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<td>Minor in Spanish</td>
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<td>Master of Arts in Spanish</td>
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<tr>
<td>Doctor of Philosophy in Spanish</td>
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<tr>
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<tr>
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<tr>
<td>Pharmacy Practice</td>
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</tbody>
</table>
Home

All academic units can be found on the left. If you are unsure how to find your major, start with Liberal Arts & Sciences.

Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your advisor (http://www.advising.ku.edu) for details).

Other years' catalogs

The University of Kansas is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools (http://www.ncahlc.org/component/directory/?Action=ShowBasic&instid=1302%22&lang=en). This institution has been continuously accredited since 1913. In addition, certain programs of the University have specialized accreditation (http://oirp.ku.edu/profiles/new/1-210.pdf).
KU Core

KU Core Curriculum

Effective Fall 2013, the KU Core is the university-wide curriculum all incoming students complete. By completing the KU Core, the successful graduate will

• Acquire essential skills
• Build a broad background of knowledge
• Have a stronger appreciation for cultural and global diversity
• Cultivate ethical integrity
• Generate the capacity and opportunity to blend and create ideas

The KU Core spans the entire undergraduate experience and comprises three general education goals and three advanced education goals. General education goals are best met during the first two years of university study.

• Critical Thinking and Quantitative Literacy
• Written & Oral Communication
• Breadth of Knowledge

Advanced education goals are most appropriately acquired using the foundation of knowledge gained from the general education goals and progression through the major. The sixth goal, Integration and Creativity, can provide a capstone experience.

• Culture & Diversity
• Social Responsibility & Ethics
• Integration & Creativity

The KU Core integrates with the degree requirements of the various majors offered at KU. In some cases, degree-specific requirements can simultaneously be used to complete the KU Core. Students may follow individual paths through the KU Core, meeting milestones in different ways.

Fulfilling the KU Core

Fulfilling the KU Core requires 12 units across the six education goals. A KU Core unit can be

• A single approved course (3-5 hours)
• An approved educational experience
• An approved combination or partnership of course work and experiences

To view a list of courses and experiences approved to meet the learning outcomes of the KU Core Curriculum, click here (http://kucore.ku.edu).

Distribution of the 12 Units

<table>
<thead>
<tr>
<th>Goal</th>
<th>Requires</th>
<th>Example</th>
</tr>
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<tbody>
<tr>
<td>Critical Thinking and Quantitative Literacy</td>
<td>2 units</td>
<td>One in critical thinking, one in quantitative literacy.</td>
</tr>
<tr>
<td>Breadth of Knowledge</td>
<td>3 units</td>
<td>One in the arts and humanities, one in the natural sciences, one in the social sciences.</td>
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<tr>
<td>Communication</td>
<td>3 units</td>
<td>Two in written communication, one in oral communication.</td>
</tr>
<tr>
<td>Culture and Diversity</td>
<td>2 units</td>
<td>One unit meeting learning outcome 1, either one unit meeting learning outcome 2 or a significant study abroad experience.</td>
</tr>
<tr>
<td>Social Responsibility and Ethics</td>
<td>1 unit</td>
<td></td>
</tr>
<tr>
<td>Integration and Creativity</td>
<td>1 unit</td>
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</table>
Regulations

The rules and regulations of the University of Kansas pertaining to academic work are published in the University Senate Rules and Regulations, the Faculty Senate Rules and Regulations, and the University of Kansas Senate Code. Copies of these documents are on file with University Governance, Strong Hall, 1450 Jayhawk Blvd., Room 33, Lawrence, KS 66045-7518, 785-864-5169, or online in the University of Kansas Policy Library (http://www.policy.ku.edu).

See your school's Regulations page for specific rules and regulations: CLAS (p. 788), Arts (p. 106), Architecture (p. 36), Business (p. 189), Education (p. 250), Engineering (p. 471), Health Professions (p. 650), Journalism (p. 735), Music (p. 2174), Nursing (p. ), Pharmacy (p. 2301), Social Welfare (p. 2353).

View Graduate Studies (p. 2369) admission and degree requirements and regulations. KUMC Office of Graduate Studies (p. 2395) has their own dedicated page for degree requirements and regulations.

Consult College Student Academic Services or the dean's office of your school for more information.

- Academic Transcripts (p. )
- Addition Courses/Changing Sections (p. )
- Application for Graduation (AFG) (p. 12)
- Classification of Students (p. )
- Course Numbering System (p. )
- Credit by Examination (p. )
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- Maximum Community College Credit Allowed (p. )
- Repetition of Courses (p. )
- Residence Credit (p. )
- Withdrawal from a Course (p. )
- Withdrawal (Drop) Policies for All Students (p. )

Academic Transcripts

The academic transcript lists all courses attempted and completed and other academic information. To determine if Independent Study courses taken through Continuing Education are calculated in the grade-point average on the transcript, see registrar.ku.edu. Schools may calculate such grades in the grade-point average and use this average for admissions and graduation purposes. You may order academic transcripts online at http://transcripts.ku.edu for Lawrence/Edwards students and at http://www.kumc.edu/student-services/enrollment-services/forms.html for KUMC students. Call (785) 864-4423 (Lawrence) or (913) 588-7055 (KUMC) for instructions and fees.

Adding Courses/Changing Sections

Procedures and deadlines for adding a course or changing sections are outlined in on the Office of the University Registrar website, http://registrar.ku.edu/adddrop-class and in the academic calendar at http://registrar.ku.edu/calendar.

Application for Graduation (AFG)

Students must apply online to graduate. Sign on to Enroll & Pay, https://sa.ku.edu and navigate to “Apply for Graduation.” If you have questions, contact the Office of the University Registrar, 121 Strong Hall, (785) 864-4423. For each semester graduation, please see the academic calendar (http://registrar.ku.edu/calendar) for application for graduation deadlines. You cannot graduate unless you have completed the AFG by the deadline. Undergraduates must have finished at least 75 hours of course work to apply for graduation. To change your AFG to a different semester, contact your school or college.

Classification of Students

Students are assigned to a particular class level on the basis of the following credit hour requirements:

- First-year—0-29 credit hours
- Sophomore—30-59 credit hours
- Junior—60-89 credit hours
- Senior—90 or more credit hours

The codes for class and school appear in the Schedule of Classes, online at www.registrar.ku.edu.

Course Numbering System

The course numbering system can be useful as a general guide to students in planning a course of study.

- 000-099 Noncredit courses or those credit courses for which records are kept but which do not count toward graduation.
- 100-299 Courses for first- and second-year students.
- 300-499 Courses for juniors and seniors.
- 500-699 Courses for juniors and seniors, also taken by some graduate students with fewer than 30 hours of graduate credit.
- 700-799 Courses for graduate students with fewer than 30 hours of graduate credit, also taken by some undergraduates.
- 800-899 Courses for graduate students with fewer than 30 hours of graduate credit, also taken by some undergraduates.
- 900-999 Courses primarily for graduate students with more than 30 hours of graduate credit (not normally open to undergraduates).

Credit by Examination

KU offers its own program of examinations for advanced credit. Applications are available in the Student Records Center. They must be approved by the instructor and the chair of the department concerned and by the student’s dean or dean’s representative. A report of the examination taken, showing the hours of credit to be granted and the grade awarded, must be signed by the professor giving the examination, the chair, and the dean or dean’s representative.

At the discretion of each academic dean, grades of A, B, C, or D may be used to indicate degrees of achievement, or a grade of Credit may indicate satisfactory performance. No record is made of an unsatisfactory attempt. Credit by Examination grades are not included in the grade-point average that appears on the official transcript.
A fee is charged per credit hour for each course. For current fee information, visit the KU Comprehensive Fee Schedule at http://registrar.ku.edu/cfs.

Warning: Some medical schools do not accept credit by examination.

Diplomas

Degrees are awarded three times a year to students who have completed applications for graduation on time and have met all requirements as of the last day of final examinations for each of the three terms: fall semester, spring semester, and summer session. A diploma normally is issued for each degree earned. Only one B.A. degree may be awarded to a student by a school or the College. Only one B.G.S. degree may be awarded to a student in the College. In the College, the combination of a B.A. degree and B.G.S. degree may only be awarded in rare situations. Almost all other combinations of two like or unlike degrees may be awarded if all degree requirements have been met. Normally, 30 credit hours of additional course work are required to earn a second bachelor’s degree. The diploma reflects only the honors earned at the time degree requirements were met. Diplomas generally list majors approved by the Board of Regents. Additional majors earned after a degree has been awarded are reflected on the transcript. To receive a diploma reflecting the additional major, the graduate may order a replacement diploma by signing on to the Enroll & Pay system and navigating to “Diploma Delivery Request.” You must present photo identification to pick up your diploma. Diplomas that have not been picked up after a year are discarded.

Enrollment

Please see registrar.ku.edu/enrollment for more information.

Full-time Student Status

Undergraduates who wish to be certified as full-time students must be enrolled for a minimum of 12 credit hours each semester (6 hours in summer). Credit by examination, Independent Study courses offered through Continuing Education, and academic work done to make up incomplete work for prior terms do not count towards a current term.

Junior/Senior Level Requirement

A minimum of 45 credit hours in courses numbered 300 or above is required for graduation from all KU undergraduate schools.

Maximum and Minimum Semester Enrollment

No student may enroll for more than 20 hours per semester except by permission of the dean of the school in which the student is enrolled. Schools may adopt more restrictive policies. See Full-time Student Status. Enrollment status (http://registrar.ku.edu/enrollment-status) and maximums (http://registrar.ku.edu/maximum-enrollment-hours) are found on the Office of the University Registrar website.

Maximum Community College Credit Allowed

No more than the equivalent of the first two years of work (64 hours) in any curriculum may be transferred from a community college as per Faculty Senate Rules and Regulations (http://policy.ku.edu/governance/FSRR#art2sect5). Transfer credit information is available online at http://credittransfer.ku.edu/.

Repetition of Courses

Policies regarding the replacement of courses are listed in the University Senate Rules and Regulations under 2.2.8, Grade Replacement in Repeat Courses (http://policy.ku.edu/governance/USRR#art2sect2). When courses do not meet the guidelines in the Grade Replacement in Repeat Courses policy, then all attempts at the course are counted towards the calculation of the official KU GPA on an academic transcript.

Students who receive an Incomplete (I) in a course, should not re-enroll in that course.

Residence Credit

Residence credit includes all KU course work offered in the Schedule of Classes, www.registrar.ku.edu. College-level course work includes only courses numbered 100 and above.

Withdrawal from a Course

This information is subject to change. Specific dates and updates are listed each semester in the Schedule of Classes, online at www.registrar.ku.edu. The complete policy appears in the University Senate Rules and Regulations, Article II, 2.2.5, http://www2.ku.edu/~unigov/usrr.html.

Withdrawal (Drop) Policies for All Students

• Each semester and term is divided into three periods.
• The deadlines for irregular-length courses are adjusted according to the length of the course. See http://registrar.ku.edu/short-courses for specific deadlines.
• Refund dates differ from the dates for canceling and withdrawing from a course.
• During the first period, all schools and colleges allow students to cancel a course. A canceled course does not appear on the student’s academic record.
• During the second period, the student must follow the withdrawal procedures of the College or the school in which he or she is enrolled. A grade of W appears on the student’s transcript. The grade appears on the student’s academic record but is not used in computing the grade-point average. It is the student’s responsibility to meet withdrawal deadlines.
• During the third period, a student cannot withdraw from a course. The course grade is determined by the student’s overall academic performance.
• Retroactive withdrawal from a course is not allowed.
• Drops or withdrawals are official as of the date they are completed online or presented in person to the Office of the University Registrar on the Lawrence campus, to the Edwards Campus reception desk in Overland Park, or to the Office of the Registrar on the KU Medical Center campus. It is the responsibility of the student to submit the withdrawal form by the required deadline.
• Specific requirements are listed by semester in the Schedule of Classes, online at www.registrar.ku.edu.
  • Absences (p. 14)
  • Academic Forgiveness (p. )
  • Auditing and Visitation of Classes (p. 14)
• Change of Grade (p. 8)
• Code of Student Rights and Responsibilities (p. 16)
• Credit/No Credit (p. 17)
• Electronic Mail Policy (p. 18)
• Grade Replacement Policy in Repeat Courses (p. 19)
• Grading System (p. 20)
• Grievances - Organization for Conflict Resolution (p. 21)
• Grievances - Procedures for Conflict Resolution (p. 22)
• Incompletes (p. 23)
• Intellectual Property Policy for the Lawrence Campus (p. 24)
• Recorded Evaluation of Student Performance (p. 25)
• Nondiscrimination, Equal Opportunity and Affirmative Action Policy (p. 26)
• Posthumous Award of Degrees (p. 27)
• Evaluation and Acceptance of Advanced Standing Credits (p. 28)
• Credit by Examination (p. 29)
• Limitations on Credit Allowed (p. 30)
• Transfer of Coursework, Minimum Grade and GPA Calculation (p. 31)

Absences

2.1.4 In cases where part of a class grade is based on attendance, a student shall not be penalized for absence from regularly scheduled class activities which conflict with mandated religious observances. In cases of conflicts between regularly scheduled class activities and mandated religious observances, the student is responsible for initiating discussion with the instructor to reach a mutually acceptable solution. (Link (https://policy.ku.edu/governance/USRR/#art2sect1para4))

Academic Forgiveness (USRR 2.8)

2.8.1 An undergraduate student may request the Office of the University Registrar, with the approval of the Dean, to invoke academic forgiveness in cases where the following conditions are met. (The term “academic forgiveness” shall mean the suspension of University Senate Rules and Regulations, Article 2.4.2.1, in order to discount the coursework of past academic semester(s).) (Link (http://policy.ku.edu/governance/USRR/#art2sect8))

2.8.2 Academic forgiveness shall be available once to those students who meet these requirements.

1. Have had a break of at least four (4) years in their attendance at the University of Kansas. A student will be considered in “attendance” during a semester or term if the student is enrolled in a least one KU course in residence, earning a grade of A-F, S, U, CR, or NC.

2. Had earned a cumulative University of Kansas G.P.A. of less than 2.0 immediately prior to leaving K.U.

3. At the time of petition, have earned a G.P.A. of at least 2.5 in at least 12 credit hours earned after returning to K.U. All grades earned at K.U. since returning will be used to make this G.P.A. calculation.

2.8.3 When invoking academic forgiveness, a student may designate not more than three (3) academic terms to be discounted in his/her academic record. Only University of Kansas terms completed prior to returning to the University of Kansas may be designated.

2.8.4 Academic terms discounted for a student using the academic forgiveness policy shall not be computed into the student’s current G.P.A., nor shall any hour completed or degree requirements satisfied in these discounted terms be counted toward a degree granted from the University of Kansas.

2.8.5 When invoking academic forgiveness, a student must obtain the approval of the Dean in his/her academic unit. The student then submits the request for academic forgiveness to the University Registrar.

Auditing and Visitation of Classes (FSRR 5.5)

5.5.1 The regulation of the auditing or visitation of classes shall be the responsibility of the faculties of the College and the several schools of the University.

5.5.2 Such regulation shall provide for approval of the instructor of the class involved. (Link (http://policy.ku.edu/governance/FSRR/#art5sect5))

Change of Grade (USRR 2.3)

2.3.1 Unless the provisions of 2.3.2 obtain, no change in a grade shall be made after it is filed with the University Registrar except upon the official request of the faculty member in charge of the course. The request must be made within one calendar year of the original grade due date for the semester in which the course is taken. The Registrar shall notify the chairperson of the department in which the course is given, with a copy to the originating faculty member. Such a change may be made only if (1) the original grade resulted from an error, or (2) the original letter was I or P or (3) due to sanctions imposed in the case of academic misconduct. In any of these cases, the change of letter shall not include the change to a W. For purposes of this provision, an official request includes an electronic request through online processes developed by the Registrar.

2.3.2 In the following exceptional cases a committee of at least three faculty members appointed by the chairperson of the department in which the course is given may review a student’s work and assign the course grade:

2.3.2.1 When a faculty member who has been charged with and found guilty of sexual harassment or academic misconduct has assigned a grade to the student who has pressed charges.

2.3.2.2 When a clerical error is suspected in a course grade assigned by a faculty member who has become seriously ill and incapacitated or has died or whom the chairperson of the department in which the course is given cannot locate with due diligence.

2.3.2.3 When a student is found guilty of academic misconduct after the course grade has been assigned by a faculty member who has become seriously ill and incapacitated or has died or whom the chairperson of the department in which the course is given cannot locate with due diligence.

2.3.2.4 When there is procedural irregularity in the assignment of the course grade. However, in such a case, the grade shall be assigned in accordance with section 2.3.5.3 of the University Senate Rules and Regulations.

2.3.3 In the most extreme and unusual circumstances a student may petition to either:

a. withdraw from all the courses in which he/she was enrolled. In this case a properly constituted committee from the school or College in which he/she was enrolled may assign the letter W in all courses of that semester. The faculty members (s) in charge of the course(s) need not be consulted. Or
b. if the student is asking for selective relief in a course in which he/she was enrolled, a properly constituted committee from the school or College in which the course was taken may assign, after consultation/concurrence with the faculty member in charge of the course, the letter I, incomplete, or W, withdrawal. If the incomplete is assigned, it is to be in accordance with University Senate Rule 2.2.3. The work necessary to complete the course and remove the incomplete is to be determined by the faculty member in charge of the course. If the faculty member in charge of the course is unavailable or otherwise unable to provide a regime of work to complete the course, the department will take responsibility to determine the required work.

Each course is to be considered separately but the same committee may consider more than one course at the discretion of the dean of the school responsible for the course.

2.3.4 To insure uniform implementation of these procedures a) each school and the College will develop a written policy for the guidance of the committee and b) each school or College will adopt a uniform policy as to whether concurrence or only consultation is required. The policies are to be made available to faculty and student.

2.3.5 A student may initiate a grade appeal of a final course grade if he or she believes that there has been an improper application of the grading procedure announced for the course by the instructor. Students who have other grievances should see Article V.

2.3.5.1 Each academic unit within the University shall provide its members access to an exclusive procedure for appeal of a final course grade, which shall be the sole procedure available to such members at the unit level.

2.3.5.2 Such an appeal shall be made in accord with the procedures established by the unit under Article V, section 2 of the University Senate Rules and Regulations. To the extent that a grade appeal involves charges of improper application of grading procedures, the dispute shall be resolved under the applicable procedures for disputes involving improper application of grading procedure, and appeal to the Judicial Board shall be available in accordance with those procedures. To the extent that a grade appeal involves charges of academic misconduct, the dispute shall be resolved under the applicable procedures for disputes involving academic misconduct, and appeal to the Judicial Board shall be available in accordance with those procedures.

2.3.5.3 If the Judicial Board sustains the student's appeal, the grade shall be assigned in accordance with Section 2.3.2 of the University Senate Rules and Regulations. (Link (http://policy.ku.edu/governance/USRR/#art2sect3))

Code of Student Rights and Responsibilities (Student Code)

The Code of Student Rights and Responsibilities outlines the rights of students and many of the standards of conduct expected within the University of Kansas community. (Link (http://policy.ku.edu/code-student-rights-and-responsibilities-student-code))

Credit/No Credit (USRR 2.2.7)

2.2.7 A student may elect to be graded on a scale of CR (credit) or NC (no credit) instead of on a scale of A, B, C, D, or F as provided below.

2.2.7.1 Students seeking the credit/no credit option in a semester-long course must register their choice in their dean's office during the 21st through the 30th instructional days of the semester. In all eight-week courses, including summer session, students must choose credit/no credit during the 11th through the 15th instructional day of class. In courses of other duration, students must choose credit/no credit during the week that 40 percent of the class sessions have been completed. In courses shorter than one week, students must choose credit/no credit before the first class session. After the deadline, a student may not alter his or her choice.

2.2.7.2 A student may use the credit/no credit option for at most one course per semester.

2.2.7.3 For undergraduate students, the grade of CR (credit) will be received for grades of C- and above, and the grade of NC (no credit) will be received for grades of D+ and below. For graduate students, the grade of CR will be received for grades of C and above, and the grade of NC (no credit) will be received for grades of C- and below. (To be implemented Spring 2012)

2.2.7.4 The instructor will not be informed when a student has chosen this option, and will assign a conventional letter grade, which will then be converted by the University Registrar to CR or NC as appropriate.

2.2.7.5 Courses graded CR or NC will not count in computing grade point average. Courses graded CR will be included in the total hours counted toward graduation; courses graded NC will not count as hours earned.

2.2.7.6 No course graded CR or NC can count toward the satisfaction of the requirements for an undergraduate major or toward the satisfaction of the requirements for a graduate degree or a graduate certificate, except in the School of Law. Courses graded CR or NC may be taken in a student's undergraduate major or in a student's graduate program if the student does not need to count them toward the satisfaction of requirements. (To be implemented Spring 2012)

2.2.7.7 The College, schools, departments, programs, and other academic units may establish degree requirements, major requirements, minor requirements, certificate requirements or other academic requirements requiring that the CR/NC grading option not be chosen for most or all of a student's courses. (To be implemented Spring 2012) (Link (https://policy.ku.edu/governance/USRR/#art2sect2para7))

Electronic Mail Policy

The University of Kansas (Lawrence and Edwards Campuses) provides electronic mail [1] (http://policy.ku.edu/provost/electronic-mail-policy/#email) for use by students, faculty, staff, and others affiliated with KU. The University encourages the appropriate use of email to further its mission goals. KU provides email for use when engaging in activities relating to instruction, research, clinical and public service, and management and administrative support. KU also permits incidental personal use provided that such use does not interfere with KU operations, does not generate incremental identifiable costs to KU, or does not negatively impact the user's job performance. [2] (http://policy.ku.edu/provost/electronic-mail-policy/#CommitmenttoTime)

KU email may not be used for commercial purposes, for personal financial gain, to distribute chain mail, or to support outside organizations not otherwise authorized to use University facilities. Individuals who wish to use KU email in support of external organizations (charities, for example) must secure written or email approval of the provost and executive vice chancellor (provost) or the provost's designee. The provost ordinarily will approve such use only when it furthers KU's mission and goals.

Registered student and campus organizations such as the College Republicans or the KU Young Democrats may use their membership list-serves to notify members of meetings, speeches, or rallies. Faculty members may use electronic systems for course-related discussions of
political topics. Individuals may use email to exchange ideas and opinions, including those dealing with political issues. The latter is generally considered an incidental use of the email system. However, KU email may not be used to support external organizations, partisan political candidates, party fundraising, or causes. [3] (http://policy.ku.edu/provost/electronic-mail-policy/#PoliticalActivity)

The University supports a climate of trust and respect and does not ordinarily read, monitor, or screen electronic mail. However, complete confidentiality or privacy of email cannot be guaranteed. Confidentiality cannot be guaranteed because of the nature of the medium, the need for authorized staff to maintain email systems, and the University’s accountability as a public institution. The provost or his designee may authorize access to employee or student email in a number of circumstances including, but not limited to, situations involving the health or safety of people or property; possible violations of University and Board of Regents codes of conduct, regulations, or policies; possible violations of state or federal laws; subpoenas and court orders; other legal responsibilities or obligations of the University; or the need to locate information required for University business.

The University routinely uses email for both formal and informal communication, including emergency messages, with faculty, staff and students. Faculty, staff, and students are required to register an email account or utilize a University-provided account during their enrollment or employment at the University. These addresses are used for University business and official University communications. All faculty and students, and all staff who have access to email, are expected to check their email regularly for University communications. Official University communications include, but are not limited to, enrollment information, grade reports, financial statements and other financial information, library overdue notices, and policy announcements.

KU email may be used to survey students, faculty, and staff. Requests to conduct surveys through email should be directed to the Office of the Provost.

Because use of broadcast email places stress on the email system, it is Lawrence campus policy to use the broadcast function very sparingly. In addition to the business communications cited above, it is used for messages from the Chancellor’s Office, the Provost’s Office, or other offices about mission-related matters or issues of broad interest to the University community, and for emergency messages dealing with power outages, street closings, or other public safety matters. Any request to use broadcast email to contact students, faculty, or staff, including survey requests, must be approved in advance and in writing or by email by the Office of the Chancellor or the Office of the Provost.

The broadcast function generally is not used to announce events such as concerts, theatre performances, conferences, symposia, or colloquia sponsored by KU units or organizations. Public events sponsored by KU units or registered student and campus organizations may be announced in KU Today, the electronic newsletter produced by News and Media Relations and posted on the electronic KU calendar (for instructions, see Submit KU News (https://policy.ku.edu/governance/USRR/#art2sect2para8)) News and Media Services regularly broadcasts a complete KU Calendar of Events.

KU email accounts remain the property of the State of Kansas. The University routinely disables accounts after graduation or termination from the University. (Link (http://policy.ku.edu/provost/electronic-mail-policy))

Grade Replacement Policy in Repeat Courses (USRR 2.2.8)

2.2.8 Grade Replacement Policy in Repeat Courses.

If a student takes a course at KU, receives a D or F in the course, enrolls in and repeats the course at KU, the new grade may be used in place of the original grade for purpose of GPA calculation, subject to the limitations herein.

2.2.8.1 The course must be numbered 000-299 and have been taken in the Fall 2001 semester or thereafter. Classes taken from Fall 2001 through Summer 2007 must have been requested by the student during the semester as qualifying for this policy. Beginning in Fall 2007, this policy automatically applies to classes that meet the criteria outlined in this section.

2.2.8.2 The grade of D or F can not be the result of an academic misconduct sanction of “Reduction of Grade for the Course.”

2.2.8.3 The grade recalculation will happen by default.

2.2.8.4 The original grade will remain on the transcript, although it will not be used to calculate the GPA.

2.2.8.5 Students may have a grade replaced no more than five times, meaning a student may retake five courses, or a course five times, or any combination thereof. Multiple retakes of a course are discouraged, but not explicitly prohibited. The time and date of registration of the second (repeat) enrollment will be used to determine the limit of five repeat courses for grade replacement.

2.2.8.6 This policy cannot be used for courses that apply to a baccalaureate degree already awarded by the University of Kansas. (Link (https://policy.ku.edu/governance/USRR/#art2sect2para8))

The Grading System (USRR 2.2)

Section 2. The Grading System

2.2.1 The letters A, B, C, D, S (satisfactory), CR (credit), and + shall be used to indicate passing work.

2.2.1.1 The grade of A will be reported for achievement of outstanding quality.

2.2.1.2 The grade of B will be reported for achievement of high quality.

2.2.1.3 The grade of C will be reported for achievement of acceptable quality.

2.2.1.4 The grade of D will be reported for achievement that is minimally passing, but at less than acceptable quality.

2.2.2 The letters F, U (unsatisfactory), and NC (no credit) shall indicate that the quality of work was such that, to obtain credit, the student must repeat the regular work of the course.

2.2.3 The letters W and I may be given. The letter W shall indicate incomplete work, such as may be completed without re-enrollment in the course. The letter I shall indicate withdrawal for which no credit or grade point is assigned.

2.2.3.1 The letter I should not be used when a definite grade can be assigned for the work done. It shall not be given for the work of a student in any course except to indicate that some part of the work has, for reasons beyond the student’s control, not been done, while the rest has
been satisfactorily completed. At the time an I is reported on the electronic roster, the character and amount of work needed, as well as the date required for completion and lapse grade if further work is not completed by this date, should be indicated.

2.2.3.2 A student who has an I posted for a course must make up the work by the date determined by the instructor, in consultation with the student, which may not exceed one calendar year from the original grade due date for the semester in which the course is taken, or the last day of the term of graduation, whichever comes first. An I not removed according to this rule shall automatically convert to a grade of F or U, or the lapse grade assigned by the course instructor, and shall be indicated on the student’s record.

2.2.3.3 Changes beyond a year or extensions to the time limit may be granted by the dean’s representative upon submission of a petition from the student containing the endorsement of the course instructor who assigned the I grade, or the department chairperson if the instructor is unavailable. After the I grade is converted to a grade of F or U, the grade may only be changed in accordance with USRR Article II, Section 3.

2.2.3.4 No graduate student will be allowed to take oral comprehensive exams if an I grade is currently listed on the student’s transcript.

2.2.4 The College or any school may use the letter P to represent satisfactory progress during one semester of work for which a grade will be given only upon the completion of the course or project in a subsequent semester.

2.2.5 The University fall and spring semesters each consist of seventy-three instructional days. The withdrawal period is divided into three instructional-day time segments:

a. **Period 1:** the first fifteen (15) instructional days of the semester or the first seven (7) instructional days of summer session (See 2.2.5.1 and 2.2.5.2);

b. **Period 2:** beginning with the sixteenth (16th) instructional day through the sixtieth (60th) instructional day of the semester or the eighth (8th) instructional day through the thirtieth (30th) instructional day of summer session (See 2.2.5.1 and 2.2.5.3);

c. **Period 3:** beginning with the sixty-first (61st) instructional day through the last day of classes for the semester or the thirty-first (31st) instructional day through the last day of classes for the summer session (See 2.2.5.4).

**NOTE:** The three time periods of instructional days for any course that has fewer instructional days than a normal semester shall be calculated on the basis of a percentage that the instructional days of the course in question represent relative to a normal semester of 73 instructional days. For example, a course of five weeks duration with a total of 25 instructional days represents one-third the length of a normal semester. Thus, Period 1 would include the first five (5) instructional days of the course, Period 2 would begin with the 6th and continue through the 20th instructional day and Period 3 would begin with the 21st instructional day and continue through the last day of the class.

[Revised 75 to 73 8/2011, removed KU Continuing Education withdrawal policy (Independent study courses changed from a 6 month to semester based format 8/30/11)]

2.2.5.1 Course withdrawal policy and procedure are determined by the individual time period (see 2.2.5, 2.2.5.2, 2.2.5.3, 2.2.5.4 and 2.2.5.5). These rules apply to both undergraduate and post-baccalaureate courses, other than Law School courses, unless specifically excluded in accordance with 2.2.5.2.

2.2.5.2 Each academic dean shall submit to the Provost a list of courses such as internships and practica that are to be excepted from 2.2.5. Upon approving the list of proposed exceptions, the Provost shall provide it to the University Registrar.

2.2.5.3 During Period 1, a student may withdraw from a course by canceling his/her enrollment in that course. The course will not appear on the student's official record.

2.2.5.4 During Period 2, a student seeking to withdraw from a course must follow the withdrawal procedures of the College or School in which the student is enrolled. A student who withdraws during Period 2 shall receive a grade of W, which will appear on the student’s academic record but will not be included in computing the grade point average. Neither the instructor nor the College or School is entitled to withhold approval of the withdrawal, but the College or School can reinstate enrollment under the provisions of USRR 2.6.5. The University Registrar shall maintain and make available information regarding withdrawal procedures of each school and the College. It is the responsibility of the student to take the necessary steps to effect the withdrawal before the deadline established under USRR 2.2.5, above.

2.2.5.5 During Period 3, a student cannot withdraw from a course. The course grade will be determined by the student's overall academic performance.

2.2.5.6 After a student completes a course and a letter grade has been assigned, including an "Incomplete" where appropriate, retroactive withdrawal from the class is not allowed, except in accordance with USRR 2.3.3.

2.2.6 The withdrawal of a student from the University shall be reported by the dean of the College or the school to the University Registrar for posting to the permanent record after consultation with the appropriate personnel dean. The rules in USRR 2.2.5 shall apply except in accordance with USRR 2.3.3.

2.2.7 A student may elect to be graded on a scale of CR (credit) or NC (no credit) instead of on a scale of A, B, C, D, or F as provided below.

2.2.7.1 Students seeking the credit/no credit option in a semester-long course must register their choice before the first class meeting. During the 11th through the 15th instructional day of class. In courses of other duration, students must choose credit/no credit during the week that 40 percent of the class sessions have been completed. In courses shorter than one week, students must choose credit/no credit before the first class session. After the deadline, a student may not alter his or her choice.

2.2.7.2 A student may use the credit/no credit option for at most one course per semester.

2.2.7.3 For undergraduate students, the grade of CR (credit) will be received for grades of C- and above, and the grade of NC (no credit) will be received for grades of D+ and below. For graduate students, the grade of CR will be received for grades of C and above, and the grade of NC (no credit) will be received for grades of C- and below. [To be implemented Spring 2012]
2.2.7.4 The instructor will not be informed when a student has chosen this option, and will assign a conventional letter grade, which will then be converted by the University Registrar to CR or NC as appropriate.

2.2.7.5 Courses graded CR or NC will not count in computing grade point average. Courses graded CR will be included in the total hours counted toward graduation; courses graded NC will not count as hours earned.

2.2.7.6 No course graded CR or NC can count toward the satisfaction of the requirements for an undergraduate major or toward the satisfaction of the requirements for a graduate degree or a graduate certificate, except in the School of Law. Courses graded CR or NC may be taken in a student's undergraduate major or in a student's graduate program if the student does not need to count them toward the satisfaction of requirements. [To be implemented Spring 2012]

2.2.7.7 The College, schools, departments, programs, and other academic units may establish degree requirements, major requirements, minor requirements, certificate requirements or other academic requirements requiring that the CR/NC grading option not be chosen for most or all of a student's courses. [To be implemented Spring 2012]

2.2.8 Grade Replacement Policy in Repeat Courses.

If a student takes a course at KU, receives a D or F in the course, enrolls in and repeats the course at KU, the new grade may be used in place of the original grade for purpose of GPA calculation, subject to the limitations herein.

2.2.8.1 The course must be numbered 000-299 and have been taken in the Fall 2001 semester or thereafter. Classes taken from Fall 2001 through Summer 2007 must have been requested by the student during the semester as qualifying for this policy. Beginning in Fall 2007, this policy automatically applies to classes that meet the criteria outlined in this section.

2.2.8.2 The grade of D or F can not be the result of an academic misconduct sanction of "Reduction of Grade for the Course."

2.2.8.3 The grade recalculation will happen by default.

2.2.8.4 The original grade will remain on the transcript, although it will not be used to calculate the GPA.

2.2.8.5 Students may have a grade replaced no more than five times, meaning a student may retake five courses, or a course five times, or any combination thereof. Multiple retakes of a course are discouraged, but not explicitly prohibited. The time and date of registration of the second (repeat) enrollment will be used to determine the limit of five repeat courses for grade replacement.

2.2.8.6 This policy cannot be used for courses that apply to a baccalaureate degree already awarded by the University of Kansas.

2.2.9 When it would not be appropriate to grade a course according to the grading system established above, the College or school may authorize the use of grades S and U in designated courses. A course to be graded S or U shall be identified prior to the beginning of the course in the Schedule of Classes. Approval to offer a course with the S and U grading system precludes the use of grades A, B, C, D, or F. The grade of S shall indicate the student did satisfactory work and these hours will count toward graduation. The U grade shall indicate the student's work was unsatisfactory and these hours will not count toward graduation. Grades of S and U will not count in computing the grade point average.

2.2.10 The dean of the College or a school may request permission of the University Senate to use a grading system other than herein provided for a specified trial period.

2.2.11 The grade of + shall indicate that credit was awarded on the basis of an examination or other appropriate experience or training, rather than as a result of the student completing the regular work of the course. (Link (https://policy.ku.edu/governance/USRR/#art2sect2))

**Grievances:**

**Organization for Conflict Resolution (USRR Article V)**

**Section 1. University Ombuds Office**

5.1.1 Appointment. The University Ombuds and Faculty Ombuds shall be appointed by the Chancellor from among a panel of three candidates presented by the University Senate Executive Committee.

5.1.2 Ombuds’ Office. Faculty will be represented in the staffing of the Ombuds Office through a part time appointment of a faculty member either to the position of University Ombuds or as Faculty Ombuds

5.1.3 Term of Office. A faculty member serving in the Ombuds Office shall serve a three-year term. The Faculty Ombuds shall be eligible for reappointment.

5.1.4 Qualifications. The University Ombuds shall possess a comprehensive knowledge of the University organization and procedures and a post-baccalaureate degree. He or she shall, at the time of initial appointment, have completed at least six years of service at the University of Kansas.

**Section 2. Unit Level Grievance Procedures**

5.2.1 Establishment and Maintenance of Unit Level Grievance Procedures.

5.2.1.1 Larger Organizational Units. The following organizational units shall be required to establish and maintain grievance procedures for utilization by directly subordinate units:

a. The Office of the Chancellor
b. The Office of the Provost and Executive Vice Chancellor
c. The Office of the Vice Chancellor and Dean of the Edwards Campus
d. The offices of the Vice Provost for Student Affairs, Research, and Information Services
e. The several schools and the College of Liberal Arts and Sciences

5.2.1.2 Subordinate Units. Subordinate units may choose to establish, create, adopt or maintain their own grievance procedures or they may elect to have grievance procedures implemented by the larger organizational entity within which the unit is contained.

5.2.1.3 Review and Approval. Any organizational unit that has developed a grievance procedure shall submit it to the General Counsel of the University. Unless the General Counsel determines that the procedure as submitted is in conflict with existing law, rules of the Board of Regents, or rules or regulations of the University, it shall become effective thirty calendar days after such submission or upon written approval of the General Counsel, whichever occurs first.
5.2.1.4 Election of Larger Unit Procedure. Any unit which has elected to place itself under the grievance procedure of the respective larger entity shall report this election in writing to the Judicial Board Chair, with information copies to the General Counsel of the University, the Equal Opportunity Office, and the University Ombudsman.

5.2.2 Essential Elements of Grievance Procedures. Because of the great variations in size and functions of units, standardization of grievance procedures is considered inappropriate. However, each such procedure shall comply with the Procedural Guarantees of Article XIV, section 2, of the University Senate Code, and shall provide for:

a. a time limit, not to exceed thirty calendar days from the written submission of a complaint to its hearing, with provisions for extensions for good cause;

b. the opportunity for each side to submit supporting materials and introduce supporting witnesses;

c. the opportunity for each side to be informed of material supporting the action or position of the other side;

d. the exclusion of any party involved in the complaint from the rendering of any decision;

e. the creation of a record of the proceeding, including audio recording of the hearing and a written decision of the hearing body.

5.2.3 Dissemination of Information. Information concerning the procedure adopted by a unit shall be easily available to all persons employed in or using the services of the unit. Copies of the procedures with effective dates shall also be placed on file in the Policy Library by the chair, dean, vice chancellor, or their designee.

5.2.4 Change and Amendments. Any change of or amendment to a grievance procedure shall be subject to review and approval as provided in 5.2.1.3, above, and updated copies disseminated as provided in 5.2.3, above.

Section 3. The Judicial Board

5.3.1 Chair. The law member serving in his or her third or final year as member of the Judicial Board shall serve as its Chair. If, by reason of absence, disability or disqualification, the Chair is unable to serve, the law member next senior in terms of service on the Judicial Board shall assume the chairperson’s duties.

5.3.2 Effective Date of Membership. The terms of service on the Judicial Board shall commence on the 16th day of August, except that in the filling of a vacancy the appointment shall become effective on the day on which the appointee’s acceptance is made known to the Judicial Board Chair.

5.3.3 Hearing Panels. All members of the Judicial Board shall be available for service on hearing panels, except that any member who has participated in grievance procedures on the same case or who in any other manner has been involved in the case shall not be asked to serve. Members of a hearing panel, five in number, shall be designated by the Judicial Board Chair as follows:

a. The Hearing Panel shall be chaired by a law member.

b. At least one member shall belong to the same appointment group (Article XIII, Section 4 (a) (ii) to (vi) of the Senate Code) as the claimant or complainant, and one to the same group to which the respondent belongs.

c. If possible, at least one member should be of the same race as the complainant.

d. If possible, at least one member should be of the same sex as the complainant.

To ascertain the prior involvement of selected individuals, the Judicial Board Chair shall advise these five members of the Board by confidential communication of the nature of complaint, including the names of the parties involved, and call for members who have had any prior connection with the case to inform him or her of that fact without delay. In the case of the prior involvement of a selected Board member, a replacement shall be similarly chosen.

5.3.4 Appeals Panel. Appeals panels shall consist of at least one law member who did not serve on the hearing panel, if any, in the particular case. This law member shall chair the appeals panel. The Judicial Board Chair and the chair of the appeals panel shall designate two additional members of the Judicial Board who did not participate in the procedures in the same case at any other level. In matters of sexual harassment, panel members must have University-approved training in handling and adjudicating matters of sexual harassment.

5.3.5 Ad Hoc Law Members. If no regular law member is available to serve on a hearing or appeals panel, the Judicial Board Chair may designate an ad hoc law member to serve on that panel. An ad hoc law member shall meet the requirements for law members contained in Article XIII, Section 5(a) (i) of the University Senate Code.

Section 4. The Court of Parking Appeals.

5.4.1 Chief Justice. The Chief Justice of the Court of Parking Appeals shall be elected by the membership of the Court which shall be called to meet in April or May of each year. At the same meeting, after the Chief Justice has been elected and has assumed the chair, an associate Chief Justice shall be elected by the membership. The Associate Chief Justice shall assume the Chief Justice’s duties if the Chief Justice should resign, is absent for a prolonged period of time, or is disabled or disqualified.

5.4.2 Administrator. The Chief Justice shall be the administrative officer of the Court of Parking Appeals. He or she may call upon the associate Chief Justice to assist with the administrative tasks of the Court.

5.4.3 Court members shall be selected to participate in Court proceedings in accordance with selection procedures established by the Court. The Chief Justice shall designate one member of each panel to chair that panel.

5.4.3.1 Challenges. Parties to a Court proceeding may challenge a member of the Court for grounds constituting prejudice or bias on the part of the member, which challenge shall be sustained only by the concurrence of a majority of the Court. A member may disqualify himself or herself or be disqualified by the Court for cause from participating in a particular proceeding, subject to concurrence in his or her disqualification by a majority of the Court. (Link: [https://policy.ku.edu/governance/USRR/#ArticleV](https://policy.ku.edu/governance/USRR/#ArticleV))

Procedures for Conflict Resolution (USRR Article VI)

Section 1. General Provisions

6.1.1 Purpose. The purpose of these procedures is to resolve conflict situations within the University community. The governance system does not command sanctions and has no enforcement powers. Its aim, therefore, is to find the facts of a contested situation and to make
reasonable and appropriate recommendations to those having the legal power and the responsibility to act. Recommended action should be in the University community’s best interest and protective of the rights of the individuals involved.

6.1.2 Protection of Privacy Interests. Except when all parties agree that the hearing shall be public, all proceedings provided for in the Article shall be closed to all but the parties involved. Public reports by any of the boards, committees or bodies involved may refer to the types of cases heard but no mention may be made of the names of the individuals nor any reference made which would permit their identification. The names of individuals, the nature of a complaint, and the resolution of the case may be disclosed, however, for purposes of action taken under USRR 6.5.4 against an individual for abuse of the grievance process, or pursuant to USRR 6.8.4.2 for the purpose of identifying multiple or successive grievances involving substantially the same underlying occurrence or events.

6.1.3 Prohibition of Retaliation. No person shall be subjected to discharge, suspension, discipline, harassment, or any form of discrimination for having utilized or having assisted others in the utilization of grievance procedures. Provided, however, that sanctions for a pattern of frivolous and abusive grievances may be imposed under USRR 6.5.4.

6.1.4 Absolute Judicial Immunity. Absolute judicial immunity shall exist for all members of unit level hearing bodies, mediators selected pursuant to USRR 6.2.3.3, the University Ombudsman, the Judicial Board and any of its panels, the Faculty Rights Board, the University Senate Executive Committee, and the Faculty Executive Committee with respect to their services as members of those units in any case, controversy, original proceeding, appeal, or any other matter in which they have served in a judicial, quasi-judicial, or other conflict-resolving role, including mediation, involving any matter over which the unit has jurisdiction.

6.1.5 Computation of Time. Unless otherwise expressly provided, in applying the time limitations set forth in this Article, the computation of elapsed time shall be in accordance with calendar days, including Saturdays, Sundays, and days on which, in accordance with University Calendar, classes do not meet. Because parties, members of decision making bodies, and other individuals relevant to a particular dispute may not be available during the Summer months, the Judicial Board and other tribunals shall accept complaints from May 15 to August 15, but need not take action on them during that period. This provision does not prevent the Judicial Board or other tribunals from scheduling a hearing or taking other action during the summer months if the Board or other tribunal determines that such action is appropriate and consistent with the rights of the parties.

6.1.6 Contrary Law. The provisions of these procedures shall be superseded by any contrary provision of state or federal law.

Section 2. Informal Means of Dispute Resolution

6.2.1 Generally. The collegial atmosphere of the University community is best served through informal compromise resolution of disputes. Thus, before pursuing formal grievance procedures, a grievant should ordinarily attempt to resolve the matter informally through direct or indirect consultation with the other party or through discussions with supervisory personnel.

6.2.2 Ombuds Office. The University and Faculty Ombuds shall be available (a) to receive and attempt to resolve individual grievances of members of the University community; and (b) to recommend procedural changes within the University in response to experience acquired in investigating individual cases.

6.2.2.1 Powers. The University and Faculty Ombuds shall have access to all administrative officials of the University and, in accordance with law, to all University records, including those of faculty members. He or she shall not have authority to take disciplinary action, reverse decisions, or circumvent existing University rules and procedures. He or she shall supplement, not replace, other means, where they exist, for redress of grievances. All proceedings in individual cases shall be held confidential by the Ombudsman unless otherwise authorized by the complainant.

6.2.2.2 Reports. The University and Faculty Ombuds shall at least annually make reports to the University community at large.

6.2.3 Mediation.

6.2.3.1 Generally. Informal mediation shall be available to resolve disputes within the University community; however, mediation shall not occur in cases alleging sexual harassment. Unless either party to a dispute waives mediation, mediation shall occur prior to a hearing on the dispute.

6.2.3.2 List of Mediators. A list of individuals willing to serve as mediators and with training and/or experience in dispute resolution shall be maintained by the Ombuds Office and the Judicial Board Chair, in consultation with others throughout the university community.

6.2.3.3 Selection of a Mediator. A mediator shall be selected by the parties from the list of mediators maintained by the Ombuds Office and the Judicial Board Chair, or the parties may agree on another individual to serve as mediator. If the parties cannot agree on a mediator, they may request that the Ombuds Office and/or the Judicial Board Chair select a mediator.

6.2.3.4 Mediation Procedures. The procedures to follow in mediation shall be determined by the mediator in consultation with the parties.

6.2.3.5 Suspension of Time Limits. The running of any time limits in the procedures for dispute resolution, Article VI of the University Senate Rules and Regulations, shall be suspended during the mediation process; that is, the time from the initiation of the mediation process until it is terminated by the mediator or either party shall not count against any time limit contained in those procedures.

Section 3. Complaint and Response

6.3.1 Complaint. Dispute resolution procedures shall be initiated through the submission of a written complaint to the hearing body with jurisdiction of the matter pursuant to section 6.4 of the University Senate Rules and Regulations.

6.3.1.1 Contents. The complaint shall contain a statement of the facts underlying the complaint and specify the provision(s) of Code of Faculty Rights, Responsibilities and Conduct, University Senate Code, The University Senate Rules and Regulations, the Code of Student Rights and Responsibilities, or other applicable rule, regulation, or law allegedly violated. The complaint shall also indicate the witnesses or other evidence relied on by the complaining party, and copies of any documents relevant to the complaint shall be attached to the complaint.

6.3.1.2 Copies to Respondents. The complaining party shall provide a copy of the complaint, with accompanying documents, to the respondent(s); i.e., the party or parties charged in the complaint. The chair
of the hearing body shall, upon receipt of a complaint, verify that a copy has been provided in accordance with this provision.

6.3.1.3 Time Limit on Complaints. Unless otherwise provided by law with respect to a specific category of complaint, no complaint shall be entertained in the hearing phase if more than six months have elapsed between the action or event complained of and the filing of the complaint. The period from May 15 to August 15 shall be counted for purposes of determining whether a complaint has been filed within the six-month limit. In exceptional circumstances, a majority of the relevant hearing body, upon written request of the complainant, may grant an extension to this time limitation. However, the six-month time limit shall not apply to complaints brought by the Chancellor to the Faculty Senate Faculty Rights Board, nor to complaints of sexual harassment.

6.3.2 Response. Normally a respondent shall submit a written response to the hearing body within two weeks of receiving the complaint. However, responses to complaints filed before the Faculty Rights Board shall be filed in accordance with the time frames set forth in Faculty Senate Rules and Regulations 7.3.1, responses to complaints filed under the Code of Student Rights and Responsibilities shall be in accordance with the time frames established by the Vice Provost for Student Affairs, and responses to complaints handled in accordance with the Discrimination Complaint Resolution Process shall be filed in accordance with time frames set forth in University policy.

6.3.2.1 Contents. The response shall contain the respondent’s statement of the facts underlying the dispute, as well as any other defenses to the allegations in the complaint. The response shall also indicate the witnesses or other evidence relied on by the respondent, and copies of any additional documents relevant to the response shall be attached.

6.3.2.2 Copy to Complaining Party. The respondent shall provide a copy of the response to the complaining party. Upon receipt of the response, the chair of the hearing body shall verify that a copy of the response has been provided in accordance with this provision.

6.3.2.3 Waiver of Defenses. Failure to respond or to raise a particular defense in the response shall not prevent the raising of the defense at a subsequent hearing or appeal unless the complaining party is prejudiced thereby.

Section 4. Jurisdiction

Disputes involving the following subject areas shall be heard by the following bodies:

6.4.1 Disputes involving faculty members and questions of academic freedom, tenure rights, dismissal, appointment, promotion, reappointment, and non-reappointment:

6.4.1.1 Hearing. Faculty Rights Board. (University Senate Code Article XV. Section 3. Functions)

6.4.1.2 Appeal. None within the university. (Faculty Senate Rules and Regulations Article VII. Section 3.)

6.4.2 Disputes involving questions of faculty rights and responsibilities:

6.4.2.1 Hearing for Major Sanctions (censure, suspension, dismissal, and leave without pay). Faculty Senate Faculty Rights Board. (Faculty Code of Rights, Responsibilities, and Conduct, Article III. #4)

6.4.2.2 Hearing for Minor Sanctions (warning and restitution). Hearing Panel of the Judicial Board. (Faculty Code of Rights, Responsibilities, and Conduct, Article III. #4)

6.4.2.3 Appeal. An appeals panel of the Judicial Board may consider an appeal from a Judicial Board hearing pursuant to Section 6.7 of the University Senate Rules and Regulations, but no appeal is available within the university for hearings on major sanctions conducted by the Faculty Senate Faculty Rights Board. (Faculty Senate Rules and Regulations Article VII. Section 3)

6.4.2.4 Merit Salary. Disputes involving merit salary increases for faculty and unclassified staff shall be resolved through the Office of the Provost, and neither the Faculty Senate Faculty Rights Board nor the Judicial Board shall have jurisdiction to consider merit salary disputes either at a hearing level or on appeal.

6.4.3 Disputes involving alleged academic misconduct by faculty or students and alleged violations of student rights by faculty or staff:

6.4.3.1 Hearing. Appropriate unit level grievance procedure or Judicial Board hearing panel. Hearings shall be held at the smallest unit with jurisdiction that has adopted procedures pursuant to section 5.2.1 of the University Senate Rules and Regulations, or in the event that a grievance is filed against an administrator of that unit, the next larger unit. However, a Judicial Board hearing panel shall hear the dispute if:

a. the parties agree to hold the hearing before a judicial board hearing panel; or

b. either party petitions the Judicial Board Chair for a Judicial Board hearing, specifically alleging reasons why a fair hearing cannot be obtained at the unit level, and the Judicial Board Chair grants the petition. A copy of any such petition shall be made available to the opposing party, who shall have the opportunity to respond.

6.4.3.2 Appeal. An appeals panel of the Judicial Board may consider an appeal from either a unit level or Judicial Board hearing pursuant to section 6.7 of the University Senate Rules and Regulations. Larger units do not have jurisdiction to hear appeals from subordinate units.

6.4.3.3 KU Mediated/Online Courses. Students/Faculty may opt to participate in the hearing or appeal in person (at their own expense) or by conference call if the course is taken from a distance greater than 150 miles from Lawrence.

6.4.3.4 Professional Standards. When a state licensing or regulatory body has delegated to an academic unit the authority to enforce legally imposed professional standards, the Judicial Board shall not have jurisdiction to hold a hearing or consider an appeal from the application of those standards.

6.4.4 Disputes involving allegedly improper application of grading procedures:

6.4.4.1 Hearing. Appropriate unit level grievance procedure. Hearings shall be held at the smallest unit with jurisdiction that has adopted procedures pursuant to section 5.2.1 of the University Senate Rules and Regulations, or in the event that a grievance is filed against an administrator of the that unit, the next larger unit.

6.4.4.2 Appeal. An appeals panel of the Judicial Board may consider the appeal pursuant to section 6.7 of the University Senate Rules and Regulations.
6.4.4.3 **KU Mediated/Online Courses.** Students/Faculty may opt to participate in the hearing or appeal in person (at their own expense) or by conference call if the course is taken from a distance greater than 150 miles from Lawrence.

6.4.5 Disputes involving allegations of discrimination on the basis of race (including racial harassment), religion, color, sex (including pregnancy, sexual harassment, and sexual violence), disability, national origin, ancestry, status as a veteran, age, sexual orientation, marital status, parental status, gender identity, and gender equity:

6.4.5.1 **Investigation of complaint.** Office of Institutional Opportunity and Access. (See the University of Kansas Discrimination Complaint Resolution Process.) All individuals involved in the adjudication of sexual harassment complaints shall receive special training regarding such complaints.

6.4.5.2 **Appeal.** In accordance with the provisions of the Discrimination Complaint Resolution Process (http://policy.ku.edu/IOA/discrimination-complaint-resolution/#Appeals), parties may appeal to the administrative officer or body appropriate to the individual’s status within the University.

6.4.6 Summons or citation for violation of parking and traffic rules:

6.4.6.1 **Hearing.** Court of Parking Appeals. (Section 6.9 of the University Senate Rules and Regulations.)

6.4.6.2 **Appeal.** None within the University. (K.S.A. 74-3215)

6.4.7 Revocation of parking permit.

6.4.7.1 **Hearing.** Court of Parking Appeals (Section 13.3 (b) of the University Senate Code).

6.4.7.2 Appeal. An appeals panel of the Judicial Board may consider the appeal (Section 6.9.6 of the University Senate Rules and Regulations).

6.4.8 Disputes involving Library Fines:

6.4.8.1 **Hearing.** Library Appeals Board. (Section 13.7 of the University Senate Code.)

6.4.8.2 Appeal. None within the University.

6.4.9 Disputes involving alleged violations by a student of the Code of Student Rights and Responsibilities (nonacademic misconduct).

6.4.9.1 **Hearing.** Vice Provost for Student Affairs. (Procedures of the Office of the Vice Provost for Student Affairs.)

6.4.9.2 Appeal. The decision may be reviewed by an appropriate administrative officer and/or an appeals panel of the Judicial Board may consider the appeal pursuant to section 6.7 of the University Senate Rules and Regulations.

6.4.10 Disputes involving alleged violations by a student of the Student Senate Election Code.

6.4.10.1 **Hearing.** Student Election Commission (Student Senate Election Code, Sec. 412).

6.4.10.2 **Appeal.** An appeals panel of the University Judicial Board may consider the appeal pursuant to section 6.7 of the University Senate Rules and regulations. (Student Senate Election Code, Sec. 500).

6.4.11 **Disputes involving rights and responsibilities under the Family Educational Rights and Privacy Act ("Buckley Amendment."):**

6.4.11.1 **Hearing.** Vice Provost for Student Affairs (Procedures of the Office of Vice Provost for Student Affairs under Article 22, Section 4, of the Code of Student Rights and Responsibilities.)

6.4.11.2 **Appeal.** None within the University. (If a student believes the University is not in compliance with the Privacy Act, the student may file a complaint with the Family Policy Compliance Office of the U.S. Department of Education.)

6.4.12 Disputes involving alleged violations of Department of Student Housing policies and matters arising under Student Housing contracts shall be handled under the same procedures as violations of the Code of Student Rights and Responsibilities under 6.4.9.

6.4.13 Disputes involving classification as a non-resident student for fee purposes:

6.4.13.1 **Hearing.** Committee on Residence Status (Kansas Administrative Regulations, 88-2-3).

6.4.13.2 **Appeal.** None within the University (Kansas Administrative Regulations, 88-2-4).

6.4.14 Disputes involving assessment or refunds of tuition and fees:

6.4.14.1 **Hearing.** Appeals Committee appointed by the Provost.

6.4.14.2 **Appeal.** None within the university.

6.4.15 **Disputes involving employment-related issues of Unclassified Professional Staff members:**

6.4.15.1 **Review.** A formal review of the grievance will be conducted in accordance with the Grievance Procedures for Personnel Policies and Procedures, Unclassified Professional Staff, Office of the Provost and Executive Vice Chancellor (http://policy.ku.edu/provost/grievance-procedure-unclassified-professional-class).

6.4.15.2 **Appeal.** Upon request by either party, a three-person review panel appointed by the Provost or the Provost's designated representative will review the decision of the unit, relevant documents, and written statements by either party. The review panel shall prepare written recommendations which shall be advisory to the Provost, or, in cases of disputes within the area of the Chancellor, to the Chancellor. A statement of final disposition shall be issued by the Provost or Chancellor or his/her designee. The disposition is not appealable within the University [Grievance Procedures for Personnel Policies and Procedures, Unclassified Professional Staff (http://policy.ku.edu/provost/grievance-procedure-unclassified-professional-class)].

6.4.16 Disputes involving employment-related issues of Graduate Teaching Assistants:

6.4.16.1 Disputes shall be resolved through the grievance and appeal procedure set forth in the Memorandum of Agreement between The University of Kansas and The Kansas Board of Regents and The Kansas Association of Public Employees (Representing Graduate Teaching Assistants at the University of Kansas, Lawrence), so long as the agreement is in force.

**NOTE:** Policies related to University Support Staff performance can be found in the **University Support Staff Handbook**.
Section 5. Prehearing Procedures and Administration of the Grievance System

In any matter pending before the Judicial Board in the hearing or appeals phase, the Judicial Board Chair may take the following actions:

6.5.1 Additional Information

6.5.1.1 Completion of Complaint, Appeal, or Response. The Judicial Board Chair may seek from either party additional information necessary to ensure that a complaint, appeal, or response is complete. Any information so obtained shall be made available to the opposing party.

6.5.1.2 Other Necessary Information. The Judicial Board Chair may, with notice to the parties, request such additional information from either party or other members of the university community as he or she determines may be necessary to provide for a fair and accurate resolution of the dispute.

6.5.2 Jurisdictional Rulings

6.5.2.1 Request of a Party. When a party to a dispute has requested an initial hearing before the Judicial Board under Section 6.4.3.1(b) of the University Senate Rules and Regulations, the Judicial Board Chair shall rule on the jurisdictional request and inform the parties in writing of his or her decision and the reasons for it. If the Chair determines that a hearing on the jurisdictional request is necessary, the Chair may, at his or her discretion, schedule a hearing, with appropriate notice to the parties. The jurisdictional ruling of the Chair shall not be reviewable.

6.5.2.2 Other Hearing Bodies. If a jurisdictional question arises in a dispute pending before another hearing body under Section 6.4 of the University Senate Rules and Regulations, that body may request a jurisdictional ruling from the Chair of the Judicial Board. Any such ruling shall be considered binding on other hearing bodies within the university community, but may be reviewed by an appeals panel of the Judicial Board after a hearing on the dispute, provided that such an appeals panel would otherwise have jurisdiction under section 6.4 of the University Senate Rules and Regulations.

6.5.2.3 Choice of Forum. The Chair of the Judicial Board, the Office of the General Counsel of the University, the University Ombuds office, the Equal Opportunity Office, and the Office of Legal Services for Students shall be available to render advice on informal and formal means of dispute resolution and to assist in the identification of the hearing body (or bodies) with jurisdiction over the matter. The complainant’s choice of a hearing body is ordinarily final provided the hearing body has jurisdiction pursuant to section 6.4 of the University Senate Rules and Regulations. The selection of one hearing body shall preclude subsequent recourse to other procedures within the university unless the hearing body selected lacks jurisdiction.

6.5.3 Involuntary Dismissal and Summary Judgment

6.5.3.1 Dismissal Without a Hearing. The Judicial Board Chair or any Judicial Board panel adjudicating a grievance or appeal may dismiss involuntarily or by summary judgment, without a hearing and upon the pleadings alone, any grievance or appeal on the grounds that:

a. the grievance or appeal, or another grievance or appeal involving substantially the same underlying occurrence or events has already been, or is being, adjudicated by proper University procedures;

b. the grievance or appeal has not been filed in a timely fashion;

c. the Judicial Board lacks jurisdiction over the subject matter or any of the parties;

d. the grievance does not state a cause of action, that is, it fails to allege a violation of a University rule, or the appeal fails to state a valid ground for appeal;

e. the party filing the grievance or appeal lacks standing because he or she has not suffered a distinct injury as a result of the challenged conduct and has not been empowered to bring the complaint or appeal on behalf of the university, or

f. the party filing the grievance has been denied the right to file grievances pursuant to USRR 6.5.4.

6.5.3.2 Dismissals for Which a Hearing is Required. The Judicial Board Chair or any Judicial Board panel adjudicating a grievance may dismiss involuntarily or by summary judgment, after a hearing based solely on the grounds for dismissal, any grievance on the grounds that:

a. the grievance fails to allege an infringement of commonly accepted standards of behavior within the University community;

b. the grievance is frivolous, or was filed for malicious or harassing purposes.

6.5.3.3 Dismissal for Nonparticipation. If a party who has filed a grievance complaint (the complainant) repeatedly and purposefully refuses or fails to participate in any proceeding related to the complaint, any party against whom the complaint has been filed (the respondent) may petition the Judicial Board Chair for an order of dismissal, and, upon finding that the complainant has refused or failed to participate in any such proceedings, the chairperson shall enter an order in the proceedings dismissing the complaint involuntarily with prejudice, and with prejudice in that matter or case against the complainant. In making a decision on the petition for involuntary dismissal with prejudice, the Judicial Board Chair shall consider and review the record of the proceedings and may take whatever other action the chairperson deems appropriate to determine the facts concerning the complainant’s refusal or failure to participate.

6.5.3.4 Appeal of Dismissal

a. When a case is dismissed before an initial hearing on the merits of the complaint by the Judicial Board Chair or by a hearing panel under this section, the aggrieved party may appeal the dismissal to an appeals panel of the Judicial Board, provided an appeals panel would otherwise have jurisdiction over the case if a hearing on the merits of the dispute had been held. The appeal must be submitted in writing within 30 days after a grievance is dismissed. The appeals panel shall consider only the grounds for dismissal. An appeal from a dismissal by the Judicial Board Chair is not itself subject to dismissal by the Judicial Board Chair, with the exception of grievances dismissed under section 6.5.3.1(f) of the University Senate Rules and Regulations.

b. The dismissal of an appeal after a hearing on the merits is not appealable.

6.5.4 Abuse of Grievance Process

6.5.4.1 Cease and Desist Request. Whenever someone establishes a pattern of repeatedly filing frivolous grievances that harass colleagues and/or abuse the grievance system, the Chair of the Judicial Board should ask that person to desist.
6.5.4.2 **Recommendation to Provost.** In the event that the person fails to desist, the chair may recommend that the Provost deny the right to file grievances for a specified period of time not to exceed 5 years.

6.5.4.3 **Action of the Provost.** After reviewing the case, if the Provost disagrees with the Chair of the Judicial Board, the Provost shall so inform the chair and the complainant's grievances shall be duly processed. But in the event that the Provost concurs that the party has established a pattern of repeatedly filing frivolous grievances that harass colleagues and/or abuse the grievance system, the Provost may deny the right to file grievances for a specified period of time not to exceed five years.

6.5.4.4 **Review.** If the party in question wishes to contest the loss of right to file grievances, he or she may request a hearing before an appeals panel of the Judicial Board.

### Section 6. Hearing Phase

6.6.1 **Application.** This section applies to any case in which the Judicial Board holds an initial hearing.

6.6.2 **Selection of Panel.** After determining that the Judicial Board has jurisdiction, and that there is no basis for dismissing the case under section 6.5.3 of the University Senate Rules and Regulations, the Judicial Board Chair shall promptly designate a hearing panel as provided for in section 5.3.3 of the University Senate Rules and Regulations. Each side shall be entitled, within five days of being notified of the membership of the panel, to challenge any member of the hearing panel who has a conflict of interest or has been previously involved in the matter. The Judicial Board Chair shall rule on any such challenge, and if he or she finds good cause to remove the panel member, shall promptly designate a replacement.

6.6.3 **Transfer of Record.** Upon designation of the hearing panel, the Judicial Board Chair shall transfer the complaint, the response, any documentary evidence submitted by the parties or obtained under section 6.5.1 of the University Senate Rules and Regulations, and any relevant correspondence to the law member who will chair the hearing panel.

6.6.4 **Hearing Procedures.**

6.6.4.1 **Scheduling a Hearing.** The chair of the hearing panel shall schedule a hearing as soon as possible after receiving the record of the case from the Judicial Board Chair. Every effort should be made to schedule the hearing during regular working hours at a convenient time for the parties and the members of the hearing panel. However, if the chair of the hearing panel determines that no such time is available, he or she may schedule the hearing at any time he or she determines to be reasonable and appropriate.

6.6.4.2 **Presentation by Parties.** Each party shall have an equal opportunity to present evidence and arguments. The complaining party shall present his or her evidence or arguments first, followed by the responding party. The chair of the hearing panel may, in his or her discretion, place reasonable time limits on each party's presentation of evidence and arguments. The availability and scope of any rebuttal is within the discretion of the chair of the hearing panel.

6.6.4.3 **Admissibility of Evidence.** Each party shall have the right to introduce witnesses and documentary evidence but reasonable advance notice of such introduction must be given to the other party and to the hearing panel. Strict rules of evidence do not apply, but the chair of the hearing panel may exclude such evidence as he or she deems irrelevant, unnecessary, or unduly prejudicial. Statements or admissions made as part of the mediation process are not admissible.

6.6.4.4 **Recording of Hearings.** All Judicial Board hearings shall be recorded by means of audio tape. All such recordings shall constitute part of the record of the hearing and shall be under the custody and control of the chair of the hearing panel until transmitted along with the record to the Judicial Board Chair. Access to the audio tapes shall be restricted to the parties, their authorized representatives, the members of the hearing panel, the members of any panel considering an appeal from the hearing, and any parties or decision makers involved in a proceeding for abuse of the grievance process under section 6.5.4 of the University Senate Rules and Regulations in which the complaint addressed at the hearing is at issue. Transcripts may be made of the contents of an audio tape at the sole expense of the requesting party or by other agreement of the parties.

6.6.5 **Hearing Panel Decision.**

6.6.5.1 **Timing.** The hearing panel shall complete its hearing and prepare a recommendation within thirty days from the date on which the matter has been assigned to the panel. However, the chair of the hearing panel may extend this time limit for good cause.

6.6.5.2 **Written Decision and Record.** The hearing panel shall prepare a written decision that includes the panel's recommendation and a nontechnical statement of the factual and legal basis for the decision. The chair of the hearing panel shall submit the written decision to the Judicial Board Chair, who shall provide copies to the parties and to such administrative or supervisory personnel as are appropriate in light of the hearing panel's recommendation. The chair of the hearing panel shall also return the original record of the case, together with any additional documents and the tape recording of the hearing, to the Judicial Board Chair.

6.6.6 **Additional Procedures.** The Judicial Board may establish additional procedures to insure fairness and effectiveness of the hearing phase. Such procedures (and subsequent changes thereto) shall be submitted to the University Senate Executive Committee, the Provost, and the Chancellor for approval. The procedures shall insure prompt and fair handling of complaints but shall avoid the formalism of legal process. Copies of the procedures shall be supplied to all University offices to which they may be of interest.

### Section 7. Appeals Phase

6.7.1 **Scope of Application.** This section applies to any case in which an Appeals Panel of the Judicial Board reviews the decision of a unit level proceeding, Judicial Board hearing panel, or specialized tribunal.

6.7.2 **Initiation of Appeal and Response.**

6.7.2.1 **Filing and Content of Appeal.** Within thirty days following the rendering of a decision by any tribunal subject to review by an appeals panel of the Judicial Board under section 6.4 of the University Senate Rules and Regulations, a dissatisfied party (the appellant) may file a written appeal with the Chair of the Judicial Board. The appeal shall indicate the specific errors attributed to the hearing body and the grounds for appeal under section 6.7.3 of the University Senate Rules and Regulations. At the time of filing, the appellant shall provide the other party or parties with a copy of the appeal. The Judicial Board Chair shall verify that the other party or parties have received a copy of the appeal.

6.7.2.2 **Response.** The other party or parties in a case that has been appealed (the appellee(s)) under this provision may file a written response to the appeal within fourteen days of receiving the appeal. The appellee
shall provide a copy of the response to the appellant and to any other parties to the appeal. The Judicial Board Chair shall verify that the appellant has received a copy of the response. Failure to raise a particular defense in a response shall not prevent the raising of the defense in the appellate hearing unless the appellant is prejudiced thereby.

6.7.3 Grounds for Appeal. An appeal to the Judicial Board shall be determined on the basis of the record of the initial hearing conducted by the unit, the Judicial Board, or other hearing body with jurisdiction under section 6.4 (https://policy.ku.edu/governance/USRR/#art6sect4) of the University Senate Rules and Regulations. Unless otherwise provided by section 6.4 (https://policy.ku.edu/governance/USRR/#art6sect4) of the University Senate Rules and Regulations or other applicable provisions of the University Senate Code (http://policy.ku.edu/governance/university-senate-code), University Senate Rules and Regulations, Handbook for Faculty and Other Unclassified Staff (http://policy.ku.edu/provost/faculty-and-unclassified-staff-handbook), or state or federal law, an appeals panel may reverse or set aside the decision of the hearing body on the following grounds.

6.7.3.1 Failure to Follow Procedures. The decision of a hearing body may be set aside if the hearing body failed to follow required procedures. However, if the failure to follow procedures was harmless, that is, did not prejudice the appellant, the hearing body decision should be affirmed notwithstanding the procedural error. The burden shall be on the appellant to identify the prejudicial effects of any alleged procedural error.

6.7.3.2 Inconsistency with Applicable Provisions. The decision of a hearing body shall be set aside if applicable provisions of the University Senate Code, University Senate Rules and Regulations, Handbook for Faculty and Other Unclassified Staff, Board of Regents policies or procedures, or state or federal law require a contrary result.

6.7.3.3 Factual Determinations Not Supported by the Record. The decision of a hearing body may be set aside if it is not supported by substantial evidence in the record compiled at the hearing. For purposes of this provision, a decision is supported by substantial evidence if a reasonable person could find that the decision was justified on the basis of the evidence submitted at the hearing, with due regard for any contrary evidence in the record. The appeals panel should bear in mind the superior opportunity of the hearing panel to judge the credibility of witnesses.

6.7.3.4 Arbitrary and Capricious Decisions. In exceptional cases, the decision of a hearing body may be set aside if it is arbitrary, capricious, or an abuse of discretion. A decision is arbitrary and capricious or an abuse of discretion if it is based on improper considerations, entirely fails to consider an important aspect of the problem, or lacks a plausible explanation of the connection between the facts found and the recommendations made.

6.7.3.5 Review of Dismissal. In any case in which the dismissal of a grievance without a hearing on the merits under section 6.5.3 of the University Senate Rules and Regulations is appealed, the appeal shall be limited to the grounds for dismissal. If the case was dismissed without a hearing on the grounds for dismissal pursuant to section 6.5.3.1 of the University Senate Rules and Regulations, the appeals panel may consider the grounds for dismissal de novo; that is, it may reverse the dismissal and reinstate the grievance if it determines that the dismissal was in error.

6.7.4 Responsibilities of Judicial Board Chair

6.7.4.1 Dismissal of Appeal. Upon receipt of an appeal from a hearing panel decision, the Judicial Board Chair shall determine whether there is a basis for dismissal of the appeal under section 6.5.3.1 of the University Senate Rules and Regulations.

6.7.4.2 Compilation of Record: When an appeal has been filed, the Judicial Board Chair shall ensure that the record for appeal is complete. The record shall include the initial complaint and response, any other documentary evidence and correspondence from the initial hearing, the tape recording of the initial hearing (or a transcript thereof), the written decision of the unit level hearing panel or specialized tribunal whose decision is under appeal, and the appeal and response or responses. If the Judicial Board Chair determines that the record for appeal is incomplete or that necessary information is omitted from the record, he or she may request such information from the parties, the unit level hearing panel or specialized tribunal, or other relevant individuals.

6.7.4.3 Selection of Appeals Panel: After determining that there is a basis for an appeal, the Judicial Board Chair shall promptly designate an appeals panel as provided for in section 5.3.4 of the University Senate Rules and Regulations. Within five days of being informed of the membership of the panel, any party may challenge any member of the appeal panel who has a conflict of interest or has been previously involved in the matter. The Judicial Board Chair shall rule on any such challenge, and if he or she finds good cause to remove the panel member, shall promptly designate a replacement.

6.7.4.4 Transfer of Record: Upon selection of the appeals panel, the Judicial Board Chair shall transfer the record of the case to the law member who will chair the appeal panel.

6.7.5 Hearing on Appeal

6.7.5.1 Scheduling of Hearing. The chair of the appeals panel shall schedule a hearing as soon as possible after receiving the record from the Judicial Board Chair. Every effort should be made to schedule the hearing during regular working hours at a convenient time for the parties and the members of the appeals panel. However, if the chair of the appeal panel determines that no such time is available, he or she may schedule the hearing at any time he or she determines to be reasonable and appropriate.

6.7.5.2 Presentation of Parties. Each party to the appeal shall have an equal opportunity to present arguments to the appeals panel. The appellant shall present his or her arguments first, followed by the appellee(s). The chair of the appeals panel shall determine the length of presentation of the parties, and the opportunity for rebuttal, if any. The hearing on appeal is not an evidentiary hearing, and neither party shall be entitled to submit evidence. In exceptional cases, if the appeals panel determines that information not contained in the record is necessary for the resolution of the appeal, the panel may, with due notice to the parties, obtain such information in the form of testimony or documentary evidence.

6.7.5.3 Recording of Hearing. An audio recording shall be made of all hearings of Judicial Board Appeals Panels. All such recordings constitute part of the record of the appeal and shall be maintained by the chair of the appeals panel until transmitted along with the remainder of the record to the Judicial Board Chair. Access to the audio recordings shall be limited to the parties, their authorized representatives, the members of the appeals panel, and any parties or decision makers involved in a proceeding for abuse of the grievance process under section 6.5.4 of the University Senate Rules and Regulations in which the complaint addressed in the appeal is at issue. Transcripts may be made of the contents of an audio recording at the sole expense of the requesting party or by other agreement of the parties.
6.7.6 Decision on Appeal

6.7.6.1 Timing. The appeals panel shall complete its hearing and prepare a recommendation within thirty days from the date on which the matter was assigned to the panel. However, the chair of the panel may extend this time limit for good cause.

6.7.6.2 Written Decision and Record. The appeals panel shall prepare a written decision that includes the panel’s recommendation and a nontechnical statement of the basis for the decision. The chair of the appeals panel shall submit the written decision to the Judicial Board Chair, who shall provide copies to the parties and to such administrative and supervisory personnel as are appropriate in light of the appeals panel’s recommendations. The chair of the appeals panel shall also return the record of the appeal together with the tape recording of the hearing to the Judicial Board Chair.

6.7.6.3 New Hearing. If the appeals panel sets aside the hearing panel decision on one or more grounds, it may order that a new hearing be held. In exceptional cases, if the appeals panel determines that the proper resolution of the case is clear from the record on appeal, it may decide the merits of the case and make appropriate recommendations in its decision.

6.7.7 Additional Procedures. The Judicial Board may establish procedures to insure fairness and effectiveness of the appeals phase. Such procedures (and subsequent changes thereto) shall be submitted to the University Senate Executive Committee, the Provost, and the Chancellor for approval. The procedures shall insure prompt and fair handling of appeals but shall avoid the formalism of legal process. Copies of the procedures shall be supplied to all University offices to which they may be of interest.

Section 8. Other Powers and Responsibilities of Judicial Board Chair

6.8 General Authority

6.8.1 General Authority

6.8.1.1 Case Management. It shall be the responsibility of the Judicial Board Chair to ensure, to the best of his or her ability, that matters submitted to the Judicial Board are processed in a prompt and fair manner. In fulfilling this responsibility, the Judicial Board Chair shall have all the powers specified in the University Senate Code and the University Senate Rules and Regulations, as well as the inherent authority to take such reasonable steps as he or she determines to be necessary, provided that such steps do not unduly prejudice the rights of the parties and do not conflict with applicable provisions of the University Senate Code, the University Senate Rules and Regulations, the Handbook for Faculty and Other Unclassified Staff, Board of Regents policies and procedures, and other applicable rules, regulations, or law.

6.8.1.2 Information and Assistance. The Judicial Board Chair shall be available to provide information on the dispute resolution process and (1) the procedures for resolving grievances; (2) the applicable provisions of the University Senate Code, University Senate Rules and Regulations, Handbook for Faculty and Other Unclassified Staff, Student Code of Rights and Responsibilities, or other applicable law; and (3) their procedural rights in any matter covered by the procedures for conflict resolution.

6.8.2 Follow up and Reports

6.8.2.1 Results of Particular Proceedings. The Judicial Board Chair shall report the outcome of any mediation, hearing or appeals proceeding to the University Senate Executive Committee and to any University administrative office affected.

6.8.2.2 Inquiries to Responsible Administrators. It shall be appropriate for the Judicial Board Chair to inquire of any party, office or other body to whom a recommendation has been addressed by the Judicial Board as to the status of the implementation of such recommendation.

6.8.2.3 Annual Report. The Judicial Board Chair shall report annually to the University Senate Executive Committee on the workload and effectiveness of the Judicial Board and shall make such recommendations for changes in the University Senate Code and University Senate Rules and Regulations as he or she deems advisable.

6.8.3 Annotation of University Senate Code and Rules and Regulations

6.8.3.1 Compilation. The Judicial Board Chair shall compile an annotated version of the University Senate Code, the University Senate Rules and Regulations, and other provisions applicable in disputes arising under these procedures. The annotated version of applicable provisions shall include brief statements of all Judicial Board decisions interpreting a provision. These statements shall identify the provision in question, the interpretive issue, the resolution of the issue by the hearing or appeal panel in question, and the date of the decision, but should not include information about the parties or details of the matter in dispute.

6.8.3.2 Availability. A copy of the annotated version of the University Senate Code and the University Senate Rules and Regulations shall be maintained in the office of the Judicial Board and provided to the Office of the University General Counsel, as well as any unit or specialized tribunal that requests a copy. The annotation(s) respecting any provision shall be available upon request to any interested person. When the application of a provision that has been subject to a prior interpretation is at issue in any matter pending before the Judicial Board, the Judicial Board Chair shall provide copies of the pertinent annotation(s) to the parties and the members of the panel who will be deciding the case. Members of a unit level hearing panel or specialized tribunal may inquire of the Judicial Board Chair whether prior interpretations of relevant provisions exist, and the Judicial Board Chair shall provide copies of the annotation(s) reflecting any such interpretation.

6.8.3.3 Effect. Prior interpretations are not binding on subsequent decision makers, but decision makers should bear in mind that inconsistent interpretation of applicable provisions undermines the fairness and predictability of the dispute resolution process. In the event that inconsistent interpretations arise, the Judicial Board Chair shall inform the University Senate Executive Committee of the inconsistency and recommend changes in the applicable provision to clarify its meaning.

6.8.4 Monitoring of Grievance Activity and Recordkeeping

6.8.4.1 General. The Office of the Judicial Board shall compile and maintain records of grievance activity and formal conflict resolution throughout the University Community.

6.8.4.2 Sharing of Information Concerning Multiple or Successive Grievances. If it comes to the attention of the Judicial Board Chair, Judicial Board Hearing Panel, Unit level Hearing Panel, or Specialized Tribunal that a party to a grievance may have made multiple or successive filings before different hearing bodies in relation to substantially the same underlying occurrence or events, the Judicial Board Chair, Unit level Hearing Panel, or Specialized Tribunal may inquire of such other hearing bodies whether a grievance or complaint
involving the underlying occurrence or events is currently pending before or has been decided by that body, and the status of any such grievance or complaint. The disclosure of such information to the Judicial Board Chair, Judicial Board Hearing Panel, Unit Level Hearing Panel, or Specialized Tribunal shall not be considered a violation of USRR 6.1.2.

6.8.4.3 Maintenance of Records. The Office of the Judicial Board shall retain the records submitted to it for a period of at least six years. The Office of the University General Counsel and the parties, if possible, shall be informed before the destruction of the record of any hearing or appeal.

6.8.5 Recording of Proceedings. Audio recordings shall be made of all hearings and appeals. Such audio recordings shall be made under the custody and control of the law member who chairs the hearing or appeals panel and shall be forwarded immediately to the custody and control of the University Archives. Access to the audio recordings or any transcripts produced therefrom shall be restricted to the parties, their authorized representatives and the members of the appropriate hearing or appeals panel. A request shall extend the destruction/erasure date for another six month period and may be renewed. Transcripts may be made of the contents of the audio tape at the sole expense of the requesting party or by other agreement of the parties.

6.8.6 Inconsistent External Time Limitations. If, in connection with any allegation of misconduct in scientific/scholarly research or sexual harassment, federal regulatory bodies impose time limitations or requirements inconsistent with the requirements of this Section 6 (USRR 6.6) the federally imposed time limitations or requirements shall supersede the provisions of this section 6 (USRR 6.6).

Section 9. Procedures of the Court of Parking Appeals

6.9.1 Adoption of Procedures. The Court of Parking Appeals shall establish procedures for the fair and timely consideration of cases involving alleged violations of the University parking regulations. Such procedures (and subsequent changes thereto) shall be submitted to the chairperson of the Judicial Board and shall become effective thirty days following such submission unless previously returned by the chairperson of the Judicial Board for corrections or modifications. Procedures of the Court of Parking Appeals shall insure prompt and fair handling of appeals but shall avoid any unnecessary formalism. Copies of the procedures shall be supplied to the offices of University Governance, Provost, General Counsel, and Dean of the Law School, and to others upon request.

6.9.2 Initiation of Proceedings. Any charged party who is unwilling to pay the penalty fees of a citation issued for an alleged violation of University parking regulations may contest the citation to the Court of Parking Appeals.

6.9.2.1 The charged party shall, within 10 business days of issuance of the citation, submit a signed statement to the Parking & Transit Department giving his or her reasons for contesting the allegations and specifying the nature of the evidence he or she is prepared to produce to support his or her contest. The statement must include the charged party’s current address and telephone number.

6.9.2.2 The Parking & Transit Department shall forward the citation and the charged party’s statement to the Court of Parking Appeals within 10 business days. Upon receipt thereof, the Court shall process the contest of the citation in accordance with procedures established by the Court of Parking Appeals.

6.9.2.3 A charged party may request that he or she appear in person (personal appearance) or may have his/her case decided by the officers of the Court without argument or evidence beyond the citation and the charged party’s statement (ex parte).

a. Individuals requesting a personal appearance before the Court are not guaranteed a personal appearance. Should the Court determine that the written evidence received is sufficient and a personal appearance will not enhance the decision-making process, the case may be handled without a personal appearance before the officers of the Court. Charged parties requesting a personal appearance, when appropriate, shall be assigned a court date by the officers of the Court within 15 business days of the case being in the Court of Parking Appeals’ possession. Charged parties will receive notification of their court date from the Parking & Transit Department.

b. If the Court is not in session, the contest of a citation that requires a personal appearance shall be assigned a court date within twenty (20) days of the beginning of the next court session.

6.9.3 Consolidation of Proceedings. Cases concerning two or more alleged violations of University parking regulations in the name of a single charged party may be consolidated by the Court of Parking Appeals.

6.9.4 Court Proceedings. Court proceedings shall follow the procedures established by the Court of Parking Appeals. In general, proceedings are to be open to the public, but a hearing may be closed to all except the charged party, his or her representative(s), and the representatives of the University if so requested by a party, and if the hearing is closed in accordance with the Kansas Open Public Meeting laws.

6.9.4.1 The Court shall be held at the time and place designated in the notice sent to the charged party. If it is found necessary to change such time or place, the Court shall inform the parties within a reasonable time in advance of the rescheduled hearing.

6.9.4.2 Procurement of Witnesses. Each party to a proceeding shall have the responsibility of procuring the attendance of any witnesses.

6.9.4.3 Evidentiary Matters. Members of the Court of Parking Appeals shall have the authority to make final rulings on questions regarding the admissibility of evidence.

a. The Court may, by majority vote taken before the beginning of the proceedings, limit the amount of evidence to be received on any given point. In general, no witnesses will be permitted on the issue of a party’s character.

b. All evidence shall be presented by the parties or their representatives. No party or representative may address the Court except in the capacity of a witness called by a party, unless the Court grants such person permission to address the Court.

6.9.5 Review of Decisions by Court En Banc

6.9.5.1 Requests for review of decisions of the Court of Parking Appeals, other than parking permit revocations, shall be submitted to the Parking & Transit Department within ten (10) business days of the decision being rendered and shall be acted upon within another forty-five (45) business days of the beginning of the next court session.

6.9.5.2 The Court of Parking Appeals shall include in its procedures provisions for the fair and timely consideration of requests for review of
decisions rendered. Such review shall be limited to the record of the Court and no new evidence shall be considered.

6.9.5.3 If the officers of the Court grant review, it shall be scheduled to be heard by the Court En Banc within that semester or within ten (10) business days of the beginning of the next court session. The officers of the Court shall grant review if the case meets at least one of the following criteria: 1) the Court misapplied a Court En Banc decision in making its decision, 2) procedural error, 3) compelling policy considerations, 4) decision clearly erroneous in light of evidence, or 5) inadequate representation of counsel.

6.9.6 Parking Permit Revocations

Court of Parking Appeals decisions with respect to parking permit revocations may be appealed to the University Judicial Board.

6.9.7 Recording of Proceedings

Records of the Court shall be taken by audio recording and such records shall remain on file in the office of the Court of Parking Appeals. Access to such records shall be restricted to the parties, their authorized representatives, the members of the Court of Parking Appeals, and the University Judicial Board. All records of hearings shall be kept for one full year. (Link (https://policy.ku.edu/governance/USRR/#ArticleVI))

**Incomplete (USRR 2.2.3 and USRR 2.3.3)**

2.2.3 The letters W and I may be given. The letter I shall indicate incomplete work, such as may be completed without re-enrollment in the course. The letter W shall indicate withdrawal for which no credit or grade point is assigned.

2.2.3.1 The letter I shall not be used when a definite grade can be assigned for the work done. It shall not be given for the work of a student in any course except to indicate that some part of the work has, for reasons beyond the student’s control, not been done, while the rest has been satisfactorily completed. At the time an I is reported on the electronic roster, the character and amount of work needed, as well as the date required for completion and lapse grade if further work is not completed by this date, should be indicated.

2.2.3.2 A student who has an I posted for a course must make up the work by the date determined by the instructor, in consultation with the student, which may not exceed one calendar year from the original grade due date for the semester in which the course is taken, or the last day of the term of graduation, whichever comes first. An I not removed according to this rule shall automatically convert to a grade of F or U, or the lapse grade assigned for the work done. It shall not be given for the work of a student only after the University has recouped any direct costs borne by the University for equipment and materials and costs paid to third parties. The portion of the revenues to be shared among multiple creators shall be shared equally unless otherwise agreed in writing by the creators.

2.2.3.3 Changes beyond a year or extensions to the time limit may be granted by the dean’s representative upon submission of a petition from the student containing the endorsement of the course instructor who assigned the I grade, or the department chairperson if the instructor is unavailable. After the I grade is converted to a grade of F or U, the grade may only be changed in accordance with USRR Article II, Section 3.

2.2.3.4 No graduate student will be allowed to take oral comprehensive exams if an I grade is currently listed on the student’s transcript. (Link (https://policy.ku.edu/governance/USRR/#art2sect2para3))

2.3.3 In the most extreme and unusual circumstances a student may petition to either:

a. withdraw from all the courses in which he/she was enrolled. In this case a properly constituted committee from the school or College in which he/she was enrolled may assign the letter W in all courses of that semester. The faculty members (s) in charge of the course(s) need not be consulted.

b. if the student is asking for selective relief in a course in which he/she was enrolled, a properly constituted committee from the school or College in which the course was taken may assign, after consultation/concurrence with the faculty member in charge of the course, the letter I, incomplete, or W, withdrawal. If the incomplete is assigned, it is to be in accordance with University Senate Rule 2.2.3. The work necessary to complete the course and remove the incomplete is to be determined by the faculty member in charge of the course. If the faculty member in charge of the course is unavailable or otherwise unable to provide a regime of work to complete the course, the department will take responsibility to determine the required work.

Each course is to be considered separately but the same committee may consider more than one course at the discretion of the dean of the school responsible for the course. (Link (https://policy.ku.edu/governance/USRR/#art2sect3para3))

**Intellectual Property Policy for the Lawrence Campus**

When revenues are to be shared, the creator(s) shall obtain his/her share only after the University has recouped any direct costs borne by the University for equipment and materials and costs paid to third parties. The portion of the revenues to be shared among multiple creators shall be shared equally unless otherwise agreed in writing by the creators.

1. General Copyright Policy

The ownership of the various rights associated with copyright is dependent upon the specific type of intellectual property. The University shall assert limited ownership of some of the various rights as set forth below. Since the University has a fiduciary responsibility for the appropriate use of state funds, unless otherwise provided for under this policy, all rights associated with works produced as “work made for hire” or other works that make “substantial use” of institutional resources belong to the University. For purposes of this policy, “work made for hire” should be as defined by the American Association of University Professors (AAUP) Statement on Copyright. "Substantial use" means that the creator receives more than normal support for the project or receives time and/or resources specifically dedicated to the project.

For the Kansas Geological Survey and the Kansas Biological Survey, which have separate statutory authority for preparation of reports, maps, or other documents, ownership of intellectual property developed in the course of work for the unit shall be determined pursuant to the authorizing statute. Ownership of other work shall be determined pursuant to this policy.

a. Mediated Courseware

For purposes of the University Intellectual Property Policy, the phrase “mediated courseware” means: course materials that (1) enable instructors to rely exclusively or substantially on non-classroom contact hours for instruction, 2) make extensive use of technology, including but not limited to video conferencing,
streaming media, and similar technologies and (3) potentially could permit students from other institutions to access courses offered by the University of Kansas upon payment of a specified fee. The phrase "mediated courseware" does not include course material prepared by an instructor that makes use of the Internet for delivery or presentation, unless all of the above criteria are met.

i The University shall have limited ownership or control rights for mediated courseware as specified below:

1. **Self-initiated mediated courseware.** When employees develop mediated courseware without specific direction by the University, unless otherwise agreed, the ownership of the courseware shall remain with the employee. Normally, no royalty, rent or other consideration shall be paid to the employee when that mediated courseware is used for instruction at the University and such mediated courseware shall not be sold or modified without the consent of the creator(s). The mediated courseware shall not be sold, leased, rented or otherwise used in a manner that competes in a substantial way with the for-credit offering of the University unless that transaction has received the approval of the Provost and Executive Vice Chancellor. Should approval be granted to offer the course outside of the University, the creator shall reimburse the University for substantial use of institutional resources from revenues derived from the transaction offering the course.

2. **Institution-directed mediated courseware.** When the University specifically directs the creation of mediated courseware by assigning one or more employees to develop the mediated courseware and supplies them with materials and time to develop the mediated courseware, the resulting mediated courseware belongs to the University and the University shall have the right to revise it and decide who will utilize the mediated courseware in instruction. The University may specifically agree to share revenues and control rights with the employee.

ii Mediated courseware when judged by the creator(s) to have commercial value shall be reported to a designee of the Provost and Executive Vice Chancellor. The report shall contain a description of the mediated courseware. Mediated courseware judged by the creator(s) not to have commercial value shall be considered reported when used in a University of Kansas course.

Procedure: When the University directs employees to develop mediated courseware, a contract should be agreed to between the University of Kansas and the faculty member(s) before the project begins. The contract should contain clear statements regarding the following:

1. Definition of the project and participants
2. Time commitment
3. Compensation, such as release time, summer salary, etc.
4. Ownership of derivative works
5. Revenue sharing
6. Conditions of revision
7. Credits to creators

8. Procedures for creating an agreement on instructional uses by other institutions or licensing should those conditions warrant.

b. Scholarly and Artistic Works
Notwithstanding any use of institutional resources or "work made for hire," the ownership of textbooks, scholarly monographs, trade publications, maps, charts, articles in popular magazines and newspapers, novels, nonfiction works, supporting materials, artistic works, and like works shall reside with the creator(s) and any revenue derived from their work shall belong to the creator(s). Except for textbooks, the University shall have royalty-free use of the work within the University, unless otherwise agreed in writing.

c. Manuscripts for Academic Journals
i Notwithstanding any use of University resources or "work made for hire" the ownership of manuscripts for publication in academic journals shall reside with the creator(s) and any revenue derived from their works shall belong to the creator(s).

ii If the manuscript is to be published, the creator(s) shall request the right to provide the University with a royalty-free right to use the manuscript within the University in its teaching, research, and service programs, but not for external distribution, and, if successful, the creator(s) shall grant such right to the University.

Procedure: Upon acceptance of the manuscript, the University will provide a royalty-free request form to be sent to the publisher by the creator. The creator’s responsibility for this policy ends with the submission of the form.

iii Upon the establishment of national governmental or nonprofit entities whose purpose is to maintain in an electronically accessible manner a publicly available copy of academic manuscripts, the Kansas Board of Regents will review each entity and upon determination that providing the manuscripts will not jeopardize the publication of articles or infringe on academic freedom, require the creator(s) to provide to the appropriate entity a limited license for the use of each manuscript.

d. Copyrightable Software
The rights to copyrightable software with an actual or projected market value in excess of $10,000 annually, except software included in computer-mediated courseware, shall be determined pursuant to the Board's Patent and Copyrightable Software Policy (II.A.8.b).

Procedure: The University will provide a form for disclosing copyrightable software that a reasonable person would believe to have commercial value. The University will establish a procedure for normally rendering a decision within 45 days.

e. Student Academic Creations
The ownership of student works submitted in fulfillment of academic requirements shall be with the creator(s) with the following exception: upon request of the creators, the University shall determine ownership of works created from research or development activities that are collaborative efforts involving students, faculty or staff, or spanning several semesters. The student by enrolling in the University gives the University a nonexclusive royalty-free license to mark on, modify, retain the work as may be required by the process of instruction, or otherwise handle the work as set out in the University’s
Intellectual Property Policy or in the course syllabus. The University shall not have the right to use the work in any other manner without the written consent of the creator(s). Where the creation is part of any ongoing research or development project, the involved faculty or staff shall have the right to use and to modify the creation for use within that project and related research projects without additional consent of the creator(s).

Procedure: A statement on accessibility to the University policy on intellectual property will be inserted in documents accessible to students.

2. Patent and Copyrightable Software Policy

Patents obtained on inventions or the ownership of copyrightable software with an actual or projected market value in excess of $10,000 annually resulting from University of Kansas-sponsored research shall be retained by the University or may be assigned to the University of Kansas Center for Research, Inc., (KUCR) for the purpose of obtaining patents on inventions, receiving gifts, administering or disposing of such patents, and promoting research and the development of intellectual property at the University of Kansas by every proper means.

The following regulations shall be followed with respect to inventions or software:

a. Anyone who conceives an invention or who develops copyrightable software that is not included in mediated courseware resulting from a research project sponsored by the University shall report the matter to the Vice Chancellor for Research and President of the University of Kansas Center for Research, Inc., or designee, on an Invention Disclosure form (http://www.kuic.ku.edu/sites/default/files/KUIC_Invention_Disclosure_Form.pdf), available from the University of Kansas Center for Research, Inc. Following receipt of the Invention Disclosure Form, the University of Kansas Center for Research, Inc., will schedule a meeting with the creators to discuss the disclosed invention.

b. If the University or the University of Kansas Center for Research, Inc., notifies the inventor that the invention does not warrant commercialization, then the inventor is free to patent it. The inventor shall be notified within 180 days of the date of submission of the invention disclosure to the University of Kansas Center for Research, Inc., that KUCR has begun to proceed with commercialization or that he or she is free to obtain and exploit a patent or other intellectual property in his or her own right. In such case, however, the University does not relinquish its right to publish any of the data obtained in the research project. If the University or the University of Kansas Center for Research, Inc. decides not to further the use of the patent or copyrightable software, it shall assign all other rights therein to the creator(s). Procedure: Upon making a decision that the invention does not warrant commercialization, the University or the University of Kansas Center for Research, Inc., shall notify the inventor(s) in writing that they are assigned the rights therein upon execution of a University of Kansas Center for Research, Inc., Technology Release form.

c. When any revenue is obtained by or on behalf of the University or the University of Kansas Center for Research, Inc., from the commercialization of any technology, including royalties, license fees or other charges based on any patent or copyrightable software, one-third of revenues shall be paid directly to the inventor or creator(s) and one third shall be paid to the department or center to which the inventor or creator(s) belongs, per the approved Technology Transfer Revenue Distribution Policy (http://policy.ku.edu/research/technology-transfer).

Revenue sharing shall begin only after the University or the University of Kansas Center for Research, Inc. recoups costs paid in support of obtaining revenue from the invention, including costs of patents.

d. The remainder of any revenue mentioned in Paragraph 3 shall be used to sponsor further research and research-related activities on behalf of the University or the University of Kansas Center for Research, Inc.

e. In case of cooperative research sponsored in part by an outside corporation or individual, a written contract shall be made between the University or the University of Kansas Center for Research, Inc. and the cooperating agency. This contract should include a statement of policy substantially equivalent to that outlined below: It is agreed by the parties to this contract that all results of experimental work, including inventions, carried on under the direction of the scientific staff of the University of Kansas, belong to the University of Kansas or at the discretion of the University of Kansas to the University of Kansas Center for Research, Inc., and to the public and shall be used and controlled so as to produce the greatest benefit to the public. It is understood and agreed that if patentable inventions or copyrightable software grow out of the investigation and such inventions or software have commercial value, the cooperating agency shall receive preferential consideration as a prospective licensee, with a view to compensating said cooperating agency in part for the assistance rendered in the investigation.

It is further agreed that the name of the University of Kansas or the University of Kansas Center for Research, Inc., shall not be used by the cooperating agency in any advertisement, whether with regard to the cooperative agreement or any other related matter.

f. In case of a research project where it is proposed that all costs including overhead, salary of investigator, reasonable rent on the use of equipment, etc., are paid by an outside party, the outside party and the University or the University of Kansas Center for Research, Inc., shall negotiate the appropriate assignment of all patent or copyrightable software rights prior to the provision of any funding by the outside party. The University shall reserve the right to publish all data of fundamental value to science and technology. The educational programs of students, including publication of theses, dissertations, and papers, will be given highest priority when students participate in externally funded research.

g. Changes in the above policies may be made by the University to conform to the requirements of the United States Government when contracting with the United States Government or a Federal Government Agency.

3. Trademark Policy

The University reserves the right to control and protect the trademark and service marks of the University. See Trademark Licensing Policy (http://policy.ku.edu/provost/trademark-licensing-policy).

4. Institutional Procedures

The University shall establish procedures that require employment contracts and course catalogs or syllabi to state that the employee or student is subject to the Intellectual Property Policy of the University...
and to resolve questions concerning intellectual property rights and any disputes that develop under this policy. Final decisions on disputed matters will be made by the Chancellor or designee and shall constitute final University action.

Procedure: The following statement will be included in the graduate and undergraduate catalogs: "All enrolled students are subject to the Board of Regents and University Intellectual Property Policies.

1 The University of Kansas, Lawrence, will be guided specifically by that portion of the AAUP 1999 Statement on Copyright (AAUP Policy Documents & Reports, Tenth Edition, p.215, lines 15-21), that states, "Works created as a specific requirement of employment or as an assigned institutional duty that may, for example, be included in a written job description or an employment agreement, may be fairly deemed works made for hire. Even absent such prior written specification, ownership will vest in the college or university in those cases in which it provides the specific authorization or supervision for the preparation of the work. Examples are reports prepared by a dean or by the chair or members of a faculty committee, or college promotional brochures prepared by a director of admissions." (Link [http://policy.ku.edu/provost/intellectual-property-policy])

Recorded Evaluation of Student Performance (USRR 2.1)

2.1.1 The evaluation of student performance shall be based upon examinations, written papers, class participation and such other requirements as the instructor in each course may determine.

2.1.2 Information about the basis for evaluating students' performance and about the requirements that students must fulfill shall be made available to students, in print or electronic format by the 10th class day of the semester or, for summer or short courses, by the 5th class day. This requirement does not apply to discussion sections or labs for which a separate grade is not given, or to courses that meet by appointment, such as thesis, dissertations, directed studies, and directed projects. Students who are not in class when such information is provided are responsible for knowing it. Students are also responsible for subsequent announcements about course content and grading policies. This information should not be considered a contract; the information may be revised as the course progresses, provided students are given timely notice of such revisions.

2.1.3 The faculty of the College or a school may prescribe conditions under which individual students may be exempted from final examinations, provided that such exemption is based on grades received prior to the time of the final examination.

2.1.4 In cases where part of a class grade is based on attendance, a student shall not be penalized for absence from regularly scheduled class activities which conflict with mandated religious observances. In cases of conflicts between regularly scheduled class activities and mandated religious observances, the student is responsible for initiating discussion with the instructor to reach a mutually acceptable solution.

2.1.5 The evaluation of student performance is the responsibility and privilege of the faculty. If this responsibility is delegated to a Teaching Assistant or an Assistant Instructor, the faculty member or members in charge of the course retain the right to assign the final course grade. (Link [http://policy.ku.edu/governance/USRR/#art2sect1])

Nondiscrimination, Equal Opportunity and Affirmative Action Policy

As a premier learning and research institution, the University of Kansas must continuously address issues of diversity and multiculturalism. Every member of the university community is expected to engage in action that leads towards the development of a more democratic and inclusive community. Proactive efforts towards increasing diversity and the elimination of discrimination are necessary in our university.

In accordance with Titles VI and VII of the Civil Rights Act of 1964, the Equal Pay Act of 1963, the Age Discrimination in Employment Act of 1967, the Age Discrimination Act of 1975, Executive Order 11246, Title IX of the Education Amendments of 1972, Section 503 and 504 of the Rehabilitation Act of 1973, The Americans with Disabilities Act, the Vietnam Veterans Readjustment Assistance Act of 1974, the Jobs for Veterans Act of 2002, the Kansas Acts Against Discrimination and all other applicable civil rights and nondiscrimination statutes, the University of Kansas prohibits discrimination. Specifically, the University of Kansas prohibits discrimination on the basis of race, color, ethnicity, religion, sex, national origin, age, ancestry, disability, status as a veteran, sexual orientation, marital status, parental status, gender identity, gender expression and genetic information in the University's programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Executive Director of the Office of Institutional Opportunity and Access, IOA@ku.edu, 1246 W. Campus Road, Room 153A, Lawrence, KS, 66045, (785)864-6414, 1049 Miller Building, 3901 Rainbow Blvd. Kansas City, Kansas, 66160, (913)588-5048, 711 TTY.

The University of Kansas is committed to the full participation of previously excluded or neglected classes of people. Thus, it is also the policy of the university to prohibit discrimination on the basis of sexual orientation, marital status, parental status, gender identity, and gender expression. The university’s nondiscrimination policy extends to employment practices, conditions of employment, personnel actions and all other educational programs and activities of the university and its affiliates. It also extends to any retaliatory actions by an individual and his/her associates that may arise as a result of a discrimination complaint. Leaders in the university community continuously examine all areas of the institution, make policy decisions, and implement strategies to eliminate and prevent discrimination wherever necessary. Reports of discrimination shall be evaluated promptly and acted upon in the manner deemed necessary by the appropriate faculty, staff, and administrators and as prescribed by the appropriate grievance procedure.

Equal Opportunity

The University of Kansas is also proud of its goal to help all individuals realize their potential. To this end, the university is committed to providing an equal opportunity for all qualified individuals to be considered for employment, benefits and conditions of employment, educational programs and activities, regardless of race, religion, color, ethnicity, sex, disability, national origin, ancestry, age, status as a veteran, sexual orientation, marital status, parental status, gender identity, gender expression, or genetic information. University leaders and supervisory personnel shall recruit, hire, train and promote persons in all job titles utilizing only valid requirements related to the position functions. A university community that provides equal opportunity in hiring and all conditions of employment will make significant strides towards the elimination of discrimination. Thus, the University of Kansas applauds
every effort to create a positive working and learning environment for all individuals.

**Affirmative Action**

In addition to providing a discrimination-free community and equal opportunity for all persons, the university is committed to taking specific, result-oriented steps to increase the number of historically underrepresented persons and increase overall diversity. Cultural and intellectual diversity are critical components of premier learning communities. Thus, the university will actively recruit and encourage applications from underrepresented group members and will endeavor to provide a positive and supportive environment for members of these groups.

The university shall monitor its efforts to increase diversity through its Affirmative Action Plans. The university's Plans shall outline strategic initiatives and set goals to increase the representation of underrepresented group members.

Paramount to the success of the affirmative action program are the actions of university leaders. University officials at all levels are expected to establish a plan and implement procedures that help to meet the university's goals. The Office of Institutional Opportunity and Access staff are charged with the responsibility of responding to complaints of discrimination, monitoring university procedures regarding equal opportunity, setting goals, and monitoring and evaluating the university's progress towards its affirmative action goals. (Link [http://policy.ku.edu/IOA/nondiscrimination])

**Posthumous Award of Degrees**

In order to recognize the achievement of students who have died, the University of Kansas may grant undergraduate, graduate and professional degrees posthumously. This policy applies to deceased students who were in good academic standing at the time of death and enrolled for their final semester at the University of Kansas, as determined by the dean of the school or college. Requests for posthumous degrees must be initiated by the student's academic department and approved by the dean of the school or college conferring the degree. Each case will be determined on its own merits.

The dean of the school or college posthumously conferring the degree should contact the Office of the University Registrar to confirm the correct information for the degree to be conferred, notify the Vice Provost for Academic Affairs, and coordinate with the Office of the Chancellor for notification of the family. Posthumous degrees are conferred during the semester in which the student was expected to graduate. The Chancellor informs the student's family in writing of the posthumous award of the degree. (Link [http://policy.ku.edu/provost/posthumous-award-of-degrees])

**Credit by Examination (FSRR 4.4)**

4.4.1 Credit may be granted to a student for work done by private study, or in occupational or technical experience, by passing an examination or by submitting evidence that the studies pursued or the skills acquired are equivalent to but not necessarily the same as those acquired in courses offered at the University of Kansas.

4.4.2 An application for such an examination may be obtained from the University Registrar and must be approved by the Dean of the College or the school and the chairman of the department concerned. A report of the examination taken, showing the hours of credit to be granted and the grade awarded, shall be signed by the professor giving the examination, the chairperson of the department and the Dean of the College or school and forwarded to the University Registrar for evaluation and for recording on the permanent record.

4.4.3 A request for credit which is not to be based on an examination must be supported by extensive evidence of the work done and must be submitted to the department concerned for evaluation. Each unit of credit which has the approval of the department must be submitted to the Dean and the academic policies committee of the proper school or the College for final approval of the amount of credit the student is to receive. Information regarding the number of hours of credit to be granted and the grade to be awarded shall be forwarded to the University Registrar for posting to the permanent record.

4.4.4 The grade to be awarded for satisfactory performance on examinations or other work evaluated under the terms of this section will be determined by the department and the faculty member administering the examination, in consultation. At their discretion, the grades of A, B, C, or D may be used to indicate varying degrees of achievement, or the grade of + (credit by examination) may be used to indicate satisfactory
performance where no further differentiation is desired. No record shall be made of an unsatisfactory attempt.

4.4.5 Examinations administered by recognized national testing organizations may be used to secure credit at the University of Kansas. Each such examination must be submitted to the academic unit responsible for instruction in subject matter within the purview of the examination. This unit (department, school, College, or area) will determine whether the examination may be used for credit, the amount of credit to be allowed, the grading system to be employed (within the policies established in Section 4.4.4), and the minimum score necessary to obtain such credit. The transcript entry for each such award of credit shall identify the examination taken and, in addition to the grade, will record the percentile rank or other performance index used by the organization that grades the examination.

The following regulations shall govern the use of the College-Level Examination Program (CLEP) of the College Entrance Examination Board in the institutions governed by the State Board of Regents. The extent to which the program is utilized by any institution is a matter of institutional prerogative, but credit awarded by an institution in conformity with this policy shall be transferable to all other institutions in the state system.

Students who have taken CLEP examinations prior to enrollment must submit an official CLEP transcript. The permanent academic record of the student shall indicate which credit was earned by CLEP examination. Credit earned through standardized tests such as CLEP shall not be included in the computation of the instructional base of Regent’s institutions. One-half the credit hours earned through campus-developed and administered tests may be included in the instructional base. (Link (http://policy.ku.edu/governance/FSRR/#art4sect4))

Limitations on Credit Allowed (FSRR 4.5)

4.5.1 To obtain a Bachelor’s degree from the University of Kansas, a student shall earn the last 30 hours of credit for a degree by resident study as defined in Section 4.1. above. A student may petition his or her dean for a waiver of this rule. (Link (http://policy.ku.edu/governance/FSRR/#art4sect5))

Transfer Coursework, Minimum Grade and GPA Calculation

Minimum Grade for Transfer Credit

Transfer credit will not be awarded for courses in which a grade of D+ and below (or the equivalent grade) was earned.

If the course is otherwise transferable, grades of D+, D, D−, and F (or the equivalent grades) are used to calculate the cumulative transfer GPA.

Grades from all graded coursework (A-F), without respect to transferability, will be used to calculate the transfer admissions GPA for all entry terms prior to summer 2016. For entry terms summer 2016 and following, the cumulative transfer GPA will be used to determine admissibility.

If the course is otherwise transferable, transfer credit will be awarded for courses with grades of satisfactory/unsatisfactory, pass/fail, credit/no credit and similar. Students should be aware that some degree programs at KU may require that the sending institution’s policy on credit/no credit align with KU’s policy requiring a grade of C or higher for credit in order for the course to meet degree requirements.

Grades of satisfactory/unsatisfactory, pass/fail, credit/no credit and similar will not count in computing the transfer admissions or cumulative transfer grade point average

Calculation of Transfer Admissions GPA

The transfer admissions GPA is calculated by dividing the grade points earned in all coursework by the cumulative transferable graded (A-F) credit hours.

If a student repeats a course at the same institution, KU will honor the course repeat policy in effect at the institution issuing the transcript. If a student repeats a course taken at one institution with an approved equivalent course from another institution, both grades will be used to calculate the transfer admissions GPA. Credit will be awarded only once for successful completion of a course and only the instance of the best grade for a transferable repeated course will count toward degree requirements.

Grades of satisfactory/unsatisfactory, pass/fail, credit/no credit and similar will not count in computing the admissions grade point average.

Calculation of Cumulative Transfer GPA

The cumulative transfer GPA is calculated by dividing the grade points earned in all transferable coursework by the cumulative transferable graded (A-F) credit hours.

If a student repeats a course at the same institution, KU will honor the course repeat policy in effect at the institution issuing the transcript. If a student repeats a course taken at one institution with an approved equivalent course from another institution, both grades will be used to calculate the cumulative transfer GPA. Credit will be awarded only once for successful completion of a course and only the instance of the best grade for the repeated course will count toward degree requirements. (Link (http://policy.ku.edu/admissions/transfer-coursework))
Resources

• Academic Achievement and Access Center (http://www.achievement.ku.edu)
• Admissions (http://www.ku.edu/admission)
• Advising (http://advising.ku.edu)
• Disability Resource Center (http://disability.ku.edu)
• Edwards Campus (http://edwardscampus.ku.edu)
• Enroll & Pay (https://sa.ku.edu/psp/csprd/?cmd=login&languageCd=ENG&)
• Finals Schedule (http://registrar.ku.edu/exams)
• Financial Aid (http://affordability.ku.edu)
• GPA Calculator (http://degreeprogress.ku.edu/gpa)
• Graduate Studies (http://graduate.ku.edu)
• Honors Program (http://honors.ku.edu)
• Housing (http://housing.ku.edu)
• International Students (http://iss.ku.edu)
• Libraries (http://lib.ku.edu)
• Math help room (http://www.math.ku.edu/academics/kap/contact/help-room.html)
• Medical Center (http://www.kumc.edu)
• Online Courses (http://online.ku.edu)
• Policies (http://policy.ku.edu)
• Registrar (http://registrar.ku.edu)
• Safety (http://www.ku.edu/safety)
• Scholarships (http://affordability.ku.edu/scholarships)
• Search Class Sections (https://classes.ku.edu/Classes/ExternalDisplay.action)
• Textbooks (http://www.kubookstore.com/c-707-textbooks.aspx)
• Tuition & fees (http://affordability.ku.edu/costs)
• Tutoring (http://tutoring.ku.edu)
• Writing Center (http://writing.ku.edu)
Architecture, Design & Planning

Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your advisor (http://www.advising.ku.edu) for details). Other years’ catalogs:

**Architecture** (p. 59)
- Master of Architecture (5-year) (p. 60)
- Bachelor of Arts in Architectural Studies (p. 64)
- Master of Architecture (3-year) (p. 73)
- Doctor of Philosophy in Architecture (p. 75)

**Design** (p. 76)
- Bachelor of Fine Arts in Design (p. 86)
- Master of Arts in Design with a concentration in Design Management (p. 93)
- Master of Arts in Design with a concentration in Environmental Design (p. 94)
- Master of Arts in Design with a concentration in Interaction Design (p. 95)

**Urban Planning** (p. 96)
- Master of Urban Planning (p. 99)

**Introduction**

The School of Architecture, Design and Planning offers undergraduate and graduate degree programs for students interested in a variety of design-based professions. The School's three departments-Architecture, Design and Urban Planning-share this common dedication to the professional education of students. Degree programs in all three departments emphasize the mastery of appropriate skills, technologies and bodies of knowledge as well as the development of critical thinking and creative problem-solving abilities. Our faculty are dedicated to educating students who will excel in their professional paths or career lines.

The School's students share a common interest, as well, in the design and construction of buildings, environments, objects and visual forms of communication. They take courses that incorporate knowledge and theory related to sustainability and sustainable design, to human wellness and the creation of healthy environments, places and lifestyles, and to the design of client- or user-oriented buildings, places, objects and communications. They have many unique opportunities for interdisciplinary course work, service learning and study abroad in the School's degree programs.

**Facilities**

The School of Architecture, Design and Planning is at the western end of Jayhawk Boulevard on the Lawrence campus. It occupies several large adjacent buildings with additional facilities in Lawrence and Kansas City. The school has been headquartered in Marvin Hall since its founding. The main administrative offices are there along with the departmental offices for Architecture, Design and Urban Planning. The Architectural Resource Center and Hatch Reading Room are in Marvin Hall along with 18 design studios, several classrooms, offices for architecture and planning faculty, woodworking and metal shops, three computer labs, and critique spaces on each floor. In 2014 the School’s Studio 804 completed design and construction of a LEED Platinum, 120-seat auditorium, critique space and addition to Marvin Hall known as the Forum. It provides a central gathering area within the School.

Snow Hall, directly across Jayhawk Boulevard from Marvin Hall, contains 6 architecture studios and a number of faculty and staff offices. An open-access computer lab and a well-equipped model-building shop are in Snow Hall, along with a large critique and display area for student work. Marvin Studios, formerly known as Broadcasting Hall when it housed the campus radio station, is just behind Marvin Hall. It includes studios as well as robotics, laser-cutter, acoustics and various other digital fabrication labs as well as faculty offices.

The school’s Design-Build Center is in the East Hills Industrial Park on Highway K-10 in East Lawrence. This 63,000-square-foot, open-span building acquired in 2009 is the site of design-build studios, including the internationally acclaimed Studio 804. It includes studio design spaces, offices, conference areas, shop facilities, and large assembly areas for indoor construction of modular buildings.

Since 1987, the school has supported an urban design studio and a public education and community outreach center in Kansas City. The two programs operate together in the Kansas City Design Center at 1020 Baltimore Avenue in the heart of downtown Kansas City. This large street-front location includes working space for an entire architectural design studio as well as offices for instructors, exhibitions areas, and conference and meeting spaces for events that include community partners and sponsors.

The 130,000-square-foot Art and Design Building, next to Marvin Hall, houses the main Design Department programs, including studios and classrooms. The building also houses the 2,100-square-foot Art and Design Gallery, which features new exhibits every two weeks and is an important component of the teaching mission. Each major program offers all students spacious work areas and a range of equipment, from traditional to the newest digital technology. Students have access to multi-platform computer labs with the most commonly used current software for photography, animation, CAD, 3-D modeling, video production, desktop publishing, scanning, illustration, large- and medium-format plotters, and color and black-and-white laser printers. Unique satellite computer areas are dedicated to each major area. Students have access to a traditional film Photography Lab, which includes a dark room for black-and-white photography as well as a digital processing lab with dedicated spaces for video and digital image production and an equipment checkout facility. The 6,400-square-foot Common Shop includes a range of woodworking equipment, a plastic vacuum former, metal-working equipment, and classroom space. All computer and photo labs and the common shop have professionally trained technical support staff.

The historic Chamney Farm, on the western edge of the Lawrence campus, is the site of the school’s Center for Design Research, an award-winning building that connects a converted native limestone farmhouse and 19th-century restored barn. Corporate-sponsored projects are supervised by design faculty and executed by graduate students and advanced undergraduates. This fully equipped facility has become a connection between the academic and professional worlds of design as...
well as a focus for collaborations among applied design areas and other KU units.

The Helen Foresman Spencer Museum of Art houses the only comprehensive art collection in Kansas. Collections are particularly noteworthy in medieval art, 17th- and 18th-century German and Austrian painting, sculpture, American painting, prints, American photography, Japanese art of the Edo period, textiles (especially quilts), and decorative arts. Spencer Museum sponsors exhibitions, lectures, films, workshops, and activities that support curricular instruction in the arts. Another important resource is the Murphy Art and Architecture Library, with 150,000 volumes and 600 current journals documenting design, and architecture from all cultures, from antiquity to the present.

School of Architecture, Design and Planning

Marvin Hall
1465 Jayhawk Blvd., Room 206
Lawrence, KS 66045-7626
Phone: 785-864-4281
Fax: 785-864-5393
archku@ku.edu
http://www.sadp.ku.edu/

Undergraduate Programs

Degree programs available to entering first-year students include a 5-year professional Master of Architecture (p. 60); a professional Bachelor of Fine Arts (p. 86) in design with concentrations in Environmental Design, Illustration and Animation, Industrial Design, Photo Media, and Visual Communication Design. The Bachelor of Arts in Architectural Studies (p. 64), a preprofessional degree, is also available to entering first-year students.

Admission

Information on undergraduate admission standards and requirements, as well as application procedures and deadlines, is found on the Department of Architecture and Design of Page 36: Architecture, Design & Planning KU units.

that the course load for professional architecture and design degrees may make it difficult to participate in the Honors Program.

Graduate Programs

Graduate programs include

• Master of Architecture (p. 73) (M.Arch.), a 2 or 3-year professional degree for students already holding bachelor’s degrees in any field;
• Doctor of Philosophy in Architecture (p. 75) (Ph.D.);
• Master of Arts (p. 93) (M.A.) in Design with a concentration in Design Management;
• Master of Arts (p. 95) (M.A.) in Design with a concentration in Environmental Design;
• Master of Arts (p. 95) (M.A.) in Design with a concentration in Interaction Design; and
• Master of Urban Planning (p. 99) (M.U.P.).

Undergraduate Scholarships and Financial Aid

Awards and scholarships are available to students at all year levels. All students who wish to be considered for KU financial aid or for the scholarships available within the school must complete applications with Financial Aid and Scholarships (http://financialaid.ku.edu).

Graduate Fellowships and Assistantships

For information about graduate assistantships, contact the School of Architecture, Design and Planning (http://www.sadp.ku.edu).

Visit the Graduate Studies website for information about funding opportunities (http://www.graduat.ku.edu/03-07_student_funding.shtml) for graduate students at KU.

Financial Aid and Scholarships (http://financialaid.ku.edu) administers grants, loans, and need-based financial aid.

Undergraduate University Regulations

For information about university regulations, see Regulations (p. 12) or visit the University of Kansas Policy Library (http://www.policy.ku.edu).

Absences

A student with excessive absences may be withdrawn from the course by the dean.

Credit/No Credit

A Credit/No Credit option is available to all degree-seeking undergraduates. You may enroll in one course a semester under the option, if the course is not in your major or minor. Students must submit a form in 205 Marvin during the two week period designated by the University in order to elect a course for Credit/No Credit. For more information, visit the KU Policy Library (https://documents.ku.edu/policies/ governance/USRK.htm#art2sec2).

Warning: Certain undesirable consequences may result from exercising the option. Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of No Credit to F when computing grade-point averages.
Credit/No Credit is allowed for electives not in the major. It is not allowed for required courses or electives in the major.

ARCH 690 and ARCH 691 can only be taken for Credit/No Credit.

Graduation with Distinction and Highest Distinction

Students who rank in the upper 10 percent of their graduating class graduate with distinction. The upper third of those awarded distinction graduate with highest distinction. The list is compiled each spring and includes July, December, and May graduates.

Honor Roll (Dean's List)

Students in the upper 10 percent of undergraduate student body who have completed at least 14 hours for architecture students and at least 12 hours for design students with letter grades are recognized on the honor roll or dean's list in fall and spring. An Honor Roll notation appears on the transcript.

Independent Study Through KU Continuing Education

Students may take 9 hours of elective credit in Independent Study courses offered through KU Continuing Education.

Maximum and Minimum Semester Enrollment

No student may enroll in more than 19 credits without the approval of the department. No more than 15 hours for architecture students and no more than 9 hours for design students may be taken in summer session.

Prerequisites and Corequisites

The school strictly enforces prerequisites for all courses. Students enrolled in a course without successfully completing the appropriate prerequisites may be administratively dropped without notice in the first weeks of the semester.

Probation

Master of Architecture (5-year) and B.A. in Architectural Studies

Probation

Student records are reviewed after each semester. A student is placed on probation if the KU semester or cumulative grade-point-average is below 2.0. Students placed on probation are sent a letter stating the length of probation and the requirements for being returned to good standing.

Continued on Probation

A student on probation may be continued on probation for one more semester if the following KU semester and cumulative grade-point-averages show considerable improvement, but the semester or cumulative grade-point-average is lower than 2.0.

Dismissal

A student may be dismissed for poor scholarship if any of the following situations apply:

1. Fall and spring KU semester or cumulative grade-point-averages are below 2.0 with no considerable improvement.
2. The student has been placed on probation and has failed to meet the conditions required to return to good standing.

Reinstatement

Appeals for reinstatement may be submitted to the department’s probation committee, 206 Marvin Hall. A student reinstated has one semester to return to good standing.

Good Standing

Students with KU semester and cumulative grade-point-averages of 2.0 or above are in good standing.

B.F.A. in Design

Probation

A student is placed on probation after completing a semester at KU without a 2.0 grade-point average. Students placed on probation are informed of their probationary terms and must have a mandatory advising meeting with a departmental advisor. For admissions purposes, students with strong portfolios may be admitted on a probationary basis if their grades or ACT scores are not strong enough.

Continued on Probation

A student on probation may be continued on probation for an additional semester if the student's cumulative grade-point average shows considerable improvement.

Dismissal

A failure to raise the grade-point average above 2.0 in a semester while on probation may be grounds for dismissal. Students may also be dismissed by the Department of Design chair at any time for excessive absences or for failing to make progress toward the degree.

Good Standing

Students with KU semester and cumulative grade-point-averages of 2.0 or above are in good standing.

Required Work in Residence

Architecture Students

All architecture students must complete 30 hours of KU work. Architecture students who have grade-point averages of 2.0 in total and in residence hours may take up to 12 of the final 30 hours in nonresident study. Such an enrollment requires prior approval by petition and excludes fifth-year studios.

Design Students

Six of the final 30 hours may be taken for nonresident credit, with advance permission. Nonresident credit may fill only elective requirements not in the major field of study.

Transfer of Credit

CredTran (http://credittransfer.ku.edu) is a transfer course equivalency system that lists more than 2,200 colleges and universities from which KU has accepted transfer courses in the past. If your school or course is not listed, your evaluation will be completed when you are admitted to KU.

Architecture Students

Only grades of C- or higher are accepted in transfer credit toward a degree. Architecture students who wish to transfer design courses may do so only upon submission of a portfolio of work done in such
courses. Placement in the professional curriculum is based on completed course work, a review of the comprehensive portfolio of prior work in architecturally oriented courses, and on a space-available basis. The student must conform to the work in residence requirements stated above.

Design Students

Only grades of C or higher in general course work are accepted as transfer credit toward degrees. Grades for studio related course work must be B or higher for transfer credit. Applicants with a lapse of four or more years since their last full-time enrollment may not expect studio credits to be accepted for transfer.

Graduate University Regulations

For information about university regulations, see Regulations (p. 12) or visit the University of Kansas Policy Library (http://www.policy.ku.edu).

Credit/No Credit

The Credit/No Credit option is not authorized for graduate students’ enrollments, including, but not limited to, courses taken to fulfill the research skills requirements, undergraduate deficiencies, etc.

Master of Architecture (2 & 3-year)

Probation

Student records are reviewed after each semester. A student is placed on probation if the KU cumulative grade-point-average is below 3.0. Students placed on probation are sent a letter stating the length of probation and the requirements for being returned to good standing.

Continued on Probation

A student on probation may be continued on probation for one more semester if the cumulative grade-point-averages show considerable improvement, but the semester or cumulative grade-point-average is lower than 3.0.

Dismissal

A student may be dismissed for poor scholarship if any of the following situations apply:

1. Cumulative grade-point-averages are below 3.0 with no considerable improvement.
2. The student has been placed on probation and has failed to meet the conditions required to return to good standing.
3. The student has repeatedly failed to make progress toward graduation.

Good Standing

Graduate Students with KU cumulative grade-point-averages of 3.0 or above are in good standing.

Architecture Courses

ARCH 100. Architectural Foundations I. 4 Hours.

An introductory design studio directed toward the development of spatial thinking and the skills necessary for the analysis and design of architectural space and form. This course is based on a series of exercises that include direct observation: drawing, analysis and representation of the surrounding world, and full-scale studies in the making of objects and the representation of object and space. Students are introduced to different descriptive and analytical media and techniques of representation to aid in the development of critical thought. These include freehand drawing, orthographic projection, paraline drawing, basic computer skills, and basic materials investigation. Prerequisite: Approval from the Dean of the School of Architecture and Urban Planning. LAB.

ARCH 101. Architectural Foundations II. 6 Hours.

A continuation of ARCH 100 with major emphasis on the design relationships among people, architectural space, and the environment. The course is based on a series of exercises leading to the understanding of architectural enclosure as mediating between people and the outside world. Issues of scale, light, proportion, rhythm, sequence, threshold, and enclosure are introduced in relation to the human body, as well as in relation to architectural form, environment, and social and psychological factors. Students will engage in drawing, perspective projection, model building, and basic computer graphics. Prerequisite: ARCH 100. LAB.

ARCH 103. Introduction to Architecture. 3 Hours.

An introduction to the study and practice of architecture. This course aims at orienting the student to the various disciplinary facets which make up the total architectural curriculum as well as to the various professional roles which architects can be expected to perform. Architectural study is seen as both an art and a science, and architectural practice is seen as a complex, interdisciplinary professional activity. Students taking this course must bring a lap top computer to class. LEC.

ARCH 104. Principles of Modern Architecture. 3 Hours.

A lecture course covering the emergence of technological, theoretical and aesthetic principles of modern design beginning with the socio-cultural impact of industrialization and the crisis in architecture at the end of the 19th century. Attention is given to functionalist theory, mechanical analogies and the so-called machine aesthetic of 1910-1930 and to the precedents of important design principles of modern architecture, including modular coordination, the open plan, interlocking universal space, unadorned geometry, structural integrity, programmatic and tectonic expression, efficiency and transparency and briefly explores their development in post-war and late 20th century examples. LEC.

ARCH 105. B.A. Architectural Studies Seminar. 1 Hour.

The seminar provides a discussion section that supplements the lectures presented in ARCH 103. The course must be taken concurrently with ARCH 103 and is open only to students in the B.A. in Architectural Studies Program, or with approval by the School of Architecture and Urban Planning. SEM.

ARCH 106. B.A. Architectural Studies Seminar II. 1 Hour.

This seminar provides a discussion section that supplements the lectures presented in the lectures of ARCH 104. The course must be taken concurrently with ARCH 104 and is open only to students in Architectural Studies program, or with consent of the Dean of the School of Architecture and Urban Planning. LEC.


An introductory design studio directed towards the development of spatial thinking and the skills necessary for the analysis and design of architectural space and form. This course is based on a series of exercises that include direct observation: drawing, analysis and representation of the surrounding world, and full-scale studies in the making of objects and the representation of object and space. Students are introduced to different descriptive and analytical media and techniques of representation to aid in the development of critical thought. These include but are not limited to freehand drawing, orthographic projection, paraline drawing, basic computer skills, and basic materials investigation. Prerequisite: Approval from the Dean of the School of Architecture and Urban Planning. LAB.
A continuation of ARCH 108 with major emphasis on the design relationships among people, architectural space, and the environment. The course is based on a series of exercises leading to the understanding of architectural enclosure as mediating between people and the outside world. Issues of scale, light, proportion, rhythm, sequence, threshold, and enclosure are introduced in relation to the human body, as well as in relation to architectural form. Students will engage in drawing, perspective projection, model building, and basic computer graphics. Prerequisite: ARCH 108. LAB.

ARCH 152. Professional Practice I. 1 Hour.
This course will introduce students to the history and nature of the architecture profession and its relationship to education, internship, registration and certification. The various roles which architects are expected to perform and the ethical standards they are expected to uphold are explored in the context of different models of practice. Prerequisite: Must be admitted to M.Arch 5-year program, Arch Studies Program or approval by the School of Architecture and Urban Planning. LEC.

ARCH 200. Architectural Foundations III. 6 Hours.
A continuation of ARCH 201 with a series of studio exercises following a succession based on analysis, form, and syntax, with an emphasis on the communication of architectural ideas. Students explore plan, section, and spatial organization, spatial sequence, structure and materiality in relation to human dwelling and the building site. The course aims for student integration of these issues into building designs that require the organization of multiple spaces. Students will consider natural forces as they both shape and affect buildings, including gravity, wind, light, heat, sound, and fluids. Precedent studies, direct observation, building analysis, and site analysis are significant aspects of the semester. Prerequisite: ARCH 101. LAB.

ARCH 208. Architectural Design I. 6 Hours.
The second year studios are responsible for introducing students to the basic form determinants of architecture—from limited scope exercises to complete building designs. Using diagrams and sketches, plans, sections, elevations and models, students explore the spatial ordering of human activity, site and landscape analysis, light and air modulation, simple environmental controls and energy conservation, basic framing systems, volumetric organization and the materials of building skins and envelopes. Prerequisite: ARCH 109. LAB.

ARCH 209. Architectural Design II. 6 Hours.
A continuation of ARCH 208 with an emphasis on the synthesis of basic form determinants of medium-sized, multi-story public building in the urban environment. Students will demonstrate competence in basic architectural design, and preparedness for the third-year focus on materials and methods of building construction. Prerequisite: ARCH 109. LAB.

ARCH 280. Design Workshop I: Visual Narratives. 3 Hours.
This lab-based course will develop the skills and understanding necessary to visually communicate compelling narratives of complex data and situations. Students will engage in hand-sketching and diagramming as well as utilizing digital tools designed to facilitate clear and persuasive data display. Environmental scales ranging from settlement patterns down to product interface will be addressed. Students will learn the visualization pipeline, processing data for visualization, visual representations, the design of interaction in visualization systems, and the impact of perception. Students will also develop the skills necessary to solve visualization problems and critique and evaluate information visualization. This material will be covered through class discussions, readings, and a number of assignments and projects. The assignments and large group project will provide students with practical experience in the construction of visual narratives. LEC.

ARCH 281. Design Workshop II: Design Thinking. 3 Hours.
This course aims to enhance student's abilities to apply concepts and methods associated with design thinking with an emphasis on ill-structured problem-solving and human-centered design. Students will gain exposure to design thinking processes including forecasting, scenario planning and various forms of analysis all of which help shape a robust problem statement that forward design innovation. This material will be covered through class discussions, readings, and a number of assignments and projects. Students will have the opportunity to develop their design-thinking competence through their final project which may be at the level of models, product, spatial, building and/or community designs. LEC.

ARCH 310. Computer Applications. 3 Hours.
The course will immerse students in the exploration of the generation, manipulation, and production of graphic images through the use of computers. The goal of the course is to help reach an understanding of computers that allows for future growth in an environment in constant change, and to provide an overview of what is currently possible. The format of the course will be a combination of lectures and workshops. The lectures will introduce students to theoretical and application-oriented topics. Group discussions will focus on the computer as a conceptual construct, the computability of design, and computers as design partners. The workshops will provide students with hands-on experience. The vehicles used for these investigations will be desktop publishing, paint, and drafting tools. As resources become available this list will be augmented. LEC.

ARCH 359. Special Problems. 1-3 Hours.
Special problems in architecture. The study of a particular problem in architecture involving individual research and presentation. Conferences and reports. (May be taken for Credit/No Credit.) Prerequisite: Student must submit to his or her faculty advisor, in advance, a statement of the problem he or she wishes to pursue, the methodology he or she plans to use in the program, and the objectives of the special problems. He or she must also be in agreement with the faculty member he or she proposes as instructor for the course. IND.

ARCH 360. Introduction to Landscape Architecture. 3 Hours.
This course situates landscape architecture in a broad cultural and social context with the intention of developing skills in critical thinking about the role of exterior place-making in the built environment. Lectures and assigned readings will explore central issues in the history and theory of landscape architecture and look at key sites and their designers. Other topics will include environmental attitudes and perception, the human experience of place, and ideas of nature. LEC.

ARCH 380. Design Workshop III: Ideas and Methods in Planning and Design. 3 Hours.
This course focuses on design methods, ideas and approaches at the city, neighborhood and community levels. The course will introduce approaches to urban design and planning which are responsive to social, environmental and ecological issues. The goal is to develop core competencies in design thinking such as analyzing specific problems and developing possible design interventions by understanding relevant theories and analyzing case studies. Students will critically analyze past and current urban trends through case studies to inform design ideas for more equitable and sustainable communities. This material will be covered through class discussions, readings, and a number of design-oriented team projects and assignments. LEC.
ARCH 381. Design Workshop V: Designing Sustainable Futures. 3 Hours.
This problem-based service-learning course aims to enhance students’ abilities to apply the concepts and methods associated with effective and facilitative leadership focused upon sustainable design problems. This material will be covered through class discussions, readings, and design-oriented team projects. Students learn core competencies such as analyzing organizational problems and goals, strategic planning, intervention, and evaluation. In the service-learning component, students apply these skills to issues that matter to them and to the communities they serve to generate design solutions for their client’s consideration. These projects may be at the level of interaction models, product, spatial, building and/or community designs. LEC.

ARCH 480. Senior Seminar. 3 Hours.
This seminar will expose students to normative and critical approaches in the profession of architecture. Through field trips, attendance at juries, readings, and presentations by architects and designers, they are to develop an understanding of the precedence, theories, and practices of the profession. This is the capstone course for the B.A. in Architectural Studies. Prerequisite: ARCH 381. LEC.

ARCH 502. Accelerated Design I. 6 Hours.
The first of two accelerated design studios, this course emphasizes the design relationships among people, architectural space, and the environment. Issues of shelter, light, sequence and threshold are considered in relation to physical, psychological and sociological factors. The course gives the basic notion of site, structure, materiality, and develops an understanding of building program. Focus is on developing the ability to think spatially and an understanding of human behavior relative to the physical environment. Prerequisite: Permission of the Dean of Architecture and Planning. LAB.

ARCH 503. Accelerated Design II. 6 Hours.
The second of three accelerated design studios, this course emphasizes construction and technology as expressive mediators in the relationship between human dwelling and site. Students will consider natural forces as they both shape and affect buildings, including gravity, wind, light, heat, sound and fluids. Prerequisite: ARCH 502 and/or permission of the Dean of the School of Architecture and Urban Planning. Corequisite: ARCH 626. LAB.

ARCH 504. Accelerated Design III. 6 Hours.
The third of three accelerated design studios, this course focuses on the integration of material learned in previous studios with urban-based design problems of increasing scale and complexity within the frameworks of sustainability and universal design. Students will demonstrate an ability to use research and critical thinking skills, including the use of case precedents, and the ability to integrate various building systems in building design. Prerequisite: ARCH 503 (see studio grading policy) or permission of the Dean of the School of Architecture and Urban Planning. Corequisite: ARCH 627. LAB.

ARCH 508. Architectural Design III. 6 Hours.
A continuation of ARCH 209 with an increased emphasis of studies in urban spaces and design development of building envelopes as related to urban public-life, structural and mechanical systems, and principles of sustainability. Students shall work individually on an advanced building design. Work will focus on medium scale, multi-story, urban-infill, buildings developed to an appropriate level of technical resolution as evidenced in clear schematic wall sections and structural proposals. Students shall demonstrate an understanding of formal ordering and building-concept development as related to the tectonic form determinants. Prerequisite: ARCH 209. LAB.

ARCH 509. Architectural Design IV. 6 Hours.
A continuation of ARCH 209 with an emphasis on materiality and construction of built assemblies through hands-on activities. Development of craft, process, collaboration and technical documentation skills will be primary objective of the course. Prerequisite: ARCH 209. LAB.

ARCH 510. Problems in Computer Applications. 3 Hours.
The study of a particular problem in architecture involving the application of computer-aided design and analysis techniques. Individual or group tutorials. Prerequisite: Consent of instructor based on the student's advance submission of a written proposal outlining the plan of study. Completion of one course in computer programming and/or specific experience in writing original computer programs. LEC.

ARCH 515. Building Information Modeling. 3 Hours.
This course will expose students to building information modeling: a digital representation of the building process that facilitates exchange and interoperability of information in digital format. The focus will be on the software’s potential for reducing the information loss that occurs during each handoff of the project during the traditional delivery method. Possibilities for integrated practice including lifecycle costing and knowledge management are discussed. LEC.

ARCH 516. Portfolio Development. 3 Hours.
The aim of the course is to teach practical presentation skills using computer software, in addition to graphic design theories and strategies. This course will provide an opportunity for students to design and produce a design portfolio appropriate for internship and/or graduate school applications. LEC.

ARCH 520. Architectural Acoustics. 3 Hours.
An introduction to the physics of sound. Objective and subjective evaluation and control of sound as applied to architectural spaces. Room shaping, mechanical and electrical system noise and vibration control, and electro-acoustic sound reinforcement. Prerequisite: PHSX 114 and ARCH 626 or equivalent, or consent of instructor. LEC.

ARCH 521. Electro-Acoustical Systems. 3 Hours.
A study of electro-acoustic sound reinforcement and reproduction systems for buildings. Prerequisite: PHSX 212, or consent of instructor. LEC.

ARCH 524. Structures I. 3 Hours.
The fundamental principles of structural behavior including stress and deformation in structural components and systems. Open to architecture students only. Prerequisite: PHSX 114. LEC.

ARCH 530. Environmental Systems I. 3 Hours.
This introductory course addresses human needs and comfort in relation to the natural and man-made environments. Specific topics include: climate and weather; environmental health; indoor air quality; thermal comfort; passive and active systems and design strategies for heating, ventilating, and air-conditioning; plumbing; noise control; building management systems; and life safety systems. Prerequisite: PHSX 114. LEC.

ARCH 531. Environmental Systems II. 3 Hours.
This course addresses human needs and comfort in relation to the natural and man-made environments. Specific topics include: daylighting, electrical lighting systems, building acoustics, electrical power distribution systems, alternative energy sources, communication systems, and transportation systems. Prerequisite: ARCH 530. LEC.

The first unit of the two-part survey history course explores the historical changes of architecture in relation to civilization change, techno-spatial experiments and town-building efforts, from the earliest evidence of
human dwelling to the beginning of the industrial revolution. Emphasis
is on the architecture as an integrated development of commercial,
technological, and ideological transferences among different regions,
nascent religious groups and evolving political enterprises. In regard to
the geographical and geopolitical regions, the course includes South and
Central America, Europe, Classical Greece and Italy, Asia Minor, North
Africa and Asia. LEC.

ARCH 541. Global History of Architecture II: From Industrial
Revolution to Present (1700 CE-Present). 3 Hours. AE42.
The second unit of study of the two-part survey history course offers
a global perspective of the development of modern architecture from
the industrial revolution to contemporary times. This course traces
the genealogy of modern architecture to its multiple roots in European
enlightenment, global dissemination of industrial knowledge, invention
of new building materials and techniques, and development of architectural
theory. Emphasis is on the historical context of how the diverse
approaches of architects from different regions create variations of
formal expressions, spatial program and theoretical underpinning, and
thus create multiple meanings and images of modern architecture.
Prerequisite: ARCH 340 or ARCH 540 or ARCH 640 or consent of
instructor. LEC.

ARCH 542. History of Architecture III: Modern. 3 Hours.
A continuation of ARCH 541, History of Architecture II, covers the period
from around 1800 to the present. Particular emphasis is placed on the
major cultural shifts that have impacted architectural representation and
have contributed to its differentiation as Modern, not only in Europe, North
and South America but also with examples in India and Pakistan. Weekly
lectures and readings including original sources. Supplementary readings
and/or assignments may be assigned. Prerequisite: ARCH 341 or ARCH
541 or ARCH 641 or consent of instructor. LEC.

ARCH 552. Ethics and Leadership in Professional Practice. 3 Hours.
This course takes the perspective that architectural design is inherently
an ethical act. Through this lens, students will learn the essentials
of office practices, the many definitions of client and their roles in
the design process, the legal responsibilities of the profession, the
importance of continuous professional development and the obligation the
profession has to provide civic leadership in regard to the built and natural
environment. LEC.

ARCH 560. Site Design. 3 Hours.
This course introduces concepts of architectural context and site through
a combination of lectures and field studies. Natural, social and built
systems are presented using a range of perspectives, including holistic
ones. Students will develop visual and written skills of analysis through
specific site analytic and design techniques. Application exercises
and ongoing analysis assignments are required. Restricted to 3.5 and
5 year Master of Architecture students. Prerequisite: ARCH 109 for
undergraduate students. LEC.

ARCH 570. Contemporary Issues Seminar I. 1 Hour.
A series of seminars on contemporary issues facing the profession. LEC.

ARCH 571. Contemporary Issues Seminar II. 1 Hour.
These seminars will consist of three to four guest lecturers each
semester. All students enrolled in this course will attend the same lecture
as ARCH 572. Topics will be selected to reflect major issues covered
in the course work, or contemporary issues facing the profession. LEC.

ARCH 572. Contemporary Issues Seminar III. 1 Hour.
These seminars will consist of three to four guest lecturers each
semester. All students enrolled in this course will attend the same lecture
with ARCH 571. Topics will be selected to reflect major issues covered
in the course work, or contemporary issues facing the profession. LEC.

ARCH 573. Financial and Economic Issues in Architecture
Management. 3 Hours.
This course will focus on the fundamentals of accounting,
macroeconomics and the construction industry, and concepts related to
the development and implementation of a strategic business plan. LEC.

ARCH 574. Organizational Issues in Architecture Management. 3
Hours.
Topics that will be covered in this course include the organization of a
professional practice, personnel management, and the development of
effective communication skills. LEC.

ARCH 575. Architecture Management: Managing a CAD System. 3
Hours.
This course covers the various procedures involved in managing a
CAD system within a design organization. It also explores the different
applications and uses of current CAD technology. Topics to be addressed
include: selecting a system; billing CAD services; support services and
personnel; marketing CAD; customization, file management, menus
and script files; AutoLisp Programming; and integrating CAD with other
programs. Prerequisite: An introductory CAD class or permission of
the instructor. LEC.

ARCH 576. Project Delivery in Architecture Management. 3 Hours.
Conventional methods for project delivery will be reviewed along with
design/build, fast-track, and other techniques. The relationship of the
architect and development will also be explored, as will the relationship of
project development to urban design concepts. LEC.

ARCH 577. Marketing Architectural Services. 3 Hours.
The emphasis of this course will be on the development and
implementation of a marketing plan, techniques related to the marketing of
specific projects, and the relationship of marketing to other components of
a firm. LEC.

ARCH 578. Legal Issues in Architectural Management. 3 Hours.
A course designed to familiarize the student with legal considerations
related to a professional practice. Case studies and selected readings
will serve as the basis for discussion of registration, contracts, business
formation, taxes, employment practices, copyright, and patent law. In
addition, the course will draw upon the knowledge and experience of
members of the professional community. LEC.

ARCH 600. Special Topics in Architecture: _____. 3 Hours.
This course is for the study of architectural topics on a one time or
experimental basis in response to changing needs and/or resources in
the Program. May be offered concurrently by different instructors under
different subtitles as announced in the Timetable. May be repeated for
credit. Prerequisite: Variable. IND.

ARCH 601. Design Research. 3 Hours.
This course will examine issues in architectural research. It will provide
an overview of graduate level studies with regard to definitions, methods,
skills, and techniques. The course will consist of lectures, seminars,
readings and guest presentations. The class will enable students to make
informed judgments about matters of quality and quantity on architectural
issues. Students will be expected to formulate sensible systems of
classification for their chosen material. Students will be expected to
formulate sensible systems of classification for their chosen material.
Students will be expected to produce papers and essays, make sample
research proposals, and other research based assignments. Limited to
students in M. Arch Program with Undergraduate status. Prerequisite:
ARCH 608. LEC.

ARCH 602. Accelerated Design IV. 6 Hours.
Graduate studio emphasizing urban context and design theories.
Students will undertake specialized research projects. Prerequisite: ARCH
ARCH 605. Visualizing Natural Forces. 3 Hours.
The course advances empirical understanding of natural forces as they both shape and affect buildings, including gravity, wind, light, heat, sound, and fluids. Two class hours and one laboratory per week. This course emphasizes the development of conceptual thinking and problem solving skills through sensory-based demonstrations, lectures, and laboratory experimentation. The course will emphasize concepts of PHSX 114 as they relate to the built environment. Prerequisite: PHSX 114. LEC.

ARCH 608. Architecture and Urbanism. 6 Hours.
An advanced studio with an emphasis on program analysis and design of urban building(s) and urban spaces with culture, context and precedent as major form determinants. Prerequisite: ARCH 408 and ARCH 409; or ARCH 508 and ARCH 509; or ARCH 602. LAB.

ARCH 609. Integrated Design. 6 Hours. AE61.
An advanced studio with an emphasis on given to the individual student's demonstration of integration of all previously learned design skills. These include program analysis, site design, structure, formal composition, materials and methods of construction, technical development of building fabric, environmental systems, code and zoning compliance, and principles of sustainability. Students should also demonstrate an appropriate awareness of history, theory, and culture. The level of project development should be demonstrated by technically precise drawings and well-researched written documentation in additional to other means of representation. Prerequisite: ARCH 608. LAB.

ARCH 610. Computers and Project Development. 3 Hours.
This course introduces one to the use of computers in project development (final and execution drawings, specifications). Initiates advanced computer aided design systems. Emphasis is to be on CAD potential in generating complex representation; lectures and laboratory work on extent and limits of CAD systems in design; familiarizes with software and hardware (basic training, plotting, etc.); encourages the use of CAD for exploration (three-dimensional representation); introduces editing and report preparation. Lectures on computers and profession. No computer language is taught in this course. Prerequisite: ARCH 310 or introductory CAD course. LEC.

ARCH 613. Visual Thinking Studio I. 3 Hours.
An intensive course covering the graphics topics described in ARCH 113 and ARCH 114. Graduate level course that supplements the core syllabus or ARCH 102 with weekly seminars, expanded reading lists, and additional classroom assignments. Prerequisite: Undergraduate degree in area other than architecture with three credits in calculus, four credits in physics, three semesters of English, and/or permission of the Dean of the School of Architecture and Urban Planning. LAB.

ARCH 614. Freehand Drawing. 3 Hours.
Open to all SADP non-graduating students interested in enhancing current freehand drawing skills, generally in the architectural realm. While a broad range of expression and graphic materials is explored, emphasis is on drawing as a notational skill, the instrument of creative expression for professional purposes as well as for lifelong artistic fulfillment. Prerequisite: Consent of instructor. LAB.

ARCH 615. Intensive Graphics II. 3 Hours.
Open to students with intermediate level graphic skills. Course will be designed to deal with all aspects of graphic communication for designers in the different stages of the architectural process. This would include sketching, drafting, lettering, rendering, modelmaking, photographic and slide presentation, reproduction, brochure, etc. Prerequisite: Consent of instructor. LAB.

ARCH 616. Advanced Architectural Presentation Techniques. 3 Hours.
An advanced studio course intended for students who have a working knowledge of basic presentation techniques wishing to refine their existing skills and experiment with new techniques. The course will review basic techniques and explore new ones through a series of lectures and these techniques will be put to use in the concurrent development of complete presentations of architecturally significant buildings. The lectures and studio work will be supplemented by slide presentations, demonstrations, guest lecturers, and field trips. Not intended as a remedial course or substitute for ARCH 615. Prerequisite: Consent of instructor. LEC.

ARCH 618. Architectural Photography. 3 Hours.
A basic course in black and white photography intended to enable the student to utilize photography routinely as a medium for visualization, documentation and presentation of images useful for design. It is organized in relation to the controls of the roll film camera so that assignments reinforce the understanding of this tool and its creative possibilities. Experiences include making photographs, developing black and white film, printing black and white images, mounting and presenting prints, photocopying, photographing buildings and architectural models, photomontage, high contrast graphics effects and an introduction to color materials. Enough technical information is included for the student to pursue black and white photography on his/her own to the desired level of proficiency. LAB.

ARCH 619. Advanced Architectural Photography. 3 Hours.
An advanced course in photography specifically dealing with the skills and techniques of the professional architectural photographer. Students will use and experiment with large format photography, manipulation of the exposure and development process, special developers and processes; negative retouching, specialized film and their application, simulation, model photography, and photographic rendering. Brochure development, marketing services, and professional ethics will also be discussed. Prerequisite: ARCH 618 or equivalent, submission of a brochure, and consent of instructor. LAB.

ARCH 622. Material Investigations. 3 Hours.
This course will provide opportunities for students to learn about research methods in the realm of architectural materials. The course will have two concurrent phases: the first phase will consist of a series of field trips to materials manufacturers, fabricators and distributors in the Lawrence, Topeka and Kansas City area. The purpose of these trips is to see, first-hand, how materials are developed and made, and to understand the research involved in their development. The second phase will consist of a self-directed research project based on the students' natural curiosity about a particular material or process. The project will have three components: 1) a research agenda, rigorously developed and executed; and 2) a "built" component, with actual materials, executed by the students' own hands and financial resources; and 3) final documentation of the research project. LEC.

ARCH 623. Building Practicum. 3 Hours.
The building technology practicum is offered as a course that will afford students a "real world" experience outside of the academic setting. Students can bring their own project proposals to the practicum committee or faculty members on the committee can suggest local preservation efforts, including planning and administration, or actual physical implementation of such projects. It could also be in the interest of some students to develop skills in a specific area, i.e. model building, architectural photography, historic reconstruction, or technical documentation. Those interested in specific areas will need to work closely with the practicum committee to develop a working list of goals and objectives. Students can elect to work individually or in teams, can
work outside of the semester schedule with grades assigned at the completion of the project, and will be bound by a contract approved by the practicum committee. LEC.

ARCH 624. Structures II. 3 Hours.
A continuation of ARCH 524, with focus on applying learned principles to basic contemporary structural systems such as concrete, steel, and wood framing systems. Open to architecture students only. Prerequisite: ARCH 524 or ARCH 620 and ARCH 621. LEC.

ARCH 625. Analysis and Design of Structures for Architects. 3 Hours.
Analysis of statically indeterminate beams and frames. Fundamentals of structural design in concrete and steel. Open to architecture students only. Prerequisite: ARCH 624. LEC.

ARCH 626. Building Technology I: Construction Systems and Assemblies. 3 Hours.
This course is an introduction to the materials, processes and craft of construction. Along with presenting the information required for understanding the basic principles and appropriate application and performance of construction systems and assemblies, the course also provides a conceptual framework to bridge between the physical conditions of construction and the more abstract processes of design. Teaching method includes modeling and hands-on building experiences. Prerequisite: ARCH 200 or ARCH 209 or Corequisite: ARCH 408 or ARCH 409 or ARCH 503. LEC.

ARCH 627. Building Technology II: Culture of Building Technology. 3 Hours.
A continuation of ARCH 626. Introduction to industrialized production. A consideration of the detailed sub-systems and cultural practices that comprise the built environment, and the factors responsible for their design and installation. Includes discussion of building codes, mechanisms of failure, and materials selection. Lectures and demonstrations by the instructors and visitors, films, slide projections, quizzes and written examinations. A student should demonstrate an understanding of elementary systems of construction and be able to relate this understanding to the design process. Prerequisite: ARCH 626. LEC.

ARCH 628. Structure in Nature and Architecture. 3 Hours.
The course deals with the historical development of structure, first in nature and then in architecture. In nature, the course discusses the evolution of structural materials, systems, connections and anchorage (foundations) in geological structure, botanical structure, endoskeleton structure, exoskeleton structure and insect architecture. The course then analyzes the growth of structure from anthropological structure through ancient and medieval structure to modern architecture. In these broad architectural periods in world history, the course examines the structural materials, structural behavior and construction of some of the important buildings that helped to define and delineate the architecture of their time. This course helps students to understand structural systems and their behavior, in a non-mathematical way, by relating the structural principles involved to our common experience of the world around us. The course will have every student do a research project on an assigned topic in geological structure, botanical structure, endoskeleton structure, exoskeleton structure, insect architecture or anthropological structure. LEC.

ARCH 629. Acoustic Studio. 3 Hours.
This course has the objectives of introducing the art and science of "listening" to architectural spaces; exploring, from both historical and current viewpoints, how proper acoustical conditions have and can be realized within the aesthetic and functional parameters of the particular architectural space; understanding the importance of building acoustics in architectural design; obtaining the ability to discuss building acoustics with the proper use of acoustical terms and descriptions; and understanding the basics of how sound behaves in an enclosed architectural space. The course will include several visits to existing architectural spaces that have specific acoustical requirements and interesting acoustical characteristics. Prerequisite: ARCH 524 or ARCH 620 and ARCH 621. LEC.

ARCH 630. Theory and Context of Architecture. 3 Hours.
An examination of architectural theories that understand the designed environment as a cultural medium and product of a sociocultural process that expresses values and ideas. Understanding of these theories will be enhanced through the analysis of paradigmatic buildings, urban form and ideologies that have influenced architectural culture. LEC.

ARCH 631. Issues in Contemporary Architecture. 3 Hours.
This class focuses the student on directed readings and provides the student the opportunity to select a topic for the semester's duration. With a very crammed schedule, the student is given a venue to concentrate on issues that they wish to pursue. A seminal reading is provided to the class, at the beginning of the semester, and this reading forms the basis of the semester's discussion. The selected reading is "current" and is the device used to distribute other readings pertinent to the author's argument. The basis of selection is related to current thought and discourse affecting the evolving nature of architectural culture. Class discussion may include slides, videos, sound tapes, etc. These are intended to complement the assigned readings. LEC.

ARCH 632. Contemporary French Architecture. 3 Hours.
This course introduces the student to contemporary trends in French architecture. Social, technological, economic, and theoretical perspectives will be investigated, and the work of the major French architects of the latter half of the twentieth century will be studied in depth. This course supplements the Paris studio program. LEC.

ARCH 635. Visualizing Airflow In and Around Buildings. 3 Hours.
It is often difficult to predict the way certain environmental design features will perform if not built and tested which can be costly and time consuming. This course will analyze the performance of such designs in an efficient and cost effective manner within a visual medium using computational fluid dynamics (CFD). CFD will provide a visual understanding of airflow behavior in and around buildings. In addition, thermal comfort and air quality will be investigated in this animated environment. The culmination of the course will be an analysis of a portion of one's studio design project. Prerequisite: ARCH 530. LEC.

ARCH 636. Art of Architectural Machines. 3 Hours.
This course emphasizes architectural trends of the twentieth century, which have been influenced by significant technological advances. The purpose of the course is to familiarize the student with the achievements and failures of architectural concepts that were influenced by modern technology. Examples will be drawn primarily from buildings and architects in Western Europe and North America. LEC.

ARCH 637. Architecture and Cosmos. 3 Hours.
Ideas of symmetry, harmony, proportion, and ideal form have long been used by architectural theorists and practitioners as a way of translating a traditional knowledge of the world into architectural form. Such traditional knowledge is embedded in the mathematics of Pythagoras, the philosophy of Plato, and the four part study of the cosmos (known in Western thought as "the quadrivium"—arithmetic, geometry, music, and astronomy). This course will entail the study of selected readings in this intellectual tradition as well as the analysis of buildings as they relate to the concepts learned through this study. Prerequisite: ARCH 641, History of Architecture II: Renaissance, or consent of instructor. LEC.

ARCH 638. Architecture, Art and Science. 3 Hours.
This course explores the relationship between architecture and the liberal arts and sciences through the principle of isomorphic correspondence--
a term from Gestalt psychology to describe similar structures occurring in different media. Emphasis on the historical connections to music and on aesthetic principles on the natural sciences. Prerequisite: Six hours of architectural history or consent of instructor for non-majors. LEC.

ARCH 639. Current/Historical Directions in Architecture. 2-3 Hours. A study of contemporary or historical trends in architecture which relate to the development of individual or broad philosophies of architecture. LEC.

ARCH 648. Historic Preservation. 3 Hours. The focus of this course is on the development of concepts and practices of retrieving, recycling, and curating the built environment from the mid-nineteenth century to the present. After a series of introductory readings and discussions, students are encouraged to investigate particular environmental, technological, social, or ideological questions of their choice, focusing on structures that demonstrate persistence over great distances and, co-existing with this persistence, ability to accommodate changes over time. LEC.

ARCH 650. Architect-Led Design-Build. 1 Hour. This is a 5-week course covering an introduction to the design-build method of project delivery, highlighting the role of architect as leader of the design-build team. The course covers team structure; ethical issues; forming a design-build firm; project management; licensing, corporate and insurance issues; public design-build laws and bridging. LEC.

ARCH 651. Advanced Design-Build for Architects. 2 Hours. This is a 10-week course covering a more advanced examination of the design-build method of project delivery, highlighting the role of architect as leader of the design-build team. The course covers team structure; ethical issues; forming a design-build firm; project management; licensing, corporate and insurance issues; public design-build laws and bridging; as well as history, architect-as-prime contractor, architect-as-subcontractor, business issues and marketing, bonding, design-build contracts, cost estimating and OSHA, risks and legal liabilities. LEC.

ARCH 652. Architect-Client Relations. 1 Hour. The intent of this five-week course is to provide a forum for the examination of varied aspects of the architect-client relationship. Components of this relationship will be explored both from the point of view of the practicing architect and of the project owner or client. LEC.

ARCH 653. Non-Traditional Careers in Architecture. 1 Hour. The intent of this five-week course is to provide a forum for the examination of the wide range of career options that are open to architects. The positive impact, to both the built environment and society as a whole that architects in alternative roles are ideally suited to provide, will be explored. LEC.

ARCH 654. Ethics in Architectural Practice. 1 Hour. This course is designed to develop an understanding of the underpinnings of ethical reasoning including the structure and vocabulary of moral argumentation; apply this knowledge to common ethical issues confounding contemporary architects, demonstrated through presentations and interaction with leading Kansas City architects, interactive analysis of case studies, participatory discussions, reading comprehension and analytical writing. LEC.

ARCH 655. Programming and Pre-Design Issues. 3 Hours. This course will introduce the concepts, methods, techniques, and information used by the architect to establish the parameters of a project, prior to entering the formal design process. The course will introduce the student to the social, technical, legal and economic dimensions of architectural programming. The content will introduce the core competencies in programming, site, and environmental analysis required by the profession. Programming theory, research techniques, information analysis, evaluation of significance, and creative synthesis of the multivalent factors acting upon the pre-design process of project definition will be covered. Exercises may include programming and analysis of projects and sites assigned in the Architectural Design Studio sequence. Prerequisite: ARCH 209 or ARCH 502. LEC.

ARCH 656. Eighteenth to Twentieth Century American Landscape Design. 3 Hours. This course will explore eighteenth, nineteenth, and twentieth-century American landscape design including gardens, estates, rural cemeteries, campuses, suburbs, urban parks, and national parks, as well as the beginnings of landscape architecture as a profession. Topics of inquiry will include European contributions in landscape theory, practice, and aesthetics, and American adaptations in response to climatic, social, and political differences. An important focus will be whether one can look at a designed landscape and see the expression of an attitude toward nature. LEC.

ARCH 657. Darwin, Humboldt, and Changing Ideas in Landscape Architecture. 3 Hours. The seminar explores the influence of the natural historians Alexander von Humboldt and Charles Darwin on American writings in landscape architecture in the late 19th and early 20th centuries. The original texts of Humboldt (including Aspects of Nature and Cosmos) and Darwin (including On the Origin of Species and Insectivorous Plants), will be studied in conjunction with significant authors in landscape architecture including A. J. Downing, George Perkins Marsh, Frederick Law Olmsted, Horace William Shaler Cleveland, Mariana Griswold van Rensselaer, Jens Jensen, Garrett Eckbo, Daniel Kiley, and James C. Rose. The emerging ideas of conservation and ecology found in these works will also be examined. LEC.

ARCH 658. History of Urban Design. 3 Hours. An exploration of the evolution of cities through the cultural and spatial development of human settlement patterns. The role of cities in the transformations of human culture from tribal communities to post industrial society is defined in terms of the historical origins of urban institutions and functions and their transformation into spatial structure and physical form. LEC.

ARCH 659. Spreadsheet Applications. 1 Hour. This course will focus on the application of electronic spreadsheets in the management of project files, company staffing, and business cash flow. Topics covered include spreadsheet linkage, creation of lookup tables, data consolidation, writing macros and charting results. LEC.

ARCH 660. Database Management. 1 Hour. This course focuses on the development of database applications to track the information generated during the normal course of business operations. Topics include database design, table creation, queries, forms, reports, and macros. LEC.

ARCH 661. Project Management Software. 1 Hour. This course uses software packages to manage a simulated design project. The topics in this section include creating tasks and linkages, assigning and managing resources, monitoring a project and creating reports. LEC.

ARCH 662. Project Management Tools. 1 Hour. This course covers the use of various software packages in the development of on-screen and hard-copy presentations. Topics
include presentation design, importing graphics, output strategies, and communications techniques. LEC.

ARCH 674. Electronic Communication. 1 Hour.
This course focuses on the use of electronic data communications in operating a design organization. Topics include use of the Internet, electronic research, telecommunication technologies and remote access. LEC.

ARCH 675. Graphics Packages. 1 Hour.
This course focuses on the development of graphic images. Students are taught to generate vector-based graphics and bit-mapped images that can be incorporated into various software packages. LEC.

ARCH 676. Facility Management: Tools and Techniques. 3 Hours.
The application of Information Technology to Facility Management has changed a formerly basement operation into a center of corporate support. In this course, we explore the use of Computer Aided Facility Management (CAFM) software and its application to real world facility management. LEC.

ARCH 677. Construction Cost Estimating for Architects. 1 Hour.
The main objective of this course is to introduce and inform the student of the processes involved in construction estimating. This course will focus on commercial construction and the fundamentals of estimating a commercial project. This course will acquaint the student with quantity surveying, costing methods, types of estimates, estimating software, the construction estimating process, and estimating the various parts of a project. LEC.

ARCH 678. Construction Project Management for Architects. 1 Hour.
The main objective of this course is to introduce and inform the student of the processes involved in construction project management. This course will focus on commercial construction and the fundamentals of managing a commercial project. The course will acquaint the student with transferring a project from the estimating stage to actual construction, the buyout process, contracts, purchase orders, responsibilities of project managers, responsibilities of superintendents, planning and scheduling, management of changes in a project, financial reporting, accounting processes, payment procedures, and the close-out process in construction. LEC.

ARCH 680. Building with Intelligence. 3 Hours.
This course is intended to be a broad course introducing basic concepts of sustainable design. It will introduce broad outlines of many of the crucial issues facing us in the next few decades. This course identifies how we can re-imagine the relationship between human beings and living systems. The order of the course will begin at a broad overview of our environmental dilemma, then focus upon community issues and end with a close look at green buildings and their systems. This course will include a series of lectures, required reading with written responses, visits to local examples of sustainable buildings and the development of research projects. LEC.

ARCH 681. Defining Community. 3 Hours.
This course explores how a neighborhood is sustainable, or is not. Imbedded in our built landscape are constructs, which once revealed, offer us insight into a community's values and underlying intentions. We will engage neighborhoods in Lawrence, Kansas, and other community neighborhoods. This seminar course will provide a format for discussion and testing observations of patterns in neighborhoods. Our intent will be to describe the detailed patterns for neighborhoods, houses, and gardens, thereby increasing an understanding of how people inform and are informed by their neighborhoods. This course will include a series of lectures, required reading with written responses, visits to a variety of neighborhoods and the development of research projects. LEC.

ARCH 689. Architecture Study Abroad. 3-6 Hours.
May be repeated up to a maximum of 9 credits. Students participate in a study abroad program approved by the Architecture Chair. Students will be evaluated upon a submitted journal, sketchbook, or equivalent assignments assigned by the instructor. Graded on a satisfactory/unsatisfactory basis. IND.

ARCH 691. Architecture Practicum. 6 Hours.
Based upon the student's approved proposal, each student will explore the process of creating the built environment by working in a setting that is intended to provide a new perspective for that student. The range of venues may include non-profit organizations, research settings, hands-on building experiences, and other professional settings as approved by the instructor. Students evaluation will include an assessment by the supervisor in the practicum settings as well as on a final paper using appropriate graphics to illustrate key points. Graded on a satisfactory/unsatisfactory basis. IND.

ARCH 692. Documentation. 3 Hours.
Students will document their experience in ARCH 690 or another approved study abroad program. This is intended as a critical reflection upon the student's experience and is additional documentation produced beyond the work done for the study abroad credit. The final product will include a written paper, using appropriate graphics to illustrate key points. IND.

ARCH 693. Workplaces. 3 Hours.
This course is about the design of places where people work. The workplace is important for many reasons. Not only do we spend a considerable amount of our waking life there, but our work often becomes one of the central features of our life. In some senses it can be considered to be a homelike activity; people often identify with their work and personalize their workplaces and make them responsive to their daily life needs. Workplaces are also social places where people meet and interact. And, of course they are also places of work, where they must respond to work needs and be conducive to efficient and productive work activities. This course will raise questions about how to design good workplaces. LEC.

ARCH 694. Homeplaces. 3 Hours.
Architects design buildings and spaces which they hope will contribute to making significant, enriching, and rewarding places. The quality of places, however, is not identical to the quality of buildings which contribute to them. This course will explore ways in which physical environments, in this case, houses can become and be experienced as rich and embraced homeplaces. It will look at the various processes through which residents, dwellers, designers, real-estate agents, builders, and others are involved with home environments. Implications for design and production processes will be investigated with reference to particular case studies. LEC.

ARCH 697. The Making of Place in an Aging Society. 3 Hours.
This course explores both theoretical and applied perspectives as to how design at the scales of settlement, neighborhood, building and room enables enhanced quality of life for society’s elderly and their families. Discussion will center on readings, case studies and lecture material, with a focus on arriving at a critical understanding of how built fabric choreographs the aging experience. Prerequisite: Graduate standing or consent of instructor. LEC.

ARCH 700. Directed Readings in Architecture. 1-3 Hours.
Individual study of special topics and problems. May be repeated for credit. Prerequisite: Graduate standing. RSH.
ARCH 701. Introduction to Graduate Studies. 3 Hours.
This course will examine issues in architectural research. It will provide an overview of graduate level studies with regard to definitions, methods, skills, and techniques. The course will consist of lectures, seminars, readings and guest presentations. The class will enable students to make informed judgments about matters of quality and quantity on architectural issues. Students will be expected to formulate sensible systems of classification for their chosen material. Students will be expected to produce papers and essays, make sample grant applications, and thesis formulations. Prerequisite: Students must be admitted to the 3.5 or 5 year Master of Architecture Professional plan and have successfully completed ARCH 409 or ARCH 608. LEC.

ARCH 706. Thesis or Project Definition. 1 Hour.
Seminar oriented to the clarification of the thesis or project problem and to the development of the thesis or project proposal. Prerequisite: Graduate standing. RSH.

ARCH 707. Furniture Design and Production. 3 Hours.
The object of this course is an intensive examination of the aesthetic problems of perceiving and making quality objects. Students will be expected to engage in a series of short-term, limited scope design exercises and experiments of an architectural nature. LEC.

ARCH 720. Architectural Acoustics. 3 Hours.
An introduction to the physics of sound. Objective and subjective evaluation and control of sound as applied to architectural spaces. Room shaping, mechanical and electrical system noise and vibration control, and electro-acoustic sound reinforcement. Prerequisite: PHSX 114 and ARCH 626 or equivalent, or consent of instructor. LEC.

ARCH 721. Electro-Acoustical Systems. 3 Hours.
A study of electro-acoustic sound reinforcement and reproduction systems for buildings. Prerequisite: PHSX 212, or consent of instructor. LEC.

ARCH 730. The Environmental Psychology of Health and Well-Being. 3 Hours.
This seminar examines the theories and understandings that address the health and well-being outcomes resulting from the complexity of interaction between human beings, their behavior, and designed systems or objects and how this varies across the life course. Environmental stimulation, orientation, control, restoration and their relationship to health outcomes through mediating concepts including stress, place identity and person-environment fit will be addressed. Students will engage in several research/assessment projects through the semester. Participation in class discussion will be an essential component of the class. Prerequisite: Graduate status or consent of the instructor. LEC.

ARCH 731. Architecture of Health. 3 Hours.
This is a seminar that will focus on the architectural dimensions of health and wellness. The course will investigate the ways the environment contributes to the well being (physical, emotional, spiritual) of people. The history of healthcare environments will be explored to show how healthcare environments have evolved to meet changing medical protocols and environmental technologies. A range of contemporary building types will studied, from critical-care hospitals to assisted-living residences and health spas. Students will research bibliographic sources, prepare case studies of existing health and wellness environments and prepare preliminary planning and design proposals for an environment that human well being. LEC.

ARCH 732. Environmental Pattern Languages. 3 Hours.
An introduction to the theory of pattern languages with particular emphasis on the work of Christopher Alexander; analysis of its relationships to other architectural theories; exploration of its implications for architectural practice. LEC.

ARCH 733. Analogous Thinking in Design. 3 Hours.
This seminar will seek analogs in psychology, medicine, biology, anthropology, and other disciplines; analogs that can serve to develop problem-seeking and problem-solving skills in design. Practice sessions in morphological analysis, synectics, bisoniation, and triadization will link rigorous research to methods of application. LEC.

ARCH 735. Graduate Seminar in Environmental Systems. 3 Hours.
The intention of this seminar is to provide a substantive overview of the literature and themes in environmental systems. It will serve to introduce students to skills required to conduct research in environmental systems. In addition, the course will entail discussions of students’ works in progress, peer review sessions, and completion of a conference paper. LEC.

ARCH 754. Design Ethics. 3 Hours.
This seminar will explore both Western and Eastern concepts of ethics and morality through readings, papers, discussion, and guest speakers. The role of ethics in providing guideposts for social and societal responsibility in design will be developed. LEC.

ARCH 762. Urban Design Studies. 3 Hours.
Seminar concerned with the factors, processes, techniques, and current issues in urban design practice. LEC.

ARCH 765. Theory of Urban Design. 3 Hours.
An examination of the relationship between architecture and urban planning through contemporary interpretations of future urban form and the determinants of the location, spatial structure, growth and decline of cities. Foundations for an interdisciplinary synthesis are examined in an attempt to bridge the hiatus between large-scale architectural design and incremental adjustments to urban dynamics. LEC.

ARCH 770. Contemporary Issues Seminar I. 1 Hour.
A series of seminars on contemporary issues facing the profession. LEC.

ARCH 771. Contemporary Issues Seminar II. 1 Hour.
These seminars will consist of three to four guest lecturers each semester. All students enrolled in this course will attend the same lecture as ARCH 772. Topics will be selected to reflect major issues covered in the course work, or contemporary issues facing the profession. LEC.

ARCH 772. Contemporary Issues Seminar III. 1 Hour.
These seminars will consist of three to four guest lecturers each semester. All students enrolled in this course will attend the same lecture with ARCH 771. Topics will be selected to reflect major issues covered in the course work, or contemporary issues facing the profession. This course will be graded Satisfactory/Unsatisfactory. LEC.

ARCH 773. Financial and Economic Issues in Architecture Management. 3 Hours.
This course will focus on the fundamentals of accounting, macroeconomics and the construction industry, and concepts related to the development and implementation of a strategic business plan. LEC.

ARCH 774. Organizational Issues in Architecture Management. 3 Hours.
Topics that will be covered in this course include the organization of a professional practice, personnel management, and the development of effective communication skills. LEC.

ARCH 775. Architecture Management: Managing a CAD System. 3 Hours.
This course covers the various procedures involved in managing a CAD system within a design organization. It also explores the different applications and uses of current CAD technology. Topics to be addressed include: selecting a system; billing CAD services; support services and personnel; marketing CAD; customization, file management, menus...
and script files; AutoLisp Programming; and integrating CAD with other programs. Prerequisite: An introductory CAD class or permission of the instructor. LEC.

ARCH 766. Project Delivery in Architecture Management. 3 Hours. Conventional methods for project delivery will be reviewed along with design/build, fast-track, and other techniques. The relationship of the architect and development will also be explored, as will the relationship of project development to urban design concepts. LEC.

ARCH 775. Marketing Architectural Services. 3 Hours. The emphasis of this course will be on the development and implementation of a marketing plan, techniques related to the marketing of specific projects, and the relationship of marketing to other components of a firm. LEC.

ARCH 776. Legal Issues in Architecture Management. 3 Hours. A course designed to familiarize the student with legal considerations related to professional practice. Case studies and selected readings will serve as the basis for discussion of registration, contracts, business formation, taxes, employment practices, copyright, and patent law. In addition, the course will draw upon the knowledge and experience of members of the professional community. LEC.

ARCH 790. Architectural Study Abroad: _____ 1-3 Hours. Organized field visits and study of selected architectural and urban sites abroad. Pre- and post-travel readings on themes selected to supplement and reinforce thesis or project research or areas of concentration. Students will be expected to maintain a diary and/or sketch book and submit a final paper. Prerequisite: Graduate standing and permission of instructor. FLR.

ARCH 799. Independent Study. 1-3 Hours. May be repeated for credit up to a total of nine (9) credits. Prerequisite: Graduate standing and consent of instructor. IND.

ARCH 801. Special Topics in Architecture: _____ 1-3 Hours. Advanced or experimental courses on specialized topics representing unique or changing needs and resources in the graduate program in architecture. LEC.

ARCH 802. Urban and Community Issues I. 6 Hours. A workshop-based course involving approved self and group directed investigations into issues of urban and community design with a focus on problem-setting, discovery and analysis. Prerequisite: Successful completion of ARCH 609 and consent of the Architecture Program Chair. LAB.

ARCH 803. Design-Build and Materiality I. 6 Hours. An advanced studio with an emphasis on issues of design-build and/or materiality with a focus on problem-setting, discovery, and analysis. Prerequisite: ARCH 609 and/or consent of the Architecture Department Chair. LAB.

ARCH 804. Design-Build and Materiality II. 6 Hours. Continuation of the critical and rigorous investigations into issues of design-build and/or materiality with an increasing focus on synthesis and evaluation. Prerequisite: ARCH 803. LAB.

ARCH 805. Architectural Cooperatives. 6 Hours. An advanced studio with an emphasis on professional collaboration and scholarship. Faculty-directed investigations within the context of an internship experience will focus on the development of a research topic in areas such as health and wellness, global issues, public interest, and entrepreneurship. Graded on a satisfactory/unsatisfactory basis. Prerequisite: ARCH 609. LAB.

ARCH 806. Architectural Technology II. 6 Hours. Continuation of the critical and rigorous investigations into issues of building technology with an increasing focus on synthesis and evaluation. Prerequisite: ARCH 805. LAB.

ARCH 807. Healthy and Sustainable Environments I. 6 Hours. A workshop-based course involving approved self and group directed investigations into healthy and sustainable environments with a focus on problem-setting, discovery and analysis. Prerequisite: Successful completion of ARCH 609 and consent of the Architecture Program Chair. LAB.

ARCH 808. Healthy and Sustainable Environments II. 6 Hours. An advanced studio with an emphasis on investigations into healthy and sustainable environments with a focus on problem-setting, discovery, and analysis. Prerequisite: ARCH 807. LAB.

ARCH 809. Internship/Study Abroad. 6 Hours. An advanced studio involving directed investigations with a focus on problem-setting, discovery, and analysis. Graded on satisfactory/unsatisfactory basis. Prerequisite: ARCH 609. LAB.

ARCH 810. Public Interest Design Studio. 6 Hours. An advanced studio with an emphasis on engaging community stakeholders and the general public, with a focus on problem-setting, discovery, and analysis. Prerequisite: ARCH 809. LEC.

ARCH 811. Architectural Investigation I. 6 Hours. A workshop-based course involving approved self and group directed investigations in a particular area of architectural investigation with a focus on problem-setting, discovery and analysis. Prerequisite: ARCH 609. LAB.

ARCH 812. Architectural Investigation II. 6 Hours. Continuation of the critical and rigorous investigations in a particular area of architectural investigation with an increasing focus on synthesis and evaluation. Prerequisite: ARCH 811. LAB.

ARCH 830. Designing Healthy Places and Communities. 3 Hours. This seminar investigates the research-based evidence regarding health outcomes at four different levels of dwelling: settlement, institution, home and proximate. Research domains that will be explored include how the urban fabric impacts active living; the role of public parks in urban health; environmental factors on health outcomes in hospitals and workplaces; environmental pathogens in the home; and ergonomic health. Healthy design will be understood as an important variable impacting people’s health by: increasing physical activity; reducing injury; improving air and water quality; minimizing environmental degradation; decreasing mental health stresses; and strengthening social fabric. Environmental assessment audits appropriate at various scales as well as space syntax as an analytic tool will be introduced and utilized. Participation in class discussion will be an essential component of the class. The semester will include a problem-based service-learning project requiring application of research in a real-life setting and active student reflection. Prerequisite: Graduate status or consent of the instructor. LEC.

ARCH 850. Special Topics in Management/Practice: ____. 2-3 Hours. Advanced or experimental courses on specialized topics representing unique or changing needs and resources in the management/practice option. IND.

ARCH 852. Ethics and Leadership in Professional Practice. 3 Hours. This course takes the perspective that architectural design is inherently an ethical act. Through this lens, students will learn the essentials of office practices, the many definitions of client and their roles in the design process, the legal responsibilities of the profession, the
importance of continuous professional development and the obligation the profession has to provide civic leadership in regard to the built and natural environment. LEC.

ARCH 858. Architectural Management Systems. 3 Hours.
Graduate course that investigates current issues in construction technologies and management techniques. LEC.

ARCH 899. Thesis or Project Research. 1-6 Hours.
Independent study, research and project work leading to the submission of a master's thesis or master's project. May be repeated for credit. Note: In some cases a Comprehensive Oral Examination Option may be substituted. Prerequisite: Permission of the Architecture Program Chair. THE.

ARCH 930. Doctoral Seminar I. 1 Hour.
The purpose of this discussion-based seminar is to explore issues of architectural research from a variety of perspectives. May be repeated up to a maximum of two (2 credits). Prerequisite: Admission to the Ph.D. in Architecture Program or consent of the Architecture Program Chair. LEC.

ARCH 931. Theories of Architectural Inquiry. 3 Hours.
This course will introduce the doctoral student to the major historical and theoretical foundations of architectural research. Architectural inquiry will be defined from diverse and distinct perspectives, and it will be assumed that buildings should be viewed as physical and cultural artifacts, as elements within larger social, natural and urban contexts, and as products of design and fabrication processes. The course will be a seminar format in which students will contribute to the discussions through independent research and critical analyses of the assigned readings and lectures. Prerequisite: Admission to the Ph.D in Architecture Program or consent of the Architecture Program Chair. LEC.

ARCH 951. Methods of Inquiry in Architectural Research. 3 Hours.
This course will provide students a foundation in methods of inquiry in researching the built environment. The purpose is to train students in developing research strategies applicable to the areas of design-fabrication processes, dwelling and community, and health and sustainability. Students will be exposed to a variety of methods of inquiry drawn from a number of disciplines. Through critical reading and content analysis, students will consider the value of scholarly research, learn to develop research questions, understand the nature of evidence, and the writing, presentation and illustration of scholarship. The course will be a seminar format in which students will contribute to the discussions through independent research and critical analyses of the assigned readings and lectures. Prerequisite: Admission to the Ph.D. in Architecture Program or consent of the Architecture Program Chair. LEC.

ARCH 958. Research Practicum Preparation. 1-6 Hours.
In this course, the students will frame a research question and develop a research proposal. The course is intended to serve as preparation for ARCH 959. Prerequisite: ARCH 931 and ARCH 951. RSH.

ARCH 959. Research Practicum. 4 Hours.
This is a research project undertaken and completed under the supervision of the student's major professor. The student designs, executes, and completes a small scale research project and produces a document of publishable quality within his/her area of inquiry. The project is intended to serve as a pilot study leading towards the dissertation. Prerequisite: ARCH 958. RSH.

ARCH 999. Doctoral Dissertation. 1-9 Hours.
Individual research work. A minimum of nine credits is required for the degree. May be repeated for credit. Prerequisite: Successful completion of the Comprehensive Oral Examination. THE.

Design Courses

ADS 320. Hallmark Symposium Series. 1 Hour.
Visiting professionals discuss various aspects of Design based upon their own special areas of expertise. The series is mandatory for all Design majors. Design majors must repeat this course at least 4 times for a total of 4 credit hours for graduation. Graded on a satisfactory/unsatisfactory basis. Open to all University wide students. LEC.

ADS 340. History and Philosophy of Design. 3 Hours.
Survey of design history from 1800 to present with emphasis on graphics, architecture, industrial and interior design movements, individuals and their influences. Prerequisite: BDS 102. LEC.

ADS 530. Intra Design Problems. _____, 3 Hours.
A collaborative studio across all Design Department areas of study. Students of the different areas will be organized into work groups and conduct in-depth research, investigate new problem solving methodologies, develop new applications and working knowledge of specialized subjects. Prerequisite: Junior level or higher standing in Design or Architecture or permission of the instructor. LAB.

ADS 531. Internship. 3 Hours.
Students develop professional skills and problems solving with an applied and relevant design employer's office. Supervision by faculty and a professional designer, designated and approved by the faculty in the area is mandatory. Graded on a Satisfactory/Unsatisfactory basis. May be repeated twice for credit. Prerequisite: Junior level or higher standing in the Design Department. FLD.

ADS 532. Study Abroad: _____, 3 Hours.
Students will participate in a Design focused study abroad program. The student will be required to attend group meetings prior to the trip along with development of research topics of interest. Simple documentation would be required - sketchbook/journal responding to day-to-day itinerary and other events, following the trip and presented for a grade. Prerequisite: Junior level or higher standing in Design or with permission of the instructor. Corequisite: ADS 533. LAB.

ADS 533. Study Abroad Documentation. 3 Hours.
Consists of research work prior to the trip as well as follow-up and required studio work due after return. A portfolio of work will be required for a grade. Course will also fulfill Design-specific requirements or studio credits for other majors. Areas may designate specific Design courses as substitutions for this course. Prerequisite: Junior level or higher standing in Design or with permission of the instructor. Corequisite: ADS 532. LEC.

ADS 560. Topics in Design: _____, 3 Hours.
A study of different topics in different semesters in a special area of interest to a staff member and suitable qualified students. May be repeated for credit. Prerequisite: Junior standing in department or permission of instructor. LAB.

ADS 570. Design Seminar. 3 Hours.
Comprehensive examination of a complex design problem from the point of view of the various specializations. Prerequisite: Junior standing in department. LEC.

ADS 580. Special Problems in Design. 1-6 Hours.
A study of current problems in design or crafts with an emphasis on research. Special problems proposals must be discussed with and approved by the instructor and advisor prior to enrollment in the course. A student may not take more than six credit hours of special problems in any one semester. Prerequisite: Junior standing in department. IND.

ADS 710. Advanced Human Factors in Interaction Design. 3 Hours.
The study of human factors principles and guidelines are fundamental to interaction design. In this course, these principles will be illustrated
and applied to real-world design projects/problems. Human physical and cognitive capabilities, computer-human interface and systems properties, interaction design methods, and the physical and socio-cultural environment will be considered. Fundamental issues in human-centered systems, basic research methods, including statistics and literature searches, will be included. Open to all university students. Graduate students will meet concurrently with INDD 510 and receive additional coursework. LEC.

**ADS 712. Design Strategies and Methods. 3 Hours.**
This course will cover the principles of design thinking, design processes, design strategies and methods, including techniques and tools for the development of human-technology interfaces. Abstract through concrete representation methods and techniques will be applied to interaction design projects/problems. Information collection and analysis methods, scenario and prototyping methods, evaluation methods (empirical), creativity methods, and task-oriented method (non-empirical) will also be considered. Methods common to design-related disciplines in the social sciences, business, architecture, communication studies and engineering are integrated. Graduate students will meet concurrently with INDD 512 and receive additional work. Prerequisite: Consent of instructor for all non-design students. LEC.

**ADS 714. Designing Business Services and Consumer Experiences. 3 Hours.**
Business products, services and environments are often intermingled in ways that require more holistic ways of thinking and development. A challenge of service innovation is to design with an understanding of the many dimensions of human experience and satisfaction. This course elaborates how, where, when, and why design can enhance the value of business services. Theory, methods, and practice aspects of services design are presented. LEC.

**ADS 720. Graduate Seminar in Design. 1 Hour.**
Comparative studies of various areas of specialization in design. Repeat for credit to a maximum of six credit hours. LEC.

**ADS 730. Directed Reading in Design. 1-3 Hours.**
Research reading and presentation of reports on specific subjects related to the students major area of specialization. Required of all graduate students. RSH.

**ADS 732. Study Abroad: ______. 3 Hours.**
Students will participate in a Design focused study abroad program. The student will be required to attend group meetings prior to the trip along with development of research topics of interest. Simple documentation would be required - sketchbook/journal responding to day-to-day itineraries and other events, following the trip and presented for a grade. Prerequisite: Junior level or higher standing in Design or with permission of the instructor. Corequisite: ADS 733. LAB.

**ADS 733. Study Abroad Documentation. 3 Hours.**
Consists of research work prior to the trip as well as follow-up and required studio work due after return. A portfolio of work will be required for a grade. Course will also fulfill Design-specific requirements or studio credits for other majors. Areas may designate specific Design courses as substitutions for this course. Prerequisite: Junior level or higher standing in Design or with permission of the instructor. Corequisite: ADS 732. LEC.

**ADS 740. Special Problems in Design. 1-6 Hours.**
An in-depth study of current problems in design or crafts with an emphasis on research. Special problems proposals must be discussed with and approved by the instructor and graduate advisor prior to enrollment in the course. RSH.

**ADS 745. Branding and Design. 3 Hours.**
A rapidly changing marketplace demands business strategy that is rooted in the dynamics of human culture, society, and psychology. Design thinking directly engages such factors and is, thus, well suited to help organizations formulate effective, versatile and strategic brands. This class focuses on strategic design analysis as a means to promote innovation in core brand development and extension into new applications and product categories. By aligning design with engineering, marketing, advertising, packaging, and service, business can innovate new sources of market value and deliver a more powerful brand messages. Prerequisite: Consent of instructor for all non-design students. LEC.

**ADS 750. Design Management. 3 Hours.**
Design Management has been described as “applied innovation” or the methodical capturing of talent and resources available inside and outside an organization to create valuable new offerings, brands, and business models. This course explores the design functions in business as a means to solve difficult challenges and develop new market-facing opportunities. Subjects include brand value creation, differentiation, coordination, and transformation. Numerous cases will be discussed. LEC.

**ADS 751. Creating Design Scenarios and Simulations. 3 Hours.**
Most organizations are imaginatively challenged and experience difficulty innovating and marketing new concept offerings. Conventional methods spotting and validating new opportunities often lack the persuasive power necessary for change to occur. Scenario-based design and simulation offers ways to vividly representing a future that is different from the past. This course presents theory, methods and practice aspects of design scenario construction and simulation. LEC.

**ADS 760. Design and Strategic Innovation. 3 Hours.**
As companies struggle with the demands of increasing consumer, intense competition and downward price pressures, there is a corresponding increase in the demand for more innovative business models and higher-value offerings. These forces have significantly broadened the strategic scope of design. Advanced, multi-disciplinary design teams are being engaged early to help guide new business and product development efforts. Why, where, when, and how this is done in order to deliver on the promise of innovation is the subject of this course. Prerequisite: ADS 750 or with consent of instructor. LEC.

**ADS 765. Interaction Design. 3 Hours.**
Interaction Design is about creating products, services or environments that offer significant experiential value to people and economic value to organizations. This course engages the comprehensive subject of design for human experience. Building on the gamut of human factors and design methods knowledge, this offers hands-on experience in the research, analysis, modeling and simulation of original and experientially compelling design solutions. Prerequisite: ADS 710, ADS 712 or with consent of instructor. LEC.

**ADS 770. Design Cognition. 3 Hours.**
In a science of design, the study of “human designers” is as important as the study of designed artifacts or design tools. Since the beginning of research in Design Cognition, many empirical studies have opened up our understanding or human designers and the ways they design. While design is largely a mental activity, it interacts strongly with heterogeneous external representations. It encompasses problem definition and solving, analogical mappings, mental imaging and other mental processes. It requires team coordination and is situated in a cultural milieu that defines roles and modes of behavior. As such, distributed cognition, situated cognition, and social cognition - all have become relevant to the understanding of design cognition. The structure of a design task, the mental representation of design form and behavior, the structure of design
teams, and the associated concepts of design cognition will be the subject of the course. LEC.

ADS 810. Orientation Seminar. 1 Hour.
Studies directed to development of a thesis plan. Required of all graduate students. Offered in fall semester only. Graded on a satisfactory/unsatisfactory basis. LEC.

ADS 850. Studio Teaching Practice. 1 Hour.
Graduate students only. Must hold an assistant instructor or teaching appointment. Credit earned does not satisfy any credit requirement for a degree. Graded S or U. FLD.

ADS 860. Graduate Synthesis and Applications Seminar. 1 Hour.
Group discussion and presentations on timely industry topics. Topics will be substantial, bridging relevant program subjects and professional area boundaries. May be repeated for up to six credit hours in subsequent semesters. LEC.

ADS 861. Thesis Research Seminar. 1 Hour.
Approaches to producing original design research. Methods, resources, topics and projects are discussed and evaluated. May be repeated for up to six credit hours in subsequent semesters. LEC.

ADS 890. Thesis. 1-8 Hours.
For guidance refer to Design department graduate guidelines. THE.

BDS 100. Design Dialogues. 3 Hours.
Design, like almost every industry, profession, school or major on campus, is forever being changed by technology, it's reach, global access, and social innovation. From the basics of how to think like a designer or how to design a better presentation in powerpoint to how design can be situated in businesses and organizations to create innovative new products, services or social change. This course will give students an awareness of design in our everyday world; an understanding of some of the cultural, theoretical, conceptual, and practical issues related to design and designing. The ultimate goal is that by the end of this course students will know how design contributes to contemporary society and how they might use this understanding throughout their life in little and big ways. Open to all majors. Corequisite: BDS 102 (for Design majors only). LEC.

BDS 101. Design Thinking and Making I. 3 Hours.
This is a course for all Design Department majors, to introduce them to creative problem solving; and the fundamentals of two, three and four-dimensional design. Drawing, photography, 2D and 3D models are used in this course as a means of design thinking to visually represent problems and solutions. Students must receive at least a grade of C (2.0) in this course to continue in the Design program. Prerequisite: Must be admitted into the Design Department or receive instructor permission. Corequisite: BDS 102. LEC.

BDS 102. Design Thinking and Making II. 3 Hours.
This is a course for all Design Department majors and serves as a continuation of BDS 101 with a greater emphasis on examining the relationships between design and other systems: environment, society and culture, and technology and economics. One and a half hours of lecture and six hours of studio/lab per week. Students must receive at least a grade of C (2.0) in this course to continue in their Design program. Prerequisite: Must be admitted into the Design Department and have completed BDS 101 and 103 with at least a grade of C (2.0) or equivalent course work, or receive instructor permission. Prerequisite: BDS 101 and 103. LAB.

BDS 103. Drawing for Design. 3 Hours.
This course will focus on drawing as a tool of communication through freehand exercises that explore observation and perception, form and proportion, dimensional illusion and expressive characteristics using a variety of materials and media. Some identified sections of this course will also use two-and-three-dimensional modeling software. Students must receive at least a grade of C (2.0) in this course to continue in their Design program. Prerequisite: Must be admitted into the Design Department or receive instructor permission. Corequisite: BDS 101. LAB.

ENVD 200. Fundamentals of Environmental Design. 3 Hours.
Introduction to fundamentals and processes involved in developing design concepts in the unit scale interior environment that may include residential or small area commercial spaces. The studio focuses on developing design vocabulary, graphic representations, space planning, furnishing and furnishings. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: BDS 102 and ENVD 202. Corequisite: ENVD 203. Prerequisite or corequisite: ENVD 212 or permission of instructor. LAB.

ENVD 203. Materials and Sustainability. 3 Hours.
Study and analyze building materials, furniture and furnishings through investigation into their physical and technical characteristics, limitations, and applications. The course also introduces the sustainability issues that relate to the selections and specifications that impact the environment, energy use and limited resources. It covers various agencies and organizations that develop guidelines on materials, resources, building practices, processes and systems that support sustainable design. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: BDS 102 and ENVD 202. Corequisite: ENVD 200 or permission of the instructor. LAB.

ENVD 204. Fundamentals of Interior Design. 3 Hours.
This first interior design studio will introduce the principles and elements of interior design, including design composition, space planning, furniture layout, color, and finish materials. It will also provide the direction and opportunity for the student to apply basic design and drawing skills developed in the Foundation courses to meet project program requirements in a series of projects of increasing complexity. Students will be expected to produce process diagrams, plans, elevations, models and finish boards. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: BDS 102 and BDS 103 or permission of instructor. Corequisite: ENVD 212 or permission of instructor. LAB LAB.

ENVD 212. Drawing for Environmental Design. 3 Hours.
Introduction to visualization tools in applications to interior environments using freehand sketching and computer aided design. The class focuses on vocabulary and theories of different drawing systems and develops basic CAD skills using Autocad and related software to generate 3D digital modeling, scene descriptions and view manipulations. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: BDS 102 and BDS 103 or permission of instructor. Corequisite: ENVD 212 or permission of instructor. LAB.

ENVD 304. Environmental Topics. 3 Hours.
This studio focuses on topics that relate to specific environments that may include retailing, hospitality, health care, restaurants, or work space strategies in offices. Students conduct research, explore ideas and generate concepts at a more complex scale level. Emphasis will be placed on understanding of users' operational needs, company brand or image, adjacencies, spatial analyses, understanding of material and their applications, environmental factors, codes and regulations that impact the
planning and selections. Related issues include lighting, furniture systems analysis and their applications, and custom casework design. Depending on availability, studio may work with other studio in Architecture or other discipline within the department on joint projects. This class may be repeated for credit. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ENVD 200 or permission of instructor. LAB.

ENVD 305. Research and Programming. 3 Hours.
Examining and analyzing essential information necessary to determine the clients' present and future operational requirements and the space, facilities, and services required for support. Establishing pre-planning concepts and guidelines on building and space utilization. Effort is directed toward developing space into a functional, flexible, and aesthetic environment in which to work. Study includes the use of questionnaires, organization charts, space study and standards, space projections, space tabulations, and space distribution using interaction, blocking, and layering diagrams. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ENVD 200, ENVD 304 and MATH 101 or permission of instructor. LAB.

ENVD 306. Environmental Topics II. 3 Hours.
Similar to Environmental Topics with focus on large scale projects in the range of 15,000 to 20,000 square feet. Emphasis on skill building, originality and expression of personal philosophy through advance planning and design. Other related studies include furniture systems research, evaluations, and their specifications. Students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ENVD 304 LAB.

ENVD 408. Integrated Senior Problems I. 3 Hours.
This class provides individual students with the opportunity to develop a project of choice based on the individual's interest and design philosophy and incorporates the skills acquired from the integrated curriculum. Students will conduct initial research and data collection to develop a program that includes the schematic and preliminary design development. Projects may include corporate offices, retailing, health care, hospitality and restaurants, exhibitions, residential design, or specialty interior products. Effort will focus on the investigation of a component within a large or complex project. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ENVD 304 and ENVD 305. LAB.

ENVD 410. Integrated Senior Problems II and Specification. 3 Hours.
A continuation of ENVD 408 that focuses on further design development leading to final design solutions and explores in detail the design of the total environment. The use of materials and their limitations, sustainability, environmental factors, technology, graphics and signage, custom design casework and interior products, applicable codes and standards, budget, and construction document production are all part of the investigations. Final results may include a set of drawings, working drawings, detail drawings, 4D models and/or multi-media presentations. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ENVD 408. LAB.

ENVD 413. Portfolio and Professional Practice. 3 Hours.
There are two different components to this class. The first is to develop the student's graduating portfolio that relates to the individual's professional interest. The second is the standards associated with the professional practice of a design office including office personnel and organization, scheduling, fee structures, contracts, billing, marketing and professional ethics. The course will include lectures, guest speakers, and field trips. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ENVD 304 and ENVD 305. LAB.

ENVD 715. Interior Design. 2-6 Hours.
Individual research. Prerequisite: INTD 606 or equivalent. RSH.

ENVD 815. Interior Design. 2-6 Hours.
Continuation of INTD 715. RSH.

ILLU 205. Drawing Media for Illustration. 3 Hours.
Exploration of problems in drawing for various reproduction processes. Emphasis on perspective, head drawing, the clothed and nude figure, nature illustration, perspective, and environments. Various drawing media and materials are explored. Required for Illustration majors as a pre-review course. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: BDS 101 or permission of instructor. LAB.

ILLU 305. Image Making. 3 Hours.
Concentrated study in developing methodologies for producing contemporary illustration. Emphasis is placed on concept development, composition exploration, value and color studies, and reference creation. Required for Illustration majors as a pre-review course. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: BDS 102. LAB.

ILLU 315. Introduction to Illustration. 3 Hours.
Concentrated study in developing skills and techniques with media and materials that are employed in producing contemporary illustration. Continued emphasis on methods of research and idea generation. For majors only. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C+ (2.3) or higher to continue on to the next course in the sequence. Prerequisite: BDS 305 and/or permission of instructor. Corequisite: ILLU 305. LAB.

ILLU 405. Drawing Media for Illustration II. 3 Hours.
Students will explore various drawing and painting media to continue developing their mastery of representational imagery for illustration. Reference collecting, model making, and the creating of photographic reference material will be addressed. Emphasis on mark making, value and color relationships, and placing the figure in an environment is also covered. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C+ (2.3) or higher to continue on to the next course in the sequence. Prerequisite: BDS 205 or permission of instructor. Corequisite: ILLU 315 or permission of instructor. LAB.

ILLU 410. Fundamentals of Animation. 4 Hours.
Concentrated study in developing skills and techniques with digital media and materials employed in producing basic contemporary animation. Development of concept, script, storyboard, and use of audio, music and sound effects are part of this animation experience. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: BDS 305 and BDS 405 and/or permission of instructor. Corequisite: BDS 415. LAB.

ILLU 415. Illustration Concepts. 3 Hours.
Focus of this course is to learn how to think visually. Concentrated study on developing different forms of concepts for illustration. Continued development of technical skills and visual literacy to gain insight on how
to make images that communicate unique ideas clearly. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ILLU 305 and ILLU 315. Corequisite: ILLU 410. LAB.

ILLU 425. Concept Art. 3 Hours.
Introductory exploration of the process, skills and concepts necessary for successful concept art character design and effective blending of matte painting and film. Drawing will be of primary concern for this course, yet exploring digital means of character development will also be introduced. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ILLU 410 and ILLU 415 and/or permission of instructor. Corequisite: ILLU 425. LAB.

ILLU 435. Sequential and Narrative Illustration. 4 Hours.
Exploration of thematic illustration through the development of a series of images based on a topic or story. Aspects of continuity, consistency, storytelling, pacing, editing, packaging and a holistic method of developing illustration are addressed. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ILLU 410 and ILLU 415. Corequisite: ILLU 425. LAB.

ILLU 445. Advanced Concept Art. 3 Hours.
Continuation in exploration of the process, skills and concepts for successful concept art character design, along with continued development of digital characters and 3D modeling. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ILLU 425 and ILLU 435 and/or permission of instructor. LAB.

ILLU 510. Animation. 3 Hours.
Continued development of concepts, scripts, storyboards, and use of audio, music and sound effects in the production of a one to three minute animated film. Prerequisite: ILLU 410 or permission of instructor. LAB.

ILLU 535. Promotion and Marketing for Illustration. 4 Hours.
Focus will be on preparation for entering the profession. Development and completion of self-promotion and marketing package will supplement and support the senior portfolio. Contemporary business practices and legal issues will be addressed. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ILLU 425 and ILLU 435 and/or permission of instructor. LAB.

ILLU 545. Basic Industrial Design Studio. 3 Hours.
Course introduces tools, techniques and processes used in the professional practice of Industrial Design. Learning is through a series of short, focused projects. Techniques in drawing, computer modeling, physical modeling, and presentation are demonstrated and developed. Strategies to improve creativity are explored, while addressing market and production considerations. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: BDS 102 and INDD 212. LAB.

INDD 302. Intermediate Industrial Design Studio. 3 Hours.
Course introduces tools, techniques and processes used in the professional practice of Industrial Design. Learning is through a series of short, focused projects. Techniques in drawing, computer modeling, physical modeling, and presentation are demonstrated and developed. Strategies to improve creativity are explored, while addressing market and production considerations. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: BDS 102 and INDD 212. LAB.

INDD 378. Problems in Industrial Design: ______. 3 Hours.
Individual and/or group research projects in one of several specific design areas which will be identified on a semester by semester basis. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. May be repeated for credit. Prerequisite: Eligibility for INDD 302 or permission of instructor. LAB.

INDD 446. Advanced Industrial Design Studio. 3 Hours.
Continuation of INDD 284 and 302 but encompassing design problems of greater complexity including group research and problem solving assignments in advanced product and service design. Advanced techniques in problem solving, concept communication, visualization, and overall design expression will be demonstrated and explored. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: INDD 302. LAB.

INDD 448. Professional Industrial Design Studio Practices. 3 Hours.
Continuation of Industrial Design studios, projects are longer requiring a high level of demonstrated design ability for successful completion. Issues regarding professional ethics, accountability, and responsibility to public and client are discussed and implemented. Professional design, presentation, and visualization skills will be demonstrated and explored. Finished designs will include full production technical specifications. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: INDD 446. LAB.

INDD 508. Materials and Processes. 3 Hours.
A study of modern materials, manufacturing processes, and construction methods applicable to the fields of industrial design and interior design. Design analysis of existing products, furniture, building components, and storage systems. Design assignments in furniture, storage systems, and interior space arrangements with emphasis on materials and construction. Field trips to area manufacturing and design facilities. Prerequisite: Permission of instructor. LEC.

INDD 510. Human Factors in Design. 3 Hours.
Introduction to the field of human factors (ergonomics) appropriate to industrial, interior, and visual design. Human capabilities, human-machine
interfaces and system laboratories, and the environment are considered, a micro-computer laboratory is integrated into the course. Open to all university students. Prerequisite: Consent of instructor for non-art and non-design majors. Corequisite: BDS 102. LEC.

**INDD 512. Methods in Design. 3 Hours.**
Introduction to the study of methods of designing common to industrial, interior, and visual design. Evaluation methods (semantic differential), creativity methods (scenario writing), and task-oriented method: (PERT/CPM) will be considered in relation to design problems. Open to non-design students. Prerequisite and/or Corequisite: INDD 302 for industrial design majors or ENVD 200 for environmental design majors respectively. Consent of instructor for all other students. LEC.

**INDD 555. Portfolio. 3 Hours.**
Work directed toward maximizing the quality and effectiveness of the individual student's professional portfolio. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite or Corequisite: INDD 448. LEC.

**INDD 580. Senior Industrial Design Studio. 3 Hours.**
Course requires the negotiation and accomplishment of a comprehensive body of work, comprising independent research, ideation, refinement, detail technical specifications, renderings, and a working and tested prototype of your final design. A final report of the project is required documenting your design process, the depth and complexity of which are commensurate with expectations for entry-level professionals. Faculty may consider national or international competitions as appropriate substitutions for student derived briefs, where applicable. The nature and scope of the work (1-2 projects maximum), as well as details of anticipated accomplishment must be outlined by the student and approved by the instructor prior to the beginning of the second week of classes. In exceptional circumstances, projects may extend into both semesters, via INDD 581--this requires permission/negotiation with faculty and is to be declared as an aspiration at start of INDD 580. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: INDD 580. LAB.

**INDD 581. Senior Industrial Design Studio II. 3 Hours.**
Course requires the negotiation and accomplishment of a comprehensive body of work, comprising independent research, ideation, refinement, detail technical specifications, renderings, and a working and tested prototype of your final design. A final report of the project is required documenting your design process, the depth and complexity of which are commensurate with expectations for entry-level professionals. Faculty may consider national or international competitions as appropriate substitutions for student derived briefs, where applicable. The nature and scope of the work (1-2 projects maximum), as well as details of anticipated accomplishment must be outlined by the student and approved by the instructor prior to the beginning of the second week of classes. In exceptional circumstances, projects may be a continuation of those started in INDD 580--this requires permission/negotiation with faculty and is to be declared as an aspiration at start of INDD 580. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: INDD 580. LAB.

**PHMD 101. Fundamentals of Photography. 3 Hours. GE3H.**
Open to students of all disciplines and experience levels, this course provides an introduction to the medium and language of photography. Basic camera operation, workflow, and digital/analog printing methods are explored, accompanied by lectures, readings, and discussions regarding the historical and theoretical concerns of the medium. A digital camera with full manual controls is required - RAW capable preferred. Open to students of all disciplines and experience levels. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. LAB.

**PHMD 201. Photography I. 4 Hours.**
The first of the two-part foundational Photography sequence, this majors-only course provides students with a rigorous immersion into the formal, technical, and conceptual concerns and challenges of photography by way of the view camera. Embracing both the wet and digital darkrooms, students shoot and develop sheet film that is then utilized to produce both traditional and digital prints. Intermediate digital editing methods are introduced and explored. View cameras are provided. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: PHMD 101, BDS 102, and permission of instructor. LAB.

**PHMD 202. Photography II. 4 Hours.**
The second of the two-part foundational Photography sequence, this advanced course builds upon PHMD 201 with additional emphasis on color, RAW workflow, and advanced methods for digital capture, manipulation, editing, and compositing. Additionally, students work extensively with large-format inkjet printers to create custom ICC printing profiles. A digital SLR (RAW capable) camera with full manual controls is required. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: PHMD 201 and permission of instructor. LAB.

**PHMD 210. Understanding Photographs. 3 Hours.**
Understanding Photographs is a lecture-based course that focuses on developing a critical understanding of how images, paired with culture and society, generate meaning in both the historical and contemporary contexts. Open to students of all disciplines and experience level. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: PHMD 201 and permission of instructor. LAB.

**PHMD 301. Lighting Studio. 3 Hours.**
Lighting Studio is a fundamental course in awareness, modification, and control of light. Students work extensively with strobe and continuous light sources. Principles of natural and artificial light are introduced, explored, and applied through hands on assignments both in and out of the studio environment. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: PHMD 202 or permission of instructor. LAB.

**PHMD 302. The Moving Image. 3 Hours.**
This course serves as an introduction to the principles and challenges of photography as a time-based medium. Fundamental concepts of production are introduced and explored through hands-on exercises, class presentations and discussions, lectures, critiques, and individual and group projects. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: PHMD 202 or permission of instructor. LAB.
PHMD 315. Experimental Processes. 3 Hours.
Experimental Processes is an introduction to the understanding and production of image-based works utilizing experimental approaches and alternative processes in an interdisciplinary environment. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: PHMD 202 or permission of instructor. LAB.

PHMD 402. Photo Media Seminar. 3 Hours.
This upper-level seminar is focused primarily on the development of independent and collaborative projects through on-going group critique with an emphasis on research and analysis. Learning is focused on personal development and other issues relevant to contemporary photographic practice through assigned readings, presentations, and group discussion. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. May be repeated for credit. Prerequisite: PHMD 202 or instructor permission. LAB.

PHMD 500. Portfolio. 3 Hours. AE61.
Taken the final semester of study, this course guides students through the research, preparation, and refinement of a final portfolio and appropriate supplemental materials. Methods and strategies of presentation and dissemination are discussed and explored. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: PHMD 402 or instructor permission. LAB.

PHMD 501. Advanced Lighting Studio. 3 Hours.
A continuation of the skills and principles discussed in PHMD 301. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: PHMD 301. LAB.

PHMD 502. Advanced Moving Image. 3 Hours.
A continuation of the skills and principles discussed in PHMD 302. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: PHMD 302. LAB.

PHMD 515. Advanced Experimental Processes. 3 Hours.
A continuation of the skills and principles covered in PHMD 315. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: PHMD 315. LAB.

PHMD 560. Special Topics in Photo Media: ______. 3 Hours.
Special topics courses in Photo Media vary by instructor and provide additional opportunities for interdisciplinary research and advanced specialized study. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. May be repeated for credit. Prerequisite: PHMD 202 or permission of instructor. LAB.

VISC 177. First Year Seminar.: 3 Hours. GE11.
Graphic design is everywhere, on everything we see, touching everything we do, on everything we buy. Graphic design is a popular art and a practical art, an applied art and an ancient art. Simply put, it is the art of visualizing ideas and it is a way of thinking. In this class we will explore principles of Graphic Design: how to identify them, how to be more savvy consumers of them and how to use them for good and not for evil. You will learn to look at your visual environment with designer’s eyes to discern “good design” from “bad design”, while putting powerful design principles in to practice in your own careers, communities and classrooms. LEC.

VISC 201. Visual Communication Design. 3 Hours.
Presentation of fundamental concepts of visual and non-visual communication. Exploration of various theories of visual perception and visual communication with emphasis on reading visual images for meaning and making meaning through the construction of visual images and typography. A special laboratory section will include design thinking and making strategies and processes which are common to visual communication design from the handmade to the computer. This course is for non-Visual Communication majors. Prerequisite and/or Corequisite: BDS 102. LAB.

VISC 202. Elements of Typography. 3 Hours.
Introduces the discipline, function, and tradition of typography as it relates to visual/verbal communication. Emphasis is on interrelationships of letter, word, line and page. Projects examine two-dimensional typographic space, sequence and information hierarchy. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: BDS 102. Corequisite: VISC 204. LAB.

VISC 204. Principles of Visual Communication. 3 Hours.
Visual communication problems involving the student in the translation of verbal concepts and design theory into visual images. This course focuses attention on the process of defining problems, gathering information, and formulating clear, powerful, and persuasive visual statements. Introduction to methods of research, idea generation, and image making will be an integral part of this course. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: BDS 102. Corequisite: VISC 202. LAB.

VISC 302. Typographic Systems. 3 Hours.
Further exploration of typographic form and manipulation of variables which affect content; stresses the importance of typographic composition as an integral component of visual communication design. Projects examine advanced structures of typographic space, work-image structure, and typographic details and aesthetic. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C+ (2.3) or higher to continue on to the next course in the sequence. Prerequisite: VISC 202, VISC 204, and permission of instructor. Corequisite: VISC 304. LAB.

VISC 304. Designing Understanding. 3 Hours.
Exploration of the relationships among people, places, and the visual objects and information they use. Attention on the different roles of the designer as observer, empathizer, communicator and experience builder. Introduction to information design processes and procedures of understanding by ordering data into useful and persuasive information tools and experiences. Various methodologies will be explored for visualizing information for clarity, resonance, and editorial voice with special attention to the relationships among audience and context in the creation of meaning. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C+ (2.3) or higher to continue on to the next course in the sequence. Prerequisite: VISC 202, VISC 204, and permission of instructor. Corequisite: VISC 302. LAB.

VISC 310. Letterpress. 3 Hours.
This course concentrates on the traditional methods of hand typesetting, using the Department of Design’s collection of lead and wood type. Learn
VISC 410. Letterpress II. 3 Hours.
Artists’ books are books created as original works of art that push the boundaries of the traditional book. This course will focus on the interdependence of form and content through studio work, readings, and the examination of historical and contemporary models. Students will explore a wide range of book structures from basic to innovative. Final outcomes will combine images, hand set type, and digital processes to create both one-of-a-kind, and limited edition artists’ books. VISC 310 Letterpress I is recommended, but not required. Open to all majors. Prerequisite: VISC 201 or VISC 202, or permission of the instructor. LAB.

VISC 414. Publication and Editorial. 4 Hours.
Exploration of topics dealing intensively with editorial concept and format organization. Projects stress advanced problems in the integration of text and image through the development of complex and variable structures. Emphasis on thorough researching of content and audience as well as understanding of production/execution implications of solutions. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: VISC 402, VISC 404. LAB.

VISC 415. Motion Graphics. 3 Hours.
Introduction to the elements, principles and history of motion design. Emphasis on the conceptualization, planning and storyboarding of time-based media with respect to some specific, clearly stated aesthetic and/or communicative purpose. Students will examine methods for synthesizing still moving imagery, typography and audio, in motion, using Adobe After Effects in combination with other software such as Final Cut Pro, Illustrator and Photoshop. Prerequisite: VISC 201, ARCH 108 or VISC 202. LAB.

VISC 420. Exhibition Design. 3 Hours.
This course will explore how exhibitions are conceptualized, designed and made. It will look at the role of curators, exhibition designers, graphic designers as well as the audience of cultural institutions. Open to all majors. Prerequisite: VISC 201, ARCH 108 or VISC 202. LEC.

VISC 425. Environmental Graphics. 3 Hours.
This course will examine core principles and practices of environmental graphic design. Many of these concepts will be concerned with the visual aspects of wayfinding, communicating identity and information, and shaping the idea of place. Some of the topics discussed will include: signage, exhibit design, identity graphics, pictogram design, mapping, civic design and themed environments. Prerequisite: VISC 201 or VISC 304. LEC.

VISC 435. Book Arts. 3 Hours.
Producing books in editions is a complex undertaking. Students work in teams to create or compile content of their choosing, then edit, design, and bind their own books in a small edition. The class combines both traditional letterpress technology and digital interface for the creation of text and image. Each student receives two copies of the team's final book, one copy is archived in Special Collections at the Spencer Research Library. This class is required for the completion of the Book Arts Certificate. Open to all majors. Prerequisite: VISC 201 or VISC 202, or permission of the instructor. LAB.

VISC 440. Bookstructures and Papermaking. 3 Hours.
Students will learn to make a variety of book structures and enclosures, from historical to contemporary. Prototypes and models, as well as comprehensive notes and instructions will provide the student with a library of bindings for future reference. Students will document paper that is made in class and create a record for themselves, other students, and the Department of Design. Open to all majors. Prerequisite: VISC 201 or VISC 202 or permission of the instructor. LAB.

VISC 450. Designing Information. 3 Hours.
Making preliminary visualizations, models, and prototypes. Examines words, diagrams, type, and sequencing to restructure messages so that they tell a story more effectively. Editing images to make messages clear, unambiguous and understandable by their intended audience(s). Designing the appearance of an information product so that users can find what they want and understand it when they get there. Open to all Design majors. Prerequisite: VISC 201 or VISC 304 or permission of the instructor. LAB.

VISC 520. Designing for Change. 4 Hours. AE61.
Exploration of branding, service and interaction design opportunities that respond to real-life complexity: audiences, systems and contexts. Introduces business and design thinking strategies associated with brand development and the idea that design plays a vital role in our local, national, and global society and well-being. Emphasis on the methods of thinking and research which precede the making of design as well as the importance of writing and verbal presentation to the visual communication design profession. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: VISC 414 or permission of the instructor. LAB.

VISC 525. Senior Problems. 4 Hours.
Goal-oriented graphic design problem-solving with emphasis on research, analysis, and synthesis of complex visual problems. Will allow for in-depth study of professional design issues and topics; provides a forum for multi-disciplinary collaboration with related professional disciplines. May be repeated for credit. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade
of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: VISC 520 or permission of instructor. LAB.

**VISC 530. Portfolio. 3 Hours.**
Instruction in the organization and presentation of a professional quality visual portfolio. Readings, feedback and online collaborations will focus on the development of a focused portfolio consistent with the individual student's pursuits. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite or Corequisite: VISC 520 or permission of instructor. LAB.

**VISC 531. Professional Practice. 1 Hour.**
Though class discussions, guest speakers and professional roundtables, the Professional Practice course covers writing the perfect cover letter, how to contact companies and grow professional relationships, freelancing, fees and contracts, interviewing, landing the first job and expectations, recruiters, moving to the second job. Participation in professional portfolio reviews and one-on-one sessions are a requirement of the course. Graded on a satisfactory/unsatisfactory basis. Prerequisite: VISC 520 or permission of instructor. LEC.

**VISC 534. Portfolio Development. 3 Hours.**
This course will provide design and non-design majors instruction in the organization and presentation of a professional quality visual portfolio. Readings, feedback and online collaborations will focus on the development of a focused portfolio consistent with the individual student's pursuits. Graded on a satisfactory/unsatisfactory basis. LEC.

**VISC 550. Special Topics in Visual Communication: ______. 3 Hours.**
A study of different topics in different semesters in a special area of visual communication. Entry by permission of instructor. May be repeated for credit. LAB.

**VISC 701. Visual Communication. 3 Hours.**
Presentation of fundamental concepts of visual and non-visual communication. Exploration of various theories of visual perception and visual communication with emphasis on reading visual images for meaning and making meaning through the construction of visual images and typography. A special laboratory section will include design thinking and making strategies and processes which are common to visual communication design from the handmade to the computer. Prerequisite: Permission of the instructor. LAB.

**VISC 704. Designing Understanding. 3 Hours.**
Exploration of the relationships among people, places, and the visual objects and information they use. Attention on the different roles of the designer as observer, empathizer, communicator and experience builder. Introduction to information design processes and procedures of understanding by ordering data into useful and persuasive information tools and experiences. Various methodologies will be explored for visualizing information for clarity, resonance, and editorial voice with special attention to the relationships among audience and context in the creation of meaning. Prerequisite: Permission of the instructor. LAB.

**VISC 706. Graphics. 3-6 Hours.**
LAB.

**VISC 710. Letterpress. 3 Hours.**
This introductory course in letterpress will instruct the student in methods for printing from moveable type and other type-high surfaces. The discipline will be explored from a historic as well as artistic perspective. Emphasis will be placed on the acquisition of skills and vocabulary, and the creative use of type and techniques. Prerequisite: Permission of the instructor. LAB.

**VISC 712. Letterpress II: Form and Content. 3 Hours.**
Artists' books are books created as original works of art that push the boundaries of the traditional book. This course will focus on the interdependence of form and content through studio work, readings, and the examination of historical and contemporary models. Students will explore a wide range of book structures from basic to innovative. Final outcomes will combine images, hand set type, and digital processes to create both one-of-a-kind, and limited edition artists' books. VISC 710 is recommended, but not required. Open to all majors. Prerequisite: Permission of the instructor. LAB.

**VISC 714. Designing for Social Interactions. 3 Hours.**
Introduces the discipline of designing for dynamic media (i.e., internet, on screen, multi-media.) Emphasis will be placed on concept development and on the fundamental principles of information hierarchy, user experience, navigation strategies, site development and site architecture. Projects, lectures and tutorials will provide a working knowledge of current tools and techniques, while exploring the issues of narrative structure, rhythm, space, animation, sound, and video. Prerequisite: Permission of the instructor. LAB.

**VISC 715. Motion Graphics. 3 Hours.**
Introduction to the elements, principles and history of motion design. Emphasis on the conceptualization, planning and storyboarding of time-based media with respect to some specific, clearly stated aesthetic and/or communicative purpose. Students will examine methods for synthesizing still moving imagery, typography and audio, in motion, using Adobe After Effects in combination with other software such as Final Cut Pro, Illustrator and Photoshop. Prerequisite: Permission of the instructor. LAB.

**VISC 720. Exhibition Design. 3 Hours.**
This course will explore how exhibitions are conceptualized, designed and made. It will look at the role of curators, exhibition designers, graphic designers as well as the audience of cultural institutions. Open to all majors. Prerequisite: Permission of the instructor. LAB.

**VISC 725. Environmental Graphics. 3 Hours.**
This course will examine core principles and practices of environmental graphic design. Many of these concepts will be concerned with the visual aspects of wayfinding, communicating identity and information, and shaping the idea of place. Some of the topics discussed will include: signage, exhibit design, identity graphics, pictogram design, mapping, civic design and themed environments. Prerequisite: Permission of the instructor. LAB.

**VISC 735. Books Art. 3 Hours.**
Combines wide range of traditional letterpress and digital processes for type and image for individually determined student book projects. Projects will culminate in a small printed and bound edition. Prequisite: Permission of the instructor. LAB.

**VISC 740. Bookstructures and Papermaking. 3 Hours.**
This course will seek to acquaint the student with the origins of the book, paper, and pre-paper writing surfaces. Prototypes and models, as well as comprehensive notes and instructions will provide the student with a library of structures and variations for future reference. Students will document paper that is made in class and create a record for themselves, other students, and the School of Design. Prerequisite: Permission of the instructor. LAB.

**VISC 755. Designing Information. 3 Hours.**
Making preliminary visualizations, models, and prototypes. Examines words, diagrams, type, and sequencing to restructure messages so that they tell a story more effectively. Editing images to make messages clear, unambiguous and understandable by their intended audience(s). Designing the appearance of an information product so that users can find
what they want and understand it when they get there. Open to all Design majors. Prerequisite: Permission of the instructor. LAB.

**VISC 760. Designing for Change. 3 Hours.**
Exploration of branding, service and interaction design opportunities that respond to real-life complexity: audiences, systems and contexts. Introduces business and design thinking strategies associated with brand development and the idea that design plays a vital role in our local, national, and global society and well-being. Emphasis on the methods of thinking and research which precede the making of design as well as the importance of writing and verbal presentation to the visual communication design profession. Prerequisite: Permission of the instructor. LAB.

**VISC 815. Graphics. 2-6 Hours.**
Individual research. RSH.

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**Urban Planning Courses**

**UBPL 200. Sustainability and Society. 3 Hours. AE51/GE11/GE3S.**
This course will introduce the concept of sustainability, examining its early iterations, recent applications, and possible future transformations. Critical analysis of sustainability as a concept and societal goal will be a course cornerstone. We will examine two contemporary social issues that are relevant to students at the University of Kansas. Social science perspectives will be emphasized, but, because sustainability necessitates an interdisciplinary perspective, the course will consider the contributions of a wide range of disciplines to these issues. LEC.

**UBPL 300. Planning the American City. 3 Hours. GE3S.**
A broad introduction to the field of urban planning as a technical profession, a process of decision-making, and a governmental function. The multi-disciplinary nature of planning as an area for professional practice in the geographical, socio-economic and political contexts of the U.S. is stressed. We will explore the promise and limitations of planning in the context of mitigating and adapting to climate change. The course is intended for both the student who is considering planning as a major field of study and the student with primary interest in a related field who would like a working knowledge of past and current planning in the U.S. LEC.

**UBPL 502. Special Topics in Urban Planning: ______. 1-6 Hours.**
Intended for undergraduate individual or group projects/research in an urban planning topic. LEC.

**UBPL 522. History of the American City I. 3 Hours.**
This course examines the evolution of American cities from their European antecedents through the late 20th Century, from the urban planning perspective. It focuses on the changing spatial forms and functions of American cities and how these changes relate to socioeconomic and political aspects of urbanization as well as changes in technology. Emphasis is placed on analyzing the relationships between historical development patterns and the current range of problems facing most U. S. cities. (Same as UBPL 722 but gives undergraduate credit.) LEC.

**UBPL 538. Environmental Planning Techniques. 3 Hours.**
The course covers a variety of topics within environmental planning. Each topic is examined with respect to the scope of the issues, the methods of analyzing and/or measuring those issues, and the ways planners can address those issues in order to avoid or mitigate environmental problems. LEC.

**UBPL 565. Introduction to Sustainable Land Use Planning. 3 Hours.**
This course introduces students to the issues that planners and decision makers face as they strive to protect environmental resources, especially within the context of land use planning. Emphasis will be placed on the theoretical and policy considerations that guide the work of environmental planners. LEC.

**UBPL 662. Twentieth Century American Landscape. 3 Hours.**
The purpose of this course is to investigate the relationships between the American culture and the resulting built and natural landscape. Issues of building types, public places, and land use arrangements will be studied from a socio-historical perspective. (Same as ARCH 662.) LEC.

**UBPL 701. Directed Readings. 1-6 Hours.**
Designed to meet the needs of students whose study in urban planning cannot be met with the present courses. Prerequisite: Consent of instructor. RSH.

**UBPL 705. Economic Analysis for Planners. 3 Hours.**
An introduction to the concepts and analytical techniques of economics that are most relevant to urban planners. The first part of the course is devoted to microeconomic theory, welfare economics, and the role of the government in the economy. The remainder covers public finance, investment analysis, and methods of determining the allocation of public resources (such as benefit-cost analysis). LEC.

**UBPL 710. Introduction to Housing Policy. 3 Hours.**
Designed to provide an introduction to the various methods used by the public sector in order to intervene in the housing market. Many different programs are used by governments at all levels to serve many different housing goals. This course will examine many of these programs in an effort to understand what they are supposed to accomplish and how well they work. In all cases, the objective of the course is to train planners so that they have a firm understanding of housing programs that exist now as well as a grasp of the methods used to select housing strategies for implementation by the public sector. LEC.

**UBPL 714. Local Economic Development Planning. 3 Hours.**
This course provides a broad overview of local economic development planning. Emphasis is on the role of the practitioner and the various activities that can be pursued to encourage and enhance the economic base of a locality. The objectives of the course are to answer the questions: who are economic development planners; what backgrounds and interests do they have; what types of activities do they perform and initiate to encourage and enhance economic development; and how do they decide upon which activities to pursue? Prerequisite: UBPL 764 or permission of instructor. LEC.

**UBPL 715. Community* in Neighborhood Planning and Design. 3 Hours.**
This course provides a place-centered approach for understanding and applying the idea of community to local neighborhood planning. The course explores social theories of community and how these have influenced prescriptive models for neighborhood development and design. The course also evaluates the interplay of social, environmental, and economic forces at the neighborhood level and their relationship to community development and well-being. LEC.

**UBPL 716. Community and Neighborhood Revitalization. 3 Hours.**
The course examines the fields of community development and the revitalization of urban neighborhoods. In the course, students study the theories of community redevelopment as well as the methods of analysis guiding the planning of neighborhoods. The course also reviews the many programs that exist to assist the neighborhood revitalization process and looks at the literature evaluating the implementation of these programs. As an implementation course, students complete a project that calls for them to apply the knowledge learned to real world setting. Prerequisite: UBPL 764 or permission of the professor. LEC.

**UBPL 722. History of the American City II. 3 Hours.**
This course examines the evolution of American cities from their European antecedents through the late 20th Century, from the urban planning perspective. It focuses on the changing spatial forms
and functions of American cities and how these changes relate to socioeconomic and political aspects of urbanization as well as changes in technology. Emphasis is placed on analyzing the relationships between historical development patterns and the current range of problems facing most U. S. cities. (Same as UBPL 522 but gives graduate credit.) LEC.

UBPL 730. Plans and Planning Processes. 3 Hours.
This course is about how to create plans and put the pieces of cities together in a sustainable manner, balancing the competing values of economy, ecology, equity, and livability. It introduces students to the planning process in the U.S., what makes great plans, the basic implementation tools for planning (zoning, capital improvement plans, engineering standards, and subdivision regulations.) We will learn about the Comprehensive Plan along with specialized plans for transportation, housing, land use, and the environment. LEC.

UBPL 735. Site Planning and Design. 3 Hours.
Site planning is the arrangement of elements (buildings, landscaping, parking, open space) on particular pieces of property. This class focuses on the site planning process and the implementation of site design standards through regulations. We will delve into the elements and principles of design and ask these big questions: What makes great public spaces? What makes great neighborhoods? What makes great streets? What can we do to steer development in the direction of greatness? LEC.

UBPL 736. Planning Institutions. 3 Hours.
This course explores the legal principles underlying the institutions, practices and processes of city planning. Subjects to be discussed include zoning, eminent domain, subdivision regulation, transfer of development rights, environmental regulation, growth management, and other planning mechanisms used to guide urban growth and control the use of land. Students should emerge from the course with a solid understanding of both the logic and routine practice of planning in a procedural and institutional context. LEC.

UBPL 737. NEPA Environmental Assessments. 3 Hours.
This course provides an understanding of how to effectively manage and conduct environmental assessments as required by the National Environmental Protection Act (NEPA). Topics include the history and intent of NEPA; the steps, players and assessment types; techniques used to balance environmental concerns with the social and economic considerations; and the role of the courts and environmental advocacy groups in challenging NEPA assessment findings. The class also addresses the role of leadership, conflict resolution, and consensus building in managing environmental assessments. Case studies are used to examine different assessment types and process approaches. LEC.

UBPL 738. Environmental Planning Techniques. 3 Hours.
The course covers a variety of topics within environmental planning. Each topic is examined with respect to the scope of the issues, the methods of analyzing and/or measuring those issues, and the ways planners can address those issues in order to avoid or mitigate environmental problems. LEC.

UBPL 739. Issues in Growth Management. 3 Hours.
This course examines various aspects of growth management including its history, legal foundations, and application at different levels of government. Growth management not only means dealing with the rapid growth of cities, it also includes managing slow growth, no growth, and negative growth with the ultimate goal being sustainability. Impacts on affordable housing, economic development, social equity, transpiration, and environmental conservation are also explored. LEC.

UBPL 740. Quantitative Methods I. 3 Hours.
Introduction to quantitative techniques utilized in planning analysis. Introduction to research design, inferential statistics, and survey methods. LEC.

UBPL 741. Quantitative Methods II. 3 Hours.
Advanced study in planning techniques in the areas of population forecasting, analysis of variance, and regression. The course makes extensive use of microcomputers. Prerequisite: UBPL 740 or consent of instructor. LEC.

UBPL 746. GIS Applications for Design and Planning. 3 Hours.
This course will explore a range of Geographic Information Systems (GIS) applications for students in architecture and planning. It will be structured as a workshop, starting with a review of basic GIS concepts and procedures. Different digital data sources will be explored, along with file sharing (import and export) capabilities. The focus will be on applications at different scales using projects in architecture, site planning, environmental planning, urban analysis, and regional analysis. Three dimensional analysis will also be introduced. Each student will develop a final project as a synthesis of earlier exercises and as an application relevant to their individual professional interests. LEC.

UBPL 750. Introduction to Transportation Planning. 3 Hours.
This course is a survey course covering multiple modes of transportation (planes, trains, buses, automobiles, bicycles, and walking). The field of transportation planning is examined within a policy analysis framework. Knowing the policy context and understanding how decisions are made will assist transportation planners in understanding the world in which they operate. In addition to the policy context, this course will focus on the technical knowledge transportation planners are expected to know like federal requirements, traffic modeling, and specific topics like bicycle and pedestrian planning and traffic calming. LEC.

UBPL 755. Planning Intercity Transportation Systems. 3 Hours.
This course explores the supply and demand of intercity multimodal movement of people and goods from megaregional to global scales. Students will learn the characteristics and performance of rail, aviation, and marine travel, the nuts and bolts of supply provision, effects of intercity connections on communities, and mechanisms for planning across state and national borders. LEC.

UBPL 756. Travel Demand Forecasting Methods. 3 Hours.
The course is intended to provide a working knowledge of analytical transportation planning; it emphasizes two elements. One emphasis is to describe the fundamental principles of transportation planning through the review of transportation modeling theory and practice. The second emphasis is to work with the TransCad model. Students learn how to use these models by running TransCad (GIS based modeling software), building a transportation model, and using it to forecast future transportation conditions. Prerequisite: UBPL 750 or consent of instructor. LEC.

UBPL 757. Transportation Planning Implementation. 3 Hours.
A variety of transportation implementation methods and strategies are explored. Project management with an emphasis on finance is the major focus of this course. This is a significant responsibility of transportation planners, consisting of several key steps including project initiating, planning, execution, and control. Other techniques included in this course deal with air quality conformity, congestion management, environmental reviews, developing performance measures, scenario testing, highway capacity analysis and micro-simulation modeling, and executing public involvement programs. LEC.
UBPL 758. Public Transit. 3 Hours.
This course familiarizes students with core concepts and practices in public provision of local transit systems from high-capacity heavy rail to on-the-fly demand response. Course modules examine modes, system design, planning issues, organizational relationships inherent to public transit, and technical operations. The course concludes with an examination of comprehensive transit systems. LEC.

UBPL 760. Historic Preservation Planning. 3 Hours.
In addition to studying the history of the preservation movement in the United States, the course will discuss preservation at the state and local level, preservation at the private level, ordinance creation, legal aspects of preservation, technical issues and contemporary issues and controversies in the field of preservation. Projects will deal with philosophic and current issues in preservation. LEC.

UBPL 761. Historic Preservation Economics. 3 Hours.
This course considers the economic strategies for the historic preservation of the built environment. Topics include investment tax credits, tax increment financing and tax abatement, bond issues, historic preservation grants, and revolving funds. Students will analyze case studies and meet guest speakers who make preservation projects work. Class projects may include market analyses, economic feasibility studies, rehabilitation/redevelopment plans, and technical research papers. LEC.

UBPL 762. Sustainability and the Future of the Built Environment. 3 Hours.
This course critically examines the evolving relationship between rehabilitation preservation, and new construction in creating a sustainable built environment in the United States during the twenty-first century. Some observers insist that we cannot build our way to sustainability, but instead must conserve our way to it. What is the appropriate balance of rehabilitation and new construction in creating sustainable built environment? What is the appropriate role of planning and design professionals in this movement? What knowledge and skills will be necessary? The course surveys the contemporary discussion about defining and evaluating a sustainable built environment as well as the economic and social requirements for creating a sustainable society. LEC.

UBPL 763. Professional Practice. 3 Hours.
This course seeks to provide students with both skills and evaluative frameworks to enhance their work as practicing planners. We will focus specifically on issues related to ethics, citizen participation, dispute resolution, and management. Considerable attention will be paid to "real life" lessons. Prerequisite: UBPL 741 and UBPL 815. LEC.

UBPL 764. Real Estate Development I. 3 Hours.
This course is designed to provide a working knowledge of the mechanics of real estate investment analysis. As a planning course, the emphasis is placed upon the process as performed by the practicing planner working with the public sector. This means that the course covers much of the same material that is normally included in a real estate development course in a business school. However, this material is augmented with the study of techniques used to achieve public sector goals. Among the topics covered in the course are: the calculation of return on investment in real estate; the financing of real estate development; the various forms of property ownership; and the implications of tax laws upon the rehabilitation of historic properties and the provision of low-income housing. Prerequisite: Knowledge of spreadsheet software on a personal computer. LEC.

UBPL 765. Introduction to Sustainable Land Use Planning. 3 Hours.
This course introduces students to the issues that planners and decision makers face as they strive to promote sustainability, especially within the context of land use planning. Emphasis will be placed on the theoretical and policy considerations that guide the work of planners. LEC.

UBPL 766. Real Estate Development II. 3 Hours.
This course extends the study of real estate development planning begun in UBPL 764: Real Estate Development Planning I. The course will examine various forms of public-private participation in the real estate development process. Advanced study of various public sector programs to guide and direct the real estate development process will be undertaken, including the use of tax credits for affordable housing and for historic preservation. Projects developed within the region will be examined to illustrate the application of these techniques. Prerequisite: Successful completion of UBPL 764 or permission of instructor. LEC.

UBPL 773. Sustainable Land Use Planning Implementation. 3 Hours.
This course emphasizes the development of sustainability-focused plan elements that ensure successful implementation. While the course topic changes each year, the techniques and processes studied will be broadly applicable. Students will also apply their skills and knowledge to a service learning project using real-world data. Prerequisite: UBPL 765, UBPL 738, or consent of instructor. LEC.

UBPL 802. Special Topics: ______. 1-6 Hours.
This course is intended to afford the opportunity for individual or group projects/research in an urban planning topic. RSH.

UBPL 806. Thesis - Graduate Research. 1-6 Hours.
Independent study and research related to the master's thesis. Prerequisite: Consent of instructor. THE.

UBPL 815. History and Theory of Planning. 3 Hours.
The course serves as an introduction to the history of city planning and "how to plan" in general. Planners are particularly concerned with future consequences of current action. In looking to the future, knowing past history is a good place to start. Also, planning theorists have thought deeply about how best to plan and their thoughts and advice can serve planners and decision-makers well when they are facing unknowns. LEC.

UBPL 816. Politics and Planning. 3 Hours.
Planners operate within a highly technical yet political environment. Planners often try to bring consensus and action-taking to communities but the very structure of our democracy promotes conflict and stalemate. Understanding how power, structures and agencies influence policy-making will help planners become savvier as they balance their roles as advisors, educators, facilitators, advocates, and administrators. This class explores the trials, tribulations, and triumphs of planners as they deal with politics. LEC.

UBPL 850. Urban and Regional Theory. 3 Hours.
The course explores the forces that shape the structure and function of cities and regions, drawing upon insights from planning, geography, economics, sociology, demography, and political science. Special attention is paid to theories that can be applied by urban planners to improve the economic performance, quality of life, and social equity of urban areas. Topics covered include the origin and development of cities, agglomeration economies, location theory, central place, mix-and-share analysis, economic base, input-output, labor markets, urban models, regional development planning, globalization, high technology, urban poverty, and problems of regional governance. Prerequisite: UBPL 741 and UBPL 815. LEC.

Department of Architecture

Introduction

Architecture is inherently an interdisciplinary field of study, integrating knowledge from art, science, and the humanities. As a method of practice, it is a complex, collaborative, professional activity aimed at
improving the quality of life for people and the planet. The discipline requires creative, critical, agile, and integrative thinking. Architecture deals with highly complex problems and aims to solve them not only competently, but in a way that ennobles society. The curriculum responds to these considerations by offering a series of overlapping sequences in professional and academic course work.

**Mission**

The Department of Architecture engages in progressive knowledge generation, dissemination, and application through its core activities of teaching, scholarship, and service to enhance the quality of life for people and the planet. The department furthers this mission by offering 4 degrees:

- The Master of Architecture (an NAAB-accredited professional degree);
- The Bachelor of Arts in Architectural Studies (a pre-professional program); and
- 2 post-professional graduate degrees,
  - the Master of Arts in Architecture
  - the Ph.D. in Architecture

**Undergraduate Programs**

**Master of Architecture Program (5-year)**

“In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (http://www.naab.org) (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a six-year, three-year, or two-year term of accreditation, depending on the extent of its conformance with established educational standards. Master’s degree programs may consist of a preprofessional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the preprofessional degree is not, by itself, recognized as an accredited degree.”

— National Architectural Accrediting Board

Prospective students who apply for admission to the accredited 5-year degree program and are accepted through the undergraduate admissions process are admitted directly into the Master of Architecture program. These students pay undergraduate tuition through the first 4 years and are considered graduate students for the final year. Students holding a baccalaureate degree apply through graduate admissions and enter a 3- plus-year program (those holding a preprofessional degree in architecture receive advanced standing and usually complete the degree in 2 years plus 1 summer).

**Bachelor of Arts in Architectural Studies**

The B.A. in Architectural Studies is designed to serve as a platform or foundational degree for students who plan to specialize in architecture and other disciplines that focus on the design, planning and construction of the built environment. It exposes students to ideas and practices currently followed in all of the School’s design disciplines and it focuses on many of the business, communications and organizational skills that are not covered in the technical requirements of the graduate curricula. Students at KU who start in the B.A. in Architectural Studies, co-enroll in graduate professional degrees and take courses that count toward the B.A. and the graduate professional degree.

**Graduate Programs**

The Department of Architecture offers 3 distinct plans for graduate study:

1. A Master of Architecture (M.Arch.), a 3-year professional degree for students already holding bachelor’s degrees in any field (those with architecture degrees are considered for advanced placement);
2. A Master of Arts in Architecture (M.A.) — Academic/Research Track for students interested in the study of architecture from an academic and scholarly perspective;
3. A Doctor of Philosophy in Architecture (Ph.D.) for students interested in engaging in robust, innovative inquiry that adds to the body of knowledge in architecture and its related fields.

Of these 3 degree programs, only the 3-year Master of Architecture is a professional degree. The other degrees are post-professional degrees that do not place the student on the path for architectural registration. Students seeking a career change into a professional curriculum, should apply for admission to the 3-year M.Arch. degree.

**Master of Architecture (5-year)**

**Master of Architecture (Track I: 5+ Year Program)**

The Master of Architecture is an NAAB-accredited professional degree program and is an essential aspect of preparing for the professional practice of architecture. Graduates of this program who complete a recognized internship program (such as the Intern Development Program) and successfully complete the Architectural Registration Examination are able to become licensed architects.

Track I is designed for students entering from high school or transferring from another undergraduate program. The curriculum is designed so as to be completed within 5 calendar years, but to do so demands sustained concentration and focus. We highly recommend that students consider leveraging the available time by planning to spend one summer between their first and fourth years in residence in Lawrence, taking a studio and another course.

The 180 credit curriculum is divided into three segments: Foundations, Core and Professional Options.

The Foundations segment involves three foundation design studios and three introductory lecture courses examining the discipline of architecture. A unique aspect of our program is that immediately upon commencing their studies at KU, first year students enter into architecture-specific design studios and are immediately ensconced in the program’s culture.

The Core is a five-semester sequence that addresses the wide range of skills and understanding required for the practice of architecture, including history and theory, technology, professional practice, and integrating this knowledge within design projects of increasing scale and complexity. The core culminates in a comprehensive studio experience in which students demonstrate their readiness to enter the profession of architecture.

Professional Options. The architecture profession has become an extremely diverse field. Seeking to provide our students the greatest opportunity within that diversity, the final year of the curriculum allows a student to explore a more-focused professional option of their choosing.
This experience allows students to craft an area of specialization or a domain of architecture that may otherwise be addressed superficially within a professional curriculum. Currently students are investigating design-build processes, researching sustainable design practices, pursuing healthcare and urban design as areas of specialization and engaging in service-learning opportunities around the globe.

Within the 180 credits required to graduate, students will also have a study abroad experience and complete coursework in a variety of other academic disciplines. Students will be exposed to the social sciences, the physical sciences, the humanities and the arts. Study abroad options currently include spending a semester in Denmark, Germany, England, or Australia, travel to Siena and Berlin, a technology and culture tour of Italy and France, or working in an international architecture office in Paris.

**Professional Registration and Licensing**

Although state laws vary, professional registration as an architect in Kansas involves completion of three aspects: receiving an accredited professional degree (such as the M.Arch.), completion of internship requirements (for information on the Intern Development Program, see www.ncarb.org) and successful completion of all sections of the Architectural Registration Examination (ARE). Upon successful completion of these three aspects, the applicant may use the title “architect” and may practice as an architect, either as an individual or as a licensed professional in an office performing professional services.

**Undergraduate Admission**

First-year and transfer students may be admitted to the 5-year Master of Architecture degree program. Contact:

University of Kansas
Michael Swann, Associate Dean,
School of Architecture, Design and Planning (http://www.sadp.ku.edu)
Marvin Hall
1465 Jayhawk Blvd., Room 206
Lawrence, KS 66045-7626
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For undergraduate applications, write to:

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Applications for fall semester should be submitted during the student’s senior year in high school. The priority application deadline is November 1, and the final application deadline is February 1. Completed applications are reviewed, and applicants are notified of their admission status. A complete application includes sixth-semester transcript, rank in class, ACT scores, and a list of courses in progress. Applications received after February 1 are considered but are less likely to be accepted due to space limitations.

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**High School Students**

High school students are encouraged to apply for admission if they have a cumulative GPA of at least 3.2 and have a minimum SAT of 1050 and if they meet the following preparation thresholds by the time they graduate:

- 3 or more years of math ending with calculus (preferred),
- 3 or more years of natural science including physics,
- 3 or more art/drawing classes. Art/drawing classes are preferred over additional drafting or technical courses (1 semester of drafting is adequate),
- 2 or more years of foreign language (recommended).

Although students who do not meet these minimum thresholds may apply to the Department of Architecture, they are encouraged to enroll in the College of Liberal Arts and Sciences for a preliminary year of study.

During the first semester of this preliminary year, students should complete:

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<tr>
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<td>Composition</td>
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</tr>
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<td>ARCH 103</td>
<td>Introduction to Architecture</td>
<td>3</td>
</tr>
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<td>Electives</td>
<td></td>
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</tr>
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</tr>
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<tbody>
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</tr>
<tr>
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<td>Principles of Modern Architecture</td>
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**Transfer Students**

Transfer students may be admitted, if space is available, and if they have an overall grade-point average of at least 3.0.

**International Students**

The School of Architecture, Design and Planning admits only exceptional students from other countries. Standards for admission are set according to the traditions and grading policies of those countries. In some countries, for example, the grade of A is almost never given, while in other countries the A grade is more frequently seen. The number of students admitted depends on the space available on February 1.

Visit the Office of International Student Services (http://www.iss.ku.edu) for information about international admissions.
Master of Architecture Degree Requirements

Credit hours in the 5-year Master of Architecture curriculum are distributed as follows:

Design/Synthesis 61
Architecture Support Courses 58
Architecture Electives 15
General Education Courses 46

Students must maintain a 2.0 grade-point average to remain in good standing and to graduate.

The core of the curriculum is a sequence of design studios composing approximately 1/3 of the total degree requirements. Students complete sequences in graphics, structures, building construction, environmental technology, and architectural history and meet a study abroad requirement. Course work in site planning, urban design, and professional practice completes the professional content.

In addition to professional courses, students are expected to complete course work in a variety of academic disciplines, reflecting the interdisciplinary nature of architecture. These general education requirements include course work in mathematics, physics, English, communication, humanities and Western civilization, fine arts, and the natural and social sciences.

In the final year of the program, students participate in a chosen year-long professional option. Options are defined by faculty strengths and the emerging needs of the profession. They offer students the opportunity to focus in a particular area of interest that is one of the professional choices or specializations available after graduation. These currently include Design-Build, Health and Wellness, Globalized Practice, Urban Design, and Architectural Investigations.

- Students in the Design-Build option participate in our national award-winning Studio 804, where they collaboratively design and construct a sustainable building.
- Students in the Health and Wellness option are expected to complete a 7-month professional work experience in an architectural firm engaged in design for health followed by a service-learning studio.
- Globalized Practice in Asia or Paris introduces students to the increasingly multinational nature of architectural practice; students are placed in an internship abroad for a semester followed by a campus studio in the final semester.
- Social Entrepreneurship studio on campus

Requirements and Policies

General Education Electives

Oral Communication (3)

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Western Civilization (6)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HWC 204</td>
<td>Western Civilization I</td>
<td>3</td>
</tr>
<tr>
<td>HWC 205</td>
<td>Western Civilization II</td>
<td>3</td>
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Environmental and Social Sciences (6)

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVRN 148</td>
<td>Scientific Principles of Environmental Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

Natural Sciences (3)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 100</td>
<td>Principles of Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 116</td>
<td>Introduction to Evolutionary Biology</td>
<td></td>
</tr>
<tr>
<td>GEOL 101</td>
<td>The Way The Earth Works</td>
<td></td>
</tr>
<tr>
<td>GEOL 105</td>
<td>History of the Earth</td>
<td></td>
</tr>
<tr>
<td>GEOL 121</td>
<td>Life Through Times: DNA to Dinosaurs</td>
<td></td>
</tr>
</tbody>
</table>

Music (3)

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 136/336</td>
<td>Masterworks of Music</td>
<td>3</td>
</tr>
</tbody>
</table>

Free Electives (12)

Selected outside of architecture 12

Study Abroad Requirement

Students must fulfill a 9-credit-hour study abroad requirement. This requirement gives students an experience completely different from their previous educational careers and provides some preparation for the increasingly globalized architectural profession. There are several ways in which students may meet this requirement:

1. Participation in any of the school’s academic-year or semester study abroad programs in Germany, England, Denmark, and Australia automatically fulfills the study abroad requirement; however, to fulfill the total degree requirements, students must complete an additional 9 hours of electives.

2. Participation in any school-directed short-term study abroad program, usually in the summer (but including any during regular semesters), meets the requirement. These programs vary from 3 to 9 credit hours, and several may be combined (not necessarily in the same semester) to total 9 hours.

3. Participation in any university-sponsored study abroad programs or programs at other college-level institutions approved by KU for transfer credit meets the requirement. These programs, including summer programs, vary from 3 to 6 credit hours and may be combined with one another or with school-directed programs (including ARCH 692) to total 9 hours.

4. Enrollment in ARCH 691 (3-6 hours) meets the requirement. The practicum component is one option for earning a portion of the 9 hours. Students who choose this option are required, through special scholarship programs, to take advantage of short-duration, intensive study abroad experiences (e.g., Western Civilization London Spring Break, 2-week summer programs, etc.) to earn a minimum of 3 hours in a study abroad experience to complete the 9-hour requirement. Note: ARCH 691 requires approval of the student’s proposal by the architecture chair.

5. International students, for whom enrollment in the school is already a study abroad experience, automatically meet the requirement; however, to fulfill the total degree requirements, they may need to complete an additional 9 hours of electives.

All students are encouraged to meet with their faculty advisor by the end of the second year to begin planning to fulfill the study abroad requirement.

This is an ambitious program of study, averaging 17 credit hours a semester, plus a summer of study abroad. Given the number of general
education hours in the fourth and fifth years, it is highly recommended that students either

1. attempt to enter with advanced-placement credit for general education courses such as calculus, physics, environmental studies, or geography and/or
2. plan to take 6 hours of general education requirements during a summer (this may be completed at a local community college).

Portfolio Requirement

All students must maintain a record of work as they proceed through the program. This must be in the form of an 8½” x 11” portfolio (exceptions to the required format may be approved by the faculty) and must include examples of at least one major project from each semester of the design sequence, starting with the foundations studies in the first year. It is recommended that all major projects be included in the portfolio as well as selected examples of work from support and elective courses such as building technology, construction documents, and photography. The portfolio is a prerequisite for advancement in the studio course sequence and may be requested by the studio critic on the first day of class.

Studio Grading Policy

Work evaluated as “satisfactory” is graded C. Work evaluated as “more than satisfactory” is graded B. Work evaluated as “exceptional” is graded A. Work evaluated as “less than satisfactory” is graded D. Work evaluated as “failing” is graded F. Information on the studio grade appeal procedure is available in the architecture department office.

If a student receives a grade of D in a design studio in any semester, he or she is placed on notice by the school, regardless of overall grade-point average. To be removed from this status, the student must perform satisfactory work in the next semester of design. If in any subsequent semester the student receives another grade of D, he or she must repeat that studio before advancing in the sequence. If the student receives a grade of D in 2 consecutive studios, he or she must repeat the entire design year in which the first D was given.

Computer Requirement

All third-year students and above in the Master of Architecture program must supply a computer for digitally based architectural studios. Students must follow a checklist of minimum hardware- and software-requirements when they purchase a computer. The specifications for architectural studio computing are on the school’s website (http://www.sadp.ku.edu).

Substitution of Courses

A student who wishes to select certain courses not in the prescribed curriculum may petition through the chair at the department office. Petitions for substitution of courses are considered at any time except after the beginning of the student’s last semester.

Credit for ROTC Courses

Students may enter the Reserve Officers Training Corps to train for commissions as regular or reserve officers. An allowance of 6 hours of military science, aerospace studies, or naval science may be substituted for free electives in the M.Arch. program. A student who enters one of the ROTC programs but discontinues military training and does not receive a commission may not apply credits for ROTC courses toward a degree in architecture. If a student does not receive a commission because of circumstances beyond his or her control (such as a medical discharge), he or she may use ROTC credits as part of the requirements for the degree as indicated above.

Activity Courses

The School of Architecture, Design and Planning does not accept physical education activity courses for fulfilling graduation requirements.

Studio Enrollment/Selection Process

KU’s online enrollment system allows students in each year level to enroll in an order based on the number of college credit hours completed (then by grade-point average, then by age). To eliminate the disadvantage that this imposes on some students in the selection of their studio instructor and to discourage students from repeating the same instructor for design studio, the architecture department has developed alternative processes for studio enrollment, which are used at the department’s discretion.

Career Opportunities

The M.Arch. is a NAAB accredited professional degree. The following options are open to students after they complete it:

1. Graduates may seek to refine and augment their professional capabilities through experience in an office under a licensed architect. Such experience qualifies the graduate for admission to the appropriate examination for licensing and practice as an architect or may precede admission to graduate school. Increasingly, graduates are finding alternative career options, including work in urban design, design-build firms, interior design, historic preservation, and many others.

2. Qualified students may pursue graduate study in Ph.D. in architecture programs or in areas related to architecture and environmental design, such as urban planning, law, psychology, social welfare, public administration, or business.

Prescribed Curriculum

Master of Architecture (5-year)

A total of 180 credit hours is required. Substitutions in the prescribed curriculum may be made only by petition to the department.

Students are in Undergraduate Status for enrollment first 4 years and begin Graduate Status enrollment the final year of this program.

Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 103</td>
<td>3</td>
<td>ARCH 104</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 108</td>
<td>6</td>
<td>ARCH 109</td>
<td>6</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>3</td>
<td>ENGL 102 or 105</td>
<td>3</td>
</tr>
<tr>
<td>MATH 115 or 105</td>
<td>3</td>
<td>PHSX 114</td>
<td>4</td>
</tr>
<tr>
<td>Gen Ed Elective</td>
<td>Gen Ed Elective</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Year 2

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ARCH 208</td>
<td>6</td>
<td>ARCH 209</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 524</td>
<td>3</td>
<td>ARCH 541</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 540</td>
<td>3</td>
<td>ARCH 560</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 605</td>
<td>3</td>
<td>ARCH 624</td>
<td>3</td>
</tr>
<tr>
<td>HWC 204</td>
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</table>

| 18 | 18 |
The B.A. in Architectural Studies is designed to serve as a platform or foundational degree for students who plan to specialize in architecture and other disciplines that focus on the design, planning and construction of the built environment. It exposes students to ideas and practices currently followed in all of the School’s design disciplines and it focuses on many of the business, communications and organizational skills that are not covered in the technical requirements of the graduate curricula. Students at KU who start in the B.A. in Architectural Studies, co-enroll in graduate professional degrees and take courses that count toward the B.A. and the graduate professional degree.

Some students may opt to complete the 124-credit B.A. without continuing and completing the additional year (or two) required to finish one of the professional degree paths. The four-year, 124-credit course of study that leads to a Bachelor of Arts (B.A.) in Architectural Studies prepares students for graduate education in many other fields such as law, business, government, facility management, and public administration that are enhanced by a broad knowledge of architecture. It also prepares them for work in a number of fields related to architecture.

Students who complete the B.A. and later wish to become licensed architects may pursue a professionally accredited Master of Architecture degree. This educational path may include KU’s accredited M.Arch III or it may include a three-year M.Arch III at one of the many other architecture schools that offer this graduate professional degree.

NOTE: Students admitted to the B.A. Architectural Studies degree prior to 2014 must follow the 4-year, 124-credit curriculum in place at the time of their admission. (see the KU Academic Catalog for 2013).

**Undergraduate Admission**

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**High School Students**

High school students are encouraged to apply for admission if they have a cumulative GPA of at least 3.2 and have a minimum ACT of 23 or a minimum SAT of 1050 and if they will meet the following preparation thresholds by the time they graduate:

- 3 or more years of math ending with calculus (preferred),
- 3 or more years of natural science including physics,
- 3 or more years of English
- 3 or more years of foreign language
- 3 or more years of science including laboratory
- 3 or more years of history
- 3 or more years of Fine Arts/History Elective

The School of Architecture, Design and Planning encourages dual-credit and Advanced Placement courses in the above areas. A minimum threshold of 3.0 GPA in these courses is preferred for entrance to the School.

**Bachelor of Arts in Architectural Studies**

**Architectural Studies, The B.A. Path**

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The University of Kansas

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<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 540</td>
<td>Global History of Architecture I: Origins to Industrial Revolution (3500 BCE-1700 CE)</td>
<td>3</td>
</tr>
<tr>
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Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Requirements for the B.A. in Architectural Studies
A minimum of 124 hours is required, including 45 hours of courses numbered 300 or above.

Students must follow the degree curriculum as stated under B.A. Architectural Studies.

Credit for ROTC Courses
Students may enter the Reserve Officers Training Corps to train for commissions as regular or reserve officers. An allowance of 6 hours of military science, aerospace studies, or naval science may be substituted for free electives in the M.Arch. program. A student who enters one of the ROTC programs but discontinues military training and does not receive a commission may not apply credits for ROTC courses toward a degree in architecture. If a student does not receive a commission because of circumstances beyond his or her control (such as a medical discharge), he or she may use ROTC credits as part of the requirements for the degree as indicated above.

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4-Year Graduation Plan for students admitted 2014

B.A. in Architectural Studies
Suggested Undergraduate Curriculum

Freshman

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Fall</td>
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</tr>
<tr>
<td>ARCH 103</td>
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<td>BDS 102</td>
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Sophomore

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>Fall</td>
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<td>ARCH 281</td>
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<td>3</td>
</tr>
<tr>
<td>ADS 320</td>
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<tr>
<td>BDS 103</td>
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<tr>
<td>ARCH 280</td>
<td></td>
<td>3</td>
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<tr>
<td>MATH 115, 105, or 365</td>
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<td>ENGL 101</td>
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Junior

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<thead>
<tr>
<th>Course</th>
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<td>Fall</td>
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<td>ARCH 380</td>
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<tr>
<td>KU Core Class, Goal 3, Social Sciences</td>
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<tr>
<td>Certificate Program Course 3 or Free Elective</td>
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<tr>
<td>Free Elective 3</td>
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Senior

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<thead>
<tr>
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<tbody>
<tr>
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<tr>
<td>Professional Enrichment Elective</td>
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The University of Kansas
B.A. Architectural Studies - Master of Architecture

Architectural Studies, The B.A. Path

The B.A. – M.Arch. Path

The B.A.-M.Arch. path at the University of Kansas is designed to give students seeking a professional, accredited Master of Architecture degree the skills in design, visualization, and technology that are required in a professional architecture degree. It also provides formal, advanced instruction in the communication, business, organizational and interpersonal skills that have become especially important in the 21st century.

Students who pursue the 173-credit, six-year B.A.-M.Arch. path of study receive a B.A. in Architectural Studies, and a professional accredited Master of Architecture degree. Approximately one-third of the credits in this path focus on the B.A. degree core and the KU Core Curriculum and the remaining two-thirds involve professional course work.

Years 1 through 3 include studios, workshops and courses that focus on architecture, design and planning while students are also completing the KU Core. Years 4 through 6 focus on the design/synthesis and technical support classes that are central to the accredited professional degree.

The B.A.-M.Arch. path is highly appropriate for students who intend to become practicing architects and also have multiple academic interests or believe they may be interested in pursuing more than one professional degree.

Undergraduate Admission

First-year and transfer students may be admitted to the B.A. in architectural studies degree program. Contact:

University of Kansas
Michael Swann, Associate Dean,
School of Architecture, Design and Planning (http://www.sadp.ku.edu)
Marvin Hall
1465 Jayhawk Blvd., Room 206
Lawrence, KS 66045-7626
archku@ku.edu

For undergraduate applications, write to:

KU Office of Admissions (http://admissions.ku.edu)
KU Visitor Center
1502 Iowa St.
Lawrence, KS 66044-7576
785-864-3911

adm@ku.edu

Application

Applications for fall semester should be submitted during the student’s senior year in high school. The priority application deadline is November 1, and the final application deadline is February 1. Completed applications are reviewed, and applicants are notified of their admission status. A complete application includes sixth-semester transcript, rank in class, ACT scores, and a list of courses in progress. Applications received after February 1 are considered but are less likely to be accepted due to space limitations.

Transfer students should apply by October 1 for the spring semester and by the priority deadline of November 1 for the summer and fall terms. The final application deadline is February 1. Space limitations apply to transfer students. Transfer applications received after February 1 are likely to be denied for reasons not connected with the applicant’s academic qualifications. The School of Architecture, Design and Planning encourages applications from women and members of minority groups.

High School Students

High school students are encouraged to apply for admission if they have a cumulative GPA of at least 3.2 and have a minimum ACT of 23 or a minimum SAT of 1050 and if they will meet the following preparation thresholds by the time they graduate:

• 3 or more years of math ending with calculus (preferred),
• 3 or more years of natural science including physics,
• 3 or more art/drawing classes. Art/drawing classes are preferred over additional drafting or technical courses (1 semester of drafting is adequate),
• 2 or more years of foreign language (recommended).

Although students who do not meet these minimum thresholds may apply to the Department of Architecture, they are encouraged to enroll in the College of Liberal Arts and Sciences for a preliminary year of study.

During the first semester of this preliminary year, students should complete:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MATH 105</td>
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<td>MATH 115</td>
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<td>ARCH 103</td>
<td>Introduction to Architecture</td>
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<td>Electives</td>
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During the second semester, students should complete:

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<thead>
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<td>Global History of Architecture I: Origins to Industrial Revolution (3500 BCE-1700 CE)</td>
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<td>Electives</td>
<td></td>
<td>6</td>
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</table>

Students already at the University of Kansas may apply to the B.A. in Architectural Studies program by February 1 for admission the following fall. Students must have a cumulative college GPA of 3.0 or higher and space must be available to be admitted to the B.A. in Architectural Studies program.
## Transfer Students
Transfer students may be admitted, if space is available, if they have an overall grade-point average of 3.0.

## International Students
The School of Architecture, Design and Planning admits only exceptional students from other countries. Standards for admission are set according to the traditions and grading policies of those countries. In some countries, for example, the grade of A is almost never given, while in other countries the A grade is more frequently seen. The number of students admitted depends on the space available on February 1.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

### B.A. - M.Arch Plan

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<thead>
<tr>
<th>Freshman</th>
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<tr>
<td>Fall</td>
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<td>Hours</td>
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<tr>
<td>ARCH 103</td>
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<td>3 ADS 320 Hallmark Symposium</td>
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<td>Hours Summer</td>
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<td>ARCH 602</td>
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<td>Hours</td>
</tr>
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<td>6 ARCH 609</td>
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<td>ARCH 524</td>
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<td>3</td>
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<td>Hours</td>
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| Total Hours: 121 |

Bachelor of Architectural Studies conferred.

### Enroll Summer as Graduate Student

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<td>ARCH 602</td>
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| Total Hours: 12 |

Bachelor of Architectural Studies conferred.

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<td>Hours</td>
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<tr>
<td>ARCH 608</td>
<td>6 ARCH 609</td>
<td>9</td>
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<tr>
<td>ARCH 524</td>
<td>4 ARCH 624</td>
<td>3</td>
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<table>
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<tr>
<th>Year 6</th>
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<tbody>
<tr>
<td>Fall</td>
<td>Hours Spring</td>
<td>Hours</td>
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<tr>
<td>ARCH 8XX Professional Option</td>
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<td>ARCH XXX Architectural Elective</td>
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</tr>
<tr>
<td></td>
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</table>

| Total Hours: 37 |

Master of Architecture conferred.

### B.A. Architectural Studies - M.A. Environmental Design

In a highly competitive economy where the success of a building such as a stadium, restaurant, retail boutique, museum or theater rests as much on the user’s experience as it does on a building’s performance,
cost or look, the successful design of interior environments is critical. Traditional approaches in interior design and interior architecture lack the specialized and technology-based focus on individual experience that an environmental design degree path offers through the special fusion of course work in architecture, interior design and interaction design.

The B.A. – M.A. Environmental Design degree path is offered by the School’s Architecture and Design departments. It allows architecture students to combine the skills and knowledge obtained in the Architectural Studies degree core with basic interior design and interior architecture skills and techniques offered in professional enrichment classes.

Students complete a rigorous sequence of courses in interaction design that includes the research skills needed to design extraordinary spaces that respond to the needs and perceptions of different individuals. In addition, they are trained to use emerging technologies to customize environments for different purposes.

Students in this degree path also have the opportunity to develop leadership and entrepreneurial skills in one of KU’s Undergraduate Certificate Programs and, more importantly, they go well beyond the basic professional practice training found in a traditional interior design or interior architecture degree with specialized course work in design management.

In addition to the challenges offered by this rigorous sequence of courses, students can participate in professional internships and they have the opportunity to engage in research projects conducted within the School’s highly recognized Center for Design Research. Within this 154-credit degree path, the B.A. is awarded by the Architecture Department and the NASAD-accredited M.A. in Environmental Design is awarded by the Department of Design.

**Undergraduate Admission**

First-year and transfer students may be admitted to the B.A. in architectural studies degree program. Contact:

University of Kansas
Michael Swann, Associate Dean,
School of Architecture, Design and Planning (http://www.sadp.ku.edu)
Marvin Hall
1465 Jayhawk Blvd., Room 206
Lawrence, KS 66045-7626
archku@ku.edu

For undergraduate applications, write to:

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KU Visitor Center
1502 Iowa St.
Lawrence, KS 66044-7576
785-864-3911
adm@ku.edu

**Application**

Applications for fall semester should be submitted during the student’s senior year in high school. The priority application deadline is **November 1**, and the final application deadline is **February 1**. Completed applications are reviewed, and applicants are notified of their admission status. A complete application includes sixth-semester transcript, rank in class, ACT scores, and a list of courses in progress. Applications received after February 1 are considered but are less likely to be accepted due to space limitations.

Transfer students should apply by **October 1** for the spring semester and by the priority deadline of **November 1** for the summer and fall terms. The final application deadline is **February 1**. Space limitations apply to transfer students. Transfer applications received after February 1 are likely to be denied for reasons not connected with the applicant’s academic qualifications. The School of Architecture, Design and Planning encourages applications from women and members of minority groups.

**High School Students**

High school students are encouraged to apply for admission if they have a cumulative GPA of at least 3.2 and have a minimum ACT of 23 or a minimum SAT of 1050 and if they will meet the following preparation thresholds by the time they graduate:

- 3 or more years of math ending with calculus (preferred).
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- 2 or more years of foreign language (recommended).

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During the first semester of this preliminary year, students should complete:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MATH 105</td>
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<tr>
<td>or MATH 115</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>or MATH 365</td>
<td>Elementary Statistics</td>
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<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
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<tr>
<td>ARCH 103</td>
<td>Introduction to Architecture</td>
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<td>Electives</td>
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During the second semester, students should complete:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>PHSX 114</td>
<td>College Physics I</td>
<td>1-4</td>
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<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
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<tr>
<td>ARCH 540</td>
<td>Global History of Architecture I: Origins to Industrial Revolution (3500 BCE-1700 CE)</td>
<td>3</td>
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<tr>
<td>Electives</td>
<td></td>
<td>6</td>
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</tbody>
</table>

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countries, for example, the grade of A is almost never given, while in other countries the A grade is more frequently seen. The number of students admitted depends on the space available on February 1.

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### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ARCH 103</td>
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<td>ARCH 105</td>
<td>1 ADS 320</td>
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<td>BDS 101</td>
<td>3 ENGL 102 or 105</td>
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<tr>
<td>BDS 103</td>
<td>3 ARCH 540</td>
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<tr>
<td>MATH 105 or 115</td>
<td>3 PHSX 114</td>
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<td>ENGL 101</td>
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### Sophomore

<table>
<thead>
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<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ARCH XXX Touchstone Workshop I</td>
<td>3 ARCH XXX Touchstone Workshop II</td>
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<td>UBPL 200</td>
<td>3 KU Core Class, Goal 3 Social Sciences</td>
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<td>KU Core Class, Goal 2, Learning Outcome 2</td>
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<td>CAD*</td>
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### Junior

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<tr>
<td>ARCH 626</td>
<td>3 ARCH 627</td>
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<td>Certificate Program Course 1</td>
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<td>ADS 320 Hallmark Symposium</td>
<td>1 Certificate Program Course 2</td>
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<td>3 ENVD 304 Topics in Environmental Design</td>
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<td>ADS 560 (or Arch Elective) Complete GRE. Submit Graduate Studies form. Make sure GPA is 3.00</td>
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### Senior

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</tr>
<tr>
<td>ENVD 413</td>
<td>3 Elective based on concentration or MA</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective based on concentration or MA</td>
<td>3 Certificate Program Course 4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Certificate Program Course 3</td>
<td>3 ADS 560 or Arch Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>VISC or INDD elective</td>
<td>3 Free Elective 1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Hours:</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

* Recommended Courses (see advisor for substitutions)

### B.A. Architectural Studies and Undergraduate Certificate Confirmed.

#### Year 5

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVD XXX Advanced Research &amp; Programming Experience in Space, Graphics &amp; Arch</td>
<td>3</td>
<td>3</td>
<td></td>
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</tr>
<tr>
<td>ADS 712</td>
<td>3</td>
<td>ADS 714</td>
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<td>ADS 860</td>
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<td>ADS 890 Thesis</td>
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<tr>
<td>ADS 861</td>
<td>1</td>
<td>Graduate Elective in Design</td>
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<tr>
<td>ADS 890</td>
<td>1</td>
<td>Open Elective</td>
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<tr>
<td>Graduate Elective in Design</td>
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<td><strong>Total Hours:</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
<td></td>
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</tr>
</tbody>
</table>

### M.A. Design (Environmental Design) conferred.

### B.A. Architectural Studies - M.U.P. Plan

#### The B.A. – M.U.P Path

Urban planners work with civic leaders, residents and businesses to develop new solutions to community problems. They help leaders envision the direction their community will grow and find the right balance of new development and services, environmental protection, and innovative change.

Urban planners are trained to protect the environment, to create housing for people, to preserve historic buildings and places, to design public spaces, to develop alternative transportation choices, to foster economic development and to craft healthy communities. Good urban planning creates communities that offer better choices for living. Planners help people make their communities more convenient, healthful, efficient, fair and attractive. Good planning improves the welfare of people and communities in the present and for the future.

The B.A.-M.U.P. degree path is offered jointly by the Architecture and Urban Planning departments. It includes the basic elements of the B.A.--studios, workshops, certificate program, basic professional and general enrichment electives and the KU Core Curriculum, along with core courses in planning history, theory and methods as well as specialized classes in environmental planning, housing and development planning, land use planning and urban design, and transportation planning.

The Master of Urban Planning (M.U.P.) degree is the normal academic qualification for those who wish to become professional planners. An M.U.P. degree opens doors to careers in environmental conservation, housing, economic development, historic preservation, real estate development, and many other areas. State, city and local governments as well as private companies and nonprofit agencies employ planners. There are planning jobs in such areas as health care delivery, criminal justice, education, public finance and law.

Students in the B.A.-M.U.P track have the opportunity to shorten the usual 6-year period required to complete a bachelor’s degree and the M.U.P. by one full year of study. Students who achieve a GPA of 3.25 by the end of their third year of study, and complete the appropriate
B.A. requirements shown in the B.A.-M.U.P. Plan will spend their fourth year in the B.A. degree completing the first year of courses required in the M.U.P. These urban Planning classes are used to satisfy remaining undergraduate requirements so that students receive the B.A. degree at the end of their fourth year. This also allows students to finish the second and final year of M.U.P. work in their fifth year at KU, when they would also be awarded the accredited M.U.P. degree.

**Undergraduate Admission**

First-year and transfer students may be admitted to the B.A. in architectural studies degree program. Contact:

University of Kansas
Michael Swann, Associate Dean,
School of Architecture, Design and Planning (http://www.sadp.ku.edu)
Marvin Hall
1465 Jayhawk Blvd., Room 206
Lawrence, KS 66045-7626
archku@ku.edu

For undergraduate applications, write to:

KU Office of Admissions (http://admissions.ku.edu)
KU Visitor Center
1502 Iowa St.
Lawrence, KS 66044-7576
785-864-3911
adm@ku.edu

**Application**

Applications for fall semester should be submitted during the student’s senior year in high school. The priority application deadline is **November 1**, and the final application deadline is **February 1**. Completed applications are reviewed, and applicants are notified of their admission status. A complete application includes sixth-semester transcript, rank in class, ACT scores, and a list of courses in progress. Applications received after February 1 are considered but are less likely to be accepted due to space limitations.

Transfer students should apply by **October 1** for the spring semester and by the priority deadline of **November 1** for the summer and fall terms. The final application deadline is **February 1**. Space limitations apply to transfer students. Transfer applications received after February 1 are likely to be denied for reasons not connected with the applicant’s academic qualifications. The School of Architecture, Design and Planning encourages applications from women and members of minority groups.

**High School Students**

High school students are encouraged to apply for admission if they have a cumulative GPA of at least 3.2 and have a minimum ACT of 23 or a minimum SAT of 1050 and if they will meet the following preparation thresholds by the time they graduate:

- 3 or more years of math ending with calculus (preferred),
- 3 or more years of natural science including physics,
- 3 or more art/drawing classes. Art/drawing classes are preferred over additional drafting or technical courses (1 semester of drafting is adequate),
- 2 or more years of foreign language (recommended).

Although students who do not meet these minimum thresholds may apply to the Department of Architecture, they are encouraged to enroll in the College of Liberal Arts and Sciences for a preliminary year of study.

During the first semester of this preliminary year, students should complete:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 105</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 115</td>
<td></td>
</tr>
</tbody>
</table>

**Electives**

Students already at the University of Kansas may apply to the B.A. in Architectural Studies program by February 1 for admission the following fall. Students must have a cumulative college GPA of 3.0 or higher and space must be available to be admitted to the B.A. in Architectural Studies program.

**Transfer Students**

Transfer students may be admitted, if space is available, if they have an overall grade-point average of 3.0.

**International Students**

The School of Architecture, Design and Planning admits only exceptional students from other countries. Standards for admission are set according to the traditions and grading policies of those countries. In some countries, for example, the grade of A is almost never given, while in other countries the A grade is more frequently seen. The number of students admitted depends on the space available on February 1.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

**Freshman**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 103</td>
<td>3 BDS 102</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 105</td>
<td>1 ADS 320</td>
<td>1</td>
</tr>
<tr>
<td>BDS 103</td>
<td>3 ENGL 102</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 280</td>
<td>3 KU Core Class, Goal 2, Learning Outcome 2</td>
<td>3</td>
</tr>
<tr>
<td>MATH 105, 115, or 365</td>
<td>3 ARCH 540</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>3 GEOL 101 or GEOG 104</td>
<td>3</td>
</tr>
</tbody>
</table>

16

**Sophomore**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 281</td>
<td>3 ARCH Hist/Theory Class</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 200</td>
<td>3 ECON 104, 105, 142, or 143</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 522</td>
<td>3 UBPL 300</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 541</td>
<td>3 KU Core Class, goal 4, Learning Outcome 1</td>
<td>3</td>
</tr>
</tbody>
</table>

16
B.A. Architectural Studies - M.C.M. Plan

The B.A. – M.C.M. Path

The rise of the design-build approach in the production of buildings has made architectural training as well as a solid grounding in business essential educational elements in the Construction Management profession. The leadership of complex design-build teams that involve architects, engineers, clients, building contractors, building systems experts, and multiple consultants involves knowledge of the many subfields that inform the building process as well as advanced interpersonal and communication skills.

At the same time, the constant emergence of new design and construction technologies, the development and use of new building materials and the application of new performance and sustainability standards highlight the need for architectural training in the development of professional construction managers.

The B.A. – M.C.M. degree path at KU is a cooperative program involving the SADP Architecture Department and the Department of Civil, Environmental and Architectural Engineering in KU’s School of Engineering. It allows architecture students to enroll in construction management courses while they are completing studios, workshops and other courses required in the Architectural Studies degree core. The 154-credit path draws heavily on courses in both schools that directly address the issues described above.

B.A. – M.C.M. students begin with the Architectural Studies core, and move quickly into professional enrichment courses in Construction Management. Students have sufficient enrichment electives to include a minor in Business as well.

Undergraduate Admission

First-year and transfer students may be admitted to the B.A. in Architectural Studies degree program. Contact:

University of Kansas
Michael Swann, Associate Dean,
School of Architecture, Design and Planning (http://www.sadp.ku.edu)
Marvin Hall
1465 Jayhawk Blvd., Room 206
Lawrence, KS 66045-7626
archku@ku.edu

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KU Visitor Center
1502 Iowa St.
Lawrence, KS 66044-7576
785-864-3911
adm@ku.edu

Application

Applications for fall semester should be submitted during the student’s senior year in high school. The priority application deadline is November 1, and the final application deadline is February 1. Completed applications are reviewed, and applicants are notified of their admission status. A complete application includes sixth-semester transcript, rank in
class, ACT scores, and a list of courses in progress. Applications received after February 1 are considered but are less likely to be accepted due to space limitations.

Transfer students should apply by October 1 for the spring semester and by the priority deadline of November 1 for the summer and fall terms. The final application deadline is February 1. Space limitations apply to transfer students. Transfer applications received after February 1 are likely to be denied for reasons not connected with the applicant’s academic qualifications. The School of Architecture, Design and Planning encourages applications from women and members of minority groups.

High School Students

High school students are encouraged to apply for admission if they have a cumulative GPA of at least 3.2 and have a minimum ACT of 23 or a minimum SAT of 1050 and if they will meet the following preparation thresholds by the time they graduate:

• 3 or more years of math ending with calculus (preferred),
• 3 or more years of natural science including physics,
• 3 or more art/drawing classes. Art/drawing classes are preferred over additional drafting or technical courses (1 semester of drafting is adequate),
• 2 or more years of foreign language (recommended).

Although students who do not meet these minimum thresholds may apply to the Department of Architecture, they are encouraged to enroll in the College of Liberal Arts and Sciences for a preliminary year of study.

During the first semester of this preliminary year, students should complete:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 105</td>
<td>3</td>
<td>ARCH 103</td>
<td>3 BDS 102</td>
</tr>
<tr>
<td>or MATH 115</td>
<td></td>
<td>ARCH 105</td>
<td>1 ADS 320</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>3</td>
<td>BDS 103</td>
<td>3 ENGL 102 or 105</td>
</tr>
<tr>
<td>ARCH 103</td>
<td>3</td>
<td>ARCH 280</td>
<td>3 ARCH 540</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
<td>MATH 105, 115, or 365</td>
<td>3 KU Core Class, Goal 2, Learning Outcome 2</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>3</td>
<td>ENGL 101</td>
<td>3 KU Core, Goal 3, Nat. Science (suggest Geol 101 or Geog 104)</td>
</tr>
</tbody>
</table>

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sophomore

During the second semester, students should complete:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 114</td>
<td>1-4</td>
<td>ARCH 380</td>
<td>3 ARCH 627</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>3</td>
<td>ARCH 626</td>
<td>3 ARCH 381</td>
</tr>
<tr>
<td>ARCH 540</td>
<td>3</td>
<td>ENGR 357</td>
<td>3 ARCH 530</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
<td>Certificate Program Course</td>
<td>3 Certificate Program Course 3 or Free Elective 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 or Free Elective</td>
<td>3 Free Elective 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Free Elective 4</td>
<td>3 Free Elective 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Free Elective 5</td>
<td>2</td>
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</tbody>
</table>

Junior

Students already at the University of Kansas may apply to the B.A. in Architectural Studies program by February 1 for admission the following fall. Students must have a cumulative college GPA of 3.0 or higher and space must be available to be admitted to the B.A. in Architectural Studies program.

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 114</td>
<td>1-4</td>
<td>ARCH 380</td>
<td>3 ARCH 627</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>3</td>
<td>ARCH 626</td>
<td>3 ARCH 381</td>
</tr>
<tr>
<td>ARCH 540</td>
<td>3</td>
<td>ENGR 357</td>
<td>3 ARCH 530</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
<td>Certificate Program Course</td>
<td>3 Certificate Program Course 3 or Free Elective 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 or Free Elective</td>
<td>3 Free Elective 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Free Elective 4</td>
<td>3 Free Elective 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Free Elective 5</td>
<td>2</td>
</tr>
</tbody>
</table>

Senior

Students may be admitted, if space is available, if they have an overall grade-point average of 3.0.

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 531</td>
<td>3</td>
<td>CMGT 701</td>
<td>3</td>
</tr>
<tr>
<td>CMGT 500</td>
<td>3</td>
<td>CMGT 702</td>
<td>3</td>
</tr>
<tr>
<td>CMGT 700</td>
<td>3</td>
<td>Professional Enrichment Elective</td>
<td>3 Professional Enrichment Elective</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Professional Enrichment Elective</td>
<td>3 Professional Enrichment Elective</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Certificate Program Course</td>
<td>3 Free Elective 7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Complete GRE. Submit Graduate Studies form. Make sure that GPA is 3.00</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours: 124-125

B.A. Architectural Studies and Undergraduate Certificate conferred.
The total number of credit hours required for graduation is likely to be approximately 109.

3. Students with a pre-professional degree in architecture, such as a Bachelor of Arts in Architectural Studies, are likely to be placed in the second year of the curriculum if they have a background in design studio. This is commonly referred to as the 4+2 option. Students interested in being placed in this way should make this clear in their statements. These students normally are asked to complete four studios (synthesis experiences), a study abroad summer experience, and architecture support courses whose number and content are determined on a case-by-case basis. The total number of credit hours required for graduation depends on the student's previous preparation and is highly variable, but is likely to be approximately 75 hours.

4. Students who already possess an accredited professional Bachelor of Architecture degree generally enter a three-semester program that requires a study abroad experience during a summer session as well as the final year of the curriculum. The total number of credit hours required for graduation depends on the student's previous preparation and is highly variable, but a minimum of 36 hours is required.

**Joint 3-Year M.Arch.-B.S. in Architectural Engineering Option**

This program is for students who have completed all requirements for the Bachelor of Science (B.S.) degree in architectural engineering. (See specific degree requirements in the Department of Civil, Environmental, and Architectural Engineering (p. 557) section of the online catalog.) The B.S. in architectural engineering is an ABET-accredited professional degree that requires a minimum of 5 years and 164 credit hours to complete.

Architectural engineering students who wish to complete an accredited Master of Architecture degree in addition to the B.S. in architectural engineering should apply for admission to the school's 3-year M.Arch. program by February 1 of the final year in architectural engineering. The application includes the completed application form and appropriate fee, a statement of purpose, and a portfolio of work. Assuming good performance in previous design studios, students are likely to receive advanced placement into the M.Arch. curriculum (normally into the second year of study).

**Dual Master of Architecture and Master of Business Administration Degree Program**

The Master of Business Administration/Master of Architecture dual degree program is designed particularly for students intending to pursue leadership opportunities in architecture, development, or construction. The M.B.A./M.Arch. program requires 4 years of study, 1 year less than it would take to earn each degree separately.

Students completing the dual degree program earn an M.B.A. from the KU School of Business (http://www.business.ku.edu) and an M.Arch. from the KU School of Architecture, Design and Planning (http://www.sadp.ku.edu). Students complete 112 credits in the 3-year Master of Architecture program and 37 credits in the School of Business. Prospective dual degree students must already be students in the Master of Architecture program and must apply and be accepted by the School of Business. New students must complete the first year of the architecture curriculum before

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**Year 5**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMGT 703</td>
<td>3 CMGT 895</td>
<td>3</td>
</tr>
<tr>
<td>CMGT 704</td>
<td>3 CMGT 805</td>
<td>3</td>
</tr>
<tr>
<td>CMGT 705</td>
<td>3 CMGT XXX Construction Management Elective</td>
<td>3</td>
</tr>
<tr>
<td>CMGT XXX Construction Management Elective</td>
<td>3 CMGT XXX Construction Management Elective</td>
<td>3</td>
</tr>
<tr>
<td>CMGT XXX Construction Management Elective</td>
<td>3 CMGT XXX Construction Management Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 30

Master of Construction Management conferred.

**Master of Architecture (3-year)**

**Master of Architecture 3-year**

Students who have completed or are completing a bachelor's degree and who wish to pursue professional careers as licensed architects may apply for admission to this program. In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor Architecture, Master of Architecture and the Doctor of Architecture. A program may be granted a 6-year, 3-year or 2-year term of accreditation, depending on the extent of its conformity with established educational standards.

Master's degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

This Master of Architecture degree is accredited by the National Architectural Accrediting Board (NAAB). Students who have completed previous course work in an approved NAAB architecture curriculum or a pre-professional architectural degree program may achieve advanced standing. All requests for advanced standing are evaluated using the minimum qualifications for graduate study at KU, the student performance criteria established by NAAB, and procedures approved by the architecture graduate studies committee. This degree requires a sequence of 6 semesters and 2 summers of architectural design studio/synthesis experiences, each of which is accompanied by associated professional graduate courses, constituting a total of 118 credit hours. The program also has a required study abroad component, planned to occur during a student's second summer.

There are 4 typical entry points to this curriculum:

1. Students without backgrounds in architecture who hold bachelor's degrees in non-design-oriented disciplines enter the first year of the curriculum which begins in the summer session. The first year of the curriculum is 2 academic semesters and 2 summer sessions. The total number of credit hours required is 118.

2. Students without backgrounds in architecture who hold bachelor's degrees in a design discipline usually begin course work with the fall semester of the first year. Other curricular requirements may potentially be waived after a careful vetting of the student's educational background. The total number of credit hours required for graduation is likely to be approximately 109.

3. Students with a pre-professional degree in architecture, such as a Bachelor of Arts in Architectural Studies, are likely to be placed in the second year of the curriculum if they have a background in design studio. This is commonly referred to as the 4+2 option. Students interested in being placed in this way should make this clear in their statements. These students normally are asked to complete four studios (synthesis experiences), a study abroad summer experience, and architecture support courses whose number and content are determined on a case-by-case basis. The total number of credit hours required for graduation depends on the student's previous preparation and is highly variable, but is likely to be approximately 75 hours.

4. Students who already possess an accredited professional Bachelor of Architecture degree generally enter a three-semester program that requires a study abroad experience during a summer session as well as the final year of the curriculum. The total number of credit hours required for graduation depends on the student's previous preparation and is highly variable, but a minimum of 36 hours is required.

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**The University of Kansas**

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**Position Title**

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**Job Title**

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**Salary**

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**Benefits**

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**Job Responsibilities**

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**Qualifications**

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**Contact Information**

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**Additional Information**

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starting the M.B.A. curriculum and must declare their intention before completing the second year of the architecture curriculum.

For information, consult the school websites and program chairs. See also the Master of Business Administration (p. 234) section of the online catalog.

Joint Master of Architecture and Master of Urban Planning

This joint degree combines in a 4-year program the normal 2-year Master of Urban Planning (p. 99) degree and the 3-year M.Arch. degree, both offered through the School of Architecture, Design and Planning. The program is intended for students interested in careers in urban design. A total of 133 credit hours is required, comprising 39 hours in urban planning and 94 hours in architecture. Applicants must meet admission requirements of both the Department of Architecture and the Department of Urban Planning. Students pursuing the M.Arch. may apply to the joint degree program during, but not after, the second year of study. Students pursuing the M.U.P. may apply to the joint degree program during, but not after, the first year of study.

Graduate Admission

Regardless of background or career goals, a person whose previous records indicate the ability to succeed with advanced work may be admitted to one of the graduate programs. Admission requires a bachelor's degree and a grade-point average of 3.0 from KU or another accredited institution or foreign university with substantially equivalent requirements for the bachelor's degree. The academic background is reviewed before a student without a bachelor's degree is admitted as a degree-seeking graduate student at KU. A complete application for admission consists of the following materials:

1. Graduate application (http://www.graduate.ku.edu).
2. One unofficial transcript where the undergraduate degree is confirmed and one copy of the transcript where any graduate degree/credit was earned (if applicable).
3. Three letters of recommendation from persons qualified to comment on the applicant’s intellectual abilities and probable success in graduate study.
4. Application fee, nonrefundable check or money order payable to the University of Kansas (See Admission in the Graduate Studies (p. 2369) section of the online catalog for further information).
5. Evidence of language proficiency if the native tongue is not English, including
   a. A degree from an English-language college or university or
   b. Receipt of official copy of applicant's proficiency scores achieved not more than 2 years before the semester of admission: IELTS scores: minimum overall score 6.5 with no part score below 6.0; TOEFL scores (iBT): all part scores at least 23; TOEFL scores (CBT): all part scores at least 23 and essay score of at least 5; TOEFL scores (paper): all part scores at least 57 and essay score of at least 5.
6. A statement of interest indicating the applicant’s career goals and the relationship of these goals to the specific option chosen (Those seeking advanced placement in the M.Arch. program should make this clear in this statement.).
7. A portfolio of work demonstrating the candidate’s strengths. Examples may include design or creative work and writing samples. The portfolio is limited to 10 megabytes (not zipped) in PDF format. Upload under other documents.
8. Graduate Record Examination (GRE) test results.
9. For international students, a financial statement showing minimum financial support for the first year of study (see the admissions page on the school’s website (http://www.sadp.ku.edu)).

Submit your graduate application and upload all application materials online (http://www.graduate.ku.edu). Please contact the Admissions Coordinator if you have any questions:

The University of Kansas
Department of Architecture
Marvin Hall
1465 Jayhawk Blvd., Room 206
Lawrence, KS 66045-7626

Be sure to check the school’s website (http://www.sadp.ku.edu) for updates to the admission process or requirements.

Master of Architecture Degree Requirements

M.Arch. Curriculum (3-year)

The curriculum is designed in 3 parts. The first 2 semesters plus 2 summer sessions offer an accelerated education in the foundations of architecture as a professional discipline. The second academic year emphasizes professional development, with the comprehensive studio as a capstone experience. The third and final year offers students a choice of options for an inquiry of enhanced depth typical in graduate education. This allows students to develop a specialization by the time they complete the professional degree. The timing of course offerings is subject to change. Please visit the school’s website (http://www.sadp.ku.edu) for the most current information.

Plan (3-year)

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<th>Year</th>
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The University of Kansas

Doctor of Philosophy in Architecture

Introduction

Architecture is inherently an interdisciplinary field of study, integrating knowledge from art, science, and the humanities. As a method of practice, it is a complex, collaborative, professional activity aimed at improving the quality of life for people and the planet. The discipline requires creative, critical, agile, and integrative thinking. Architecture deals with highly complex problems and aims to solve them not only competently, but in a way that ennobles society. The curriculum responds to these considerations by offering a series of overlapping sequences in professional and academic course work.

The Ph.D. in Architecture educates students to become more valuable to society through academic, business, and government organizations that require greater artistic, scientific, and investigative skills. It offers candidates opportunities to develop and deepen their education in 3 important ways:

- Enhancing research and analytical skills with rigorous methods of inquiry and synthesis;
- Acquiring advanced knowledge specific to their area(s) of inquiry through comprehensive scholarly investigations and distinguished documentation; and
- Developing the ability to communicate knowledge in a clear and eloquent manner.

To realize this goal, the faculty has made a commitment to create, along with doctoral students, a climate in which scholarship and creativity can flourish. Underlying the advanced study of architecture at KU is an ethic regarding architectural inquiry and architectural practice; one that sustains the question, “What ought we do as architects and researchers to improve the quality of life for people and the planet?” Examples of inquiry at KU that exemplify this underlying question are

- Progressive models of practice embracing evidence-based design and design-build practices;
- Affordable housing with a sensitive aesthetic;
- Material investigations to create more affordable and sustainable building practices;
- Rigorous evaluations of built artifacts to inform better design practice;
- Translation of empirical findings of person-place interaction research into design guidelines; and
- Critical perspectives on human settlement patterns.

Our research is founded on an ethical position. We are not involved in research simply to generate knowledge for its own sake but rather to improve the human condition through more thoughtful built form. The overall focus is on developing understanding that may inform the critical delivery processes by which humane architecture is created.

Note: Contact the Architecture department or program for more information about the Research and Skills and Responsible Scholarship requirement for doctoral students.

Graduate Admission

Regardless of background or career goals, a person whose previous records indicate the ability to succeed with advanced work may be admitted to the Ph.D., Architecture. Admission requires a bachelor’s degree and a grade-point average of 3.0 from KU or another accredited institution or foreign university with substantially equivalent requirements for the bachelor’s degree. The academic background is reviewed before a student without a bachelor’s degree is admitted as a degree-seeking graduate student at KU. A complete application for admission consists of the following materials:

1. Graduate application (http://www.graduate.ku.edu).
2. Curriculum Vitae or resume.
3. A statement of interest outlining reasons for pursuing the Ph.D. (not to exceed 1500 words).
4. 1 unofficial copy of the transcript where the undergraduate degree was confirmed and 1 copy of the transcript where any graduate degree/credit was earned.
5. 3 letters of recommendation from persons qualified to comment on the applicant’s intellectual abilities and probable success in graduate study.
6. Application fee, nonrefundable check or money order payable to the University of Kansas (See Admission in the Graduate Studies (p. 2369) section of the online catalog for further information).
7. Evidence of language proficiency if the native tongue is not English, including
   a. A degree from an English-language college or university or
   b. Receipt of official copy of applicant's proficiency scores achieved not more than 2 years before the semester of admission:
      IELTS scores: minimum overall score 6.5 with no part score below 6.0;
      TOEFL scores (iBT): all part scores at least 23;
      TOEFL scores (paper): all part scores at least 57 and essay score of at least 5.
8. One research-informed writing sample (example: published article, manuscript, report, thesis) (limited to 10 megabytes).
9. Exhibit of work illustrating the applicant's interests and abilities in areas related to the design disciplines (limited to 10 megabytes, not zipped, in PDF format). Upload under “other documents.”
10. Graduate Record Examination (GRE) test results.
11. For international students, a financial statement showing minimum financial support for the first year of study (see the admissions page on the school’s website (http://www.sadp.ku.edu)).

Submit your graduate application and upload all application materials online (http://www.graduate.ku.edu). Please contact the Admissions Coordinator if you have any questions:

The University of Kansas

Year 3

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<thead>
<tr>
<th>Fall</th>
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<th>Spring</th>
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<td>Total Hours: 111</td>
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Ph.D. Degree Requirements

General Plan of Study

The Ph.D. in Architecture degree program is carefully crafted to allow students to engage in rewarding and potentially revolutionary scholarly investigation steeped in an atmosphere of rigorous academic pursuit. The 49-credit-hour curriculum is divided into three parts: foundation, concentrations, and advanced study. In the foundation, students must take the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
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<td>ARCH 951</td>
<td>Methods of Inquiry in Architectural Research</td>
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<td>Research Skills</td>
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<td>Advanced Methods</td>
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<td>ARCH 958</td>
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</tr>
<tr>
<td>ARCH 959</td>
<td>Research Practicum</td>
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Concentrations are major (12 credit hours minimum) and minor (9 credit hours minimum) curricula developed by the student in concert with the major professor. The student becomes a candidate upon passing the comprehensive examination. As a candidate, the student enters the advanced studies portion of the curriculum and begins work on the dissertation. The student must be continuously enrolled, including summer sessions, until all requirements for the degree are completed. A minimum of 9 dissertation credit hours is required for the degree. What follows under "Degree Plan" is a sample plan of study.

Year 1

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Hours</th>
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<td>Research skills</td>
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Year 2

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<tr>
<td>ARCH 959</td>
<td>4 Minor course</td>
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<tr>
<td>Major course</td>
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<td>3</td>
<td>Minor course</td>
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<tr>
<td>Minor course</td>
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Total Hours: 41-49

Department of Design

Introduction

The Department of Design advances the professional work of thoughtful, creative, and meaningful design to delight, inspire, and serve the needs of people. Design is the planning that lays the basis for creation and development of every object or system people use. Design programs train students to be problem solvers who consider the aesthetic, functional, and user-focused aspects of an object or a process. This requires considerable integrative research, thought, modeling, interactive adjustments, and redesign.

KU is an accredited institutional member of the National Association of Schools of Art and Design (http://nasad.arts-accredit.org). The entrance and graduation requirements in this catalog conform to the published guidelines of that organization.

Undergraduate Programs

The department offers a professional B.F.A. degree program with concentrations in:

- Environmental Design,
- Illustration and Animation,
- Industrial Design,
- Photo Media,
- Visual Communication Design.

Courses for Nonmajors

Students in other KU schools may enroll in design courses for credit, subject to the availability of classroom space, with the permission of the instructor of the course.

Course Policies

To get the most out of the courses and grow as a young designer, students need to approach the course work with a serious attitude and a willingness to work beyond just doing what is asked. Design is a very competitive and challenging profession, but for those who find a way to be engaged with the work and enjoy being challenged, the demands are well worth meeting and the rewards are truly fulfilling. Courses are taught with this philosophy in mind. Students are expected to commit themselves and to work hard, every day, not just for better grades, but for the enjoyment that the work brings and the creative growth and skill development that comes with it.

Attendance

Students are required to attend class. Please be in class on time and remain for the entire period. Attendance will be taken at the beginning of each class period. Three "late" marks will equal one absence. Leaving class early will be counted the same as arriving late. A total of 3 absences will be allowed for any reason. On the 4th absence the student will be
asked to withdraw from the course. If it is necessary for a student to be absent more than 3 classes for any reason, including medical condition, they are advised to withdraw from the class.

In the event of any absence, students are still responsible for obtaining all information and materials from the class period and completing all assignments on time. It is your sole responsibility to find out about any new work assigned during your absence.

**Religious Holidays**

If any scheduled course meeting conflicts with mandated religious observance, the student must notify the instructor prior the day of the observance that the student will be absent.

**Expected Workload**

Throughout the semester students are required to work a minimum of 3 hours of homework per credit hour per week outside of class on their projects (3 hour studio will have a minimum of 9 hours of homework per week). Many students will find that they will need to spend even more time per week to complete the work.

Students should be aware that not all project work can be done at home or at their convenience. They should also be aware that expecting to work a full-time or near full-time job (over 20 hrs. per week) will most likely have a negative impact on their performance and grade. Studio course projects require a great deal of time in order to develop and complete. It is very difficult to try and balance both a full-time job and a full load of studio classes.

**Participation & Professionalism**

Design does not happen in a vacuum. Clear verbal skills are important in communicating ideas to clients and design team members. For all critiques, students are expected to come prepared to present their concepts, discuss how the form of their design supports their concept, and describe how they arrived at their ideas. Providing comments to their peers is a privilege. Students will benefit from both giving and receiving feedback—students do not have to "like" another’s work, but they must provide insightful commentary in a courteous and productive manner.

Students are required to turn their mobile phones to silent and refrain from surfing the web, updating their Facebook page (or any social media), checking email, text messaging, etc. during class, lectures, and demos. Students may use theses devices only during designated break times.

Lack of professionalism can effect a student’s grade and can lower their grade by one full letter grade.

- attend class on time and stay throughout the whole class period
- prepare for every class
- participate in classroom discussions and critiques
- maintain a positive and open-minded attitude
- demonstrate deliberate self-disciplined and timely work habits
- progressively strive for and achieve the highest standards of quality

**Plagiarism & Academic Misconduct**

If a student tries to copy someone’s work or take someone’s idea and pass it off as their own they will suffer the penalties as outlined in the KU Student Code of Rights and Responsibilities.

All work that students hand in for a course must be made and created by them, over the course of this semester, exclusively for the course in question.

Academic misconduct by a student shall include, but not be limited to, disruption of classes; threatening an instructor or fellow student in an academic setting; giving or receiving of unauthorized aid on examinations or in the preparation of notebooks, themes, reports, or other assignments; knowingly misrepresenting the source of any academic work; unauthorized changing of grades; unauthorized use of University approvals or forging of signatures; falsification of research results; plagiarizing of another’s work; violation of regulations or ethical codes for the treatment of human and animal subjects; or otherwise acting dishonestly in research. See full policy. (http://design.ku.edu/academic-misconduct-policy/)

**Disabilities (ADA)**

The Academic Achievement and Access Center (AAAC) coordinates academic accommodations and services for all eligible KU students with disabilities. If you have a disability for which you wish to request accommodations and have not contacted the AAAC, please do so as soon as soon as possible. They are located in 22 Strong Hall and can be reached at 785-864-4064 (V/TTY). Information about their services can be found at http://www.disability.ku.edu. Please contact the instructor privately in regard to your needs in the course.

**Late Projects**

All projects and assignments are due on the date set by the instructor. All projects are due at the start of class. Late projects will be penalized by lowering the project grade by one full letter grade for each day that it is late. After three days, late projects will no longer be accepted and a grade of F will be assigned.

**Grade Requirements**

If a course is required under the majors studies section on the degree check sheet students must receive a grade of C (2.0) or better to continue on to the next course in the sequence. A grade of C- (1.7) or lower will require them to repeat this course. In most cases these courses are only offered once a year. Students in the Department of Design must maintain a cumulative 2.0 GPA to graduate with a degree in Design.

**Graduate Programs**

The department offers the following graduate degree programs:

- Master of Arts (M.A.) in Design with a concentration in Design Management
- Master of Arts (M.A.) in Design with a concentration in Environmental Design
- Master of Arts (M.A.) in Design with a concentration in Interaction Design

Please visit the Graduate Studies (http://www.graduate.ku.edu) website for more information.

**Courses**

**ADS 320. Hallmark Symposium Series. 1 Hour.**

Visiting professionals discuss various aspects of Design based upon their own special areas of expertise. The series is mandatory for all Design majors. Design majors must repeat this course at least 4 times for a total.
systems, basic research methods, including statistics and literature properties, interaction design methods, and the physical and socio-cultural and applied to real-world design projects/problems. Human physical to interaction design. In this course, these principles will be illustrated The study of human factors principles and guidelines are fundamental ADS 710. Advanced Human Factors in Interaction Design. 3 Hours.

A collaborative studio across all Design Department areas of study. Students of the different areas will be organized into work groups and conduct in-depth research, investigate new problem solving methodologies, develop new applications and working knowledge of specialized subjects. Prerequisite: Junior level or higher standing in Design or Architecture or permission of the instructor. LAB.

Students develop professional skills and problems solving with an applied and relevant design employer's office. Supervision by faculty and a professional designer, designated and approved by the faculty in the area is mandatory. Graded on a Satisfactory/Unsatisfactory basis. May be repeated twice for credit. Prerequisite: Junior level or higher standing in the Design Department. FLD.

Students will participate in a Design focused study abroad program. The student will be required to attend group meetings prior to the trip along with development of research topics of interest. Simple documentation would be required - sketchbook/journal responding to day-to-day itinerary and other events, following the trip and presented for a grade. Prerequisite: Junior level or higher standing in Design or with permission of the instructor. Corequisite: ADS 533. LAB.

ADS 532. Study Abroad: ____. 3 Hours.

ADS 533. Study Abroad Documentation. 3 Hours.

Consists of research work prior to the trip as well as follow-up and required studio work due after return. A portfolio of work will be required for a grade. Course will also fulfill Design-specific requirements or studio credits for other majors. Areas may designate specific Design courses as substitutions for this course. Prerequisite: Junior level or higher standing in Design or with permission of the instructor. Corequisite: ADS 532. LEC.

ADS 530. Intra Design Problems: ____. 3 Hours.

A study of different topics in different semesters in a special area of interest to a staff member and suitable qualified students. May be repeated for credit. Prerequisite: Junior standing in department or permission of instructor. LAB.

ADS 570. Design Seminar. 3 Hours.

Comprehensive examination of a complex design problem from the point of view of the various specializations. Prerequisite: Junior standing in department. LEC.

ADS 580. Special Problems in Design. 1-6 Hours.

A study of current problems in design or crafts with an emphasis on research. Special problems proposals must be discussed with and approved by the instructor and advisor prior to enrollment in the course. A student may not take more than six credit hours of special problems in any one semester. Prerequisite: Junior standing in department. IND.

The study of human factors principles and guidelines are fundamental to interaction design. In this course, these principles will be illustrated and applied to real-world design projects/problems. Human physical and cognitive capabilities, computer-human interface and systems properties, interaction design methods, and the physical and socio-cultural environment will be considered. Fundamental issues in human-centered systems, basic research methods, including statistics and literature searches, will be included. Open to all university students. Graduate students will meet concurrently with INDD 510 and receive additional coursework. LEC.

ADS 712. Design Strategies and Methods. 3 Hours.

This course will cover the principles of design thinking, design processes, design strategies and methods, including techniques and tools for the development of human-technology interfaces. Abstract through concrete representation methods and techniques will be applied to interaction design projects/problems. Information collection and analysis methods, scenario and prototyping methods, evaluation methods (empirical), creativity methods, and task-oriented method (non-empirical) will also be considered. Methods common to design-related disciplines in the social sciences, business, architecture, communication studies and engineering are integrated. Graduate students will meet concurrently with INDD 512 and receive additional work. Prerequisite: Consent of instructor for all non-design students. LEC.

ADS 714. Designing Business Services and Consumer Experiences. 3 Hours.

Business products, services and environments are often intermingled in ways that require more holistic ways of thinking and development. A challenge of service innovation is to design with an understanding of the many dimensions of human experience and satisfaction. This course elaborates how, where, when, and why design can enhance the value of business services. Theory, methods, and practice aspects of services design are presented. LEC.

ADS 720. Graduate Seminar in Design. 1 Hour.

Comparative studies of various areas of specialization in design. Repeat for credit to a maximum of six credit hours. LEC.

ADS 730. Directed Reading in Design. 1-3 Hours.

Research reading and presentation of reports on specific subjects related to the students major area of specialization. Required of all graduate students. RSH.

ADS 732. Study Abroad: ____. 3 Hours.

Students will participate in a Design focused study abroad program. The student will be required to attend group meetings prior to the trip along with development of research topics of interest. Simple documentation would be required - sketchbook/journal responding to day-to-day itinerary and other events, following the trip and presented for a grade. Prerequisite: Junior level or higher standing in Design or with permission of the instructor. Corequisite: ADS 733. LAB.

ADS 733. Study Abroad Documentation. 3 Hours.

Consists of research work prior to the trip as well as follow-up and required studio work due after return. A portfolio of work will be required for a grade. Course will also fulfill Design-specific requirements or studio credits for other majors. Areas may designate specific Design courses as substitutions for this course. Prerequisite: Junior level or higher standing in Design or with permission of the instructor. Corequisite: ADS 732. LEC.

ADS 740. Special Problems in Design. 1-6 Hours.

An in-depth study of current problems in design or crafts with an emphasis on research. Special problems proposals must be discussed with and approved by the instructor and graduate advisor prior to enrollment in the course. RSH.

ADS 745. Branding and Design. 3 Hours.

A rapidly changing marketplace demands business strategy that is rooted in the dynamics of human culture, society, and psychology. Design thinking directly engages such factors and is, thus, well suited to help organizations formulate effective, versatile and strategic brands. This class focuses on strategic design analysis as a means to promote innovation in core brand development and extension into new applications
and product categories. By aligning design with engineering, marketing, advertising, packaging, and service, business can innovate new sources of market value and deliver a more powerful brand messages. Prerequisite: Consent of instructor for all non-design students. LEC.

**ADS 750. Design Management. 3 Hours.**
Design Management has been described as "applied innovation" or the methodical capturing of talent and resources available inside and outside an organization to create valuable new offerings, brands, and business models. This course explores the design functions in business as a means to solve difficult challenges and develop new market-facing opportunities. Subjects include brand value creation, differentiation, coordination, and transformation. Numerous cases will be discussed. LEC.

**ADS 751. Creating Design Scenarios and Simulations. 3 Hours.**
Most organizations are imaginatively challenged and experience difficulty innovating and marketing new concept offerings. Conventional methods spotting and validating new opportunities often lack the persuasive power necessary for change to occur. Scenario-based design and simulation offers ways to vividly representing a future that is different from the past. This course presents theory, methods and practice aspects of design scenario construction and simulation. LEC.

**ADS 760. Design and Strategic Innovation. 3 Hours.**
As companies struggle with the demands of increasing consumer, intense competition and downward price pressures, there is a corresponding increase in the demand for more innovative business models and higher-value offerings. These forces have significantly broadened the strategic scope of design. Advanced, multi-disciplinary design teams are being engaged early to help guide new business and product development efforts. Why, where, when, and how this is done in order to deliver on the promise of innovation is the subject of this course. Prerequisite: ADS 750 or with consent of instructor. LEC.

**ADS 765. Interaction Design. 3 Hours.**
Interaction Design is about creating products, services or environments that offer significant experiential value to people and economic value to organizations. This course engages the comprehensive subject of design for human experience. Building on the gamut of human factors and design methods knowledge, this offers hands-on experience in the research, analysis, modeling and simulation of original and experientially compelling design solutions. Prerequisite: ADS 710, ADS 712 or with consent of instructor. LEC.

**ADS 770. Design Cognition. 3 Hours.**
In a science of design, the study of "human designers" is as important as the study of designed artifacts or design tools. Since the beginning of research in Design Cognition, many empirical studies have opened up our understanding or human designers and the ways they design. While design is largely a mental activity, it interacts strongly with heterogeneous external representations. It encompasses problem definition and solving, analogical mappings, mental imaging and other mental processes. It requires team coordination and is situated in a cultural milieu that defines roles and modes of behavior. As such, distributed cognition, situated cognition, and social cognition - all have become relevant to the understanding of design cognition. The structure of a design task, the mental representation of design form and behavior, the structure of design teams, and the associated concepts of design cognition will be the subject of the course. LEC.

**ADS 810. Orientation Seminar. 1 Hour.**
Studies directed to development of a thesis plan. Required of all graduate students. Offered in fall semester only. Graded on a satisfactory/unsatisfactory basis. LEC.

**ADS 850. Studio Teaching Practice. 1 Hour.**
Graduate students only. Must hold an assistant instructor or teaching appointment. Credit earned does not satisfy any credit requirement for a degree. Graded S or U. FLD.

**ADS 860. Graduate Synthesis and Applications Seminar. 1 Hour.**
Group discussion and presentations on timely industry topics. Topics will be substantial, bridging relevant program subjects and professional area boundaries. May be repeated for up to six credit hours in subsequent semesters. LEC.

**ADS 861. Thesis Research Seminar. 1 Hour.**
Approaches to producing original design research. Methods, resources, topics and projects are discussed and evaluated. May be repeated for up to six credit hours in subsequent semesters. LEC.

**ADS 890. Thesis. 1-8 Hours.**
For guidance refer to Design department graduate guidelines. THE.

**BDS 100. Design Dialogues. 3 Hours.**
Design, like almost every industry, profession, school or major on campus, is forever being changed by technology, it's reach, global access, and social innovation. From the basics of how to think like a designer or how to design a better presentation in powerpoint to how design can be situated in businesses and organizations to create innovative new products, services or social change. This course will give students an awareness of design in our everyday world; an understanding of some of the cultural, theoretical, conceptual, and practical issues related to design and designing. The ultimate goal is that by the end of this course students will know how design contributes to contemporary society and how they might use this understanding throughout their life in little and big ways. Open to all majors. Corequisite: BDS 102 (for Design majors only). LEC.

**BDS 101. Design Thinking and Making I. 3 Hours.**
This is a course for all Design Department majors, to introduce them to creative problem solving; and the fundamentals of two, three and four-dimensional design. Drawing, photography, 2D and 3D models are used in this course as a means of design thinking to visually represent problems and solutions. Students must receive at least a grade of C (2.0) in this course to continue in the Design program. Prerequisite: Must be admitted into the Design Department or receive instructor permission. Corequisite: BDS 103. LAB.

**BDS 102. Design Thinking and Making II. 3 Hours.**
This is a course for all Design Department majors and serves as a continuation of BDS 101 with a greater emphasis on examining the relationships between design and other systems: environment, society and culture, and technology and economics. One and a half hours of lecture and six hours of studio-lab per week. Students must receive at least a grade of C (2.0) in this course to continue in their Design program. Prerequisite: Must be admitted into the Design Department and have completed BDS 101 and 103 with at least a grade of C (2.0) or equivalent course work, or receive instructor permission. Prerequisite: BDS 101 and 103. LAB.

**BDS 103. Drawing for Design. 3 Hours.**
This course will focus on drawing as a tool of communication through freehand exercises that explore observation and perception, form and proportion, dimensional illusion and expressive characteristics using a variety of materials and media. Some identified sections of this course will also use two-and three-dimensional modeling software. Students must receive at least a grade of C (2.0) in this course to continue in their Design program. Prerequisite: Must be admitted into the Design Department or receive instructor permission. Corequisite: BDS 101. LAB.
ENVD 200. Fundamentals of Environmental Design. 3 Hours.
Introduction to fundamentals and processes involved in developing design concepts in the unit scale interior environment that may include residential or small scale commercial spaces. The studio focuses on developing design vocabulary, graphic representations, space planning, furniture and furnishings. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: BDS 102 and ENVD 202. Corequisite: ENVD 203. Prerequisite or corequisite: ENVD 212. or permission of instructor. LAB.

ENVD 203. Materials and Sustainability. 3 Hours.
Study and analyze building materials, furniture and furnishings through investigation into their physical and technical characteristics, limitations, and applications. The course also introduces the sustainability issues that relate to the selections and specifications that impact the environment, energy use and limited resources. It covers various agencies and organizations that develop guidelines on materials, resources, building practices, processes and systems that support sustainable design. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: BDS 102 and ENVD 202. Corequisite: ENVD 200 or permission of the instructor. LAB.

ENVD 204. Fundamentals of Interior Design. 3 Hours.
This first interior design studio will introduce the principles and elements of interior design, including design composition, space planning, furniture layout, color, and finish materials. It will also provide the direction and opportunity for the student to apply basic design and drawing skills developed in the Foundation courses to meet project program requirements in a series of projects of increasing complexity. Students will be expected to produce process diagrams, plans, elevations, models and finish boards. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: BDS 102 and ENVD 202. Corequisite: ENVD 200 or permission of the instructor. LAB.

ENVD 212. Drawing for Environmental Design. 3 Hours.
Introduction to visualization tools in applications to interior environments using freehand sketching and computer aided design. The class focuses on vocabulary and theories of different drawing systems and develops basic CAD skills using Autocad and related software to generate 3D digital modeling, scene descriptions and view manipulations. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: BDS 102 and BDS 103 or permission of instructor. Corequisite: ENVD 212. or permission of instructor. LAB.

ENVD 304. Environmental Topics. 3 Hours.
This studio focuses on topics that relate to specific environments that may include retailing, hospitality, health care, restaurants, or work space strategies in offices. Students conduct research, explore ideas and generate concepts at a more complex scale level. Emphasis will be placed on understanding of users' operational needs, company brand or image, adjacencies, spatial analyses, understanding of material and their applications, environmental factors, codes and regulations that impact the planning and selections. Related issues include lighting, furniture systems analysis and their applications, and custom casework design. Depending on availability, studio may work with other studio in Architecture or other discipline within the department on joint projects. This class may be repeated for credit. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ENVD 200 or permission of instructor. LAB.

ENVD 305. Research and Programming. 3 Hours.
Examining and analyzing essential information necessary to determine the clients' present and future operational requirements and the space, facilities, and services required for support. Establishing pre-planning concepts and guidelines on building and space utilization. Effort is directed toward developing space into a functional, flexible, and aesthetic environment in which to work. Study includes the use of questionnaires, organization charts, space study and standards, space projections, space tabulations, and space distribution using interaction, blocking, and layering diagrams. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ENVD 200, ENVD 304 and MATH 101 or permission of instructor. LAB.

ENVD 306. Environmental Topics II. 3 Hours.
Similar to Environmental Topics with focus on large scale projects in the range of 15,000 to 20,000 square feet. Emphasis on skill building, originality and expression of personal philosophy through advance planning and design. Other related studies include furniture systems research, evaluations, and their specifications. Students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ENVD 304 LAB.

ENVD 308. Integrated Senior Problems I. 3 Hours.
This class provides individual students with the opportunity to develop a project of choice based on the individual's interest and design philosophy and incorporates the skills acquired from the integrated curriculum. Students will conduct initial research and data collection to develop a program that includes the schematic and preliminary design development. Projects may include corporate offices, retailing, health care, hospitality and restaurants, exhibitions, residential design, or specialty interior products. Effort will focus on the investigation of a component within a large or complex project. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ENVD 304 and ENVD 305. LAB.

ENVD 408. Integrated Senior Problems II and Specification. 3 Hours.
A continuation of ENVD 408 that focuses on further design development leading to final design solutions and explores in detail the design of the total environment. The use of materials and their limitations, sustainability, environmental factors, technology, graphics and signage, custom design casework and interior products, applicable codes and standards, budget, and construction document production are all part of the investigations. Final results may include a set of drawings, working drawings, detail drawings, 3D models and/or multi-media presentations. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ENVD 304 and ENVD 305. LAB.

ENVD 410. Integrated Senior Problems II and Specification. 3 Hours.
There are two different components to this class. The first is to develop the student's graduating portfolio that relates to the individual's professional interest. The second is the standards associated with the professional practice of a design office including office personnel and organization, scheduling, fee structures, contracts, billing, marketing and professional ethics. The course will include lectures, guest speakers, and field trips. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ENVD 408. LAB.
ILLU 205. Drawing Media for Illustration. 3 Hours.
Exploration of problems in drawing for various reproduction processes. Emphasis on perspective, head drawing, the clothed and nude figure, nature illustration, perspective, and environments. Various drawing media and materials are explored. Required for Illustration majors as a pre-review course. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: BDS 101 or permission of instructor. LAB.

ILLU 305. Image Making. 3 Hours.
Concentrated study in developing methodologies for producing contemporary illustration. Emphasis is placed on concept development, composition exploration, value and color studies, and reference creation. Required for Illustration majors as a pre-review course. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: BDS 102. LAB.

ILLU 315. Introduction to Illustration. 3 Hours.
Concentrated study in developing skills and techniques with media and materials that are employed in producing contemporary illustration. Continued emphasis on methods of research and idea generation. For majors only. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C+ (2.3) or higher to continue on to the next course in the sequence. Prerequisite: ILLU 305 and/or permission of instructor. Corequisite: ILLU 405. LAB.

ILLU 405. Drawing Media for Illustration II. 3 Hours.
Students will explore various drawing and painting media to continue developing their mastery of representational imagery for illustration. Reference collecting, model making, and the creating of photographic reference material will be addressed. Emphasis on mark making, value and color relationships, and placing the figure in an environment is also covered. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C+ (2.3) or higher to continue on to the next course in the sequence. Prerequisite: ILLU 205 or permission of instructor. Corequisite: ILLU 315 or permission of instructor. LAB.

ILLU 410. Fundamentals of Animation. 4 Hours.
Concentrated study in developing skills and techniques with digital media and materials employed in producing basic contemporary animation. Development of concept, script, storyboard, and use of audio, music and sound effects are part of this animation experience. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ILLU 315 and ILLU 405 and/or permission of instructor. Corequisite: ILLU 415. LAB.

ILLU 415. Illustration Concepts. 3 Hours.
Focus of this course is to learn how to think visually. Concentrated study on developing different forms of concepts for illustration. Continued development of technical skills and visual literacy to gain insight on how to make images that communicate unique ideas clearly. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ILLU 305 and ILLU 315. Corequisite: ILLU 410. LAB.

ILLU 425. Concept Art. 3 Hours.
Introductory exploration of the process, skills and concepts necessary for successful concept art character design and effective blending of matte painting and film. Drawing will be of primary concern for this course, yet exploring digital means of character development will also be introduced. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ILLU 410 and ILLU 415 and/or permission of instructor. Corequisite: ILLU 435. LAB.

ILLU 435. Sequential and Narrative Illustration. 4 Hours.
Exploration of thematic illustration through the development of a series of images based on a topic or story. Aspects of continuity, consistency, storytelling, pacing, editing, packaging and a holistic method of developing illustration are addressed. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ILLU 415 and ILLU 440. Corequisite: ILLU 425. LAB.

ILLU 445. Advanced Concept Art. 3 Hours.
Continuation in exploration of the process, skills and concepts for successful concept art character design, along with continued development of digital characters and 3D modeling. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ILLU 425 and ILLU 435 and/or permission of instructor. LAB.

ILLU 510. Animation. 3 Hours.
Continued development of concepts, scripts, storyboards, and use of audio, music and sound effects in the production of a one to three minute animated film. Prerequisite: ILLU 410 or permission of instructor. LAB.

ILLU 535. Promotion and Marketing for Illustration. 4 Hours.
Focus will be on preparation for entering the profession. Development and completion of a self-promotion and marketing package will supplement and support the senior portfolio. Contemporary business practices and legal issues will be addressed. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ILLU 445. LAB.

ILLU 703. Illustration. 3-6 Hours.
LAB.

ILLU 825. Illustration. 2-6 Hours.
Individual research. RSH.

INDD 212. Drawing for Industrial Design. 3 Hours.
This course will focus on drawing as a tool of communication through a variety of exercises that explore observation and perception, form and proportion, dimensional illusion and expressive characteristics using a variety of materials and media. This course will also use two- and three-dimensional modeling software necessary for all Industrial Designers. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: BDS 101 and BDS 103. Corequisite: BDS 102. LAB.

INDD 284. Basic Industrial Design Studio. 3 Hours.
Course introduces tools, techniques and processes used in the professional practice of Industrial Design. Learning is through a series of short, focused projects. Techniques in drawing, computer modeling, physical modeling, and presentation are demonstrated and developed. Strategies to improve creativity are explored, while addressing market and production considerations. If this course is required under the major
INDD 302. Intermediate Industrial Design Studio. 3 Hours.
Course introduces tools, techniques and processes used in the professional practice of Industrial Design. Learning is through a series of short, focused projects. Techniques in drawing, computer modeling, physical modeling, and presentation are demonstrated and developed. Strategies to improve creativity are explored, while addressing market and production considerations. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: BDS 102 and INDD 212. LAB.

INDD 378. Problems in Industrial Design: _____ . 3 Hours.
Individual and/or group research projects in one of several specific design areas which will be identified on a semester by semester basis. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. May be repeated for credit. Prerequisite: Eligibility for INDD 302 or permission of instructor. LAB.

INDD 446. Advanced Industrial Design Studio. 3 Hours.
Continuation of INDD 284 and 302 but encompassing design problems of greater complexity including group research and problem solving assignments in advanced product and service design. Advanced techniques in problem solving, concept communication, visualization, and overall design expression will be demonstrated and explored. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: INDD 302. LAB.

INDD 448. Professional Industrial Design Studio Practices. 3 Hours.
Continuation of Industrial Design studios, projects are longer requiring a high level of demonstrated design ability for successful completion. Issues regarding professional ethics, accountability, and responsibility to public and client are discussed and implemented. Professional design, presentation, and visualization skills will be demonstrated and explored. Finished designs will include full production technical specifications. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: INDD 446. LAB.

INDD 508. Materials and Processes. 3 Hours.
A study of modern materials, manufacturing processes, and construction methods applicable to the fields of industrial design and interior design. Design analysis of existing products, furniture, building components, and storage systems. Design assignments in furniture, storage systems, and interior space arrangements with emphasis on materials and construction. Field trips to area manufacturing and design facilities. Prerequisite: Permission of instructor. LEC.

INDD 510. Human Factors in Design. 3 Hours.
Introduction to the field of human factors (ergonomics) appropriate to industrial, interior, and visual design. Human capabilities, human-machine interfaces and system properties, and the environment are considered, a micro-computer laboratory is integrated into the course. Open to all university students. Prerequisite: Consent of instructor for non-art and non-design majors. Corequisite: BDS 102. LEC.

INDD 512. Methods in Design. 3 Hours.
Introduction to the study of methods of designing common to industrial, interior, and visual design. Evaluation methods (semantic differential), creativity methods (scenario writing), and task-oriented method: (PERT/CPM) will be considered in relation to design problems. Open to non-design students. Prerequisite and/or Corequisite: INDD 302 for industrial design majors or ENVD 200 for environmental design majors respectively. Consent of instructor for all other students. LEC.

INDD 555. Portfolio. 3 Hours.
Work directed toward maximizing the quality and effectiveness of the individual student’s professional portfolio. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite or Corequisite: INDD 448. LEC.

INDD 580. Senior Industrial Design Studio. 3 Hours.
Course requires the negotiation and accomplishment of a comprehensive body of work, comprising independent research, ideation, refinement, detail technical specifications, renderings, and a working and tested prototype of your final design. A final report of the project is required documenting your design process, the depth and complexity of which are commensurate with expectations for entry-level professionals. Faculty may consider national or international competitions as appropriate substitutions for student derived briefs, where applicable. The nature and scope of the work (1-2 projects maximum), as well as details of anticipated accomplishment must be outlined by the student and approved by the instructor prior to the beginning of the second week of classes. In exceptional circumstances, projects may extend into both semesters, via INDD 581—this requires permission/negotiation with faculty and is to be declared as an aspiration at start of INDD 580. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: INDD 448. LAB.

INDD 581. Senior Industrial Design Studio II. 3 Hours.
Course requires the negotiation and accomplishment of a comprehensive body of work, comprising independent research, ideation, refinement, detail technical specifications, renderings, and a working and tested prototype of your final design. A final report of the project is required documenting your design process, the depth and complexity of which are commensurate with expectations for entry-level professionals. Faculty may consider national or international competitions as appropriate substitutions for student derived briefs, where applicable. The nature and scope of the work (1-2 projects maximum), as well as details of anticipated accomplishment must be outlined by the student and approved by the instructor prior to the beginning of the second week of classes. In exceptional circumstances, projects may be a continuation of those started in INDD 580—this requires permission/negotiation with faculty and is to be declared as an aspiration at start of INDD 580. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: INDD 580. LAB.

INDD 715. Industrial Design. 2-6 Hours.
Research-oriented advanced study in industrial design. Prerequisite: Graduate major in industrial design or consent of instructor. RSH.

INDD 815. Industrial Design. 2-6 Hours.
Prerequisite: INDD 715. RSH.

PHMD 101. Fundamentals of Photography. 3 Hours. GE3H.
Open to students of all disciplines and experience levels, this course provides an introduction to the medium and language of photography. Basic camera operation, workflow, and digital/analog printing methods
are explored, accompanied by lectures, readings, and discussions regarding the historical and theoretical concerns of the medium. A digital camera with full manual controls is required - RAW capable preferred. Open to students of all disciplines and experience levels. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. LAB.

PHMD 201. Photography I. 4 Hours.
The first of the two-part foundational Photography sequence, this majors-only course provides students with a rigorous immersion into the formal, technical, and conceptual concerns and challenges of photography by way of the view camera. Embracing both the wet and digital darkrooms, students shoot and develop sheet film that is then utilized to produce both traditional and digital prints. Intermediate digital editing methods are introduced and explored. View cameras are provided. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: PHMD 101, BDS 102, and permission of instructor. LAB.

PHMD 202. Photography II. 4 Hours.
The second of the two-part foundational Photography sequence, this advanced course builds upon PHMD 201 with additional emphasis on color, RAW workflow, and advanced methods for digital capture, manipulation, editing, and compositing. Additionally, students work extensively with large-format inkjet printers to create custom ICC printing profiles. A digital SLR (RAW capable) camera with full manual controls is required. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: PHMD 201 and permission of instructor. LAB.

PHMD 210. Understanding Photographs. 3 Hours.
Understanding Photographs is a lecture-based course that focuses on developing a critical understanding of how images, paired with culture and society, generate meaning in both the historical and contemporary contexts. Open to students of all disciplines and experience level. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. LEC.

PHMD 301. Lighting Studio. 3 Hours.
Lighting Studio is a fundamental course in awareness, modification, and control of light. Students work extensively with strobe and continuous light sources. Principles of natural and artificial light are introduced, explored, and applied through hands-on assignments both in and out of the studio environment. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: PHMD 202 or permission of instructor. LAB.

PHMD 302. The Moving Image. 3 Hours.
This course serves as an introduction to the principles and challenges of photography as a time-based medium. Fundamental concepts of production are introduced and explored through hands-on exercises, class presentations and discussions, lectures, critiques, and individual and group projects. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: PHMD 202 or permission of instructor. LAB.

PHMD 315. Experimental Processes. 3 Hours.
Experimental Processes is an introduction to the understanding and production of image-based works utilizing experimental approaches and alternative processes in an interdisciplinary environment. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: PHMD 202 or permission of instructor. LAB.

PHMD 402. Photo Media Seminar. 3 Hours.
This upper-level seminar is focused primarily on the development of independent and collaborative projects through on-going group critique with an emphasis on research and analysis. Learning is focused on personal development and other issues relevant to contemporary photographic practice through assigned readings, presentations, and group discussion. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. May be repeated for credit. Prerequisite: PHMD 202 or instructor permission. LAB.

PHMD 500. Portfolio. 3 Hours. AE61.
Taken the final semester of study, this course guides students through the research, preparation, and refinement of a final portfolio and appropriate supplemental materials. Methods and strategies of presentation and dissemination are discussed and explored. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: PHMD 301. LAB.

PHMD 502. Advanced Moving Image. 3 Hours.
A continuation of the skills and principles discussed in PHMD 301. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: PHMD 301. LAB.

PHMD 515. Advanced Experimental Processes. 3 Hours.
A continuation of the skills and principles covered in PHMD 315. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: PHMD 315. LAB.

PHMD 560. Special Topics in Photo Media: _____. 3 Hours.
Special topics courses in Photo Media vary by instructor and provide additional opportunities for interdisciplinary research and advanced specialized study. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. May be repeated for credit. Prerequisite: PHMD 202 or permission of instructor. LAB.

VISC 177. First Year Seminar:. 3 Hours. GE11.
Graphic design is everywhere, on everything we see, touching everything we do, on everything we buy. Graphic design is a popular art and a practical art, an applied art and an ancient art. Simply put, it is the art of visualizing ideas and it is a way of thinking. In this class we will explore principles of Graphic Design: how to identify them, how to be more savvy consumers of them and how to use them for good and not for evil. You will learn to look at your visual environment with designer’s eyes to discern “good design” from “bad design”, while putting powerful design principles in to practice in your own careers, communities and classrooms. LEC.
VISC 201. Visual Communication Design. 3 Hours.
Presentation of fundamental concepts of visual and non-visual communication. Exploration of various theories of visual perception and visual communication with emphasis on reading visual images for meaning and making meaning through the construction of visual images and typography. A special laboratory section will include design thinking and making strategies and processes which are common to visual communication design from the handmade to the computer. This course is for non-Visual Communication majors. Prerequisite and/or Corequisite: BDS 102. LAB.

VISC 202. Elements of Typography. 3 Hours.
Introduces the discipline, function, and tradition of typography as it relates to visual/verbal communication. Emphasis is on interrelationships of letter, word, line and page. Projects examine two-dimensional typographic space, sequence and information hierarchy. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: VISC 204. LAB.

VISC 204. Principles of Visual Communication. 3 Hours.
Visual communication problems involving the student in the translation of verbal concepts and design theory into visual images. This course focuses attention on the process of defining problems, gathering information, and formulating clear, powerful, and persuasive visual statements. Introduction to methods of research, idea generation, and image making will be an integral part of this course. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: BDS 102. Corequisite: VISC 204. LAB.

VISC 302. Typographic Systems. 3 Hours.
Further exploration of typographic form and manipulation of variables which affect content; stresses the importance of typographic composition as an integral component of visual communication design. Projects examine advanced structures of typographic space, work-image structure, and typographic details and aesthetic. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C+ (2.3) or higher to continue on to the next course in the sequence. Prerequisite: VISC 202, VISC 204, and permission of instructor. Corequisite: VISC 304. LAB.

VISC 304. Designing Understanding. 3 Hours.
Exploration of the relationships among people, places, and the visual objects and information they use. Attention on the different roles of the designer as observer, empathizer, communicator and experience builder. Introduction to information design processes and procedures of understanding by ordering data into useful and persuasive information tools and experiences. Various methodologies will be explored for visualizing information for clarity, resonance, and editorial voice with special attention to the relationships among audience and context in the creation of meaning. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C+ (2.3) or higher to continue on to the next course in the sequence. Prerequisite: VISC 202, VISC 204, and permission of instructor. Corequisite: VISC 304. LAB.

VISC 310. Letterpress. 3 Hours.
This course concentrates on the traditional methods of hand typesetting, using the Department of Design's collection of lead and wood type. Learn how to use a pica rule, composing stick, leading, spacing material, the California Job Case, mix ink and operate a Vandercook proof press and CP or Golding platen. Be inspired by visits to Special Collections.

Emphasis will be placed on the acquisition of skills and the creative use of type and images. Open to all majors. Prerequisite: VISC 201 or VISC 202 or permission of the instructor. LAB.

VISC 402. Designer as Author. 3 Hours.
Building from the structures and approaches of VISC 302, the course is a research-based examination of traditional, non-traditional and expressive uses of the typographic medium. Projects emphasize the student as both content generator as well as designer and include development of text + image narrative, word as image and typographic "voice" while further refining technical proficiency. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: VISC 302 and VISC 304. Corequisite: VISC 404. LAB.

VISC 404. Designing for Social Interactions. 3 Hours.
Introduces the discipline of designing for dynamic media (i.e., internet, on screen, multimedia.) Emphasis will be placed on concept development and on the fundamental principles of information hierarchy, user experience, navigation strategies, site development and site architecture. Projects, lectures and tutorials will provide a working knowledge of current tools and techniques, while exploring the issues of narrative structure, rhythm, space, animation, sound, and video. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: VISC 302 and VISC 304. Corequisite: VISC 402. LAB.

VISC 410. Letterpress II. 3 Hours.
Artists' books are books created as original works of art that push the boundaries of the traditional book. This course will focus on the interdependence of form and content through studio work, readings, and the examination of historical and contemporary models. Students will explore a wide range of book structures from basic to innovative. Final outcomes will combine images, hand set type, and digital processes to create both one-of-a-kind, and limited edition artists' books. VISC 310 Letterpress I is recommended, but not required. Open to all majors. Prerequisite: VISC 201 or VISC 202, or permission of the instructor. LAB.

VISC 414. Publication and Editorial. 4 Hours.
Exploration of topics dealing intensively with editorial concept and format organization. Projects stress advanced problems in the integration of text and image through the development of complex and variable structures. Emphasis on thorough researching of content and audience as well as understanding of production/execution implications of solutions. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: VISC 402, VISC 404. LAB.

VISC 415. Motion Graphics. 3 Hours.
Introduction to the elements, principles and history of motion design. Emphasis on the conceptualization, planning and storyboarding of time-based media with respect to some specific, clearly stated aesthetic and/or communicative purpose. Students will examine methods for synthesizing still moving imagery, typography and audio, in motion, using Adobe After Effects in combination with other software such as Final Cut Pro, Illustrator and Photoshop. Prerequisite: VISC 201, ARCH 108 or VISC 202. LAB.

VISC 420. Exhibition Design. 3 Hours.
This course will explore how exhibitions are conceptualized, designed and made. It will look at the role of curators, exhibition designers, graphic designers as well as the audience of cultural institutions. Open to all majors. Prerequisite: VISC 201, ARCH 108 or VISC 202. LEC.
VISC 425. Environmental Graphics. 3 Hours.
This course will examine core principles and practices of environmental graphic design. Many of these concepts will be concerned with the visual aspects of wayfinding, communicating identity and information, and shaping the idea of place. Some of the topics discussed will include: signage, exhibit design, identity graphics, pictogram design, mapping, civic design and themed environments. Prerequisite: VISC 201 or VISC 304. LEC.

VISC 435. Book Arts. 3 Hours.
Producing books in editions is a complex undertaking. Students work in teams to create or compile content of their choosing, then edit, design, and bind their own books in a small edition. The class combines both traditional letterpress technology and digital interface for the creation of text and image. Each student receives two copies of the team's final book, one copy is archived in Special Collections at the Spencer Research Library. This class is required for the completion of the Book Arts Certificate. Open to all majors. Prerequisite: VISC 201 or VISC 202, or permission of the instructor. LAB.

VISC 440. Bookstructures and Papermaking. 3 Hours.
Students will learn to make a variety of book structures and enclosures, from historical to contemporary. Prototypes and models, as well as comprehensive notes and instructions will provide the student with a library of bindings for future reference. Students will document paper that is made in class and create a record for themselves, other students, and the Department of Design. Open to all majors. Prerequisite: VISC 201 or VISC 202 or permission of the instructor. LAB.

VISC 455. Designing Information. 3 Hours.
Making preliminary visualizations, models, and prototypes. Examines words, diagrams, type, and sequencing to restructure messages so that they tell a story more effectively. Editing images to make messages clear, unambiguous and understandable by their intended audience(s). Designing the appearance of an information product so that users can find what they want and understand it when they get there. Open to all Design majors. Prerequisite: VISC 201 or VISC 202 or permission of the instructor. LAB.

VISC 520. Designing for Change. 4 Hours. AE61.
Exploration of branding, service and interaction design opportunities that respond to real-life complexity: audiences, systems and contexts. Introduces business and design thinking strategies associated with brand development and the idea that design plays a vital role in our local, national, and global society and well-being. Emphasis on the methods of thinking and research which preceed the making of design as well as the importance of writing and verbal presentation to the visual communication design profession. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: VISC 414 or permission of the instructor. LAB.

VISC 525. Senior Problems. 4 Hours.
Goal-oriented graphic design problem-solving with emphasis on research, analysis, and synthesis of complex visual problems. Will allow for in-depth study of professional design issues and topics; provides a forum for multi-disciplinary collaboration with related professional disciplines. May be repeated for credit. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: VISC 520 or permission of instructor. LAB.

VISC 530. Portfolio. 3 Hours.
Instruction in the organization and presentation of a professional quality visual portfolio. Readings, feedback and online collaborations will focus on the development of a focused portfolio consistent with the individual student's pursuits. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite or Corequisite: VISC 520 or permission of instructor. LEC.

VISC 531. Professional Practice. 1 Hour.
Though class discussions, guest speakers and professional roundtables, the Professional Practice course covers writing the perfect cover letter, how to contact companies and grow professional relationships, freelancing, fees and contracts, interviewing, landing the first job and expectations, recruiters, moving to the second job. Participation in professional portfolio reviews and one-on-one sessions are a requirement of the course. Graded on a satisfactory/unsatisfactory basis. Prerequisite: VISC 520 or permission of instructor. LEC.

VISC 534. Portfolio Development. 3 Hours.
This course will provide design and non-design majors instruction in the organization and presentation of a professional quality visual portfolio. Readings, feedback and online collaborations will focus on the development of a focused portfolio consistent with the individual student's pursuits. Graded on a satisfactory/unsatisfactory basis. LEC.

VISC 536. Special Topics in Visual Communication: ______. 3 Hours.
A study of different topics in different semesters in a special area of visual communication. Entry by permission of instructor. May be repeated for credit. LEC.

VISC 701. Visual Communication. 3 Hours.
Presentation of fundamental concepts of visual and non-visual communication. Exploration of various theories of visual perception and visual communication with emphasis on reading visual images for meaning and making meaning through the construction of visual images and typography. A special laboratory section will include design thinking and making strategies and processes which are common to visual communication design from the handmade to the computer. Prerequisite: Permission of the instructor. LAB.

VISC 704. Designing Understanding. 3 Hours.
Exploration of the relationships among people, places, and the visual objects and information they use. Attention on the different roles of the designer as observer, empathizer, communicator and experience builder. Introduction to information design processes and procedures of understanding by ordering data into useful and persuasive information tools and experiences. Various methodologies will be explored for visualizing information for clarity, resonance, and editorial voice with special attention to the relationships among audience and context in the creation of meaning. Prerequisite: Permission of the instructor. LAB.

VISC 706. Graphics. 3-6 Hours.
LAB.

VISC 710. Letterpress. 3 Hours.
This introductory course in letterpress will instruct the student in methods for printing from moveable type and other type-high surfaces. The discipline will be explored from a historic as well as artistic perspective. Emphasis will be placed on the acquisition of skills and vocabulary, and the creative use of type and techniques. Prerequisite: Permission of the instructor. LAB.

VISC 712. Letterpress II: Form and Content. 3 Hours.
Artists' books are books created as original works of art that push the boundaries of the traditional book. This course will focus on the interdependence of form and content through studio work, readings, and the examination of historical and contemporary models. Students will explore a wide range of book structures from basic to innovative. Final outcomes will combine images, hand set type, and digital processes.
to create both one-of-a-kind, and limited edition artists’ books. VISC 710 is recommended, but not required. Open to all majors. Prerequisite: Permission of the instructor. LAB.

**VISC 714. Designing for Social Interactions. 3 Hours.**
Introduces the discipline of designing for dynamic media (i.e., internet, on screen, multi-media.) Emphasis will be placed on concept development and on the fundamental principles of information hierarchy, user experience, navigation strategies, site development and site architecture. Projects, lectures and tutorials will provide a working knowledge of current tools and techniques, while exploring the issues of narrative structure, rhythm, space, animation, sound, and video. Prerequisite: Permission of the instructor. LAB.

**VISC 715. Motion Graphics. 3 Hours.**
Introduction to the elements, principles and history of motion design. Emphasis on the conceptualization, planning and storyboarding of time-based media with respect to some specific, clearly stated aesthetic and/or communicative purpose. Students will examine methods for synthesizing still moving imagery, typography and audio, in motion, using Adobe After Effects in combination with other software such as Final Cut Pro, Illustrator and Photoshop. Prerequisite: Permission of the instructor. LAB.

**VISC 720. Exhibition Design. 3 Hours.**
This course will explore how exhibitions are conceptualized, designed and made. It will look at the role of curators, exhibition designers, graphic designers as well as the audience of cultural institutions. Open to all majors. Prerequisite: Permission of the instructor. LAB.

**VISC 725. Environmental Graphics. 3 Hours.**
This course will examine core principles and practices of environmental graphic design. Many of these concepts will be concerned with the visual aspects of wayfinding, communicating identity and information, and shaping the idea of place. Some of the topics discussed will include: signage, exhibit design, identity graphics, pictogram design, mapping, civic design and themed environments. Prerequisite: Permission of the instructor. LAB.

**VISC 730. Books Art. 3 Hours.**
Combines wide range of traditional letterpress and digital processes for type and image for individually determined student book projects. Projects will culminate in a small printed and bound edition. Prequisite: Permission of the instructor. LAB.

**VISC 740. Bookstructures and Papermaking. 3 Hours.**
This course will seek to acquaint the student with the origins of the book, paper, and pre-paper writing surfaces. Prototypes and models, as well as comprehensive notes and instructions will provide the student with a library of structures and variations for future reference. Students will document paper that is made in class and create a record for themselves, other students, and the School of Design. Prerequisite: Permission of the instructor. LAB.

**VISC 755. Designing Information. 3 Hours.**
Making preliminary visualizations, models, and prototypes. Examines words, diagrams, type, and sequencing to restructure messages so that they tell a story more effectively. Editing images to make messages clear, unambiguous and understandable by their intended audience(s). Designing the appearance of an information product so that users can find what they want and understand it when they get there. Open to all Design majors. Prerequisite: Permission of the instructor. LAB.

**VISC 760. Designing for Change. 3 Hours.**
Exploration of branding, service and interaction design opportunities that respond to real-life complexity: audiences, systems and contexts. Introduces business and design thinking strategies associated with brand development and the idea that design plays a vital role in our local, national, and global society and well-being. Emphasis on the methods of thinking and research which precede the making of design as well as the importance of writing and verbal presentation to the visual communication design profession. Prerequisite: Permission of the instructor. LAB.

**VISC 815. Graphics. 2-6 Hours.**
Individual research. RSH.
the indicated application deadline (http://design.ku.edu/admission-requirements).

The department encourages all transfer students to follow the full 4-year program. Transfer students are considered for admission and will be placed accordingly.

Transfer students with fewer than 9 hours in studio courses equivalent to the Basic Design Studies courses must enroll in the Foundation studios (BDS courses). Students who wish to transfer 9 or more credit hours in art and design studio courses may be requested to submit examples of their work to the chair for evaluation before enrollment. Portfolios should represent all college-level studio experiences and must contain original examples of drawings and designs. Paintings, sculpture, and other three-dimensional work should be submitted as PDFs or JPDFs on a CD or flash drive.

Possible receipt of advanced-standing credit is decided by review of portfolio work representing all courses for which advanced standing is to be considered. A catalog description and syllabus for each course must accompany the portfolio. Consideration for advanced standing is based on the nature and quality of work in courses for which it is sought. Prospective transfer students must submit applications and portfolios the spring semester prior to the fall term for which they are seeking admission.

Applicants with a lapse of 3 or more years since their last full-time enrollment may not be able to apply studio credits toward advanced standing or transfer credit.

Change of School Students

Students may apply to the department from other KU schools if they have B (3.0) average or higher. They must also pass a portfolio and essay review. Admission is highly competitive. All design applicants must answer 3 essay questions and submit a digital portfolio (on a CD or flash drive) of 10 to 20 images, including a color inventory sheet. See the department website (http://design.ku.edu/admission-procedures-transfer-re-admit-or-change-school-students) for details.

- Students with more than 24 hours of college level credit must have at least a 3.0 cumulative GPA on a 4.0 point scale at a college or university.
- Students with less than 24 hours of college level credit will be evaluated on the freshmen requirements (http://design.ku.edu/admission-requirements).

Applications must be submitted online through the Office of Admissions (http://admissions.ku.edu/?initial=transfers). All transcripts from previously attended institutions must be sent to Admissions. The essays, portfolio, and inventory sheet should be mailed directly to the department by the indicated application deadline (http://design.ku.edu/admission-requirements).

The department encourages all re-admit students to follow the full 4-year program. Re-admit students are considered for admission and will be placed accordingly.

Re-admit students with fewer than 9 hours in studio courses equivalent to the Basic Design Studies courses must enroll in the Foundation studios (BDS courses). Students who wish to transfer 9 or more credit hours in art and design studio courses may be requested to submit examples of their work to the chair for evaluation before enrollment. Portfolios should represent all college-level studio experiences and must contain original examples of drawings and designs. Paintings, sculpture, and other three-dimensional work should be submitted as PDFs or JPDFs on a CD or flash drive.

Possible receipt of advanced-standing credit is decided by review of portfolio work representing all courses for which advanced standing is to be considered. A catalog description and syllabus for each course must accompany the portfolio. Consideration for advanced standing is based on the nature and quality of work in courses for which it is sought. Prospective re-admit students must submit applications and portfolios the spring semester prior to the fall term for which they are seeking admission.

Applicants with a lapse of 3 or more years since their last full-time enrollment may not be able to apply studio credits toward advanced standing or credit.

Restrictions on Admission

By permission of the Kansas Board of Regents, application for admission or transfer to the Department of Design may be refused if the available instructional space does not allow the addition of more students. Students may be denied admission to the department if they do not meet the academic requirements and/or do not pass the portfolio review. It is recommended that students apply before the indicated deadline.

Undergraduate Requirements for Graduation

Degrees from the Department of Design and the School of Architecture, Design and Planning are conferred on candidates who have satisfactorily completed the necessary course requirements.

Students must complete the total hours required for the degree; 45 credit hours must be in junior/senior-level courses, numbered 300 and above. At least 30 hours must be in residence to receive a degree from the department and KU. Only 3 hours of activity and/or performance work will count toward the degree.
English
At least 9 hours of English composition and literature are required of all design students, consisting of:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 203</td>
<td>Topics in Reading and Writing: ____</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 209</td>
<td>Introduction to Fiction</td>
<td></td>
</tr>
<tr>
<td>ENGL 210</td>
<td>Introduction to Poetry</td>
<td></td>
</tr>
<tr>
<td>ENGL 211</td>
<td>Introduction to the Drama</td>
<td></td>
</tr>
</tbody>
</table>

Some areas require additional course work in English. Students must enroll continuously in ENGL 101 or ENGL 102, as appropriate, until completed. When the requirement is reduced, due to an ACT/SAT score or an AP exemption, students must substitute these hours in liberal arts electives.

Remedial Courses
Remedial courses listed in the catalog and Schedule of Classes are numbered below 100. Such courses include, but are not limited to, MATH 2. If such courses are required for a student they will have to pass the course(s), however, the remedial course(s) do not count toward graduation in design and may not be counted as distribution courses.

First-Year Preparation: Basic Design Studies
A minimum of 9 hours in Basic Design Studies courses is required before a student may enter a major program in the sophomore year. The 9 hours are composed of Design Thinking and Making I and II and Drawing for Design (BDS) studios. These specified prerequisites must be completed before enrollment in advanced design studio courses.

The typical first year enrollment below should be followed for two semesters, unless specific requirements for a degree program are different (16 hours each semester):

<table>
<thead>
<tr>
<th>Basic Design Studies (6)</th>
<th>Drawing for Design (3)</th>
<th>Studio (3)</th>
<th>Hallmark Symposium (2)</th>
<th>English (6)</th>
<th>History of art (6)</th>
<th>Liberal arts (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDS 101 Design Thinking and Making I</td>
<td>BDS 103 Drawing for Design</td>
<td>Elective</td>
<td>ADS 320 Hallmark Symposium Series</td>
<td>ENGL 101 Composition</td>
<td>HA 100 Introduction to Western Art History</td>
<td>Required electives</td>
</tr>
<tr>
<td>BDS 102 Design Thinking and Making II</td>
<td></td>
<td></td>
<td></td>
<td>ENGL 102 Critical Reading and Writing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

KU Core & Liberal Arts Requirements
All design majors must take at least the following courses in the College of Liberal Arts and Sciences:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition (GE21)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing (GE21)</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 203</td>
<td>Topics in Reading and Writing: ____ (GE11)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 209</td>
<td>Introduction to Fiction</td>
<td></td>
</tr>
<tr>
<td>ENGL 210</td>
<td>Introduction to Poetry</td>
<td></td>
</tr>
<tr>
<td>ENGL 211</td>
<td>Introduction to the Drama</td>
<td></td>
</tr>
<tr>
<td>ENGL to be determined by the area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts &amp; Humanities course - HA preferred (GE3H)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Social Sciences courses (GE3S)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Natural Science courses (GE3N)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FIN 101</td>
<td>Personal Finance (GE12)</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 101</td>
<td>College Algebra</td>
<td></td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication (GE22)</td>
<td>3</td>
</tr>
<tr>
<td>or JOUR 150</td>
<td>Stand and Deliver</td>
<td></td>
</tr>
<tr>
<td>or COMS 132</td>
<td>Speaker-Audience Communication for the Professional Schools</td>
<td></td>
</tr>
<tr>
<td>SOC 104</td>
<td>Elements of Sociology (GE41)</td>
<td>3</td>
</tr>
<tr>
<td>Social Responsibility &amp; Ethics (GE5)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>History of art:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HA 100/300</td>
<td>Introduction to Western Art History (GE42)</td>
<td>3</td>
</tr>
<tr>
<td>ADS 340</td>
<td>History and Philosophy of Design</td>
<td>3</td>
</tr>
<tr>
<td>Additional hours of art history</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

Concentration-specific CLAS requirements are listed with the course work in more detail.

Programs
The Department of Design offers the B.F.A. in design with concentrations in:

- Environmental Design,
- Illustration and Animation,
- Industrial Design,
- Photo Media, and
- Visual Communication Design.

All program requirements are 124 credit hours and normally can typically be completed in 8 semesters (4 years).

Concentrations

Environmental Design
The Environmental Design program focuses on preparing designers with the critical thinking and technical skills that integrate architecture/interior architecture, environmental graphics, furniture/casework and product design with traditional interior design practice for the design of the total built environment. Studio project experiences may include simple residential, retailing, hospitality, health care, as well as complex corporate offices functional types. The program provides for collaboration through teamwork opportunities in which students work on joint projects with other disciplines within the School of Architecture, Design and Planning.

A total of 124 hours is required for the degree, including 64 hours in design as follows:
Foundation (9)
BDS 101  Design Thinking and Making I  3
BDS 102  Design Thinking and Making II  3
BDS 103  Drawing for Design  3

Studio Requirements (12)
VISC 201  Visual Communication Design  3
PHMD Photo Media elective  3
Select one of the following INDD electives:  3
  INDD 508  Materials and Processes
  INDD 510  Human Factors in Design
  INDD 512  Methods in Design
VISC 425  Environmental Graphics (or VISC Elective)  3

Major Studies (33)
ENVD 204  Fundamentals of Interior Design  3
ENVD 200  Fundamentals of Environmental Design  3
ENVD 212  Drawing for Environmental Design  3
ENVD 203  Materials and Sustainability  3
ENVD 304  Environmental Topics (option to repeat for credit)  3
ENVD 305  Research and Programming  3
ENVD 408  Integrated Senior Problems I  3
ENVD 410  Integrated Senior Problems II and Specification  3
ENVD 413  Portfolio and Professional Practice  3
Select two of the following courses for a total of 6 credits:  6
  ENVD 304  Environmental Topics
  ARCH 694  Homeplaces
  or ARCH 731  Architecture of Health
  or INDD 508  Materials and Processes
  or INDD 510  Human Factors in Design
  or INDD 512  Methods in Design
  VISC 425  Environmental Graphics (or VISC Elective)
  ADS 560  Topics in Design: ____

Professional Studies (10)
ADS 320  Hallmark Symposium Series (1 credit hour, 4 semesters)  4
Select two of the following:  6
  ADS 530  Intra Design Problems: ____
  ADS 531  Internship
  ADS 560  Topics in Design: ____ (OR)
  ADS 532  Study Abroad: ____ (and ADS 533 Study Abroad Documentation)

KU CORE & Liberal Arts (60)
English: Basic requirements  9
Select one of the following:  3
  ENGL 351  Fiction Writing I
  or ENGL 353  Screenwriting I
  or ENGL 360  Advanced Composition: ____
  or ENGL 361  Professional Writing: ____
  or ENGL 362  Foundations of Technical Writing
COMS 130  Speaker-Audience Communication (GE22)  3
  or JOUR 150  Stand and Deliver
  or COMS 132  Speaker-Audience Communication for the Professional Schools
Arts & Humanities course (GE3H)  3

Natural Sciences Course (GE3N)  3
MATH 101  College Algebra (GE12)  3
PSYC 104  General Psychology (GE3S)  3
SOC 104  Elements of Sociology (or other GE41 course)  3
Social Responsibility & Ethics (GE5)  3

Architecture Studies:
ARCH 104  Principles of Modern Architecture  3
ARCH 531  Environmental Systems II  3
ARCH 626  Building Technology I: Construction Systems and Assemblies  3

History of Art/Architecture/Design:
HA 100/300  Introduction to Western Art History (GE42)  3
ADS 340  History and Philosophy of Design  3
ARCH 540  Global History of Architecture I: Origins to Industrial Revolution (3500 BCE-1700 CE)  3
ARCH 541  Global History of Architecture II: From Industrial Revolution to Present (1700 CE-Present)  3

Select two of the following courses for a total of 6 credits:  6
  ENVD 410  Integrated Senior Problems II and Specification
  ENVD 413  Portfolio and Professional Practice
  ADS 560  Topics in Design: ____
  ARCH 694  Homeplaces
  or ARCH 731  Architecture of Health
  or INDD 508  Materials and Processes
  or INDD 510  Human Factors in Design
  or INDD 512  Methods in Design
  VISC 425  Environmental Graphics (or VISC Elective)
  ADS 560  Topics in Design: ____

Illustration and Animation
The Illustration & Animation program prepares students to develop and refine methodologies in image making while acquiring an effective use of visual language, and problem solving skills. Technical skills and techniques, as well as a refined understanding of composition, color and value are developed through the introduction and exploration of traditional and contemporary media. Business and legal issues of the industry are addressed that prepare students for numerous professional options that include print media, book publishing, motion graphics, entertainment, gallery installation, fashion, toys and games, and surface design.

The number of students admitted in the fall is based on resources (space and number of faculty members).

First-year Checkpoint / Entrance to the Second Year Studios
Beyond first-year studies there is a maximum of 20 seats available for degree-seeking Illustration & Animation majors each year. There are typically two students vying for every one available position. In order to arrive at an impartial means of entry, all first year students declaring Illustration & Animation as their major are ranked according to their cumulative GPA. The first 18 students on the list are allowed first opportunity to enroll in ILLU 305 (Image Making), the first of the two-part second-year foundational sequence. Enrollment for ILLU 305 is done ONLY during the Spring Advising & Enrollment period (for the following Fall term) and entry into the course is based solely on cumulative GPA standings. In order to qualify, students must have successfully completed BDS 101 and 103 (or their equivalents) and be enrolled in (or have completed) BDS 102 and ILLU 205 (or their equivalent) at the time of Spring Advising and Enrollment. Students will also enroll in VISC 201 (Visual Communication).

Note: ILLU 205 Drawing Media for Illustration should be taken in the spring semester of the freshman year.

A total of 124 credit hours is required for the degree, including 67 hours in art and design courses, as follows:

Foundation (9)
BDS 101  Design Thinking and Making I  3
Bachelor of Fine Arts in Design

**Studio Requirements (12)**

- VISC 201  Visual Communication Design 3
- PHMD Elective 3
- DRWG 213  Life Drawing I 3
- PNTG 263  Painting I 3

**Major Studies (37)**

- ILLU 205  Drawing Media for Illustration 3
- ILLU 305  Image Making 3
- ILLU 315  Introduction to Illustration 3
- ILLU 405  Drawing Media for Illustration II 3
- ILLU 410  Fundamentals of Animation 4
- ILLU 445  Advanced Concept Art 3
- ILLU 535  Promotion and Marketing for Illustration 4

**Professional Studies (10)**

- ADS 320  Hallmark Symposium Series (1 credit hour, 4 semesters) 4

Select two from the following:

- ADS 530  Intra Design Problems: ______
- ADS 531  Internship
- ADS 560  Topics in Design: ______
- VISC 530  Portfolio
- ART 300 & 500: Special Topic in VA
- ADS 532  Study Abroad: _____ (and ADS 533 Study Abroad Documentation)

**KU Core & Liberal Arts (57)**

- English: Basic requirements 9
- COMS 130  Speaker-Audience Communication 3
  or JOUR 150  Stand and Deliver
  or COMS 132  Speaker-Audience Communication for the Professional Schools

- Arts & Humanities course (GE3H) 3
  This requirement should be fulfilled by an HA elective.

- Natural Sciences course (GE3N) 3
- FIN 101  Personal Finance (GE12) 3
  or MATH 101  College Algebra

- Social Sciences course (GE3S) 3
- SOC 104  Elements of Sociology (or other GE41 course) 3
- Social Responsibility & Ethics (GE5) 3
- History of Art/Architecture/Design:
  - HA 100/300  Introduction to Western Art History 3
  - ADS 340  History and Philosophy of Design 3
  - HA electives 3
- Academic concentration (9 hours at the 300+ level, no Design or Visual Art) 9
- General electives 9

1 To enroll in Illustration and Animation courses in this category, students must pass a review and go through checkpoints. For more information, refer to the undergraduate degree and review requirements on the Design website.

**Industrial Design**

Graduates of KU's Industrial Design program are particularly attractive to potential employers because of our well rounded and rigorous curriculum. Our students find career opportunities in a wide variety of disciplines including product design, furniture design, exhibit design, package design, human factors, design research and product planning. The variety of products and systems that fall within the potential scope of an industrial designer's work is extremely broad. Examples range from household appliances to aircraft interiors and from furniture to major electronics equipment, transportation vehicles, and myriad other product areas.

**First-year Checkpoint / Entrance to the Second Year Studios**

Beyond first-year studies there is a maximum of 22 seats available for degree-seeking Industrial Design majors each year. There are typically two students vying for every one available position. In order to arrive at an impartial means of entry, all first year students declaring Industrial Design as their major are ranked according to their cumulative GPA. The first 20 students on the list are allowed first opportunity to enroll in INDD 284 (Intro Industrial Design Studio), the first of the two-part second-year foundational sequence. Enrollment for INDD 284 is done ONLY during the Spring Advising & Enrollment period (for the following Fall term) and entry into the course is based solely on cumulative GPA standings. In order to quality, students must have successfully completed BDS 101 and 103 (or their equivalents) and be enrolled in (or have completed) BDS 102 and INDD 212 (or their equivalent) at the time of Spring Advising and Enrollment.

A total of 124 hours is required for the degree, including 67 hours in design, as follows:

**Foundation (9)**

- BDS 101  Design Thinking and Making I 3
- BDS 102  Design Thinking and Making II 3
- BDS 103  Drawing for Design 3

**Studio Requirements (15)**

- VISC 201  Visual Communication Design 3
- INDD 508  Materials and Processes 3
- INDD 510  Human Factors in Design 3
- INDD 512  Methods in Design 3
- Elective studio in Design, Architecture, or Visual Art 3

**Major Studies (33)**

- INDD 212  Drawing for Industrial Design 3
- INDD 284  Basic Industrial Design Studio 3
- INDD 302  Intermediate Industrial Design Studio 3
- INDD 378  Problems in Industrial Design: ______ 9
- INDD 446  Advanced Industrial Design Studio 3
- INDD 448  Professional Industrial Design Studio Practices 3
- INDD 555  Portfolio 3
- INDD 580  Senior Industrial Design Studio 3
- INDD 581  Senior Industrial Design Studio II 3

**Professional Studies (10)**
Photo Media

The Photo Media program at the University of Kansas is dedicated to evaluating and redefining the medium of photography. Through in-depth instruction, students develop a diverse technical skillset, becoming proficient in both analog and digital practices. The program encourages a strong work ethic, and places emphasis on visual literacy. Graduates of the Photo Media program at the University of Kansas leave with exceptional visual communication skills, fully prepared to successfully engage in a wide range of possible careers in lens-based media.

The number of students admitted in the fall is based on resources (space and number of faculty members).

First-year Checkpoint / Entrance to the Second Year Studios

Beyond first-year studies there is a maximum of 20 seats available for degree-seeking Photo Media majors each year. There are typically two students vying for every one available position. In order to arrive at an impartial means of entry, all first year students declaring Photo Media as their major are ranked according to their cumulative GPA. The first 18 students on the list are allowed first opportunity to enroll in PHMD 201 (Photography I), the first of the two-part second-year foundational sequence. Enrollment for PHMD 201 is done ONLY during the Spring Advising & Enrollment period (for the following Fall term) and entry into the course is based solely on cumulative GPA standings. In order to qualify, students must have successfully completed BDS 101 and 103 (or their equivalents) and be enrolled in (or have completed) BDS 102 and PHMD 101 (or their equivalent) at the time of Spring Advising and Enrollment.

A total of 124 hours is required for the degree, including 67 hours in design, as follows:

Foundation (9)
- BDS 101 Design Thinking and Making I 3
- BDS 102 Design Thinking and Making II 3
- BDS 103 Drawing for Design 3

Studio Requirements (15)
- VISC 201 Visual Communication Design 3
- 4 studio elective courses in Design, Architecture, or Visual Art 12

Major Studies (32)
- PHMD 101 Fundamentals of Photography 3
- PHMD 201 Photography I 4
- PHMD 202 Photography II 4
- PHMD 210 Understanding Photographs 3
- PHMD 402 Photo Media Seminar 3
- PHMD 500 Portfolio 3
- 4 additional PHMD courses 300+ 12

Professional Studies (10)
- ADS 320 Hallmark Symposium Series (1 credit hour, 4 semesters) 4

Select two from the following:
- ADS 530 Intra Design Problems:_____ 6
- ADS 531 Internship
- ADS 560 Topics in Design:_____ 4
- PHMD 560 Special Topics in Photo Media:_____ 3
- ADS 532 Study Abroad:_____ (and ADS 533 Study Abroad Documentation) 3

KU Core & Liberal Arts (57)

English: Basic requirements 9

Arts & Humanities course (GE3H) This course should be fulfilled by an HA elective.
- COMS 130 Speaker-Audience Communication (GE22) 3
- or JOUR 150 Stand and Deliver
- or COMS 132 Speaker-Audience Communication for the Professional Schools

Natural Sciences course (GE3N) 3
- FIN 101 Personal Finance (GE12) 3
- or MATH 101 College Algebra

Social Sciences course (GE3S) 3
- SOC 104 Elements of Sociology (or other GE41 course) 3
- Social Responsibility & Ethics (GE5) 3

History of Art/Architecture/Design:
- HA 100/300 Introduction to Western Art History 3
- ADS 340 History and Philosophy of Design 3
- HA electives 3
- Academic concentration (9 hours at the 300+ level, no Design or Visual Art) 9
- General electives 9

1 To enroll in Industrial Design courses in this category, students must pass a review and go through checkpoints. For more information, refer to the undergraduate degree and review requirements on the Design website.
Bachelor of Fine Arts in Design

Social Responsibility & Ethics (GE5) 3
History of Art/Architecture/Design:
HA 100/300 Introduction to Western Art History 3
ADS 340 History and Philosophy of Design 3
HA 580 History of Photography 3
Academic concentration (9 hours at the 300+ level, no Design or Visual Art) 9
General electives 9

To enroll in Photo Media courses in this category, students must pass a review and go through checkpoints. For more information, refer to the undergraduate degree and review requirements on the Design website.

Visual Communication Design

Visual Communication Designers shape the information that everybody sees, uses and experiences. The Visual Communication Design program at KU prepares students for current professional demands and provides students with the fundamental design thinking, making and process skills required to build a rewarding career and facilitate life-long learning. Career options for visual communication designers include a wide range of areas such as traditional print media, magazine and book design, corporate marketing communications, branding, packaging design, exhibition and environmental design, motion graphic design, website design, interface design and more.

The number of students admitted in the fall is based on resources (space and number of faculty members).

First-year Checkpoint / Entrance to the Second Year Studios

Beyond first-year studies there is a maximum of 40 seats available for degree-seeking Visual Communication Design majors each year. There are typically two students vying for every one available position. In order to arrive at an impartial means of entry, all first year students declaring Visual Communication as their major are ranked according to their cumulative GPA. The first 36 students on the list are allowed first opportunity to enroll in VISC 202 (Elements of Typography) and VISC 204 (Principles of Visual Communication), the first of the two-part second-year sequence. Enrollment for VISC 202 & 204 is done ONLY during the Spring Advising & Enrollment period (for the following Fall term) and entry into the course is based solely on cumulative GPA standings. In order to qualify, students must have successfully completed BDS 101 and 103 (or their equivalents) and be enrolled in (or have completed) BDS 102 at the time of Spring Advising and Enrollment.

Visual Communication Design Track

A total of 124 credit hours is required for the degree, including 67 hours in design courses, as follows:

Foundation (9)
BDS 101 Design Thinking and Making I 3
BDS 102 Design Thinking and Making II 3
BDS 103 Drawing for Design 3

Studio Requirements (15)
ILLU 205 Drawing Media for Illustration (or Drawing Elective) 3
PHMD 101 Fundamentals of Photography (or Photo Media elective) 3

3 studio elective courses in Design, Architecture, or Visual Art 9

Major Studies (33) 1
VISC 202 Elements of Typography 3
VISC 204 Principles of Visual Communication 3
VISC 302 Typographic Systems 3
VISC 304 Designing Understanding 3
VISC 402 Designer as Author 3
VISC 404 Designing for Social Interactions 3
VISC 414 Publication and Editorial 4
VISC 520 Designing for Change 4
VISC 525 Senior Problems 4
VISC 530 Portfolio 3

Professional Studies (10)
ADS 320 Hallmark Symposium Series (1 credit hour, 4 semesters) 4
Select two from the following: 6
ADS 530 Intra Design Problems: ______
ADS 531 Internship
ADS 560 Topics in Design: ______
ADS 532 Study Abroad: ______ (and ADS 533 Study Abroad Documentation)

KU Core & Liberal Arts (57)
English: Basic requirements 9
Arts & Humanities course (GE3H) 3
This course should be fulfilled by an HA elective.
COMS 130 Speaker-Audience Communication (GE22) 3
or JOUR 150 Stand and Deliver
or COMS 132 Speaker-Audience Communication for the Professional Schools
Natural Sciences course (GE3N) 3
FIN 101 Personal Finance (GE12) 3
or MATH 101 College Algebra
Social Sciences course (GE3S) 3
SOC 104 Elements of Sociology (or other GE41 course) 3
Social Responsibility & Ethics (GE5) 3
History of Art/Architecture/Design:
HA 100/300 Introduction to Western Art History 3
ADS 340 History and Philosophy of Design 3
HA electives 3
Academic concentration (9 hours at the 300+ level, no Design or Visual Art) 9
General electives 9

1 To enroll in Visual Communication courses in this category, students must pass a review and go through checkpoints. For more information, refer to the undergraduate degree and review requirements on the Design website.
Master of Arts in Design with Concentration in Design Management

The Department of Design advances the professional work of thoughtful, creative, and meaningful design to delight, inspire, and serve the needs of people. Design is the planning that lays the basis for creation and development of every object or system people use. Design programs train students to be problem solvers who consider the aesthetic, functional, and user-focused aspects of an object or a process. This requires considerable integrative research, thought, modeling, interactive adjustments, and redesign.

The M.A in Design with a concentration in Design Management explores in depth the design function in business as an important integrative, and often interdisciplinary, area. The curriculum couples a rigorous, practical understanding of business with design’s natural capacity for handling diverse input, creative problem-solving, and human-centered understanding.

The Design Management program is for prospective students who already hold design-related baccalaureate degrees and are seeking specialized study in management. Applicants should have at least 2 years of full-time professional work experience in design or a design-related field.

The master’s student in design management should demonstrate an advanced ability to solve design problems, manage teams and processes, communicate clearly, and produce excellent goal-directed outcomes. The graduate will have completed significant course work and a thesis that documents independent discovery and research and will have passed an oral examination on that work. For more information about the program M.A in Design Management (http://design.ku.edu/ma-design-management-0).

The design department offers 3 Master of Arts degrees, which share a core curriculum.

The M.A in Design Management educates students in the theory, methods, and practices relevant to managing design in an organizational and business context. The program gives students the requisite knowledge to augment their professional skills and abilities, perform as effective design managers, and advance their careers.

The M.A in Environmental Design educates students in the theory, methods, and practices of design for the built environment. This program prepares students for professional practice in integrated multi-disciplinary design practice.

The M.A in Interaction Design educates students in the theory, methods, and practices of interaction design. It gives students the requisite professional knowledge, skills, and abilities to perform as interaction designers.

KU is an accredited institutional member of the National Association of Schools of Art and Design (http://nasad.arts-accredit.org). The entrance and graduation requirements in this catalog conform to the published guidelines of that organization.

M.A. in Design Management Admission

By permission of the Kansas Board of Regents, application for admission to graduate programs in the Department of Design may be refused if available instructional space does not allow addition of more students. The application deadline for Fall is April 1 and October 1 for Spring.

A departmental graduate faculty committee reviews transcripts and evaluates applications to determine admission qualifications. Applicants to the M.A. programs must have undergraduate and/or professional backgrounds judged by the Graduate Faculty to be appropriate preparation for the specialization selected.

A complete application for admission consists of the following materials:

1. Graduate application (http://www.graduate.ku.edu) and application fee (See Admission in the Graduate Studies (p. 2369) section of the online catalog for further information);
2. 1 unofficial copy of the transcript from all colleges or universities attended, showing receipt of a bachelor’s degree, and 1 unofficial copy of the transcript showing any graduate degree or credit earned;
3. 3 letters of recommendation from people in a position to comment on your abilities and performance;
4. Statement of design philosophy and approach;
5. A portfolio of your design work, or if your previous degree was not in a design related discipline, samples of written work or other creative artifacts you have produced. Portfolio should represent the scope of your experience, knowledge, skills, and abilities to date. Please include documentation of each project: the challenge it was intended to address, the process involved, your role and the role of others in its execution. Please upload your portfolio digitally under "other documents" during the online application process. The portfolio is limited to 10 megabytes (not zipped) in PDF format;
6. For international students, a financial statement showing minimum financial support for the first year of study (see the Admissions page on the school’s website (http://www.sadp.ku.edu)).
7. Evidence of language proficiency if the native tongue is not English.
8. Graduate Record Examination (GRE) test results.

Submit your graduate application and application materials online (http://www.graduate.ku.edu). Please contact the Admissions Coordinator if you have any questions:

The University of Kansas Department of Design Admissions Coordinator
1465 Jayhawk Blvd., Room 205
Lawrence, KS 66045-7531
785-864-3167
ger@ku.edu

Course and Credit Distribution Requirements

Total Credit Hours 31

CORE COURSES (12 credit hours)
ADS 750 Design Management (3)
ADS 712 Design Strategies & Methods (3)
ADS 760 Strategic Design Innovation (3)
ADS 714 Designing Business Services & Consumer Services (3)

RESEARCH

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Master of Arts in Design with Concentration in Environmental Design

The Department of Design advances the professional work of thoughtful, creative, and meaningful design to delight, inspire, and serve the needs of people. Design is the planning that lays the basis for creation and development of every object or system people use. Design programs train students to be problem solvers who consider the aesthetic, functional, and user-focused aspects of an object or a process. This requires considerable integrative research, thought, modeling, interactive adjustments, and redesign.

The concentration in Environmental Design educates students and develops their competency in design solutions that will enhance and improve the experience of the “user” occupant of both the interior and exterior built environment. Theory, method, and practice of this integrated discipline approach create a basis for effective research and conceptualization of design ideas for public and private spaces.

The M.A. in Environmental Design further provides the student with the opportunity to develop projects that integrate architecture, interior spaces and graphics in a multi-disciplinary approach that is common today. The program aims to provide a broad based design experience that involves the analyses of building systems, circulation, spatial experiences, materials, furniture, lighting, use of graphics and advanced digital technology. Students develop specific experience within an environment that may involve strategically focused project types such as retail, hospitality, health care, mixed use development, sport facilities, etc. where integration of multi-disciplinary design is interdependent and plays an important role in users’ interactions with the built environment.

The University of Kansas
Course and Credit Distribution Requirements

Total Credit Hours 31

CORE COURSES (12 credit hours)
ADS 710 Advanced Human Factors in Design (3)
ADS 712 Design Strategies & Methods (3)
ADS 714 Designing Business Services & Consumer Services (3)
ADS 765 Interaction Design (3)

ELECTIVES IN ARCHITECTURE or DESIGN (select 3 courses, 9 credit hours)
Architecture
ARCH 524 Structures I (3)
ARCH 530 Environmental Systems (3)
ARCH 626 Building Technology (3)
ARCH 600 Special Topics in Architecture (3)
ARCH 731 Architecture of Health (3)

Design
ADS 560 Topics in Design (3)
ADS 740 Special Problems in Design (3)
ADS 751 Creating Design Scenarios (3)
ADS 770 Design Cognition (3)
ADS 540 History & Philosophy of Design (3)

Visual Communication (Graphic Design)
VISC 525 Environmental Graphics (3)
ADS 745 Branding & Design (3)
VISC 815 Graphics (3)

RESEARCH (2-3 credit hours)
ADS 860 Graduate Synthesis & Applications Seminar 1 x 2 (2)
ADS 861 Thesis Research Seminar (1)

PRACTICA (3 credit hours)
ADS 890 Thesis (1-8 cr) (3)

ELECTIVES OUTSIDE OF ART AND DESIGN (5)

Master of Arts in Design with Concentration in Interaction Design

The Department of Design advances the professional work of thoughtful, creative, and meaningful design to delight, inspire, and serve the needs of people. Design is the planning that lays the basis for creation and development of every object or system people use. Design programs train students to be problem solvers who consider the aesthetic, functional, and user-focused aspects of an object or a process. This requires considerable integrative research, thought, modeling, interactive adjustments, and redesign.

Interaction Design involves researching and fashioning products, services, and systems that are useful, useable, and desirable. Interaction design offers a human-centered approach to innovation, creatively mediating how businesses engage with customers and how brands and organizations can become more relevant in the marketplace. Broadly speaking, interaction design defines the contextual behavior of artifacts, environments, and systems.

The Interaction Design program is for prospective students who already hold design-related baccalaureate degrees and are seeking advanced study in a versatile, rapidly growing professional design discipline. Applicants should have at least 2 years of full-time professional work experience in design or a design-related field.

The master’s student in interaction design should demonstrate the ability to conduct original design research, translate research insights into design input, and produce an interactive artifact of relevance and quality. The graduate will have completed significant course work and a thesis that documents independent discovery and research and will have passed an oral examination on that work. For more information about the program M.A in Interaction Design. (http://design.ku.edu/ma-interaction-design)

The design department offers 3 Master of Arts degrees, which share a core curriculum.

The M.A. in Design Management educates students in the theory, methods, and practices relevant to managing design in an organizational and business context. The program gives students the requisite knowledge to augment their professional skills and abilities, perform as effective design managers, and advance their careers.

The M.A. in Environmental Design educates students in the theory, methods, and practices of design for the built environment. This program prepares students for professional practice in integrated multi-disciplinary design practice.

The M.A. in Interaction Design educates students in the theory, methods, and practices of interaction design. It gives students the requisite professional knowledge, skills, and abilities to perform as interaction designers.

KU is an accredited institutional member of the National Association of Schools of Art and Design (http://nasad.arts-accredit.org). The entrance and graduation requirements in this catalog conform to the published guidelines of that organization.

M.A. in Interaction Design Admission

By permission of the Kansas Board of Regents, application for admission to graduate programs in the Department of Design may be refused if available instructional space does not allow addition of more students. The application deadline for Fall is April 1 and October 1 for Spring.

A departmental graduate faculty committee reviews transcripts and evaluates applications to determine admission qualifications. Applicants to the M.A. programs must have undergraduate and/or professional backgrounds judged by the Graduate Faculty to be appropriate preparation for the specialization selected.
Department of Urban Planning

Introduction

The KU Urban Planning program emphasizes policy planning and analysis within the context of urban or urbanizing environments. Policies affecting urban issues are formulated at all levels of government—federal, state, regional, and local—as well as in the private sector. The MUP program is geared towards meeting the needs for public planning policy in all these forums.

Courses

UBPL 200. Sustainability and Society. 3 Hours. AE51/GE11/GE3S.
This course will introduce the concept of sustainability, examining its early iterations, recent applications, and possible future transformations. Critical analysis of sustainability as a concept and societal goal will be a course cornerstone. We will examine two contemporary social issues that are relevant to students at the University of Kansas. Social science perspectives will be emphasized, but, because sustainability necessitates an interdisciplinary perspective, the course will consider the contributions of a wide range of disciplines to these issues. LEC.

UBPL 300. Planning the American City. 3 Hours. GE3S.
A broad introduction to the field of urban planning as a technical profession, a process of decision-making, and a governmental function. The multi-disciplinary nature of planning as an area for professional practice in the geographical, socio-economic and political contexts of the U.S. is stressed. We will explore the promise and limitations of planning in the context of mitigating and adapting to climate change. The course is intended for both the student who is considering planning as a major field of study and the student with primary interest in a related field who would like a working knowledge of past and current planning in the U.S. LEC.

UBPL 502. Special Topics in Urban Planning: ______. 1-6 Hours.
Intended for undergraduate individual or group projects/research in an urban planning topic. LEC.

UBPL 522. History of the American City I. 3 Hours.
This course examines the evolution of American cities from their European antecedents through the late 20th Century, from the urban planning perspective. It focuses on the changing spatial forms and functions of American cities and how these changes relate to socioeconomic and political aspects of urbanization as well as changes in technology. Emphasis is placed on analyzing the relationships between historical development patterns and the current range of problems facing most U. S. cities. (Same as UBPL 722 but gives undergraduate credit.) LEC.

UBPL 538. Environmental Planning Techniques. 3 Hours.
The course covers a variety of topics within environmental planning. Each topic is examined with respect to the scope of the issues, the methods of analyzing and/or measuring those issues, and the ways planners can address those issues in order to avoid or mitigate environmental problems. LEC.

UBPL 565. Introduction to Sustainable Land Use Planning. 3 Hours.
This course introduces students to the issues that planners and decision makers face as they strive to protect environmental resources, especially within the context of land use planning. Emphasis will be placed on the
UBPL 662. Twentieth Century American Landscape. 3 Hours.
The purpose of this course is to investigate the relationships between the American culture and the resulting built and natural landscape. Issues of building types, public places, and land use arrangements will be studied from a socio-historical perspective. (Same as ARCH 662.) LEC.

UBPL 701. Directed Readings. 1-6 Hours.
Designed to meet the needs of students whose study in urban planning cannot be met with the present courses. Prerequisite: Consent of instructor. RSH.

UBPL 705. Economic Analysis for Planners. 3 Hours.
An introduction to the concepts and analytical techniques of economics that are most relevant to urban planners. The first part of the course is devoted to microeconomic theory, welfare economics, and the role of the government in the economy. The remainder covers public finance, investment analysis, and methods of determining the allocation of public resources (such as benefit-cost analysis). LEC.

UBPL 710. Introduction to Housing Policy. 3 Hours.
Designed to provide an introduction to the various methods used by the public sector in order to intervene in the housing market. Many different programs are used by governments at all levels to serve many different housing goals. This course will examine many of these programs in an effort to understand what they are supposed to accomplish and how well they work. In all cases, the objective of the course is to train planners so that they have a firm understanding of housing programs that exist now as well as a grasp of the methods used to select housing strategies for implementation by the public sector. LEC.

UBPL 714. Local Economic Development Planning. 3 Hours.
This course provides a broad overview of local economic development planning. Emphasis is on the role of the practitioner and the various activities that can be pursued to encourage and enhance the economic base of a locality. The objectives of the course are to answer the questions: who are economic development planners; what backgrounds and interests do they have; what types of activities do they perform and initiate to encourage and enhance economic development; and how do they decide upon which activities to pursue? Prerequisite: UBPL 764 or permission of instructor. LEC.

UBPL 715. Community” in Neighborhood Planning and Design. 3 Hours.
This course provides a place-centered approach for understanding and applying the idea of community to local neighborhood planning. The course explores social theories of community and how these have influenced prescriptive models for neighborhood development and design. The course also evaluates the interplay of social, environmental, and economic forces at the neighborhood level and their relationship to community development and well-being. LEC.

UBPL 716. Community and Neighborhood Revitalization. 3 Hours.
The course examines the fields of community development and the revitalization of urban neighborhoods. In the course, students study the theories of community redevelopment as well as the methods of analysis guiding the planning of neighborhoods. The course also reviews the many programs that exist to assist the neighborhood revitalization process and looks at the literature evaluating the implementation of these programs. As an implementation course, students complete a project that calls for them to apply the knowledge learned to real world setting. Prerequisite: UBPL 764 or permission of the professor. LEC.

UBPL 722. History of the American City II. 3 Hours.
This course examines the evolution of American cities from their European antecedents through the late 20th Century, from the urban planning perspective. It focuses on the changing spatial forms and functions of American cities and how these changes relate to socioeconomic and political aspects of urbanization as well as changes in technology. Emphasis is placed on analyzing the relationships between historical development patterns and the current range of problems facing most U. S. cities. (Same as UBPL 522 but gives graduate credit.) LEC.

UBPL 730. Plans and Planning Processes. 3 Hours.
This course is about how to create plans and put the pieces of cities together in a sustainable manner, balancing the competing values of economy, ecology, equity, and livability. It introduces students to the planning process in the U.S., what makes great plans, the basic implementation tools for planning (zoning, capital improvement plans, engineering standards, and subdivision regulations.) We will learn about the Comprehensive Plan along with specialized plans for transportation, housing, land use, and the environment. LEC.

UBPL 735. Site Planning and Design. 3 Hours.
Site planning is the arrangement of elements (buildings, landscaping, parking, open space) on particular pieces of property. This class focuses on the site planning process and the implementation of site design standards through regulations. We will delve into the elements and principles of design and ask these big questions: What makes great public spaces? What makes great neighborhoods? What makes great streets? What can we do to steer development in the direction of greatness? LEC.

UBPL 736. Planning Institutions. 3 Hours.
This course explores the legal principles underlying the institutions, practices and processes of city planning. Subjects to be discussed include zoning, eminent domain, subdivision regulation, transfer of development rights, environmental regulation, growth management, and other planning mechanisms used to guide urban growth and control the use of land. Students should emerge from the course with a solid understanding of both the logic and routine practice of planning in a procedural and institutional context. LEC.

UBPL 737. NEPA Environmental Assessments. 3 Hours.
This course provides an understanding of how to effectively manage and conduct environmental assessments as required by the National Environmental Protection Act (NEPA). Topics include the history and intent of NEPA; the steps, players and assessment types; techniques used to balance environmental concerns with the social and economic considerations; and the role of the courts and environmental advocacy groups in challenging NEPA assessment findings. The class also addresses the role of leadership, conflict resolution, and consensus building in managing environmental assessments. Case studies are used to examine different assessment types and process approaches. LEC.

UBPL 738. Environmental Planning Techniques. 3 Hours.
The course covers a variety of topics within environmental planning. Each topic is examined with respect to the scope of the issues, the methods of analyzing and/or measuring those issues, and the ways planners can address those issues in order to avoid or mitigate environmental problems. LEC.

UBPL 739. Issues in Growth Management. 3 Hours.
This course examines various aspects of growth management including its history, legal foundations, and application at different levels of government. Growth management not only means dealing with the rapid growth of cities, it also includes managing slow growth, no growth, and negative growth with the ultimate goal being sustainability. Impacts on affordable housing, economic development, social equity, transpiration, and environmental conservation are also explored. LEC.
UBPL 741. Quantitative Methods I. 3 Hours.
Introduction to quantitative techniques utilized in planning analysis. Introduction to research design, inferential statistics, and survey methods. LEC.

UBPL 742. Quantitative Methods II. 3 Hours.
Advanced study in planning techniques in the areas of population forecasting, analysis of variance, and regression. The course makes extensive use of microcomputers. Prerequisite: UBPL 741 or consent of instructor. LEC.

UBPL 746. GIS Applications for Design and Planning. 3 Hours.
This course will explore a range of Geographic Information Systems (GIS) applications for students in architecture and planning. It will be structured as a workshop, starting with a review of basic GIS concepts and procedures. Different digital data sources will be explored, along with file sharing (import and export) capabilities. The focus will be on applications at different scales using projects in architecture, site planning, environmental planning, urban analysis, and regional analysis. Three dimensional analysis will also be introduced. Each student will develop a final project as a synthesis of earlier exercises and as an application relevant to their individual professional interests. LEC.

UBPL 750. Introduction to Transportation Planning. 3 Hours.
This course is a survey course covering multiple modes of transportation (planes, trains, buses, automobiles, bicycles, and walking). The field of transportation planning is examined within a policy analysis framework. Knowing the policy context and understanding how decisions are made will assist transportation planners in understanding the world in which they operate. In addition to the policy context, this course will focus on the technical knowledge transportation planners are expected to know like federal requirements, traffic modeling, and specific topics like bicycle and pedestrian planning and traffic calming. LEC.

UBPL 755. Planning Intercity Transportation Systems. 3 Hours.
This course explores the supply and demand of intercity multimodal movement of people and goods from megaregional to global scales. Students will learn the characteristics and performance of rail, aviation, and marine travel, the nuts and bolts of supply provision, effects of intercity connections on communities, and mechanisms for planning at across state and national borders. LEC.

UBPL 756. Travel Demand Forecasting Methods. 3 Hours.
The course is intended to provide a working knowledge of analytical transportation planning; it emphasizes two elements. One emphasis is to describe the fundamental principles of transportation planning through the review of transportation modeling theory and practice. The second emphasis is to work with the TransCad model. Students learn how to use these models by running TransCad (GIS based modeling software), building a transportation model, and using it to forecast future transportation conditions. Prerequisite: UBPL 750 or consent of instructor. LEC.

UBPL 757. Transportation Planning Implementation. 3 Hours.
A variety of transportation implementation methods and strategies are explored. Project management with an emphasis on finance is the major focus of this course. This is a significant responsibility of transportation planners, consisting of several key steps including project initiating, planning, execution, and control. Other techniques included in this course deal with air quality conformity, congestion management, environmental reviews, developing performance measures, scenario testing, highway capacity analysis and micro-simulation modeling, and executing public involvement programs. LEC.

UBPL 758. Public Transit. 3 Hours.
This course familiarizes students with core concepts and practices in public provision of local transit systems from high-capacity heavy rail to on-the-fly demand response. Course modules examine modes, system design, planning issues, organizational relationships inherent to public transit, and technical operations. The course concludes with an examination of comprehensive transit systems. LEC.

UBPL 760. Historic Preservation Planning. 3 Hours.
In addition to studying the history of the preservation movement in the United States, the course will discuss preservation at the state and local level, preservation at the private level, ordinance creation, legal aspects of preservation, technical issues and contemporary issues and controversies in the field of preservation. Projects will deal with philosophic and current issues in preservation. LEC.

UBPL 761. Historic Preservation Economics. 3 Hours.
This course considers the economic strategies for the historic preservation of the built environment. Topics include investment tax credits, tax increment financing and tax abatement, bond issues, historic preservation grants, and revolving funds. Students will analyze case studies and meet guest speakers who make preservation projects work. Class projects may include market analyses, economic feasibility studies, rehabilitation/redevelopment plans, and technical research papers. LEC.

UBPL 762. Sustainability and the Future of the Built Environment. 3 Hours.
This course critically examines the evolving relationship between rehabilitation preservation, and new construction in creating a sustainable built environment in the United States during the twenty-first century. Some observers insist that we cannot build our way to sustainability, but instead must conserve our way to it. What is the appropriate balance of rehabilitation and new construction in creating sustainable built environment? What is the appropriate role of planning and design professionals in this movement? What knowledge and skills will be necessary? The course surveys the contemporary discussion about defining and evaluating a sustainable built environment as well as the economic and social requirements for creating a sustainable society. LEC.

UBPL 763. Professional Practice. 3 Hours.
This course seeks to provide students with both skills and evaluative frameworks to enhance their work as practicing planners. We will focus specifically on issues related to ethics, citizen participation, dispute resolution, and management. Considerable attention will be paid to "real life" lessons. Prerequisite: UBPL 741 and UBPL 815. LEC.

UBPL 764. Real Estate Development I. 3 Hours.
This course is designed to provide a working knowledge of the mechanics of real estate investment analysis. As a planning course, the emphasis is placed upon the process as performed by the practicing planner working with the public sector. This means that the course covers much of the same material that is normally included in a real estate development course in a business school. However, this material is augmented with the study of techniques used to achieve public sector goals. Among the topics covered in the course are: the calculation of return on investment in real estate; the financing of real estate development; the various forms of property ownership; and the implications of tax laws upon the rehabilitation of historic properties and the provision of low-income housing. Prerequisite: Knowledge of spreadsheet software on a personal computer. LEC.

UBPL 765. Introduction to Sustainable Land Use Planning. 3 Hours.
This course introduces students to the issues that planners and decision makers face as they strive to promote sustainability, especially within the context of land use planning. Emphasis will be placed on the theoretical and policy considerations that guide the work of planners. LEC.
UBPL 768. Real Estate Development II. 3 Hours.
This course extends the study of real estate development planning begun in UBPL 764: Real Estate Development Planning I. The course will examine various forms of public-private participation in the real estate development process. Advanced study of various public sector programs to guide and direct the real estate development process will be undertaken, including the use of tax credits for affordable housing and for historic preservation. Projects developed within the region will be examined to illustrate the application of these techniques. Prerequisite: Successful completion of UBPL 764 or permission of instructor. LEC.

UBPL 773. Sustainable Land Use Planning Implementation. 3 Hours.
This course emphasizes the development of sustainability-focused plan elements that ensure successful implementation. While the course topic changes each year, the techniques and processes studied will be broadly applicable. Students will also apply their skills and knowledge to a service learning project using real-world data. Prerequisite: UBPL 765, UBPL 738, or consent of instructor. LEC.

UBPL 802. Special Topics: ______. 1-6 Hours.
This course is intended to afford the opportunity for individual or group projects/research in an urban planning topic. RSH.

UBPL 806. Thesis - Graduate Research. 1-6 Hours.
Independent study and research related to the master's thesis. Prerequisite: Consent of instructor. THE.

UBPL 815. History and Theory of Planning. 3 Hours.
The course serves as an introduction to the history of city planning and "how to plan" in general. Planners are particularly concerned with future consequences of current action. In looking to the future, knowing past history is a good place to start. Also, planning theorists have thought deeply about how best to plan and their thoughts and advice can serve planners and decision-makers well when they are facing unknowns. LEC.

UBPL 816. Politics and Planning. 3 Hours.
Planners operate within a highly technical yet political environment. Understanding how power, structures and agencies influence policy-making will help planners become savvier as they balance their roles as advisors, educators, facilitators, advocates, and administrators. This class explores the trials, tribulations, and triumphs of planners as they deal with politics. LEC.

UBPL 850. Urban and Regional Theory. 3 Hours.
The course explores the forces that shape the structure and function of cities and regions, drawing upon insights from planning, geography, economics, sociology, demography, and political science. Special attention is paid to theories that can be applied by urban planners to improve the economic performance, quality of life, and social equity of urban areas. Topics covered include the origin and development of cities, agglomeration economies, location theory, central place, mix-and-share analysis, economic base, input-output, labor markets, urban models, regional development planning, globalization, high technology, urban poverty, and problems of regional governance. Prerequisite: UBPL 741 and UBPL 815. LEC.

Master of Urban Planning

The Master of Urban Planning (M.U.P.) is a graduate professional degree that prepares students for careers in urban planning. It is the normal academic qualification for various planning and planning-related positions. The M.U.P. degree is accredited by the Planning Accreditation Board. The program places strong emphasis on policy planning and analysis in the context of urban or urbanizing environments. The program is geared toward meeting the need for planning policy on urban issues at any level of government — federal, state, regional, and local — or outside the governmental area.

3 major areas of knowledge are necessary for competence in policy planning:

1. History and theory, which provide the conceptual framework of social, economic, and political environments within which public policy is formed;
2. Quantitative methods, which provide the skills necessary to define and analyze problems through data manipulation; and
3. Specialty areas, which provide focused information and skills in environmental planning, housing and development planning, land use planning and urban design, and transportation planning specializations.

Baccalaureate Preparation

A good undergraduate education in almost any discipline is acceptable preparation. Undergraduate preparation in the social sciences, engineering, business, or architecture is closely related to the direction and content of the M.U.P. program at KU. Students pursuing the bachelor of architectural studies may apply for a joint M.U.P. degree during their junior year.

Admission

Persons whose previous records indicate ability to succeed with advanced work may be admitted to graduate studies through the Department of Urban Planning. Ordinarily, admission requires a bachelor's degree and a grade-point average of approximately B from KU or another institution with substantially equivalent requirements for the bachelor's degree. The student's academic background is reviewed before an applicant without a bachelor's degree is admitted as a degree-seeking student at KU. Admission decisions are based on the information supplied in the application materials.

A complete application consists of the following:

• A completed graduate application (http://www.graduate.ku.edu) submitted online (see Admission in the Graduate Studies (p. 2369) section of the online catalog);
• A statement of the applicant's career goals and substantive interests in urban planning and rationale for undertaking graduate study in urban planning at KU;
• 1 copy of official transcripts from all colleges or universities attended;
• 3 reference forms or letters of recommendation from persons qualified to comment on the applicant's academic abilities and probable success in graduate study;
• Scores from the Graduate Record Examination;
• Test of English as a Foreign Language (TOEFL) or IELTS scores achieved not more than two years prior to the semester of first enrollment, if the student's native language is not English; and
• Application fee submitted with online application.

Application deadlines are July 1 for fall and December 1 for spring admission. Candidates are urged to submit applications as early as possible. It may take several weeks to obtain all the materials required for an application file. International applicants must apply by June 1 for fall and November 1 for spring admission.
Applications for financial aid generally are considered early in the spring. In some cases, there is a February 15 application deadline. Students seeking scholarship funding must submit their scores from the Graduate Record Examination.

Submit your graduate application (http://graduate.ku.edu/application-process) and application fee online. Other requested application materials may be submitted online with the application or mailed to:

The University of Kansas
Department of Urban Planning
Marvin Hall
1465 Jayhawk Blvd., Room 317
Lawrence, KS 66045

M.U.P. Degree Requirements
All students must complete 48 credit hours, which normally involves 4 semesters of full-time study.* The required courses are

<table>
<thead>
<tr>
<th>General (6)</th>
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<tbody>
<tr>
<td>UBPL 736  Planning Institutions 3</td>
</tr>
<tr>
<td>UBPL 763  Professional Practice 3</td>
</tr>
<tr>
<td>Techniques (9)</td>
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<tr>
<td>UBPL 705  Economic Analysis for Planners 3</td>
</tr>
<tr>
<td>UBPL 741  Quantitative Methods I 3</td>
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<tr>
<td>UBPL 742  Quantitative Methods II 3</td>
</tr>
<tr>
<td>Theory (6)</td>
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<tr>
<td>UBPL 815  History and Theory of Planning 3</td>
</tr>
<tr>
<td>UBPL 850  Urban and Regional Theory 3</td>
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<td>Total Hours          21</td>
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</tbody>
</table>

*Students completing the 5-year B.A.-M.U.P. track within the School of Architecture, Design and Planning must complete 30 credits following completion of the B.A. portion of the track.

Specializations
The curriculum requires each student to specialize in one of the following substantive areas:

- Housing and development planning,
- Sustainable land use planning, and
- Transportation planning.

The student should declare a specialization by the third semester of the course of study. In each specialization, the student must complete one course each in theory and policy, methods, and implementation. The minimum number of credit hours for the major area depends on whether the student pursues the thesis or the non-thesis option. For the thesis option, the student takes at least 9 hours in the major area. For the non-thesis option, the student takes at least 12 hours in the major area.

The specialty courses are as follows:

**Housing and Development Planning**

**Theory and Policy (3)**
- UBPL 710  Introduction to Housing Policy 3

**Methods (3)**
- UBPL 764  Real Estate Development I 3

**Implementation (3)**
- UBPL 716  Community and Neighborhood Revitalization 3

**Supplementary Courses (9)**
- UBPL 760  Historic Preservation Planning 3
- UBPL 768  Real Estate Development II 3
- UBPL 802  Special Topics: ______ 3

**Sustainable Land Use Planning**

**Theory and Policy (3)**
- UBPL 765  Introduction to Sustainable Land Use Planning 3

**Methods (6)**
- UBPL 735  Site Planning and Design 3
- UBPL 738  Environmental Planning Techniques 3

**Implementation (3)**
- UBPL 773  Sustainable Land Use Planning Implementation 3

**Supplementary Courses (9)**
- UBPL 730  Plans and Planning Processes 3
- UBPL 762  Sustainability and the Future of the Built Environment 3
- UBPL 764  Real Estate Development I 3

**Transportation Planning**

**Theory and Policy (3)**
- UBPL 750  Introduction to Transportation Planning 3

**Methods (3)**
- UBPL 756  Travel Demand Forecasting Methods 3

**Implementation (3)**
- UBPL 757  Transportation Planning Implementation 3

**Supplementary Courses (12)**
- UBPL 755  Planning Intercity Transportation Systems 3
- UBPL 758  Public Transit 3
- CE 781  Traffic Engineering Characteristics 3
- CE 881  Traffic Engineering Operations 3

**Free Electives**
Besides the specialty courses, thesis students must take 3 additional credit hours, and non-thesis students must take 9 additional credit hours of elective courses; 6 of these hours may be outside the School of Architecture, Design and Planning.

**Thesis Option**
The thesis provides an opportunity for the student to apply individual research skills in the context of her or his interest. The thesis is a continuation of the student’s course of study rather than a separate academic effort. The format, medium, and focus of the thesis vary with the problem addressed. 6 hours of academic credit are given for the thesis. A student desiring to prepare a thesis must develop, with the assistance of a faculty advisor, a thesis proposal to be submitted to the faculty thesis committee no later than the first day of classes of the semester before the semester in which the student plans to graduate. The committee’s approval is required before the student may pursue the thesis option. A final general examination on the thesis and course work is held.

**Non-thesis Option**
The comprehensive examination may be taken as an alternative to the thesis. The examination provides a learning experience that encourages
the student to synthesize the knowledge gained through course work and
tests the student’s competence as a generalist/specialist planner. The
examination consists of the student responding to a scenario or case
study in which one is asked to synthesize knowledge gained in one’s
course work and apply it within a particular context. No academic credit is
given for the examination.

M.U.P. Curriculum

A total of 48 semester hours is required. Students typically complete the
degree within 2 years.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<td></td>
<td>UBPL 741</td>
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<td>UBPL 705</td>
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<td>UBPL 815</td>
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<td>UBPL 742</td>
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<td>UBPL 736</td>
<td>3</td>
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<tr>
<td></td>
<td>Specialization course or elective</td>
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<table>
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<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<td>UBPL 763</td>
<td>3</td>
<td>Implementation seminar in specialization</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>UBPL 850</td>
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<td>Specialization courses or electives</td>
<td>9</td>
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<tr>
<td></td>
<td>Specialization courses or electives</td>
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<td></td>
<td><strong>Total Hours: 12</strong></td>
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<td><strong>Total Hours: 12</strong></td>
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Master of Urban Planning and Bachelor of Arts in Architectural Studies

This program leads to the Bachelor of Arts in Architectural Studies
and the Master of Urban Planning; it combines 6 years into 5 years of
study. A total of 154 credit hours is required, composed of 124 hours in
architectural studies and 30 additional graduate hours in urban planning.

Students wishing to pursue this option must meet with the Chair of
Urban Planning during the third year of study. Students must meet all
the required courses for the bachelor degree and have a minimum 3.25
grade-point average. In the fourth year of undergraduate study, a student
takes the same courses as a first-year graduate student and applies
for graduate admission in the spring semester. The student may submit
Graduate Record Examination scores during the junior year but must
submit GRE test results in the senior year. If the student has completed all
first-year planning courses and been accepted for admission by the end of
the fourth year of study, the student officially enters the graduate program
to pursue the second year of study toward the completion of the Master of
Urban Planning degree.

Master of Urban Planning and Master of Architecture

This joint degree combines in a 4-year program the normal 2-year
M.U.P. degree and the 3-year M.Arch. degree, both offered through the
School of Architecture, Design and Planning. The program is intended
for students interested in careers in urban design. A total of 133 credit
hours is required, comprising 39 hours in urban planning and 94 hours in
architecture.

Applicants must meet admission requirements of both the Department of
Architecture and the Department of Urban Planning. Students pursuing
the M.Arch. may apply to the joint degree program during, but not after,
the second year of study. Students pursuing the M.U.P. may apply to the
joint degree program during, but not after, the first year of study.

Master of Urban Planning and M.A. in American Studies

This joint degree combines in a 2½-year program the normal 2-year
M.U.P. degree offered through the School of Architecture, Design
and Planning and the normal 1-year M.A. degree in American studies
offered through the College of Liberal Arts and Sciences. The program
is designed for students interested in careers in policy planning and
research involving the arts, social planning, cultural activities and facilities,
and historic preservation.

Contact the Department of American Studies or the Department of Urban
Planning for information about degree requirements.

Master of Urban Planning and M.A. in Geography

This joint degree combines in a 3-year program the 2-year M.U.P. degree
offered through the School of Architecture, Design and Planning and the
normal 1½-year M.A. degree in geography offered through the College
of Liberal Arts and Sciences. The program is designed for students
interested in careers in policy planning and research involving GIS
cartography, environmental planning, and land use planning.

Contact the Department of Geography or the Department of Urban
Planning for information about degree requirements.

Master of Urban Planning and Master of Public Administration

This joint degree combines in a 3-year program the M.U.P. degree offered
in the School of Architecture, Design and Planning and the Master of
Public Administration degree offered through the College of Liberal Arts
and Sciences. The program is intended for students interested in careers
in urban policy planning and urban management.

Contact the Department of Public Administration or the Department of
Urban Planning for information about degree requirements.

Master of Urban Planning and Juris Doctor

The joint Juris Doctor/Master of Urban Planning program is open to those
who have earned baccalaureate degrees and whose undergraduate
records indicate that they have the capacity to complete the law
and urban planning programs. Applicants must meet the admission
requirements of the School of Law and of the Department of Urban
Planning. Applicants should apply and be admitted to each school
separately before they enter the first year of the program. The Law School
Admission Test is the required entrance examination for the law school;
the Graduate Record Examination is required for the Department of Urban
Planning. A student who decides to enter the program while enrolled in
the first year of the J.D. or M.U.P. curriculum must obtain approval from
the School of Law and the Department of Urban Planning as soon as
possible. No student may enter the joint degree program after completing more than 4 full semesters in the law school or 3 full semesters in the Department of Urban Planning.

A total of 115 credit hours is required for the joint degree, comprising 39 hours in urban planning and 76 hours in law. The joint degree program can be completed in 4 years. To pursue the degrees separately would require 5 years. For information on the combined program, consult the School of Law and the Department of Urban Planning.
The University of Kansas 103

Arts (in CLAS)

Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your advisor (http://www.advising.ku.edu) for details). Other years’ catalogs» (http://catalog.ku.edu/archives)

Dance (p. 136)  
Bachelor of Fine Arts in Dance  
(p. 139) 
Bachelor of Arts in Dance  
(p. 140) 
Minor in Dance  
(p. 142)

Film and Media Studies (p. 143)  
Bachelor of Arts and Bachelor of General Studies in Film and Media Studies  
(p. 149) 
Minor in Film and Media Studies  
(p. 151) 
Master of Arts in Film and Media Studies  
(p. 151) 
Doctor of Philosophy in Film and Media Studies  
(p. 152)

Theatre (p. 154)  
Bachelor of Arts and Bachelor of General Studies in Theatre  
(p. 159) 
Bachelor of Fine Arts in Theatre Design  
(p. 161) 
Minor in Theatre  
(p. 162) 
Master of Arts in Theatre  
(p. 162) 
Master of Fine Arts in Theatre Design-Scenography Concentration  
(p. 163) 
Doctor of Philosophy in Theatre  
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Visual Art (p. 165)  
Bachelor of Fine Arts in Visual Art  
(p. 176) 
Bachelor of Fine Arts in History of Art  
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Bachelor of Arts in Visual Art  
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Bachelor of Art Education in Visual Art Education  
(p. 182) 
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Master of Arts in Visual Art Education  
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Introduction

The School of the Arts in the College of Liberal Arts and Sciences is composed of 4 departments:

• Dance (p. 136)
• Film and Media Studies (p. 143),
• Theatre (p. 154), and
• Visual Art (p. 165).

The school acquaints students with the arts as an important field of a liberal culture, either as members of a discriminating public or as trained practitioners. It prepares students for careers in dance, film and media, theatre, and visual art and promotes scholarship and research in the arts.

It offers curricula for teachers of art in public schools and institutions of higher education.

The school makes a substantial contribution to the cultural life of the campus, community, and state by providing a center for the best of theatre and dance performance and the exhibition of works of art and film.

Undergraduate Degree Requirements

Undergraduate Degree Programs

• The degree of Bachelor of Arts (B.A.) is granted with majors in dance, film and media studies, theatre, and visual art.
• The degree of Bachelor of Fine Arts (B.F.A.) is granted with majors in dance, history of art, theatre design, and visual art.
• The degree of Bachelor of General Studies (B.G.S.) is granted with majors in film and media studies and theatre.
• The Bachelor of Art Education (B.A.E.) offers a major in art education.

Requirements for Graduation

All undergraduate degrees from the University of Kansas require completion of the KU Core Curriculum. In addition to the KU Core, students must satisfy the degree specific and major requirements of the degree they are pursuing.

Degrees from the School of the Arts are conferred on candidates who have satisfactorily completed a minimum of 120 credit hours for the B.A., B.G.S., and B.F.A. degrees, including required subjects. The B.A.E. degree requires additional hours in student teaching, internship, and graduate credit for Kansas licensure and therefore requires a minimum of 139 hours.

45 credit hours must be in junior/senior-level courses, numbered 300 and above. 2.0 grade-point averages in KU courses and in junior/senior hours in the major are required for graduation. 4 hours of the total in each case except B.A.E. degrees may be in physical education activity courses. Art appreciation courses are not accepted toward art history requirements for students majoring in any field of art or design. HA 100 and HA 300 are not accepted toward any requirement for students majoring in any field of art or design.

Remedial Courses

Remedial courses listed in the catalog and Schedule of Classes are numbered below 100. Such courses include, but are not limited to, ENGL 50 and MATH 2. Such courses do not count toward graduation in the School of the Arts and may not be counted as distribution courses.

Facilities

Art and Design Building

View a slide show in the School of the Arts brochure.

The 130,000-square-foot Art and Design Building houses all major art and design programs, including studios and offices. The building houses the 2,100-square-foot Art and Design Gallery (http://art.ku.edu/about/art_design_gallery.shtml); this space features new exhibitions every 2 weeks and serves as an important component of the teaching mission. Each major program offers all students spacious work areas and a range of equipment, from traditional to the newest digital technology. Students have access to multiplatform computer labs with the most commonly used current software for photography, animation, CAD, 3-D, video
production, desktop publishing, scanning, illustration, large- and medium-format plotters, and color and black-and-white laser printers. Unique satellite computer areas are dedicated to textiles, metalsmithing and jewelry, expanded media, and printmaking. Students have access to a traditional Photography Laboratory, including a dark room for black-and-white photography, a digital processing lab, dedicated spaces for project photography, and an equipment checkout facility. The 6,400-square-foot Common Shop includes a range of woodworking equipment, a plastic vacuum former, metalworking equipment, and classroom space. All labs and the shop have technical support staff.

There are 3 large, well-equipped painting studios. The print studios consist of 8,000 square feet of workspaces and a dedicated computer lab for serigraphy, lithography, and intaglio. The intaglio studio has 5 presses and a separate acid room. The lithography studio has 3 presses and various sizes of stones. The serigraphy studio has 12 printing stations, a separate wash-out room, and a large exposure unit, available for a variety of photo-based processes. The sculpture studio is divided into 5 general work areas with appropriate equipment: woodworking, metal fabrication, foundry, an open courtyard, and individual studios. The foundry contains equipment necessary for casting with a variety of kilns, 3 gas-fired furnaces, and an overhead crane. There is an induction furnace with a lift-swing unit for bronze and a tilt box unit for iron and steel.

The 3,800-square-foot metalsmithing and jewelry studio has 8 rooms with separate areas for soldering, metalsmithing, plating/electro-forming, a finishing room, casting, gas and TIG welding, enameling, and a student-operated supply store. Matrix GemVision computer software is available for students to develop 3-dimensional jewelry models. The ceramics area includes 5,300 square feet of studio space in the Art and Design building as well as separate west campus Chamney barn facilities. Kilns include salt, soda, cross-draft wood, anagama wood-fired, raku, an electric test kiln, and several kinds of gas and electric kilns. The textile design area has separate weaving, screen-printing, sewing, and dye areas. The weaving studios are equipped with 4-, 8-, and 16-harness floor looms and two 16-harness AVL compu-dobby looms. The sewing area includes traditional machines, sergers, and a computer-aided embroidery machine. The textile Mac computer lab offers numerous software applications specific to weaving and surface design including jacquard weaving CAD software.

Murphy Hall

Murphy Hall houses all major theatre programs and facilities (http://theatre.ku.edu/facilities) for University Theatre (http://www.kutheatre.com) productions. Crafton-Preyer Theatre is a large proscenium theatre seating 1,181. It is equipped with a full-stage turntable, a hydraulic orchestra pit elevator, cutting-edge lighting and sound control equipment, and a recently renovated counterweight line system. William Inge Memorial Theatre is a 50-foot by 50-foot black box theatre with flexible seating for approximately 120. It is also equipped with excellent lighting and sound control equipment. Well-equipped shops for scenery, costume, and props construction, as well as a lighting maintenance laboratory serve the production areas. Crafton-Preyer is also used as Stage Tool. The audience is built onto the large stage of the theatre for a more intimate setting. 4 main studios are used as rehearsal halls and classrooms. The Thomas Gorton Music and Dance Library is in Murphy Hall.

Oldfather Studios

Programs in film and media studies are housed in the 18,000-square-foot Oldfather Studios, a fully equipped film and video production facility featuring a soundstage, sound and editing suites, screening rooms and classrooms. In these contemporary workspaces, students have the opportunity to plan, produce, and edit film and video using current technologies.

Robinson Center

The dance department is housed in Robinson Center, which contains 3 large, well equipped dance studios. One of the studios converts into the Elizabeth Sherbon Theatre, an informal, black box theatre. Dance students have performance opportunities (http://dance.ku.edu/performance-opportunities) with the University Dance Company, New Dance, and in School of Music and Department of Theatre productions. The Thomas Gorton Music and Dance Library is in Murphy Hall.

Spencer Museum of Art

The Helen Foresman Spencer Museum of Art (http://www.spencerart.ku.edu) is regarded as one of the most innovative university museums and has long been considered one of the top teaching museums in the country. 5 galleries display selections from the permanent collection of more than 36,000 works of art. Areas of special strength include medieval art; European and American paintings, sculpture, and prints; photography; Japanese Edo-period paintings and prints; 20th-century Chinese paintings; and an ethnographic collection that includes 10,000 Native American, African, Latin American, and Australian works. Spencer Museum sponsors exhibitions, lectures, films, workshops, and activities that support curricular instruction in the arts. The also museum houses the Kress Foundation Department of Art History and the Murphy Art and Architecture Library, with more than 170,000 volumes and 600 current journals documenting the visual arts, design, and architecture from all cultures, from antiquity to the present.

Lied Center

The Lied Center of Kansas (http://www.lied.ku.edu) is a multipurpose performing arts facility with a 2,000-seat performing arts hall. It offers outstanding presentations of music, dance, and theatre, as well as lectures by artists and scholars. The Lied Center is a major regional presenter and provider of performing arts. The Department of Visual Art, Spencer Museum of Art, Hall Center for the Humanities, and the Lied Center present active visiting artist programs.

Undergraduate Programs

- The Department of Dance (p. 136) offers the Bachelor of Fine Arts degree and the Bachelor of Arts in Dance degree.
- The departments of Film and Media Studies (p. 143) and Theatre (p. 154) offer Bachelor of Arts and Bachelor of General Studies degrees.
- The Department of Visual Art (p. 165) offers the Bachelor of Fine Arts degree, the Bachelor of Arts degree, and the Bachelor of Art Education degree.
- The program leading to the Bachelor of Fine Arts degree in theatre design is offered cooperatively by the School of the Arts and the Department of Theatre (p. 154).

Courses for Nonmajors

Students in other KU schools may enroll in dance, film and media studies, theatre, and visual art courses for credit, subject to the availability of instructional time and the completion of necessary prerequisites. Qualifications are determined by course instructors.

Minors in dance, film and media studies, and theatre are offered for students in other disciplines.
University Honors Program

The school encourages qualified undergraduates to participate in the University Honors Program (http://www.honors.ku.edu).

Art Exhibitions

A number of exhibitions are sponsored by the Department of Visual Art. These are shown in department galleries and the Kansas Union. Each year, there are exhibitions of work by students in the school, representing the disciplines of art and design.

Performances

The University Dance Company (http://www.ku.edu/students/orgs/University_10366.html) performs a varied repertoire of ballet, modern, and jazz dance. It presents 2 major programs on campus each year as well as numerous presentations on tour.

The University Theatre (http://www.kutheatre.com) gives students a chance to act in, direct, design, and crew theatre productions. Each year, the University Theatre mounts about 8 fully staged productions. Students gain experience in children's theatre, musicals, operas, and a range of classical and contemporary plays.

Graduate Programs

The School of the Arts is part of the College of Liberal Arts and Sciences (called the College or CLAS). The College is KU's largest academic unit with more than 50 departments and programs. Graduate programs in the liberal arts and sciences include disciplines in the arts, humanities, social and behavioral sciences, and natural and mathematical sciences, as well as many interdisciplinary degree programs where often highly diverse disciplines come together to offer students a unique graduate experience. Each graduate program's page contains program-specific information about admission, course curriculum, and faculty mentors.

The College's participation in graduate education reflects a long and distinguished commitment to higher learning and research across the liberal arts and sciences. The College takes full advantage of KU's role as an international research institution to ensure that the knowledge imparted to students is current and that they learn the skills of inquiry and critical evaluation. Graduate students are central to the research and teaching missions of the College. They are also the next generation of scholars who will make contributions to our communities and the production of knowledge for many years to come.

It is the students' responsibility to become thoroughly acquainted with all requirements for the degree programs in which they plan to participate. These include the university requirements for graduate studies at KU outlined in the Graduate Studies (p. 2369) section of the online catalog, as well as the requirements of CLAS outlined in this section. Additionally, students are responsible for understanding the requirements that are unique to individual graduate programs outlined in both the graduate handbooks of individual academic units and the Departments & Programs sections of the online catalog.

In general, the student is subject to the regulations in force at the time of admission as a degree-seeking student. If degree requirements change, the student may opt to follow the new requirements or to continue under the regulations in force at the time of admission. Any student readmitted 10 years or more after his or her initial term as a degree-seeking student must fulfill the requirements in effect on the date of readmission to the graduate program.

School of the Arts Graduate Degrees

The School of the Arts offers graduate programs in 3 departments. The Master of Arts (M.A.) degree can be earned in film and media studies, theatre, and visual art education. The Master of Fine Arts degree is offered in visual art and in theatre design with a concentration in scenography. For students whose academic and professional goals can best be achieved through investigations at the interface of 2 or more disciplines, the School of the Arts offers master's degree programs in interdisciplinary studies.

The School of the Arts offers the Doctor of Philosophy degree in film and media studies and theatre.

Art Exhibitions

A number of exhibitions are sponsored by the Department of Visual Art. These are shown in department galleries and the Kansas Union. Each year, there are exhibitions of work by students in the school, representing the disciplines of art and design.

Performances

The University Dance Company performs a varied repertoire of ballet, modern, and jazz dance. It presents 2 major programs on campus each year as well as numerous presentations on tour.

The University Theatre (http://www.kutheatre.com) gives students a chance to act in, direct, design, and crew theatre productions. Each year, the University Theatre mounts about 8 fully staged productions. Students gain experience in children's theatre, musicals, operas, and a range of classical and contemporary plays.

Degree Requirements

Requirements for the completion of master's and doctoral degrees in the College are governed by department- or program-specific policy, College policies and procedures, Graduate Studies policies, and the University Senate Rules and Regulations.

Information on degree requirements presented in this section are limited to the most frequently consulted policies and key milestones in the graduate career. Students will find additional information under the KU Policy Library (http://policy.ku.edu), the Graduate Studies (p. 2369) and College's graduate regulations sections of the online catalog, the academic unit's handbook, and the University of Kansas Rules and Regulations (p. 12).

Master's Degree Requirements

Coursework

Coursework requirements for the Master's degree are established and tracked by the department or program, and their completion verified and approved by the College. Please consult with your advisor, the academic unit's graduate handbook, and the relevant Departments & Programs section of the online catalog for further information on specific courses or course sequences required for the degree.

Thesis

Final Examination
A final general examination in the major subject is required for MA degrees. The examination is held during the semester of the student’s final enrollment in course work and, in the case of thesis students, when the thesis has been substantially completed. In thesis programs, an oral thesis defense may be one of the degree requirements. Such a defense may be offered in addition to, or in conjunction with, the required general examination in the major field. Students earning a master’s thesis degree must have completed at least 1 hour of thesis enrollment before the master’s degree can be awarded. See also Master’s Degree Requirements (p. 2369), M.A. and M.S. Degrees, in the Graduate Studies section of the online catalog.

Doctor of Philosophy Degree Requirements

Coursework
Coursework requirements for the doctoral degree are established and tracked by the department or program, and their completion verified and approved by the College. Please consult with your advisor, the academic unit’s graduate handbook, and the relevant Departments & Programs section of the online catalog for further information on specific courses or course sequences required for the degree.

Research Skills and Responsible Scholarship
Graduate Studies requires that all doctoral students meet the Research Skills and Responsible Scholarship requirement before proceeding to the Comprehensive Exam. Specific requirements are determined by each department or program in consultation with Graduate Studies. Information on these requirements is contained in the department or program’s approved research skills requirement plan. Consult with your advisor and the Departments & Programs section of the online catalog for further information.

Residency
Two semesters, which may include one summer session, must be spent in resident study at KU. The College requires that residency be fulfilled before the comprehensive oral examination is scheduled. For more information on residency requirements, please see the Graduate Studies section (p. 2369) of the online catalog.

Comprehensive Oral Examination
The comprehensive oral examination covers the major field and any outside work for which the academic unit wishes to hold the student responsible. The examination is expected to be broader than a mere defense of the dissertation proposal.

The student must be enrolled the semester or summer session in which he or she completes the comprehensive oral examination. This enrollment may count toward the post-comprehensive enrollment requirements as described in Graduate Studies’ Candidacy for Doctoral Degree policy. If more than 5 years elapses between the completion of the comprehensive exam and degree completion, the student may be required to retake the oral comprehensive.

More information about comprehensive exam requirements may be found in the Graduate Studies section (p. 2369) of the online catalog.

Dissertation and Final Exam
Completion of the dissertation is the culminating phase of a doctoral program, marked by the final oral examination and defense of the dissertation. In all but the rarest cases, tentative approval of the dissertation is followed promptly by the final oral examination. Refer to the Graduate Studies section (p. 2369) of the online catalog for further information on the regulations governing the final oral examination, including committee composition and attendance regulations.


Ceremonies
At the end of each spring semester, the College holds a master’s hooding ceremony and Graduate Studies organizes the annual doctoral hooding ceremony. The School of the Arts hosts a separate ceremony for SOTA graduates. University Commencement information is available in the KU Commencement section of the KU website.

Attendance at these ceremonies is optional. Please consult the COGA website for more information.

The School of the Arts (http://sota.ku.edu) is home to four departments: dance, film and media studies, theatre, and visual art. It is housed within the College of Liberal Arts and Sciences, the broadest and most diverse academic unit on campus.

Students in the School of the Arts create, perform, and interpret works of art that contribute to our culture and history. As part of the College, students have access to ideas across the spectrum of arts, humanities, sciences and mathematics, social and behavioral sciences, and international studies. This partnership offers fresh possibilities for collaboration, paving the way for innovations and ideas.

Students interested in pursuing an undergraduate major or minor in the School of the Arts should contact the School of the Arts advisor at 785-864-3500 to schedule an advising appointment.

Graduate Advising
Advising of graduate students is primarily conducted within the graduate programs by program staff members and the individual faculty members who act as mentors and advisors. Students are encouraged to work with the director of graduate studies in their program regarding course selections and individual program requirements to ensure that all program milestones are reached as expected by the program faculty and the College. The graduate studies director or coordinator is also responsible for the regular assessment of students in the program and can address questions regarding a student’s progress toward the degree.

Students seeking information on specific policy or procedures should review the relevant content in the KU Policy Library (http://www.policy.ku.edu/office.shtml/#16) as well as the College and Graduate Studies (p. 2369) sections and the relevant Department or Program section of the online catalog. The College Office of Graduate Affairs (http://clas.ku.edu/coga), 102 Strong Hall, coga@ku.edu, is also available for assistance.

Students who have completed all degree requirements and are preparing to graduate are encouraged to schedule a Graduation Appointment with the College Office of Graduate Affairs.

Undergraduate University Regulations
For information about university regulations, see Regulations (p. 12) or visit the University of Kansas Policy Library (http://www.policy.ku.edu).
Credit/No Credit

A Credit/No Credit option is available to all degree-seeking undergraduates. You may enroll in one course a semester under the option, if the course is not in your major or minor. For more information, visit the KU Policy Library (https://documents.ku.edu/policies/governance/USRRT.htm#art2sect2).

Warning: Certain undesirable consequences may result from exercising the option. Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of No Credit to F when computing grade-point averages.

Incompletes

The letter I indicates incomplete work, such as may be completed without re-enrollment in the course. The letter I should not be used when a definite grade can be assigned for the work done. It is not given for the work of a student in any course except to indicate that some part of the work has, for reasons beyond the student’s control, not been done, while the rest has been satisfactorily completed. At the time an I is reported on the electronic roster, the character and amount of work needed, as well as the date required for completion and lapse grade if further work is not completed by this date, should be indicated.

A student who has an I posted for a course must make up the work by the date determined by the instructor, in consultation with the student, which may not exceed 1 calendar year, or the last day of the term of graduation, whichever comes first. An I not removed according to this rule automatically converts to a grade of F or U, or the lapse grade assigned by the course instructor, and appears on the student’s record.

Extensions to the time limit may be granted by the dean’s representative upon submission of a petition from the student containing the endorsement of the course instructor who assigned the I grade, or the department chairperson if the instructor is unavailable. After the I grade is converted to a grade of F or U, the grade may only be changed in accordance with USRR Article II, Section 3 (https://documents.ku.edu/policies/governance/USRRT.htm#art2sect3).

Probation and Dismissal

Students may be dismissed at any time by the dean for excessive absences or for failure to make satisfactory progress in their studies. A student not on probation who fails to earn a grade-point average of at least 2.0 in any semester is placed on probation for the following semester. At the end of the semester in which the student has been on probation, he or she is removed from probation if the grade-point average for the semester is at least 2.0, with a minimum course load of 12 hours and a cumulative grade-point average of 2.0. A student whose course load is fewer than 12 hours or whose cumulative grade-point average is below 2.0 continues on probation even if the semester grade-point average is 2.0 or above. At the end of the semester in which the student has been on probation, he or she is dismissed for poor scholarship if the grade-point average for the semester is below 2.0. A student who has been dismissed for poor scholarship is not eligible to enroll again at any time, except with the special permission of the chair of the department. A reinstated student is placed on final probation. If the student fails to achieve a minimum grade-point average of 2.0 for the semester, he or she is dismissed, and readmission is not granted. Students who take courses at other institutions during the suspension may receive credit for such work only if it meets the approval of the department in which the student is doing major work.

Required Work in Residence

6 of the final 30 hours may be taken for nonresident credit, with advance permission. Nonresident credit may fill only elective requirements not in the major field of study.

Transfer of Credit

Only grades of C or higher are accepted as transfer credit toward degrees. Applicants with a lapse of 4 or more years since their last full-time enrollment may not expect studio credits in visual art to be accepted for transfer.

CredTran (http://admissions.ku.edu/apply/credits) is a transfer course equivalency system that lists more than 2,200 colleges and universities from which KU has accepted transfer courses in the past. If your school or course is not listed, your evaluation will be completed when you are admitted to KU.

Graduate University Regulations

The pursuit of graduate study in the College of Liberal Arts and Sciences at KU is governed by department- or program-specific policy, College policies and procedures, Graduate Studies policies, and University Senate Rules and Regulations. Information on the most frequently consulted policies is contained in this section. Students should also consult the academic unit’s handbook, Graduate Studies and College sections of the KU Policy Library, and the Graduate Studies and University of Kansas Regulations sections of the online catalog.

Academic and Research Integrity

The College of Liberal Arts and Sciences strictly enforces KU and College policies on academic and scholarly misconduct. Academic integrity requires honest performance of academic and research responsibilities by students. These include, but are not limited to, ethical preparation of assignments, reports, and research papers; completion of examinations; ethical treatment of human and animal subjects; execution of administrative requirements; and a sincere and conscientious effort by students to abide by the policies set forth by instructors and research advisors.

Enrollment

Full-time, Half-Time and Part-Time Enrollment

Graduate Studies defines full-time enrollment as 9 credit hours in Fall or Spring semester and 6 hours in the summer session. Maximum enrollment for graduate students, except in rare instances, is 16 hours in Fall or Spring semester and 9 hours in the summer session. Please see the Full-time Enrollment for Graduate Students policy in the Graduate Studies (p. 2369) section of the online catalog and the KU Policy Library (http://policy.ku.edu) for more information on what constitutes full-time, half-time, and part-time enrollment, including variations on this policy for GTA/GRA/GA appointments and active duty military. At a minimum, all graduate students should be continuously enrolled in the Fall and Spring semesters while completing the credit hours required for the fulfillment of their degrees. Please consult the Graduate Studies (p. 2369) section of the online catalog and the KU Policy Library (http://policy.ku.edu) for other enrollment regulations.

Continuous Enrollment for Master’s Students
All master’s students in the College who have completed the required coursework for their degrees must be continuously enrolled in the Fall and Spring semesters until all remaining requirements for the degree, including thesis when applicable, are completed. No enrollment is required during the summer session unless it is the semester during which the student will graduate, in which case enrollment is required. Certain academic units have rules governing summer enrollment.

**Post-Comprehensive Enrollment for Doctoral Students**

After passing the Comprehensive Oral Exam, doctoral candidates must be continuously enrolled. During this time, until all requirements for the degree are completed (including the filing of the dissertation) or until 18 post-comprehensive hours have been completed (whichever comes first), the candidate must enroll for a minimum of 6 hours a semester and 3 hours a summer session. At least one of these hours must be in dissertation or approved dissertation equivalent coursework.

In addition, the College requires a period of at least 5 months to elapse between the comprehensive oral exam and the final exam. Students that have completed all degree requirements before completing 18 hours are still required to continue enrollment until this 5-month requirement has been met.

Upon completion of the 18-hour requirement, a student’s level of enrollment should reflect as accurately as possible the faculty time he or she utilizes. This may be as little as one hour per semester.

Special enrollment requirements apply to those with GTA/GRA/GA appointments. Please consult the Graduate Studies (p. 2369) section of the online catalog and the KU Policy Library (http://policy.ku.edu).

**Lapses in Enrollment**

Generally, no student is allowed to enroll after the first 4 weeks of a semester or the first 2 weeks of a summer session. If a student does not intend to enroll, he or she must determine the appropriate course of action in consultation with the department or program.

The student may elect to Voluntarily Discontinue from the program, and must inform the department or program in writing of this decision, which will in turn file the necessary forms with the College. This option requires the student to seek re-admission to the program if they choose to return at a future date. They remain eligible to seek admission to another department or program in the College.

The student may also petition for a Leave of Absence of up to one calendar year. If granted, the Leave of Absence maintains the student’s place in the program. Leave of Absence petitions must be filed by the department or program and provide evidence of the department or program’s endorsement of the student’s petition. Students interested in this option should begin by consulting with their advisor.

The time spent on Leave of Absence does not count toward the student’s time to degree, and therefore does not shorten the time available to complete their degree requirements. Similarly, if a student that has elected to Voluntarily Discontinue subsequently returns to the program, the time that has elapsed since his or her last enrollment does not count toward the time to degree.

Students who fail to enroll without completing the Voluntary Discontinuance process or without being granted a Leave of Absence are reviewed by the College Office of Graduate Affairs and the students’ academic units for possible dismissal. Any time that accrues during these lapses of enrollment in which the student does not occupy any approved enrollment category (e.g., Enrolled, Voluntarily Discontinued, On Leave) is counted toward the time to degree.

Students on an international student visa should consult with the International Programs office prior to any change in enrollment status.

Please see Graduate Studies policies governing Leave of Absence and Voluntary Discontinuance in the Graduate Studies (p. 2369) section of the online catalog and in the KU Policy Library (http://policy.ku.edu).

**Examinations**

Students must be enrolled during the semester in which they complete their oral comprehensive or final examinations. Additionally, no graduate student will be allowed to take oral comprehensive or final examinations, or to go forward with a thesis or dissertation defense, if a waiting grade (WG) placeholder or an incomplete (I) grade is listed on the student’s transcript.

**University Regulations on Grading**

Article II of the University Senate Rules and Regulations provides detailed information on regulations governing the grading of graduate coursework. Students should also consult the Graduate Studies (p. 2369) section of the online catalog and the KU Policy Library (http://policy.ku.edu) for more information on the Grading Policy.

The following are of particular relevance for graduate students in the College:

**Passing Grades for Graduate Coursework**

Only courses graded C or above are considered passing and may be counted for graduate credit. Courses graded C-, D or F may not be used to fulfill degree requirements.

**Incomplete (I) and Waiting Grades (WG)**

Incomplete (I) grades are used to note, temporarily, that students have been unable to complete a portion of the required course work during that semester due to circumstances beyond their control. Incomplete work must be completed and assigned an A-F or S/U grade within the time period prescribed by the course instructor. After one calendar year from the original grade due date, an Incomplete (I) grade will automatically convert to a grade of F or U, or the lapsed grade assigned by the course instructor.

Waiting Grades (WG) are placeholders and should only be used in rare instances when, for reasons beyond his or her control, an instructor is not able to assign a course grade by the deadline.

**Credit/No Credit (CR/NC)**

Graduate students may select the Credit/No Credit option only for those courses that do not fulfill a degree requirement. This includes courses used to fulfill the Research Skills and Responsible Scholarship
requirement. Students should consult with their advisor prior to electing the CR/NC option.

**College-Specific Grading Policy**

**Plus/Minus (+/-) Grades**

Plus/minus (+/-) grades may be used in the College. The plus or minus sign describes intermediate levels of performance between a maximum of A and a minimum of F. Intermediate grades are calculated as 0.3 units above or below the corresponding letter grade.

**Participation (P) Grades**

Use of the Participation (P) grade is restricted in the College. It is only approved for a limited number of courses for which special permission has been sought. When permission is granted, it is only used to indicate participation in thesis, dissertation, or research enrollments (related to thesis or dissertation), or in the first semester enrollment of a two-semester sequence course. In any semester, the instructor may elect to assign a letter grade of A, B, C, D, or F when evidence about performance is available. A letter grade (A, B, C, D, or F) must be assigned in the last semester of enrollment to characterize the quality of the final product.

A-F or S/U grades are used in all other courses, including those that are repeated across semesters. The latter include courses in which students are collecting, assembling, or analyzing data; reviewing a research or scholarly literature; creating portfolios; or writing theses or dissertations (e.g., research, thesis, and dissertation hours). Students in these courses are expected to develop plans of study with their instructors and to contact these instructors throughout the semester to discuss their progress or changes in their plans. Instructors assign grades each semester based on the quantity and quality of the work students complete that semester. The grades that students receive in the last semester of these courses (e.g., for completing data analyses and literature reviews, exhibiting portfolios, defending theses or dissertations) apply only to that semester.

If a department or program has a course for which the P grading system may be more appropriate than the A-F or S/U grading system, it must seek special approval from the College.

**Incompletes (I) and Waiting Grades (WG)**

The College does not allow graduate students to take oral comprehensive or final examinations or to go forward with a thesis or dissertation defense if a waiting grade (WG) or an incomplete (I) grade is listed on the student's transcript.

**Probation and Dismissal Guidelines**

To be in good standing, a student must maintain a 3.0 cumulative grade-point average and be making satisfactory progress toward the degree, as determined by the department or program.

If the grade-point average falls below 3.0, the department or program notifies the student in writing that they are being recommended for probation and outlines the expectations of the graduate program and the College that the student must meet to return to good standing. This is followed by a letter from the College confirming their probationary status.

When the rationale for probation is based on grade-point average, a student is typically placed on probation for 1 academic semester. If the cumulative grade-point average has not risen to 3.0 at the end of that semester, the student can either be dismissed or be allowed to continue on probation, depending on the department or program’s assessment of the student’s progress.

Students may also be placed on probation for failing to make satisfactory progress toward the degree. This may include, but is not limited to, failed exams or failure to make adequate and timely progress on the dissertation or thesis.

A graduate student is dismissed upon recommendation of the student’s department or program. This typically occurs when a student fails to raise the grade point average to 3.0 after one or more semesters of probation, or otherwise fails to meet the terms of the probationary period. Academic dismissal should occur before a semester begins. If a student is dismissed during the semester, the dismissal is effective only at the end of the semester in which the department or program gives notification of dismissal. The department or program will notify the student in writing of the reasons for their dismissal. This will be followed by a letter from the College confirming the dismissal from the program and from the College.

In cases when a student’s grade point average is so low that their ability to ever achieve the 3.0 grade-point average required for graduation is in serious doubt, the department or program should move to dismissal. If they wish to allow the student to continue, they must petition the College on the student’s behalf.

A student who has been dismissed from a graduate department or program in the College is not eligible for readmission to graduate study in any department or program in the College of Liberal Arts and Sciences.

**Time Limits**

The University and the College have established time limits governing various stages of the graduate student career.

**Maximum Time to Count Required Course Work**

Courses completed at the University of Kansas, or transfer credits from another university, are valid for a period of 10 years. Courses that were completed more than 10 years before the scheduling of the final defense may not be used to fulfill graduate degree requirements in the College of Liberal Arts and Sciences.

With the endorsement of their graduate programs, students may petition the College to accept out-of-date course work to fulfill the requirements for their graduate degrees, provided they are able to justify why this course work meets the current standards of scholarship in the discipline.

**Maximum Time to Submit Thesis or Dissertation**

Students must make all final revisions and file the final version of the thesis or dissertation manuscript to UMI/Proquest within six months of the date of final presentation and/or defense of the thesis or dissertation work. Until the final manuscript of a thesis or dissertation is filed, the student must be enrolled in accordance with enrollment policy. Graduate students in the College who do not file the final manuscript within the six-month time limit must enroll in 3 hours a semester until the thesis or dissertation is completed and filed.

**Maximum Time to Complete the Degree**

Graduate Studies has established time limits on master’s and doctoral degree completion. Please see Graduate Studies policies on Doctoral
Program Time Constraints and Master's Program Time Constraints in the Graduate Studies (p. 2369) sections of the online catalog and in the KU Policy Library (http://policy.ku.edu) for full details.

Master's degree students have a total of seven calendar years, excluding any periods of absence due to an approved leave of absence or voluntary discontinuation from a program, in which to complete the work for a master's degree.

Doctoral degree students have a total of eight calendar years, excluding any periods of absence due to an approved leave of absence or voluntary discontinuation from a program, to complete the Ph.D. This includes students who enter with a master's degree from an institution other than KU and bachelor's degree holders who bypass the master's and are admitted directly to a Ph.D. program.

Students who complete the master's degree at KU and subsequently begin doctoral studies have 10 years to complete both degrees.

A time limit extension may be granted by the College. All extension petitions require the department to prepare and file a Graduate Degree Completion Agreement, which must then be approved by a designated subcommittee of the Committee on Graduate Studies. Per Graduate Studies policy, extensions may be granted for up to one year. However, additional time may be requested in the Completion Agreement. If the Completion Agreement is approved, subsequent petitions will receive an expedited review.

Academic units may set their own, more rigorous time limits. Consult with your advisor and review your academic unit's handbook and the relevant Departments and Programs section of the online catalog for program-specific information, requirements, and restrictions.

Graduation

All graduate students must be enrolled the semester they complete all degree requirements.

Graduate Studies establishes an early deadline for degree completion for each semester and summer session, usually occurring at the end of the first 2 weeks of a semester or the end of the first week of summer session. If the student meets all degree requirements including the submission of all required documentation by this date, they are not required to enroll for that semester.

The final Graduate Application for Graduation Deadline is set by the Registrar for each semester. Please consult the official Academic Calendar for specific dates. To be eligible for graduation, an application for degree must be submitted and all degree requirements met by this deadline. This includes the submission of all required documentation to the College Office of Graduate Affairs. See the Graduation section of the COGA (http://clas.ku.edu/coga/graduation) website for more information.

Undergraduate Graduation with Honors

Undergraduates may earn honors upon graduation in 3 ways. The student may graduate with distinction or highest distinction, earn departmental honors in the major, or complete the University Honors Program (http://www.honors.ku.edu). It is possible to earn honors in 1 of these areas, any combination of them, or all 3. The award of honors is noted on the student’s transcript and in the Commencement program. Distinction and highest distinction are noted on the diploma.

Graduation with Distinction or Highest Distinction

The top 10 percent of each year's graduating class is designated as graduating with distinction. Of these, the top one-third is designated as graduating with highest distinction. To be eligible, students must have completed at least 60 credit hours, graded A through F, in residence at KU. See Required Work in Residence below.

Graduation with Departmental Honors

Most departments and programs allow qualified majors to work toward graduation with departmental honors. Graduation with departmental honors is awarded in recognition of exceptional performance in the major, completion of a program of independent research or an alternative project, and a strong overall academic record.

In addition to the requirements of individual departments and programs (which must be approved by the College committee on undergraduate studies and advising), the College requires the following for graduation with departmental honors:

1. Candidates must declare the intention to work for departmental honors with the appropriate departmental honors coordinator(s) no later than the time of enrollment for the final undergraduate semester, but sooner if required by the department(s). Copies of the intent form should be returned to College Student Academic Services.

2. At the end of the final undergraduate semester, the candidate must have achieved an overall grade-point average of at least 3.25 and a grade-point average of at least 3.5 in the major. Both overall and major grade-point averages include work completed at other institutions, as well as at KU. No minimum grade-point average is required to declare candidacy for graduation with departmental honors unless specified by the department.

3. Each candidate's departmental honors work must include independent research or an acceptable alternative project. The results of research are presented in a form appropriate to the requirements of the major department. Equivalents to the independent research component are established by approved departmental honors programs. In courses meeting the independent research requirement, the candidate must earn a grade of B or higher. Successful completion of all departmental honors requirements must be certified to the departmental honors coordinator(s) by a panel composed of at least three members of the College faculty who have read the report of the independent research and heard the oral presentation, where required.

Petitions

A department or program may petition to award graduation with departmental honors to deserving students who, for good reason, do not meet every College and departmental requirement. Send petitions to the committee on undergraduate studies and advising, College Student Academic Services (http://collegesas.ku.edu).

Late Completion of Honors Requirement

Requirements for graduation with honors may be completed after the date on which certifications are requested from departments. In fact, requirements—for example, the completion of an honors thesis for which the credit hours are not needed to graduate—may be completed after a student has graduated. When a candidate finishes all requirements,
departments must notify College Student Academic Services (http://collegesas.ku.edu) in writing.

University Honors Program

The University Honors Program (http://www.honors.ku.edu) provides opportunities for outstanding and creative undergraduate students in all schools at KU to develop their full potential during their undergraduate years. The Honors Program brings talented students together in honors classes and seminars to benefit from mutual interests and association. It brings students and faculty members together in a teaching and research environment that ensures high academic achievement and standards. The program also coordinates merit-based scholarship opportunities for qualified students, including KU awards such as the University Scholars Program, and Undergraduate Research Awards. The Honors Student Association and the Honors Ambassador Program provide opportunities for student leadership.

In general, honors classes are small, oriented to discussion, and taught by full-time members of the faculty. Most honors courses fulfill requirements and deal with introductory fundamentals and principles, but they are likely to do so in more depth than their non-honors equivalents. Honors courses are distinguished by the energetic atmosphere and critical thinking generated by the students in them and the faculty members who teach them.

Honors students are interested in expanding their knowledge and take a broad range of liberal arts and sciences courses. This is true of students in the professional schools (architecture, engineering, business, etc.) as well as students in the College of Liberal Arts and Sciences. Honors program advisors typically recommend that students explore their interests through the broad curriculum choices KU has to offer.

A first-year, semester-long tutorial experience provides an introduction to an academic area of study in an informal setting that allows students to get to know one another and the instructor. The tutorial explores the research methods of a discipline and acquaints the student with the research resources at KU. Honors advising is personalized in meetings with honors staff, faculty fellows, and specially selected advisors from across the university. The program’s advising committee facilitates early and frequent contact with academic advisors in the students’ areas of interest. Honors students benefit from priority enrollment, which provides flexibility in planning one’s academic curriculum.

The program does not require a minimum number of honors courses a semester. However, students in the program quickly discover that honors courses engage the intellect, hold the interest, and create the enthusiasm for learning they seek at a university. Students in the professional schools are particularly encouraged to seek out honors course opportunities early, while their curricula still have breadth and flexibility.

Honors students are strongly encouraged to include research, study abroad experiences, internships, and community service in their academic programs. Consult Honors Program staff about applying these activities toward completion of honors requirements.

Admission

Students with strong high school curricula and excellent academic records are encouraged to apply to the University Honors Program. Admission is highly competitive. Although no ACT/SAT composite score or high school grade-point average guarantees that a student will or will not be admitted to the University Honors Program, this year’s average ACT composite for accepted students is a 32.4, and the average unweighted GPA for an accepted student is 3.96. Applications are evaluated on the basis of high school curriculum, grades, an essay, activities, and standardized test scores. Applications from first- and second-year students currently attending KU, as well as incoming transfer students, are evaluated on the basis of college course work, an essay, and college activities. Review of applications begins in October and continues through April. Send inquiries to the University Honors Program, 1506 Engel Road, Lawrence, KS 66045-3845. View further information and the online application (http://www.honors.ku.edu).

Completion of the Program

Students graduate from the program by completing 8 honors units and the first-year, semester-long tutorial. The 8 units must be completed as follows:

1. 6 honors courses (may include graduate-level courses numbered 700 and above).
2. 1 out-of-classroom experience such as study abroad, departmental honors, documented research experience, approved and documented internship experience, or approved and documented community service.
3. The eighth unit may be from either category 1 or category 2. Students also must maintain a minimum 3.25 grade-point average.

Nunemaker Center

This unique building, with its modern architectural design, is the home of the Honors Program, near the Daisy Hill residence halls at 15th Street and Engel Road. The Honors Program is home to several faculty fellows who serve the program and bring additional resources to the program to complement the full-time staff. Faculty fellows are available for advising, consultation about majors and careers, guiding research projects, and work with the Honors Council to develop programmatic initiatives.

Students are encouraged to take advantage of the spaces available at Nunemaker, including several classrooms and study areas, a kitchen, comfortable lounges that include 2 fireplaces, and wireless Internet access. Nunemaker also serves as a gallery for undergraduate art. The center is open days and evenings.

View Honors (http://catalog.dept.ku.edu/201314/schools/clas/honors) courses in the online catalog.

Graduate Awards

The College of Liberal Arts and Sciences offers several awards to recognize outstanding graduate students, faculty service, teaching excellence, and exemplary advising. Below, you will find a brief description of each award. More specific information about eligibility and the call for nominations each year can be found on the College’s website under Faculty Awards (http://clas.ku.edu/resources/faculty-staff/awards) and Graduate Student Awards (http://clas.ku.edu/awards-funding).

Graduate Student Awards

Howard J. Baumgartel Peace and Justice Award

This is an annual award to support a graduate student in the College or the School of Business for thesis or dissertation research whose interests, achievements, and talents are in the peace and justice field.
Outstanding Thesis/Research Project Award

The Committee on Graduate Studies in the College has established 2 annual awards for students receiving a master's degree. The awards carry a $500 stipend. Students are nominated for the award by their advisors. Each department may nominate one master's student for each award.

Graduate Faculty Awards

Byron A. Alexander/John C. Wright Graduate Mentor Awards

Graduate students (current or those who have graduated since May of the calendar year prior to the award deadline) may nominate any tenured or tenure-track faculty member in the College of Liberal Arts and Sciences who has served as an outstanding mentor.

Career Achievement Teaching Award

This annual award recognizes a retired faculty member in the College of Liberal Arts and Sciences who has made a significant contribution to the teaching of College students at either the undergraduate or graduate level and who has distinguished him/herself through excellence in teaching. The award amount is $1,000.

Dance Courses

DANC 100. Introduction to the Dance Major. 1 Hour. H.
This is a 6 week online course designed to identify what is unique about the KU Dance experience, and to introduce students to the requirements for a BA or BFA degree. The course examines issues of academic integrity, informs students about academic support available to them, familiarizes students with the expectations of a dance major and suggests career opportunities for dance majors. Students complete five modules: Getting Started, Programs and Degrees, Academic Integrity and Support, Expectations and Career Pathways to provide a foundation for academic success in the major. LEC.

DANC 101. Ballet I. 1.5 Hour.
Classical and modern approaches to the language of ballet for beginners. May be repeated for credit. Does not count toward the dance major requirements. ACT.

DANC 102. Ballet II. 1.5 Hour.
Classical and modern approaches to the language of ballet for experienced beginners. May be repeated for credit. Does not count toward the dance major requirements. Prerequisite: DANC 101 or consent of instructor. ACT.

DANC 103. Modern I. 1.5 Hour.
Dance technique for beginners with precedents in the movement vocabularies of Isadora Duncan, Martha Graham, Doris Humphrey, Merce Cunningham, and the seminal choreographers of modern dance. May be repeated for credit. Does not count toward the dance major requirements. ACT.

DANC 104. Modern II. 1.5 Hour.
Dance technique for experienced beginners with precedents in the movement vocabularies of Isadora Duncan, Martha Graham, Doris Humphrey, Merce Cunningham, and the seminal choreographers of modern dance. May be repeated for credit. Does not count toward the dance major requirements. Prerequisite: DANC 103 or permission of instructor. ACT.

DANC 105. Jazz I. 1.5 Hour.
Dance technique for beginners based on elements of Latino, African, popular and classical jazz dance forms. May be repeated for credit. Does not count toward the dance major requirements. ACT.

DANC 106. Jazz II. 1.5 Hour.
Dance technique for experienced beginners based on elements of Latino, African, popular and classical jazz dance forms. May be repeated for credit. Does not count toward the dance major requirements. Prerequisite: DANC 105 or consent of instructor. ACT.

DANC 108. Pas de Deux. 1 Hour.
The elements of classical ballet partnering (pas de deux) are explored. These elements include supported poses, turns, lifts, and their coordination between the partners. For men only. Women enroll in Pointe and Pas de Deux, DANC 307. May be repeated for credit. ACT.

DANC 109. Men's Ballet. 2 Hours.
An introduction to classical ballet focusing on the particular requirements of the male ballet technique including leaps, turns, batterie, and their presentation. May be repeated for credit. ACT.

DANC 125. Movement Efficiency for Athletes. 3 Hours.
A course designed to improve athletic performance potential by improving initiation and follow-through of movement; improving coordination, timing, and ease of action; and reducing the risk of injury through better technique. Students will learn how to apply the basic principles of Rudolf Laban and Irmgard Bartenieff to the specialized movement skills of various sports. Students will also learn to develop individualized warm-ups and drills to improve performance. Prerequisite: Participation in team sports, dance, martial arts, other skilled sport movement, or consent of instructor. ACT.

DANC 150. Dance Improvisation. 2 Hours.
Developing skills in perception and the rapid translation of ideas into dance. Central to the course will be exposure to a variety of stimuli from music and the visual arts, to nature and people on the streets. Prerequisite: DANC 104 or consent of instructor. ACT.

DANC 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Dance. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

DANC 201. Ballet III. 1-2 Hours. H.
Intermediate level technique in classical and modern approaches to the language of ballet. May be repeated for variable credit. Prerequisite: Consent of instructor. LAB.

DANC 203. Modern III. 1-2 Hours. H.
Intermediate level technique. May be repeated for variable credit. Prerequisite: Consent of instructor. LAB.

DANC 205. Jazz III. 1-2 Hours.
Dance technique for intermediate dancers based on elements of Latino, African, popular and classical jazz dance forms. May be repeated for variable credit. Prerequisite: DANC 105 or consent of instructor. LAB.

DANC 210. Rhythms and Structures of Music. 1 Hour.
An introduction to the analysis and use of rhythms and the compositional forms of music for dance. LEC.

DANC 220. Dance Performance. 1 Hour.
A dance repertory and performance class with emphasis on developing skills for performing ballet, modern, jazz, historic, and/or forms of theatrical dance. May be repeated for credit. Prerequisite: 200- or 300-level dance technique course. ACT.
DANC 230. Introduction to African Dance Theatre. 2 Hours. NW.
An introduction to the general techniques of non-verbal theatrical conventions in African cultures. Practical training in movement vocabulary will be supplemented by lectures on the "text" of performance. (Same as AAAS 334 and THR 226.) LEC.

DANC 240. Introduction to Classical East Indian Dance. 3 Hours.
Classical East Indian dance has an extensive movement vocabulary that emphasizes the coordination of rhythmic foot patterns with intricate hand gestures. Students will learn the mudras (hand gestures) and their significance and integration within each dance. Readings will include excerpts from the Natya Sastra and other treatises of East Indian dance and culture. LEC.

DANC 250. Choreography: Structured Solos. 2 Hours.
Movement studies for solo figure based on exploration of the fundamental ingredients of dance (space, time, weight, and energy flow) and how to organize them into short compositional forms such as ABA, verse/ refrain, or narrative. Prerequisite: DANC 150 and DANC 203 or consent of instructor. LEC.

DANC 260. Musical Theatre Dance. 2 Hours.
This course focuses on the dance and movement vocabulary uniquely associated with musical theatre productions, as well as a variety of popular dance styles from the 1920s to the present. Performance techniques for the stage are emphasized. ACT.

DANC 290. Sophomore Review. 0 Hours. H.
The Sophomore Review of all majors in the BA program in Dance provides an assessment of student progress in the degree. Transfer students to the BA program participate in the year following their admission to KU. The review process consists of: verification that students are making academic progress; Students should have an overall GPA of 2.0; a self-evaluation composed of written responses to a series of questions about their own artistic, technical and discipline-specific academic progress in the program; a faculty evaluation comprised of written feedback on each student's artistic, technical and discipline-specific academic progress in the program; and participation in at least one speedback session prior to the end of the second year. Speedback is a feedback process modeled on the speed dating format. All majors sit with faculty members for 5-minute intervals to receive individual feedback. Students engage with professors with whom they have been in technique class or rehearsal for the current year. There are no prerequisites for entry into the course. The completion of the course will be a prerequisite for enrollment in DANC 550 Senior Project. LEC.

DANC 301. Ballet IV. 1-3 Hours. H.
Advanced level technique in classical and modern approaches to the language of ballet. May be repeated for variable credit. Prerequisite: Consent of instructor. LAB.

DANC 303. Modern IV. 1-3 Hours. H.
Advanced level technique. May be repeated for variable credit. Prerequisite: Consent of instructor. LAB.

DANC 305. Jazz IV. 3 Hours.
Dance technique for advanced dancers based on elements of Latino, African, popular and classical jazz dance forms. May be repeated for credit. Prerequisite: DANC 205 or consent of instructor. LAB.

DANC 307. Pointe and Pas de Deux. 2 Hours.
An introduction to pointe and classical partnering work for the intermediate/advanced female ballet dancer, with equal emphasis on pointe technique and style, and on classical repertory for couples. May be repeated for credit. Prerequisite: DANC 201 or consent of instructor. LAB.

DANC 308. Pas de Deux. 1 Hour.
The exploration of classical ballet partnering (pas de deux) including supported poses, lifts, turns, and their coordination between the partners. For men only. Women enroll in Pointe and Pas de Deux, DANC 307. May be repeated for credit. Prerequisite: DANC 108, DANC 201, or permission of instructor. LAB.

DANC 309. Men's Ballet. 2 Hours.
A continuation of the study of male classical ballet technique including leaps, turns, batterie, and their presentation. May be repeated for credit. Prerequisite: DANC 109, DANC 201, or permission of instructor. LAB.

DANC 310. Music for Dance. 3 Hours.
An examination of music as accompaniment for dance in both classroom and performance settings. Students will listen and analyze music from various historic periods to develop the skills necessary to select music appropriate for choreography. They will learn techniques for working with accompanists and composers. Prerequisite: DANC 210 or consent of instructor. LAB.

DANC 320. University Dance Company. 0-1 Hours.
A dance repertory, performance and production class. Emphasis is on the development of skills for performing and/or producing dance concerts. Admission by audition only. May be repeated for credit. IND.

DANC 325. Movement Efficiency for Athletes. 3 Hours.
A course designed to improve athletic performance potential by improving initiation and follow-through of movement; improving coordination, timing, and ease of action; and reducing the risk of injury through better technique. Students will learn how to apply the basic principles of Rudolf Laban and Irmgard Barteneiff to the specialized movement skills of various sports. Students also will learn to develop individualized warm-ups and drills to improve performance. Prerequisite: Participation in team sports, dance, martial arts, other skilled sport movement, or consent of instructor. ACT.

DANC 330. Approaches to World Dance. 3 Hours. HL AE42 / H.
This course examines dance forms from throughout the world and how they relate to the times and cultures in which they evolved. Dance forms such as African, East Indian classical, European court dance, ballet, modern, and jazz will be studied through readings, master classes, live performances, videotapes, and films. Prerequisite: 200-level English course. LEC.

DANC 350. Choreography: Group Forms. 3 Hours.
In-depth development of movement themes for duet, trio, and larger groups. At least one concert length work with plans for presentation to an audience will be required. Prerequisite: DANC 250 or consent of instructor. LAB.

DANC 375. Ideokinesis. 3 Hours. H.
Basic concepts of neuromuscular and skeletal education through the use of specific imagery (ideokinesis). Based on the work of Mabel Todd, Lulu Sweigard, and Irmgard Barteneiff, the emphasis is on body connectedness and dynamic alignment. The aim is to realize full movement potential in the most efficient way through intrinsic body awareness. Injury prevention is addressed by introducing principles of conditioning (strength, flexibility, endurance) and factors leading to injury such as muscular imbalances or postural deviations. LEC.

DANC 420. Introduction to Videography and Website Design for Dance. 3 Hours. H.
This is a hands-on course exploring digital video technology for dance. Students are introduced to video and website production as well as the time management skills necessary to engage the multi-faceted project that is dance video. We will cover video techniques for recording dance; video editing; collaborating with national and international sites and artists;
and self-promotion and marketing strategies with video and websites. The final project will be the creation of a video website for each student. No previous video editing experience is required. Prerequisite: Basic computer literacy. LEC.

**DANC 430. Dance for Children. 3 Hours.**
Methods and materials for teaching creative dance and the fundamentals of dance technique to children. Lessons are prepared and tested in the classroom and then presented to elementary school children. Prerequisite: DANC 203 or consent of instructor. LEC.

**DANC 440. Introduction to Classical East Indian Dance. 3 Hours. NW AE42.**
Classical East Indian dance has an extensive movement vocabulary that emphasizes the coordination of rhythmic foot patterns with intricate hand gestures. Students will learn the mudras (hand gestures) and their significance and integration within each dance. Readings will include excerpts from the Natya Sastra and other treatises of East Indian dance and culture. LEC.

**DANC 450. Environmental Choreography. 3 Hours.**
Designing dances for non-traditional performing spaces both indoors and outdoors. Students analyze how different natural and built environments can affect the gesture, space, time, and overall structure of a dance composition as well as the relationship between performers and spectators. Prerequisite: DANC 350 or consent of instructor. LAB.

**DANC 460. Dance History: Research and Reconstruction. 3 Hours. HL AE42 / H.**
Through research and reconstruction, students will examine major topics in dance history, such as the meaning and function of dance in pre-industrial societies, communal and court dance in Europe from the 14th to the 19th centuries, and the transformation and development of dance as a theatre art in the modern world. Texts by dance historians and treatises by dancing masters will be supplemented by readings from fields, such as anthropology, philosophy, art history, and literature, that indicate the different ways of approaching the history of dance. LEC.

**DANC 470. Renaissance and Baroque Dance. 3 Hours.**
Students will analyze, interpret, reconstruct, and perform historic dance forms, such as the galliard and minuet, by working with treatises of Renaissance and Baroque dancing masters, scholarly studies, and other documentary materials. The dance forms will be studied in relation to the music, visual arts, and literature of the period. LEC.

**DANC 475. Career Preparation in the Arts. 3 Hours. H.**
Designed to provide an overview of key areas in career preparation in the arts, including resume writing, audition skills, professional speaking, grant writing and development, publicity and marketing strategies, developing relationships with presenters and funders, and audience education. Through readings, class discussion, guest lectures with professionals, and projects based on real-life scenarios, students develop tools to further their careers in the arts. This focused study also provides individuals with the direction and means to employ their training in the field of performing arts administration and management at many different levels. This course prepares students for their entry into the professional arts marketplace. LEC.

**DANC 480. Movement for Older Adults. 3 Hours.**
This course is designed to increase knowledge and understanding of the movement problems experienced by older adults and to develop the student's ability to create movement interventions to address these concerns. Prerequisite: Open to juniors and seniors only. LEC.

**DANC 490. Introduction to Flamenco Dance Technique. 3 Hours. AE42/GE3H.**
Using the basic compas (rhythmic structures) of Flamenco, we will explore the different components of flamenco dance technique: floreo (spiral fingers), brazeo (arm movements), palmas (rhythmic hand-clapping), maraje (marking, or movement through space), vueltas (turns) and zapateado (footwork). We will cultivate an awareness of flamenco's unique posture, learn the structure of the different rhythmic forms and introduce the possibilities for personal expression and improvisation. LEC.

**DANC 498. Directed Study in: 1-3 Hours.**
Investigation of a special topic or project in aesthetics, dance history, movement analysis, production, or a creative project. A maximum of six hours may be counted toward graduation. Prerequisite: At least seven hours of credit in dance courses. IND.

**DANC 530. Practicum in: 1 Hour.**
Supervised experience in teaching beginning level dance technique in the styles of ballet, jazz, or modern dance. Different approaches are analyzed, discussed, and tested in the studio. Prerequisite: Intermediate level of dance technique in the style of the practicum. FLD.

**DANC 540. Field Experience in Dance Teaching. 1-3 Hours.**
Teaching ballet, modern, or jazz dance technique to children or adults with faculty supervision in an academic or community program. Prerequisite: DANC 530 and consent of instructor. FLD.

**DANC 550. Senior Project. 3 Hours. AE61.**
In-depth research project in dance theory or history, or choreography project involving the complete development and presentation of a dance idea. Prerequisite: Performance option: DANC 320, DANC 350, DANC 450, DANC 290 (for BA students only) and permission of the dance division. Research option: DANC 340, DANC 370, DANC 375, DANC 460, DANC 462, DANC 290 (for BA students only) and permission of the dance division. IND.

**DANC 580. Special Topics in Dance. 1-3 Hours.**
A study of current developments in dance with an emphasis on performance or research. May be repeated for credit. Prerequisite: Junior or senior standing and consent of instructor. IND.

**DANC 598. Seminar in Dance. 3 Hours.**
Special studies in dance. May be repeated for credit. Prerequisite: Junior or senior standing and consent of instructor. LEC.

**DANC 735. Analysis, Criticism, and Choreography. 3 Hours.**
The choreographic approaches of outstanding dance masters of the past (for example, Marius Petipa and Isadora Duncan) and present (for example, Martha Graham and Merce Cunningham) will be analyzed in terms of their handling of gesture, time, space, structure, and meaning. Students will be expected to seek out and study readings, photographs, and films in order to do written and performance projects based on the choreographic principles of old and new masters in ballet and modern dance. Prerequisite: A course in dance choreography or consent of instructor. LEC.

**DANC 740. Introduction to Laban Movement. 3 Hours.**
This course will introduce both the theoretical and physical applications of Laban Movement Analysis: Effort/Shape Notation (a notation system recording changes in movement qualities with respect to time, weight, space, and energy flow); Space harmony (a system that describes human movement in relation to space); Bartenieff Movement Fundamentals (a series of basic exercises to integrate and facilitate the neuromuscular connections within the body); and Laban Movement Analysis to the fields of anthropology, dance, human development, industrial efficiency, the performing arts, physical education, physical therapy, and psychology will be introduced. LAB.
DANC 742. Laban Movement Observation, Analysis, and Notation. 3 Hours.
Two systems of symbolic movement notation will be used in this course: Rudolf Laban’s Effort/Shape Writing and his system of Labanotation. Several applications of Laban’s notational systems will be studied as they appear in cross-cultural, developmental, psychological, and sociological research. Emphasis will be placed on refining the student’s ability to perceive, describe, and notate human movement of all kinds from everyday gestures to highly trained movement skills. Prerequisite: DANC 740 or consent of instructor. LAB.

DANC 780. Movement for Older Adults. 3 Hours.
This course is designed to increase knowledge and understanding of the movement problems experienced by older adults and to develop the student’s ability to create movement interventions to address these concerns. Prerequisite: Open to graduate students in any field of study. LEC.

DANC 898. Directed Study in: ____. 1-3 Hours.
Directed study in some aspect of aesthetics, dance history, movement analysis, production, or an advanced creative project. Prerequisite: Consent of instructor. IND.

Film and Media Studies Courses

FMS 100. Introduction to the Film Medium. 3 Hours. HL / H.
Study of film as a visual art. Focus on communicative transaction between film viewer and film maker. Learning to read basic signs, syntaxes, and structures of cinematic language. Direct analysis of selected films. LEC.

FMS 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Film and Media Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

FMS 200. Film and Media Aesthetics. 3 Hours. HL GE3H / H.
An introduction to film and media aesthetics, including basic film/media theories and their practical applications. Students will be introduced to the concepts of time, space, composition, movement, editing, light, color, and sound. A key feature of the course will be a practical emphasis on learning how to see creatively by applying elements of design, camera lens and sound recording principles. Examples of these aspects of film and associated media will be examined and discussed in depth. Should be taken before or concurrently with FMS 275 or FMS 276. LEC.

FMS 204. Study Abroad Topics in: ____. 1-6 Hours. H.
This course is designed for the study of special topics in Film at the freshman/sophomore level. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

FMS 273. Basic Screenwriting. 3 Hours. H.
An introduction to the craft and principles of screenwriting, from inspiration to writing a complete first act. Emphasis on factors relevant to the creation of a treatment and a screenplay. Prerequisite: Consent of instructor. LEC.

FMS 275. Basic Video Production. 3 Hours. H.
Theory and practice of video production with emphasis on production planning, scripting, directing, lighting, camera operation and audio. Lecture-laboratory. Prerequisite: FMS 100, completion of or concurrent enrollment in FMS 200, and consent of instructor. LEC.

FMS 276. Basic Film Production. 3 Hours. H.
An introduction to 16mm film techniques and structures, requiring construction of brief, individually produced fictive-narrative films employing classical continuity. Lecture-laboratory. Prerequisite: FMS 100 and consent of instructor. LEC.

FMS 302. Undergraduate Studies Seminar in: ____. 1-3 Hours. H.
Course organized any given semester to examine a particular studies topic or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. LEC.

FMS 303. Undergraduate Production Seminar in: ____. 1-3 Hours. H.
Course organized any given semester to study a particular production topic or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. LEC.

FMS 304. Study Abroad Topics in: ____. 1-6 Hours. H.
This course is designed for the study of special topics in Film at the junior/senior level. Credit for course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

FMS 307. Undergraduate Film/Media Internship. 1-6 Hours. H.
Supervised study with an approved film/media company or project. May be repeated for credit. No more than six hours may be applied to the B.A. or B.G.S. degrees. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Consent of instructor and at least seven hours credit in the department. LEC.

FMS 310. History of the Silent Film. 3 Hours. H.
A survey of the artistic, economic and sociological development of the narrative cinema with emphasis on the American studio system, German Expressionism, and Soviet Expressive Realism. Analysis of selected films. LEC.

FMS 311. History of the American Sound Film. 3 Hours. HL / H.
A study of the artistic, economic, and sociological development of the American sound film with emphasis on the studio system, major directors, genres, and the impact of television. Analysis of selected films. LEC.

FMS 312. History of the International Sound Film to 1950. 3 Hours. H.
A survey of the artistic, economic, and sociological development of the international sound film 1929 to 1950. Emphasis on European National Cinemas. LEC.

FMS 313. History of the International Sound Film Post 1950. 3 Hours. H.
A survey of the artistic, economic, and sociological development of the international sound film from 1950 to the present. Emphasis on Free Cinema, New Wave, and other emerging post-war cinemas. LEC.

FMS 314. History of African-American Images in Film. 3 Hours. HL AE41 / H.
A history and critical assessment of the diverse images of African-Americans in American cinema and the impact of those images on American society. Screenings of feature and independent films, including those by African-Americans. LEC.

FMS 315. Survey of Japanese Film. 3 Hours. NW AE42 / H.
This course surveys the major developments in and critical approaches to twentieth-century Japanese film. Focusing mostly on narrative films, Survey of Japanese Film introduces students to basic methodological issues in Japanese film history, especially questions of narrative, genre, stardom, and authorship. We examine Japanese cinema as an institution located within specific contexts focusing on the ways in which this institution shapes gender, class, ethnic, and national identities. This course examines how patterns of distribution, exhibition, and reception have influenced film aesthetics and film style over the last century. Through secondary readings, lectures, and discussions students critically examine how Japanese cinema as an institution both responds to and
intervenes in the social, cultural, and political history of twentieth century Japan. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. (Same as EALC 315.) LEC.

**FMS 316. Cinemas of the Southern Cone: Argentina, Chile, and Uruguay. 3 Hours. AE41 / H.**

This course will examine the cinemas of three neighboring South American countries to find similar themes and some differences between them historically, politically, and culturally. Themes will include: gender and nation, political repression during dictatorship, globalization and the cinema, youth culture in the Southern Cone, and representations of race and ethnicity, immigration and identity in contemporary cinema. Other themes in common are financing issues, such as co-production agreements, film production under the regional trade pact Mercosur and issues of circulation, distribution and marketing of national films. Most films will be feature length narrative, but a few documentaries will be shown. May be taken as FMS 716, but with additional requirements. LEC.

**FMS 317. Race and the American Documentary. 3 Hours. H.**

This course surveys a range of documentaries in which race is a key part. There are two class objectives: the first is to broaden the students' knowledge of American social history and culture, especially around issues of identity, representation and race. The second is to heighten the students' critical skills as viewers of films in general. A complete film or portion is screened at each class session, preceded by an introductory lecture, and a follow-up discussion. Readings from a variety of scholarly texts are excerpted for student review prior to a particular class. LEC.

**FMS 318. Anti-war Film. 3 Hours. H.**

An overview and exploration of the history of anti-war film and media themes to show how attitudes regarding war and political policy can be affected by positive and negative depictions of conflict. Course includes analysis of selected films. LEC.

**FMS 320. Adaptation from Stage to Screen. 3 Hours. H.**

In an increasingly global media economy, adaptation study offers an enterprising model for the cross-pollination of texts across historical, national, and cultural boundaries. Although this course focuses more specifically on adaptations and adaptation processes involving theatrical events and cinematic properties, this larger view should be kept in mind. The course will consist of readings, screenings, and presentations by faculty in the Department Film and Media Studies and the Department of Theatre addressing theoretical issues, case studies, and intertextual considerations, and an historical overview of theatre-film interaction. LEC.

**FMS 345. New Media and Society. 3 Hours. H.**

Students will be introduced to major themes and debates in digital media studies and apply critical approaches for understanding new media practices, technologies, and theories. In addition to readings and lectures, students will engage in a variety of digital activities and participate in production-oriented projects. By the end of the course students will gain a foundational understanding of historical and emerging relationships between new media (internet, cell phones, digital games, etc.) and society, acquire key digital skills, and experience a variety of new media texts and services. This course is offered at the 300 and 700 levels, with additional assignments at the 700 level. LEC.

**FMS 373. Intermediate Screenwriting. 3 Hours. H.**

Emphasis on writing a full-length screenplay. Explores genre, character, dialogue, and the development of a personal writing style. Prerequisite: FMS 273 and consent of instructor (students will be selected based on writing samples). LEC.

**FMS 374. Animation. 3 Hours. H.**

A survey that combines animation history, theory, and production by examining animated works of all kinds and exploring various styles utilizing both hands-on techniques and digital animation programs. Lecture-laboratory. LEC.

**FMS 375. Intermediate Video Production. 3 Hours. H.**

Theory and practice of longer-form video production with emphasis on scripting, talent coordination and editing in preproduction, production and postproduction. Lecture-laboratory. Prerequisite: FMS 275 and consent of instructor. LEC.

**FMS 376. Cinematography. 3 Hours. H.**

Theory and practice of cinematography, with emphasis on creation of film, video, and digital imagery. Prerequisite: FMS 275 or FMS 276, and consent of instructor. LEC.

**FMS 377. Post-Production. 3 Hours. H.**

Students become familiar with techniques and processes in film and video post-production including, but not limited to, editing, sound, post-production management, marketing, and distribution. This course is offered at the 300 and 700 levels, with additional assignments at the 700 level. Prerequisite: FMS 275 and consent of instructor. LEC.

**FMS 380. American Popular Culture of: ______. 3 Hours. HL / H.**

An interdisciplinary examination of popular cultural forms and their relationships with the social, political and economic dynamics of America, with emphasis on film, media, music, literature (including magazines and newspapers) and the graphic arts. The decade or other specific topic to be studied changes as needs and resources develop. May be repeated for credit for different decades or topics. LEC.

**FMS 401. Undergraduate Professional Development Seminar. 1 Hour. H.**

Provides an overview of opportunities for professional development in Film and Media Studies, and helps students plan goals for their education through an understanding of professional practices. The course also covers practical exercises in professional development, including writing resumes, finding internships and entry-level work, and other aspects of establishing a career in Film and Media Studies. Prerequisite: FMS 275 or equivalent. Open to FMS Majors only. Graded satisfactory/unsatisfactory. LEC.

**FMS 407. Undergraduate Film/Media Service Learning Internship. 1-6 Hours. H.**

Supervised study with an approved government agency, established non-profit organization, school, or community-based partner to produce a professional-level film and/or media project in the public interest. Community work should meet the needs of the community-based organization and the education goals set by the student, instructor, and community based partner; be in direct service, indirect service, policy analysis, research, and/or advocacy work; engage the student with individuals or communities of need and with issues related to social justice, community development, and/or access to resources. May be repeated for credit. No more than six hours may be applied to the B.A. or B.G.S. degrees. Graded satisfactory/unsatisfactory. Prerequisite: Consent of instructor and at least 22 credit hours in the department. FLD.

**FMS 410. Race, Class, and Gender in Visual Culture. 3 Hours. H.**

Examines the way in which race, class, and gender are represented through visual culture, historically and in the present. The study of visual culture analyzes the way in which visual images communicate systems of beliefs, contribute to identity formation, and have an influence on our thinking about race, class, and gender. Course looks at visual objects, i.e., film, television, photography, art, advertisements, and theatre as well as visual practices, i.e., in public and private spaces. LEC.

**FMS 411. Television Studies. 3 Hours. H.**

A historical, theoretical and critical survey of U.S. television from 1945 to the present from the public's perspective, with emphasis on the early
influences of radio (e.g., Federal regulation and sponsorship), film and theatre; TV's rapid rise as the U.S. public's prime source of entertainment, news and information; TV's rise as a key cultural, economic and political phenomenon; TV's more recent accommodations to the forces of globalization, new technologies/media, and new business models through convergence. Discussion and screening of representative TV texts as seen against the backdrop of the theories and critical views of TV scholars ranging from Raymond Williams and John Fiske to Henry Jenkins. LEC.

FMS 412. Cyberculture Studies. 3 Hours. H.
Historically there has been a tendency to approach new media technologies and their proliferation as either utopic or dystopic. Cyberculture studies has been no exception. Students will work toward a comprehensive understanding of cyberculture as emergent computer networks forming around and constructing entertainment, knowledge, business, community, and identity. Cyberculture will be examined as the constant (re)organizing of virtual and physical relationships as well as the reorganization of media production, distribution and consumption. The variety of opportunities for computer-mediated human interaction such as social networks, virtual worlds, blogs, and games will be examined as cyberculture transposes online and offline relationships and practices. LEC.

FMS 413. Asian Media Studies. 3 Hours. H.
This course examines new and emerging media in East Asia and how the media industries of East Asia function. Using recent scholarship and industry data on contemporary cyberculture, music studies, and television industries of East Asia we examine how such factors as globalization, post-colonialism, censorship, emerging technology, and national media legislation affect regional and transnational media industries in Japan, South Korea, and Mainland China/Taiwan/Hong Kong. (Same as EALC 413.) LEC.

FMS 414. Kansas Art, History, and Popular Culture. 3 Hours. H.
An overview of the art and cultural history of Kansas (and Kansas City) from territorial days to the present. Emphasis is placed on key issues, figures and events. A general familiarity with American history is recommended. May be taken as FMS 714, but with additional requirements. (Same as HA 584.) LEC.

FMS 475. Advanced Video Production. 3 Hours. H.
Special projects in video production, using both studio and remote locations. Prerequisite: FMS 375 and consent of instructor. LEC.

FMS 477. Sound Design. 3 Hours. H.
Students will study and produce film and video work with an emphasis on sound design theory and practice. Course projects consist of several short works in response to readings and screenings, which include a survey of sound in cinema, internet and radio. Students will also become conversant with related equipment, software and techniques. Prerequisite: FMS 275 and consent of instructor. LEC.

FMS 478. Experimental Production. 3 Hours. H.
Students will produce experimental film and video projects, including installation art and performance art pieces, in both collaborative and a collaborative production modes. Practical production aspects of historical experimental works will be studied, with emphasis on creation of works inspired by these earlier artists and their work. Unorthodox video and film production concepts and modes will also be studied and used in the creation of original works. The incorporation of experimental elements in the creation of mainstream works, and the creation of such projects, will also be a key area of study and experimentation. By pushing their individual creative limits, students will gain an appreciation for the experimental film and video genre, as well as an expansion of their production skills. Prerequisite: FMS 275 and consent of instructor. LEC.

FMS 479. Broadcast Documentary Production. 3 Hours. H.
This is a hands-on production course in which students will research, plan and produce short-form non-fiction documentaries. The class is dedicated to training young professionals in the principles, skills, techniques, habits and practices of documentary production. We will focus also on the aesthetics of our craft and the documentary form. The objective is to ground students in the fundamental skills of good non-fiction storytelling-conceptualization, research, story structure, theme development, writing, producing and directing. The goal is the production of several short-form compositions (videos) where storytelling is employed to communicate a concept or idea effectively. Students will form into teams to research, develop and produce a course-long short-form documentary. Prerequisite: FMS 275 and consent of instructor. LEC.

FMS 480. Music Video Production. 3 Hours. H.
This course will cover elements of the history, aesthetics, and business of music video and music video production. Students will view and discuss many different types of music videos, and will learn how to classify and critique these videos in a professional manner. Students will gain familiarity with the genres, themes, forms, and iconography of music video; an understanding of the place of music video in media culture; an exploration of the ideological, cultural, and historical contexts of music video; and an ability to create or assist in the creation of professional-quality music videos. Prerequisite: FMS 275 and consent of instructor. LEC.

FMS 498. Honors Seminar. 2-6 Hours. AE61 / H.
Study may be directed toward either (a) reading for integration of knowledge and insight in film and media, or (b) original research (i.e., investigation of a specific problem in film and media). Six hours maximum credit. Prerequisite: Consent of Departmental Honors Coordinator. LEC.

FMS 499. Directed Study in Film. 1-6 Hours. AE61 / H.
Investigation of a special topic or project selected by the student with advice, approval, and supervision by an instructor. Such study may take the form of directed reading or special research. Individual reports and conferences. A maximum of six hours credit may be counted toward a degree. Prerequisite: At least seven hours credit in the department and consent of instructor. IND.

FMS 530. Classical Film/Media Theory. 3 Hours. H.
Comprehensive examination of most significant theories and theorists of film. Organized around specific questions, e.g., what qualities make film art unique, and how is film related to other visual and literary arts? Class discussion, individual projects. Prerequisite: FMS 100 or equivalent (determined by instructor). LEC.

FMS 531. Contemporary Concepts in Media Studies. 3 Hours. H.
This course emphasizes a theoretical understanding of media and media production skills. It is a critical cultural study of the media, focusing on the relationships between media representations and society. Students explore different conceptual perspectives on the role and power of visual media in society in influencing social values, political beliefs, identities and behaviors; analyze specific media texts, such as film and television shows; and examine the dynamics of how class, gender, generation, and race influence the production and reception of media. LEC.

FMS 540. Cuban Cinema. 3 Hours. H.
This course explores Cuban cinema from 1959 to the present day. Special attention is paid to the representations of Cuban history, cultural politics, and the political-economic conditions of production in Cuba. In addition, the Cuban-American community and their contributions or reactions to Cuban film are discussed. Through readings, lectures, discussion, and viewing Cuban films, the class examines a variety of topics related to Cuban cinema, history, and contemporary concerns. This course is
offered at the 500 and 800 levels, with additional assignments at the 800 level. Prerequisite: Junior standing. LEC.

FMS 541. Asian Film. 3 Hours. NW AE42 / H.
Seminar on various national film cultures of East and Southeast Asia. Representative films are studied from formal, stylistic, and socio-historic perspectives. Addresses the impact of key cultural, economic, and political issues on each film industry. Class discussion, reports, and individual research papers. The course is offered at the 500 and 800 levels, with additional assignments at the 800 level. (Same as EALC 541.) Prerequisite: Junior status. LEC.

FMS 542. Latin American Film. 3 Hours. H.
The course explores the national cinemas and film industries of various nations in Latin America, as well as films made by Indigenous and Chicano/a filmmakers. Films are analyzed both as artistic works (formal qualities, cinematic styles, and influences) and as documents that provide windows to the socio-historical context of the nation. The course focuses on the political-economic factors surrounding the production of Latin American national cinema (the role of the state, coproductions, film markets). Prerequisite: Junior status. May be taken as FMS 842. There will be additional requirements for graduate students taking FMS 842. LEC.

FMS 543. Contemporary Japanese Film. 3 Hours. NW AE42 / H.
Seminar on the major developments in the contemporary (1980-present) Japanese film industry examining how filmmaking practices and film criticism have been influenced by such issues as transnationalism, postcolonialism, critical race theory, postmodernism, and new media. We survey recent Industrial and stylistic trends as well as key critical debates. Class discussion, reports, and individual research papers. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. (Same as EALC 543.) Prerequisite: Junior status. LEC.

FMS 544. African Film. 3 Hours. NW / H.
A critical study of Africa and its peoples as depicted in films. The aesthetic, cultural, economic, political, historical, and ideological aspects of African films are examined. (Same as AAAS 555.) LEC.

FMS 585. Capstone in Film and Media Studies. 3 Hours. H.
This course integrates the knowledge and skills acquired across the curriculum of Film Media Studies including primarily academic studies, but also production and other related disciplines to enable the student to demonstrate achievement through the production of a major creative research project. Prerequisite: Must be admitted to the Film and Media Studies B.A. or B.G.S. degree. Must have completed one FMS production course. Must have Departmental permission to enroll. LEC.

FMS 592. Documentary Film and Video. 3 Hours. H.
An historical and theoretical survey of that major genre of film and video typically termed "documentary." The course will trace the main historical developments from documentary's beginnings through contemporary innovations. Prerequisite: FMS 100 and FMS 310, FMS 311, or consent of instructor. LEC.

FMS 593. Experimental Film and Video. 3 Hours. H.
A history of experimental film and video through an examination of major artists, movements, theories, and films/tapes. Prerequisite: FMS 100 and FMS 310, or consent of instructor. LEC.

FMS 620. International Women Filmmakers. 3 Hours. H.
This course examines films made by women around the world. Mainstream and independent fiction, documentary, and experimental works will be screened and discussed. The objectives of the course are: 1) to learn the variety of films made by women and the conditions of their production, distribution, reception, 2) to interrogate the idea of women's cinema as `counter-cinema'. We will acquire tools for analyzing films in terms of economic, aesthetic, cultural, and political circumstance by women of different countries, classes, races, ethnicities, genders, and sexual preferences. LEC.

FMS 621. American Film Criticism. 3 Hours. H.
An analysis of the evolution, methods and impact of American film criticism as practiced by such critics as James Agee, Robert Warshow, Andrew Sarris, John Simon, Pauline Kael, Stanley Kauffman, and Dwight Macdonald. Prerequisite: FMS 310 or FMS 311. LEC.

FMS 673. Problems in Basic Screenwriting. 3 Hours. U.
The principles of screenwriting are developed through scene writing and analysis culminating in the writing and structure of a full-length, three-act screenplay. In addition to the class sessions taught with FMS 273 Basic Screenwriting, separate consultations and specific research assignments for graduate students in FMS 673 are also required. LEC.

FMS 675. Problems in Basic Video Production. 3 Hours. U.
Theory and practice of single-camera video production with emphasis on preproduction planning, scripting, directing, lighting, camera operation and audio. In addition to the class sessions taught with FMS 275 Basic Video Production, separate consultations and specific research assignments for graduate students in FMS 675 are also required. Lecture-laboratory. LEC.

FMS 702. Graduate Seminar in: _____. 1-3 Hours.
Course organized any given semester to study particular subject matter or to take advantage of special competency by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. SEM.

FMS 704. Study Abroad Topics in: _______. 1-6 Hours.
This course is designed for the study of special topics in Film. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

FMS 707. Film/Media Internship. 3-12 Hours.
Study with an approved film or media company. Emphasis may be in one or all of the following areas: acting, directing, or promotion management. No more than six hours may be applied to an M.A. degree. Course will be graded satisfactory/unsatisfactory. Prerequisite: Consent of instructor. FLD.

FMS 714. Kansas Art, History and Popular Culture. 3 Hours.
An overview of the art and cultural history of Kansas (and Kansas City) from territorial days to the present. Emphasis is placed on key issues, figures and events. A general familiarity with American history is recommended. In addition to the lecture sessions taught in tandem with FMS 414, additional research component, lecture presentation, and class meeting are also required. LEC.

FMS 715. Survey of Japanese Film. 3 Hours.
This course surveys the major developments in patterns of distribution, exhibition, and reception and their influence on film aesthetics in twentieth century Japanese film. Through secondary readings, lectures, and discussions students will examine how Japanese cinema, as an institution, responds to and intervenes in the social, cultural, and political history of twentieth century Japan. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. (Same as EALC 715.) LEC.
FMS 716. Cinemas of the Southern Cone: Argentina, Chile, and Uruguay. 3 Hours.
This course will examine the cinemas of three neighboring South American countries to find similar themes and some differences between them historically, politically, and culturally. Themes will include: gender and nation, political repression during dictatorship, globalization and the cinema, youth culture in the Southern Cone, and representations of race and ethnicity, immigration and identity in contemporary cinema. In addition to the lecture sessions taught in tandem with FMS 316, additional research component, lecture presentation, and class meeting are also required. LEC.

FMS 717. Race and the American Documentary. 3 Hours.
This course will survey a range of documentaries in which race is a key part of the film’s text. There are two class objectives: to broaden the student’s knowledge of American social history and culture, especially around issues of identity, representation and race, and to heighten the student’s ability as a critical viewer of films. This course will include: film viewing, scholarly readings, and lectures. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. LEC.

FMS 718. Anti-war Films. 3 Hours.
An overview and exploration of the history of the portrayal of anti-war film and media themes to show how anti-war attitudes and political policy can be affected by positive and negative depictions of conflict. Analysis of selected films. FMS 318 and FMS 718 will meet concurrently, though separate consultations and specific research assignments for FMS 718 are also required. LEC.

FMS 743. Contemporary Japanese Film. 3 Hours.
Seminar on the major developments in the contemporary (1980-present) Japanese film industry examining how filmmaking practices and film criticism have been influenced by such issues as transnationalism, postcolonialism, critical race theory, postmodernism, and new media. We will survey recent industrial and stylistic trends as well as key critical debates. Class includes discussion, reports, and individual research papers. This course is offered at the 500 and 700 levels, with additional assignments at the 700 level. (Same as EALC 743.) SEM.

FMS 745. New Media and Society. 3 Hours.
Students will be introduced to major themes and debates in digital media studies and apply critical approaches for understanding new media practices, technologies, and theories. In addition to readings and lectures, students will engage in a variety of digital activities and participate in production-oriented projects. By the end of this course students will gain a foundational understanding of historical and emerging relationships between new media (internet, cell phones, digital games, etc.) and society, acquire key digital skills, and experience a variety of new media texts and services. This course is offered at the 300 and 700 levels, with additional assignments at the 700 level. LEC.

FMS 773. Problems in Intermediate Screenwriting. 3 Hours.
The principles of screenwriting are developed through scene writing and analysis culminating in the writing and structuring of a full-length, three act screenplay. In addition to the class sessions taught with FMS 373 Intermediate Screenwriting, separate consultations and specific research assignments for graduate students in FMS 773 are also required. LEC.

FMS 774. Animation. 3 Hours.
A survey that combines animation history, theory, and production by examining animated works of all kinds and exploring various styles utilizing both hands-on techniques and digital animation programs. This course is offered at the 300 and 700 levels, with additional assignments at the 700 level. Lecture-laboratory LEC.

FMS 775. Problems in Intermediate Video Production. 3 Hours.
Theory and practice of multiple-camera video production with emphasis on preproduction planning, scripting, directing, lighting, camera operation, and audio. In addition to the class sessions taught with FMS 375 Intermediate Video Production, separate consultations and specific research assignments for graduate students in FMS 775 are also required. Lecture-laboratory. LEC.

FMS 776. Problems in Cinematography. 3 Hours.
Theory and practice of cinematography, with emphasis on creation of film, video, and digital imagery. FMS 776 meets concurrently with FMS 376; students enrolled in the graduate-level course will have separate consultations and specific research assignments. Lecture-laboratory. Prerequisite: Consent of instructor and FMS 675 or FMS 676. LEC.

FMS 777. Post-Production. 3 Hours.
Students will become familiar with techniques and processes in film and video post-production including, but not limited to, editing, sound, post-production management, marketing, and distribution. This course is offered at the 300 and 700 levels, with additional assignments at the 700 level. Prerequisite: Consent of instructor. LEC.

FMS 800. Introduction to Graduate Study in Film/Media. 3 Hours.
Major emphasis is placed upon the principles of research, bibliographical data, and research methods useful in film and television. The course should be taken at the beginning of the graduate student's program. LEC.

FMS 801. Professional Development Seminar. 1 Hour.
Preparation and training for faculty careers in film and related fields, including research skills and methods, responsible scholarship, teaching, and service. Other topics vary from semester to semester. May be repeated for credit. SEM.

FMS 802. Master's Projects. 3-6 Hours.
Advanced creative projects which may be elected by master's degree candidates in lieu of thesis. RSH.

FMS 810. Development of the Silent Film. 3 Hours.
Intensive study of the artistic, economic, and sociological development of the silent narrative film with emphasis on the evolution of the American studio system, German Expressionism, and Soviet Expressive Realism. LEC.

FMS 811. Development of the American Sound Film. 3 Hours.
Intensive study of the artistic, economic, and sociological development of the American sound film with emphasis on the studio system, major directors, genres, and the impact of television. LEC.

FMS 813. Development of the International Sound Film. 3 Hours.
Intensive study of the artistic, economic, and sociological development of the international sound film with emphasis on the cinemas of England, France, Italy, Germany, Sweden, and Eastern Europe. LEC.

FMS 814. Development of African-American Images in Film. 3 Hours.
A history and critical assessment of the development of diverse images of African-Americans in American cinema and the impact of those images of American society. Screenings of feature and independent films, including those by African-Americans. In addition to the lecture/screening sessions taught in tandem with FMS 314, a separate discussion section and specific research assignments for graduate students enrolled in FMS 814 are also required. LEC.

FMS 840. Cuban Cinema. 3 Hours.
This course explores Cuban cinema from 1959 to the present day. Special attention will be paid to the representations of Cuban history, cultural politics, and the political-economic conditions of production in Cuba. In addition, the Cuban-American community and their contributions or reactions to Cuban film will be discussed. Through readings, lectures,
discussion, and viewing Cuban films, the class will examine a variety of
topics related to Cuban cinema, history, and contemporary concerns. This
course is offered at the 500 and 800 levels, with additional assignments at
the 800 level. LEC.
FMS 841. Asian Film. 3 Hours.
Seminar on various national film cultures of East and Southeast Asia.
Representative films are studied from formal, stylistic, and socio-historic
perspectives. Addresses the impact of key cultural, economic and political
issues on each film industry. Class includes discussion, reports, and
individual research papers. This course is offered at the 500 and 800
levels, with additional assignments at the 800 level. (Same as EALC 841.)
SEM.
FMS 842. Latin American Film. 3 Hours.
The course explores the national cinemas and film industries of various
nations in Latin America, as well as films made by indigenous and
Chicano/a filmmakers. Films are analyzed both as artistic works (formal
qualities, cinematic styles, and influences) and as documents that provide
windows to the socio-historical context of the nation. The course focuses
on the political-economic factors surrounding the production of Latin
American national cinema (the role of the state, co-productions, film
markets). LEC.
FMS 862. Survey of Film and Media History. 3 Hours.
This seminar will be primarily international in scope and will concentrate
on the following: technological and production issues relating to the
transition in 1927-1931 of silent to sound film; the constructions of national
identity, including those of recently emerging cultures; a comparison and
contrast of the censorial agencies in America and abroad; and current
revisionist perspectives on received film and media history. SEM.
FMS 863. Survey of Documentary and Experimental Film and Media.
3 Hours.
Surveys the important historical and theoretical issues pertinent to
both the documentary and experimental approaches as expressed in
film, video and new technologies. Includes major documentary and
experimental genres, directors, national schools, artistic movements, and
landmark works. Screenings reflect a chronology from origins to present-
day. LEC.
FMS 864. Classical Film and Media Theory. 3 Hours.
This seminar is a comprehensive survey of the major classical film and
media theories and theorists, such as Münsterberg, Eisenstein, Arnheim,
Bazin, and Adorno. Organized around specific questions, e.g.: What
qualities differentiate film and media from other art and communications
forms? What qualities do film and media share with other art and
communication forms? What qualities differentiate film from other forms
of media such as television? Readings from primary sources stressed. Class
discussion, individual research papers. SEM.
FMS 865. Contemporary Film and Media Theory. 3 Hours.
This seminar is a study of the theories applied to the study of film and
media since the 1970s moving through structuralism, and into these posts: -
structuralism, -modernism, -colonialism, and beyond. Within these broad
paradigms some of the theories examined in depth are cinesemiotics,
Marxism, cinematic apparatus, feminist film theory, reception theory, new
media and virtual reality. SEM.
FMS 875. Problems in Advanced Video Production. 3 Hours.
Special projects in video production, using both studio and remote
locations. In addition to the class sessions taught with FMS 475
Advanced Video Production, separate consultations and specific research
assignments for graduate students in FMS 875 are also required.
Prerequisite: FMS 775 or consent of instructor. LEC.
FMS 880. Development of American Popular Culture in the: _____. 3
Hours.
Intensive interdisciplinary examination of popular culture forms and their
relationships with the social, political, and economic dynamics of America
in a specific decade, with emphasis on film, broadcasting, theatre, music
literature (including magazines and newspapers), and the graphic arts.
Decade to be studied changes as resources and needs develop. LEC.
FMS 887. Film and the Public. 3 Hours.
A study of the actual and implied responsibilities of film and video to
the public, as seen in regulations, self-regulatory codes, and the critical
literature of the field. Prerequisite: Consent of instructor. LEC.
FMS 888. Special Problems in Film History and Criticism. 1-4 Hours.
RSH.
FMS 895. Intensive Film Project Seminar. 1-4 Hours.
The student plans and executes an intensive special project which
requires the professional skills of investigation and performance
appropriate to radio, television and/or film. May be repeated for credit up
to a maximum of six credit hours. (This seminar is to the special project
program what "thesis" is to the traditional program.) RSH.
FMS 897. Practicum in Film. 1-3 Hours.
Various approaches to the illustration of principles of production in film
and/or video through the supervision of laboratory exercises and
subsequent evaluation by the Theatre and Film graduate faculty. FLD.
FMS 898. Investigation and Conference (for Master's Students). 1-8
Hours.
Directed research and experimentation in film or media. Limited to eight
hours credit toward the Master's degree. RSH.
FMS 899. Master's Thesis. 1-6 Hours.
THE.
FMS 902. Film Seminar in: _____. 3 Hours.
A graduate seminar devoted to selected historical, theoretical, or critical
issues. Prerequisite: Consent of instructor. LEC.
FMS 998. Investigation and Conference (for Doctoral Students). 1-8
Hours.
RSH.
FMS 999. Doctoral Dissertation. 1-12 Hours.
THE.

Theatre Courses
THR 100. Introduction to the Theatre. 3 Hours. HL GE3H / H.
Designed to help students by means of experience with theatre as
well as study about it to achieve an understanding of its cultural role in
contemporary society, to develop a sensitive and informed appreciation
of its art, and to make it an integral part of their cultural lives. Lectures,
discussion groups, special interest groups, theatre attendance. LEC.
THR 101. Theatre Practicum I. 1 Hour. H.
Involvement in theatre performance and/or production. One acting role
in a University Theatre production or classroom project plus one crew
assignment, or two crew assignments qualify for credit. May be repeated
for credit ACT.
THR 105. Improvisation. 3 Hours. H.
Designed to free the beginning actor physically, vocally, and emotionally.
Beginning with basic physical action and sense memory exercises
performed by individuals, the work will progress to pair and small-group
improvisations in preparation for scene work. Open to freshmen and
sophomores only. LEC.
THR 106. Acting I. 3 Hours. HL GE3H / H.
Fundamental techniques in acting. Practice in character creation, body language, and effective stage speech. LEC.

THR 111. Make-Up. 1 Hour. H.
The techniques in application of make-up for specific characterizations, both straight and character. Study of the structure of the face and hands for stage make-up. Should be taken concurrently with THR 106, if possible. LEC.

THR 116. Scenographic Techniques. 3 Hours. H.
Emphasis on drafting, model building, and presentational techniques for the theatrical designer or art director. Some work in computer drafting for the designer-technician. Lecture and laboratory periods. LEC.

THR 120. Public Speaking as Performance. 3 Hours. GE22 / H.
This course offers students a unique embodied approach to public speaking. Students will compose and deliver presentations. Theatre games, improvisational techniques, and vocal exercises will help students gain awareness of how mind, body, and speech interrelate. Students will learn to manage performance anxiety, organize a narrative, speak extemporaneously and articulate clearly. Texts used in acting training will supplement a public speaking textbook. Through a combination of speech assignments and theatre exercises, this course will teach students to generate, explore, organize, interpret, and express ideas orally; to use language and media to express ideas clearly and confidently; and integrate body and mind to serve speaking needs in a variety of contexts and across social, cultural, and disciplinary boundaries. LEC.

THR 177. First Year Seminar: . 3 Hours. HT GE11.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in Theatre. May not contribute to major requirements in theatre. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

THR 201. Theatre Practicum II. 1 Hour. H.
Involvement in theatre performance and/or production. One acting role in University Theatre production or classroom project plus one crew assignment, or two crew assignments qualify for credit. May be repeated for credit. Prerequisite: THR 101. ACT.

THR 204. Study Abroad Topics in: . 1-6 Hours. H.
This course is designed for the study of special topics in Theatre at the freshman/sophomore level. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

THR 206. Acting II. 3 Hours. H.
The study of roles and scenes from plays. Practice in character analysis, creation of roles, rehearsal of scenes, and ensemble work. Prerequisite: THR 106. LEC.

THR 209. Play Reading for Performance. 3 Hours. H.
This course is designed to prepare students for upper-level courses in theatre by developing and enhancing their ability to read plays. Close reading of plays introduces students to a variety of different dramatic genres and theatrical styles. Emphasis is placed on comprehension and analysis of dramatic literature for theatrical performance. LEC.

THR 210. Musical Performance for the Actor I. 3 Hours. H.
Beginning Studies in Musical Theatre Performance: practical application of voice, acting and movement techniques for musical theatre, solo and group performance. LEC.

THR 212. Beginning Voice and Speech for Actors. 3 Hours. H.
A foundation course; introduction to phonic exposure; training in Standard American Stage Speech; articulation skills; resonance and voice placement. LEC.

THR 213. Movement I: The Acting Instrument. 3 Hours. H.
A foundational course in discovering ease and efficient use of the body in a performance context, developing non-verbal communication and partnering skills, and establishing the connection of movement to voice production. Trains actors in proper warm-up technique, alignment and balance, physical safety, and basic tumbling skills. LEC.

THR 215. Approaching Design. 3 Hours. HL GE3H / H.
Conceptualization and visualization of the elements involved in creative design for theatre, dance, television, and film. LEC.

THR 216. Scenic Production. 2 Hours. H.
Introduction to the planning, construction, and mounting of scenery for theatre, television, and film. Concentration on the technical organization of scenic production. Lecture, discussion, and laboratory periods. LEC.

THR 220. Costume Production. 2 Hours. H.
Introduction to techniques of costume construction, including study of fabrics, color, fundamentals of pattern making, and draping of costumes for theatre, television, and film. Concentration on the technical organization of costume production. Lecture, discussion, and laboratory periods. LEC.

THR 224. Lighting Production. 2 Hours. H.
Introduction to the planning and execution of lighting for theatre, television, and film. Concentration organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. LEC.

THR 226. Introduction to African Dance Theatre. 2 Hours. NW / H.
Introduction to the general techniques of non-verbal theatrical conventions in African cultures. Practical training in movement vocabulary supplemented by lectures on the "text" of performance. There will be an end of semester "studio performance." (Same as AAAS 334 and DANC 230.) LEC.

THR 301. Theatre Practicum III. 1 Hour. H.
Involvement in theatre performance and/or production. One acting role in a University Theatre production or classroom project plus one crew assignment, or two crew assignments qualify for credit. May be repeated for credit. Prerequisite: THR 201. ACT.

THR 302. Undergraduate Seminar in: . 3 Hours. H.
Course organized any given semester to study a particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. LEC.

THR 303. Summer Theatre. 1-6 Hours. H.
Provides experience in a wide range of theatre activity related to the summer theatre production or productions. Work may include activity in the following areas: acting, directing, design, technical theatre, voice and/or movement. Specialized skills are developed through individual classes, production preparation and performance. Prerequisite: Consent of instructor. ACT.

THR 304. Study Abroad Topics in: . 1-6 Hours. H.
This course is designed for the study of special topics in Theatre at the junior/senior level. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.
THR 305. Honors Seminar in: ______. 3 Hours. H.
Special topics seminar serving students enrolled in the University Honors Program. Course organized any given semester to study a particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Prerequisite: Students must be enrolled in the University Honors Program. LEC.

THR 306. Acting III. 3 Hours. H.
Advanced projects in acting. Character and scene analysis, scoring the role, rehearsal, and performance. Prerequisite: THR 206. LEC.

THR 307. Undergraduate Theatre Internship. 1-3 Hours. AE61 / H.
Supervised study with an approved theater company or project. May be repeated for credit. No more than six hours may be applied to the B.A. or B.G.S. degrees. This course will be graded satisfactory/unsatisfactory. Prerequisite: Consent of instructor and at least seven hours credit in the department. FLD.

THR 308. Script Analysis. 3 Hours. H.
This course provides knowledge and methods enabling students to conduct in-depth study of dramatic scripts. Emphasis is given to the analysis skills appropriate to practitioners of stage and screen arts. LEC.

THR 310. Musical Performance for the Actor II. 3 Hours. H.
Intermediate Studies in Musical Theatre Performance: practical application of voice, acting and movement techniques for musical theatre, solo and group performance. Prerequisite: THR 106 and THR 210. LEC.

THR 312. Acting with an Accent. 3 Hours. H.
A performance class for actors using monologues and scenes involving the use of accents and dialects. The course will also provide instruction in many of the most used American regional, British regional dialects, and foreign language accents. Prerequisite: THR 212, or by permission of instructor after the student demonstrates an ability in the International Phonetic Alphabet. LEC.

THR 313. Movement II: Physical Characterization. 3 Hours. H.
The study of diverse physical acting techniques, and an investigation into creating a character through manipulation of the acting instrument. Actor training in performance neutrality, mask work, age, and gender distinctions. Prerequisite: THR 213 and permission of instructor. LEC.

THR 316. Beginning Scene Design. 3 Hours. H.
Study of scenic design process with beginning problems in textual analysis, style, historical research, and preliminary and finished methods of design presentation. Concentration on developing fundamental design skills and awareness. Prerequisite: THR 116 and THR 215, or permission of instructor. LEC.

THR 320. Beginning Costume Design. 3 Hours. H.
Study of the costume design process with beginning problems in textual analysis, style, historical research, and preliminary and finished methods of design presentation. Concentration on developing fundamental design skills and awareness. Prerequisite: THR 215. LEC.

THR 324. Beginning Lighting Design. 3 Hours. H.
Study of the lighting design process with beginning problems in textual analysis, style, historical research, with preliminary and finished methods of design presentation. Concentration on developing fundamental design skills and awareness. Prerequisite: THR 116 and THR 215, or permission of instructor. LEC.

THR 326. African Theatre and Drama. 3 Hours. NW / H/W.
A study of the origin and development of continental African theatre and its affinity to the Levant. Traditional, colonial and contemporary dramatic theories and experiments will be examined in play selections. (Same as AAAS 355.) LEC.

THR 327. African-American Theatre and Drama. 3 Hours. AE41 / H.
A historical study of Black Theatre in the U.S.A. from its African genesis to its contemporary Americanness. Epochs in African-American dramaturgy will be critically examined. (Same as AAAS 356.) LEC.

THR 380. Popular Culture: ______. 3 Hours. HL GE3H / H.
Interdisciplinary examination of popular culture oriented around a specific genre or theme. Objects of study may include popular forms of live performance such as musicals or vaudeville, as well as media-based performances (radio, television, film, internet). Specific topic to be studied changes as needs and resources develop. May be repeated for credit for different topics. LEC.

THR 401. Stage Management and Assistant Direction. 1 Hour. H.
Majors are assigned to stage manage or assistant direct a University Theatre production, or to take related workshops in stage management or assistant directing. May be repeated for credit ACT.

THR 404. Children and Drama. 3 Hours. HL / H.
Exploration of forms, methods, and materials appropriate for development of elementary-age children in dramatic arts. LEC.

THR 405. Children and Media. 3 Hours. H.
The applied study of child development theories and research methods on the influences and effects of television and related visual media on childhood in the contexts of families, schools, and society. (Same as ABSC 405 and PSYC 405.) LEC.

THR 406. Audition Techniques. 3 Hours. H.
This course prepares students for all types of audition experiences. It includes study in techniques of prepared auditions, cold readings, interviews, and the musical audition for actors. Emphasis is placed upon developing resumes and photo portfolios as well as concentrated study in professional contracts, unions, and agent acquisition. Prerequisite: THR 206. LEC.

THR 410. Musical Performance for the Actor III. 3 Hours. H.
Advanced Studies in Musical Theatre Performance: practical application of voice, acting and movement techniques for musical theatre, solo and group performance. Prerequisite: THR 106, THR 210, and THR 310. LEC.

THR 413. Stage Combat Skills. 3 Hours. U.
Study of the illusion of violence in a dramatic context and the special skills necessary for creating believable and safe stage fights. Actor training in armed and unarmed combat, including one or more of the following: rapier and dagger, broadsword, and quarter staff. Prerequisite: THR 313 and permission of instructor. LEC.

THR 416. Design Forum. 3 Hours. U.
Depending on student qualifications and specialization, focus is on scenic, costume, and/or lighting design. Special attention placed on developing collaborative awareness and the conceptual and presentation skills that underlie and influence the design process. Prerequisite: THR 316 or THR 320 or THR 324. LEC.

THR 429. Postcolonial Theatre and Drama. 3 Hours. NW AE42/GE3H / H.
The course develops an understanding of the postcolonial concept and its different manifestations in theatre and drama across nations and cultures. It approaches postcolonialism as a way of reading theatre, and as a genre within theatre by exploring how the "colonial project" has reconfigured the concept, content, and context of theatre in both colonized and colonizing cultures. In addition to the study of postcolonial playwrights and their works, the course is also an introduction to postcolonial theory and its critics. (Same as AAAS 429.) LEC.
THR 445. Teaching Theatre in the Middle/Secondary Schools. 3 Hours. H.
Study of philosophy and methods appropriate to teaching improvisation, acting, stagecraft, directing, playwriting, dramatic literature, and theatre history in middle/secondary schools. Includes curriculum development, instructional and evaluative strategies, and management of co-curricular theatre programs. Prerequisite: Consent of instructor. LEC.

THR 498. Honors Seminar. 2-6 Hours. AE61 / H.
Study may be directed toward either (1) reading for integration of knowledge and insight in theatre or (2) original research, i.e., investigation of a specific problem in theatre. Six hours maximum credit, which may be distributed through four semesters. Prerequisite: Consent of Departmental Honors Committee. IND.

THR 499. Directed Study in Theatre. 1-6 Hours. AE61 / H.
Investigation of a special topic or project selected by the student with advice, approval, and supervision by an instructor. Such study may take the form of directed reading or special research. Individual reports and conferences. A maximum of six hours credit may be counted toward a degree. Prerequisite: At least seven hours credit in the department and consent of instructor. IND.

THR 501. Colloquium on American Theatre. 1 Hour. U.
A series of fourteen weekly lecture/discussions led by invited guests both from the university and outside it on various topics central to the study of theatre. The first four meetings, led by the course coordinator, are a brief survey of the history of theatre in America and a preparation for the ten lecture/discussions to follow. LEC.

THR 506. Acting for the Camera. 3 Hours. H.
A study of acting techniques appropriate to the requirements of the camera. Emphasis is placed on developing audition skills necessary to compete for roles in dramatic features, corporate videos, and commercials. Actors acquire skills essential to the transition from stage to camera. Prerequisite: Permission of instructor. LEC.

THR 508. Fundamentals of Directing. 3 Hours. H.
Offered as a first course in play directing. Designed primarily for theatre majors and secondary education majors in language arts with a theatre and drama concentration. The content is principally descriptive in nature with some practical experience. Lecture and laboratory periods. Prerequisite: THR 308. LEC.

THR 509. Dramatic Script Writing. 3 Hours. H.
Study and practice in the fundamental techniques of dramatic writing and the application of such techniques most specifically to theatre. Open upon consent of instructor to students who have completed one course in advanced composition and one course in the theory or history of drama. LEC.

THR 512. A Vocal Approach to the Classics. 3 Hours. H.
This is an advanced voice and speech course for actors aiming to further increase their command over tone, rhythm, pacing, and diction. Their range and power will be extended. Through discovery of the demands of a variety of classical texts, the actor will be challenged both in verse and in prose to develop the skills necessary to fully interpret that material. Prerequisite: THR 212. LEC.

THR 516. Scenic Painting Techniques. 3 Hours. H.
Study of painting equipment, tools, pigments, binders, and vehicles, and their relationship to the surfaces to be painted. Instruction in basic painting techniques. Prerequisite: THR 115 and THR 215. LEC.

THR 517. Computer-Aided Design. 3 Hours. U.
Study of new media in theatre and film/video production, primarily computer technologies and methods for the theatrical designer or art director. Emphasis on computer 3-D modeling and color rendering. Prerequisite: THR 116, THR 215, or permission of instructor. LEC.

THR 518. Scenography and the Classic Script. 3 Hours. H.
Holistic production design, including lighting, scenery, and costumes, for classic theatre scripts. Contrasts historical styles of production with styles for contemporary spaces and audiences. Projects tailored to the needs and level of the students. Prerequisite: Consent of instructor. LEC.

THR 519. Scenography and the Modern Script. 3 Hours. H.
Holistic production design, including lighting, scenery, and costumes, for modern theatre scripts. Examines modern styles of production. Projects tailored to the needs and level of the students. Prerequisite: Consent of instructor. LEC.

THR 520. History of Period Style I. 3 Hours. H.
A survey of Western style from ancient Egypt to the Restoration. Focus is placed on developing a comprehensive understanding of the stylistic relationships between art, architecture, clothing, decor, manners, and social and political history. Prerequisite: Nine hours in theatre/design/technical courses or consent of instructor. LEC.

THR 521. History of Period Style II. 3 Hours. H.
Continuation of THR 520, from the Restoration to the present day. Prerequisite: Nine hours in theatre/design/technical courses or consent of instructor. LEC.

THR 525. History of Theatre. 3 Hours. H.
Study of developments in world theatre and drama from the ancient world to the eighteenth century. LEC.

THR 526. History of Theatre II. 3 Hours. H.
Study of developments in world theatre and drama since the eighteenth century. LEC.

THR 527. Asian Theatre and Performance. 3 Hours. NW / H/W.
A survey of traditional and modern theatre and performance in Asia, with greatest attention given to India, China, and Japan. A study of plays, dramatic genres, history, conventions of play production, acting styles and other performance forms. (Same as EALC 527.) LEC.

THR 528. History of U.S. Theatre and Drama. 3 Hours. H.
Historical approach to the development of theatre and performing arts in the United States. LEC.

THR 529. Race and the American Theatre. 3 Hours. U.
The representation(s) of race in significant texts and performance styles in American theatre analyzed according to political ideologies, dramatic movements and the impact of these factors on the representation of the "other" in the theatre. (Same as AAAS 585 and AMS 529.) LEC.

THR 550. Applied and Interactive Theatre. 3 Hours. H.
This course is an exploration of interactive drama techniques and practices of the evolving field of applied theatre. The tools of applied theatre serve varied purposes and are being used around the world for community-building, personal empowerment, to address social and political issues, and to strengthen communication skills. The class will work specifically on community-based dialogue and classroom situations that students and professors encounter in their daily lives. LEC.

THR 599. Special Topics in Scenography. 1-6 Hours. U.
Individual studio activity. Course content to be determined by the student under the supervision of a faculty member. May be repeated for credit in subsequent semesters. Prerequisite: Permission of instructor. IND.

THR 603. Theatre for Young Audiences. 3 Hours. U.
A survey of theories, history, literature, criticism, production methods, and audience research about theatre performed by adults for children and
adolescents. Emphasis is on child development and community outreach. Prerequisite: THR 308 or consent of instructor. LEC.

THR 604. Drama with Young People. 1-3 Hours. U.
A laboratory experience in developing and conducting improvisational drama workshops with children or adolescents in local schools. Includes readings by leading theorists and practitioners. Prerequisite: Actors cast in current KU Theatre for Young People Production, or THR 404, or consent of instructor. LEC.

THR 609. Play Directing. 3 Hours. H.
Readings, lectures, and practice dealing with the relationship between actor and director. Prerequisite: THR 508. LEC.

THR 617. Computer-Aided Design II. 3 Hours. U.
Continuation of THR 517. Emphasis on computer-generated images as scenic media in production situations. Prerequisite: THR 517, or permission of instructor. LEC.

THR 618. Scenography and the Musical Theatre. 3 Hours. H.
Holistic production design, including lighting, scenery, and costumes, for musical theatre, opera, and dance. Examines development and changes in design styles in the evolution of musical theatre, opera, and dance and the special requirements of these forms. Projects tailored to the needs and level of the students. Prerequisite: Consent of instructor. LEC.

THR 619. Scenography and the Contemporary Script. 3 Hours. H.
Holistic production design, including lighting, scenery, and costumes, for contemporary scripts. Examines contemporary episodic scripts written for the stage that are based on a filmic structure, the special problems of these kinds of scripts, and the respective problems of designing for theatre and film. Projects tailored to the needs and level of the students. Prerequisite: Consent of instructor. LEC.

THR 620. Scenography and the Experimental Production. 3 Hours. H.
Holistic production design, including lighting, scenery, and costumes, for experimental scripts/scenarios. Examines experimental approaches to a variety of script/scenarios, including mixed-media production. Projects tailored to the needs and level of the students. Prerequisite: Consent of instructor. LEC.

THR 626. Myth and the Dramatist. 3 Hours. U.
This seminar critically explores myths in dramatic literature from ancient to contemporary times, using select authors from different cultures. Analysis of the works will be based on both conventional and post-structuralist theories and specific emphasis will be on myths that have been adapted cross-culturally and/or in different time perspectives. LEC.

THR 702. Graduate Seminar in: ______. 3 Hours.
Course organized any given semester to study particular subject matter or to take advantage of special competency by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. LEC.

THR 703. Directed Readings in Theatre. 1-3 Hours.
Research reading and presentation of reports on specific subjects related to the students major area of specialization. May be repeated up to a total of six credits on petition. Required of all MFA Scenography students. IND.

THR 704. Study Abroad Topics in: ______. 1-6 Hours.
This course is designed for the study of special topics in Theatre. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

THR 707. Theatre Internship. 3-12 Hours.
Study with an approved theatre company. Emphasis may be in one or all of the following areas: acting, directing, stage management, technical theatre, promotion management. No more than six hours may be applied to an M.A. degree. Course will be graded satisfactory/unsatisfactory. Prerequisite: Consent of instructor. FLD.

THR 709. Advanced Dramatic Script Writing. 3 Hours.
The purpose of this course is to permit selected students, by consent of instructor, to develop or continue dramatic writing projects in theatre, film, television, and radio under the individual supervision of the instructor. LEC.

THR 711. Styles of Acting: Shakespearean. 3 Hours.
An approach to acting styles of the period, based on a study of the art, customs, spirit, and the theatre of the times applied to scene studies taken from the works of Shakespeare. Prerequisite: THR 106 and THR 206 or consent of instructor. LEC.

THR 713. Styles of Acting: Restoration and 18th Century English. 3 Hours.
An approach to acting styles of the period, based on a study of the art, customs, spirit, and the theatre of the times applied to scene studies taken from the works of English Restoration dramatists and those 18th century English playwrights writing in the Restoration mode. Prerequisite: THR 106 and THR 206 or consent of instructor. LEC.

THR 715. Problems and Techniques of Direction. 3 Hours.
Practical experience in directing. Prerequisite: THR 609. RSH.

THR 719. M.F.A. Production Seminar. 3 Hours.
To be taken by M.F.A. candidates during those semesters in which they are assigned to design one or more elements in a production to be mounted on one of our stages. Weekly critique and discussion of solutions to practical design problems from conception through execution. May be repeated for a total of no more than six hours credit. Prerequisite: Consent of instructor. IND.

THR 725. Russian Theatre and Drama from Stanislavski and Chekhov to the Present. 3 Hours.
A study of the development of Russian theatre and dramatic literature from 1898 to the present. Lectures and readings in English. (Same as SLAV 562.) LEC.

THR 800. Introduction to Graduate Study in Theatre. 3 Hours.
Major emphasis is placed upon the principles of research, bibliographical data, and research methods useful in theatre and performance studies. The course should be taken at the beginning of the graduate student's program. LEC.

THR 801. Professional Development Seminar. 1 Hour.
Preparation for faculty careers in theatre and related fields, including issues of research, teaching, and service. At least three hours per semester will be devoted to training in responsible scholarship. May be repeated for credit. RSH.

THR 802. Master's Projects. 3-6 Hours.
Advanced creative projects which may be elected by master's degree candidates in lieu of thesis. RSH.

THR 803. Summer Theatre: Graduate. 1-3 Hours.
Provides graduate level experience in a wide range of theatre activity related to the summer theatre production or productions. Work may include activity in the following areas: acting, directing, design, technical theatre, voice and/or movement. Specialized skills are developed through individual classes, production preparation, and performance. Prerequisite: Consent of instructor. FLD.

THR 815. Advanced Play Production. 1-3 Hours.
Individually supervised directing of theatre pieces for public presentation. In special cases credit may be given for musical direction, choreography, or stage management. Prerequisite: THR 715. FLD.
THR 817. Theory of Acting and Directing. 3 Hours. 
Readings, lectures, discussions and papers on acting and directing theory; is concerned with the divergence between representational and representational acting methods and the emergence of directing art. Prerequisite: THR 609 or THR 715. LEC.

THR 819. Advanced M.F.A. Production Seminar. 3 Hours. 
Continuation of THR 719, but production design assignments will be more complex and larger in scope. May be repeated for maximum of six hours credit. Prerequisite: Six hours of THR 719 and consent of instructor. IND.

THR 826. Seminar in African Theatre. 3 Hours. 
A study of developments in African theatre in the 20th Century focusing on themes, concepts, styles, and critical perspectives. The course will investigate the idea of an "African theatre" and identify different periods and movements within national and international contexts. The analysis of representative works and authors will be grounded within appropriate theoretical frameworks. LEC.

THR 828. Seminar in American Theatre and Drama to 1895. 3 Hours. 
Intensive investigation of selected topics. Individual study emphasized. LEC.

THR 829. Seminar in American Theatre and Drama from 1895. 3 Hours. 
Intensive investigation of selected topics. Individual study emphasized. LEC.

THR 898. Investigation and Conference (for Master's Students). 1-8 Hours. 
Directed research and experimentation in theatre. Limited to eight hours credit toward the Master's degree. RSH.

THR 899. Master's Thesis. 1-6 Hours. 
The University of Kansas

THR 901. Theatre Seminar in: ______. 3 Hours. 
A graduate seminar devoted to selected historical, theoretical, or critical issues in theatre. Prerequisite: Consent of instructor. LEC.

THR 914. Theories of Race and Performance. 3 Hours. 
Theories of Race and Performance is an inter-textual graduate course that explores interdisciplinary scholarship on race and performance. It seeks to translate these theories into practical application in various visual, audio and performance texts in popular culture. The course is divided into modules aimed at gaining an understanding of the shifting meaning of race over time and its relationship to ethnicity, gender, sexuality, class, nation, and power. How do we perform our identities? How is race constructed and maintained through performance? To begin to answer these questions, we will examine the ways in which racial identities are created through performance. SEM.

THR 915. Modern Theatre and Drama. 3 Hours. 
A study of the movements in playwriting and theatrical production in Europe and America from the mid-19th century to World War II. Prerequisite: THR 525 and THR 526 or comparable courses. LEC.

THR 916. Postmodern Theatre and Drama. 3 Hours. 
A study of developments in Europe and American playwriting, directing, acting, and design from World War II to the present. SEM.

THR 917. Dramatic Theory I. 3 Hours. 
A survey of dramatic theory from Plato to Lessing. LEC.

THR 918. Dramatic Theory II. 3 Hours. 
A survey of dramatic theory from Lessing to Langer. LEC.

THR 919. Dramatic Theory Seminar. 3 Hours. 
Study in depth of selected theorists. Offered as determined by faculty availability and student interest. LEC.

THR 920. Practicum in Criticism. 3 Hours. 
Contemporary approaches to theatre and drama criticism. Emphasis on actual practice, using a variety of critical methods. FLD.

THR 922. Theatre Historiography. 3 Hours. 
This course focuses on the advanced study of research methods, subjects, interpretative paradigms, theoretical frameworks, and philosophies of history employed in contemporary approaches to writing and teaching theatre history. Prerequisite: THR 525 and THR 526 or equivalent. LEC.

THR 998. Investigation and Conference (for Doctoral Students). 1-8 Hours. 
RSH.

THR 999. Doctoral Dissertation. 1-12 Hours. 
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Visual Art Courses

ADSC 177. First Year Seminar: ______. 3 Hours. GE11 / U. 
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Advanced Design Studies College. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

ADSC 560. Topics in Design: ______. 1-3 Hours. 
A study of different topics in different semesters in a special area of interest to a staff member and suitable qualified students. May be repeated for credit. Prerequisite: Junior standing in department. LAB.

ADSC 580. Special Problems in Design. 1-6 Hours. 
A study of current problems in design or crafts with an emphasis on research. Special problems proposals must be discussed with and approved by the instructor and advisor prior to enrollment in the course. A student may not take more than six credit hours of special problems in any one semester. Prerequisite: Junior standing in department. IND.

ADSC 810. Orientation Seminar. 1 Hour. 
Studies directed to development of a thesis plan. Required of all graduate students. Offered in fall semester only. Graded S or F. LEC.

ART 101. Drawing I. 3 Hours. GE3H. 
Basic problems in drawing. LAB.

ART 102. Drawing II. 3 Hours. 
Continuation of ART 101. Prerequisite: ART 101. LAB.

ART 103. Art Concepts and Practice. 3 Hours. U. 
A companion course to ART 104. Lecture and studio experiences across disciplines emphasizing conceptual fundamentals, technical/skill development, visual sensibility, critical thinking and professional topics in art. LEC.

ART 104. Art Principles and Practice. 3 Hours. U. 
A companion course to ART 103. Lecture and studio experiences across disciplines emphasizing conceptual fundamentals, technical/skill development, visual sensibility, critical thinking and professional topics in art. LEC.

ART 120. Fundamentals of Drawing and Painting. 3 Hours. 
Open to all university students. Specifically for students with limited or no previous experience. An exploration of basic technical and expressive possibilities in drawing and painting; may include field trips, films, visiting lecturers. Six hours scheduled studio activity and three hours outside work weekly. LAB.
ART 121. Fundamentals of Printmaking. 3 Hours.
Open to all university students. Specifically for students with limited or no previous experience. An exploration of basic technical and expressive possibilities in printmaking, including woodcut, etching, lithography and silk screen; may include field trips, films, visiting lecturers. Six hours scheduled studio activity and three hours outside work weekly. LAB.

ART 122. Fundamentals of Sculpture. 3 Hours.
Open to all university students. Specifically for students with limited or no previous experience. An exploration of basic technical and expressive possibilities in three-dimensional form and space, including sculpture, modeling, carving, and construction; may include field trips, films, visiting lecturers. Six hours scheduled studio activity and three hours outside work weekly. LAB.

ART 123. Fundamentals of Expanded Media. 3 Hours. GE3H / U.
Open to all university students. Specifically for students with limited or no previous experience. An exploration of basic technical and expressive possibilities in Expanded Media, including Installation, Performance, Video and other Digital technologies; may include field trips, films, and/or visiting lecturers. Six hours scheduled studio activity and three hours outside work weekly. LAB.

ART 130. Fundamentals of Fiber Forms. 3 Hours. U.
Open to all university students. Studio exploration of fibers as an art form and means of personal expression. Emphasis is placed on three-dimensional objects. A variety of interlacement, construction, and dye techniques are introduced. LAB.

ART 131. Fundamentals of Ceramics. 3 Hours.
Open to all university students. Specifically for students with limited or no previous experience. An introduction to ceramics including throwing, handbuilding, glazing, firing, and related activities. LAB.

ART 132. Fundamentals of Metalsmithing/Jewelry. 3 Hours. GE3H.
Open to all university students. Specifically for students with limited or no previous experience. A comprehensive study of the field of jewelry and metalsmithing with an emphasis on the tools, processes, and techniques used in the design and fabrication of objects from metals such as aluminum, brass, copper, bronze, sterling and related materials. Studio experience will include lectures, slide presentations, demonstrations, visiting artist, and student projects. LAB.

ART 133. Fundamentals of Fibers. 3 Hours. GE3H / U.
Open to all university students. Studio exploration of fibers as an art form and means of personal expression. A variety of dyeing, construction, and surface embellishment techniques will be introduced. LAB.

ART 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Art. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

ART 201. Color Theory. 3 Hours.
An introduction to the basic color theories and their application. Presentation of the relationship between pigment and light, and of additive and subtractive color mixing. Prerequisite: ART 101, and ART 103 or ART 104. LAB.

ART 300. Special Topics in Visual Art: ______. 1-4 Hours.
Course to be offered in related areas of research, mixed media or interdisciplinary exploration. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor. LAB.

ART 305. Visual Language. 3 Hours. H.
This course explores visual language and its relationship to cultural meaning. We examine the ways that cultural experience both influences and is influenced by artistic expression. An investigation of artistic practice and its basic elements and principles is used to demonstrate the connections between visual perception and the interpretation of visual experience. Examples from the arts and popular culture are used to illustrate the ways that we create meaning from the things we see. This course is open to all university students. Prerequisite: ENGL 101 and ENGL 102 or equivalent, or completion of the KU Core Written Communication requirements (Goal 2.1). LEC.

ART 310. Build Smart. 3 Hours. U.
Introduction to the experience and culture of building projects by hand. Students analyze and determine the best ways to build. Students also become familiar with tools, machines, building practices and material necessary for wood and steel fabrication. Prerequisite: ART 103, ART 104, or permission of the instructor. LEC.

ART 375. Directed Readings in Visual Art. 1-3 Hours. U.
Directed reading in specific areas of visual art. May be repeated for credit in subsequent semesters. Prerequisite: ART 102, ART 103 and ART 104; and six hours of Visual Art courses, or permission of instructor. IND.

ART 395. Study Abroad Topics in: ______. 1-6 Hours. H.
This course is designed for the study of special topics in Visual Art. Credit for course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. Open to all students. LEC.

ART 500. Advanced Special Topics in Visual Art: ______. 1-4 Hours.
Course to be offered in related areas of research, mixed media or interdisciplinary exploration. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Visual Art courses, or permission of instructor. LEC.

ART 540. Professional Activities Seminar. 3 Hours.
Comprehensive development of skills and strategies needed to pursue a career as a professional studio artist. Prerequisite: Twenty-four hours of departmental electives or permission of instructor. LEC.

ART 575. Directed Reading in Visual Art. 1-3 Hours.
Directed reading in specific areas of visual art. May be repeated for credit in subsequent semesters. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Visual Art courses, or permission of instructor. IND.

ART 590. Internship in Visual Art. 1-3 Hours. U.
Practical experience in the use of artistic skills in approved and supervised academic or professional settings. May be repeated for credit; no more than six hours may be applied to the B.A. or B.F.A. degree. Credit hours are graded on a satisfactory/unsatisfactory basis, according to the written recommendation provided by the internship supervisor to the faculty advisor. Prerequisite: ART 102, ART 103, and ART 104; and fifteen hours of Visual Art courses; and prerequisite of instructor. FLD.

ART 595. Advanced Study Abroad Topics in: ______. 1-6 Hours. H.
This course is designed for the study of special topics in Visual Art at the senior/graduate level. Credit for course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. Open to seniors and graduate level students. LEC.

ART 598. Special Topics: Studio Theory and Criticism. 3 Hours.
Lecture, discussion, and supervised research in current topics related to contemporary studio theory and criticism. May be repeated for credit as topics vary. This course will be counted as free electives in course distribution. Prerequisite: Eighteen hours of departmental electives. LEC.
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours may apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Visual Art courses; and permission of instructor. Does not fulfill ART 695/ART 696 requirement. IND.

ART 695. Directed Study I. 3 Hours.
Individual studio activity under direction of faculty advisor; capstone experience. Prerequisite: Thirty hours of departmental electives, consent of department, and permission of instructor. IND.

ART 696. Directed Study II. 4 Hours. AE61.
Continuation of ART 695; capstone experience. May be repeated for credit in subsequent semesters. Prerequisite: ART 695 and permission of instructor. IND.

ART 801. Directed Study III. 2-5 Hours.
Individual studio activity under the direction of faculty member. May be repeated for credit in subsequent semesters. Prerequisite: Permission of graduate director and enrollment in the Visual Art MFA program. RSH.

ART 802. Directed Study IV. 2-5 Hours.
Continuation of Directed Study III. Prerequisite: Enrollment in the Visual Art MFA Program. RSH.

ART 803. Directed Study V. 2-5 Hours.
Continuation of Directed Study IV. Prerequisite: Enrollment in the Visual Art MFA Program. RSH.

ART 805. Graduate Studio. 1-3 Hours.
Individual graduate studio research in visual art. Course content to be determined by the student under the supervision of a graduate faculty member. May be repeated for credit. Prerequisite: Graduate standing in The School of The Arts and permission of the instructor. RSH.

ART 861. Directed Reading in Visual Art. 1-3 Hours.
Research reading and presentation of reports on specific subjects related to the student's major area of specialization. Prerequisite: Enrollment in the MFA Program in the Department of Visual Art. RSH.

ART 877. Graduate Seminar. 3 Hours.
The graduate seminar emphasizes professional preparation for contemporary artists focusing on writing skills, oral presentations, critiques of individual creative research/artwork, critical thinking about and visual analysis of current art forms and contemporary approaches to the teaching of studio art. Prerequisite: Admission to the Graduate Program in Visual Art. SEM.

ART 887. Special Topics: Studio Theory and Criticism. 3 Hours.
Lecture, discussion, and supervised research in current topics related to contemporary studio theory and criticism. May be repeated for credit as topics vary. This course will be counted as a graduate level academic elective in course and credit distribution. LEC.

ART 899. Graduate Seminar. 1 Hour.
Weekly discussion of issues and/or work in art. (Graded on a satisfactory/ or F basis.) Repeat for credit in subsequent semesters. SEM.

ART 906. Graduate Studio. 1-3 Hours.
Individual graduate studio research in visual art. Course content to be determined by the student under the supervision of a graduate faculty member. May be repeated for credit. Prerequisite: ART 805 and permission of the instructor. RSH.

Original research in visual art culminating in a thesis exhibition. May be repeated for credit. Prerequisite: Thirty-six credit hours of graduate credit and permission of the graduate review committee. THE.

CER 177. First Year Seminar: _______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Ceramics. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

CER 208. Ceramics I. 3 Hours.
The development of form and surface through the use of handbuilding and wheel thrown techniques. Stoneware and Raku are explored. Prerequisite: ART 102 and ART 104. LAB.

CER 300. Special Topics in Ceramics: ______. 1-4 Hours. U.
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor. LEC.

CER 301. Ceramics II. 3 Hours.
A continuation of ART 131 and/or CER 208 with emphasis in firing low temperature ceramics. An introduction to glaze formulation and firing procedures through the use of earthenware and low temperature talc bodies. Prerequisite: ART 131 or CER 208. LAB.

CER 402. Ceramics III. 3 Hours.
A study of high fire ceramics using stoneware and porcelain. The development of ceramic forms and shapes utilizing traditional and nontraditional techniques such as salt glaze, wood firing, oxidation, and reductions. Prerequisite: ART 131 or CER 208. LAB.

CER 500. Advanced Special Topics in Ceramics: ______. 1-4 Hours. U.
Course to be offered in an area of specific interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Ceramics courses, or permission of instructor. LEC.

CER 504. Kilns. 3 Hours.
The principles in kiln design, including up-draft, down-draft, cross-draft, and electric kilns, and burner technology. Prerequisite: CER 301. LEC.

CER 505. Clay and Glaze Formulation. 3 Hours.
Formulation of the various clay bodies and glazes associated with ceramics. Prerequisite: CER 301. LEC.

CER 506. Production. 6 Hours.
Procedures, techniques, problems, and solutions for setting up and operating a production pottery studio, including the development of ceramic forms and glazes related to marketability and design and mold production for industry. May be repeated for credit. Prerequisite: CER 301 and CER 402. LAB.

CER 515. Advanced Ceramics I. 3-6 Hours. AE61.
Development of individual direction in ceramics based on experience, research, and skills acquired in previous courses; capstone experience. May be repeated for credit. Prerequisite: CER 301 and CER 402. LAB.

CER 520. Advanced Ceramics II. 3-6 Hours. AE61 / U.
Continuation of CER 515; capstone experience. May be repeated for credit. Prerequisite: CER 515. LAB.
CER 590. Internship in Ceramics. 1-3 Hours. U.
Practical experience in the use of artistic skills in approved and supervised academic or professional settings. May be repeated for credit; no more than six hours may be applied to the B.A. or B.F.A. degree. Credit hours are graded on a satisfactory/unsatisfactory basis, according to the written recommendation provided by the internship supervisor to the faculty advisor. Prerequisite: ART 102, ART 103, and ART 104; and fifteen hours of Visual Art courses; and permission of instructor. FLD.

CER 599. Individual Studies in Ceramics. 1-6 Hours. AE61 / U.
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours may apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Ceramics courses or permission of instructor. IND.

CER 715. Ceramics. 2-6 Hours.
Individual research. Prerequisite: CER 515 or equivalent. RSH.

CER 725. Glass. 2-6 Hours.
Course to be offered in an area of special interest to individual faculty, and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit.

CER 815. Ceramics. 2-6 Hours.
Continuation of CER 805. RSH.

CER 825. Glass. 2-6 Hours.
Individual research. Prerequisite: Approval of instructor. RSH.

DRWG 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Drawing. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

DRWG 203. Drawing III. 3 Hours.
Advanced problems in drawing. Prerequisite: ART 102. LAB.

DRWG 213. Life Drawing I. 3 Hours.
Figure drawing. Prerequisite: ART 102 and ART 103 or ART 104. LAB.

DRWG 300. Special Topics in Drawing: _____. 1-4 Hours. U.
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor. LEC.

DRWG 304. Drawing IV. 3 Hours.
Continuation of DRWG 203. Prerequisite: DRWG 203. LAB.

DRWG 314. Life Drawing II. 3 Hours.
Continuation of DRWG 213. Prerequisite: DRWG 213. LAB.

DRWG 318. Life Drawing II, Honors. 3 Hours.
Figure drawing, a continuation of DRWG 213. Prerequisite: DRWG 213; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

DRWG 335. Special Topics in Drawing: _____. 3 Hours.
Course to be offered in area of special interest to individual faculty, and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: DRWG 203, or DRWG 213, or permission of instructor. LAB.

DRWG 500. Advanced Special Topics in Drawing: _____. 1-4 Hours. U.
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Drawing courses, or permission of instructor. LEC.

DRWG 505. Drawing V. 3 Hours.
Continuation of DRWG 304. Prerequisite: DRWG 304. LAB.

DRWG 506. Drawing VI. 3 Hours.
Continuation of DRWG 505. May be repeated for credit in subsequent semesters. Prerequisite: DRWG 505. LAB.

DRWG 515. Life Drawing III. 3 Hours.
Continuation of DRWG 314. Prerequisite: DRWG 314. LAB.

DRWG 516. Life Drawing IV. 3 Hours.
Continuation of DRWG 515. May be repeated for credit in subsequent semesters. Prerequisite: DRWG 515. LAB.

DRWG 518. Life Drawing III, Honors. 3 Hours.
Figure drawing, a continuation of DRWG 314 or DRWG 318. May be repeated for credit in subsequent semesters. Prerequisite: DRWG 314 or DRWG 318; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

DRWG 519. Life Drawing IV, Honors. 3 Hours.
Figure drawing, a continuation of DRWG 515 or DRWG 518. May be repeated for credit in subsequent semesters. Prerequisite: DRWG 515 or DRWG 518; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

DRWG 535. Special Topics in Drawing: _____. 3 Hours.
Course to be offered in area of special interest to individual faculty, and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: 12 hours of drawing and permission of instructor. LAB.

DRWG 599. Individual Studies in Drawing. 1-6 Hours. AE61 / U.
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours may apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Drawing courses, or permission of instructor. IND.

DRWG 807. Drawing VII. 3 Hours.
Individual research in drawing. Prerequisite: DRWG 506. RSH.

DRWG 817. Life Drawing V. 3 Hours.
Individual research in figure drawing. Prerequisite: DRWG 516. RSH.

DRWG 908. Drawing VIII. 3 Hours.
Continuation of DRWG 807. Prerequisite: DRWG 807. RSH.

DRWG 918. Life Drawing VI. 3 Hours.
Continuation of DRWG 817. Prerequisite: DRWG 817. RSH.

EXM 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Expanded Media. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

EXM 274. Expanded Media. 3 Hours. U.
Beginning course to introduce the fundamental concepts, strategies, and technologies that comprise the Expanded Media area of the Department of Visual Art: Installation, Performance, and Digital Image. Emphasis is placed on forming ideas and strategies, and creating artwork that considers the core connections within Expanded Media: time, space, the body, the viewer, and society at large. Computer-based technologies and
time-based media that are inherent to Expanded Media practice support studio assignments. Coursework includes the investigation and discussion of historic precedents and the development of an appropriate critical dialogue with which to discuss their work. Prerequisite: ART 102, ART 103, and ART 104. LAB.

EXM 300. Special Topics in Expanded Media: ______. 1-4 Hours. U.
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor. LEC.

EXM 301. The Digital Image I. 3 Hours.
Introduction to various still digital processes and skills that encourage the use of digital imagery within a variety of other media. Focus on content issues as they relate to development of artwork incorporating digital imagery. LAB.

EXM 302. Performance Art I. 3 Hours. U.
An introduction to the understanding and production of performance art. Students gain proficiency in conceptualization and production of performance-based art in an Interdisciplinary art-making environment. Prerequisite: ART 102, ART 103, and ART 104. LAB.

EXM 303. Intermedia I. 3 Hours.
An introduction to the use/handling and integration of diverse, new and traditional materials, techniques and processes. Problems will involve strategies for discovering and managing combinations of drawn, painted, digital and constructed forms. Studio sessions will include research, lecture, demos, and guest speakers. Prerequisite: Permission of instructor. LAB.

EXM 307. Installation Art I. 3 Hours. U.
An introduction to the understanding and production of installed art environments using a variety of media and approaches to art-making. Students gain proficiency in conceptualization and production of installation art in an interdisciplinary art-making environment. Prerequisite: ART 102, ART 103, and ART 104. LAB.

EXM 314. Alternative Approaches in Photography I. 3 Hours. U.
An introduction to the understanding and production of alternative approaches in photography. Students gain proficiency in conceptualization and production of artwork using alternative approaches in photography in an interdisciplinary art-making environment. Prerequisite: ART 102, ART 103, and ART 104. LAB.

EXM 326. Video and Time-Based Media I. 3 Hours. U.
An introduction to the understanding and production of video and time-based art. Students gain proficiency in conceptualization and production of video and time-based art in an interdisciplinary art-making environment. Prerequisite: EXM 274. LAB.

EXM 500. Advanced Special Topics in Expanded Media: ______. 1-4 Hours. U.
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor. LEC.

EXM 501. The Digital Image II. 3 Hours.
Continuation of EXM 301, The Digital Image I. May be repeated for credit. LAB.

EXM 503. Intermedia II. 3 Hours.
Continuation of EXM 303, Intermedia I. May be repeated for credit. Prerequisite: Permission of instructor. LAB.

EXM 514. Alternative Approaches in Photography II. 3 Hours. U.
Continuation of EXM 314. Prerequisite: EXM 314. LAB.

EXM 526. Video and Time-Based Media II. 3 Hours. U.
Continuation of EXM 326. Prerequisite: EXM 326. LAB.

EXM 535. Intermediate Expanded Media. 3 Hours.
Continuation of Expanded Media studio research. Prerequisite: Two (200- and/or 300-level) Expanded Media courses. LAB.

EXM 536. Intermediate Expanded Media, Honors. 3 Hours.
Continuation of Expanded Media studio research. Prerequisite: Two (200- and/or 300-level) Expanded Media courses; membership in the University Honors Program or 3.25 minimum cumulative grade point average with permission of the department. LAB.

EXM 537. Advanced Expanded Media. 3 Hours.
Continuation of EXM 535. May be repeated for credit. Prerequisite: EXM 535 or EXM 536. LAB.

EXM 538. Advanced Expanded Media, Honors. 3 Hours.
Continuation of EXM 536. May be repeated for credit. Prerequisite: EXM 535 or EXM 536; membership in the University Honors Program or 3.25 minimum cumulative grade point average with permission of the department. LAB.

EXM 541. Graduate Performance Art. 3 Hours.
Students will gain proficiency in conceptualization and production of performance-based art in an interdisciplinary art-making environment. Prerequisite: Permission of instructor. LAB.

EXM 542. Graduate Installation Art. 3 Hours.
Advanced problems toward the creation of environments using a variety of media including traditional and non-traditional approaches to art-making. Prerequisite: Permission of instructor. LAB.

EXM 543. Graduate: The Digital Image. 3 Hours.
Advanced work focusing on content issues as they relate to development of artwork incorporating digital imagery. Prerequisite: Permission of instructor. LAB.

EXM 544. Graduate Intermedia. 3 Hours.
Advanced work in the use/handling and integration of diverse, new and traditional materials, techniques and processes. Advanced problems will involve strategies for discovering and managing combinations of drawn, painted, digital, and constructed forms. Studio sessions will include research, lecture, demos, and guest speakers. Prerequisite: Permission of instructor. LAB.

EXM 546. Graduate Expanded Media V. 3 Hours.
Continuation of Expanded Media studio research. Prerequisite: Permission of instructor. LAB.

EXM 573. Performance Art II. 3 Hours. U.
Continuation of EXM 302. Prerequisite: EXM 302. LAB.

EXM 574. Performance Art II, Honors. 3 Hours. U.
Continuation of EXM 302. Prerequisite: EXM 302; and membership in the University Honors Program or 3.25 minimum cumulative grade point average with permission of the department. LAB.

EXM 577. Installation Art II. 3 Hours. U.
Continuation of EXM 307. Prerequisite: EXM 307. LAB.

EXM 578. Installation Art II, Honors. 3 Hours. U.
Continuation of EXM 307. Prerequisite: EXM 307; and membership in the University Honors Program or 3.25 minimum cumulative grade point average with permission of the department. LAB.
EXM 599. Individual Studies in Expanded Media. 1-6 Hours. AE61 / U.
Individual studio activity; capstone experience. Course content to be
determined by the student under supervision of a faculty member. May be
repeated for credit in subsequent semesters; a maximum of nine hours
may apply toward the bachelor's degree. Prerequisite: ART 102, ART
103, and ART 104; and twelve hours of Expanded Media courses, of
permission of instructor. IND.

EXM 846. Graduate Expanded Media VI. 3 Hours.
Continuation of Expanded Media studio research. Prerequisite:
Permission of instructor. LAB.

EXM 946. Graduate Expanded Media VII. 3 Hours.
Continuation of Expanded Media studio research. Prerequisite:
Permission of instructor. LAB.

METL 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing
current issues in Metalsmithing/Jewelry. Course is designed to meet
the critical thinking learning outcome of the KU Core. First-Year
Seminar topics are coordinated and approved by the Office of First-Year
Experience. Prerequisite: First-time freshman status. LEC.

METL 211. Jewelry. 3 Hours. GE3S.
Introduction to metalsmithing and jewelry design, materials and
processes. Student projects explore the joining, forming, and surface
embellishment of metals such as copper, brass, bronze, and sterling.
Prerequisites: ART 102 and ART 104. LAB.

METL 300. Special Topics in Metalsmithing: ______. 1-4 Hours. U.
Course to be offered in an area of special interest to individual faculty
and qualified students. (This course is not regularly offered. The current
Schedule of Classes should be consulted.) May be repeated for credit.
Prerequisite: ART 102, ART 103, and ART 104; or permission of
instructor. LEC.

METL 301. Introduction to Casting for Jewelry. 3 Hours.
Introduction to casting and mold making processes used for jewelry and
small sculpture. Students explore various methods and materials for
creating models for casting in bronze or silver including wax carving,
wax modeling, and the use of natural and synthetic materials as models.
Models are cast using centrifugal and vacuum casting processes. Basic
mold making in clay and silicone are also explored. Prerequisite: ART 132
or METL 211. LAB.

METL 302. Professional Practices. 3 Hours.
The development of a portfolio including designing, rendering, and
model making for future projects. Photographing completed objects and
discussing professional aspects of the jewelry/metalsmithing field.
Prerequisite: Six hours of metalsmithing. LAB.

METL 360. Holloware. 3 Hours.
Problems related to specific smithing techniques such as raising,
stretching, shell structures and seam fabrications. Metal manipulation on a
large scale. Prerequisite: METL 301. LAB.

METL 362. Metalsmithing. 6 Hours.
Advanced metalworking with an emphasis on the refinement of design
and techniques. Processes may include linkage, marriage of metals,
metal inlays, hinge and catch fabrication. Prerequisite: METL 301. LAB.

METL 364. Enameling. 6 Hours.
Problems of basic and advanced enameling as applied to jewelry design
and metalsmithing objects. Exploration of major enameling techniques:
such as limoges, cloisonne, champeule, and bassetaille. Prerequisite: Six
hours of metalsmithing or consent of instructor. LAB.

METL 500. Advanced Special Topics in Metalsmithing: _____. 1-4
Hours. U.
Course to be offered in an area of special interest to individual faculty
and qualified students. (This course is not regularly offered. The current
Schedule of Classes should be consulted.) May be repeated for credit.
Prerequisite: ART 102, ART 103, and ART 104; or permission of
instructor. LEC.

METL 501. Seminar. 3 Hours.
Lectures and demonstrations on techniques of contemporary interest
outside of typical classroom activity. Prerequisite: Six hours of
metalsmiting. LEC.

METL 503. Gemology. 3 Hours. H.
Students study the optical and physical characteristics of gemstones in
order to identify them using gemological instruments. This laboratory and
discussion class explores related topics including the principles of optics
that support this methodology, history and geographical distribution
of gemstones, gemstone cutting and pearl farming, the history of DeBeers
and the development of the world demand for diamond, quality analysis of
diamond, colored gemstones and pearls, including the history of diamond
grading, the development and identification of synthetics, imitations and
laboratory enhancements as well as the use of gemstones in designing
jewelry. Prerequisite: ART 132. LAB.

METL 504. A History of Jewelry. 3 Hours. H.
This course explores the history from Sumeria to the 21st century of the
use of metals and gemstones in the creation of decorative art for personal
adornment. Students explore the evolution of the role of jewelry in ancient
culture and modern society and survey individuals whose ideas and work
influenced generations of goldsmiths and jewelers around the globe. The
class studies primitive tools and modern manufacturing techniques, the
history of gemstone cutting and setting and the origin and development
of gemstones as symbols. Prerequisite: ART 132. LEC.

METL 505. Digital Jewelry Design I. 3 Hours. H.
Matrix is a 3-D CAD program based on Rhino developed by Rhino,
specifically for jewelry design. The goal of this course is to instruct
beginners in the Matrix design program. Students learn to transform their
2-D designs from their sketchbooks into 3-D models in Matrix, which can
be milled in wax, and cast in metal. Students also learn how to render
their 3-D Matrix models to appear as if they were a finished object. The
class time is structured as a combination of instructor-led tutorials and
working labs. Prerequisite: ART 132. LAB.

METL 506. Digital Jewelry Design II. 3 Hours. H.
The second semester of Matrix increases the operating and design skills
building on the knowledge of DG I. The focus of the class is producing
wax models on the Revo Digital Mill.Digi II covers the advanced modeling
skills including T-spline and Rhino. Students also learn how to make a
customized tool path for Revo C mill program and how to solve milling
problems. Students also learn how to convert Rhino files to produce a 3D
print for outsourcing to other 3D modeling programs. Prerequisite: ART
132, METL 301, METL 505. LAB.

METL 515. Advanced Metals I. 6 Hours. AE61.
Emphasis on individual design aesthetic through intensive designing,
rendering, and modelmaking as preparation for fabricated pieces of
jewelry, hollower, and/or small objects; capstone experience.
Prerequisite: METL 362. LAB.

METL 520. Advanced Metals II. 6 Hours. AE61 / U.
Continuation of METL 515; capstone experience. This course requires a
final presentation of a complete portfolio including resume, renderings and
photographs of the finished work. Prerequisite: METL 515. LAB.
METL 590. Internship in Metalsmithing/Jewelry. 1-3 Hours. U.
Practical experience in the use of artistic skills in approved and supervised academic or professional settings. May be repeated for credit; no more than six hours may be applied to the B.A. or B.F.A. degree. Credit hours are graded on a satisfactory/unsatisfactory basis, according to the written recommendation provided by the internship supervisor to the faculty advisor. Prerequisite: ART 102, and ART 103, and ART 104; and fifteen hours of Visual Art Courses; and permission of instructor. FLD.

METL 599. Individual Studies in Metalsmithing/Jewelry. 1-6 Hours.
AE61 / U.
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours may apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Metalsmithing/Jewelry courses, or permission of instructor. IND.

METL 715. Metals/Jewelry. 2-6 Hours.
Continuation of METL 715. RSH.

PNTG 337. Watercolor. 3 Hours.
Sessions deal with the preparation of watercolor paints and equipment, but the main emphasis is placed on relational concepts affecting tone, structure, and unity in work. While the students are expected to explore some of the traditional approaches to watercolor, they also are encouraged to work with new and innovative ones. May be repeated for credit. Prerequisite: PNTG 263 or permission of instructor. LAB.

PNTG 338. Landscape Painting. 3 Hours.
An introduction to landscape painting. Considerable work is done out-of-doors. Emphasis is placed upon experiencing the environment and the development of individual approach. May be repeated for credit. Prerequisite: PNTG 263 and permission of instructor. LAB.

PNTG 364. Painting II. 3 Hours.
Continuation of PNTG 263. Prerequisite: PNTG 263. LAB.

PNTG 368. Painting II, Honors. 3 Hours.
Continuation of PNTG 263. Prerequisite: PNTG 263; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

PNTG 500. Advanced Special Topics in Painting: ______. 1-4 Hours.
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit.

Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Painting courses, or permission of instructor. LAB.

PNTG 565. Painting III. 3 Hours.
Continuation of PNTG 364. Prerequisite: PNTG 364. LAB.

PNTG 566. Painting IV. 3 Hours.
Continuation of PNTG 565. May be repeated for credit. Prerequisite: PNTG 565. LAB.

PNTG 567. Painting III, Honors. 3 Hours.
Continuation of PNTG 564 or PNTG 364. Prerequisite: PNTG 364 or PNTG 368; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

PNTG 569. Painting IV, Honors. 3 Hours.
Continuation of PNTG 565 or PNTG 568. Prerequisite: PNTG 565 or PNTG 568; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

PNTG 585. The Figure I. 3 Hours.
The figure and its environment in various media. Prerequisite: DRWG 314 and PNTG 364. LAB.

PNTG 586. The Figure II. 3 Hours.
Continuation of PNTG 585. May be repeated for credit. Prerequisite: PNTG 585. LAB.

PNTG 588. The Figure I, Honors. 3 Hours.
The figure and its environment in various media. Prerequisite: DRWG 314 or DRWG 318 and PNTG 364 and PNTG 368; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

PNTG 589. The Figure II, Honors. 3 Hours.
Continuation of PNTG 585 or PNTG 588. May be repeated for credit. Prerequisite: PNTG 585 or PNTG 588; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

PNTG 599. Individual Studies in Painting. 1-6 Hours. AE61 / U.
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours may apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Painting courses, or permission of instructor. IND.

PNTG 667. Painting V. 3 Hours.
Continuation of PNTG 566. Prerequisite: PNTG 566. LAB.

PNTG 668. Painting VI. 3 Hours.
Continuation of PNTG 667. May be repeated for credit in subsequent semesters. Prerequisite: PNTG 667. LAB.

PNTG 687. The Figure III. 3 Hours.
Continuation of PNTG 586. Prerequisite: PNTG 586. LAB.

PNTG 688. The Figure IV. 3 Hours.
Continuation of PNTG 687. May be repeated for credit. Prerequisite: PNTG 687. LAB.

PNTG 869. The Figure V. 3 Hours.
Individual research in the figure and its environment in various media. Prerequisite: PNTG 688. RSH.
PRNT 970. Painting VIII. 3 Hours.
Continuation of PRNT 899. Prerequisite: PRNT 897. RSH.

PRNT 990. The Figure VI. 3 Hours.
Continuation of PRNT 990. Prerequisite: PRNT 899. RSH.

PRNT 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Printmaking. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

PRNT 223. Intaglio I. 3 Hours.
Introduction to intaglio. Prerequisite: ART 102, and ART 103 or ART 104. LAB.

PRNT 224. Relief I. 3 Hours.
Introduction to relief printing. Prerequisite: ART 102, and ART 103 or ART 104. LAB.

PRNT 233. Lithography I. 3 Hours.
Introduction to lithography. Prerequisite: ART 102, and ART 103 or ART 104. LAB.

PRNT 243. Serigraphy I. 3 Hours.
Introduction to serigraphy. Prerequisite: ART 102, and ART 103 or ART 104. LAB.

PRNT 300. Special Topics in Printmaking: ______. 3 Hours. U.
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Printmaking courses, or permission of instructor. LEC.

PRNT 324. Intaglio II. 3 Hours.
Continuation of PRNT 223. Prerequisite: PRNT 223, or permission of instructor. LAB.

PRNT 325. Relief II. 3 Hours.
Continuation of PRNT 224. Prerequisite: PRNT 224, or permission of instructor. LAB.

PRNT 328. Intaglio II, Honors. 3 Hours.
Continuation of PRNT 223. Prerequisite: PRNT 223; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

PRNT 329. Relief II, Honors. 3 Hours.
Continuation of PRNT 224. Prerequisite: PRNT 224; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

PRNT 334. Lithography II. 3 Hours.
Continuation of PRNT 233. Prerequisite: PRNT 233 or permission of instructor. LAB.

PRNT 344. Serigraphy II. 3 Hours.
Continuation of PRNT 243. Prerequisite: PRNT 243 or permission of instructor. LAB.

PRNT 348. Special Problems in Printmaking--Color Printing in Relief and Intaglio. 3 Hours.
Multiple block and plate printing in color. (This course is not regularly offered. The current Schedule of Classes should be consulted.) Prerequisite: PRNT 223 and permission of instructor. LAB.

PRNT 349. Serigraphy II, Honors. 3 Hours.
Continuation of PRNT 243. Prerequisite: PRNT 243; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

PRNT 500. Advanced Special Topics in Printmaking: ______. 1-4 Hours. U.
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Printmaking courses, or permission of instructor. LEC.

PRNT 523. Printmaking III A (Intaglio). 3 Hours.
Prerequisite: PRNT 324 or permission of instructor. LAB.

PRNT 524. Printmaking III B (Lithography). 3 Hours.
Prerequisite: PRNT 324 or permission of instructor. LAB.

PRNT 525. Printmaking III C (Serigraphy). 3 Hours.
Prerequisite: PRNT 324 or permission of instructor. LAB.

PRNT 526. Printmaking IV A (Intaglio). 3 Hours.
Prerequisite: PRNT 523 or permission of instructor. LAB.

PRNT 527. Printmaking IV B (Lithography). 3 Hours.
Prerequisite: PRNT 524 or permission of instructor. LAB.

PRNT 528. Printmaking IV C (Serigraphy). 3 Hours.
Prerequisite: PRNT 525 or permission of instructor. LAB.

PRNT 599. Individual Studies in Printmaking. 1-6 Hours. AE61 / U.
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours may apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Printmaking courses, or permission of instructor. IND.

PRNT 662. Printmaking V. 3 Hours.
Individual research in printmaking. Prerequisite: PRNT 526 or PRNT 527 or PRNT 528. LAB.

PRNT 663. Printmaking VI. 3 Hours.
Continuation of PRNT 662. Prerequisite: PRNT 662. LAB.

PRNT 802. Special Problems in Printmaking. 3 Hours.
Individual research in printmaking: course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters. Prerequisite: PRNT 579 and permission of instructor. RSH.

PRNT 827. Printmaking VII. 3 Hours.
Continuation of PRNT 663. Prerequisite: PRNT 663. LAB.

PRNT 903. Special Problems in Printmaking. 3 Hours.
Individual research in printmaking: course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters. Prerequisite: PRNT 802 and permission of instructor. RSH.

PRNT 928. Printmaking VIII. 3 Hours.
Continuation of PRNT 827. Prerequisite: PRNT 827. LAB.
SCUL 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Sculpture. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

SCUL 253. Sculpture I. 3 Hours.
Introduction to sculpture. Prerequisite: ART 102, ART 103, and ART 104, or permission of instructor. LAB.

SCUL 300. Special Topics in Sculpture: ______. 1-4 Hours.
Course to be offered in an area of studio activity of specific interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104, or permission of instructor. LAB.

SCUL 349. Metal and Glass Casting. 3 Hours.
A course in foundry techniques as related to sculpture. Both traditional and experimental procedures for casting bronze, aluminum, and iron sculpture are explored. This course is taught at the 300 and 500 levels, with additional assignments at the 500 level. Prerequisite: SCUL 253. LAB.

SCUL 350. Direct Metal Fabrication. 3 Hours.
The course will present a variety of techniques for fabricating metal sculpture. Oxyacetylene and electric arc welding processes will be included. May be repeated for credit. Prerequisite: SCUL 253. LAB.

SCUL 354. Sculpture II. 3 Hours.
Continuation of SCUL 253. Prerequisite: SCUL 254. LAB.

SCUL 355. Sculpture III. 3 Hours.
Continuation of SCUL 354. Prerequisite: SCUL 355. LAB.

SCUL 358. Sculpture II, Honors. 3 Hours.
Continuation of SCUL 253. Prerequisite: SCUL 253; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

SCUL 359. Sculpture III, Honors. 3 Hours.
Continuation of SCUL 354 or SCUL 358. Prerequisite: SCUL 354 or SCUL 358; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

SCUL 500. Advanced Special Topics in Sculpture: ______. 1-4 Hours. U.
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Sculpture courses, or permission of instructor. LEC.

SCUL 549. Metal and Glass Casting. 3 Hours. U.
A course in foundry techniques as related to sculpture. Both traditional and experimental procedures for casting bronze, aluminum, and iron sculpture are explored. May be repeated for credit. This course is taught at the 300 and 500 levels, with additional assignments at the 500-level. Prerequisite: SCUL 253. LAB.

SCUL 556. Sculpture IV. 3 Hours.
Continuation of SCUL 355. May be repeated for credit. Prerequisite: SCUL 355. LAB.

SCUL 558. Sculpture IV, Honors. 3 Hours.
Continuation of SCUL 355 or SCUL 359. May be repeated for credit. Prerequisite: SCUL 355 or SCUL 359; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

SCUL 599. Individual Studies in Sculpture. 1-6 Hours. AE61 / U.
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours can apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Sculpture courses, or permission of instructor. IND.

SCUL 657. Sculpture V. 3 Hours.
Continuation of SCUL 556. Prerequisite: SCUL 556. LAB.

SCUL 658. Sculpture VI. 3 Hours.
Continuation of SCUL 657. May be repeated for credit in subsequent semesters. Prerequisite: SCUL 657. LAB.

SCUL 804. Special Problems in Sculpture. 3 Hours.
Individual research in sculpture: course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters. Prerequisite: SCUL 559 and permission of instructor. RSH.

SCUL 859. Sculpture VII. 3 Hours.
Individual research in sculpture. Prerequisite: SCUL 658. RSH.

SCUL 905. Special Problems in Sculpture. 3 Hours.
Individual research in sculpture: course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters. Prerequisite: SCUL 804 and permission of instructor. RSH.

SCUL 960. Sculpture VIII. 3 Hours.
Continuation of SCUL 859. Prerequisite: SCUL 859. RSH.

TD 130. Introduction to Weaving. 3 Hours.
Specifically for students with limited or no previous experience. Application to art and design principles to four-harness loom structures. Emphasis on the use of color and texture in loom controlled and weaver controlled techniques. Counts only as a studio elective or general elective for a B.F.A. in Art or Design. LAB.

TD 133. Introduction to Fibers. 3 Hours.
Studio exploration of fibers as an art and design form. Techniques include dyeing, spinning yarn, soft sculpture, embellishment, crochet. Open to all university students. LAB.

TD 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Textile Design. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

TD 300. Special Topics in Textiles/Fibers: ______. 1-4 Hours. U.
Course to be offered in an area of special interest to individual faculty and qualified students. May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor. IND.

TD 313. Fiber Forms. 3 Hours.
Studio exploration of fibers as an art form. Techniques include feltmaking, papermaking, basketry, and dyeing. Prerequisite: ART 101, and ART 130 or ART 133. LAB.

TD 314. Introduction to Weaving. 3 Hours. U.
Application of art and design principles to four-harness loom structures. Emphasis on the use of color and texture in loom controlled and weaver controlled techniques. Prerequisite: ART 101, and ART 130 or ART 133. LAB.
TD 315. Textile Handprinting and Resist Processes. 3 Hours. U.
Fundamentals of resist and dye techniques on textiles: batik, tie-dye, discharge, and direct application. Prerequisite: ART 101, and ART 130 or ART 133. LAB.

TD 316. Screenprinting Textiles. 3 Hours.
Design problems in textile printing with emphasis on screenprinting and photo techniques. Prerequisite: ART 101, and ART 130 or ART 133. LAB.

TD 401. Weave Structures. 3 Hours. U.
Continuation of TD 314. Research and analysis of multiple-harness weave structures. Weave drafts. Design problems to develop the use of color, form, and surface in simple and compound weaves. Prerequisite: TD 314. LAB.

TD 402. Techniques in Weaving. 3 Hours. U.
Development of individual art and design concepts in relation to woven structures and/or forms. Emphasis on weaver-controlled techniques used to create images and composition. Prerequisite: TD 314. LAB.

TD 403. Intermediate Textile Printing. 3 Hours.
Individual problems in textile printing and dyeing processes. Prerequisite: TD 316. LAB.

TD 404. Surface Design. 3 Hours.
Textile pattern design for art and/or industry. Prerequisite: Twelve hours in Visual Art or Design, or permission of the instructor. LAB.

TD 414. Experimental Concepts in Weaving. 3 Hours.
Experimentation with resist dyeing, painted warps and/or "Fiber Forms" techniques in woven structures. Individual research and development of thematic concepts. Prerequisite: TD 313, and TD 301 or TD 302. LAB.

TD 500. Advanced Special Topics in Textiles/Fibers: ___. 1-4 Hours. U.
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Textiles/Fibers courses, or permission of instructor. LEC.

TD 503. Advanced Surface Design/Screenprinting. 1-6 Hours. U.
Directed study of advanced surface design and screenprinting methods. May be repeated for credit. Prerequisite: TD 403. IND.

TD 504. History of Textiles, Lecture. 3 Hours.
Study of historical textiles, their design development, and the techniques employed. Prerequisite: Junior standing in department or permission of instructor. LEC.

TD 506. Advanced Fiber Forms. 1-6 Hours. U.
Directed study of three-dimensional and off-loom methods and techniques. May be repeated for credit. Prerequisite: TD 313. IND.

TD 514. Advanced Techniques in Weaving. 1-6 Hours. U.
Directed study of advanced loom-controlled and weaver-controlled methods. May be repeated for credit. Prerequisite: TD 401 and TD 402. IND.

TD 515. Advanced Textiles/Fibers I. 3-6 Hours. AE61.
Development of individual direction in textiles based on experience, research, and skills acquired in preceding courses; capstone experience. Prerequisite: Twenty-four credits in Textiles/Fibers and consent of instructor. LAB.

TD 520. Advanced Textiles/Fibers II. 3-6 Hours. AE61.
Continuation of TD 515, capstone experience. Prerequisite: TD 515. LAB.

TD 590. Internship in Textiles/Fibers. 1-3 Hours. U.
Practical experience in the use of artistic skills in approved and supervised academic or professional settings. May be repeated for credit; no more than six hours may be applied to the B.A. or B.F.A. degree. Credit hours are graded on a satisfactory/unsatisfactory basis, according to the written recommendation provided by the internship supervisor to the faculty advisor. Prerequisite: ART 102, ART 103, and ART 104; and fifteen hours of Visual Art courses. FLD.

TD 599. Individual Studies in Textiles/Fibers. 1-6 Hours. AE61 / U.
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours can apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Textiles/Fibers courses, or permission of instructor. IND.

TD 715. Textile Design in Weaving, Printing, and Dyeing. 2-6 Hours.
Individual research. Prerequisite: TD 520 or TD 525 or equivalent. RSH.

TD 750. Graduate Seminar. 0.5 Hours.
Discussion of issues and/or work in textiles. Graded on satisfactory/unsatisfactory basis. LEC.

TD 815. Textile Design in Weaving, Printing, and Dyeing. 2-6 Hours.
Continuation of TD 715. RSH.

VAE 100. Introduction to the Profession of Art Education. 3 Hours.
This course is designed to acquaint students with the profession of art education by helping to increase an awareness of the role and characteristics of an effective art teacher. Large and small group activities and assignments are dispersed throughout the semester to facilitate these outcomes. Students are involved in observation of and participation with art teachers and pupils in the public school classrooms, which complement course activities and assignments. VAE 100 is a professional course. LEC.

VAE 130. Art and Design in Daily Life. 3 Hours. U.
The course aims to develop students' appreciation of designed objects in contemporary life whether they are historical icons or everyday items in the immediate environment. The instructional materials and activities assist students in acquiring the knowledge and skills for critically analyzing, discussing, and evaluating objects. Course content is interdisciplinary with a focus on design history. The class is open to all students and is relevant to those who have taken classes in art, design, architecture, and art history. Not open to students with credit in VAE 530. LEC.

VAE 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Visual Art Education. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

VAE 300. Special Topics in Visual Art Education: ____. 1-4 Hours. U.
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104, or permission of instructor. LEC.

VAE 320. Instruction and Curriculum I. 3 Hours.
This methods course provides an overview of the professional practices of K-12 art educators. Course content deals with the art education program, K-12, in relationship to the rest of the curriculum. This encompasses goals, objective sequence, courses offered at various levels, finance, staffing and administration. Prerequisite: Junior standing or consent of the instructor. LEC.
VAE 325. Education in Multicultural Society. 2 Hours.
The course is designed to provide the student with an awareness of and sensitivity to the concept of multicultural education. Topics related to the rationale for and processes of providing a multicultural perspective within the schools will be addressed. Field experiences will be structured to provide students with opportunities to observe the diversity within our society. LEC.

VAE 330. Fundamentals of Art. 3 Hours.
An introduction to art designed for the general university student. Designed to facilitate understanding and viewing works of art. Basic information including elements and principles of art, materials and techniques used by artists, and the function of art in society. LEC.

VAE 341. Instructional Strategies in Art for Elementary Classroom Teachers. 2 Hours.
Child growth and development in art. Materials as they relate to a sequential art education curriculum in the elementary school. Prerequisite: Admission to the School of Education or the education division of the graduate school. LEC.

VAE 395. Community Collaborations in Art Education. 3 Hours. U.
A focused examination of existing community organizations, models, and resources alongside collaborative strategies for working with these entities to achieve common goals for art education. Students in this class will learn of collaborative community models, explore entrepreneurial and other educational initiatives that contribute to the general purpose of art education, and recognize the role of families and other community members in contributing to the arts. LEC.

VAE 410. Instruction and Curriculum II. 3 Hours.
This methods course provides an overview of the professional practices of K-12 art educators. Course content deals with the art education program, K-12, in relationship to the rest of the curriculum. This encompasses goals, objective sequence, courses offered at various levels, finance, staffing and administration. Prerequisite: Junior standing or consent of the instructor. LEC.

VAE 420. Artistic Media and Processes in Art Education. 3 Hours.
Building on course content in VAE 320, this course concentrates on instructional strategies and presentation models in art education. Students examine and explore the media appropriate to teaching art in various settings and levels as well as how art program budgets are derived and impact overall curriculum development. Prerequisite: VAE 320 or permission of instructor. LEC.

VAE 497. Independent Study. 1-3 Hours.
Only one enrollment permitted each semester; a maximum of four hours will apply toward the bachelor's degree. Prerequisite: Recommendation of advisor and consent of instructor. IND.

VAE 500. Student Teaching. 6 Hours. AE61.
A supervised teaching experience in an approved school setting, with level and subject area to be selected according to the teaching field. Prerequisite: Admission to the student teaching program. FLD.

VAE 520. Instructional Technology in Art Education. 3 Hours.
This course addresses technology that is pertinent to professional art educators. Students use technology to develop a professional portfolio and technology-related resources for teaching art in PreK-12 schools and community settings. LEC.

VAE 530. Art and Design in Daily Life. 3 Hours.
The course aims to develop students' appreciation of designed objects in contemporary life whether they are historical icons or everyday items in the immediate environment. The instructional materials and activities will assist students in acquiring the knowledge and skills for critically analyzing, discussing, and evaluating objects. Course content is interdisciplinary with a focus on design history. The class is open to all students and is relevant to those who have taken classes in art, design, architecture, and art history. Not open to students with credit in VAE 130. LEC.

VAE 596. Practicum in Teaching Art. 2 Hours.
A supervised art teaching practicum in which students will learn to employ different teaching strategies with children pre-school through high school in the school or museum setting. Prerequisite: VAE 320, VAE 410, VAE 795 or consent of instructor. LEC.

VAE 598. Special Course: ______. 1-5 Hours.
A special course of study to meet current needs of education students; primarily for undergraduates. LEC.

VAE 599. Community Based Project in Art Education. 1-6 Hours. AE61 / U.
Individual activity and project that serves as an alternate capstone experience to VAE 500 (Student Teaching). Will involve the development of an independent, community-based arts education project developed by the student under the supervision of a VAE faculty member. Prerequisite: Forty credits of Visual Art, fifteen credits of Visual Art Education Courses, and permission of the instructor. IND.

VAE 600. Evaluation and Measurement in Art Education. 3 Hours.
An introduction to the concepts and skills for the development and implementation of evaluation procedures for art education. Topics will include the development of student evaluation, the relationship between instructional objectives and evaluation, various evaluation techniques for art education, grading, and providing grades and feedback (to) students, parents, and schools. Prerequisite: VAE 320 and VAE 410. LEC.

VAE 680. Internship in Teaching Art. 5-16 Hours.
A supervised internship experience leading to initial art teacher certification. The student assumes the total professional role as a teacher of art in an approved school setting. LEC.

VAE 698. Education of Women in the Arts. 2-3 Hours.
This course will examine the education of women in the arts at all levels of schooling (preschool, primary, secondary, and university) and in nonformal settings (art clubs, women's leagues, tutoring, etc.). The intent is to further a historical and contemporary based understanding of gender characteristics and discrimination as they affect the education of women in the arts. Students enrolled in three hours credit will be required to write a case study on the education of a woman artist. LEC.

VAE 710. Assessment in Art Education. 3 Hours.
The course is designed to introduce students to evaluation procedures in art education as they apply to public school teaching K-12. The material will incorporate methods of evaluating student learning in art, the effectiveness of instruction, the designing of instruments, grading procedures including the provision of feedback to students, parents, and schools. Concepts and skills for both formative and summative evaluation will be related to the development of objectives, instruction, and curriculum development as a whole. LEC.

VAE 716. Teaching Art: ______. 1-4 Hours.
Instructional techniques, methodology, materials, and evaluation. Processes for the specific art area named. May be repeated for credit in different media. LEC.

VAE 750. Introduction to Art Museum Education. 1-4 Hours.
This course provides a general overview to the museum education field. Course readings include current ideas and issues on learning, art education, criticism, the museum in education, and museum education practices. LEC.
VAE 774. Art for Exceptional Children. 2 Hours.
A study of the psychology, philosophy, content, and media in art expression and its relationship to mental and creative growth with exceptional children. Prerequisite: SPED 741, which may be taken concurrently. LEC.

VAE 780. Internship in Teaching Art. 9 Hours.
A supervised internship experience leading to initial art teacher certification. The student assumes the total professional role as a teacher of art in an approved school setting. LEC.

VAE 790. Applications of Technology in Art Education. 1-3 Hours.
The course is designed to provide students with the skills necessary for using and assessing the impact of microcomputers, video recorders, and other technological developments in art education. Prerequisite: TL 601 or equivalent. LEC.

VAE 798. Special Course: _____. 1-5 Hours.
A special course of study to meet current needs of education professionals; primarily for graduate students. LEC.

VAE 800. Visual Art Education Curriculum Development. 1-3 Hours.
A study of research, resources, and media as they relate to learning goals in a sequential art curriculum for use by teachers. The amount of credit reflects the extent of the curriculum being developed and the amount of work involved in the development process. LEC.

VAE 825. Seminar in: _____. 1-4 Hours.
LEC.

VAE 830. Seminar in: _____. 1-4 Hours.
LEC.

VAE 842. Teaching Art Criticism. 3 Hours.
An examination of the four phases of art criticism (description, analysis, interpretation and judgment) will be followed by practice in using these phases in the development of effective art curriculum for all developmental levels. Prerequisite: PRE 702 and PRE 704 or equivalents. LEC.

VAE 850. Aesthetics, the Arts and Education. 3 Hours.
Theoretical introduction to the problems involved in teaching critical appreciation of the arts; examination of materials from aesthetics, art history, and criticism. LEC.

VAE 869. History of Art Education. 3 Hours.
A study of the historical development of art education. Prerequisite: Nine hours of education. LEC.

VAE 875. Research in Art Education. 3 Hours.
This course examines the issues and procedures commonly used to conduct research in art education in preparation for students' graduate theses or projects. Research methods are adapted and applied to students' professional needs and interests in the form of a research proposal. LEC.

VAE 890. Preparation for the M.A. Examination. 1 Hour.
An independent reading course in preparation for the M.A. Examination. The grade will be an S or U, as determined by the performance on the examination. The examination will be evaluated separately. Prerequisite: Permission of the instructor. LEC.

VAE 895. Field Experience in: _____. 1-6 Hours.
Supervised and directed experiences in selected professional settings and cooperating agencies. Prerequisite: Permission of instructor. LEC.

VAE 897. Independent Study. 1-4 Hours.
Prerequisite: Consent of advisor and instructor. RSH.

VAE 898. Master's Project. 1-4 Hours.
RSH.

VAE 899. Master's Thesis. 1-6 Hours.
THE.

VAE 900. Supervision and Evaluation of Visual Arts Programs. 3 Hours.
A study of the administration of school, museum, and community arts education programs. Topics will include curriculum development, personnel supervision, finance, and the quantitative and qualitative evaluation of arts programs. Prerequisite: TL 703 or equivalent. LEC.

VAE 929. Research in Art Education. 3 Hours.
An examination of research methodology in visual arts education. Emphasis will be on philosophical, historical, qualitative, and quantitative research development. Prerequisite: PRE 715 or equivalent. LEC.

VAE 949. Artistic Learning and Development. 3 Hours.
Research from psychology, sociology, and anthropology will be examined for its implications for the artistic development of the child. Topics include cross-cultural and age comparisons of children's graphic symbol development, aesthetic judgments, and perceptual skills. Prerequisite: PRE 702 and PRE 704 or equivalents. LEC.

VAE 995. Field Experience in: _____. 1-5 Hours.
Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experiences will be prepared independently by the student, a representative of the cooperating agency, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours. LEC.

VAE 996. College Teaching Experience in: _____. 2 Hours.
To meet the college teaching experience requirement for doctoral programs, a student shall engage in a semester long, planned, instructional activity that shall include college classroom teaching under supervision. Planning shall be done with the advisor and/or member of the faculty who will supervise the experience. The activity shall be done under the supervision of a member of the University of Kansas faculty or by an individual or individuals designated by the candidate's committee. RSH.

VAE 997. Individual Study. 1-4 Hours.
Prerequisite: Prior graduate course work in the area of study and consent of instructor. RSH.

VAE 998. Seminar in: _____. 1-4 Hours.
LEC.

VAE 999. Doctoral Dissertation. 1-15 Hours.
THE.

Department of Dance

Dance Undergraduate Programs

The Department of Dance offers the Bachelor of Arts in Dance and the Bachelor of Fine Arts in Dance degrees. A minor in dance is available to students in all majors.

Courses

DANC 100. Introduction to the Dance Major. 1 Hour. H.
This is a 6 week online course designed to identify what is unique about the KU Dance experience, and to introduce students to the requirements for a BA or BFA degree. The course examines issues of academic integrity, informs students about academic support available to them, familiarizes students with the expectations of a dance major and suggests career opportunities for dance majors. Students complete five modules:
Getting Started, Programs and Degrees, Academic Integrity and Support, Expectations and Career Pathways to provide a foundation for academic success in the major. LEC.

**DANC 101. Ballet I. 1.5 Hour.**
Classical and modern approaches to the language of ballet for beginners. May be repeated for credit. Does not count toward the dance major requirements. ACT.

**DANC 102. Ballet II. 1.5 Hour.**
Classical and modern approaches to the language of ballet for experienced beginners. May be repeated for credit. Does not count toward the dance major requirements. Prerequisite: DANC 101 or consent of instructor. ACT.

**DANC 103. Modern I. 1.5 Hour.**
Dance technique for beginners with precedents in the movement vocabularies of Isadora Duncan, Martha Graham, Doris Humphrey, Merce Cunningham, and the seminal choreographers of modern dance. May be repeated for credit. Does not count toward the dance major requirements. ACT.

**DANC 104. Modern II. 1.5 Hour.**
Dance technique for experienced beginners with precedents in the movement vocabularies of Isadora Duncan, Martha Graham, Doris Humphrey, Merce Cunningham, and the seminal choreographers of modern dance. May be repeated for credit. Does not count toward the dance major requirements. Prerequisite: DANC 103 or permission of instructor. ACT.

**DANC 105. Jazz I. 1.5 Hour.**
Dance technique for beginners based on elements of Latino, African, popular and classical jazz dance forms. May be repeated for credit. Does not count toward the dance major requirements. ACT.

**DANC 106. Jazz II. 1.5 Hour.**
Dance technique for experienced beginners based on elements of Latino, African, popular and classical jazz dance forms. May be repeated for credit. Does not count toward the dance major requirements. Prerequisite: DANC 105 or consent of instructor. ACT.

**DANC 108. Pas de Deux. 1 Hour.**
The elements of classical ballet partnering (pas de deux) are explored. These elements include supported poses, turns, lifts, and their coordination between the partners. For men only. Women enroll in Pointe and Pas de Deux, DANC 307. May be repeated for credit. ACT.

**DANC 109. Men's Ballet. 2 Hours.**
An introduction to classical ballet focusing on the particular requirements of the male ballet technique including leaps, turns, batterie, and their presentation. May be repeated for credit. ACT.

**DANC 125. Movement Efficiency for Athletes. 3 Hours.**
A course designed to improve athletic performance potential by improving initiation and follow-through of movement; improving coordination, timing, and ease of action; and reducing the risk of injury through better technique. Students will learn how to apply the basic principles of Rudolf Laban and Irmgard Bartenieff to the specialized movement skills of various sports. Students will also learn to develop individualized warm-ups and drills to improve performance. Prerequisite: Participation in team sports, dance, martial arts, other skilled sport movement, or consent of instructor. ACT.

**DANC 150. Dance Improvisation. 2 Hours.**
Developing skills in perception and the rapid translation of ideas into dance. Central to the course will be exposure to a variety of stimuli from music and the visual arts, to nature and people on the streets. Prerequisite: DANC 104 or consent of instructor. ACT.

**DANC 177. First Year Seminar: _____. 3 Hours. GE11 / U.**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Dance. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

**DANC 201. Ballet III. 1-2 Hours. H.**
Intermediate level technique in classical and modern approaches to the language of ballet. May be repeated for variable credit. Prerequisite: Consent of instructor. LAB.

**DANC 203. Modern III. 1-2 Hours. H.**
Intermediate level technique. May be repeated for variable credit. Prerequisite: Consent of instructor. LAB.

**DANC 205. Jazz III. 1-2 Hours.**
Dance technique for intermediate dancers based on elements of Latino, African, popular and classical jazz dance forms. May be repeated for variable credit. Prerequisite: DANC 105 or consent of instructor. LAB.

**DANC 210. Rhythms and Structures of Music. 1 Hour.**
An introduction to the analysis and use of rhythms and the compositional forms of music for dance. LEC.

**DANC 220. Dance Performance. 1 Hour.**
A dance repertory and performance class with emphasis on developing skills for performing ballet, modern, jazz, historic, and/or forms of theatrical dance. May be repeated for credit. Prerequisite: 200- or 300-level dance technique course. ACT.

**DANC 230. Introduction to African Dance Theatre. 2 Hours. NW.**
An introduction to the general techniques of non-verbal theatrical conventions in African cultures. Practical training in movement vocabulary will be supplemented by lectures on the "text" of performance. (Same as AAAS 334 and THR 226.) LEC.

**DANC 240. Introduction to Classical East Indian Dance. 3 Hours.**
Classical East Indian dance has an extensive movement vocabulary that emphasizes the coordination of rhythmic foot patterns with intricate hand gestures. Students will learn the mudras (hand gestures) and their significance and integration within each dance. Readings will include excerpts from the Natya Sastra and other treatises of East Indian dance and culture. LEC.

**DANC 250. Choreography: Structured Solos. 2 Hours.**
Movement studies for solo figure based on exploration of the fundamental ingredients of dance (space, time, weight, and energy flow) and how to organize them into short compositional forms such as ABA, verse/refrain, or narrative. Prerequisite: DANC 150 and DANC 203 or consent of instructor. LEC.

**DANC 260. Musical Theatre Dance. 2 Hours.**
This course focuses on the dance and movement vocabulary uniquely associated with musical theatre productions, as well as a variety of popular dance styles from the 1920s to the present. Performance techniques for the stage are emphasized. ACT.

**DANC 290. Sophomore Review. 0 Hours. H.**
The Sophomore Review of all majors in the BA program in Dance provides an assessment of student progress in the degree. Transfer students to the BA program participate in the year following their admission to KU. The review process consists of verification that students are making academic progress: Students should have an overall GPA of 2.0; a self-evaluation composed of written responses to a series of questions about their own artistic, technical and discipline-specific academic progress in the program; a faculty evaluation comprised of written feedback on each student's artistic, technical and discipline-specific
academic progress in the program; and participation in at least one speedback session prior to the end of the second year. Speedback is a feedback process modeled on the speed dating format. All majors sit with faculty members for 5-minute intervals to receive individual feedback. Students engage with professors with whom they have been in technique class or rehearsal for the current year. There are no prerequisites for entry into the course. The completion of the course will be a prerequisite for enrollment in DANC 550 Senior Project. LEC.

DANC 301. Ballet IV. 1-3 Hours. H.
Advanced level technique in classical and modern approaches to the language of ballet. May be repeated for variable credit. Prerequisite: Consent of instructor. LAB.

DANC 303. Modern IV. 1-3 Hours. H.
Advanced level technique. May be repeated for variable credit. Prerequisite: Consent of instructor. LAB.

DANC 305. Jazz IV. 3 Hours.
Dance technique for advanced dancers based on elements of Latino, African, popular and classical jazz dance forms. May be repeated for credit. Prerequisite: DANC 205 or consent of instructor. LAB.

DANC 307. Pointe and Pas de Deux. 2 Hours.
An introduction to pointe and classical partnering work for the intermediate/advanced female ballet dancer, with equal emphasis on pointe technique and style, and on classical repertory for couples. May be repeated for credit. Prerequisite: DANC 201 or consent of instructor. LAB.

DANC 308. Pas de Deux. 1 Hour.
The exploration of classical ballet partnering (pas de deux) including supported poses, lifts, turns, and their coordination between the partners. For men only. Women enroll in Pointe and Pas de Deux, DANC 307. May be repeated for credit. Prerequisite: DANC 108, DANC 201, or permission of instructor. LAB.

DANC 309. Men's Ballet. 2 Hours.
A continuation of the study of male classical ballet technique including leaps, turns, batterie, and their presentation. May be repeated for credit. Prerequisite: DANC 109, DANC 201, or permission of instructor. LAB.

DANC 310. Music for Dance. 3 Hours.
An examination of music as accompaniment for dance in both classroom and performance settings. Students will listen and analyze music from various historic periods to develop the skills necessary to select music appropriate for choreography. They will learn techniques for working with accompanists and composers. Prerequisite: DANC 210 or consent of instructor. LEC.

DANC 320. University Dance Company. 0-1 Hours.
A dance repertory, performance and production class. Emphasis is on the development of skills for performing and/or producing dance concerts. Admission by audition only. May be repeated for credit. IND.

DANC 325. Movement Efficiency for Athletes. 3 Hours.
A course designed to improve athletic performance potential by improving initiation and follow-through of movement; improving coordination, timing, and ease of action; and reducing the risk of injury through better technique. Students will learn how to apply the basic principles of Rudolf Laban and Irmgard Bartenieff to the specialized movement skills of various sports. Students also will learn to develop individualized warm-ups and drills to improve performance. Prerequisite: Participation in team sports, dance, martial arts, other skilled sport movement, or consent of instructor. ACT.

DANC 330. Approaches to World Dance. 3 Hours. HL AE42 / H.
This course examines dance forms from throughout the world and how they relate to the times and cultures in which they evolved. Dance forms such as African, East Indian classical, European court dance, ballet, modern, and jazz will be studied through readings, master classes, live performances, videotapes, and films. Prerequisite: 200-level English course. LEC.

DANC 350. Choreography: Group Forms. 3 Hours.
In-depth development of movement themes for duet, trio, and larger groups. At least one concert length work with plans for presentation to an audience will be required. Prerequisite: DANC 250 or consent of instructor. LAB.

DANC 375. Ideokinesis. 3 Hours. H.
Basic concepts of neuromuscular and skeletal education through the use of specific imagery (ideokinesis). Based on the work of Mabel Todd, Lulu Sweigard, and Irmgard Bartenieff, the emphasis is on body connectedness and dynamic alignment. The aim is to realize full movement potential in the most efficient way through intrinsic body awareness. Injury prevention is addressed by introducing principles of conditioning (strength, flexibility, endurance) and factors leading to injury such as muscular imbalances or postural deviations. LEC.

DANC 420. Introduction to Videography and Website Design for Dance. 3 Hours. H.
This is a hands-on course exploring digital video technology for dance. Students are introduced to video and website production as well as the time management skills necessary to engage the multi-faceted project that is dance video. We will cover video techniques for recording dance; video editing; collaborating with national and international sites and artists; and self-promotion and marketing strategies with video and websites. The final project will be the creation of a video website for each student. No previous video editing experience is required. Prerequisite: Basic computer literacy. LEC.

DANC 430. Dance for Children. 3 Hours.
Methods and materials for teaching creative dance and the fundamentals of dance technique to children. Lessons are prepared and tested in the classroom and then presented to elementary school children. Prerequisite: DANC 203 or consent of instructor. LEC.

DANC 440. Introduction to Classical East Indian Dance. 3 Hours. NW AE42.
Classical East Indian dance has an extensive movement vocabulary that emphasizes the coordination of rhythmic foot patterns with intricate hand gestures. Students will learn the mudras (hand gestures) and their significance and integration within each dance. Readings will include excerpts from the Natya Sastra and other treatises of East Indian dance and culture. LEC.

DANC 450. Environmental Choreography. 3 Hours.
Designing dances for non-traditional performing spaces both indoors and outdoors. Students analyze how different natural and built environments can affect the gesture, space, time, and overall structure of a dance composition as well as the relationship between performers and spectators. Prerequisite: DANC 350 or consent of instructor. LAB.

DANC 460. Dance History: Research and Reconstruction. 3 Hours. HL AE42 / H.
Through research and reconstruction, students will examine major topics in dance history, such as the meaning and function of dance in pre-industrial societies, communal and court dance in Europe from the 14th to the 19th centuries, and the transformation and development of dance as a theatre art in the modern world. Texts by dance historians and treatises by dancing masters will be supplemented by readings from fields, such as anthropology, philosophy, art history, and literature, that indicate the different ways of approaching the history of dance. LEC.
DANC 470. Renaissance and Baroque Dance. 3 Hours.
Students will analyze, interpret, reconstruct, and perform historic dance forms, such as the galliard and minuet, by working with treatises of Renaissance and Baroque dancing masters, scholarly studies, and other documentary materials. The dance forms will be studied in relation to the music, visual arts, and literature of the period. LEC.

DANC 475. Career Preparation in the Arts. 3 Hours. H.
Designed to provide an overview of key areas in career preparation in the arts, including resume writing, audition skills, professional speaking, grant writing and development, publicity and marketing strategies, developing relationships with presenters and funders, and audience education. Through readings, class discussion, guest lectures with professionals, and projects based on real-life scenarios, students develop tools to further their careers in the arts. This focused study also provides individuals with the direction and means to employ their training in the field of performing arts administration and management at many different levels. This course prepares students for their entry into the professional arts marketplace. LEC.

DANC 480. Movement for Older Adults. 3 Hours.
This course is designed to increase knowledge and understanding of the movement problems experienced by older adults and to develop the student's ability to create movement interventions to address these concerns. Prerequisite: Open to juniors and seniors only. LEC.

DANC 490. Introduction to Flamenco Dance Technique. 3 Hours.
AE42/GE3H.
Using the basic compas (rhythmic structures) of Flamenco, we will explore the different components of flamenco dance technique: floreo (spiraling fingers), brazao (arm movements), palmas (rhythmic hand-clapping), maraje (marking, or movement through space), vueltas (turns) and zapateado (footwork). We will cultivate an awareness of flamenco's unique posture, learn the structure of the different rhythmic forms and introduce the possibilities for personal expression and improvisation. LEC.

DANC 498. Directed Study in: _____ . 1-3 Hours.
Investigation of a special topic or project in aesthetics, dance history, movement analysis, production, or a creative project. A maximum of six hours may be counted toward graduation. Prerequisite: At least seven hours of credit in dance courses. IND.

DANC 530. Practicum in: ______. 1 Hour.
Supervised experience in teaching beginning level dance technique in the styles of ballet, jazz, or modern dance. Different approaches are analyzed, discussed, and tested in the studio. Prerequisite: Intermediate level of dance technique in the style of the practicum. FLD.

DANC 540. Field Experience in Dance Teaching. 1-3 Hours.
Teaching ballet, modern, or jazz dance technique to children or adults with faculty supervision in an academic or community program. Prerequisite: DANC 530 and consent of instructor. FLD.

DANC 550. Senior Project. 3 Hours. AE61.
In-depth research project in dance theory or history, or choreography project involving the complete development and presentation of a dance idea. Prerequisite: Performance option: DANC 320, DANC 350, DANC 450, DANC 290 (for BA students only) and permission of the dance division. Research option: DANC 340, DANC 370, DANC 375, DANC 460, DANC 462, DANC 290 (for BA students only) and permission of the dance division. IND.

DANC 580. Special Topics in Dance. 1-3 Hours.
A study of current developments in dance with an emphasis on performance or research. May be repeated for credit. Prerequisite: Junior or senior standing and consent of instructor. IND.

DANC 598. Seminar in Dance. 3 Hours.
Special studies in dance. May be repeated for credit. Prerequisite: Junior or senior standing and consent of instructor. LEC.

DANC 735. Analysis, Criticism, and Choreography. 3 Hours.
The choreographic approaches of outstanding dance masters of the past (for example, Marius Petipa and Isadora Duncan) and present (for example, Martha Graham and Merce Cunningham) will be analyzed in terms of their handling of gesture, time, space, structure, and meaning. Students will be expected to seek out and study readings, photographs, and films in order to do written and performance projects based on the choreographic principles of old and new masters in ballet and modern dance. Prerequisite: A course in dance choreography or consent of instructor. LEC.

DANC 740. Introduction to Laban Movement. 3 Hours.
This course will introduce both the theoretical and physical applications of Laban Movement Analysis: Effort/Shape Notation (a notation system recording changes in movement qualities with respect to time, weight, space, and energy flow); Space harmony (a system that describes human movement in relation to space); Bartenieff Movement Fundamentals (a series of basic exercises to integrate and facilitate the neuromuscular connections within the body); and Laban Movement Analysis to the fields of anthropology, dance, human development, industrial efficiency, the performing arts, physical education, physical therapy, and psychology will be introduced. LAB.

DANC 742. Laban Movement Observation, Analysis, and Notation. 3 Hours.
Two systems of symbolic movement notation will be used in this course: Rudolf Laban's Effort/Shape Writing and his system of Labanotation. Several applications of Laban's notational systems will be studied as they appear in cross-cultural, developmental, psychological, and sociological research. Emphasis will be placed on refining the student's ability to perceive, describe, and notate human movement of all kinds from everyday gestures to highly trained movement skills. Prerequisite: DANC 740 or consent of instructor. LAB.

DANC 780. Movement for Older Adults. 3 Hours.
This course is designed to increase knowledge and understanding of the movement problems experienced by older adults and to develop the student's ability to create movement interventions to address these concerns. Prerequisite: Open to graduate students in any field of study. LEC.

DANC 898. Directed Study in: _____. 1-3 Hours.
Directed study in some aspect of aesthetics, dance history, movement analysis, production, or an advanced creative project. Prerequisite: Consent of instructor. IND.

Bachelor of Fine Arts in Dance

Dance Undergraduate Programs

The Department of Dance offers the Bachelor of Arts in Dance and the Bachelor of Fine Arts in Dance degrees. A minor in dance is available to students in all majors.

Bachelor of Fine Arts in Dance Degree Requirements

The B.F.A. requires an audition for entry; however, students enrolled in the B.A. program may audition at the end of each academic year. In order to be considered for a scholarship or entry directly into the B.F.A.
program, incoming students MUST audition in person or online via Acceptd (https://app.getacceptd.com/kudance).

The curriculum leading to the B.F.A. focuses on technique, choreography, and performance. It prepares students for professional careers or further academic study in dance. Entrance into the B.F.A. program is provisional during the first year. After evaluation of the year’s work and approval by the faculty, a student is fully accepted into the B.F.A. program.

B.F.A. majors receive integrated training in ballet, modern, and jazz dance technique. They also take courses in choreography, dance theory, history, dance science, and pedagogy. Other B.F.A. courses include flamenco, performing arts administration, classical East Indian dance, conditioning and injury prevention for dancers, and musical theatre dance. Students must complete a senior project in performance and/or choreography. B.F.A. majors have a variety of performance opportunities as members of the University Dance Company (http://www.ku.edu/students/orgs/University_10366.html). A total of 120 credit hours is required.

General Education Requirements (0)
In addition to degree and major requirements, all students must complete the KU Core. Students may fulfill both KU Core and Major requirements by taking following: GOAL 4 Learning Outcome 2 - DANC 230, 330, 440, 450, or 490. GOAL 6 - DANC 550.

Introduction to the Dance Major (1)
DANC 100 Introduction to the Dance Major

Dance Technique (32)
Majors must complete 32 hours of courses in the following areas.

- Majors must have at least 6 hours of technique at the 300 level in ballet and modern and 3 hours at the 300 level in jazz.

DANC 201 Ballet III
DANC 203 Modern III
DANC 205 Jazz III
DANC 301 Ballet IV
DANC 303 Modern IV
DANC 305 Jazz IV

The following may be substituted for DANC 201, DANC 203, DANC 301, or DANC 303 if 4 semesters of level IV ballet or modern are completed.

- DANC 307 Pointe and Pas de Deux
- DANC 308 Pas de Deux
- DANC 309 Men's Ballet

Choreography (10)
Majors must complete courses as specified in each of the following areas:

- DANC 150 Dance Improvisation
- DANC 250 Choreography: Structured Solos
- DANC 350 Choreography: Group Forms
- DANC 450 Environmental Choreography

Dance Performance (22)
Majors must complete courses as specified in each of the following areas:

- DANC 210 Rhythms and Structures of Music
- DANC 230 Introduction to African Dance Theatre
- DANC 330 Approaches to World Dance
- DANC 375 Ideokinesis

Bachelor of Arts in Dance

Bachelor of Fine Arts in Dance

The Department of Dance offers the Bachelor of Arts in Dance and the Bachelor of Fine Arts in Dance degrees. A minor in dance is available to students in all majors.

Bachelor of Arts in Dance Degree Requirements

The B.A. in Dance at the University of Kansas does not require an audition. Instead, all students must pass a technical and academic evaluation at the end of their sophomore year. However, to be considered for a scholarship, a prospective or transfer student must audition. The B.A. in dance offers comprehensive technical training, built on a solid liberal arts foundation, which allows students to double-major or to pursue graduate study in any number of fields.

The curriculum leading to the B.A. in dance offers integrated training in ballet, modern, and jazz dance techniques, as well as courses in classical Indian dance, African dance and flamenco dance techniques, musical theatre dance, dance improvisation and composition, video for dance, history and philosophy of dance, music for dance, creative dance for children, dance production, career preparation in the arts and independent study options. The program prepares students for professional careers in dance or for further academic study. The senior project may involve research in any of the above areas or choreography and performance culminating in a senior recital. Students are expected to take technique classes appropriate to their level of training each semester they are enrolled. A total of 120 credit hours is required.
Bachelor of Arts in Dance Course Requirements

General Education Requirements (0)
Completion of the KU Core (See KU Core)
Completion of the College BA degree specific requirements (see College BA requirements)

Introduction to the Dance Major (1)
DANC 100 Introduction to the Dance Major

Dance Technique (16)
Students may choose 16 hours from among the following, but must take at least the following: One semester of level III in jazz, Two semesters of level III in ballet and two semesters of level III in modern. Courses may be taken twice for full credit and may be taken for variable credit thereafter.

DANC 102 Ballet II
DANC 104 Modern II
DANC 106 Jazz II
DANC 201 Ballet III
DANC 203 Modern III
DANC 205 Jazz III
DANC 301 Ballet IV
DANC 303 Modern IV
DANC 305 Jazz IV

Dance Performance (2)
University Dance Company. Satisfied by 2 hours of the following:
DANC 320 University Dance Company

Dance Composition (10)
Majors must complete courses as specified in each of the following areas.
DANC 150 Dance Improvisation
DANC 250 Choreography: Structured Solos
DANC 350 Choreography: Group Forms
DANC 450 Environmental Choreography

Pedagogy (4)
DANC 430 Dance for Children
DANC 530 Practicum in: _____

Dance Studies (15)
Majors must complete courses as specified in each of the following areas.
DANC 330 Approaches to World Dance
DANC 375 Ideokinesis

Students must select 9 hours from the following:
DANC 210 Rhythms and Structures of Music
DANC 230 Introduction to African Dance Theatre
DANC 260 Musical Theatre Dance
DANC 420 Introduction to Videography and Website Design for Dance
DANC 440 Introduction to Classical East Indian Dance
DANC 460 Dance History: Research and Reconstruction
DANC 475 Career Preparation in the Arts
DANC 490 Introduction to Flamenco Dance Technique

Senior Project (3)

Satisfied by completion of 3 hours of the following:
DANC 550 Senior Project

Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 51 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Below is a sample 4-year plan for students pursuing the BA in Dance. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 (2 crs req), BA Writing I)</td>
<td>3 ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101 (Goal 1.2 Quantitative Reasoning)</td>
<td>3 Quantitative Reasoning (Goal 1.2, BA Quantitative Reasoning)</td>
<td>3</td>
</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3 Goal 3 Social Science</td>
<td>3</td>
</tr>
<tr>
<td>DANC 150 (Major Requirement)</td>
<td>2 DANC 250 (Major Requirement)</td>
<td>2</td>
</tr>
<tr>
<td>Dance Technique (Modern, Jazz, Ballet), Major Requirement</td>
<td>2 Dance Technique (Modern, Jazz, Ballet), Major Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Dance Technique (Modern, Jazz, Ballet), Major Requirement</td>
<td>1-3 Dance Technique (Modern, Jazz, Ballet), Major Requirement</td>
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</tbody>
</table>

Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5 2nd Semester Language (BA Second Language)</td>
<td>5</td>
</tr>
<tr>
<td>Goal 2.2 Communication</td>
<td>3 Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>DANC 350 (Major Requirement)</td>
<td>3 Lab Science (BA Lab Requirement)</td>
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<tr>
<td>DANC 330 (Goal 4.2 Global Awareness, Major Requirement)</td>
<td>3 Dance Technique (Modern, Jazz, Ballet), Major Requirement</td>
<td>1-3</td>
</tr>
</tbody>
</table>
Minor in Dance

Dance Undergraduate Programs

The Department of Dance offers the Bachelor of Arts in Dance and the Bachelor of Fine Arts in Dance degrees. A minor in dance is available to students in all majors.

Requirements for the Minor in Dance

Open to all KU students

Dance Minor Course Requirements

Students selecting this minor must complete the following requirements:

Dance Technique (8)

Satisfied by 8 hours from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>DANC 102 Ballet II</td>
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</tr>
<tr>
<td>DANC 104 Modern II</td>
<td>3</td>
</tr>
<tr>
<td>DANC 106 Jazz II</td>
<td>3</td>
</tr>
<tr>
<td>DANC 201 Ballet III</td>
<td>3</td>
</tr>
<tr>
<td>DANC 203 Modern III</td>
<td>3</td>
</tr>
<tr>
<td>DANC 205 Jazz III</td>
<td>3</td>
</tr>
<tr>
<td>DANC 260 Musical Theatre Dance</td>
<td>3</td>
</tr>
<tr>
<td>DANC 301 Ballet IV</td>
<td>3</td>
</tr>
<tr>
<td>DANC 303 Modern IV</td>
<td>3</td>
</tr>
<tr>
<td>DANC 305 Jazz IV</td>
<td>3</td>
</tr>
</tbody>
</table>

Dance Minor Required Electives (12)

Satisfied by 12 hours from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 150 Dance Improvisation</td>
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<tr>
<td>DANC 210 Rhythms and Structures of Music</td>
<td>3</td>
</tr>
<tr>
<td>DANC 230 Introduction to African Dance Theatre</td>
<td>3</td>
</tr>
<tr>
<td>DANC 250 Choreography: Structured Solos</td>
<td>3</td>
</tr>
<tr>
<td>DANC 330 Approaches to World Dance</td>
<td>3</td>
</tr>
<tr>
<td>DANC 375 Ideokinesis</td>
<td>3</td>
</tr>
<tr>
<td>DANC 420 Introduction to Videography and Website Design for Dance</td>
<td>3</td>
</tr>
<tr>
<td>DANC 430 Dance for Children</td>
<td>3</td>
</tr>
<tr>
<td>DANC 440 Introduction to Classical East Indian Dance</td>
<td>3</td>
</tr>
<tr>
<td>DANC 460 Dance History: Research and Reconstruction</td>
<td>3</td>
</tr>
<tr>
<td>DANC 475 Career Preparation in the Arts</td>
<td>3</td>
</tr>
<tr>
<td>DANC 490 Introduction to Flamenco Dance Technique</td>
<td>3</td>
</tr>
</tbody>
</table>

Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

Please note:

1 Dance Technique courses can be taken for 1-3 credit hours. For the purposes of this 4-year plan, most Dance Technique courses are listed at 3 credit hours to represent completion of the full 120 credit hours required to graduate.

2 DANC 150 and DANC 350 are rotational and must be taken in sequence.

3 Visit this website (http://college.ku.edu/undergrad/curriculum/ba_QR) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

All students in the College of Liberal Arts and Sciences are required to completed 120 total hours of which 45 hours must be at the Jr/Sr (300+) level, and 100 hours must be from within the College of Liberal Arts and Sciences.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
Minor Hours
Satisfied by 20 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 junior/senior hours of KU resident credit in the minor.

Minor Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the minor. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Department of Film and Media Studies

Why study film and media?
The Department of Film and Media Studies unites the inquiry of the academic with the practice and technique of the artist. Scholars and filmmakers work and study together in an environment of mutual encouragement and collegiality.

Undergraduate Programs
The department offers Bachelor of Arts and Bachelor of General Studies degrees, as well as a minor in film and media studies.

Courses for Nonmajors
The department offers many courses open to nonmajors who wish to learn more about film and media, including but not limited to:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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Graduate Programs
The department offers graduate programs culminating in a Master of Arts degree in Film and Media Studies and/or a Doctor of Philosophy degree in Film and Media Studies.

Courses

FMS 100. Introduction to the Film Medium. 3 Hours. HL / H.
Study of film as a visual art. Focus on communicative transaction between film viewer and film maker. Learning to read basic signs, syntaxes, and structures of cinematic language. Direct analysis of selected films. LEC.

FMS 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Film and Media Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

FMS 200. Film and Media Aesthetics. 3 Hours. HL GE3H / H.
An introduction to film and media aesthetics, including basic film/media theories and their practical applications. Students will be introduced to the concepts of time, space, composition, movement, editing, light, color, and sound. A key feature of the course will be a practical emphasis on learning how to see creatively by applying elements of design, camera lens and sound recording principles. Examples of these aspects of film and associated media will be examined and discussed in depth. Should be taken before or concurrently with FMS 275 or FMS 276. LEC.

FMS 204. Study Abroad Topics in: _____. 1-6 Hours. H.
This course is designed for the study of special topics in Film at the freshman/sophomore level. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

FMS 273. Basic Screenwriting. 3 Hours. H.
An introduction to the craft and principles of screenwriting, from inspiration to writing a complete first act. Emphasis on factors relevant to the creation of a treatment and a screenplay. Prerequisite: Consent of instructor. LEC.

FMS 275. Basic Video Production. 3 Hours. H.
Theory and practice of video production with emphasis on preproduction planning, scripting, directing, lighting, camera operation and audio. Lecture-laboratory. Prerequisite: FMS 100, completion of or concurrent enrollment in FMS 200, and consent of instructor. LEC.

FMS 276. Basic Film Production. 3 Hours. H.
An introduction to 16mm film techniques and structures, requiring construction of brief, individually produced fictive-narrative films employing classical continuity. Lecture-laboratory. Prerequisite: FMS 100 and consent of instructor. LEC.

FMS 302. Undergraduate Studies Seminar in: _____. 1-3 Hours. H.
Course organized any given semester to examine a particular studies topic or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. LEC.

FMS 303. Undergraduate Production Seminar in: _____. 1-3 Hours. H.
Course organized any given semester to study a particular production topic or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. LEC.

FMS 304. Study Abroad Topics in: _____. 1-6 Hours. H.
This course is designed for the study of special topics in Film at the junior/senior level. Credit for course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

FMS 307. Undergraduate Film/Media Internship. 1-6 Hours. H.
Supervised study with an approved film/media company or project. May be repeated for credit. No more than six hours may be applied to the B.A. or B.G.S. degrees. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Consent of instructor and at least seven hours credit in the department. FLD.

FMS 310. History of the Silent Film. 3 Hours. H.
A survey of the artistic, economic and sociological development of the narrative cinema with emphasis on the American studio system, German Expressionism, and Soviet Expressionist Realism. Analysis of selected films. LEC.

FMS 311. History of the American Sound Film. 3 Hours. HL / H.
A study of the artistic, economic, and sociological development of the American sound film with emphasis on the studio system, major directors, genres, and the impact of television. Analysis of selected films. LEC.
FMS 312. History of the International Sound Film to 1950. 3 Hours. H.
A survey of the artistic, economic, and sociological development of the international sound film 1929 to 1950. Emphasis on European National Cinemas. LEC.

FMS 313. History of the International Sound Film Post 1950. 3 Hours. H.
A survey of the artistic, economic, and sociological development of the international sound film from 1950 to the present. Emphasis on Free Cinema, New Wave, and other emerging post-war cinemas. LEC.

FMS 314. History of African-American Images in Film. 3 Hours. HL AE41 / H.
A history and critical assessment of the diverse images of African-Americans in American cinema and the impact of those images on American society. Screenings of feature and independent films, including those by African-Americans. LEC.

FMS 315. Survey of Japanese Film. 3 Hours. NW AE42 / H.
This course surveys the major developments in and critical approaches to twentieth-century Japanese film. Focusing mostly on narrative films, Survey of Japanese Film introduces students to basic methodological issues in Japanese film history, especially questions of narrative, genre, stardom, and authorship. We examine Japanese cinema as an institution located within specific contexts focusing on the ways in which this institution shapes gender, class, ethnic, and national identities. This course examines how patterns of distribution, exhibition, and reception have influenced film aesthetics and film style over the last century. Through secondary readings, lectures, and discussions students critically examine how Japanese cinema as an institution both responds to and intervenes in the social, cultural, and political history of twentieth-century Japan. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. (Same as EALC 315.) LEC.

FMS 316. Cinemas of the Southern Cone: Argentina, Chile, and Uruguay. 3 Hours. AE41 / H.
This course will examine the cinemas of three neighboring South American countries to find similar themes and some differences between them historically, politically, and culturally. Themes will include: gender and nation, political repression during dictatorship, globalization and the cinema, youth culture in the Southern Cone, and representations of race and ethnicity, immigration and identity in contemporary cinema. Other themes in common are financing issues, such as co-production agreements, film production under the regional trade pact Mercosur and issues of circulation, distribution and marketing of national films. Most films will be feature length narrative, but a few documentaries will be shown. May be taken as FMS 716, but with additional requirements. LEC.

FMS 317. Race and the American Documentary. 3 Hours. H.
This course surveys a range of documentaries in which race is a key part. There are two class objectives: the first is to broaden the students' knowledge of American social history and culture, especially around issues of identity, representation and race. The second is to heighten the students' critical skills as viewers of films in general. A complete film or portion is screened at each class session, preceded by an introductory lecture, and a follow-up discussion. Readings from a variety of scholarly texts are excerpted for student review prior to a particular class. LEC.

FMS 318. Anti-war Film. 3 Hours. H.
An overview and exploration of the history of anti-war film and media themes to show how attitudes regarding war and political policy can be affected by positive and negative depictions of conflict. Course includes analysis of selected films. LEC.

FMS 320. Adaptation from Stage to Screen. 3 Hours. H.
In an increasingly global media economy, adaptation study offers an enterprising model for the cross-pollination of texts across historical, national, and cultural boundaries. Although this course focuses more specifically on adaptations and adaptation processes involving theatrical events and cinematic properties, this larger view should be kept in mind. The course will consist of readings, screenings, and presentations by faculty in the Department Film and Media Studies and the Department of Theatre addressing theoretical issues, case studies, and intertextual considerations, and an historical overview of theatre-film interaction. LEC.

FMS 345. New Media and Society. 3 Hours. H.
Students will be introduced to major themes and debates in digital media studies and apply critical approaches for understanding new media practices, technologies, and theories. In addition to readings and lectures, students will engage in a variety of digital activities and participate in production-oriented projects. By the end of this course students will gain a foundational understanding of historical and emerging relationships between new media (internet, cell phones, digital games, etc.) and society, acquire key digital skills, and experience a variety of new media texts and services. This course is offered at the 300 and 700 levels, with additional assignments at the 700 level. LEC.

FMS 373. Intermediate Screenwriting. 3 Hours. H.
Emphasis on writing a full-length screenplay. Explores genre, character, dialogue, and the development of a personal writing style. Prerequisite: FMS 273 and consent of instructor (students will be selected based on writing samples). LEC.

FMS 374. Animation. 3 Hours. H.
A survey that combines animation history, theory, and production by examining animated works of all kinds and exploring various styles utilizing both hands-on techniques and digital animation programs. Lecture-laboratory. LEC.

FMS 375. Intermediate Video Production. 3 Hours. H.
Theory and practice of longer-form video production with emphasis on scripting, talent coordination and editing in preproduction, production and postproduction. Lecture-laboratory. Prerequisite: FMS 275 and consent of instructor. LEC.

FMS 376. Cinematography. 3 Hours. H.
Theory and practice of cinematography, with emphasis on creation of film, video, and digital imagery. Prerequisite: FMS 275 or FMS 276, and consent of instructor. LEC.

FMS 377. Post-Production. 3 Hours. H.
Students become familiar with techniques and processes in film and video post-production including, but not limited to, editing, sound, post-production management, marketing, and distribution. This course is offered at the 300 and 700 levels, with additional assignments at the 700 level. Prerequisite: FMS 275 and consent of instructor. LEC.

FMS 380. American Popular Culture of: ______. 3 Hours. HL / H.
An interdisciplinary examination of popular cultural forms and their relationships with the social, political and economic dynamics of America, with emphasis on film, media, music, literature (including magazines and newspapers) and the graphic arts. The decade or other specific topic to be studied changes as needs and resources develop. May be repeated for credit for different decades or topics. LEC.

FMS 401. Undergraduate Professional Development Seminar. 1 Hour. H.
Provides an overview of opportunities for professional development in Film and Media Studies, and helps students plan goals for their education through an understanding of professional practices. The course also covers practical exercises in professional development, including writing
resumes, finding internships and entry-level work, and other aspects of establishing a career in Film and Media Studies. Prerequisite: FMS 275 or equivalent. Open to FMS Majors only. Graded satisfactory/unsatisfactory. LEC.

FMS 407. Undergraduate Film/Media Service Learning Internship. 1-6 Hours. H.
Supervised study with an approved government agency, established non-profit organization, school, or community-based partner to produce a professional-level film and/or media project in the public interest. Community work should meet the needs of the community-based organization and the education goals set by the student, instructor, and community based partner; be in direct service, indirect service, policy analysis, research, and/or advocacy work; engage the student with individuals or communities of need and with issues related to social justice, community development, and/or access to resources. May be repeated for credit. No more than six hours may be applied to the B.A. or B.G.S. degrees. Graded satisfactory/unsatisfactory. Prerequisite: Consent of instructor and at least 22 credit hours in the department. FLD.

FMS 410. Race, Class, and Gender in Visual Culture. 3 Hours. H.
Examines the way in which race, class, and gender are represented through visual culture, historically and in the present. The study of visual culture analyzes the way in which visual images communicate systems of beliefs, contribute to identity formation, and have an influence on our thinking about race, class, and gender. Course looks at visual objects, i.e., film, television, photography, art, advertisements, and theatre as well as visual practices, i.e., in public and private spaces. LEC.

FMS 411. Television Studies. 3 Hours. H.
A historical, theoretical, and critical survey of U.S. television from 1945 to the present from the public's perspective, with emphasis on the early influences of radio (e.g., Federal regulation and sponsorship), film and theatre; TV's rapid rise as the U.S. public's prime source of entertainment, news and information; TV's rise as a key cultural, economic and political phenomenon; TV's more recent accommodations to the forces of globalization, new technologies/media, and new business models through convergence. Discussion and screening of representative TV texts as seen against the backdrop of the theories and critical views of TV scholars ranging from Raymond Williams and John Fiske to Henry Jenkins. LEC.

FMS 412. Cyberculture Studies. 3 Hours. H.
Historically there has been a tendency to approach new media technologies and their proliferation as either utopian or dystopic. Cyberculture studies has been no exception. Students will work toward a comprehensive understanding of cyberculture as emergent computer networks forming around and constructing entertainment, knowledge, business, community, and identity. Cyberculture will be examined as the constant (re)organizing of virtual and physical relationships as well as the reorganization of media production, distribution and consumption. The variety of opportunities for computer-mediated human interaction such as social networks, virtual worlds, blogs, and games will be examined as cyberculture transposes online and offline relationships and practices. LEC.

FMS 413. Asian Media Studies. 3 Hours. H.
This course examines new and emerging media in East Asia and how the media industries of East Asia function. Using recent scholarship and industry data on contemporary cyberculture, music studies, and television industries of East Asia we examine how such factors as globalization, post-colonialism, censorship, emerging technology, and national media legislation affect regional and transnational media industries in Japan, South Korea, and Mainland China/Taiwan/Hong Kong. (Same as EALC 413.) LEC.

FMS 414. Kansas Art, History, and Popular Culture. 3 Hours. H.
An overview of the art and cultural history of Kansas (and Kansas City) from territorial days to the present. Emphasis is placed on key issues, figures and events. A general familiarity with American history is recommended. May be taken as FMS 714, but with additional requirements. (Same as HA 584.) LEC.

FMS 475. Advanced Video Production. 3 Hours. H.
Special projects in video production, using both studio and remote locations. Prerequisite: FMS 375 and consent of instructor. LEC.

FMS 477. Sound Design. 3 Hours. H.
Students will study and produce film and video work with an emphasis on sound design theory and practice. Course projects consist of several short works in response to readings and screenings, which include a survey of sound in cinema, internet and radio. Students will also become conversant with related equipment, software and techniques. Prerequisite: FMS 275 and consent of instructor. LEC.

FMS 478. Experimental Production. 3 Hours. H.
Students will produce experimental film and video projects, including installation art and performance art pieces, in both collaborative and a collaborative production modes. Practical production aspects of historical experimental works will be studied, with emphasis on creation of works inspired by these earlier artists and their work. Unorthodox video and film production concepts and modes will also be studied and used in the creation of original works. The incorporation of experimental elements in the creation of mainstream works, and the creation of such projects, will also be a key area of study and experimentation. By pushing their individual creative limits, students will gain an appreciation for the experimental film and video genre, as well as an expansion of their production skills. Prerequisite: FMS 275 and consent of instructor. LEC.

FMS 479. Broadcast Documentary Production. 3 Hours. H.
This is a hands-on production course in which students will research, plan and produce short-form non-fiction documentaries. The class is dedicated to training young professionals in the principles, skills, techniques, habits and practices of documentary production. We will focus also on the aesthetics of our craft and the documentary form. The objective is to ground students in the fundamental skills of good non-fiction storytelling-conceptualization, research, story structure, theme development, writing, producing and directing. The goal is the production of several short-form compositions (videos) where storytelling is employed to communicate a concept or idea effectively. Students will form into teams to research, develop and produce a course-long short-form documentary. Prerequisite: FMS 275 and consent of instructor. LEC.

FMS 480. Music Video Production. 3 Hours. H.
This course will cover elements of the history, aesthetics, and business of music video and music video production. Students will view and discuss many different types of music videos, and will learn how to classify and critique these videos in a professional manner. Students will gain familiarity with the genres, themes, forms, and iconography of music video; an understanding of the place of music video in media culture; an exploration of the ideological, cultural, and historical contexts of music video; and an ability to create or assist in the creation of professional-quality music videos. Prerequisite: FMS 275 and consent of instructor. LEC.

FMS 498. Honors Seminar. 2-6 Hours. A E 61 / H.
Study may be directed toward either (a) reading for integration of knowledge and insight in film and media, or (b) original research (i.e., investigation of a specific problem in film and media). Six hours maximum credit. Prerequisite: Consent of Departmental Honors Coordinator. LEC.
FMS 499. Directed Study in Film. 1-6 Hours. AE61 / H.
Investigation of a special topic or project selected by the student with advice, approval, and supervision by an instructor. Such study may take the form of directed reading or special research. Individual reports and conferences. A maximum of six hours credit may be counted toward a degree. Prerequisite: At least seven hours credit in the department and consent of instructor. IND.

FMS 530. Classical Film/Media Theory. 3 Hours. H.
Comprehensive examination of most significant theories and theorists of film. Organized around specific questions, e.g., what qualities make film art unique, and how is film related to other visual and literary arts? Class discussion, individual projects. Prerequisite: FMS 100 or equivalent (determined by instructor). LEC.

FMS 531. Contemporary Concepts in Media Studies. 3 Hours. H.
This course emphasizes a theoretical understanding of media and media production skills. It is a critical cultural study of the media, focusing on the relationships between media representations and society. Students explore different conceptual perspectives on the role and power of visual media in society in influencing social values, political beliefs, identities and behaviors; analyze specific media texts, such as film and television shows; and examine the dynamics of how class, gender, generation, and race influence the production and reception of media. LEC.

FMS 540. Cuban Cinema. 3 Hours. H.
This course explores Cuban cinema from 1959 to the present day. Special attention is paid to the representations of Cuban history, cultural politics, and the political-economic conditions of production in Cuba. In addition, the Cuban-American community and their contributions or reactions to Cuban film are discussed. Through readings, lectures, discussion, and viewing Cuban films, the class examines a variety of topics related to Cuban cinema, history, and contemporary concerns. This course is offered at the 500 and 800 levels, with additional assignments at the 800 level. Prerequisite: Junior standing. LEC.

FMS 541. Asian Film. 3 Hours. NW AE42 / H.
Seminar on various national film cultures of East and Southeast Asia. Representative films are studied from formal, stylistic, and socio-historic perspectives. Addresses the impact of key cultural, economic, and political issues on each film industry. Class discussion, reports, and individual research papers. The course is offered at the 500 and 800 levels, with additional assignments at the 800 level. (Same as EALC 541.) Prerequisite: Junior status. LEC.

FMS 542. Latin American Film. 3 Hours. H.
The course explores the national cinemas and film industries of various nations in Latin America, as well as films made by Indigenous and Chicano/a filmmakers. Films are analyzed both as artistic works (formal qualities, cinematic styles, and influences) and as documents that provide windows to the socio-historical context of the nation. The course focuses on the political-economic factors surrounding the production of Latin American national cinema (the role of the state, coproductions, film markets). Prerequisite: Junior status. May be taken as FMS 842. There will be additional requirements for graduate students taking FMS 842. LEC.

FMS 543. Contemporary Japanese Film. 3 Hours. NW AE42 / H.
Seminar on the major developments in the contemporary (1980-present) Japanese film industry examining how filmmaking practices and film criticism have been influenced by such issues as transnationalism, postcolonialism, critical race theory, postmodernism, and new media. We survey recent industrial and stylistic trends as well as key critical debates. Class discussion, reports, and individual research papers. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. (Same as EALC 543.) Prerequisite: Junior status. LEC.

FMS 544. African Film. 3 Hours. NW / H.
A critical study of Africa and its peoples as depicted in films. The aesthetic, cultural, economic, political, historical, and ideological aspects of African films are examined. (Same as AAAS 555.) LEC.

FMS 585. Capstone in Film and Media Studies. 3 Hours. H.
This course integrates the knowledge and skills acquired across the curriculum of Film Media Studies including primarily academic studies, but also production and other related disciplines to enable the student to demonstrate achievement through the production of a major creative research project. Prerequisite: Must be admitted to the Film and Media Studies B.A. or B.G.S. degree. Must have completed one FMS production course. Must have Departmental permission to enroll. LEC.

FMS 592. Documentary Film and Video. 3 Hours. H.
An historical and theoretical survey of that major genre of film and video typically termed "documentary." The course will trace the main historical developments from documentary's beginnings through contemporary innovations. Prerequisite: FMS 100 and FMS 310, FMS 311, or consent of instructor. LEC.

FMS 593. Experimental Film and Video. 3 Hours. H.
A history of experimental film and video through an examination of major artists, movements, theories, and films/tapes. Prerequisite: FMS 100 and FMS 310, or consent of instructor. LEC.

FMS 620. International Women Filmmakers. 3 Hours. H.
This course examines films made by women around the world. Mainstream and independent fiction, documentary, and experimental works will be screened and discussed. The objectives of the course are: 1) to learn the variety of films made by women and the conditions of their production, distribution reception. 2) to interrogate the idea of women's cinema as 'counter-cinema'. We will acquire tools for analyzing films in terms of economic, aesthetic, cultural, and political circumstance by women of different countries, classes, races, ethnicities, genders, and sexual preferences. LEC.

FMS 621. American Film Criticism. 3 Hours. H.
An analysis of the evolution, methods and impact of American film criticism as practiced by such critics as James Agee, Robert Warshow, Andrew Sarris, John Simon, Pauline Kael, Stanley Kauffman, and Dwight Macdonald. Prerequisite: FMS 310 or FMS 311. LEC.

FMS 673. Problems in Basic Screenwriting. 3 Hours. U.
The principles of screenwriting are developed through scene writing and analysis culminating in the writing and structure of a full-length, three-act screenplay. In addition to the class sessions taught with FMS 273 Basic Screenwriting, separate consultations and specific research assignments for graduate students in FMS 673 are also required. LEC.

FMS 675. Problems in Basic Video Production. 3 Hours. U.
Theory and practice of single-camera video production with emphasis on preproduction planning, scripting, directing, lighting, camera operation and audio. In addition to the class sessions taught with FMS 275 Basic Video Production, separate consultations and specific research assignments for graduate students in FMS 675 are also required. Lecture-laboratory. LEC.

FMS 676. Problems in Basic Film Production. 3 Hours. U.
An introduction to 16mm film techniques and structures, requiring construction of brief, individually produced fictive-narrative films employing classical continuity. In addition to the class sessions taught with FMS 276 Basic Film Production, separate consultations and specific research assignments for graduate students in FMS 676 are also required. Lecture-laboratory. LEC.
FMS 702. Graduate Seminar in: _____. 1-3 Hours.
Course organized any given semester to study particular subject matter or to take advantage of special competency by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. SEM.

FMS 704. Study Abroad Topics in: _____. 1-6 Hours.
This course is designed for the study of special topics in Film. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

FMS 707. Film/Media Internship. 3-12 Hours.
Study with an approved film or media company. Emphasis may be in one or all of the following areas: acting, directing, or promotion management. No more than six hours may be applied to an M.A. degree. Course will be graded satisfactory/unsatisfactory. Prerequisite: Consent of instructor. FLD.

FMS 714. Kansas Art, History and Popular Culture. 3 Hours.
An overview of the art and cultural history of Kansas (and Kansas City) from territorial days to the present. Emphasis is placed on key issues, figures and events. A general familiarity with American history is recommended. In addition to the lecture sessions taught in tandem with FMS 414, additional research component, lecture presentation, and class meeting are also required. LEC.

FMS 715. Survey of Japanese Film. 3 Hours.
This course surveys the major developments in patterns of distribution, exhibition, and reception and their influence on film aesthetics in twentieth century Japanese film. Through secondary readings, lectures, and discussions students will examine how Japanese cinema, as an institution, responds to and intervenes in the social, cultural, and political history of twentieth century Japan. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. (Same as EALC 715.) LEC.

FMS 716. Cinemas of the Southern Cone: Argentina, Chile, and Uruguay. 3 Hours.
This course will examine the cinemas of three neighboring South American countries to find similar themes and some differences between them historically, politically, and culturally. Themes will include: gender and nation, political repression during dictatorship, globalization and the cinema, youth culture in the Southern Cone, and representations of race and ethnicity, immigration and identity in contemporary cinema. In addition to the lecture sessions taught in tandem with FMS 316, additional research component, lecture presentation, and class meeting are also required. LEC.

FMS 717. Race and the American Documentary. 3 Hours.
This course will survey a range of documentaries in which race is a key part of the film’s text. There are two class objectives: to broaden the student's knowledge of American social history and culture, especially around issues of identity, representation and race, and to heighten the student's ability as a critical viewer of films. This course will include: film viewing, scholarly readings, and lectures. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. LEC.

FMS 718. Anti-war Films. 3 Hours.
An overview and exploration of the history of the portrayal of anti-war film and media themes to show how anti-war attitudes and political policy can be affected by positive and negative depictions of conflict. Analysis of selected films. FMS 318 and FMS 718 will meet concurrently, though separate consultations and specific research assignments for FMS 718 are also required. LEC.

FMS 743. Contemporary Japanese Film. 3 Hours.
Seminar on the major developments in the contemporary (1980-present) Japanese film industry examining how filmmaking practices and film criticism have been influenced by such issues as transnationalism, postcolonialism, critical race theory, postmodernism, and new media. We will survey recent industrial and stylistic trends as well as key critical debates. Class includes discussion, reports, and individual research papers. This course is offered at the 500 and 700 levels, with additional assignments at the 700 level. (Same as EALC 743.) SEM.

FMS 745. New Media and Society. 3 Hours.
Students will be introduced to major themes and debates in digital media studies and apply critical approaches for understanding new media practices, technologies, and theories. In addition to readings and lectures, students will engage in a variety of digital activities and participate in production-oriented projects. By the end of this course students will gain a foundational understanding of historical and emerging relationships between new media (internet, cell phones, digital games, etc.) and society, acquire key digital skills, and experience a variety of new media texts and services. This course is offered at the 300 and 700 levels, with additional assignments at the 700 level. LEC.

FMS 773. Problems in Intermediate Screenwriting. 3 Hours.
The principles of screenwriting are developed through scene writing and analysis culminating in the writing and structuring of a full-length, three act screenplay. In addition to the class sessions taught with FMS 373 Intermediate Screenwriting, separate consultations and specific research assignments for graduate students in FMS 773 are also required. LEC.

FMS 774. Animation. 3 Hours.
A survey that combines animation history, theory, and production by examining animated works of all kinds and exploring various styles utilizing both hands-on techniques and digital animation programs. This course is offered at the 300 and 700 levels, with additional assignments at the 700 level. Lecture-laboratory LEC.

FMS 775. Problems in Intermediate Video Production. 3 Hours.
Theory and practice of multiple-camera video production with emphasis on preproduction planning, scripting, directing, lighting, camera operation, and audio. In addition to the class sessions taught with FMS 375 Intermediate Video Production, separate consultations and specific research assignments for graduate students in FMS 775 are also required. Lecture-laboratory. LEC.

FMS 776. Problems in Cinematography. 3 Hours.
Theory and practice of cinematography, with emphasis on creation of film, video, and digital imagery. FMS 776 meets concurrently with FMS 376; students enrolled in the graduate-level course will have separate consultations and specific research assignments. Lecture-laboratory. Prerequisite: Consent of instructor and FMS 675 or FMS 676. LEC.

FMS 777. Post-Production. 3 Hours.
Students will become familiar with techniques and processes in film and video post-production including, but not limited to, editing, sound, post-production management, marketing, and distribution. This course is offered at the 300 and 700 levels, with additional assignments at the 700 level. Prerequisite: Consent of instructor. LEC.

FMS 800. Introduction to Graduate Study in Film/Media. 3 Hours.
Major emphasis is placed upon the principles of research, bibliographical data, and research methods useful in film and television. The course should be taken at the beginning of the graduate student's program. LEC.

FMS 801. Professional Development Seminar. 1 Hour.
Preparation and training for faculty careers in film and related fields, including research skills and methods, responsible scholarship, teaching,
and service. Other topics vary from semester to semester. May be repeated for credit. SEM.

FMS 802. Master's Projects. 3-6 Hours.
Advanced creative projects which may be elected by master's degree candidates in lieu of thesis. RSH.

FMS 810. Development of the Silent Film. 3 Hours.
Intensive study of the artistic, economic, and sociological development of the silent narrative film with emphasis on the evolution of the American studio system, German Expressionism, and Soviet Expressive Realism. LEC.

FMS 811. Development of the American Sound Film. 3 Hours.
Intensive study of the artistic, economic, and sociological development of the American sound film with emphasis on the studio system, major directors, genres, and the impact of television. LEC.

FMS 813. Development of the International Sound Film. 3 Hours.
Intensive study of the artistic, economic, and sociological development of the international sound film with emphasis on the cinemas of England, France, Italy, Germany, Sweden, and Eastern Europe. LEC.

FMS 814. Development of African-American Images in Film. 3 Hours.
A history and critical assessment of the development of diverse images of African-Americans in American cinema and the impact of those images of American society. Screenings of feature and independent films, including those by African-Americans. In addition to the lecture/screening sessions taught in tandem with FMS 314, a separate discussion section and specific research assignments for graduate students enrolled in FMS 814 are also required. LEC.

FMS 840. Cuban Cinema. 3 Hours.
This course explores Cuban cinema from 1959 to the present day. Special attention will be paid to the representations of Cuban history, cultural politics, and the political-economic conditions of production in Cuba. In addition, the Cuban-American community and their contributions or reactions to Cuban film will be discussed. Through readings, lectures, discussion, and viewing Cuban films, the class will examine a variety of topics related to Cuban cinema, history, and contemporary concerns. This course is offered at the 500 and 800 levels, with additional assignments at the 800 level. LEC.

FMS 841. Asian Film. 3 Hours.
Seminar on various national film cultures of East and Southeast Asia. Representative films are studied from formal, stylistic, and socio-historic perspectives. Addresses the impact of key cultural, economic and political issues on each film industry. Class includes discussion, reports, and individual research papers. This course is offered at the 500 and 800 levels, with additional assignments at the 800 level. (Same as EALC 841.) SEM.

FMS 842. Latin American Film. 3 Hours.
The course explores the national cinemas and film industries of various nations in Latin America, as well as films made by indigenous and Chicano/a filmmakers. Films are analyzed both as artistic works (formal qualities, cinematic styles, and influences) and as documents that provide windows to the socio-historical context of the nation. The course focuses on the political-economic factors surrounding the production of Latin American national cinema (the role of the state, co-productions, film markets). LEC.

FMS 862. Survey of Film and Media History. 3 Hours.
This seminar will be primarily international in scope and will concentrate on the following: technological and production issues relating to the transition in 1927-1931 of silent to sound film; the constructions of national identity, including those of recently emerging cultures; a comparison and contrast of the censorial agencies in America and abroad; and current revisionist perspectives on received film and media history. SEM.

FMS 863. Survey of Documentary and Experimental Film and Media. 3 Hours.
Surveys the important historical and theoretical issues pertinent to both the documentary and experimental approaches as expressed in film, video and new technologies. Includes major documentary and experimental genres, directors, national schools, artistic movements, and landmark works. Screenings reflect a chronology from origins to present-day. LEC.

FMS 864. Classical Film and Media Theory. 3 Hours.
This seminar is a comprehensive survey of the major classical film and media theories and theorists, such as Munsterberg, Eisenstein, Arnheim, Bazin, and Adorno. Organized around specific questions, e.g.: What qualities differentiate film and media from other art and communications forms? What qualities do film and media share with other art and communication forms? What qualities differentiate film from other forms of media such as television? Readings from primary sources stressed. Class discussion, individual research papers. SEM.

FMS 865. Contemporary Film and Media Theory. 3 Hours.
This seminar is a study of the theories applied to the study of film and media since the 1970s moving through structuralism, and into the posts: structuralism, modernism, colonialism, and beyond. Within these broad paradigms some of the theories examined in depth are cinesemiotics, Marxism, cinematic apparatus, feminist film theory, reception theory, new media and virtual reality. SEM.

FMS 875. Problems in Advanced Video Production. 3 Hours.
Special projects in video production, using both studio and remote locations. In addition to the class sessions taught with FMS 475 Advanced Video Production, separate consultations and specific research assignments for graduate students in FMS 875 are also required. Prerequisite: FMS 775 or consent of instructor. LEC.

FMS 880. Development of American Popular Culture in the: _____. 3 Hours.
Intensive interdisciplinary examination of popular culture forms and their relationships with the social, political, and economic dynamics of America in a specific decade, with emphasis on film, broadcasting, theatre, music literature (including magazines and newspapers), and the graphic arts. Decade to be studied changes as resources and needs develop. LEC.

FMS 887. Film and the Public. 3 Hours.
A study of the actual and implied responsibilities of film and video to the public, as seen in regulations, self-regulatory codes, and the critical literature of the field. Prerequisite: Consent of instructor. LEC.

FMS 888. Special Problems in Film History and Criticism. 1-4 Hours.
RSH.

FMS 895. Intensive Film Project Seminar. 1-4 Hours.
The student plans and executes an intensive special project which requires the professional skills of investigation and performance appropriate to radio, television and/or film. May be repeated for credit up to a maximum of six credit hours. (This seminar is to the special project program what “thesis” is to the traditional program.) RSH.

FMS 897. Practicum in Film. 1-3 Hours.
Various approaches to the illustration of principles of production in film and/or video through the supervision of laboratory exercises and subsequent evaluation by the Theatre and Film graduate faculty. FLD.
FMS 898. Investigation and Conference (for Master’s Students). 1-8 Hours.
Directed research and experimentation in film or media. Limited to eight hours credit toward the Master’s degree. RSH.

FMS 899. Master’s Thesis. 1-6 Hours.
THE.

FMS 902. Film Seminar in: ____. 3 Hours.
A graduate seminar devoted to selected historical, theoretical, or critical issues. Prerequisite: Consent of instructor. LEC.

FMS 998. Investigation and Conference (for Doctoral Students). 1-8 Hours.
RSH.

FMS 999. Doctoral Dissertation. 1-12 Hours.
THE.

Bachelor of Arts and Bachelor of General Studies in Film and Media Studies

Why study film and media?
The Department of Film and Media Studies unites the inquiry of the academic with the practice and technique of the artist. Scholars and filmmakers work and study together in an environment of mutual encouragement and collegiality.

First-Year Preparation
Students considering a major in film and media studies should enroll in FMS 100 and complete all courses required for admission to the major within the first 3 semesters.

Admission to the Major

Admission Requirements

Courses Required

FMS 100 Introduction to the Film Medium 3
FMS 200 Film and Media Aesthetics 3
FMS 380 American Popular Culture of: ____ Admissions 3

Admission GPA
Satisfied by a minimum GPA of 2.5 on a 4.0 scale in required admission courses designated above. University Course Repeat Policy will apply.

Apply to the Major

Application Term
Students should apply to the major during the semester in which major admission criteria will be completed; normally no later than 60 hours, or for transfer students, during the initial term at KU. Application to this major after completion of 60 hours, or the initial KU term for transfer students, will likely delay graduation.

Application Process
Students with the film and media studies interest code who are enrolled in the second admissions class are contacted by the department and invited to a major admissions orientation mid-semester. Attendance at an orientation is necessary to be admitted to the film and media studies department. Admission occurs at the end of the semester once the 2.5 grade-point average in FMS 100, FMS 200, and FMS 380 is confirmed.

Film and Media Studies Programs
Film/video production experience is provided through course work at Oldfather Studios. B.A. and B.G.S. requirements are quite different, so it is important to check with a department advisor. The B.A. in film and media studies introduces students to the overall field of film and media studies and prepares them for graduate study. The B.G.S. in film and media studies prepares students broadly in film/video production.

Requirements for the B.A. Major

Film and Media Studies Core Knowledge and Skills (16)

Majors must complete the following courses:

FMS 100 Introduction to the Film Medium Admission requirements. Must receive a 2.5 cumulative GPA. 3
FMS 200 Film and Media Aesthetics Admission requirements. Must receive a 2.5 cumulative GPA. 3
FMS 380 American Popular Culture of: ____ Admissions requirements. Must receive a 2.5 GPA. 3
FMS 345 New Media and Society 3
FMS 401 Undergraduate Professional Development Seminar 1
FMS 530 Classical Film/Media Theory 3

Film and Media Studies Required Electives (12)

Majors must complete a course in each of the following areas:

Documentary of Experimental Film. Satisfied by one of the following: 3
FMS 100 Introduction to the Film Medium
FMS 200 Film and Media Aesthetics
FMS 380 American Popular Culture

Film History. Satisfied by one of the following: 3
FMS 310 History of the Silent Film
FMS 311 History of the American Sound Film
FMS 312 History of the International Sound Film to 1950
FMS 313 History of the International Sound Film Post 1950
FMS 621 American Film Criticism

Film and Media Electives (6)

Satisfied by 6 hours from courses in the Film & Media Studies department (any course with an FMS prefix) 6
**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 37 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major, of which 8 must be at the junior/senior (300+) level.

**Major Junior/Senior Hours**
Satisfied by a minimum of 22 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

**Graduation Plan**
With careful planning and commitment to a full-time course load, you can graduate in 4 years. For details please consult the department.

**Requirements for the B.G.S. Major**

**Film and Media Studies Core Knowledge and Skills (16)**

Majors must complete a course in each of the following areas:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 100</td>
<td>Introduction to the Film Medium Admissions requirements. Must review a 2.5 cumulative GPA.</td>
<td>3</td>
</tr>
<tr>
<td>FMS 200</td>
<td>Film and Media Aesthetics Admissions requirements. Must review a 2.5 cumulative GPA.</td>
<td>3</td>
</tr>
<tr>
<td>FMS 380</td>
<td>American Popular Culture of: _______ Admissions requirements. Must review a 2.5 cumulative GPA.</td>
<td>3</td>
</tr>
<tr>
<td>FMS 275</td>
<td>Basic Video Production</td>
<td>3</td>
</tr>
<tr>
<td>FMS 401</td>
<td>Undergraduate Professional Development Seminar</td>
<td>1</td>
</tr>
<tr>
<td>FMS 530</td>
<td>Classical Film/Media Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

**Film and Media Studies Required Electives (15)**

Majors must complete a course in each of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 592</td>
<td>Documentary Film and Video</td>
<td>3</td>
</tr>
<tr>
<td>FMS 593</td>
<td>Experimental Film and Video</td>
<td>3</td>
</tr>
<tr>
<td>FMS 273</td>
<td>Basic Screenwriting</td>
<td>3</td>
</tr>
<tr>
<td>FMS 345</td>
<td>New Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>FMS 621</td>
<td>American Film Criticism</td>
<td>3</td>
</tr>
</tbody>
</table>

**Film History, Satisfied by one of the following:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 310</td>
<td>History of the Silent Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 311</td>
<td>History of the American Sound Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 312</td>
<td>History of the International Sound Film to 1950</td>
<td>3</td>
</tr>
<tr>
<td>FMS 313</td>
<td>History of the International Sound Film Post 1950</td>
<td>3</td>
</tr>
</tbody>
</table>

Majors must complete two courses in the following area:

**Immediate Production. Satisfied by two of the following:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 373</td>
<td>Intermediate Screenwriting</td>
<td>3</td>
</tr>
<tr>
<td>FMS 374</td>
<td>Animation</td>
<td>3</td>
</tr>
<tr>
<td>FMS 375</td>
<td>Intermediate Video Production</td>
<td>3</td>
</tr>
<tr>
<td>FMS 376</td>
<td>Cinematography</td>
<td>3</td>
</tr>
<tr>
<td>FMS 377</td>
<td>Post-Production</td>
<td>3</td>
</tr>
<tr>
<td>FMS 477</td>
<td>Sound Design</td>
<td>3</td>
</tr>
<tr>
<td>FMS 478</td>
<td>Experimental Production</td>
<td>3</td>
</tr>
<tr>
<td>FMS 479</td>
<td>Broadcast Documentary Production</td>
<td>3</td>
</tr>
<tr>
<td>FMS 480</td>
<td>Music Video Production</td>
<td>3</td>
</tr>
</tbody>
</table>

**Capstone (3)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 585</td>
<td>Capstone in Film and Media Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

**Film and Media Studies Electives (6)**

Satisfied by 6 hours elected from courses in the Film & Media Studies department (any course with an FMS prefix).

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 40 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major, of which 8 must be at the junior/senior (300+) level.

**Major Junior/Senior Hours**
Satisfied by a minimum of 22 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of 22 hours from junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

**Departmental Honors**

An undergraduate interested in honors in film and media studies must present a written declaration of intention to the department’s honors coordinator as early as possible in the junior or senior year. The following are required:

1. A grade-point average at the time of declaration and at graduation of at least 3.25 overall and 3.5 in film and media studies courses.
2. Six hours in FMS 498 Honors Seminar. Enrollment in this course must be approved by the honors coordinator. Students in the honors seminar work under the direction of one instructor for each semester. The instructor conducts an examination at the end of each semester's work and assigns a grade. Credit only is given to students who complete the work assigned for any semester but do not complete the requirements for honors. Students may change area of interest
or instructor at the beginning of a semester with the consent of the honors coordinator.

3. Satisfactory performance in a final oral examination given approximately one month before graduation.

Minor in Film and Media Studies

Why study film and media?
The Department of Film and Media Studies unites the inquiry of the academic with the practice and technique of the artist. Scholars and filmmakers work and study together in an environment of mutual encouragement and collegiality.

Requirements for the Minor
Students selecting this minor must complete the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 100</td>
<td>Introduction to the Film Medium</td>
<td>3</td>
</tr>
<tr>
<td>FMS 380</td>
<td>American Popular Culture of: _____</td>
<td>3</td>
</tr>
<tr>
<td>FMS 310</td>
<td>History of the Silent Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 311</td>
<td>History of the American Sound Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 312</td>
<td>History of the International Sound Film to 1950</td>
<td>3</td>
</tr>
<tr>
<td>FMS 313</td>
<td>History of the International Sound Film Post 1950</td>
<td>3</td>
</tr>
<tr>
<td>FMS 314</td>
<td>History of African-American Images in Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 530</td>
<td>Classical Film/Media Theory</td>
<td>3</td>
</tr>
<tr>
<td>FMS 531</td>
<td>Contemporary Concepts in Media Studies</td>
<td>3</td>
</tr>
<tr>
<td>FMS 592</td>
<td>Documentary Film and Video</td>
<td>3</td>
</tr>
<tr>
<td>FMS 593</td>
<td>Experimental Film and Video</td>
<td>3</td>
</tr>
<tr>
<td>FMS 302</td>
<td>Undergraduate Studies Seminar in: _____</td>
<td>3</td>
</tr>
<tr>
<td>FMS 542</td>
<td>Latin American Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 621</td>
<td>American Film Criticism</td>
<td>3</td>
</tr>
</tbody>
</table>

Minor Hours & Minor GPA
While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 hours of KU resident credit in the minor.

Minor Junior/Senior Hours
Satisfied by a minimum of 15 hours from junior/senior courses (300+) in the minor.

Master of Arts in Film and Media Studies

Why study film and media?
The Department of Film and Media Studies unites the inquiry of the academic with the practice and technique of the artist. Scholars and filmmakers work and study together in an environment of mutual encouragement and collegiality.

Graduate Admission

Graduate Admission Criteria

M.A. Degree
To be admitted, a student ordinarily is expected to have a Graduate Record Examination score of at least 160 (verbal), 144 (quantitative), and 4.5 analytical writing.

Ph.D. Degree
To be admitted, a student ordinarily is expected to have a Graduate Record Examination score of at least 160 (verbal), 144 (quantitative), and 4.5 analytical writing. Applicants also must have a grade-point average of at least 3.2 for undergraduate and at least 3.5 for graduate work, and a master’s degree acceptable to the graduate faculty. Deficiencies in a student’s background may require make-up work.

How to Apply (Graduate Level)

Deadlines
To apply for admission in the fall term, please submit all application materials for admission no later than

- January 1 to be considered for funding
- February 15 to be considered without funding

The department does not admit new students in the spring or summer terms.

Online Submission of Application and Fee
Submit your application fee and graduate application online (http://www.graduate.ku.edu).

Application Materials
Graduate Record Examination scores should be sent directly from the Educational Testing Service. For routing, the institution code is 6871; the department code is 4505. Check with your GRE Examination Center (http://www.ets.org/gre) to be certain your scores will arrive at KU by the application deadline.

The items listed below should be submitted online with the application and/or mailed to this address:

The University of Kansas
Department of Film and Media Studies
Attn: Graduate Secretary
Oldfather Studios
1621 W. 9th St.
Lawrence, KS 66044-2488

- An official transcript, sent directly to KU, from every previous college or university attended (copies issued to students are not accepted).
- 3 recent letters of recommendation, 2 of which should be from your current or former teachers. Each letter of recommendation must be accompanied by Graduate Letter of Recommendation Form. Completed letters with accompanying forms may be sent directly to the department by your recommenders, uploaded with your application, or included (in signed and sealed envelopes) with the rest of the materials you send us.
M.A. Degree Requirements

The Master of Arts in film and media is an academic degree, but students are expected to complete 6 hours in film and video production. All M.A. students must write a thesis as the culmination of the degree.

To be admitted, a student ordinarily is expected to have a Graduate Record Examination score of at least 160 (verbal), 144 (quantitative), and 4.5 analytical writing.

To complete the M.A., the student must sustain a grade-point average of 3.0 or higher through 33 graduate credit hours.

Requirements for the M.A. in Film and Media Studies

A total of 33 hours is required.

Core Courses (15)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 800</td>
<td>Introduction to Graduate Study in Film/Media</td>
<td>3</td>
</tr>
<tr>
<td>FMS 864</td>
<td>Classical Film and Media Theory</td>
<td>3</td>
</tr>
<tr>
<td>FMS 865</td>
<td>Contemporary Film and Media Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

Production. Select two of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 673</td>
<td>Problems in Basic Screenwriting</td>
<td>3</td>
</tr>
<tr>
<td>FMS 675</td>
<td>Problems in Basic Video Production</td>
<td>3</td>
</tr>
<tr>
<td>FMS 676</td>
<td>Problems in Basic Film Production</td>
<td>3</td>
</tr>
</tbody>
</table>

Area of Concentration (12)

Select 12 hours of courses from one of the following 4 categories: 12

A. History and Theory

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 841</td>
<td>Asian Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 842</td>
<td>Latin American Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 862</td>
<td>Survey of Film and Media History</td>
<td>3</td>
</tr>
<tr>
<td>FMS 863</td>
<td>Survey of Documentary and Experimental Film and Media</td>
<td>3</td>
</tr>
<tr>
<td>FMS 902</td>
<td>Film Seminar in: _____</td>
<td>3</td>
</tr>
</tbody>
</table>

1 elective in film history or theory 3

B. International Film and Media

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 841</td>
<td>Asian Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 842</td>
<td>Latin American Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 862</td>
<td>Survey of Film and Media History</td>
<td>3</td>
</tr>
</tbody>
</table>

1 elective chosen with the graduate advisor from the film and culture sequences offered, for example, by French and Italian or African and African-American studies, or appropriate FMS 902 Film Seminar in: _____ (3)

C. Practical Criticism

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 621</td>
<td>American Film Criticism</td>
<td>3</td>
</tr>
<tr>
<td>FMS 880</td>
<td>Development of American Popular Culture in the:</td>
<td>3</td>
</tr>
<tr>
<td>FMS 841</td>
<td>Asian Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 842</td>
<td>Latin American Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 862</td>
<td>Survey of Film and Media History</td>
<td>3</td>
</tr>
<tr>
<td>FMS 863</td>
<td>Survey of Documentary and Experimental Film and Media</td>
<td>3</td>
</tr>
<tr>
<td>FMS 902</td>
<td>Film Seminar in: _____</td>
<td>3</td>
</tr>
</tbody>
</table>

D. Theory and Practice of Production

Select two electives of the following: 6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 675</td>
<td>Problems in Basic Video Production</td>
<td>3</td>
</tr>
<tr>
<td>FMS 676</td>
<td>Problems in Basic Production</td>
<td>3</td>
</tr>
<tr>
<td>FMS 773</td>
<td>Problems in Intermediate Screenwriting</td>
<td>3</td>
</tr>
</tbody>
</table>

Select two electives of the following: 6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 841</td>
<td>Asian Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 842</td>
<td>Latin American Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 862</td>
<td>Survey of Film and Media History</td>
<td>3</td>
</tr>
<tr>
<td>FMS 863</td>
<td>Survey of Documentary and Experimental Film and Media</td>
<td>3</td>
</tr>
</tbody>
</table>

Master's Thesis

FMS 899 Master's Thesis 6

All courses should be selected in consultation with the advisor.

Doctor of Philosophy in Film and Media Studies

Why study film and media?

The Department of Film and Media Studies unites the inquiry of the academic with the practice and technique of the artist. Scholars and filmmakers work and study together in an environment of mutual encouragement and collegiality.

Graduate Admission

Graduate Admission Criteria

M.A. Degree

To be admitted, a student ordinarily is expected to have a Graduate Record Examination score of at least 160 (verbal), 144 (quantitative), and 4.5 analytical writing.

Ph.D. Degree

To be admitted, a student ordinarily is expected to have a Graduate Record Examination score of at least 160 (verbal), 144 (quantitative), and 4.5 analytical writing. Applicants also must have a grade-point average of at least 3.2 for undergraduate and at least 3.5 for graduate work, and a master’s degree acceptable to the graduate faculty. Deficiencies in a student’s background may require make-up work.
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• January 1 to be considered for funding
• February 15 to be considered without funding

The department does not admit new students in the spring or summer terms.

Online Submission of Application and Fee
Submit your application fee and graduate application online (http://www.graduate.ku.edu).

Application Materials
Graduate Record Examination scores should be sent directly from the Educational Testing Service. For routing, the institution code is 6871; the department code is 4505. Check with your GRE Examination Center (http://www.ets.org/gre) to be certain your scores will arrive at KU by the application deadline.

The items listed below should be submitted online with the application and/or mailed to this address:

The University of Kansas
Department of Film and Media Studies
Attn: Graduate Secretary
Oldfather Studios
1621 W. 9th St.
Lawrence, KS 66044-2488

• An official transcript, sent directly to KU, from every previous college or university attended (copies issued to students are not accepted).
• 3 recent letters of recommendation, 2 of which should be from your current or former teachers. Each letter of recommendation must be accompanied by Graduate Letter of Recommendation Form. Completed letters with accompanying forms may be sent directly to the department by your recommenders, uploaded with your application, or included (in signed and sealed envelopes) with the rest of the materials you send us.
• A current résumé of academic and artistic experiences.
• A statement of personal goals that explains why you want to pursue graduate study.
• A writing sample (no more than 15 pages) that demonstrates your ability to theorize, analyze, and synthesize scholarly information. (Please do not send theses, DVDs, CDs, jump drives, or videotapes.)
• International students must provide TOEFL scores (http://policy.ku.edu/graduate-studies/english-proficiency-international-students) and the international I-20 Request Form.

Ph.D. Degree Requirements
The Ph.D. is an academic degree, but students are expected to complete 6 hours in film and video production.

To be admitted, a student ordinarily is expected to have a Graduate Record Examination score of at least 160 (verbal), 144 (quantitative), and 4.5 analytical writing. The applicant also must have a grade-point average of at least 3.2 for undergraduate and at least 3.5 for graduate work and a master's degree acceptable to the graduate faculty. Deficiencies in background may require make-up work.

Ph.D. Degree in Film and Media Studies
The degree requires 60 hours not including language proficiency. Please meet with your advisor or graduate director each semester to assess your progress.

Core Requirements
24 hours of core courses are required. Doctoral students in film and media studies must take a core of courses aimed at strengthening methodological, historical, and theoretical grounding. 1 course must be taken in non-Western/indigenous film; 2 graduate-level production courses are required, and 2 courses in FMS 902 Film Seminar are mandatory.

Elective Requirements
9 hours of electives are required. Elective courses focus on the academic study of history, international cinema, popular culture, and film criticism. These courses are selected with a graduate advisor to reflect the student’s special interest. The advisor may increase the number of hours, depending on the student’s academic needs.

Production Requirements
6 hours of production courses are required. Production courses give students an understanding of the production process in making film, video, or animation pieces. On graduation, doctoral students can perform as competent artisans in addition to research scholars. Production courses are selected with a graduate advisor to reflect the student’s specific interest. The advisor may increase the number of hours, depending on the student’s academic needs.

Secondary Field Requirements
9 hours of secondary field courses at the graduate level from outside the Department of Film and Media Studies, are chosen to assist the student in writing the dissertation. They are related to the student’s proposed area of specialization. Examples include English; history; women, gender, and sexuality studies; American studies; education; and social welfare.

Research Skills and Responsible Scholarship Requirements
KU requires all doctoral students to meet the Research Skills requirement before proceeding to comprehensive exams. Compliance with this policy requires all graduate students to receive training in responsible scholarship pertinent to the field of research and obtain research skills pertinent to the doctoral level of research in their field(s). Research Skills requirements may be satisfied by taking either FMS 902: Research Methods and Applications of New Media or FMS 902: Visual Methods. Students may also elect to demonstrate proficiency in one foreign language for conducting research.

Comprehensive Examination
2 publishable papers are due at the time of the examination. The examination includes written responses to questions in history, theory, production, and literature/criticism, followed by an oral examination.

Dissertation
18 hours of dissertation credit are required. The finished dissertation must constitute a palpable contribution to knowledge in the candidate’s chosen
field. After its completion, an oral defense must be held no less than 4 weeks before the graduation deadline. The committee consists of 1 chair, 3 departmental members, and an outside member.

Ph.D. in Film and Media Studies Program of Study

Core (24)
- FMS 800 Introduction to Graduate Study in Film/Media 3
- FMS 801 Professional Development Seminar 3
- FMS 862 Survey of Film and Media History 3
- FMS 863 Survey of Documentary and Experimental Film and Media 3
- FMS 864 Classical Film and Media Theory 3
- FMS 865 Contemporary Film and Media Theory 3
- FMS 902 Film Seminar in: _______ 3
- Select one graduate-level non-Western/indigenous film course 3

Electives (9)
Select 9 hours of the following in consultation with the advisor:
- FMS 621 American Film Criticism 3
- FMS 702 Graduate Seminar in: _______ 3
- FMS 814 Development of African-American Images in Film 3
- FMS 841 Asian Film 3
- FMS 842 Latin American Film 3
- FMS 880 Development of American Popular Culture in the: _______ 3
- FMS 902 Film Seminar in: _______ 3
- FMS 998 Investigation and Conference (for Doctoral Students) 3

Others to be added from semester offerings at the graduate level

Production (6)
Select two of the following:
- FMS 673 Problems in Basic Screenwriting 3
- FMS 675 Problems in Basic Video Production 3
- FMS 676 Problems in Basic Film Production 3
- FMS 702 Graduate Seminar in: _______ 3
- FMS 773 Problems in Intermediate Screenwriting 3
- FMS 775 Problems in Intermediate Video Production 3
- FMS 895 Intensive Film Project Seminar 3
- FMS 897 Practicum in Film 3

Department of Theatre

KU Theatre: A Family of Students, Artists, Scholars, and Arts Professionals

The Department of Theatre offers outstanding theatre training in a liberal arts context. Our undergraduate programs are grounded in the philosophy that good theatre artists are thinking theatre artists. Our students work intensively on acquiring theatre skills and knowledge in our classrooms, studios, and laboratories. They receive small-school individual attention while benefiting from big-school academic choices and a vast array of programs. KU theatre students often undertake secondary study in areas such as business, journalism, art, and English. The Department of Theatre is internationally recognized for its graduate education. Our M.A. and Ph.D. programs are unique for combining intensive study of theatre and performance with the production training necessary for theatre careers in higher education. Our groundbreaking M.F.A. in Scenography is unique for having an integrated approach to scenic, lighting, and costume design that prepares artists for professional and academic careers.

Home of the University Theatre

Classroom meets the stage in the University Theatre, a leading arts program serving the KU and Lawrence communities. KU Theatre students, faculty and professional staff work together to create up to ten fully produced shows each year, from dramas to musicals to opera. In our fully-equipped facilities students engage in all aspects of production onstage and backstage. Production continues year round with the summer Kansas Classical Repertory Theatre (KCRT).

Highly Qualified Faculty Scholars and Artists

The faculty of the Department of Theatre are creative artists and researchers working in the areas of theatre stagecraft, performance, design, dramatic literature, dramaturgy, pedagogy, as well as the historical, literary, and cultural study of theatre and performance. Our faculty include award-winning teachers and internationally recognized scholars and artists working in professional theatre, authoring books and establishing research and outreach programs.

Support for Students

The Department of Theatre offers students financial aid in the form of dozens of scholarships, awards, and teaching assistantships each year to graduate and undergraduate students. A strong community of support is found in the Friends of the Theatre (FROTH), a community group dedicated to enhancing the mission of the University Theatre. Once students graduate our program they join a wide network of theatre Alumni and Professional Advisors.

Undergraduate Programs

The department offers Bachelor of Arts and Bachelor of General Studies degrees, as well as a minor in Theatre. The program leading to the Bachelor of Fine Arts degree in theatre design is offered cooperatively by the Department of Visual Art and the Department of Theatre.

Undergraduates may choose from 5 emphases: the B.A. or B.G.S with an emphasis in Theatre, Culture, and Society; the B.A. or B.G.S. with an emphasis in Performance; and a B.F.A. in Theatre Design. The concentration in Theatre, Culture, and Society acquaints students with historical, literary, and cultural study of theatre and performance. The B.A. and B.G.S. with an emphasis in Performance prepares students for professional work in theatre and for M.F.A. study in acting or directing. The B.F.A. in Theatre Design is intended as general preparation for the professional designer of scenery, costumes or lighting working in theatre and/or film or as preparation for graduate study.

The B.A., B.G.S. and B.F.A. requirements are quite different, so it is important to consult with a department advisor. Theatre production experience is provided through coursework in conjunction with the Theatre Production Program.

Courses for Nonmajors

The department offers many courses (including KU Core fulfillment) open to non-majors who wish to learn more about theatre, including but not limited to:

THR 100 Introduction to the Theatre (Fulfills KU Core Goal 3)
and across social, cultural, and disciplinary boundaries. LEC.

integrate body and mind to serve speaking needs in a variety of contexts

use language and media to express ideas clearly and confidently; and

speech assignments and theatre exercises, this course will teach students

extemporaneously and articulate clearly. Texts used in acting training

will learn to manage performance anxiety, organize a narrative, speak

games, improvisational techniques, and vocal exercises will help students

speaking. Students will compose and deliver presentations. Theatre

This course offers students a unique embodied approach to public

involvement in theatre performance and/or production. One acting role

University Theatre production or classroom project plus one crew

assignment, or two crew assignments qualify for credit. May be repeated

University Theatre production or classroom project plus one crew

assignment, or two crew assignments qualify for credit. May be repeated

for credit. Prerequisite: THR 101. ACT.

THR 204. Study Abroad Topics in: _____. 1-6 Hours. H.

This course is designed for the study of special topics in Theatre at the

freshman/sophomore level. Credit for coursework must be arranged

through the Office of KU Study Abroad. May be repeated for credit if

content varies. LEC.

THR 206. Acting II. 3 Hours. H.

the study of roles and scenes from plays. Practice in character analysis,

creation of roles, rehearsal of scenes, and ensemble work. Prerequisite:

THR 106. LEC.

THR 209. Play Reading for Performance. 3 Hours. H.

This course is designed to prepare students for upper-level courses in

theatre by developing and enhancing their ability to read plays. Close

reading of plays introduces students to a variety of different dramatic

genres and theatrical styles. Emphasis is placed on comprehension and

analysis of dramatic literature for theatrical performance. LEC.

THR 210. Musical Performance for the Actor I. 3 Hours. H.

Beginning Studies in Musical Theatre Performance: practical application

of voice, acting and movement techniques for musical theatre, solo and

group performance. LEC.

THR 212. Beginning Voice and Speech for Actors. 3 Hours. H.

A foundation course; introduction to phonetics; training in Standard

American Stage Speech; articulation skills; resonance and voice

placement. LEC.

THR 213. Movement I: The Acting Instrument. 3 Hours. H.

A foundational course in discovering ease and efficient use of the body

in a performance context, developing non-verbal communication and

partnering skills, and establishing the connection of movement to voice

production. Trains actors in proper warm-up technique, alignment and

balance, physical safety, and basic tumbling skills. LEC.

THR 215. Approaching Design. 3 Hours. HL GE3H / H.

Conceptualization and visualization of the elements involved in creative

design for theatre, dance, television, and film. LEC.

THR 216. Scenic Production. 2 Hours. H.

Introduction to the planning, construction, and mounting of scenery for

theatre, television, and film. Concentration on the technical organization

of scenic production. Lecture, discussion, and laboratory periods. LEC.

THR 220. Costume Production. 2 Hours. H.

Introduction to techniques of costume construction, including study of

fabrics, color, fundamentals of pattern making, and draping of

costumes for theatre, television, and film. Concentration on the technical

organization of costume production. Lecture, discussion, and laboratory

periods. LEC.

THR 224. Lighting Production. 2 Hours. H.

Introduction to the planning and execution of lighting for theatre,

television, and film. Concentration organized any given semester to study

particular subject matter or to take advantage of special competence by
an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. LEC.

THR 226. Introduction to African Dance Theatre. 2 Hours. NW / H.
Introduction to the general techniques of non-verbal theatrical conventions in African cultures. Practical training in movement vocabulary supplemented by lectures on the "text" of performance. There will be an end of semester "studio performance." (Same as AAAS 334 and DANC 230.) LEC.

THR 301. Theatre Practicum III. 1 Hour. H.
Involvement in theatre performance and/or production. One acting role in a University Theatre production or classroom project plus one crew assignment, or two crew assignments qualify for credit. May be repeated for credit. Prerequisite: THR 201. ACT.

THR 302. Undergraduate Seminar in: _____, 3 Hours. H.
Course organized any given semester to study a particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. LEC.

THR 303. Summer Theatre. 1-6 Hours. H.
Provides experience in a wide range of theatre activity related to the summer theatre production or productions. Work may include activity in the following areas: acting, directing, design, technical theatre, voice and/or movement. Specialized skills are developed through individual classes, production preparation and performance. Prerequisite: Consent of instructor. ACT.

THR 304. Study Abroad Topics in: _____, 1-6 Hours. H.
This course is designed for the study of special topics in Theatre at the junior/senior level. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

THR 305. Honors Seminar in: _____, 3 Hours. H.
Special topics seminar serving students enrolled in the University Honors Program. Course organized any given semester to study a particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Prerequisite: Students must be enrolled in the University Honors Program. LEC.

THR 306. Acting III. 3 Hours. H.
Advanced projects in acting. Character and scene analysis, scoring the role, rehearsal, and performance. Prerequisite: THR 206. LEC.

THR 307. Undergraduate Theatre Internship. 1-3 Hours. AE61 / H.
Supervised study with an approved theater company or project. May be repeated for credit. No more than six hours may be applied to the B.A. or B.G.S. degrees. This course will be graded satisfactory/unsatisfactory. Prerequisite: Consent of instructor and at least seven hours credit in the department. FLD.

THR 308. Script Analysis. 3 Hours. H.
This course provides knowledge and methods enabling students to conduct in-depth study of dramatic scripts. Emphasis is given to the analysis skills appropriate to practitioners of stage and screen arts. LEC.

THR 310. Musical Performance for the Actor II. 3 Hours. H.
Intermediate Studies in Musical Theatre Performance: practical application of voice, acting and movement techniques for musical theatre, solo and group performance. Prerequisite: THR 106 and THR 210. LEC.

THR 312. Acting with an Accent. 3 Hours. H.
A performance class for actors using monologues and scenes involving the use of accents and dialects. The course will also provide instruction in many of the most used American regional, British regional dialects, and foreign language accents. Prerequisite: THR 212, or by permission of instructor after the student demonstrates an ability in the International Phonetic Alphabet. LEC.

THR 313. Movement II: Physical Characterization. 3 Hours. H.
The study of diverse physical acting techniques, and an investigation into creating a character through manipulation of the acting instrument. Actor training in performance neutrality, mask work, age, and gender distinctions. Prerequisite: THR 213 and permission of instructor. LEC.

THR 316. Beginning Scene Design. 3 Hours. H.
Study of scenic design process with beginning problems in textual analysis, style, historical research, and preliminary and finished methods of design presentation. Concentration on developing fundamental design skills and awareness. Prerequisite: THR 116 and THR 215, or permission of instructor. LEC.

THR 320. Beginning Costume Design. 3 Hours. H.
Study of the costume design process with beginning problems in textual analysis, style, historical research, and preliminary and finished methods of design presentation. Concentration on developing fundamental design skills and awareness. Prerequisite: THR 215. LEC.

THR 324. Beginning Lighting Design. 3 Hours. H.
Study of the lighting design process with beginning problems in textual analysis, style, historical research, with preliminary and finished methods of design presentation. Concentration on developing fundamental design skills and awareness. Prerequisite: THR 116 and THR 215, or permission of instructor. LEC.

THR 326. African Theatre and Drama. 3 Hours. NW / H/W.
A study of the origin and development of continental African theatre and its affinity to the Levant. Traditional, colonial and contemporary dramatic theories and experiments will be examined in play selections. (Same as AAAS 355.) LEC.

THR 327. African-American Theatre and Drama. 3 Hours. AE41 / H.
A historical study of Black Theatre in the U.S.A. from its African genesis to its contemporary Americanness. Epochs in African-American dramaturgy will be critically examined. (Same as AAAS 356.) LEC.

THR 380. Popular Culture: _____, 3 Hours. HL GESH / H.
Interdisciplinary examination of popular culture oriented around a specific genre or theme. Objects of study may include popular forms of live performance such as musicals or vaudeville, as well as media-based performances (radio, television, film, internet). Specific topic to be studied changes as needs and resources develop. May be repeated for credit for different topics. LEC.

THR 401. Stage Management and Assistant Direction. 1 Hour. H.
Majors are assigned to stage manage or assistant direct a University Theatre production, or to take related workshops in stage management or assistant directing. May be repeated for credit ACT.

THR 404. Children and Drama. 3 Hours. HL / H.
Exploration of forms, methods, and materials appropriate for development of elementary-age children in dramatic arts. LEC.

THR 405. Children and Media. 3 Hours. H.
The applied study of child development theories and research methods on the influences and effects of television and related visual media on childhood in the contexts of families, schools, and society. (Same as ABSC 405 and PSYC 405.) LEC.

THR 406. Audition Techniques. 3 Hours. H.
This course prepares students for a variety of audition experiences. It includes study in techniques of prepared auditions, cold readings, interviews, and the musical audition for actors. Emphasis is placed upon developing resumes and photo portfolios as well as concentrated study in
professional contracts, unions, and agent acquisition. Prerequisite: THR 206. LEC.

THR 410. Musical Performance for the Actor III. 3 Hours. H.
Advanced Studies in Musical Theatre Performance: practical application of voice, acting and movement techniques for musical theatre, solo and group performance. Prerequisite: THR 106, THR 210, and THR 310. LEC.

THR 413. Stage Combat Skills. 3 Hours. U.
Study of the illusion of violence in a dramatic context and the special skills necessary for creating believable and safe stage fights. Actor training in armed and unarmed combat, including one or more of the following: rapier and dagger, broadsword, and quarter staff. Prerequisite: THR 313 and permission of instructor. LEC.

THR 416. Design Forum. 3 Hours. U.
Depending on student qualifications and specialization, focus is on scenic, costume, and/or lighting design. Special attention placed on developing collaborative awareness and the conceptual and presentation skills that underlie and inform the design process. Prerequisite: THR 316 or THR 320 or THR 324. LEC.

THR 429. Postcolonial Theatre and Drama. 3 Hours. NW AE42/GE3H / H.
The course develops an understanding of the postcolonial concept and its different manifestations in theatre and drama across nations and cultures. It approaches postcolonialism as a way of reading theatre, and as a genre within theatre by exploring how the "colonial project" has reconfigured the concept, content, and context of theatre in both colonized and colonizing cultures. In addition to the study of postcolonial playwrights and their works, the course is also an introduction to postcolonial theory and its critics. (Same as AAAS 429.) LEC.

THR 445. Teaching Theatre in the Middle/Secondary Schools. 3 Hours. H.
Study of philosophy and methods appropriate to teaching improvisation, acting, stagecraft, directing, playwriting, dramatic literature, and theatre history in middle/secondary schools. Includes curriculum development, instructional and evaluative strategies, and management of co-curricular theatre programs. Prerequisite: Consent of instructor. LEC.

THR 498. Honors Seminar. 2-6 Hours. AE61 / H.
Study may be directed toward either (1) reading for integration of knowledge and insight in theatre or (2) original research, i.e., investigation of a specific problem in theatre. Six hours maximum credit, which may be distributed through four semesters. Prerequisite: Consent of Departmental Honors Committee. IND.

THR 499. Directed Study in Theatre. 1-6 Hours. AE61 / H.
Investigation of a special topic or project selected by the student with advice, approval, and supervision by an instructor. Such study may take the form of directed reading or special research. Individual reports and conferences. A maximum of six hours credit may be counted toward a degree. Prerequisite: At least seven hours credit in the department and consent of instructor. IND.

THR 501. Colloquium on American Theatre. 1 Hour. U.
A series of fourteen weekly lecture/discussions led by invited guests both from the university and outside it on various topics central to the study of theatre. The first four meetings, led by the course coordinator, are a brief survey of the history of theatre in America and a preparation for the ten lecture/discussions to follow. LEC.

THR 506. Acting for the Camera. 3 Hours. H.
A study of acting techniques appropriate to the requirements of the camera. Emphasis is placed on developing audition skills necessary to compete for roles in dramatic features, corporate videos, and commercials. Actors acquire skills essential to the transition from stage to camera. Prerequisite: Permission of instructor. LEC.

THR 508. Fundamentals of Directing. 3 Hours. H.
Offered as a first course in play directing. Designed primarily for theatre majors and secondary education majors in language arts with a theatre and drama concentration. The content is principally descriptive in nature with some practical experience. Lecture and laboratory periods. Prerequisite: THR 308. LEC.

THR 509. Dramatic Script Writing. 3 Hours. H.
Study and practice in the fundamental techniques of dramatic writing and the application of such techniques most specifically to theatre. Open upon consent of instructor to students who have completed one course in advanced composition and one course in the theory or history of drama. LEC.

THR 512. A Vocal Approach to the Classics. 3 Hours. H.
This is an advanced voice and speech course for actors aiming to further increase their command over tone, rhythm, pacing, and diction. Their range and power will be extended. Through discovery of the demands of a variety of classical texts, the actor will be challenged both in verse and in prose to develop the skills necessary to fully interpret that material. Prerequisite: THR 212. LEC.

THR 516. Scenic Painting Techniques. 3 Hours. H.
Study of painting equipment, tools, pigments, binders, and vehicles, and their relationship to the surfaces to be painted. Instruction in basic painting techniques. Prerequisite: THR 115 and THR 215. LEC.

THR 517. Computer-Aided Design. 3 Hours. U.
Study of new media in theatre and film/video production, primarily computer technologies and methods for the theatrical designer or art director. Emphasis on computer 3-D modeling and color rendering. Prerequisite: THR 116, THR 215, or permission of instructor. LEC.

THR 518. Scenography and the Classic Script. 3 Hours. H.
Holistic production design, including lighting, scenery, and costumes, for classic theatre scripts. Contrasts historical styles of production with styles for contemporary spaces and audiences. Projects tailored to the needs and level of the students. Prerequisite: Consent of instructor. LEC.

THR 519. Scenography and the Modern Script. 3 Hours. H.
Holistic production design, including lighting, scenery, and costumes, for modern theatre scripts. Examines modern styles of production. Projects tailored to the needs and level of the students. Prerequisite: Consent of instructor. LEC.

THR 520. History of Period Style I. 3 Hours. H.
A survey of Western style from ancient Egypt to the Restoration. Focus is placed on developing a comprehensive understanding of the stylistic relationships between art, architecture, clothing, decor, manners, and social and political history. Prerequisite: Nine hours in theatre/design/technical courses or consent of instructor. LEC.

THR 521. History of Period Style II. 3 Hours. H.
Continuation of THR 520, from the Restoration to the present day. Prerequisite: Nine hours in theatre/design/technical courses or consent of instructor. LEC.

THR 525. History of Theatre. 3 Hours. H.
Study of developments in world theatre and drama from the ancient world to the eighteenth century. LEC.

THR 526. History of Theatre II. 3 Hours. H.
Study of developments in world theatre and drama since the eighteenth century. LEC.
THR 527. Asian Theatre and Performance. 3 Hours. NW / H/W.
A survey of traditional and modern theatre and performance in Asia, with greatest attention given to India, China, and Japan. A study of plays, dramatic genres, history, conventions of play production, acting styles and other performance forms. (Same as EALC 527.) LEC.

THR 528. History of U.S. Theatre and Drama. 3 Hours. H.
Historical approach to the development of theatre and performing arts in the United States. LEC.

THR 529. Race and the American Theatre. 3 Hours. U.
The representation(s) of race in significant texts and performance styles in American theatre analyzed according to political ideologies, dramatic movements and the impact of these factors on the representation of the "other" in the theatre. (Same as AAAS 585 and AMS 529.) LEC.

THR 550. Applied and Interactive Theatre. 3 Hours. H.
This course is an exploration of interactive drama techniques and practices of the evolving field of applied theatre. The tools of applied theatre serve varied purposes and are being used around the world for community-building, personal empowerment, to address social and political issues, and to strengthen communication skills. The class will work specifically on community-based dialogue and classroom situations that students and professors encounter in their daily lives. LEC.

THR 599. Special Topics in Scenography. 1-6 Hours. U.
Individual studio activity. Course content to be determined by the student under the supervision of a faculty member. May be repeated for credit in subsequent semesters. Prerequisite: Permission of instructor. IND.

THR 603. Theatre for Young Audiences. 3 Hours. U.
A survey of theories, history, literature, criticism, production methods, and audience research about theatre performed by adults for children and adolescents. Emphasis is on child development and community outreach. Prerequisite: THR 308 or consent of instructor. LEC.

THR 604. Drama with Young People. 1-3 Hours. U.
A laboratory experience in developing and conducting improvisational drama workshops with children or adolescents in local schools. Includes readings by leading theorists and practitioners. Prerequisite: Actors cast in current KU Theatre for Young People production, or THR 404, or consent of instructor. LEC.

THR 609. Play Directing. 3 Hours. H.
Readings, lectures, and practice dealing with the relationship between actor and director. Prerequisite: THR 508. LEC.

THR 617. Computer-Aided Design II. 3 Hours. U.
Continuation of THR 517. Emphasis on computer-generated images as scenic media in production situations. Prerequisite: THR 517, or permission of instructor. LEC.

THR 618. Scenography and the Musical Theatre. 3 Hours. H.
Holistic production design, including lighting, scenery, and costumes, for musical theatre, opera, and dance. Examines development and changes in design styles in the evolution of musical theatre, opera, and dance and the special requirements of these forms. Projects tailored to the needs and level of the students. Prerequisite: Consent of instructor. LEC.

THR 619. Scenography and the Contemporary Script. 3 Hours. H.
Holistic production design, including lighting, scenery, and costumes, for contemporary scripts. Examines contemporary episodic scripts written for the stage that are based on a filmic structure, the special problems of these kinds of scripts, and the respective problems of designing for theatre and film. Projects tailored to the needs and level of the students. Prerequisite: Consent of instructor. LEC.

THR 620. Scenography and the Experimental Production. 3 Hours. H.
Holistic production design, including lighting, scenery, and costumes, for experimental scripts/scenarios. Examines experimental approaches to a variety of script/scenarios, including mixed-media production. Projects tailored to the needs and level of the students. Prerequisite: Consent of instructor. LEC.

THR 626. Myth and the Dramatist. 3 Hours. U.
This seminar critically explores myths in dramatic literature from ancient to contemporary times, using select authors from different cultures. Analysis of the works will be based on both conventional and post-structuralist theories and specific emphasis will be on myths that have been adapted cross-culturally and/or in different time perspectives. LEC.

THR 702. Graduate Seminar in: _____. 3 Hours.
Course organized any given semester to study particular subject matter or to take advantage of special competency by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. LEC.

THR 703. Directed Readings in Theatre. 1-3 Hours.
Research reading and presentation of reports on specific subjects related to the students major area of specialization. May be repeated up to a total of six credits on petition. Required of all MFA Scenography students. IND.

THR 704. Study Abroad Topics in: _____. 1-6 Hours.
This course is designed for the study of special topics in Theatre. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

THR 707. Theatre Internship. 3-12 Hours.
Study with an approved theatre company. Emphasis may be in one or all of the following areas: acting, directing, stage management, technical theatre, promotion management. No more than six hours may be applied to an M.A. degree. Course will be graded satisfactory/unsatisfactory. Prerequisite: Consent of instructor. FLD.

THR 709. Advanced Dramatic Script Writing. 3 Hours.
The purpose of this course is to permit selected students, by consent of instructor, to develop or continue dramatic writing projects in theatre, film, television, and radio under the individual supervision of the instructor. LEC.

THR 711. Styles of Acting: Shakespearean. 3 Hours.
An approach to acting styles of the period, based on a study of the art, customs, spirit, and the theatre of the times applied to scene studies taken from the works of Shakespeare. Prerequisite: THR 106 and THR 206 or consent of instructor. LEC.

THR 713. Styles of Acting: Restoration and 18th Century English. 3 Hours.
An approach to acting styles of the period, based on a study of the art, customs, spirit, and the theatre of the times applied to scene studies taken from the works of English Restoration dramatists and those 18th century English playwrights writing in the Restoration mode. Prerequisite: THR 106 and THR 206 or consent of instructor. LEC.

THR 715. Problems and Techniques of Direction. 3 Hours.
Practical experience in directing. Prerequisite: THR 609. RSH.

THR 719. M.F.A. Production Seminar. 3 Hours.
To be taken by M.F.A. candidates during those semesters in which they are assigned to design one or more elements in a production to be mounted on one of our stages. Weekly critique and discussion of solutions to practical design problems from conception through execution. May be repeated for a total of no more than six hours credit. Prerequisite: Consent of instructor. IND.
THR 725. Russian Theatre and Drama from Stanislavski and Chekhov to the Present. 3 Hours.
A study of the development of Russian theatre and dramatic literature from 1898 to the present. Lectures and readings in English. (Same as SLAV 562.) LEC.

THR 800. Introduction to Graduate Study in Theatre. 3 Hours.
Major emphasis is placed upon the principles of research, bibliographical data, and research methods useful in theatre and performance studies. The course should be taken at the beginning of the graduate student's program. LEC.

THR 801. Professional Development Seminar. 1 Hour.
Preparation for faculty careers in theatre and related fields, including issues of research, teaching, and service. At least three hours per semester will be devoted to training in responsible scholarship. May be repeated for credit. RSH.

THR 802. Master's Projects. 3-6 Hours.
Advanced creative projects which may be elected by master's degree candidates in lieu of thesis. RSH.

THR 803. Summer Theatre: Graduate. 1-3 Hours.
Provides graduate level experience in a wide range of theatre activity related to the summer theatre production or productions. Work may include activity in the following areas: acting, directing, design, technical theatre, voice and/or movement. Specialized skills are developed through individual classes, production preparation, and performance. Prerequisite: Consent of instructor. FLD.

THR 815. Advanced Play Production. 1-3 Hours.
Individually supervised directing of theatre pieces for public presentation. In special cases credit may be given for musical direction, choreography, or stage management. Prerequisite: THR 715. FLD.

THR 817. Theory of Acting and Directing. 3 Hours.
Readings, lectures, discussions and papers on acting and directing theory; is concerned with the divergence between presentational and representational acting methods and the emergence of directing art. Prerequisite: THR 609 or THR 715. LEC.

THR 819. Advanced M.F.A. Production Seminar. 3 Hours.
Continuation of THR 719, but production design assignments will be more complex and larger in scope. May be repeated for maximum of six hours credit. Prerequisite: Six hours of THR 719 and consent of instructor. IND.

THR 826. Seminar in African Theatre. 3 Hours.
A study of developments in African theatre in the 20th Century focusing on themes, concepts, styles, and critical perspectives. The course will investigate the idea of an "African theatre" and identify different periods and movements within national and international contexts. The analysis of representative works and authors will be grounded within appropriate theoretical frameworks. LEC.

THR 828. Seminar in American Theatre and Drama to 1895. 3 Hours.
Intensive investigation of selected topics. Individual study emphasized. LEC.

THR 829. Seminar in American Theatre and Drama from 1895. 3 Hours.
Intensive investigation of selected topics. Individual study emphasized. LEC.

THR 898. Investigation and Conference (for Master's Students). 1-8 Hours.
Directed research and experimentation in theatre. Limited to eight hours credit toward the Master's degree. RSH.

THR 899. Master's Thesis. 1-6 Hours.
THE.

THR 901. Theatre Seminar in: ___. 3 Hours.
A graduate seminar devoted to selected historical, theoretical, or critical issues in theatre. Prerequisite: Consent of instructor. LEC.

THR 914. Theories of Race and Performance. 3 Hours.
Theories of Race and Performance is an inter-textual graduate course that explores interdisciplinary scholarship on race and performance. It seeks to translate these theories into practical application in various visual, audio and performance texts in popular culture. The course is divided into modules aimed at gaining an understanding of the shifting meaning of race over time and its relationship to ethnicity, gender, sexuality, class, nation, and power. How do we perform our identities? How is race constructed and maintained through performance? To begin to answer these questions, we will examine the ways in which racial identities are created through performance. SEM.

THR 915. Modern Theatre and Drama. 3 Hours.
A study of the movements in playwriting and theatrical production in Europe and America from the mid-19th century to World War II. Prerequisite: THR 525 and THR 526 or comparable courses. LEC.

THR 916. Postmodern Theatre and Drama. 3 Hours.
A study of developments in Europe and American playwriting, directing, acting, and design from World War II to the present. SEM.

THR 917. Dramatic Theory I. 3 Hours.
A survey of dramatic theory from Plato to Lessing. LEC.

THR 918. Dramatic Theory II. 3 Hours.
A survey of dramatic theory from Lessing to Langer. LEC.

THR 919. Dramatic Theory Seminar. 3 Hours.
Study in depth of selected theorists. Offered as determined by faculty availability and student interest. LEC.

THR 920. Practicum in Criticism. 3 Hours.
Contemporary approaches to theatre and drama criticism. Emphasis on actual practice, using a variety of critical methods. FLD.

THR 922. Theatre Historiography. 3 Hours.
This course focuses on the advanced study of research methods, subjects, interpretative paradigms, theoretical frameworks, and philosophies of history employed in contemporary approaches to writing and teaching theatre history. Prerequisite: THR 525 and THR 526 or equivalent. LEC.

THR 998. Investigation and Conference (for Doctoral Students). 1-8 Hours.
RSH.

THR 999. Doctoral Dissertation. 1-12 Hours.
THE.

Bachelor of Arts and Bachelor of General Studies in Theatre

Department of Theatre B.A. and B.G.S. students work intensively on acquiring theatre skills and knowledge in classrooms, studios, and laboratories. Undergraduates pursuing the B.A. or B.G.S. may choose from two emphases: Theatre, Culture, and Society or Performance.

The Performance concentration prepares theatre majors toward a career as a professional performer. Through small-class studio courses and department productions, our program provides talented performing
artists with a basic foundation in acting, movement, voice and speech, improvisation, and musical theatre.

The Theatre, Culture and Society concentration prepares students for careers that require critical, analytical, and historical foundations in the liberal arts, while providing courses in acting, directing and design as well as participation in University Theatre production. Our program provides emerging scholars with basic knowledge and research tools for understanding the social and cultural significance of theatre and performance.

Both the Bachelor of Arts (B.A.) and Bachelor of General Studies (B.G.S.) require 40 hours. The primary distinctions between the B.A. and the B.G.S. degree are the foreign language requirement (required of the B.A. but not the B.G.S.) and 18 hours junior/senior concentration or minor (required for the B.G.S but not the B.A.).

There are no major admission requirements for the B.A. or B.G.S. in Theatre.

Students considering a theatre major should enroll in THR 106 and THR 101 and complete all 100- and 200-level courses in the first 2 years of study. It is imperative that theatre students earn practicum credit (THR 101, 201, 301) early in their careers at KU.

Requirements for the B.A. and B.G.S. Major

Both the B.A. and B.G.S. require 40 hours. The distinction between the B.G.S. degree and the B.A. degree is found in College of Liberal Arts and Sciences requirements.

Theatre, Culture, and Society Emphasis

The following 40 hours are required: (40 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THR 101</td>
<td>Theatre Practicum I</td>
<td>1</td>
</tr>
<tr>
<td>THR 106</td>
<td>Acting I</td>
<td>3</td>
</tr>
<tr>
<td>THR 201</td>
<td>Theatre Practicum II</td>
<td>1</td>
</tr>
<tr>
<td>THR 215</td>
<td>Approaching Design</td>
<td>3</td>
</tr>
<tr>
<td>THR 308</td>
<td>Script Analysis</td>
<td>3</td>
</tr>
<tr>
<td>Select two of the following:</td>
<td></td>
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<tr>
<td>THR 216</td>
<td>Scenic Production</td>
<td></td>
</tr>
<tr>
<td>THR 220</td>
<td>Costume Production</td>
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<tr>
<td>THR 224</td>
<td>Lighting Production</td>
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<tr>
<td>Select one of the following:</td>
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<td></td>
</tr>
<tr>
<td>THR 301</td>
<td>Theatre Practicum III</td>
<td></td>
</tr>
<tr>
<td>THR 401</td>
<td>Stage Management and Assistant Direction</td>
<td></td>
</tr>
<tr>
<td>Select two of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THR 525</td>
<td>History of Theatre</td>
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<tr>
<td>THR 526</td>
<td>History of Theatre II</td>
<td></td>
</tr>
<tr>
<td>THR 528</td>
<td>History of U.S. Theatre and Drama</td>
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<tr>
<td>Select 18 hours from the following:</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>THR 209</td>
<td>Play Reading for Performance</td>
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</tr>
<tr>
<td>THR 302</td>
<td>Undergraduate Seminar in:</td>
<td></td>
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<tr>
<td>THR 304</td>
<td>Study Abroad Topics in:</td>
<td></td>
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<tr>
<td>THR 312</td>
<td>Acting with an Accent</td>
<td></td>
</tr>
<tr>
<td>THR 404</td>
<td>Children and Drama</td>
<td></td>
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<tr>
<td>THR 429</td>
<td>Postcolonial Theatre and Drama</td>
<td></td>
</tr>
</tbody>
</table>

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours

Satisfied by 40 hours of major courses.

Major Hours in Residence

Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Performance Emphasis

The following 40 hours are required: (40 hours)

<table>
<thead>
<tr>
<th>Course</th>
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<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>THR 101</td>
<td>Theatre Practicum I</td>
<td>1</td>
</tr>
<tr>
<td>THR 106</td>
<td>Acting I</td>
<td>3</td>
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<tr>
<td>THR 201</td>
<td>Theatre Practicum II</td>
<td>1</td>
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<tr>
<td>THR 206</td>
<td>Acting II</td>
<td>3</td>
</tr>
<tr>
<td>THR 212</td>
<td>Beginning Voice and Speech for Actors</td>
<td>3</td>
</tr>
<tr>
<td>THR 213</td>
<td>Movement I: The Acting Instrument</td>
<td>3</td>
</tr>
<tr>
<td>THR 215</td>
<td>Approaching Design</td>
<td>3</td>
</tr>
<tr>
<td>THR 308</td>
<td>Script Analysis</td>
<td>3</td>
</tr>
<tr>
<td>Select two of the following:</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>THR 216</td>
<td>Scenic Production</td>
<td></td>
</tr>
<tr>
<td>THR 220</td>
<td>Costume Production</td>
<td></td>
</tr>
<tr>
<td>THR 224</td>
<td>Lighting Production</td>
<td></td>
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<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THR 301</td>
<td>Theatre Practicum III</td>
<td></td>
</tr>
<tr>
<td>THR 401</td>
<td>Stage Management and Assistant Direction</td>
<td></td>
</tr>
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</tr>
<tr>
<td>THR 304</td>
<td>Study Abroad Topics in:</td>
<td></td>
</tr>
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<td>THR 312</td>
<td>Acting with an Accent</td>
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<tr>
<td>THR 404</td>
<td>Children and Drama</td>
<td></td>
</tr>
<tr>
<td>THR 429</td>
<td>Postcolonial Theatre and Drama</td>
<td></td>
</tr>
</tbody>
</table>

1 Other THR courses (such as special topics) not listed among the electives above are normally eligible as substitutes with advisor’s permission. Up to 3 hours may be taken in a drama, cultural studies, or related course outside the department, with a faculty advisor’s approval.
THR 525  History of Theatre
THR 526  History of Theatre II
THR 528  History of U.S. Theatre and Drama

Select 9 hours from the following 1 9
THR 210  Musical Performance for the Actor I
THR 306  Acting III
THR 310  Musical Performance for the Actor II
THR 312  Acting with an Accent
THR 313  Movement II: Physical Characterization
THR 401  Stage Management and Assistant Direction
THR 404  Children and Drama
THR 406  Audition Techniques
THR 410  Musical Performance for the Actor III
THR 506  Acting for the Camera
THR 508  Fundamentals of Directing
THR 512  A Vocal Approach to the Classics
THR 603  Theatre for Young Audiences
THR 609  Play Directing

1 Other THR courses (such as special topics) not listed among the electives above are normally eligible as substitutes with advisor’s permission.

Departmental Honors
An undergraduate interested in honors in theatre must present a written declaration of intention to the department’s honors coordinator as early as possible in the junior or senior year. The following are required:

1. A grade-point average at the time of declaration and at graduation of at least 3.25 overall and 3.5 in theatre courses.
2. A maximum of 6 hours in THR 498 Honors Seminar. Enrollment in this course must be approved by the honors coordinator. Students in the honors seminar work under the direction of one instructor for each semester. The instructor conducts an examination at the end of each semester’s work and assigns a grade. Credit is given to students who complete the work assigned for any semester but do not complete the requirements for honors. Students may change area of interest or instructor at the beginning of a semester with the consent of the honors coordinator.
3. Satisfactory performance in a final oral examination given approximately one month before graduation.

Bachelor of Fine Arts in Theatre Design
Bachelor of Fine Arts (B.F.A.) in Theatre Design is intended as general preparation for the professional designer of scenery, costumes or lighting working in theatre and/or film or as preparation for graduate studies. Students learn through small-class studio courses, laboratories, and involvement in productions in the University Theatre. The degree is offered cooperatively by the Department of Theatre and Department of Visual Arts. Students in the B.F.A. Theatre Design take 69 hours in the Departments of Theatre, Visual Art, and Art History in addition to the KU Core and electives.

B.F.A. in Theatre Design Degree Requirements
The program leading to the B.F.A. degree in theatre design is offered cooperatively by the School of the Arts and the Department of Theatre. It requires 6 hours of foundational coursework, 63 additional hours in the major, and completion of the KU Core, as well as additional general electives, for a total of 120 hours.

Foundations: Art and Design (63)
ART 101  Drawing I  3
ART 102  Drawing II  3

Core Theatre Courses  30
THR 100  Introduction to the Theatre
THR 106  Acting I
THR 215  Approaching Design
THR 216  Scenic Production
THR 220  Costume Production
THR 224  Lighting Production
THR 308  Script Analysis
THR 508  Fundamentals of Directing
THR 520  History of Period Style I
THR 521  History of Period Style II

Theatre History Courses. Choose two of the following: 6
THR 525  History of Theatre

Sample 4-year plans for the BA degree in Theatre with the following concentrations can be found here: Theatre, Culture, and Society (http://catalog.ku.edu/arts/theatre/ba-bgs/ba-theatre-culture-society) and Performance (http://catalog.ku.edu/arts/theatre/ba-bgs/ba-performance), or by using the left-side navigation.

Sample 4-year plans for the BGS degree in Theatre and the BFA degree in Theatre Design will be coming soon.

Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 40 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/ Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa). (http://clas.ku.edu/undergrad/tools/gpa)

Sample 4-year plans for the BA degree in Theatre with the following concentrations can be found here: Theatre, Culture, and Society (http://catalog.ku.edu/arts/theatre/ba-bgs/ba-theatre-culture-society) and Performance (http://catalog.ku.edu/arts/theatre/ba-bgs/ba-performance), or by using the left-side navigation.

Sample 4-year plans for the BGS degree in Theatre and the BFA degree in Theatre Design will be coming soon.
Minor in Theatre

| THR 526 | History of Theatre II |
| THR 528 | History of U.S. Theatre and Drama |

Theatre Design Concentration

| THR 116 | Scenographic Techniques 3 |
| THR 316 | Beginning Scene Design 3 |
| THR 320 | Beginning Costume Design 3 |
| THR 324 | Beginning Lighting Design 3 |

Theatre design electives from an approved list 9

History of Art:

| HA 150 | History of Western Art: Ancient Through Medieval 3 |
| HA 151 | History of Western Art: Renaissance to Contemporary 3 |

History of art of architecture electives

General Education Courses

Completion of the KU Core

General Electives

- Additional credit hours of general electives are needed to meet the minimum total hours required for graduation.

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours

Satisfied by 69 hours of major courses.

Major Hours in Residence

Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours

Satisfied by a minimum of 27 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://www.collegesas.ku.edu/GPAcalculator.shtml).

Minor in Theatre

The Department of Theatre welcomes non-majors who wish to learn about acting, drama, design, theatre history, and technical theatre through the completion of a minor. Students minoring in theatre are welcome to audition for department productions and serve on backstage technical crews.

Requirements for the Minor

A minimum of 18 hours is required for the minor; 12 hours must be numbered 300 and above.

Theatre Minor Course Requirements

Minors must complete each of the following:

Theatre Core Knowledge and Skills (12)

Minors must complete courses in each of the following core areas:

THR 101 Theatre Practicum I 1
THR 106 Acting I 3
THR 216 Scenic Production 2
or THR 220 Costume Production 2
or THR 224 Lighting Production 2

Select two of the following: 6

| THR 525 | History of Theatre 3 |
| THR 526 | History of Theatre II 3 |
| THR 528 | History of U.S. Theatre and Drama 3 |

Theatre Required Electives (6)

Satisfied by 2 courses (6 hours) from the following:

| THR 302 | Undergraduate Seminar in: _____ 3 |
| THR 326 | African Theatre and Drama 3 |
| THR 327 | African-American Theatre and Drama 3 |
| THR 404 | Children and Drama 3 |
| THR 405 | Children and Media 3 |
| THR 527 | Asian Theatre and Performance 3 |
| THR 528 | History of U.S. Theatre and Drama 3 |
| THR 529 | Race and the American Theatre 3 |
| THR 603 | Theatre for Young Audiences 3 |
| THR 626 | Myth and the Dramatist 3 |
| THR 725 | Russian Theatre and Drama from Stanislavski and Chekhov to the Present 3 |

Minor Hours

Satisfied by 18 hours of minor courses.

Minor Hours in Residence

Satisfied by a minimum of 9 hours of KU resident credit in the minor.

Minor Junior/Senior (300+) Hours

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Junior/Senior Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the minor. GPA calculations include all departmental courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://www.collegesas.ku.edu/GPAcalculator.shtml).

Master of Arts in Theatre

The Master of Arts in Theatre Studies helps students to begin developing a broad, comparative grasp of the major methods, approaches and protocols currently used in both the study and practice of theatre and related art forms. Special emphasis is placed on (1) an analytic understanding of specific episodes in the history of theatre and similar genres of enactment, (2) the ability to grasp the assumptions and practical protocols that are or have been influential in the creation of theatrical art, and (3) the capacity to examine and appreciate the way theatre influences and is influenced by the context in which it occurs.

By virtue of its broad regard for the way context and live performance interact, the M. A. helps to prepare students for leadership roles in community and regional arts organizations, especially when course work
A total of 33 hours is required. Requirements for the M.A. in Theatre must sustain a grade-point average of 3.0 or higher through 33 graduate credit hours. To complete the M.A., the student must write a thesis as the culmination of the degree.

The Master of Arts in theatre is an academic degree, but students are expected to complete 6 hours in theatrical production. All M.A. students support). The Department does not admit new students for the Spring or Summer terms.

Please visit the Department of Theatre (http://www.theatre.ku.edu) for more information about graduate application materials required.

### M.A. Degree Requirements

The Master of Arts in theatre is an academic degree, but students are expected to complete 6 hours in theatrical production. All M.A. students must write a thesis as the culmination of the degree.

To complete the M.A., the student must sustain a grade-point average of 3.0 or higher through 33 graduate credit hours.

### Requirements for the M.A. in Theatre

A total of 33 hours is required.

#### Core Requirement (15)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THR 800</td>
<td>Introduction to Graduate Study in Theatre</td>
<td>3</td>
</tr>
</tbody>
</table>

In consultation with an advisor, students choose from among departmental courses in theatre history, dramatic literature, theory, and criticism. Production - Select two courses in either directing or scenography: 6

#### A. Directing

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>THR 609</td>
<td>Play Directing</td>
</tr>
<tr>
<td>THR 715</td>
<td>Problems and Techniques of Direction</td>
</tr>
<tr>
<td>THR 815</td>
<td>Advanced Play Production</td>
</tr>
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</table>

#### B. Scenography

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>THR 516</td>
<td>Scenic Painting Techniques</td>
</tr>
<tr>
<td>THR 517</td>
<td>Computer-Aided Design</td>
</tr>
<tr>
<td>THR 518</td>
<td>Scenography and the Classic Script</td>
</tr>
<tr>
<td>THR 519</td>
<td>Scenography and the Modern Script</td>
</tr>
<tr>
<td>THR 618</td>
<td>Scenography and the Musical Theatre</td>
</tr>
<tr>
<td>THR 619</td>
<td>Scenography and the Contemporary Script</td>
</tr>
<tr>
<td>THR 620</td>
<td>Scenography and the Experimental Production</td>
</tr>
</tbody>
</table>

#### General Theatre Studies (15)

Select 15 hours of courses from graduate offerings in theatre history, dramatic literature, history and criticism: Of these 15 hours, up to 6 may be graduate courses from other areas such as film and media studies; child psychology; American studies; African and African-American studies; women, gender, and sexuality studies; developmental psychology; English; and pertinent offerings from language and culture programs.

#### Completion of the Degree (3)

An oral examination structured around a thesis based on scholarly and/or creative research:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THR 899</td>
<td>Master's Thesis</td>
<td>3</td>
</tr>
</tbody>
</table>

All courses should be selected in consultation with the graduate advisor.

### Master of Fine Arts in Theatre Design-Scenography Concentration

The M.F.A. in Scenography is a three-year integrated program of study leading to a Master of Fine Arts degree, the terminal degree for professionals working in design for theatre, film, and television. Scenography classes are at the core of the curriculum and students will develop a portfolio in a wide variety of theatrical and performance genres. Students will execute realized designs in both the large Crafton-Preyer proscenium stage and the William Inge Memorial theatre (black box). Opportunities exist to work with new technologies in theatre design, including Virtual Realties.

To be admitted, a prospective M.F.A. candidate must have a cumulative undergraduate GPA of at least 3.0 on a 4.0 scale and submit a design portfolio, resume, undergraduate transcripts, a letter of intent and three letters of recommendation.

Visit the Department of Theatre (http://theatre.ku.edu) for more information about application materials required.

### M.F.A. in Theatre Design with a Concentration in Scenography Degree Requirements

Scenography classes are at the core of the curriculum. While in the program, students will design at least 4 realized productions in the University Theatre program. They will do at least 1 lighting, 1 costume and 1 scenic design, and preferably a combination of 2 or all design areas for 1 production. Design assignments, made by the scenography faculty, will be based on the students’ experience and interests (i.e., a student with little experience in lighting design will be given a less challenging project in the smaller theatre).

Students work with the KU Theatre's professional staff in the realization of their designs. Successful scenography students at the University of Kansas have come from a variety of backgrounds, including theatre, art and design, illustration and architecture. Students with deficiencies in theatre production, theatre and/or art history, and painting and drawing may be required to take undergraduate courses in these areas, which could result in a longer program.
To complete the M.F.A., the student must sustain a grade-point average of 3.0 or higher through 60 graduate credit hours. The following guidelines govern the distribution of hours:

<table>
<thead>
<tr>
<th>Core Requirement (3)</th>
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<tbody>
<tr>
<td>THR 703 Directed Readings in Theatre</td>
<td>3</td>
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Electives: no limit, but a minimum of 15 hours for a total of 60 hours 15

Doctor of Philosophy in Theatre

The purpose of the Ph.D. in Theatre is to develop leaders in the areas of both studies and practice. The curriculum requires an intense exposure to critical theory, history and historiography, and the craft and art of performance, especially directing. The majority of graduates become teachers in higher education, artists or both. Recent and former students from the M.A. and Ph.D. programs work or have worked across a wide array of academic and artistic settings, including Southern Methodist University, The Ohio State University System, Chapman College, Washburn University, CBS, Disney Productions, University of Costa Rica, University of Minnesota (Morehead), Southern Illinois University, University of Georgia, Texas Christian University, University of Minnesota (Duluth), University of Arizona, and Converse College.

Applicants for the Ph.D. program in Theatre typically hold the M.A. or M.F.A. in theatre or a related field. To be admitted, a student will ordinarily be expected to have a Graduate Record Examination score of at least 148 (verbal), 144 (quantitative), and 4.5 (analytical writing). Students who took the GRE before the implementation of the analytical writing section (i.e. before October 2002) will be expected to have an analytical score of 600 or above. Applicants should also have a grade-point average of at least 3.2 for undergraduate and at least 3.5 for graduate work; and a master’s degree acceptable to the graduate faculty. Deficiencies in a student's background may necessitate remedial courses. These courses do not count toward the degree requirements.

Visit the Department of Theatre (http://theatre.ku.edu) for more information about application materials required.

To apply for Fall admission into the Ph.D. program, please submit all application materials no later than: January 1 (to be considered for admission with financial support) or February 15 (for admission consideration without financial support). The Department does not admit new students for the Spring or Summer terms.

Ph.D. Degree Requirements

The Ph.D. is an academic degree, but students must demonstrate competence in at least one production area. Normally the Ph.D. requires 60 hours not including Research Skills and Responsible Scholarship requirements. All courses must be chosen in consultation with an advisor.

Core Requirements

12 hours of core courses are required. In consultation with an advisor, students choose from departmental courses in theatre history, dramatic literature, theory, and criticism.

Elective Requirements

9 hours of electives are required. Elective courses focus on the academic study of theatre/performance history, theory, and related methodologies. Courses are selected with a graduate advisor to reflect the student’s special interest. Some courses may be taken outside theatre, for example in film and media studies, English, American studies, African and African-American studies, and history.

Secondary Field Requirements

Students choose 9 hours at the graduate level from outside the department to assist them in writing the dissertation. Courses are related to the student's proposed specialization. (See examples under Elective Requirements.)

Production Courses

6 hours of production courses are required. To become competent artists as well as developing research scholars, students choose a sequence of graduate courses in either scenography or directing.

Research Skills and Responsible Scholarship

Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current policies on Doctoral Research Skills and Responsible Scholarship are listed under Degree Requirements in Graduate Studies section of the online catalog.

Comprehensive Examination

The comprehensive examination (6 credit hours) is an essential element of the doctoral program, providing an opportunity for students to focus and consolidate the diverse strands of their graduate course work, to demonstrate competence for teaching in particular subject areas, and to establish a strong foundation for moving on to the dissertation. It consists of 3 parts:

1. A written examination, which covers 4 or 5 areas of expertise. Ordinarily, each area corresponds to a member of the student’s committee.

2. Submission of 2 publishable papers of article length (5,000 to 8,000 words) that demonstrate the student’s ability to research and write original scholarship at a level appropriate to the field. Publishable papers may be revised versions of papers submitted in KU courses. Publishable papers must be submitted on the first day of the written examination.

3. An oral examination, given 2 to 4 weeks after the written examination. The oral examination lasts about 90 minutes and may revisit material covered in the written examination, the publishable papers, and/or other material as deemed appropriate by the committee. While
preparing for the examination, students may enroll twice in THR 998 Investigation and Conference (for Doctoral Students).

Dissertation

Doctoral candidates are required, after passing the comprehensive oral examination, to be continuously enrolled in one or more hours of dissertation or programatically equivalent coursework that both moves the student towards degree completion and reflects, as accurately as possible, the candidate’s demands on faculty time and university facilities. During this time, until all requirements for the degree are completed (including the filing of the dissertation) or until 18 post-comprehensive hours have been completed (whichever comes first), the candidate must enroll for a minimum of 6 hours a semester and 3 hours a summer session.

Department of Visual Art

Introduction

The University of Kansas is a member of the National Association of Schools of Art and Design (http://nasad.arts-accredit.org). The entrance and graduation requirements in this catalog conform to the published guidelines of those organizations.

Undergraduate Programs

Advanced Placement in Art and Design

Students who score 3, 4, or 5 on the CEEB Advanced Placement Examination may receive up to 3 credit hours in art studio electives. Advanced placement credit does not exempt students from foundations requirements.

Advising

Students admitted to work toward B.F.A., B.A., or B.A.E. degrees are advised by the advising specialist until foundations courses are complete, usually two semesters. After a student has completed 12 hours of foundations courses, he or she is advised by faculty members in their chosen concentration. Check sheets describing each program in complete detail are available from the Art and Design office, 300 Art and Design Building, or online (http://art.ku.edu). History of Art, information is available from the Kress Foundation Department of Art History (http://www2.ku.edu/~kuarthis). Students are encouraged to seek advice from any faculty member in a specific area of interest.

Students are expected to spend time outside of class working in the studio. For each credit hour in class another three hours of work will be expected outside of class time. It is normally expected that for 3 credit hours of studio a student will spend 9-15 hours per week working and studying for the entire 15 weeks during the semester.

Graduate Programs

The Department of Visual Art offers graduate programs leading to the Master of Fine Arts degree in visual art. Concentrations include ceramics, drawing and painting, expanded media, fibers, metalsmithing and jewelry, printmaking, and sculpture. A Master of Arts degree in visual art education and graduate licensure in art education are also available through the Department of Visual Art.

Courses

ADSC 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Advanced Design Studies College. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

ADSC 560. Topics in Design: _____. 1-3 Hours.
A study of different topics in different semesters in a special area of interest to a staff member and suitable qualified students. May be repeated for credit. Prerequisite: Junior standing in department. LAB.

ADSC 580. Special Problems in Design. 1-6 Hours.
A study of current problems in design or crafts with an emphasis on research. Special problems proposals must be discussed with and approved by the instructor and advisor prior to enrollment in the course. A student may not take more than six credit hours of special problems in any one semester. Prerequisite: Junior standing in department. IND.

ADSC 810. Orientation Seminar. 1 Hour.
Studies directed to development of a thesis plan. Required of all graduate students. Offered in fall semester only. Graded S or F. LEC.

ART 101. Drawing I. 3 Hours. GE3H.
Basic problems in drawing. LAB.

ART 102. Drawing II. 3 Hours.
Continuation of ART 101. Prerequisite: ART 101. LAB.

ART 103. Art Concepts and Practice. 3 Hours. U.
A companion course to ART 104. Lecture and studio experiences across disciplines emphasizing conceptual fundamentals, technical/skill development, visual sensibility, critical thinking and professional topics in art. LEC.

ART 104. Art Principles and Practice. 3 Hours. U.
A companion course to ART 103. Lecture and studio experiences across disciplines emphasizing conceptual fundamentals, technical/skill development, visual sensibility, critical thinking and professional topics in art. LEC.

ART 120. Fundamentals of Drawing and Painting. 3 Hours.
Open to all university students. Specifically for students with limited or no previous experience. An exploration of basic technical and expressive possibilities in drawing and painting; may include field trips, films, visiting lecturers. Six hours scheduled studio activity and three hours outside work weekly. LAB.

ART 121. Fundamentals of Printmaking. 3 Hours.
Open to all university students. Specifically for students with limited or no previous experience. An exploration of basic technical and expressive possibilities in printmaking, including woodcut, etching, lithography and silk screen; may include field trips, films, visiting lecturers. Six hours scheduled studio activity and three hours outside work weekly. LAB.

ART 122. Fundamentals of Sculpture. 3 Hours.
Open to all university students. Specifically for students with limited or no previous experience. An exploration of basic technical and expressive possibilities in three-dimensional form and space, including sculpture, modeling, carving, and construction; may include field trips, films, visiting lecturers. Six hours scheduled studio activity and three hours outside work weekly. LAB.

ART 123. Fundamentals of Expanded Media. 3 Hours. GE3H / U.
Open to all university students. Specifically for students with limited or no previous experience. An exploration of basic technical and expressive possibilities in Expanded Media, including Installation, Performance,
ART 130. Fundamentals of Fiber Forms. 3 Hours. U.
Open to all university students. Studio exploration of fibers as an art form and means of personal expression. Emphasis is placed on three-dimensional objects. A variety of interlacement, construction, and dye techniques are introduced. LAB.

ART 131. Fundamentals of Ceramics. 3 Hours.
Open to all university students. Specifically for students with limited or no previous experience. An introduction to ceramics including throwing, handbuilding, glazing, firing, and related activities. LAB.

ART 132. Fundamentals of Metalsmithing/Jewelry. 3 Hours. GE3H.
Open to all university students. Specifically for students with limited or no previous experience. A comprehensive study of the field of jewelry and metalsmithing with an emphasis on the tools, processes, and techniques used in the design and fabrication of objects from metals such as aluminum, brass, copper, bronze, sterling and related materials. Studio experience will include lectures, slide presentations, demonstrations, visiting artist, and student projects. LAB.

ART 133. Fundamentals of Fibers. 3 Hours. GE3H / U.
Open to all university students. Studio exploration of fibers as an art form and means of personal expression. A variety of dyeing, construction, and surface embellishment techniques will be introduced. LAB.

ART 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Art. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

ART 201. Color Theory. 3 Hours.
An introduction to the basic color theories and their application. Presentation of the relationship between pigment and light, and of additive and subtractive color mixing. Prerequisite: ART 101, and ART 103 or ART 104. LAB.

ART 300. Special Topics in Visual Art: ______. 1-4 Hours.
Course to be offered in related areas of research, mixed media or interdisciplinary exploration. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; and six hours of Visual Art courses, or permission of instructor. LEC.

ART 305. Visual Language. 3 Hours. H.
This course explores visual language and its relationship to cultural meaning. We examine the ways that cultural experience both influences and is influenced by artistic expression. An investigation of artistic practice and its basic elements and principles is used to demonstrate the connections between visual perception and the interpretation of visual experience. Examples from the arts and popular culture are used to illustrate the ways that we create meaning from the things we see. This course is open to all university students. Prerequisite: ENGL 101 and ENGL 102 or equivalent, or completion of the KU Core Written Communication requirements (Goal 2.1). LEC.

ART 310. Build Smart. 3 Hours. U.
Introduction to the experience and culture of building projects by hand. Students analyze and determine the best ways to build. Students also become familiar with tools, machines, building practices and material necessary for wood and steel fabrication. Prerequisite: ART 103, ART 104, or permission of the instructor. LEC.

ART 375. Directed Readings in Visual Art. 1-3 Hours. U.
Directed reading in specific areas of visual art. May be repeated for credit in subsequent semesters. Prerequisite: ART 102, ART 103 and ART 104; and six hours of Visual Art courses, or permission of instructor. IND.

ART 395. Study Abroad Topics in: ______. 1-6 Hours. H.
This course is designed for the study of special topics in Visual Art. Credit for course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. Open to all students. LEC.
ART 801. Directed Study III. 2-5 Hours.
Individual studio activity under the direction of faculty member. May be repeated for credit in subsequent semesters. Prerequisite: Permission of graduate director and enrollment in the Visual Art MFA program. RSH.

ART 802. Directed Study IV. 2-5 Hours.
Continuation of Directed Study III. Prerequisite: Enrollment in the Visual Art MFA Program. RSH.

ART 803. Directed Study V. 2-5 Hours.
Continuation of Directed Study IV. Prerequisite: Enrollment in the Visual Art MFA Program. RSH.

ART 805. Graduate Studio. 1-3 Hours.
Individual graduate studio research in visual art. Course content to be determined by the student under the supervision of a graduate faculty member. May be repeated for credit. Prerequisite: Graduate standing in The School of The Arts and permission of the instructor. RSH.

ART 861. Directed Reading in Visual Art. 1-3 Hours.
Research reading and presentation of reports on specific subjects related to the student's major area of specialization. Prerequisite: Enrollment in the MFA Program in the Department of Visual Art. RSH.

ART 877. Graduate Seminar. 3 Hours.
The graduate seminar emphasizes professional preparation for contemporary artists focusing on writing skills, oral presentations, critiques of individual creative research/artwork, critical thinking about and visual analysis of current art forms and contemporary approaches to the teaching of studio art. Prerequisite: Admission to the Graduate Program in Visual Art. SEM.

ART 896. Special Topics: Studio Theory and Criticism. 3 Hours.
Lecture, discussion, and supervised research in current topics related to contemporary studio theory and criticism. May be repeated for credit as topics vary. This course will be counted as a graduate level academic elective in course and credit distribution. LEC.

ART 899. Graduate Seminar. 1 Hour.
Weekly discussion of issues and/or work in art. (Graded on a satisfactory/ or F basis.) Repeat for credit in subsequent semesters. SEM.

ART 906. Graduate Studio. 1-3 Hours.
Individual graduate studio research in visual art. Course content to be determined by the student under the supervision of a graduate faculty member. May be repeated for credit. Prerequisite: ART 805 and permission of the instructor. RSH.

Original research in visual art culminating in a thesis exhibition. May be repeated for credit. Prerequisite: Thirty-six credit hours of graduate credit and permission of the graduate review committee. THE.

CER 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-year freshmen, addressing current issues in Ceramics. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

CER 178. Ceramics I. 3 Hours.
The development of form and surface through the use of handbuilding and wheel thrown techniques. Stoneware and Raku are explored. Prerequisite: ART 102 and ART 104. LAB.

CER 300. Special Topics in Ceramics: ______. 1-4 Hours. U.
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor. LEC.

CER 301. Ceramics II. 3 Hours.
A continuation of ART 131 and/or CER 208 with emphasis in firing low temperature ceramics. An introduction to glaze formulation and firing procedures through the use of earthenware and low temperature talc bodies. Prerequisite: ART 131 or CER 208. LAB.

CER 402. Ceramics III. 3 Hours.
A study of high fire ceramics using stoneware and porcelain. The development of ceramic forms and shapes utilizing traditional and nontraditional techniques such as salt glaze, wood firing, oxidation, and reductions. Prerequisite: ART 131 or CER 208. LAB.

CER 500. Advanced Special Topics Ceramics: ______. 1-4 Hours. U.
Course to be offered in an area of specific interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Ceramics courses, or permission of instructor. LEC.

CER 504. Kilns. 3 Hours.
The principles in kiln design, including up-draft, down-draft, cross-draft, and electric kilns, and burner technology. Prerequisite: CER 301. LEC.

CER 505. Clay and Glaze Formulation. 3 Hours.
Formulation of the various clay bodies and glazes associated with ceramics. Prerequisite: CER 301. LEC.

CER 506. Production. 6 Hours.
Procedures, techniques, problems, and solutions for setting up and operating a production pottery studio, including the development of ceramic forms and glazes related to marketability and design and mold production for industry. May be repeated for credit. Prerequisite: CER 301 and CER 302. LAB.

CER 515. Advanced Ceramics I. 3-6 Hours. AE61.
Development of individual direction in ceramics based on experience, research, and skills acquired in previous courses; capstone experience. May be repeated for credit. Prerequisite: CER 301 and CER 402. LAB

CER 520. Advanced Ceramics II. 3-6 Hours. AE61 / U.
Continuation of CER 515; capstone experience. May be repeated for credit. Prerequisite: CER 515. LAB.

CER 600. Internship in Ceramics. 1-3 Hours. U.
Practical experience in the use of artistic skills in approved and supervised academic or professional settings. May be repeated for credit; no more than six hours may be applied to the B.A. or B.F.A. degree. Credit hours are graded on a satisfactory/unsatisfactory basis, according to the written recommendation provided by the internship supervisor to the faculty advisor. Prerequisite: ART 102, ART 103, and ART 104; and fifteen hours of Visual Art courses; and permission of instructor. FLD.

CER 699. Graduate Seminar. 1 Hour.
Weekly discussion of issues and/or work in art. (Graded on a satisfactory/ or F basis.) Repeat for credit in subsequent semesters. SEM.

CER 708. Graduate Studio. 1-3 Hours.
Individual graduate studio research in visual art. Course content to be determined by the student under supervision of a graduate faculty member. May be repeated for credit. Prerequisite: ART 805 and permission of instructor. RSH.

CER 715. Ceramics. 2-6 Hours.
Individual research. Prerequisite: CER 515 or equivalent. RSH.

CER 725. Glass. 2-6 Hours.
Individual research. Prerequisite: Approval of instructor. RSH.
CER 815. Ceramics. 2-6 Hours.
Continuation of CER 805. RSH.

CER 825. Glass. 2-6 Hours.
Individual research. Prerequisite: Approval of instructor. RSH.

DRWG 177. First Year Seminar: _____ 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Drawing. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

DRWG 203. Drawing III. 3 Hours.
Advanced problems in drawing. Prerequisite: ART 102. LAB.

DRWG 213. Life Drawing I. 3 Hours.
Figure drawing. Prerequisite: ART 102 and ART 103 or ART 104. LAB.

DRWG 300. Special Topics in Drawing: _____ 1-4 Hours. U.
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor. LEC.

DRWG 304. Drawing IV. 3 Hours.
Continuation of DRWG 203. Prerequisite: DRWG 203. LAB.

DRWG 314. Life Drawing II. 3 Hours.
Continuation of DRWG 213. Prerequisite: DRWG 213. LAB.

DRWG 318. Life Drawing II, Honors. 3 Hours.
Figure drawing, a continuation of DRWG 213. Prerequisite: DRWG 213; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

DRWG 335. Special Topics in Drawing: _____ 3 Hours.
Course to be offered in area of special interest to individual faculty, and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: DRWG 203, or DRWG 213, or permission of instructor. LAB.

DRWG 500. Advanced Special Topics in Drawing: _____ 1-4 Hours. U.
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Drawing courses, or permission of instructor. LEC.

DRWG 505. Drawing V. 3 Hours.
Continuation of DRWG 304. Prerequisite: DRWG 304. LAB.

DRWG 506. Drawing VI. 3 Hours.
Continuation of DRWG 505. May be repeated for credit in subsequent semesters. Prerequisite: DRWG 505. LAB.

DRWG 515. Life Drawing III. 3 Hours.
Continuation of DRWG 314. Prerequisite: DRWG 314. LAB.

DRWG 516. Life Drawing IV. 3 Hours.
Continuation of DRWG 515. May be repeated for credit in subsequent semesters. Prerequisite: DRWG 515. LAB.

DRWG 518. Life Drawing III, Honors. 3 Hours.
Figure drawing, a continuation of DRWG 314 or DRWG 318. May be repeated for credit in subsequent semesters. Prerequisite: DRWG 314 or DRWG 318; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

DRWG 519. Life Drawing IV, Honors. 3 Hours.
Figure drawing, a continuation of DRWG 515 or DRWG 518. May be repeated for credit in subsequent semesters. Prerequisite: DRWG 515 or DRWG 518; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

DRWG 535. Special Topics in Drawing: _____ 3 Hours.
Course to be offered in area of special interest to individual faculty, and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: 12 hours of drawing and permission of instructor. LAB.

DRWG 599. Individual Studies in Drawing. 1-6 Hours. AE61 / U.
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours may apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Drawing courses, or permission of instructor. IND.

DRWG 807. Drawing VII. 3 Hours.
Individual research in drawing. Prerequisite: DRWG 506. RSH.

DRWG 817. Life Drawing V. 3 Hours.
Individual research in figure drawing. Prerequisite: DRWG 516. RSH.

DRWG 908. Drawing VIII. 3 Hours.
Continuation of DRWG 807. Prerequisite: DRWG 807. RSH.

DRWG 918. Life Drawing VI. 3 Hours.
Continuation of DRWG 817. Prerequisite: DRWG 817. RSH.

EXM 177. First Year Seminar: _____ 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Expanded Media. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

EXM 274. Expanded Media. 3 Hours. U.
Beginning course to introduce the fundamental concepts, strategies, and technologies that comprise the Expanded Media area of the Department of Visual Art: Installation, Performance, and Digital Image. Emphasis is placed on forming ideas and strategies, and creating artwork that considers the core connections within Expanded Media: time, space, the body, the viewer, and society at large. Computer-based technologies and time-based media that are inherent to Expanded Media practice support studio assignments. Coursework includes the investigation and discussion of historic precedents and the development of an appropriate critical dialogue with which to discuss their work. Prerequisite: ART 102, ART 103, and ART 104. LAB.

EXM 300. Special Topics in Expanded Media: _____ 1-4 Hours. U.
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor. LEC.

EXM 301. The Digital Image I. 3 Hours.
Introduction to various still digital processes and skills that encourage the use of digital imagery within a variety of other media. Focus on content issues as they relate to development of artwork incorporating digital imagery. LAB.

EXM 302. Performance Art I. 3 Hours. U.
An introduction to the understanding and production of performance art. Students gain proficiency in conceptualization and production
of performance time-based art in an Interdisciplinary art-making environment. Prerequisite: ART 102, ART 103, and ART 104. LAB.

**EXM 303. Intermedia I. 3 Hours.**
An introduction to the use/handling and integration of diverse, new and traditional materials, techniques and processes. Problems will involve strategies for discovering and managing combinations of drawn, painted, digital and constructed forms. Studio sessions will include research, lecture, demos, and guest speakers. Prerequisite: Permission of instructor. LAB.

**EXM 307. Installation Art I. 3 Hours. U.**
An introduction to the understanding and production of installed art environments using a variety of media and approaches to art-making. Students gain proficiency in conceptualization and production of installation art in an interdisciplinary art-making environment. Prerequisite: ART 102, ART 103, and ART 104. LAB.

**EXM 314. Alternative Approaches in Photography I. 3 Hours. U.**
An introduction to the understanding and production of art-making using alternative approaches in photography. Students gain proficiency in conceptualization and production of artwork using alternative approaches in photography in an interdisciplinary art-making environment. Prerequisite: ART 102, ART 103, and ART 104. LAB.

**EXM 326. Video and Time-Based Media I. 3 Hours. U.**
An introduction to the understanding and production of video and time-based art. Students gain proficiency in conceptualization and production of video and time-based art in an interdisciplinary art-making environment. Prerequisite: ART 102, ART 103, and ART 104. LAB.

**EXM 500. Advanced Special Topics in Expanded Media: ______. 1-4 Hours. U.**
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor. LEC.

**EXM 501. The Digital Image II. 3 Hours.**
Continuation of EXM 301, The Digital Image I. May be repeated for credit. LAB.

**EXM 503. Intermedia II. 3 Hours.**
Continuation of EXM 303, Intermedia I. May be repeated for credit. Prerequisite: Permission of instructor. LAB.

**EXM 514. Alternative Approaches in Photography II. 3 Hours. U.**
Continuation of EXM 314. Prerequisite: EXM 314. LAB.

**EXM 526. Video and Time-Based Media II. 3 Hours. U.**
Continuation of EXM 326. Prerequisite: EXM 326. LAB.

**EXM 535. Intermediate Expanded Media. 3 Hours.**
Continuation of Expanded Media studio research. Prerequisite: Two (200- and/or 300-level) Expanded Media courses. LAB.

**EXM 536. Intermediate Expanded Media, Honors. 3 Hours.**
Continuation of Expanded Media studio research. Prerequisite: Two (200- and/or 300-level) Expanded Media courses; membership in the University Honors Program or 3.25 minimum cumulative grade point average with permission of the department. LAB.

**EXM 537. Advanced Expanded Media. 3 Hours.**
Continuation of EXM 535. May be repeated for credit. Prerequisite: EXM 535 or EXM 536. LAB.

**EXM 538. Advanced Expanded Media, Honors. 3 Hours.**
Continuation of EXM 536. May be repeated for credit. Prerequisite: EXM 535 or EXM 536; membership in the University Honors Program or 3.25 minimum cumulative grade point average with permission of the department. LAB.

**EXM 541. Graduate Performance Art. 3 Hours.**
Students will gain proficiency in conceptualization and production of performance time-based art in an interdisciplinary art-making environment. Prerequisite: Permission of instructor. LAB.

**EXM 542. Graduate Installation Art. 3 Hours.**
Advanced problems toward the creation of environments using a variety of media including traditional and non-traditional approaches to art-making. Prerequisite: Permission of instructor. LAB.

**EXM 543. Graduate: The Digital Image. 3 Hours.**
Advanced work focusing on content issues as they relate to development of artwork incorporating digital imagery. Prerequisite: Permission of instructor. LAB.

**EXM 545. Graduate Intermedia. 3 Hours.**
Advanced work in the use/handling and integration of diverse, new and traditional materials, techniques and processes. Advanced problems will involve strategies for discovering and managing combinations of drawn, painted, digital, and constructed forms. Studio sessions will include research, lecture, demos, and guest speakers. Prerequisite: Permission of instructor. LAB.

**EXM 546. Graduate Expanded Media V. 3 Hours.**
Continuation of Expanded Media studio research. Prerequisite: Permission of instructor. LAB.

**EXM 573. Performance Art II. 3 Hours. U.**
Continuation of EXM 302. Prerequisite: EXM 302. LAB.

**EXM 574. Performance Art II, Honors. 3 Hours. U.**
Continuation of EXM 302. Prerequisite: EXM 302; and membership in the University Honors Program or 3.25 minimum cumulative grade point average with permission of the department. LAB.

**EXM 577. Installation Art II. 3 Hours. U.**
Continuation of EXM 307. Prerequisite: EXM 307. LAB.

**EXM 578. Installation Art II, Honors. 3 Hours. U.**
Continuation of EXM 307. Prerequisite: EXM 307; and membership in the University Honors Program or 3.25 minimum cumulative grade point average with permission of the department. LAB.

**EXM 599. Individual Studies in Expanded Media. 1-6 Hours. AE61 / U.**
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours may apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Expanded Media courses, of permission of instructor. IND.

**EXM 846. Graduate Expanded Media Vi. 3 Hours.**
Continuation of Expanded Media studio research. Prerequisite: Permission of instructor. LAB.

**EXM 946. Graduate Expanded Media VII. 3 Hours.**
Continuation of Expanded Media studio research. Prerequisite: Permission of instructor. LAB.

**METL 177. First Year Seminar: ______. 3 Hours. GE11 / U.**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Metalsmithing/Jewelry. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.
METL 211. Jewelry. 3 Hours. GE3S.
Introduction to metalsmithing and jewelry design, materials and processes. Student projects explore the joining, forming, and surface embellishment of metals such as copper, brass, bronze, and sterling. Prerequisites: ART 102 and ART 104. LAB.

METL 300. Special Topics in Metalsmishing: _____ 1-4 Hours. U.
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor. LEC.

METL 301. Introduction to Casting for Jewelry. 3 Hours.
Introduction to casting and mold making processes used for jewelry and small sculpture. Students explore various methods and materials for creating models for casting in bronze or silver including wax carving, wax modeling, and the use of natural and synthetic materials as models. Models are cast using centrifugal and vacuum casting processes. Basic mold making in clay and silicone are also explored. Prerequisite: ART 132 or METL 211. LAB.

METL 302. Professional Practices. 3 Hours.
The development of a portfolio including designing, rendering, and model making for future projects. Photographing completed objects and discussing professional aspects of the jewelry/metalsmishing field. Prerequisite: Six hours of metalsmishing. LAB.

METL 360. Holloware. 3 Hours.
Problems related to specific smithing techniques such as raising, stretching, shell structures and seam fabrications. Metal manipulation on a large scale. Prerequisite: METL 301. LAB.

METL 362. Metalsmishing. 6 Hours.
Advanced metalworking with an emphasis on the refinement of design and techniques. Processes may include linkage, marriage of metals, metal inlays, hinge and catch fabrication. Prerequisite: METL 301. LAB.

METL 364. Enameling. 6 Hours.
Problems of basic and advanced enameling as applied to jewelry design and metalsmishing objects. Exploration of major enameling techniques: such as limoges, cloissoné, champlevé, and bassetaille. Prerequisite: Six hours of metalsmishing or consent of instructor. LAB.

METL 500. Advanced Special Topics in Metalsmishing: _____ 1-4 Hours. U.
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor. LEC.

METL 501. Seminar. 3 Hours.
Lectures and demonstrations on techniques of contemporary interest outside of typical classroom activity. Prerequisite: Six hours of metalsmishing. LEC.

METL 503. Gemology. 3 Hours. H.
Students study the optical and physical characteristics of gemstones in order to identify them using gemological instruments. This laboratory and discussion class explores related topics including the principles of optics that support this methodology, history and geographical distribution of gemstones, gemstone cutting and pearl farming, the history of DeBeers and the development of the world demand for diamond, quality analysis of diamond, colored gemstones and pearls, including the history of diamond grading, the development and identification of synthetics, imitations and laboratory enhancements as well as the use of gemstones in designing jewelry. Prerequisite: ART 132. LAB.

METL 504. A History of Jewelry. 3 Hours. H.
This course explores the history from Sumeria to the 21st century of the use of metals and gemstones in the creation of decorative art for personal adornment. Students explore the evolution of the role of jewelry in ancient culture and modern society and survey individuals whose ideas and work influenced generations of goldsmiths and jewelers around the globe. The class studies primitive tools and modern manufacturing techniques, the history of gemstone cutting and setting and the origin and development of gemstones as symbols. Prerequisite: ART 132. LEC.

METL 505. Digital Jewelry Design I. 3 Hours. H.
Matrix is a 3-D CAD program based on Rhino developed by Rhino, specifically for jewelry design. The goal of this course is to instruct beginners in the Matrix design program. Students learn to transform their 2-D designs from their sketchbooks into 3-D models in Matrix, which can be milled in wax, and cast in metal. Students also learn how to render their 3-D Matrix models to appear as if they were a finished object. The class time is structured as a combination of instructor-led tutorials and working labs. Prerequisite: ART 132. LAB.

METL 506. Digital Jewelry Design II. 3 Hours. H.
The second semester of Matrix increases the operating and design skills building on the knowledge of DG I. The focus of the class is producing wax models on the Revo Digital Mill. Digi II covers the advanced modeling skills including T-spline and Rhino. Students also learn how to make a customized tool path for Revo C mill program and how to solve milling problems. Students also learn how to convert Rhino files to produce a 3D print for outsourcing to other 3D modeling programs. Prerequisite: ART 132, METL 301, METL 505. LAB.

METL 515. Advanced Metals I. 6 Hours. AE61.
Emphasis on individual design aesthetic through intensive designing, rendering, and modelmaking as preparation for fabricated pieces of jewelry, holloware, and/or small objects; capstone experience. Prerequisite: METL 362. LAB.

METL 520. Advanced Metals II. 6 Hours. AE61 / U.
Continuation of METL 515; capstone experience. This course requires a final presentation of a complete portfolio including resume, renderings and photographs of the finished work. Prerequisite: METL 515. LAB.

METL 580. Internship in Metalsmishing/Jewelry. 1-3 Hours. U.
Practical experience in the use of artistic skills in approved and supervised academic or professional settings. May be repeated for credit; no more than six hours may be applied to the B.A. or B.F.A. degree. Credit hours are graded on a satisfactory/unsatisfactory basis, according to the written recommendation provided by the internship supervisor to the faculty advisor. Prerequisite: ART 102, and ART 103, and ART 104; and fifteen hours of Visual Art Courses; and permission of instructor. FLD.

METL 599. Individual Studies in Metalsmishing/Jewelry. 1-6 Hours. AE61 / U.
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours may apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Metalsmishing/Jewelry courses, or permission of instructor. IND.

METL 715. Metals/Jewelry. 2-6 Hours.
Individual research. Prerequisite: METL 515 or equivalent. RSH.

METL 815. Metals/Jewelry. 2-6 Hours.
Continuation of METL 715. RSH.
PNTG 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Painting. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

PNTG 263. Painting I. 3 Hours.
Basic problems in painting. Prerequisite: ART 102, and ART 103 or ART 104. LAB.

PNTG 300. Special Topics in Painting: ______. 1-4 Hours.
Course to be offered in area of studio activity of specific interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor. LEC.

PNTG 337. Watercolor. 3 Hours.
Sessions deal with the preparation of watercolor paints and equipment, but the main emphasis is placed on relational concepts affecting tone, structure, and unity in work. While the students are expected to explore some of the traditional approaches to watercolor, they also are encouraged to work with new and innovative ones. May be repeated for credit. Prerequisite: PNTG 263 or permission of instructor. LAB.

PNTG 338. Landscape Painting. 3 Hours.
An introduction to landscape painting. Considerable work is done out-of-doors. Emphasis is placed upon experiencing the environment and the development of individual approach. May be repeated for credit. Prerequisite: PNTG 263 and permission of instructor. LAB.

PNTG 364. Painting II. 3 Hours.
Continuation of PNTG 263. Prerequisite: PNTG 263. LAB.

PNTG 368. Painting II, Honors. 3 Hours.
Continuation of PNTG 263. Prerequisite: PNTG 263; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

PNTG 500. Advanced Special Topics in Painting: ______. 1-4 Hours.
Course to be offered in area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Painting courses, or permission of instructor. LAB.

PNTG 564. The Figure I. 3 Hours.
The figure and its environment in various media. Prerequisite: DRWG 314 and PNTG 364. LAB.

PNTG 586. The Figure II. 3 Hours.
Continuation of PNTG 585. May be repeated for credit. Prerequisite: PNTG 585. LAB.

PNTG 588. The Figure I, Honors. 3 Hours.
The figure and its environment in various media. Prerequisite: DRWG 314 or DRWG 318 and PNTG 364 and PNTG 368; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

PNTG 589. The Figure II, Honors. 3 Hours.
Continuation of PNTG 585 or PNTG 588. May be repeated for credit. Prerequisite: PNTG 585 or PNTG 588; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

PNTG 599. Individual Studies in Painting. 1-6 Hours. AE61 / U.
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours may apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Painting courses, or permission of instructor. IND.

PNTG 667. Painting V. 3 Hours.
Continuation of PNTG 566. Prerequisite: PNTG 566. LAB.

PNTG 668. Painting VI. 3 Hours.
Continuation of PNTG 667. May be repeated for credit in subsequent semesters. Prerequisite: PNTG 667. LAB.

PNTG 687. The Figure III. 3 Hours.
Continuation of PNTG 586. Prerequisite: PNTG 586. LAB.

PNTG 688. The Figure IV. 3 Hours.
Continuation of PNTG 687. May be repeated for credit. Prerequisite: PNTG 687. LAB.

PNTG 869. Painting VII. 3 Hours.
Individual research in painting. Prerequisite: PNTG 668. RSH.

PNTG 889. The Figure V. 3 Hours.
Individual research in the figure and its environment in various media. Prerequisite: PNTG 688. RSH.

PNTG 970. Painting VIII. 3 Hours.
Continuation of PNTG 869. Prerequisite: PNTG 869. RSH.

PNTG 990. The Figure VI. 3 Hours.
Continuation of PNTG 889. Prerequisite: PNTG 889. RSH.

PRNT 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Printmaking. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

PRNT 223. Intaglio I. 3 Hours.
Introduction to intaglio. Prerequisite: ART 102, and ART 103 or ART 104. LAB.

PRNT 224. Relief I. 3 Hours.
Introduction to relief printing. Prerequisite: ART 102, and ART 103 or ART 104. LAB.

PRNT 233. Lithography I. 3 Hours.
Introduction to lithography. Prerequisite: ART 102, and ART 103 or ART 104. LAB.
PRNT 243. Serigraphy I. 3 Hours.
Introduction to serigraphy. Prerequisite: ART 102, and ART 103 or ART 104. LAB.

PRNT 300. Special Topics in Printmaking: ____. 3 Hours. U.
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor. LEC.

PRNT 324. Intaglio II. 3 Hours.
Continuation of PRNT 223. Prerequisite: PRNT 223, or permission of instructor. LAB.

PRNT 325. Relief II. 3 Hours.
Continuation of PRNT 224. Prerequisite: PRNT 224, or permission of instructor. LAB.

PRNT 328. Intaglio II, Honors. 3 Hours.
Continuation of PRNT 223. Prerequisite: PRNT 223; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

PRNT 329. Relief II, Honors. 3 Hours.
Continuation of PRNT 224. Prerequisite: PRNT 224; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

PRNT 334. Lithography II. 3 Hours.
Continuation of PRNT 233. Prerequisite: PRNT 233 or permission of instructor. LAB.

PRNT 338. Lithography II, Honors. 3 Hours.
Continuation of PRNT 233. Prerequisite: PRNT 233; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

PRNT 344. Serigraphy II. 3 Hours.
Continuation of PRNT 243. Prerequisite: PRNT 243 or permission of instructor. LAB.

PRNT 348. Special Problems in Printmaking—Color Printing in Relief and Intaglio. 3 Hours.
Multiple block and plate printing in color. (This course is not regularly offered. The current Schedule of Classes should be consulted.) Prerequisite: PRNT 223 and permission of instructor. LAB.

PRNT 349. Serigraphy II, Honors. 3 Hours.
Continuation of PRNT 243. Prerequisite: PRNT 243; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

PRNT 500. Advanced Special Topics in Printmaking: ____. 1-4 Hours. U.
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Printmaking courses, or permission of instructor. LEC.

PRNT 523. Printmaking III A (Intaglio). 3 Hours.
Prerequisite: PRNT 524 or permission of instructor. LAB.

PRNT 524. Printmaking III B (Lithography). 3 Hours.
Prerequisite: PRNT 534 or permission of instructor. LAB.

PRNT 525. Printmaking III C (Serigraphy). 3 Hours.
Prerequisite: PRNT 544 or permission of instructor. LAB.

PRNT 526. Printmaking IV A (Intaglio). 3 Hours.
Prerequisite: PRNT 523 or permission of instructor. LAB.

PRNT 527. Printmaking IV B (Lithography). 3 Hours.
Prerequisite: PRNT 524 or permission of instructor. LAB.

PRNT 528. Printmaking IV C (Serigraphy). 3 Hours.
Prerequisite: PRNT 525 or permission of instructor. LAB.

PRNT 599. Individual Studies in Printmaking. 1-6 Hours. AE61 / U.
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours may apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Printmaking courses, or permission of instructor. IND.

PRNT 662. Printmaking V. 3 Hours.
Individual research in printmaking. Prerequisite: PRNT 526 or PRNT 527 or PRNT 528. LAB.

PRNT 663. Printmaking VI. 3 Hours.
Continuation of PRNT 662. Prerequisite: PRNT 662. LAB.

PRNT 802. Special Problems in Printmaking. 3 Hours.
Individual research in printmaking; course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters. Prerequisite: PRNT 579 and permission of instructor. RSH.

PRNT 827. Printmaking VII. 3 Hours.
Continuation of PRNT 826. Prerequisite: PRNT 826. LAB.

PRNT 903. Special Problems in Printmaking. 3 Hours.
Individual research in printmaking; course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters. Prerequisite: PRNT 802 and permission of instructor. RSH.

PRNT 928. Printmaking VIII. 3 Hours.
Continuation of PRNT 927. Prerequisite: PRNT 927. LAB.

SCUL 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Sculpture. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

SCUL 253. Sculpture I. 3 Hours.
Introduction to sculpture. Prerequisite: ART 102, ART 103, and ART 104, or permission of instructor. LAB.

SCUL 300. Special Topics in Sculpture: ____. 1-4 Hours.
Course to be offered in an area of studio activity of specific interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104, or permission of instructor. LAB.

SCUL 349. Metal and Glass Casting. 3 Hours.
A course in foundry techniques as related to sculpture. Both traditional and experimental procedures for casting bronze, aluminum, and iron sculpture are explored. This course is taught at the 300 and 500 levels, with additional assignments at the 500 level. Prerequisite: SCUL 253. LAB.

SCUL 350. Direct Metal Fabrication. 3 Hours.
The course will present a variety of techniques for fabricating metal sculpture. Oxyacetylene and electric arc welding processes will be included. May be repeated for credit. Prerequisite: SCUL 253. LAB.
SCUL 354. Sculpture II. 3 Hours.
Continuation of SCUL 253. Prerequisite: SCUL 253. LAB.

SCUL 355. Sculpture III. 3 Hours.
Continuation of SCUL 354. Prerequisite: SCUL 354. LAB.

SCUL 358. Sculpture II, Honors. 3 Hours.
Continuation of SCUL 253. Prerequisite: SCUL 253; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

SCUL 359. Sculpture III, Honors. 3 Hours.
Continuation of SCUL 354 or SCUL 358. Prerequisite: SCUL 354 or SCUL 358; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

SCUL 500. Advanced Special Topics in Sculpture: ______. 1-4 Hours. U.
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Sculpture courses, or permission of instructor. LEC.

SCUL 549. Metal and Glass Casting. 3 Hours. U.
A course in foundry techniques as related to sculpture. Both traditional and experimental procedures for casting bronze, aluminum, and iron sculpture are explored. May be repeated for credit. This course is taught at the 300 and 500 levels, with additional assignments at the 500-level. Prerequisite: SCUL 253. LAB.

SCUL 556. Sculpture IV. 3 Hours.
Continuation of SCUL 355. May be repeated for credit. Prerequisite: SCUL 355. LAB.

SCUL 558. Sculpture IV, Honors. 3 Hours.
Continuation of SCUL 355 or SCUL 359. May be repeated for credit. Prerequisite: SCUL 355 or SCUL 359; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department. LEC.

SCUL 599. Individual Studies in Sculpture. 1-6 Hours. AE61 / U.
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours can apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Sculpture courses, or permission of instructor. IND.

SCUL 657. Sculpture V. 3 Hours.
Continuation of SCUL 556. Prerequisite: SCUL 556. LAB.

SCUL 658. Sculpture VI. 3 Hours.
Continuation of SCUL 657. May be repeated for credit in subsequent semesters. Prerequisite: SCUL 657. LAB.

SCUL 804. Special Problems in Sculpture. 3 Hours.
Individual research in sculpture; course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters. Prerequisite: SCUL 559 and permission of instructor. RSH.

SCUL 859. Sculpture VII. 3 Hours.
Individual research in sculpture. Prerequisite: SCUL 658. RSH.

SCUL 905. Special Problems in Sculpture. 3 Hours.
Individual research in sculpture; course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters. Prerequisite: SCUL 804 and permission of instructor. RSH.

SCUL 960. Sculpture VIII. 3 Hours.
Continuation of SCUL 859. Prerequisite: SCUL 859. RSH.

TD 130. Introduction to Weaving. 3 Hours.
Specifically for students with limited or no previous experience. Application to art and design principles to four-harness loom structures. Emphasis on the use of color and texture in loom controlled and weaver controlled techniques. Counts only as a studio elective or general elective for a B.F.A. in Art or Design. LAB.

TD 133. Introduction to Fibers. 3 Hours.
Studio exploration of fibers as an art form. May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104. May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104, or permission of instructor. LEC.

TD 313. Fiber Forms. 3 Hours.
Studio exploration of fibers as an art form. Techniques include felting, spinning yarn, soft sculpture, embellishment, crochet. Open to all university students. LAB.

TD 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Textile Design. Course is designed to meet critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

TD 300. Special Topics in Textiles/Fibers: ______. 1-4 Hours. U.
Course to be offered in an area of special interest to individual faculty and qualified students. May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104, or permission of instructor. LEC.

TD 313. Fiber Forms. 3 Hours.
Studio exploration of fibers as an art form. Techniques include felting, papermaking, basketry, and dyeing. Prerequisite: ART 101, and ART 130 or ART 133. LAB.

TD 314. Introduction to Weaving. 3 Hours. U.
Application of art and design principles to four-harness loom structures. Emphasis on the use of color and texture in loom controlled and weaver controlled techniques. Prerequisite: ART 101, and ART 130 or ART 133. LAB.

TD 315. Textile Handprinting and Resist Processes. 3 Hours. U.
Fundamentals of resist and dye techniques on textiles: batik, tie-dye, discharge, and direct application. Prerequisite: ART 101, and ART 130 or ART 133. LAB.

TD 316. Screenprinting Textiles. 3 Hours.
Design problems in textile printing with emphasis on screenprinting and photo techniques. Prerequisite: ART 101, and ART 130 or ART 133. LAB.

TD 401. Weave Structures. 3 Hours. U.
Continuation of TD 314. Research and analysis of multiple-harness weave structures. WEave drafts. Design problems to develop the use of color, form, and surface in simple and compound weaves. Prerequisite: TD 314. LAB.

TD 402. Techniques in Weaving. 3 Hours. U.
Development of individual art and design concepts in relation to woven structures and/or forms. Emphasis on weaver-controlled techniques used to create images and composition. Prerequisite: TD 314. LAB.

TD 403. Intermediate Textile Printing. 3 Hours.
Individual problems in textile printing and dyeing processes. Prerequisite: TD 316. LAB.

TD 404. Surface Design. 3 Hours.
Textile pattern design for art and/or industry. Prerequisite: Twelve hours in Visual Art or Design, or permission of the instructor. LAB.

TD 414. Experimental Concepts in Weaving. 3 Hours.
Experimentation with resist dyeing, painted warps and/or “Fiber Forms” techniques in woven structures. Individual research and development of thematic concepts. Prerequisite: TD 313, and TD 301 or TD 302. LAB.
TD 500. Advanced Special Topics in Textiles/Fibers: __. 1-4 Hours. U.
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Textiles/Fibers courses, or permission of instructor. LEC.

TD 503. Advanced Surface Design/Screenprinting. 1-6 Hours. U.
Directed study of advanced surface design and screenprinting methods. May be repeated for credit. Prerequisite: TD 403. IND.

TD 504. History of Textiles, Lecture. 3 Hours.
Study of historical textiles, their design development, and the techniques employed. Prerequisite: Junior standing in department or permission of instructor. LEC.

TD 506. Advanced Fiber Forms. 1-6 Hours. U.
Directed study of three-dimensional and off-loom methods and techniques. May be repeated for credit. Prerequisite: TD 313. IND.

TD 514. Advanced Techniques in Weaving. 1-6 Hours. U.
Directed study of advanced loom-controlled and weaver-controlled methods. May be repeated for credit. Prerequisite: TD 401 and TD 402. IND.

TD 515. Advanced Textiles/Fibers I. 3-6 Hours. AE61.
Development of individual direction in textiles based on experience, research, and skills acquired in preceding courses; capstone experience. Prerequisite: Twenty-four credits in Textiles/Fibers and consent of instructor. LAB.

TD 520. Advanced Textiles/Fibers II. 3-6 Hours. AE61.
Continuation of TD 515, capstone experience. Prerequisite: TD 515. LAB.

TD 590. Internship in Textiles/Fibers. 1-3 Hours. U.
Practical experience in the use of artistic skills in approved and supervised academic or professional settings. May be repeated for credit; no more than six hours may be applied to the B.A. or B.F.A. degree. Credit hours are graded on a satisfactory/unsatisfactory basis, according to the written recommendation provided by the internship supervisor to the faculty advisor. Prerequisite: ART 102, ART 103, and ART 104; and fifteen hours of Visual Art courses. FLD.

TD 599. Individual Studies in Textiles/Fibers. 1-6 Hours. AE61 / U.
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours can apply toward the bachelor's degree. Prerequisite: Twenty-four credits in Textiles/Fibers and consent of instructor. IND.

TD 715. Textile Design in Weaving, Printing, and Dyeing. 2-6 Hours.
Individual research. Prerequisite: TD 520 or TD 525 or equivalent. RSH.

TD 750. Graduate Seminar. 0.5 Hours.
Discussion of issues and/or work in textiles. Graded on satisfactory/unsatisfactory basis. LEC.

TD 815. Textile Design in Weaving, Printing, and Dyeing. 2-6 Hours.
Continuation of TD 715. RSH.

VAE 100. Introduction to the Profession of Art Education. 3 Hours.
This course is designed to acquaint students with the profession of art education by helping to increase an awareness of the role and characteristics of an effective art teacher. Large and small group activities and assignments are dispersed throughout the semester to facilitate these outcomes. Students are involved in observation of and participation with art teachers and pupils in the public school classrooms, which complement course activities and assignments. VAE 100 is a professional course. LEC.

VAE 130. Art and Design in Daily Life. 3 Hours. U.
The course aims to develop students' appreciation of designed objects in contemporary life whether they are historical icons or everyday items in the immediate environment. The instructional materials and activities assist students in acquiring the knowledge and skills for critically analyzing, discussing, and evaluating objects. Course content is interdisciplinary with a focus on design history. The class is open to all students and is relevant to those who have taken classes in art, design, architecture, and art history. Not open to students with credit in VAE 530. LEC.

VAE 177. First Year Seminar: __. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Visual Art Education. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

VAE 300. Special Topics in Visual Art Education: __. 1-4 Hours. U.
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104, or permission of instructor. LEC.

VAE 320. Instruction and Curriculum I. 3 Hours.
This methods course provides an overview of the professional practices of K-12 art educators. Course content deals with the art education program, K-12, in relationship to the rest of the curriculum. This encompasses goals, objective sequence, courses offered at various levels, finance, staffing and administration. Prerequisite: Junior standing or consent of the instructor. LEC.

VAE 325. Education in Multicultural Society. 2 Hours.
The course is designed to provide the student with an awareness of and sensitivity to the concept of multicultural education. Topics related to the rationale for and processes of providing a multicultural perspective within the schools will be addressed. Field experiences will be structured to provide students with opportunities to observe the diversity within our society. LEC.

VAE 330. Fundamentals of Art. 3 Hours.
An introduction to art designed for the general university student. Designed to facilitate understanding and viewing works of art. Basic information including elements and principles of art, materials and techniques used by artists, and the function of art in society. LEC.

VAE 341. Instructional Strategies in Art for Elementary Classroom Teachers. 2 Hours.
Child growth and development in art. Materials as they relate to a sequential art education curriculum in the elementary school. Prerequisite: Admission to the School of Education or the education division of the graduate school. LEC.

VAE 395. Community Collaborations in Art Education. 3 Hours. U.
A focused examination of existing community organizations, models, and resources alongside collaborative strategies for working with these entities to achieve common goals for art education. Students in this class will learn of collaborative community models, explore entrepreneurial and other educational initiatives that contribute to the general purpose of art education, and recognize the role of families and other community members in contributing to the arts. LEC.
VAE 410. Instruction and Curriculum II. 3 Hours.
This methods course provides an overview of the professional practices of K-12 art educators. Course content deals with the art education program, K-12, in relationship to the rest of the curriculum. This encompasses goals, objective sequence, courses offered at various levels, finance, staffing and administration. Prerequisite: Junior standing or consent of the instructor. LEC.

VAE 420. Artistic Media and Processes in Art Education. 3 Hours.
Building on course content in VAE 320, this course concentrates on instructional strategies and presentation models in art education. Students examine and explore the media appropriate to teaching art in various settings and levels as well as how art program budgets are derived and impact overall curriculum development. Prerequisite: VAE 320 or permission of instructor. LEC.

VAE 497. Independent Study. 1-3 Hours.
Only one enrollment permitted each semester; a maximum of four hours will apply toward the bachelor's degree. Prerequisite: Recommendation of advisor and consent of instructor. IND.

VAE 500. Student Teaching. 6 Hours. AE61.
A supervised teaching experience in an approved school setting, with level and subject area to be selected according to the teaching field. Prerequisite: Admission to the student teaching program. FLD.

VAE 520. Instructional Technology in Art Education. 3 Hours.
This course addresses technology that is pertinent to professional art educators. Students use technology to develop a professional portfolio and technology-related resources for teaching art in PreK-12 schools and community settings. LEC.

VAE 530. Art and Design in Daily Life. 3 Hours.
The course aims to develop students' appreciation of designed objects in contemporary life whether they are historical icons or everyday items in the immediate environment. The instructional materials and activities will assist students in acquiring the knowledge and skills for critically analyzing, discussing, and evaluating objects. Course content is interdisciplinary with a focus on design history. The class is open to all students and is relevant to those who have taken classes in art, design, architecture, and art history. Not open to students with credit in VAE 130. LEC.

VAE 596. Practicum in Teaching Art. 2 Hours.
A supervised art teaching practicum in which students will learn to employ different teaching strategies with children pre-school to high school in the school or museum setting. Prerequisite: VAE 320, VAE 410, VAE 795 or consent of instructor. LEC.

VAE 598. Special Course: ____. 1-5 Hours.
A special course of study to meet current needs of education students; primarily for undergraduates. LEC.

VAE 599. Community Based Project in Art Education. 1-6 Hours.
AE61 / U.
Individual activity and project that serves as an alternate capstone experience to VAE 500 (Student Teaching). Will involve the development of an independent, community-based arts education project developed by the student under the supervision of a VAE faculty member. Prerequisite: Forty credits of Visual Art, fifteen credits of Visual Art Education Courses, and permission of the instructor. IND.

VAE 600. Evaluation and Measurement in Art Education. 3 Hours.
An introduction to the concepts and skills for the development and implementation of evaluation procedures for art education. Topics will include the development of student evaluation, the relationship between instructional objectives and evaluation, various evaluation techniques for art education, grading, and providing grades and feedback (to) students, parents, and schools. Prerequisite: VAE 320 and VAE 410. LEC.

VAE 680. Internship in Teaching Art. 5-16 Hours.
A supervised internship experience leading to initial art teacher certification. The student assumes the total professional role as a teacher of art in an approved school setting. LEC.

VAE 698. Education of Women in the Arts. 2-3 Hours.
This course will examine the education of women in the arts at all levels of schooling (preschool, primary, secondary, and university) and in nonformal settings (art clubs, women's leagues, tutoring, etc.). The intent is to further a historical and contemporary based understanding of gender characteristics and discrimination as they affect the education of women in the arts. Students enrolled in three hours credit will be required to write a case study on the education of a woman artist. LEC.

VAE 710. Assessment in Art Education. 3 Hours.
The course is designed to introduce students to evaluation procedures in art education as they apply to public school teaching K-12. The material will incorporate methods of evaluating student learning in art, the effectiveness of instruction, the designing of instruments, grading procedures including the provision of feedback to students, parents, and schools. Concepts and skills for both formative and summative evaluation will be related to the development of objectives, instruction, and curriculum development as a whole. LEC.

VAE 716. Teaching Art: ____. 1-4 Hours.
Instructional techniques, methodology, materials, and evaluation. Processes for the specific art area named. May be repeated for credit in different media. LEC.

VAE 750. Introduction to Art Museum Education. 1-4 Hours.
This course provides a general overview to the museum education field. Course readings include current ideas and issues on learning, art education, criticism, the museum in education, and museum education practices. LEC.

VAE 774. Art for Exceptional Children. 2 Hours.
A study of the psychology, philosophy, content, and media in art expression and its relationship to mental and creative growth with exceptional children. Prerequisite: SPED 741, which may be taken concurrently. LEC.

VAE 780. Internship in Teaching Art. 9 Hours.
A supervised internship experience leading to initial art teacher certification. The student assumes the total professional role as a teacher of art in an approved school setting. LEC.

VAE 790. Applications of Technology in Art Education. 1-3 Hours.
The course is designed to provide students with the skills necessary for using and assessing the impact of microcomputers, video recorders, and other technological developments in art education. Prerequisite: TL 601 or equivalent. LEC.

VAE 798. Special Course: ____. 1-5 Hours.
A special course of study to meet current needs of education professionals; primarily for graduate students. LEC.

VAE 800. Visual Art Education Curriculum Development. 1-3 Hours.
A study of research, resources, and media as they relate to learning goals in a sequential art curriculum for use by teachers. The amount of credit reflects the extent of the curriculum being developed and the amount of work involved in the development process. LEC.

VAE 825. Seminar in: ____. 1-4 Hours.
LEC.
VAE 830. Seminar in: ____. 1-4 Hours.
LEC.

VAE 842. Teaching Art Criticism. 3 Hours.
An examination of the four phases of art criticism (description, analysis, interpretation and judgment) will be followed by practice in using these phases in the development of effective art curriculum for all developmental levels. Prerequisite: PRE 702 and PRE 704 or equivalents.
LEC.

VAE 850. Aesthetics, the Arts and Education. 3 Hours.
Theoretical introduction to the problems involved in teaching critical appreciation of the arts; examination of materials from aesthetics, art history, and criticism. LEC.

VAE 869. History of Art Education. 3 Hours.
A study of the historical development of art education. Prerequisite: Nine hours of education. LEC.

VAE 875. Research in Education. 3 Hours.
This course examines the issues and procedures commonly used to conduct research in art education in preparation for students' graduate theses or projects. Research methods are adapted and applied to students' professional needs and interests in the form of a research proposal. LEC.

VAE 890. Preparation for the M.A. Examination. 1 Hour.
An independent reading course in preparation for the M.A. Examination. The grade will be an S or U, as determined by the performance on the examination. The examination will be evaluated separately. Prerequisite: Permission of the instructor. LEC.

VAE 895. Field Experience in: ____. 1-6 Hours.
Supervised and directed experiences in selected professional settings and cooperating agencies. Prerequisite: Permission of instructor. FLD.

VAE 897. Independent Study. 1-4 Hours.
Prerequisite: Consent of advisor and instructor. RSH.

VAE 898. Master's Project. 1-4 Hours.
RSH.

VAE 899. Master's Thesis. 1-6 Hours.
THE.

VAE 900. Supervision and Evaluation of Visual Arts Programs. 3 Hours.
A study of the administration of school, museum, and community arts education programs. Topics will include curriculum development, personnel supervision, finance, and the quantitative and qualitative evaluation of arts programs. Prerequisite: TL 703 or equivalent. LEC.

VAE 929. Research in Education. 3 Hours.
An examination of research methodology in visual arts education. Emphasis will be on philosophical, historical, qualitative, and quantitative research development. Prerequisite: PRE 715 or equivalent. LEC.

VAE 949. Artistic Learning and Development. 3 Hours.
Research from psychology, sociology, and anthropology will be examined for its implications for the artistic development of the child. Topics include cross-cultural and age comparisons of children's graphic symbol development, aesthetic judgments, and perceptual skills. Prerequisite: PRE 702 and PRE 704 or equivalents. LEC.

VAE 995. Field Experience in: ____. 1-5 Hours.
Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experiences will be prepared independently by the student, a representative of the cooperating agency, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours. LEC.

VAE 996. College Teaching Experience in: ____. 2 Hours.
To meet the college teaching experience requirement for doctoral programs, a student shall engage in a semester long, planned, instructional activity that shall include college classroom teaching under supervision. Planning shall be done with the advisor and/or member of the faculty who will supervise the experience. The activity shall be done under the supervision of a member of the University of Kansas faculty or by an individual or individuals designated by the candidate's committee. RSH.

VAE 997. Individual Study. 1-4 Hours.
Prerequisite: Prior graduate course work in the area of study and consent of instructor. RSH.

VAE 998. Seminar in: ____. 1-4 Hours.
LEC.

VAE 999. Doctoral Dissertation. 1-15 Hours.
THE.

Bachelor of Fine Arts in Visual Art

First-Year Preparation: Foundations

A minimum of 12 hours in foundations courses is required before a student may enroll in further studio classes for a B.F.A., B.A., or B.A.E. degree:

**ART 101** Drawing I 3
**ART 102** Drawing II 3
**ART 103** Art Concepts and Practice 3
**ART 104** Art Principles and Practice 3

Additional specified prerequisites must be completed before enrollment in advanced visual art studio courses.

The foundations enrollment should be followed for 2 semesters (15 hours each semester):

**Foundations (12)**

<table>
<thead>
<tr>
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</thead>
<tbody>
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<td>3</td>
</tr>
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<td>ART 104</td>
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**English (6)**

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<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

**History of Art (6)**

<table>
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<tr>
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</thead>
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<td>History of Western Art: Ancient Through Medieval</td>
<td>3</td>
</tr>
<tr>
<td>HA 151</td>
<td>History of Western Art: Renaissance to Contemporary</td>
<td>3</td>
</tr>
</tbody>
</table>

Bachelor of Fine Arts in Visual Art Degree Requirements

The Department of Visual Art offers the B.F.A. in visual art, including the areas of ceramics, drawing, expanded media, metalsmithing/jewelry, painting, printmaking, sculpture, and textiles/fibers. A total of 120 hours is required for the degree, including 45 junior/senior hours (courses numbered 300 or higher). 30 of these 45 junior/senior hours must be taken in residence at the University of Kansas. In addition to the 12-hour
foundations requirement, a minimum of 48 hours in departmental courses is required, including 2 semesters of directed study.

The Department of Visual Art reserves the right to retain examples of student work and to use images of student work on internet websites and for university publication purposes.

B.F.A. Major Requirements

General Option

General Education Requirements
Completion of KU Core Requirements (see KU Core)

BFA-specific requirements

Writing Requirement - ENGL101 and ENGL 102, or placement in and completion of ENGL 102/105 and an additional Goal 2, Outcome 1 course

Foundations Studies (12)

<table>
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History of Art (15)

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<td>HA 150</td>
<td>History of Western Art: Ancient Through Medieval</td>
<td>3</td>
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<tr>
<td>HA 151</td>
<td>History of Western Art: Renaissance to Contemporary</td>
<td>3</td>
</tr>
<tr>
<td>HA 150+ level elective (6)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

BFA General students must choose one of the following courses covering art history from 1900-1945:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>HA 380</td>
<td>History of Photography</td>
<td>3</td>
</tr>
<tr>
<td>or HA 580</td>
<td>History of Photography</td>
<td>3</td>
</tr>
<tr>
<td>or HA 564</td>
<td>European Art, 1900-1945</td>
<td></td>
</tr>
<tr>
<td>or HA 571</td>
<td>Modern Sculpture</td>
<td></td>
</tr>
<tr>
<td>or HA 583</td>
<td>American Art 1900-1945: Rise of Modernism</td>
<td></td>
</tr>
<tr>
<td>or HA 588</td>
<td>Modern and Contemporary Visual Arts of Japan</td>
<td></td>
</tr>
<tr>
<td>HA300+ level elective</td>
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</tr>
</tbody>
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BFA General students must choose one of the following courses covering art history from 1945-present:

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<tr>
<th>Course</th>
<th>Title</th>
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<tr>
<td>HA 565</td>
<td>Art Since 1945</td>
<td>3</td>
</tr>
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<td>3</td>
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</tr>
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<td>3</td>
</tr>
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<td>or HA 588</td>
<td>Modern and Contemporary Visual Arts of Japan</td>
<td></td>
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</table>

School of the Arts Elective (3)
Satisfied by one course from the Dance (DANC), Film & Media Studies (FMS), Theatre (THR), or Visual Art (ART, CER, EXM, METL, PNTG, PRNT, SCUL, TD, VAE) department.

Electives
- Additional credit hours of general electives are needed to meet the minimum total hours required for graduation.

Major Requirements - General Option

The general option requires 49 major hours, including a minimum of 15 junior/senior hours in the major, a minimum of 15 major hours in residence, and a minimum 2.0 KU junior/senior grade-point average in the major.

Visual Art Core Courses (15)
Select one course in 5 of the following areas:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 131</td>
<td>Fundamentals of Ceramics</td>
<td>3</td>
</tr>
<tr>
<td>ART 123</td>
<td>Fundamentals of Expanded Media</td>
<td>3</td>
</tr>
<tr>
<td>ART 132</td>
<td>Fundamentals of Metalsmithing/Jewelry</td>
<td>3</td>
</tr>
<tr>
<td>ART 120</td>
<td>Fundamentals of Drawing and Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 121</td>
<td>Fundamentals of Printmaking</td>
<td>3</td>
</tr>
<tr>
<td>ART 122</td>
<td>Fundamentals of Sculpture</td>
<td>3</td>
</tr>
<tr>
<td>ART 130</td>
<td>Fundamentals of Fiber Forms</td>
<td>3</td>
</tr>
<tr>
<td>ART 133</td>
<td>Fundamentals of Fibers</td>
<td>3</td>
</tr>
<tr>
<td>or any 200-level TD course</td>
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Visual Art Studies (15)
Select one of the following:

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<tbody>
<tr>
<td>DRWG 203</td>
<td>Drawing III</td>
<td>3</td>
</tr>
<tr>
<td>DRWG 213</td>
<td>Life Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>DRWG 300</td>
<td>Special Topics in Drawing: ____</td>
<td></td>
</tr>
</tbody>
</table>

Electives: Satisfied by 12 hours selected from the Visual Art Department (ART, CER, EXM, METL, PNTG, PRNT, SCUL, TD, VAE)

Studio Electives (9)
Select 9 hours from Visual Art or Design courses

Senior Studio Requirements (10)
Prerequisite: 30 hours of studio art courses.

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<tr>
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<tr>
<td>ART 540</td>
<td>Professional Activities Seminar</td>
<td>3</td>
</tr>
<tr>
<td>ART 695</td>
<td>Directed Study I</td>
<td>3</td>
</tr>
<tr>
<td>ART 696</td>
<td>Directed Study II</td>
<td>4</td>
</tr>
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Ceramics Option

General Education Requirements

BFA-specific requirements

Writing Requirement – ENGL 101 and ENGL 102, or placement in and completion of ENGL 102/105 and an additional Goal 2, Outcome 1 course.

Foundations Studies (12)

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Electives
- Additional credit hours of general electives are needed to meet the minimum total hours required for graduation.
Major Requirements - Ceramics Option

The ceramics option requires 48 major hours, including a minimum of 24 junior/senior hours in the major, a minimum of 15 major hours in residence, and a minimum 2.0 KU junior/senior grade-point average in the major.

Ceramics (27)

ART 131 Fundamentals of Ceramics 3
or CER 208 Ceramics I 3
CER 301 Ceramics II 3
CER 402 Ceramics III 3
CER 504 Kilns 3
CER 505 Clay and Glaze Formulation 3
CER 515 Advanced Ceramics I 6
CER 520 Advanced Ceramics II 6

Studio Electives (21)
Select 21 hours 21

Additional Required Visual Art and Design Electives (6)
(6 hours, not counted toward major)

PHMD elective 3
SCUL 253 Sculpture I 3
or SCUL 349 Metal and Glass Casting 3

Metalsmithing/Jewelry Option

General Education Requirements

Completion of KU Core Requirements (see KU Core)
BFA-specific requirements

Writing Requirement – ENGL 101 and 102, or placement in and completion of ENGL 102/105 and an additional Goal 2 Outcome 1 course.

Foundations Studies (12)

ART 101 Drawing I 3
ART 102 Drawing II 3
ART 103 Art Concepts and Practice 3
ART 104 Art Principles and Practice 3

Additional Foundation Requirements (9 hours, not counted toward major) (9)

ART 130 Fundamentals of Fiber Forms 3
or ART 133 Fundamentals of Fibers 3
TD 314 Introduction to Weaving 3
TD 315 Textile Handprinting and Resist Processes 3

History of Art (12)

HA 150 History of Western Art: Ancient Through Medieval 3
((fall only - HA 150 must be taken before HA 151))

HA 151 History of Western Art: Renaissance to Contemporary (spring only) 3

Non-Western History of Art 3

300+ HA Electives Students encouraged to take METL 504 as HA Elective 6

School of the Arts Elective (3)

Satisfied by 1 course (3 hours) from the Dance (DANC), Film & Media Studies (FMS), Theatre (THR), or Visual Art (ART, CER, EXM, METL, PNTG, PRNT, SCUL, TD, VAE) department.

Electives Additional credit hours of general electives are needed to meet the minimum total hours required for graduation.

Textiles/Fibers Option

General Education Requirements

Completion of KU Core (see KU Core)
BFA-specific requirements

Writing Requirement – ENGL 101 and 102, or placement in and completion of ENGL 102/105 and an additional Goal 2 Outcome 1 course.

Foundations Studies (12)

ART 101 Drawing I 3
ART 102 Drawing II 3
ART 103 Art Concepts and Practice 3
ART 104 Art Principles and Practice 3

Additional Foundation Requirements (9 hours, not counted toward major) (9)

ART 130 Fundamentals of Fiber Forms 3
or ART 133 Fundamentals of Fibers 3
TD 314 Introduction to Weaving 3
TD 315 Textile Handprinting and Resist Processes 3

History of Art (12)

HA 150 History of Western Art: Ancient Through Medieval 3
((fall only - HA 150 must be taken before HA 151))

HA 151 History of Western Art: Renaissance to Contemporary (spring only) 3
The University of Kansas

Non-Western history of art  3
HA Elective  3
School of the Arts Elective (DANC, FMS, THR course) (3)  3

Major Requirements - Textiles/Fibers Option

The textiles/textile option requires 48 major hours, including a minimum of 30 junior/senior hours in the major, a minimum of 15 major hours in residence, and a minimum 2.0 KU junior/senior grade-point average in the major.

Intermediate Textiles/Fibers Courses (12)
TD 313  Fiber Forms  3
TD 316  Screenprinting Textiles  3
TD 401  Weave Structures  3
or TD 402  Techniques in Weaving
or TD 403  Intermediate Textile Printing
or TD 404  Surface Design
or TD 414  Experimental Concepts in Weaving
TD 401  Weave Structures  3
or TD 402  Techniques in Weaving
or TD 403  Intermediate Textile Printing
or TD 404  Surface Design
or TD 414  Experimental Concepts in Weaving

Advanced Textiles/Fibers Courses (15)
TD 504  History of Textiles, Lecture  15
TD 515  Advanced Textiles/Fibers I
or TD 503  Advanced Surface Design/Screenprinting
or TD 506  Advanced Fiber Forms
or TD 514  Advanced Techniques in Weaving
TD 520  Advanced Textiles/Fibers II
or TD 503  Advanced Surface Design/Screenprinting
or TD 506  Advanced Fiber Forms
or TD 514  Advanced Techniques in Weaving

Studio Electives (18)
(any Visual Art, Design, or applicable studio courses)  18

A sample 4-year plan for the BFA in Visual Art will be coming soon.

Bachelor of Fine Arts in History of Art

First-Year Preparation

A minimum of 12 hours in foundations courses is required before a student may enroll in further studio classes for a B.F.A., B.A., or B.A.E. degree:

ART 101  Drawing I  3
ART 102  Drawing II  3
ART 103  Art Concepts and Practice  3
ART 104  Art Principles and Practice  3

Additional specified prerequisites must be completed before enrollment in advanced visual art studio courses.

The foundations enrollment should be followed for 2 semesters (15 hours each semester):

Foundations (12)
ART 101  Drawing I  3
ART 102  Drawing II  3
ART 103  Art Concepts and Practice  3
ART 104  Art Principles and Practice  3

English (6)
ENGL 101  Composition  3
ENGL 102  Critical Reading and Writing  3

Bachelor of Fine Arts in History of Art

Degree Requirements

A major in the history of art is available to candidates for the B.F.A. degree. This major combines a 30-hour concentration in art history with 18 hours of studio training (beyond the 12 hours of foundation courses). A total of 120 hours is required for the degree, including 45 junior/senior hours (courses numbered 300 or higher). 30 of these 45 junior/senior hours must be taken in residence at the University of Kansas. The B.A. and B.G.S. degrees (p. 159) are offered by the College of Liberal Arts and Sciences.

Requirements for the B.F.A. Degree

1. Major Program Courses (9)
HA 150  History of Western Art: Ancient Through Medieval  3
HA 151  History of Western Art: Renaissance to Contemporary  3

2. Breadth Courses: Complete one course at or above the 300 level in each of the following six categories: (18)

- A. Art between 400-1400: European, Mediterranean, or Near Eastern
  - HA 393  Special Study in Medieval Art: _____
  - HA 506  Early Medieval and Romanesque Art
  - HA 507  Gothic Art
  - HA 510  Medieval Manuscripts and Early Printed Books
  - HA 527  Late Medieval Art in Italy
  - HA 593  Special Study in Medieval Art: _____
- B. Art between 1300-1600: European, Mediterranean, or Near Eastern
  - HA 330  Italian Renaissance Art
F. Art after 1900

3. Complete an art history course (3 hours) or studio course (3-6 hours) approved for Goal 6 in the KU Core. (The Goal 6 art history course may also fulfill one of the breadth requirements above, in which case an elective course should be taken for the final 3 required hours of art history. If a Goal 6 studio course is taken, an elective course should be taken for the final 3 required hours of art history. (3)

4. Art history elective (0-3 hours); see number 3 above (3)

Electives in art and design: Satisfied by completing 18 hours of coursework with subject code (ART, CER, EXM, METL, PNTG, PRNT, SCUL, TD, VAE, PHMD, INTD, ILLU, INDD, BDS, VISC, ADS) (18)

General Education Courses (0)

Completion of KU Core Requirements. (see KU Core section of the catalog)

Liberal Arts and Sciences/Foundation Studies Courses (43)

ART 101 Drawing I
ART 102 Drawing II
ART 103 Art Concepts and Practice
ART 104 Art Principles and Practice

Writing Requirement – ENGL 101 and 102, or placement in and completion of ENGL 102/105 and an additional Goal 2 Outcome 1 course.

Foreign language: A fourth-level proficiency in one language, or third-level proficiency in one language and first-level proficiency in another.

A sample 4-year plan for the BFA in History of Art will be coming soon.

Bachelor of Arts in Visual Art

First-Year Preparation: Foundations

Students must submit a portfolio to be accepted as a visual art major and to enroll in foundations courses. A minimum of 12 hours in foundations courses is required before a student may enroll in further studio classes for a B.F.A., B.A., or B.A.E. degree:

ART 101 Drawing I 3
ART 102 Drawing II 3
The University of Kansas

ART 103  Art Concepts and Practice  3
ART 104  Art Principles and Practice  3

Additional specified prerequisites must be completed before enrollment in advanced visual art studio courses.

The foundations enrollment should be followed for 2 semesters (15 hours each semester):

<table>
<thead>
<tr>
<th>Foundations (12)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101  Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART 102  Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>ART 103  Art Concepts and Practice</td>
<td>3</td>
</tr>
<tr>
<td>ART 104  Art Principles and Practice</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>English (6)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101  Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102  Critical Reading and Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>History of art (6)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 150  History of Western Art: Ancient Through Medieval</td>
<td>3</td>
</tr>
<tr>
<td>HA 151  History of Western Art: Renaissance to Contemporary</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mathematics (6)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 101  College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>Second MATH course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Bachelor of Arts in Visual Art**

A Bachelor of Arts degree is offered in visual art. A total of 120 hours is required for the degree, including 45 junior/senior hours (courses numbered 300 or higher). 30 of these 45 junior/senior hours must be taken in residence at the University of Kansas.

Liberal Arts and Sciences Requirements

Completion of KU Core Requirements (see KU Core for specific requirements)

Completion of College BA degree specific requirements (see College BA requirements)

<table>
<thead>
<tr>
<th>Foundations (12)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101  Drawing I</td>
<td>3</td>
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<tr>
<td>ART 102  Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>ART 103  Art Concepts and Practice</td>
<td>3</td>
</tr>
<tr>
<td>ART 104  Art Principles and Practice</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Visual Art Major (36)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual Art Major Studies</td>
<td></td>
</tr>
<tr>
<td>(Including a minimum of 15 junior/senior hours in the major, a minimum of 15 major hours in residence, and a minimum 2.0 KU junior/senior grade-point average in the major)</td>
<td></td>
</tr>
<tr>
<td>Visual Art Concentration: (24 hours)</td>
<td></td>
</tr>
<tr>
<td>Any Visual Art (ART, CER, EXM, METL, PNTG, PRNT, SCUL, TD, VAE) and Photomedia (PHMD) classes.</td>
<td></td>
</tr>
<tr>
<td>History of Art: (12 hours)</td>
<td></td>
</tr>
<tr>
<td>HA 150  History of Western Art: Ancient Through Medieval (fall only)</td>
<td></td>
</tr>
<tr>
<td>HA 151  History of Western Art: Renaissance to Contemporary (spring only)</td>
<td></td>
</tr>
</tbody>
</table>

| HA elective (numbered 300 or higher) |  |
| HA elective (numbered 300 or higher) |  |

Below is a sample 4-year plan for students pursuing the BA in Visual Art. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 (2 crs req), BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)</td>
</tr>
<tr>
<td>MATH 101 (Goal 1.2 Quantitative Reasoning)</td>
<td>3</td>
<td>Quantitative Reasoning (Goal 1.2, BA Quantitative Reasoning)</td>
</tr>
<tr>
<td>ART 101 (Goal 3 Humanities, Major Requirement)</td>
<td>3</td>
<td>ART 102 (Major Requirement)</td>
</tr>
<tr>
<td>ART 103 (Major Requirement)</td>
<td>3</td>
<td>ART 104 (Major Requirement)</td>
</tr>
<tr>
<td>HA 150 (Goal 4.2 Global Awareness, Major Requirement)</td>
<td>3</td>
<td>HA 151 (Major Requirement)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sophomore</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
</tr>
<tr>
<td>Goal 1.1 Critical Thinking</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
</tr>
<tr>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td>Lab Science (BA Lab Requirement)</td>
</tr>
<tr>
<td>HA (Art History) Elective 300+ (Major Requirement)</td>
<td>3</td>
<td>HA (Art History) Elective 300+ (Major Requirement)</td>
</tr>
<tr>
<td>Studio Art Course (Major Requirement)</td>
<td>3</td>
<td>Studio Art Course (Major Requirement)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Junior</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
</tr>
<tr>
<td>Studio Art Course (Major Requirement)</td>
<td>3</td>
<td>Studio Art Course 300+ (Major Requirement)</td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
<td>Elective or possible minor course 300+ (Major Requirement)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Senior</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio Art Course 300+ (Major Requirement)</td>
<td>3</td>
<td>Goal 3 Social Science</td>
</tr>
</tbody>
</table>
**Bachelor of Art Education in Visual Art Education**

**First-Year Preparation: Foundations**

A minimum of 12 hours in foundations courses is required before a student may enroll in further studio classes for a B.F.A., B.A., or B.A.E. degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART 102</td>
<td>Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>ART 103</td>
<td>Art Concepts and Practice</td>
<td>3</td>
</tr>
<tr>
<td>ART 104</td>
<td>Art Principles and Practice</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional specified prerequisites must be completed before enrollment in advanced visual art studio courses.

The foundations enrollment should be followed for 2 semesters (18 hours each semester):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101</td>
<td>Drawing I</td>
<td>3</td>
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<td>ART 104</td>
<td>Art Principles and Practice</td>
<td>3</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
</tr>
</tbody>
</table>

**Undergraduate Admission**

Students who wish to teach art should seek admission to the School of the Arts by submitting a portfolio. Applicants should also consult the Department of Visual Art for assignment of an advisor and requirement information. In the first 2 years, students enroll as art education majors in prerequisites. These prerequisites are necessary for admission to the VAE professional sequence in the junior year:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 101</td>
<td>College Algebra (or higher)</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 104</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>HA 150</td>
<td>History of Western Art: Ancient Through Medieval</td>
<td>3</td>
</tr>
<tr>
<td>HA 151</td>
<td>History of Western Art: Renaissance to Contemporary</td>
<td>3</td>
</tr>
<tr>
<td>ART 101</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART 102</td>
<td>Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>ART 103</td>
<td>Art Concepts and Practice</td>
<td>3</td>
</tr>
<tr>
<td>ART 104</td>
<td>Art Principles and Practice</td>
<td>3</td>
</tr>
</tbody>
</table>

Students must apply for admission to the professional sequence upon completing the first semester of the sophomore year. Transfer students with more than 45 hours must apply the first semester at KU. Students may not enroll in the professional sequence before formal approval by VAE. Admission to the professional sequence is based on the following minimum criteria:

1. Cumulative grade-point average of 2.5.
2. Grade-point average of 2.75 in required course work.
3. Minimum scores on the Pre-Professional Skills Test of 172 on the writing test, 173 on the reading test, and 172 on the mathematics test.
4. Successful completion of the application form (typed).
5. Satisfactory faculty evaluations in the areas relevant to visual art education including art and history of art. Each applicant’s applied instructor must complete a special recommendation form.
6. No grade lower than a C in any course in the professional education sequence.

**Recommendation for Student Teaching and Internship**

The capstone experience of student teaching and internship in art education requires a strong knowledge base particularly in certain content areas. Academic performance in content areas is a predictor of success in this capstone experience. Therefore, it is strongly recommended that students have a minimum grade of B– in all visual art education classes and an academic record with a grade-point average of at least 3.0 in the following areas: visual art education, the history of art, studio art, and education.

**Note:** Students must complete the student teaching experience with grades of C or higher.

**Note:** To be licensed as an art teacher in Kansas, a student must fill out an application, pay a fee, pass all 3 parts of the Pre-Professional Skills Test and the Professional Knowledge component of the National Teachers’ Examination, and complete other specified academic degree requirements. Information is available in 211 J.R. Pearson Hall.

Students who do not meet all criteria may be admitted to the professional sequence on a provisional basis and may enroll in a maximum of 5 credit hours of professional sequence courses during the first term of the junior year. Students assigned provisional status must complete all requirements by the end of that term. Candidates are reviewed for admission twice a year. The deadline for all applications is March 1 or October 1 for fall or October 1 for spring, by 5 p.m. Submit applications to visual art education, 300 Art and Design Building. Students who are denied admission may reapply for the next deadline but must resubmit a complete application. Students who transfer into the program with more than 45 credit hours may be admitted to the professional sequence on a provisional basis but must complete the application by the first deadline that occurs during their residence at KU. They also must register for classes that fulfill any deficiencies they might have on arrival at KU.

On admission to the professional sequence, students enroll as visual art education majors (code AEPS-BAE) and identify their emphases in consultation with the visual art education advisor. Regular admission requires a cumulative grade-point average of 3.0 or higher in the baccalaureate degree curriculum. Students with cumulative undergraduate grade-point averages of 2.75 may be admitted on probation.

**Requirements for the B.A.E. Degree**

The Bachelor of Art Education degree requires a minimum of 124 credit hours distributed among general studies, the major, and professional education. 45 of the 125 undergraduate credit hours must be taken at the junior/senior level (courses numbered 300 or higher). 30 of the 45 junior/senior hours must be taken in residence at the University of Kansas. At least 15 major hours must be taken in residence at the University of Kansas. The program requires either VAE 500 (Student Teaching), which leads to PreK-12 licensure, or VAE 599 (Community Based Project in Art Education), which completes the degree without licensure eligibility.

**General Studies in Liberal Arts and Sciences (28-29)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
</tr>
</tbody>
</table>

(Fullfills KU Core Goal 2, LO 1, 1st unit) (3)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Communication (KU Core Goal 2, LO 1, 2nd unit)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication</td>
<td>3</td>
</tr>
<tr>
<td>(Fullfills KU Core Goal 2, LO 2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 104</td>
<td>General Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

(Fullfills KU Core Goal 3, Social/Behavioral Science) (4-5)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 101</td>
<td>College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>(Fullfills KU Core Goal 1, LO 2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 105</td>
<td>Introduction to Topics in Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 150</td>
<td>Community Leadership</td>
<td>3</td>
</tr>
</tbody>
</table>

(Fullfills KU Core Goal 5, Ethics) (37-40)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;T 235</td>
<td>Multicultural Education</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 306</td>
<td>Development and Learning of the Adolescent</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 359</td>
<td>Literacy in the Content Areas</td>
<td>1</td>
</tr>
<tr>
<td>ELPS 250</td>
<td>Education and Society</td>
<td>3</td>
</tr>
<tr>
<td>SPED 326</td>
<td>Teaching Exceptional Children and Youth in General Education</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 537</td>
<td>The Governance and Organization of Schools</td>
<td>3</td>
</tr>
<tr>
<td>VAE 320</td>
<td>Instruction and Curriculum I</td>
<td>3</td>
</tr>
<tr>
<td>VAE 395</td>
<td>Community Collaborations in Art Education</td>
<td>3</td>
</tr>
<tr>
<td>VAE 410</td>
<td>Instruction and Curriculum II</td>
<td>3</td>
</tr>
<tr>
<td>VAE 420</td>
<td>Artistic Media and Processes in Art Education</td>
<td>3</td>
</tr>
<tr>
<td>VAE 520</td>
<td>Instructional Technology in Art Education</td>
<td>3</td>
</tr>
<tr>
<td>VAE 500</td>
<td>Student Teaching</td>
<td>6-9</td>
</tr>
<tr>
<td>or VAE 599</td>
<td>Community Based Project in Art Education</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101</td>
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<tr>
<td>ART 102</td>
<td>Drawing II</td>
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</tr>
<tr>
<td>ART 103</td>
<td>Art Concepts and Practice</td>
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<tr>
<td>ART 104</td>
<td>Art Principles and Practice</td>
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</tr>
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<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ART 103</td>
<td>Art Concepts and Practice</td>
<td>3</td>
</tr>
<tr>
<td>ART 104</td>
<td>Art Principles and Practice</td>
<td>3</td>
</tr>
</tbody>
</table>

(When completing the area requirements below, with the exception of PNTG 263, which is a specific course requirement, any courses with the following prefixes may be taken: CER, METL, SCUL, EXM, TD, and for courses in photography, PHMD or ART may apply.)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;T 235</td>
<td>Multicultural Education</td>
<td>3</td>
</tr>
<tr>
<td>PNTG 263</td>
<td>Painting I</td>
<td>3</td>
</tr>
<tr>
<td>Expanded Media</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Photography</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Sculpture</td>
<td>3</td>
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<tr>
<td>Textiles</td>
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**History of Art (12)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>HA 150</td>
<td>History of Western Art: Ancient Through Medieval</td>
<td>3</td>
</tr>
<tr>
<td>(Fullfills KU Core Goal 3, Arts/Humanities)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HA 151</td>
<td>History of Western Art: Renaissance to Contemporary</td>
<td>3</td>
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tr>
<td>HA 150</td>
<td>History of Western Art: Ancient Through Medieval</td>
<td>3</td>
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<tr>
<td>(Fullfills KU Core Goal 3, Arts/Humanities)</td>
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<tr>
<td>HA 151</td>
<td>History of Western Art: Renaissance to Contemporary</td>
<td>3</td>
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Western history of art chosen from: HA 266, HA 267, HA 268, or HA 269 (Fullfills KU Core Goal 4, LO 2)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Contemporary art history at the junior/senior level, chosen from: HA 365, HA 566, HA 567, HA 571</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Area of Emphasis (9)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
</tr>
</tbody>
</table>

(Fullfills KU Core Goal 2, LO 1, 1st unit) (3)
Studio art study in 1 area selected from those offered for the B.F.A. in visual art, design, or history of art (9) Must be taken at the 300 level or above. (The selected area may be chosen using courses with one of the following prefixes: DRWG, PNTG, PRNT, SCUL, EXM, METL, TD, CER, ART, HA, PHMD, ADS, ILLU, INDD, VISC. The following combinations of areas are also acceptable: DRWG and PNTG; ILLU and VISC; ART with any of the following: DRWG, PNTG, PRNT, SCUL, EXM, CER, TD, METL, PHMD. For questions, please consult with visual art education advisor.)

### Additional Non-Licensure Option Elective (3)
Students completing the B.A.E. Degree without licensure must also take an additional elective at the junior/senior level (3) in any area in order to meet the University’s minimum junior/senior hour requirement for degree completion.

A sample 4-year plan for the BAE in Visual Art Education will be coming soon.

## Master of Fine Arts in Visual Art

The Department of Visual Art has been authorized by the University and the Kansas Board of Regents to offer the Master of Fine Arts (M.F.A.) in Visual Art. The Department of Visual Art offers graduate programs leading to the Master of Fine Arts degree in studio art. Concentrations include ceramics, drawing and painting, expanded media, metalsmithing and jewelry, printmaking, sculpture, and textiles and fibers. The MFA degree in the Department of Visual Art is a terminal professional studio degree. The program’s goals are to develop each student’s critical thinking and studio skills so that they have the necessary tools and experience to pursue a career as a studio artist and to otherwise participate in the creative community both on a regional and national level.

The University of Kansas is a member of the National Association of Schools of Art and Design (http://nasad.arts-accredit.org). The entrance and graduation requirements in this catalog conform to the published guidelines of those organizations.

### Graduate Admission - M.F.A.
To be admitted, students must have undergraduate backgrounds judged by the graduate faculty to be appropriate preparation for the specific specialization selected for graduate study. A strong preference exists for applicants whose undergraduate backgrounds are in visual art.

Departmental faculty selection and review committees evaluate each applicant’s transcripts, portfolios, and letters of recommendation to determine their qualifications for admission. The committees expect applicants to have the B.F.A. degree or equivalent experience. In general, committees expect applicants to present about 70 hours of undergraduate credit in studio or related professional courses including about 36 hours of studio credit in a major area, to have maintained an undergraduate overall grade-point average of 3.0 on a 4.0 scale and in the proposed major, and to have had a minimum of 9 hours of credit in art history. The department encourages full-time residence.

Application to the program is competitive, by permission of the Kansas Board of Regents application for admission to graduate programs in Visual Art may be refused if available instructional space does not allow for addition of more students. The deadline for fall admission is January 15.

Submit your graduate application (http://www.graduate.ku.edu) and fee online, print it, and send it along with
- 1 official transcript of all college and university coursework,
- statement of purpose,
- 3 letters of recommendation,
- digital portfolio,
- printed image index,
- application form for financial aid,
- statement of financial resources (international students) and
- proof of proficiency in English (international students)

in 1 envelope to the department:

The University of Kansas
Department of Visual Art
Director of Graduate Studies
Art and Design Bldg.
1467 Jayhawk Blvd., Room 300
Lawrence, KS 66045-7531

### M.F.A. in Visual Art Degree Requirements

#### Concentrations in Ceramics, Drawing and Painting, Expanded Media, Fibers, Metalsmithing and Jewelry, Printmaking, and Sculpture

The graduate program consists of 60 semester hours of graduate credit, including thesis exhibition, in courses approved by the graduate director and the graduate thesis committee. A student may concentrate in one or more specializations. When the student has completed 2 semesters, the faculty selection and review committee reviews the student’s work. The graduate director gives the student a written assessment of progress, signed by the committee. At the end of the third semester, the same committee conducts a thesis review that determines whether the student is prepared to begin thesis work, needs additional coursework, or is to be dropped from the program.

Upon approval by the review committee, the candidate begins work toward the thesis. Students not receiving approval may continue to work toward the next review unless denied by the committee. A student who is approved for thesis work may enroll in Thesis in Art. Before thesis enrollment, the student selects a graduate thesis committee consisting of 3 members of the graduate art faculty. The committee advises the student, conducts regularly scheduled reviews of the work, and determines whether the requirements for the thesis have been completed. The graduate director must approve the membership of the graduate thesis committee.

The final departmental requirements are
- A thesis exhibition of the student’s work,
- An oral examination, and
- A thesis folio of the exhibition.

The thesis folio includes a statement written by the candidate concerning the work and a visual record of the exhibition. The department reserves the option of selecting and retaining one example of each graduate student’s work. Upon enrolling, the student automatically accepts these requirements and conditions.
Required Courses (60)

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seminar</td>
<td>12</td>
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<tr>
<td>Concentration</td>
<td>23</td>
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<tr>
<td>Studio or general electives</td>
<td>6</td>
</tr>
<tr>
<td>Graduate-level academic electives</td>
<td>9</td>
</tr>
<tr>
<td>Thesis</td>
<td>10</td>
</tr>
</tbody>
</table>

Master of Arts in Visual Art Education

The Department of Visual Art has been authorized by the University and the Kansas Board of Regents to offer the Master of Arts (M.A.) in Visual Art Education. The Visual Art Education graduate program strives to advance students’ understanding of art education with a complement of courses that explores historical studies of art education, art criticism, studio work, and aesthetics. An important goal of the curriculum is the development of a broad perspective of art education through multicultural studies, cognitive approaches in teaching and learning, assessment in teaching, and technological issues that arise in contemporary society. Students’ programs are tailored to their interests for specialties in areas such as studio, art history, evaluation, and others.

The University of Kansas is a member of the National Association of Schools of Art and Design (http://nasad.arts-accredit.org). The entrance and graduation requirements in this catalog conform to the published guidelines of those organizations.

Graduate Admission - M.A. Visual Art Education

Application deadlines:

- December 1 - Spring admission
- May 1 - Fall admission

Admission requirements for regular status:

1. Entrance into the M.A. degree program requires a bachelor’s degree, from an accredited institution, which encompasses a minimum of 40 semester hours in fine arts studio (courses in drawing, painting, sculpture, design, printmaking, ceramics, metalsmithing/jewelry, weaving, lettering, commercial art, graphic design, constructive design, etc.), 9 hours in history of art, and 8 hours in visual art education. Applicants must have an overall undergraduate grade-point average of at least 3.0 on a 4-point scale.

2. 1 official transcript.

3. A minimum of 3 letters of recommendation from former or current instructors and/or those able to recommend the applicant on the basis of professional experience (e.g., principals, supervisors, or former employers). The letters of recommendation must address the applicant’s potential to take initiative as a graduate student and ability to be a self-starter.


Submit your graduate application (http://www.graduate.ku.edu) and fee online, then print a copy and send it along with

- 1 official transcript of all college and university coursework,
- Graduate Student Information Questionnaire,
- 3 letters of recommendation,
- Graduate Licensure applicants only, Praxis I test scores
- statement of financial resources (international students) and
- proof of proficiency in English (international students)

in one envelope to the department:

The University of Kansas
Visual Art Education
Director of Graduate Studies
Art and Design Bldg.
1467 Jayhawk Blvd., Room 300
Lawrence, KS 66045-7531

M.A. in Visual Art Education

The graduate program includes advanced professional and scholarly study for art educators and teaching licensure for those with baccalaureate degrees in other fields who wish to enter art education licensure typically also requires collateral undergraduate study) and advanced study for individuals in related disciplines. Details may be found in the Visual Art Education M.A. handbook, available from the Department of Visual Art (http://art.ku.edu).

M.A. Degree Requirements

At least 15 and no more than 18 hours in visual art education are required. The remainder of the coursework can be in related fields such as history of art, education, psychology, etc. This emphasis is appropriate for the student desiring to improve his or her fine arts knowledge and research skills in art education.

Thesis Option

The student completes 9 credit hours of core courses (VAE 800 , VAE 869 , and VAE 875 ), additional elective hours, and an independent experimental, descriptive, historical, or philosophical investigation of a topic related to visual art education. A total of 30 credit hours is required.

Project Option

The student completes 9 credit hours of core courses/VAE 800 , VAE 869 , and VAE 875 ), and additional elective hours. A substantial application of theory, principles, and/or products of visual art education in a pedagogical setting must be documented. A total of 30 credit hours is required.

Examination Option

Students take a total of 37 credit hours in required core courses (including VAE 875 Research in Art Education) and elective courses with 36 credit hours in regularly scheduled classes. Students also take a 1-credit-hour course, VAE 890 Preparation for the M.A. Examination, devoted to preparing for a written final examination. Preparation for the examination occurs during the first half of the semester and provides the basis for the course grade. The written examination, taken during the second half of the semester, requires students to demonstrate their knowledge of current issues in the field. If the written exam is deemed unsatisfactory by a majority of the student’s committee, the student will be required to retake the exam. The exact content and format of the second examination will be determined by the student’s committee members.

Graduate Licensure in Art Education

Students who seek to be art teachers in public schools (PreK-12) may obtain licensure as part of the M.A. degree. The licensure track is for
individuals with especially strong academic and artistic backgrounds who have completed baccalaureate degrees in studio art, design, art history, or other art-related fields. Coursework is taken at the undergraduate and graduate levels. Upon completion, individuals are recommended by the university for PreK-12 art licensure in Kansas and have earned a significant amount of credit required for the M.A. in Visual Art Education. Prospective students must meet all application requirements for the master’s degree to be considered for licensure in art. For further information, contact the Department of Visual Art (http://art.ku.edu) at 785-864-4401.
Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your advisor (http://www.advising.ku.edu) for details). Other years’ catalogs (http://catalog.ku.edu/archives)

Bachelor of Science in Business (p. 226)
Bachelor of Business Administration (p. 232)
Minor in Business (p. 234)
Master of Business Administration (p. 234)
Master of Accounting (p. 240)
Master of Science in Business (p. 241)
Doctor of Philosophy in Business (p. 242)

Introduction
In the School of Business, students acquire a rigorous education that prepares them for positions in a dynamic and competitive global environment.

The University of Kansas School of Business is accredited by the Association to Advance Collegiate Schools of Business International (http://www.aacsb.edu).

Undergraduate Programs
The school offers the Bachelor of Science (p. 226) degree in business on the Lawrence campus and the Bachelor of Business Administration (p. 232) on the KU Edwards Campus.

The undergraduate curriculum develops a foundation for lifelong education and growth. The strength of the program is based not only on the quality of the professional course offerings but also on the offerings of other KU divisions, particularly in the social sciences, natural sciences, and humanities. Students acquire a foundation education in business and management with emphasis on analytical skills and obtain a liberal arts and sciences education from their work outside the school.

The school offers advanced electives in various areas of business. Seven undergraduate majors are available:

- Accounting
- Business administration
- Finance
- Information systems
- Management and leadership
- Marketing
- Supply chain management

Business concentrations may be earned in entrepreneurship, information systems, international business, human resources and supply chain management. The baccalaureate programs in the School of Business, and independently the accounting program, are accredited by the Association to Advance Collegiate Schools of Business (http://www.aacsb.edu).

Resources and Opportunities

Study Abroad
The school encourages students to incorporate study abroad into their programs. Student and Academic Services can help students plan study to meet KU requirements while they are abroad. The school works with students and the KU Office of Study Abroad to select programs and courses appropriate to their interests and majors. Contact the Office of Study Abroad (http://www.studyabroad.ku.edu), 108 Lippincott Hall, 785-864-3742.

Job Shadowing
One on One, Jayhawks on the Job, allows business students to shadow a business professional during the course of a workday. The program offers students a daylong experience that enhances their understanding of a particular field and the business world, allows an opportunity for students to learn more about themselves and refine their career goals, and provides an opportunity for students to network with business professionals.

Internship Program
Internships offer students the opportunity to build on, apply, and assess the concepts that are developed through the curriculum and to further professional growth through meaningful real-world job experiences. The internship experience provides many benefits, from enhancing your knowledge of an industry or business field to increasing confidence in yourself and your abilities. Internships offer an opportunity to improve your professional skills, familiarize yourself with the business environment, network with business professionals, and refine your personal and career goals and aspirations. The school representative must approve the internship work experience. Not all positions qualify for internship credit.

Library Resources
The Anschutz Library offers a closed reserve service and reference services including a small print collection. The large collection in Watson Library offers additional reference and research materials. The business/economics bibliographer in the reference department can help business students use the library system. Spencer Research Library has an excellent collection on the history of economic thought and a special collection of business papers and records.

Computer Resources
Wagnon Computer Laboratory
The Wagnon Laboratory in Summerfield Hall is available to business undergraduate and graduate students for classroom assignments and individual research projects. About 46 computers and 30 software programs are available.

Harper Computing Classroom
Equipped with 44 PCs, the Harper room is intended for teaching classes that make heavy use of computers.

Faculty
The school’s faculty consists of 59 professors drawn from first-rank universities throughout the nation. The faculty enjoys a national reputation for research productivity and teaching success.
**Graduate Programs**

Four graduate degree programs are offered:

- Master of Business Administration (p. 234).
- Master of Science (p. 241).
- Master of Accounting (p. 240).
- Doctor of Philosophy (p. 242).

Four degree programs are offered jointly with other departments:

- Combined MBA/J.D. with the School of Law.
- MBA/Pharm.D. in Pharmacy.
- MBA with a graduate certificate in petroleum management with the School of Engineering.

General admission requirements and the content of each of these programs are discussed on their pages of the online catalog.

**Resources and Opportunities**

**Study Abroad**

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**Undergraduate Advising**

The Student and Academic Services (http://www.business.ku.edu/undergrad/current/advising) office, 206 Summerfield Hall, helps students meet their academic goals. Students should take primary responsibility for their academic careers by consulting SAS, becoming familiar with the undergraduate curriculum and graduation requirements, and complying with all guidelines. Advisors help students choose classes and make efficient progress towards graduation. For information, see the school’s website (http://www.business.ku.edu).

**Mandatory Advising**

Once a student is admitted to the School of Business, he or she must meet with a business advisor at least once a semester. A business advising hold is placed on admitted students’ enrollment each semester and released after the student meets with the advisor.

**Graduate Advising**

The MBA office in Summerfield Hall coordinates advising for MBA and M.S. students. The MACc office coordinates advising for MACc students, and the doctoral office coordinates advising for Ph.D. students. Staff members advise students about program requirements, course prerequisites, and program planning. Students based at the KU Edwards Campus typically receive advising sessions over the phone and by email. Advising sessions are optional.

**Undergraduate Scholarships and Financial Aid**

The school awards scholarships to current business students annually.

To be considered for need-based scholarships, file the Free Application for Federal Student Aid (http://www.fafsa.gov) (FAFSA) by March 1. A few scholarships are available for incoming first-year students. High school students interested in majoring in business should contact Financial Aid and Scholarships (http://financialaid.ku.edu), Strong Hall, 1450 Jayhawk Blvd., Room 50, Lawrence, KS 66045-7518, 785-864-4700, for information about federal and state funded financial aid programs.

**Graduate Fellowships and Assistantships**

For information about graduate assistantships, contact the School of Business (http://www.business.ku.edu).
Undergraduate University Regulations

For information about university regulations, see Regulations (p. 12) or visit the University of Kansas Policy Library (http://policy.ku.edu).

Business Honor Code

Students taking any business course must sign a pledge of academic honesty at the end of all examinations. Upon application to the school, each student must electronically sign an honor code form, available from the School of Business (http://www.business.ku.edu).

Change of School

Admission is competitive. Applications are due February 15 for fall admission and September 15 for spring admission.

Credit/No Credit

A Credit/No Credit option is available to all degree-seeking undergraduates. You may enroll in one course a semester under the option, if the course is not in your major or minor. For more information, visit the KU Policy Library (http://policy.ku.edu).

Warning: Certain undesirable consequences may result from exercising the option. Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of No Credit to F when computing grade-point averages.

Credit/No Credit is allowed for electives only. Required professional (business and economics) courses, ENGL 101, ENGL 102, COMS 130 (or ENGL 200 and above), and PSYC 104 may not be taken for Credit/No Credit.

Graduation with Distinction and Highest Distinction

Undergraduates whose KU professional grade-point averages rank in the upper 10 percent of their graduating class graduate with distinction. The upper 3 percent of those awarded distinction graduate with highest distinction.

Honor Roll

Undergraduates with grade-point averages of 3.5 who have completed at least 12 hours with letter grades are recognized on the honor roll or dean's list in fall and spring. An honor roll notation appears on the transcript.

Maximum and Minimum Semester Enrollment

No student may enroll for more than 20 hours a semester, or more than 9 hours in a summer session without permission from an undergraduate advisor.

Nonresidence Study Before the Last 30 Hours

Before the last 30 hours required for the degree, students may, under certain conditions, take courses at other institutions and transfer the credit to KU. Before enrolling in a nonresidence course, check on how your courses will transfer to KU (http://admissions.ku.edu/apply/transfercredits/ustudents/credittran) or complete KU's standard form, Request for Tentative Evaluation of Transfer Credit, in your dean's office or in College Student Academic Services for students in the College. After completing the course work, you must request that an official transcript be sent to the Office of Admissions (http://admissions.ku.edu), KU Visitor Center, 1502 Iowa St., Lawrence, KS 66044-7576, 785-864-3911. For transcripts to be official, they must be mailed from the college or university directly to KU. Faxed transcripts are not accepted for posting of transfer credit.

Nonresidence credit includes all credits from another college or university taken after initial enrollment at KU, military service courses, and other undergraduate course work not formally offered in the Schedule of Classes (http://www.classes.ku.edu).

Prerequisites and Corequisites

The student is responsible for checking course prerequisites before enrollment. Course rosters are checked before the start of each semester and again after the last day to add classes online. Students who are enrolled in a course without its prerequisites are administratively dropped without notice during the first four weeks of the semester.

Probation

Placed on Probation

An undergraduate student whose cumulative grade-point average, either overall or at KU (in all courses or professional courses), is lower than 2.2 is placed on probation for the following semester.

Continued on Probation

A student on probation is continued on probation for one more semester if the KU semester grade-point average is at least 2.2, but the cumulative grade-point average, either overall or at KU (in all courses or professional courses), is lower than 2.2.

Returned to Good Standing

A student on probation is returned to good standing if the cumulative grade-point average, both overall and at KU (in all courses and professional courses), is at least 2.2.

Dismissed

A student on probation is dismissed for failure to earn a KU grade-point average of at least 2.2 (in all courses and professional courses) in the next semester of enrollment, or if after two consecutive semesters on probation, the cumulative grade-point average, either overall or at KU (in all courses and professional courses), is not at least 2.2. Students are readmitted through the competitive admission process. Those students are dropped from all courses for the next semester and must complete a Change of School form.
Required Work in Residence

No baccalaureate degree is granted to a student who has not completed at least 30 semester credit hours of residence courses at KU. No exceptions are granted.

To earn a bachelor's degree from KU, you must complete the last 30 hours of credit for the degree by resident study. You may petition the dean for a waiver.

After admission to the school, written advance permission of the director of undergraduate programs is required for work taken at another institution to be applied to a student's degree. Nonresident credits may fill only elective requirements. They may not be used for courses specifically required for graduation.

Transfer of Credit

CredTran (http://admissions.ku.edu/apply/transfercredits/usstudents/credtran) is a transfer course equivalency system that lists more than 2,200 colleges and universities from which KU has accepted transfer courses in the past. If your school or course is not listed, your evaluation will be completed when you are admitted to KU.

Courses completed at other institutions are accepted to fulfill graduation requirements (e.g., in place of specifically prescribed courses), only if they are substantially equivalent as indicated by course description, hours of credit, and prerequisites. For professional courses not listed on CredTran (http://admissions.ku.edu/apply/transfercredits/usstudents/credtran), the student must submit a petition along with a course syllabus to the School of Business. Petition forms are available from Student and Academic Services, 206 Summerfield Hall.

Only transfer grades of C or higher apply toward graduation from the School of Business at KU.

Graduate University Regulations

For information about university regulations, see Regulations (p. 12) or visit the University of Kansas Policy Library (http://policy.ku.edu).

Business Career Services

The Business Career Services Center (http://business.ku.edu/business-career-services-center) (BCSC) provides a variety of resources including recruiting (on-campus interviews) for full-time and internship positions facilitated through KU Career Connections/Symplicity, an online job and internship database; individual career advising; and a variety of workshops and events—to name a few.

Other BCSC services include

- Individual career advising with trained counselors
- Business career fair
- Résumé review
- Mock interviews and interview preparation assistance
- Workshops on various career-related topics
- Online resource libraries
- Salary information

The faculty and career services staff are committed to providing a strong student-oriented program to help students develop career objectives and target job opportunities. The BCSC cannot guarantee jobs, but it will make every effort to bring together the job-seeking candidate and potential employers in accordance with their needs, abilities, and interests. Business graduates have been successful in finding employment in their areas of interest. Positions have been available nationwide, regardless of academic area or business degree.

Students are encouraged to register with the BCSC as early as possible. An early start can mean wider access to potential employment opportunities. Registrants may include one or more résumés in a web-based database, allowing access by the BCSC and employers. This allows the BCSC to perform résumé referrals quickly and companies to conduct their own résumé searches. Students can update their résumés at any time from any Internet-linked computer.

Statistics on graduates are collected each semester. Information on the number of degrees granted, percentage of graduates employed, and average starting salaries can be found on the School of Business website (http://www.business.ku.edu).

Contact the BCSC for more information at 785-864-5591, fax: 785-864-5078, bscs@ku.edu.

Courses

Accounting 200 is an introduction to the concepts of business and the measurement systems used to control and evaluate business activities. This course is designed to be of interest to all students regardless of discipline. Prerequisite: Goal 1, Outcome 2 and Goal 2, Outcome 1. LEC.

ACCT 201. Managerial Accounting I. 3 Hours.
A continuation of Financial Accounting I. A study of concepts of materials, labor, and overhead control; budget administration; cost accounting systems including standard costing; full costing and direct costing; income determination; differential costing; break-even analysis; accounting statement analysis; and use of return on investment as a basis for management decisions. Prerequisite: ACCT 200. LEC.

ACCT 205. Survey of Accounting. 3 Hours.
This course is an introduction to financial and managerial accounting. It will introduce the concepts of business and the measurement systems used to control and evaluate business activities. It will also explore product costing systems and the use of accounting data as a basis for management planning and decision making. (Not open to students with credit in ACCT 200.) Prerequisite: Goal 1, Outcome 2 and Goal 2, Outcome 1. LEC.

ACCT 300. Special Topics in Accounting: ______. 1-5 Hours.
This is a variable-topic course open to undergraduates meeting the prerequisites for the specific topic being offered. Its purpose is to allow the occasional offering of accounting topics not covered by established courses. Enrollment is not limited to School of Business students. Prerequisite: Determined for each topic by instructor. LEC.

ACCT 303. Introduction to the Accounting Profession. 1 Hour.
This course will focus on Accounting as a profession. Prospective and current accounting students will be exposed to a variety of topics. These include, but are not limited to, career options in Accounting, the CPA exam, ethics in the profession, current issues in Accounting, professional standards, the Accounting major, and the five-year Accounting program. Prerequisite: Acct 200 or coenrollment in Acct 200. LEC.

ACCT 311. Information Systems for Accountants. 3 Hours.
This course provides an overview of how to understand, analyze, and control computerized information systems, and is designed to provide the computer tools and knowledge so that today's business or accounting student will be tomorrow's successful and complete manager, consultant,
accountant, and/or auditor. The topics covered in this course will include computer technology, internal control in a computer environment, computer auditing, systems analysis and design, database systems, networking, electronic commerce, and specific systems applications. Hands on experience will be obtained through projects and various software packages. This course will count as an advanced business elective. Prerequisite: ACCT 201 and IST 202 or IST 301. Enrollment restricted. LEC.

ACCT 320. Intermediate Accounting I. 3 Hours.
A study of generally accepted accounting principles (GAAP) underlying the preparation and interpretation of general-purpose financial statements with emphasis on the principles of revenue recognition, matching revenues and related costs, and the determination of proper balance sheet valuations of assets and liabilities. The asset side of the balance sheet is the primary emphasis though the entire financial statements are used in examples throughout the course. Prerequisite: ACCT 201. Prerequisite or Corequisite: ACCT 303. LEC.

ACCT 321. Intermediate Accounting for Finance. 3 Hours.
An intermediate accounting course with emphasis on interpretation of general-purpose financial statements and the related disclosure notes. Includes understanding interrelationships among the various financial statements and analyzing the effects of transactions on the financial statements. Common and significant accounts/transactions will be analyzed, especially those relating to the financing and equity sections of the financial statements. Not open to students with credit in ACCT 320 or ACCT 323 or ACCT 410 or ACCT 411. Prerequisite: FIN 310 or FIN 311. Enrollment restricted. LEC.

ACCT 322. Intermediate Accounting I, Honors. 3 Hours.
Interpretation and application of financial accounting standards, with an emphasis on U.S. Generally Accepted Accounting Principles (GAAP) and ancillary treatment of International Financial Reporting Standards (IFRS). General coverage of all financial statements, with specific attention placed upon the balance sheet. A primary focus of the course is on the comprehension of foundational principles, concepts, and theories underlying financial reporting. Only open to students admitted to the University Honors Program, the School of Business Honors Program, or by consent of the instructor. Prerequisite: ACCT 201. Prerequisite or Corequisite: ACCT 303. LEC.

ACCT 325. Managerial Accounting II. 3 Hours.
An analysis of cost systems and their application in the determination, analysis and control of manufacturing and distribution costs. Emphasis is on managerial planning and control. Prerequisite: ACCT 201. Enrollment restricted. LEC.

ACCT 326. Managerial Accounting II, Honors. 3 Hours.
Honors treatment of this course involves an analysis of cost systems and their application in the determination analysis and control of manufacturing and distribution costs. Emphasis is on managerial planning and control. Open only to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. Prerequisites: ACCT 201. Enrollment restricted LEC.

ACCT 330. Introduction to Taxation. 3 Hours.
A study of the major concepts related to taxation with emphasis on the federal income tax for individuals including the implications of being a sole proprietor, partner of a partnership, and a corporate shareholder. Major topics covered include: different types of taxes; formation of the tax law; gross income; deductions; the tax formula; tax credits; filing status; tax treatment for capital gains and losses; and selected nontaxable transactions. Prerequisite: ACCT 320 or ACCT 323. Enrollment restricted. LEC.

ACCT 331. Introduction to Taxation, Honors. 3 Hours.
Honors treatment of this course is a study of the major concepts related to taxation with emphasis on the federal income tax for individuals including the implications of being a sole proprietor, partner of a partnership, and a corporate shareholder. Major topics covered include: different types of taxes; formation of the tax law; gross income; deductions; the tax formula; tax credits; filing status; tax treatment for capital gains and losses; and selected nontaxable transactions. Prerequisite: ACCT 320 or ACCT 323. Only open to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. LEC.

ACCT 335. Introduction to Income Tax. 3 Hours.
An introduction to basic concepts of income tax and how the tax law is formed. While tax problems of an individual are considered, emphasis is placed on tax factors to consider when conducting a business either as a single proprietor, corporation, or partnership. Not open to students with credit in ACCT 330 or ACCT 331. This course is for non-accounting majors. Prerequisite: ACCT 201. Enrollment restricted. LEC.

ACCT 400. Special Topics in Accounting: _____. 1-5 Hours.
This is a variable-topic seminar. Its purpose is to allow the occasional offering of accounting topics not covered by established courses. Prerequisite: Determined for each topic by the instructor. Enrollment restricted. LEC.

ACCT 410. Intermediate Accounting II. 3 Hours.
A continuation of the study of generally accepted accounting principles (GAAP) underlying the preparation and interpretation of general-purpose financial statements. The focus of this course is on the liability and equity sections of the balance sheet, including such topics as loans, bonds, leases, pensions, accounting for income taxes, equity transactions, employee stock options, earnings per share, and cash flows. Application of many of the authoritative accounting pronouncements is illustrated. Prerequisite: ACCT 320 or ACCT 323. Enrollment restricted. LEC.

ACCT 411. Intermediate Accounting II, Honors. 3 Hours.
Honors treatment of this course is a continuation of the study of generally accepted accounting principles (GAAP) underlying the preparation and interpretation of general-purpose financial statements. The focus of this course is on the liability and equity sections of the balance sheet, including such topics as loans, bonds, leases, pensions, accounting for income taxes, equity transactions, employee stock options, earnings per share, and cash flows. Application of many of the authoritative accounting pronouncements is illustrated. Prerequisite: ACCT 320 or ACCT 323. Only open to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. LEC.

ACCT 500. Individual Research in Accounting: _____. 1-5 Hours.
Individual study of selected topics in business not otherwise available to the student. Topics selected to be determined by the special interests and objectives of the student in consultation with a faculty member who will supervise the reading and research. Prerequisite: FIN 310 or FIN 311, MGMT 310 or MGMT 311, MKTG 310 or MKTG 311 and SCM 310 or SCM 311; approval of the Area Director. Enrollment restricted. LEC.

ACCT 515. Accounting Professional Communications. 3 Hours.
This course is designed to improve the professional communications skills of students interested in pursuing careers in accounting. Topics covered include communication styles, communication approaches for different styles, listening skills, client interactions, appropriate communication channels, receiving feedback, and presentation skills. Graded on satisfactory/unsatisfactory basis. Prerequisite: ACCT 599 or ACCT 799. Enrollment restricted. LEC.
ACCT 543. Introduction to Auditing. 3 Hours.
The fundamental concepts of audit risk, evidence accumulation and materiality are applied to financial statement audits using established accounting principles as the criterion for evaluating fair presentation. Audit objectives and procedures are studied in relation to the opinion which the auditor expresses on clients' financial statements. Financial statement audits are compared with other types of engagements performed by public accountants, and with other types of audits, such as compliance and operational audits. Prerequisite: ACCT 311 and ACCT 410 or ACCT 411. Enrollment restricted. LEC.

ACCT 544. Introduction to Auditing, Honors. 3 Hours.
Honors treatment of this course involves the fundamental concepts of audit risk, evidence accumulation and materiality are applied to financial statement audits using established accounting principles as the criterion for evaluating fair presentation. Audit objectives and procedures are studied in relation to the opinion which the auditor expresses on clients' financial statements. Financial statement audits are compared with other types of engagements performed by public accountants, and with other types of audits, such as compliance and operational audits. Open only to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. Prerequisite: ACCT 311 and ACCT 410 or ACCT 411. LEC.

ACCT 545. Advanced Taxation. 3 Hours.
Introduction to taxation for corporations, partnerships, S corporations and limited liability companies. The course will also include coverage of property transactions, methods of accounting, tax-related investment decisions, and selected tax issues. Prerequisite: ACCT 330 or ACCT 331. Enrollment restricted. LEC.

ACCT 599. Internship in Accounting. 1-3 Hours.
Internships provide opportunities for students to combine their academic education with a meaningful experience in the business world. Accounting internships allow students to explore career pathways in accounting, further their professional growth, expand professional networks, and increase the relevancy of their academic course work. The internship course combines job-related activities of the accounting internship position with a set of academic requirements. These requirements include academic assignments as well as a pre- and post-internship seminar held in the semester before and after the semester in which the internship occurs. Internships for credit must be approved by the Director of the Internship Program prior to the internship experience. Students may not receive more than three hours of internship credit from ACCT 599. ACCT 599 may count as an Accounting elective for students majoring in Accounting. Prerequisite: Approval of the internship; two of the following: FIN 310 or FIN 311, MGMT 310 or MGMT 311, MKTG 310 or MKTG 311, SCM 310 or SCM 311. Enrollment restricted. LEC.

ACCT 701. Financial Accounting. 2 Hours.
Financial accounting provides information to decision-makers external to the business, such as investors and lenders. The course describes the process through which economic information is captured, validated, and distributed externally in the form of financial statements. It also covers the contents of the major financial statements, focusing on how the various accounts are defined and measured and how the information can be used by external decision-makers. Enrollment restricted. LEC.

ACCT 705. Financial Statement Presentation and Analysis II. 2 Hours.
This course covers topics in intermediate-level financial accounting and financial statement analysis. Accounting topics are taught from an external decision-maker's perspective. The course is intended to help students read and understand complex financial statements, and to extract key financial information from a mass of detail. Topics will vary over time but can include financial reporting of various liabilities, derivatives and hedging, investments and acquisitions. Topics also can include forecasting financial statements, and valuation of common stock using accounting data. Not open to MAcc students or students with credit in ACCT 320 or ACCT 323, ACCT 410 or ACCT 411, ACCT 721, or ACCT 722. Prerequisite: ACCT 701. Enrollment restricted. LEC.

ACCT 706. Accounting. 3 Hours.
This course introduces students to the creation and application of financial accounting information and financial statements for decision making by corporate stakeholders, and to the use of internal accounting information for decision making by firm management. Enrollment restricted. LEC.

ACCT 708. Accounting and Finance for Professionals. 3 Hours.
This course is an introduction to financial and managerial accounting. It also serves as a bridge to basic financial decision-making. It will introduce the concepts of business and the measurement systems used to control and evaluate business activities. It will also explore costing systems and the use of accounting data as a basis for management planning and decision making, using basic tools such as return on investment. Not open to School of Business students. LEC.

ACCT 710. Business Writing for Accountants. 3 Hours.
This course is designed to improve students' professional writing skills. The course will emphasize effectively determining and meeting writing goals; writing with the readers' perspective in mind; employing a writing strategy to increase efficiency and effectiveness when writing; thinking critically about writing; writing clearly, concisely, and effectively within the context of business and accounting; avoiding common grammar errors; writing in a professional tone; reviewing and editing in an effective manner; and drafting email, client letters, and memos in an effective and professional manner using proper format. Not open to students with credit in BUS 105. Prerequisite: Admission to the MAcc program. Enrollment restricted. LEC.

ACCT 721. Advanced Accounting. 3 Hours.
A series of topics related mainly to financial accounting for corporations. Includes accounting for acquisitions and consolidations, asset impairments and derivative instruments. Also includes accounting for partnership equity. Prerequisite: Admission to the MAcc program or permission of the instructor. Enrollment restricted. LEC.

ACCT 722. Researching Financial Accounting Issues. 3 Hours.
This course develops students' technical research skills within the context of financial accounting as well as their proficiency with professional resources, including the FASB's Accounting Standards Codification. Research topics vary by semester in response to evolving practices. Students will also gain an understanding of regulatory and standard setting processes. Prerequisite: Admission to the MAcc program. Enrollment restricted. LEC.

ACCT 724. Accounting Theory. 3 Hours.
This course examines the economic drivers, competing interests, and regulatory institutions that determine accounting policy choice and the societal role of accounting. By the end of the course, students will have developed a cognitive framework that will enable them to identify and understand the forces that shape financial reporting, firms' reporting decisions, the behavior of financial regulatory bodies, interactions among agents in the capital markets, the behavior of public accounting firms, as well as other relevant issues. The end-goal of this course is to develop in the participants a more advanced and sophisticated perspective of the economic, political, ethical, and social role of accounting. Prerequisite: ACCT 410 or ACCT 411 and Admission to the MAcc program. Enrollment restricted. LEC.
ACCT 726. Advanced Managerial Accounting - Quantitative and Economic Topics. 3 Hours.
Through judicious use of quantitative methods including statistical decision theory, this course provides a conceptual analysis of several prominent managerial accounting topics. This course is intended to assist both public accountants and management accountants to understand management decision-making processes and information requirements thereof. Prerequisite: Admission to the MAcc program. Enrollment restricted. LEC.

ACCT 731. Tax Research. 3 Hours.
A course designed to develop one's ability to use the research tools available and provide comprehensive coverage of the many aspects of tax research. Emphasis is placed on locating authorities, solving tax problems, and communicating the results. Prerequisite: Admission to the MAcc program. Corequisite: ACCT 545. Enrollment restricted. LEC.

ACCT 732. Taxation for Business Entities. 4 Hours.
A study of federal income taxation for corporations, subchapter S corporations, and partnerships. The tax problems associated with formation, operation, distributions, reorganizations, and selected special topics will be analyzed. Prerequisite: ACCT 545 and admission to the MAcc. Prerequisite or concurrent enrollment in ACCT 731. Enrollment restricted. LEC.

ACCT 733. Tax Planning. 3 Hours.
A study of the fundamentals of Federal estate and gift taxation, the income taxation of estates and trusts, and various aspects of family tax planning. Prerequisite: ACCT 545 and admission to the MAcc program. Enrollment restricted. LEC.

ACCT 749. Internal Auditing. 3 Hours.
This course is designed to improve and enhance your knowledge of internal auditing, information systems auditing, and written and oral communications skills. The course will discuss the role of the Internal Auditor and their relationship with Board of Directors Audit Committee members; CEO’s; Members of Senior Management; Division and/or Operations Managers; External Auditors; Stakeholders and the General Public. Students will develop intellectual curiosity, the ability to spot the unusual, and the tenacity to discover the cause. To have the willingness to scrutinize details, without losing sight of the big picture; understand financial deception in order to detect it and to develop deterrence measures; understand evidence-gathering and investigative procedures; accept that everything you do will be challenged; develop the confidence to handle the challenge and respond; begin the development of your “Professional Skepticism;” apply your computer skills; produce exceptional quality written reports; enhance your verbal presentation skills and refine your time management technique. Prerequisite: ACCT 543 or ACCT 544 or permission of instructor. Enrollment restricted. LEC.

ACCT 743. Accounting Information System Risks and Controls. 3 Hours.
Students learn how to perform the risk assessments that auditors use to plan a top-down, risk-based assurance engagement. Using auditing standards and internal control frameworks as a guide, students learn how auditors (a) evaluate market conditions, industry practices, and client business activities to assess the risk of financial misstatement, (b) search potential misstatements by analyzing patterns of fluctuations in related financial statement accounts, and (c) assess the effectiveness of internal controls that protect technology-driven financial reporting processes from errors and irregularities. Prerequisite: Admission to the MAcc program. Enrollment restricted. LEC.

ACCT 745. Specialized Accounting Practices. 3 Hours.
This course is an extension of the study of basic financial accounting practices to include specialized industries that have particular or varied forms of GAAP applications and reporting which are not normally covered in basic financial accounting courses. Topics include accounting for banking, retail, insurance, not-for-profit entities, oil and gas, and financial institutions. Typically, this course should be taken by students in the audit track of the MAcc Program. Prerequisite: Admission to the MAcc program. Enrollment restricted. LEC.

International Financial Reporting Standards (IFRS) have become commonplace in nearly every country in the world. Even in the US, the SEC has sanctioned the use of IFRS for reporting purposes by a specific classification of exchange-listed corporations. In addition, the SEC has made a consistent attempt to converge US and international standards since the beginning of the 21st century. There is no question that US GAAP-trained accountants require a working knowledge of international financial reporting standards. Prerequisite: Admission to the MAcc program. Enrollment restricted. LEC.

This course will follow an independent study model with students identifying IFRS topics they wish to study further. Having successfully mastered the basic IFRS materials offered in IFRS I, this course will allow students an opportunity to explore a specific IFRS topic of interest with an in-depth research paper. Topics must be approved in advance. Students will interact with the professor to determine appropriate research material and obtain guidance to their research, the paper and their conclusions. Students are encouraged to work at their own pace in order to obtain the best possible outcome from their research activity. Graded on satisfactory/unsatisfactory basis. Prerequisite: Admission to the MAcc program. Enrollment restricted. LEC.

ACCT 744. Research and Literature in Auditing. 3 Hours.
Students are encouraged to work at their own pace in order to obtain the best possible outcome from their research activity. Graded on satisfactory/unsatisfactory basis. Prerequisite: Admission to the MAcc program. Enrollment restricted. LEC.
Excel; and analyze and interpret the data that will be used to compile a tax provision. Students will understand the tax attributes of various entities; the tax principles of business income, deductions and accounting methods including being able to differentiate between permanent and temporary differences; understand the basic principles of accounting for income taxes including financial statement classification and footnote disclosures; be able to prepare a tax provision and interpret the data utilized in the preparation process; understand the basic principles of FIN 48 -- Uncertainty in Income Taxes; understand other taxation areas of required review or complexity within a corporation including state and local taxes and taxes related to foreign operations. Prerequisite: ACCT 330 or equivalent and Admission to the MAcc program. Enrollment restricted. LEC.

**ACCT 799. Internship in Accounting. 1-3 Hours.**
Internships provide opportunities for students to combine their academic education with a meaningful experience in the business world. Accounting internships allow students to explore career pathways in accounting, further their professional growth, expand professional networks, and increase the relevancy of their academic coursework. The internship course combines job-related activities of the accounting internship position with a set of academic requirements. These requirements include academic assignments as well as a pre- and post-internship seminar held in the semester before and after the semester in which the internship occurs. Internships for credit must be approved by the Director of the Internship Program prior to the internship experience. Students may not receive more than three hours of internship credit. Enrollment restricted and by permission only. FLD.

**ACCT 810. Accounting and Financial Management. 4 Hours.**
Accounting and Financial Management introduces foundation concepts and analytical tools from accounting and finance and applies them to financial decision making. Topics include accounting information systems, financial statements, financial statement analysis, cash flows, operating and financial risks, valuation of real and financial assets, and the cost of capital. This course is open only to students in the full-time MBA program. LEC.

**ACCT 895. Graduate Seminar in Accounting: ______. 0.5-5 Hours.**
A variable-topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. Enrollment restricted. LEC.

**ACCT 898. Independent Study for Master’s Students. 1-6 Hours.**
Individual study of selected current problems in the field of accounting to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Students must have at least a 3.0 grade point average and be in good academic standing in a graduate business program and must submit a written statement of the proposed project approved by a supervisory faculty member prior to enrollment. RSH.

**ACCT 925. Seminar in Contemporary Accounting Theory II. 3 Hours.**
(S) Continuance of BUS 740 with emphasis upon the economic and social factors affecting the development of accounting thought. Each student will make both oral and written presentations of his/her original investigation and analysis of contemporary controversial issues. Prerequisite: Consent of PhD advisor. LEC.

**ACCT 927. Seminar in Management Accounting. 3 Hours.**
(V) The objective of this course is to foster a student’s conception and resolution of substantive issues in the management accounting area. Thus, the course will provide exposure to selected contemporary research topics. Representative topics that will be discussed are: concept of information, information economics, accounting information for planning and control, design of accounting information systems, variance analysis, and cost allocations. Prerequisite: Consent of PhD advisor. LEC.

**ACCT 928. Introduction to Accounting Research. 3 Hours.**
Students will gain a broad overview of the empirical/archival financial accounting and auditing literature. The readings for the course focus on the identification of research issues, background and context, hypotheses, data sources, and variables. Students will identify a research topic that interests them and will assess its viability as a project for possible future research. LEC.

**ACCT 929. Seminar in Archival-Based Accounting Research. 3 Hours.**
Students will gain an understanding of the history and future of significant streams of archival-based accounting research. Students will replicate seminal studies, learn to calculate important variables used in prior literature, and gain an understanding of the various methodologies used in archival-based research. LEC.

**ACCT 930. Seminar in Auditing Research I. 3 Hours.**
Students will gain in-depth knowledge of specific streams of the empirical/archival auditing literature. Topics may vary over time depending upon the interests of the students and instructor. Possible topics include (but are not limited to): the role of the auditor and audit committee in corporate governance, the auditing environment including regulation, audit quality, the pricing of audit and assurance services, litigation against auditors, and international auditing research. Students are expected to critically analyze and suggest ways to improve and extend the extant literature. The seminar will also include hands on analysis of data used in archival auditing research. LEC.

**ACCT 931. Seminar in Auditing Research II. 2-3 Hours.**
Students will be introduced to research issues involved in the audit process including modeling and assessing audit risk, independent risk, fraud risk, control risk, assurance risk, and judgement under uncertainty. Topics covered also include key research methods utilized in audit and assurance research, and important lines of research within the audit and assurance literature. Students also will study several important areas within the filed of auditing and assurance such as fraud, independence, internal control, audit evidence, and analytical review. LEC.

**ACCT 932. Seminar in Financial Accounting Research I. 3 Hours.**
Students will gain in-depth knowledge of specific streams of financial accounting research. Topics may vary over time depending upon the interests of the students and instructor. Possible topics include (but are not limited to): the role of financial reporting in corporate governance and debt contracting determinants and effects of financial reporting standards; the financial reporting environment including regulation; measuring financial reporting quality; the role of financial reporting and analysis in securities pricing; and the inter-relations among financial reporting of taxes and tax reporting to government authorities. LEC.

**ACCT 933. Seminar in Financial Accounting Research II. 2-3 Hours.**
Students will gain in-depth knowledge of specific streams of financial accounting research. Topics may vary over time depending upon the interests of the students and instructor. Possible topics include (but are not limited to): the role of financial reporting in corporate governance and debt contracting; determinants and effects of financial reporting standards; the financial reporting environment including regulation; measuring financial reporting quality; the role of financial reporting and analysis in securities pricing; and the inter-relations among financial reporting of taxes and tax reporting to government authorities. LEC.
ACCT 934. Seminar in Empirical Tax Research I. 3 Hours.
Students will gain in-depth knowledge and understanding how taxes affect
decision-making, asset prices, equilibrium returns, and the financial and
operational structure of firms. LEC.

ACCT 935. Seminar in Empirical Tax Research II. 2-3 Hours.
Students will gain in-depth knowledge of empirical tax research including
research on book-tax tradeoffs and earnings management, information
content of tax information and book-tax differences, impact of GAAP
rules regarding accounting for income taxes, how tax accounts reveal tax
planning and tax shelters, debt and taxes, and taxes and asset prices.
LEC.

ACCT 995. Doctoral Seminar in Accounting: ____. 2-5 Hours.
A variable topic seminar open only to graduate students meeting the
requirements established by faculty members offering the course.
Prerequisite: Consent of instructor. LEC.

ACCT 997. Directed Research in Accounting. 1-5 Hours.
Students will research selected topics in the field of business
administration under the direction of a graduate faculty member.
Students are expected to report the results of their research by writing a
publishable-quality scholarly article. Graded on satisfactory/unsatisfactory
basis. Prerequisite: Approval required from supervising graduate faculty
member. RSH.

ACCT 998. Independent Study for Doctoral Students. 1-5 Hours.
Individual study of selected current problems in the field of business
administration to be adapted to the special interests and objectives of the
students and conducted through extensive reading and research. Student
must submit written statement of proposed project. Prerequisite: Approval
required from supervising faculty member and PhD Team. RSH.

ACCT 999. Doctoral Dissertation. 1-12 Hours.
(V) Individual research work. THE.

BBA 200. Special Topics in Business Administration: ____. 1-5 Hours.
This is a variable-topic course open to undergraduates meeting the
prerequisites for the specific topic being offered. Its purpose is to allow the
occasional offering of business topics not covered by established courses.
Enrollment is not limited to School of Business students. Prerequisite:
Determined for each topic by instructor. LBN.

BBA 301. Managerial Economics. 3 Hours.
This course uses economic theory and methodology to understand and
improve managerial decision making. The focus is on the role of markets
in determining business and individual opportunities to create value, the
behavior of individual markets reacting to supply and demand forces, and
the consequences of alternative market structures and business policies.
Course content includes demand, production, cost analysis, supply and
demand analysis, price and non-price modes of competition, market
structure, and economic efficiency. Prerequisite: Completion of ECON 142
or ECON 143 and ECON 144. LEC.

BBA 302. Legal Aspects of Business. 3 Hours. GE11.
A course designed to acquaint the student with the basic principles of law
that are applicable to business transactions in the modern business world
and the legal systems. LEC.

BBA 303. Organizational Behavior. 3 Hours.
This course serves as an introduction to the study of individual and
group behavior within the context of an organization. An objective may
be the development of the student's potential for becoming an effective
organization member and manager of people. Experiential learning
methods are utilized to involve the student actively. A wide variety of
topics and theories may be covered, generally including motivation,
leadership, job design, group dynamics, and formal organizational
structure and process. Prerequisite: Completion of ECON 142 or
ECON 143, ACCT 200, PSYC 104, or PSYC 105 and completion or co-
enrollment in ACCT 201 and college algebra- or calculus-based statistics.
LEC.

BBA 304. Marketing. 3 Hours.
A study of marketing from the point of view of the business firm. Topics
include the structure of the marketing system, the nature of marketing
management, consumer behavior, marketing research, product policy,
channels of distribution policy, and analytical techniques useful to
marketing management. Prerequisite: ECON 142 or ECON 143, ACCT
200 and PSYC 104 or PSYC 105. Completion or co-enrollment in college
algebra- or calculus-based statistics. LEC.

BBA 305. Management Science and Operations Management. 3 Hours.
Introduces some of the most widely used models from management
science in business decision making. Topics include decision making
under uncertainty, resource allocation models, and production and
operations management. Prerequisite: Completion or co-enrollment in IST
202, IST 205 or IST 301, and college algebra- or calculus-based statistics.
LEC.

BBA 306. Finance. 3 Hours.
This course consists of the analysis of problems relating to estimating the
financial needs of an enterprise and to evaluating the alternative means
of providing and utilizing both temporary and permanent capital. The
relationship of current financial decisions with financial policy is analyzed
from the viewpoint of management and the stockholder. Prerequisite:
Completion of ACCT 200, and completion or co-enrollment in college
algebra- or calculus-based statistics. LEC.

BBA 307. Introduction to International Business. 3 Hours. AE42.
This course provides an overview of the key concepts, analytical
frameworks and institutions that underlie international business. Particular
attention is paid to the cultural and social diversity present in the world
as well as the economic theories that explain the benefits of trade and
underpin the agreements governing such international transactions.
Prerequisite: Completion of ECON 144 or ECON 145. LEC.

BBA 308. Business Policy and Strategy. 3 Hours. AE61.
This course exposes students to the role of general management in
complex organizations. The cases, conceptual materials, and projects
are selected to provide students with opportunities to analyze and
formulate strategic decisions that allow businesses to create and sustain
competitive advantages. Knowledge and skills gained in previous
business courses, including marketing, finance, and quantitative methods,
will be applied to problems associated with the totality of organizational
strategic activity. Prerequisite: BBA 303, BBA 304, BBA 305, and BBA
306. Enrollment restricted to students admitted to the Bachelor of
Business Administration Major. LEC.

BBA 401. Marketing Management and Strategy. 3 Hours.
This course builds upon the principles of marketing introduced in BBA
304 (Marketing) by further developing concepts in such areas as product
management, pricing, distribution, promotion, market segmentation,
product positioning, and strategic marketing planning. The primary focus
of the course is the integration of these concepts to achieve specific
marketing and segment goals and objectives. An important component
of the course is the application of concepts to realistic marketing
problems through the use of comprehensive marketing simulations or in-
depth cases that capture the dynamics of the marketing environment.
Prerequisite: BBA 304. Enrollment restricted to students admitted to the
Bachelor of Business Administration Major. LEC.
BBA 402. Human Resources Management. 3 Hours.
This course addresses the ways that firms manage employment relationships, including staffing, training and development, compensation, performance appraisal, labor-management relations, employment law, career management, and job design. Upon completion of the course, students will be able to identify and address these topics from a general management perspective. Prerequisite: BBA 303. Enrollment restricted to students admitted to the Bachelor of Business Administration Major. LEC.

BBA 403. Ethical Decision Making in Business. 3 Hours. AE51.
This course is designed to provide students with: (a) a grounding in the psychological and philosophical foundations of business ethics; (b) the ability to recognize ethical problems; (c) an exposure to many of the ethically sensitive issues facing corporations and managers in business today (e.g., layoffs, outsourcing, employee whistle-blowing, employee privacy, employee health and safety, marketing and advertising, environmental issues, discrimination, and the global responsibilities of business); and (d) the tools for analyzing and reaching closure on ethical problems. Students will study the role of ethics in the relation of business to employees, consumers, and society. Students in this course will have the opportunity to engage in stimulating class discussions, justify ethical positions in case study analyses, investigate ethical issues in their own future professional lives, and develop and present their solutions for typical ethical problems faced by managers in organizations. Prerequisite: BBA 303. Enrollment restricted to students admitted to the Bachelor of Business Administration Major. LEC.

BBA 404. Entrepreneurship. 3 Hours.
In this course the student examines the disciplines which comprise the critical success factors in entrepreneurship and develops a fundamental understanding of the basic skill set required to manage his/her own business. Learning will be achieved by both study and discussion of key entrepreneurial business issues as well as the critical appraisal of new venture business plans as presented in the text. Readings in entrepreneurship and case studies, contained in the text as well as in video presentations, will be used to illustrate the essential entrepreneurial management issues. Enrollment restricted to students admitted to the Bachelor of Business Administration Major. LEC.

BBA 405. Introduction to Supply Chain Management. 3 Hours.
This course introduces the student to supply chain management. Students are presented the key concepts of supply chain management, the application of these concepts and are provided with the managerial knowledge of supply chain management through class discussions and case studies. Students discover the impact of information technologies, strategic alliances and logistics on supply chain management and the performance implication of supply chain management. Prerequisite: BBA 304, BBA 305, and BBA 306. Enrollment restricted to students admitted to the Bachelor of Business Administration Major. LEC.

BBA 406. Advanced Finance - Principle and Applications. 3 Hours.
This course covers the theory and professional practice in three areas of finance. (1) The processes investors follow in selecting where to place their savings are detailed. (2) The investment and financing issues faced by firms are investigated. (3) The financial intermediaries that facilitate the flow of funds between investors and firms are studied. Prerequisite: BBA 306. Enrollment restricted to students admitted to the Bachelor of Business Administration Major. LEC.

This is a variable-topic seminar. Its purpose is to allow the occasional offering of information systems technology topics not covered by established courses. Prerequisite: Determined for each topic by the instructor. Enrollment restricted to students admitted to the Bachelor of Business Administration Major. LEC.

BBA 408. Accounting Elective: ______. 3 Hours.
This is a variable-topic seminar. Its purpose is to allow the occasional offering of accounting topics not covered by established courses. Prerequisite: Determined for each topic by the instructor. Enrollment restricted to students admitted to the Bachelor of Business Administration Major. LEC.

BBA 410. Project Management. 3 Hours.
This course develops a systems view of business so students can more effectively integrate project management into their business strategy. A common language and knowledge of project management concepts, principles and practices is developed. Students develop an understanding of what project management involves, how it relates to other functional management areas, and its role in an organization's structure and leadership. Topics are covered in the order they appear in the project lifecycle starting with project selection and bidding and ending with project acceptance and close out. Topics covered in this course include: the importance and role of project management, the contextual nature of projects, logistics issues in project management, and the E-business impact on project management. Prerequisite: BBA 303. Enrollment restricted to student admitted to the BBA program. LEC.

BBA 500. Individual Research in Business. 1-5 Hours.
Individual study of selected topics in business not otherwise available to the student. Topics selected to be determined by the special interests and objectives of the student in consultation with a faculty member who will supervise the reading and research. Prerequisite: Approval of proposed plan of study by the instructor. Enrollment restricted to students admitted to the Bachelor of Business Administration Major. Enrollment restricted. RSH.

BE 301. Managerial Economics. 3 Hours.
This course uses economic theory and methodology to understand and improve managerial decision making. The focus is on the role of markets in determining business and individual opportunities to create value, the behavior of individual markets reacting to supply and demand forces, and the consequences of alternative market structures and business policies. Course content includes demand, production, cost analysis, supply and demand analysis, price and non-price modes of competition, market structure, and economic efficiency. Not open for credit to students in ECON 524. Prerequisite: ECON 142 and ECON 143, and ECON 144 or ECON 145. LEC.

BE 302. Managerial Economics, Honors. 3 Hours.
Honors treatment of this course includes uses of economic theory and methodology to understand and improve managerial decision making. The focus is on the role of markets in determining business and individual opportunities to create value, the behavior of individual markets reacting to supply and demand forces, and the consequences of alternative market structures and business policies. Course content includes demand, production, cost analysis, supply and demand analysis, price and non-price modes of competition, market structure, and economic efficiency. Not open for credit to students in ECON 524. Prerequisite: ECON 142 or ECON 143 and ECON 144 or ECON 145. Only open to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. LEC.

BE 701. Business Economics. 2 Hours.
This course uses economic theory and methodology to understand and improve managerial decision making. The focus is on the role of markets in determining business and individual opportunities to create value, the behavior of individual markets reacting to supply and demand forces, and the consequences of alternative market structures and business policies. Course content includes demand, production, cost analysis, supply and
demand analysis, price and non-price modes of competition, market structure, and economic efficiency. Enrollment restricted. LEC.

BLAW 810. Managerial Economics. 3 Hours.
This course covers principles of microeconomic analysis and methodology used in managerial decision-making. The focus is on the role of markets in determining business and individual opportunities to create value, the behavior of individual markets reacting to supply and demand forces, and the consequences of alternative market structures for business strategy. Course content includes demand, cost and production analysis, supply and demand analysis, price and non-price competition, market structure, the basic elements of game theory, and the economics of information. Cases and problems will be used throughout the course to help students develop the skill of applying economic analysis to the types of problems managers confront in the basic business disciplines of finance, marketing, management of people and organizations, supply chain management and strategy. This course is open only to students in the full-time MBA program. LEC.

BLAW 895. Graduate Seminar in Business Economics: _____. 0.5-5 Hours.
A variable-topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. Enrollment restricted. LEC.

BLAW 898. Independent Study for Master's Students. 1-6 Hours.
Individual study of selected current problems in the field of economics to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Students must have at least a 3.0 grade point average and be in good academic standing in a graduate business program and must submit a written statement of the proposed project approved by a supervisory faculty member prior to enrollment. RSH.

BLAW 917. Advanced Managerial Economics. 3 Hours.
(F) This course is designed primarily for doctoral candidates in business administration. It will provide a rigorous analytical approach to developing and understanding an integrated economic model of the business firm and its environment. The student will be expected to learn the theory and understand how it can be applied to solve problems in business. Upon completion of the course the student should also possess an understanding of how economic analysis relates to and can be used in his/her own field of research. Masters students may enroll with consent of instructor. LEC.

BLAW 300. Special Topics in Business Law: _____. 1-5 Hours.
This is a variable-topic course open to undergraduates meeting the prerequisites for the specific topic being offered. Its purpose is to allow the occasional offering of business law topics not covered by established courses. Enrollment is not limited to School of Business students. Prerequisite: Determined for each topic by instructor. LEC.

BLAW 301. Legal Aspects of Business. 3 Hours. GE11/GE3S.
A course designed to acquaint the student with the basic principles of law that are applicable to business transactions in the modern business world and the legal systems. LEC.

BLAW 302. Legal Aspects of Business, Honors. 3 Hours. GE11/GE3S.
Honors treatment of this course involves acquainting students with the basic principles of law that are applicable to business transactions in the modern business world and the legal systems. Only open to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. LEC.

BLAW 400. Special Topics in Business Law: _____. 1-5 Hours.
This is a variable-topic seminar. Its purpose is to allow the occasional offering of business law topics not covered by established courses. Prerequisite: Determined for each topic by the instructor. Enrollment restricted. LEC.

BLAW 500. Individual Research in Business Law. 1-5 Hours.
Individual study of selected topics in business law not otherwise available to the student. Topics selected to be determined by the special interests and objectives of the student in consultation with a faculty member who will supervise the reading and research. Prerequisite: BLAW 301 or BLAW 302: 3.0 professional grade point average and approval of proposed plan of study by the instructor. Enrollment restricted. LEC.

BLAW 505. Legal Aspects of the Management Process. 3 Hours.
A course designed to acquaint students with the basic principles of agency relationships, such as partnerships, limited liability companies, and corporations, with special emphasis on the problems encountered by managers and directors in operating a corporation. The course should acquaint a student with how to create and operate a corporation in light of current federal and state enactments. Prerequisite: BLAW 301 or BLAW 302. Enrollment restricted. LEC.

BLAW 510. Legal Aspects of Real Property Transactions. 3 Hours.
This course will address legal matters of concern to property owners, real estate agents and brokers, developers, renters, property managers, contractors, architects, planners, and lenders regarding real estate transactions. Concentrating on the general subjects of (1) the nature of real property, (2) transfer and financing of real estate, (3) land use and regulations, and (4) landlord and tenant relations, the course will address specific topics such as estates and interests in land, forms of ownership, agency and brokerage, and tax attributes of real estate investments, and will consider pertinent statutes and legal documents frequently used in real estate transactions. Prerequisite: BLAW 301 or BLAW 302. Enrollment restricted. LEC.

BLAW 515. Commercial Law. 3 Hours.
An advanced course in legal aspects of business with emphasis on the Uniform Commercial Code. Prerequisite: BLAW 301 or BLAW 302. Enrollment restricted. LEC.

BLAW 525. Negotiations and Dispute Settlement. 3 Hours.
This course involves the study of the theory and practice of dispute resolution and negotiation in business mediation (facilitated negotiation). Conflict resolution in the workplace, including grievance procedures, will be considered. Students are required to apply concepts studied through role playing simulations. (Same as MGMT 525.) Prerequisite: MGMT 310 or MGMT 311 and BE 301 or BE 302. Enrollment restricted. LEC.

BLAW 701. Introduction to the Legal Environment of Business. 2 Hours.
A course focused on understanding legal rights and duties and ethical responsibilities in the business environment and identifying and addressing legal risks in business decision making. This is an introductory course which includes an overview of several foundational areas of law that are highly relevant to business. LEC.

BLAW 702. Legal Aspects of Business Transactions: Contracts and Torts. 2 Hours.
A course focused primarily on principles of contract and tort law. Contract law and tort law serve as the foundation for many other areas of law that are relevant in the business environment. Prerequisite: BLAW 301 or BLAW 302 or BLAW 701. LEC.

BLAW 703. Legal Aspects of Business Organizations. 3 Hours.
A course focused on the legal attributes of different forms of business organizations, such as partnerships, limited liability companies, and
corporations. This course includes a study of the basic principles of agency law. It explores the rights and responsibilities of people and entities (such as partners, stockholders, directors, officers, contractors, employers, and employees) functioning in the organizational environment. Also considered are the interests of third parties, including the public, which brings into focus related topics, such as securities regulations, ethics, and corporate social responsibility. Not open to students with credit in BLAW 505. Prerequisite: BLAW 301 or BLAW 302 or BLAW 701. LEC.

BLAW 704. Commercial Law. 3 Hours.
An examination of the Uniform Commercial Code and related legal topics, such as bankruptcy and property law. Not open to students with credit in BLAW 515. Prerequisite: BLAW 301 or BLAW 302 or BLAW 701. LEC.

BLAW 748. Negotiation and Dispute Resolution. 3 Hours.
This course will include a study of the theory and practice of negotiation and dispute resolution in business contexts. It will focus on the use of alternatives to litigation, such as various forms of arbitration, mediation, and, especially, negotiation. In addition to emphasizing negotiation as a means of resolving disputes, attention will be directed at negotiation of transactions. Appreciation of concepts will be promoted through role play simulations. Not open to students with credit in BLAW 525 or MGMT 525. (Same as MGMT 748.) LEC.

BLAW 895. Graduate Seminar in Business Law: ______. 0.5-5 Hours.
A variable-topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. Enrollment restricted. LEC.

BLAW 898. Independent Study for Master's Students. 1-6 Hours.
Individual study of selected current problems in the field of business law to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Students must have at least a 3.0 grade point average and be in good academic standing in a graduate business program and must submit a written statement of the proposed project approved by a supervisory faculty member prior to enrollment. Enrollment restricted. RSH.

BUS 101. Business Majors, Careers and Professional Skills. 3 Hours.
This course acquaints students with the nature of business majors and careers. With this knowledge, students can explore, engage and implement their academic and career interests within business. Students are introduced to the curricula requirements, expectations of business students, possible career paths, and the necessary professional skills in the business environment. Prerequisite: Open only to students with fewer than 60 hours. LEC.

BUS 105. Business Writing. 3 Hours. GE21.
This course explores the theory and practice of written communication in business. Students learn strategies for writing clearly, effectively, and in a professional tone and format within different business contexts that require both expositive and persuasive writing styles. This course focuses entirely on the writing process, including developing ideas, organizing, drafting, revising, and editing. Classes provide students multiple opportunities to write drafts, receive feedback, and revise their work. This is done in the context of analyzing, discussing, and critiquing different forms of business writing. Prerequisite: Goal 2, Outcome 1. LEC.

BUS 110. The First Year Business Experience I. 1 Hour.
This course is designed to connect students to life at KU and to opportunities within the School of Business. Students will learn academic success, personal success in the transition to college, opportunities for leadership development, problem solving, decision making, and business professionalism. Students will also be provided opportunities to create lasting connections with School of Business staff, advisors, and faculty. Experiential learning activities outside of the classroom will be integrated into the course. This course is offered in the fall term only. Enrollment restricted. LEC.

BUS 120. First Year Business Experience II. 1 Hour.
This course will enable students to begin to explore major options in the Business School and career paths in the business world. Topics such as available majors, business professionalism, resumes, cover letters, internships, and team dynamics will be covered. Students will also be provided opportunities to create lasting connections with School of Business staff, advisors, and faculty. Experiential learning activities outside the classroom will be integrated into the course. This course is offered in the fall term only. Enrollment restricted. LEC.

BUS 177. First Year Seminar in Business. 3 Hours. GE11.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in business. Does not contribute to major requirements in business. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

BUS 200. Business Leadership Seminar. 1 Hour.
This course provides students with structured opportunities to engage in active career and major exploration, support leadership development, build professional skills, and promote self-discovery. The class is held for one hour a week and additional out-of-class activities are required. May be taken more than once; total credit not to exceed four hours. Prerequisite: Admission to the Business Leadership Program. Enrollment is restricted. LEC.

BUS 201. Ethics, Entrepreneurship and Commercial Society. 3 Hours. AE51.
This course is an introductory examination of the ethics of commercial activity and the ongoing debate over the moral character of commercial society. We begin with an elementary study of the major schools of ethical theory (deontology, consequentialism, contractarianism, and virtue ethics) and their application to the most basic of commercial activities: the reciprocal acts of buying and selling and the acts immediately preparatory to them, bargaining and negotiation. Then we will consider the two main narratives about the commercial republic emerging from the Enlightenment and the appearance of the commercial republic: the Lockean liberty narrative and the Rousseauist equality narrative. We will discuss the narratives' historical emergence, as well as their continuation in philosophical and public policy debates to the present day. Central to that discussion will be the role of the entrepreneur and of competition in the marketplace. LEC.

BUS 210. The Second Year Business Experience I. 1 Hour.
Students will choose focused learning events that meet their specific career goals and needs through exposure to detailed information about business careers, job search skills, business etiquette, professionalism and leadership. Students will create relationships with business and recruiting professionals while continuing connections with School of Business staff, faculty, and advisors. This course is offered in the fall term only. Enrollment restricted. LEC.

BUS 220. The Second Year Business Experience II. 1 Hour.
This course will enable students to begin to explore major options in the Business School and career paths in the business world. Topics such as available majors, business professionalism, resumes, cover letters, internships, and team dynamics will be covered. Students will also be provided opportunities to create lasting connections with School of Business staff, advisors, and faculty. Experiential learning activities outside the classroom will be integrated into the course. This course is offered in the spring term only. Enrollment restricted. LEC.
BUS 300. Special Topics in Business: _____. 1-5 Hours.
This is a variable-topic course open to undergraduates meeting the prerequisites for the specific topic being offered. Its purpose is to allow the occasional offering of business topics not covered by established courses. Enrollment is not limited to School of Business students. Prerequisite: Determined for each topic by instructor. LEC.

BUS 303. Career Planning and Job-Search Strategies. 1 Hour.
This course will introduce students to the fundamentals of organizing a personal employment search strategy. Emphasis will be placed on the assessment of individual goals and talents, job markets, evaluation, and employment search strategies. It is highly recommended that students take this course during their junior year. Course is graded satisfactory/unsatisfactory. Course counts as an activity course. Prerequisite: Junior standing (60 hours completed). LEC.

BUS 305. Information Sources for Business Research. 1 Hour.
This course is intended to prepare you for the rapidly changing environment of business information retrieval, using both print and electronic information sources. Course sessions will cover both (1) the conceptual analysis, selection, and use of business information sources and (2) research strategies and techniques in locating information on your topic. The course will focus on your ability to develop critical thinking skills in researching your topic throughout the semester. LEC.

BUS 330. Directed Study in Business Topics. 1-3 Hours.
Individual study of selected topics in business administration not otherwise available to non-business majors. Topics selected will be determined by special interest and objectives of the student in consultation with the faculty member who will supervise the directed study or research. Prerequisite: 3.0 grade-point average, major in a field other than business administration and/or accounting, and permission of instructor offering the directed study and of the director of the undergraduate program. IND.

BUS 399. Internship in Business. 1 Hour.
Internships provide opportunities for students to integrate their academic education with a meaningful experience in the business world. Internships allow students to further their professional growth, explore career pathways, expand professional networks, and increase the relevancy of their academic course work. The internship course combines job-related activities of the internship position with a set of academic requirements. These requirements include academic assignments as well as a pre- and post-internship seminar held in the semester before and after the semester in which the internship occurs. Internships for credit must be approved by the coordinator of the internships prior to the internship experience. BUS 399 is limited to one (1) credit hour per offering, but students may count a maximum of two (2) cumulative credit hours of BUS 399 toward degree requirements. Internships must satisfy specific criteria in order to qualify for academic credit. Contact the Business Career Services Center in 125 Summerfield for information regarding the process of having an internship evaluated for academic credit. Prerequisite: Approval of the internship; two of the following: FIN 310 or FIN 311, MGMT 310 or MGMT 311, MKTG 310 or MKTG 311, SCM 310 or SCM 311. Enrollment restricted. LEC.

BUS 400. Special Topics in Business: _____. 1-5 Hours.
A special variable-topic seminar open to seniors and graduate students meeting the requirements established by the faculty members offering the particular seminar. Its purpose is to allow the occasional offering of management-related topics not adequately covered in any regular course available to students of the School of Business. Prerequisite: Determined for each topic by instructor. Enrollment restricted. LEC.

BUS 500. Individual Research in Business. 1-5 Hours.
Individual study of selected topics in business not otherwise available to the student. Topics selected to be determined by the special interests and objectives of the student in consultation with a faculty member who will supervise the reading and research. Prerequisite: FIN 310 or FIN 311, MGMT 310 or MGMT 311, MKTG 310 or MKTG 311 and SCM 310 or SCM 311; 3.0 professional grade point average and approval of proposed plan of study by the instructor. Enrollment restricted. IND.

BUS 801. Professional Development Skills. 0.5 Hours.
A series of workshops for graduate business students which provide foundation and supplemental skill development in such areas as leadership training, career development, communications, negotiations, ethical behavior, technology, business writing, and market-based thinking. This course is open only to students in the full-time MBA program. LEC.

BUS 810. Application and Integration Course. 1 Hour.
The course provides an active learning opportunity to complement classroom learning. Many different enrichment activities can be used to provide an opportunity to apply classroom knowledge to specific situations. Some examples of possible enrichment activities include, but are not limited to case competitions, community consulting activities, communication skills workshops, leadership and team building exercises, intensive simulation. The principal objectives of the course are to enhance “doing” skills and help students turn classroom knowledge into action, to emphasize collaboration and team initiatives, to develop collaborative and cooperative behaviors, and to develop an understanding of how “failure” can ultimately be the best learning tool. Topics will vary depending on the enrichment activity. This course may be repeated for credit. This course is open only to students in the full-time MBA program. LEC.

BUS 825. Internship Program. 1 Hour.
The Internship Program provides a continuous learning opportunity between the first and second year of MBA studies which complements the comprehensive, research based in class learning with a full immersion clinical experience. The principal objectives of the course are to acquire a meaningful work related education, witnessing how the classroom instruction translates to practical applications and to develop interpersonal and executional skills. This course provides clinical applications of business problem solving and consulting. The course links the models and theories studied in the classroom with field applications to solve real business problems requiring real time analysis, consideration of practical alternative strategies, determination of sales and profit implications of the recommended course of action. A principal objective is for the student to acquire first-hand industry knowledge and witness varying client management styles. Topics include consulting processes and successful consultant characteristics, hypothesis generation, problem identification and differentiation of root cause vs. symptom, application of market research methods, solution modeling, and presentation of solution. This course is open only to students in the full-time MBA program. LEC.

BUS 895. Regionalism - From Concepts to Working Models. 2 Hours.
This seminar course introduces students to the concept of regionalism and progresses through the development of working models for regional approaches to business/economic development and governance. Topics include understanding the complexities related to doing business and governing in the Kansas City region, models of effective leadership necessary to manage and govern in the region, the economic impact of border wars, economic incentive policies that promote small business growth and entrepreneurs, and moving regionalism from concepts to working models. LEC.

BUS 901. Research Issues in Business Administration. 2 Hours.
(FS) A core course for Ph.D. students (with the exception of Finance and Management) majoring in business administration. Provides a workshop
format for discussion of the currently prevalent research methodologies
and problems being addressed in the areas of accounting, finance,
human resources management, information systems, marketing, decision
sciences, organizational behavior, and strategic management. All Ph.D.
students and faculty are encouraged to attend workshops of interest.
Prerequisite: Admission to the Ph.D. program. LEC.

BUS 902. Teaching Seminar. 1 Hour.
(F) The objective of this course is to improve the teaching effectiveness
of the participants. Highly effective teachers demonstrate their teaching
techniques and discuss the reasons underlying their actions. School of
Business Ph.D. students are required to take this seminar during the first
semester in which they are the instructor of record for a course. LEC.

BUS 903. Responsible Conduct of Research. 2 Hours.
The major objectives of this doctoral level course on the responsible
coduct of research are to build students' abilities to analyze ethical
issues, and to expose students in advance to various issues that may
arise while engaging in the research endeavor. Issues will be covered that
arise in such areas as research design, data collection and management,
the use of human subjects, data analysis, authorship, publication, peer
review, and other aspects of professional practice. LEC.

DSCI 202. Statistics. 4 Hours. GE12.
An introduction to statistical inference techniques with emphasis on
the application of these techniques to decision making in a firm. Topics
include probability theory, random variables, probability distribution
functions, estimation, test of hypothesis, regression, correlation, and
introduction to statistical process control. Prerequisite: MATH 115. LEC.

DSCI 300. Special Topics in Decision Science: _____ 1-5 Hours.
This is a variable-topic course open to undergraduates meeting the
prerequisites for the specific topic being offered. Its purpose is to allow
the occasional offering of decision science topics not covered by established
courses. Enrollment is not limited to School of Business students.
Prerequisite: Determined for each topic by instructor. LEC.

DSCI 302. Quantitative Methods and Data Analysis. 3 Hours.
This course will cover quantitative methods and techniques of data
analysis that are useful in solving common problems that arise in all the
functional areas of business. Upon completion of this course, given a
business problem, students will be expected to know how to formulate
a mathematical model which is appropriate to the problem, to fit the
model to available data, and to interpret the model results to derive
actionable insights. Examples of quantitative methods and data analysis
that may be taught include: multiple regression, analysis of variance,
statistical process control, linear programming, non-linear optimization
and decision making under uncertainty. Prerequisite: MATH 115 and
DSCI 202 (formally DSCI 301.) LEC.

DSCI 400. Special Topics in Decision Sciences: _____ 1-5 Hours.
This is a variable-topic seminar. Its purpose is to allow the occasional
offering of decision science topics not covered by established courses.
Prerequisite: Determined for each topic by instructor. Enrollment
restricted. LEC.

DSCI 405. Advanced Production and Operations Management. 4 Hours.
A further study of problems encountered in production from a managerial
perspective employing the methodology of management science. Topics
included in the course are location of facilities, design of product lines,
replacement of facilities, quality control, production planning, production
and inventory control, and scheduling. This course is in the Management
Science and Operations Management area. Prerequisite: SCM 310 or
SCM 311. Enrollment restricted. LEC.

DSCI 410. Advanced Management Science. 3 Hours.
Decision making under uncertainty and resource allocation models were
introduced in DSCI 310. These topics will be covered in greater depth
in this course. Applications of these models to complex problems in
business will be emphasized. Cases illustrating the use of these models
will also be covered. This course is in the Management Science and
Operations Management area. Prerequisite: SCM 310 or SCM 311.
Enrollment restricted. LEC.

DSCI 500. Individual Research in Decision Sciences. 1-5 Hours.
Individual study of selected topics in decision sciences not otherwise
available to the student. Topics selected to be determined by the special
interests and objectives of the student in consultation with a faculty
member who will supervise the reading and research. Prerequisite: FIN
310 or FIN 311, MGMT 310 or MGMT 311, MKTG 310 or MKTG 311 and
SCM 310 or SCM 311; 3.0 professional grade point average and approval
of proposed plan of study by the instructor. Enrollment restricted. LEC.

DSCI 701. Statistical Decision Making. 2 Hours.
This course provides an introduction to data gathering and analysis
with an emphasis on problem solving for decision making and process
improvement in a business setting. The role of numerical data in the
understanding of business problems and in the evaluation of planned
improvements is studied, along with the study of variation commonly
occurring in business processes and methods of reducing this variation.
Statistical software is used to supplement data analysis and aid in the
problem solving. Topics covered may include statistical methods such as
exploratory data analysis, graphical analysis, Pareto analysis, stratification
analysis, confidence intervals, correlation, linear regression, and control
charts. Enrollment restricted. LEC.

DSCI 706. Statistics. 3 Hours.
This course covers basic statistical tools for understanding data in
organizations. The principal objectives of the course are to learn data
analysis techniques and to learn how to apply statistical tools to help
understand common problems in organizations. Course content includes
data gathering and problem analysis tools, probability distributions
and features of distributions (means, standard deviations, Normal
distribution, and Binomial distribution), stratification analysis, Pareto
analysis, correlation, confidence intervals, simple hypothesis testing,
linear regression, and analysis of variance. LEC.

DSCI 710. Business Forecasting Methods and Applications. 3-4
Hours.
A survey of forecasting methods and application. Essential concepts
underlying these methods are discussed, including cost and performance
characteristics. Criteria for selection of appropriate methods are
developed. Issues concerning effective utilization for forecasting in several
corporate planning situations are considered. Prerequisite: IST 701.
Enrollment restricted. LEC.

DSCI 712. Advanced Statistics I. 2 Hours.
This class covers the process of building statistical models from observed
data: including identifying an appropriate model, checking the fit of the
model to observed data, and using the model to make inferences. An
emphasis is upon development of models that can help answer questions
of interest. The class covers multiple regression, variable selection
in multiple regression, analysis of variance and logistic regression.
Prerequisite: DSCI 701 or an introductory statistics class. Enrollment
restricted. LEC.

DSCI 713. Advanced Statistics II. 2 Hours.
This is a continuation of Advanced Statistics I. The topics covered in this
class include time series models, sampling, classification, and clustering
models. There will be an emphasis on development of statistical models
that can be used to help solve business problems. Prerequisite: DSCI 712. Enrollment restricted. LEC.

DSCI 714. Data Visualization. 2 Hours.
The ability to accurately and effectively analyze and communicate business data is paramount in today's world of business analytics and big data. Increasingly, professionals are being asked to use business data as a crucial component of everyday business decisions--competitive advantage is gained in companies that can analyze and visualize data successfully to help them make business decisions. This course will focus on data visualization through applied, hands-on projects that will help students produce, analyze, and communicate data in a variety of business sectors. A principle focus of the course will be the use of data analysis programs and associated visualization techniques. LEC.

DSCI 715. Managing for Quality Improvement. 3 Hours.
This course will take a closer look at various aspects of the total quality theory and its practices. Particular attention will be paid to the foundations of total quality theory including Deming's 14 principles of management and key tenants of Juran and Crosby. Additional topics include an examination of the continual improvement process in theory and action, strategies for getting started, and issues to address during a transformation into a total quality model of operation. Prerequisite: DSCI 702. Enrollment restricted. LEC.

DSCI 716. Business Analytics Models. 2 Hours.
This course will cover construction and solution of analytic models for problems in the business domain using spreadsheet software. Examples of analytic models are linear, nonlinear, and integer programming models. Examples of business problems are advertising, workforce scheduling, aggregate planning, blending, production process, financial, transportation, assignment, network flows, and shortest path determination. LEC.

DSCI 717. Business Analytics Projects. 2 Hours.
Business analytic projects are assigned to teams in this class and the teams are charged with identifying the project problem, obtaining data relevant to the problem, developing a model that represents the problem, and using the model and the data to make inferences relevant to the project. The data analysis tools that have been covered in previous classes will be used to help perform these projects. Prerequisite: DSCI 712, DSCI 713, DSCI 716, IST 713, and DSCI 714. LEC.

DSCI 720. Operations Management. 2 Hours.
This course is a survey of the strategic concepts and techniques used in managing the operations function in both the manufacturing and the service sectors. The course has the following principal objectives: to identify different kinds of operations problems and understand their impact on business and to apply basic operations analysis techniques to provide business solutions and to find improvement strategies. Topics covered include process and cycle time analysis, capacity planning, service operation and waiting line management, sales and operations planning, inventory management, and constraint management. Prerequisite: DSCI 701 or DSCI 810. Enrollment restricted. LEC.

DSCI 730. Managing Customer Focused Enterprises. 2 Hours.
An introduction to management principles supporting the concept that a primary goal of a business is to meet the needs of its customers. To accomplish this goal, organizations must design, build, and deliver products and services that meet customer needs in a resource effective manner. Topics covered include the role of the customer, the nature of process improvement in meeting customer needs in a cost effective manner, the view of the organization as a system, the reduction of variation in all organizational processes, the nature of continual organizational learning, and the responsibilities of management in this approach. LEC.

DSCI 740. Seminar in Decision Sciences: ____. 3 Hours.
This course will cover theories of decision making under uncertainty and competition. Examples of topics that may be covered are Bayesian decision theory, game theory, habitual domain theory for forming winning strategies and effective decision making. Automated aids for decision making such as expert systems may also be covered. Prerequisite: DSCI 701 and DSCI 702, or consent of instructor. Enrollment restricted. LEC.

DSCI 744. Statistical Process Control and Improvement. 2-3 Hours.
This course deals with process improvement through the reduction and control of variation in business organizations. The result of reduced variation is an improvement of integral organizational functions, a reduction of costs, and a minimization of defects in the market place. Data driven improvement is emphasized. Topics covered include advanced discussion of using control charts for process improvement, and the use of designed experiments in process improvement. Particular emphasis will be given to methods used to analyze a given process, to the use of statistical tools to stabilize an entire process, to understand the natural variability in process output and to reducing process variation. Prerequisite: DSCI 701. Enrollment restricted. LEC.

DSCI 746. Contemporary Issues in Operations Management. 3 Hours.
This course will examine the major manufacturing and the operating strategies used by firms today. A partial list of these strategies include quality improvement, theory of constraints, just-in-time, and manufacturing planning and control systems. Pros and cons of each strategy will be discussed. Implementation issues will also be discussed. Prerequisite: DSCI 702. Enrollment restricted. LEC.

DSCI 749. Special Topics Decision Science: ____. 2-5 Hours.
A variable-topic course open to graduate and selected undergraduate students meeting the requirements established by faculty members offering the course. Prerequisite: Determined by the instructor. Enrollment restricted. LEC.

DSCI 810. Statistics and Decision Tools. 3 Hours.
This course covers basic statistical tools for solving problems in organizations. The principal objectives of the course are to learn a strategy to solve organizational problems, to learn some data gathering and data analysis techniques, to learn how to interpret data and understand variation in data, and to learn how to reduce variation in organizational processes and output. Course content includes data gathering and problem analysis tools, probability distributions and features of distributions (means, standard deviations, Normal distribution, and Binomial distribution), stratification analysis, Pareto analysis, correlation, confidence intervals, simple hypothesis testing, linear regression, and analysis of variance. This course is open only to students in the full-time MBA program. LEC.

DSCI 895. Graduate Seminar in Decision Sciences: ____. 0.5-5 Hours.
A variable-topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. Enrollment restricted. LEC.

DSCI 896. Independent Study for Master's Students. 1-6 Hours.
Individual study of selected current problems in the field of decision science to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Students must have at least a 3.0 grade point average and be in good academic standing in a graduate business program and must submit a written statement of the proposed project approved by a supervisory faculty member prior to enrollment. RSH.
DSCI 920. Probability for Business Research. 4 Hours.
(F) This course covers the basic theory of probability and its use for research in the business disciplines. The course is designed primarily for Ph.D. students in the business school. Prerequisite: Doctoral standing and two semesters of calculus, or consent of instructor. LEC.

DSCI 921. Statistics for Business Research. 4 Hours.
(S) This course covers the basic theory of statistics and its use for research in the business disciplines. The course is designed primarily for Ph.D. students in the School of Business. Prerequisite: DSCI 920. LEC.

DSCI 922. Advanced Regression. 3 Hours.
This course presents various statistical tools for undertaking quantitative research in business. The regression model under the full ideal conditions is discussed, along with methodological issues that arise when these ideal conditions are violated, as often occurs in business research. A high degree of theoretical rigor is maintained, along with an emphasis on practical applications through the use of assignments that require data analysis. Prerequisite: DSCI 921 or consent of instructor. LEC.

DSCI 934. Seminar in Probability and Statistics: _____. 3 Hours.
(V) This course will cover advanced topics in probability and statistics with application to various business disciplines. Topics covered may vary and will depend on the instructor. Examples of topics that may be covered are time series models, stochastic processes, uncertainty in artificial intelligence, multivariate statistics, etc. Prerequisite: DSCI 920 and DSCI 921, or consent of instructor. LEC.

DSCI 935. Seminar in Optimization: _____. 3 Hours.
(V) This course will cover basic and advanced topics in optimization theory and applications. Examples of topics that may be covered are linear programming, nonlinear programming, dynamic programming, multiple-criteria decision making, habitual domain theory for forming winning strategies and effective decision making and game theory. Prerequisite: Linear algebra and real analysis or consent of instructor. LEC.

DSCI 936. Management Science Research Seminar. 1 Hour.
The seminar will discuss current research in management science topics such as artificial intelligence, statistics, optimization, decision making, decision support systems, and production/operations management. Topics covered will reflect the research interests of the instructor and participants. Participation is required to lead the discussion for at least one paper of their choice. Graded on a satisfactory/unsatisfactory basis. LEC.

DSCI 995. Doctoral Seminar in Decision Sciences: _____. 2-5 Hours.
A variable topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. Prerequisite: Consent of instructor. LEC.

DSCI 997. Directed Research in Decision Science. 1-5 Hours.
Students will research selected topics in the field of business administration under the direction of a graduate faculty member. Students are expected to report the results of their research by writing a publishable-quality scholarly article. Graded on satisfactory/unsatisfactory basis. Prerequisite: Approval required from supervising graduate faculty member. RSH.

DSCI 998. Independent Study for Doctoral Students. 1-5 Hours.
Individual study of selected current problems in the field of business administration to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Student must submit written statement of proposed project. Prerequisite: Approval required from supervising faculty member and PhD Team. RSH.

DSCI 999. Doctoral Dissertation. 1-12 Hours.
(V) Individual research work. THE.

ENTR 177. The Entrepreneurial Mindset. 3 Hours. GE11.
Entrepreneurs are passionate, creative, idea people. They ask the tough why not questions, they seek and seize opportunities, they rarely accept the status quo, and throughout history entrepreneurs have developed innovative answers to the most challenging issues in technology, business and society. This course will allow students to become rigorous, versatile and agile thinkers by flexing their own critical thinking muscles through an examination of the entrepreneurial mindset. What made entrepreneurs like Steve Jobs, Bill Gates, Mary Kay, Mark Zuckerberg, and Oprah so wildly successful? Are there common characteristics that you may want to adopt to increase the likelihood of your own success? We’ll look at them, and look at ourselves to see if and how to apply their innovative techniques to our own pursuits. Maybe starting the next Apple Computer company is in your future. LEC.

ENTR 300. Special Topics in Entrepreneurship: _____. 1-5 Hours.
LEC.

ENTR 301. Starting Your Own Business. 3 Hours. AE61.
In this course the student examines the disciplines which comprise the critical success factors in entrepreneurship and develops a fundamental understanding of the basic skills required to manage his/her own business. The course will emphasize the Entrepreneurial Process in which each of the following disciplines will be introduced so that the student understands meaning, interrelationship and the application of the subject matter. First the student will be introduced to entrepreneurship and the personal attributes which historically have produced successful entrepreneurs. Further, the student will learn how to evaluate business opportunities via Feasibility Analysis which encompasses industry and competitor analysis, developing an effective business model, building a new venture team, developing an effective marketing plan, assessing the new venture’s financial strengths and preparing the proper ethical and legal foundation for the new business. Finally, on completion of the course the student will possess a beginning comprehension for getting financing for the new venture and preparing for the challenges of business growth. Prerequisite: Goal 1, Outcome 2 and Goal 2, Outcome 1. LEC.

ENTR 302. Financing Your Own Business. 3 Hours.
This course introduces the non-business student to the language of business, accounting, and its applications in the financial management of new and small business environments. Students will learn how to account for the various activities of the start-up and early stage new venture as well as the importance, utility and construction of financial statements. Further, students will acquire the ability to construct financial projections for a start-up firm and monitor the financial performance of the growing business with a focus on cash flow management. Finally, students will be introduced to various remedies in the event that performance does not meet expectations. Prerequisite: Goal 1, Outcome 2 and Goal 2, Outcome 1. LEC.

ENTR 303. Marketing Your Own Business. 3 Hours.
This course focuses on the marketing development of new business ideas for small businesses including creating an environment conducive to innovation, recognizing business opportunities, assessing the industry and its potential customer segments, barriers to entry and competitive set. In addition, students will acquire an understanding of the primary marketing tools available to the entrepreneur to drive customer awareness, initial and repeat purchase and the ability to fully integrate each of those tools into a cohesive, integrated marketing plan, all on an extremely limited budget as typifies start up businesses. Upon successful completion of the course, students will understand how to plan an entrepreneurial marketing program, implement it and evaluate its performance. This includes market
analysis, segmentation, the marketing mix of product, price, promotion and distribution and marketing strategy, both long term and annually. Prerequisite: ENTR 301 and ENTR 302. LEC.

ENTR 304. Launching Your Own Business. 3 Hours. This course provides the student with an opportunity to develop a complete go-to-market business plan for a new venture which leverages the students' major area of study so that following graduation the student has the option of pursuing self employment in the launch of their own business. The students' expertise from their area of major study will be combined with the entrepreneurial skills acquired from the prior three courses in this Certificate sequence. Ideally, this course will originate from the students' school of origin, either selected from a roster of existing qualifying courses or independent study with a faculty member in the students' field of major study. In the event that the students' school of major study cannot provide the teaching resources for independent study, it will be provided by the School of Business, Center for Entrepreneurship. If the faculty at the students' school of origin wants to develop a specific course which completes the Certificate requirements, course preparation funding has been arranged via a grant from the Kauffman Foundation. Prerequisite: ENTR 303. LEC.

ENTR 400. Special Topics in Entrepreneurship: ____. 1-5 Hours. This is a variable-topic seminar. Its purpose is to allow the occasional offering of entrepreneurship topics not covered by established courses. Prerequisite: Determined for each topic by instructor. Enrollment restricted. LEC.

ENTR 410. Introduction to Entrepreneurship. 3 Hours. In this course the student examines the disciplines which comprise the critical success factors in entrepreneurship and develops a fundamental understanding of the basic skill set required to manage his/her own business. Learning will be achieved by both study and discussion of key entrepreneurial business issues as well as the critical appraisal of new venture business plans as presented in the text. Readings in entrepreneurship and case studies, contained in the text as well as in video presentations, will be used to illustrate the essential entrepreneurial management issues. Enrollment restricted. LEC.

ENTR 430. Entrepreneurship and Innovation in the Corporate Environment. 3 Hours. This course explores challenges to entrepreneurship and innovation in large established organizations and how entrepreneurial principles can be applied to drive competitive advantage. Applications include exploration and development of new products, business processes, markets, customers, and organizational structures. The course emphasizes experiential learning through the study of large companies that have successfully implemented entrepreneurial practices. Enrollment restricted. LEC.

ENTR 450. New Venture Creation/Business Plan Development. 3 Hours. This course builds upon the foundation created by the Introduction to Entrepreneurship course. It will provide the student with two learning opportunities: first, it details the critical success factors of starting a new venture, growing it and finally harvesting it profitably; secondly, this course will provide hands-on instruction regarding the development of a complete and compelling business plan. Students will work as teams on the development of a business plan for the purposes of commercializing an innovative business concept or KU lab-sourced technology. These student teams will also present and defend their business plans at various venues including intercollegiate competitions for the purposes of improving their team interaction skills, their presentation capabilities. Prerequisite: ENTR 410. Enrollment restricted. LEC.

ENTR 470. Entrepreneurial Marketing. 3 Hours. The course focuses on the development of new business ideas for new or established organizations, creating an environment conducive to innovation, recognizing business opportunities, assessing the industry, potential customers, market segment, barriers to entry and competitor set. The development of each of these subjects will lead to a feasibility analysis which each student will prepare for his/her chosen new venture. This course will also examine the development of the optimal sales and distribution. Additionally, the course will provide an understanding of how to translate the product/service idea to the business concept and marketing positioning. Lastly, students will acquire an understanding of the primary marketing tools available to the entrepreneur to drive customer awareness, initial and repeat purchase and the ability to fully integrate each of those tools into a cohesive, integrated marketing communications program. Prerequisite: ENTR 410 and MKTG 310 or MKTG 311. Enrollment restricted. LEC.

ENTR 480. Management of Small Business. 3 Hours. This course looks at the unique aspects of owning and managing a small business, family business or franchise, with the owners having close control over operations and management decisions. Students will examine the startup options of buying, starting, or franchising; operations and human resources management; the unique factors of the family business; marketing, including setting prices, choosing a location, developing competitive advantage, positioning, and promotion with limited resources; financial statements, accounting systems, financing, cash flow and the working-capital cycle; and exit through selling, bequeathing, or dissolving the business. Prerequisite: ENTR 410. Enrollment restricted. LEC.

ENTR 490. Social Entrepreneurship. 3 Hours. This course emphasizes the idea that every new venture should seek not only a return to its stakeholders, but also a return to society. Students will be exposed to a variety of entrepreneurial ventures that demonstrate the establishment of both economic sustainability and social benefit as a part of new venture success, whether it be in a for profit or nonprofit venture. A variety of stimuli will be employed to generate discussion and allow for experiential learning including: an online new venture simulation game, analysis of social entrepreneurship oriented business cases, and development of a new venture social impact project. Prerequisite: ENTR 410, ENTR 301 or instructor approval. LEC.

ENTR 500. Individual Research in Entrepreneurship: ____. 1-5 Hours. Individual study of selected topics in entrepreneurship not otherwise available to the student. Topics selected to be determined by the special interests and objectives of the student in consultation with a faculty member who will supervise the reading and research. Enrollment restricted. RSH.

ENTR 701. Starting Your Own Business. 3 Hours. In this course the student examines the disciplines which comprise the critical success factors in entrepreneurship and develops a fundamental understanding of the basic skill set required to manage his/her own business. The course will emphasize the Entrepreneurial Process in which each of the following disciplines will be introduced so that the student understands meaning, interrelationship and the application of the subject matter. First the student will be introduced to entrepreneurship and the personal attributes which historically have produced successful entrepreneurs. Further, the student will learn how to evaluate business opportunities via Feasibility Analysis which encompasses industry and competitor analysis, developing an effective business model, building a new venture team, developing an effective marketing plan, assessing the new venture's financial strengths and preparing the proper ethical and
legal foundation for the new business. Finally, on completion of the course the student will possess a beginning comprehension for getting financing for the new venture and preparing for the challenges of business growth. Not open to students in the School of Business. LEC.

ENTR 702. Financing Your Own Business. 3 Hours.
This course introduces the non-business student to the language of business, accounting, and its applications in the financial management of new and small business environments. Students will learn how to account for the various activities of the start-up and early stage new venture as well as the importance, utility and construction of financial statements. Further, students will acquire the ability to construct financial projections for a start-up firm and monitor the financial performance of the growing business with a focus on cash flow management. Finally, students will be introduced to various remedies in the event that performance does not meet expectations. Not open to students in the School of Business. LEC.

ENTR 703. Marketing Your Own Business. 3 Hours.
This course focuses on the marketing development of new business ideas for small businesses including creating an environment conducive to innovation, recognizing business opportunities, assessing the industry and its potential customer segments, barriers to entry and competitive set. In addition, students will acquire an understanding of the primary marketing tools available to the entrepreneur to drive customer awareness, initial and repeat purchase and the ability to fully integrate each of those tools into a cohesive, integrated marketing plan, all on an extremely limited budget as typifies start up businesses. Upon successful completion of the course, students will understand how to plan an entrepreneurial marketing program, implement it and evaluate its performance. This includes market analysis, segmentation, the marketing mix of product, price, promotion and distribution and marketing strategy, both long term and annually. Not open to students in the School of Business. LEC.

ENTR 704. Launching Your Own Business. 3 Hours.
This course provides the student with an opportunity to prepare a complete go-to-market business plan for a new venture which leverages the students’ major area of study so that following graduation the student has the option of pursuing self employment in the launch of their own business. The students’ expertise from their area of major study will be combined with the entrepreneurial skills acquired from the prior three courses in this Certificate sequence. Ideally, this course will originate from the students’ school of origin, either selected from a roster of existing qualifying courses or independent study with a faculty member in the students’ field of major study. In the event that the students’ school of major study cannot provide the teaching resources for independent study, it will be provided by the School of Business, Center for Entrepreneurship. If the faculty at the students’ school of origin wants to develop a specific course which completes the Certificate requirements, course preparation funding has been arranged via a grant from the Kauffman Foundation. Not open to students in the School of Business. Prerequisite: ENTR 703. LEC.

ENTR 830. New Venture Practicum. 3 Hours.
This course in entrepreneurship shows the student how to start, grow and harvest a business. Students learn how diverse business disciplines integrate to form an optimal go-to-market plan for a given new business opportunity which maximizes likelihood of success and investor return. They learn how to commercialize a technological or social business opportunity and apply the models and theories acquired from other classes to clinical practice. Topics include identifying new venture opportunities, writing the business plan, validating the market opportunity, developing the business model and go-to-market strategy, preparing financial projections and new venture valuations, raising equity capital, understanding deal structures and terms, negotiating the term sheet, raising debt capital, and presenting the business plan to investors. This course is open to those with admission to a graduate business program. LEC.

ENTR 850. New Venture Creation/Business Plan Development. 4 Hours.
This course will focus on identifying and evaluating the business opportunity, the strategies to be developed and implemented as well as entrepreneurial capabilities required for marketplace success. Development of a robust and compelling business concept will be emphasized. Analyses of the industry, competition, the new business points of strategic leverage, creation of an effective business model and funding strategies will be studied. Financing the new venture, sourcing and structuring the required deal capital will be explored and attention to managing rapid growth and exit strategies will be provided. LEC.

ENTR 895. Graduate Seminar Entrepreneurship: ______. 0.5-5 Hours.
A variable-topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. Prerequisite: Consent of instructor. LEC.

ENTR 898. Independent Study for Master’s Students. 1-6 Hours.
Individual study of selected current problems in the field of entrepreneurship to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Students must have at least a 3.0 grade point average and be in good academic standing in a graduate business program and must submit a written statement of the proposed project approved by a supervisory faculty member prior to enrollment. RSH.

FIN 101. Personal Finance. 3 Hours. GE11/GE12.
This course will provide the tools to help you better understand and improve the financial decisions you’ll make throughout your life. You will learn how to analyze the financial effects of spending and investing decisions and how to use credit well, including credit cards. You will develop an understanding of the basics of mortgages, purchase (rent) versus lease (buy) decisions, savings, investments, and insurance. You will acquire an appreciation of the time value of money that provides a foundation for reasonable financial planning. Given the basic tools and terminology you’ll learn, the course will help you develop solutions to various practical financial problems that you will face. Not open to students who have taken FIN 301. This course is open to all university students. LEC.

FIN 300. Special Topics in Finance: ______. 1-5 Hours.
This is a variable-topic course open to undergraduates meeting the prerequisites for the specific topic being offered. Its purpose is to allow the occasional offering of finance topics not covered by established courses. Enrollment is not limited to School of Business students. Prerequisite: Determined for each topic by instructor. LEC.

FIN 301. Personal Finance. 3 Hours. GE11/GE12.
This course will provide the tools to help you better understand and improve the financial decisions you’ll make throughout your life. You will learn how to analyze the financial effects of spending and investing decisions and how to use credit well, including credit cards. You will develop an understanding of the basics of mortgages, purchase (rent) versus lease (buy) decisions, savings, investments, and insurance. You will acquire an appreciation of the time value of money that provides a foundation for reasonable financial planning. Given the basic tools and terminology you’ll learn, the course will help you develop solutions to various practical financial problems that you will face. Not open to students who have taken FIN 101. This course is open to all university students. LEC.
FIN 302. Finance Scholars I: Introduction to Financial Institutions. 1 Hour.
This course acquaints students with the financial institutions. Topics include a review of major international, national, regional money center institutions, investment management and other related institutions. The management and key revenue generators for these institutions will also be discussed. Enrollment restricted. LEC.

FIN 303. Finance Scholars II: Financial Careers and Institutions. 1 Hour.
This course acquaints students with the careers in financial institutions. Topics include: careers in major international, national, and regional money center institutions; ethical issues related to financial careers; a comparison of recruiting practices in investment banks, investment management, and corporate finance positions. Placement and recruiting practices in those institutions would be reviewed. Enrollment restricted. LEC.

FIN 305. Survey of Finance. 3 Hours.
The purpose of this course is to help the student develop a basic understanding of Finance. Topics covered include (1) financial instruments and the markets in which they are traded, (2) financial planning and analysis, (3) the cost and time-value of money, and (4) the fundamentals of investor decision-making. (Not open to students with credit in FIN 310.) Prerequisite: Goal 1, Outcome 2 and Goal 2, Outcome 1 and ACCT 200 or ACCT 205. LEC.

FIN 310. Finance. 3 Hours.
This course consists of the analysis of problems relating to estimating the financial needs of an enterprise and to evaluating the alternative means of providing and utilizing both temporary and permanent capital. The relationship of current financial decisions with financial policy is analyzed from the viewpoint of management and the stockholder. Prerequisite: Prior completion of ACCT 200; prior completion or co-enrollment in DSCI 202 or DSCI 301. LEC.

FIN 311. Finance, Honors. 3 Hours.
Honors treatment of this course consists of the analysis of problems relating to estimating the financial needs of an enterprise and to evaluating the alternative means of providing and utilizing both temporary and permanent capital. The relationship of current financial decisions with financial policy is analyzed from the viewpoint of management and the stockholder. Only open to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. Prerequisite: Prior completion of ACCT 200; prior completion or co-enrollment in DSCI 202 or DSCI 301. LEC.

FIN 400. Special Topics in Finance: _____. 1-5 Hours.
This is a variable-topic seminar. Its purpose is to allow the occasional offering of finance topics not covered by established courses. Prerequisite: Determined for each topic by instructor. Enrollment restricted. LEC.

FIN 410. Investment Theory and Applications. 3 Hours.
This course emphasizes the theoretical and practical aspects of investments. Financial instruments such as common stocks, bonds, options, futures, and mutual funds are analyzed in a theoretical context using efficient market theory, capital market theory, option pricing, and stock valuation models. Experience in practical applications is generally obtained through the use of case studies. Prerequisite: FIN 310 or FIN 311. Enrollment restricted. LEC.

FIN 411. Investment Theory and Applications, Honors. 3 Hours.
Honors treatment of this course emphasizes the theoretical and practical aspects of investments. Financial instruments such as common stocks, bonds, options, futures, and mutual funds are analyzed in a theoretical context using efficient market theory, capital market theory, option pricing, and stock valuation models. Experience in practical applications is generally obtained through the use of case studies. Prerequisite: FIN 310 or FIN 311. Only open to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. LEC.

FIN 415. Corporate Finance. 3 Hours.
Building on the concepts of present value, the focus of this course is on the theory of and methods for corporate asset selection. The course includes coverage of important technical issues such as risk analysis, evaluation of mutually exclusive projects, capital rationing, and leasing. Some attention usually will be devoted to the topic of project financing. Prerequisite: FIN 310 or FIN 311. Open only to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. LEC.

FIN 416. Corporate Finance, Honors. 3 Hours.
Honors treatment of this course builds on the concepts of present value. The focus of this course is on the theory of and methods for corporate asset selection. The course includes coverage of important technical issues such as risk analysis, evaluation of mutually exclusive projects, capital rationing, and leasing. Some attention usually will be devoted to the topic of project financing. Prerequisite: FIN 310 or FIN 311. Open only to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. LEC.

FIN 417. Business Valuation. 3 Hours.
Apply finance principles to measure and manage the value of companies using a professional’s step-by-step approach. In this course, students estimate free cash flows, economic value added, and cost of capital. They also forecast accounting statements, compare absolute and relative valuation techniques, and evaluate restructuring opportunities and potential flexibility options. Prerequisite: FIN 415 or FIN 416. Enrollment restricted. LEC.

FIN 420. International Finance. 3 Hours.
The economic determinants of exchange rates are discussed. This is followed by an examination of the financing problems faced by the multinational corporation and the international portfolio manager, arising from the international nature of their environment. Topics include spot, forward, futures, and options markets in foreign currency, international risk management, purchasing power parity, interest rate parity, covered interest arbitrage, and contemporary issues in international financial management. Prerequisite: FIN 310 or FIN 311. Enrollment restricted. LEC.

FIN 425. Futures and Options. 3 Hours.
This course examines the use of forwards, futures, SWAPs options, and related financial derivatives for hedging arbitrage, and speculative purposes in the global environment. The course focuses on understanding how firms can manage interest rate risk, exchange rate risk, and commodity price risk using these derivatives. The emphasis is on understanding the motivation issues, and the techniques behind financial engineering with these derivatives, as practiced by firms and individuals to maximize value in global markets. Prerequisite: FIN 410 or FIN 411. Enrollment restricted. LEC.

FIN 430. Financial Markets and Intermediaries. 3 Hours.
Explores the financial institutions that create credit and liquidity for businesses and other borrowers, the financial instruments that facilitate credit and liquidity creation, and the markets in which those instruments are sold or traded. Special emphasis is paid to commercial banks, but non-depository intermediaries such as finance companies, mortgage banks, insurance companies and investment banks are also discussed. Presents and analyzes the workings of money markets, bond markets, commercial loan markets, mortgage markets and foreign exchange markets. Throughout the course, the determination of interest rates,
as well as the sources and implications of credit risk, liquidity risk and interest rate risk, are central to the discussion. The course closes with an introduction to risk management at financial intermediaries using on-balance sheet (e.g., loan underwriting, asset-liability management) and off-balance sheet (e.g., asset securitization, interest rate, foreign exchange and credit derivatives) tools. Prerequisite: FIN 310 or FIN 311. Enrollment restricted. LEC.

FIN 435. Commercial Bank Management. 3 Hours.  
An in-depth study of commercial banking. The primary focus is the value maximization of the bank, given the legal, technological, macro-economics, and competitive constraints facing bank managers. The course emphasizes bank investment decisions (e.g., underwriting loans), financing decisions (e.g., generating deposits, capital adequacy), and risk-management decisions (hedging interest rate risk, credit risk, liquidity risk, and foreign exchange risk). Ongoing changes in financial markets, information technology, and government regulations, and the importance of these changes for banking business strategies, are stressed throughout the course. Prerequisite: FIN 430 or co-enrollment in FIN 430. Enrollment restricted. LEC.

FIN 440. Insurance. 3 Hours.  
The central focus of study is on the role of insurance in business and society. The approach is, in general, from the standpoint of the person confronted with problems of risk management and loss prevention in coping with insurable (pure) risk situations. The course is designed to further the ability of the student to analyze and evaluate programs undertaken to control the loss of income which results from the destruction of property values. Prerequisite: FIN 310 or FIN 311. Enrollment restricted. LEC.

FIN 445. Fixed Income. 3 Hours.  
This course is an introduction to bond markets and bond derivatives. Bonds and associated financial derivatives include securities that promise a fixed income stream and by extension all securities whose valuation and hedging are related to interest rates. The objective of this course is to provide students with a guide to financial markets, institutions and instruments associated with debt funds and help them to understand the determinants of the general level and structure of interest rates. The focus of this course is on the concepts and tools that are useful to understand and interpret real world issues related to bond markets. Prerequisite: FIN 415 or FIN 416. Enrollment restricted LEC.

FIN 450. Applied Portfolio Management, Honors. 4 Hours.  
Honors treatment of this course provides the student with practical portfolio experience. Students actually and collectively manage funds in an endowment account of the benefit of the University and the School of Business. Experienced instructors, speakers, and financial analysts from Wall Street give the class a hands-on real life experience in analyzing and managing securities. The student will be familiarized with many different applied valuation procedures such as cash flows and growth models in an event driven context, as well as market capitalization techniques. Individual securities and stock options are analyzed on a continuing basis. Prerequisite: FIN 410 or FIN 411. Enrollment by application only. Open only to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. LEC.

FIN 454. Portfolio Strategy. 3 Hours.  
Investors construct portfolios by choosing allocations across asset classes and by selecting funds or managers within each asset class. This course will (1) examine methods to forecast return and risk across asset classes, including fixed income, equities, real assets, venture capital, buyouts, and hedge fund strategies, (2) describe ways to evaluate the performance of fund managers relative to appropriate benchmarks, and (3) consider optimal allocations among fund managers in various asset classes. Prerequisite: FIN 410 or FIN 411. Enrollment restricted. LEC.

FIN 460. Financial Modeling and Risk Analysis. 3 Hours.  
An introduction to the concepts, methodologies, and applications of risk analysis and modeling. This course is designed primarily to develop practical modeling skills with spreadsheet software. To accomplish this, material from across the finance discipline will be covered as well as material from the supply chain management discipline. Examples from corporate finance, investments, financial derivatives, real estate, personal finance, and supply chain management methods will be used to demonstrate modeling. (Same as SCM 418.) Prerequisite: FIN 310 or FIN 311. Enrollment restricted. LEC.

FIN 462. Mergers and Acquisitions. 3 Hours.  
This is a course about corporate "deals" - corporate transactions that change who owns a business or who controls it. Naturally, the course covers classical mergers and acquisitions, including the financial, strategic and regulatory issues. However, it also covers corporate governance and control, IPO's (initial public offerings), financial distress, and venture capital and private equity. Finally, deals require deal-makers - the investment bankers. We'll touch on aspects of investment banking, an industry that majors in finance and MBA's often work in or have contact with. Prerequisite: FIN 310 or FIN 311. Enrollment restricted. LEC.

FIN 464. Security Analysis. 3 Hours.  
A purpose of this course is to offer a well-rounded exposure to the theory and practice of security analysis. The course emphasizes the usefulness of sound investment theory as a backdrop for understanding asset pricing in dynamic financial markets. The course forms a bridge between a student's initial exposure to investment theory and the practice of stock selection and active portfolio management. Prerequisite: FIN 410 or FIN 411. Enrollment restricted. LEC.

FIN 466. Entrepreneurial Finance. 3 Hours.  
The entrepreneurial finance course will focus on valuing and financing young high-growth potential private companies (start-ups). The objective is for the students to learn how to make investment and financing decisions (and how to distinguish good from bad investments) in an environment characterized by very high degrees of uncertainty and information asymmetry. We will address this topic from two distinct perspectives: the perspective of users (entrepreneurs) and suppliers (venture capitalists and other private equity investors) of capital. In the beginning of the semester we will first take the perspective of the individual entrepreneur (or manager), We will focus on identifying good ideas (evaluating projects using different valuation techniques), separating them from bad ideas, and placing a quantitative value on these opportunities. This part will review different valuation methods used to value start-up companies. We will also deal with issues such as forecasting cash flows of a start-up firm and ways to grow the firm using internal resources. Then we will turn our attention to the next step in the entrepreneurial process - raising capital to take advantage of good opportunities. Specifically we will consider venture capital (independent venture capitalists, angels, and corporate venture capitalists) as a source of financing for start-ups. This part will provide overview of the venture capital industry (players, organizational forms, contracting) and introduce students to the challenges of structuring venture capital deals. In addition, we will cover other ways of raising capital to aid the growth of the entrepreneurial firm. The focus will be on the private debt market as well as other alternative sources of financing for start-up firms (SBA loans, SBICs, mezzanine financing, L/Cs, etc.). Finally, we will study the ways to harvest the ventures (IPOs, acquisitions, LBOs). Prerequisite: FIN 415 or FIN 416. Enrollment restricted. LEC.
FIN 468. Corporate Financial Policy. 3 Hours.
The course will have three primary objectives. First, students will review basic valuation methods, including instruction on the location of relevant resources. Some advanced valuation techniques will be examined, e.g., APV, multiples and capital cash flow. Finally, students will work to apply these techniques to particular corporate financial decisions. Prerequisite: FIN 415 or FIN 416. Enrollment restricted. LEC.

FIN 492. Honors Topics and Problems in Finance: ____, 1-5 Hours.
This honors topics seminar is open only to students meeting the requirements established by faculty members offering the course. Open only to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. LEC.

FIN 500. Individual Research in Finance. 1-5 Hours.
Individual study of selected topics in finance not otherwise available to the student. Topics selected to be determined by the special interests and objectives of the student in consultation with a faculty member who will supervise the reading and research. Prerequisite: Approval of proposed plan of study by the instructor. Enrollment restricted. LEC.

FIN 600. Advanced Portfolio Management. 3 Hours.
This course is designed to give students increased practical portfolio experience. Students actually and collectively manage funds in an endowment account of the benefit of the University and the School of Business. Students will analyze portfolio decisions and determine the risk/reward profile of the portfolio. The student will apply many different valuation models to current and potential equity holdings in the portfolio. Individual securities and stock options are analyzed on a continuing basis. Enrollment restricted. LEC.

FIN 701. Financial Management. 2 Hours.
This course provides an overview of the problems associated with the financial management of business firms. The focus is on the practices followed by managers in raising and investing capital so as to maximize value. Prerequisite: ACCT 701. LEC.

FIN 702. Business Finance for Supply Chain Management. 2 Hours.
Adopting the perspective of the CFO, this course focuses on the problems and opportunities, analytic methods, and solutions in the businesses’ (1) working capital management, (2) long-term capital investments, and (3) financing. The unifying theme involves balancing expected return and risk in order to maximize the financial value of the enterprise. LEC.

FIN 710. Investments I. 2 Hours.
This course covers financial instruments and markets used by investment professionals and the key concepts used in the construction and management of equity portfolios. Emphasis is placed on understanding and managing investment risk, on the concept of market efficiency, and the role of financial markets and institutions in shaping the investment environment. Topics include financial instruments; financial markets and institutions; risk and return; portfolio optimization; asset pricing models; and behavioral finance. Prerequisite: FIN 701. Enrollment restricted. LEC.

FIN 711. Investments II. 2 Hours.
This course covers bonds, bond markets, options, futures, and derivative securities. Emphasis is placed on the features, risks and valuation of fixed income and derivative securities. Topics include types of bonds and bond terminology; valuation of bonds; derivatives including options, futures and swaps; and risk, return and diversification. Prerequisite: FIN 710. Enrollment restricted. LEC.

FIN 712. Business Investment. 2 Hours.
This course examines the tools for assessing the value of projects and capital investments, and the use of these tools in financial decision-making in public and private corporations. Topics to be covered include estimating the cost of capital, computing and discounting projected cash flows, capital budgeting, real options, and the intersection between business investment and strategy. Prerequisite: FIN 701. Enrollment restricted. LEC.

FIN 713. Business Financing. 2 Hours.
This course examines how firms finance their projects and investments, and how those corporate financing decisions impact firm value. Topics covered include capital structure, payout policy, security issuance, mergers and acquisitions, and corporate governance. Prerequisite: FIN 712. Enrollment restricted. LEC.

FIN 720. Advanced Investments. 2 Hours.
This course covers asset pricing models used by investment professionals to evaluate the performance of actively managed portfolios, such as mutual funds and hedge funds. Emphasis is placed on understanding managerial risk-taking and risk-adjusted performance. Topics include the Capital Asset Pricing Model (CAPM); multi-factor models; statistical analysis of portfolio returns; benchmark portfolios; the risk and assessment of portfolio performance; and the theory of active portfolio management. Prerequisite: FIN 711. Enrollment restricted. LEC.

FIN 722. Prediction Markets. 2 Hours.
Prediction markets are a type of derivative market which can be used to make forecasts about upcoming events. Research has shown that they leverage the incentives of financial markets and the wisdom of crowds to effectively pool large amounts of information and make accurate, real-time forecasts. The class will explore the theoretical underpinnings of prediction markets and how they have been applied to topics ranging from politics to athletics. The main focus will be on applications within firms. We will evaluate the strengths and weaknesses of prediction markets, using as the basis of our discussion cases from real-world applications. Prerequisite: FIN 711. Enrollment restricted. LEC.

FIN 725. Business Valuation. 2 Hours.
This course applies finance principles to measure and manage the company value. In this course students estimate free cash flows, economic value added, and cost of capital. They forecast accounting statements and compare absolute and relative valuation techniques. Prerequisite: FIN 701 or ACCT 810 and ACCT 720. Enrollment restricted. LEC.

FIN 726. Financial Statement Analysis. 2 Hours.
This course covers topics in financial accounting and financial statement analysis. Accounting topics are taught from an external decision-maker’s perspective. The course is intended to help students read and understand complex financial statements, and to extract key financial information from a mass of detail. Topics will vary over time but can include analyses of cash flows, quality and persistence of earnings, income recognition, restructuring, other special charges and off-balance sheet financing. Prerequisite: ACCT 701 or ACCT 810. Not open to MAcc students or students with credit in ACCT 320, ACCT 410, ACCT 721, or ACCT 722. Enrollment Restricted. LEC.

FIN 728. Fair Valuation. 3 Hours.
Apply finance principles to value entire businesses as well as their assets and liabilities, primarily based on financial reporting and tax accounting standards. The course begins with conducting valuation research, reorganizing financial statements, and interpreting financial ratios. Then values are estimated using the income (discounted cash flow) method, the market (multiples) method, and the asset (adjusted cost) method. In addition, the valuations of typical intangible assets including goodwill are addressed, and option valuation techniques for contingent items are introduced. The course also examines discounts for lack of control and for lack of marketability. Prerequisite: FIN 310 or FIN 701 or equivalent. LEC.
that explain security risk and return in a portfolio framework, to explain objectives are to apply financial theory and develop analytical models
stocks, and options, asset allocation in a portfolio framework, and valuation and selection of financial instruments such as bonds, common.
Topics include factors that affect security risk and return, portfolio theory, structure to address investment problems in a systematic manner.
managers. The goal of this class is to provide MBA students with a essential to investment management by individual investors and portfolio.
This course introduces theoretical concepts and analytical tools credit markets, economic indicators, trend analysis and forecasts, the inflation, exchange rates, monetary policy, fiscal policy, capital markets, function of markets and the behavior of firms and individuals. Topics in the course include economic growth, employment and labor markets, inflation, exchange rates, monetary policy, fiscal policy, capital markets, credit markets, economic indicators, trend analysis and forecasts, the language of the economics, and the financial press. This course is open only to students in the full-time MBA program. LEC.
FIN 821. Business Investment and Valuation. 3 Hours.
This course explores how businesses evaluate investment opportunities and deploy capital to enhance firm value. Principal objectives include
identification of incremental cash flows and growth options generated by business investment, application of discounted cash flow techniques to evaluate investment opportunities and firms, understanding of alternative valuation techniques and their use in the analysis of real options, understanding interactions between a firm's financing structure and its investment policies, and identification of managerial incentives and how a firm's governance structure affects investment policy and firm valuation. Topics include incremental cash flow identification, discounted cash flow techniques, real options analysis, leverage, cost of capital, corporate governance. Prerequisite: ACCT 810. This course is open only to students in the full-time MBA program. LEC.
FIN 830. Investments. 3 Hours.
This course introduces theoretical concepts and analytical tools essential to investment management by individual investors and portfolio managers. The goal of this class is to provide MBA students with a structure to address investment problems in a systematic manner. Topics include factors that affect security risk and return, portfolio theory, valuation and selection of financial instruments such as bonds, common stocks, and options, asset allocation in a portfolio framework, and performance evaluation of portfolios and portfolio managers. Principal objectives are to apply financial theory and develop analytical models that explain security risk and return in a portfolio framework, to explain risks and returns associated with alternative asset allocation strategies, to evaluate the performance of portfolios and portfolio managers, and to value securities such as bonds, stocks, and options. Prerequisite: FIN 821. This course is open only to students in the full-time MBA program. LEC.
FIN 831. Financing Business Growth. 3 Hours.
This course evaluates alternative means of financing business operations and capital investment. The principal objectives are to evaluate the effects of alternative financial structures on a firm's risk, cost of capital, and valuation; to understand how young entrepreneurial firms raise capital from financiers and financial markets, including sources such as angel investors, bank loans, venture capital, private equity, and initial public offerings; to understand how mature firms raise capital via seasoned equity issuance, corporate bonds, and leases, and how financial terms affect mergers and acquisitions, and to appreciate how firms engage in financial restructuring, including bankruptcy, subsequent to financial distress. Topics include leverage and financial risk, venture capital, private equity, public equity, bond financing, leasing, financial distress. Prerequisite: FIN 821. This course is open only to students in the full-time MBA program. LEC.
FIN 832. Derivatives and Risk Management. 3 Hours.
This course focuses on understanding how firms manage interest rate risk, exchange rate risk, and commodity price risk using derivative instruments such as forwards, futures, swaps, and options. The emphasis is on the motivation, issues, and techniques behind financial engineering with these derivatives, as practiced by firms and individuals to maximize value in global markets. The principal objectives are to identify sources of risk to businesses and financial institutions, including commodity price risk, interest rate risk, and exchange rate risk; to understand institutional features and pricing of derivative instruments such as forwards, futures, swaps, and options; to use derivative instruments and other risk management tools to hedge financial and operational risks for both financial and non-financial firms and to appreciate the limitations of risk management and hazards such as "model risk" and counterparty risk. Topics include financial and operating risk assessment; valuation of forwards, futures, swaps, and options; use of derivative instruments and other risk management tools to hedge financial and operational risk; limitations and hazards of risk management. Prerequisite: FIN 821. This course is open only to students in the full-time MBA program. LEC.
FIN 840. Applied Portfolio Management. 4 Hours.
This course provides the student with practical portfolio experience. Students actually and collectively manage funds in an endowment account for the benefit of the University and the School of Business. Experienced instructors, speakers, and financial analysts from Wall Street give the class a hands-on real life experience in analyzing and managing securities. The student will be familiarized with many different applied valuation procedures such as cash flows and growth models in an event driven context, as well as market capitalization techniques. Individual securities and stock options are analyzed on a continuing basis for inclusion or exclusion in the portfolio. Prerequisite: FIN 410 or FIN 411 or FIN 710 or ACCT 810. Enrollment by application only. LEC.
FIN 898. Independent Study for Master's Students. 1-6 Hours.
Individual study of selected current problems in the field of finance to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Students must have at least a 3.0 grade point average and be in good academic standing in a graduate business program and must submit a written statement of the proposed project approved by a supervisory faculty member prior to enrollment. RSH.
FIN 901. Current Research in Finance. 2 Hours.
This course provides a seminar format for a discussion of the currently prevalent research topics, methods, and problems being addressed in the area of finance. All first year PhD students in finance will enroll in this course their first semester in the doctoral program. LEC.

FIN 918. Macroeconomics for Research in Business. 3 Hours. (S) This course is designed primarily for doctoral candidates in business administration. The basic Classical and Keynesian macroeconomic models are explored, along with extensions of these models. Concentration is placed on the role of monetary, fiscal, and trade policies, and the dialogues concerning stabilization policy, the unemployment-inflation tradeoff, wealth effects, rational expectations, and international policy issues. The focus is on a comparative static analysis of equilibrium, and the stability of equilibrium. Prerequisite: ECON 522 and MATH 115 and (MATH 116 or MATH 121), or consent of instructor. LEC.

FIN 937. Seminar in Business Finance. 3 Hours.
This course is designed to develop the students' analytical abilities. Course material is of a theoretical and empirical nature. Advanced topics in financial management of business firms are covered. Special emphasis is given to long-term financing topics. Prerequisite: FIN 705 (BUS 751) and FIN 706 (BUS 752). LEC.

FIN 938. Seminar in Investments. 3 Hours.
A study of advanced topics in investments, capital markets, and portfolio theory. Special emphasis is given to the theory of efficient markets. The course is designed to cover recent analytical and empirical literature in the investment area. Prerequisite: FIN 710 (BUS 753). LEC.

FIN 939. Seminar in Financial Institutions. 3 Hours.
A survey of the academic literature in financial institutions. The reading list will vary depending on the instructor. May include both seminal theoretical papers and/or recent empirical studies on the role and importance of financial institutions in market economies. Prerequisite: Consent of Instructor. LEC.

FIN 995. Doctoral Seminar in Finance: _____. 2-5 Hours.
A variable topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. Prerequisite: Consent of instructor. LEC.

FIN 997. Directed Research in Finance. 1-5 Hours.
Students will research selected topics in the field of business administration under the direction of a graduate faculty member. Students are expected to report the results of their research by writing a publishable-quality scholarly article. Graded on satisfactory/unsatisfactory basis. Prerequisite: Approval required from supervising graduate faculty member. RSH.

FIN 998. Independent Study for Doctoral Students. 1-5 Hours.
Individual study of selected current problems in the field of business administration to be adapted to the special interests and objectives of the student. Students will conduct extensive reading and research. Student must submit written statement of proposed project. Prerequisite: Approval required from supervising faculty member and PhD Team. RSH.

FIN 999. Doctoral Dissertation. 1-12 Hours.
(V) Individual research work. THE.

IBUS 300. Special Topics in International Business: _____. 1-5 Hours.
This is a variable-topic course open to undergraduates meeting the prerequisites for the specific topic being offered. Its purpose is to allow the occasional offering of international business topics not covered by established courses. Enrollment is not limited to School of Business students. Prerequisite: Determined for each topic by instructor. LEC.

IBUS 400. Special Topics in International Business: _____. 1-5 Hours.
This is a variable-topic seminar. Its purpose is to allow the occasional offering of international business topics not covered by established courses. Prerequisite: Determined for each topic by instructor. Enrollment restricted. LEC.

IBUS 410. Introduction to International Business. 3 Hours. AE42.
This course provides an overview of the international business environment and explores its implications for firms and managers. Students will analyze the political, economic, legal and socio-cultural forces that shape the conduct of business in and across divergent cultural and institutional settings and examines theories and trends in international trade and investment from the perspective of a manager doing business across borders. Prerequisite: ECON 144 or ECON 145. Enrollment restricted or permission of the instructor. LEC.

IBUS 415. Business in Latin America. 3 Hours.
This course analyzes the unique aspects of the Latin American business environment and the major managerial issues that are likely to confront firms and individuals doing business in the region. The first part of the course develops analytic skills for assessing country environments. The second part of the course focuses on making corporate and managerial decisions in the Latin American context. Prerequisite or Co-requisite: IBUS 410 or permission of the instructor. Enrollment restricted. LEC.

IBUS 425. Business in China. 3 Hours.
This course analyzes the unique aspects of the Chinese business environment and the major managerial issues that are likely to confront firms and individuals doing business in the country. The first part of the course develops knowledge about the country and skills for assessing it as a place for business. The second part of the course focuses on the performance of key management functions in the Chinese context such as marketing, finance, supply chain and human resource management. Prerequisite or Co-requisite: IBUS 410 or permission of the instructor. Enrollment restricted. LEC.

IBUS 462. Comparative and Cross-Cultural Management. 3 Hours. AE42.
This course examines in depth how culture, in all its aspects, is the major determinant of successful organizational performance and management practices in the global workplace. This is accomplished by comparing and contrasting various cultural norms and values, and demonstrating how those differences impact business in the areas of communication (verbal and nonverbal), relationship building, the role of the manager, the functioning of teams and group dynamics, negotiation, conflict resolution, and decision making. Students will also examine the influences of culture on legal and governmental considerations in business, organization structures and corporate culture. The basis for cultural norms and comparisons used in this course are drawn from all areas of the world. The emphasis is on developing the awareness and skills necessary for managing multicultural diversity in both domestic and international settings. Prerequisite or Co-requisite: MGMT 310 or MGMT 311 or permission of the instructor. Enrollment restricted. LEC.

IBUS 480. International Management. 3 Hours. AE42.
This course provides an overview of the essential managerial issues that firms and individuals will confront and must master to successfully operate in the international business setting. This is accomplished by introducing the student to an array of practical concepts, analytical frameworks and vital managerial techniques that will be useful to the international manager. Specific topics covered include the role of culture in global business, ethics and social responsibility in a multicultural setting, strategy development and organizational structure models for multinational operations, methods for analyzing and evaluating potential foreign
markets and modes for foreign market entry. Also covered is the impact of a global scope of operations on basic management functions including marketing, finance, supply chain and human resource management. Prerequisite or Co-requisite: MGMT 310 or MGMT 311, MKTG 310 or MKTG 311 and FIN 310 or FIN 311 or permission of the instructor. Enrollment restricted. LEC.

IBUS 500. Individual Research in International Business. 1-5 Hours. Individual study of selected topics in international business not otherwise available to the student. Topics selected to be determined by the special interests and objectives of the student in consultation with a faculty member who will supervise the reading and research. Prerequisite: FIN 310 or FIN 311, MGMT 310 or MGMT 311, MKTG 310 or MKTG 311 and SCM 310 or SCM 311; 3.0 professional grade point average and approval of proposed plan of study by the instructor. Enrollment restricted. LEC.

IBUS 701. International Business. 2 Hours. This course aims to provide an understanding of the basic concepts, institutions, and practices of international business, and their implications for business decision making. Topics include the causes and consequences of globalization, the political, economic, legal and socio-cultural differences across countries, and the institutional arrangements governing cross-border flows of trade, investment and intellectual property. Enrollment restricted. LEC.

IBUS 720. Business in China. 2 Hours. The course analyzes the unique aspects of the Chinese business environment and the major managerial issues that are likely to confront firms conducting business in the country. The first part of the course reviews the country's geography, history and culture, and examines its contemporary political process, economic structure, financial system, and legal and social institutions. The second part of the course examines important strategic and operational issues such as market entry, contract negotiation, supply chain management, marketing strategies and techniques, and human resource management. Prerequisite: IBUS 701 or IBUS 820. Enrollment restricted. LEC.

IBUS 721. Business in Latin America. 2 Hours. This course analyzes the business environment of Latin America and the managerial practices that have evolved in this unique context. Using cases, readings, lectures and videos, the course seeks to cover a broad set of countries, industries and companies as it examines the conduct and performance of business in Latin America. Prerequisite: IBUS 701 or IBUS 820. Enrollment restricted. LEC.

IBUS 730. International Business Strategy. 2 Hours. This course examines the important managerial issues arising from a firm's expansion into the international arena and introduces analytical frameworks and management techniques that are essential for an international manager. Specific topics covered include foreign market entry decisions, strategies and organizational structures for managing a multinational corporation, and management of various functional areas (such as production, marketing, finance and human resources) in an international setting. Prerequisite: MGMT 704 and IBUS 701 or IBUS 820. Enrollment restricted. LEC.

IBUS 731. Comparative and Cross-Cultural Management. 2 Hours. This course explores how culture, in all of its aspects, is a major determinant of organizational practices and performance. We analyze how and why organizational communication and practices vary from one culture to another, as well as why certain values and cultural contexts might make particular management styles more successful than others. Finally, we will investigate the possibilities for transferring certain practices between cultures. Prerequisite: IBUS 701 or IBUS 820. Enrollment restricted. LEC.

IBUS 740. Business Practices in China. 2 Hours. This course provides students an opportunity to learn about business in China by observing it in practice. Students will travel to China to visit a variety of companies and meet with their managers to learn about the unique opportunities and challenges faced by companies operating in China. Company visits will be selected to include both manufacturing and services firms and to reflect a variety of ownership structures (foreign subsidiaries, locally-owned companies, joint-ventures, etc.). Lectures from faculty at a Chinese host institution will provide specific information on the local business environment and cultural, historical and institutional context. Prerequisite: IBUS 701 or IBUS 820 and IBUS 720. (Please note: This course involves travel abroad and required PRIOR completion of both IBUS 701 and IBUS 720.) Enrollment restricted. LEC.

IBUS 741. Business Practices in Latin America. 2 Hours. This course provides students an opportunity to learn about business in Latin America by observing it in practice. Students will travel to a Latin American country to visit a variety of companies and meet with their managers to learn about the unique opportunities and challenges faced by companies operating in Latin America. Company visits will be selected to include both manufacturing and services firms and to reflect a variety of ownership structures (foreign subsidiaries, locally-owned companies, joint-ventures, etc.). Lectures from faculty at a Latin American host institution will provide specific information on the local business environment and cultural, historical and institutional context. Prerequisite: IBUS 701 or IBUS 820 and IBUS 721. (Please note: This course involves travel abroad and required PRIOR completion of both IBUS 701 and IBUS 721.) Enrollment restricted. LEC.

IBUS 820. International Business. 3 Hours. This course aims to provide an understanding of the basic concepts, institutions, and practices of international business, and their implications for business decision making. The main objectives of this course include developing an understanding of cross-national differences in political, economic, legal and socio-cultural systems. The course will place special emphasis on understanding the unique institutions of emerging economies and their implications for doing business in these countries, and the effects of differences in culture on the practice of management in different parts of the world. Topics include the principal theories of, government policies on, and international institutional arrangements for international trade and foreign direct investment. The course will examine the key factors affecting a firm's foreign market entry decisions. Students will apply these theories to the analysis of a country's business environment and the formulation of international business decisions. This course is open only to students in the full-time MBA program. LEC.

IBUS 895. Graduate Seminar in International Business: _____, 0.5-5 Hours. A variable-topic seminar opens only to graduate students meeting the requirements established by faculty members offering the course. Enrollment restricted. LEC.

IBUS 898. Independent Study for Master's Students. 1-6 Hours. Individual study of selected current problems in the field of business management to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Students must have at least a 3.0 grade point average and be in good academic standing in a graduate business program and must submit a written statement of the proposed project approved by a supervisory faculty member prior to enrollment. RSH.

IBUS 950. Research in International Management and Strategy. 3 Hours. This seminar surveys the literature, classic and contemporary, that forms the theoretical basis of the international business field. Topics
covered include but are not limited to: (1) institutional issues such as the international framework of trade and investment, crosscountry governance differences, and the role of NGOs; (2) firm-level strategic issues such as choice of market entry modes, international entrepreneurship, and management of multinational enterprises; and (3) group- and individual-level organizational issues such as international staffing and cross-cultural management. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor. LEC.

IST 202. Introduction to Information Systems. 3 Hours.
This course introduces essential components of information systems from an organizational perspective. The course covers the role of information systems in organizations, the technical foundations of information systems, the design and management of information systems, and the effect of information systems on organizations. The course also exposes students to software tools used to solve business problems. Prerequisite: ACCT 200 or coenrollment in ACCT 200. LEC.

IST 205. Survey of Information Systems. 3 Hours.
This course focuses on the use of information systems in business. Topics will include components of information systems, types of information systems, development of information systems, and uses and benefits of information systems. Relevant technology issues such as security, privacy and ethics will also be introduced. In addition to content on information systems, the course will cover the basic principles of Microsoft Office. (Not open to students with credit in IST 202 or 301.) Prerequisite: Goal 1, Outcome 2 and Goal 2, Outcome 1. LEC.

IST 310. Spreadsheet and Database Applications. 3 Hours.
This course focuses on analyzing business data and solving business problems with spreadsheet and database management software. The main objective of the course is to expose students to tools that will help them transform data into decisions. Students are expected to master intermediate and advanced spreadsheet skills such as logical functions, PivotTables, and macros. Additionally, students will design and build a database that will then be manipulated, queried, and exported to Microsoft Excel in order to perform data analysis and modeling. LEC.

IST 312. Information Systems for Managers. 3 Hours.
This course provides an overview of how to understand, analyze, and design computerized information systems, and is designed to provide the computer tools and knowledge so that today's business student will be tomorrow's successful and complete manager and/or consultant. The topics covered in this course include computer technology, internal control in a computer environment, strategic information systems planning, systems analysis and design, database systems, networking, and various software packages. This course will count as an advanced business elective. Not open to students with credit in ACCT 311. Prerequisite: ACCT 201 and IST 202 or IST 301. Enrollment restricted. LEC.

IST 320. Fundamentals of Software Development. 3 Hours.
This course provides an introduction to software development concepts and techniques. Students will develop an understanding of the software development process through hands-on programming assignments and projects. The course emphasizes problem solving, initiative, and teamwork within an information systems framework. Prerequisite: IST 202 or IST 301. Enrollment restricted. LEC.

IST 325. Systems Analysis and Design. 3 Hours.
This will take students through the entire systems development life cycle from the first contact with a customer through analysis and design to the implementation of the customer's system. It will introduce the student to the field of systems analysis and design, basic systems analysis tools, and the procedures for conducting systems analysis. Topics covered will include the roles of the systems analyst in the organization, concepts, philosophies and trends in systems analysis and design, and tools and techniques for such analysis. Prerequisite: IST 202 or IST 301. Enrollment restricted. LEC.

IST 326. Database Management Systems. 3 Hours.
This course introduces the fundamental concepts and implementation of the database development process and relational database systems. The student will be exposed to database development issues, SQL methodology, and entity-relationship models. Prerequisite: IST 202 or IST 301. Enrollment restricted. LEC.

IST 330. Fundamentals of Business Computer Networking. 3 Hours.
This course introduces business students to the terms and concepts of networking in the business environment. This course balances practical application and network theory. It examines common architecture models, transmission media, network topologies, and protocols in both local area network (LAN) and wide area network (WAN) environments. The course also delves into the operating characteristics of the Internet and various applicable protocol suites. Conceptual learning is supported by team exercises and projects. Prerequisite: IST 202 or IST 301. Prerequisite or Corequisite: IST 320. Enrollment restricted. LEC.

IST 335. Information Security. 3 Hours.
This course provides an introduction to a wide range of topics associated with managing the security of information systems and related data in a business environment. Topics addressed include cryptography and security of operating systems, databases, networks. . both wired and wireless, and telecommunications systems. Security issues are examined related to application development and to the use of the Internet as a business medium. Other elements of security are reviewed: physical security, disaster recovery and business resumption planning, change control, and so forth. On successful completion of the course, each student will be better able to: a. Understand and appreciate risks associated with business information systems infrastructures and the dynamic nature of these threats. b. Evaluate various risks associated with information systems. c. Envision controls that might mitigate these risks. d. Possess the ability to effectively articulate the threats and need for appropriate controls to others, be they higher management, peers, or subordinates. Prerequisite: IST 202 or IST 301. Enrollment restricted. LEC.

IST 400. Special Topics in Information Systems Technology: ______. 1-5 Hours.
This is a variable-topic seminar. Its purpose is to allow the occasional offering of information systems technology topics not covered by established courses. Prerequisite: Determined for each topic by instructor. Enrollment restricted. LEC.

IST 401. Management of Integrated Information Systems/ERP. 3 Hours.
This course provides an introduction to Enterprise resource planning (ERP) systems. We explore process integration of business-wide functions (controlling, production planning, demand management, sales and distribution) as required and supported by ERP implementations. The objectives of the course include: (1) understanding processes and data needs of different business functions; (2) understanding alternative information systems solutions and the challenges of independent information systems and; (3) understanding ERP systems as solutions to business process integration. Prerequisite: IST 202 or IST 301. Enrollment restricted. LEC.

IST 405. Contemporary Information Technology Topics. 3 Hours.
This course examines a wide range of innovative information technologies (IT) which have both technical and strategic implications for businesses. These IT innovations affect all functions of businesses. Topics include Web 2.0, Web 3.0, next generation Web, social networking technology, virtual world, pervasive computing, ubiquitous computing, unified
communications (unification), IT utility, on-demand computing, grid computing, Web services, service-orientation architecture, business intelligence, data mining, search technology and applications (Google), next generation Web search, virtualization (server, hardware), storage fabrics, open source, IT outsourcing, personal technology, healthcare IT, green IT, security and privacy, Internet policy, regulation global control, and the gap between IT and business (goals and strategies). This course is available to all undergraduate and graduate students in the business school. Prerequisite: IST 202 or IST 301. Enrollment restricted. LEC.

**IST 410. IT Project Management. 3 Hours.**
This course provides initial exposure to concepts related to the project management discipline generally, while focusing on management of information technology projects in particular. The course is organized to emphasize core project management knowledge areas developed by the Project Management Institute, and it stresses the benefits of a disciplined, formal project management methodology. Students completing the course will gain an appreciation for the complex nature of projects and be better prepared to be an effective member of project teams encountered in many types of organizations. Prerequisite: IST 202 or IST 301. Enrollment restricted. LEC.

**IST 492. Honors Topics and Problems in Information Systems and Technology: _____ 1-5 Hours.**
This honors topic seminar is open only to students meeting the requirements established by faculty members offering the course. Open only to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. LEC.

**IST 495. Foundations in Business Analytics. 3 Hours.**
Introduces students to the key business, computational and data competencies needed by business analysts for effective data-driven decision making. The course focuses on how structural as well as unstructured “big data” can be used to help decision makers improve organizational competitiveness. Students will learn fundamental skills for business analytics: data manipulation, data visualization and statistical methods to gain experience with different software tools used for data analysis and reporting. Enrollment restricted. LEC.

**IST 500. Individual Research in Information Systems Technology. 1-5 Hours.**
Individual study of selected topics in information systems technology not otherwise available to the student. Topics selected to be determined by the special interests and objectives of the student in consultation with a faculty member who will supervise the reading and research. Prerequisite: FIN 310 or FIN 311, MGMT 310 or MGMT 311, MKTG 310 or MKTG 311 and SCM 310 or SCM 311; approval of the Area Director. Enrollment restricted. LEC.

**IST 701. Managerial Information Systems. 2 Hours.**
This course provides a broad, managerial level introduction to fundamental information technology concepts and terminology and the application of those concepts in business organizations. It addresses a variety of topics including: the Internet, intranets, and extranets; relational database theory; hardware, software, and networking concepts; the system development life cycle, project management; eBusiness/ eCommerce; knowledge management; enterprise resource planning; ethical considerations related to information technology advances; and organizational considerations related to information systems. The course focuses on the knowledge and expertise required for managers to successfully leverage information systems assets in a business setting. LEC.

**IST 702. Systems Development. 3 Hours.**
This course focuses on the practical issues of system development. A main objective of the course is to teach students system development through programming projects. In addition, the course examines the software engineering issues involved in system development, including usability and design issues, and alternative systems development processes. To enhance the quality of the system developed, the course also looks into software testing and evaluation issues. This course is not open to students with credit in IST 320. Prerequisite: IST 202 or IST 301 or IST 701 or concurrent enrollment in IST 701. Enrollment restricted.

**IST 704. Database Management. 3 Hours.**
This course provides insight into the managerial and organizational issues that surround the development and implementation of database systems in organizations. Students will undertake a project that allows them to experience the database development process while learning and practicing modern data modeling techniques. Students will also study the value that databases have to the organization and the impact that databases have on decision-making processes. Students also will study strategic issues that impact database development and will research the latest advances in database management systems and other emerging technology to gain insight on how these advances will impact the future of database development. This course is not open to students with credit in IST 326. Prerequisite: IST 202 or IST 301 or IST 701. Enrollment restricted. LEC.

**IST 706. Systems Analysis and Design. 3 Hours.**
This course develops skills with regard to the Analysis and Design activities typically encountered in an organizational software development environment. It emphasizes structured project planning, analysis and design techniques, including Project Estimation Methods, Data Flow Diagrams, Entity-Relationship Diagrams, and the application of CASE (Computer-Aided Software Engineering) Tools. The teaching methods will combine classroom experience with an analysis and design case study using role-play techniques to simulate an actual analysis and design scenario. This course is not open to students with credit in IST 325. Prerequisite: IST 202 or IST 301 or IST 701. Enrollment restricted. LEC.

**IST 708. Strategic Information Systems Planning. 3 Hours.**
This course has two objectives. The first objective is to give graduate students an understanding of the need for high level IT strategy in organizations. This is accomplished through case analysis, the experiential learning of strategic concepts and through interaction with IT executives. IT strategy is explored at the executive levels of an organization. The second objective of the course is to give students experience working on projects/research and presenting materials as is done in developing IT strategy for real organizations. Prerequisite: IST 202 or IST 301 or IST 701. Enrollment restricted. LEC.

**IST 709. Business Computer Networking. 3 Hours.**
This course has two objectives. The first objective is to give graduate students an understanding of the need for high level IT strategy in organizations. This is accomplished through case analysis, the experiential learning of strategic concepts and through interaction with IT executives. IT strategy is explored at the executive levels of an organization. The second objective of the course is to give students experience working on projects/research and presenting materials as is done in developing IT strategy for real organizations. Prerequisite: IST 202 or IST 301 or IST 701. Enrollment restricted. LEC.

**IST 712. Information Security. 3 Hours.**
This course will introduce, at a managerial rather than highly technical level, a range of topics associated with security of information systems and related data in a business environment. Topics addressed include selected cryptography concepts and the security of operating systems, databases, networks--both wired and wireless, and telecommunications systems. The course also considers security issues related to application
IST 713. Data Management. 2 Hours.
Businesses today collect and manage large volume of data in a variety of types, forms, and sources for myriad uses. To provide necessary skills to data scientists and analysts, this course introduces traditional data management concepts and techniques as well as contemporary information retrieval and processing innovations. Topics include database fundamentals, database query techniques, data marts and data warehouse, information retrieval and Web search, NoSQL movement and practices, data management for analytics, distributed data management and cloud computing, and other emerging trend and techniques. Enrollment restricted. LEC.

IST 715. E-Commerce: An Integrative Perspective. 3 Hours.
This course examines how organizations and individuals exploit the Internet and other emerging information technology to conduct business in an information era. This course combines practice and theory to examine successes, failures, and common practices when using information technology for e-commerce activities. Prerequisite: IST 202 or IST 301 or IST 701. Enrollment restricted. LEC.

IST 720. Developments in Software Technology. 3 Hours.
This course is an introduction to object-oriented (OO) technology and the object paradigm. We explore the object paradigm, its benefits and limitations. Specifically, we study a state-of-art technique for OO modeling. We also apply this technique to the analysis and design of a system, and implement the concepts with OO programming. Students will gain practical experience in OO analysis, design, and implementation through projects with an OO programming language. Prerequisite: IST 702. Enrollment restricted. LEC.

IST 725. Contemporary Information Technology Topics. 3 Hours.
This course examines a wide range of innovative information technologies (IT) which have both technical and strategic implications for businesses. These IT innovations affect all functions of businesses. Topics include Web 2.0, Web 3.0, next generation Web, social networking technology, virtual world, pervasive computing, ubiquitous computing, unified communications (unification), IT utility, on-demand computing, grid computing, Web services, service-oriented architecture, business intelligence, data mining, search technology and applications (Google), next generation Web search, virtualization (server, hardware), storage fabrics, open source, IT outsourcing, personal technology, healthcare IT, green IT, security and privacy, Internet policy, regulation, global control, and the gap between IT and business (goals and strategies). This course is not open to students with credit in IST 405. Prerequisite: IST 202 or IST 301 or IST 701. LEC.

IST 730. IT Project Management. 3 Hours.
This course provides initial exposure to concepts related to the project management discipline generally, while focusing on management of information technology projects in particular. The course is organized to emphasize core project management knowledge areas developed by the Project Management Institute, and it stresses the benefits of a disciplined, formal project management methodology. Students completing the course will gain an appreciation for the complex nature of projects and be better prepared to be an effective member of project teams encountered in many types of organizations. This course is not open to students with credit in IST 410. Prerequisite: IST 202 or IST 301 or IST 701. LEC.

IST 799. Internship in Information Systems. 1-3 Hours.
Internships provide opportunities for students to combine their academic education with a meaningful experience in the business world. Accounting internships allow students to explore career pathways in accounting, further their professional growth, expand professional networks, and increase the relevancy of their academic coursework. The internship course combines job-related activities of the accounting internship position with a set of academic requirements. These requirements include academic assignments as well as a pre- and post-internship seminar held in the semester before and after the semester in which the internship occurs. Internships for credit must be approved by the Director of the Internship Program prior to the internship experience. Students may not receive more than three hours of internship credit. Enrollment restricted and by permission only. LEC.

IST 895. Graduate Seminar Information Systems: _____. 0.5-5 Hours.
A variable-topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. Enrollment restricted. LEC.

IST 898. Independent Study for Master’s Students. 1-6 Hours.
(V) Individual study of selected current problems in the field of information systems to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Students must have at least a 3.0 grade point average and be in good academic standing in a graduate business program and must submit a written statement of the proposed project approved by a supervisory faculty member prior to enrollment. RSH.

IST 995. Doctoral Seminar in Information Systems: _____. 2-5 Hours.
A variable topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. Prerequisite: Consent of instructor. LEC.

IST 997. Directed Research in Information Systems. 1-5 Hours.
Students will research selected topics in the field of business administration under the direction of a graduate faculty member. Students are expected to report the results of their research by writing a publishable-quality scholarly article. Graded on satisfactory/unsatisfactory basis. Prerequisite: Approval required from supervising graduate faculty member. RSH.

IST 998. Independent Study for Doctoral Students. 1-5 Hours.
Individual study of selected current problems in the field of business administration to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Student must submit written statement of proposed project. Prerequisite: Approval required from supervising faculty member and PhD Team. RSH.

IST 999. Doctoral Dissertation. 1-12 Hours.
(V) Individual research work. THE.

MGMT 300. Special Topics in Management: _____. 1-5 Hours.
This is a variable-topic course open to undergraduates meeting the prerequisites for the specific topic being offered. Its purpose is to allow the occasional offering of management topics not offered by established courses. Enrollment is not limited to School of Business students. Prerequisite: Determined for each topic by instructor. LEC.

MGMT 305. Survey of Management and Leadership. 3 Hours.
This course is designed to acquaint students with traditional business management ideas, recent management thinking, and the contemporary application of both to the management functions of planning, organizing, leading and controlling. A survey of a wide variety of topics is offered, generally including goal setting, strategy formulation and implementation, managerial decision making, structure and design of organizations, corporate culture, organizational change and development, human
resources management, managing diversity, leading, motivation, communication, teamwork, quality control, management control systems, operations and service management, entrepreneurship and small business management, managerial ethics, corporate social responsibility, and management in the global environment. (Not open to students with credit in MGMT 310 or MGMT 311.) Prerequisite: Goal 1, Outcome 2 and Goal 2, Outcome 1. LEC.

MGMT 310. Organizational Behavior. 3 Hours.
This course serves as an introduction to the study of individual and group behavior within the context of an organization. An objective may be the development of the student's potential for becoming an effective organization member and manager of people. Experiential learning methods are utilized to involve the student actively. A wide variety of topics and theories may be covered, generally including motivation, leadership, job design, group dynamics, and formal organizational structure and process. Prerequisites: Completion of ECON 142 or ECON 143, ACCT 200, PSYC 104 or PSYC 105, and prior completion or co-enrollment in ACCT 201 and DSCI 202 or DSCI 301. LEC.

MGMT 311. Organizational Behavior, Honors. 3 Hours.
This course serves as an introduction to the study of individual and group behavior within the context of an organization. An objective may be the development of the student's potential for becoming an effective organization member and manager of people. Experiential learning methods are utilized to involve the student actively. A wide variety of topics and theories may be covered, generally including motivation, leadership, job design, group dynamics, and formal organizational structure and process. Honors students will be held to especially high expectations in terms of analyzing, evaluation, and creating, with systematic and continuous emphasis on personal and professional development. Only open to students admitted to the University Honors Program, the School of Business Honors Program, or by consent of the instructor. Prerequisites: Completion of ECON 142 or ECON 143, ACCT 200, PSYC 104 or PSYC 105, and prior completion or co-enrollment in ACCT 201 and DSCI 202 or DSCI 301. LEC.

MGMT 400. Special Topics in Management: _____ 1-5 Hours.
This is a variable-topic seminar. Its purpose is to allow the occasional offering of management topics not covered by established courses. Prerequisite: Determined for each topic by instructor. Enrollment restricted. LEC.

MGMT 405. Ethical Decision Making in Business. 3 Hours. AE51.
This course is designed to provide students with: (a) a grounding in the psychological and philosophical foundations of business ethics; (b) the ability to recognize ethical problems; (c) an exposure to many of the ethically sensitive issues facing corporations and managers in business today (e.g., layoffs, outsourcing, employee whistle-blowing, employee privacy, employee health and safety, marketing and advertising, environmental issues, discrimination, and the global responsibilities of business); and (d) the tools for analyzing and reaching closure on ethical problems. Students will study the role of ethics in the relation of business to employees, consumers, and society. Students in this course will have the opportunity to engage in stimulating class discussions, justify ethical positions in case study analyses, investigate ethical issues in their own future professional lives, and develop and present their solutions for typical ethical problems faced by managers in organizations. Prerequisite: MGMT 310 or MGMT 311. Enrollment restricted. LEC.

MGMT 410. Human Resources Management. 3 Hours.
This course addresses the ways that firms manage employment relationships, including staffing, training and development, compensation, performance appraisal, labor-management relations, employment law, career management, and job design. Upon completion of the course, students will be able to identify and address these topics from a general management perspective. Prerequisite: MGMT 310 or MGMT 311. Sports Management majors may petition for entry to the course with completion of the following prerequisite: MGMT 305, ECON 142, or ECON 143, and an introductory statistics course (DSCI 202 or DSCI 301), HSES 310, MATH 365, PSYC 300). Enrollment restricted. LEC.

MGMT 413. Recruiting and Selecting Effective Employees. 3 Hours.
What makes for a great employee? The answer will depend on the fit between the person and the organization. One size does not fit all. This course covers policies and procedures for recruitment, selection and staffing to enhance organizational effectiveness. Students learn about individual differences, how to measure these differences, and how to ensure the organization's recruitment and selection processes are reliable, valid, legal and "fair." Topics will include (i) conducting a job analysis for creating job descriptions, (ii) recruiting candidates, and (iii) setting up selection procedures through initial screening and resume review, the employment interview, general and specific ability tests, personality tests, assessment centers, performance tests, integrity testing, and drug testing. Prerequisite: MGMT 310 or MGMT 311. Enrollment restricted. LEC.

MGMT 416. Training, Development, and Management Careers for Individuals and Organizations. 3 Hours.
The course introduces students to effective approaches for developing training and career management processes that support continuous learning and organizational adaptation. Topics include analyzing training needs, developing training with clear objectives, evaluating outcomes rigorously, and individual and organizational strategies for careers and work-life balance. Prerequisite: MGMT 310 or MGMT 311. Enrollment restricted. LEC.

MGMT 419. Managing Performance and Compensation. 3 Hours.
This course focuses on principles and practices in designing and administering performance management and reward systems. Employee performance measurement at both the individual and group levels is reviewed. Using performance measurement information for administrative decision-making and employee development is discussed. The impact of reward systems on employee recruitment, satisfaction and individual and firm-level performance is examined, including establishing pay structures, individual and group-based pay-for-performance plans, executive pay issues, government influences, and employee benefits. Prerequisite: MGMT 310 or MGMT 311. Enrollment restricted. LEC.

MGMT 431. Legal Environment for Managing Employees. 3 Hours.
The focus of this course is how the legal environment affects the management of employees. The topics covered include laws on employment discrimination, employment-at-will, and negligent hiring, the Occupational Safety and Health Act, the National Labor Relations Act, the Fair Labor Standards Act, and the Family and Medical Leave Act. Prerequisite: MGMT 310 or MGMT 311. Enrollment restricted. LEC.

MGMT 434. International Human Resource Management. 3 Hours.
Whether a company has a domestic or an international footprint, there is little doubt that it is impacted by global competition for markets and for talent. This course increases students' understanding of core HRM activities as they are conducted in a global context. These activities include staffing, performance management, training and development, compensation, and labor relations. These topics are examined in the light of cultural and institutional differences. Prerequisite: MGMT 310 or MGMT 311. Enrollment restricted. LEC.

MGMT 437. Developing Management Skills. 3 Hours.
This course enhances leadership and other people-related skills of students in order to strengthen their capacity to manage others effectively. The course begins by focusing on self-awareness and self-management.
Students also learn systems for classification of people on the basis of personality, behavior and attitudes. Other topics covered include communication skills, time management, techniques for controlling stress, problem solving, reading people’s emotions and intentions more effectively, effective team leadership, coaching and counseling, delegation and empowerment, conflict resolution, motivation, and effective discipline techniques. The focus of the course is on skill acquisition and development. Other pedagogy involves readings, personality and behavior inventories, role-playing, and case analyses. Prerequisite: MGMT 310 or MGMT 311. Enrollment restricted. LEC.

MGMT 455. The Role of the General Manager: Leadership and Management. 3 Hours.
The course focuses on the principles and methods that general managers use to implement strategies, both at the business unit and corporate levels. While stressing the complex nature of the general manager's job, the organization’s mission, environment, technology, and strategy are discussed as the primary drivers of designing effective organizational structures, processes, and management systems. Change processes for realigning the organization's strategy, structure, processes, and culture are further emphasized, highlighting the role of the general manager as the architect of change. Topics covered include: organization design, transaction costs, behavior and output control; strategic leadership; design of information and reward systems; organizational change and cultural change processes. Prerequisite: MGMT 310 or MGMT 311. Enrollment restricted. LEC.

MGMT 470. Leadership in Business Organizations. 3 Hours.
This course provides the opportunity to learn and practice the behaviors common to business leaders; these include establishing direction, aligning others behind that direction, motivating and inspiring, and generally promoting organizational change and transformation. Experiential learning will be used to develop skills by having students lead learning teams through a variety of classroom-based exercises and one service learning project of their choosing. Creation of a personal leadership development plan will be a major component of a portfolio of assessments, analyses, and reflections that the student will build throughout the course. A key goal will be establishing a leadership development mindset that will drive students' future personal and professional development efforts. Prerequisite: MGMT 310 or MGMT 311. Enrollment restricted. LEC.

MGMT 472. Project Management. 3 Hours.
The purpose of this course is to examine business from a project management perspective, to develop a systems view of business rather than a functional view and to lay the foundation for future leaders to more effectively integrate project management into their business strategy. Further, to establish a common language for and a common knowledge of project management concepts, principles, and practices. This course is intended to help students gain an understanding of what project management involves, how it relates to other functional management areas, and its role in an organization's structure and leadership. This course is made up of topical lectures, article/video analysis, open discussion, in-class experiential exercises and a team-based outside class project. In order to foster good project management habits, topics will be covered in the order they appear in the project lifecycle starting with project selection and bidding and ending with project acceptance and close out. Topics covered in this course include: the importance and role of project management, the contextual nature of projects, logistics issues in project management, and the E-business impact on project management. Prerequisite: MGMT 310 or MGMT 311 and SCM 310 or SCM 311. Enrollment restricted. LEC.

MGMT 485. Business Consulting. 4 Hours.
Business Consulting teaches the skills necessary to become consummate consultants and presents students with live projects incorporating real business challenges requiring real time analysis, consideration of practical alternative strategies, exploration of sales and profit implications of the selected strategy and delivery of a full rationalized recommendation to real clients. Prerequisite: MGMT 310 or MGMT 311. Enrollment restricted. LEC.

MGMT 492. Honors Topics and Problems in Management: _______. 1-5 Hours.
This honors topics seminar is open only to students meeting the requirements established by faculty members offering the course. Open only to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. LEC.

The course exposes the student to the role of general management in complex organizations. The cases, conceptual materials, and projects are selected to provide the student with decision-making opportunity in major areas of managerial concern: environmental opportunities and constraints, formulation of business policy, and policy implementation mechanisms. Knowledge and skills gained in previous business courses, including marketing, finance, and quantitative methods, will be applied to problems associated with the totality of organizational activity. Prerequisite: FIN 310 or FIN 311; MGMT 310 or MGMT 311; MKTG 310 or MKTG 311 and SCM 310 or SCM 311 and Senior standing (90 hours completed). Enrollment restricted. LEC.

Honors treatment of this course exposes the student to the role of general management in complex organizations. The cases, conceptual materials, and projects are selected to provide the student with decision-making opportunity in major areas of managerial concern: environmental opportunities and constraints, formulation of business policy, and policy implementation mechanisms. Knowledge and skills gained in previous business courses, including marketing, finance, and quantitative methods, will be applied to problems associated with the totality of organizational activity. Only open to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. Prerequisite: FIN 310 or FIN 311; MGMT 310 or MGMT 311; MKTG 310 or MKTG 311 and SCM 310 or SCM 311 and Senior standing (90 hours completed). LEC.

MGMT 500. Individual Research in Management. 1-5 Hours.
Individual study of selected topics in management not otherwise available to the student. Topics selected to be determined by the special interests and objectives of the student in consultation with a faculty member who will supervise the reading and research. Prerequisite: FIN 310 or FIN 311, MGMT 310 or MGMT 311, MKTG 310 and MKTG 311 and SCM 310 or SCM 311; 3.0 professional grade point average and approval of proposed plan of study by the instructor. Enrollment restricted. LEC.

MGMT 525. Negotiations and Dispute Settlement. 3 Hours.
This course involves the study of the theory and practice of dispute resolution and negotiation in business mediation (facilitated negotiation). Conflict resolution in the workplace, including grievance procedures, will be considered. Students are required to apply concepts studied through role playing simulations. (Same as BLAW 525.) Prerequisite: MGMT 310 or MGMT 311 and BE 301 or BE 302. Enrollment restricted. LEC.

MGMT 701. Organizational Behavior. 2 Hours.
This course focuses on human behavior in organizations. It helps the student learn to think systemically and critically about organizations, to appreciate knowledge building in the organization sciences, and to apply
that knowledge in the work setting. Topics covered may include: individual
differences and motivation, work and group design, leading and decision
making, organization design and culture, and organization change and
development. LEC.

MGMT 704. Strategic Management. 2 Hours.
Strategic Management has as its primary objective the development
of an understanding of the role of general management from both
a conceptual and operating standpoint. The course is based on the
strategic management framework emphasizing the evaluation of an
organization’s strategic situation and the formulation of viable alternative
strategies required to deal with the challenges facing the organization.
Attention is focused on the development of organizational objectives
and the formulation of strategies at the business and operating levels.
Prerequisite: MGMT 701, FIN 701, and MKTG 701. Enrollment restricted.
LEC.

MGMT 705. Ethical Decision Making in Business. 2 Hours.
This course is designed to provide students with: (a) a grounding in the
psychological and philosophical foundations of business ethics; (b) the
ability to recognize ethical problems; (c) an exposure to many of the
ethically sensitive issues facing corporations and managers today in each
of the functional areas of business (management, accounting, finance,
information systems, and marketing); and (d) the tools for analyzing and
reaching closure on ethical problems. Students will study the role of
ethics in the relation to the individual, manager, organization, and global
business environment. Students in this course will have the opportunity
to engage in stimulating class discussions, justify ethical positions in case
study analyses, investigate ethical issues in their own future professional
lives, and develop and present their solutions for typical ethical problems
faced by managers in organizations after fully exploring the ethical
dimensions of both sides of a given issue. Prerequisite: MGMT 701.
Enrollment restricted. LEC.

MGMT 706. Managing People. 3 Hours.
This course addresses topics, challenges and processes associated with
business-related people issues. The principal objectives are to increase
understanding of human and group behavior in organizations; to learn
how to effectively motivate and lead individuals and groups; to increase
effectiveness in managing oneself and others in team settings; and to
increase understanding of human resource policies and practices that
help create and sustain competitive advantage through people. Course
topics include individual differences, motivation, groups, leadership,
strategic HR, employment law, staffing, compensation, performance
management, and training and development. LEC.

MGMT 710. Leadership Philosophy and Practice. 2 Hours.
This course emphasizes an exploration of ideas about leadership
that are practice-oriented. The material covered is based primarily on
ethnographic and clinical inquiry rather than social scientific research. A
central theme of this material, some of which is philosophical in nature,
is the focus on learning and the role of reflection in both the leadership
process itself and in the process of developing leaders. Varieties of
topics are covered, including foresight, intuition, practical reason, critical
thinking, reflective practice, and ethical judgment. A key goal is to move
the student into a position where he or she can begin to take control
of their own leadership development process. The course is structured
so as to give students the opportunity to reflect on their experiences,
analyze those experiences using the conceptual material, and then enter
into systematic dialogue on these issues with other students and the
instructor. The ultimate product of this learning process is the creation of a
detailed personal leadership development plan. Prerequisite: MGMT 701.
Enrollment restricted. LEC.

MGMT 711. Human Resources Management. 2 Hours.
The purpose of this course is to acquaint students with the rationale
and tools for creating a sustainable competitive advantage through
human resources. The management of human resources - people
and their human capital - is approached from the perspective of the
practicing manager as opposed to that of the human resources specialist.
The major topics covered include staffing, training and development,
performance management, compensation and benefits, job design,
facets of employment law, and employee (labor-management) relations.
Prerequisite: BE 701, DSCI 701 and MGMT 701. Enrollment restricted.
LEC.

MGMT 712. Economic, Environment, and Social Sustainability in
Business. 2 Hours.
This course introduces students to conducting business and pursuing
organizational goals sustainably. It includes principles (scientific,
economic, and cultural) to guide decision-making for sustainability,
metrics to assess sustainability [e.g. the integrated or triple bottom line],
and the application of sustainability concepts to business functions.
Examples of global environmental sustainability [energy, water, agriculture,
resource use and waste] are considered. The use of cases, discussion of
best practices, and attention to relevant skills help students gain familiarity
with sustainable business practices and develop their capabilities
to contribute to firm efforts to operate more sustainably. Enrollment
restricted. LEC.

MGMT 713. Managing People: Applications and Skills. 2 Hours.
The goal of this course is to increase the capacity of the student to
manage others effectively. It begins by focusing on self-awareness
and self-management. Students also learn systems for classification
of people on the basis of behavior and attitudes. Topics covered may
include time management, problem solving, reading people, coaching
and counseling, delegation and empowerment, conflict resolution,
motivation and discipline. The focus is on skill acquisition and the learning
approaches including readings, inventories, role playing and case
analysis. Prerequisite: MGMT 701. Enrollment restricted. LEC.

MGMT 718. Business Law and Ethics. 3 Hours.
This course has two purposes: 1) to provide a foundation for
understanding the relation between law and business and 2) to address
ethical decision-making and the management of ethics in the workplace.
Topics include classifications of law; legal processes; emerging legal
issues; alternative dispute resolution; recognition of ethical issues; ethical
analysis frameworks; and the management of ethical responsibilities in a
global business environment. LEC.

MGMT 722. Corporate Strategy. 2 Hours.
The objective of this course is to help students build an understanding
of how competitive strategy may lead to the creation and persistence of
competitive advantage in diversified firms. In contrast to the core Strategic
Management (MGMT 704) course, which is designed to address how
firms develop competitive advantage in a single market, this course
analyzes how advantage can be created through the configuration and
coordination of activities across multiple markets. Examples of corporate
strategies include vertical integration, cooperative alliances, corporate
diversification, mergers and acquisitions, and so forth. Prerequisite:
MGMT 704 or 830. Enrollment restricted. LEC.

MGMT 725. Strategic Management of Technological Innovation. 2
Hours.
This course focuses on the dynamics of industries driven by technological
innovation. It strives to help students think strategically about appraising
and managing technological innovation and new product deployment.
Specific topics covered include how innovations emerge, their type and
pattern of diffusion, and their meaning to businesses and society. In
depth coverage is given to dominant designs and industry standards, decisions on entry timing of new technologies, resource allocation among multiple attractive innovation projects, and capturing the value created by innovations. Prerequisite: MGMT 704 or MGMT 830. Enrollment restricted. LEC.

MGMT 727. Strategy Implementation. 2 Hours.
The course focuses on the principles and methods of implementing strategies, both at the business unit and corporate levels. Strategy is discussed as the primary driver of organization structure, processes, systems, culture and skills in successful organizations. The role of the general manager as the architect of implementation is highlighted. Topics covered include: different forms of structure, behavior and output controls; organization design, information systems design, reward systems and organizational culture. Prerequisite: MGMT 704 or MGMT 830. Enrollment restricted. LEC.

MGMT 728. Managing Strategic Direction and Change. 2 Hours.
This course focuses on executive actions needed to create and sustain high performance of firms. The vision, credibility, and human skills that executives need to set strategic direction are explored extensively. A major part of the course covers strategic and organizational change practices that can be used to motivate employees to alter their patterns of behavior to meet the shifting needs of the firm’s strategy. Emphasis is placed on theories of effective change implementation, mutual engagement and shared diagnosis, organizational redesign, reinforcing new behaviors, organizational culture and change, and the political dynamics of strategic change. Prerequisite: MGMT 704 or MGMT 830. Enrollment restricted. LEC.

MGMT 732. Recruiting and Selecting Effective Employees. 2 Hours.
Building on selected fundamental principles from psychology, economics, and sociology, this course emphasizes the importance of sound measurement practices for the acquisition of effective human talent by organizations. Topics covered include job analysis for selection procedure development, legal and fairness issues, recruitment, initial screening, employment testing, and the employment interview. Prerequisite: MGMT 701 or MGMT 810. Enrollment restricted. LEC.

MGMT 734. Compensation and Rewards. 2 Hours.
This course focuses on principles, policies and practices in designing and administering compensation and reward systems. It covers frameworks and applications useful for achieving organizational effectiveness through pay systems that help promote a competent and committed workforce. Topics include: developing pay structures, formulating and implementing pay level strategies, assessing and managing employee performance, pay-for-performance issues, legal issues, executive compensation and employee benefits. Prerequisite: MGMT 701 or MGMT 810. Enrollment restricted. LEC.

MGMT 738. Developing People and Careers. 2 Hours.
This course is designed with an emphasis on effective talent management for practicing managers and includes individual and organizational perspectives. Topics include assessing training needs; designing, developing, delivering and evaluating training and development investments; and career management planning, strategies and progression, including succession planning. Prerequisite: MGMT 701 or MGMT 810. Enrollment restricted. LEC.

MGMT 740. Appraising and Managing Employee Performance. 2 Hours.
This course covers the measurement/appraisal of employee performance at the individual and small work group/team levels, and the use of appraisal information in administrative decision-making, employee coaching, employee counseling, and individual/team performance improvement. Prerequisite: MGMT 701 or MGMT 810. Enrollment restricted. LEC.

MGMT 741. International Human Resources Management. 2 Hours.
This course introduces students to the major issues associated with managing people in the context of the global marketplace. The focus is on understanding human resource issues that are unique to international business and strategies for effectively addressing them. These issues include staffing, performance management, compensation and labor relations. These topics are considered in the context of factors such as culture, socio-politics, legal regulations, and education. Prerequisite: MGMT 701 or MGMT 810. Enrollment restricted. LEC.

MGMT 748. Negotiation and Dispute Resolution. 3 Hours.
This course will include a study of the theory and practice of negotiation and dispute resolution in business contexts. It will focus on the use of alternatives to litigation, such as various forms of arbitration, mediation, and, especially, negotiation. In addition to emphasizing negotiation as a means of resolving disputes, attention will be directed at negotiation of transactions. Appreciation of concepts will be promoted through role play simulations. Not open to students with credit in BLAW 525 or MGMT 525. (Same as BLAW 748.) LEC.

MGMT 810. Managing People. 3 Hours.
This course addresses topics, challenges and processes associated with business-related people issues. The principal objectives are to increase understanding of human and group behavior in organizations; to learn how to effectively motivate and lead individuals and groups; to increase effectiveness in managing oneself and others in team settings; and to increase understanding of human resource (HR) policies and practices that help create and sustain competitive advantage through people. Course topics include individual differences, motivation, groups, leadership, strategic HR, employment law, staffing, compensation, performance management, and training and development. This course is open only to students in the full-time MBA program. LEC.

MGMT 820. Business Law and Ethics. 3 Hours.
This course has two purposes: to explore the relationship between law and business and provides a foundation for further understanding of business relevant laws and to address ethical decision-making and the management of ethics in the work place. Topics include classifications of law, federalism, court systems, civil judicial process, alternative dispute resolution, ethical analysis tools, recognition of ethical issues, organizational dimensions that impact ethical behavior, and the management of ethical responsibilities in a global business environment. This course is open only to students in the full-time MBA program. LEC.

MGMT 830. Global Strategic Management. 3 Hours.
Global Strategic Management is a capstone Strategic Management course infused with applications to global business. The principal objectives of the course are to learn the basics of strategic decision making and how strategy integrates functional area policies in organizations; to understand how industries affect firm strategies; to understand how firms develop resources and capabilities for competitive advantage; to examine key strategic decisions or areas such as vertical integration, diversification, technology and market entry; and to understand how globalization affects core aspects of strategic business decisions. Topics include firm strategy, industry analysis, resources and capabilities, cost and differentiation advantage, organizing for competitive advantage, strategic change, technology-based competition, multinational strategy, vertical integration, and diversification. This course is open only to students in the full-time MBA program. LEC.

MGMT 831. Consulting Practicum. 3 Hours.
This course provides clinical applications of business problem solving and consulting. The course objectives are to link models and theories with field
applications to solve real business problems; to acquire first-hand industry knowledge and witness varying client management styles; to learn time management skills and acquire a practical 'tool kit' for diverse business problem solving; to apply problem solving techniques in both corporate and client consulting environments; and to enhance team interaction and leadership capabilities. Topics include consulting processes and successful consultant characteristics, hypothesis generation, problem identification and differentiation of root cause vs. symptom, market research methods, solution modeling, prep and presentation of solution, keys to consulting effectiveness. This course is open to those with admission to a graduate business program. LEC.

MGMT 885. Business Consulting. 4 Hours.
Through experiential learning using live consulting assignments, students will achieve understanding clarity of the linkage between models and theories studied in the classroom and application in the field; direct interaction with clients at sophisticated corporate organizations; and first hand experience in addressing significant business challenges with impactful and strategically correct solutions. Students will enhance their team and leadership skill capabilities through interaction with other team members. This course is not open to students with credit in MGMT 485. LEC.

MGMT 895. Graduate Seminar in Management: ______. 0.5-5 Hours.
A variable-topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. Enrollment restricted. LEC.

MGMT 898. Independent Study for Master's Students. 1-6 Hours.
Individual study of selected current problems in the field of business management to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Students must have at least a 3.0 grade point average and be in good academic standing in a graduate business program and must submit a written statement of the proposed project approved by a supervisory faculty member prior to enrollment. RSH.

MGMT 901. Current Research in Management. 1 Hour.
This course provides a workshop format for a discussion of the currently prevalent research topics, methods, and problems being addressed in the areas of human resources management, organizational behavior, and strategic management. All first year PhD students in HRM, OB, and SM will typically enroll in this course their first and second semesters in the doctoral program. Students will enroll in this course with their respective faculty advisors, who will work out a schedule of research seminars that each student must attend and participate in during the semester. Prerequisite: Admission to the School of Business PhD Program in HRM, OB, or SM, or permission of the Management Area Director. LEC.

MGMT 905. Philosophy of the Behavioral and Organizational Sciences. 3 Hours.
An advanced introduction to the philosophy of science relevant to the behavioral and organizational sciences. Introduces the student to contemporary philosophical thought concerning the nature of scientific knowledge and its acquisition. Students will be exposed to classic works in the 20th century movement of thought in the philosophy of science and the philosophy of social science. Subject matter will include the study of logical positivism, anti-positivist responses such as falsificationism, epistemological anarchism, and Kuhnian relativism, to contemporary neo-pragmatist, postmodernist, and constructivist developments related to the indeterminacy of knowledge. The method of the course is philosophical; critical thinking, critical discussion, and dialectical exchange will be encouraged. The course is oriented to the interests of social scientists, rather than philosophers. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor. LEC.

MGMT 906. Behavioral Research Methods. 4 Hours.
This course is designed to develop in students an ability to analyze research reports critically and to provide skills in designing, performing, and reporting original behavioral research. Methodologies ranging from naturalistic field studies to laboratory experiments are reviewed along with various data collection strategies. Students prepare and defend an original research proposal. Recommended to be taken early in the program for Human Resource Management, Organizational Behavior, and Strategic Management doctoral students. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor. LEC.

MGMT 916. Seminar in Organization Theory. 3 Hours.
This course provides an advanced survey of theories about organizations as entities, their properties, and major processes. Topics include structures, structural change, organizational forms, decentralization, effectiveness, adoption and diffusion processes, concepts and theories of processes, interdependence and recent developments in organizational design and change. Major organization theories are also covered. Students are expected to write a serious research paper. This course is primarily for School of Business Ph.D. students but other advanced graduate students may enroll with the permission of the instructor. Prerequisite: Doctoral standing or masters students with at least one undergraduate or M.B.A. level behavioral science course or consent of instructor. LEC.

MGMT 950. Personnel Selection and Effective Work Performance. 3 Hours.
This seminar focuses on staffing organizations to produce effective performance of work. It covers work performance, recruitment, and virtually all aspects of personnel selection. Topics include but are not limited to the following: measurement issues (reliability, validity, decision-making strategies); validity generalization; legal issues (discrimination, adverse impact); job and work analysis; evaluation of job applicant training and work experience; weighted application blanks and biodata; ability testing; personality assessment; performance tests and assessment centers; other methods of assessment (integrity testing, drug testing, graphology). Typically reading assignments include a substantial textbook plus articles from research journals (e.g., Journal of Applied Psychology, Personnel Psychology). Typically students are required to write a substantial paper on a major aspect of personnel selection approved by the Professor. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor. LEC.

MGMT 951. Training, Developing, and Managing Careers in Organizations. 3 Hours.
This seminar focuses on the development and maintenance of human capital and career management. A multi-level perspective is adopted and issues are considered from individual and organizational perspectives within the context of an HR system addressing contemporary workplace challenges. Theoretical and empirical readings will be drawn from OB, HR, and other relevant social sciences. Topics and themes include the processes of (a) training design, from needs assessment, through development, delivery and evaluation, and (b) career development and management. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor. LEC.

MGMT 952. Strategic Human Resource Management. 3 Hours.
This seminar focuses on macro-level perspectives on managing people for organizational effectiveness. Theoretical and empirical readings will be drawn from the OB, HR, strategy and other relevant literatures (e.g., services marketing) that explore themes related to: (a) human/social capital and firm success; (b) employee attitudes/behavior and firm success; (c) HR policies/practices and firm success; and (d) contingency
perspectives applied to the above, including factors such as national culture, industry, competitive strategy and employee groups. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor. LEC.

MGMT 953. Designing Effective Work Environments in Organizations. 3 Hours.
This seminar focuses on conceptual and empirical research in organizational behavior that seeks to understand how to achieve organizational effectiveness through establishing positive conditions for employees to flourish. The implications of these conditions for the motivation and ethical behavior of individuals will be discussed. Readings will address the following topics: Person-Organization Fit, Work Design, Work Teams, Leadership, Psychological Engagement, Decision-Making, Ethics, and Cross-cultural Dimensions of organization behavior or of the preceding topics. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor. LEC.

MGMT 954. Individual and Interactionist Perspectives of Organizations. 3 Hours.
This seminar focuses on conceptual and empirical research in organizational behavior that seeks to understand how the interaction between individuals and organizational facets influences their sense-making and identity. The implications of these processes for employees' well-being, performance, and careers will be discussed. Readings will address the following topics: Social Cognitive Theory, Self-efficacy, Employee Attachment and Job Attitudes, Individual Differences, Careers, Employee Well-being, Emotions, Attribution Theory, Sense-making processes, Identity, Organizational Culture, and Cross-cultural Dimensions/Globalization. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor. LEC.

MGMT 955. Creativity, Innovation, and Change in Organizations. 3 Hours.
This seminar focuses on theoretical and empirical research that seeks to understand the behavioral aspects of creativity and innovation in organizations. Central to this understanding is how organizations develop and change over time. Readings will include articles on the following topics: Expectancy theory, Goal setting, Intrinsic Motivation, Creativity, Innovation, Organizational Development, Learning, and Change Processes, Power and Politics, Organizational Citizenship Behaviors; and Cross-Cultural Dimensions. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor. LEC.

MGMT 956. Economic Theories of Strategic Management. 3 Hours.
This seminar surveys the scholarly literature in Strategic Management that is based on economic modeling of human and firm behavior. Topics include but are not limited to Industrial Organization Economics, Transaction Costs Economics, Property Rights Theory, Agency Theory, Resource-Based View and Dynamic Capabilities, and Real Options Theory. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor. LEC.

MGMT 957. Behavioral Theories of Strategic Management. 3 Hours.
This seminar surveys the scholarly literature in Strategic Management that is based on behavioral, psychological and sociological theories. Topics include but are not limited to the Behavioral Theory of the Firm, Behavioral Models of Strategic Decision Making, Strategy Formation, Strategic Leadership including CEO's, Boards and Top Management Teams, Organizational Demography, Cognition in Strategic Decision Making, Power Politics in Strategy Development. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor. LEC.

MGMT 995. Doctoral Seminar in Management: ____. 2-5 Hours.
A variable topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. Prerequisite: Consent of instructor. LEC.

MGMT 997. Directed Research in Management. 1-5 Hours.
Students will research selected topics in the field of management under the direction of a graduate faculty member. Students are expected to report the results of their research by writing a publishable-quality scholarly article. Graded on satisfactory/unsatisfactory basis. Prerequisite: Approval required from supervising graduate faculty member. RSH.

MGMT 998. Independent Study for Doctoral Students. 1-5 Hours.
Individual study of selected current problems in the field of business administration to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Student must submit written statement of proposed project. Prerequisite: Approval required from supervising faculty member and PhD Team. RSH.

MGMT 999. Doctoral Dissertation. 1-12 Hours.
(V) Individual research work. THE.

MKTG 300. Special Topics in Marketing: ____. 1-5 Hours.
This is a variable-topic course open to undergraduates meeting the prerequisites for the specific topic being offered. Its purpose is to allow the occasional offering of marketing topics not covered by established courses. Enrollment is not limited to School of Business students. Prerequisite: Determined for each topic by instructor. LEC.

MKTG 305. Survey of Marketing. 3 Hours.
This course introduces the student to marketing from the perspective of the business firm. Topics include the marketing system, consumer and industrial behavior, market segmentation and positioning, product policy, channels of distribution, pricing strategy, sales management, and marketing communications. (Not open to students with credit in MKTG 310 or MKTG 311.) Prerequisite: Goal 1, Outcome 2 and Goal 2, Outcome 1. LEC.

MKTG 310. Marketing. 3 Hours.
A study of marketing from the point of view of the business firm. Topics include the structure of the marketing system, the nature of marketing management, consumer behavior, marketing research, product policy, channels of distribution policy, and analytical techniques useful to marketing management. Prerequisite: Completion of ECON 142 or ECON 143, ACCT 200, and PSYC 104 or PSYC 105. Prior completion or co-enrollment in DSCI 202 or DSCI 301. LEC.

MKTG 311. Marketing, Honors. 3 Hours.
Honors treatment of this course involves a study of marketing from the point of view of the business firm. Topics include the nature of marketing management, consumer behavior, marketing research, product policy, channels of distribution policy, marketing communications, pricing, and analytical techniques relevant to marketing management. Only open to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. Prerequisite: Completion of ECON 142 or ECON 143, ACCT 200, and PSYC 104 or PSYC 105. Prior completion or co-enrollment in DSCI 202 or DSCI 301. LEC.

MKTG 400. Special Topics in Marketing: ____. 1-5 Hours.
This is a variable-topic seminar. Its purpose is to allow the occasional offering of marketing topics not covered by established courses. Prerequisite: Determined for each topic by instructor. LEC.

MKTG 411. Introduction to Consumer Behavior. 3 Hours.
A study of the buyer's information acquisition, evaluation, purchasing, and post-purchasing evaluation process. Emphasis is placed upon social psychological theories and their implications on the understanding and
prediction of consumers’ behavior. The student, from the standpoint of the marketing manager, will apply behavioral science concepts to the problems of planning, pricing, and promotion decisions. Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted. LEC.

MKTG 412. Introduction to Consumer Behavior, Honors. 3 Hours.
Honors treatment of this course involves study of the buyer’s information acquisition, evaluation, purchasing, and post-purchasing evaluation process. Emphasis is placed upon social psychological theories and their implications on the understanding and prediction of consumers’ behavior. The student, from the standpoint of the marketing manager, will apply behavioral science concepts to the problems of planning, pricing, and promotion decisions. Only open to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. Prerequisite: MKTG 310 or MKTG 311. LEC.

MKTG 415. Marketing Research for Managers. 3 Hours.
This course introduces the student to the fundamentals of marketing research and analytical approaches to marketing problems. The material is presented from an applied point of view and is designed to familiarize the student with those aspects of marketing research with which the marketing manager is likely to interact. Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted. LEC.

MKTG 420. Integrated Marketing Communications. 3 Hours.
This course will deal with the use of advertising, personal selling, sales promotion, and public relations as elements in a promotional program. The perspective of the course will be distinctly managerial. Therefore, the emphasis will be upon the efficient use of an organization’s resources to accomplish communication goals through effective promotional strategy. A good part of the course will be spent examining the communication process; the nature of the receiver and how information is processed; determination of promotional objectives; promotional budget; media decisions, and measuring the effectiveness of the promotional campaigns. The goal of the course is to enable the students to better evaluate and devise a marketing communications program for any given product, service, or idea. Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted. LEC.

MKTG 425. Sales Force Management. 3 Hours.
This course, as an advanced marketing elective, is designed to integrate sales force planning into the marketing planning process; to present the necessary tools and skills needed for developing and evaluating a competitive sales function; and to analyze the components of the sales function from a managerial perspective. Specifically, topics include strategic sales planning, forecasting, quotas and compensation plans, selection and training, time and territory management, motivation, and performance analysis. Pedagogical methods for the course include: lecture, case study, role-playing, micro-computer simulations, and spreadsheet analyses. Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted. LEC.

MKTG 430. New Product Management. 3 Hours.
This course deals with the strategies, techniques, and methods used to develop and market a new product. An important aspect of the course deals with anticipating and managing change that can affect a firm’s marketing opportunities and response. Also emphasized is the need for a disciplined process of development. Subjects examined include innovative thinking, identification, and development of marketing opportunities, marketing mix strategies, and implementation. Prerequisite: MKTG 310, MKTG 311 or consent of instructor. Enrollment restricted. LEC.

MKTG 435. Marketing Strategy. 3 Hours.
The emphasis of this course is strategic marketing analysis and planning. Concepts and methods for the strategic analysis of product-market definition, segmentation, product positioning, and new product planning are examples of individual subjects that are covered. However, the primary objective is to integrate various topics into a strategic planning framework. An important component of the course is the application of concepts to realistic marketing problems through the use of comprehensive marketing simulations or in-depth cases that capture the dynamics of the marketing environment. Students will learn how to identify markets, assess company strengths and weaknesses, target market segments, analyze competition, and develop specific functional strategies in such areas as product development, pricing, distribution, and promotion. Prerequisite: MKTG 411 or MKTG 412 and MKTG 415. Enrollment restricted. LEC.

MKTG 440. Global Marketing. 3 Hours. AE42.
Today businesses compete in a global environment. As such, marketing managers must recognize the global nature of their markets and must develop the knowledge background, sensitivity, and skills required to successfully operate in this dynamic setting. This course examines the array of activities required to select, gain entry, and compete in a location other than the “home” country. Also examined is the influence that culture, environment, government regulation, and economic systems can have upon marketing mix decisions (product, price, promotion, distribution) related to localization, standardization, and local adaptation. Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted. LEC.

MKTG 445. Services Marketing. 3 Hours.
This course prepares students for careers, which will entail managing businesses in the service sector. This sector includes accounting management consulting, engineering services, environmental services, health care, research, architectural, hotel and restaurant, charitable, and many others. It provides the foundation a student needs so that he or she can move beyond providing technical support to the client and towards managing and developing the business. For a marketing or management student, it provides the foundation they need to be able to find a job, hit the ground running, and advance in a marketing (management) position with companies in the service sector. Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted. LEC.

MKTG 446. Services Marketing, Honors. 3 Hours.
Honors treatment of this course prepares students for careers, which will entail managing businesses in the service sector. This sector includes accounting, management consulting, engineering services, environmental services, health care, research, architectural, hotel and restaurant services, charitable institutions, and many others. It provides the foundation a student needs so that he or she can move beyond providing technical support to the client and towards managing and developing the business. For a marketing or management student, it provides the foundation they need to be able to find a job, hit the ground running, and advance in a marketing (management) position with companies in the service sector. Prerequisite: MKTG 310 or MKTG 311. Only open to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. LEC.

MKTG 450. Internet Marketing. 3 Hours.
This course examines how the power of today’s digital technologies can be harnessed to enhance and deploy the marketing function. The course begins with an overview of the key forces shaping the digital environment. It then examines several topics that define and characterize marketing in this new environment. Illustrative topics include web business models, traffic driving strategies, one-to-one marketing, personalization, closed-loop marketing, online support, dynamic pricing, channel redesign, and m-commerce. Throughout, emphasis is placed on linking key concepts to best practices in the field. Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted. LEC.
**MKTG 455. Pricing. 3 Hours.**
The primary objective of this course is to examine the concepts and tools required to effectively manage the pricing function. Both strategic and tactical aspects of pricing will be covered with a view to identify profit-boosting practices across a range of professional contexts - as product managers, business unit managers, management consultants, and entrepreneurs. Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted. LEC.

**MKTG 460. Practicum in Promotional Plan Development. 3 Hours.**
The course is an experiential approach to promote campaign development with an emphasis on promotional strategy as a single component of the total marketing strategy. Student teams work with actual businesses to address the business's individual marketing needs. Students conduct environmental and industry analysis and primary and secondary market research to identify target markets, develop a marketing strategy, promotional objectives, product positioning, brand development and ROI measures for a promotional strategy. Students then complete media planning, creative execution, and budgeting and present the project to the business. Prerequisite: MKTG 310 or MKTG 311 and at least two of the following three courses: MKTG 411 or MKTG 412, MKTG 415 or MKTG 416, or MKTG 435. Enrollment restricted. LEC.

**MKTG 465. Customer Relationship Management. 3 Hours.**
This course offers a comprehensive introduction to the strategy and tactics of customer relationship management (CRM). Particular emphasis is given toward understanding the key strategic principles inherent in the customer-centric focus that underlies a successful CRM program. Topics include: Fundamentals of CRM strategy, marketing metrics, customer profitability analysis, choice modeling, techniques for evaluating model performance and applications of CRM to marketing campaign management. Students will be instructed on how to implement the CRM techniques using various software tools and real-world data. (Same as SCM 425.) Prerequisite: MKTG 310 or MKTG 311; SCM 310 or SCM 311. Enrollment restricted. LEC.

**MKTG 500. Individual Research in Marketing. 1-5 Hours.**
Individual study of selected topics in marketing not otherwise available to the student. Topics selected to be determined by the special interests and objectives of the student in consultation with a faculty member who will supervise the readings and research. Prerequisite: FIN 310 or FIN 311, MGMT 310 or MGMT 311, MKTG 310 or MKTG 311 and SCM 310 or SCM 311; 3.0 professional grade point average and approval of proposed plan of study by the instructor. Enrollment restricted. LEC.

**MKTG 701. Marketing Management. 2 Hours.**
This course examines the marketing function of the firm, primarily from a managerial perspective. The topics examined include: marketing concepts, segmentation, and decisions related to positioning, products, pricing, distribution, and promotion. LEC.

**MKTG 714. Discovering &Evaluating New Product Opportunities. 2 Hours.**
Rapid shifts in technology and consumer preferences make new products critical to a firm's portfolio. This course highlights the value of a disciplined approach in bringing new products and services to market. Specific topics covered include models for opportunity identification, understanding customer preferences and perceptions, and gauging market demand. Multidimensional scaling, factor analysis, clustering, preference regression and conjoint analysis are some techniques used in this course. Prerequisite: MKTG 701 or MKTG 810. Enrollment restricted. LEC.

**MKTG 715. Consumer Behavior. 2 Hours.**
This course is designed to review behavioral science concepts applicable to understanding behavior of consumers in the marketplace. It investigates the specific processes of consumer decision-making and purchasing, and the implications these have for marketing strategy. Topics covered include: effect of internal and external factors on consumer decision making, information processing, learning and memory, attitude formation and change, postpurchase behavior, ethical/social issues, effects on marketing strategy. Prerequisite: MKTG 701. Enrollment restricted. LEC.

**MKTG 716. Global Marketing. 2 Hours.**
This course is designed to provide a set of conceptual and managerial tools to students for undertaking marketing of products and services on a global scale. The topics covered in the course include economic and financial dimensions in global marketing, social and cultural aspects of the global market environment, regional market characteristics, political and legal issues in global marketing. A significant portion of the course is devoted to the study of competitive analysis and competitive strategy for the global markets, marketing information systems, various strategies for enter global markets, organization, planning and control of global marketing, and marketing mix decisions (product, price, promotion, and distribution) in a global setting. Prerequisite: IBUS 701 and MKTG 701. Enrollment restricted. LEC.

**MKTG 717. Integrated Marketing Communications. 2 Hours.**
The goal of this course is to enable the student to evaluate and devise a product/service marketing communications program. Emphasis will be placed on the efficient use of resources to accomplish communication goals through effective promotional strategy involving advertising, personal selling, sales promotion and publicity. Topics covered include the communication process, determination of promotional objectives, promotional budgeting, media planning, measuring effectiveness and ethical issues. Prerequisite: MKTG 701. Enrollment restricted. LEC.

**MKTG 721. Advanced Topics in Managing Products and Brands. 2 Hours.**
This course is designed to explore various marketing issues in managing a portfolio of products in a global marketplace, across multiple product lines. While the course will review marketing strategies concerning pricing, promotions, product liability, and protection of intellectual property rights, it will especially focus on such concepts as brand identity/personality brand extension/leveraging, co-branding, brand loyalty, brand equity, product and brand strategies over the lifecycle of products and brands, and organizational requirements for building successful brands. Prerequisite: MKTG 701 or MKTG 810. Enrollment restricted. LEC.

**MKTG 722. Marketing Strategy. 2 Hours.**
The emphasis of this course is strategic marketing analysis and planning. Topics examined include (a) Situation and SWOT analyses and how these lead to an understanding of the firm's sustainable competitive advantage, (b) methods for the identification of segmentation within consumer and business markets, (c) the selection of target segments based upon competitive advantage and value, (d) positioning and differentiation within target segments, and (e) the development of brand strategy and action plans based upon segment positioning and differentiation. An important component of the course is the application of concepts to realistic marketing problems that captures the dynamics of marketing environments. Prerequisite: MKTG 701 or MKTG 810. Enrollment restricted. LEC.

**MKTG 723. Marketing Research. 2 Hours.**
This course engages students in a broad examination of marketing research as practiced in marketing organizations today. Topics include defining business problems and establishing research objectives, choosing among research approaches (survey, qualitative, and secondary designs), gathering data (questionnaires, focus groups/interviews, and online), analyzing research data, and generating actionable results for
business decision-making. The emphasis is on practical applications for the marketing professional. Prerequisite: DSCI 701 or DSCI 810. Enrollment restricted. LEC.

**MKTG 724. Pricing of Products and Services. 2 Hours.**
The objective of this course is to prepare students for addressing strategic and tactical pricing issues and identifying profit-boosting changes in pricing practices. Pricing issues will be examined from various perspectives (e.g., product managers, business unit managers, management consultants, and entrepreneurs). The course will focus on teaching key economic, analytical and behavioral concepts associated with costs, customer behavior and competition. The course will employ economic, analytical, and behavioral concepts to illustrate how pricing decisions can be deployed to capture additional value. It will cover basic topics such as measurement of price sensitivity, segmented pricing, role of costs, and life cycle pricing as well as advanced topics such as dynamic pricing, pricing structures, and pricing under competition. Prerequisite: MKTG 701 or MKTG 810. Enrollment restricted. LEC.

**MKTG 810. Marketing Management. 3 Hours.**
This course is designed to equip students with basic concepts associated with the marketing function. Principal objectives are to discuss the role of marketing in an organization, to describe the processes of buyer behavior and the impact of these processes on marketing decisions, to develop an understanding of approaches used to segment markets and factors influencing the selection of target markets, and to develop an understanding of elements of the marketing mix (product, price, communications, channels) and factors affecting decisions in these areas. This course is open only to students in the full-time MBA program. LEC.

**MKTG 895. Graduate Seminar in Marketing: 1. 0.5-5 Hours.**
A variable-topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. Enrollment restricted. LEC.

**MKTG 898. Independent Study for Master's Students. 1-6 Hours.**
(V) Individual study of selected current problems in the field of business management to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Students must have at least a 3.0 grade point average and be in good academic standing in a graduate business program and must submit a written statement of the proposed project approved by a supervisory faculty member prior to enrollment. RSH.

**MKTG 950. Advanced Marketing Research. 3 Hours.**
This course deals with measurement tools typically used in marketing such as conjoint analysis, multi-dimensional scaling, questionnaire construction, formative and causal indicators of constructs, scale development and testing, reliability and validity issues, and design of complex lab and field experiments. The goal of the course is to equip students with measurement tools to conduct research in academic and applied settings. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor. LEC.

**MKTG 951. Consumer Behavior. 3 Hours.**
This seminar provides an overview of the current theories and methodological approaches associated with consumer behavior research. Main topics of the course include attention and information search, consumer memory structure, consumer knowledge, inference making, motivation/goal, consumer attitude and persuasion, judgment and decision making, self-perception and regulation, culture’s influence on consumer behavior, and affect/emotion/mood. The content will be based on literature from multiple disciplines including marketing, psychology, sociology, and economics. Students will be required to critically analyze and synthesize the literature, with a view to formulate research proposals on issues that interest them. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor. LEC.

**MKTG 952. Introduction to Marketing Models. 3 Hours.**
There is a rich tradition of using models to represent and analyze various marketing phenomena. An illustrative list of topics include: examining first-mover advantages, understanding response to price, analyzing new pricing formats, compensation design, interaction between marketing investments and stock market response, consumer surplus analysis, allocation of marketing resources, and decision support systems. Against this backdrop, the objectives of this course are two-fold: (i) to provide a non-technical overview of various modeling approaches employed in marketing, and (ii) to present advanced topics to generate new research. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor. LEC.

**MKTG 953. Marketing Communications. 3 Hours.**
This course focuses on fundamentals of marketing communications with a heavy emphasis on message-memory. Some of the topics covered in this course include memory (e.g., elderly adults). Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor. LEC.

**MKTG 954. Pricing and Strategy. 3 Hours.**
This seminar exposes students to the various analytical approaches to understand and model pricing phenomena by examining the classic as well as contemporary works on pricing. The students will learn how to model strategic interactions in the marketplace using game theory and other analytical tools as well as theories such as auction theory, prospect theory, and mental accounting. Some of the topics covered in this course include price discrimination mechanisms, price as a competitive tool (e.g., entry deterrence), price as a promotional strategy, role of price in channel structure and strategy, and effect of price on consumer choice. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor. LEC.

**MKTG 955. Product Management. 3 Hours.**
This course focuses on understanding products and the product development process. Readings are drawn from the literature in marketing, management, decision theory and psychology. Some topics covered in the course include creation and diffusion of innovations, modeling consumers’ perceptions and preferences, brand equity and branding, entry order, sales forecasting, and global product development. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor. LEC.

**MKTG 956. Current Topics in Behavioral Marketing Research. 3 Hours.**
This course focuses on theories and current topics in behavioral research in marketing. The primary goals of this course are: (1) to familiarize students with current topics and issues in behavioral marketing, with particular regard to psychological processes underlying consumers’ choices and preference in everyday life, (2) to improve critical thinking about behavioral aspects of marketing, and (3) to help students develop meaningful and testable research ideas and to design experiments to test these ideas. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor. LEC.

**MKTG 957. Managerial Issues in Marketing. 3 Hours.**
The course is designed to examine issues that influence managerial decision-making such as product management, behavioral pricing, marketing communications, and marketing models. Instructor’s research interest would dictate the emphasis on a particular topic. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor. LEC.
MKTG 958. Consumer Judgment and Decision Making. 3 Hours.
The purpose of this course is to develop a solid foundation for critical
thinking and research on judgment and decision making aspects of
consumer behavior, marketing, and business in general. This graduate
seminar may cover a wide range of behavioral research topics relevant
to the study of judgment and decision making, such as utility theory,
prospect theory, costly signaling theory and conspicuous consumption,
sex differences in behavior and consumption, and hormonal influence
on consumption. Prerequisite: Admission to the Doctoral Program or
graduate standing and permission of the instructor. LEC.

MKTG 959. Affect, Cognition and Hedonic Consumption. 3 Hours.
This seminar takes a comprehensive look at the current and prior
research on affect and cognitive processes, and specifically examines
various aspects of consumption, both pleasant and unpleasant. Topics
covered in this course include-but are not limited to-positive emotions,
mindfulness, and various social, emotional, and cognitive determinants
of consumer satisfaction, happiness, and well-being. Prerequisite: Admission
to the Doctoral Program or graduate standing and permission of the
instructor. LEC.

MKTG 960. Emotion and Motivation. 3 Hours.
This course provides an overview of recent research on emotions and
motivations, with an emphasis on how they effect consumer behavior.
The course explores questions such as “Do emotions lead us to make
irrational decisions?”, and “What are fundamental human motivations?”
Through the course, students will gain a better understanding of
perspectives within the field of motivations and emotion, research that
has been conducted on various types of motivations, and how motivation
theory is applied to marketing. Prerequisite: Admission to the Doctoral
Program or graduate standing and permission of the instructor. LEC.

MKTG 995. Doctoral Seminar in Marketing: _____ 2-5 Hours.
A variable topic seminar open only to graduate students meeting the
requirements established by faculty members offering the course.
Prerequisite: Consent of instructor. LEC.

MKTG 997. Directed Research in Marketing. 1-5 Hours.
Students will research selected topics in the field of business
administration under the direction of a graduate faculty member.
Students are expected to report the results of their research by writing a
publishable-quality scholarly article. Graded on satisfactory/unsatisfactory
basis. Prerequisite: Approval required from supervising graduate faculty
member. RSH.

MKTG 998. Independent Study for Doctoral Students. 1-5 Hours.
Individual study of selected current problems in the field of business
administration to be adapted to the special interests and objectives of the
students and conducted through extensive reading and research. Student
must submit written statement of proposed project. Prerequisite: Approval
required from supervising faculty member and PhD Team. RSH.

MKTG 999. Doctoral Dissertation. 1-12 Hours.
(V) Individual research work. THE.

MSCM 820. Marketing Intelligence. 3 Hours.
This course is an introduction to marketing research. The emphasis will
be on providing an understanding of the value of marketing research
and the tools to engage in the process. The objectives are to understand
research planning, types of research and design, to determine appropriate
sampling, data collections methods and research methodologies, to
understand, apply and interpret fundamental concepts of data analysis
and analysis software. Topics covered will include the research process,
understanding data sources, qualitative research, measurement and
scaling issues, questionnaire design, analysis of data, and the research
report. Prerequisite: DSCI 810. This course is open only to students in the
full-time MBA program. LEC.

MSCM 830. Understanding Customers. 3 Hours.
This course is designed to review behavioral science concepts
applicable to understanding behavior of consumers in the marketplace.
It investigates the specific processes of consumer decision making and
purchasing, and the implications these have for marketing strategy. The
course will cover the internal and external factors that affect consumer
decision-making processes; the steps consumers go through before,
during and following the purchase decision; theories of attitude formation,
methods of attitude-measurement and attitude change. Topics include
the effect of external factors (cultures, social class, reference groups, family),
effect of internal factors (needs, motives, personality), the extended
decision-making process, information processing, learning and memory,
attitude formation and change, low-involvement decision making, post-
purchase behavior, ethical/social issues, effects on marketing strategy.
Prerequisite: MSCM 820. This course is open only to students in the full-
time MBA program. LEC.

MSCM 831. Distribution Channels and Global Operations. 3 Hours.
This course addresses the theory and practice of designing distribution
channels and global supply chains. The objectives of the course are to
provide an understanding of different channels of distribution and the
complexities of global operations along with their associated risks and
rewards. The course will address topics in transportation, fulfillment, and
facility location to support global supply chains. It will develop the ability
to design logistics systems and formulate integrated supply chain strategy.
The topics also include channels of distribution, , warehousing, and global
operations management. Prerequisite: MSCM 820. This course is open only
to students in the full-time MBA program. LEC.

MSCM 832. Marketing Services and Managing Customer Relationships. 3 Hours.
This course is designed to fill the knowledge gap between managing
products and managing services. It will help students understand the
unique needs and challenges faced by service companies (and those
manufacturing companies that rely on services for their differential
advantage) in a complex global environment. The primary objective is to
provide a set of conceptual and managerial tools for effective
management and marketing of services. Broad topics include services
characteristics, managing customer expectations, understanding service
consumption behavior, service strategy, segmentation positioning,
creating service offerings, service quality, managing demand for services,
service pricing. Topics pertaining to customer relationships include
acquiring and retaining customers, customer profitability lifetime value,
customer satisfaction measurement, relationship marketing, and service
recovery. Topics pertaining to managing service employees include
empowering service employees, employees as living brands; globalization
of services; and ethical issues in services marketing. Prerequisite: MSCM
820. This course is open only to students in the full-time MBA program.
LEC.

SCM 305. Survey of Decision Making in Business. 3 Hours.
An introduction to decision making under the uncertainty encountered
in business and in everyday life. Covers selected topics in probability,
statistics, economics, and operations research, and their application
to complex problems in financial management, marketing, operations
management, supply chain management, and quality management; as
well as risks affecting everyday life, such as personal decisions in regard
to career, marriage, and wealth management. (Not open to students
with credit in SCM 310.) Prerequisite: Goal 1, Outcome 2 and Goal 2,
Outcome 1. LEC.
SCM 310. Management Science and Operations Management. 3 Hours.
Introduces some of the most widely used models from management science in business decision making. Topics include decision making under uncertainty, resource allocation models, and production and operations management. (Formerly DSCI 310). Prerequisite: Prior completion or co-enrollment in DSCI 202 or DSCI 301 and IST 202 or IST 301. LEC.

SCM 311. Management Science and Operations Management, Honors. 3 Hours.
Honors treatment of this course introduces some of the most widely used models from management science in business decision making. Topics include decision making under uncertainty, resource allocation models, and production and operations management. Only open to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. Prerequisite: Prior completion or co-enrollment in DSCI 202 or DSCI 301 and IST 202 or IST 301. LEC.

SCM 400. Special Topics in Supply Chain Management: ____, 1-5 Hours.
This is a variable-topic seminar. Its purpose is to allow the occasional offering of supply chain management topics not covered by established courses. Prerequisite: Determined for each topic by instructor. Enrollment restricted. LEC.

SCM 401. Introduction to Supply Chain Management. 3 Hours.
This course introduces the student to supply chain management. Students are presented the key concepts of supply chain management, the application of these concepts and are provided with the managerial knowledge of supply chain management through class discussions and case studies. Students discover the impact of information technologies, strategic alliances and logistics on supply chain management and the performance implication of supply chain management. Prerequisite: SCM 310 or SCM 311, FIN 310 or FIN 311, and MKTG 310 or MKTG 311. Enrollment restricted. LEC.

SCM 402. Procurement and Supplier Management. 3 Hours.
This course involves the study of supply management. Topics covered include the purchasing process, the role of the procurement function within the company, and the evaluation, selection and development of suppliers. The course is also designed to emphasize the importance of negotiations and managing contracts. Prerequisite: SCM 401. Enrollment restricted. LEC.

SCM 403. Logistics, Transportation and Warehouse Management. 3 Hours.
This course discusses the area of physical distribution management of supply chains. Attention is given to managerial responsibilities such as network design, transportation methods, inventory management, warehousing, packaging, and materials handling. Prerequisite: SCM 401. Enrollment restricted. LEC.

SCM 404. Management of Integrated Information System/ERP. 3 Hours.
This course provides an introduction to Enterprise resource planning (ERP) systems. We will evaluate the functions, processes and data requirements of business functions in an integrated framework. The objectives of the course include (1) understanding data needs of different business functions; (2) understanding alternative information systems solutions and the problems in independent information systems and; (3) understanding ERP systems as solutions to integration. Prerequisite: IST 202 or IST 301. Enrollment restricted LEC.

SCM 410. Capstone in Supply Chain Management. 3 Hours.
Integrating and apply the theories, concepts, and methods taken in previous supply chain management courses through the use of readings, case studies, projects, and industry speakers. Prerequisite: SCM 401 and IST 202 or IST 301. Enrollment restricted. LEC.

SCM 415. Data Analysis and Forecasting. 3 Hours.
This course is concerned with the analysis and interpretation of data encountered in business and economics. One goal of the course is to develop skills in the analysis of data that can be used to solve problems students are likely to encounter on the job. The course attempts to develop an attitude toward data analysis that can be usefully applied in a wide variety of real life situations. A variety of statistical tools are covered. In particular, the multiple regress model is covered with an emphasis on how the model can be used in situations involving economic data. Data analysis techniques are illustrated with examples and case studies using computers. This course is in the management sciences and operations management area. Prerequisite: SCM 310 or SCM 311. Enrollment restricted. LEC.

SCM 416. Supply Chain Modeling and Optimization. 3 Hours.
Design, develop, and use computer decision models for analysis of supply chain operations; computer intensive coursework emphasizing spreadsheet applications. Prerequisite: SCM 401. Enrollment restricted. LEC.

SCM 418. Modeling and Risk Analysis. 3 Hours.
An introduction to the concepts, methodologies, and applications of risk analysis and modeling. This course is designed primarily to develop practical modeling skills with spreadsheet software. To accomplish this, material across the finance discipline will be covered as well as material from the supply chain management discipline. Examples from corporate finance, investments, financial derivatives, real estate, personal finance, and supply chain management methods will be used to demonstrate modeling. (Same as FIN 460.) Prerequisite: FIN 310 or FIN 311. Enrollment restricted. LEC.

SCM 420. Customer Focused Operations Service Management. 3 Hours.
The purpose of this course is to build the conceptual framework which drives an organization striving to operate in a customer-focused mode. This requires an integration of basic principles of marketing and operations in order to define the value-added in each of an organization’s products and/or services, to use this information to define the value-added in work, and to use this definition to improve the actual work. To do this effectively, requires leadership, empowerment, focused data, and a system view. The basic principles of each requirement will be discussed as well as their integration into a unified whole. Prerequisite: SCM 310 or SCM 311 and MKTG 310 or MKTG 311. Enrollment restricted. LEC.

SCM 425. Customer Relationship Management. 3 Hours.
This course introduces the theory and practical implementation of customer relationship management (CRM) strategies using marketing databases. Topics include: fundamentals of CRM strategy, RFM analysis, LTV metrics, logit models, decision tress, hazard models techniques for evaluating model performance (e.g., lift charts, ROC) and applications to campaign management. In keeping with the hands-on nature of the course, students will be instructed on how to implement the CRM techniques using various software tools. (Same as MKTG 465.) Prerequisite: MKTG 310 or MKTG 311; SCM 310 or SCM 311. Enrollment restricted. LEC.

SCM 500. Individual Research in Supply Chain Management. 1-5 Hours.
Individual study of selected topics in supply chain management not otherwise available to the student. Topics selected to be determined by
SCM 701. Introduction to Supply Chain Management. 2 Hours.
This overview course covers a wide set of topics to develop a strategic view of supply chain management and to illustrate its interdisciplinary nature. The course has the following principal objectives: to introduce the strategic and operating issues and decisions involved in managing the operational and supply chain processes within and across firms; to understand the global and interdisciplinary nature of supply chain management; to understand the concept of supply chain coordination by managing information and inventory. Topics covered in the class include supply chain functions, forecasting and demand management, inventory management, managing information flows in supply chains, globalization and outsourcing, and supply chain technologies. Prerequisite/Co-requisite: SCM 701. Enrollment restricted to Fort Leavenworth officers. LEC.

SCM 702. Procurement and Supplier Management. 2-3 Hours.
This course involves the study of supply management. Topics covered include the purchasing process, the role of the procurement function within the company, and the evaluation, selection and development of suppliers. The course is also designed to emphasize the importance of negotiation and managing contracts. Prerequisite: SCM 701. Enrollment restricted to Fort Leavenworth officers. LEC.

SCM 703. Transportation, Logistics Systems. 2-3 Hours.
This course discusses the area of physical distribution management of supply chains. Attention is given to managerial responsibilities such as network design, transportation methods, inventory management, warehousing, packaging and materials handling. Prerequisite/Corequisite: SCM 701. Enrollment restricted to Fort Leavenworth officers. LEC.

SCM 704. Information Systems for Supply Chain Management. 2-3 Hours.
This course provides an introduction to Enterprise Resource Planning (ERP) systems. We will evaluate the functions processes and data requirements of business functions in an integrated framework. The objectives of the course include (1) understanding data needs of different business functions; (2) understanding alternative information systems solutions and the problems in independent information systems; (3) understanding (ERP) systems as solution to integration. Prerequisite: SCM 701. Enrollment restricted to Fort Leavenworth officers. LEC.

SCM 710. Capstone in Supply Chain Management. 2-3 Hours.
Integrating and applying the theories, concepts, and methods taken in previous supply chain management courses through the use of readings, case studies, project and industry speakers. Prerequisite: SCM 701. Enrollment restricted to Fort Leavenworth officers. LEC.

SCM 720. Procurement and Supplier Management. 2 Hours.
This course provides the students with an understanding of procurement, strategic sourcing and supplier management. The course has the following principal objectives: to introduce the basic concepts, terminology, tools of purchasing; to provide a conceptual framework of the trends and developments in global sourcing; to understand the techniques of negotiations; and to develop understanding of supplier relationship management. Topics covered in the course include purchasing process, policy, and procedures, purchasing law and ethics, supply management, supplier selection and evaluation, supplier relations management, global sourcing, and negotiations. Prerequisite: SCM 701 or SCM 820. Enrollment restricted. LEC.

SCM 721. Logistics and Distribution Management. 2 Hours.
This course addresses the theory and practice of designing distribution channels and logistics systems. The course has the following principal objectives: to understand how logistics management generates value to customers; to establish a sound foundation in transportation, fulfillment, and facility location to support global supply chains; and to develop the ability to design logistics systems and formulate integrated supply chain strategy, so that all components are not only internally synchronized but also tuned to fit corporate strategy, competitive realities and market needs. Topics covered include transportation fulfillment, inventory management, facility location, warehousing, and global logistics. Prerequisite: SCM 701 or SCM 820. Enrollment restricted. LEC.

SCM 722. Information Systems for Supply Chain Management. 2 Hours.
This course examines information technology (IT) applications in the field of supply chain management, focusing on such issues as the breadth of IT tools and products available to support the planning, implementation and operation of supply chains, the process by which specific applications are selected by companies, and the implementation process. Among the other topics addressed in the course are the integration of IT systems between internal and external supply chain partners and the IT problems typically facing a company post acquisition. Prerequisite: SCM 701 or SCM 820. Enrollment restricted. LEC.

SCM 723. Lean Six Sigma. 2 Hours.
This course addresses the theory and practice of continuous process improvement through lean thinking and six sigma quality improvement. The course has the following principle objectives: to understand the process associated with continuous improvement in manufacturing and service organizations; to understand common tools that are useful in continuous improvement in manufacturing and service organizations; and to gain experience in the practice of continuous improvement. Topics covered include using the scientific method in continuous improvement; tools to understand and reduce variability like control charts, capability analysis, stratification analysis, Pareto analysis, etc; and tools to implement lean thinking like Kanban (pull systems), Takt time (process pacing to customer demand), one piece flow, Jodoka (error proofing), Heijunka (product leveling). Prerequisite: DSCI 701 or DSCI 810. Enrollment restricted. LEC.

SCM 820. Operations and Supply Chain Management. 3 Hours.
This introductory course covers a wide set of topics to develop both strategic and analytical skills in supply chain management. The course will provide a conceptual framework and a set of analytical tools to analyze, coordinate, and improve organizational processes. Objectives of the course include an introduction to the strategic and operating issues and decisions involved in managing the operational and supply chain processes within and across firms; an understanding of the concept of supply chain coordination by managing information and inventory; and to develop a basic understanding of purchasing, supplier relationship management, and outsourcing. Topics include process and cycle time analysis, lean/JIT production system, six sigma, inventory management, managing information flows in supply chains, and purchasing and supply management. This course is open only to students in the full-time MBA program. LEC.

SCM 895. Graduate Seminar in Supply Chain Management: ____. 0.5-5.5 Hours.
A variable-topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. LEC.

SCM 898. Independent Study for Master’s Students. 1-6 Hours.
Individual study of selected current problems in the field of supply chain management to be adapted to the special interests and objectives of
the students and conducted through extensive reading and research. Students must have at least a 3.0 grade point average and be in good academic standing in a graduate business program and must submit a written statement of the proposed project approved by a supervisory faculty member prior to enrollment. RSH.

Bachelor of Science in Business

Since its founding in 1924, the School of Business at the University of Kansas has been committed to shaping tomorrow's business leaders. The business school holds the gold standard of accreditation in business education, the Association to Advance Collegiate Schools of Business (http://www.aacsb.edu), for both the school and its accounting programs. With its focus on teaching and research, the KU School of Business bridges theory and practice to know where business is going. Learn more at business.ku.edu.

Undergraduate Admission to the School of Business

There are two paths for admission to the School of Business:

1. Freshman admission
2. Competitive admission (standard process)

Freshman Admission

Incoming freshmen are eligible for direct entry to the School of Business. Students must meet all three of the following requirements:

- Achieve 25 or higher ACT composite score (or 1150 or higher SAT in critical reading and math),
- Earn 3.25 or higher high school GPA, and
- Indicate a business major on the application to KU.

As an admitted Freshman, you will take BUS 110, BUS 120, BUS 210, and BUS 220. These courses are designed to connect students to life at KU and to opportunities within the School of Business. Students will learn academic success, personal success in the transition to college, opportunities for leadership development, problem solving, decision making, and business professionalism. Students will also be provided opportunities to create lasting connections with School of Business staff, advisors, and faculty. Experiential learning activities outside of the classroom will be integrated into the course.

Note: Freshman admission is not an option for students who change their major to business or pre-business after enrollment at KU. Students admitted as freshmen must complete the same degree requirements as students who go through the competitive admission process.

Competitive Admission

Students going through the competitive admission process should apply during the semester in which they will complete the minimum requirements for admission. Applicants satisfying these requirements are ranked by academic merit and their professional résumés, then considered for admission to the School of Business based on rank and available space.

Apply online (http://www.business.ku.edu/admission). The deadline is September 15 for spring admission or February 15 for fall admission.

Applicants who are not currently KU students must first apply to KU and submit official transcripts for all previous colleges and universities attended to the Office of Admissions (http://admissions.ku.edu) along with the application.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Prebusiness Preparation

Students planning to enter the School of Business as juniors should work toward completing pre-admission requirements during the first two years. Every student contemplating a major in the school should enroll in a mathematics course during the first semester at KU. It is highly recommended that students complete PSYC 104. Students must take the following courses before admission to the school:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 200</td>
<td>Fundamentals of Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 201</td>
<td>Managerial Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>IST 202</td>
<td>Introduction to Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>DSCI 202</td>
<td>Statistics</td>
<td>4</td>
</tr>
<tr>
<td>ECON 142</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 144</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
</tbody>
</table>

See the Office of Admissions (http://admissions.ku.edu) for more information.

Minimum Requirements

To satisfy minimum standards for admission to the School of Business, a student must

1. Complete 60 college credit hours including ACCT 200, ACCT 201, IST 202, DSCI 202, ECON 142, and ECON 144 (or their equivalents). It is strongly recommended that PSYC 104 and a Culture and Society (SC) course also be completed.

2. Achieve a minimum grade-point average of 2.5 in
   a. all course work,
   b. all professional course work (business and economics),
   c. all KU course work, and
   d. all KU professional course work.

Because admission is competitive, students who meet the minimum admission standards may not be admitted.

Guaranteed admission to the School of Business is possible when achievement of a grade-point average of 3.0 in all professional course work (business and economics) has been met at the time of application (in addition to the minimum requirements listed above).

Transfer Students

Transfer students may find it to their advantage to enter KU before the junior year, because some required courses may be available only at KU. Students attending Kansas community colleges should consult their advisors and a KU School of Business advisor about course equivalents and articulation agreements to ensure progress toward the degree. The Office of Admissions provides a guide (http://credittransfer.ku.edu) to how classes at your current or former school transfer to KU. You must submit official transcripts of course work completed to the Office of Admissions (http://admissions.ku.edu) before a final determination can be made.
At least 30 hours of junior/senior professional course work must be completed at KU (courses in residence) for the student to be eligible for graduation. As of fall 2008, only transfer grades of C or higher apply toward graduation from the KU School of Business.

64-Hour Rule

A maximum of 64 hours of community college course work can be applied toward a KU business degree. All subsequent credit hours earned at a community college or other 2-year institution add an equivalent number of hours to the 120-hour minimum required to graduate.

10-Year Rule

Transfer business credits are limited to a 10-year span in which they can be considered equivalent to a KU School of Business course and satisfy any corresponding requirement. This 10-year limit begins on the date of completion of the credit. After 10 years, transfer business credits are treated as elective business credit, and a course repeat or update may be necessary.

Tentative Evaluation of Credit

Before enrolling in a non-KU course, students must submit KU’s standard Request for Tentative Evaluation of Credit form to Student and Academic Services (http://business.ku.edu/advising-1) for approval.

Readmission

Students must submit an application for readmission to KU if their lapse in attendance is one semester or more. See the Office of Admissions for more information. Students may be readmitted to the School of Business if they left the school in good standing and it has been less than 5 years since they last attended.

5-Year Rule

If a student does not complete the business degree within 5 years of last attendance, the student must reapply through the competitive admission process. Students also must complete degree requirements in effect at the time of readmission to the business school regardless of the initial program.

Dismissal

Students who have been dismissed from the school must reapply through the competitive admission process.

Bachelor of Science in Business Degree Requirements

The School of Business offers a Bachelor of Science in Business (B.S.B.) with majors in accounting, business administration, finance, information systems, management, leadership, marketing, and supply chain management. Each major consists of the following components: general education courses, business foundation classes, international dimension requirement, major courses, and advanced business electives. Degree requirements are subject to change. It is the student’s responsibility to stay informed of requirements. To receive the B.S. in business degree, a student must complete the degree requirements in effect at the time he or she is admitted to the school.

General Education Requirements

In addition to the university’s Core requirements, all business majors are required to take:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 115</td>
<td>Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 121</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>PSYC 104</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Natural Science with lab</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Requirements for All Majors

International Dimension Requirement

The International Dimension Requirement (IDR) is required of all students graduating from the KU School of Business. To complete the IDR, students must choose one of the following options:

Option 1. Foreign Language

Complete through the fourth level (intermediate II) of courses in a modern foreign language or earn equivalent proficiency as determined by the appropriate language department. International students who have completed the English proficiency requirement through the Applied English Center (http://www.aec.ku.edu) may use this to fulfill Option 1.

Option 2. International Studies

6 credit hours of courses completed in one or a combination of the following categories:

1. (a) Study abroad credit hours from any study abroad program approved by KU.
2. (b) Contemporary regional/international studies/international business courses must be selected from a list available online (http://www.business.ku.edu/degrees) and may be double-counted to meet General Education requirements. Courses in this category may be doubled-counted toward the corresponding business major and/or concentration.

Core Courses and Capstone Course

In addition to the business foundation courses, all majors must complete the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE 301</td>
<td>Managerial Economics</td>
<td>3</td>
</tr>
<tr>
<td>BLAW 301</td>
<td>Legal Aspects of Business</td>
<td>3</td>
</tr>
<tr>
<td>DSCI 302</td>
<td>Quantitative Methods and Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>FIN 310</td>
<td>Finance</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 310</td>
<td>Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 310</td>
<td>Marketing</td>
<td>3</td>
</tr>
<tr>
<td>SCM 310</td>
<td>Management Science and Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 498</td>
<td>Business Policy and Strategy</td>
<td>3</td>
</tr>
</tbody>
</table>

Majors

Within the Bachelor of Science in Business degree, students may earn major(s) in accounting, business administration, finance, information systems, management and leadership, marketing, or supply chain
management. Each major has core and elective major courses which must be completed.

Program guides are available on the school’s website (http://www.business.ku.edu/academics).

**Accounting Major**
The KU accounting program develops students with superior management and accounting skills and a well-rounded education in the liberal arts. This program produces qualified graduates who are responsive to the needs of the profession in academia, government, industry, and public accounting. The primary objectives are to produce entrepreneurs with a fundamental understanding of accounting, provide an adequate foundation for graduate study in accounting, and provide an adequate foundation for securing positions in private accounting and industry. Those seeking positions in public accounting may need 150 hours of college credit (state requirements vary) and should consider the Master of Accounting program.

All accounting majors must complete 6 hours of advanced business electives. ABE courses are numbered 320 and higher and have prerequisites.

The accounting major must complete the following core courses with a grade-point average of at least 2.5:

<table>
<thead>
<tr>
<th>Accounting (25)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 303 Introduction to the Accounting Profession 1</td>
</tr>
<tr>
<td>ACCT 311 Information Systems for Accountants 3</td>
</tr>
<tr>
<td>ACCT 320 Intermediate Accounting I 3</td>
</tr>
<tr>
<td>ACCT 325 Managerial Accounting II 3</td>
</tr>
<tr>
<td>ACCT 330 Introduction to Taxation 3</td>
</tr>
<tr>
<td>ACCT 410 Intermediate Accounting II 3</td>
</tr>
<tr>
<td>ACCT 543 Introduction to Auditing 3</td>
</tr>
<tr>
<td>Advanced business electives 6</td>
</tr>
</tbody>
</table>

**Business Administration Major**
This major offers a broad interdisciplinary approach. Discovering solutions to complex problems in a globalized marketplace requires a multidisciplinary and integrated approach. The major prepares students for a variety of job markets and career paths. The program is flexible, allowing students to develop in-depth skills in such areas as accounting, business law, finance, information systems, management and leadership, marketing, and supply chain management.

This major changes the way students learn by shifting the emphasis from the traditional, discipline-based approach to a more comprehensive, integrative approach to business problems and opportunities. Students acquire the skills, attitudes, and flexibility needed to be competitive in a global marketplace. Students can expect to live in a dynamic world where a series of career changes over a lifetime is probable and where change and the unknown are inevitable. In such a world, proficiency in a number of related disciplines becomes a survival tool.

Creativity is enhanced by knowledge of related disciplines, and new insights are gained by applying the methods of one discipline to another. This program offers students the academic tools and interdisciplinary perspective that allow them to prosper in a business environment. Concentrations in entrepreneurship, human resource management, information systems, international business, and supply chain management are available.

The major requires 21 hours of advanced business credit from courses numbered 320 or above. The 21 hours must be distributed across at least three of the following prefixes, with a minimum of 3 hours in each of the three prefixes selected: ACCT, BE, BLAW, DSCI, ENTR, FIN, IBUS, IST, MGMT, MKTG, and SCM.

The student must satisfy all business graduation requirements for the B.S. and have a grade-point average of at least 2.2 in the 21 advanced business credit hours selected for the major.

**Finance Major**
Students with finance majors often pursue careers in commercial or investment banking or become internal financial managers for corporations or government entities. The program is concerned with such areas as

1. Investments and asset pricing—the behavior and determinants of security prices, including stocks, bonds, options, and futures;
2. Corporate finance—the financing and investment decisions of firms;
3. Corporate governance—how best to govern corporations while enhancing both corporate accountability and the creation of wealth;
4. The management and regulation of financial institutions; and
5. International finance.

Majors also take courses in accounting, economics, and the liberal arts. The finance major must complete the following core courses with a grade-point average of at least 2.5:

<table>
<thead>
<tr>
<th>Finance (21)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 321 Intermediate Accounting for Finance 3</td>
</tr>
<tr>
<td>or ACCT 410 Intermediate Accounting II 3</td>
</tr>
<tr>
<td>FIN 410 Investment Theory and Applications 3</td>
</tr>
<tr>
<td>FIN 415 Corporate Finance 3</td>
</tr>
<tr>
<td>FIN 430 Financial Markets and Intermediaries 3</td>
</tr>
<tr>
<td>FIN 400 or higher electives 9</td>
</tr>
</tbody>
</table>

**Information Systems Major**
The information systems major exposes students to a range of studies focused on the effective use of information technologies in settings typical of business, governmental, and not-for-profit organizations. Students gain a comprehensive understanding of specific technologies as well as an appreciation of challenges involved with the application of such technologies in dynamic environments. The major equips graduates with both technical and managerial skill sets needed to begin careers in major business and governmental entities or with major information systems consulting firms.

The information systems major must complete the following core courses with a grade-point average of at least 2.5:

<table>
<thead>
<tr>
<th>Information Systems (21)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IST 320 Fundamentals of Software Development 3</td>
</tr>
<tr>
<td>IST 325 Systems Analysis and Design 3</td>
</tr>
<tr>
<td>IST 326 Database Management Systems 3</td>
</tr>
<tr>
<td>IST 330 Fundamentals of Business Computer Networking 3</td>
</tr>
</tbody>
</table>
IST 410  IT Project Management  3
IST 400 or higher electives  6

Management and Leadership Major
The management and leadership major gives students the knowledge and skills to be successful leaders and managers of people and organizations. Students learn to design and modify organizational structure, strategy, and processes to enhance organization performance in a socially and ethically responsible manner. They learn how to influence and direct change through a better understanding of organization politics, vision, and values. Students learn to influence and lead others effectively through skill development in communication, motivation, and conflict resolution. They develop self-awareness and an appreciation for individual differences, leading to more successful work relations. They learn to lead and follow in team settings and to use team-based problem-solving skills. Students learn to create competent and committed teams and organizations through the use of effective systems for employee hiring, development, compensation, and performance management. They also learn about the challenges of competing globally, including how to adapt organizational structures, processes, and functions such as production, marketing, finance, and human resources so that they function more effectively cross-culturally. Student learning is enhanced through supporting activities such as clubs, consulting projects, case competitions, and study abroad opportunities.

The management and leadership major must complete the following core courses with a grade-point average of at least 2.5:

Management and Leadership (21)
MGMT 410  Human Resources Management  3
MGMT 437  Developing Management Skills  3
MGMT 455  The Role of the General Manager: Leadership and Management  3
IBUS 480  International Management  3
Select three of the following:
Courses at the 400 level or above with ENTR, MGMT, or IBUS as a prefix  9
BLAW 505  Legal Aspects of the Management Process  3

Marketing Major
The marketing major gives students the concepts and tools needed to succeed as marketing managers skilled in the creation, evaluation, and refinement of marketing programs that lead to valuable exchanges between channel partners, firms, and customers. Core concepts and tools are primarily provided through four required foundation courses: Marketing Management, Consumer Behavior, Marketing Research, and Marketing Strategy. The major offers numerous electives to reflect the breadth of the marketing function and to allow students to tailor their programs to individual preferences and career goals. Such opportunities as the marketing club, consulting projects, case competitions, and study abroad further enhance the learning experience.

The marketing major must complete the following core courses with a grade-point average of at least 2.5:

Marketing (21)
MKTG 411  Introduction to Consumer Behavior  3
MKTG 415  Marketing Research for Managers  3
MKTG 435  Marketing Strategy  3
MKTG 400 or higher electives  12

Supply Chain Management Major
Supply chain management professionals integrate the flow of materials, finances, and information from suppliers, manufacturers, wholesalers, distributors, and retailers to the final consumer and back again. The major gives students the basic skills to do this work. The demand for professionals in the field is rapidly growing as firms realize improved efficiency from good SCM practices. The field continues to evolve to become a proactive, strategic enterprise, often with global partners. Students typically have opportunities for internships and other experiential activities with businesses while they are in the program. The major offers a set of required core courses and electives.

The supply chain management major must complete the following core courses with a grade-point average of at least 2.5:

Supply Chain Management (21)
SCM 401  Introduction to Supply Chain Management  3
SCM 402  Procurement and Supplier Management  3
SCM 403  Logistics, Transportation and Warehouse Management  3
SCM 404  Management of Integrated Information System/ERP  3
SCM-related electives  9

Business Concentrations
Students may choose to complete a business concentration. Concentrations require a minimum of 12 hours and are available in entrepreneurship, information systems, international business, human resources and supply chain management. For specific concentration requirements, see the school’s website (http://www.business.ku.edu).

C.P.A. Certification
For more information on requirements to sit for the C.P.A. examination and to qualify for the certificate and permit to practice with reduced experience, visit the CPA Requirements page (http://business.ku.edu/degrees/accounting/macc/cpa). See also the Master of Accounting (p. 240) section of the online catalog.

School of Business Undergraduate Program

Freshman Year
KU Core Requirements
PSYC 104  General Psychology (Social Science)  3
Natural Science: one course and one lab science
Mathematics: through calculus I

Sophomore Year
ACCT 200  Fundamentals of Financial Accounting  4
ACCT 201  Managerial Accounting I  3
ACCT 303  Introduction to the Accounting Profession (Accounting Majors Only)  1
DSCI 202  Statistics  4
IST 202  Introduction to Information Systems  3
ECON 142 Principles of Microeconomics 3
ECON 144 Principles of Macroeconomics 3

Junior/Senior Year
BE 301 Managerial Economics 3
BLAW 301 Legal Aspects of Business 3
DSCI 302 Quantitative Methods and Data Analysis 3
FIN 310 Finance 3
MGMT 310 Organizational Behavior 3
MKTG 310 Marketing 3
SCM 310 Management Science and Operations Management 3

Accounting Major:
ACCT 320 Intermediate Accounting I 3
ACCT 325 Managerial Accounting II 3
ACCT 330 Introduction to Taxation 3
ACCT 410 Intermediate Accounting II 3
ACCT 543 Introduction to Auditing 3
ACCT 311 Information Systems for Accountants 3
and 6 hours of advanced business electives

Business Administration Major:
21 hours of advanced business courses numbered 320 or above distributed across three of the following prefixes with a minimum of 3 hours in each: ACCT, BLAW, DSCI, ENTR, FIN, IBUS, IST, MGMT, MKTG, SCM

Finance Major:
ACCT 321 Intermediate Accounting for Finance 3
or ACCT 410 Intermediate Accounting II 3
FIN 410 Investment Theory and Applications 3
FIN 415 Corporate Finance 3
FIN 430 Financial Markets and Intermediaries 3
and 9 hours numbered FIN 400 and above

Information Systems Major:
IST 320 Fundamentals of Software Development 3
IST 325 Systems Analysis and Design 3
IST 326 Database Management Systems 3
IST 410 IT Project Management 3
IST 330 Fundamentals of Business Computer Networking 3
and 6 hours numbered IST 400 and above

Management and Leadership Major:
MGMT 410 Human Resources Management 3
MGMT 437 Developing Management Skills 3
MGMT 455 The Role of the General Manager: Leadership and Management 3
IBUS 480 International Management 3
and 9 hours numbered 400 or higher with MGMT, ENTR, or IBUS as a prefix, or BLAW 505

Marketing Major:
MKTG 411 Introduction to Consumer Behavior 3
MKTG 415 Marketing Research for Managers 3
MKTG 435 Marketing Strategy 3
and 12 hours numbered MKTG 400 and above

Supply Chain Management Major:
SCM 401 Introduction to Supply Chain Management 3
SCM 402 Procurement and Supplier Management 3
SCM 403 Logistics, Transportation and Warehouse Management 3
SCM 404 Management of Integrated Information System/ERP 3
and 9 hours of SCM-related electives

Residence Requirement: 30 hours of professional course work (BUS and ECON) must be completed after admission to the School of Business
MGMT 498 Business Policy and Strategy 3

International Dimension Requirement: (see options under Requirements for All Majors)

This chart depicts the approximate order in which students complete the requirements for a B.S. in Business degree.

Graduation Requirements
Hours Required for Graduation
A minimum of 120 credit hours is required for graduation. Of the 120 hours, a student must earn at least 45 junior/senior hours and 30 residency hours (business and economics completed at KU after admission to the school). At least 50 percent of all professional course work must be completed at KU for the student to be eligible for graduation.

- The 120-hour minimum to graduate is increased by the following:
  - More than 4 hours in physical education courses (HSES 112 and below).
  - More than 4 hours of music organization courses.
  - Any repeated courses for which a student has already received credit.
  - All subsequent credits earned at a community college or other 2-year institution after a student has completed a total of 64 community college credit hours.

Grade-Point Average Required for Graduation
To be eligible to graduate from the School of Business with any major, a student must earn a grade-point average of 2.2 in

1. Total hours attempted from all schools (including Independent Study through KU Continuing Education),
2. All professional (business and economics) courses attempted from all schools,
3. Total hours attempted at KU, and
4. All professional hours attempted at KU.

Accounting, finance, information systems, management and leadership, marketing, and supply chain management majors also must earn minimum grade-point averages of 2.5 in their respective core courses.

Independent Study Through KU Continuing Education
After admission to the school, students may complete up to 30 hours of Independent Study through KU Continuing Education. Prior approval from the school is recommended.
Entrepreneurship Certificate

The Certificate in Entrepreneurship is a series of courses designed to help undergraduates and graduate students start, finance, plan, and launch their own business in their major or favorite subject. You will learn how to be your own boss, realize your dream job and acquire wealth by becoming an entrepreneur with the following courses:

**ENTR 301. Starting Your Own Business. 3 Hours. AE61.**
In this course the student examines the disciplines which comprise the critical success factors in entrepreneurship and develops a fundamental understanding of the basic skill set required to manage his/her own business. The course will emphasize the Entrepreneurial Process in which each of the following disciplines will be introduced so that the student understands meaning, interrelationship and the application of the subject matter. First the student will be introduced to entrepreneurship and the personal attributes which historically have produced successful entrepreneurs. Further, the student will learn how to evaluate business opportunities via Feasibility Analysis which encompasses industry and competitor analysis, developing an effective business model, building a new venture team, developing an effective marketing plan, assessing the new ventures financial strengths and preparing the proper ethical and legal foundation for the new business. Finally, on completion of the course the student will possess a beginning comprehension for getting financing for the new venture and preparing for the challenges of business growth. Prerequisite: Goal 1, Outcome 2 and Goal 2, Outcome 1. LEC.

**ENTR 302. Financing Your Own Business. 3 Hours.**
This course introduces the non-business student to the language of business, accounting, and its applications in the financial management of new and small business environments. Students will learn how to account for the various activities of the start-up and early stage new venture as well as the importance, utility and construction of financial statements. Further, students will acquire the ability to construct financial projections for a start-up firm and monitor the financial performance of the growing business with a focus on cash flow management. Finally, students will be introduced to various remedies in the event that performance does not meet expectations. Prerequisite: Goal 1, Outcome 2 and Goal 2, Outcome 1. LEC.

**ENTR 303. Marketing Your Own Business. 3 Hours.**
This course focuses on the marketing development of new business ideas for small businesses including creating an environment conducive to innovation, recognizing business opportunities, assessing the industry and its potential customer segments, barriers to entry and competitive set. In addition, students will acquire an understanding of the primary marketing tools available to the entrepreneur to drive customer awareness, initial and repeat purchase and the ability to fully integrate each of those tools into a cohesive, integrated marketing plan, all on an extremely limited budget as typifies start up businesses. Upon successful completion of the course, students will understand how to plan an entrepreneurial marketing program, implement it and evaluate its performance. This includes market analysis, segmentation, the marketing mix of product, price, promotion and distribution and marketing strategy, both long term and annually. Prerequisite: ENTR 301 and ENTR 302. LEC.

**ENTR 304. Launching Your Own Business. 3 Hours.**
This course provides the student with an opportunity to prepare a complete go-to-market business plan for a new venture which leverages the students' major area of study so that following graduation the student has the option of pursuing self employment in the launch of their own business. The students' expertise from their area of major study will be combined with the entrepreneurial skills acquired from the prior three courses in this Certificate sequence. Ideally, this course will originate from the students' school of origin, either selected from a roster of existing qualifying courses or independent study with a faculty member in the students' field of major study. In the event that the students' school of major study cannot provide the teaching resources for independent study, it will be provided by the School of Business, Center for Entrepreneurship. If the faculty at the students' school of origin wants to develop a specific course which completes the Certificate requirements, course preparation funding has been arranged via a grant from the Kauffman Foundation. Prerequisite: ENTR 303. LEC.

**ENTR 701. Starting Your Own Business. 3 Hours.**
In this course the student examines the disciplines which comprise the critical success factors in entrepreneurship and develops a fundamental understanding of the basic skill set required to manage his/her own business. The course will emphasize the Entrepreneurial Process in which each of the following disciplines will be introduced so that the student understands meaning, interrelationship and the application of the subject matter. First the student will be introduced to entrepreneurship and the personal attributes which historically have produced successful entrepreneurs. Further, the student will learn how to evaluate business opportunities via Feasibility Analysis which encompasses industry and competitor analysis, developing an effective business model, building a new venture team, developing an effective marketing plan, assessing the new venture's financial strengths and preparing the proper ethical and legal foundation for the new business. Finally, on completion of the course the student will possess a beginning comprehension for getting financing for the new venture and preparing for the challenges of business growth. Not open to students in the School of Business. LEC.

**ENTR 702. Financing Your Own Business. 3 Hours.**
This course introduces the non-business student to the language of business, accounting, and its applications in the financial management of new and small business environments. Students will learn how to account for the various activities of the start-up and early stage new venture as well as the importance, utility and construction of financial statements. Further, students will acquire the ability to construct financial projections for a start-up firm and monitor the financial performance of the growing business with a focus on cash flow management. Finally, students will be introduced to various remedies in the event that performance does not meet expectations. Not open to students in the School of Business. LEC.

**ENTR 703. Marketing Your Own Business. 3 Hours.**
This course focuses on the marketing development of new business ideas for small businesses including creating an environment conducive to innovation, recognizing business opportunities, assessing the industry and its potential customer segments, barriers to entry and competitive set. In addition, students will acquire an understanding of the primary marketing tools available to the entrepreneur to drive customer awareness, initial and repeat purchase and the ability to fully integrate each of those tools into a cohesive, integrated marketing plan, all on an extremely limited budget as typifies start up businesses. Upon successful completion of the course, students will understand how to plan an entrepreneurial marketing program, implement it and evaluate its performance. This includes market analysis, segmentation, the marketing mix of product, price, promotion and distribution and marketing strategy, both long term and annually. Not open to students in the School of Business. LEC.

**ENTR 704. Launching Your Own Business. 3 Hours.**
This course provides the student with an opportunity to prepare a complete go-to-market business plan for a new venture which leverages the students' major area of study so that following graduation the student has the option of pursuing self employment in the launch of their own business. The students' expertise from their area of major study will be combined with the entrepreneurial skills acquired from the prior three
courses in this Certificate sequence. Ideally, this course will originate from
the students’ school of origin, either selected from a roster of existing
qualifying courses or independent study with a faculty member in the
students’ field of major study. In the event that the students’ school of
major study cannot provide the teaching resources for independent study,
it will be provided by the School of Business, Center for Entrepreneurship.
If the faculty at the students’ school of origin wants to develop a specific
course which completes the Certificate requirements, course preparation
funding has been arranged via a grant from the Kauffman Foundation. Not
open to students in the School of Business. Prerequisite: ENTR 703. LEC.

University Honors Program

Prebusiness majors who meet admission requirements for the University
Honors Program (http://www.honors.ku.edu) are strongly encouraged
to participate in it. Its small, challenging classes provide an excellent
opportunity for business majors to develop a strong base in liberal
arts and sciences. Because its requirements fit well with the school’s
distribution requirements, the program fits easily into the normal 4-year
program.

Undergraduate Business Honors Program

The Business Honors Program allows an elite cadre of undergraduate
business school students to participate in a special set of enrichments.
Graduating with business honors requires that the students admitted to
the programs complete at least 12 hours of business honors classes.
They will also be expected to be deeply involved in the life of the school,
routinely assuming leadership positions and taking advantage of
experiential learning opportunities.

Bachelor of Business
Administration

Business Administration B.B.A.

The Bachelor of Business Administration (BBA) exposes students to
a broad range of topics such as business law, economics, finance,
management, marketing and international business. The accredited BBA
program curriculum provides a strong professional education within a
broad liberal arts context.

Program outcomes include strong verbal and written communication skills,
an aptitude for technology, data analysis proficiency, a global perspective
on business and the ability to maintain good professional relationships.
Flexible course schedules make it easy for full-time employees to earn
t heir degrees as part-time students.

Accredited

The KU School of Business is proud to be accredited by the Association
to Advance Collegiate Schools of Business (http://www.aacsb.edu).
AACSAB accreditation is the gold standard of quality in the world of
business education.

Requirements

Ideal candidates are individuals wanting to gain business theory, practical
knowledge and professional skills in preparation for careers as business
leaders. Those interested should have earned an associate’s degree or
equivalent credit hours and are looking to complete requirements for a
bachelor’s degree.

This program is funded by the Education and Research Triangle (http://
edwardscampus.drupal.ku.edu/johnson-county-education-research-
triangle) initiative.

B.B.A. Admission

Admission is competitive. Students should apply during the semester in
which they will complete the minimum requirements for admission and
after gaining admission to KU. The application is available on the Edwards
Campus website (http://www.business.ku.edu/edwards-campus-bba). Deadlines are December 1 for spring, May 1 for summer, and July 1 for
fall entry. Students who meet the minimum admission standards are not
guaranteed admission.

Prebusiness Preparation

Students planning to enter the School of Business as juniors should work
toward completing pre-admission requirements during the first two years.
Every student contemplating a major in the school should enroll in a
mathematics course during the first semester. It is highly recommended
that students complete PSYC 104. Students must take the following
courses before admission to the school:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 200</td>
<td>Fundamentals of Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 201</td>
<td>Managerial Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>IST 202</td>
<td>Introduction to Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>DSCI 202</td>
<td>Statistics (with prerequisite MATH 101)</td>
<td>4</td>
</tr>
<tr>
<td>ECON 142</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 144</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
</tbody>
</table>

See the Office of Admissions (http://admissions.ku.edu) for more
information.

Minimum Requirements

To satisfy minimum standards for admission to the School of Business, a
student must

1. Complete 60 college credit hours including ACCT 200, ACCT 201,
   IST 202, DSCI 202, ECON 142, and ECON 144 (or their equivalents).
   It is strongly recommended that PSYC 104 and a Culture and Society
   (SC) course also be completed.

2. Achieve a minimum grade-point average of 2.5 in
   a. all course work,
   b. all professional course work (business and economics),
   c. all KU course work, and
   d. all KU professional course work.

Because admission is competitive, students who meet the minimum
admission standards may not be admitted.

Guaranteed admission to the School of Business is possible when
achievement of a grade-point average of 3.0 in all professional course
work (business and economics) has been met at the time of application (in
addition to the minimum requirements listed above).

Transfer Students

Transfer students may find it to their advantage to enter KU before the
junior year, because some required courses may be available only at
KU. Students attending Kansas community colleges should consult their
advisors and a KU School of Business advisor about course equivalents.
and articulation agreements to ensure progress toward the degree. The Office of Admissions provides a guide (http://credittransfer.ku.edu) to how classes at your current or former school transfer to KU. You must submit official transcripts of course work completed to the Office of Admissions (http://admissions.ku.edu) before a final determination can be made.

At least 30 hours of junior/senior professional course work must be completed at KU (courses in residence) for the student to be eligible for graduation. As of fall 2008, only transfer grades of C or higher apply toward graduation from the KU School of Business.

64-Hour Rule
A maximum of 64 hours of community college course work can be applied toward a KU business degree. All subsequent credit hours earned at a community college or other 2-year institution add an equivalent number of hours to the 120-hour minimum required to graduate.

10-Year Rule
Transfer business credits are limited to a 10-year span in which they can be considered equivalent to a KU School of Business course and satisfy any corresponding requirement. This 10-year limit begins on the date of completion of the credit. After 10 years, transfer business credits are treated as elective business credit, and a course repeat or update may be necessary.

Tentative Evaluation of Credit
Before enrolling in a non-KU course, students must submit KU’s standard Request for Tentative Evaluation of Credit form to Student and Academic Services (http://business.ku.edu/advising-1) for approval.

Readmission
Students must submit an application for readmission to KU if their lapse in attendance is one semester or more. See the Office of Admissions (http://admissions.ku.edu) for more information. Students may be readmitted to the School of Business if they left the school in good standing and it has been less than 5 years since they last attended.

5-Year Rule
If a student does not complete the business degree within five years of last attendance, the student must reapply through the competitive admission process. Students also must complete degree requirements in effect at the time of readmission to the business school regardless of the initial program.

Dismissal
Students who have been dismissed from the school must reapply through the competitive admission process.

Bachelor of Business Administration Degree Requirements
KU Edwards Campus
This program for students who want to attain practical knowledge, business theory, and professional skills in preparation for careers as business leaders. It covers a broad range of topics including business law, economics, finance, management and leadership, marketing, and international business. Calculus is not required.

Offered exclusively at the KU Edwards Campus (http://edwardscampus.ku.edu), 12600 Quivira Rd., Overland Park, KS 66213, this program responds to the needs and goals of nontraditional part-time students. In addition to the 39 credit hours listed below, School of Business graduation requirements apply. Contact Chris Claussen (claussen@ku.edu), 913-897-8419, for information and advising.

B.B.A. Curriculum

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBA 301</td>
<td>Managerial Economics</td>
<td>3</td>
</tr>
<tr>
<td>BBA 302</td>
<td>Legal Aspects of Business</td>
<td>3</td>
</tr>
<tr>
<td>BBA 303</td>
<td>Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>BBA 304</td>
<td>Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BBA 305</td>
<td>Management Science and Operations</td>
<td>3</td>
</tr>
<tr>
<td>BBA 306</td>
<td>Finance</td>
<td>3</td>
</tr>
<tr>
<td>BBA 307</td>
<td>Introduction to International Business</td>
<td>3</td>
</tr>
<tr>
<td>BBA 308</td>
<td>Business Policy and Strategy</td>
<td>3</td>
</tr>
<tr>
<td>BBA electives:</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>BBA 401</td>
<td>Marketing Management and Strategy</td>
<td></td>
</tr>
<tr>
<td>BBA 402</td>
<td>Human Resources Management</td>
<td></td>
</tr>
<tr>
<td>BBA 403</td>
<td>Ethical Decision Making in Business</td>
<td></td>
</tr>
<tr>
<td>BBA 404</td>
<td>Entrepreneurship</td>
<td></td>
</tr>
<tr>
<td>BBA 405</td>
<td>Introduction to Supply Chain Management</td>
<td></td>
</tr>
<tr>
<td>BBA 406</td>
<td>Advanced Finance - Principle and Applications</td>
<td></td>
</tr>
<tr>
<td>BBA 407</td>
<td>Information Systems Technology Elective: _____</td>
<td></td>
</tr>
<tr>
<td>BBA 408</td>
<td>Accounting Elective: _____</td>
<td></td>
</tr>
<tr>
<td>BBA 410</td>
<td>Project Management</td>
<td></td>
</tr>
</tbody>
</table>

Please visit the B.B.A. website (http://edwardscampus.ku.edu/overview-bachelors-business-administration-bba) for further information.

Graduation Requirements

Grade-Point Average Required for Graduation
To be eligible to graduate from the School of Business, a student must earn a grade-point average of 2.2 in

1. Total hours attempted from all schools (including Independent Study through KU Continuing Education),
2. All professional (business and economics) courses attempted from all schools,
3. Total hours attempted at KU, and
4. All professional hours attempted at KU.

B.B.A. candidates must achieve a 2.5 grade-point average in the 21 credit hours that include BBA 307, BBA 308, and the 5 BBA electives.

Tentative Evaluation of Credit
Before enrolling in a non-KU course, students must submit KU’s standard Request for Tentative Evaluation of Credit form to Student and Academic Services (http://business.ku.edu/advising-1) for approval.
Independent Study Through KU Continuing Education

After admission to the school, students may complete up to 30 hours of Independent Study (http://www.independentstudy.ku.edu) through KU Continuing Education. Prior approval from the school is recommended.

Minor in Business

Introduction

In the School of Business, students acquire a rigorous education that prepares them for positions in a dynamic and competitive global environment.

The University of Kansas School of Business is accredited by the Association to Advance Collegiate Schools of Business International (http://www.aacsb.edu).

Requirements for the Minor in Business

The business minor program complements nonbusiness majors by providing a general overview of accounting, information systems, finance, management and leadership, marketing, and supply chain.

The minor requires completion of 18 hours (6 courses) with a cumulative grade-point average of 2.0 or higher in these courses. All business minor courses must be taken for a grade; credit/no credit is not permitted.

Students must declare the business minor by completing the declaration form (http://business.ku.edu/degrees/business/minor/declare) and are strongly encouraged to do so as early as possible.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 205</td>
<td>Survey of Accounting</td>
<td>3</td>
</tr>
<tr>
<td>or ACCT 200</td>
<td>Fundamentals of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>FIN 305</td>
<td>Survey of Finance</td>
<td>3</td>
</tr>
<tr>
<td>or FIN 310</td>
<td>Finance</td>
<td>3</td>
</tr>
<tr>
<td>or FIN 311</td>
<td>Finance, Honors</td>
<td>3</td>
</tr>
<tr>
<td>IST 205</td>
<td>Survey of Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>or IST 202</td>
<td>Introduction to Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 305</td>
<td>Survey of Management and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>or MGMT 310</td>
<td>Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>or MGMT 311</td>
<td>Organizational Behavior, Honors</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 305</td>
<td>Survey of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>or MKTG 310</td>
<td>Marketing</td>
<td>3</td>
</tr>
<tr>
<td>or MKTG 311</td>
<td>Marketing, Honors</td>
<td>3</td>
</tr>
<tr>
<td>SCM 305</td>
<td>Survey of Decision Making in Business</td>
<td>3</td>
</tr>
<tr>
<td>or SCM 310</td>
<td>Management Science and Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>or SCM 311</td>
<td>Management Science and Operations Management, Honors</td>
<td>3</td>
</tr>
</tbody>
</table>

The 12-hour residency requirement requires students to take a minimum of 12 hours of business minor credits from the University of Kansas. Approved KU study abroad opportunities may count towards the residency requirement.

Master of Business Administration

When you earn your MBA from The University of Kansas, you’ll receive a well-rounded education that not only supports your career goals, but also incorporates both the theoretical background and practical experience needed to succeed in today’s ever-changing global economy. Two MBA programs are offered at KU: 1) the Full-Time MBA based in Lawrence for those seeking a career change, and 2) the Working Professional MBA based at the Edwards Campus in Overland Park for those seeking career enhancement.

The Full-Time Program includes 50 hours of coursework and can be completed in as little as 16 months (3 semesters, plus a summer of career exploration). The program is cohort based and special emphasis is placed on social entrepreneurship through our Kansas Impact Project. Specialized tracks are available in Finance and Marketing Supply Chain Management. An optional 4th semester is available for those who wish to specialize and enhance their credentials before entering the job market. New students are admitted each fall semester.

The Working Professional program includes 42 hours of coursework and can be completed in about two years. Classes are offered weekday evenings at the Edwards Campus. Students have the opportunity to specialize with an Advanced Core in Management, Marketing or Finance. Further elective content can be used towards Graduate Certificates in Human Resource Management, International Business, Investments, Marketing, Strategic Management, Supply Chain Management, and Valuation.

The KU MBA program is designed for business leaders, from the recent college graduate to the seasoned executive. If you are looking to advance, re-brand, change industries, or start your own business, a KU MBA will open the doors to new possibilities.

Baccalaureate Preparation

The Master of Business Administration program is open to graduates from areas other than business administration. It also provides an opportunity for continued study in management for graduates from a school or department of business. The only prerequisite coursework is college algebra or its equivalent.

Admission to MBA Programs

MBA programs are open to those who have earned baccalaureate degrees from accredited colleges or universities and whose undergraduate academic records, scores on the required standardized examination, and prior work experience indicate that they have the capability to complete the program. Admission to all programs in business is reviewed by the MBA Admissions Committee. Those who have not completed a baccalaureate degree are not eligible for enrollment in MBA courses.

Applicants for MBA graduate programs must take the Graduate Management Admission Test (http://www.mba.com/us/the-gmat-exam/register.aspx) administered by Pearson VUE. The GMAT is administered in most foreign countries and by appointment at designated testing centers throughout the United States. The test typically is taken during the academic year before the term for which admission is sought.

Students whose native language is not English or who have not completed a degree from a college or university in the United States,
Great Britain, Canada, or Australia must also have a score of at least 600 for the MBA program on the Test of English as a Foreign Language. A minimum score of 57 on each of the three sections of the TOEFL is required. For students taking the computerized version of the TOEFL, an overall score of 250 is required, with a minimum score of 23 on each of the 3 sections of the test.

All applications for admission to the MBA programs must include:

1. Graduate application (http://graduate.ku.edu/ku-graduate-application);
2. 3 essays;
3. An official transcript from each college or university that conferred a degree;
4. 2 letters of recommendation from faculty members and/or employers;
5. Scores on the GMAT and scores on the TOEFL if required;
6. A $65 nonrefundable application fee ($75 for international applicants); and
7. A current résumé.

Completed applications are reviewed by the MBA committee and action is taken on them on a rolling basis. Each applicant is notified by email of the action taken on his or her application.

Admission to any graduate program in business is subject to and in accordance with all rules and regulations of the University of Kansas. See the Graduate Studies Admission (http://policy.ku.edu/graduate-studies/admission-to-graduate-study?num1_1=) policy in the KU online Policy Library for more information.

Submit your graduate application online (http://graduate.ku.edu/ku-graduate-application). Send original transcripts of all completed college and university coursework and all other requested application materials to the School of Business MBA Office:

The University of Kansas
School of Business
MBA Admissions Coordinator
Summerfield Hall
1300 Sunnyside Ave., Room 124
Lawrence, KS 66045-7543

MBA Admission

The MBA Admissions Committee reviews all applications. The required and preferred criteria are:

1. Baccalaureate degree from an accredited college or university or the equivalent. Specific coursework in business administration is not required.
2. Proficiency in mathematics at the college algebra level
3. 2 years of work experience preferred.
4. A $65 nonrefundable application fee.
5. Selection is based on high promise of success in graduate study in business administration, as indicated by a combination of
   a. Prior academic performance;
   b. Scores on the Graduate Management Admission Test (GMAT);
   c. Scores on the Test of English as a Foreign Language, if appropriate;
   d. Prior work experience;
   e. 2 letters of recommendation from employers or professors;
   f. A current résumé
   g. Evidence of leadership

Submit your graduate application online (http://graduate.ku.edu/ku-graduate-application). Send official transcripts of all completed college and university coursework and all other requested application materials to the School of Business MBA Office.

Combined Degrees

Dual MBA and JD

This program combines in 4 years of study the 3-year Juris Doctor (http://business.ku.edu/mba-juris-doctor-mba-jd) program offered by the School of Law (http://law.ku.edu) and the Full-Time MBA program offered by the School of Business. It entails 40 hours of MBA coursework and 76 hours of law coursework. It is for students who plan to engage in corporate law practice or enter business using law training as background. It offers training in the convergent fields of business management and law.

Students must meet the admission requirements of each school and should be admitted by both the School of Law and the School of Business before entering the second year. The Law School Admission Test and the Graduate Management Admission Test are required. A student who decides to enter the program after beginning the first year in the School of Law or in the MBA program should discuss the plan with the associate dean or program director of each school as early as possible. No student may be admitted to the joint program after completing more than two full semesters in either the JD or the MBA curriculum. Diplomas are awarded concurrently by each school at the conclusion of the joint degree program requirements.

The joint MBA/JD is open to those who have earned baccalaureate degrees from accredited colleges or universities and whose undergraduate academic records indicate that they have the capability to complete both programs. All students in the combined program must complete a minimum of 40 credit hours of graduate work in business.

The School of Business follows general Graduate Studies regulations requiring a 3.0 cumulative grade-point average for all coursework counted toward any master’s degree. The School of Law requires a minimum cumulative grade-point average of 2.0 (C) in all law school work. Grades received in any law courses credited toward fulfillment of the MBA degree requirements are incorporated into the MBA grade-point average, which ultimately must be 3.0 for the awarding of the MBA degree.

Dual MBA and M.Arch. Degree Program

The Master of Business Administration/Master of Architecture dual degree program is designed particularly for students intending to pursue leadership opportunities in architecture, development, or construction. Students completing the dual degree program earn an MBA from the KU School of Business (http://business.ku.edu/degrees/businessadmin/MBA/full/overview) and an M.Arch. from the KU School of Architecture, Design and Planning (http://sapid.ku.edu).

Students complete 106 credit hours in the Master of Architecture (http://business.ku.edu/mba-architecture-mba-march) program and 34 credit hours in the School of Business. Prospective dual degree students must already be students in the Master of Architecture program and must apply and be accepted by the School of Business. New students must complete the architecture curriculum before starting the MBA curriculum and must declare their intention before completing the first year of the architecture
curriculum. Typically, the MBA is completed during the final year of study. Degrees are granted concurrently.

**Dual MBA and MD**

This dual degree offered in partnership with the KU Medical Center allows MD students an opportunity to earn an MBA in one year, as part of the full-time program.

**Dual MBA and Pharm.D.**

This dual degree program allows students to earn an MBA from the School of Business (http://www.business.ku.edu) and a Doctor of Pharmacy (http://business.ku.edu/mba-doctor-pharmacy-mba-pharmd) from the School of Pharmacy (http://pharmacy.ku.edu) by extending their professional graduate study. The MBA/Pharm.D. program is combined with the Working Professional Program at the Edwards Campus. Students take 32 hours to complete the MBA portion of this dual degree. Students gain competence and expertise in the complementary fields of business management and pharmacy. It is particularly appropriate for those intending to manage a retail or health-system pharmacy or assume a leadership role in the pharmaceutical industry or in managed health care.

Prospective students must submit an application and be accepted to the School of Pharmacy first. Pharmacy students are recommended to the MBA program by the Associate Dean of Pharmacy. Students must meet the prerequisites of and be accepted by both schools. Degrees are granted concurrently.

**MBA with a Graduate Certificate in Petroleum Management**

The MBA program with a graduate certificate in Petroleum Management (http://business.ku.edu/mba-petroleum-management-mba-pm) from the School of Engineering (http://www. engr.ku.edu) is offered full time on the Lawrence campus. This is a specially designed course of study. It meets the requirements of active-duty U.S. Naval Supply Corps officers who usually are assigned to billets requiring this training upon completion of study at KU. Other students interested in the intersection of the management of fuels and business are also encouraged to apply to this program. Students typically take a minimum of 43 hours of MBA coursework and 15 hours of Engineering coursework during this two-year program.

**Master of Business Administration**

The Master of Business Administration degree program meets the educational needs of persons seeking positions with managerial responsibilities in both the public and the private sectors. KU’s program emphasizes broad concepts of business administration but provides options for graduate certificates in specific areas of business management.

KU offers two MBA programs: one for full-time students, who take their courses on the Lawrence campus, and one for working professional students, who take courses in the evenings at the KU Edwards Campus (http://edwardscampus.ku.edu) in Overland Park. The two programs are tailored to meet the different needs of students. Full-time students typically are committed to a career change. Working professional students generally seek to enhance their career paths while remaining fully employed.

**Full-Time MBA Degree Program**

The full-time MBA program features an emphasis on cohort learning. The community building begins each August with orientation and is integrated throughout the program. The Full-Time MBA program in Lawrence requires 50 credit hours over 16 months. An optional fourth semester is offered. Students are admitted to the program only once a year in the fall semester. Requirements are designed for a person holding a baccalaureate degree in any field, with no specific course requirements in business and related areas. Transfer credit is not accepted to this program. Due to the accelerated nature of this program, students who receive a failing grade in a course or have less than 3.0 after the first semester may be dismissed upon recommendation of the MBA team.

The 50 hours in the MBA program consist of 31 credit hours in ten core classes, 7 credit hours of application classes, and 12 credit hours of specialized track classes. Prior to the beginning of the second semester, students select a track of either Finance or Marketing/Supply Chain Management.

**MBA Degree Requirements**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Hours</th>
<th>Hours</th>
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<td>FIN 820</td>
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<td>MGMT 810</td>
<td>SCM 820</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>ACCT 810</td>
<td>IBUS 820</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>MKTG 810</td>
<td>MGMT 820</td>
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<td></td>
<td>BE 810</td>
<td>Application: 1.5</td>
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<td>Application:</td>
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<tr>
<td></td>
<td>BUS 810</td>
<td>BUS 810</td>
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<td>BUS 801</td>
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<td>16.5</td>
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<td>Year 2</td>
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<td>Hours</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Core: 3</td>
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<td></td>
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<tr>
<td></td>
<td>MGMT 830</td>
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<td>MGMT 831 or ENTR 830</td>
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<tr>
<td></td>
<td>MSCM 832 or FIN 831</td>
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<td>Total Hours:</td>
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</table>
Working Professional MBA Degree Program

KU Edwards Campus

The Working Professional MBA program in Kansas City is located at 12600 Quivira Rd., Overland Park. The Working Professional MBA program at the KU Edwards Campus requires a total of 42 credit hours. All classes in the Working Professional program are 2 hours. The credits are allocated as follows: 24 hours of 12 core classes, 8 hours of advanced core classes, and one completed certificate program or other electives to total 42 credit hours. Core and Advanced Core Classes cannot be waived or substituted. Up to 6 hours may be transferred in as elective content if pre-approved by the MBA team.

MBA Degree Requirements

Required Core Classes (24)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ACCT 701</td>
<td>Financial Accounting</td>
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</tr>
<tr>
<td>DSCI 701</td>
<td>Statistical Decision Making</td>
<td>2</td>
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<tr>
<td>MGMT 701</td>
<td>Organizational Behavior</td>
<td>2</td>
</tr>
<tr>
<td>FIN 701</td>
<td>Financial Management</td>
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<tr>
<td>BLAW 701</td>
<td>Introduction to the Legal Environment of Business</td>
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</tr>
<tr>
<td>IST 701</td>
<td>Managerial Information Systems</td>
<td>2</td>
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<tr>
<td>MKTG 701</td>
<td>Marketing Management</td>
<td>2</td>
</tr>
<tr>
<td>BE 701</td>
<td>Business Economics</td>
<td>2</td>
</tr>
<tr>
<td>SCM 701</td>
<td>Introduction to Supply Chain Management</td>
<td>2</td>
</tr>
<tr>
<td>MGMT 705</td>
<td>Ethical Decision Making in Business</td>
<td>2</td>
</tr>
<tr>
<td>IBUS 701</td>
<td>International Business</td>
<td>2</td>
</tr>
<tr>
<td>MGMT 704</td>
<td>Strategic Management</td>
<td>2</td>
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</tbody>
</table>

Required Advanced Core Classes (8)

Each student must select one of the following three areas:

Finance Advanced Core:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>FIN 710</td>
<td>Investments I</td>
<td>2</td>
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<tr>
<td>FIN 711</td>
<td>Investments II</td>
<td>2</td>
</tr>
<tr>
<td>FIN 712</td>
<td>Business Investment</td>
<td>2</td>
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<tr>
<td>FIN 713</td>
<td>Business Financing</td>
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</table>

Management Advanced Core:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 710</td>
<td>Leadership Philosophy and Practice</td>
<td></td>
</tr>
<tr>
<td>MGMT 711</td>
<td>Human Resources Management</td>
<td></td>
</tr>
<tr>
<td>MGMT 712</td>
<td>Economic, Environment, and Social Sustainability in Business</td>
<td></td>
</tr>
<tr>
<td>MGMT 713</td>
<td>Managing People: Applications and Skills</td>
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Marketing Advanced Core:

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>MKTG 714</td>
<td>Discovering &amp; Evaluating New Product Opportunities</td>
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<tr>
<td>MKTG 715</td>
<td>Consumer Behavior</td>
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<tr>
<td>MKTG 716</td>
<td>Global Marketing</td>
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<tr>
<td>MKTG 717</td>
<td>Integrated Marketing Communications (Management Advanced Core)</td>
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Business Analytics Advanced Core

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSCI 712</td>
<td>Advanced Statistics I</td>
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</tr>
<tr>
<td>DSCI 713</td>
<td>Advanced Statistics II</td>
<td></td>
</tr>
<tr>
<td>IST 713</td>
<td>Data Management</td>
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</tr>
<tr>
<td>DSCI 714</td>
<td>Data Visualization</td>
<td></td>
</tr>
</tbody>
</table>

Accelerated Working Professional MBA Degree Program

The Accelerated Working Professional MBA degree requires a total of 32 credit hours. Divided into core courses, advanced core courses, and electives, the curriculum is designed to provide a foundation for successful management careers. Only those with a business undergraduate degree from an AACSB accredited institution within the last 5 years are eligible for enrollment.

Core Courses (8)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>SCM 701</td>
<td>Introduction to Supply Chain Management</td>
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</tr>
<tr>
<td>MGMT 705</td>
<td>Ethical Decision Making in Business</td>
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</tr>
<tr>
<td>IBUS 701</td>
<td>International Business</td>
<td></td>
</tr>
<tr>
<td>MGMT 704</td>
<td>Strategic Management (Marketing Advanced Core)</td>
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</table>

Advanced Core Courses (8)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 714</td>
<td>Discovering &amp; Evaluating New Product Opportunities</td>
<td></td>
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<tr>
<td>MGMT 715</td>
<td>Consumer Behavior</td>
<td></td>
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<tr>
<td>MGMT 716</td>
<td>Global Marketing</td>
<td></td>
</tr>
<tr>
<td>MGMT 717</td>
<td>Integrated Marketing Communications (Management Advanced Core)</td>
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</tbody>
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Management Advanced Core

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 710</td>
<td>Leadership Philosophy and Practice</td>
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<td>Human Resources Management</td>
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<td>MGMT 713</td>
<td>Managing People: Applications and Skills</td>
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</table>

Finance Advanced Core

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 710</td>
<td>Investments I</td>
<td></td>
</tr>
<tr>
<td>FIN 711</td>
<td>Investments II</td>
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</tr>
<tr>
<td>FIN 712</td>
<td>Business Investment</td>
<td></td>
</tr>
<tr>
<td>FIN 713</td>
<td>Business Financing</td>
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</tbody>
</table>

Business Analytics Advanced Core

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSCI 712</td>
<td>Advanced Statistics I</td>
<td></td>
</tr>
<tr>
<td>DSCI 713</td>
<td>Advanced Statistics II</td>
<td></td>
</tr>
<tr>
<td>IST 713</td>
<td>Data Management</td>
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</tr>
<tr>
<td>DSCI 714</td>
<td>Data Visualization</td>
<td></td>
</tr>
</tbody>
</table>

Certificate Programs

Certificates in business at the graduate level offer an opportunity to pursue a specific skill set in an in-depth and focused manner.

MBA Certificates are designed to work in tandem with the Working Professional MBA program, but may also be taken as a “stand-alone.” Some certificates require a previous MBA or specific course prerequisites. Others may be taken with only a bachelor’s degree. Prerequisites for each certificate program vary and must be taken in addition to the concentration courses.

Stand-alone students must maintain a 3.0 and pass each course each semester to remain in good standing. Students who drop below 3.0 after the first semester may be dismissed upon recommendation of the MBA team.
Current students in the MBA program are encouraged, but not required, to complete a certificate. Certificates provide official recognition on their transcript of an area of study. All of these certificates require 10 credit hours for completion.

Students must apply to certificates separately according to certificate admission guidelines (http://business.ku.edu/working-professional-mba-certificates). The following certificates are offered:

**Human Resources Management**

- The increase in the importance of intellectual and human capital for business success has elevated the value of effective people management. The goal of this certificate is to provide depth and breadth of knowledge in policies and practices in the core areas of HRM: Staffing, performance management, compensation, rewards and training and development. The certificate will also build competence in HRM in the global arena.

The completion of this business certificate program affords students a record of an academic accomplishment in the Human Resources Management area. This certificate is open to current MBAs, MBA alumni, and others not currently pursuing an MBA. An accredited bachelor’s degree is necessary for admission.

**Prerequisite courses for the HRM concentration:** MGMT 711 Human Resources Management or MGMT 810 Managing People or equivalent MBA level HR course.

**Required Courses**

- MGMT 732 - Recruiting and Selecting Effective Employees
- MGMT 734 - Compensation and Rewards
- MGMT 738 - Developing People and Careers
- MGMT 740 - Appraising and Managing Employee Performance
- MGMT 741 - International Human Resources Management

**Faculty Coordinator**

James Guthrie

jguthrie@ku.edu

**Admission Deadline**

One month prior to the semester start: June 15th for August or December 1st for January start.

**Application Requirements**

- Online Application Data Form (http://www.graduate.ku.edu/apply)
- $30 application fee, payable online
- Official Transcript (if current KU MBA student, an Advising Report from “KYOU” may be uploaded)
- Current resume (for non-KU MBAs only)
- Letter from your Advisor acknowledging your participation in the certificate program (for current or former KU MBA students, a permission letter will be provided for you)

**International Business Management**

Managing operations in a global environment differs from that of a single country perspective. Global businesses must simultaneously cope with management issues in multiple markets and multiple constituencies. Students engaged in the International Business certificate will learn to address differing cultural values in human resources, marketing and other areas. Students will also be able to participate in a short-term study abroad class.

The completion of a business certificate program in International Business affords students a record of an academic accomplishment in the International Business Management area. This certificate is open to current MBAs, MBA alumni, and others not currently pursuing an MBA. An accredited bachelor's degree is necessary for admission.

**Prerequisites for the International Business Certificate** include: IBUS 701 International Business, IBUS 820 International Business, MGMT 704 Strategic Management or equivalent MBA level course. Two courses in this certificate are offered as electives in other certificates, MGMT 741 International Human Resources Management and FIN 735 International Finance. MKTG 716 is offered as part of the Advanced Core in Marketing. These courses have separate pre-requisites that must be followed.

**Required Courses**

- IBUS 730 - International Business Strategy
- IBUS 731 - Comparative and Cross-Cultural Management

**Choose three of the following courses:**

- IBUS 720 - Business in China
- IBUS 721 - Business in Latin America
- IBUS 740 - Business Practices in China (Involves study abroad and requires IBUS 720 as a prerequisite)
- IBUS 741 - Business Practices in Latin America (Involves study abroad and requires IBUS 721 as a prerequisite)
- IBUS 895 - Graduate Seminar in International Business: (Topic)
- FIN 735 - International Finance
- MGMT 741 - International Human Resources Management
- MKTG 716 - Global Marketing

**Faculty Coordinator**

Dennis Karney

dkarney@ku.edu

**Admission Deadline**

One month prior to the semester start: June 15th for August or December 1st for January start.

**Application Requirements**

- Online Application Data Form (http://www.graduate.ku.edu/apply)
- $30 application fee, payable online
- Official Transcript (if current student, an Advising Report from “KYOU” may be uploaded)
- Current resume (for non-KU MBAs only)
• Current KU Students: A letter from your Advisor acknowledging your participation in the certificate program (for current MBA students, a permission letter will be provided for you)

Marketing

• Companies rely on customers as the foundation of their business. In this certificate students will learn how to discover what customers want, how to evaluate new opportunities, and effective means of reaching new customers. Marketing research tools provide students an opportunity to learn the latest research and how to evaluate the effectiveness of marketing campaigns.

The completion of a business certificate program affords students a record of an academic accomplishment in the Marketing area. This certificate is open to current MBAs, MBA alumni, and others not currently pursuing an MBA. A bachelors degree is necessary for admission.

Required Courses

MKTG 714  – Discovering and Evaluating New Product Opportunities
MKTG 721 - Advanced Topics in Managing Products and Brands
MKTG 722 - Marketing Strategy
MKTG 723 - Marketing Research
MKTG 724 - Pricing of Products and Services

Faculty Coordinator
Sanjay Mishra
smishra@ku.edu

Admission Deadline
One month prior to the semester start: June 15th for August or December 1st for January start.

Application Requirements

• Online Application Data Form (http://www.graduate.ku.edu/apply)
• $30 application fee, payable online
• Official Transcript (if current student, an Advising Report from “KYOU” may be uploaded)
• Current resume (for non-KU MBAs only)
• Current KU Students: A letter from your Advisor acknowledging your participation in the certificate program (for current MBA students, a permission letter will be provided for you)

Strategic Management

• Understanding of strategic management enables students to be successful in top management positions in organizations or in running their own businesses. Students learn critical skills in understanding industries and global competition, developing sustainable competitive advantages, recognizing business opportunities and understanding how technology affects competition. Students completing the certificate will have strong strategic thinking skills and will be able to develop strategic plans that will make their organizations more successful and thus advancing their careers.

The completion of a business certificate program affords students a record of an academic accomplishment in the Strategic Management area. This certificate is open to current MBAs, MBA alumni, and others not currently pursuing an MBA. A bachelors degree is necessary for admission.

Required Courses:

IBUS 730 - International Business Strategy
MGMT 722 - Corporate Strategy
MGMT 725 - Strategic Management of Technological Innovation
MGMT 727 - Strategy Implementation
MGMT 728 - Managing Strategic Direction and Change

Faculty Coordinator
Vince Barker
vbarker@ku.edu

Admission Deadline
One month prior to the semester start: June 15th for August or December 1st for January start.

Application Requirements

• Online Application Data Form (http://www.graduate.ku.edu/apply)
• $30 application fee, payable online
• Official Transcript (if current student, an Advising Report from “KYOU” may be uploaded)
• Current resume (for non-KU MBAs only)
• Current KU Students: A letter from your Advisor acknowledging your participation in the certificate program (for current MBA students, a permission letter will be provided for you)

Supply Chain Management

• Supply Chain strategies are the critical to efficient organizations. Effective market coverage and availability of products at the right locations are key components of business success. A certificate in supply chain management provides a student with a broad understanding of the issues and key technical tools in logistics, scheduling and multi-national topics to manage a supply chain.

The completion of a business certificate program affords students a record of an academic accomplishment in the Supply Chain Management area. This certificate is open to current MBAs, MBA alumni, and others not currently pursuing an MBA. A bachelors degree is necessary for admission.

Required Courses

DSCI 720 - Operations Management
SCM 720 - Procurement and Supplier Management
SCM 721 - Logistics and Distribution Management
SCM 722 - Information Systems for Supply Chain Management
Faculty Coordinator
Steve Hillmer
hillmer@ku.edu

Admission Deadline
One month prior to the semester start: June 15th for August or December 1st for January start.

Application Requirements
- Online Application Data Form (http://www.graduate.ku.edu/apply)
- $30 application fee, payable online
- Official Transcript (if current student, an Advising Report from “KYOU” may be uploaded)
- Current resume (for non-KU MBAs only)
- Current KU Students: A letter from your Advisor acknowledging your participation in the certificate program (for current MBA students, a permission letter will be provided for you)

Master of Accounting

Overview
Earning a Master of Accounting (MAcc) degree not only expands a student’s education and job options, it amplifies earning potential and career advancement. On average, over 90 percent of graduates secure a job by graduation. From coast to coast, in every major metropolitan area of the country, even the world, KU MAcc graduates find success.

For students who have never considered accounting, a MAcc can be an excellent gateway into a career they’re passionate about through a route they never thought to explore. The MAcc program welcomes students from many different backgrounds who are looking to enhance their professional options.

The KU MAcc program offers a challenging curriculum, acclaimed faculty and opportunities for experiential learning that provide a comprehensive graduate program. The University of Kansas School of Business is accredited by the Association for the Advancement of Collegiate Schools of Business International (AACSB). Not only is the School of Business as a whole AACSB-accredited, but the accounting program also holds the distinction.

Less than 5 percent of the 15,000 business programs worldwide earn an AACSB accreditation, and even fewer programs are dually accredited. Attending an AACSB-accredited program ensures students receive relevant coursework taught by highly qualified faculty who are working on the most current issues in the profession.

Two Master of Accounting programs are offered at KU: 1) the Full-Time program in Lawrence and 2) the Working Professional program based at the Edwards Campus in Overland Park.

Baccalaureate Preparation
The Full-Time Master of Accounting program offers a 1-year degree for students with baccalaureate degrees in accounting equivalent to that required for accreditation by the AACSB. Deficiencies in the undergraduate program result in additional hours being required for the degree.

The Working Professional Master of Accounting program length varies based upon the pace at which students complete classes. Most students with baccalaureate degrees in accounting equivalent to that required for accreditation by the AACSB can complete the program in 5 semesters. Deficiencies in the undergraduate program result in additional hours being required for the degree.

Admission to the Master of Accounting Programs

Full-Time Program
The Full-Time MAcc program is open to graduates who have earned baccalaureate degrees from accredited colleges or universities and whose undergraduate academic records, scores on required standardized examinations, and/or prior work experience indicate that they have the capability to complete the program. Admission to the program is limited on the basis of space, facilities, faculty, and other resources.

Applicants for the program may be required to take the Graduate Management Admission Test (http://www.mba.com/mba) administered by Pearson VUE. The GMAT is administered in most foreign countries and by appointment at designated testing centers throughout the United States. The test typically is taken during the academic year before the term for which admission is sought.

Working Professional Program
The Working Professional MAcc program is open to working professional graduates who have earned baccalaureate degrees from accredited colleges or universities and whose undergraduate academic records, and prior work experience indicate that they have the capability to complete the program. Admission to the program is limited on the basis of space, facilities, faculty, and other resources.

Applicants for the Working Professional program are not required to take the GMAT. Applicants are required to complete an interview with the MAcc Admission Committee to assess work experience and capability to complete the program. Applicants will be contacted to schedule the interview subsequent to review of application by committee.

Both Programs
Students whose native language is not English or who have not completed a degree from a college or university in the United States, Great Britain, Canada, or Australia must obtain satisfactory scores on the Test of English as a Foreign Language or International English Language Testing System (IELTS).

All applications for admission to the Full-Time MAcc program must include:

1. An OFFICIAL transcript or “etranscript” from the institution granting your undergraduate degree and from any institution(s) where you have completed graduate study at the time of your application.
2. The score from your GMAT, if applicable.
3. International students only: The score from your Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) unless you have earned a degree from a qualifying institution.
4. Two letters of recommendation.
The Working Professional MAcc program offers students at least two classes per semester. Although a specific track is not required for Working Professional students, courses offered are similar to those in the Full-Time Corporate track. Students are required to complete a total of 30 credit hours.

Students with a non-accounting undergraduate degree will take an additional set of classes prior to their track coursework.

**Contact Information**

For more information about the KU Master of Accounting programs, please see our Full-Time website (http://www.macc.ku.edu) and/or our Working Professional website (http://edwardscampus.ku.edu/macc) or email bschoolmacc@ku.edu.

**Master of Science in Business**

**Master of Science with a Major in Business**

The Master of Science degree program is for students who have completed a baccalaureate degree in business or a related degree as prescribed by the Association to Advance Collegiate Schools of Business and want to do concentrated study in a specific business area. Deficiencies in a student’s undergraduate program result in additional hours being required for the degree. These are determined before or at the time of initial enrollment.

A concentration in supply chain management is offered. Supply chain management is only available to U.S. Army majors, or major-eligible captains stationed at Fort Leavenworth in Leavenworth, Kan. The program is lock-step, 24 credit hours from KU and must be completed in 2 semesters. Six hours of credit are afforded students from concurrent course work at Command and General Staff College.

**Baccalaureate Preparation**

The Master of Science in business requires a baccalaureate degree in business equivalent to that required for accreditation by the American Assembly of Collegiate Schools of Business. Deficiencies in the undergraduate program result in additional hours being required for the degree. A concentration in supply chain management is offered.

**Admission to Master’s Programs**

All graduate programs are open to those who have earned baccalaureate degrees from accredited colleges or universities and whose undergraduate academic records, scores on the required standardized examination, and prior work experience indicate that they have the capability to complete the program. Admission to all programs in business is limited on the basis of space, facilities, faculty, and other resources.

Students whose native language is not English or who have not completed a degree from a college or university in the United States, Great Britain, Canada, or Australia must also have a score of at least 570 (600 for the M.B.A. program) on the Test of English as a Foreign Language. A minimum score of 57 on each of the three sections of the TOEFL is required. For students taking the computerized version of the TOEFL, an overall score of 230 is required (250 for the M.B.A. program), with a minimum score of 23 on each of the 3 sections of the test.

All applications for admission to the M.S. programs must include

5. Pledge to support the Honor System of the School of Business.
7. Three essays.
8. $65 application fee.

Completed applications are reviewed by committee, and action is taken on them periodically throughout the year. Each applicant is notified by letter of the action taken on his or her application.

Submit your graduate application online (http://www.graduate.ku.edu). For detailed application steps and answers to frequently asked questions, please visit the Getting Admitted (http://business.ku.edu/degrees/accounting/macc/apply) section of our website.

All admissions to any graduate program in business are subject to and in accordance with all rules and regulations. See Admission in the Graduate Studies (p. 2369) section of the online catalog for more information.

**Curriculum**

**Full-Time Program**

The Full-Time MAcc program offers four different tracks of coursework, allowing students to specialize in assurance, tax, advisory/consulting services or corporate accounting. Each track requires 30 credit hours, but the number and type of required courses and electives in each track varies. Students with a non-accounting undergraduate degree will take an additional set of classes prior to their track coursework.

**Assurance (Audit)**

The Assurance (Audit) track curriculum prepares students for a career in external audit at public accounting firms. External auditors examine financial records and assess internal controls to ensure a company’s financial statements are presented fairly and in accordance with generally accepted accounting principles.

**Tax**

The Tax track curriculum prepares students to meet the demands of a career in taxation, including positions in public accounting or corporate tax. There are many opportunities to specialize as a tax professional, including state and local tax, international tax, transfer pricing and estate and trust planning.

**Advisory/Consulting Services**

The Advisory/Consulting Services track curriculum helps students develop the skills necessary to become successful advisors in a complex and diverse business world. Advisory and consulting services careers vary greatly and include risk management, IT audit, performance improvement, fraud and forensics, business valuation and mergers and acquisitions.

**Corporate**

The Corporate track curriculum prepares students for a career outside of public accounting, including private industry, not-for-profit and government. Typical entry-level positions are in the areas of corporate accounting and internal audit.

See the Curriculum (http://business.ku.edu/degrees/accounting/macc/curriculum) page of our website for more detailed track information.

**Working Professional Program**

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See the Curriculum (http://business.ku.edu/degrees/accounting/macc/curriculum) page of our website for more detailed track information.
1. Graduate application (http://graduate.ku.edu/ku-graduate-application); (http://graduate.ku.edu/ku-graduate-application)
2. 1 official transcript of each college and university record;
3. Scores on the TOEFL if required;
4. A current résumé; and

Completed applications are reviewed by committee, and action is taken on them periodically throughout the year. Each applicant is notified by Graduate Studies of the action taken on his or her application.

All admissions to any graduate program in business are subject to and in accordance with all rules and regulations. See Admission (http://policy.ku.edu/graduate-studies/admission-to-graduate-study?num1_1=num1_1) in the Graduate Studies section of the online catalog for more information.

Submit your graduate application online (http://graduate.ku.edu/ku-graduate-application). Send original transcripts of all completed college and university course work and all other requested application materials to the school:

The University of Kansas
School of Business
Admissions Coordinator
Summerfield Hall
1300 Sunnyside Ave., Room 124
Lawrence, KS 66045-7534

M.S. Degree Requirements
Candidates must complete a minimum of 30 semester hours of graduate credit. Students must fulfill the following requirements:

1. Earn credit in required courses toward a concentration in Supply chain management.
2. Complete a capstone course.
3. Pass a comprehensive examination in the concentration, prepared and evaluated by at least three Graduate Faculty members in the area.

Undergraduate prerequisites that were not completed during the undergraduate program must be taken during initial enrollment and do not count toward fulfillment of the degree requirement of 30 hours.

Doctor of Philosophy in Business
School of Business
Summerfield Hall
1300 Sunnyside Ave.
Lawrence, KS 66045
785-864-3841
bschoolphd@ku.edu
Charly Edmonds, Director, Ph.D. Program
785-864-3841

Financial Aid
Students admitted to the Ph.D. program receive financial assistance. Contingent on satisfactory progress and availability of funds, the school provides financial assistance to most students for the first 4 years of their programs. Financial assistance is available in varying degrees through assistantships, fellowships, grants, loans, and employment.

Assistantships
During the first year, most doctoral students are appointed as research or teaching assistants. Many doctoral students also receive dissertation fellowships while writing their dissertations. During 2013-14, a graduate teaching assistantship paid about $1,800 a month, and a 50-percent-time graduate research assistantship paid about $1,800 a month plus tuition and fees. Appointment as a graduate teaching assistant at 40-percent time or more entitles the student to a 100-percent tuition waiver.

For non-native speakers of English, appointment as a graduate teaching assistant is only made after the student passes the SPEAK test or the Test of Spoken English administered by KU’s Applied English Center (http://www.aec.ku.edu).

Fellowships and Grants
The School of Business has been successful in nominating doctoral students for fellowships and grants from sources outside the school. Business students have received awards from the Richard D. Irwin Foundation, Kauffman Foundation, the American Institute of Certified Public Accountants, Beta Gamma Sigma, the American Accounting Association, Accounting Doctoral Scholars, and KU. Several dissertation fellowships normally are awarded annually. These awards allow the student to receive support for a semester while working on his or her dissertation.

The School of Business maintains active files on these and other sources of fellowships and grants, recommends qualified students for the awards, and works closely with students in submitting application materials.

Visit the Graduate Studies website for information about other funding opportunities (http://graduate.ku.edu/funding) for graduate students at KU.

Assistance in the form of loans or employment is available through:

Financial Aid and Scholarships (http://financialaid.ku.edu)
Strong Hall
1450 Jayhawk Blvd., Room 50
Lawrence, KS 66045-7518
785-864-4700

Ph.D. Admission
The applicant must hold at least a bachelor’s degree from an accredited college or university. No specific undergraduate preparation in business is required.

The applicant must demonstrate competence as a scholar through a high level of previous academic performance and high percentile scores on the Graduate Management Admission Test or Graduate Record Examination. Scores may not be older than five years at the time of application. In addition, international applicants must present high scores on the Test of English as a Foreign Language, or IELTS.

Finally, the applicant must demonstrate the ability for doctoral study in business, either by a record of achievement in previous professional or academic experience, including research and scholarship, or through letters of recommendation and a personal interview.

These requirements are intended only as suggestions for minimum admission standards. They should not be construed as a guarantee of admission to the Ph.D. program.
A $65 nonrefundable application fee for domestic students and $75 for international students, payable to the University of Kansas, must accompany all applications.

Submit your graduate application online (http://www.graduate.ku.edu).

Doctor of Philosophy in Business

The program is designed for students who wish to become scholar-teachers. It develops the capacity for original research and effective teaching by providing mastery of the knowledge in a particular field, a thorough understanding of research methodology, the ability to communicate effectively, and the motivation for continuing self-education. Students must specialize in a concentration and develop a broad knowledge of other areas of business and their interrelationships in the management function.

As of fall 2013, 42 students were enrolled in the Ph.D. program. The program will continue to be limited in size so each student can work closely with faculty members to receive substantial individual attention.

Ph.D. Degree Requirements

By the end of the third semester of the aspirant’s program (excluding summer sessions), an aspirant must complete the following qualifier requirements. All aspirants must demonstrate some proficiency in doing original research of publishable quality and some proficiency in teaching.

Human Resources Management, Organizational Behavior, and Strategic Management

Ph.D. students must take the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 905</td>
<td>Philosophy of the Behavioral and Organizational Sciences</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 906</td>
<td>Behavioral Research Methods</td>
<td>4</td>
</tr>
<tr>
<td>MGMT 916</td>
<td>Seminar in Organization Theory</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following in microeconomic theory:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BE 701</td>
<td>Business Economics</td>
<td>3</td>
</tr>
<tr>
<td>BE 917</td>
<td>Advanced Managerial Economics</td>
<td></td>
</tr>
<tr>
<td>ECON 700</td>
<td>Survey of Microeconomics</td>
<td></td>
</tr>
</tbody>
</table>

Finance

Ph.D. students must take the following:

2-course sequence in probability and statistical methods. Satisfied by the following, or equivalent courses in other departments:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSCI 920</td>
<td>Probability for Business Research</td>
<td>8</td>
</tr>
<tr>
<td>&amp; DSCI 921</td>
<td>and Statistics for Business Research</td>
<td></td>
</tr>
</tbody>
</table>

Finance students must also take one course in regression:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSCI 922</td>
<td>Advanced Regression</td>
<td>3</td>
</tr>
</tbody>
</table>

Accounting and Decision Sciences

Ph.D. students must take the following:

2-course sequence in probability and statistical methods. Satisfied by the following, or equivalent courses in other departments:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSCI 920</td>
<td>Probability for Business Research</td>
<td>8</td>
</tr>
<tr>
<td>&amp; DSCI 921</td>
<td>and Statistics for Business Research</td>
<td></td>
</tr>
</tbody>
</table>

Mathematics

Ph.D. students must take the following:

1 course in microeconomic theory:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE 917</td>
<td>Advanced Managerial Economics</td>
<td>3</td>
</tr>
</tbody>
</table>

Marketing

Ph.D. students must take the following

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSCI 920</td>
<td>Probability for Business Research</td>
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</tr>
<tr>
<td>BE 917</td>
<td>Advanced Managerial Economics</td>
<td>3</td>
</tr>
</tbody>
</table>

These courses should be completed in the first 2 years of a student’s program. In addition, students must take area-specific core courses defined by their area group. At or before the end of the aspirant’s third semester in the program, a qualifier assessment team, composed of five faculty members, holistically determines whether or not a student continues in the program.

The aspirant for the Ph.D. in business administration must have an area of concentration, supporting areas, and preparation in research methodology.

Concentration

Each aspirant, with the assistance of her or his faculty advisor and the area faculty, selects an area of concentration from the traditional business disciplines of accounting, finance, human resources management, decision sciences, marketing, organizational behavior, and strategic management. An aspirant also may propose an interdisciplinary concentration that is a combination of these disciplines, or may include emphases such as international business, law, and economics. The aspirant must take at least five advanced courses in the concentration. These courses may include those offered outside the School of Business.

Supporting Areas

Course work in the area of concentration is supplemented and strengthened by study in one or two supporting areas. A supporting area is one that supplements and complements the concentration. The aspirant satisfies the supporting area requirement by taking at least 4 advanced courses in the supporting areas (at least 2 courses in each of 2 supporting areas or at least 4 courses in 1 supporting area). Courses recommended for preparation for the qualifier assessment may not be included in satisfying the supporting area requirement.

Probation and Dismissal Guidelines

To be in good standing, a student must maintain a 3.0 cumulative grade-point average; if the grade-point average falls below 3.0, the student is placed on probation. This is followed by a letter to the student confirming the probation and explaining the student’s options.

A student is placed on probation for 1 academic semester. If the cumulative grade-point average has not risen to 3.0 in the next semester of enrollment (excluding summers), the student can either be dismissed or allowed to continue on probation. Continued probation requires the area director for the student’s concentration to write a letter to the Ph.D. team explaining why the student should be allowed to continue.

A graduate student can be dismissed on recommendation of the area director for the student’s concentration. Usually a graduate student is dismissed because of a low grade-point average; however, failure of examinations or failure to make satisfactory progress toward the degree is also cause for dismissal. Academic dismissal should occur before a semester begins; but if a student is dismissed during the semester, the
dismissal is effective only at the end of the semester in which the Ph.D. team gives notification of dismissal.

**Research Methodology**

When preparing for the qualifier assessment, area groups should ensure that the student’s program includes adequate preparation in research methodology.

**Responsible Scholarship**

Students in the first year must enroll in BUS 903 Responsible Conduct of Research. This course builds students’ abilities to analyze ethical issues and introduces students to various issues that may arise while engaging in the research endeavor.

Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current Lawrence and Edwards Campus policies on Doctoral Research Skills and Responsible Scholarship are listed in the KU Policy Library.

**Teaching**

Students enroll in BUS 902 Teaching Seminar during the first semester in which they teach independently. Before the completion of the Ph.D. program, all students also must have teaching experience equivalent to teaching at least 2 undergraduate courses independently in 2 different semesters.

**Examinations**

To advance to candidacy, the student must pass a written-oral comprehensive examination in the concentration. Finally, the student must pass an oral defense of the dissertation research proposal and the dissertation.
Graduation requirements and regulations for each of the School's academic programs are provided in this catalog. For information on graduate program regulations, refer to the School of Education Graduate Regulations tab. In most cases, you will use the catalog of the year you entered KU (see your advisor (http://www.advising.ku.edu) for details).

Other years' catalogs:

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Special Education (p. 450)  Master of Science in Education in Special Education (p. 463)  Doctor of Education in Special Education (p. 464)  Doctor of Philosophy in Special Education (p. 465)  Autism Spectrum Disorders Graduate Certificate (p. 466)

Introduction

The primary mission of the School of Education (http://www.soe.ku.edu) is to prepare educators as leaders. Within the university, the School of Education serves Kansas, the nation, and the world by

1. Preparing individuals to be leaders and practitioners in education and related human-service fields,
2. Expanding and deepening understanding of education as a fundamental human endeavor, and
3. Helping society define and respond to its educational responsibilities and challenges.

To accomplish this mission, the School of Education

1. Offers an extensive curriculum leading to academic degrees and professional licensure,
2. Requires faculty and students to engage in scholarship, and
3. Provides a range of professional services to schools, other institutions, and individuals.

The components of preparing educators as leaders that frame this mission for our initial programs are

1. Research and best practice,
2. Content and pedagogical knowledge, and
3. Professionalism.

These three themes build our conceptual framework.

Mission Statement

View the mission statement (http://www.soe.ku.edu/about) of the School of Education.

Undergraduate Degree Programs

Degree and Licensure Requirements for Teacher Education Students

Completion of the Teacher Education Program requires 4 years. After completing a minimum of 120 approved hours and the requirements for the specific teacher licensure program, the student receives a bachelor's degree and is eligible for a Kansas teaching license.

Majors are available in the following teaching fields:

- Unified Early Childhood (Birth-Grade 3)
- Elementary (K-6)
- Secondary English (6-12)
- Middle Mathematics (5-8)
- Secondary History and Government (6-12)
- Middle Science (5-8)
Foreign languages (Chinese, French, German, Japanese, Latin, Russian, Spanish) (PreK-12)
Health and Physical Education (PreK-12)

Endorsements are available in the following areas:

- English for Speakers of Other Languages (ESOL)
- Special Education

(Note: Students must speak to the appropriate advisors while planning these added endorsements.)

A minimum cumulative grade-point average of 2.75 is required for graduation. However, admission requirements for student teaching in the senior year are based on the following criteria:

1. Complete an Intent to Student Teach form and pass a criminal background check.
2. At least a 2.5 grade-point average in the field in which a student intends to teach at the elementary, middle, and secondary level.
3. A cumulative grade-point average of 2.75.

Students who complete the requirements for teacher licensure in their area, pass with a minimum score of 20 on the Kansas Performance Teaching Portfolio (KPTP), pass the state’s licensure examinations and PRAXIS II subject examination meet Kansas requirements for teacher licensure. Upon application through the Licensure Office (http://www.soe.ku.edu/licensure), students are recommended to the Kansas State Board of Education for licensure. A handbook issued by the state board contains a summary of rules and regulations governing teachers’ licenses in Kansas. Each state has different requirements. Students planning to teach in other states should check with those states.

Information about teaching requirements may be obtained from the Licensure Office (http://www.soe.ku.edu/licensure). Information about the Kansas licensure examinations is available at Testing Services, 2150 Watkins Memorial Health Center, 785-864-2768.

Professional Development Schools

Before the senior year, teacher candidates may apply to complete their experiences in one of the Professional Development Schools. PDS schools are in 4 different districts, which may include elementary, middle, or secondary sites. The University of Kansas Professional Development School (KUPDS) is an active partnership between the University of Kansas School of Education and 13 public schools in four surrounding school districts. Founded in 1991, our Alliance works to provide collaborative educator preparation, ongoing professional development, reflective inquiry, and continuous school renewal. Within these tenets, the Alliance works for collaborative research, training and professional development opportunities for public school educators, university faculty, and teacher education students with the ultimate goal of improving education for all children. For more information, visit the School of Education (http://www.soe.ku.edu).

Degree Requirements for Students in Nonlicensure Areas

Students in the non-teacher-licensure areas of athletic training, exercise science, sport management, and community health usually complete the bachelor’s degree program in 4 years. Students seeking admission to undergraduate sport science and community health programs must have minimum cumulative grade-point averages of 2.75. Achieving the minimum grade-point average is not a guarantee of admission. Admission also is based on performance in core courses, academic preparation for the major, and the number of students each program can admit.

Licensure: Added Endorsements

At least 8 hours of the required course work must be completed at KU if it is to be the recommending institution for adding endorsements to the teaching license. For information about adding endorsements, contact the School of Education at 785-864-3726.

Graduate Degree Programs (refer to the School of Education Graduate Regulations tab)

Undergraduate Programs

The School of Education offers programs that lead to teacher licensure in health & physical education, unified early childhood and at the elementary, middle, and secondary levels, as well as nonlicensure options in athletic training, community health, sport management or exercise science (pre-physical therapy, cardiac rehabilitation, and strength and conditioning).

Students planning to teach must complete programs composed of 3 major parts: General Education (requirements completed primarily in the first 2 years), Major (content areas in which students are specializing), and Professional Education (course work that helps them to understand students as learners and to communicate knowledge effectively).

On admission, students who plan to major in health and physical education report to the Department of Health, Sport, and Exercise Sciences (p. 427). Students who plan to teach all other subjects and in elementary education and unified early childhood are in the Department of Curriculum and Teaching (p. 302). Course requirements for each of the three parts of the Teacher Education Programs are listed under departmental headings.

University Honors Program

The school encourages qualified students to participate in the University Honors Program (http://www.honors.ku.edu).

Data from the Title II Report

The Title II Report (http://www.soe.ku.edu/about/accreditation) provides information about the performance of KU School of Education teacher education program students on required state examinations. This data is part of the Title II report required by the federal government. 99 percent of KU teacher education students passed the required state licensure examinations in academic year 2011-12.

Special Programs and Facilities

The School of Education provides these programs and facilities for students, faculty, and, in many cases, the public. Most facilities offer graduate students opportunities for assistantship, laboratory, and research experiences related to their programs of study. Contact the individual programs for information.

Applied Physiology Laboratory and Fitness Evaluation Clinic (http://hses.soe.ku.edu/research/applied-physiology-lab)

This teaching and research laboratory in stress physiology at Robinson Center assesses physical function through physiological tests. Fitness parameters of physical education majors and students in health, sport,
and exercise sciences classes are assessed routinely. Demonstrations of physiological and biochemical concepts are performed for exercise physiology classes. Research on the physiological ramifications of exercise stress is conducted. Graduate and undergraduate students assist in service and research projects.

**Beach Center on Disability** ([http://www.beachcenter.org](http://www.beachcenter.org))

The Beach Center, is funded by the National Institute for Disability and Rehabilitation Research, Office of Special Education and Rehabilitative Services, U.S. Department of Education. It is the only federally funded center in the nation conducting research with families with members with disabilities. The center is involved in research and training projects addressing family well-being across the life span. Projects are guided by six fundamental beliefs about families: positive contributions, great expectations, full citizenship, choices, inherent strengths, and relationships.

**Center for Economic Education** ([http://www2.ku.edu/~ierps/cgi-bin/program/center-for-economic-education](http://www2.ku.edu/~ierps/cgi-bin/program/center-for-economic-education))

The center works to increase the economic literacy of pre-service and in-service teachers through credit and noncredit teaching and consultation in economic education. It maintains a library of current materials on economic/consumer education.

**Center for Educational Testing and Evaluation** ([http://cete.ku.edu](http://cete.ku.edu))

The center engages in research and service in educational assessment and program evaluation. Issues in educational testing are studied and projects are designed and carried out to examine school effectiveness, personnel/student evaluation, and policy implications of educational testing and assessment. There are opportunities for assistantships for interested and qualified students.

**Center for Psychoeducational Services** ([http://soe.ku.edu/cps](http://soe.ku.edu/cps))

CPS is a training site for students in the Department of Educational Psychology. CPS is staffed by student clinicians in school psychology and counseling psychology who earn credit while they gain practical experience working directly with clients. CPS is a self-sustaining, nonprofit agency.

**Center for Research on Learning** ([http://www.ku-crl.org](http://www.ku-crl.org))

The center conducts research centered on solving problems that limit individuals' quality of life and their ability to learn and perform in school, work, home, or the community. It serves as the parent organization for 7 research institutes: Advanced Learning Technologies (ALTEC), Division of Adult Studies, e-Learning Design Lab, Institute for Health and Disability Policy Studies, Institute for Research on Adolescent Learning, Kansas Coaching Project, Professional Development Research Institute, and Transition Coalition.

**Advanced Learning Technology in Education** ([http://www.altec.org](http://www.altec.org))

The Advanced Learning Technologies project at the KU Center for Research on Learning, uses the most advanced and innovative technologies available to improve teaching and learning. Faculty and students in ALTEC come from a range of disciplines and programs, including the School of Education, the School of Journalism and Mass Communications, the School of Engineering, the School of Music, and the School of the Arts. This collection of talent gives ALTEC broad capabilities including advanced networking and telecommunication expertise, instructional design, data harvesting and warehousing, distance education experience, and programming.

ALTEC is committed to developing new technologies to empower learners of all types and ages and to redefining the learning experience through innovative resources. ALTEC partners with those who recognize the tremendous capabilities available through electronic strategies for dissemination, communication, and collaboration. They provide support in the development of the initiative, interpreting the intent of the content authors with the latest in design, development, and delivery. ALTEC maintains its partnership with an individual project by contributing specific resources required through the phases of implementation, including design, development, maintenance, and evaluation.

**Achievement & Assessment Institute** ([http://aai.ku.edu](http://aai.ku.edu))

The Institute serves both the School of Education faculty members and the state of Kansas. This institute has a two-fold mission. The first part of this mission is to provide faculty with infrastructure support for its research. The support includes assistance with identifying funding sources, proposal development, and grant administration. The second part of the institute's mission is to help schools and other educational agencies respond to initiatives that are educationally beneficial to the state and that contribute to the teaching, research, and service missions of the school. The institute also houses the Assembly of Equity Programs, TRIO programs, and the Kansas Enrichment Network. At the heart of these programs lies an interest in promoting educational opportunity for youth and young adults in the state.

**Kinesiology/Biomechanics Laboratory**

The laboratory analyzes human motion. The primary emphasis is on computer-aided cinematographical analysis, but other research tools such as electromyography (EMG), electrogoniometry, stroboscopy, and force plates are used. Major attention is given to the study of efficient movement techniques, equipment design, strength, flexibility, and body types.

**Learning Resource and Technology Center** ([http://soe.ku.edu/facilities/lrc](http://soe.ku.edu/facilities/lrc))

The center serves faculty and students of the school and the public. Its resources include the Curriculum Laboratory, professional books and journals, K-12 textbooks, curriculum guides and course outlines from school districts throughout the country, selected reference and reserve materials, and mediated instructional packages for pre-service and in-service teacher education. It supports teaching, research, and service involving educational applications of media and microcomputers. Teacher education students develop skills in operating media equipment and producing materials to support their teaching. A representative cross section of instructional equipment found in schools is available, along with emerging technologies used in distance learning and interactive video instruction. The center offers production support for instructional materials and research support for design, evaluation, use, and dissemination of instructional technology.

**Microcomputer Laboratories**

Microcomputer laboratories in Joseph R. Pearson Hall and Robinson and Dole Centers prepare students to use computers in administrative, instructional, and research applications. The laboratories offer a range of equipment found in schools, including PC and Macintosh computers. Computers are networked to KU’s backbone and resources such as scanners, laser printers, CD-ROM, CD, and DVD players. The
School of Education Student Organization

The School of Education offers a variety of ways to get involved: to meet and engage with fellow students; to explore academic opportunities; and to gain more than an education while at KU. In addition to the student organizations available in education, there are more than 600 clubs on campus to get involved with. The KU Student Involvement & Leadership Center (SILC) prepares students to become contributing citizens of society by providing meaningful co-curricular experiences.

For more information about our KU School of Education student organizations, please go to our website (https://soe.ku.edu/students/student-life/student-organizations) or stop by the Welcome Center, 208 J.R. Pearson Hall.

- Athletic Training Club (KUATC)
- America Reads
- Council for the Social Studies
- Exercise Science Club
- International Students Education Association (ISEA)
- KU Edwards Campus Student Advisory Board (KUEC SAB)
- Pre-Occupational Therapy Club
- Pre-Physical Therapy Club
- Professionals for Disability (KUPD)
- Reach To Teach (R2T)
- TESOL Club

Graduate Programs

To facilitate preparation for specific types of professional service and teaching, graduate study in education has been organized into the program areas encompassed by these departments:

- Curriculum and Teaching (p. 302) includes programs in curriculum and instruction, including the fields relating to elementary and secondary education.
- Educational Leadership and Policy Studies (p. 395) comprises programs in educational administration, social and cultural studies in education, higher education, and educational technology.
- Health, Sport, and Exercise Sciences (p. 427) offers areas of study in exercise science, health science, pedagogy, and sports studies.
- Educational Psychology and Research (p. 408) offers programs in counseling psychology, school psychology, and educational psychology and research.
- Special Education (p. 450) conducts graduate degree programs in autism spectrum disorders, early childhood unified, high-incidence disabilities, low-incidence/significant intellectual disabilities, and secondary transition education and services.

Further information on graduate study may be found on the departmental sections of the online catalog.

Most graduate students are expected to complete work in education areas other than their program areas, as well as in liberal arts or other noneducation areas. The amount of such work depends on the degree sought and the major area. A student must be enrolled for the period during which the comprehensive or final examination is taken. Full-time graduate student enrollment in the School of Education is 9 graduate credit hours or the equivalent.

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Undergraduate Advising

Early in the first year, prospective students in all areas should make appointments with a pre-education advisor at the Advising Center (http://soe.ku.edu/advising) in 208 J.R. Pearson Hall (Welcome Center) to ensure fulfillment of admission requirements and to plan efficient programs of study. Education staff members advise pre-education students individually and in group sessions.

Walk-in appointments are available through the Welcome Center (http://soe.ku.edu/advising), 208 J.R. Pearson Hall. Call 785-864-9616 to make an appointment to meet with an advisor.

Graduate Advising

Graduate advising is done at the department and program level. For more information, please contact the director of graduate studies in your department or program.

All education students have a graduate advisor and should know and be in contact with the advisor to whom they have been assigned. Students who are unsure of their advisor should contact their academic department or an advisor for information.
Undergraduate Scholarships and Financial Aid

In addition to scholarships and financial aid administered by Financial Aid and Scholarships (http://affordability.ku.edu/steps/index.shtml), the school administers a number of special scholarships. Online applications are available in early December each year. The deadline is mid-February; contact the school (http://www.soe.ku.edu) for the specific date.

Graduate Fellowships and Assistantships

For information about graduate assistantships, contact the School of Education (http://www.soe.ku.edu).

Visit the Graduate Studies website for information about funding opportunities (http://graduate.ku.edu/funding) for graduate students at KU.

Financial Aid and Scholarships (http://affordability.ku.edu/steps/index.shtml) administers grants, loans, and need-based financial aid.

Undergraduate University Regulations

For information about university regulations, see Regulations (p. 12) or visit the University of Kansas Policy Library (http://www.policy.ku.edu).

Absences

A student with excessive absences may be withdrawn from the course by the dean.

Change of School

To change from one school to another, you must submit a Change of School form in the dean’s office of the school you plan to enter. Follow the deadlines on the form.

- Students are admitted to C&T programs once a year; online applications are due September 15 for spring semester.
- Students are admitted to the HSES teaching and community health programs once a year; online applications are due February 3 for next fall semester.
- Students are admitted to the HSES athletic training program once a year; online applications are due February 3 and paper applications are due May 1 for fall semester.
- Students are admitted to HSES exercise science and sport management programs twice a year; applications are due February 3 for fall and September 15 for spring semester.

Consult the School of Education Welcome Center, 208 J.R. Pearson Hall, 785-864-3726, for information.

Course Substitutions

Course substitutions in any program may require approval of the advisor, department, and associate dean. In addition, some requests must be approved by the school curriculum committee. Approval requires submission of a written petition initiated by the student and approved by the advisor. The associate dean communicates the action taken to the advisor and the student. A copy is placed in the student’s file.

Credit/No Credit

A Credit/No Credit option is available to all degree-seeking undergraduates. You may enroll in one course a semester under the option, if the course is not in your major or minor. For more information, visit the KU Policy Library (https://documents.ku.edu/policies/governance/USR2.htm#art2sec2).

Warning: Certain undesirable consequences may result from exercising the option. Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of No Credit to F when computing grade-point averages.

Students planning to enter education programs who are not formally admitted to the school are strongly discouraged from taking any course required for graduation for Credit/No Credit.

Any course not required for graduation and up to 6 hours of courses required for graduation may be taken for Credit/No Credit. No more than 6 hours of courses required for graduation may be taken for Credit/No Credit.

Graduation with Distinction and Highest Distinction

Students who rank in the upper 10 percent of their graduating class graduate with distinction. The upper third of those awarded distinction graduate with highest distinction. Grade-point averages are based on total credits (KU and transfer credit). To be considered for distinction, students must have completed a minimum of 75 hours at KU. The list is compiled each spring and includes July, December, and May graduates.

Honor Roll

Students with grade-point averages of 3.75 who have completed at least 12 hours with letter grades are recognized on the honor roll or dean’s list in fall and spring. An Honor Roll notation appears on the transcript.

Maximum and Minimum Semester Enrollment

A 12-hour enrollment is a minimum full-time enrollment. Enrollment for more than 19 hours during fall or spring semesters or more than 9 hours during the summer session requires special permission from the associate dean and is not considered unless the student has demonstrated academic ability and has the advisor’s approval.

Maximum Community College Credit Allowed

A maximum of 64 community college hours may be counted toward a student’s degree.

Probation

Placed on Probation

Students must maintain a minimum cumulative grade-point average of at least 2.75. Students whose cumulative grade-point averages are below 2.75 at the end of any semester are placed on academic probation.

Dismissed

If at the end of the following semester (spring or fall) the cumulative grade-point average is not 2.75 or above, the student is dismissed.
from the school. Those students are dropped from all courses for the next semester and required to complete a Change of School form to enroll. They are not allowed to enroll in any courses restricted to School of Education students until they are reinstated. Students admitted provisionally who don’t fulfill specified criteria for admission revert to the school in which they were previously enrolled. In these cases, only courses restricted for School of Education students are dropped from the student’s schedule.

Readmission after Dismissal

Programs are subject to change. Within 1 year of dismissal, if the cumulative grade-point average is at least 2.75, students are readmitted to the program to which they had been admitted. After 1 year, students who wish to follow the program to which they had been admitted must submit a petition to the associate dean. If the petition is denied, students must follow the current program (if different from the one to which they had been admitted).

Required Work in Residence

To be eligible for the B.S.E. degree, a student must complete at least 30 hours at KU and at least 30 hours after being admitted to the school. Up to 6 hours of work done at another institution may be accepted as part of the last 30 hours. Before enrolling in a nonresident course, the student should complete a Request for Tentative Evaluation of Credit in 208 J.R. Pearson Hall. After completing the course, the student must request that an official transcript be sent to KU.

Transfer of Credit

CredTran (http://admissions.ku.edu/apply/credits) is a transfer course equivalency system that lists more than 2,200 colleges and universities from which KU has accepted transfer courses in the past. If your school or course is not listed, your evaluation will be completed when you are admitted to KU.

Courses completed at other institutions are accepted to fulfill graduation requirements (e.g., in place of specifically prescribed courses), only if they are substantially equivalent as indicated by course description. At least 62 hours must be completed at an upper-division institution.

Master's Degree Programs

Master's degrees are granted on satisfactory completion of not less than 1 academic year, or its equivalent, of graduate study. The school provides 3 options for the master’s degree:

- The thesis option,
- The project option, and
- A minimum 36-graduate-credit-hour study option.

At least 20 of the credit hours required for master’s programs must be in regular course work, as contrasted with independent study and similar enrollments. Students pursuing the 36-hour program option must have 26 hours in regular course work.

All master’s programs require a graduate class in research and evaluation methods, successfully completed during the first 12 hours.

As part of the requirement for the degree, the candidate must pass a final oral or written examination. A candidate’s advisor and two additional members of the Graduate Faculty constitute the oral examining committee (http://policy.ku.edu/graduate-studies/masters-oral-exam-committee-composition) for the thesis option. A majority of committee members (http://policy.ku.edu/graduate-studies/oral-exam-attendance) must be physically present for an examination. Similar policy holds if an oral examination is required for the project or non-thesis program option. In addition, the policy (http://policy.ku.edu/graduate-studies/oral-exam-attendance) requires that the student being examined and the chair of the committee both be physically present at the oral examination or thesis defense. The department prepares and evaluates the written examination for the credit-hour degree option.

To ensure continuity of progress and currency of knowledge, there is a 7-year time limit (http://policy.ku.edu/graduate-studies/ma-program-time-constraints) for completion of master’s degree requirements. The Graduate Division has the authority to grant a 1 year extension for compelling reasons, on recommendation of the departments/committee. If more than 8 years are requested, the appropriate appeals body of the school considers petition for further extensions and, where evidence of continuous progress, currency of knowledge, and other reasons are compelling, may grant further extensions. Because substantive and procedural differences exist among the programs, some may have more stringent policies on time extensions. Students should inquire about the specific policies in effect in the department or program in which they intend to study.

To be eligible for the degree, a student pursuing the thesis option must deposit signed title and acceptance pages, a signed ETD Release (http://graduate.ku.edu/masters-students) form, and complete all other requirements, including electronic submission of the thesis before the degree requirements submission deadline in the graduate academic calendar. Graduate Studies establishes the degree submission deadline each year. Please see the Graduate Studies website (http://www.graduate.ku.edu) for more information.

Master of Arts

A candidate for the Master of Arts degree completes work both in education and in a teaching area (other than physical education). For students who choose the thesis or project option, a minimum of 30 hours of graduate credit is required for this degree, of which no fewer than 10 and no more than 15 hours must be earned in the teaching area. Some work must be elected in at least 2 of the approved graduate program areas in the School of Education.

The candidate must complete a thesis related to the teaching area (6 hours maximum credit applicable to degree requirements) or complete the non-thesis option by enrolling in Master’s Project (4 hours applicable to degree requirements). While enrolled, the candidate submits a research paper related to a teaching area to the advisor. Check with the department for specific course requirements for the 36-hour master’s degree option.

Master of Science

A candidate for the degree of Master of Science in Counseling Psychology (http://epsy.soe.ku.edu/academics/cpsy/masters) earns a concentration in mental health counseling. A minimum of 60 credit hours is required for this degree, about 50 of which are prescribed, with the rest made up of electives approved by the student’s advisor. The candidate must complete a Master’s Thesis (3 hours maximum credit applicable to degree requirements), or complete a Master’s Project (3 hours applicable to degree requirements), or complete a written comprehensive
examination. Check with the department for specific course requirements for the 60-hour master's degree.

**Master of Science in Education**

A candidate for the degree of Master of Science in Education selects 1 of the program areas as a concentration for graduate study. A minimum of 30 credit hours is required, of which no fewer than 10 hours must be in the concentration. Credit in Thesis or Master’s Project may not be included in these 10 hours. The candidate must elect course work in at least 2 graduate program areas outside the concentration. Normally, these courses would be in the School of Education.

The candidate must complete a thesis in the concentration by enrolling in Master’s Thesis (6 hours maximum credit applicable to degree requirements) or complete the project option by enrolling in Master’s Project (4 hours applicable to degree requirements). While enrolled, the candidate submits a research paper related to the specialization to the advisor. Check with the department for specific course requirements for the 36-hour non-thesis master’s degree program.

**Specialist in Education Degree Program**

The Specialist in Education program consists of 2 years of full-time graduate study (about 70 semester credit hours) followed by a third year of internship.

**Doctoral Degree Programs**

**Doctor of Philosophy with a Major in Education (Ph.D.)**

The Doctor of Philosophy degree is awarded for mastering a field of scholarship, learning the methods of investigation appropriate to that field, and completing a substantial piece of original research. The degree is intended to produce highly competent scholars who are prepared to be university faculty members and other professionals, to conduct and evaluate original research, to teach at the college/university level, and to provide discipline-related leadership to the field and to the public. The Ph.D. is offered in all education graduate programs.

Although the courses and the research leading to the Ph.D. are necessarily specialized, the attainment of this degree should not be an isolated event in the enterprise of learning. The aspirant for the Ph.D. is expected to be a well-educated person and should have acquired a broad base of general knowledge, both as preparation for more advanced work and as a means of knowing how the concentration is related to other fields of human thought.

**Advisory Committee**

A student admitted to study for the Ph.D. is known as an aspirant for the degree until the comprehensive examination has been passed. After passing this examination, the student is known as a candidate for the degree.

Each student must have an advisory committee consisting of at least three members of the Graduate Faculty. One member of the committee serves as the chair. One member must be from the graduate department representing the student’s minor area if the student’s program or department requires a minor area.

The student meets with this committee before completing 12 hours of course work to plan and approve formally an appropriate program leading to the Ph.D. The approved program (http://soe.ku.edu/forms/graduate), signed by members of the committee and the student, is placed in the student’s file in the School of Education Graduate Division office.

**Requirements**

Students must acquaint themselves thoroughly with departmental requirements for the degree, which may be in addition to general requirements and those of the School of Education. Consistent with Graduate Studies’ general regulations, it is the student’s responsibility to know and observe all university, school, department, and academic program regulations and procedures relating to the graduate program.

In no case will a regulation be waived or an exception be granted because a student pleads ignorance of, or contends that he or she was not informed of, requirements, regulations, procedures, or deadlines.

Responsibility for following all policies and meeting all requirements and deadlines rests with the student.

1. **Time Limit-Maximum Tenure**

   After being admitted to doctoral programs at KU, students complete all degree requirements in eight years. In cases in which compelling circumstances recommend a one-year extension, the School’s Graduate Division has authority to grant the extension on the written advice of the department and dissertation committee. Students who complete the master’s degree at KU and subsequently begin doctoral studies have a maximum total enrolled time of 10 years to complete both degrees. Normal expectations, however, are that most master’s degrees (excluding some professional terminal degrees) should be completed in two years of full-time study, and both master’s and doctorate in six years of full-time study. Some graduate degree programs may have more stringent time restrictions. Students should inquire about the policy in effect in the department in which they plan to study.

   A student may petition the Graduate Division through the department for a leave of absence during either the pre- or post-comprehensive period to pursue full-time professional activities related to the doctoral program, extraordinary circumstances (e.g. cases of illness, emergency, financial hardship, military leave), to pursue family responsibilities or to pursue full-time activities related to long-range professional goals.

   Appropriate documentation related to these extraordinary circumstances may be requested from the student directly. Evidence of progress towards degree will also be a determining factor in the decision to grant an exception.

   Ordinarily a leave of absence is granted for one year, with the possibility of extension upon request. The time taken for a leave of absence does not count against the student’s time to degree. However, after an absence of five years, a doctoral aspirant or candidate loses status as such and must apply for readmission to the program and the Graduate Division.

2. **Resident Study**

   The student must spend the equivalent of 3 academic years, including the time spent attaining the master’s degree, in resident study at this or another approved university. Because general requirements do not specify a minimum number of hours for the degree, no transfer of credits
is appropriate. Departments do, however, consider relevant prior graduate work in setting up programs of study leading to the doctorate.

**Residence Requirement.** Two semesters, which may include one summer session, must be spent in resident study at KU. During this period, the student must be involved full time in academic or professional pursuits, which may include an appointment for teaching or research if it is directed specifically toward degree objectives. Enrollment in approved distance-learning courses offered through KU cannot be used to meet the doctoral residency requirement. The student must be enrolled in a minimum of 6 credit hours per semester, and the increased research involvement must be fully supported and documented by the dissertation supervisor as contributing to the student’s dissertation or program objectives. Research must be performed under the direct supervision of the major advisor if on campus, or with adequate liaison if off campus.

Special circumstances such as internal employment for more than half time as a teaching or research assistant, or as another type of university employee, must have advance approval on an individual basis by petition to the Graduate Division of the School of Education. The student, with the help of the advisory committee, must file in the Graduate Division office a residence plan congruent with School of Education requirements before the beginning of the formal residence period. This plan may be filed as a part of the overall program plan. Because residence is not merely a requirement measured in hours of enrollment or of credit in courses toward a degree, the plan may include other academic and professional activities appropriate to the field of study.

**Note:** Hourly enrollment requirements must be met through courses at the program’s home campus, and if appropriate internal employment is not involved, at least 9 hours must be in regularly scheduled courses.

3. **Program Area**

In applying for doctoral study, the student specifies a program area in which formal classes and research work are to be done and in which she or he expects to become a scholar. A minimum of 36 credit hours is required in the major area, excluding credits used to fulfill research skills and the dissertation requirements. The doctoral core requirement (EDUC 800) may be included as part of the major if it is consistent with the student’s area of study and if doing so is supported by the student’s department and doctoral committee. Fifty-percent of the student’s major must be 800-level or above (18 credit hours). The program must include at least 6 credit hours outside of the student’s home department, not including courses required to fulfill the student’s research skills component or the doctoral core (EDUC 800).

**Note:** Course work completed at KU or at another institution as part of a previous graduate degree, cannot be used to meet the credit hour requirements for this degree.

Upon admission to doctoral study, students who have not completed a research and evaluation methods course for the education master’s degree must take the course, e.g. EPSY 715, during the first doctoral enrollment. The course taken to fulfill this requirement, whether taken at KU or at another institution, does not count toward any doctoral requirements.

4. **Core Requirement**

All students are required to complete EDUC 800: Education as a Field of Scholarship, in their first year of doctoral enrollment.

5. **Teaching Experience**

In addition to the requirements above, the student must satisfactorily complete at least 1 semester of supervised college teaching experience under the direction of a KU faculty member. This may be completed during the semester in which the student takes the comprehensive examination, but ordinarily it should be completed before admission to the comprehensive examination. This experience does not count towards the 36 credit hour requirement. Documentation of the student’s supervised college teaching experience must be submitted to the Graduate Division office.

6. **Research Skills**

Before being admitted to the comprehensive examination, the student must have completed the research skills requirements established for the degree. Specific research skills requirements vary with department and program, but all reflect the expectation of a significant research skills component distinct from the dissertation but strongly supportive of it. The Ph.D. research skills requirement includes completion of at least 12 graduate hours relevant to the aspirant’s research: statistics, measurement and assessment, qualitative methods, historical and philosophical methods, or foreign language (a reading knowledge in one foreign language is equivalent to 6 hours of credit). Up to 6 hours, excluding credit hours for the required master’s course in research methods and evaluation, whether taken at KU or elsewhere, may be waived using prior B-level or higher graduate course work. A statement concerning specific research skills should be secured from the student’s major department. At least 9 of the 12 credit hours must be 800 level or above. The 12 credit hours cannot include EPSY 715 or its program equivalent.

When the student has met the requirements for research skills, the committee chair must report this to the Graduate Division on the appropriate form, certifying that the student is prepared to proceed to the comprehensive oral examination. If a program requires research skills that are tested separately rather than integrally with the program, the completion of each requirement should be reported immediately to the Graduate Division so that it may be recorded on the student’s permanent record.

**Responsible Conduct of Research:** All students must satisfy departmental and university requirements regarding the responsible conduct of research. In order to meet this requirement, students are required to complete EDUC 800 Education as a Field of Scholarship, in their first years of doctorate enrollment. Students in HSES and Counseling Psychology doctoral programs are exempt from EDUC 800 but must meet other program requirements.

7. **Comprehensive Examination**

When a Ph.D. aspirant has completed the major portion of the course work at a satisfactory level (having no more than 6 credits of required regularly scheduled coursework in the degree program remaining) and has completed the research skills requirement and all other departmental requirements prerequisite to the comprehensive examination, the department asks the School of Education Graduate Division office to schedule the comprehensive examination. This request must be made at least 2 weeks before the date of the written portion of the examination. Students must be enrolled when they take the exam.

The examining committee must consist of at least 5 members (usually including the advisory committee). All must be graduate faculty, and 3 of the 5 must be regular faculty from the student’s home department. For more information visit the KU Policy library: Doctoral Student Oral Exam Committee Composition (http://policy.ku.edu/graduate-studies/oral-exam-committee-composition) and Graduate Studies Representative on Doctoral Exam Committees (http://policy.ku.edu/graduate-studies/graduate-studies-representative-on-doctoral-exam-committees).

The comprehensive examination consists of both written and oral parts and covers the major area pursued by the student, as well as the minor
area, if one is required by the student's program. The student passes the comprehensive examination if a majority of the official examining committee (including the chair) approves the student's performance. The grade on this examination is Honors, Satisfactory, or Unsatisfactory. An aspirant who receives a grade of Unsatisfactory may be allowed, upon the recommendation of the department, to repeat it, but it may not be taken more than 3 times. The aspirant may not repeat the oral examination until at least 90 days have elapsed since the last unsuccessful attempt.

Note: Students in Ph.D. education programs must pass both written and oral components of the comprehensive examination. Satisfactory performance on the written component must be attained before the oral component may be attempted. To fail either component is to fail the examination. All 5 members of the student’s comprehensive examination committee are involved in the evaluation process. The written component of the comprehensive examination, like the oral, focuses on advanced knowledge in the major and any appropriate related areas. To pass, the student must be evaluated as having responded satisfactorily to questions in the major areas. If a student fails any portion of the written comprehensive component, a failure of the examination is recorded. The examining committee determines if the entire written component of the examination, or only the failed portion(s), must be retaken. The entire written component lasts a minimum of 16 hours. If a student passes the written component but fails the oral, the examining committee determines if both components or only the oral must be repeated, after the minimum 90-day interim period.

8. Dissertation Proposal Committee and Proposal

Upon passing the comprehensive examination, the aspirant becomes a candidate for the Ph.D.

The Graduate Division, using the recommendations of the candidate’s department, designates the dissertation/proposal committee at this time. The dissertation committee must consist of at least five members and may include members from other departments and divisions or, on occasion, members from outside the university. All members of the committee must be chosen from the graduate Faculty, and the chair must, in addition, be authorized to chair doctoral dissertations. A prospective member of the committee from outside the university must have gained appointment as a Special member of the Graduate Faculty before appointment to the committee.

Doctoral aspirants may begin work on the dissertation after they complete the equivalent of one full-time semester of doctoral study in regular student status and may use their research practicum experience in preparation for the dissertation. However, students may first enroll in dissertation credit hours only during the semester in which they take their comprehensive examinations. Dissertation hours taken during that semester count toward the minimum of 18 hours of dissertation credit only if the examinations are passed during that same semester. The dissertation proposal must be read by all members of the dissertation committee. One copy of the approved dissertation proposal title sheet, signed by all members of the dissertation committee, along with an electronic copy of the proposal must be submitted to the School of Education Graduate Division office.

9. Continuous Enrollment

After passing the comprehensive examination, the candidate must be continuously enrolled (http://policy.ku.edu/graduate-studies/doctoral-candidacy), including summer sessions, until the degree is completed. A student must be continuously enrolled in accordance with the following schedule: Until the degree is completed or until 18 post-comprehensive hours have been completed (whichever comes first), the student must enroll for at least 6 hours a semester and 3 hours a summer session. Students who have not completed the degree after completing 18 hours of post-comprehensive enrollment must continue to enroll for the amount of credit that best reflects their demands on faculty time and university resources each semester and each summer session until they pass the final oral examination.

Post-comprehensive enrollment may include enrollment during the semester or summer session in which the comprehensive examination has been passed if the student is enrolled for the appropriate number of credit hours (6 during a regular semester, 3 during the summer session). Students may enroll for dissertation hours as well as other courses when the examination is taken. Students who do not pass the examination cannot apply dissertation hours to degree requirements. Under certain conditions, the candidate may petition the School of Education Graduate Division for a leave of absence during the period between the comprehensive examination and the final oral examination.

10. Dissertation

The candidate must present a dissertation showing the results of original research. The dissertation for the Ph.D. considers applied or basic concerns and results in conclusions that have broad theoretical implications. Various styles and formats for theses and dissertations are acceptable. The formal and style of a student’s thesis or dissertation is left to the discretion of the student and the advisor, but format and style options may be constrained or dictated by Graduate Studies policies. The dissertation is prepared under the direction of the dissertation committee. The norm for dissertation enrollment is about 24 credit hours. The minimum number of dissertation hours in the Ph.D. program is 18. Instructions regarding the proper form of the final document (http://graduate.ku.edu/etd-formatting-and-working-multimedia-files) may be obtained from the School of Education Graduate Division office.

11. Final Oral Examination

When the dissertation has been tentatively accepted by the dissertation committee, and approved as ready for defense, the chair of the dissertation committee may request the School of Education Graduate Division office to schedule the final oral examination. This request must be made at least two weeks before the desired examination date. At least five months must have elapsed between the successful completion of the comprehensive examination and the date of the final oral examination.

The committee for the final oral examination (http://policy.ku.edu/graduate-studies/final-oral-exams) must consist of at least five members (the members of the dissertation committee plus other members of the Graduate Faculty recommended by the committee chair and the department and appointed by the Graduate Division). At least one member must be from a department other than the major department. This member represents Graduate Studies and must be a regular member of the Graduate Faculty.

The final examination must be partly oral and may be wholly so. The examination covers the dissertation and the candidate’s concentration area and, if appropriate, minor area. The candidate passes the final examination if a majority of the official examining committee members (including the chair) approves the candidate’s performance. When the final oral examination has been passed, the dissertation committee reports a grade of Honors, Satisfactory, or Unsatisfactory. Candidates who fail the final oral examination may be allowed to repeat it upon the recommendation of the dissertation committee.
12. Dissertation Copies

When the final oral examination has been passed and the dissertation has been signed by the members of the dissertation committee, a title page and acceptance page with original signatures and ETD Release form are to be delivered to the Graduate Division so that completion of degree requirements may be officially certified.

Doctor of Education (Ed.D.)

The Doctor of Education is awarded upon completion of 3 years of advanced training in both the theory and the practice of education. It is a professional degree intended primarily for practitioners in education rather than for researchers, for whom the Ph.D. is the appropriate degree plan. The Ed.D. is offered in curriculum and instruction, educational administration, higher education, and special education.

Advisory Committee

A student admitted to study for the Ed.D. is considered an aspirant for the degree until the comprehensive examination has been passed. After passing this examination, the student is considered a candidate for the degree. Each student must have an advisory committee of at least 3 members of the Graduate Faculty. One member of the committee serves as the chair. The student meets with this committee before completing 12 hours of course work to plan and approve formally an appropriate program leading to the Ed.D. The approved program, signed by members of the committee and the student, is placed in the student’s file in the School of Education Graduate Division office.

Requirements

Students must acquaint themselves thoroughly with departmental requirements for the degree, which may be in addition to general requirements and those of the School of Education. Consistent with Graduate Studies’ general regulations, it is each student’s responsibility to know and observe all university, school, departmental, and academic program regulations and procedures relating to the graduate program. In no case will a regulation be waiver of content or be granted because a student pleads ignorance of, or contends he or she was not informed of, requirements, regulations, procedures, or deadlines. Responsibility for following all policies and meeting all requirements and deadlines rests with the student.

1. Time Limit-Maximum Tenure

After being admitted to doctoral programs at KU, students complete all degree requirements in eight years. In cases in which compelling circumstances recommend a one-year extension, the School’s Graduate Division has authority to grant the extension on the written advice of the department and dissertation committee. Students who complete the master’s degree at KU and subsequently begin doctoral studies have a maximum total enrolled time of 10 years to complete both degrees. Normal expectations, however, are that most master’s degrees (excluding some professional terminal degrees) should be completed in two years of full-time study, and both master’s and doctorate in six years of full-time study. Some graduate degree programs may have more stringent time restrictions. Students should inquire about the policy in effect in the department in which they plan to study.

A student in any of the above categories may petition the Graduate Division through the department for a leave of absence during either the pre- or post-comprehensive period to pursue full-time professional activities related to the doctoral program, extraordinary circumstances (e.g., cases of illness, emergency, financial hardship, military leave), to pursue family responsibilities or to pursue full-time activities related to long-range professional goals.

Appropriate documentation related to these extraordinary circumstances may be requested from the student directly. Evidence of progress towards degree will also be a determining factor in the decision to grant an exception.

Ordinarily a leave of absence is granted for one year, with the possibility of extension upon request. The time taken for a leave of absence does not count against the student’s time to degree. However, after an absence of five years, a doctoral aspirant or candidate loses status as such and must apply for readmission to the program and the Graduate Division.

2. Period of Continuous Study

This agreement is established to help assure that the Ed.D. period of continuous study requirement is fulfilled according to its purpose and with maximal benefit to the doctoral aspirant. In all options it has been recognized that continuous involvement in formal study and the close association with faculty and graduate student colleagues, which are the general goals of this requirement may be enhanced, particularly for the professional practitioner degree aspirant, by related professional activities—such as experiences are directly related, contributory to and coordinated with on-campus courses and research. The following options are available:

A. Two consecutive semesters, one of which may be a summer, of full-time enrollment in regularly scheduled courses normally at the program’s home campus (full-time = 9 hrs, fall or spring, and 6 hrs in the summer).

B. Two consecutive semesters of at least 6 hours and adjacent summer session of at least 3 hours, all in regularly scheduled courses at the program’s home campus.

C. Three consecutive semester enrollments (excluding summer session) of at least 6 hours each in regularly scheduled courses at the program’s home campus.

D. Eighteen (18) hours taken during the period encompassed by two consecutive summer sessions with enrollment in each of the four semesters: Summer, Fall, Spring, Summer.

E. Twenty-seven (27) hours taken during any five consecutive semesters (including summer sessions), with enrollments in each semester. During the period, the student must be employed full-time in a field directly related to the student’s academic field.

These options include the following stipulations:

• Only course work taken after the first year of graduate study, that is, after the master’s degree or its equivalent, may satisfy the period-of-continuous-study requirement.

• Dissertation, individual study, field experience, and off-campus practicum hours may not be included in the stated minimal requirements.

• For all enrollments of 8 hours or more, 1 course may be taken away from the program’s home campus, e.g., on the KU Edwards Campus, if need can be demonstrated from a scheduling standpoint.

• Got options B. C. and D., at least quarter-time, appropriately related, professional involvement on or off campus is required.

The period of continuous study is not merely a requirement measured in hours of enrollment or of credit in courses counted toward a degree but
may include other academic and professional activities appropriate to the field of study.

The student, with the help of the advisory committee, must file in the Graduate Division office a period of continuous study plan congruent with School of Education requirements before the beginning of the formal period of continuous study. This plan may be filed as a part of the overall program plan.

The period of continuous study requirement for the Ed.D. ensures a minimum period of bona fide on-campus study and related academic and professional involvement. Because of the particular professional nature of the degree, appropriately related professional endeavors may

3. Program Area
All candidates for the Ed.D. must complete a minimum of 27 credit hours in their major area, excluding credits used to fulfill Research Skills, Dissertation, and the doctoral practicum requirements. Coursework completed at KU or at another institution as part of a previous graduate degree, cannot be used to meet the credit hour requirements for this degree.

4. Research Skills
Upon admission to doctoral study, students who have not completed a research and evaluation methods course for the education master’s degree must take the course, e.g., EPSY 715, during the first doctoral enrollment. The course used to fulfill this requirement, whether taken at KU or at another institution, does not count toward any doctoral requirements.

Before being admitted to the comprehensive examination, students must present satisfactory evidence that they possess the professional research skills of advanced practitioners in their concentrations by meeting the following research skills requirements: Complete a minimum of 9 hours of graduate study in 1 or more supporting areas that develop skills relevant to understanding, promoting, and evaluating professional practice. Supporting areas may include statistics, assessment and evaluation, qualitative methods, or historical or philosophical methods. Up to 6 hours, excluding credit hours for the required master’s course in research methods and evaluation, whether taken at KU or elsewhere, may be waived using prior B-level or higher graduate course work. Research skills requirements vary among programs to meet the individual needs of students. The student must secure the most recent information on research skills requirements from the appropriate department.

The research skills requirements chosen by the student must be approved and passed upon by the advisory committee. The chair must file the results in the School of Education Graduate Division office on the appropriate form so that they may be recorded on the student’s permanent record.

Responsible Conduct of Research: All students must satisfy departmental and university requirements regarding the responsible conduct of research. Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current Lawrence and Edwards Campus policies on Doctoral Research Skills and Responsible Scholarship (https://documents.ku.edu/policies/Graduate_Studies/Research_Skills_and_Responsible_Scholarship.htm) are listed in the KU Policy Library.

5. Doctoral Practicum Enrollment
Ed.D. aspirants must complete at least 1 structured 3-credit-hour practicum in a supervised internship setting. A description of the practicum prepared by the student and approved by the advisory committee must be filed with the department and the graduate records office. Specific requirements for this practicum experience are available from students’ departments.

6. Comprehensive Examination
When a Ed.D. aspirant has completed the major portion of the course work at a satisfactory level (having no more than 6 credits of required regularly scheduled coursework in the degree program remaining) and has completed the research skills requirement and all other departmental requirements prerequisite to the comprehensive examination, the department asks the School of Education Graduate Division office to schedule the comprehensive examination.

This request must be made at least 2 weeks before the date of the written portion of the examination. Students must be enrolled when they take the exam.

The examining committee must consist of at least 5 members (usually including the advisory committee). All must be graduate faculty, and 3 of the 5 must be regular faculty from the student’s home department. For more information visit the KU Policy library: Doctoral Student Oral Exam Committee Composition (http://policy.ku.edu/graduate-studies/oral-exam-committee-composition) and Graduate Studies Representative on Doctoral Exam Committees (http://policy.ku.edu/graduate-studies/graduate-studies-representative-on-doctoral-exam-committees).

The comprehensive examination consists of both written and oral parts and covers the major area pursued by the student, as well as the minor area, if one is required by the student's program. The student passes the comprehensive examination if a majority of the official examining committee (including the chair) approves the student’s performance. The grade on this examination is Honors, Satisfactory, or Unsatisfactory. An aspirant who receives a grade of Unsatisfactory may be allowed, upon the recommendation of the department, to repeat it, but it may not be taken more than 3 times. The aspirant may not repeat the oral examination until at least 90 days have elapsed since the last unsuccessful attempt.

Note: Students in Ed.D. programs must pass both written and oral components of the comprehensive examination. Satisfactory performance on the written component must be attained before the oral component may be attempted. To fail either component is to fail the examination. All 5 members of the student’s comprehensive examination committee are involved in the evaluation process. The written component of the comprehensive examination, like the oral, focuses on advanced knowledge in the major and any appropriate related areas. The focus of the examination is the ability to relate this knowledge to tasks and problems faced by practitioners. To pass, the student must be evaluated as having responded satisfactorily to questions in the major areas. If a student fails any portion of the written comprehensive component, a failure of the examination is recorded. The examining committee determines if the entire written component of the examination, or only the failed portion(s), must be retaken.

The entire written component lasts a minimum of 16 hours. If a student passes the written component but fails the oral, the examining committee determines if both components or only the oral must be repeated, after the minimum 90-day interim period.

7. Dissertation Proposal Committee and Proposal
Upon passing the comprehensive examination, the aspirant becomes a candidate for the Ed.D.

The Graduate Division, using the recommendations of the candidate’s department, designates the dissertation/proposal committee at this time. The dissertation committee must consist of at least five members and may include members from other departments and divisions or, on occasion, members from outside the university. All members of the committee must be chosen from the graduate faculty, and the chair must, in addition, be authorized to chair doctoral dissertations. A prospective member of the committee from outside the university must have gained appointment as a special member of the graduate faculty before appointment to the committee.

Doctoral aspirants may begin work on the dissertation after they complete the equivalent of one full-time semester of doctoral study in regular student status and may use their research practicum experience in preparation for the dissertation. However, students may first enroll in dissertation credit hours only during the semester in which they take their comprehensive examinations. Dissertation hours taken during that semester count toward the minimum of 12 hours of dissertation credit only if the examinations are passed during that same semester.

The dissertation proposal must be read by all members of the dissertation committee. One copy of the approved dissertation proposal title sheet, signed by all members of the dissertation committee, along with an electronic copy of the proposal must be submitted to the School of Education Graduate Division office.

8. Continuous Enrollment

After passing the comprehensive examination, the candidate must be continuously enrolled (http://policy.ku.edu/graduate-studies/doctoral-candidacy), including summer sessions, until the degree is completed. A student must be continuously enrolled in accordance with the following schedule: Until the degree is completed or until 18 post-comprehensive hours have been completed (whichever comes first), the student must enroll for at least 6 hours a semester and 3 hours a summer session. Students who have not completed the degree after completing 18 hours of post-comprehensive enrollment must continue to enroll for the amount of credit that best reflects their demands on faculty time and university resources each semester and each summer session until they pass the final oral examination.

Post-comprehensive enrollment may include enrollment during the semester or summer session in which the comprehensive examination has been passed if the student is enrolled for the appropriate number of credit hours (6 during a regular semester, 3 during the summer session). Students may enroll for dissertation hours as well as other courses when the examination is taken. Students who do not pass the examination cannot apply dissertation hours to degree requirements. Under certain conditions, the candidate may petition the School of Education Graduate Division for a leave of absence during the period between the comprehensive examination and the final oral examination.

9. Dissertation

The candidate must present a dissertation that exhibits the application of existing knowledge in the major field of professional study. Ed.D. candidates may satisfy the dissertation requirement by completing a comprehensive, critical assessment of the relevant literature on a major educational issue or problem. This study should demonstrate the application of existing knowledge to the author’s area of professional practice. Various styles and formats for theses and dissertations are acceptable. The format and style of a student’s thesis or dissertation is left to the discretion of the student and the advisor, but format and style options may be constrained or dictated by the policy of the department from which the student is to receive the degree. The dissertation is prepared under the direction of the dissertation committee. The minimum number of dissertation hours in the Ed.D. program is 12. Instructions regarding the proper form of the final document (http://graduate.ku.edu/etd-formatting-and-working-multimedia-files) may be obtained from the School of Education Graduate Division office.

10. Final Oral Examination

When the dissertation has been tentatively accepted by the dissertation committee, the chair of the dissertation committee may request the School of Education Graduate Division office to schedule the final oral examination. This request must be made at least two weeks before the desired examination date. At least five months must have elapsed between the successful completion of the comprehensive examination and the date of the final oral examination.

The committee for the final oral examination (http://policy.ku.edu/graduate-studies/final-oral-exams) must consist of at least five members (the members of the dissertation committee plus other members of the Graduate Faculty recommended by the committee chair and the department and appointed by the Graduate Division). At least one member must be from a department other than the major department. This member represents Graduate Studies and must be a regular member of the Graduate Faculty.

The final examination must be partly oral and may be wholly so. The examination covers the dissertation and the candidate’s concentration area and, if appropriate, minor area. The candidate passes the final examination if a majority of the official examining committee members (including the chair) approves the candidate’s performance. When the final oral examination has been passed, the dissertation committee reports a grade of Honors, Satisfactory, or Unsatisfactory. Candidates who fail the final oral examination may be allowed to repeat it upon the recommendation of the dissertation committee.

11. Dissertation Copies

When the final oral examination has been passed and the dissertation has been signed by the members of the dissertation committee, a title page and acceptance page with original signatures and ETD Release form are to be delivered to the Graduate Division so that completion of degree requirements may be officially certified.

Licensure: Added Endorsements

At least 8 hours of the required course work must be completed at KU if it is to be the recommending institution for adding endorsements to the teaching license. For information about adding endorsements, contact the School of Education at 785-864-3726.

University Career Center

The University Career Center (http://www.kucareerhawk.com/s/762/start.aspx), 110 Burge Union, 785-864-3624, provides career counseling and services for all KU students, including students in the School of Education.

Curriculum and Teaching Courses

C&T 100. Introduction to the Education Profession. 3 Hours. This course is designed to acquaint students with the profession of education by helping to increase an awareness of the role and characteristics of an effective teacher. Large and small group activities
and assignments are dispersed throughout the semester to facilitate these outcomes. Students will be involved in observation of and participation with teachers and pupils in public school classrooms, which complement course activities and assignments. Students will work with a mentor pre-service teacher from the KU School of Education to provide discussions about each of the course objectives. CT 100 is a pre-professional course. Successful completion of the course does not guarantee eventual admission to the School of Education's Teacher Education Program. LEC.

C&T 235. Multicultural Education. 3 Hours. AE41.
The course is designed to provide the student with an awareness of and sensitivity of the concept of multicultural education. Topics related to the rationale for and processes of providing a multicultural perspective within the schools will be addressed. Field experiences will be structured to provide students with opportunities to observe the diversity within the educational setting. LEC.

C&T 322. Curriculum and the Learner in the Elementary School. 3 Hours.
Building on the experiences in CT 100 and CT 200, this course will focus on the learner in the elementary setting. Learning occurs as a result of interaction among learners, teacher and subject matter in the classroom within a school in a community. The impact of the interactions of these students of learning of young children is studied in this course. Emphasis is given to the factors that influence curriculum decision-making, and methods that are considered in elementary grades curriculum and how it is delivered. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 324. Curriculum Learner in the Middle School and High School. 3 Hours.
Building on experiences in CT 100 and CT 200, this course will focus on the learner within the high school setting. Learning occurs in a classroom within a school in a community, and the nature and structure of these settings as well as their impact on learning is studied in this course. Emphasis is given to the curriculum, the factors that influence the curriculum, and the ways that goals for high school students are reflected in the high school curriculum. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 330. Instructional Approaches for ESOL Learners in the Elementary/Early Childhood Classroom. 3 Hours.
Teaching English as a Second or Additional Language/Bilingual Education is designed to provide preservice elementary teachers with an understanding of the history and methodology of teaching English to speakers of other languages, both as a foreign language and as an additional language within American English settings. Future ESL/EFL/EB teachers will be prepared to develop the investigative, decision-making, and reflective teaching skills needed to work with English language learners of all ages, and to impart language instruction in the appropriate context. Emphasis is placed on developing a clear understanding of who English language learners are; what programs and services are-or should be-available to the ESOLs/EBs; the critical pedagogical aspects of teaching ESL/EFL/EB; and the preparation of teaching materials for classroom use. Prerequisite: Admission to the teacher education program. LEC.

C&T 331. Instructional Approaches for ESOL Learners in the Middle/Secondary Classroom. 3 Hours.
This course is designed to provide preservice middle/secondary discipline specific teachers with an understanding of the history and methodology of teaching English to speakers of other languages, both as a foreign language and as an additional language within American English settings. Future ESL/EFL/EB teachers will be prepared to develop the investigative, decision-making, and reflective teachings skills needed to work with English language learners of all ages, and to impart language instruction in the appropriate context. Emphasis is placed on developing a clear understanding of who English language learners are; what programs and services are-or should be-available to the ESOLs/EBs; the critical pedagogical aspects of teaching ESL/EFL/EB; and the preparation of teaching materials for classroom use. Prerequisite: Admission to the teacher education program. LEC.

C&T 335. Curriculum and Instruction in Middle and Secondary History and Government Classrooms. 3 Hours.
The purpose of this course is to help prepare students to teach social studies in the middle and secondary grades. Prerequisite: Admission to the teacher education program. LEC.

C&T 344. Children's Literature in the Elementary School. 2 Hours.
A study of literature (poetry, folk literature, fiction, and nonfiction) appropriate for elementary school children with a focus on contemporary children's books. Emphasis will be on selection of literature based on child development, literary quality, curriculum, and pluralism and the engagement of children in literature experiences from the interactive, reader response, and critical perspectives. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 347. Social Studies in the Elementary Classroom. 3 Hours.
A study of curricula, instructional strategies, and classroom organization for social studies education K-6. Emphasis is placed on the effective implementation of social studies programs in classroom settings. Prerequisite: Admission to the School of Education in elementary, middle, or secondary, or the Unified Early Childhood programs. LEC.

C&T 349. Science in the Elementary Classroom. 3 Hours.
In this course, you will develop an understanding of how children learn science and why science education is important. You will examine effective approaches to teaching, instructional materials, and student assessment and will learn how to plan and implement a science unit. The course will emphasize a guided-inquiry approach to science instruction appropriate for the abilities and interests of children in grades K-6. Prerequisite: Admission to the School of Education. LEC.

C&T 351. Mathematics for the Elementary Classroom. 3 Hours.
This course is a study of the curriculum, instructional strategies, and classroom organization for mathematics in grades K-6. Emphasis is placed on the effective implementation of mathematics programs in classroom settings. Prerequisite: Admission to the School of Education. LEC.

C&T 352. Literacy Instruction in the Primary Grades (K-3). 3 Hours.
This course is intended to develop the attitudes, knowledge, and skills necessary to effectively instruct primary grades (K-3) children through the development of literacy skills: reading, writing, listening, speaking, spelling, and handwriting. The major goals of this course are for the prospective teacher to develop an understanding of literacy development of the primary-grades child, current literacy theories, and the ability to work with a number of approaches to promote literacy learning and a positive attitude toward literacy in all primary-grades students who may have different needs due to language, culture, learning challenges, and/or differing stages of development. This course is to be taken concurrently with CT 353, Literacy Practicum in the Primary Grades. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 353. Literacy Practicum in the Primary Grades. 1 Hour.
This supervised practicum is intended to allow the pre-service teacher to apply the knowledge gained in CT 352, Literacy Instruction in the primary grades (K-3), by teaching children in the primary grades. To be taken concurrently with CT 352 Prerequisite: Admission to the Teacher Education Program. LEC.
C&T 354. Literacy Instruction in the Intermediate Grades. 2 Hours.
This course is intended to develop the attitudes, knowledge, and skills necessary to effectively instruct intermediate-grades children (4-6) through the development of literacy skills: reading, writing, listening, speaking, and spelling. The major goals of this course are for the prospective teacher to develop an understanding of literacy development of the intermediate-grades child, current literacy theories, and the ability to work with a number of approaches to promote literacy learning and a positive attitude toward literacy in all intermediate-grades students who may have different needs due to language, culture, learning challenges, and/or differing stages of development. Prerequisite: Admission to the Teacher Education Program. This course is to be taken concurrently with CT 355, Literacy Practicum in the Intermediate Grades. LEC.

C&T 355. Literacy Practicum in the Intermediate Grades (4-6). 1 Hour.
This supervised practicum is intended to allow the preservice teacher to apply the knowledge gained in CT 354, Literacy Instruction in the intermediate grades (4-6), by teaching children in the intermediate grades. To be taken concurrently with CT 354. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 359. Literacy in the Content Areas. 1 Hour.
An introduction to reading in relation to specific areas of art, music and health and physical education. Focus on specialized vocabulary and literature related to each area. Introduction of specific strategies to teach vocabulary and comprehension and to integrated units of study. Prerequisite: Admission to certification program in music education, art education, health education, or physical education. LEC.

C&T 360. Knowing and Learning in Mathematics and Science. 3 Hours.
This course focuses on issues of what it means to learn and know science and mathematics. What are the standards for knowing we will use? How is knowing and learning structured and how does what we know change and develop? For the science and mathematics educator, what are the tensions between general, cross-disciplinary characterizations of knowing (e.g. intelligence) and the specifics of coming to understand powerful ideas in mathematics and science? What are the links between knowing and developing in learning theory, and the content and evolution of scientific ideas. Also, current issues and tensions in education will be discussed, especially as it relates to mathematics and science instruction. LEC.

C&T 366. Classroom Interactions in Mathematics and Science. 3 Hours.
To make prospective teachers aware of multiple models of teaching (including direct instruction, inquiry teaching and use of small groups); the advantages, disadvantages and uses of each; and what each model requires of teachers. To allow prospective teachers to explore ways of probing student understanding through authentic assessment, evaluating student understanding through student artifacts, and enhancing student understanding through lesson plans built around models of how people learn. To make prospective teachers aware of equity and diversity issues in classroom teaching and ways of ensuring that all students have an opportunity to learn. To make students aware of the proficiencies for licensure recognized by UKanTeach and Kansas State Board of Education and facilitate students' demonstration and documentation of these through their development of a professional portfolio. To develop students' capacity to identify and evaluate best teaching practices as presented in research literature. Prerequisite: CT 360. LEC.

C&T 420. Teaching Kansas Government and Contemporary Public Policy Issues: _____. 3 Hours.
A study of the constitution, organization, functions, and processes of Kansas government, of contemporary public policy issues with local, state and national implications, and of strategies for teaching these in middle and secondary classrooms. Prerequisite: Admission to the School of Education and POLS 110. LEC.

C&T 430. Teaching Literature for Young Adults. 3 Hours.
Teaching literature (novel, short story, poetry, drama, nonfiction) suitable for students in the middle school, the junior high school, and the senior high school. Ethnic literature, censorship, bibliographies, and other relevant sources of information about books for young adults will be studied. Prerequisite: Admission to the School of Education. LEC.

C&T 448. Reading and Writing Across the Curriculum. 3 Hours.
Content area teachers do far more than impart information to students. They play an important role in guiding middle/secondary students as they use reading and writing as tools for learning. This course includes an overview of the state and national reading and writing scores of adolescents. Students will then be introduced to the basic processes or ways in which individuals may learn to read and write. The course continues with a focus on the instructional strategies and materials that promote the development of reading and writing in the context of teaching new information. Additionally, the course emphasizes the informal methods educators can use, on an on-going basis, to diagnose their students ability to comprehend content material. Finally, appropriate fix-up strategies will be modeled. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 460. Project Based Instruction in Mathematics and Science. 3 Hours.
This course will have three essential components. The first will be a theory driven perspective accounting for what we know of how people learn and how project-based instruction improves student learning in math and science. The second component will provide the students with support as they develop their own project-based unit. The third component will be field experiences consisting of two parts: 1) observation of well-implemented project-based instruction in local schools and 2) teaching project-based activities in an informal education setting. Prerequisite: CT 360. LEC.

C&T 489. Advanced Teaching Practicum. 1 Hour.
This supervised practicum is intended to allow the pre-service teacher to apply knowledge gained in SPED 507; CT 448, ELPS 537; and CT 540, CT 541, CT 542, CT 543 and CT 544: Advanced (Content Area) Methods by teaching children in the middle/secondary grades. To be taken concurrently with SPED 507; CT 448, ELPS 537; and CT 540, CT 541, CT 542, CT 543 and CT 544: Advanced (Content Area) Methods. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 490. Student Teaching. 6 Hours.
A supervised teaching experience in an approved school setting, with level and subject area to be selected according to the teaching field. Prerequisite: Successful completion of fall practicum experiences and demonstration of appropriate professional dispositions. LEC.

C&T 491. TESOL Practicum for Kansas State Endorsement. 3 Hours.
The TESOL Practicum allows individuals to gain supervised experience in Teaching English to Speakers of Other Languages (TESOL) for a professional KSDE ESOL endorsement and advancement. Prerequisite: Completion of all TESOL endorsement courses. LEC.

C&T 494. Internship. 6 Hours.
A supervised internship experience leading to initial certification. The student assumes the total professional role as a teacher in an approved school setting, with level and subject area to be selected according to the teaching field. Prerequisite: Successful completion of all practicum experiences and demonstration of appropriate professional dispositions. LEC.
C&T 495. Seminar: Developing the Teaching Portfolio. 3 Hours.
This course serves to instruct students in the research, teaching, and writing components of developing a teaching portfolio. The seminar will provide a forum for discussion and deeper exploration into topics and issues related to working in the school setting, teaching, and developing a professional teaching philosophy. Course is graded on a satisfactory/fail basis. Prerequisite: Enrollment in Student Teaching or Internship during the Spring semester. LEC.

C&T 497. Independent Study in: ____. 1-2 Hours.
Only one enrollment permitted each semester. A maximum of four hours will apply toward the bachelor's degree. Prerequisite: Recommendation of advisor and consent of instructor. IND.

C&T 499. Bachelor's Project. 4-6 Hours.
A formal report of some aspect of the field experience that relates formal learning and in situ experience to program planning, implementation, and evaluation. Topic will be selected in consultation with the project advisor. Prerequisite: CT490 and CT 491 (CT 491 may be taken concurrently). IND.

C&T 500. Student Teaching in: _____. 1-6 Hours. AE61.
A supervised teaching experience in an approved school setting, with level and subject area to be selected according to the teaching field. Prerequisite: Admission to the Student Teaching program. FLD.

C&T 501. Student Teaching Practicum in: _____. 1-6 Hours.
A supervised classroom teaching experience under the direction of an experienced teacher and in close relationship with a university supervisor. Prerequisite: Admission to the Graduate Certification Program and approval of advisor. FLD.

C&T 503. International Perspectives in Primary and Secondary Education. 3 Hours.
This course is will expose students to a variety of debates and developments related to primary and secondary education in our globalized era. Students will survey educational systems from the US and selected world regions, comparing and contrasting them in terms of access, funding, curriculum, and pedagogy. They will investigate educational systems from the perspective of international development while addressing issues of local vs. national or international control, tradition vs. global advancement, and other challenges and trade-offs. Prerequisite: Junior standing or higher, or permission of instructor. The course is suitable for advanced undergraduate and master's degree seeking students. LEC.

C&T 530. Curriculum and Instruction in Foreign Language Classrooms. 3 Hours.
A study of philosophy, objectives, curriculum, instructional strategies, and evaluation in teaching foreign language at the K-12 levels. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 533. Curriculum and Instruction in Middle & Secondary English/Language Arts Classrooms. 3 Hours.
This is an English/Language Arts methods course that focuses on curriculum development and instructional strategies appropriate for teaching English/Language Arts in grades 5-12. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 537. Curriculum and Instruction in Middle and Secondary Science Classrooms. 3 Hours.
The purpose of this course is to help you prepare to teach science in the middle and secondary grades. The instructor designed the class sessions and learning tasks to enable you to make progress toward achieving the Kansas Science Teaching Standards and Kansas Professional Education Standards. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 539. Curriculum and Instruction in Middle and Secondary Mathematics Classrooms. 3 Hours.
This course is designed to provide focused study of curriculum development and instructional strategies appropriate for teaching mathematics in grades 5-12. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 540. Advanced Practices in Teaching English in the Middle and Secondary Schools. 3 Hours.
The course is designed to provide continued study of curriculum development and instructional strategies appropriate for teaching English/Language Arts in grades 5-12 and as a final readiness for the undergraduate student teaching experience. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 541. Advanced Practices in Teaching Social Studies in Middle/Secondary Schools. 3 Hours.
Advanced study of curriculum development and instructional strategies appropriate for teaching social studies in grades 6-12 and application of learning in a middle/secondary classroom. Prerequisite: CT 335; SPED 326 and, CT 324 LEC.

C&T 542. Advanced Practices in Teaching Science in the Middle and Secondary Schools. 3 Hours.
This course is designed as a final readiness for the semester-long student teaching experience and the Kansas Performance Teaching Portfolio to be completed during that student teaching experience. The course deals with the analysis, adaptation, and application of varied instructional designs to implement curricula in specific science areas in grades 5-12. Prerequisite: Admission to the middle-level licensure program in science education at the undergraduate level or one of the graduate licensure programs in middle/secondary science. Successful completion of CT 537. LEC.

C&T 543. Advanced Practices in Teaching Mathematics in the Middle and Secondary Schools. 3 Hours.
The course is designed to provide continued study of curriculum development and instructional strategies appropriate for teaching mathematics in grades 5-12 and as a final readiness for the undergraduate of GLP student teaching experience. Prerequisite: Admission to the middle-level licensure program in mathematics education at the undergraduate level or the GLP in middle or secondary mathematics. Successful completion of CT 539. LEC.

C&T 544. Advanced Practices: Situating Foreign Language Content, Dispositions, Skills & Tools Language Classroom. 3 Hours.
This is an advanced Foreign Language methods course that focuses on the critical importance of the socio-linguistic environment of foreign language classrooms. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 598. Special Course: _____. 1-5 Hours. AE61.
A special course of study to meet current needs of education students, primarily for undergraduates. LEC.

C&T 620. Teaching English as a Second Language/Bilingual Education. 3 Hours.
The purpose of this course is to study the objectives and methods of ESL/Bilingual education. Students will examine methods and techniques of teaching: listening, speaking, reading, and writing in the ESL/Bilingual Education settings. The course will also emphasize the importance of culture in second language teaching, and self-evaluation of teaching and instructional materials. Undergraduate course that will meet with CT 820 Teaching English as a Second Language/Bilingual Education. Prerequisite: Admission to the School of Education. LEC.
C&T 621. Diagnosis and Remediation in Second Language Education. 3 Hours.
This course provides an overview of diagnostic techniques and instruments used to identify and remediate specific learning difficulties associated with normal second language development in the area of listening, speaking, reading, and writing. The course includes a review of research concerning assessment as it relates to error analysis in the second language context. Prerequisite: Admission to the School of Education. LEC.

C&T 622. Second Language Acquisition. 3 Hours.
This course provides an intensive review of the theory and research base of second language acquisition. Particular attention is given to the influence of research trends in linguistics and psychology on second language education theory and practice. Current trends in second language education are examined in light of the historical theory base. Prerequisite: Admission to the School of Education. LEC.

C&T 630. Understanding the Nature of Talent in Children and Youth. 3 Hours.
This course addresses the social, cognitive, affective, and other developmental aspects of talent as manifested in children and youth with high potential. The course provides an opportunity to examine characteristics, strengths, and needs of children and their families. The course focuses on the foundational aspects of gifted/talented education: educational and political history of the field, etiology of extraordinary potential, and identification and assessment techniques, instruments, and systems. Included in the course are relevant research, policies and regulations, services, and information resources. Prerequisite: SPED 325, SPED 425, SPED 431, SPED 725 or equivalent. LEC.

C&T 631. Teaching for Talent Development. 3 Hours.
The course introduces key theories and basic principles of curriculum development and introduction for students with high potential and/or high achievement. Frameworks and models for modifying general education content, cognitive processes, and learning outcomes are applied to enhancing talent development. The course addresses affective considerations, peer relations, and working with families. Prerequisite: CT 630 or CT 730. LEC.

C&T 649. An International Teaching Experience. 3 Hours.
This study abroad focuses on professional growth in teaching and understanding education based on an international experience. Students learn about curriculum and teaching from an international perspective, and engage in professional discussions with Italian teachers and administrators. Students engage in culturally responsive teaching in preschool-secondary settings, they participate in family and community activities/events, and they visit renowned museums and cities. Prerequisite: Application through the Office of Study Abroad and interview with the director. LEC.

C&T 707. Project Based Instruction. 3 Hours.
This course will emphasize exploring, designing, and evaluating materials and pedagogy to work toward the design of project-based curriculum and instruction. Topics focus on the principles of project-based instruction as well as multiple models for its use in the classroom. LEC.

C&T 709. Foundations of Curriculum and Instruction. 3 Hours.
Basic concepts and processes of curriculum and instruction, including theories, planning models, resources for decision-making, current trends, research, and proposals for improvement of curriculum and instruction. LEC.

C&T 710. Writing, Language, and Learning. 3 Hours.
This course will situate issues about writing and learning in the context of more general inquiry about language and learning. We will read research related to classroom discourse and the teaching of writing in secondary classrooms. We will then connect this body of research to the teaching of English in middle/secondary classrooms. LEC.

C&T 711. Teaching Young Adult Literature (Grades 7-12). 3 Hours.
A study of the characteristics of adolescents with respect to their interest and reading habits; criteria for choosing books for junior and senior high school in-class and out-of-class reading; selection of materials; methods for helping poor readers; literary discrimination and appreciation; censorship; ethnic literature; techniques for presenting literary selection in class. Wide reading among best of current and classical literature. LEC.

C&T 730. Understanding Talent. 3 Hours.
This course addresses the social, cognitive, affective, and other developmental aspects of talent as manifested in children and youth with high potential. The course provides an opportunity to examine characteristics, strengths, and needs of these children and their families. The course focuses on the foundational aspects of gifted/talented education: educational and political history of the field, etiology of extraordinary potential, and identification and assessment techniques, instruments, and systems. Included in the course are relevant research, policies and regulations, services, and information resources. Prerequisite: SPED 425, SPED 431, SPED 725 or equivalent introductory course on exceptional children and youth. LEC.

C&T 731. Teaching for Talent Development. 3 Hours.
The course introduces key theories and basic principles of curriculum development and introduction for students with high potential and/or high achievement. Frameworks and models for modifying general education content, cognitive processes, and learning outcomes are applied to enhancing talent development. The course addresses affective considerations, peer relations, and working with families. Prerequisite: CT 644 or CT 730 or equivalent introductory course on exceptional children and youth. LEC.

C&T 732. Teaching for Talent in General Education Settings. 3 Hours.
This course is for classroom teachers concerned about meeting the needs of students with high potential in their classrooms. Students will be introduced to various curriculum models and teaching strategies commonly employed in special programs for gifted/talented students. There will be opportunities to apply gifted education models to modify existing curriculum or to develop new curricula which enhances the abilities of all students. Prerequisite: CT 644 or CT 730 or equivalent introductory course on exceptional children and youth. LEC.

C&T 733. Practicum in Gifted and Talented Education. 1-10 Hours.
A course designed to provide experiences for students to work intensively and to teach identified gifted and high potential students in educational settings. Students will develop competencies relative to implementing individual group and individual education plans through a variety of instructional alternatives. Arranged service delivery options are possible. Prerequisite: CT 645, CT 731, CT 732, or equivalent course. FLD.

C&T 738. Applied Research in the Classroom. 3 Hours.
This course is designed to facilitate the implementation and completion of an action research project during the internship experience. Prerequisite: Successful completion of student teaching. LEC.

C&T 739. Internship in Teaching: _____. 1-15 Hours.
A supervised internship experience leading to initial certification. The student assumes the total professional role as a teacher in an approved school setting, with level and subject area to be selected according to the teaching field. Prerequisite: CT 500 and CT 736 appropriate to the student's teaching level and area, or equivalent. FLD.
C&T 740. Foundations of Reading: Process, Theory, and Instruction. 3 Hours.
It is the purpose of this course to introduce students to the foundations of the reading process, developmental levels, theory, models, and procedures at the emergent, elementary, and secondary levels. Elements of cultural, linguistic, and ethnic diversity that affect the reading process are included. Students work with research related to the reading process, remediation, and assessment. LEC.

C&T 741. Comprehension and Study Strategies for Use with Multiple Texts. 3 Hours.
It is the purpose of this course to examine research, theory, and practice in reading comprehension. Emphasis is placed on the application of strategies for various text types (expository, narrative, persuasive, and technical) for teaching reading comprehension and study skills across content areas in the K-12 classrooms. Prerequisite: CT 740 or permission of the instructor. LEC.

C&T 742. Language and Literature in the Reading Program. 3 Hours.
A study of linguistic and literary aspects of reading instruction, focusing on language and cognitive development as they relate to reading. Emphasis will be on approaches for differentiating reading instruction to provide for less proficient to gifted readers, research and issues related to reader response, techniques for assessing children's reading attitudes and interests, procedures for selecting literature, and strategies for integrating literature into the elementary school reading program. Prerequisite: CT 740 or permission of instructor. LEC.

C&T 743. Writing and Spelling Development and Instruction. 3 Hours.
A study of the research base on writing, spelling, speaking, and listening for teaching the language arts; an overview of development in writing and spelling, the writing and spelling processes and instruction, and strategies for integrating the language arts. Prerequisite: Admission to a masters program within the School of Education, CT 740 or permission of the instructor. LEC.

C&T 744. Teaching Literature to Children. 3 Hours.
An opportunity to survey the broad range of trade books published for children; criteria for book selection; children's reading interests and tastes; illustrations of children's books; sources for selecting literature; poetry; the role of children's literature in today's elementary curriculum. LEC.

C&T 745. Reading and the English Language Learner. 3 Hours. LEC.

C&T 746. Reading and Writing Across the Curriculum. 3 Hours.
In CT 746, preservice content teachers, who have had no previous literacy courses, are introduced to the basic processes of reading and to instructional strategies and materials that promote the development of reading, writing, and studying in the context of teaching new information. Additionally, we discuss the ways in which teachers diagnose, in an informal, on-going basis, their students' abilities to comprehend the material they are teaching. LEC.

C&T 747. An International Teaching Experience. 3 Hours.
This study abroad focuses on professional growth in teaching and understanding education based on an international experience. Students learn about curriculum and teaching from an international perspective, and engage in professional discussions with Italian teachers and administrators. Students engage in culturally responsive teaching in preschool-secondary settings, they participate in family and community activities/events, and they visit renowned museums and cities. Prerequisite: Application through the Office of Study Abroad and interview with the director. LEC.

C&T 748. Teaching with Community, Contemporary, and Primary Resources. 3 Hours.
A practical course designed for grades 4-12 teachers who wish to utilize community-based, mass media, and/or primary resources. The course focuses on the use of community resources such as local historical societies, museums, and government agencies; on the use of mass media such as newspapers, magazines, organizations' newsletters, television, and film; and on the use of primary resources such as artifacts, documents, recordings, and oral historians. Participants receive sample resources from each of the three areas along with accompanying activities. LEC.

C&T 749. Special Project in: _____ 2 Hours.
Implementation of the curriculum project planned in CT 734 or CT 735; implementation and assessment of the special project will occur during the internship. Prerequisite: CT 734, CT 735, and CT 736. RSH.

C&T 750. Connecting Research to Classroom Practice in Elementary Mathematics and Science. 3 Hours.
The primary purpose of this course is to examine current research on issues important to elementary mathematics and science programs. The course will explore issues important to the classroom practices of elementary mathematics and science teachers. Provides a broad background for understanding current issues related to elementary mathematics and science curriculum, instruction, and assessment. LEC.

C&T 751. Modern Approaches to Elementary Social Studies. 3 Hours.
A study of the purpose, content, psychology, and materials and methods for teaching the social sciences in the elementary school. Emphasis on principles and procedures for combining the social studies with other areas of the curriculum in broad unit instruction. Prerequisite: Nine hours of Education including educational psychology. LEC.

C&T 752. Modern Approaches to Middle/Secondary Social Studies. 3 Hours.
The purpose of the course is to offer preservice and practicing K-12 social studies educators the following: (1) an overview of theoretical bases for social studies education and of the social studies and discipline specific curriculum standards; (2) a review of the major curricular and extracurricular K-12 social studies programs; (3) strategies for the design, implementation, and evaluation of social studies programs; and (4) experience with the design, implementation, and/or evaluation of a social studies program. Prerequisite: Nine hours of Education including educational psychology. LEC.

C&T 753. Economic Education. 2-3 Hours.
An examination of the concepts, theories, and resource materials utilized in teaching economics in the K-12 curriculum. Particular attention is given to the functional integration of economic concepts into the elementary and secondary social studies curriculum. The use of economic resource material is considered. Participants develop projects for use in their own classrooms. LEC.

C&T 754. Teaching Economics in: _____ 3 Hours.
A critical analysis of the relationship between economics and a designated school subject selected from history, geography, or consumer education; a determination of the economic concepts that can be appropriately integrated into the particular discipline; and a comprehensive search of the particular curriculum area to identify the most effective and efficient points at which the economic concepts can be integrated. Prerequisite: CT 763. LEC.

C&T 755. Teaching with Community, Contemporary, and Primary Resources. 3 Hours.
A practical course designed for grades 4-12 teachers who wish to utilize community-based, mass media, and/or primary resources. The course focuses on the use of community resources such as local historical societies, museums, and government agencies; on the use of mass media such as newspapers, magazines, organizations' newsletters, television, and film; and on the use of primary resources such as artifacts, documents, recordings, and oral historians. Participants receive sample resources from each of the three areas along with accompanying activities. LEC.

C&T 756. Special Course: _____ 1-5 Hours.
A special course of study to meet current needs of education professionals–primarily for graduate students. LEC.
C&T 800. Foundations of Curriculum Development. 3 Hours.
This course is designed for students to gain a functional understanding of the historical, philosophical, political, psychological, and cultural factors which affect the designing and implementation of curriculum at several levels: the individual classroom, the team, the school, the larger administrative unit, the state, and the nation. Prerequisite: CT 709 or permission of instructor. LEC.

C&T 801. Planning for School Improvement. 2-3 Hours.
The course will emphasize the latest research and practice related to school improvement. Students will function as a member of a school improvement team to assimilate and synthesize research and practice into the development, revision, and/or assessment of a school improvement plan for a specific school site. Corequisite: Enrollment in the summer institute on school improvement. LEC.

C&T 802. Curriculum Planning for Educational Settings. 3 Hours.
A focus on organizing and managing curriculum development in educational settings. Such curricular decisions as writing philosophies, setting goals and objectives, selecting and organizing content, and designing and monitoring evaluation procedures will be emphasized. Providing leadership for the collaborative process of curriculum planning in organizational settings will receive attention. Prerequisite: CT 709, admission to Building Principal Certification program, or permission of instructor. LEC.

C&T 803. Differentiating Curriculum and Instruction. 3 Hours.
This course is designed for educators interested in expanding curriculum and instruction to accommodate diverse learners in the classroom, K-12. Topics include: models, methods, and resources for differentiating curriculum and instruction, designing and modifying differentiated curriculum, evaluating student learning, and introducing students, parents and colleagues to differentiation. An evidence-based, practical course for teachers, administrators, and support personnel. Prerequisite: Admission to Graduate School. LEC.

C&T 804. Trends and Issues in Middle Level Education. 3 Hours.
Information from current research, area specialists and exemplary practitioners will be used to extend appropriate teaching strategies and supplement background knowledge on special topics related to social, emotional and physical development as it relates to the curricula and young adolescents. LEC.

C&T 805. Planning Instruction and Instructional Strategies in Urban Settings. 3 Hours.
This course will prepare students to become cognizant of the particular contextual variables that pertain to the urban setting, engage in instructional planning utilizing pertinent instructional strategies for urban classrooms. Students will become familiar with conceptual frameworks appropriate to education in the urban environment, review research on education in the urban setting, and discuss goals and options for effectively coping with the demands of the urban classroom. LEC.

C&T 806. Instructional Strategies and Models. 3 Hours.
Analysis of models of teaching which represent distinct orientations toward students and how they learn. The application of these models is complemented by the study of research evidence on effective teaching strategies. Prerequisite: CT 709. LEC.

C&T 807. Multicultural Education. 3 Hours.
In order to provide the student with an understanding of multicultural education, the course will examine the effects of such issues as ethnicity in America, the melting pot theory, separatism, cultural pluralism, legal issues, and bilingual education upon the curriculum and instruction in today’s classrooms. It will include an evaluation of materials for bias and stereotypes. Field experiences are a part of this course. LEC.

C&T 808. Qualitative Research: Curriculum Inquiry. 3 Hours.
Curriculum Inquiry provides an opportunity to reflect, explore, understand, and broaden perspectives of curriculum through examining the theories, methodologies, strategies, and design of qualitative research. This course is designed to develop a common understanding of the major elements of qualitative research, while offering each student an opportunity to examine research topics and methods of personal interest, with particular attention to curricular issues. The course also includes practical experience with various modes of data collection and analysis. LEC.

C&T 809. Creative Thinking and Learning. 3 Hours.
This course provides an opportunity to investigate the nature of the creative process in educational settings. The knowledge base for the course builds from foundations of creativity, principles and theories of identifying and enhancing creative production, and affective learner variables. The course blends classic and contemporary works in creativity, and features the application of theories and models of the origins and development of creativity to promoting creative thinking and learning among children, youth and adults. Participants learn about, apply, and adapt techniques for defining and identifying creative potential and for encouraging creative thinking in educational settings. Prerequisite: Admission to graduate school. LEC.

C&T 810. Issues in Teaching Language Arts. 3 Hours.
A study of present curricula in junior and senior high school English and speech; current thinking in grammar and usage; language development in oral and written communication; problems of teaching reading and literature in the junior and senior high school; construction and reorganization of language arts courses. Students will be permitted to make an intensive study of an individual problem relating to more effective instruction in the language arts. LEC.

C&T 820. Methods of Teaching English to Speakers of Other Languages (TESOL). 3 Hours.
The purpose of this course is to study the objectives and methods of ESL/Bilingual education. Students will examine methods and techniques of teaching: listening, speaking, reading, and writing in the ESL/Bilingual Education settings. The course will also emphasize the importance of culture in second language teaching, and self-evaluation of teaching and instructional materials. Prerequisite or Corequisite: CT 709. LEC.

C&T 821. Assessment in Teaching English to Speakers of Other Languages (TESOL). 3 Hours.
This course provides an overview of diagnostic techniques and instruments used to identify and remediate specific learning difficulties associated with normal second language development in the area of listening, speaking, reading, and writing. The course includes a review of research concerning assessment as it relates to error analysis in the second language context. Corequisite: CT 820. LEC.

C&T 822. Second Language Acquisition for Teaching English to Speakers of Other Languages Educators (TESOL). 3 Hours.
This course provides an intensive review of the theory and research base of second language acquisition. Particular attention is given to the influence of research trends in linguistics and psychology on second language education theory and practice. Current trends in second language education are examined in light of the historical theory base. Prerequisite: CT 820. LEC.

C&T 823. Intercultural Competence for Teaching English to Speakers of Other Languages Educators (TESOL). 3 Hours.
This course includes the study of the interrelationship of language and culture and the use of multicultural training techniques to develop cultural awareness and positive attitudes in the second language classroom. Emphasis is on the integration of culture in the second language curriculum. Prerequisite: CT 820 or CT 803. LEC.
C&T 824. Problems in Second Language Instruction. 3 Hours.
This course presents a study of curricula and instruction in the second language setting at all levels with emphasis on educational research concerning these issues. Particular attention is given to developing competency in locating and utilizing sources of information and to preparing the research document. The course facilitates practical problem solving in the second language learning context. Prerequisite: CT 820. LEC.

C&T 825. Advanced Practicum in Teaching English to Speakers of Other Languages (TESOL). 3 Hours.
This course provides a supervised teaching experience in a setting appropriate to the goals of the prospective ESL/Bilingual teacher: elementary, secondary, or adult. Particular attention is given to lesson planning, classroom management, and the development of self-evaluation techniques. This course will also emphasize structured classroom observation prior to teaching and techniques for developing and maintaining positive working relationships with other professionals in the school setting. Prerequisite: CT 820, CT 821, and CT 822 or CT 824. FLD.

C&T 826. Linguistic Analysis for Teaching English to Speakers of Other Languages Educators (TESOL). 3 Hours.
This course offers pre- and in-service teachers the basic foundations of language analysis necessary for the teaching of second/foreign languages. The course covers basic linguistic topics common to all human languages (grammatical, phonological, and semantic aspects) with the intent to help teachers understand and address common language problems that students face when learning English as a second/foreign language. LEC.

C&T 827. Teaching Pronunciation for Foreign Language/Teaching English to Speakers of Other Languages (TESOL). 3 Hours.
The objective of this course is to give prospective language teachers the requisite theoretical and practical background for making decisions concerning pronunciation teaching. This course provides second and foreign language teachers with the necessary knowledge and skills to address the teaching of pronunciation in the foreign/second language classroom. After a review of theoretical and practical research dealing with universal human speech perception and production, implications for the design of appropriate strategies and lessons to teaching pronunciation, both at the segmental and suprasegmental levels, are addressed. Prerequisite: CT 444, CT 820 or CT 822. LEC.

C&T 828. Language and Identity. 3 Hours.
This interdisciplinary seminar explores the interrelationship between language and identity, and the role of language in developing identities of second language learners. LEC.

C&T 829. Teaching English to Speakers of Other Languages in Global Context (TESOL). 3 Hours.
The purpose of this course is to investigate contemporary issues in and key concepts pertaining to Teaching English to Speakers of Other Languages (TESOL) throughout the world. We will examine primary research and employ a sociocultural lens to better understand how the phenomenon of globalization has shaped how, why, and the conditions under which English is taught and learned on different continents, as well as critiquing research methods and approaches to studying English language teaching and learning. LAB.

C&T 830. Classroom Applications of Assessment Information. 1 Hour.
The primary purpose of this course is to examine classroom-based practices for identifying intellectual and creative potential in school-aged children and youth, and to apply that information to classroom instruction as well as to individual education planning. Particular attention is paid to populations who are traditionally underserved due to language status, ethnicity, socio-economic status, geography, or multiple exceptionality. Parent and student roles are also emphasized. An evidence-based practice course for teachers, administrators, and support personnel. Prerequisite: Admission to Graduate School. LEC.

C&T 831. Personal Dimensions of Talent. 1 Hour.
The course focuses on affective aspects of individuals with high potential. Particular attention is paid to populations who are traditionally underserved due to ethnicity, socio-economic status, geography, or multiple exceptionality. The course focuses on theories, models and methods for understanding and addressing the successful personal development of talented individuals, supporting families, and personal issues linked to high potential. An evidence-based practice course for teachers, administrators, and support personnel. Prerequisite: Admission to Graduate School in Education. LEC.

C&T 840. Emergent Literacy and Beginning Reading. 3 Hours.
A study of emergent literacy through the beginning stages of literacy development. Course content focuses on the history, theory, and research that supports instructional reading practices for children Pre-kindergarten through grade 2. Prerequisite: CT 740, CT 741, or permission of instructor. LEC.

C&T 841. Early Intervention in Reading Practicum. 3 Hours.
A case study approach to the instruction of children in need of early intervention in reading. Requires assessment, instruction, and case reports of tutored children. Prerequisite: CT 740, CT 741, CT 840, or permission of instructor. FLD.

C&T 842. Supporting Striving Readers: Adolescent through Adult. 3 Hours.
A study of the characteristics and multiple causes of reading and writing difficulties, principles and procedures for diagnosing and remediating reading difficulties, how to provide individual and group intervention strategies, communicate diagnostic information, and gain awareness of the impact of research on instructional decision-making for students with reading difficulties. Prerequisite: Admission to a masters program within the School of Education, CT 740, CT 741, CT 840, and CT 841, or permission of instructor. LEC.

C&T 843. Supporting Striving Readers Practicum. 3 Hours.
Case study approach to the treatment of pre-adolescent through adults with reading disabilities. Requires diagnostic testing of the learner, compilation of case study reports, and participating in staffing for the purpose of designing remedial reading programs. Students also participate in implementation of remedial programs with pre-adolescent through adults through tutoring in either a clinical setting or a public school setting. Prerequisite: Admission to a masters program within the School of Education, CT 740, CT 741, CT 840, CT 841, CT 842, or permission of instructor. LEC.

C&T 844. The Reading Program: Coordination and Supervision. 3 Hours.
An overview of the role of the reading coordinator/supervisor and that individual's responsibility for the components of a balanced reading program. Emphasis will be given to assessment of the reading program, strategies for change, improving the reading program, in-service programs, working with other school personnel, providing services, and public relations. Prerequisite: CT 740, CT 741, CT 840, CT 841, CT 842, and CT 843. LEC.

C&T 845. Reading Specialist Internship. 1-2 Hours.
Supervised and directed experiences to develop the necessary instructional and leadership competencies of a reading specialist.
Activities will include district and building level needs assessment, data analysis, professional development of teachers and paraprofessionals, and cooperative planning with teachers and administrators around issues of literacy instruction and achievement. Prerequisite: Completion (at the University of Kansas) of course requirements for the Reading Specialist program. The Reading Specialist course requirements may be a part of a graduate degree. FLD.

C&T 850. Seminar in Science and Mathematics Educational Research. 3 Hours.
The primary purpose of this course is to examine literature in science and mathematics education in order to better understand research in these fields from both a historical and contemporary perspective. The process of examining literature in these fields will be used to help understand how to plan, conduct, and evaluate research in science and math education. This course emphasizes both qualitative and quantitative research in science and math education. LEC.

C&T 851. Modern Approaches to Middle/Secondary School Mathematics. 3 Hours.
A study of aspects of curriculum and instruction in middle/secondary school mathematics programs, including research on teaching and learning mathematics. Prerequisite: Teaching experience in middle-level or high school mathematics or permission of instructor. LEC.

C&T 852. Instruction in Mathematics and Science. 3 Hours.
In this course, students will explore a variety of research-based instructional theories, models, and strategies for teaching and learning of mathematics and science. They will apply and evaluate the usage of one instructional strategy in an action research project in their classrooms. Prerequisite: CT 709. LEC.

C&T 853. Connecting Research to Classroom Practice in Middle/Secondary Science. 3 Hours.
This course will explore current research on issues important to middle and high school science teachers so they can use research to support and improve their classroom practice. Prerequisite: Teaching experience in middle level or high school science or permission of instructor. LEC.

C&T 854. Assessment and Evaluation in Science and Mathematics. 3 Hours.
The primary purpose of this course is to examine assessment and evaluation in science and mathematics, including assessment of students, teachers, schools, and educational programs. The course will examine technical characteristics of various assessment methods including both traditional and alternative methods. In addition and alternative methods. In addition, the course will analyze and discuss various controversial issues in assessment such as authentic assessment, and large scale assessment, and large scale assessments, assessment for accountability, and equity issues. LEC.

C&T 855. Curriculum in Science and Mathematics. 3 Hours.
A survey of the concepts and processes that provide the focus of modern science and mathematics curricula will be central to the course. Students develop a standards-based framework for a school science or mathematics program. The course includes an analysis of national and state recommendations for the reform of science and mathematics education in the context of our state and local educational systems, which is applied by evaluating exemplary instructional materials and activities appropriate for classroom use. Prerequisite: CT 709. LEC.

C&T 856. Practicum in Science Education. 1-3 Hours.
Intensive supervised experience working with improvement of science curriculum and/or instruction in an educational setting. Credit in any one semester may range from one to three hours; and total credit may not exceed three hours. Prerequisite: Two graduate courses in science education and prior consent of practicum supervisor. FLD.

C&T 857. Practicum in Mathematics Education. 1-3 Hours.
Intensive supervised experience working with improvement of mathematics curriculum and/or instruction in an educational setting. Credit in any one semester may range from one to three hours; and total credit may not exceed three hours. Prerequisite: Two graduate courses in mathematics education and prior consent of practicum supervisor. FLD.

C&T 858. Connecting Research to Classroom Practice in Mathematics. 3 Hours.
This course will explore current research on issues important to mathematics teachers so they can use research to support and improve their classroom practice. Prerequisite: Teaching experience or permission of instructor. LEC.

C&T 859. Issues in Mathematics or Science Education: ______. 1-3 Hours.
A study of issues in a particular area of mathematics or science education. The course may be repeated for different topics. Prerequisite: Admission to graduate study. LEC.

C&T 860. Topics in Teaching and Learning Social Studies: ______. 3 Hours.
An examination of current topics and issues from social science perspectives. Special emphasis is given to effective integration of one of the social sciences, such as anthropology, geography, political science, science technology and society, and topics affect issues of curriculum at both elementary and secondary levels. Students will need to confer with the instructor of record to determine which topic will be the current focus of the course. LEC.

C&T 861. Curriculum and Assessment in Social Studies Programs K-12. 3 Hours.
The purpose of the course is to offer preservice and practicing K-12 social studies educators the following: (1) an overview of theoretical bases for social studies education and of the social studies and discipline specific curriculum standards; (2) a review of the major curricular and extra-curricular K-12 social studies programs; (3) strategies for the design, implementation, and evaluation of social studies programs; and (4) experience with the design, implementation, and/or evaluation of a social studies program. LEC.

C&T 862. Trends and Issues in Social Studies Instruction. 3 Hours.
A study of trends and issues relating to, and needed changes in the content, organization, emphasis, resources and equipment, methods, devices and evaluation in the social studies. Consideration of related problems such as achieving meaning and understanding, providing for individual differences, providing motivation, the cooperative assignment and socialized recitation. Students will be permitted to concentrate on those problems of particular interest to them. Prerequisite: Nine hours of Education including educational psychology. LEC.

C&T 863. Curriculum Development in Economic Education. 3 Hours.
Extension and application of economic concepts and theories through integration into the scope and sequence of the school curriculum. The process will include the development and field testing of a project that utilizes appropriate concepts, materials, community resources and techniques for integrating economics into the total curriculum. Prerequisite: CT 763. LEC.

C&T 864. International Issues in the K-12 Classroom. 3 Hours.
An examination of current international topics and issues from an economic education perspective. Special emphasis is given to effective integration of global topics and issues into the curriculum at both elementary and secondary levels. Students survey and analyze economic
C&T 868. Connecting Research to Classroom Practice in Social Studies. 3 Hours.
The purpose of the course is to explore readings on effective practice and current research on issues important to social studies teachers. Knowledge gained from the exploration of readings will be used to develop a plan and implementation procedures for improving classroom practice. Prerequisite: Teaching experience in social studies education or permission of the instructor. LEC.

C&T 896. Seminar in: _____ 1-4 Hours.
LEC.

C&T 897. Independent Study. 1-4 Hours.
Prerequisite: Consent of advisor and instructor. RSH.

C&T 898. Master's Project. 1-4 Hours.
RSH.

C&T 899. Master's Thesis. 1-6 Hours.
The.

C&T 900. Current Trends & Issues in Curriculum & Instruction. 3 Hours.
The course, taught as a capstone seminar, will provide a review of current trends and issues in theories, practices, and events within curricular and instructional efforts in American education. Topics studied may include constructivism, connectivism in the digital age, contemporary theories and theorists such as Vygotsky, online instruction and the Internet's potential and growth, the new Cult of Efficiency, stigmatization and standardized testing, and charter schools. Student composition of each class will influence the final syllabus, which may include other topics reflective of student interests and goals. The class is designed for those in the final course phase of their doctoral studies. Students in their first or second semester of their programs will not be encouraged to enroll in the class. LEC.

C&T 901. Contemporary Research of Teaching Effectiveness. 3 Hours.
A review of recent research on the conceptualization, measurement, and improvement of teaching effectiveness. Particular attention is given to the history of efforts to improve teaching, to the reasons why such efforts have often been unsuccessful, and to the recent contributions of the "micro-criteria" approach to the problem. LEC.

C&T 903. Curriculum Supervision. 3 Hours.
An intensive study of the theoretical and research bases for curriculum supervision and improvement. Topics include models and practices in supervision and staff development, skills and instruments used in curriculum assessment, coordination of both human and material resources, and the dynamics of change strategies. LEC.

C&T 904. Philosophical Questions in Curriculum and Teaching. 3 Hours.
This course addresses philosophical questions pertaining to curriculum and teaching across a range of educational contexts. These questions center on epistemology, ethics, and the assumptions underlying alternative approaches to research in education. Students completing this course should be able to engage in philosophical inquiry and apply relevant philosophical literature and principles to the examination of curriculum and teaching. LEC.

C&T 905. Teacher Education in the U.S.. 2 Hours.
A study of the development, issues, and programs for the preparation of teachers. Open to all regular graduate students. LEC.

C&T 906. Qualitative and Curriculum Inquiry: Analysis and Interpretation. 3 Hours.
Supports novice researchers in extending their understanding of the theoretical frameworks underlying qualitative research, qualitative methodologies, the research process and its relationship with curriculum inquiry. During the course we will discuss various forms of qualitative research methods, approaches to research, and perspectives in methodology relate to curriculum inquiry. We will explore the intertwining of data generation, analysis, and writing. In addition, we will focus on refining data generation techniques, strategies for data analysis, data interpretation, and various forms of reporting/writing. Prior coursework: Introduction to a graduate level qualitative research course or permission from the instructor. Prerequisite: Introduction to a graduate level qualitative research course or permission from the instructor. LEC.

C&T 907. Critical Pedagogies. 3 Hours.
This course examines the theories and practices of several educational orientations that comprise "critical pedagogy." Students examine the historical roots and evolution of this broad orientation toward education. Recurring themes in the class are relations between knowledge and curriculum, the school and society, and teachers and students. Students completing the course should be able to analyze educational phenomena through a critical theoretical lens. Open to all doctoral students and advanced masters students with instructor permission. LEC.

C&T 910. Research Seminar in English Education. 3 Hours.
This course will focus on both the conduct and findings of research related to English/Language Arts Education. Its purpose will be to foster discussion among students concerning paradigms that have shaped the field of English/Language Arts as well as encourage critique of the ways in which these paradigms are enacted in research. In this course, each student will develop a reading list on a topic of interest related to research in English/Language Arts Education and/or pursue the writing of an individual research proposal. Prerequisite: Admission to master's or doctoral program in CT, emphasis in English/Language Arts Education. LEC.

C&T 940. Evaluation of Research in Reading. 3 Hours.
LEC.

C&T 944. Diagnosis and Evaluation of Instruction in Higher Education. 2-3 Hours.
The course will focus on (1) a review of the practical and theoretical problems of developing, in institutions of higher education, programs for the diagnosis and/or evaluation of classroom instruction, including use of videotape feedback for diagnosis, and the development of surveys for evaluation for diagnosis of teaching, and (2) the importance of careful administrative and review procedures as the evaluation of teaching becomes more formal and consequential. Three hours of credit will be awarded to those enrolled in the laboratory section of the course. LEC.

C&T 951. Research and Evaluation in Mathematics and Science. 3 Hours.
This course introduces students to the processes of planning, conducting, and evaluating mathematics and science research and evaluation in education. This course emphasizes the methods and techniques used in both quantitative mathematics and science research and evaluation methodologies. Prerequisite: A PRE course in statistics. LEC.

C&T 960. Theory and Research in Social Studies Education. 3 Hours.
The purpose of this graduate level course is to stimulate and communicate systematic research and thinking in Social Studies
Education. Its purpose is to foster the creation and exchange of ideas and research findings that will expand knowledge about purposes, conditions, and effects of schooling and education about society and social relations. LEC.

C&T 968. Readings in Economic Education Research. 3 Hours.
A survey of research in elementary, secondary, and higher education economic education. After initial, mutual readings, and discussions, class members will determine a list of broad research questions around which we will focus our readings. Each student is responsible for developing a reading list on one of the topics and reporting on selected readings. Class meetings will focus on summarizing and critiquing published research. Purpose of this course is to prepare doctoral students for comprehensive examinations and dissertation research. LEC.

C&T 970. Fostering Teacher Growth and Inquiry. 3 Hours.
Students will explore theory and research related to professional learning with a focus on the professional learner, professional contexts, and professional learning activities. Students will also learn about and design a pilot study that is set in a relevant professional context. Prerequisite: Admission to the Ed.D. program in the Department of Curriculum Teaching or consent of instructor. LEC.

C&T 994. Advanced Topics: ______. 1-3 Hours.
A special course of study to meet current needs of education professionals -- primarily for post-master's level students. LEC.

C&T 995. Field Experience in: ______. 1-5 Hours.
Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experiences will be prepared independently by the student, a representative of the cooperating agencies, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours. FLD.

C&T 996. College Teaching Experience in: ______. 2 Hours.
To meet the college teaching experience requirement for doctoral programs, a student shall engage in a semester-long, planned, instructional activity that shall include college classroom teaching under supervision. Planning shall be done with the advisor and/or the member of the faculty who will supervise the experience. The activity shall be conducted under the supervision of a member of the University of Kansas faculty or by an individual or individuals designated by the candidate's committee. FLD.

C&T 997. Individual Study. 1-4 Hours.
Prerequisite: Prior graduate course work in the area of study and consent of instructor. RSH.

C&T 998. Seminar in: ______. 1-4 Hours.
LEC.

C&T 999. Doctoral Dissertation. 1-15 Hours.
THE.

Educ Leadership Policy Stds Courses

ELPS 200. Making Connections Between Schools and Community. 3 Hours.
This course is designed to increase the students' awareness of learning in the classroom and to familiarize them with the role of the school and the community. Institutions and resources that support children and families will be addressed through large and small group sessions and field experiences. Emphasis is given to the diverse nature of schools, communities, and their populations. In addition, the course will acclimate students with the School of Education programs, admissions procedures, and curriculum offerings. Successful completion of this course does not guarantee eventual admission of the School of Education's Teacher Education Program. Prerequisite: Successful completion of CT 100. LEC.

ELPS 250. Education and Society. 3 Hours. AE41/AE51.
This course provides students with an introduction to key ideas and socio-historical forces that have shaped the contemporary educational system in the United States, drawing upon the disciplines of the historical, philosophical, and social foundations of education. The development of school and community relations will be a point of emphasis. LEC.

ELPS 301. Educational Technology in Elementary-Middle Education. 3 Hours.
The focus of this course is on developing integration strategies and acquiring computer skills for using instructional technology and educational software, digital media, and information technologies appropriate to elementary and middle school teaching environments. Students will gain expertise in (a) the selection of appropriate instructional technologies and digital media for use in the classroom; (b) production of technology-based instructional materials; and (c) the evaluation and validation of a variety of electronic information sources. Prerequisite: Admission to the Teacher Education Program. LEC.

ELPS 302. Educational Technology in Middle/Secondary Education. 3 Hours.
The focus of this course is on developing integration strategies and acquiring computer skills for using instructional technology and educational software, digital media, and information technologies appropriate to middle and high school teaching environments. Students will gain expertise in (a) the selection of appropriate instructional technologies and digital media for use in the classroom; (b) production of technology-based instructional materials; and (c) the evaluation and validation of a variety of electronic information sources. Prerequisite: Admission to the Teacher Education Program. LEC.

ELPS 437. Politics and Governance of Public Schools. 3 Hours.
This course introduces students not pursuing K-12 teaching or administrative positions to the organizational and legal foundations of the American educational system. LEC.

ELPS 450. Foundations of Education. 3 Hours.
A historical approach to the major social and philosophical foundations of American education, with an emphasis on the relation of educational theory to classroom practice. LEC.

ELPS 490. Senior Internship I. 4 Hours.
Supervised field experience in an on-site educational setting that provides the student an opportunity to study and participate in the professional activities of a designated educational setting with emphasis on the planning, implementation, and evaluation of such activities. Regular conferences with faculty to evaluate student progress will be scheduled. Prerequisite: Admission to the non-certificate baccalaureate program. LEC.

ELPS 491. Senior Internship II. 4 Hours.
Supervised field experience in an on-site educational setting with increasing emphasis placed on an integration of formal learning and in site experience. Regular conferences with faculty will be scheduled. Prerequisite: Admission to the non-certificate baccalaureate program. FLD.

ELPS 497. Independent Study in:. 1-2 Hours.
Only one enrollment permitted each semester. A maximum of four hours will apply toward the bachelor's degree. Prerequisite: Recommendation of advisor and consent of instructor. IND.
ELPS 537. The Governance and Organization of Schools. 3 Hours.
The course provides the prospective teacher with an overview of the legal foundations of the American educational system including the ways schools and school districts are organized and run; the role of various levels of government and various governmental and educational officials in controlling education; the rights of students and teachers; the terms, conditions, and responsibilities of teacher employment. Prerequisite: Admission to the Teacher Education Program. LEC.

ELPS 540. Ethics in Education. 3 Hours.
This course examines practices and policies occurring in k-12 and postsecondary educational institutions through the lenses provided by ethics. During the semester, we will read, discuss, and write about ethics in education from both theoretical and practical perspectives. Prerequisite: Junior standing or higher. The course is suitable for advanced undergraduate and master¿s degree seeking students. LEC.

ELPS 550. Childhood and Youth in America. 3 Hours.
A study of the changing role and character of childhood and youth as stages of life in the context of American educational and cultural history. LEC.

ELPS 598. Special Course:. 1-5 Hours.
A special course of study to meet current needs of education students, primarily for undergraduates. LEC.

ELPS 627. Growing Up in Urbanizing America. 3 Hours.
A study of the changing role and character of childhood and youth as stages of life in the context of American urban and social history, with particular attention to education and human development. Prerequisite: Junior standing or higher. LEC.

ELPS 652. Residential Staff Skill Enhancement and Administration. 2-3 Hours.
This special course of study in residential staff skill enhancement and administration is an exploration of concepts and skills necessary for becoming an effective paraprofessional staff member in a residential living unit. Each class session will include presentations and experiential learning on topics to develop or improve interpersonal skills and skill in dealing with special concerns. The course is required or recommended for all residence and scholarship hall staff and open to upperclass or graduate students interested in student personnel work. LEC.

ELPS 715. Understanding Research in Education. 3 Hours.
This course introduces the concepts and skills involved in understanding and analyzing research in education and related areas. The course provides an overview of basic, general knowledge of various research methodologies. Students should expect to study much of this material in greater depth through additional course work before being prepared to conduct independent research. However, this course should enhance their ability to locate, read, comprehend, and critically analyze research articles and reports. Topics in the course include quantitative and qualitative methods and designs, historical and descriptive research, and program evaluation. Prerequisite: Admission to graduate standing in the School of Education. LEC.

ELPS 720. Foundations of Educational Technology. 3 Hours.
This course provides a comprehensive overview of the historical and theoretical foundations of educational technology. The goal of this course is to provide students with a survey of the research literature and definitions of terminology central to the field. Special emphasis is on current and emerging learning science research and how it can be applied to the creation of technology supported learning environments. LEC.

ELPS 750. Principalship. 3 Hours.
An introduction to the role, responsibilities, expectations and major duties of elementary, middle, and high school building administrators. Students are presented typical problems faced by school administrators through simulations and role playing and are expected, through reflection and discussion, to develop viable solutions. LEC.

ELPS 751. Educational Finance. 3 Hours.
A description and analysis of national, state, and local strategies for the financial support of education, utilizing social, economic, legal, and political frameworks. Particular attention to the principles of revenue acquisition and distribution at the local and state level for public school operations, with analysis of how these principles apply to Kansas. Designed for the wide variety of educational practitioners regardless of organizational and degree levels. Prerequisite: Admission to graduate study. LEC.

ELPS 752. Education Law. 3 Hours.
A study of legal principles and issues affecting educational policy making and practice with emphasis on student and teacher rights, equity, and the administration of schools. Prerequisite: Admission to graduate study. LEC.

ELPS 753. Introduction to Personnel Administration in Education. 3 Hours.
An overview of the theory and practice of personnel administration. The course focuses on the processes of recruitment, selection, training and development, evaluation, compensation, equal employment opportunity, and labor relations. LEC.

ELPS 754. Analysis of Administrative Problems. 3 Hours.
An introduction to various methods of problem identification; strategies of information gathering; schemes for the analysis of qualitative and quantitative data; models of problem resolution and decision making; and communication methods appropriate for differing audiences. Students will build basic computer, library, decision and communication skills useful in future administrative practice and subsequent coursework. LEC.

ELPS 755. Human Resource Management. 3 Hours.
An overview of the theory and practice of the management, recruitment, selection, compensation, placement, and development of personnel in the school setting. LEC.

ELPS 757. Education in American Society. 3 Hours.
A study of the roles and goals of education in the United States, the interrelationships among schools and students, teachers, administrators, and parents, and the culture of schools. LEC.

ELPS 760. Integration of Educational Technology. 3 Hours.
This course focuses on strategies for integrating educational technology in K-12 schools, universities, government or industry. Topics include applying technology in: a) understanding basic technology operations b) planning and designing learning experiences, c) curriculum development, d) assessment and evaluation e) productivity and professional practices, and considering f) social, ethical, legal, and human issues. Students produce a comprehensive electronic portfolio that describes the theoretical perspectives that guide their technology integrations strategies and evidence that demonstrates their competencies. LEC.

ELPS 766. Social Media Technologies. 3 Hours.
This course provides students with an introduction to the history, theory, and uses of Social Media and Web 2.0 technologies. Social media technologies enable individuals to create, collaborate, and share information. This course will examine the affordances and constraints of social media and provide students with hands-on experience using multiple forms of social media technologies throughout the class. In this course students will be required to develop implementation strategies for the use of social media technologies in the context of organizational development and training. LEC.
ELPS 772. Philosophical Problems in Comparative Education. 3 Hours.
A study of significant philosophical problems encountered when comparing educational systems. Special emphasis on the implications of axiological analysis for educational theory and practice in different areas of the world. Relationships among the social sciences, philosophy, and the international or cross-cultural venture in education. The importance of systematic value-theory in comparative research and international education. LEC.

ELPS 773. School and Society in Comparative Education. 3 Hours.
Analysis of the role of social science in comparative education as perceived by different philosophies or schools of thought, such as Marxism, phenomenology, empiricism, pragmatism, and linguistic analysis. LEC.

ELPS 774. Modern Educational Theorists. 3 Hours.
An in-depth study of prominent European thinkers who have contributed to educational theory and practice (e.g., Rousseau, Pestalozzi, Herbert, Froebel, Montessori, Nietzsche, Freud, Piaget, Ortega Gasset, etc.). Prerequisite: ELPS 770 or ELPS 771 is recommended. LEC.

ELPS 777. Problems in Contemporary Educational Theory. 3 Hours.
Select explorations into such provocative and problematic trends in current educational theory as Marxism, behaviorism, phenomenology, existentialism, analytic philosophy, hedonism, nonverbal education, etc. Prerequisite: ELPS 770 or ELPS 771 is recommended. LEC.

ELPS 780. Introduction to Higher Education Administration. 3 Hours.
This course is designed for beginning master’s degree students and for doctoral students who have had no previous administrative experience in college or university settings. Students will be introduced to the function and responsibilities of major administrative divisions of a college or university to the major tasks of administration: planning, programming, budgeting, staffing, managing. An emphasis will be placed on current issues facing higher education and students will be introduced to the major journals of the field. As part of the course requirements, students will spend some time familiarizing themselves with one or more administrative offices on a college campus. Prerequisite: Admission to study in higher education at the graduate level. LEC.

ELPS 781. Student Affairs Administration in Higher Education. 3 Hours.
This course is designed to include the study of the history and development of student personnel services in higher education, the role and function of the student affairs administrator, contemporary issues and problems, and an understanding of the organization and role of student affairs administration within higher education settings. Prerequisite: Admission to the higher education program or permission of instructor. LEC.

ELPS 798. Special Course:. 1-5 Hours.
A special course of study to meet current needs of education professionals – primarily for graduate students. LEC.

ELPS 810. Educational Media Development. 3 Hours.
Media surrounds today’s learning environments. How can you effectively engage learners with multimedia, meaningful interactions, and motivational strategies? This course will take a hands-on practical approach to creating interactive educational multimedia products including, but not limited to, digital images, movies, podcast, Web publishing and educational games. Also, students will learn about the underlying learning theories of educational media development. LEC.

ELPS 811. Constructivist Learning Technologies. 3 Hours.
This course explores the design and use of new educational technologies to support constructivist learning. Throughout the course, students will (1) get hands-on experiences with emerging educational technologies, (2) examine how the underlying learning theories are reified into concrete learning environments, and (3) analyze how the affordances of new technologies (e.g., modeling and visualization) can facilitate the constructivist learning processes. This course is suitable for students who wish to develop greater knowledge about the ways emerging computer technologies can empower constructivist learning. Prerequisite: CT 770. LEC.

ELPS 812. Design of Educational Technology. 3 Hours.
This course introduces instructional design theory and production techniques for developing educational technology resources and systems. Students apply their understandings of design and education theories as they work in teams to develop real-world applications of educational technology for specific clients. LEC.

ELPS 814. Design and Development of Online Instruction. 3 Hours.
This course focuses on the design and development of online instruction for education, medicine, military, business, and industry. The major goal of the course is for students, working individually and/or in teams, to design and develop instruction and acquire the skills needed to facilitate both asynchronous and synchronous online learning. Special emphasis is on instructional systems design and the management of online learning solutions. LEC.

ELPS 816. Human Performance Technology. 3 Hours.
This course will provide an introduction to the field of human performance technology (HPT) and how it is applied to productivity and efficiency problems in the workplace. Performance improvement methods include data gathering, analysis, change management, implementation, measurement and the integration of technology. The goal of this course is to provide students with a survey of the research literature and definitions of terminology central to the field of performance improvement. Special emphasis is on current and emerging technology and how it can be applied to human performance improvement in education and the workplace. LEC.

ELPS 818. Game and Simulation Design. 3 Hours.
This course provides an introduction to the design and development of games, gamification, and simulations for learning and instruction. Emphasis is on the design and development of interactive learning environments for K-16 education and workforce training. Topics include a review of the essential elements of game design, rapid prototyping, the psychology of gaming, game technology, and research related to the use of games, gamification, and simulations in K-16 education and workforce training. LEC.

ELPS 820. Practicum in Educational Technology. 1-3 Hours.
Supervised practice in a media center in selection, classifying, designing, producing, and/or managing instructional materials. Prerequisite: CT 770 and CT 871. FLD.

ELPS 830. Foundations of Multicultural Education. 3 Hours.
This class provides students with an understanding of multicultural education as an instructional concept, educational reform movement, and systemic process meant to ensure educational equity for all people, especially those who have been inadequately served and/or historically discriminated against because of their racial/ethnic or linguistic backgrounds, gender or sexual orientation, socio-economic status, and special needs. Students will examine different theoretical approaches that inform the practice of multicultural education and explore the contribution of various social sciences to the field. LEC.

ELPS 831. Sociology of Education. 3 Hours.
This course will provide an introduction to the sociology of education. This course is designed to fulfill the doctoral core requirement for social,
historical and philosophical foundations of education. Specific topics will include: conflict over the purposes of education; how those purposes are or are not-translated into actual classroom life; how educational systems have developed historically, how status, and more specifically race, class and gender relations, affect student experiences; and contemporary policy and reform movements. LEC.

ELPS 832. History of Educational Thought. 3 Hours.
An examination of the major ideas that have shaped practice in the schools. Emphasis is placed on assisting the student with the development of a coherent and consistent personal philosophy of education upon which administrative practice can be based. LEC.

ELPS 833. Social Context of Urban Education. 3 Hours.
This course examines education in urban communities through the foundational disciplines of history, philosophy, and the social sciences. Particular attention is given to ways in which the changing social and political contexts of American cities affect the educational process. LEC.

ELPS 834. History and Philosophy of Education. 3 Hours.
A comprehensive study of influential persons and movements in the development of educational thought, Eastern and Western, from ancient times to the present. Emphasis on those ideas and historical roots which are relevant to contemporary issues in teaching and school administration. LEC.

ELPS 835. Philosophy of Education. 3 Hours.
An analytic inquiry into basic philosophical positions and issues relevant to education. The difference between ELPS 770 and ELPS 771 is that the latter is topically arranged and does not necessarily follow a historical sequence; it normally proceeds by problems and schools of thought. LEC.

ELPS 837. History of Education and Culture in America. 3 Hours.
A study of the relation between education and culture in America from colonial times to the present. American schools are considered in the wider context of cultural and social change. LEC.

ELPS 838. History of Childhood and Youth in America. 3 Hours.
An exploration of changing attitudes toward children and youth, their subjective experience, their impact on adults, and the conditions that shaped their development. Special attention will be given to the relationship between the changing nature of childhood as a social and cultural category and the development of the education profession. LEC.

ELPS 839. Historical Inquiry in Education. 3 Hours.
This course will provide an introduction to the methodology of historical research in education. This course is designed to fulfill the doctoral core requirement for research methods in education for students interested in doing this type of research. Specific topics will include: the historiography of education; working with primary and secondary documents; oral history as method and documentation, quantitative approaches to history; constructing historical narratives; the question of interpretation. LEC.

ELPS 850. Educational Facilities. 3 Hours.
A study of the principles and processes of developing functional educational facilities. Special emphasis placed on the educational planning that precedes and provides the basis for architectural planning. Among topics considered are plant utilization analysis, enrollment projections, site and equipment needs, fiscal and legal constraints, environmental factors, and the development of educational specifications. Designed for both building and central office level administrators. Prerequisite: Admission to graduate study. LEC.

ELPS 851. Supervision of Student Teaching. 2 Hours.
A study of the organization and functions of student-teaching programs. Emphasis on the development of effective interpersonal relationships among school administrators, cooperating teachers, university supervisors, and student teachers. Designed for both administrative and instructional personnel. Prerequisite: Admission to graduate study. LEC.

ELPS 852. School Resource Management. 3 Hours.
An examination of the sources and uses of fiscal resources in education including underlying concepts from economic theory, the impact of values on fiscal policy, state funding formulas, and school budgeting and accounting practices. LEC.

ELPS 853. Staff Evaluation and Development. 3 Hours.
An examination of current trends in personnel evaluation with a focus on clinical supervision and adult development. Students will participate in simulation exercises to develop skills in classroom observation, conferencing techniques, evaluation of teaching artifacts, and the construction of staff development plans. LEC.

ELPS 854. The Student in Society. 3 Hours.
A study of children and youth with particular emphasis on demographic characteristics of the population served by schools and implications of those characteristics for schools and schooling. LEC.

ELPS 855. Teacher Evaluation. 3 Hours.
Teacher Evaluation is based on clinical, empirical and theoretical information related to effective teacher evaluation behavior from the administrative perspective. It is intended to provide exposure to competencies essential to effective evaluation of teaching performance. Evaluation knowledge, skill and performance are acquired and developed through reading, discussion, active teaching of content related to teacher evaluation and practicing observation, recording and conferencing skills. A variety of approaches is considered, but behaviorally-anchored measurement of teaching behavior is emphasized. Opportunities and needs for improvement are identified with the assistance of video-taped diagnosis of conferencing behavior. Prerequisite: Two of the following: ELPS 750, ELPS 752, ELPS 753, or CT 840. LEC.

ELPS 856. Law and Special Education. 3 Hours.
This course focuses on laws that apply to special education. The American legal system, particularly in respect to special education, the constitutional and statutory provisions of federal and state law and the judicial decisions interpreting those laws are reviewed. The course relates equal protection, procedural due process, and substantive due process doctrines to school practices affecting disabled children and examines the sex principles of P.L. 94-142 and similar principles in state legislation. This course is not the equivalent of or a substitute for ELPS 752. (Same as SPED 851.) Prerequisite: SPED 750 or permission of instructor. LEC.

ELPS 857. Disabled Citizens, Public Policy and Policy Analysis. 3 Hours.
To train students to analyze public policy that affects disabled citizens, various models of analysis are brought to bear on federal policy (education, transportation, housing, institutionalization, protection and advocacy, medical assistance, employment, vocational rehabilitation and others). Not valid for core requirement in history and/or philosophy of education. (Same as SPED 852.) Prerequisite: SPED 851 or SPED 750 or permission of instructor. LEC.

ELPS 858. Professional Ethics, Public Values and Disabled Citizens. 3 Hours.
This course addresses the issues that professionals (educators, physicians, allied health providers, attorneys and others) and families of disabled people face in the context of public values and attitudes and rules of law. The issues include, without limitation, education, treatment and non-treatment. Not valid for core requirement in history and/or philosophy of education. (Same as SPED 853.) Prerequisite: SPED 750, SPED 851, SPED 852 or permission of instructor. LEC.
ELPS 870. Philosophy of Education II. 3 Hours.
An exploration of select areas in philosophy, such as emphasis on value-theory or epistemology or metaphysics, and their implications for educational theory. Normally a limited number of authors will also be selected for monographic treatment. Prerequisite: ELPS 770 or ELPS 771 is recommended. LEC.

ELPS 871. Introduction to Qualitative Research. 3 Hours.
An introduction to the foundations of and techniques associated with qualitative research methods. Students will practice interview and participant observation skills and will analyze and interpret data. Additional topics include crafting qualitative research questions, ethics of fieldwork, and establishing trustworthiness of data. Common traditions of qualitative methods employed in education and other related fields will be introduced. LEC.

ELPS 880. The Community/Junior College. 3 Hours.
A survey of the history and development of the community/junior college. Particular emphasis will be given to the student, the faculty, the curricula, administration, and finance. The course is intended to provide a general understanding of the operation and concerns of today's community/junior college for the current or potential community/junior college staff member. LEC.

ELPS 881. Seminar in Leadership. 3 Hours.
The purpose of this seminar is to explore leadership in education, particularly higher education, from a variety of perspectives. Readings come from a variety of disciplinary perspectives, such as sociology, organizational behavior, and psychology. We consider various aspects of leadership and analyze the leader from a symbolic perspective, as a manager of meaning and critical change agent. We then challenge ourselves to deconstruct our leadership realities with the help of several critical perspectives as we prepare to examine who the leaders are as well as who they will, and need to, be in the educational organizations of tomorrow. LEC.

ELPS 882. Higher Education in the United States. 3 Hours.
The purpose of the course is to acquaint students in higher education, and students from other areas who intend to work in the post-secondary setting, with the history, philosophy and development of higher education in the United States. The course focuses on three periods: 1) the founding of Harvard to 1965; 2) dissent, disruption, and change, 1965-1979; and 3) the future and crucial issues, the 1980's. European higher education and its early influence on higher education in the United States is also examined. LEC.

ELPS 883. The College Student. 3 Hours.
The characteristics of college students; impact of college on student behavior, changing attitudes, values, beliefs, and the implications of recent research on traditional and new students for instructional and administrative practices. LEC.

ELPS 884. Research on College Students. 3 Hours.
Examination of the American college student from societal, development, research, and institutional perspectives and to review the policy implications of these findings for college and university administrators and faculty. Topics include research and theory concerning the college student experience, the diverse nature of the student body and its implications for institutional policy and practice, and formulation of individual philosophies and priorities applicable to working with college students. LEC.

ELPS 885. Assessment and Program Evaluation in Higher Education. 3 Hours.
Nature, objectives, and basic procedures of assessment and program evaluation as applied to the various aspects of higher education settings. In addition to basic procedures for evaluating programs, topics covered include accreditation, program review, benchmarking, student outcomes assessment, and evaluation of teaching in colleges and universities. Prerequisite: ELPS 715 or equivalent. LEC.

ELPS 886. Theory into Practice in Higher Education. 3 Hours.
This course is required as a final course for all master's students in higher education. It is designed to prepare students for professional life after graduation. Using a case study approach, students will examine the reality of practice in a variety of higher educational settings including relevant political and ethical factors. Prerequisite: Higher education students in last semester of master's coursework. LEC.

ELPS 889. Advanced Building Leadership Internship. 2 Hours.
Supervised and directed experiences to enhance the necessary leadership skills of a building/district leaders. Activities will include building/district level resource assessment, data analysis, professional development of teachers/principals (and district level professionals), and cooperative planning with teachers and administrators around responsibilities of curriculum, instruction, resource management and student achievement. Prerequisite: Completion (at the University of Kansas) of all certification program (MS/EdD) requirements for the Building/District Leadership Licenses. FLD.

ELPS 890. School Finance: Policy and Practice. 3 Hours.
The on site development of the skills necessary to effectively function as a school building leader. Activities will be tailored to the needs of individual students in consultation with a university advisor and a field advisor. FLD.

ELPS 896. Independent Study. 1-4 Hours.
LEC.

ELPS 897. Seminar in Community College. 1-4 Hours.
Prerequisite: Consent of advisor and instructor. IND.

ELPS 898. Master's Project. 1-4 Hours.
RSH.

ELPS 899. Master's Thesis. 1-6 Hours.
THE.

ELPS 894. Research in Education Policy and Leadership. 3 Hours.
This course is required as a final course for all master's students in higher education. It is designed to prepare students for professional life after graduation. Using a case study approach, students will examine the reality of practice in a variety of higher educational settings including relevant political and ethical factors. Prerequisite: Higher education students in last semester of master's coursework. LEC.

ELPS 895. Internship. 1-5 Hours.
The on site development of the skills necessary to effectively function as a school building leader. Activities will be tailored to the needs of individual students in consultation with a university advisor and a field advisor. FLD.

ELPS 948. Research in Education Policy and Leadership. 3 Hours.
This course is an introduction to methods of inquiry in education policy and leadership studies. It is designed to help doctoral students explore possible research interests, formulate research questions, and to review a rich variety of approaches to inquiry in the field of education. Specific topics include: interview- and observation-driven studies, ethnography, feminist and narrative methods, legal and historical methods, questionnaire-driven studies, quantitative evaluation studies, and studies using administrative and large national data sources. LEC.

ELPS 950. Educational Policy Making and Reform. 3 Hours.
An analysis of patterns of influence, organizations, and governmental agencies which impact education at the community, state and national levels. Particular emphasis is placed on analysis of policy development process and the relationship of policy to administration. Recommended to students in educational administration and higher education. LEC.

ELPS 951. Supervision of Instruction. 3 Hours.
A study of the principles and techniques necessary for coordinating, monitoring, and improving the educational programs of elementary and secondary schools. LEC.

ELPS 952. School Finance: Policy and Practice. 3 Hours.
The objective of this course is to understand the financial systems and mechanisms used by states in the funding of elementary and secondary education in the United States. In simple language, we will be concerned with five basic issues: (1) Where the money comes from; (2) How it is redistributed; (3) How it is spent; (4) The relative effectiveness of spending decisions including selected international comparisons; and (5)
How the previous four financial activities participate in a common financial ecology. The course provides an overview of theory and concepts central to the understanding of school finance with an emphasis on policy issues. It also examines the mechanics of school finance funding in light of state policies. LEC.

ELPS 953. District Human Resource Management. 3 Hours.
An in-depth study of theory and research in personnel administration. The focus will be on current literature dealing with empirical assessments of personnel theory and techniques. Specific concepts to be considered include the following: educator characteristics, job analysis and design, personnel recruitment, selection and evaluation techniques, staffing and development, and labor relations. Prerequisite: ELPS 753 or its equivalent. LEC.

ELPS 954. Sociology of Educational Organizations. 3 Hours.
This class is an overview of basic and advanced sociological and political theories of organization, with specific application to issues and problems in K-12 education. It is designed for graduate students and practicing educational leaders and administrators who intend to utilize research on organizations in their studies of the governance of schools, the sociology and politics of education, and education policy. The topics covered include the origins and nature of modern bureaucracy, formal structure and function, organizational control, transaction cost economics, population ecology, resource dependence, the new institutionalism, organizational effectiveness and legitimacy, organizational culture, power and politics, and change. LEC.

ELPS 955. District Business Management. 3 Hours.
This course emphasizes skills for effective and efficient business and financial management of school districts in a Kansas or Missouri context. Basic topics include: Short range and long range financial planning, analysis of financial statements, budget preparation, fund accounting and financial reporting, contracting of services including transportation and food services, staff salaries and benefits and insurance. The course also includes a number of strategic methods for institutional planning including: Cost Benefit Analysis, Cost Effectiveness Analysis, and enrollment, revenue and expenditure forecasting techniques. Prerequisite: ELPS 952. LEC.

ELPS 956. District Leadership. 3 Hours.
The focus of the course is the role of the public school district superintendent. Organized study will include assigned readings, lectures, guest speakers, discussion, and the completion of a study project. The course will include consideration of such topics as boardmanship, community relations, district leadership, professional accountability, district maintenance and operations, professional employment and relationships with other agencies. The course is designed to serve the needs of those graduate students pursuing advanced study with the intention of completing requirements for district certification. Some students will also find the field appealing as an area for dissertation research. Prerequisite: Doctoral status in education administration or permission of instructor. LEC.

ELPS 957. Educational Policy, Ethics and Law. 3 Hours.
Course focuses on use of legal and moral reasoning in analysis of educational policy issues. Specific topics will vary depending on interests of instructor and students and current controversy. Examples of possible topics to be included: school desegregation, teacher collective bargaining, separation of church and school, equal educational opportunity. Prerequisite: ELPS 752, equivalent, or consent of instructor. LEC.

ELPS 958. American Educational Reform Movements: Past and Present. 3 Hours.
An examination of the origin, nature, and consequences of educational reform in the United States. The primary goal is to attain a balanced evaluation of current educational reform. LEC.

ELPS 959. Organization and Administration of Services for Exceptional Children. 3 Hours.
To aid administrators and prospective administrators responsible for organizing and administering programs of education for exceptional children, state and federal guidelines and regulations, legal aspects and financing of special education, planning a program, administering special services. (Same as SPED 971.) Prerequisite: Nine hours of Education including educational psychology and SPED 725. LEC.

ELPS 960. Specialist Project. 1-4 Hours.
RSH.

ELPS 969. Dissertation Seminar. 3 Hours.
This seminar is designed to facilitate proposal development for doctoral-level research in educational leadership and policy studies. The objective is to help students select and refine a topic, critically analyze existing research, set forth a theoretical framework, and design a research methodology suitable for your topic. LEC.

ELPS 970. Theory and Research in Administration. 3 Hours.
A survey of the theoretical and empirical literature in educational administration and the methods used to investigate these content areas. Major emphasis is devoted to developing research skills applicable in practice and to the identification of possible generic topics suitable for future dissertation work. LEC.

ELPS 971. Comparative Education. 2 Hours.
A factual, descriptive, and analytical study of national systems of formal education, or schooling, as exemplified in contemporary educational establishments. Organizational and administrative policies and teaching practices, with emphasis on Germany, France, England, U.S.S.R., People’s Republic of China and Japan. Other nations may be examined on an individual project basis. The difference between ELPS 971 and ELPS 772 is the philosophical emphasis of the latter. LEC.

ELPS 972. Educational Problems in Latin America. 3 Hours.
Designed to meet the needs of students majoring in Latin American studies or interested in the area. Development of an awareness of the concept of cross-cultural confluence with Latin America as it relates to education. Survey of the main problems confronted by Latin American educational systems and examination of the difficulties experienced by North American educators when confronted with such problems. LEC.

ELPS 975. Education, Technology and Social Change. 3 Hours.
This interdisciplinary course provides an opportunity to read, reflect upon, and discuss ideas drawn from the emerging field of Science and Technology Studies (STS) in connection with education. Its focus is the interrelationships between technology, society, and education (defined broadly to include non-school and adult learning settings). It explores how knowledge, expertise, and authority are constructed within and across social and cultural groups, with particular attention social and economic inequality. It also considers the relationship between emerging technologies, educational experiences and the nature of “the self” in society, among other issues. Prerequisite: Admission to ELPS doctoral program, or permission of instructor. LEC.

ELPS 980. Postsecondary Finance. 3 Hours.
This course is designed for advanced doctoral students in higher education, particularly those who will be preparing unit budgets or budget presentations and those who make and implement fiscal policy (e.g., financial aid offers). The course material covers different types of college
and university budgeting -- incremental, zero-based and formula -- and their impact on university revenues; statewide coordination and its impact on programs, program duplication and funding; retrenchment and quality issues; the legislative role in budget preparation; unified and comparative management systems (e.g., WICHE and NCHEMS); and the impact of federal contracting and student aid policies. LEC.

**ELPS 981. Higher Education Law. 3 Hours.**
An overview of the developing law of higher education, with emphasis on and analysis of employer-employee relationships, student-faculty/administration relationships, and the impact of federal and state regulation on these relationships. LEC.

**FLD.**

**ELPS 982. Faculty in Higher Education. 3 Hours.**
This course considers the role and circumstances of faculty in higher education including variations among different types of institutions. Topics include the history and demographics of the professoriate; the academic work environment and labor market; the role of faculty in institutional governance and policy making; and the social and political context of academia. LEC.

**ELPS 983. Curriculum Innovation in Higher Education. 3 Hours.**
A study of contemporary post-secondary curriculum with particular emphasis on the nature of curriculum, the organization and structure of academic programs, the nature of change in academic communities and exemplary innovative institutions. LEC.

**ELPS 984. Teacher Education in the United States. 2 Hours.**
A study of the development, issues, and programs for the preparation of teachers. Open to all regular graduate students. LEC.

**ELPS 985. Evaluations of Programs in Higher Education. 2 Hours.**
Nature, objectives, and basic procedures of evaluation as applied to the various aspects of higher education. Open to all regular graduate students. LEC.

**FLD.**

**ELPS 986. The Governance and Administration of Higher Education. 3 Hours.**
A theory-based course aimed at providing an understanding of the governance and administration of academic institutions -- particularly universities. Emphasis is directed toward an analysis of decision-making in these complex organizations. LEC.

**ELPS 987. Leadership Development for Educational Professionals. 2 Hours.**
Supervised and directed experiences to enhance the necessary leadership skills of a building/district leaders. Activities will include building/district level resource assessment, data analysis, professional development of teachers/principals, and cooperative planning with teachers and administrators around responsibilities of curriculum, instruction, resource management and student achievement. Prerequisite: Completion (at the University of Kansas) of all certification program (MS/EdD) requirements for the Building/District Leadership Licenses. LEC.

**FLD.**

**ELPS 990. Doctoral Dissertation. 1-15 Hours.**
LEC.

**FLD.**

**ELPS 991. Field Experience in: _____. 1-5 Hours.**
Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experience will be prepared independently by the student, a representative of the cooperating agencies, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours. FLDC.

**ELPS 996. College Teaching Experience in: _____. 2 Hours.**
To meet the college teaching experience requirement for doctoral degrees, a student shall engage in a semester-long, planned, instructional activity that shall include college classroom teaching under supervision. Planning shall be done with the advisor and/or the member of the faculty who will supervise the experience. The activity shall be done under the supervision of a member of the University of Kansas faculty or by an individual or individuals designated by the candidate’s committee. FLDC.

**ELPS 997. Individual Study. 1-4 Hours.**
Prerequisite: Prior graduate course work in the area of study and consent of instructor. RSH.

**FLD.**

**ELPS 998. Seminar in: _____. 1-4 Hours.**
LEC.

**FLD.**

**ELPS 999. Doctoral Dissertation. 1-15 Hours.**
THE.

**Educational Psychology Courses**

**EPSY 106. Multicultural Student Leadership Seminar. 2 Hours.**
This course will introduce students of color to leadership theory and develop personal skills in the areas of organizational, career, and community leadership. Topics covered include public speaking, group process, time management, and discussion of the special challenges for leaders of color. Prerequisite: Must have taken Hawk Link UNIV 101 and fewer than 60 hours credit from the University of Kansas. LEC.

**EPSY 210. Career and Life Planning: Decision-Making for College Students. 3 Hours.**
The purpose of this course is to assist college students in career and life planning choices by first understanding the current theories of career decision-making and then by applying those theories to their own choices. The course will meet twice each week, the first being a lecture session, with the second session consisting of smaller groups of six to eight students. Students will be exposed to information related to the career development process, factors that affect the career choice process, knowledge of work environments, sex role socialization, career and decision making processes, and how to approach the job search. Experiential learnings will include exercises related to values clarification, self understanding, knowledge of interests, competencies and personality characteristics, decision making, use of career information, and implementing a plan of action. Weekly course assignments will include activities in class and homework units. Prerequisite: Enrollment in this course is limited to students with fewer than 60 hours of college credit. LEC.

**EPSY 305. Development and Learning of the Child. 3 Hours. GE3S.**
An introduction to the study of children’s thinking, behavior, and development in school, home, and community settings. Classic and contemporary theories of developmental and educational psychology will be addressed; these theories will provide a foundation for thinking about important contemporary issues in child development. Specific topics covered will include research methods for studying children’s development, cognitive development, intelligence, language, emotional development, aggression, moral development, and family and peer relationships. Emphasis will be placed on the study of individuals and groups, describing the process of development, and considering educational implications of theory and research. LEC.

**EPSY 306. Development and Learning of the Adolescent. 3 Hours. GE3S.**
An introduction to the study of adolescence (puberty to roughly age 18), with a focus on implications and applications for optimal adolescent
development. Approaching development from an applied lens, the course will cover foundational information on brain and biological changes that occur during adolescence, as well as on integrating this foundational knowledge with theories of learning, motivation, cognition, and emotional and social development. LEC.

EPSY 450. Introduction to Counseling Psychology. 3 Hours.
An historical and contemporary overview of the science and practice of counseling psychology, including trends in the roles and functions of counseling psychology practitioners, the research and scientific foundations of counseling practice, the psychological theories of counseling and psychotherapy that guide professional practice, and the ethical and professional issues confronting counseling practitioners. Prerequisite: PSYC 104. LEC.

EPSY 455. Managing and Motivating Learners in the Pre K-6th Grade Classroom. 3 Hours.
This course is designed to help elementary preservice teachers organize an enriched learning environment and develop strategies for managing and motivating students to help them become better and more responsible learners. Prerequisite: CT 322, EPSY 305 or equivalent. LEC.

EPSY 456. Managing and Motivating Learners in the Middle and Secondary Classroom. 3 Hours.
This course is designed to help middle and secondary preservice teachers organize an enriched learning environment and develop strategies for managing and motivating students to help them become better and more responsible learners. Prerequisite: CT 324, EPSY 306 or equivalent. LEC.

EPSY 497. Independent Study. 1-2 Hours.
Only one enrollment permitted each semester, a maximum of four hours will apply toward the bachelor's degree. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Recommendation of advisor and consent of instructor. IND.

EPSY 515. Research Methods for McNair Scholars. 3 Hours.
This course provides participants in the McNair Scholars program with an understanding of research methods appropriate to their field so they can write proposals for their summer research projects. Prerequisite: Acceptance into the McNair Scholars Program. LEC.

EPSY 520. Classroom Assessment. 3 Hours.
This course is an introduction to the concepts and skills required to develop and evaluate various forms of formal and informal classroom assessments to determine student learning and teacher instructional effectiveness. LEC.

EPSY 575. Internship Exploration. 1-5 Hours. AE61.
This course provides academic credit for a supervised practical experience in an occupational area of interest. In addition to the work-related activity, students will complete reading and writing assignments, participate in on-line discussion and create a final portfolio of internship accomplishments. Credit hours (1-5) are based on number of hours at internship site in agreement with instructor. Prerequisite: Secured internship of 8 hours per week or more for semester in which student will be enrolled in the course; permission from instructor. LEC. FLD.

EPSY 580. Positive Psychology. 3 Hours.
An introduction to the core assumptions and research findings associated with human strengths and positive emotions. Also an exploration of interventions and applications informed by positive psychology in counseling and psychotherapy, and its application to school, work, family and other close relationships. (Same as PSYC 598.) Prerequisite: PSYC 104 or consent of instructor. LEC.

EPSY 598. Special Course: ______. 1-5 Hours. AE61.
A special course of study to meet current needs of education students--primarily for undergraduates. LEC.

EPSY 700. Advanced Educational Psychology: Development and Education of the Adolescent. 2-3 Hours.
An introduction, from a psychological perspective, to topics and problems in the development of adolescents and youth, with emphasis on application to educational issues. Note: To be offered annually. LEC.

EPSY 702. Advanced Educational Psychology: The Development and Education of the Child. 3 Hours.
Study of children from a cognitive developmental perspective. Changes in children are examined in light of environmental influences including social factors, educational practices, and child-rearing as they interact with conditions internal to children. Key issues include the study of cognition, language, motives, social-emotional issues, the self, and the problem of developmental delays. A major concern is the role of adults in supporting positive development, particularly in educational settings. LEC.

EPSY 703. Constructive Classroom Discipline. 3 Hours.
This course will examine concepts and techniques of constructive classroom management. Various theoretical orientations including humanism and behaviorism will be considered. Emphasis will be on the identification of strategies that teachers can use (1) to facilitate an environment that reduces the likelihood of misbehavior occurring, and (2) to cope constructively with individuals and groups of children to resolve difficulties that arise in the classroom. The class should have value to classroom teachers, school psychologists, counselors, and other school consultants. LEC.

EPSY 704. Advanced Educational Psychology: Learning Processes in Education. 3 Hours.
A study of the mental processes that influence learning and comprehension. The scope of the course will include individuals at all developmental levels and in a variety of educational settings. Key issues include the study of language, memory, concepts, motivation and social factors affecting learning processes. LEC.

EPSY 705. Human Development through the Lifespan. 3 Hours.
This course will cover the social, emotional, psychological, and cognitive changes that occur from conception through death. Methodological issues will also be addressed. Prerequisite: A graduate or undergraduate course in psychology. LEC.

EPSY 710. Introduction to Statistical Analysis. 3 Hours.
Emphasis on the conceptual underpinnings of statistical analysis of educational data. Includes univariate and bivariate descriptive statistics, sampling distributions, statistical estimation, hypothesis testing and procedures in testing statistical hypothesis for one and two sample designs. Prerequisite: Concurrent enrollment in EPSY 711 required, or with the permission of instructor on the basis of knowledge of statistical packages presented in EPSY 711. LEC.

EPSY 711. Lab for Introduction to Statistical Analysis. 1 Hour.
Creation and manipulation of data sets. Analysis of data with statistical packages, with an emphasis on descriptive statistics, graphical procedures, and univariate parametric methods. Graded on a satisfactory/fail basis. Prerequisite: Concurrent enrollment in EPSY 710 or EPSY 811 or with the permission of the instructor. LAB.

EPSY 715. Understanding Research in Education. 3 Hours.
This course introduces the concepts and skills involved in understanding and analyzing research in education and related areas. The course provides an overview of basic, general knowledge of various research methodologies. Students should expect to study much of this material in greater depth through additional course work before being fully prepared.
to conduct independent research. However this course should enhance
their ability to locate, read, comprehend, and critically analyze research
articles and reports. Topics in the course include quantitative and
qualitative methods and designs, historical and descriptive research, and
program evaluation. (This course fulfills the requirement of a research
methods course in the first 12 hours of graduate study.) LEC.

EPSY 725. Educational Measurement. 3 Hours.
The course is an introduction to the application of the concepts of
reliability, validity, and practicality to the development, selection, use,
and interpretation of tests and other measuring instruments in the field
of education. The concepts of norm referenced and criterion referenced
tests; the interpretation and use of norms; standard scores, percentiles,
quotients, and grade equivalents are among the topics covered. An
understanding of the role of measurement in evaluation, diagnosis,
selection and placement is included. LEC.

EPSY 740. Counseling and Interviewing Skills. 3 Hours.
An experiential and performance based course having three major
objectives: 1) the acquisition of basic counseling skills and strategies
by means of microcounseling training; 2) learning to use these skills
effectively and appropriately in a simulated counseling session; 3) the
students' understanding of their personal characteristics and how these
characteristics relate to functioning as an effective helping professional.
This course should normally be taken at the earliest possible time in
the student's program. Open to counseling majors. Non-majors may
be admitted only by permission of the instructor, if space permits.
Prerequisite: Permission of the instructor. LEC.

EPSY 742. Counseling Theory and Techniques. 3 Hours.
An introductory examination of several major theories of counseling and
therapy including psychodynamic views, person-centered, behavioral, and
cognitive-behavioral approaches. Attention given to research reviews and
factors various theories have in common. Designed for graduate students
in counseling psychology or allied fields. Prerequisite: Graduate student
status or permission of the instructor. LEC.

EPSY 760. Ethics, Law, and Professional Issues in School
Psychology. 3 Hours.
This course is intended to introduce the student to a) ethical principles,
standards, and issues in the profession of psychology; b) legal issues
involved in the practice of school psychology; c) problem-solving models
to solve ethical and ethical-legal dilemmas; d) roles and functions of
a school psychologist; and e) current topics in the field of school
psychology. Prerequisite: Permission of the instructor. LEC.

EPSY 770. Developmental Psychopathology: Diagnosis, Intervention,
and Prevention. 3 Hours.
Foundations of child and adolescent psychopathology from a
developmental and educational perspective. Classification, assessment,
etiology of clinical disorders. Examination of risk and protective
factors associated with these various disorders. Coverage of empirically-
biased intervention strategies and prevention programs. Graduate student
standing. LEC.

EPSY 790. Research and Evaluation Proposal Development. 3 Hours.
A course for students designing a research or evaluation proposal
leading to data collection. Specific topics considered include formulating
a problem for study, reviewing the literature, and selecting appropriate
research and evaluation designs, instrumentation, and data analysis
issues. The goal of the course is to aid students in the preparation of
research proposals at the master's level. LEC.

EPSY 797. Independent Readings and Research in: _____. 1-3 Hours.
Opportunity for students to participate in supervised reading and research
in special topics of interest (for which regularly scheduled courses are
not given). Topics and credit are arranged by advisement: May not be
used to substitute for regularly scheduled course offerings. Intended for
students with appropriate undergraduate or graduate preparation but
without extensive graduate course background in the area of proposed
study. (Students with extensive graduate work should enroll in EPSY
997; undergraduate students may enroll in EPSY 497.) Graded on a
satisfactory/unsatisfactory basis. RSH.

EPSY 798. Special Course: _____. 1-5 Hours.
A special course of study to meet current needs of education
professionals--primarily for graduate students. Course is graded on a
satisfactory/fail basis. LEC.

EPSY 800. Development during Youth and Adulthood. 3 Hours.
An examination from a life-span perspective of major issues affecting
changes after adolescence. Topics include intelligence, identity, intimacy,
the role of work, and moral concepts. Theoretical issues, research
findings, and educational and social policy implications will be examined.
Students will prepare papers on significant issues in the field and survey
extensively the research and theoretical literature. Prerequisite: Prior
enrollment in a course on naturalistic or experimental research methods.
LEC.

EPSY 803. Computer Applications for Statistical Analyses. 3 Hours.
Computer applications for a variety of statistical techniques. Emphasis
may be with applications on microcomputers and/or mainframe.
Prerequisite: EPSY 810 or EPSY 811 or equivalent course. LEC.

EPSY 805. Individual Intelligence Testing. 1-3 Hours.
Based on supervised experience in the administration, scoring,
and interpretation of the major individual intelligence tests for children, adolescents, and adults.
Other areas to be covered in this course will include models of intelligence
and factors influencing intelligence; measurement characteristics of
instruments used to assess cognitive abilities; ethical and legal issues
in the use of intelligence tests; and the use of cognitive assessments for
identification and diagnosis. Prerequisite: Permission of instructor. LEC.

EPSY 806. Issues in Human Growth and Development. 3 Hours.
An overview and analysis of selected issues in the field of human growth
and development. The focus will be on current issues of a theoretical and
methodological nature that affect the field of developmental psychology
and applications to social and educational settings. Prerequisite: Prior
completion of a course in developmental psychology. LEC.

EPSY 807. Theories and Research in Human Learning. 3 Hours.
An overview of important models, principles and research findings related
to the learning process. Attention is given to theories of learning and
information processing which attempt to explain perceptual behavior,
verbal learning and memory and social learning processes. Emphasis
is placed on student development of research proposals in the area of
human learning and achievement. Prerequisite: Permission of instructor.
LEC.

EPSY 810. Regression Analysis. 3 Hours.
Multiple correlation/regression techniques, including polynomials, analysis
of interactions, dummy coding, non-orthogonal analysis of variance, and
analysis of covariance. Prerequisite: EPSY 710 or equivalent course.
LEC.

EPSY 811. Analysis of Variance. 3 Hours.
Analysis of variance techniques including one-way ANOVA, planned and
post hoc comparisons, multway ANOVA, repeated measures ANOVA,
and mixed designs. Prerequisite: EPSY 710 and EPSY 711. LEC.

EPSY 812. Meta-Analysis. 3 Hours.
Statistical methods to summarize results from multiple studies.
Prerequisite: EPSY 811. LEC.
EPSY 814. Nonparametric Statistics. 3 Hours.
Methods of analysis for nominal and ranked data, multiway contingency table analysis. Prerequisite: EPSY 811. LEC.

EPSY 816. Evaluating School Programs. 3 Hours.
Methods and procedures for evaluating educational programs. Attention is given to the development and evaluation of goals and objectives, creation of designs to monitor processes and outcomes, utilization of test and measurement systems for assessing outcomes, establishing evaluation standards and criteria, and application of statistical analyses. Prerequisite: EPSY 710 or equivalent. LEC.

EPSY 822. Educational Scales, Questionnaires, and Sampling. 3 Hours.
Development, construction, validation and scaling of noncognitive instruments including questionnaires, surveys, checklists, rating scales and unobtrusive measures. The sampling methodology is emphasized. Item construction and analysis and the development of subscales are stressed. Prerequisite: EPSY 720 or EPSY 725 and EPSY 710. LEC.

EPSY 830. Individual and Group Assessment. 3 Hours.
A consideration of basic concepts pertaining to selection and interpretation of both standardized and non-standardized assessment procedures and devices with attention given to communicating assessment information within the context of the counseling relationship. Prerequisite: EPSY 725 or comparable undergraduate principles of measurement course. LEC.

EPSY 835. Clinical Techniques in Academic Assessment and Intervention. 3 Hours.
Students will learn techniques of formal and informal assessment of academic skills in school-aged students. In addition, students will learn consultation and intervention approaches and strategies for use with students who have academic delays. This course has a field-based practicum component. Prerequisite: Graduate student standing in the School Psychology program and permission of instructor. LEC.

EPSY 840. Guidance and Counseling in the Public Schools. 3 Hours.
This course is designed to provide information about the organization and administration of guidance and counseling programs in the public schools. Non-majors wishing to know more about the role of the counselor can be admitted with approval of the instructor. LEC.

EPSY 842. Counseling Practicum (Elementary, Secondary, Counseling Psychology). 6 Hours.
This course is taken as one of the last courses in the master's degree counseling program. The primary purpose of the course is for the student to develop individual counseling skills while functioning in a counseling setting. In addition to individual skills, students are also encouraged to participate in group counseling and other counseling related activities within the particular counseling setting. Students enroll in practicum for the level most closely related to their professional goals, i.e., elementary, secondary, counseling psychology. Graded on a satisfactory/fail basis. Prerequisite: EPSY 740, EPSY 742, and EPSY 880, and prior or concurrent enrollment in EPSY 830, EPSY 840, EPSY 844, and EPSY 846. Pre-enrollment with practicum coordinator. Students currently on academic probation will not be allowed to enroll in practicum. LEC.

EPSY 844. Theory of Group Counseling. 3 Hours.
Focuses on issues in group counseling. Topics covered are types of groups, theoretical orientation of groups, stages of group development, group leadership, selection of members, ethical issues, and effectiveness of groups. Prerequisite: Students must be admitted to the Program in Counseling Psychology. Nonmajors must have prior written consent of instructor. LEC.

EPSY 845. Substance Abuse Counseling. 3 Hours.
The aim of this course is to provide advanced training in the area of substance abuse and substance addictions counseling to graduate students in the helping professions. Topics covered include practical guidelines, specific intervention strategies, treatment principles, legal and ethical responsibilities, and issues within the field. Prerequisite: EPSY 740, EPSY 742. LEC.

EPSY 846. Career Development. 3 Hours.
Stresses the importance of career development in education, with an emphasis on developmental life planning. Course includes topics such as delivery systems, utility of career development theory, sexism and racism in career development and counseling, the effects of sex role socialization, nature of the world of work, evaluation of career information, use of career information in individual and group counseling, and the role of empirical research in career development theory and practice. LEC.

EPSY 850. Human Relationship Skills in the Classroom. 3 Hours.
The purpose of this course is to provide educators with an awareness and skill training in basic human relationship/communication skills. The course is focused on skills that provide educators with effective communication skills for working with students, educators, and parents. LEC.

EPSY 855. Psychoeducational Clinic I: Assessment, Consultation, and Intervention. 3 Hours.
This is a practical course where students apply previous learning and gain experience in assessment and intervention with children, families, and school consultation. Team collaboration, peer review, and case conferences are essential elements of this course. Students work with clients in the on campus learning center under supervision. Topical seminars also are included throughout the semester. Prerequisite: Graduate student standing in the School Psychology program and permission of instructor. LEC.

EPSY 860. Assessment of Behavior Problems and Personality. 3 Hours.
The purpose of this course is to examine appropriate assessment techniques for the evaluation of behavior problems. Interview procedures, behavioral observation strategies, behavior rating scales and checklists, self-report inventories, and rational theoretical techniques will be introduced. The intent is to place these assessment approaches in their theoretical contexts and to discuss how they could be used by pupil personnel specialists to understand the problem behavior and plan interventions to enhance students' personal adjustment and achievement in the classroom. Prerequisite: EPSY 770, graduate standing in the School of Psychology program, or permission of instructor. LEC.

EPSY 865. Psychoeducational Clinic 2: Assessment, Consultation, and Intervention. 3 Hours.
A continuation of School Psychology Clinic 1 where students will be performing the same activities at a higher level of autonomy and independence. Prerequisite: Graduate student standing in the School Psychology program, EPSY 855, and permission of instructor. LEC.

EPSY 870. Quantitative Methods for Research in Educational Leadership and Policy Studies. 3 Hours.
This course addresses the conceptual basis of statistical analysis with an emphasis on applied data analysis. The use of descriptive statistics, distributions, graphic displays, hypothesis testing, group comparison, and analyses of relationships among variables to explore research questions in education will be covered. This course is designed specifically for Ed.D. students in the School of Education. Students in other degree programs may not enroll. Prerequisite: This course is open only to Ed.D. students in the School of Education. LEC.
EPSY 871. Crisis and Disaster Counseling. 3 Hours.
This course provides advanced training in Crisis and Disaster Counseling to graduate students in the helping professions, providing students with the foundation, knowledge, and skills to effectively help those in crisis. Practical guidelines, specific intervention strategies, treatment principles, legal and ethical responsibilities, and self-care regarding crisis work will be discussed and integrated. Prerequisite: EPSY 740 and EPSY 742; or consent from instructor. LEC.

EPSY 875. Individual and Cultural Differences in Counseling Psychology. 3 Hours.
Examines the role of culture in human behavior and its influence in counseling theories, practice, and research. The course will assist students develop multicultural awareness, understanding, and skills in working with people from diverse racial, social, cultural, and individual backgrounds. The course will provide opportunities for self-examination of cultural assumptions/values in order to develop multicultural competence. Prerequisite: EPSY 742 or equivalent. LEC.

EPSY 880. Ethical and Legal Issues in Professional Psychology. 3 Hours.
An examination of legal, ethical, and professional standards and issues affecting the practice of professional psychology. Topics include legislative regulation of professional psychology, ethical standards and codes of conduct for psychology and related mental health professions, standards of professional practice, and issue of practice liability and risk management. LEC.

EPSY 882. History and Systems of Psychology. 3 Hours.
A historical survey of the evolution of concepts, theories, and systems of thought in psychology with an emphasis on their relationship to contemporary issues in psychological theory, research, and practice. Prerequisite: Graduate standing in EPSY or consent of the instructor. LEC.

EPSY 885. Projective Assessment. 3 Hours.
The major goal of the course is to integrate information about a person from one or more projective tests into a useful summary. The projective assessment instruments to be used include the Rorschach (using the Exner system of scoring and interpretation), the Thematic Apperception Test, and projective drawings (e.g., Draw-A-Person test). Prerequisite: At least one graduate-level course in measurement and one graduate course in assessment plus consent of the instructor. LEC.

EPSY 888. Evidence Based Practice in Counseling Psychology. 3 Hours.
This course is an introduction to the skills involved in a small number of Evidence Based Treatments, in the context of understanding their place in the pursuit of Evidence Based Practice. The course includes readings, videos, and discussion of the treatments, with a heavy experiential component of role plays and reviews on video through the Center for Psychoeducational Services. The emphasis is on developing initial skills in the selected treatments. Prerequisite: Graduate student in Counseling Psychology or permission of the instructor. LEC.

EPSY 890. Diagnosis and Psychopathology. 3 Hours.
An examination of psychological disorders from a counseling psychology perspective that emphasizes strengths. The course will cover the current version of the Diagnostic and Statistical Manual (DSM), as well as alternative taxonomies, exploring personality as it ranges from normal personality styles to personality disorders, as well as Axis I disorders. The emphasis is on identifying and assessing these phenomena and understanding possible behavioral and treatment implications. Prerequisite: Degree seeking status in Counseling Psychology or consent of instructor. LEC.

EPSY 893. Internship in School Counseling. 2 Hours.
Two consecutive enrollments covering a period of one academic year. During this time the student prepares a portfolio of skills competencies, classroom guidance programs presented, and other experiences appropriate to the student's school level. Supervision will be conducted on an individual basis and will include a minimum of two site visits per semester. Prerequisite: Must have school counseling position and a completed Masters degree from K.U. in School Counseling. FLD.

EPSY 895. Field Experience in: ____. 1-5 Hours.
Supervised and directed experiences in selected educational or mental health settings. The campus-based instructor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experiences will be prepared independently by the student, a representative of the cooperating agency, and the campus-based instructor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit in this and additional field experience enrollments may not exceed eight hours. Graded on a satisfactory/fail basis. Prerequisite: EPSY 842 and consent of the practicum coordinator. FLD.

EPSY 896. Seminar in: ____. 1-3 Hours.
Prerequisite: Permission of instructor. LEC.

EPSY 897. Independent Study. 1-4 Hours.
Graded on a satisfactory/unsatisfactory basis. Prerequisite: Consent of advisor and instructor. RSH.

EPSY 898. Master's Project. 1-4 Hours.
Prerequisite: Prior or concurrent enrollment in EPSY 710, EPSY 715, or EPSY 790. RSH.

EPSY 899. Master's Thesis. 1-6 Hours.
Prerequisite: Prior or concurrent enrollment in EPSY 710, THE.

EPSY 900. Legal, Ethical, and Professional Issues in Professional Psychology. 3 Hours.
This proseminar is designed to examine the major legal and ethical principles and areas of concern that affect professional psychology. The course will also examine the historical development of professional psychology and current issues that affect the future direction of research and practice. Prerequisite: Doctoral status in counseling, clinical, clinical child, or school psychology, or consent of the instructor. LEC.

EPSY 901. Research Practicum in: ____. 1-3 Hours.
This course is designed to give students experience in conducting research. It is expected that students will take this course for at least two consecutive semesters. (This course fulfills the requirement by the School of Education for a two semester, research practicum course.) Prerequisite: Doctoral student status in a program in the Department of Educational Psychology. RSH.

EPSY 902. Research Methodology in Education. 3 Hours.
An examination and study of the problems and procedures which relate to the validity of research methods. Emphasis will be placed on reading the current literature on research methodology. Students are required to develop a research proposal. Prerequisite: EPSY 811 and EPSY 720 or EPSY 725. LEC.

EPSY 905. Multivariate Analysis. 3 Hours.
Multivariate analysis of variance, discriminant analysis, logistic regression, and exploratory factor analysis. Prerequisite: EPSY 810, EPSY 811 and experience with a statistical software package. LEC.

EPSY 906. Structural Equation Modeling I. 3 Hours.
The purpose of this course is to introduce students to Structural Equation Modeling (SEM). Topics to be covered include matrix algebra, correlation/
covariation, regression, Path analysis, exploratory and confirmatory factor analysis, full structural equation models and multi-group models. Students will be exposed to the various statistical software programs available for SEM and will be expected to become proficient in utilizing EQS. Prerequisite: EPSY 710 or equivalent course. LEC.

EPSY 907. The Psychology of Instruction and Human Learning. 4 Hours.
A study of research and theory in the areas of cognitive learning and of instruction, including such topics as motivation, problem solving, discovery learning, conceptualization, theory construction and task analysis. Emphasis placed on independent learning experiences and field-based experimentation with pilot study. Prerequisite: EPSY 807 and EPSY 715 or permission of instructor. LEC.

EPSY 908. Structural Equation Modeling II. 3 Hours.
The purpose of this course is to introduce students to advanced topics in Structural Equation Modeling. Topics to be covered include multi-level models, latent growth models, mixture models and approaches to handling missing and/or non-normal data. Students will be exposed to the various statistical software programs and will be expected to become proficient in utilizing EQS. Prerequisite: EPSY 906 or equivalent course. LEC.

EPSY 910. Practicum in School Psychology. 3 Hours.
Supervised practice in the application of psychological theory of educational problems. Includes work useful with exceptional children as well as experience in the application of such areas as mental hygiene and learning theory to problems involving the total school population. (Same as SPED 801.) Prerequisite: Permission of advisor and instructor. LEC.

EPSY 911. Advanced Practicum in School Psychology. 3 Hours.
A continuation of EPSY 910 with special emphasis on remedial techniques associated with learning difficulties. (Same as SPED 802.) Prerequisite: EPSY 910 and permission of advisor and instructor. LEC.

EPSY 916. Educational Evaluation: Theory and Practice. 3 Hours.
The course will treat an intensive critical study of various views of evaluation as it exists opposite the experimental research process, emphasizing the operational definitions of objectives, existing models, taxonomies, and structure, and goals and methods of obtaining and summarizing evaluation data. Prerequisite: EPSY 710 and EPSY 816 or equivalents or permission of instructor. LEC.

EPSY 918. Seminar in Current Issues and Trends in: ______. 1-3 Hours.
An examination of selected current issues and trends. (This course fulfills the requirement by the School of Education for a course in current issues and trends.) Prerequisite: Doctoral student status in a program in the Department of Educational Psychology. LEC.

EPSY 921. Theory and Applications of Educational Measurement. 3 Hours.
Application of theory including classical theories of reliability and validity, latent-trait theories, item sampling, and factor analysis to problems in educational test development and use in areas such as evaluation, research, placement, and selection. Prerequisite: EPSY 725 and EPSY 811. LEC.

EPSY 922. Item Response Theory. 3 Hours.
Theoretical foundations and practical applications of item response theory in educational measurement. Prerequisite: EPSY 921. LEC.

EPSY 923. Advanced Theory and Applications of Item Response Theory. 3 Hours.
This course is designed to acquaint students with knowledge of advanced theory and applications in the field of item response theory (IRT). Topics to be covered include: advanced IRT models for dichotomous and polytomous, multidimensional, rater effects, and testlet-based item response data, estimation of parameters for these models and related software, and goodness of fit tests. The course will also focus on some advanced applications using these models, including test development, test score equating, differential item functioning, scoring and score reporting, Monte Carlo simulation studies, and innovative test designs. Prerequisite: EPSY 922 or equivalent course. LEC.

The purpose of this course is to provide advanced students in the areas of educational research, psychometrics, and statistics with techniques for computer programming, analysis, and carrying out research using computer simulations. The topics covered are: Programming with Fortran languages, data manipulation and management, analysis, simulation of data according to statistical and psychometric models, numerical techniques for matrix operations, sampling from distributions, solutions for non-linear equations, and Markov-Chain Monte-Carlo techniques. There are no prerequisites for this course, but those students who have coursework through the multivariate statistics level will benefit most from this course. Other suggested courses include those related to psychological and educational measurement, classical test theory, item response theory, and research methods. LEC.

EPSY 926. Hierarchical Linear Modeling. 3 Hours.
This course provides students with an introductory background in the basic principles and applications of hierarchical linear modeling (HLM). The course will review both the conceptual issues and methodological issues in using hierarchical linear modeling by working step-by-step with real data sets. Prerequisite: EPSY 810 Regression Analysis (formerly EPSY 904). LEC.

EPSY 931. Computer-Based Testing. 3 Hours.
Computer-based testing holds the promise of increasing test validity and reliability while reducing the logistical problems associated with large-scale assessment. This seminar will provide an overview of what we have learned about administering tests on computer between the 1960s and today. The focus will be on measurement issues, but depending on class interest topics will vary. A prior course in item response theory is desirable but not required. Prerequisite: EPSY 725 or equivalent course. LEC.

EPSY 932. Diagnostic Testing. 3 Hours.
There is a great demand for more useful, more actionable test scores. Traditional large-scale group administered tests do not provide this kind of information due to low reliabilities of, or high inter-correlations among, sub-scores. This course will explore approaches used by individually administered tests to provide diagnostic information, new psychometric models that hold promise of providing better diagnostic information, and implications for test design. A primary focus will be on how psychometric models can be used with diagnostic subscores that are more reliable and less correlated than traditional approaches. Prerequisite: PRE 922 or equivalent course. LEC.

EPSY 940. Advanced Studies in Educational Psychology and Research. 3 Hours.
A course designed to offer a comprehensive view of the field of educational psychology and research. The course will treat a series of thematic areas with a focus on latest developments and emerging theories in learning, development and quantitative methods. Intended for post-master's level students. Prerequisite: Prior graduate level course work in development, learning, measurement, and statistics. LEC.

EPSY 945. Clinical Supervision and Consultation. 3 Hours.
This course is designed to provide students with a knowledge foundation of clinical supervision and consultation theories and models, modes/
formats of supervision, the supervisory/consulting relationship, legal and ethical considerations in the provision of supervision/consultation, and supervision research issues. Prerequisite: EPSY 948. LEC.

EPSY 947. Specialist Research. 1-4 Hours.

RSH.

EPSY 948. Advanced Practicum I. 3 Hours.

Designed to be the initial advanced practicum for first year doctoral students. Attention is directed to development of a broad range of basic and advanced skills. Graded on a satisfactory/fail basis. Prerequisite: EPSY 842 or equivalent. LEC.

EPSY 949. Advanced Practicum II. 3 Hours.

Intensive counseling practice, including group and individual supervision, that may be taken either through Counseling and Psychological Services or an approved site outside of the university. Focus is on the acquisition and demonstration of advanced counseling skills. Two consecutive semesters (Fall, Spring) of enrollment are required of doctoral students. Responsibility to the site is for a continuous nine months, with fall semester responsibilities ending on the first day of spring semester classes. A grade of incomplete will be granted at the end of the regular fall grading period, with the regular fall grade being granted after completion of fall semester responsibilities. Graded on a satisfactory/fail basis. Prerequisite: Satisfactory completion of EPSY 948 and prior or concurrent enrollment in EPSY 951. LEC.

EPSY 950. Cognitive Theory and Strategies in Counseling Psychology. 3 Hours.

An examination of historical and contemporary cognitive theories and strategies used in the practice of counseling psychology. Consideration of theoretical positions and issues, research functions, assessment strategies, and application of techniques. Prerequisite: EPSY doctoral student status or consent of instructor. LEC.

EPSY 951. Psychodiagnostic Assessment. 3 Hours.

Survey of selected psychodiagnostic instruments currently in use and their administration, scoring, and interpretation. Emphasis will be also be placed on the use of the clinical interview as an assessment tool, case conceptualization, diagnosis, and integrative report writing. Prerequisite: Completion of EPSY 830 and degree-seeking status in Counseling Psychology or consent of instructor. LEC.

EPSY 952. Advanced Counseling Theory and Research. 3 Hours.

An advanced treatment of theory, research, and practice issues central to Counseling Psychology. Topics include theoretical and research paradigms in Counseling Psychology; the relationship of theory and research to practice; and evidence on factors influencing counseling processes and outcomes. Prerequisite: Counseling Psychology doctoral student status or consent of instructor. LEC.

EPSY 953. Interactional Perspectives on Counseling and Personality. 3 Hours.

A study of personality and therapeutic change from systems, interactional, and communications perspectives, with implications for research and assessment in counseling. Designed for graduate students at the specialist and doctoral levels. Prerequisite: Counseling Psychology doctoral student status or consent of instructor. LEC.

EPSY 954. Vocational Psychology. 3 Hours.

A survey of the major career development theories in counseling psychology. Models and methods of career counseling will be reviewed and integrated from the different theoretical perspectives. The empirical support of each theory and needed research will be identified. The course will include presentation of theories of career development and their specific applicability in counseling. The career development of special groups (women, the culturally different, non-whites) will be studied as well as alternative methods of delivery in career development and counseling. Prerequisite: Completion of EPSY 846 or equivalent, and Ph.D. degree-seeking status in Counseling Psychology or consent of instructor. LEC.

EPSY 955. Research Methods in Counseling Psychology. 3 Hours.

This course is a foundational course in research methods and design in counseling psychology. The course covers (a) design type and threats to design validity, (b) the formulation of research problems, (c) research instrumentation/measures, (d) data analytic methods, (e) interpreting data, and (f) ethical issues, research integrity, and the responsible conduct of research. Prerequisite: EPSY 710 and EPSY 711 or equivalent. Doctoral student in Counseling Psychology or consent of instructor. LEC.

EPSY 956. Theory of Couples and Family Counseling. 3 Hours.

A survey of contemporary systems of couples and family counseling. Consideration of couple and family function/dysfunction, theoretical models of family interaction, models of counseling practice and methods, and research on couples and family counseling. Prerequisite: Degree-seeking status in Counseling Psychology or consent of instructor. LEC.

EPSY 960. Assessment of Infants, Toddlers, and Young Children. 3 Hours.

The purpose of this course is to introduce the student to the assessment of various domains related to the development of infants, toddlers, and young children. The student will learn how to use formal and informal assessment techniques for screening, diagnostic, educational planning, and educational evaluation purposes. An emphasis will be placed on the linkage between assessment and intervention. This course is designed for students in the applied psychology fields (i.e., school psychology, counseling psychology, clinical child psychology, and clinical psychology). Prerequisite: EPSY 705, EPSY 725, EPSY 805 and permission from the instructor. LEC.

EPSY 965. Foundations of Psychoeducational Consultation. 3 Hours.

This is the first of a two semester sequence of courses on school-based consultation. The course is a combination lecture-laboratory experience that introduces the student to the literature, theory, and techniques of consultation. Prerequisite: Approval of instructor. LEC.

EPSY 970. Counseling with Adults. 3 Hours.

This course will focus on the utilization and integration of adult life span theory and issues with counseling theory and practice. Particular attention is given to the adaptation of counseling practices to the developmental concerns of adult male and female clients. Additional emphasis is given to encouraging research projects related to the adult lifespan and effective counseling practices. Prerequisite: Graduate student status as an advanced master's student or doctoral student in the Program in Counseling Psychology or written permission of instructor. LEC.

EPSY 975. Therapeutic Intervention: Home and School. 3 Hours.

The course includes a review of literature and theory as well as supervised practice. Therapeutic intervention is broadly conceived, including individual and group counseling, and parent and teacher consultation. The importance of the family-school relationship is stressed. Prerequisite: Permission of instructor and completion of course on counseling. LEC.

EPSY 980. Advanced Topics: ______. 1-3 Hours.

A special course of study to meet current need of education professionals--primarily for post-master's level students. LEC.

EPSY 990. Internship in Counseling Psychology. 1 Hour.

Three consecutive enrollments, covering a minimum of eleven months of experience in an approved counseling psychology field setting. Supervision and directed experiences coordinated by the student's adviser, the program training director, and internship setting supervisors. Required of all counseling psychology doctoral students. Prerequisite:
Doctoral degree-seeking status in counseling psychology, completion of Ph.D. comprehensive examinations, and consent of counseling psychology faculty. FLD.

EPSY 991. Ed.S. Internship. 1-5 Hours.
This course has two components: 1) a supervised experience as practicing a school psychologist, and 2) a group supervision class emphasizing case presentations and other integrative practice elements. The student functions as a provisionally certified school psychologist. Prerequisite: Completion of Ed.S. degree. FLD.

EPSY 992. Ph.D. Internship in School Psychology. 5 Hours.
This is a one-year, supervised experience in an approved setting. The structure and content of the experience follows guidelines of several professional organizations including The American Psychological Association and the National Association of School Psychologists. Prerequisite: Approval of School Psychology committee. FLD.

EPSY 995. Field Experience in: __________. 1-5 Hours.
Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experiences will be prepared independently by the student, a representative of the cooperating agency, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours. FLD.

EPSY 996. College Teaching Experience in: __________. 1-5 Hours.
To meet the college teaching experience requirement for doctoral programs, a student shall engage in a semester-long, planned, instructional activity that shall include college classroom teaching under supervision. Planning shall be done with the advisor and/or member of the faculty who will supervise the experience. The activity shall be done under the supervision of a member of the University of Kansas faculty or by an individual or individuals designated by the candidate’s committee. FLD.

EPSY 997. Individual Study. 1-4 Hours.
Prerequisite: Prior graduate course work in the area of study and consent of instructor. Course is graded on a satisfactory/fail basis. RSH.

EPSY 998. Seminar in: __________. 1-4 Hours.
Course is graded on a satisfactory/fail basis. LEC.

THE.

Special Education Courses

SPED 261. Families and Professional Partnerships. 3 Hours.
This course provides information on issues and practices related to working together in partnership with families of young children including those who have a young child with special needs. Emphasis will be placed on taking a family systems prospective and a family-centered approach to family support. Strategies for effective communication for the purpose of information sharing and collaborative planning with families are provided. Relevant current scientifically based evidence will be reviewed and discussed pertaining to these topics. LEC.

SPED 326. Teaching Exceptional Children and Youth in General Education. 3 Hours.
This course is designed for general education teacher trainees. It will provide them information about students with disabilities that they will have in their classrooms and the law governing special education and its implications for them as general educators. The course will address Individualized Educational Plans that are developed for students with disabilities and how general educators contribute to these plans. Students will learn about planning instruction that is differentiated to meet various learner needs, universal design principles and instructional tools, providing meaningful access to general education classrooms and curriculum for students with disabilities and designing and delivering appropriate accommodations and modifications to assist student learning. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 362. Introduction to Early Education and Early Childhood Special Education. 3 Hours.
This course is designed to provide an overview of the field of early education including early childhood education and early childhood special education. The historical, philosophical, research-based, policy and legal foundations for the field are discussed to provide the students with the knowledge to become an advocate for early learning opportunities (birth through grade 3) for all children and their families. LEC.

SPED 425. Introduction to Exceptional Children and Youth. 3 Hours.
Designed for regular education teacher trainees, those in training for support roles in public schools and/or residential facilities (music educators/therapists, speech clinicians, etc.), and others interested in providing services for exceptional children and youth. Emphasis on the learning and adjustment problems of exceptional children and youth. Includes fieldwork experiences in residential and/or public school settings. LEC.

SPED 431. Introduction to the Exceptional Child/Adolescent. 1 Hour.
The course is designed to provide the student with knowledge of and direct experiences within instructional settings that include one or more exceptional children. Structured experiences will be provided to (a) ensure mastery of skills in differentiating normal from atypical patterns of behavior in children or adolescents, (b) promote acquisition of skill in understanding the educational needs of exceptional learners as well as the procedures used to identify and provide instruction for them, (c) ensure the generalization of communication skills to the unique needs of exceptional learners in instructional settings, and (d) promote a positive attitude toward atypical students. LEC.

SPED 439. Student Teaching: Unified Early Childhood. 1-6 Hours.
A supervised student teaching experience leading to initial teaching licensure in Kansas Unified Early Childhood (birth through grade 3). The student assumes the professional role as a teacher in an approved inclusive early childhood infant/toddler or preschool. Prerequisite: Admission to the Unified Early Childhood program. Approved application of intent to student teach. LEC.

SPED 450. Disability in an American Context. 3 Hours.
This course is designed to introduce undergraduate students of any major to important theoretical and practical concepts regarding special education, disability, and diversity. Successful completion of this course fulfills one requirement for the School of Education minor in Education. LEC.

SPED 497. Independent Study. 1-2 Hours.
Only one enrollment permitted each semester, a maximum of four hours will apply toward a bachelor's degree. Prerequisite: Recommendation of advisor and consent of instructor. IND.

SPED 500. Introduction to Sign Language. 3 Hours.
This is an introductory course in Sign Language and includes ASL and English sign vocabulary, a description of all manual sign systems, medical aspects of hearing loss, communication and language, and Deaf culture and community. LEC.

This course will cover the development of American Sign Language and its application within the Deaf Community. It is based on the functional-notational approach to learning sign language. This approach organizes language around communicative purposes of everyday interaction. LEC.
SPED 502. American Sign Language II (ASL II). 3 Hours.
This is the second level course in American Sign Language and its application within the Deaf Community. It is based on the functional-notational approach to learning sign language. This approach organizes language around communicative purposes of everyday interaction.
Prerequisite: SPED 501. LEC.

SPED 503. American Sign Language III (ASL III). 3 Hours.
This is the third level course in American Sign Language. The primary objective of the American Sign Language III “Signing Naturally” Level 2 curriculum is for students to continue using the two basic language skills: visual listening and signing. Prerequisite: SPED 502. LEC.

SPED 504. American Sign Language IV (ASL IV). 3 Hours.
This is the fourth level course in American Sign Language. The primary objective of the American Sign Language IV “Signing Naturally” Level 3 curriculum is for students to continue using the two basic language skills -- visual listening and signing. Prerequisite: SPED 503. LEC.

SPED 506. Advanced Practices for Children with Disabilities in the Elementary General Education Classroom. 3 Hours.
This course is designed to enable novice teachers to master and apply the instructional and communicative skills that will facilitate appropriate and productive inclusion of children and youth with exceptionalities within general education classrooms and other school settings. Specific research-based strategies in curriculum content acquisition (content enhancements, learning strategies, classwide-peer tutoring), and specific research-based strategies in behavior management will be learned and applied to real teaching experiences. Novice teachers will learn about collaborative structures found in schools to support student learning in general education settings (co-teaching, collaborative consultation, teacher/student support teams) and roles and responsibilities of teachers within these structures. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 507. Advanced Practices for Children with Disabilities Middle/Secondary General Education Classroom. 3 Hours.
This course is designed to enable novice teachers to master and apply the instructional and communicative skills that will facilitate appropriate and productive inclusion of middle and secondary age students with disabilities within general education classrooms and other school settings. Specific research-based strategies in curriculum content acquisition (content enhancements, learning strategies, classwide-peer tutoring), and specific research-based strategies in behavior management will be learned and applied to real teaching experiences. Novice teachers will learn about collaborative structures found in schools to support student learning in general education settings (co-teaching, collaborative consultation, teacher/student support teams) and roles and responsibilities of teachers within these structures. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 508. Special Course: ____. 1-5 Hours.
A special course of study designed to meet current needs of education students; primarily for undergraduates. LEC.

SPED 631. Characteristics of Students Needing an Adaptive Curriculum. 3 Hours.
This course is designed as an introduction to the definition, characteristics, causes, assessment, and specific remedial techniques for students needing an adaptive curriculum. The needs for specialized services to meet specific learning and/or behavioral needs will be presented. Students will learn about the history of serving children and youth with high incidence disabilities associated with specific learning, emotional/behavioral, mild mental retardation and a range of physical and health needs. Key individuals in the research of specific disabilities associated with these needs and how they helped expand our understanding of who these individuals are and how to address specific needs, will also be addressed. Learning characteristics will be addressed in relation to why and how specialized instruction can meet the learning and developmental needs of these individuals, specifically in the areas of instructional and assistive technology. LEC.

SPED 632. Characteristics of Students Needing a Functional Curriculum. 3 Hours.
This introductory course provides an overview of the characteristics of learners with significant support needs. Students will learn to define and understand various classification systems and the implications of: low-incidence disabilities, significant cognitive disability, various vision and/or hearing impairments, including deaf-blindness motor disabilities, and health impairments. Students will be introduced to various etiologies: pre-, peri-, and post-natal causes, syndromes and chromosomal disorders, and biomedical causes of severe disability. Additional content includes anatomy of sensory organs, interpretation of pertinent medical reports, assessment procedures, and in school settings considerations (e.g., orientation and mobility, cochlear implants, medications, tube feeding, physical therapy, occupational therapy). Prerequisite: An introductory course in special education. LEC.

SPED 633. Characteristics of Learners with Hearing Loss -- Deaf Studies. 3 Hours.
Deaf Studies is the basic characteristics course for both the Master's degree in Deaf Education and for Kansas and Missouri endorsement in Deaf/HOH. The course includes medical aspects/etiology of hearing loss, history, pertinent laws, Deaf culture and community, issues in assessment and psychology, language and sign systems, multicultural education, multiple disabilities and hearing loss, and specific issues in the field. LEC.

SPED 635. Introduction to Teaching Learners with Low-Incidence Disabilities in Inclusive Settings. 3 Hours.
This course examines current principles and inclusive practices for learners with significant disabilities. The course will focus on the extant research base concerning inclusive practices, characteristics of learners with low-incidence disabilities, and instructional strategies. Prerequisite: SPED 326 or equivalent. LEC.

SPED 641. Methods & Assessment: Literacy Interventions Struggling Learners & Students High-Incidence Disabilities. 3 Hours.
This course will provide in depth learning experiences targeting literacy: both reading and writing. Students will learn about assessment tools and assessment systems used in tiered support frameworks to determine the required intensity of literacy support and instruction needed by children/adolescents with adaptive special education needs, and will learn about evidence-based instructional approaches and curriculum developed for students with disabilities and struggling students in general. The course is intended for persons working toward the Kansas teaching license in teaching students needing an adapted curriculum. Prerequisite: SPED 730, admittance into the Adaptive program in the Department of Special Education, or permission of the instructor. LEC.

SPED 642. Assessment and Methods of Teaching Students with Low-Incidence Disabilities in Inclusive Settings. 3 Hours.
This course prepares teacher candidates to assess students with disabilities using formal and informal measures, to use assessment information to develop a strengths-based inclusive Individual Education Program (IEP), to design instruction related to IEP goals and state standards, and to evaluate the effectiveness of that instruction using progress-monitoring techniques. Prerequisite: SPED 326. LEC.
SPED 644. Assessment and Instructional Methods I: Learners with Hearing Loss. 3 Hours.
This course will provide an introduction to appropriate instructional methodology for teaching students who are deaf or hard of hearing at the early childhood, elementary, and secondary levels. Upon completion students will be familiar with legal issues, teaching, assessment, IEP development, curriculum planning, instructional methods, and transition. LEC.

SPED 650. Constructing Early Childhood Curriculum. 3 Hours.
Students in this course will learn to design, implement and evaluate developmentally appropriate curricula and programs for children from birth through kindergarten. Issues of curriculum design and assessment are introduced as interrelated processes that include structuring learning environments and experiences that are responsive to children's interests and abilities. Students analyze and evaluate curriculum that focuses on the five developmental domains a) social emotional development; b) cognitive development; c) language and communication development; d) adaptive behavior development; and e) gross and fine motor development and in addition the content domains of literacy, science, math, and fine art. Strategies for developing learning opportunities that are appropriate for young children, including children with special needs and children from diverse cultural, ethnic and linguistic backgrounds, will be explored. Prerequisite: Admission to School of Education UEC program. LEC.

SPED 660. Education of Children and Youth with Disabilities I: ______. 3 Hours.
This is a methods course that covers instructional approaches and procedures that offer developmentally appropriate, effective and inclusive early intervention for preschool and kindergarten age children who experience developmental delays, disabling conditions or who are at-risk for developmental problems and disabilities. It is directed toward: (a) "how" to teach, or the technical components of developing and delivering effective instruction that provide access to the general early childhood curriculum within recognized approaches to early childhood education for young children, and (b) the "what" to teach, or the selection of developmentally and individually appropriate child objectives as well as specific materials and specialized instructional approaches. The relationship of instructional planning to state and federal mandates will also be considered. The course is primarily intended for persons who are currently working toward certification in the ECSE program area. Prerequisite: SPED 425 or SPED 725, and SPED 735, which can be taken concurrently. LEC.

SPED 661. Supporting Children with Significant Learning and Behavioral Challenges. 3 Hours.
Students in this course will gain knowledge of the causes, and intervention and support approaches for young children with multiple and significant disabilities including neurological impairments, physical disabilities, sensory impairments, significant developmental disabilities and challenging behavior. Emphasis is placed on environmental adaptations and direct instructional techniques to maximize independence as determined through systematic ecological inventories tailored to the individual child's strengths and needs. Information is also provided on assistive technology designed to provide appropriate supports. Functional behavioral assessment procedures, proactive intervention strategies, and developing collaborative support plans will be studied. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 663. Assessment Strategies in Early Education. 3 Hours.
Examines the practice of gathering information for the purpose of making individual referral and instructional decisions for infants, toddlers, and young children with and without special needs. Discusses effective informal assessment techniques and emphasizes an ecological approach to gathering information. Introduces standardized assessment and screening instruments and provides an overview of the purposes and limitations of such tests. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 664. Inclusive Strategies and Intervention for Infants and Toddlers. 3 Hours.
Emphasizes curriculum development and early intervention provision for infants and toddlers through the planning of appropriate learning experiences, the design of learning environments, developing Individual Family Service Plans (IFSP), promoting collaboration among families and the use of various methods of enhancing the child's development across the five (social-emotional, adaptive, cognitive, physical/movement, communication) development domains. The role of the educator/early interventionist in relation to the family and the child is examined. Curriculum resources and intervention strategies for infants and toddlers with special needs are reviewed with emphasis on interdisciplinary planning and implementation. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 665. Inclusive Strategies and Intervention for Preschoolers. 3 Hours.
Provides the opportunity for students to develop and evaluate inclusive environments for young children. This course emphasizes meeting the needs of all young children through an integrated approach to planning, implementing and assessing instruction in all areas; linking assessment information to individualized instruction; developing Individual Educational Plans (IEPs) and collaborating among families, schools and communities. Service delivery systems and transitions between early childhood programs are reviewed in relation to curriculum. Curriculum development for early childhood content areas (literacy and language, numeracy, science, social studies, physical education and the arts) and domains (language, social/emotional, physical, and cognitive) will be explored. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 667. Field Experience in Preschool. 1 Hour.
This supervised field experience is intended to allow the pre-service teacher to apply the knowledge gained in SPED 665 Inclusive Strategies and Intervention for Preschoolers, by working with infants and toddlers in early intervention settings/programs. To be taken concurrently SPED 665. Prerequisite: Admission to the Teacher Education Program. FLD.

SPED 668. Field Experience Infant/Toddler. 1 Hour.
This supervised field experience is intended to allow the pre-service teacher to apply the knowledge gained SPED 664 Inclusive Strategies and Intervention for Infants and Toddlers, by working with infants and toddlers in early intervention settings/programs. To be taken concurrently SPED 664. Prerequisite: Admission to the Teacher Education Program. FLD.

SPED 672. Field Experiences with Exceptional Children and Youth: ____. 1-3 Hours.
A course designed to provide experiences for students to participate with exceptional children in public schools and/or residential facilities and with professional personnel associated with the lives of exceptional students including special education teachers, child care workers, therapists, etc. Students will have opportunities to participate as aides, tutors, and instructors with individual and small groups of exceptional youth in one or more placements. Through weekly meetings with the instructor students are guided to relate their experiences to the needs and services for exceptional children and youth. Prerequisite: SPED 635. FLD.
SPED 675. Practicum with Children and Youth with Disabilities: _____, 1-10 Hours.
Intensive diverse and direct teaching experiences with children and youth with disabilities in educational settings. The course is differentiated from SPED 775 through the amount of scaffolding undergraduate students will receive when demonstrating skill application (e.g., undergraduates report and receive feedback on practicum experiences on a more frequent basis, reduced data collection requirements, more emphasis on cooperating teacher providing guidance, etc.). This practicum is a requirement for provisional endorsement according to KSDE. Students who have completed SPED 675 cannot enroll in SPED 775 within in same curricular area. Prerequisite: SPED 326. LEC.

SPED 700. Introduction to Sign Language. 3 Hours.
This is an introductory course in Sign Language and includes ASL and English sign vocabulary, a description of all manual sign systems, medical aspects of hearing loss, communication and language, and Deaf culture and community. LEC.

SPED 701. American Sign Language I (ASL I). 3 Hours.
This course will cover the development of American Sign Language and its application within the Deaf Community. It is based on the functional-notational approach to learning sign language. This approach organizes language around communicative purposes of everyday interaction. LEC.

SPED 702. American Sign Language II (ASL II). 3 Hours.
This is the second level course American Sign Language and its application within the Deaf Community. It is based on the functional-notational approach to learning sign language. This approach organizes language around communicative purposes of everyday interaction. Prerequisite: SPED 701. LEC.

SPED 703. American Sign Language III (ASL III). 3 Hours.
This is the third level course in American Sign Language. The primary objective of the American Sign Language III “Signing Naturally” Level 2 curriculum is for students to continue using the two basic language skills: visual listening and signing. Prerequisite: SPED 702. LEC.

SPED 704. American Sign Language IV (ASL IV). 3 Hours.
This is the fourth level course in American Sign Language. The primary objective of the American Sign Language IV “Signing Naturally” Level 3 curriculum is for students to continue using the two basic language skills — visual listening and signing. Prerequisite: SPED 703. LEC.

SPED 706. Advanced Practices for Children with Disabilities in the Elementary General Education Classroom. 3 Hours.
This course is designed to enable novice teachers to master and apply the instructional and communicative skills that will facilitate appropriate and productive inclusion of children and youth with exceptionalities within general education classrooms and other school settings. Specific research-based strategies in curriculum content acquisition (content enhancements, learning strategies, classwide-peer tutoring), and specific research-based strategies in behavior management will be learned and applied to real teaching experiences. Novice teachers will learn about collaborative structures found in schools to support student learning in general education settings (co-teaching, collaborative consultation, teacher/student support teams) and roles and responsibilities of teachers within these structures. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 707. Advanced Practices for Adolescents with Disabilities in the Middle/Secondary General Classroom. 3 Hours.
This course is designed to enable novice teachers to master and apply the instructional and communicative skills that will facilitate appropriate and productive inclusion of middle and secondary age students with disabilities within general education classrooms and other school settings. Specific research-based strategies in curriculum content acquisition (content enhancements, learning strategies, classwide-peer tutoring), and specific research-based strategies in behavior management will be learned and applied to real teaching experiences. Novice teachers will learn about collaborative structures found in schools to support student learning in general education settings (co-teaching, collaborative consultation, teacher/student support teams) and roles and responsibilities of teachers within these structures. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 708. Introduction to Hearing Impaired. 2 Hours.
A study of hearing defects and methods of diagnosis. The course also covers remedial work which teachers can use in treating such defects and meeting problems of hearing defective children. Prerequisite: Nine hours of education including educational psychology. LEC.

SPED 710. Methods of Teaching Language to the Deaf I. 3 Hours.
The effects of hearing loss on language acquisition and development. Systems for teaching language to individuals with hearing loss are introduced. Prerequisite: Course in normal language development and nine hours of education including educational psychology. LEC.

SPED 715. Understanding Research in Education. 3 Hours.
This course introduces concepts and skills involved in understanding and analyzing research in special education. The course provides an overview of basic, general knowledge of various research methodologies. In addition, this course will teach students to locate, read, comprehend, and critically analyze research articles and reports. Students will become familiar with the principles of educational research to become good “consumers” of this research. LEC.

SPED 716. Exceptional Children in Regular Classrooms. 3 Hours.
This course is designed to explore the relationship between regular and special education. Educational service delivery systems for exceptional children are identified and analyzed. Emphasis is placed upon procedures and special services that regular class teachers can use to provide instructional services to exceptional children assigned to regular classrooms. Procedures for enabling normal children to understand and appreciate the interaction with children who exhibit physical and behavioral variances from established norms are conveyed. Especially for regular class teachers and students desiring a career in teaching exceptional children. Will be offered by designated area sections or as a general overview of several areas. LEC.

SPED 716. Instructional Planning for Children and Youth with Disabilities: _____, 1-3 Hours.
This course provides knowledge and skills to select, adapt, and sequence instructional methods and materials to facilitate general education curriculum mastery. LEC.

SPED 719. Learning and Technology. 1 Hour.
The central framework of “human learning” provides a context for understanding technology-based educational innovations. The lessons in this course explore how various “features of learning” and “features of technology” interact. They discuss realistic options for improving the learning of students, and the learning of teachers, as they use technology in education. (Life-span range of levels.) LEC.

SPED 724. Data-Driven Instructional Decision Making. 1 Hour.
The lessons in this course present research-based methods for monitoring student behavior and academic progress. They explain how teachers may use this information to evaluate current and plan future instructional and behavioral interventions following a decision making model. It is also explored how computer and information management technology tools support and facilitate the collection, storage, and analysis of observational data. LEC.
SPED 725. Introduction to the Psychology and Education of Children and Youth with Disabilities. 3 Hours.
This course provides an overview of current practices in the identification, placement, and education of students with disabilities. This course emphasizes on patterns of social, cognitive, language, and physical development. Social, political, and economic advocacy issues are also addressed. Prerequisite: One course in Child Development. LEC.

SPED 726. Exceptionality and Technology. 1 Hour.
Technology has the potential to dramatically improve the education and quality of life for people with disabilities. This course presents you with a basic foundation for understanding technology in special education, a functional model for selecting the best technology applications for students with special needs, and strategies for applying your knowledge to practical situations. LEC.

SPED 727. Designing Instruction for Diverse Learners. 3 Hours.
This course explores to design, development, and implementation of technology-based solutions for struggling learners in the preK-12 instructional environment. Throughout the course, students will (1) gain an understanding of the Principles of Universal Design for Learning, (2) examine how technology has and can be developed in a manner to meet multiple needs, especially those with disabilities, and (3) analyze how professionals can identify and assess what technology-based solution would meet the needs of a particular individual or group of individuals. LEC.

SPED 729. Introduction to Computing in Special Education. 3 Hours.
This course is designed to provide an introduction to basic concepts of computer literacy, with particular emphasis on the uses of microcomputers in educational settings for individuals with special needs. Topics include an overview of computing specific to the needs of individuals with special needs including: a) applications and the impact of computers on society; b) an introduction to computer hardware and associated concepts; c) introductory programming concepts; d) a survey of instructional and instructional-support applications of computers including examples of related software; e) software evaluation techniques; and f) an overview of resources in educational computing. Students will acquire hands-on operating experience with microcomputers through scheduled laboratory periods. LEC.

SPED 730. Characteristics, Methods & Assessment: Intro Struggling Learners & Stuqnds High-Incidence Disabilities. 3 Hours.
The course is designed as an introduction to the characteristics, assessment and identification process, and initial instructional and behavioral interventions needed in meeting the needs of students with high-incidence disabilities under the Kansas Adaptive Teacher Education Standards. The needs for specialized services to meet specific learning and/or behavioral needs will be presented. Frameworks for instruction and conceptualizing best practice will be introduced including the principles of Universal Design for Learning and the Multi-Tier System of Support. The role of the educator in identifying, understanding and implementing evidence-based practices is also examined. Curriculum resources and intervention strategies for students with high-incidence disabilities will be introduced with emphasis on tiered planning and implementation. The course is intended for persons working toward the Kansas teaching endorsement in the Special Education Adaptation Area. Prerequisite: Admission into the Adaptive endorsement teacher education program in the Department of Special Education or permission of the instructor. LEC.

SPED 731. Supporting Children with Significant Learning and Behavioral Concerns. 3 Hours.
Students in this course will gain knowledge of the causes, and intervention and support approaches for young children birth through 5 years with significant support needs. These include young learners with multiple and significant disabilities including neurological impairments, physical disabilities, sensory impairments including dual sensory impairments, complex health care needs, significant developmental disabilities and challenging behavior. Emphasis is placed on environmental adaptations and direct instructional techniques to maximize independence as determined through systematic ecological inventories tailored to the individual child's strengths and needs. Information is also provided on assistive technology designed to provide appropriate supports. Functional behavioral assessment procedures, proactive intervention strategies, and developing collaborative support plans will be studied. Prerequisite: Admission into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. SPED 752 or its equivalent, SPED 734 or its equivalent, and SPED 755 or its equivalent. LEC.

SPED 732. Early Childhood Unified Student Teaching/Practicum. 1-6 Hours.
Opportunity to study and experience the fundamentals of teaching young children with and without disabilities with the aim of evolving a set of proactive intervention strategies, and developing collaborative support plans will be studied. Prerequisite: Admission into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. LEC.

SPED 733. Characteristics of Learners with Hearing Loss -- Deaf Studies. 3 Hours.
Deaf Studies is the basic characteristics course for both the Master's degree in Deaf Education and for Kansas and Missouri endorsement in Deaf/HH. The course includes medical aspects/etiology of hearing loss, history, pertinent laws, Deaf culture and community, issues in assessment and psychology, language and sign systems, multicultural education, multiple disabilities and hearing loss, and specific issues in the field. LEC.

SPED 734. Inclusive Strategies and Intervention for Infants and Toddlers: _____, 3 Hours.
Emphasizes curriculum development and early intervention provision for infants and toddlers through the planning of appropriate learning experiences, the design of learning environments, developing Individual Family Service Plans (IFSP), promoting collaboration among families and the use of various methods of enhancing the child's development across the five (social-emotional, adaptive, cognitive, physical, communication) developmental domains. The role of the educator/early interventionist in relation to the family and the child is examined. Curriculum resources and intervention strategies for infants and toddlers with special needs are reviewed with emphasis on interdisciplinary planning and implementation. Prerequisite: Admission into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. LEC.

SPED 735. Introduction to Teaching Learners with Low-Incidence Disabilities in Inclusive Settings. 3 Hours.
This course examines current principles and inclusive practices for learners with significant disabilities. The course will focus on the extant research base concerning inclusive practices, characteristics of learners with low-incidence disabilities, and instructional strategies. Prerequisite: SPED 326 or equivalent. LEC.

SPED 736. Unified Early Childhood Applied Research. 1 Hour.
This seminar is designed to facilitate the UEC teacher candidate's completion of a Teaching Work Sample during the UEC Student Teaching experience. The purpose of the seminar together with the UEC student teaching experience is to provide the UEC teacher candidate with the opportunity to study and experience the fundamentals of teaching young children with and without disabilities with the aim of evolving a set of values, principles, and skills which will guide future early education teaching situations. Prerequisite: Admission to UEC Student Teaching. Corequisite: SPED 739 UEC Student Teaching. LEC.

SPED 737. Early Childhood Unified Student Teaching/Practicum. 1-6 Hours.
A supervised student teaching experience leading to initial teaching licensure in unified early childhood (birth through grade 3). The student assumes the total professional role as a teacher in an approved
inclusive early childhood program to include infant/toddler, preschool or kindergarten. Prerequisite: Admission to UEC Student Teaching. Corequisite: SPED 738 UEC Unified Early Childhood Applied Research. LEC.

SPED 740. Managing Classroom Behavior of Exceptional Children and Youth. 3 Hours.
Designed to acquaint regular and special education teachers, principals, school psychologists, counselors, and speech pathologists with principles and application of classroom management techniques applicable to exceptional children and youth. Methods of changing inappropriate behaviors and prompting the acquisition of adaptive behaviors through positive management procedures will be stressed. Includes an introduction to behavior analysis. Prerequisite: SPED 425 or SPED 725. LEC.

SPED 741. Methods & Assessment: Literacy Interventions Struggling Learners & Students High-Incidence Disabilities. 3 Hours.
This course will provide in depth learning experiences targeting literacy; both reading and writing. Students will learn about assessment tools and assessment systems used in tiered support frameworks to determine the required intensity of literacy support and instruction needed by children/adolescents with adaptive special education needs, and will learn about evidence-based instructional approaches and curriculum developed for students with disabilities and struggling students in general. The course is intended for persons working toward the Kansas teaching license in teaching students needing an adapted curriculum. Prerequisite: SPED 730, admittance into the Adaptive program in the Department of Special Education, or permission of the instructor. LEC.

SPED 742. Assessment and Methods of Teaching Students with Low-Incidence Disabilities in Inclusive Settings. 3 Hours.
This course prepares teacher candidates to assess students with disabilities using formal and informal measures, to use assessment information to develop a strengths-based inclusive Individual Education Program (IEP), to design instruction related to IEP goals and state standards, and to evaluate the effectiveness of that instruction using progress-monitoring techniques. Prerequisite: SPED 635 or 735. LEC.

SPED 743. Methods: Functional Behavioral Assessment, Positive Behavior Support and Classroom Management. 3 Hours.
This course provides a problem-solving approach and the framework for teaching and assessment strategies to develop pro-social behavior in students with disabilities and their typical peers in classrooms and whole school contexts. Students assess problem behavior, discover the functions of problem behavior, and learn pro-social alternatives in home, school, and community settings. Prerequisite: SPED 631 or SPED 731, and SPED 632 or SPED 732. LEC.

SPED 744. Assessment and Instructional Methods I: Learners with Hearing Loss. 3 Hours.
This course will provide an introduction to appropriate instructional methodology for teaching students who are deaf or hard of hearing at the early childhood, elementary, and secondary levels. Upon completion students will be familiar with legal issues, teaming, assessment, IEP development, curriculum planning, instructional methods, and transition. LEC.

SPED 745. Audiology and Aural Rehabilitation. 3 Hours.
This course will provide a broad overview of the components of an aural rehabilitation service delivery model including audiological diagnostics and assessment, selection and fitting of a variety of listening devices, and intervention strategies for auditory training and speech perception training. The emphasis of this course will be on the aural habilitation of children; therefore, each of the components of an aural (re)habilitation plan will be considered in relation to the needs of individual children and their families. LEC.

SPED 750. Curriculum and Methods in Early Childhood. 3 Hours.
This is a curriculum and methods course that addresses how to design, implement and evaluate developmentally appropriate curricula and programs for children from birth to six years of age. Issues of curriculum design and assessment are introduced as interrelated processes that include structuring learning environments and experiences that are responsive to children's interests and abilities. Strategies for developing learning opportunities that are appropriate for young children, including children with special needs and children from diverse cultural, ethnic and linguistic backgrounds, will be explored. Students analyze and evaluate curriculum that focuses on facilitating progress in the domains of a) social emotional development; b) cognitive development; c) language and communication development; d) adaptive behavior development and e) gross and fine motor development. Students also analyze and evaluate curriculum standards and frameworks for the young child's acquisition of concepts, skills and dispositions that support the development of early competencies and interest in literacy, mathematics, the sciences, social studies, the arts and individual and group sports. Prerequisite: Admission into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. SPED 752 or its equivalent (may be taken concurrently). LEC.

This course is designed for teachers seeking the Adaptive certification to teach students with High-Incidence Disabilities (Adaptive). Students will learn how to select, administer, score, and interpret formal and informal assessments; make data-based instructional decisions for students with specific learning disabilities, with social and emotional needs and disorders in behavior, mild mental retardation, and/or who experience other chronic health impairments. Individually chosen and administered tests, as well as high-stakes assessments, will be discussed. Prerequisite: SPED 631 or SPED 731. LEC.

SPED 752. Overview of Early Childhood and Early Childhood Special Education. 3 Hours.
The course serves as an introduction to the profession including historical, philosophical, social and psychological foundations, awareness of value, ethical and legal issues, staff relations and the importance of becoming an advocate for children and families. Students will analyze/interpret trends in early education, including diversity, early childhood special education, family centered practices, legislation, public policy, and developmentally appropriate practice. The two key professional organizations, National Association for the Education of Young Children (NAEYC) and Division of Early Childhood for the Council for Exceptional Children (DEC), recommended practices serve as the foundation for understanding the roles, knowledge and competencies of the early educator. Prerequisite: Admission into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. LEC.

SPED 753. Assessment in Early Education. 3 Hours.
This course examines the practice of gathering information for the purpose of making individual referral and instructional decisions for infants, toddlers, and young children with and without special needs. Discusses effective informal assessment techniques and emphasizes an ecological approach to gathering information. Introduces standardized assessment and screening instruments and provides an overview of the purposes and limitations of such tests. Prerequisite: Admission into the ECU - Birth through Kindergarten graduate initial licensure teacher
education program in the Department of Special Education or permission of the instructor. LEC.

**SPED 755. Inclusive Strategies and Interventions for Preschoolers:** 3 Hours.
This is a methods course that covers instructional approaches and procedures that offer developmentally appropriate, effective and inclusive early intervention for preschool and kindergarten age children who experience developmental delays, disabling conditions or who are at-risk for developmental problems and disabilities. It is directed toward: (a) “how” to teach, or the technical components of developing and delivering effective instruction that provide access to the general early childhood curriculum within recognized approaches to early childhood education for young children, and (b) the “what” to teach, or the selection of developmentally and individually appropriate child objectives as well as specific materials and specialized instructional approaches. The relationship of instructional planning to state and federal mandates will also be considered. The course is primarily intended for persons who are currently working toward certification in the ECSE program area. Prerequisite: Admission into the ECU Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. SPED 752 (may be taken concurrently). LEC.

**SPED 760. Introduction to Autism Spectrum Disorders.** 3 Hours.
An introductory graduate-level course on autism spectrum disorders. It addresses characteristics of children and youth with autism spectrum disorders; trends and issues associated with autism spectrum disorders; and effective practices and strategies for structuring, managing, and promoting social skill development and social interactions among learners with autism spectrum disorders. LEC.

**SPED 761. Foundations of Positive Behavioral Support (PBS).** 1 Hour.
The purpose of this course is to provide an introduction to positive behavioral support (PBS). The lessons contained within this course include an overview of positive behavioral support, the basics of behavior, an introduction to specific positive behavioral support strategies, and a lesson on preventing problem behavior. LEC.

**SPED 762. Functional Assessment Methods for Positive Behavioral Support (PBS).** 1 Hour.
This course introduces current functional assessment methods that are used to build effective behavioral support plans. A strong functional assessment is at the heart of Positive Behavioral Support. After completing this course, you will have a better understanding of how to implement functional assessment methods in your classroom. LEC.

**SPED 763. Development and Implementation of PBS Plans.** 1 Hour.
A positive behavioral support plan (PBS) describes how features of the environment associated with problem behavior will be modified, what and how skills and strategies will be taught, and how individuals supporting a student will respond to both positive and problematic behavior. This course contains lessons on designing PBS plans, implementing PBS plans, and modifying and assessing PBS plans. LEC.

**SPED 764. Intervention Strategies for PBS-I.** 1 Hour.
The purpose of this course is to introduce interventions that can be used as part of a comprehensive positive behavioral support plan. An effective positive behavioral support plan contains multiple intervention strategies that address the function maintaining a student's problem behavior. This course contains lessons addressing setting events, antecedent interventions, replacing problem behavior, and consequence interventions. LEC.

**SPED 765. Intervention Strategies for PBS-II.** 1 Hour.
The purpose of this course is to introduce three types of interventions that can be used in positive behavioral support. An effective positive behavioral support plan contains multiple intervention strategies that address the function maintaining a student's problem behavior. This course contains a lesson on social skills education, crisis prevention, and interventions addressing physiological factors that influence a student's problem behavior. LEC.

**SPED 766. Redesigning Environmental Systems.** 1 Hour.
The purpose of this course is to describe how positive behavioral support can be used to redesign the environment at a systems level. Considering the larger issues within a system including the broader environment, the values and beliefs held by staff, policies and procedures that promote ongoing learning, and collaborative problem solving processes within a school will improve implementation of long-term positive behavioral support efforts. This course contains lessons on classroom management, staff development, and school-wide discipline. LEC.

**SPED 767. Creating Positive Lifestyles through PBS.** 1 Hour.
One of the most important outcomes of a positive behavioral support plan is an increase in the quality of life for both the student and everyone within the student's social network. The purpose of this course is to introduce topics related to creating positive lifestyles including person-centered planning, self-determination, and quality of life. LEC.

**SPED 772. Participation with Children and Youth with Disabilities:** 1-3 Hours.
A course designed to provide field experiences with children and youth with disabilities in settings where educational services are provided. Students work directly with professionals such as special education teachers, general education teachers, therapists and other support personnel. Students participate as aides, tutors, and instructors with individual and small groups of children and youth. Ongoing meetings with supervisors are designed to facilitate both reflection and strategic learning. FLD.

**SPED 774. Education of Secondary and Post-Secondary Level Exceptional Students:** 1-3 Hours.
A course based on the problems and needs of secondary and post-secondary level handicapped students with a focus on curriculum alternatives (academic and vocational), instructional planning options, instructional methods and materials and educational and community resources. The focus is on both mildly and moderately handicapped students. Prerequisite: Appropriate section of SPED 735 which may be taken concurrently. LEC.

**SPED 775. Practicum with Children and Youth with Disabilities:** 1-10 Hours.
Intensive diverse and direct teaching experiences with children and youth with disabilities in educational settings. This practicum is a requirement for provisional endorsement according to KSDE. Students who have completed SPED 775 cannot enroll in SPED 675 within the same curricular area. Prerequisite: Varies by topic. FLD.

**SPED 785. Application of Assessment Information for Exceptional Children and Youth.** 3 Hours.
An analysis of information derived from assessment instruments and procedures appropriate to measuring the social and cognitive development of exceptional children and youth. Provides experiences in determining assessment data required in the development of individualized educational programs (IEP). Attention is also given to the design of informal assessment procedures, specific to the needs of exceptional children and youth. Experience is provided in the preparation and presentation of assessment data for use in instructional planning.
confers. Prerequisite: An undergraduate or graduate course in educational measurement, and SPED 760. LEC.

SPED 790. Methods for Learners with Higher-Functioning Autism Spectrum Disorders. 3 Hours.
This is a methods course, with special emphasis on learners with high-functioning autism spectrum disorders. Particular attention is given effective practices and strategies for teaching, managing and promoting social skill and social communication development and proactive social interactions. LEC.

SPED 793. Psychology of Deafness. 2 Hours.
Reviews of the literature pertaining to psychological evaluations of the deaf and hard of hearing. Divergent views of deafness, type and degree of deafness are considered. Prerequisite: SPED 791. LEC.

SPED 798. Special Course: _____. 1-5 Hours.
A special course designed to address topical issues. LEC.

SPED 800. Classroom Intervention for Language Disorders of Handicapped Learners. 3 Hours.
Emphasis is given to milestones in normal language acquisition and variations from norms demonstrated by handicapped learners. Attention is also given to theoretical approaches to language training, formal and informal language assessment techniques, and instructional methods. Students design individualized instructional plans for incorporating language into the daily curriculum for handicapped learners. Prerequisite: SPED 425 or SPED 725. LEC.

SPED 801. Practicum in School Psychology. 4 Hours.
Supervised practice in the application of psychological theory to educational problems. Includes work useful with exceptional children as well as experiences in the application of such areas as mental hygiene and learning theory to problems involving the total school population. (Same as EPSY 910.) Prerequisite: Permission of advisor and instructor. FLD.

SPED 802. Advanced Practicum in School Psychology. 4 Hours.
A continuation of SPED 801 with special emphasis on remedial techniques associated with learning difficulties. (Same as EPSY 911.) Prerequisite: SPED 801 and permission of advisor and instructor. FLD.

SPED 804. Designing Online Instruction for E-Learning Environments. 3 Hours.
The focus of the course is on the status of e-learning at the K-12 and postsecondary levels and the process of designing content for e-learning applications. Attention will be given to design features, content structuring, instructional management, evaluation, and collaboration in the process of working with technicians in the process of developing online curriculum and instruction. Prerequisite: None. A background in education is preferred. LEC.

SPED 805. Practicum in Individual Intelligence Testing. 4 Hours.
Practicum training, by arrangement, in administration and interpretation of test results for school situations with particular emphasis on the Stanford-Binet. Prerequisite: Permission of instructor. FLD.

SPED 809. Language Assessment and Instruction II: Learners with Hearing Loss. 3-6 Hours.
This course covers assessment and instruction of speech skills for students who are deaf or hard of hearing. A historical review of the emphasis placed on speech development in deaf students will be provided. Students will learn formal and informal methods of assessment, developmental order and classification systems for English language sounds, and visual, auditory, and tactile facilitation techniques. Auditory training programs and techniques will be emphasized. LEC.

SPED 810. Speech Assessment and Instruction III: Learners with Hearing Loss. 3-6 Hours.
The purpose of this course is to prepare students to provide effective language assessment and instruction to students who are deaf or hard of hearing. This course focuses on the effect of hearing loss on assessment, language and reading, communication options, and instructional strategies. LEC.

SPED 811. Methods of Teaching Elementary School Subjects to the Deaf. 3 Hours.
Focus is on development of skills in adapting materials and methods of teaching science, math, social studies, spelling, and writing to hearing impaired students. Emphasis is placed on problems, trends and procedures used in career education specifically for the hearing impaired. Prerequisite: SPED 711. LEC.

SPED 812. Instructional Approaches in Inclusive Elementary Settings. 2 Hours.
This advanced method course provides curriculum design and instructional procedures appropriate for students at the elementary and middle school levels, including functional academic, social, and home and community life skills. NOTE: This is a 2 credit course to be offered during the first 8 weeks of a semester. It will precede SPED 814 in the same semester. Prerequisite: SPED 614 or SPED 714: Learning Styles and Instructional Accommodations. LEC.

SPED 814. Instructional Approaches in Inclusive Secondary Settings. 2 Hours.
This advanced method course provides curriculum design and instructional procedures for students at the secondary level, including career preparation and transition from school to adult life in the community. Prerequisite: SPED 614 or SPED 714: Learning Styles and Instructional Accommodations. LEC.

SPED 839. Management Principles and Assessment Procedures for the Young or Severely Handicapped. 2-3 Hours.
Examines basic learning procedures and techniques that are essential to programming efforts with the severely or young handicapped. Includes assessment scales, writing instructional programs, measuring operant behavior and evaluating operant behavior. Task and concept analysis related to treatment programs. Prerequisite: Students in the Early Childhood for the Handicapped program must enroll in one hour of practicum, SPED 775. Students in the Severely Handicapped Program must have completed SPED 726. LEC.

SPED 840. Program Planning in Special Education-Early Childhood. 3 Hours.
This course is designed to provide knowledge and skills to implement federal and state development mandates for special education and related services programs for young children from birth to five. It covers procedures for developing, implementing, and evaluating (a) instructional accountability for these children’s participation in the general early childhood curriculum, (b) relationships between general and special early education personnel and programs; (c) roles and responsibilities; (d) interdisciplinary team planning including families; (e) coordinating, educating, and supervising paraeducators; and (f) general management responsibilities associated with instruction of young children with disabilities. Prerequisite: SPED 760 or SPED 860, which may be taken concurrently. LEC.

SPED 841. Advncd Methds&Asmnt:Learnng Srl&Contnt Mastery Struggling Learners&Sntns High-Incidence Disabilit. 3 Hours.
This course is designed for graduate students enrolled in the Masters of Science Program with an emphasis in school-age populations primarily with high mild disabilities or seeking to obtain a license to teach students needing an adapted curriculum in Kansas. Course experiences focus on
how to identify and implement evidenced-based practices designed to increase the success of students with mild disabilities in mathematics, social studies, science, and language arts through their participation in general and special education classrooms primarily in grades 4-12. This course emphasizes practices associated with understanding and evaluating curricular demands, monitoring student progress in content-area courses, providing tiered supports and accommodations in teaching, using assessment and grading alternatives, and incorporating the principles of explicit and strategic instruction to design instruction that will promote and enhance content-area learning. The course is intended for persons working toward the Kansas teaching license in teaching students needing an adapted curriculum. Prerequisite: SPED 730, SPED 741, admittance into the High Incidence Disabilities program in the Department of Special Education, or permission of the instructor. LEC.

SPED 842. Methods in Access and Inclusion in the Core Curriculum. 3 Hours.
This course focuses on foundational skills for setting up an inclusive program that meets the needs of students with low-incidence disabilities in general education settings. The course will emphasize many of the "behind-the-scenes" strategies and activities that must be completed on a regular basis to make inclusive education effective and efficient. Prerequisite: SPED 635 or SPED 735 and SPED 642 or SPED 742. LEC.

SPED 843. Advanced Methods & Assessment: Strategies for Students with Significant Behavior, Social & Emotional Need. 3 Hours.
This course is designed to introduce educators and related service professionals to prevention and intervention related to a broad range of antisocial, aggressive, and behavioral problems. Approaches focus on understanding and addressing the precipitating factors related to inappropriate behavior, short-term approaches for immediate crises, and problem-solving strategies for longer-term change. Content will include antisocial, aggressive, and violent behavior; options for classroom interventions; school and system-oriented interventions, and ethical and legal issues involved in various prevention and intervention approaches. Class work will focus on literature, research-based intervention approaches, and case work illustrating specific approaches and programs. Prerequisite: SPED 631 or SPED 731, SPED 741, and SPED 743. LEC.

SPED 844. Advanced Methods in Access and Inclusion in the Core Curriculum. 3 Hours.
This course develops critical skills for implementing an inclusive program that meets the needs of students with low-incidence disabilities in general education settings. The course will emphasize many of the day-to-day strategies and activities that must be completed on a regular basis to make inclusive education effective and efficient for all learners. Prerequisite: SPED 635 or SPED 735 and SPED 642 or SPED 742. LEC.

SPED 850. Curriculum Planning for Exceptional Children and Youth. 3 Hours.
Provides experiences in applying information on identifying learning and behavioral characteristics of exceptional children and youth. Practices in adapting curriculum materials to meet the needs of the handicapped. Prerequisite: SPED 725 and SPED 735. LEC.

SPED 851. Law and Special Education. 3 Hours.
This course focuses on laws that apply to special education, especially "Individuals with Disabilities Education Act" and "No Child Left Behind Act." The American legal system, particularly in respect to special education, the constitutional and statutory provisions of federal and state law, and judicial decisions interpreting those laws are reviewed. The course relates equal protection, procedural due process, and substantive due process doctrines to school practices affecting students with disabilities and examines the six principles of P.L. 94-142 and similar principles in state legislation. (Same as ELPS 856.) LEC.

SPED 852. Citizens with Disabilities, Public Policy, and Policy Analysis. 3 Hours.
Students to analyze public policy that affects citizens with disabilities, various models of analysis are brought to bear on federal policy (e.g., education, transportation, housing, institutionalization, protection and advocacy, medical assistance, employment, vocational rehabilitation, and others). This course is not valid for core requirement in history and/or philosophy of education. (Same as ELPS 857.) Prerequisite: SPED 851 or permission of instructor. LEC.

SPED 853. Professional Ethics, Public Values, and Citizens with Disabilities. 3 Hours.
This course addresses the issues that professionals (e.g., educators, physicians, allied health providers, attorneys, and others) and families of persons with disabilities face in the context of public values, attitudes, and rules of law. The issues include education, treatment and nontreatment. This course is not valid for core requirement in history and/or philosophy of education. (Same as ELPS 858.) Prerequisite: SPED 850, SPED 852 or permission of instructor. LEC.

SPED 854. Family and Interprofessional Collaboration in Special Education. 3 Hours.
This course is designed to provide knowledge and skills to implement federal and state mandates for special education and related services programs as they relate to building and maintaining relationships with families of students with disabilities, and developing effective school programs. It covers procedures for developing, implementing, and evaluating (a) instructional accountability for special education students' participation in district and state assessments; (b) relationships between general and special education personnel and programs; (c) roles and responsibilities; (d) interdisciplinary team planning including families; (e) coordinating, educating, and supervising paraeducators; and (f) general management responsibilities associated with instruction of children and youth with disabilities. Course topics will include collaboration in schools, community systems and families, historical perspectives of family life and school involvement, effective relationships between home, school, community, communication among professionals and with families, school-based programs, home-based programs, and multicultural considerations. Prerequisite: SPED 631 or SPED 731, or SPED 632 or SPED 732, or SPED 735. LEC.

SPED 856. Transition Education and Services from Childhood through Adulthood. 3 Hours.
The purpose of this course is to provide a background in career development and transition education for persons with disabilities from middle school through adulthood. Emphasis is placed on IDEA requirements for transition services, career development and transition processes, transition services assessment, secondary special education curricular implications, career development and transition service needs, collaborative services in schools and communities to promote quality transition services, and issues and trends in transition education and services. LEC.

SPED 857. Career Development for Youth. 3 Hours.
The purpose of this course is to provide graduate students in special education and related areas who are specializing in secondary school/transition programs with an overview of career development for youth with disabilities. Emphasis is placed upon theory and practice related to career development, workbased learning, and school and community vocational training models. Prerequisite: SPED 856. LEC.
SPED 858. Assessment for Transition Planning. 3 Hours.
This course is designed to provide a review of psychometric principles and their utility as a foundation for quality assessment in transition assessment and planning for youth with disabilities. Formal and informal assessments across a range of transition planning areas are reviewed and evaluated. Skills in curriculum-based assessment, rating scales, situational assessment, and functional assessment are emphasized. Prerequisite: SPED 856 or permission of instructor. LEC.

SPED 859. Interagency Services for Transition to Adulthood. 3 Hours.
The purpose of this course is to provide an overview of interagency and community services and systems for adolescents and young adults with disabilities. Emphasis is placed on theory and practice related to interagency collaboration; systems change efforts in transition services; and state-of-art practices regarding supporting individuals with disabilities in community employment, living, socialization, community participation, and other areas of adult life. Prerequisite: SPED 856. LEC.

SPED 860. Education of Children and Youth with Disabilities II: _____, 3 Hours.
This course is designed to prepare students to implement specialized alternative strategies for individualized group instruction. Methods for developing and implementing overall treatment/educational programs, planning or selecting curriculum/service models for programs, and developing instructional materials are emphasized. Procedures for managing classroom staff and service resources, coordinating educational programs with families, other service personnel and program support staff, and monitoring overall program effectiveness are addressed. Prerequisite: SPED 760. LEC.

SPED 861. Blending Academics and Transition. 3 Hours.
The purpose of this course is to provide graduate students with research evidence of each of the components of universal design for learning within access to the general academic curriculum: multiple means of representation, expression, and engagement. Prerequisite: SPED 856. LEC.

SPED 862. Work-Based Learning. 3 Hours.
The purpose of this course is to provide graduate students with models and strategies to develop and coordinate meaningful work experiences for youth with disabilities. Emphasis is placed on practical strategies for engaging with community businesses, developing and customizing jobs and supporting youth in the workplace. Prerequisite: SPED 856. LEC.

SPED 863. Student Engagement in School and Community. 3 Hours.
The purpose of this course is to provide graduate students in special education and related areas who are specializing in secondary school/transition programs with an overview of models and issues pertaining to school and community engagement for secondary age youth. Prerequisite: SPED 856. LEC.

SPED 871. Advanced Practicum with Exceptional Children Needing an Autism Spectrum Curriculum. 3 Hours.
This is an advanced practicum experience for the graduate student teaching children and youth with autism spectrum disorders (ASD). The practicum is designed to provide intense, diverse and direct teaching experiences with children and youth who have learning and behavioral needs in the mild through moderate range and who have been identified with ASD including those who may have PDD- NOS, Asperger syndrome, autism and or high functioning autism. Prerequisite: SPED 760, SPED 785, SPED 743 and SPED 775. FLD.

SPED 874. Planning for Adult Outcomes: _____, 1-3 Hours.
The problems, trends, issues, and procedures used in planning life skills, occupational and vocational skills, and transition from school to adult living for persons with disabilities. Separate sections will be organized by topics pertaining to career/vocational development, assessment, and transition programs and services. These will include: (a) transitions from early childhood to adulthood, (B) application of assessment information, and (c) vocational preparation and employment. Prerequisite: SPED 725 (may be taken concurrently). LEC.

SPED 875. Practicum with Children and Youth with Disabilities: _____, 1-10 Hours.
This course is designed to provide intensive field work and direct teaching experiences with children and youth with disabilities in educational, residential, and clinical settings. Prerequisite: SPED 775. LEC.

SPED 879. Conferencing with Parents of Exceptional Children and Youth: _____, 3 Hours.
A course to develop knowledge and skills in the techniques of interviewing and conferencing, with special application to the professional, legal and ethical problems related to working with parents of exceptional children. Prerequisite: SPED 425 or SPED 725. LEC.

SPED 880. Coordination and Supervision of Services for Exceptional Children. 3 Hours.
An analysis of the role of the special education coordinator and supervisor. Particular attention will be given to: program development; planning, organizing, and delivering inservice training; personnel recruitment, selection, and evaluation; program management; and program evaluation. Students will relate the topical content to their specific area of expertise in special education. Prerequisite: SPED 425 or SPED 725 and six additional semester hours in special education. LEC.

SPED 890. Interdisciplinary Programming for Children and Youth with Disabilities. 3 Hours.
This course is designed to provide students a survey of disciplines which contribute to care and treatment of students with disabilities. Emphasis on professional roles, team participation, case management, and reporting and follow up. Disciplines include medicine, education, audiology, psychology, speech pathology, occupational therapy, physical therapy, music therapy and social work. Prerequisite: SPED 425 or SPED 725. LEC.

SPED 896. Capstone Adaptive Program Seminar. 3 Hours.
This course is designed to be a culminating experience for Adaptive Program students who choose to complete their masters programs with a comprehensive masters examination instead of one of the other program options (i.e., project or thesis). Students will complete this course during the final semester of their programs. Participants will review current issues, evidence-based practices, home-school considerations, state and federal regulations, and Kansas standards regarding appropriate education for students with mild to moderate disabilities (i.e., Adaptive category designation). The course is a prerequisite for the departmental comprehensive examination in the Adaptive area. LEC.

SPED 897. Independent Study. 1-4 Hours.
Prerequisite: Consent of advisor and instructor. RSH.

SPED 898. Master's Project. 1-4 Hours.
RSH.

SPED 899. Master's Thesis. 1-6 Hours.
THE.

SPED 910. Advanced Application of Behavioral Management Techniques to Exceptional Children and Youth. 3 Hours.
Theory and principles of behavioral analysis. Emphasis will be given to observation, measurement, recording, and visual display techniques. Other topics include maintenance and generalization of behavior change. Students will be provided experience in the design and carrying out of
research studies related to exceptional children and youth using principles and methods of behavioral analysis. Prerequisite: SPED 425 or SPED 725 and SPED 839. LEC.

SPED 915. Advanced Curriculum Development for Children and Youth with Disabilities. 3 Hours.
This course is designed to provide principles of development, needs assessment, evaluation and dissemination applied to curriculum products. Analysis of organizational and conceptual features of major curriculum development projects for students with disabilities are addressed; participants design curriculum procedures. Prerequisite: Twelve semester hours in special education and a general curriculum course. LEC.

SPED 920. Management of Instructional Resources for Exceptional Children and Youth. 3 Hours.
Designed for individuals with responsibilities for the operation of instructional resource centers and educational programs serving exceptional children and youth. Experiences relate to: selection, acquisition, circulation, and management of special education instructional media/materials and the delivery of inservice training specific to their skills. Prerequisite: Professional preparation and/or experience in the Education of Exceptional Children and Youth and CI 616, Introduction to Educational Communications. LEC.

SPED 925. Medical Aspects of Handicapping Conditions. 3 Hours.
The organization of this course follows the chronology of an individual’s total development from genetic origin through fetal development, perinatal, infancy, childhood, and adolescence. Emphasis is given to etiology and implications of handicapping conditions on development. Attention is given to prevention, treatment, and habilitation or rehabilitation of various conditions. Prerequisite: SPED 725. LEC.

SPED 930. Praxis Seminar: Scholarship and Writing. 3 Hours.
Course assists first-year doctoral students in (a) developing a scholarly identity and technical skills in the areas of teaching, scholarship, and service, (b) developing a critical understanding of the scholarship informing special education practices and policies through course readings and seminar discussions, and (c) developing the skills to complete a comprehensive, critical review of a topic in the field of special education and disability. Prerequisite: Doctoral student status in Special Education. LEC.

SPED 932. Praxis Seminar: Scholarship of Teaching. 3 Hours.
Course assists doctoral students in learning (a) what is known about effective teacher education, (b) how that knowledge is translated into practice, and (c) what methodologies can be enlisted to conduct cutting-edge teacher education research. Prerequisite: Doctoral student status in Special Education. LEC.

SPED 936. Cross-Spec I: Conceptual Issues in Special Education. 3 Hours.
The focus of the seminar is current and historically-significant disability-related special education issues and problems (e.g., inclusive education, effective instruction, race and social class bias) that both intersect and implicate the various special education doctoral specializations. Because such problems tend to be intractable, the seminar is designed to build student capacity for conceptualizing and addressing them by exploring forms of disciplinary, interdisciplinary, and specialization scholarship and inquiry applicable to (re)framing and potentially resolving them. Prerequisite: Doctoral student status in Special Education. LEC.

SPED 949. Specialist Research. 1-4 Hours.
RSH.

SPED 950. Civic Professionalism. 3 Hours.
This course is concerned with the relationship between professions and society in a democracy, and specifically, with the ethics and practices associated with the professions of education, special education, and other disability-related fields. Models of professionalism are compared and advantages of civic professionalism for individuals with disabilities and their families, the professions, and society as a whole are explored. Lessons drawn from disagreements over questions such as the nature and social consequences of the professions are used to broaden understanding of what professionalism could and should be in a democracy. Prerequisite: Admission to doctoral program. LEC.

SPED 970. Problems of Exceptionality: ___ Hours.
An extensive analysis of the literature and research pertinent to issues in a given disability. Separate sections are organized for various disabilities. Students may enroll in more than one section as a part of a graduate program. Prerequisite: Three courses in special education or permission of instructor. LEC.

SPED 971. Organization and Administration of Services for Children and Youth with Disabilities. 3 Hours.
This course is designed to prepare administrators and prospective administrators for organizing and administering educational programs for students with disabilities. Major topics include a review of current trends in special education, state and federal guidelines and regulations, legal and financing aspects of special education, program planning, and administration of special services. (Same as ELPS 959.) Prerequisite: Nine hours of education including educational psychology and SPED 725. LEC.

SPED 972. Issues and Trends in Special Education I. 2 Hours.
This course is designed to assist first-year special education doctoral students organize and synthesize a conceptual and substantive map of the field of special education and introduce them to corresponding faculty research interests and resources. Emphasis is placed on the academic writing expectations and resources of the field, university, and department, and on building a cohort of students to address common issues and to provide a foundation for peer support throughout the doctoral program. Prerequisite: Admission to special education doctoral program or permission of instructor. LEC.

SPED 973. Issues and Trends in Special Education II. 2 Hours.
This capstone seminar is designed to assist advanced doctoral students synthesize and evaluate information on a broad range of current and historically significant special education issues and trends in preparation for comprehensive examinations and future professional roles. Substantively, its primary focus is issues and trends that affect the entire field or cut across several areas of study and practice. Its secondary focus is significant issues and trends that affect particular categorical or functional sub-areas of study and practice within the field. Prerequisite: Completion of nine doctoral courses in special education, including 4 of 6 departmental Core courses. LEC.

SPED 974. Issues and Trends: Students with Learning Disabilities. 3 Hours.
This doctoral level course will explore current issues related to characteristics, educational methods and curricula, and questions, problems, concerns and movements connected to the education of children and youth with learning disabilities, emotional/behavioral disorders and autism spectrum disorders. Prerequisite: Doctoral program admission or permission of instructor. LEC.

SPED 975. Advanced Practicum with Children and Youth with Disabilities: _____. 1-10 Hours.
Advanced development of conceptual and practical field-based skills. Prerequisite: SPED 775. FLD.
SPED 977. Learning Disabilities/Behavior Disorders Issues II. 3 Hours.
This course is designed to provide students an opportunity to engage in an extensive analysis of the literature and research pertinent to critical issues in the field of learning and behavioral exceptionality. Prerequisite: SPED 970 LD/BD Issues I; SPED 972 Trends and Issues in Special Education I. LEC.

SPED 980. Advanced Topics: ___. 1-3 Hours.
A special course of study to meet current needs of education professionals -- primarily for post-master's level students. LEC.

SPED 981. Changing Complex Systems. 3 Hours.
This course is designed to provide students with an overview of seminal leadership and systems change literature. Prerequisite: Admission to doctoral program. LEC.

SPED 982. Preparing Future Faculty. 3 Hours.
This course is designed to give students an introduction and overview of academic life and the roles and responsibilities of an academic career. Its primary purpose is to help develop a realistic perspective of the expectations of academic life and the competencies required for a successful start in an academic career. Organized around the broad themes of understanding the academy, faculty life and work, and academic career paths, course content addresses the roles and responsibilities of faculty life in different types of institutions and the issues faculty face as they pursue their academic careers. The course offers an opportunity for students to critically review their doctoral program in the context of preparing them for a successful start in an academic career and to explore options for academic career choices. Prerequisite: Doctoral program admission. LEC.

SPED 983. Proposal Development. 3 Hours.
This course is designed to teach a broad array of strategies associated with the development of successful proposals that will generate funds to support programmatic work. Among the topics covered in this course are sources of funding, strategies for conceptualizing and writing proposals, collaboration strategies, proposal peer-review process, and integrating proposal development activities into other professional responsibilities. Prerequisite: Admission to doctoral program and PRE 710. LEC.

SPED 984. School Reform and School Community Partnerships. 3 Hours.
This is an interprofessional course in public policy and school reform that is concerned with current policy and systems transformations in education and child/family services, including educational, social and health service systems and the movement toward school-linked service integration strategies and family partnerships, called the "community school" movement. Issues connected with comprehensive school reform including the role of special education and mental health in this process will be emphasized. Particular emphasis will be placed on urban, multicultural issues affecting community schools. Prerequisite: Doctoral program admission or permission of instructor. LEC.

SPED 985. Naturalistic Research. 3 Hours.
This course is designed to develop skills in naturalistic or constructivist research, while situating it theoretically within the broader framework of modern and postmodern social inquiry, and exploring its social, political and ethical implications. The course develops students' skills in using this form of interpretive qualitative research, provides a theoretical framework for selecting inquiry paradigms, compares and contrasts positivist and constructivist inquiry, and reviews social and political implications of constructivist inquiry. Prerequisite: Six hours of statistics, measurement, and/or large or small group research design. LEC.

SPED 986. Trends and Issues Associated with Online Instruction. 3 Hours.
The course examines the opportunities, challenges, cautions, and demands of web-based instruction in higher education. It explores the policy implications of web-based instruction, development of collaborative teaming skills utilizing telecommunications resources, and the design and technical aspects of online instruction. Particular attention is given to the implications of online instruction for accommodating needs presented by diverse learners through strategies such as universal designs. Prerequisite: Admission to doctoral program or permission of instructor. LEC.

SPED 990. Small Sample Empirical Research Methods. 3 Hours.
This course provides a detailed examination of research methods for advancing knowledge and validating hypothesically useful treatments in situations in which sufficient sample sizes to conduct formal experiments are lacking, the question of interest is better addressed by multiple observations of treatment effects over time, and/or the question is best addressed by taking a variety of observations of a single unit of interest. Specifically, two small sample research methods will be examined in depth with examples and practical application experience: interrupted time series design for small samples ("single case" design), and Yin's empirical case study method. Prerequisite: Doctoral program admission or permission of instructor. LEC.

SPED 991. Family Outcomes in Special Education. 3 Hours.
This course focuses on analyzing and synthesizing research literature focusing on intermediate outcomes (e.g., family-professional partnerships) and long-term outcomes (e.g., family quality of life) related to families of children, youth, and adults with disabilities. Key family theories are discussed and applied in the development and implementation of interventions that have potential to increase intermediate and long-term family outcomes. Prerequisite: Three courses in special education or permission of instructor. LEC.

SPED 992. Seminar in Early Childhood/Intervention. 3 Hours.
This seminar examines research to support evidence-based practices that currently exist in the areas of early intervention and early childhood special education. The primary objective is to learn how to read and critically analyze studies that form the evidence base for several early intervention and early childhood special education practices. Primary goals of the class include the development of skills for evaluating research studies in early intervention and early childhood special education, and increasing knowledge of evidence-based practices in the early intervention literature. Prerequisite: Three courses in special education or permission of instructor. LEC.

SPED 995. Field Experience in: ___. 1-5 Hours.
Supervised and directed experiences in selected educational settings. Instructors conduct regular observations and conference with students. Written summaries and evaluations of field experiences are prepared independently by the student, a representative of the cooperating agency, and the instructor. Open only to advanced students and field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours. FLD.

SPED 996. College Teaching Experience. 2 Hours.
This course is designed to prepare students for college teaching. Enrolled students shall engage in semester-long, planned, instruction that includes college classroom teaching under supervision. Planning shall be done with a member of the faculty who will supervise the experience. FLD.

SPED 997. Individual Study. 1-4 Hours.
Prerequisite: Prior graduate course work in the area of study and consent of instructor. RSH.
SPED 998. Seminar in: _____. 1-4 Hours.
LEC.

SPED 999. Doctoral Dissertation. 1-15 Hours.
THE.

Deaf Education Courses

DE 702. Intermediate Signing Exact English. 3 Hours.
Intermediate vocabulary (700 words) for basic school routines and subjects will be taught using curricular materials to practice SEE 2 vocabulary and affix markers. Two college sign classes of any kind. LEC.

DE 717. Pidgin Sign English/American Sign Language. 3 Hours.
An intermediate level, educationally oriented vocabulary (450 words) taught in PSE/ASL. Comparison of literally and conceptually signed sentences. Prerequisite: Any sign course, admittance into Deaf Education Masters Program. LEC.

DE 808. Family Focus With Young Hearing-Impaired Children. 3 Hours.
Focus on the family as the primary teachers of deaf and hard-of-hearing infants and toddlers. The purpose of the class is twofold: to develop an understanding of the effect of deafness and to develop skills to deal with its intervention. Future teachers, early-childhood specialists, and related service providers will participate in discussion, simulations, and applied exercises in acquiring course competencies. Prerequisite: Sign class of any type. LEC.

Education Courses

EDUC 800. Education as a Field of Scholarship. 3 Hours.
An intensive interdisciplinary examination of classic and current scholarship in education, for students in Ph.D. programs in the School of Education. It surveys the interdisciplinary range of scholarship and inquiry in education, as preparation for careers in research. The course features discussion of exemplary studies, both for their contributions to various fields, but also with regard to research methods, related ethical issues and the responsible conduct of research. Prerequisite: Admission to Ph.D. in Education Program. LEC.

Health Sport Exercise Sci Courses

HSES 104. Physical Activity in: _____. 0.5-1 Hours.
(An accurate description of the activity or activities will be given in the Timetable.) Graded on a satisfactory/unsatisfactory basis. ACT.

HSES 108. Basic Skill Instruction in: _____. 0.5-2 Hours.
(An accurate description of the activity or activities will be given in the Timetable.) ACT.

HSES 110. Intermediate Skill Instruction in: _____. 0.5-2 Hours.
(An accurate description of the activity or activities will be given in the Timetable.) ACT.

HSES 112. Advanced Skill Instruction in: _____. 0.5-2 Hours.
(An accurate description of the activity or activities will be given in the Timetable.) ACT.

HSES 200. Coaching Certification for Youth Sports. 2 Hours.
This course will examine theories, practices, methods and techniques used to coach youth sports. Emphasis will be upon training, conditioning, sports psychology, nutrition, organization and management as prescribed by the National Federation of Interscholastic Coaches’ Education Program. Students will have opportunity to receive coaching certification. Prerequisite: Open to physical education majors, or by consent of instructor. Students must pass the National Federation of Interscholastic Coaches’ Education Program (NFICEP) examination before exiting the course. LEC.

HSES 201. Team Sports. 2 Hours.
This course will deal with Soccer, Touch Football, Basketball, Softball, and Volleyball. Practice in construction of lesson plans and unit plans, skill performance and peer teaching pacticum are emphasized in each of the areas of team sports. Class meets three days per week with one hour being a laboratory session. Prerequisite: Basic fitness and knowledge of the activities. Open to HSES majors and minors, or by consent of instructor. LEC.

HSES 202. Individual and Dual Sports. 2 Hours.
Instruction and analysis in individual sports such as track and field, bowling or archery, and dual sports such as tennis, badminton or handball. Development of sport skills and rule knowledge are emphasized. Prerequisite: Basic fitness and knowledge of the activities. Prerequisite: Open to pre-HSES and HSES majors, or by consent of instructor. LEC.

HSES 204. Gymnastics. 2 Hours.
Instruction and analysis in the eleven gymnastics events for men and women. Skill performance, spotting and teaching techniques, lesson and unit plan construction, and teaching practicum constitute the basic focus of this course. Class meets three days per week with one hour being a laboratory session. Prerequisite: Basic fitness and gymnastics/tumbling experience. Open to HSES majors and minors, or by consent of instructor. LEC.

HSES 210. Instruction and Analysis in: _____. 1-16 Hours.
Study of the skills to be included in the instruction of the indicated activities and the analysis of skill performance involved. Presentation of instructional techniques and practice in construction of lesson and unit plans are included for each activity. Open to majors in physical education only. The activities included in the major program are as follows: (a) Swimming (b) Folk and Square Dance (c) Modern Dance and Women's Gymnastics (d) Weight-Training and Men's Gymnastics (e) Soccer-Speedball, Volleyball, Wrestling (f) Field Hockey, Soccer-Speedball, Volleyball (g) Golf, Tennis, Badminton, Archery (h) Basketball, Softball, Flag Football, Team Handball (i) Track and Field, Handball-Paddleball, Fencing. Prerequisite: Basic fitness and basic skill in the course activities shown through competency tests and/or credit in basic skill courses in the appropriate activity. LAB.

HSES 214. Physical Education Activities for Elementary School Children. 3 Hours.
This course will introduce the student to a variety of physical education activities that are appropriate for children in grades K-6. Age appropriate activities demonstrated in this course include: individual and group games, self testing games, stunts and tumbling experiences, physical fitness, modified sports, and movement exploration. Class participation will be expected for all students. Prerequisite: Open to pre-HPE and HPE majors. LEC.

HSES 218. Lifeguard Training. 2 Hours.
The course involves American Red Cross certification in lifeguarding which includes rescue techniques and safety procedures. It also includes first aid and CPR certifications. Each student will be asked to identify common hazards associated with various types of aquatic facilities and develop skills necessary to recognize a person in a distress or drowning situation and to effectively rescue that person. This course will help each student to understand the lifeguard/employer and lifeguard/patron relationship as well as provide explanations, demonstrations, practice and review of the rescue skills essential for lifeguards. Prerequisite: HSES 112 Advanced Skill Instruction in Swimming or consent of instructor. LEC.
HSES 220. Officiating of: ______. 1 Hour.
A study of the rules and techniques of officiating. Students will officiate during laboratory sessions. The activities offered in officiating are: basketball, football, gymnastics, softball, swimming, track and field, and volleyball. Prerequisite: Basic competency in the sport to be officiated, or consent of instructor. LEC.

HSES 222. Water Safety Instruction. 2 Hours.
This course is designed to train instructor candidates to teach American Red Cross Swimming and Water Safety courses. Through practice teaching sessions, students will plan and organize skill development utilizing the various educational methods and approaches applicable to swimming and water safety instruction. Students will also learn the correct swimming styles taught by the Red Cross. Prerequisite: HSES 112 Advanced Skill Instruction in Swimming or consent of instructor. LEC.

HSES 224. Lifeguard Training Instructor. 2 Hours.
This course is designed as a lecture/laboratory course, meeting for one hour three days per week. Each instructor candidate (student) will have an opportunity for skill development necessary to instruct American Red Cross Lifeguard Training courses. Through practice teaching sessions, emphasis will be placed on enforcing safety precautions, identifying errors, providing effective instruction, and skills correction. After successful completion of this course, the student will be certified to instruct the following American Red Cross Aquatic courses: (1) lifeguard training, (2) waterfront lifeguarding, (3) CPR for professional rescue, and (4) community first aid. Prerequisite: HSES 218 or lifeguard training. LEC.

HSES 236. Practicum in: ______. 1-3 Hours.
A description of the activities offered will be provided in the Timetable. Prerequisite: Consent of instructor. FLD.

HSES 240. The Coaching of Football. 2 Hours.
A complete study of the theoretical aspects of the fundamentals of football. Study of defensive and offensive tactics for each position. Prerequisite: Sophomore standing. LEC.

HSES 244. Introduction to Physical Education and Sport Studies. 3 Hours. GE3H.
The study of the history, foundational concepts, and current principles of physical education and sport programs. LEC.

HSES 248. First Aid. 2 Hours.
This course is designed to teach emergency treatment of injuries, wounds, hemorrhage, burns, and poisoning. Emphasis is placed on the techniques of rescue breathing, CPR, and emergency bandaging. American Red Cross certification is included. LEC.

HSES 250. Introduction to Athletic Training. 3 Hours.
The introductory study of the prevention, immediate care, and treatment of athletic related injuries and illnesses. This course is designed for Athletic Training majors to cover the basic competencies of injury/illness recognition as well as discuss the various strategies for the prevention, evaluation, and care of injuries to the physically active. Prerequisite: Instructor consent and concurrent enrollment in HSES 251. LEC.

HSES 251. Introduction to Athletic Training Practicum. 1 Hour.
This course is designed to introduce the practical skills and psychomotor clinical competencies of the beginning student-athlete trainer. Emphasis will be placed on basic Athletic Training procedures including but not limited to preventative taping, bracing, and padding techniques as well as various other procedures and techniques related to the prevention, care, and management of athletic related injuries/illnesses. Prerequisite: Completed or enrolled in Human Anatomy, First Aid/CPR (or proof of current certification). Concurrent enrollment in HSES 250 or transfer credit. Open to Athletic Training majors only. LEC.

HSES 252. The Coaching of Basketball. 2 Hours.
Theory of basketball, including methods of teaching fundamentals; individual and team offense and defense; various styles of play and methods of coaching. Prerequisite: Sophomore standing. LEC.

HSES 260. Personal and Community Health. 3 Hours.
Emphasis on healthful and intelligent living and the application of the fundamental principles of health. LEC.

HSES 262. Life Skills Training for Intercollegiate Athletics. 2 Hours.
This course will focus on issues surrounding drug use, testing, and prevention in sports and will incorporate life skills training in the areas of career transition, stress and time management, performance enhancement, strategic learning skills, and the dynamics of communication and leadership. LEC.

HSES 264. The Coaching of Individual Sports. 2 Hours.
An analysis of coaching techniques and study of materials for the coaching of gymnastics, swimming, golf, tennis, and wrestling. LEC.

HSES 269. Introduction to Exercise Science. 3 Hours.
A study of the various components of physical fitness and the wellness and the implications for developing programs to promote good health and fitness. Lectures and laboratory sessions will be centered on practical knowledge and experiences designed to help individuals enhance their own health, as well as develop sound programs for others. The topics discussed include cardiovascular fitness, body composition, muscular strength, flexibility, evaluation of fitness components, training program design, nutrition, weight management, and facts and fallacies of nutrition and fitness. LEC.

HSES 289. Introduction to Sport Management. 3 Hours.
This course provides an overview of the field of sport management including the principles of leadership and management and the fundamentals of personnel management, financial management, marketing, strategic planning, sport ethics, sport law, time management, stress management, facility management, and event management applied to sport settings. LEC.

HSES 290. Safety Education. 3 Hours.
A survey of safety problems as they exist in society today, with emphasis on preventive, corrective, and compensatory procedures. LEC.

Emphasis will be on instructional techniques that are used for the inclusion of all students in health and physical education learning experiences. Students will develop an understanding of how to deliver health and physical education activities that may be part of an individual education program. As a part of this course, a practicum experience of 30 hours in a public school adaptive physical education setting will be required. LEC.

HSES 305. Methods of Strength Training and Conditioning. 3 Hours.
This course will provide the students with the scientific principles and the hands-on experience to develop resistance exercise and related conditioning programs for a wide range of populations, including those focusing on general fitness, therapeutic rehabilitation and sport performance. Prerequisite: Anatomy, Physiology, admission to the Exercise Science or Athletic Training undergraduate programs, or permission of instructor. LEC.

HSES 308. Drugs and Diseases in Society. 3 Hours.
This course is an overview of human disease processes as well as legal and illegal use of drugs and narcotics for treatment or recreational purposes. Both communicable and degenerative diseases will be covered with regards to prevention, transmission, effects, management, and
treatment. Legal drugs and illegal drugs will be discussed with regards to their treatment or abuse potential, legislative issues, and consumer education. Reflective thinking will be used to formulate improved perspectives on the roles of drugs and diseases in society. Prerequisite: Admission to Community Health Program or consent of instructor. LEC.

HSES 310. Research and Data Analysis in Health, Sport, and Exercise Sciences. 3 Hours.
This course provides formal instruction in the areas of test administration, general statistics, and basic research design. Emphasis will be placed upon the interpretation of statistical data, evaluation of data, and basic methodologies utilized in health, sport, and exercise sciences research. Data collection, analysis, and evaluation will be an integral part of the class. Prerequisite: Admission to the School of Education. LEC.

HSES 315. Health and Fitness Technology. 2 Hours.
The course will prepare health and physical education majors to use technology effectively to enhance teaching and learning. Students will explore the use of technology appropriate for communication, organization, instruction, and assessment in health and physical education classrooms. Prerequisite: Admission to the HPE Teacher Licensure Program. LEC.

HSES 320. Methods of Teaching Physical Education. 3 Hours.
This course provides a systematic approach to the development of effective teaching skills in physical education. Students receive practical and field experiences that enable them to observe and practice managerial, instructional, and interpersonal skills necessary to produce student learning in K-12 physical education classrooms. Prerequisite: Admission to the HSES Teacher Certification Program. LEC.

HSES 330. Principles of Nutrition and Health. 3 Hours.
This course will provide an introduction to the basic principles of nutrition, with an emphasis on application of these principles to improve overall health. Topics include: guidelines for a balanced diet, index of nutritional quality, energy requirements and balance, weight management and obesity, nutritional quackery, sports nutrition, nutrition for children and elderly, and eating disorders. LEC.

HSES 340. Instructional Strategies in Motor Development. 2 Hours.
This course is designed to provide students with an examination of current theories of motor development throughout the life cycle. Emphasis is placed on content regarding the development of fundamental motor skills, physical growth and development, and assessment. Prerequisite: Admission to the HSES Teacher Certification Program. LEC.

HSES 341. Instructional Strategies in Physical Education for Elementary Classroom Teachers. 1 Hour.
The application of child growth and development principles to physical education. The use of materials as related to a sequential physical education curriculum in the elementary school will also be included. Prerequisite: Prior or concurrent enrollment in CT 322 or equivalent. LEC.

HSES 350. Care and Prevention of Athletic Injuries. 3 Hours.
The introductory study of the prevention, immediate care, and treatment of athletic related injuries and illnesses. This course is designed to cover the basic fundamentals of injury/illness recognition as well as discuss the various strategies for the prevention and care of injuries to the physically active. Prerequisite: Courses in Human Anatomy and First Aid. LEC.

HSES 351. Foundations of Athletic Training. 1 Hour.
This course is designed to introduce the practical skills and psychomotor clinical competencies of the beginning student-athletic trainer. Emphasis will be placed on basic athletic training procedures including but not limited to preventative taping, bracing, and padding techniques as well as various other procedures and techniques related to the prevention, care, and management of athletic related injuries/illnesses. Prerequisite: Human Anatomy, First Aid, concurrent enrollment in HSES 350. Open to Athletic Training majors only. LEC.

HSES 352. Therapeutic Modalities. 3 Hours.
This course presents the theoretical and physiological foundations of pain and inflammation. Discussion of therapeutic agents to treat pain and inflammation are presented along with progressive planning and implementation of a comprehensive treatment for injuries/illnesses sustained by physically active individuals. Prerequisite: Admission into the Athletic Training Education program and HSES 250 or the transfer equivalent. LEC.

HSES 353. Athletic Training Practicum I. 2 Hours.
This course provides a practical experience for the student-athlete trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury/illness evaluation during their clinical and field experience. Specific skills addressed in HSES 352 will be practiced, applied, and mastered during this experience. Prerequisite: Admission to Athletic Training Education program and concurrent enrollment in HSES 352. FLD.

HSES 354. Lower Extremity Evaluation. 3 Hours.
This course provides a comprehensive study of the techniques used by the Athletic Trainer in regard to the assessment and evaluation of athletic injuries/illnesses of the lower extremity. Procedures for reporting and evaluating injuries/illnesses will be discussed so that appropriate injury management and referral may take place. The etiological factors common to athletic injuries, as well as specific signs and symptoms of various athletic related pathological conditions will be discussed. Prerequisite: Admission to the Athletic Training Program, HSES 352, and HSES 353. LEC.

HSES 355. Athletic Training Practicum II. 2 Hours.
This course provides a practical experience for the student-athlete trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury/illness evaluation during their clinical and field experience. Specific skills addressed in HSES 354 will be practiced, applied, and mastered during this experience. Prerequisite: Admission to Athletic Training Education program and concurrent enrollment in HSES 354. FLD.

HSES 358. Creative Movement and Dance Appreciation. 3 Hours.
An appreciation for dance will be developed through the study of the pioneers of dance and the critique of local dance performances. Students will experience the following types of dance: creative movement, basic rhythms, ballet, ballroom dance, folk and square dance. Prerequisite: Admission to the School of Education. LEC.

HSES 365. Peer Health Education. 3 Hours.
The course is designed to train students in peer health education, as peer health educators in college settings, and as trainers, training adolescents in community health settings for grades 6-12 peer health education. Subject content and teaching methodologies will be emphasized in the ten content areas of health with special emphasis on alcohol, drugs, tobacco, stress reduction, mental health and human sexuality. Prerequisite: HSES 260 or instructor consent. LEC.

HSES 369. Kinesiology. 3 Hours.
This course is designed primarily for students in the field of exercise science who already have taken an introductory course in human anatomy and who need a more detailed exposure to concepts of functional movement anatomy. This course will provide a detailed study
of the skeletal and muscular systems to include identification of the origin, insertion, and action of the major muscles of the human body. Students will become proficient in the use of directional and movement terminology used to describe movement and be able to identify the plane/axis as well as the agonist and antagonist muscles involved in a movement. Prerequisite: A course in human anatomy, admission to School of Education. LEC.

HSES 375. Neuromuscular Exercise Physiology and Motor Control. 3 Hours.
This course explores the control of human movement from an exercise neurophysiology perspective. Emphasis will be placed on understanding the interactions between the nervous system and muscular systems in the control of muscle force/power production and the control of movement under a variety of contexts. These contexts include responses and adaptations to exercise training, the aging process, and in a variety of neuromuscular disorders. Prerequisite: BIOL 240 and BIOL 246. LEC.

HSES 378. The Coaching of Volleyball. 2 Hours.
Theory of volleyball, including methods of teaching fundamentals, individual and team offense and defense. Various styles of play and methods of coaching. Efficient performance of the skills during game conditions will be emphasized. LEC.

HSES 379. The Coaching of Softball. 2 Hours.
Theory and fundamentals of coaching softball. Methods of coaching, as well as team offense, defense, and strategies will be stressed. Efficient performance of the skills during game conditions will be emphasized. Prerequisite: Consent of instructor. LEC.

HSES 380. Sociology of Sport. 3 Hours. GE35.
A survey of the current literature concerning the scope of sociology in sport, the interaction of people in sport, the social systems controlling sport, and the small group dynamics in sport. Prerequisite: Admission to Sport Management program or permission of instructor. LEC.

HSES 381. Sport Ethics. 3 Hours.
This course will help students develop their abilities to reason morally through an examination within competitive sports of ethical theories, moral values, intimidation, gamesmanship, and violence, eligibility, elimination, winning, commercialization, racial equity, performance-enhancing drugs, and technology. Students will develop a personal philosophy of sport and learn how to apply a principled decision-making process to issues in sport. Prerequisite: Admission to Sport Management program or permission of instructor. LEC.

HSES 382. Sport Facilities and Event Management. 3 Hours.
This course will provide students with a solid grasp of the fundamental skills in sport facility and event management and the knowledge base to apply those skills in a real world environment. Students will learn about planning, designing and financing the construction of new sport facilities, sport facility management of regular and special events, sporting event planning and game day operations. Prerequisite: Admission in the Sport Management program or permission of instructor. LEC.

HSES 384. Sport Law. 3 Hours.
This course is intended to introduce undergraduate students to the major legal issues in amateur and professional sports including dispute resolution, tort law, contract law, constitutional law, statutory law, labor and antitrust law and intellectual law. Students will also learn about risk management, gender equity, the Americans with Disabilities Act and agency law and sports agents. Prerequisite: Admission to Sport Management program or permission of instructor. LEC.

HSES 385. Psychological Aspects of Exercise. 3 Hours.
This course is designed for students interested in optimizing motivation and adherence to exercise among individuals in a wide range of physical activity settings (e.g., health clubs, corporate fitness, and physical therapy/rehab). The course content will include a review of the literature highlighting the psychological benefits of exercise, the theoretical advances in understanding the psychological aspects influencing individuals’ participation in physical activity, and an introduction to strategies and techniques for professionals attempting to foster motivation and adherence to exercise among their clients. Prerequisite: Admission to the Community Health program or instructor consent. LEC.

HSES 390. The Coaching of Track and Field. 2 Hours.
Designed to acquaint the student with the fundamentals of track and field athletics. LEC.

HSES 395. Concepts in Health and Wellness. 3 Hours.
This is designed as an introductory course into the profession of School and Community Health Education. Regardless of a person’s areas of specialization in Health Education, there are commonalities shared by all of us who are charged with the responsibility of providing education about health. Course emphasis will focus on: defining health education; history of health education; roles and competencies of health educators; theoretical bases for the profession; planning, implementing, administering, and evaluating health programs; settings for health education; future issues. Prerequisite: HSES 260. LEC.

HSES 403. Health Behavior Theory. 3 Hours.
This class will be an introduction to the primary models and theories used in health behavior research and health promotion practice. These models and theories undergird the development of successful health-related programs and interventions, and will help guide educators in the development of innovative and effective programming. The course will cover individual, interpersonal, community-level, and ecological theories, and students will have the opportunity to apply these theories to health behaviors of interest. LEC.

HSES 410. Program Design in Physical Education. 3 Hours.
The study of physical education curriculum models and extraclass programs appropriate for students in grades PK-12. Students will receive practical and field experiences related to program design and implementation. They will learn techniques appropriate for program evaluation as well as the assessment of student sport skills and fitness. Prerequisite: Admission to the HSES Teacher Certification Program. LEC.

HSES 418. Health Aspects of Aging. 3 Hours.
This course will consist of a Holistic Health approach to the various components of the aging process. Special emphasis will be placed on the demographic aspects of aging; normal aging changes and deviations in the aging process (pathophysiology); the relationship between mental and physical health, and the implications for the promotion of risk reduction and prevention principles that can effectively improve the quality of life for older individuals. Prerequisite: A course in personal and community health. LEC.

HSES 434. Consumer Health. 3 Hours.
This course will be a comprehensive examination of the factors involved in the selection of health products and services. Topics of discussion will be: protection laws and services, fraudulent practices and products, consumerism, and traditional and alternative health care. There will also be an in-depth examination of how to assess and evaluate health based products that are available to consumers. Prerequisite: Admission to the Community Health Program or consent of instructor. LEC.

HSES 440. Applied Sport and Performance Psychology. 3 Hours.
This course will examine the psychological principles and techniques that are applied to improve sport performance and other fields of achievement (e.g., exercise and wellness, music, and academics). Special attention will be given to psychological aspects of injury and rehabilitation,
psychological conditioning, psychological training methods, coaching philosophy, the social psychology of team members, and components of peak performances. LEC.

HSES 453. Communicable and Degenerative Diseases. 3 Hours. This course is designed to introduce the student to the study of the basic concepts/principles of disease process. Special emphasis will be placed on the etiology, origin, symptoms, treatment, body defenses, primary prevention, host, agent, (microbes) and environmental factors affecting disease occurrence, prevention and control measures. Topical application of the fundamental concepts of microbiology in school/community health practice will be critically discussed. The natural history of disease and disease classification will be highlighted. Many disease topics (both communicable and chronic, degenerative diseases) will be discussed. Prerequisite: A course in personal and community health. LEC.

HSES 455. Manual Therapy Techniques and Emergency Care Instructor Training. 3 Hours. The purpose of the course is to train students in a Manual Therapy Technique for use in the clinical setting. The course is also designed to certify students as instructors in American Red Cross First Aid, CPR and AED courses as well as instructors for the CPR/AED for the Healthcare Provider. Prerequisite: Completion of HSES 352, HSES 354, HSES 456 and HSES 459 or equivalency from an accredited Athletic Training Education Program or have current First Aid and CPR/AED for the Healthcare Provider certification. LEC.

HSES 456. Upper Extremity Evaluation. 3 Hours. The comprehensive study of the techniques used by the Athletic Trainer in regard to the assessment and evaluation of athletic injuries/illenesses of the upper extremity, head, and spine. Procedures for evaluating and reporting injuries/illnesses will be discussed as well as etiological factors and common signs/symptoms of various related pathological conditions. The purpose of this course is to prepare students with the skills necessary to accurately recognize the signs/symptoms of injuries and conditions in order to determine the nature and severity of the problems as well as establishing a proper care plan and medical referral when appropriate. Prerequisite: Admission into the Athletic Training Education program, HSES 354, and HSES 355. LEC.

HSES 457. Athletic Training Practicum III. 2 Hours. This course provides a practical experience for the student-athlete trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills obtained during previous coursework as well as apply rehabilitation skills obtained in HSES 459. Prerequisite: Admission into the Athletic Training Education program, HSES 457, and concurrent enrollment in HSES 459. FLD.

HSES 461. Organization and Administration of Athletic Training. 2 Hours. This course discusses the planning, coordinating, and supervising of all administrative components of an athletic training program. This includes public relations, athletic health counseling, and coach advisement about athletes' health matters. Prerequisite: Admission to the Athletic Training Education program, HSES 459 and HSES 460, and concurrent enrollment in HSES 562. LEC.

HSES 462. Athletic Training Practicum V. 2 Hours. This course will provide a practical hands-on experience for the athletic training students enrolled in HSES 561. Prerequisite: Admission into the Athletic Training Education Program and concurrent enrollment in HSES 561. FLD.

HSES 463. Senior Capstone in Athletic Training. 2 Hours. This course is designed to allow senior Athletic Training Students to review previous content and prepare for the BOC certification exam as well as explore areas of professional development. Prerequisite: Admission into the Athletic Training program, HSES 561, and HSES 562. LEC.

HSES 464. Athletic Training Practicum VI. 2 Hours. This course will provide a culminating practical experience for the athletic training students enrolled in HSES 563. Prerequisite: Admission into the Athletic Training Education program and concurrent enrollment in HSES 536. FLD.

HSES 465. Program Assessment and Evaluation. 3 Hours. This course will offer an introduction and hands-on application of program assessment and evaluation techniques in health education. As health educators and program planners, we are required not only to develop innovative programs and interventions to address community- and school-based health concerns, but also to give evidence that our efforts are both adequate and effective. Successful program assessment and evaluation incorporate knowledge of basic research methods as well as the theoretical understanding of health behaviors. LEC.

HSES 466. Program Planning in Health Education. 3 Hours. This course is designed to provide the students with an in-depth knowledge of proven health planning models that can be used for program development and intervention. Students will learn how to develop attainable program goals and objectives which will allow programs and interventions to evolve into useful forms of community based health education. Prerequisite: Students must be admitted to the School of Education and the Community Health Program. LEC.

HSES 467. Introduction to Health Education. 3 Hours. This course will provide an overview the various health education professions. Topics emphasized in the course are: the nature of health education, an in-depth description of community health, the school health program, and identifying program and services of voluntary and services of voluntary and official health and welfare organizations. Prerequisite: Admission to the School of Education and the Community Health Program. LEC.

HSES 468. Methods and Materials in Health Education. 3 Hours. Emphasis is placed on the presentation and preparation of health topics along with the recommended resources and materials available. The teaching method is emphasized and student participation is stressed.
HSES 470. Biomechanics. 3 Hours.
The course is designed to cover a basic understanding of the anatomical and mechanical principles of human movement. Areas covered will be joint and segmental movement, muscle actions, time-displacement motion description, forces causing or inhibiting motion, and stability. Special attention will be given to the application of the theoretical concepts in movement activities. Prerequisite: Anatomy, admission to the Exercise Science program, or permission of instructor. LEC.

HSES 472. Exercise Physiology. 3 Hours.
A fundamental study of the physiological adjustments that occur within the body during exercise. The presentation of this material is particularly oriented toward a basic understanding of the physiological systems as they are affected by the activity of a normal coaching or teaching situation. The physiological values of exercise are also stressed. Prerequisite: Three hours of physiology. LEC.

HSES 473. Clinical Fitness Evaluation Techniques. 3 Hours.
This course will provide the student with the knowledge and skills to assess components of physical fitness in adults including cardiorespiratory fitness, body composition, strength, and flexibility. In addition, specific emphasis will be placed on the development of exercise and weight management prescriptions. Students completing the course will have the skills to take the Health Fitness Instructor Certification exam given by the American College of Sports Medicine. Prerequisite: Exercise physiology or equivalent. LEC.

HSES 474. Exercise Biochemistry. 3 Hours.
This course will examine the processes that underlies the use and production of energy for exercise. Topics that will be explored include glycolysis and glycolysis in muscle, cellular oxidation of pyruvate, lipid metabolism, metabolism of proteins and amino acids, molecular biology, neural and endocrine control of metabolism, and local fatigue during exercise. Emphasis will be placed on carbohydrates, protein, and lipid metabolism and the acute and chronic effects that exercise has on these processes. Prerequisite: HSES 472. LEC.

HSES 480. Physical Activity and Exercise Management Individuals with Disabilities. 3 Hours. AE41.
An in-depth study of how physical activity and exercise can be a part of the treatment plan for people who have chronic disease or a disability. A variety of physical activity and exercise intervention programs and models will be presented and discussed, as well as protocols for baseline testing and post-treatment testing. A portion of this course will focus on how physical activity and exercise can prevent motor functioning deterioration in people who have a disability or limited functional movement. Prerequisite: Admission to the School of Education Exercise Science or Athletic Training programs and a course in human anatomy and physiology, or consent of instructor. LEC.

HSES 482. Drugs in Society. 3 Hours.
This course is designed to provide an in-depth exposure to basic drug classification, pharmacological effects, causes of drug abuse to society, common treatment modalities, and effective prevention/intervention strategies. In addition, consumer issues related to drug use, drug legislation, and drug education programs for school and community implementation will be discussed. Prerequisite: A course in personal and community health or consent of instructor. LEC.

HSES 483. Sport Finance and Economics. 3 Hours.
This course will help students gain an understanding of the critical importance of budgeting and financing sports-related industries based on sound financial principles and methods of financial control. Students will learn how economic principles shape the major national industry of sport. Prerequisite: Admission to Sport Management program or permission of instructor and completion of or concurrent registration in FIN 305 or FIN 310. LEC.

HSES 484. Sport in Film. 3 Hours.
In the course, students will critically engage and interpret a series of popular sport-related films. By the end of the course, students will be able to write and think critically about the role that film in general, and sport-based films in particular, play in promoting and challenging dominant perceptions of gender, sexuality, nationalism, race, social class, and ability. LEC.

HSES 485. Sport Communication. 3 Hours.
This course examines the complex and evolving field of sport communication including personal, organizational, and external perspectives of sport communication. LEC.

HSES 486. Sport Marketing. 3 Hours.
This course is intended to provide undergraduate students with basic knowledge and competencies in definitions of marketing and sport marketing, understanding the unique aspects of sport marketing, marketing planning process, consumer demographics and psychographics, the marketing mix, segmentation and target marketing, marketing proposal preparation, sponsorship, endorsement, merchandising, fundraising, marketing goals and objectives, sport consumer and consumer behavior, industry segmentation, special events, ticket sales and their use in promotion, the role of the media, television marketing ratings and shares and venue and event marketing. The proposed content of this course will address each of these expectations. Prerequisite: Admission to the Sport Management program or permission of instructor. LEC.

HSES 487. Personnel Management in Sport. 3 Hours.
This course provides students with an overview of the requisite communication skills and concepts of leadership and management as they relate to sport managers. Students will learn how leadership and management practitioners, utilizing effective communication techniques, shape successful sport organizations. Additional emphasis will be placed on building and nurturing relationships with people as a key to effective management. Prerequisite: Admission to Sport Management program or permission of instructor. LEC.

HSES 488. Pre-Internship Seminar. 1 Hour.
This course will prepare students for their actual semester-long Internship experience. Students will be provided with background information on available internship sites to assist in their site-selection decision. Students will learn about different management styles they may encounter, the traits and characteristics of effective and productive employees, common rules of the workplace and internship experiences of previous HSES Interns. Prerequisite: All HSES students must be in final semester prior to Internship. LEC.

HSES 489. Health and Human Sexuality. 3 Hours.
The course is designed to encompass the various components of human sexuality as well as to demonstrate applicable teaching techniques for sex education. Included in the content of the course are: human sexual response, sexually transmitted diseases, family planning, sex roles, rape, sexual preferences, and topics such as sexuality and the handicapped, sexuality and the mass media, and sexuality and the church. Teaching techniques such as values clarification, non-verbal communications, role
playing, tape recordings, and problem solving are demonstrated with appropriate topics. LEC.

HSES 497. Independent Study. 1-3 Hours.
Only one enrollment permitted each semester; a maximum of six hours will apply toward the bachelor's degree. This course cannot be taken as a substitute for a required course. Prerequisite: Recommendation of advisor and consent of instructor and department chairperson. IND.

HSES 499. Internship in Sport Management. 2-16 Hours. AE61.
A full-time work experience in the sport industry (40 hours per week). This experience is actual work in a sport management setting in which management practices are applied. Student interns are directed and evaluated by a faculty member with appropriate supervision by an on-site professional. Student interns must keep an accurate accounting of hours with a performance work diary. Grades/credit for the internship are determined by a faculty member with input from the on-site supervisor. Prerequisite: Completion of all Sport Management coursework. Admission to the Sport Management Internship program. FLD.

HSES 500. Student Teaching in: ____. 14 Hours. GE11.
A supervised teaching experience in an approved school setting, teaching physical education at the elementary level and health and physical education at the secondary level. The student must teach 8 weeks at the elementary level and 8 weeks at the secondary level. Prerequisite: A cumulative GPA of 2.75 or higher and admission to the HSES teacher certification program. FLD.

HSES 501. Seminar in Teaching Health and Physical Education. 2 Hours. AE61.
Student teachers will learn to analyze teaching styles and instructional methods that apply and/or relate to their student teaching experience. Discussions of various teaching practices will be facilitated by the university supervisor with input from the student teachers. Topics will include: curriculum, teaching methods, discipline, safety, equipment, and communicating with teachers, parents, and students. Prerequisite: Admission to the HSES Teacher Certification Program. LEC.

HSES 502. Camp Leadership and Counseling. 2 Hours.
Involves a complete study of the organization and administration of the various types of camps. It is designed to familiarize the student with camp leadership responsibilities; the development of the camp, the program involving camp crafts, outdoor cookery, hikes and outings, singing, and simple guidance of the individual camper. Prerequisite: General psychology plus three hours in sociology. LEC.

HSES 515. Assessment of Motor Development and Motor Control of Exceptional Children. 3 Hours.
Standardized motor assessment tools appropriate for use with exceptional children with motor difficulty will be critiqued and practiced. A battery of tests to measure developmental lag or structural deviation will be selected and administered to determine the motor control of exceptional children and the results will be interpreted. Prerequisite: Six hours of physical education course work. LEC.

HSES 528. Techniques of Athletic Training - I Lower Extremity. 3 Hours.
This course provides a comprehensive study of the techniques used by the Athletic Trainer in regard to the assessment and evaluation of athletic injuries/illnesses of the lower extremity, abdomen, and thorax, as well as the study of common illnesses/diseases that affect the physically active. Procedures for reporting and evaluating injuries/illnesses will be discussed so that appropriate injury management and referral may take place. The etiological factors common to athletic injuries, as well as specific signs and symptoms of various athletic related pathological conditions, will be discussed. Prerequisite: Human Anatomy, Human Anatomy Lab, Care and Prevention of Athletic Injuries, and admission to the Athletic Training Program. LEC.

HSES 529. Techniques of Athletic Training - II Upper Extremity. 3 Hours.
The comprehensive study of the techniques used by the Athletic Trainer in regard to the assessment and evaluation of athletic injuries/illnesses of the upper extremity, head, and spine. Procedures for evaluating and reporting injuries/illnesses will be discussed as well as etiological factors and common signs/symptoms of various related pathological conditions. The purpose of this course is to prepare students with the skills necessary to accurately recognize the signs/symptoms of injuries and conditions in order to determine the nature and severity of the problem as well as establishing a proper care plan and medical referral when appropriate. Prerequisite: HSES 528 Techniques of Athletic Training - I Lower Extremity. LEC.

HSES 578. Health Internship Seminar. 2 Hours.
Students enrolled in the internship will learn how to analyze professional health environments, examine intervention programs, and understand models used to develop health based programs. Discussions surrounding the internship experience will be facilitated by the health education faculty. Topics will relate to all phases of the internship experience. The intent of this course is to better prepare the student for entering the health profession. Discussions will be held on conflict resolution in the work place, professional development, professional behavior and etiquette. Prerequisite: Concurrent enrollment in HSES 580 Internship in Health. LEC.

HSES 580. Internship in: ____. 2-16 Hours.
A supervised internship experience in an approved setting. The specific type of internship experience and the credits for that particular experience will be outlined in the appropriate program of the student. Prerequisite: Admission to a HSES Internship Program. FLD.

HSES 581. Athletic Training Practicum I: Recognition and Evaluation. 4 Hours.
This course provides a practical experience for the student-athletic trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury/illness recognition and evaluation during their clinical and field experience. Specific skills addressed in HSES 528 will be practiced, applied, and mastered during this experience. Prerequisite: Admission to the Athletic Training program. Concurrent enrollment in HSES 528. LEC.

HSES 582. Athletic Training Practicum II: Management and Treatment. 4 Hours.
This course provides a practical experience for the student-athletic trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury/illness evaluation, and the management and treatment of athletic injuries through a variety of therapeutic modalities during their clinical and field experience. Specific skills addressed in HSES 529 and HSES 654 will be practiced, applied, and mastered during this experience. Prerequisite: HSES 581 and concurrent enrollment in HSES 529 and HSES 654. LEC.

HSES 583. Athletic Training Practicum III: Rehabilitation. 4 Hours.
This course provides a practical experience for the student-athletic trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury rehabilitation/reconditioning through a
variety of therapeutic exercise techniques during their clinical and field experience. Specific skills addressed in HSES 656 will be practiced, applied, and mastered during this experience. Prerequisite: HSES 582, concurrent enrollment in HSES 656. LEC.

HSES 584. Athletic Training Practicum IV: Senior Sport Experience. 4 Hours.
This course provides a culminating practical experience for the student-athletic trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills obtained during previous coursework as well as apply administrative and management skills obtained in HSES 658. This course is intended to allow the Senior student more freedom and responsibility in decision making regarding the health care of an athletic team. Prerequisite: HSES 583, concurrent enrollment in HSES 658. LEC.

HSES 598. Special Course: ____. 1-5 Hours.
A special course of study to explore current trends and issues in health and physical education - primarily for undergraduates. LEC.

HSES 605. Administering Health Related Programs. 3 Hours.
This course will consist of an analysis of administration as it relates to both school and community health programs. The focus will be on administrative models and techniques used to establish and maintain sound health programs in school and community settings. Prerequisite: Six hours of health education or consent of instructor. LEC.

HSES 671. Applied Biomechanics. 3 Hours.
This course will examine the qualitative biomechanical analysis of human movement directed towards the goals of performance improvement and injury prevention and rehabilitation. Specifically, this course will provide students with a basis knowledge of the biomechanical foundations of human movement, the knowledge and skills necessary to complete a systematic analysis and evaluation of human motor performance, and the ability to determine and provide interventions that are likely to improve movement in athletic, clinical, educational, and work environments. Prerequisite: A course in human anatomy, admission to the HSES Teacher Certification Program or consent of instructor. LEC.

HSES 714. Motor Development During Growth. 3 Hours.
Motor development in childhood and adolescence and its relationship to physical growth. Factors influencing motor learning and development will be explored. This course provides basic understanding of the neuromuscular changes and abilities of children and adolescents. Prerequisite: A course in kinesiology and anatomy. LEC.

HSES 715. Understanding Research in HSES. 3 Hours.
This course introduces the concepts and skills involved in understanding and analyzing research in education and related areas. The course provides an overview of basic, general knowledge of various research methodologies. Students should expect to study much of this material in greater depth through additional work before being fully prepared to conduct independent research. However, this course should enhance their ability to locate, read, comprehend, and critically analyze research articles and reports. Topics in the course include quantitative and qualitative methods and designs, historical and descriptive research, and program evaluation. (This course fulfills the requirement of a research methods course in the first 12 hours of graduate study.) Prerequisite: Must be an admitted HSES graduate student. LEC.

HSES 730. Advanced Concepts in Nutrition. 3 Hours.
A study of the nutritional factors that affect health at all ages. Specific nutritional needs and effects of deficiency states on health will also be addressed. The course will also include the physiological and biochemical mechanisms involved in the use of nutrients for human growth and development as well as the production of energy through the metabolic process. Prerequisite: HSES 330 or equivalent experience and permission of instructor. LEC.

HSES 771. Internship in Exercise Science. 6 Hours.
A supervised internship experience in an approved exercise science setting. Students will gain experience through a hands-on approach via clinical and/or research settings. The specific type of internship experience will be agreed upon by the student and their academic advisor. Prerequisite: Successful completion of at least 24 graduate credit hours. LEC.

HSES 777. Practicum in Health Education and Wellness Promotion. 1-3 Hours.
This course is designed to provide practical community health experiences in health education and wellness promotion, including: assessment, planning, implementation and program evaluation. With approval of the instructor, students may choose their practicum focus in any of the ten content areas of health: mental and emotional, family living, growth and development, nutrition, personal health, alcohol tobacco and other drugs, communicable and chronic diseases, injury prevention and safety, consumer health and environmental health. Prerequisite: Enrolled in graduate school and consent of the instructor. LAB.

HSES 779. Physiology of Functional Aging. 3 Hours.
The course has been designed to address issues and concepts relating to the biological aging process as a foundation for physical performance, general fitness, and health status. The biological concepts are applied to the human physiological aging process and the systems involved as well as the possible interventions that may effect that process. The several theories associated with physiological aging are also addressed as related to the physiological systems and current research that may impact the understanding of these theories. Prerequisite: A course in basic biology. LEC.

HSES 780. Internship in Teaching Physical Education: ____. 1-16 Hours.
A supervised internship experience leading to initial physical education teacher certification. The student assumes the total professional role as a teacher of physical education in an approved school setting. FLD.

HSES 795. Traditions and Principles in Health Education. 3 Hours.
This course is designed to explore the philosophy and principles which provide the foundation of health education as an academic discipline. Specific topics include: history of the profession, theories of health behavior and behavior change, principles of learning applied to health communications, health promotion practices, professional preparation, and the integration of philosophical and ethical ideals into program planning and implementation. LEC.

HSES 798. Special Course: ____. 1-5 Hours.
A special course of in-depth study exploring current trends and issues in health and physical education - primarily for undergraduates. LEC.

HSES 801. Sport Facilities. 3 Hours.
The purpose of this course is to study current developments and trends in the financing, programming, design, and construction of facilities for collegiate athletics and professional sports. Prerequisite: Admitted to graduate school. A course in the administration/management of sport or consent of the instructor. LEC.

HSES 803. Health Behavior Theory. 3 Hours.
Given that theories of health behavior drive research and practice in health education, the purpose of this course is to familiarize students with the major theories and planning models related to health behavior change. Particular focus will be applied to the role of theory in health
HSES 804. Sport Psychology. 3 Hours.
This course is designed to introduce students to the current research and theoretical perspectives in the sport psychology literature. Specifically, students will gain a broad understanding of the three major areas of sport psychology: social psychology (e.g., motivation), performance enhancement (e.g., mental skills training), and psycho-physiology (e.g., impact of anxiety on performance). Prerequisite: Admission to the health program or consent of the instructor. LEC.

HSES 805. Laboratory Experiments and Analysis--Exercise Physiology. 3 Hours.
Students will learn the techniques of operating various types of laboratory equipment and will conduct small-scale lab experiments in areas such as respiration, circulation, metabolism, strength, neuromuscular function, cardiac function, and body composition. Special emphasis will be placed on laboratory techniques of assessing physical fitness. Prerequisite: A course in exercise physiology. LAB.

HSES 806. Stress Management. 3 Hours.
The long range objectives of this course are to assist students in gaining stress management knowledge; to help them to formulate improved perspectives on various stress management techniques; and consequently apply the developing constructs in their lives with a sense of purpose and self-responsibility. Prerequisite: Two courses in health education or consent of instructor. LEC.

HSES 807. Current Literature in Exercise Physiology. 2 Hours.
A wide range of topics from the exercise physiology literature will be discussed. Instructor and students will present reports to the group centered on current research findings with discussion aimed at application of these results to physical exercise and training. Prerequisite: A basic course in exercise physiology or consent of instructor. LEC.

HSES 808. Biomechanics of Human Movement. 3 Hours.
This course will examine the movements and the structure and function of human beings by means of the methods of mechanics. An emphasis will be placed on the two primary goals of biomechanics: performance improvement and injury prevention and rehabilitation. Topics to be covered include the kinematics and kinetics of human movement, muscle mechanics, bone and joint mechanics, and the biomechanics of musculoskeletal injury. Prerequisite: Courses in calculus, physics, anatomy, and biomechanics, or consent of instructor. LEC.

HSES 810. Advanced Exercise Physiology. 3 Hours.
An advanced study of the physiological and biomechanical aspects of muscular, cardiovascular, and respiratory function as the human is engaging in exercise. The topics of energy metabolism, hormones, and nutrition as related to exercise also are presented. Prerequisite: A basic course in exercise physiology. LEC.

HSES 812. Current Issues in Health. 3 Hours.
This course is designed to review and discuss current issues in various health related areas. The focus will be on relevant issues and topics that are guiding and directing the health profession. The range of topics discussed will vary from popular literature to scientific research and cover such areas as health education, community health, and health over the lifespan. Students in the course will be expected to report, discuss, and interact with each other concerning the issues as they are reported. Prerequisite: A graduate course in health or consent of the instructor. LEC.

HSES 814. Implementing Health Programs. 3 Hours.
The purpose of this course is to explore planning models used for designing, implementing and managing health promotion programs. Students will be trained to develop objectives, assess determinants, select methods and strategies, pre-test program materials, and adopt and implement promotional plans. Problem based and community based learning experiences will be provided. Prerequisite: A health major or permission from the instructor. LEC.

HSES 817. Practical Aspects of Aerobic and Resistance Training. 3 Hours.
This course will be a discussion of various concepts related to aerobic and resistance training. By the end of the semester, the student should be able to demonstrate an understanding of information presented in this course by achieving satisfactory evaluations of presentations, papers, and an examination of the following topics: energy metabolism, general adaptations of aerobic and resistance training, exercise techniques for aerobic and resistance training, periodization of training, testing and evaluation of aerobic and resistance training performance, and exercise prescription for aerobic and resistance training. Prerequisite: Undergraduate course in exercise physiology or consent of instructor. LEC.

HSES 818. Legal Aspects of Public Health Education. 3 Hours.
This course is designed to enhance understanding of the variety of legal issues which affect health educators and their audiences. Specifically, this course will survey federal, state, and local public health laws and regulations which may prescribe health education content and the health educator's actions. Legislation will be analyzed and the practical impact of the health educator upon the legislative process will be emphasized. Prerequisite: A course in community health or consent of instructor. LEC.

HSES 823. Behavior Modification in Health and Exercise. 3 Hours.
This course will examine the behavioral principles that influence health and exercise practices. Theories of human behavior, reinforcement theory, and models of self-esteem will serve as the foundation for studying behavior change. Society influences will be strongly emphasized. Course topics will include exercise determinants, motivation, media representation, negative behaviors, self-efficacy, social support, and effective promotion strategies. Prerequisite: Admitted to Graduate School or consent of instructor. LEC.

HSES 824. Epidemiology and Concepts of Disease Causation. 3 Hours.
This course involves the study of the etiology and natural history of infectious and non-infectious diseases including vector control, host defenses and resistance, investigation of disease outbreaks, mental health and public health. The course deals with detailed analytic and descriptive epidemiology and their implications for improving our understanding of health and diseases; epidemiologic consequences of nuclear war and retrospective and prospective approaches in epidemiological research. Contemporary developmental methods for disease prevention will be critically reviewed. Prerequisite: HSES 573, or equivalent, or consent of instructor. LEC.

HSES 825. Skeletal Muscle Physiology. 3 Hours.
This course will provide the student with an in-depth study of the structure and development, contractile mechanics, and neuromuscular system as it relates to the skeletal musculature. Structure and Development - muscle fiber, motor neuron, neuromuscular junction, muscle receptors, muscle formation, development of muscle innervation. Putting Muscles to Work - ion channels, pumps, and binding proteins, axoplasmic transport, resting and action potentials, neuromuscular transmission, muscle contraction, motor units, exercise, muscle metabolism. The Adaptable Neuromuscular System - fatigue, loss of muscle innervation, recovery of
HSES 828. Sport Finance. 3 Hours.
A study of the principles and applications of finance and economics in the sport industry. Strategic financial planning as a part of managements responsibilities is highlighted. Prerequisite: Admitted to Graduate School. LEC.

HSES 830. Socio-Cultural Dimensions of Sport. 3 Hours.
Current literature concerning the impact of American social values and cultural patterns of sport and physical activity will be studied. Critiques of related research involving sport and social institutions, and socio-cultural groups in sport will be emphasized. Prerequisite: A course in Sociology of Sport or consent of instructor. LEC.

HSES 831. Ethics in the Sport Industry. 3 Hours.
This course is designed to help students learn to make morally reasoned decisions in various sport settings. This course will help prepare students to respond more responsibly when faced with challenging ethical dilemmas and guide them in learning to serve as role models for ethical conduct. LEC.

HSES 832. Physical Education Instructional and Assessment Methods. 3 Hours.
The study of research-based instructional and assessment methods appropriate for PK-12 physical education. Managerial, instructional, and supervisory skills will be developed. Traditional and alternative assessment tools will be discussed. Readings, observations (live and video), and practice teaching will prepare students to complete a practical experience and an action research project in a PK-12 school. Prerequisite: Admission to Graduate School. LEC.

HSES 833. Public Health Aspects of Exercise. 3 Hours.
This course describes the timeline for physiologic adaptations to long-term physical activity. It describes the effects of physical activity on chronic disease. It describes, from a population perspective, the effects of physical activity on the health of the nation. Prerequisite: 12 hours of HSES courses, or equivalent, or consent of instructor. LEC.

HSES 836. Physical Education Curriculum Models. 3 Hours.
An examination of the elements and processes of curriculum construction in physical education for elementary, secondary, and postsecondary institution, and the institutional and professional issues that affect these processes. A study of contemporary curricula structures in regard to planning, implementation, and evaluation of K-12 curricula and professional preparation curricula in physical education programs. Prerequisite: A course in physical education curriculum, or equivalent. LEC.

HSES 840. Organizational Behavior in Sport. 3 Hours.
This course utilizes a micro perspective to analyze the behavior and culture within sport organizations. Specifically, the student will study and learn how to apply management and leadership theories that have the potential to shape the work environment and will discuss how current topics in organizational behavior are particularly relevant to the sport industry. Prerequisite: Admitted to Graduate School. Consent of the instructor. LEC.

HSES 842. Sports Marketing. 3 Hours.
This course helps students gain a deeper understanding of sport marketing by examining in-depth the sport marketing mix of product, price, place, and promotion as well as marketing research, marketing strategy, market segmentation, branding, sponsorships, licensing, venue and event marketing, public relations, and global sport marketing. LEC.

HSES 850. Analysis Techniques for Health, Sport, and Exercise Sciences Laboratory and Field Data. 3 Hours.
Techniques for analyzing data gathered in Health, Sport, and Exercise Sciences laboratories and field studies will be presented in this course. Techniques for the recording of raw data, appropriate organization of raw data, selection of test for analysis of data, use of computer software, and computer programming for analysis and reporting results of the data will also be included. Prerequisite: PRE 710, PRE 720, or PRE 725. LEC.

HSES 866. Contemporary Trends in Elementary and Secondary Physical Education. 3 Hours.
An in-depth study into the research and other forms of literature will be made to study and examine the latest trends in elementary and secondary school physical education. Games, activities, dances, and rhythms will be presented and discussed relative to developmental levels of students grades K-12. Prerequisite: A methods course in teaching physical education or consent of instructor. LEC.

HSES 872. Exercise and the Cardiovascular System. 3 Hours.
This course will be a discussion of various concepts specifically related to exercise and the cardiovascular system. By the end of the semester, the student should be able to demonstrate an understanding of the interaction of exercise and cardiovascular system by achieving satisfactory evaluations on examinations, abstracts, and classroom presentations. The following topics will be discussed as they relate specifically to exercise: homeostasis and cardiovascular transport mechanisms, basic structure and function; characteristics of cardiac cells; the heart as a pump; the peripheral vascular system; vascular control; venous return and cardiac output; regulation of arterial pressure; cardiovascular responses to stress; and cardiovascular function in pathological situations. Prerequisite: Undergraduate course in exercise physiology or consent of instructor. LEC.

HSES 880. Internship in Sport Management. 1-10 Hours.
This course will provide for supervised and directed experiences in selected sport management settings. The graduate advisor will schedule observations of the internship, as well as regular conferences with the student. Written summaries and evaluations of the internship will be prepared by the student, the agency supervisor, and the university graduate faculty member. Prerequisite: Admission to the Graduate Program in Sport Management. FLD.

HSES 884. Legal Aspects of Sport. 3 Hours.
This course is intended to introduce graduate students to the basic concepts of the American legal system and the application of them to intercollegiate and professional sports. Particular emphasis will be given to risk management and preventive law. Other topics include: governance issues in intercollegiate and professional sports, contract law, employment discrimination, labor relations and collective bargaining, agency law and athlete agents, regulation of participation in intercollegiate and high school athletics, sport facility and event issues, participant liability issues, product liability issues, premises and spectator liability, participant violence in sports, and intellectual property law. Prerequisite: Admission to graduate program in School of Education LEC.

HSES 890. Seminar in HSES. 3 Hours.
This course is designed to provide a general research seminar learning experience for graduate students in HSES. In particular, students will learn about faculty research activities and interests from a variety of specialty areas both within KU and outside of KU. Through faculty and guest presentations, students will be exposed to a variety of design and methodologies used to conduct research in the specialty areas of HSES. LEC.
HSES 892. Psychology of Physical Activity. 3 Hours.
This course is designed for students interested in optimizing motivation and adherence to exercise among individuals in a wide range of physical activity settings (e.g., health clubs, corporate fitness, physical therapy). The course content includes a review of the literature highlighting the psychological benefits of exercise, the theoretical advances in understanding the psychological aspects of individuals' participation in physical activity, and strategies and techniques for professionals attempting to foster motivation and adherence to exercise among their clients/members. Prerequisite: Admission in the health program or consent of the instructor. LEC.

HSES 897. Independent Study. 1-4 Hours.
Prerequisite: Consent of advisor and instructor. RSH.

HSES 898. Master's Project. 1-4 Hours.
RSH.

HSES 899. Master's Thesis. 1-6 Hours.
The.

HSES 905. Advanced Concepts in Health Education. 3 Hours.
This course is designed as an in-depth study of the pedagogy of health education. It is concerned with the effects of various health education models, new materials, and innovative teaching techniques. The effectiveness of various media such as films, slides, transparencies, microcomputers, and assessment tools will be analyzed. Research concerning innovations in education will be investigated along with a study of future trends in the field. Timely issues of controversy about health education practices and the effectiveness of values clarification activities will also be discussed. LEC.

HSES 910. Biochemistry of Exercise. 3 Hours.
This course will include an in-depth examination of metabolic and endocrine principles as they relate to physical exercise and training. Specific topics will include: substrate utilization in exercise, metabolic controls, muscle biochemistry, body composition, nutritional aspects and hormonal influences in exercise. Both instructor and students will report on the most current literature relating to the topics. Prerequisite: Human biodynamics or a course in biochemistry. LEC.

HSES 926. Grant and Research Proposal Writing. 3 Hours.
This is a course for students to examine the sources and areas which provide financial support for research projects. The areas of study include types of research funding available on a local, state, and federal level, the elements and design of writing a proposal and strategies involved in securing financial support for research. A focus for the course will center upon preparing a research proposal for funding. Prerequisite: Human biodynamics or a course in biochemistry. LEC.

HSES 940. Scientific Dimensions of Exercise and Health. 3 Hours.
This course has been designed to bring together the many scientific factors relating exercise and physical activity to health and human function. The course focuses on the interdisciplinary nature of this relationship and reviews the physiological, sociological, psychological, and behavioral factors involved. Prerequisite: Fifteen hours of graduate level course work in health or physical education and admission to health or physical education doctoral program. LEC.

HSES 980. Advanced Topics: ____. 1-3 Hours.
A special course of study to meet current needs of education professionals -- primarily for post-master's level students. LEC.

HSES 981. Current Issues in Health and Physical Education. 3 Hours.
This course will explore the latest philosophical issues and controversies which are impacting the fields of health, physical education, and athletics. The student will explore the current and future ramifications of each issue and its potential effects on the profession. Prerequisite: Admission to the Health, Sport, and Exercise Sciences Doctoral Program. LEC.

HSES 990. Doctoral Seminar. 3 Hours.
This seminar based course will be designed to prepare the doctoral student for academic careers or careers in industry after they graduate. The topics covered will be promotion and tenure procedures and expectations, including but not limited to teaching, responsible conduct of research, professional ethics, historical ethical issues, evaluation of ethical dilemmas, and service expectations at research intensive institutions, regional comprehensive institutions and small liberal arts colleges. Industry career options will be discussed and guest speakers from various disciplines will be brought in to discuss options and expectations with this career path. Prerequisite: Doctoral student or permission of the instructor. LEC.

HSES 995. Field Experience in: ____. 1-5 Hours.
Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experiences will be prepared independently by the student, a representative of the cooperating agency, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours. FLD.

HSES 996. College Teaching Experience in: ____. 3 Hours.
To meet the college teaching experience requirement for doctoral programs, a student shall engage in a semester long, planned, instructional activity that shall include college classroom teaching under supervision. Planning shall be done with the advisor and/or member of the faculty who will supervise the experience. The activity shall be done under the supervision of a member of the University of Kansas faculty or by an individual or individuals designated by the candidate's committee. FLD.

HSES 997. Individual Study. 1-4 Hours.
Prerequisite: Prior graduate course work in the area of study and consent of instructor. RSH.

HSES 999. Doctoral Dissertation. 1-15 Hours.
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Department of Curriculum and Teaching

Curriculum and Teaching

Undergraduate Programs

The Department of Curriculum and Teaching (http://ct.soe.ku.edu) offers undergraduate programs that lead to teacher licensure in unified early childhood and at the elementary, middle, and secondary levels and a broad range of graduate professional programs in curriculum and instruction that promote the professional and intellectual development of practitioners and scholars in this field at all levels of education. The faculty is known for its field leadership and commitment to high-quality education for youth and adults in a variety of educational settings, innovative field-based research, and preparation of highly effective program graduates.
This catalog is in effect for undergraduates admitted to the School of Education for 2015-16.

Students planning to teach must complete programs composed of 3 major parts:

- **General Education** (requirements completed primarily in the first two years),
- **Major** (content areas in which students are specializing), and
- **Professional Education** (course work that helps them to understand students as learners and to communicate knowledge effectively).

### Non–Western Culture Requirement

The Kansas State Board of Education requires students seeking licensure to study both Western and non-Western cultures. To meet the non-Western culture requirement, students must complete at least one course classified as NW. This requirement also may count in the appropriate category (behavioral science, social sciences, or arts/humanities) of the general education requirements.

View the list of non-Western culture courses.

### Undergraduate Advising

After undergraduate admission, advisors are assigned according to students’ intended licensure levels and teaching fields. The advisor’s name appears in each student’s letter of acceptance or is available from the SOE Advising Center.

### Curriculum and Teaching

#### Graduate Programs

The department offers a broad range of graduate professional programs in curriculum and instruction. Students should contact the appropriate program advisor for specific program requirements. Information about the department faculty is in the Faculty/Staff section of the department’s website.

For complete program information, visit the Department of Curriculum and Teaching (http://ct.soe.ku.edu) or send an inquiry to ctdepartment@ku.edu.

**Note:** Degree requirements are subject to change. Prospective and current students should obtain the current degree requirements from the department.

Programs in curriculum and instruction prepare students to complete advanced degrees by addressing critical issues in learning, teaching, and curriculum, from local to global levels.

The **Master of Arts** with a major in education and **Master of Science in Education** are available for students who hold the bachelor’s degree and seek to advance their knowledge and skills in their professional areas or areas of interest. The **Doctor of Education** and **Doctor of Philosophy** with a major in curriculum and instruction are for students who plan to pursue employment at the college level or assume major leadership positions in schools.

An initial licensure program is also available to students who already hold the bachelor’s degree and want to teach foreign language, mathematics, or science. The **Graduate Licensure Program** combines graduate and undergraduate courses including a semester-long student teaching experience that helps students obtain the initial teaching license while completing the Master of Science in Education degree.


Graduate classes are taught on the main campus in Lawrence and on the KU Edwards Campus (http://edwardscampus.ku.edu) in Overland Park in suburban Kansas City about 40 miles from Lawrence. Master’s and doctoral students can expect to complete some graduate work on each campus.

#### Graduate Advising

When application materials are processed and program requirements are met, an advisor is assigned according to the student’s interest. Each student should consult the assigned advisor during each enrollment period.

Doctoral candidates should develop a program plan at the first enrollment or promptly thereafter. A copy of this program should be filed with the Graduate Division of the School of Education. Basic and applied research skills, including statistics, research design, and related requirements appropriate to the degree, are required for the Ph.D. and Ed.D. Specific descriptions of research options may be obtained from the department (http://ct.soe.ku.edu).

### Curriculum and Teaching Courses

**C&T 100. Introduction to the Education Profession. 3 Hours.** This course is designed to acquaint students with the profession of education by helping to increase an awareness of the role and characteristics of an effective teacher. Large and small group activities and assignments are dispersed throughout the semester to facilitate these outcomes. Students will be involved in observation of and participation with teachers and pupils in public school classrooms, which complement course activities and assignments. Students will work with a mentor preservice teacher from the KU School of Education to provide discussions about each of the course objectives. CT 100 is a pre-professional course. Successful completion of the course does not guarantee eventual admission to the School of Education’s Teacher Education Program. LEC.

**C&T 235. Multicultural Education. 3 Hours. AE41.** The course is designed to provide the student with an awareness of and sensitivity to the concept of multicultural education. Topics related to the rationale for and processes of providing a multicultural perspective within the schools will be addressed. Field experiences will be structured to provide students with opportunities to observe the diversity within the educational setting. LEC.

**C&T 322. Curriculum and the Learner in the Elementary School. 3 Hours.** Building on the experiences in CT 100 and CT 200, this course will focus on the learner in the elementary setting. Learning occurs as a result of interaction among learners, teacher and subject matter in the classroom within a school in a community. The impact of the interactions of these students of learning of young children is studied in this course. Emphasis is given to the factors that influence curriculum decision-making, and methods that are considered in elementary grades curriculum and how it is delivered. Prerequisite: Admission to the Teacher Education Program. LEC.
C&T 324. Curriculum Learner in the Middle School and High School. 3 Hours.
Building on experiences in CT 100 and CT 200, this course will focus on the learner within the high school setting. Learning occurs in a classroom within a school in a community, and the nature and structure of these settings as well as their impact on learning is studied in this course. Emphasis is given to the curriculum, the factors that influence the curriculum, and the ways that goals for high school students are reflected in the high school curriculum. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 330. Instructional Approaches for ESOL Learners in the Elementary/Early Childhood Classroom. 3 Hours.
Teaching English as a Second or Additional Language/Bilingual Education is designed to provide preservice elementary teachers with an understanding of the history and methodology of teaching English to speakers of other languages, both as a foreign language and as an additional language within American English settings. Future ESL/EFL/EB teachers will be prepared to develop the investigative, decision-making, and reflective teaching skills needed to work with English language learners of elementary age, and to impart language instruction in the appropriate context. Emphasis is placed on developing a clear understanding of who English language learners are; what programs and services are or should be available to the ESOLs/EBs; the critical pedagogical aspects of teaching ESL/EFL/EB; and the preparation of teaching materials for classroom use. Prerequisite: Admission to the teacher education program. LEC.

C&T 331. Instructional Approaches for ESOL Learners in the Middle/Secondary Classroom. 3 Hours.
This course is designed to provide preservice middle/secondary discipline specific teachers with an understanding of the history and methodology of teaching English to speakers of other languages, both as a foreign language and as an additional language within American English settings. Future ESL/EFL/EB teachers will be prepared to develop the investigative, decision-making, and reflective teachings skills needed to work with English language learners of all ages, and to impart language instruction in the appropriate context. Emphasis is placed on developing a clear understanding of who English language learners are; what programs and services are or should be available to the ESOLs/EBs; the critical pedagogical aspects of teaching ESL/EFL/EB; and the preparation of teaching materials for classroom use. Prerequisite: Admission to the teacher education program. LEC.

C&T 335. Curriculum and Instruction in Middle and Secondary History and Government Classrooms. 3 Hours.
The purpose of this course is to help prepare students to teach social studies in the middle and secondary grades. Prerequisite: Admission to the teacher education program. LEC.

C&T 344. Children’s Literature in the Elementary School. 2 Hours.
A study of literature (poetry, folk literature, fiction, and nonfiction) appropriate for elementary school children with a focus on contemporary children's books. Emphasis will be on selection of literature based on child development, literary quality, curriculum, and pluralism and the engagement of children in literature experiences from the interactive, reader response, and critical perspectives. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 347. Social Studies in the Elementary Classroom. 3 Hours.
A study of curricula, instructional strategies, and classroom organization for social studies education K-6. Emphasis is placed on the effective implementation of social studies programs in classroom settings. Prerequisite: Admission to the School of Education in elementary, middle, or secondary, or the Unified Early Childhood programs. LEC.

C&T 349. Science in the Elementary Classroom. 3 Hours.
In this course, you will develop an understanding of how children learn science and why science education is important. You will examine effective approaches to teaching, instructional materials, and student assessment and will learn how to plan and implement a science unit. The course will emphasize a guided-inquiry approach to science instruction appropriate for the abilities and interests of children in grades K-6. Prerequisite: Admission to the School of Education. LEC.

C&T 351. Mathematics for the Elementary Classroom. 3 Hours.
This course is a study of the curriculum, instructional strategies, and classroom organization for mathematics in grades K-6. Emphasis is placed on the effective implementation of mathematics programs in classroom settings. Prerequisite: Admission to the School of Education. LEC.

C&T 352. Literacy Instruction in the Primary Grades (K-3). 3 Hours.
This course is intended to develop the attitudes, knowledge, and skills necessary to effectively instruct primary grades (K-3) children through the development of literacy skills: reading, writing, listening, speaking, spelling, and handwriting. The major goals of this course are for the prospective teacher to develop an understanding of literacy development of the primary-grades child, current literacy theories, and the ability to work with a number of approaches to promote literacy learning and a positive attitude toward literacy in all primary-grades students who may have different needs due to language, culture, learning challenges, and/or differing stages of development. This course is to be taken concurrently with CT 353, Literacy Practicum in the Primary Grades. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 353. Literacy Practicum in the Primary Grades. 1 Hour.
This supervised practicum is intended to allow the pre-service teacher to apply the knowledge gained in CT 352, Literacy Instruction in the primary grades (K-3), by teaching children in the primary grades. To be taken concurrently with CT 352 Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 354. Literacy Instruction in the Intermediate Grades. 2 Hours.
This course is intended to develop the attitudes, knowledge, and skills necessary to effectively instruct intermediate-grades children (4-6) through the development of literacy skills: reading, writing, listening, speaking, spelling, and handwriting. The major goals of this course are for the prospective teacher to develop an understanding of literacy development of the intermediate-grades child, current literacy theories, and the ability to work with a number of approaches to promote literacy learning and a positive attitude toward literacy in all intermediate-grades students who may have different needs due to language, culture, learning challenges, and/or differing stages of development. Prerequisite: Admission to the Teacher Education Program. This course is to be taken concurrently with CT 355, Literacy Practicum in the Intermediate Grades. LEC.

C&T 355. Literacy Practicum in the Intermediate Grades (4-6). 1 Hour.
This supervised practicum is intended to allow the preservice teacher to apply the knowledge gained in CT 354, Literacy Instruction in the intermediate grades (4-6), by teaching children in the intermediate grades. To be taken concurrently with CT 354 Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 359. Literacy in the Content Areas. 1 Hour.
An introduction to reading in relation to specific areas of art, music and health and physical education. Focus on specialized vocabulary and literature related to each area. Introduction of specific strategies to teach vocabulary and comprehension and to integrated units of study. Prerequisite: Admission to certification program in music education, art education, health education, or physical education. LEC.
C&T 360. Knowing and Learning in Mathematics and Science. 3 Hours.
This course focuses on issues of what it means to learn and know science and mathematics. What are the standards for knowing we will use? How is knowing and learning structured and how does what we know change and develop? For the science and mathematics educator, what are the tensions between general, cross-disciplinary characterizations of knowing (e.g., intelligence) and the specifics of coming to understand powerful ideas in mathematics and science? What are the links between knowing and developing in learning theory, and the content and evolution of scientific ideas. Also, current issues and tensions in education will be discussed, especially as it relates to mathematics and science instruction. LEC.

C&T 366. Classroom Interactions in Mathematics and Science. 3 Hours.
To make prospective teachers aware of multiple models of teaching (including direct instruction, inquiry teaching and use of small groups); the advantages, disadvantages and uses of each; and what each model requires of teachers. To allow prospective teachers to explore ways of probing student understanding through authentic assessment, evaluating student understanding through student artifacts, and enhancing student understanding through lesson plans built around models of how people learn. To make prospective teachers aware of equity and diversity issues in classroom teaching and ways of ensuring that all students have an opportunity to learn. To make students aware of the proficiencies for licensure recognized by UKanTeach and Kansas State Board of Education and facilitate students’ demonstration and documentation of these through their development of a professional portfolio. To develop students’ capacity to identify and evaluate best teaching practices as presented in research literature. Prerequisite: CT 360. LEC.

C&T 420. Teaching Kansas Government and Contemporary Public Policy Issues: _____. 3 Hours.
A study of the constitution, organization, functions, and processes of Kansas government, of contemporary public policy issues with local, state and national implications, and of strategies for teaching these in middle and secondary classrooms. Prerequisite: Admission to the School of Education and POLS 110. LEC.

C&T 420. Teaching Literature for Young Adults. 3 Hours.
Teaching literature (novel, short story, poetry, drama, nonfiction) suitable for students in the middle school, the junior high school, and the senior high school. Ethnic literature, censorship, bibliographies, and other relevant sources of information about books for young adults will be studied. Prerequisite: Admission to the School of Education. LEC.

C&T 448. Reading and Writing Across the Curriculum. 3 Hours.
Content area teachers do far more than impart information to students. They play an important role in guiding middle/secondary students as they use reading and writing as tools for learning. This course includes an overview of the state and national reading and writing scores of adolescents. Students will then be introduced to the basic processes or ways in which individuals may learn to read and write. The course continues with a focus on the instructional strategies and materials that promote the development of reading and writing in the context of teaching new information. Additionally, the course emphasizes the informal methods educators can use, on an on-going basis, to diagnose their students ability to comprehend content material. Finally, appropriate fix-up strategies will be modeled. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 460. Project Based Instruction in Mathematics and Science. 3 Hours.
This course will have three essential components. The first will be a theory driven perspective accounting for what we know of how people learn and how project-based instruction improves student learning in math and science. The second component will provide the students with support as they develop their own project-based unit. The third component will be field experiences consisting of two parts: 1) observation of well-implemented project-based instruction in local schools and 2) teaching project-based activities in an informal education setting. Prerequisite: CT 360. LEC.

C&T 469. Advanced Teaching Practicum. 1 Hour.
This supervised practicum is intended to allow the pre-service teacher to apply knowledge gained in SPED 507; CT 448, ELPS 537; and CT 540, CT 541, CT 542, CT 543 and CT 544: Advanced (Content Area) Methods by teaching children in the middle/secondary grades. To be taken concurrently with SPED 507; CT 448, ELPS 537; and CT 540, CT 541, CT 542, CT 543 and CT 544: Advanced (Content Area) Methods. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 490. Student Teaching. 6 Hours.
A supervised teaching experience in an approved school setting, with level and subject area to be selected according to the teaching field. Prerequisite: Successful completion of fall practicum experiences and demonstration of appropriate professional dispositions. LEC.

C&T 491. TESOL Practicum for Kansas State Endorsement. 3 Hours.
The TESOL Practicum allows individuals to gain supervised experience in Teaching English to Speakers of Other Languages (TESOL) for a professional KSDE ESOL endorsement and advancement. Prerequisite: Completion of all TESOL endorsement courses. LEC.

C&T 494. Internship. 6 Hours.
A supervised internship experience leading to initial certification. The student assumes the total professional role as a teacher in an approved school setting, with level and subject area to be selected according to the teaching field. Prerequisite: Successful completion of all practicum experiences and demonstration of appropriate professional dispositions. LEC.

C&T 495. Seminar: Developing the Teaching Portfolio. 3 Hours.
This course serves to instruct students in the research, teaching, and writing components of developing a teaching portfolio. The seminar will provide a forum for discussion and deeper exploration into topics and issues related to working in the school setting, teaching, and developing a professional teaching philosophy. Course is graded on a satisfactory/fail basis. Prerequisite: Enrollment in Student Teaching or Internship during the Spring semester. LEC.

C&T 497. Independent Study in: ____. 1-2 Hours.
Only one enrollment permitted each semester. A maximum of four hours will apply toward the bachelor's degree. Prerequisite: Recommendation of advisor and consent of instructor. IND.

C&T 499. Bachelor's Project. 4-6 Hours.
A formal report of some aspect of the field experience that relates formal learning and in situ experience to program planning, implementation, and evaluation. Topic will be selected in consultation with the project advisor. Prerequisite: CT 490 and CT 491 (CT 491 may be taken concurrently). IND.

C&T 500. Student Teaching in: ____. 1-6 Hours. AE61.
A supervised teaching experience in an approved school setting, with level and subject area to be selected according to the teaching field. Prerequisite: Admission to the Student Teaching program. FLD.
C&T 501. Student Teaching Practicum in: _____. 1-6 Hours.
A supervised classroom teaching experience under the direction of an experienced teacher and in close relationship with a university supervisor. Prerequisite: Admission to the Graduate Certification Program and approval of advisor. FLD.

C&T 503. International Perspectives in Primary and Secondary Education. 3 Hours.
This course is will expose students to a variety of debates and developments related to primary and secondary education in our globalized era. Students will survey educational systems from the US and selected world regions, comparing and contrasting them in terms of access, funding, curriculum, and pedagogy. They will investigate educational systems from the perspective of international development while addressing issues of local vs. national or international control, tradition vs. global advancement, and other challenges and trade-offs. Prerequisite: Junior standing or higher, or permission of instructor: The course is suitable for advanced undergraduate and master's degree seeking students. LEC.

C&T 530. Curriculum and Instruction in Foreign Language Classrooms. 3 Hours.
A study of philosophy, objectives, curriculum, instructional strategies, and evaluation in teaching foreign language at the K-12 levels. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 533. Curriculum and Instruction in Middle & Secondary English/Language Arts Classrooms. 3 Hours.
This is an English/Language Arts methods course that focuses on curriculum development and instructional strategies appropriate for teaching English/Language Arts in grades 5-12. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 537. Curriculum and Instruction in Middle and Secondary Science Classrooms. 3 Hours.
The purpose of this course is to help you prepare to teach science in the middle and secondary grades. The instructor designed the class sessions and learning tasks to enable you to make progress toward achieving the Kansas Science Teaching Standards and Kansas Professional Education Standards. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 539. Curriculum and Instruction in Middle and Secondary Mathematics Classrooms. 3 Hours.
This course is designed to provide focused study of curriculum development and instructional strategies appropriate for teaching mathematics in grades 5-12. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 540. Advanced Practices in Teaching English in the Middle and Secondary Schools. 3 Hours.
The course is designed to provide continued study of curriculum development and instructional strategies appropriate for teaching English/Language Arts in grades 5-12 and as a final readiness for the undergraduate student teaching experience. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 541. Advanced Practices in Teaching Social Studies in Middle/Secondary Schools. 3 Hours.
Advanced study of curriculum development and instructional strategies appropriate for teaching social studies in grades 6-12 and application of learning in a middle/secondary classroom. Prerequisite: CT 335; SPED 326 and, CT 324 LEC.

C&T 542. Advanced Practices in Teaching Science in the Middle and Secondary Schools. 3 Hours.
This course is designed as a final readiness for the semester-long student teaching experience and the Kansas Performance Teaching Portfolio to be completed during that student teaching experience. The course deals with the analysis, adaptation, and application of varied instructional designs to implement curricula in specific science areas in grades 5-12. Prerequisite: Admission to the middle-level licensure program in science education at the undergraduate level or one of the graduate licensure programs in middle/secondary science. Successful completion of CT 537. LEC.

C&T 543. Advanced Practices in Teaching Mathematics in the Middle and Secondary Schools. 3 Hours.
The course is designed to provide continued study of curriculum development and instructional strategies appropriate for teaching mathematics in grades 5-12 and as a final readiness for the undergraduate GLP student teaching experience. Prerequisite: Admission to the middle-level licensure program in mathematics education at the undergraduate level or the GLP in middle or secondary mathematics. Successful completion of CT 539. LEC.

C&T 544. Advanced Practices:Situating Foreign Language Content, Dispositions, Skills&Tools Language Classroom. 3 Hours.
This is an advanced Foreign Language methods course that focuses on the critical importance of the socio-linguistic environment of foreign language classrooms. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 598. Special Course: _____. 1-5 Hours. AE61.
A special course of study to meet current needs of education students, primarily for undergraduates. LEC.

C&T 620. Teaching English as a Second Language/Bilingual Education. 3 Hours.
The purpose of this course is to study the objectives and methods of ESL/Bilingual education. Students will examine methods and techniques of teaching: listening, speaking, reading, and writing in the ESL/Bilingual Education settings. The course will also emphasize the importance of culture in second language teaching, and self-evaluation of teaching and instructional materials. Undergraduate course that will meet with CT 820 Teaching English as a Second Language/Bilingual Education. Prerequisite: Admission to the School of Education. LEC.

C&T 621. Diagnosis and Remediation in Second Language Education. 3 Hours.
This course provides an overview of diagnostic techniques and instruments used to identify and remediate specific learning difficulties associated with normal second language development in the area of listening, speaking, reading, and writing. The course includes a review of research concerning assessment as it relates to error analysis in the second language context. Prerequisite: Admission to the School of Education. LEC.

C&T 622. Second Language Acquisition. 3 Hours.
This course provides an intensive review of the theory and research base of second language acquisition. Particular attention is given to the influence of research trends in linguistics and psychology on second language education theory and practice. Current trends in second language education are examined in light of the historical theory base. Prerequisite: Admission to the School of Education. LEC.

C&T 630. Understanding the Nature of Talent in Children and Youth. 3 Hours.
This course addresses the social, cognitive, affective, and other developmental aspects of talent as manifested in children and youth.
with high potential. The course provides an opportunity to examine characteristics, strengths, and needs of children and their families. The course focuses on the foundational aspects of gifted/talented education: educational and political history of the field, etiology of extraordinary potential, and identification and assessment techniques, instruments, and systems. Included in the course are relevant research, policies and regulations, services, and information resources. Prerequisite: SPED 325, SPED 425, SPED 431, SPED 725 or equivalent. LEC.

C&T 631. Teaching for Talent Development. 3 Hours.
The course introduces key theories and basic principles of curriculum development and introduction for students with high potential and/or high achievement. Frameworks and models for modifying general education content, cognitive processes, and learning outcomes are applied to enhancing talent development. The course addresses affective considerations, peer relations, and working with families. Prerequisite: CT 630 or CT 730. LEC.

C&T 649. An International Teaching Experience. 3 Hours.
This study abroad focuses on professional growth in teaching and understanding education based on an international experience. Students learn about curriculum and teaching from an international perspective, and engage in professional discussions with Italian teachers and administrators. Students engage in culturally responsive teaching in preschool-secondary settings, they participate in family and community activities/events, and they visit renowned museums and cities. Prerequisite: Application through the Office of Study Abroad and interview with the director. LEC.

C&T 707. Project Based Instruction. 3 Hours.
This course will emphasize exploring, designing, and evaluating materials and pedagogy to work toward the design of project-based curriculum and instruction. Topics focus on the principles of project-based instruction as well as multiple models for its use in the classroom. LEC.

C&T 709. Foundations of Curriculum and Instruction. 3 Hours.
Basic concepts and processes of curriculum and instruction, including theories, planning models, resources for decision-making, current trends, research, and proposals for improvement of curriculum and instruction. LEC.

C&T 710. Writing, Language, and Learning. 3 Hours.
This course will situate issues about writing and learning in the context of more general inquiry about language and learning. We will read research related to classroom discourse and the teaching of writing in secondary classrooms. We will then connect this body of research to the teaching of English in middle/secondary classrooms. LEC.

C&T 711. Teaching Young Adult Literature (Grades 7-12). 3 Hours.
A study of the characteristics of adolescents with respect to their interest and reading habits; criteria for choosing books for junior and senior high school in-class and out-of-class reading; selection of materials; methods for helping poor readers; literary discrimination and appreciation; censorship; ethnic literature; techniques for presenting literary selection in class. Wide reading among best of current and classical literature. LEC.

C&T 730. Understanding Talent. 3 Hours.
This course addresses the social, cognitive, affective, and other developmental aspects of talent as manifested in children and youth with high potential. The course provides an opportunity to examine characteristics, strengths, and needs of these children and their families. The course focuses on the foundational aspects of gifted/talented education: educational and political history of the field, etiology of extraordinary potential, and identification and assessment techniques, instruments, and systems. Included in the course are relevant research, policies and regulations, services, and information resources. Prerequisite: SPED 425, SPED 431, SPED 725, or equivalent introductory course on exceptional children and youth. LEC.

C&T 731. Teaching for Talent Development. 3 Hours.
The course introduces key theories and basic principles of curriculum development and introduction for students with high potential and/or high achievement. Frameworks and models for modifying general education content, cognitive processes, and learning outcomes are applied to enhancing talent development. The course addresses affective considerations, peer relations, and working with families. Prerequisite: CT 644 or CT 730 or equivalent course on exceptional children and youth. LEC.

C&T 732. Teaching for Talent in General Education Settings. 3 Hours.
This course is for classroom teachers concerned about meeting the needs of students with high potential in their classrooms. Students will be introduced to various curriculum models and teaching strategies commonly employed in special programs for gifted/talented students. There will be opportunities to apply gifted education models to modify existing curriculum or to develop new curricula which enhances the abilities of all students. Prerequisite: CT 644 or CT 730 or equivalent introductory course on exceptional children and youth. LEC.

C&T 733. Practicum in Gifted and Talented Education. 1-10 Hours.
A course designed to provide experiences for students to work intensively and to teach identified gifted and high potential students in educational settings. Students will develop competencies relative to implementing individual group and individual education plans through a variety of instructional alternatives. Arranged service delivery options are possible. Prerequisite: CT 645, CT 731, CT 732, or equivalent course. FLD.

C&T 738. Applied Research in the Classroom. 3 Hours.
This course is designed to facilitate the implementation and completion of an action research project during the internship experience. Prerequisite: Successful completion of student teaching. LEC.

C&T 739. Internship in Teaching: _____. 1-15 Hours.
A supervised internship experience leading to initial certification. The student assumes the total professional role as a teacher in an approved school setting, with level and subject area to be selected according to the teaching field. Prerequisite: CT 500 and CT 736 appropriate to the student's teaching level and area, or equivalent. FLD.

C&T 740. Foundations of Reading: Process, Theory, and Instruction. 3 Hours.
It is the purpose of this course to introduce students to the foundations of the reading process, developmental levels, theory, models, and procedures at the emergent, elementary, and secondary levels. Elements of cultural, linguistic, and ethnic diversity that affect the reading process are included. Students work with research related to the reading process, remediation, and assessment. LEC.

C&T 741. Comprehension and Study Strategies for Use with Multiple Texts. 3 Hours.
It is the purpose of this course to examine research, theory, and practice in reading comprehension. Emphasis is placed on the application of strategies for various text types (expository, narrative, persuasive, and technical) for teaching reading comprehension and study skills across content areas in the K-12 classrooms. Prerequisite: CT 740 or permission of the instructor. LEC.

C&T 742. Language and Literature in the Reading Program. 3 Hours.
A study of linguistic and literary aspects of reading instruction, focusing on language and cognitive development as they relate to reading. Emphasis will be on approaches for differentiating reading instruction to provide for less proficient to gifted readers, research and issues related to reader response, techniques for assessing children's reading attitudes and
interests, procedures for selecting literature, and strategies for integrating literature into the elementary school reading program. Prerequisite: CT 740 or permission of instructor. LEC.

C&T 743. Writing and Spelling Development and Instruction. 3 Hours. A study of the research base on writing, spelling, speaking, and listening for teaching the language arts; an overview of development in writing and spelling, the writing and spelling processes and instruction, and strategies for integrating the language arts. Prerequisite: Admission to a masters program within the School of Education, CT 740 or permission of the instructor. LEC.

C&T 744. Teaching Literature to Children. 3 Hours. An opportunity to survey the broad range of trade books published for children; criteria for book selection; children’s reading interests and tastes; illustrations of children's books; sources for selecting literature; poetry; the role of children's literature in today's elementary curriculum. LEC.

C&T 745. Reading and the English Language Learner. 3 Hours. LEC.

C&T 748. Reading and Writing Across the Curriculum. 3 Hours. In CT 748, preservice content teachers, who have had no previous literacy courses, are introduced to the basic processes of reading and to instructional strategies and materials that promote the development of reading, writing, and studying in the context of teaching new information. Additionally, we discuss the ways in which teachers diagnose, in an informal, on-going basis, their students’ abilities to comprehend the material they are teaching. LEC.

C&T 749. An International Teaching Experience. 3 Hours. This study abroad focuses on professional growth in teaching and understanding education based on an international experience. Students learn about curriculum and teaching from an international perspective, and engage in professional discussions with Italian teachers and administrators. Students engage in culturally responsive teaching in preschool-secondary settings, they participate in family and community activities/events, and they visit renowned museums and cities. Prerequisite: Application through the Office of Study Abroad and interview with the director. LEC.

C&T 750. Connecting Research to Classroom Practice in Elementary Mathematics and Science. 3 Hours. The primary purpose of this course is to examine current research on issues important to elementary mathematics and science programs. The course will explore issues important to the classroom practices of elementary mathematics and science teachers. Provides a broad background for understanding current issues related to elementary mathematics and science curriculum, instruction, and assessment. LEC.

C&T 760. Modern Approaches to Elementary Social Studies. 3 Hours. A study of the purpose, content, psychology, and materials and methods for teaching the social sciences in the elementary school. Emphasis on principles and procedures for combining the social studies with other areas of the curriculum in broad unit instruction. Prerequisite: Nine hours of Education including educational psychology. LEC.

C&T 762. Modern Approaches to Middle/Secondary Social Studies. 3 Hours. The purpose of the course is to offer preservice and practicing K-12 social studies educators the following: (1) an overview of theoretical bases for social studies education and of the social studies and discipline specific curriculum standards; (2) a review of the major curricular and extracurricular K-12 social studies programs; (3) strategies for the design, implementation, and evaluation of social studies programs; and (4) experience with the design, implementation, and/or evaluation of a social studies program. Prerequisite: Nine hours of Education including educational psychology. LEC.

C&T 763. Economic Education. 2-3 Hours. An examination of the concepts, theories, and resource materials utilized in teaching economics in the K-12 curriculum. Particular attention is given to the functional integration of economic concepts into the elementary and secondary social studies curriculum. The use of economic resource material is considered. Participants develop projects for use in their own classrooms. LEC.

C&T 764. Teaching Economics in: ____. 3 Hours. A critical analysis of the relationship between economics and a designated school subject selected from history, geography, or consumer education; a determination of the economic concepts that can be appropriately integrated into the particular discipline; and a comprehensive search of the particular curriculum area to identify the most effective and efficient points at which the economic concepts can be integrated. Prerequisite: CT 763. LEC.

C&T 765. Teaching with Community, Contemporary, and Primary Resources. 3 Hours. A practical course designed for grades 4-12 teachers who wish to utilize community-based, mass media, and/or primary resources. The course focuses on the use of community resources such as local historical societies, museums, and government agencies; on the use of mass media such as newspapers, magazines, organizations’ newsletters, television, and film; and on the use of primary resources such as artifacts, documents, recordings, and oral historians. Participants receive sample resources from each of the three areas along with accompanying activities. LEC.

C&T 797. Special Project in: ____. 2 Hours. Implementation of the curriculum project planned in CT 734 or CT 735; implementation and assessment of the special project will occur during the internship. Prerequisite: CT 734, CT 735, and CT 736. RSH.

C&T 798. Special Course: ____. 1-5 Hours. A special course of study to meet current needs of education professionals—primarily for graduate students. LEC.

C&T 800. Foundations of Curriculum Development. 3 Hours. This course is designed for students to gain a functional understanding of the historical, philosophical, political, psychological, and cultural factors which affect the designing and implementation of curriculum at several levels: the individual classroom, the team, the school, the larger administrative unit, the state, and the nation. Prerequisite: CT 709 or permission of instructor. LEC.

C&T 801. Planning for School Improvement. 2-3 Hours. The course will emphasize the latest research and practice related to school improvement. Students will function as a member of a school improvement team to assimilate and synthesize research and practice into the development, revision, and/or assessment of a school improvement plan for a specific school site. Corequisite: Enrollment in the summer institute on school improvement. LEC.

C&T 802. Curriculum Planning for Educational Settings. 3 Hours. A focus on organizing and managing curriculum development in educational settings. Such curricular decisions as writing philosophies, setting goals and objectives, selecting and organizing content, and designing and monitoring evaluation procedures will be emphasized. Providing leadership for the collaborative process of curriculum planning in organizational settings will receive attention. Prerequisite: CT 709, admission to Building Principal Certification program, or permission of instructor. LEC.
C&T 803. Differentiating Curriculum and Instruction. 3 Hours.
This course is designed for educators interested in expanding curriculum and instruction to accommodate diverse learners in the classroom, K-12. Topics include: models, methods, and resources for differentiating curriculum and instruction, designing and modifying differentiated curriculum, evaluating student learning, and introducing students, parents and colleagues to differentiation. An evidence-based, practical course for teachers, administrators, and support personnel. Prerequisite: Admission to Graduate School. LEC.

C&T 804. Trends and Issues in Middle Level Education. 3 Hours.
Information from current research, area specialists and exemplary practitioners will be used to extend appropriate teaching strategies and supplement background knowledge on special topics related to social, emotional and physical development as it relates to the curricula and young adolescents. LEC.

C&T 805. Planning Instruction and Instructional Strategies in Urban Settings. 3 Hours.
This course will prepare students to become cognizant of the particular contextual variables that pertain to the urban setting, engage in instructional planning utilizing pertinent instructional strategies for urban classrooms. Students will become familiar with conceptual frameworks appropriate to education in the urban environment, review research on education in the urban setting, and discuss goals and options for effectively coping with the demands of the urban classroom. FLD.

C&T 806. Instructional Strategies and Models. 3 Hours.
Analysis of models of teaching which represent distinct orientations toward students and how they learn. The application of these models is complemented by the study of research evidence on effective teaching strategies. Prerequisite: CT 709. LEC.

C&T 807. Multicultural Education. 3 Hours.
In order to provide the student with an understanding of multicultural education, the course will examine the effects of such issues as ethnicity in America, the melting pot theory, separatism, cultural pluralism, legal issues, and bilingual education upon the curriculum and instruction in today's classrooms. It will include an evaluation of materials for bias and stereotypes. Field experiences are a part of this course. LEC.

C&T 808. Qualitative Research: Curriculum Inquiry. 3 Hours.
Curriculum Inquiry provides an opportunity to reflect, explore, understand, and broaden perspectives of curriculum through examining the theories, methodologies, strategies, and design of qualitative research. This course is designed to develop a common understanding of the major elements of qualitative research, while offering each student an opportunity to examine research topics and methods of personal interest, with particular attention to curricular issues. The course also includes practical experience with various modes of data collection and analysis. LEC.

C&T 809. Creative Thinking and Learning. 3 Hours.
This course provides an opportunity to investigate the nature of the creative process in educational settings. The knowledge base for the course builds from foundations of creativity, principles and theories of identifying and enhancing creative production, and affective learner variables. The course blends classic and contemporary works in creativity, and features the application of theories and models of the origins and development of creativity to promoting creative thinking and learning among children, youth and adults. Participants learn about, apply, and adapt techniques for defining and identifying creative potential and for encouraging creative thinking in educational settings. Prerequisite: Admission to graduate school. LEC.

C&T 810. Issues in Teaching Language Arts. 3 Hours.
A study of present curricula in junior and senior high school English and speech; current thinking in grammar and usage; language development in oral and written communication; problems of teaching reading and literature in the junior and senior high school; construction and reorganization of language arts courses. Students will be permitted to make an intensive study of an individual problem relating to more effective instruction in the language arts. LEC.

C&T 820. Methods of Teaching English to Speakers of Other Languages (TESOL). 3 Hours.
The purpose of this course is to study the objectives and methods of ESL/ Bilingual education. Students will examine methods and techniques of teaching; listening, speaking, reading, and writing in the ESL/Bilingual Education settings. The course will also emphasize the importance of culture in second language teaching, and self-evaluation of teaching and instructional materials. Prerequisite or Corequisite: CT 709. LEC.

C&T 821. Assessment in Teaching English to Speakers of Other Languages (TESOL). 3 Hours.
This course provides an overview of diagnostic techniques and instruments used to identify and remediate specific learning difficulties associated with normal second language development in the area of listening, speaking, reading, and writing. The course includes a review of research concerning assessment as it relates to error analysis in the second language context. Corequisite: CT 820. LEC.

C&T 822. Second Language Acquisition for Teaching English to Speakers of Other Languages Educators (TESOL). 3 Hours.
This course provides an intensive review of the theory and research base of second language acquisition. Particular attention is given to the influence of research trends in linguistics and psychology on second language education theory and practice. Current trends in second language education are examined in light of the historical theory base. Prerequisite: CT 820. LEC.

C&T 823. Intercultural Competence for Teaching English to Speakers of Other Languages Educators (TESOL). 3 Hours.
This course includes the study of the interrelationship of language and culture and the use of multicultural training techniques to develop cultural awareness and positive attitudes in the second language classroom. Emphasis is on the integration of culture in the second language curriculum. Prerequisite: CT 820 or CT 803. LEC.

C&T 824. Problems in Second Language Instruction. 3 Hours.
This course presents a study of curricula and instruction in the second language setting at all levels with emphasis on educational research concerning these issues. Particular attention is given to developing competency in locating and utilizing sources of information and to preparing the research document. The course facilitates practical problem solving in the second language learning context. Prerequisite: CT 820. LEC.

C&T 825. Advanced Practicum in Teaching English to Speakers of Other Languages (TESOL). 3 Hours.
This course provides a supervised teaching experience in a setting appropriate to the goals of the prospective ESL/Bilingual teacher: elementary, secondary, or adult. Particular attention is given to lesson planning, classroom management, and the development of self-evaluation techniques. This course will also emphasize structured classroom observation prior to teaching and techniques for developing and maintaining positive working relationships with other professionals in the school setting. Prerequisite: CT 820, CT 821, and CT 822 or CT 824. FLD.
C&T 826. Linguistic Analysis for Teaching English to Speakers of Other Languages Educators (TESOL). 3 Hours.
This course offers pre- and in-service teachers the basic foundations of language analysis necessary for the teaching of second/foreign languages. The course covers basic linguistic topics common to all human languages (grammatical, phonological, and semantic aspects) with the intent to help teachers understand and address common languages problems that students face when learning English as a second/foreign language. LEC.

C&T 827. Teaching Pronunciation for Foreign Language/Teaching English to Speakers of Other Languages (TESOL). 3 Hours.
The objective of this course is to give prospective language teachers the requisite theoretical and practical background for making decisions concerning pronunciation teaching. This course provides second and foreign language teachers with the necessary knowledge and skills to address the teaching of pronunciation in the foreign language classroom. After a review of theoretical and practical research dealing with universal human speech perception and production, implications for the design of appropriate strategies and lessons to teaching pronunciation, both at the segmental and suprasegmental levels, are addressed. Prerequisite: CT 444, CT 820 or CT 822. LEC.

C&T 828. Language and Identity. 3 Hours.
This interdisciplinary seminar explores the interrelationship between language and identity, and the role of language in developing identities of second language learners. LEC.

C&T 829. Teaching English to Speakers of Other Languages in Global Context (TESOL). 3 Hours.
The purpose of this course is to investigate contemporary issues in and key concepts pertaining to Teaching English to Speakers of Other Languages (TESOL) throughout the world. We will examine primary research and employ a sociocultural lens to better understand how the phenomenon of globalization has shaped how, why, and the conditions under which English is taught and learned on different continents, as well as critiquing research methods and approaches to studying English language teaching and learning. LAB.

C&T 830. Classroom Applications of Assessment Information. 1 Hour.
The primary purpose of this course is to examine classroom-based practices for identifying intellectual and creative potential in school-aged children and youth, and to apply that information to classroom instruction as well as to individual education planning. Particular attention is paid to populations who are traditionally underserved due to language status, ethnicity, socio-economic status, geography, or multiple exceptionality. Parent and student roles are also emphasized. An evidence-based practice course for teachers, administrators, and support personnel. Prerequisite: Admission to Graduate School. LEC.

C&T 831. Personal Dimensions of Talent. 1 Hour.
The course focuses on affective aspects of individuals with high potential. Particular attention is paid to populations who are traditionally underserved due to ethnicity, socio-economic status, geography, or multiple exceptionality. The course focuses on theories, models and methods for understanding and addressing the successful personal development of talented individuals, supporting families, and personal issues linked to high potential. An evidence-based practice course for teachers, administrators, and support personnel. Prerequisite: Admission to Graduate School in Education. LEC.

C&T 840. Emergent Literacy and Beginning Reading. 3 Hours.
A study of emergent literacy through the beginning stages of literacy development. Course content focuses on the history, theory, and research that supports instructional reading practices for children Pre-kindergarten through grade 2. Prerequisite: CT 740, CT 741, or permission of instructor. LEC.

C&T 841. Early Intervention in Reading Practicum. 3 Hours.
A case study approach to the instruction of children in need of early intervention in reading. Requires assessment, instruction, and case reports of tutored children. Prerequisite: CT 740, CT 741, CT 840, or permission of instructor. FLD.

C&T 842. Supporting Striving Readers: Adolescent through Adult. 3 Hours.
A study of the characteristics and multiple causes of reading and writing difficulties, principles and procedures for diagnosing and remediating reading difficulties, how to provide individual and group intervention strategies, communicate diagnostic information, and gain awareness of the impact of research on instructional decision-making for students with reading difficulties. Prerequisite: Admission to a masters program within the School of Education, CT 740, CT 741, CT 840, and CT 841, or permission of instructor. LEC.

C&T 843. Supporting Striving Readers Practicum. 3 Hours.
Case study approach to the treatment of pre-adolescent through adults with reading disabilities. Requires diagnostic testing of the learner, compilation of case study reports, and participating in staffing for the purpose of designing remedial reading programs. Students also participate in implementation of remedial programs with pre-adolescent through adults through tutoring in either a clinical setting or a public school setting. Prerequisite: Admission to a masters program within the School of Education, CT 740, CT 741, CT 840, CT 841, CT 842, or permission of instructor. LEC.

C&T 844. The Reading Program: Coordination and Supervision. 3 Hours.
An overview of the role of the reading coordinator/supervisor and that individual's responsibility for the components of a balanced reading program. Emphasis will be given to assessment of the reading program, strategies for change, improving the reading program, in-service programs, working with other school personnel, providing services, and public relations. Prerequisite: CT 740, CT 741, CT 840, CT 841, CT 842, and CT 843. LEC.

C&T 845. Reading Specialist Internship. 1-2 Hours.
Supervised and directed experiences to develop the necessary instructional and leadership competencies of a reading specialist. Activities will include district and building level needs assessment, data analysis, professional development of teachers and paraprofessionals, and technical leadership of teachers and administrators around issues of literacy instruction and achievement. Prerequisite: Completion (at the University of Kansas) of course requirements for the Reading Specialist program. The Reading Specialist course requirements may be a part of a graduate degree. FLD.

C&T 850. Seminar in Science and Mathematics Educational Research. 3 Hours.
The primary purpose of this course is to examine literature in science and mathematics education in order to better understand research in these fields from both a historical and contemporary perspective. The process of examining literature in these fields will be used to help understand how to plan, conduct, and evaluate research in science and math education. This course emphasizes both qualitative and quantitative research in science and math education. LEC.

C&T 851. Modern Approaches to Middle/Secondary School Mathematics. 3 Hours.
A study of aspects of curriculum and instruction in middle/secondary school mathematics programs, including research on teaching and
learning mathematics. Prerequisite: Teaching experience in middle-level or high school mathematics or permission of instructor. LEC.

C&T 852. Instruction in Mathematics and Science. 3 Hours.
In this course, students will explore a variety of research-based instructional theories, models, and strategies for teaching and learning of mathematics and science. They will apply and evaluate the usage of one instructional strategy in an action research project in their classrooms. Prerequisite: CT 709. LEC.

C&T 853. Connecting Research to Classroom Practice in Middle/Secondary Science. 3 Hours.
This course will explore current research on issues important to middle and high school science teachers so they can use research to support and improve their classroom practice. Prerequisite: Teaching experience in middle level or high school science or permission of instructor. LEC.

C&T 854. Assessment and Evaluation in Science and Mathematics. 3 Hours.
The primary purpose of this course is to examine assessment and evaluation in science and mathematics, including assessment of students, teachers, schools, and educational programs. The course will examine technical characteristics of various assessment methods including both traditional and alternative methods. In addition, the course will analyze and discuss various controversial issues in assessment such as authentic assessment, and large scale assessment, and large scale assessments, assessment for accountability, and equity issues. LEC.

C&T 855. Curriculum in Science and Mathematics. 3 Hours.
A survey of the concepts and processes that provide the focus of modern science and mathematics curricula will be central to the course. Students develop a standards-based framework for a school science or mathematics program. The course includes an analysis of national and state recommendations for the reform of science and mathematics education in the context of our state and local educational systems, which is applied by evaluating exemplary instructional materials and activities appropriate for classroom use. Prerequisite: CT 709. LEC.

C&T 856. Practicum in Science Education. 1-3 Hours.
Intensive supervised experience working with improvement of science curriculum and/or instruction in an educational setting. Credit in any one semester may range from one to three hours; and total credit may not exceed three hours. Prerequisite: Two graduate courses in science education and prior consent of practicum supervisor. FLD.

C&T 857. Practicum in Mathematics Education. 1-3 Hours.
Intensive supervised experience working with improvement of mathematics curriculum and/or instruction in an educational setting. Credit in any one semester may range from one to three hours; and total credit may not exceed three hours. Prerequisite: Two graduate courses in mathematics education and prior consent of practicum supervisor. FLD.

C&T 858. Connecting Research to Classroom Practice in Mathematics. 3 Hours.
This course will explore current research on issues important to mathematics teachers so they can use research to support and improve their classroom practice. Prerequisite: Teaching experience or permission of instructor. LEC.

C&T 859. Issues in Mathematics or Science Education: ____. 1-3 Hours.
A study of issues in a particular area of mathematics or science education. The course may be repeated for different topics. Prerequisite: Admission to graduate study. LEC.

C&T 860. Topics in Teaching and Learning Social Studies: ____. 3 Hours.
An examination of current topics and issues from social science perspectives. Special emphasis is given to effective integration of one of the social sciences, such as anthropology, geography, political science, science technology and society, and these topics affect issues of curriculum at both elementary and secondary levels. Students will need to confer with the instructor of record to determine which topic will be the current focus of the course. LEC.

C&T 861. Curriculum and Assessment in Social Studies Programs K-12. 3 Hours.
The purpose of the course is to offer preservice and practicing K-12 social studies educators the following: (1) an overview of theoretical bases for social studies education and of the social studies and discipline specific curriculum standards; (2) a review of the major curricular and extracurricular K-12 social studies programs; (3) strategies for the design, implementation, and evaluation of social studies programs; and (4) experience with the design, implementation, and/or evaluation of a social studies program. LEC.

C&T 862. Trends and Issues in Social Studies Instruction. 3 Hours.
A study of trends and issues relating to, and needed changes in the content, organization, emphasis, resources and equipment, methods, devices and evaluation in the social studies. Consideration of related problems such as achieving meaning and understanding, providing for individual differences, providing motivation, the cooperative assignment and socialized recitation. Students will be permitted to concentrate on those problems of particular interest to them. Prerequisite: Nine hours of Education including educational psychology. LEC.

C&T 863. Curriculum Development in Economic Education. 3 Hours.
Extension and application of economic concepts and theories through integration into the scope and sequence of the school curriculum. The process will include the development and field testing of a project that utilizes appropriate concepts, materials, community resources and techniques for integrating economics into the total curriculum. Prerequisite: CT 763. LEC.

C&T 864. International Issues in the K-12 Classroom. 3 Hours.
An examination of current international topics and issues from an economic education perspective. Special emphasis is given to effective integration of global topics and issues into the curriculum at both elementary and secondary levels. Students survey and analyze economic education resource materials and develop international lessons for use in their own classrooms. This course is offered during summer term, locally, and as a study abroad option. This course has been offered two times previously as TL 798-summer 1993 at the Regents Center and in Great Britain. LEC.

C&T 866. Connecting Research to Classroom Practice in Social Studies. 3 Hours.
The purpose of the course is to explore readings on effective practice and current research on issues important to social studies teachers. Knowledge gained from the exploration of readings will be used to develop a plan and implementation procedures for improving classroom practice. Prerequisite: Teaching experience in social studies education or permission of the instructor. LEC.

C&T 896. Seminar in: ____. 1-4 Hours.
LEC.

C&T 897. Independent Study. 1-4 Hours.
Prerequisite: Consent of advisor and instructor. RSH.

C&T 898. Master's Project. 1-4 Hours.
RSH.
C&T 899. Master's Thesis. 1-6 Hours.

C&T 900. Current Trends & Issues in Curriculum & Instruction. 3 Hours.

The course, taught as a capstone seminar, will provide a review of current trends and issues in theories, practices, and events within curricular and instructional efforts in American education. Topics studied may include constructivism, connectivism in the digital age, contemporary theories and theorists such as Vygotsky, online instruction and the Internet’s potential and growth, the new Cult of Efficiency, stigmatization and standardized testing, and charter schools. Student composition of each class will influence the final syllabus, which may include other topics reflective of student interests and goals. The class is designed for those in the final course phase of their doctoral studies. Students in their first or second semester of their programs will not be encouraged to enroll in the class. LEC.

C&T 901. Contemporary Research of Teaching Effectiveness. 3 Hours.

A review of recent research on the conceptualization, measurement, and improvement of teaching effectiveness. Particular attention is given to the history of efforts to improve teaching, to the reasons why such efforts have often been unsuccessful, and to the recent contributions of the “micro-criteria” approach to the problem. LEC.

C&T 903. Curriculum Supervision. 3 Hours.

An intensive study of the theoretical and research bases for curriculum supervision and improvement. Topics include models and practices in supervision and staff development, skills and instruments used in curriculum assessment, coordination of both human and material resources, and the dynamics of change strategies. LEC.

C&T 904. Philosophical Questions in Curriculum and Teaching. 3 Hours.

This course addresses philosophical questions pertaining to curriculum and teaching across a range of educational contexts. These questions center on epistemology, ethics, and the assumptions underlying alternative approaches to research in education. Students completing this course should be able to engage in philosophical inquiry and apply relevant philosophical literature and principles to the examination of curriculum and teaching. LEC.

C&T 905. Teacher Education in the U.S. 2 Hours.

A study of the development, issues, and programs for the preparation of teachers. Open to all regular graduate students. LEC.

C&T 906. Qualitative and Curriculum Inquiry: Analysis and Interpretation. 3 Hours.

Supports novice researchers in extending their understanding of the theoretical frameworks underlying qualitative research, qualitative methodologies, the research process and its relationship with curriculum inquiry. During the course we will discuss various forms of qualitative research methods, approaches to research, and perspectives in methodology relate to curriculum inquiry. We will explore the intertwining of data generation, analysis, and writing. In addition, we will focus on refining data generation techniques, strategies for data analysis, data interpretation, and various forms of reporting/writing. Prior coursework: Introduction to a graduate level qualitative research course or permission from the instructor. Prerequisite: Introduction to a graduate level qualitative research course or permission from the instructor. LEC.

C&T 907. Critical Pedagogies. 3 Hours.

This course examines the theories and practices of several educational orientations that comprise “critical pedagogy.” Students examine the historical roots and evolution of this broad orientation toward education. Recurring themes in the class are relations between knowledge and curriculum, the school and society, and teachers and students. Students completing the course should be able to analyze educational phenomena through a critical theoretical lens. Open to all doctoral students and advanced masters students with instructor permission. LEC.

C&T 910. Research Seminar in English Education. 3 Hours.

This course will focus on both the conduct and findings of research related to English/Language Arts Education. Its purpose will be to foster discussion among students concerning paradigms that have shaped the field of English/Language Arts as well as encourage critique of the ways in which these paradigms are enacted in research. In this course, each student will develop a reading list on a topic of interest related to research in English/Language Arts Education and/or pursue the writing of an individual research proposal. Prerequisite: Admission to master’s or doctoral program in CT, emphasis in English/Language Arts Education. LEC.

C&T 940. Evaluation of Research in Reading. 3 Hours.

LEC.

C&T 944. Diagnosis and Evaluation of Instruction in Higher Education. 2-3 Hours.

The course will focus on (1) a review of the practical and theoretical problems of developing, in institutions of higher education, programs for the diagnosis and/or evaluation of classroom instruction, including use of videotape feedback for diagnosis, and the development of surveys for evaluation for diagnosis of teaching, and (2) the importance of careful administrative and review procedures as the evaluation of teaching becomes more formal and consequential. Three hours of credit will be awarded to those enrolled in the laboratory section of the course. LEC.

C&T 951. Research and Evaluation in Mathematics and Science. 3 Hours.

This course introduces students to the processes of planning, conducting, and evaluating mathematics and science research and evaluation in education. This course emphasizes the methods and techniques used in both quantitative mathematics and science research and evaluation methodologies. Prerequisite: A PRE course in statistics. LEC.

C&T 960. Theory and Research in Social Studies Education. 3 Hours.

The purpose of this graduate level course is to stimulate and communicate systematic research and thinking in Social Studies Education. Its purpose is to foster the creation and exchange of ideas and research findings that will expand knowledge about purposes, conditions, and effects of schooling and education about society and social relations. LEC.

C&T 968. Readings in Economic Education Research. 3 Hours.

A survey of research in elementary, secondary, and higher education economic education. After initial, mutual readings, and discussions, class members will determine a list of broad research questions around which we will focus our readings. Each student is responsible for developing a reading list on one of the topics and reporting on selected readings. Class meetings will focus on summarizing and critiquing published research. Purpose of this course is to prepare doctoral students for comprehensive examinations and dissertation research. LEC.

C&T 970. Fostering Teacher Growth and Inquiry. 3 Hours.

Students will explore theory and research related to professional learning with a focus on the professional learner, professional contexts, and professional learning activities. Students also will learn about and design a pilot study that is set in a relevant professional context. Prerequisite: Admission to the Ed.D. program in the Department of Curriculum Teaching or consent of instructor. LEC.
C&T 994. Advanced Topics: ______. 1-3 Hours.
A special course of study to meet current needs of education professionals -- primarily for post-master's level students. LEC.

C&T 995. Field Experience in: ______. 1-5 Hours.
Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experiences will be prepared independently by the student, a representative of the cooperating agencies, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours. FLD.

C&T 996. College Teaching Experience in: ______. 2 Hours.
To meet the college teaching experience requirement for doctoral programs, a student shall engage in a semester-long, planned, instructional activity that shall include college classroom teaching under supervision. Planning shall be done with the advisor and/or the member of the faculty who will supervise the experience. The activity shall be done under the supervision of a member of the University of Kansas faculty or by an individual or individuals designated by the candidate's committee. FLD.

C&T 997. Individual Study. 1-4 Hours.
Prerequisite: Prior graduate course work in the area of study and consent of instructor. RSH.

C&T 998. Seminar in: ______. 1-4 Hours.
LEC.

C&T 999. Doctoral Dissertation. 1-15 Hours.
THE.

**Deaf Education Courses**

DE 702. Intermediate Signing Exact English. 3 Hours.
Intermediate vocabulary (700 words) for basic school routines and subjects will be taught using curricular materials to practice SEE.2 vocabulary and affix markers. Two college sign classes of any kind. LEC.

DE 717. Pidgin Sign English/American Sign Language. 3 Hours.
An intermediate level, educationally oriented vocabulary (450 words) taught in PSE/ASL. Comparison of literally and conceptually signed sentences. Prerequisite: Any sign course, admittance into Deaf Education Masters Program. LEC.

DE 808. Family Focus With Young Hearing-Impaired Children. 3 Hours.
Focus on the family as the primary teachers of deaf and hard-of-hearing infants and toddlers. The purpose of the class is twofold: to develop an understanding of the effect of deafness and to develop skills to deal with its intervention. Future teachers, early-childhood specialists, and related service providers will participate in discussion, simulations, and applied exercises in acquiring course competencies. Prerequisite: Sign class of any type. LEC.

**Educ Leadership Policy Stds Courses**

ELPS 200. Making Connections Between Schools and Community. 3 Hours.
This course is designed to increase the students' awareness of learning in the classroom and to familiarize them with the role of the school and the community. Institutions and resources that support children and families will be addressed through large and small group sessions and field experiences. Emphasis is given to the diverse nature of schools, communities, and their populations. In addition, the course will acclimate students with the School of Education programs, admissions procedures, and curriculum offerings. Successful completion of this course does not guarantee eventual admission to the School of Education's Teacher Education Program. Prerequisite: Successful completion of CT 100. LEC.

ELPS 250. Education and Society. 3 Hours. AE41/AE51.
This course provides students with an introduction to key ideas and socio-historical forces that have shaped the contemporary educational system in the United States, drawing upon the disciplines of the historical, philosophical, and social foundations of education. The development of school and community relations will be a point of emphasis. LEC.

ELPS 301. Educational Technology in Elementary-Middle Education. 3 Hours.
The focus of this course is on developing integration strategies and acquiring computer skills for using instructional technology and educational software, digital media, and information technologies appropriate to elementary and middle school teaching environments. Students will gain expertise in (a) the selection of appropriate instructional technologies and digital media for use in the classroom; (b) production of technology-based instructional materials; and (c) the evaluation and validation of a variety of electronic information sources. Prerequisite: Admission to the Teacher Education Program. LEC.

ELPS 302. Educational Technology in Middle/Secondary Education. 3 Hours.
The focus of this course is on developing integration strategies and acquiring computer skills for using instructional technology and educational software, digital media, and information technologies appropriate to middle school and high school teaching environments. Students will gain expertise in (a) the selection of appropriate instructional technologies and digital media for use in the classroom; (b) production of technology-based instructional materials; and (c) the evaluation and validation of a variety of electronic information sources. Prerequisite: Admission to the Teacher Education Program. LEC.

ELPS 437. Politics and Governance of Public Schools. 3 Hours.
This course introduces students not pursuing K-12 teaching or administrative positions to the organizational and legal foundations of the American educational system. LEC.

ELPS 450. Foundations of Education. 3 Hours.
A historical approach to the major social and philosophical foundations of American education, with an emphasis on the relation of educational theory to classroom practice. LEC.

ELPS 490. Senior Internship I. 4 Hours.
Supervised field experience in an on-site educational setting that provides the student an opportunity to study and participate in the professional activities of a designated educational setting with emphasis on the planning, implementation, and evaluation of such activities. Regular conferences with faculty to evaluate student progress will be scheduled. Prerequisite: Admission to the non-certificate baccalaureate program. LEC.

ELPS 491. Senior Internship II. 4 Hours.
Supervised field experience in an on-site educational setting with increasing emphasis placed on an integration of formal learning and in site experience. Regular conferences with faculty will be scheduled. Prerequisite: Admission to the non-certificate baccalaureate program. FLD.

ELPS 497. Independent Study in:. 1-2 Hours.
Only one enrollment permitted each semester. A maximum of four hours will apply toward the bachelor's degree. Prerequisite: Recommendation of advisor and consent of instructor. IND.
ELPS 537. The Governance and Organization of Schools. 3 Hours.
The course provides the prospective teacher with an overview of the legal foundations of the American educational system including the ways schools and school districts are organized and run; the role of various levels of government and various governmental and educational officials in controlling education; the rights of students and teachers; the terms, conditions, and responsibilities of teacher employment. Prerequisite: Admission to the Teacher Education Program. LEC.

ELPS 540. Ethics in Education. 3 Hours.
This course examines practices and policies occurring in k-12 and postsecondary educational institutions through the lenses provided by ethics. During the semester, we will read, discuss, and write about ethics in education from both theoretical and practical perspectives. Prerequisite: Junior standing or higher. The course is suitable for advanced undergraduate and master’s degree seeking students. LEC.

ELPS 550. Childhood and Youth in America. 3 Hours.
A study of the changing role and character of childhood and youth as stages of life in the context of American educational and cultural history. LEC.

ELPS 598. Special Course:. 1-5 Hours.
A special course of study to meet current needs of education students, primarily for undergraduates. LEC.

ELPS 627. Growing Up in Urbanizing America. 3 Hours.
A study of the changing role and character of childhood and youth as stages of life in the context of American urban and social history, with particular attention to education and human development. Prerequisite: Junior standing or higher. LEC.

ELPS 652. Residential Staff Skill Enhancement and Administration. 2-3 Hours.
This special course of study in residential staff skill enhancement and administration is an exploration of concepts and skills necessary for becoming an effective paraprofessional staff member in a residential living unit. Each class session will include presentations and experiential learning on topics to develop or improve interpersonal skills and skill in dealing with special concerns. The course is required or recommended for all residence and scholarship hall staff and open to upperclass or graduate students interested in student personnel work. LEC.

ELPS 715. Understanding Research in Education. 3 Hours.
This course introduces the concepts and skills involved in understanding and analyzing research in education and related areas. The course provides an overview of basic, general knowledge of various research methodologies. Students should expect to study much of this material in greater depth through additional course work before being prepared to conduct independent research. However, this course should enhance their ability to locate, read, comprehend, and critically analyze research articles and reports. Topics in the course include qualitative and quantitative methods and designs, historical and descriptive research, and program evaluation. Prerequisite: Admission to graduate standing in the School of Education. LEC.

ELPS 720. Foundations of Educational Technology. 3 Hours.
This course provides a comprehensive overview of the historical and theoretical foundations of educational technology. The goal of this course is to provide students with a survey of the research literature and definitions of terminology central to the field. Special emphasis is on current and emerging learning science research and how it can be applied to the creation of technology supported learning environments. LEC.

ELPS 750. Principalship. 3 Hours.
An introduction to the role, responsibilities, expectations and major duties of elementary, middle, and high school building administrators. Students are presented typical problems faced by school administrators through simulations and role playing and are expected, through reflection and discussion, to develop viable solutions. LEC.

ELPS 751. Educational Finance. 3 Hours.
A description and analysis of national, state, and local strategies for the financial support of education; utilizing social, economic, legal, and political frameworks. Particular attention to the principles of revenue acquisition and distribution at the local and state level for public school operations, with analysis of how these principles apply to Kansas. Designed for the wide variety of educational practitioners regardless of organizational and degree levels. Prerequisite: Admission to graduate study. LEC.

ELPS 752. Education Law. 3 Hours.
A study of legal principles and issues affecting educational policy making and practice with emphasis on student and teacher rights, equity, and the administration of schools. Prerequisite: Admission to graduate study. LEC.

ELPS 753. Introduction to Personnel Administration in Education. 3 Hours.
An overview of the theory and practice of personnel administration. The course focuses on the processes of recruitment, selection, training and development, evaluation, compensation, equal employment opportunity, and labor relations. LEC.

ELPS 754. Analysis of Administrative Problems. 3 Hours.
An introduction to various methods of problem identification; strategies of information gathering; schemes for the analysis of qualitative and quantitative data; models of problem resolution and decision making; and communication methods appropriate for differing audiences. Students will build basic computer, library, decision and communication skills useful in future administrative practice and subsequent coursework. LEC.

ELPS 755. Human Resource Management. 3 Hours.
An overview of the theory and practice of the management, recruitment, selection, compensation, placement, and development of personnel in the school setting. LEC.

ELPS 757. Education in American Society. 3 Hours.
A study of the roles and goals of education in the United States, the interrelationships among schools and students, teachers, administrators, and parents, and the culture of schools. LEC.

ELPS 760. Integration of Educational Technology. 3 Hours.
This course focuses on strategies for integrating educational technology in K-12 schools, universities, government or industry. Topics include applying technology in: a) understanding basic technology operations b) planning and designing learning experiences, c) curriculum development, d) assessment and evaluation e) productivity and professional practices, and considering f) social, ethical, legal, and human issues. Students produce a comprehensive electronic portfolio that describes the theoretical perspectives that guide their technology integrations strategies and evidence that demonstrates their competencies. LEC.

ELPS 766. Social Media Technologies. 3 Hours.
This course provides students with an introduction to the history, theory, and uses of Social Media and Web 2.0 technologies. Social media technologies enable individuals to create, collaborate, and share information. This course will examine the affordances and constraints of social media and provide students with hands-on experience using multiple forms of social media technologies throughout the class. In this course students will be required to develop implementation strategies for the use of social media technologies in the context of organizational development and training. LEC.
ELPS 772. Philosophical Problems in Comparative Education. 3 Hours.
A study of significant philosophical problems encountered when comparing educational systems. Special emphasis on the implications of axiological analysis for educational theory and practice in different areas of the world. Relationships among the social sciences, philosophy, and the international or cross-cultural venture in education. The importance of systematic value-theory in comparative research and international education. LEC.

ELPS 773. School and Society in Comparative Education. 3 Hours.
Analysis of the role of social science in comparative education as perceived by different philosophies or schools of thought, such as Marxism, phenomenology, empiricism, pragmatism, and linguistic analysis. LEC.

ELPS 774. Modern Educational Theorists. 3 Hours.
An in-depth study of prominent European thinkers who have contributed to educational theory and practice (e.g., Rousseau, Pestalozzi, Herbert, Froebel, Montessori, Nietzsche, Freud, Piaget, Ortega Gasset, etc.). Prerequisite: ELPS 770 or ELPS 771 is recommended. LEC.

ELPS 777. Problems in Contemporary Educational Theory. 3 Hours.
Select explorations into such provocative and problematic trends in current educational theory as Marxism, behaviorism, phenomenology, existentialism, analytic philosophy, hedonism, nonverbal education, etc. Prerequisite: ELPS 770 or ELPS 771 is recommended. LEC.

ELPS 780. Introduction to Higher Education Administration. 3 Hours.
This course is designed for beginning master’s degree students and for doctoral students who have had no previous administrative experience in college or university settings. Students will be introduced to the function and responsibilities of major administrative divisions of a college or university and to the major tasks of administration: planning, programming, budgeting, staffing, managing. An emphasis will be placed on current issues facing higher education and students will be introduced to the major journals of the field. As part of the course requirements, students will spend some time familiarizing themselves with one or more administrative offices on a college campus. Prerequisite: Admission to study in higher education at the graduate level. LEC.

ELPS 781. Student Affairs Administration in Higher Education. 3 Hours.
This course is designed to include the study of the history and development of student personnel services in higher education, the role and function of the student affairs administrator, contemporary issues and problems, and an understanding of the organization and role of student affairs administration within higher education settings. Prerequisite: Admission to the higher education program or permission of instructor. LEC.

ELPS 798. Special Course:. 1-5 Hours.
A special course of study to meet current needs of education professionals -- primarily for graduate students. LEC.

ELPS 810. Educational Media Development. 3 Hours.
Media surrounds today’s learning environments. How can you effectively engage learners with multimedia, meaningful interactions, and motivational strategies? This course will take a hands-on practical approach to creating interactive educational multimedia products including, but not limited to, digital images, movies, podcast, Web publishing and educational games. Also, students will learn about the underlying learning theories of educational media development. LEC.

ELPS 811. Constructivist Learning Technologies. 3 Hours.
This course explores the design and use of new educational technologies to support constructivist learning. Throughout the course, students will

(1) get hands-on experiences with emerging educational technologies,
(2) examine how the underlying learning theories are reified into concrete learning environments, and
(3) analyze how the affordances of new technologies (e.g., modeling and visualization) can facilitate the constructivist learning processes. This course is suitable for students who wish to develop greater knowledge about the ways emerging computer technologies can empower constructivist learning. Prerequisite: CT 770. LEC.

ELPS 812. Design of Educational Technology. 3 Hours.
This course introduces instructional design theory and production techniques for developing educational technology resources and systems. Students apply their understandings of design and education theories as they work in teams to develop real-world applications of educational technology for specific clients. LEC.

ELPS 814. Design and Development of Online Instruction. 3 Hours.
This course focuses on the design and development of online instruction for education, medicine, military, business, and industry. The major goal of the course is for students, working individually and/or in teams, to design and develop instruction and acquire the skills needed to facilitate both asynchronous and synchronous online learning. Special emphasis is on instructional systems design and the management of online learning solutions. LEC.

ELPS 816. Human Performance Technology. 3 Hours.
This course will provide an introduction to the field of human performance technology (HPT) and how it is applied to productivity and efficiency problems in the workplace. Performance improvement methods include data gathering, analysis, change management, implementation, measurement and the integration of technology. The goal of this course is to provide students with a survey of the research literature and definitions of terminology central to the field of performance improvement. Special emphasis is on current and emerging technology and how it can be applied to human performance improvement in education and the workplace. LEC.

ELPS 818. Game and Simulation Design. 3 Hours.
This course provides an introduction to the design and development of games, gamification, and simulations for learning and instruction. Emphasis is on the design and development of interactive learning environments for K-16 education and workforce training. Topics include a review of the essential elements of game design, rapid prototyping, the psychology of gaming, game technology, and research related to the use of games, gamification, and simulations in K-16 education and workforce training. LEC.

ELPS 820. Practicum in Educational Technology. 1-3 Hours.
Supervised practice in a media center in selection, classifying, designing, producing, and/or managing instructional materials. Prerequisite: CT 770 and CT 871. FLID.

ELPS 830. Foundations of Multicultural Education. 3 Hours.
This class provides students with an understanding of multicultural education as an instructional concept, educational reform movement, and systemic process meant to ensure educational equity for all people, especially those who have been inadequately served and/or historically discriminated against because of their racial/ethnic or linguistic backgrounds, gender or sexual orientation, socio-economic status, and special needs. Students will examine different theoretical approaches that inform the practice of multicultural education and explore the contribution of various social sciences to the field. LEC.

ELPS 831. Sociology of Education. 3 Hours.
This course will provide an introduction to the sociology of education. This course is designed to fulfill the doctoral core requirement for social,
historical and philosophical foundations of education. Specific topics will include: conflict over the purposes of education; how those purposes are or are not-translated into actual classroom life; how educational systems have developed historically, how status, and more specifically race, class and gender relations, affect student experiences; and contemporary policy and reform movements. LEC.

ELPS 832. History of Educational Thought. 3 Hours.
An examination of the major ideas that have shaped practice in the schools. Emphasis is placed on assisting the student with the development of a coherent and consistent personal philosophy of education upon which administrative practice can be based. LEC.

ELPS 833. Social Context of Urban Education. 3 Hours.
This course examines education in urban communities through the foundational disciplines of history, philosophy, and the social sciences. Particular attention is given to ways in which the changing social and political contexts of American cities affect the educational process. LEC.

ELPS 834. History and Philosophy of Education. 3 Hours.
A comprehensive study of influential persons and movements in the development of educational thought, Eastern and Western, from ancient times to the present. Emphasis on those ideas and historical roots which are relevant to contemporary issues in teaching and school administration. LEC.

ELPS 835. Philosophy of Education. 3 Hours.
An analytic inquiry into basic philosophical positions and issues relevant to education. The difference between ELPS 770 and ELPS 771 is that the latter is topically arranged and does not necessarily follow a historical sequence; it normally proceeds by problems and schools of thought. LEC.

ELPS 837. History of Education and Culture in America. 3 Hours.
A study of the relation between education and culture in America from colonial times to the present. American schools are considered in the wider context of cultural and social change. LEC.

ELPS 838. History of Childhood and Youth in America. 3 Hours.
An exploration of changing attitudes toward children and youth, their subjective experience, their impact on adults, and the conditions that shaped their development. Special attention will be given to the relationship between the changing nature of childhood as a social and cultural category and the development of the education profession. LEC.

ELPS 839. Historical Inquiry in Education. 3 Hours.
This course will provide an introduction to the methodology of historical research in education. This course is designed to fulfill the doctoral core requirement for research methods in education for students interested in doing this type of research. Specific topics will include: the historiography of education; working with primary and secondary documents; oral history as method and documentation, quantitative approaches to history; constructing historical narratives; the question of interpretation. LEC.

ELPS 850. Educational Facilities. 3 Hours.
A study of the principles and processes of developing functional educational facilities. Special emphasis placed on the educational planning that precedes and provides the basis for architectural planning. Among topics considered are plant utilization analysis, enrollment projections, site and equipment needs, fiscal and legal constraints, environmental factors, and the development of educational specifications. Designed for both building and central office level administrators. Prerequisite: Admission to graduate study. LEC.

ELPS 851. Supervision of Student Teaching. 2 Hours.
A study of the organization and functions of student-teaching programs. Emphasis on the development of effective interpersonal relationships among school administrators, cooperating teachers, university supervisors, and student teachers. Designed for both administrative and instructional personnel. Prerequisite: Admission to graduate study. LEC.

ELPS 852. School Resource Management. 3 Hours.
An examination of the sources and uses of fiscal resources in education including underlying concepts from economic theory, the impact of values on fiscal policy, state funding formulas, and school budgeting and accounting practices. LEC.

ELPS 853. Staff Evaluation and Development. 3 Hours.
An examination of current trends in personnel evaluation with a focus on clinical supervision and adult development. Students will participate in simulation exercises to develop skills in classroom observation, conferencing techniques, evaluation of teaching artifacts, and the construction of staff development plans. LEC.

ELPS 854. The Student in Society. 3 Hours.
A study of children and youth with particular emphasis on demographic characteristics of the population served by schools and implications of those characteristics for schools and schooling. LEC.

ELPS 855. Teacher Evaluation. 3 Hours.
Teacher Evaluation is based on clinical, empirical and theoretical information related to effective teacher evaluation behavior from the administrative perspective. It is intended to provide exposure to competencies essential to effective evaluation of teaching performance. Evaluation knowledge, skill and performance are acquired and developed through reading, discussion, active teaching of content related to teacher evaluation and practicing observation, recording and conferencing skills. A variety of approaches is considered, but behaviorally-anchored measurement of teaching behavior is emphasized. Opportunities and needs for improvement are identified with the assistance of video-taped diagnosis of conferencing behavior. Prerequisite: Two of the following: ELPS 750, ELPS 752, ELPS 753, or CT 840. LEC.

ELPS 856. Law and Special Education. 3 Hours.
This course focuses on laws that apply to special education. The American legal system, particularly in respect to special education, the constitutional and statutory provisions of federal and state law and the judicial decisions interpreting those laws are reviewed. The course relates equal protection, procedural due process, and substantive due process doctrines to school practices affecting disabled children and examines the sex principles of P.L. 94-142 and similar principles in state legislation. This course is not the equivalent of or a substitute for ELPS 752. (Same as SPED 851.) Prerequisite: SPED 750 or permission of instructor. LEC.

ELPS 857. Disabled Citizens, Public Policy and Policy Analysis. 3 Hours.
To train students to analyze public policy that affects disabled citizens, various models of analysis are brought to bear on federal policy (education, transportation, housing, institutionalization, protection and advocacy, medical assistance, employment, vocational rehabilitation and others). Not valid for core requirement in history and/or philosophy of education. (Same as SPED 852.) Prerequisite: SPED 851 or SPED 750 or permission of instructor. LEC.

ELPS 858. Professional Ethics, Public Values and Disabled Citizens. 3 Hours.
This course addresses the issues that professionals (educators, physicians, allied health providers, attorneys and others) and families of disabled people face in the context of public values and attitudes and rules of law. The issues include, without limitation, education, treatment and non-treatment. Not valid for core requirement in history and/or philosophy of education. (Same as SPED 853.) Prerequisite: SPED 750, SPED 851, SPED 852 or permission of instructor. LEC.
ELPS 870. Philosophy of Education II. 3 Hours.
An exploration of select areas in philosophy, such as emphasis on value-theory or epistemology or metaphysics, and their implications for educational theory. Normally a limited number of authors will also be selected for monographic treatment. Prerequisite: ELPS 770 or ELPS 771 is recommended. LEC.

ELPS 871. Introduction to Qualitative Research. 3 Hours.
An introduction to the foundations of and techniques associated with qualitative research methods. Students will practice interview and participant observation skills and will analyze and interpret data. Additional topics include crafting qualitative research questions, ethics of fieldwork, and establishing trustworthiness of data. Common traditions of qualitative methods employed in education and other related fields will be introduced. LEC.

ELPS 880. The Community/Junior College. 3 Hours.
A survey of the history and development of the community/junior college. Particular emphasis will be given to the student, the faculty, the curricula, administration, and finance. The course is intended to provide a general understanding of the operation and concerns of today's community/junior college for the current or potential community/junior college staff member. LEC.

ELPS 881. Seminar in Leadership. 3 Hours.
The purpose of this seminar is to explore leadership in education, particularly higher education, from a variety of perspectives. Readings come from a variety of disciplinary perspectives, such as sociology, organizational behavior, and psychology. We consider various aspects of leadership and analyze the leader from a symbolic perspective, as a manager of meaning and critical change agent. We then challenge ourselves to deconstruct our leadership realities with the help of several critical perspectives as we prepare to examine who the leaders are as well as who they will, and need to, be in the educational organizations of tomorrow. LEC.

ELPS 882. Higher Education in the United States. 3 Hours.
The purpose of the course is to acquaint students in higher education, and students from other areas who intend to work in the post-secondary setting, with the history, philosophy, and development of higher education in the United States. The course focuses on three periods: 1) the founding of Harvard to 1965; 2) dissent, disruption, and change, 1965-1979; and 3) the future and crucial issues, the 1980's. European higher education and its early influence on higher education in the United States is also examined. LEC.

ELPS 883. The College Student. 3 Hours.
The characteristics of college students; impact of college on student behavior, changing attitudes, values, beliefs, and the implications of recent research on traditional and new students for instructional and administrative practices. LEC.

ELPS 884. Research on College Students. 3 Hours.
Examination of the American college student from societal, development, research, and institutional perspectives and to review the policy implications of these findings for college and university administrators and faculty. Topics include research and theory concerning the college student experience, the diverse nature of the student body and its implications for institutional policy and practice, and formulation of individual philosophies and priorities applicable to working with college students. LEC.

ELPS 885. Assessment and Program Evaluation in Higher Education. 3 Hours.
Nature, objectives, and basic procedures of assessment and program evaluation as applied to the various aspects of higher education settings. In addition to basic procedures for evaluating programs, topics covered include accreditation, program review, benchmarking, student outcomes assessment, and evaluation of teaching in colleges and universities. Prerequisite: ELPS 715 or equivalent. LEC.

ELPS 886. Theory into Practice in Higher Education. 3 Hours.
This course is required as a final course for all master's students in higher education. It is designed to prepare students for professional life after graduation. Using a case study approach, students will examine the reality of practice in a variety of higher educational settings including relevant political and ethical factors. Prerequisite: Higher education students in last semester of master's coursework. LEC.

ELPS 893. Advanced Building Leadership Internship. 2 Hours.
Supervised and directed experiences to enhance the necessary leadership skills of a building/district leaders. Activities will include building/district level resource assessment, data analysis, professional development of teachers/principals (and district level professionals), and cooperative planning with teachers and administrators around responsibilities of curriculum, instruction, resource management and student achievement. Prerequisite: Completion (at the University of Kansas) of all certification program (MS/EdD) requirements for the Building/District Leadership Licenses. FLD.

ELPS 895. Internship. 1-5 Hours.
The on site development of the skills necessary to effectively function as a school building leader. Activities will be tailored to the needs of individual students in consultation with a university advisor and a field advisor. FLD.

ELPS 896. Seminar in:. 1-4 Hours.
LEC.

ELPS 897. Independent Study. 1-4 Hours.
Prerequisite: Consent of advisor and instructor. IND.

ELPS 898. Master's Project. 1-4 Hours.
RSH.

ELPS 899. Master's Thesis. 1-6 Hours.
THE.

ELPS 948. Research in Education Policy and Leadership. 3 Hours.
This course is an introduction to methods of inquiry in education policy and leadership studies. It is designed to help doctoral students explore possible research interests, formulate research questions, and to review a rich variety of approaches to inquiry in the field of education. Specific topics include: interview- and observation-driven studies, ethnography, feminist and narrative methods, legal and historical methods, questionnaire-driven studies, quantitative evaluation studies, and studies using administrative and large national data sources. LEC.

ELPS 950. Educational Policy Making and Reform. 3 Hours.
An analysis of patterns of influence, organizations, and governmental agencies which impact education at the community, state and national levels. Particular emphasis is placed on analysis of policy development process and the relationship of policy to administration. Recommended to students in educational administration and higher education. LEC.

ELPS 951. Supervision of Instruction. 3 Hours.
A study of the principles and techniques necessary for coordinating, monitoring, and improving the educational programs of elementary and secondary schools. LEC.

ELPS 952. School Finance: Policy and Practice. 3 Hours.
The objective of this course is to understand the financial systems and mechanisms used by states in the funding of elementary and secondary education in the United States. In simple language, we will be concerned with five basic issues: (1) Where the money comes from; (2) How it is redistributed; (3) How it is spent; (4) The relative effectiveness of spending decisions including selected international comparisons; and (5)
How the previous four financial activities participate in a common financial ecology. The course provides an overview of theory and concepts central to the understanding of school finance with an emphasis on policy issues. It also examines the mechanics of school finance funding in light of state policies. LEC.

ELPS 953. District Human Resource Management. 3 Hours.
An in-depth study of theory and research in personnel administration. The focus will be on current literature dealing with empirical assessments of personnel theory and techniques. Specific concepts to be considered include the following: educator characteristics, job analysis and design, personnel recruitment, selection and evaluation techniques, staffing and development, and labor relations. Prerequisite: ELPS 753 or its equivalent. LEC.

ELPS 954. Sociology of Educational Organizations. 3 Hours.
This class is an overview of basic and advanced sociological and political theories of organization, with specific application to issues and problems in K-12 education. It is designed for graduate students and practicing educational leaders and administrators who intend to utilize research on organizations in their studies of the governance of schools, the sociology and politics of education, and education policy. The topics covered include the origins and nature of modern bureaucracy, formal structure and function, organizational control, transaction cost economics, population ecology, resource dependence, the new institutionalism, organizational effectiveness and legitimacy, organizational culture, power and politics, and change. LEC.

ELPS 955. District Business Management. 3 Hours.
This course emphasizes skills for effective and efficient business and financial management of school districts in a Kansas or Missouri context. Basic topics include: Short range and long range financial planning, analysis of financial statements, budget preparation, fund accounting and financial reporting, contracting of services including transportation and food services, staff salaries and benefits and insurance. The course also includes a number of strategic methods for institutional planning including: Cost Benefit Analysis, Cost Effectiveness Analysis, and enrollment, revenue and expenditure forecasting techniques. Prerequisite: ELPS 952. LEC.

ELPS 956. District Leadership. 3 Hours.
The focus of the course is the role of the public school district superintendent. Organized study will include assigned readings, lectures, guest speakers, discussion, and the completion of a study project. The course will include consideration of such topics as boardmanship, community relations, district leadership, professional accountability, district maintenance and operations, professional employment and relationships with other agencies. The course is designed to serve the needs of those graduate students pursuing advanced study with the intention of completing requirements for district certification. Some students will also find the field appealing as an area for dissertation research. Prerequisite: Doctoral status in education administration or permission of instructor. LEC.

ELPS 957. Educational Policy, Ethics and Law. 3 Hours.
Course focuses on use of legal and moral reasoning in analysis of educational policy issues. Specific topics will vary depending on interests of instructor and students and current controversy. Examples of possible topics to be included: school desegregation, teacher collective bargaining, separation of church and school, equal educational opportunity. Prerequisite: ELPS 752, equivalent, or consent of instructor. LEC.

ELPS 958. American Educational Reform Movements: Past and Present. 3 Hours.
An examination of the origin, nature, and consequences of educational reform in the United States. The primary goal is to attain a balanced evaluation of current educational reform. LEC.

ELPS 959. Organization and Administration of Services for Exceptional Children. 3 Hours.
To aid administrators and prospective administrators responsible for organizing and administering programs of education for exceptional children, state and federal guidelines and regulations, legal aspects and financing of special education, planning a program, administering special services. (Same as SPED 971.) Prerequisite: Nine hours of Education including educational psychology and SPED 725. LEC.

ELPS 960. Specialist Project. 1-4 Hours.
RSH.

ELPS 969. Dissertation Seminar. 3 Hours.
This seminar is designed to facilitate proposal development for doctoral-level research in educational leadership and policy studies. The objective is to help students select and refine a topic, critically analyze existing research, set forth a theoretical framework, and design a research methodology suitable for your topic. LEC.

ELPS 970. Theory and Research in Administration. 3 Hours.
A survey of the theoretical and empirical literature in educational administration and the methods used to investigate these content areas. Major emphasis is devoted to developing research skills applicable in practice and to the identification of possible generic topics suitable for future dissertation work. LEC.

ELPS 971. Comparative Education. 2 Hours.
A factual, descriptive, and analytical study of national systems of formal education, or schooling, as exemplified in contemporary educational establishments. Organizational and administrative policies and teaching practices, with emphasis on Germany, France, England, U.S.S.R., People's Republic of China and Japan. Other nations may be examined on an individual project basis. The difference between ELPS 971 and ELPS 772 is the philosophical emphasis of the latter. LEC.

ELPS 972. Educational Problems in Latin America. 3 Hours.
Designed to meet the needs of students majoring in Latin American studies or interested in the area. Development of an awareness of the concept of cross-cultural confluence with Latin America as it relates to education. Survey of the main problems confronted by Latin American educational systems and examination of the difficulties experienced by North American educators when confronted with such problems. LEC.

ELPS 975. Education, Technology and Social Change. 3 Hours.
This interdisciplinary course provides an opportunity to read, reflect upon, and discuss ideas drawn from the emerging field of Science and Technology Studies (STS) in connection with education. Its focus is the interrelationships between technology, society, and education (defined broadly to include non-school and adult learning settings). It explores how knowledge, expertise, and authority are constructed within and across social and cultural groups, with particular attention social and economic inequality. It also considers the relationship between emerging technologies, educational experiences and the nature of "the self" in society, among other issues. Prerequisite: Admission to ELPS doctoral program, or permission of instructor. LEC.

ELPS 980. Postsecondary Finance. 3 Hours.
This course is designed for advanced doctoral students in higher education, particularly those who will be preparing unit budgets or budget presentations and those who make and implement fiscal policy (e.g., financial aid offers). The course material covers different types of college
and university budgeting -- incremental, zero-based and formula -- and their impact on university revenues; statewide coordination and its impact on programs, program duplication and funding; retrenchment and quality issues; the legislative role in budget preparation; unified and comparative management systems (e.g., WICHE and NCHEMS); and the impact of federal contracting and student aid policies. LEC.

ELPS 981. Higher Education Law. 3 Hours.
An overview of the developing law of higher education, with emphasis on and analysis of employer-employee relationships, student-faculty/administration relationships, and the impact of federal and state regulation on these relationships. LEC.

ELPS 982. Faculty in Higher Education. 3 Hours.
This course considers the role and circumstances of faculty in higher education including variations among different types of institutions. Topics include the history and demographics of the professoriate, the academic work environment and labor market, the role of faculty in institutional governance and policy making, and the social and political context of academia. LEC.

ELPS 983. Curriculum Innovation in Higher Education. 3 Hours.
A study of contemporary post-secondary curriculum with particular emphasis on the nature of curriculum, the organization and structure of academic programs, the nature of change in academic communities and exemplary innovative institutions. LEC.

ELPS 984. Teacher Education in the United States. 2 Hours.
A study of the development, issues, and programs for the preparation of teachers. Open to all regular graduate students. LEC.

ELPS 985. Evaluations of Programs in Higher Education. 2 Hours.
Nature, objectives, and basic procedures of evaluation as applied to the various aspects of higher education. Open to all regular graduate students. LEC.

ELPS 986. The Governance and Administration of Higher Education. 3 Hours.
A theory-based course aimed at providing an understanding of the governance and administration of academic institutions -- particularly universities. Emphasis is directed toward an analysis of decision-making in these complex organizations. LEC.

ELPS 993. Advanced District Leadership Internship. 2 Hours.
Supervised and directed experiences to enhance the necessary leadership skills of a building/district leaders. Activities will include building/district level resource assessment, data analysis, professional development of teachers/principals (and district level professionals), and cooperative planning with teachers and administrators around responsibilities of curriculum, instruction, resource management and student achievement. Prerequisite: Completion (at the University of Kansas) of all certification program (MS/EdD) requirements for the Building/District Leadership Licenses. LEC.

ELPS 994. Advanced Topics: ___. 1-3 Hours.
A special course of study to meet current needs of education professionals -- primarily for post-master's level students. LEC.

ELPS 995. Field Experience in: ___. 1-5 Hours.
Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experience will be prepared independently by the student, a representative of the cooperating agencies, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours. FLD.

ELPS 996. College Teaching Experience in: ___. 2 Hours.
To meet the college teaching experience requirement for doctoral programs, a student shall engage in a semester-long, planned, instructional activity that shall include college classroom teaching under supervision. Planning shall be done with the advisor and/or the member of the faculty who will supervise the experience. The activity shall be done under the supervision of a member of the University of Kansas faculty or by an individual or individuals designated by the candidate's committee. FLD.

ELPS 997. Individual Study. 1-4 Hours.
Prerequisite: Prior graduate course work in the area of study and consent of instructor. RSH.

ELPS 998. Seminar in: ___. 1-4 Hours.
LEC.

ELPS 999. Doctoral Dissertation. 1-15 Hours.
THE.

Education Courses

EDUC 800. Education as a Field of Scholarship. 3 Hours.
An intensive interdisciplinary examination of classic and current scholarship in education, for students in Ph.D. programs in the School of Education. It surveys the interdisciplinary range of scholarship and inquiry in education, as preparation for careers in research. The course features discussion of exemplary studies, both for their contributions to various fields, but also with regard to research methods, related ethical issues and the responsible conduct of research. Prerequisite: Admission to Ph.D. in Education Program. LEC.

Health Sport Exercise Sci Courses

HSES 104. Physical Activity in: ___. 0.5-1 Hours.
(An accurate description of the activity or activities will be given in the Timetable.) Graded on a satisfactory/unsatisfactory basis. ACT.

HSES 108. Basic Skill Instruction in: ___. 0.5-2 Hours.
(An accurate description of the activity or activities will be given in the Timetable.) ACT.

HSES 110. Intermediate Skill Instruction in: ___. 0.5-2 Hours.
(An accurate description of the activity or activities will be given in the Timetable.) ACT.

HSES 112. Advanced Skill Instruction in: ___. 0.5-2 Hours.
(An accurate description of the activity or activities will be given in the Timetable.) ACT.

HSES 200. Coaching Certification for Youth Sports. 2 Hours.
This course will examine theories, practices, methods and techniques used to coach youth sports. Emphasis will be upon training, conditioning, sports psychology, nutrition, organization and management as prescribed by the National Federation of Interscholastic Coaches' Education Program. Students will have opportunity to receive coaching certification. Prerequisite: Open to physical education majors, or by consent of instructor. Students must pass the National Federation of Interscholastic Coaches' Education Program (NFICEP) examination before exiting the course. LEC.

HSES 201. Team Sports. 2 Hours.
This course will deal with Soccer, Touch Football, Basketball, Softball, and Volleyball. Practice in construction of lesson plans and unit plans, skill performance and peer teaching practicum are emphasized in each of the areas of team sports. Class meets three days per week with one hour being a laboratory session. Prerequisite: Basic fitness and knowledge
of the activities. Open to HSES majors and minors, or by consent of instructor. LEC.

**HSES 202. Individual and Dual Sports. 2 Hours.**
Instruction and analysis in individual sports such as track and field, bowling or archery, and dual sports such as tennis, badminton or handball. Development of sport skills and rule knowledge are emphasized. Prerequisite: Basic fitness and knowledge of the activities. Prerequisite: Open to pre-HSES and HSES majors, or by consent of instructor. LEC.

**HSES 204. Gymnastics. 2 Hours.**
Instruction and analysis in the eleven gymnastics events for men and women. Skill performance, spotting and teaching techniques, lesson and unit plan construction, and teaching practicum constitute the basic focus of this course. Class meets three days per week with one hour being a laboratory session. Prerequisite: Basic fitness and gymnastics/tumbling experience. Open to HSES majors and minors, or by consent of instructor. LEC.

**HSES 210. Instruction and Analysis in: ____. 1-16 Hours.**
Study of the skills to be included in the instruction of the indicated activities and the analysis of skill performance involved. Presentation of instructional techniques and practice in construction of lesson and unit plans are included for each activity. Open to majors in physical education only. The activities included in the major program are as follows: (a) Swimming (b) Folk and Square Dance (c) Modern Dance and Women's Gymnastics (d) Weight-Training and Men's Gymnastics (e) Soccer-Speedball, Volleyball, Wrestling (f) Field Hockey, Soccer-Speedball, Volleyball (g) Golf, Tennis, Badminton, Archery (h) Basketball, Softball, Flag Football, Team Handball (i) Track and Field, Handball-Paddleball, Fencing. Prerequisite: Basic fitness and basic skill in the course activities shown through competency tests and/or credit in basic skill courses in the appropriate activity. LAB.

**HSES 214. Physical Education Activities for Elementary School Children. 3 Hours.**
This course will introduce the student to a variety of physical education activities that are appropriate for children in grades K-6. Age appropriate activities demonstrated in this course include: individual and group games, self testing games, stunts and tumbling experiences, physical fitness, modified sports, and movement exploration. Class participation will be expected for all students. Prerequisite: Open to pre-HPE and HPE majors. LEC.

**HSES 218. Lifeguard Training. 2 Hours.**
The course involves American Red Cross certification in lifeguarding which includes rescue techniques and safety procedures. It also includes first aid and CPR certifications. Each student will be asked to identify common hazards associated with various types of aquatic facilities and develop skills necessary to recognize a person in a distress or drowning situation and to effectively rescue that person. This course will help each student to understand the lifeguard/employer and lifeguard/patron relationship as well as provide explanations, demonstrations, practice and review of the rescue skills essential for lifeguards. Prerequisite: HSES 112 Advanced Skill Instruction in Swimming or consent of instructor. LEC.

**HSES 220. Officiating of: ____. 1 Hour.**
A study of the rules and techniques of officiating. Students will officiate during laboratory sessions. The activities offered in officiating are: basketball, football, gymnastics, softball, swimming, track and field, and volleyball. Prerequisite: Basic competency in the sport to be officiated, or consent of instructor. LEC.

**HSES 222. Water Safety Instruction. 2 Hours.**
This course is designed to train instructor candidates to teach American Red Cross Swimming and Water Safety courses. Through practice teaching sessions, students will plan and organize skill development utilizing the various educational methods and approaches applicable to swimming and water safety instruction. Students will also learn the correct swimming styles taught by the Red Cross. Prerequisite: HSES 112 Advanced Skill Instruction in Swimming or consent of instructor. LEC.

**HSES 224. Lifeguard Training Instructor. 2 Hours.**
This course is designed as a lecture/laboratory course, meeting for one hour three days per week. Each instructor candidate (student) will have an opportunity for skill development necessary to instruct American Red Cross Lifeguard Training courses. Through practice teaching sessions, emphasis will be placed on enforcing safety precautions, identifying errors, providing effective instruction, and skills correction. After successful completion of this course, the student will be certified to instruct the following American Red Cross Aquatic courses: (1) lifeguard training, (2) waterfront lifeguarding, (3) CPR for professional rescue, and (4) community first aid. Prerequisite: HSES 218 or lifeguard training. LEC.

**HSES 236. Practicum in: ____. 1-3 Hours.**
A description of the activities offered will be provided in the Timetable. Prerequisite: Consent of instructor. FLD.

**HSES 240. The Coaching of Football. 2 Hours.**
A complete study of the theoretical aspects of the fundamentals of football. Study of defensive and offensive tactics for each position. Prerequisite: Sophomore standing. LEC.

**HSES 244. Introduction to Physical Education and Sport Studies. 3 Hours. GE3H.**
The study of the history, foundational concepts, and current principles of physical education and sport programs. LEC.

**HSES 248. First Aid. 2 Hours.**
This course is designed to teach emergency treatment of injuries, wounds, hemorrhage, burns, and poisoning. Emphasis is placed on the techniques of rescue breathing, CPR, and emergency bandaging. American Red Cross certification is included. LEC.

**HSES 250. Introduction to Athletic Training. 3 Hours.**
The introductory study of the prevention, immediate care, and treatment of athletic related injuries and illnesses. This course is designed for Athletic Training majors to cover the basic competencies of injury/illness recognition as well as discuss the various strategies for the prevention, evaluation, and care of injuries to the physically active. Prerequisite: Instructor consent and concurrent enrollment in HSES 251. LEC.

**HSES 251. Introduction to Athletic Training Practicum. 1 Hour.**
This course is designed to introduce the practical skills and psychomotor clinical competencies of the beginning student-athletic trainer. Emphasis will be placed on basic Athletic Training procedures including but not limited to preventative taping, bracing, and padding techniques as well as various other procedures and techniques related to the prevention, care, and management of athletic related injuries/illnesses. Prerequisite: Completed or enrolled in Human Anatomy, First Aid/CPR (or proof of current certification). Concurrent enrollment in HSES 250 or transfer credit. Open to Athletic Training majors only. LEC.

**HSES 252. The Coaching of Basketball. 2 Hours.**
Theory of basketball, including methods of teaching fundamentals; individual and team offense and defense; various styles of play and methods of coaching. Prerequisite: Sophomore standing. LEC.
HSES 260. Personal and Community Health. 3 Hours.
Emphasis on healthful and intelligent living and the application of the fundamental principles of health. LEC.

HSES 262. Life Skills Training for Intercollegiate Athletics. 2 Hours.
This course will focus on issues surrounding drug use, testing, and prevention in sports and will incorporate life skills training in the areas of career transition, stress and time management, performance enhancement, strategic learning skills, and the dynamics of communication and leadership. LEC.

HSES 264. The Coaching of Individual Sports. 2 Hours.
An analysis of coaching techniques and study of materials for the coaching of gymnastics, swimming, golf, tennis, and wrestling. LEC.

HSES 269. Introduction to Exercise Science. 3 Hours.
A study of the various components of physical fitness and the wellness and the implications for developing programs to promote good health and fitness. Lectures and laboratory sessions will be centered on practical knowledge and experiences designed to help individuals enhance their own health, as well as develop sound programs for others. The topics discussed include cardiovascular fitness, body composition, muscular strength, flexibility, evaluation of fitness components, training program design, nutrition, weight management, and facts and fallacies of nutrition and fitness. LEC.

HSES 289. Introduction to Sport Management. 3 Hours.
This course provides an overview of the field of sport management including the principles of leadership and management and the fundamentals of personnel management, financial management, marketing, strategic planning, sport ethics, sport law, time management, stress management, facility management, and event management applied to sport settings. LEC.

HSES 290. Safety Education. 3 Hours.
A survey of safety problems as they exist in society today, with emphasis on preventive, corrective, and compensatory procedures. LEC.

Emphasis will be on instructional techniques that are used for the inclusion of all students in health and physical education learning experiences. Students will develop an understanding of how to deliver health and physical education activities that may be part of an individual education program. As a part of this course, a practicum experience of 30 hours in a public school adaptive physical education setting will be required. LEC.

HSES 305. Methods of Strength Training and Conditioning. 3 Hours.
This course will provide the students with the scientific principles and the hands-on experience to develop resistance exercise and related conditioning programs for a wide range of populations, including those focusing on general fitness, therapeutic rehabilitation and sport performance. Prerequisite: Anatomy, Physiology, admission to the Exercise Science or Athletic Training undergraduate programs, or permission of instructor. LEC.

HSES 308. Drugs and Diseases in Society. 3 Hours.
This course is an overview of human disease processes as well as legal and illegal use of drugs and narcotics for treatment or recreational purposes. Both communicable and degenerative diseases will be covered with regards to prevention, transmission, effects, management, and treatment. Legal drugs and illegal drugs will be discussed with regards to their treatment or abuse potential, legislative issues, and consumer education. Reflective thinking will be used to formulate improved perspectives on the roles of drugs and diseases in society. Prerequisite: Admission to Community Health Program or consent of instructor. LEC.

HSES 310. Research and Data Analysis in Health, Sport, and Exercise Sciences. 3 Hours.
This course provides formal instruction in the areas of test administration, general statistics, and basic research design. Emphasis will be placed upon the interpretation of statistical data, evaluation of data, and basic methodologies utilized in health, sport, and exercise sciences research. Data collection, analysis, and evaluation will be an integral part of the class. Prerequisite: Admission to the School of Education. LEC.

HSES 315. Health and Fitness Technology. 2 Hours.
The course will prepare health and physical education majors to use technology effectively to enhance teaching and learning. Students will explore the use of technology appropriate for communication, organization, instruction, and assessment in health and physical education classrooms. Prerequisite: Admission to the HPE Teacher Licensure Program. LEC.

HSES 320. Methods of Teaching Physical Education. 3 Hours.
This course provides a systematic approach to the development of effective teaching skills in physical education. Students receive practical and field experiences that enable them to observe and practice managerial, instructional, and interpersonal skills necessary to produce student learning in K-12 physical education classrooms. Prerequisite: Admission to the HSES Teacher Certification Program. LEC.

HSES 330. Principles of Nutrition and Health. 3 Hours.
This course will provide an introduction to the basic principles of nutrition, with an emphasis on application of these principles to improve overall health. Topics include: guidelines for a balanced diet, index of nutritional quality, energy requirements and balance, weight management and obesity, nutritional quackery, sports nutrition, nutrition for children and elderly, and eating disorders. LEC.

HSES 340. Instructional Strategies in Motor Development. 2 Hours.
This course is designed to provide students with an examination of current theories of motor development throughout the life cycle. Emphasis is place don content regarding the development of fundamental motor skills, physical growth and development, and assessment. Prerequisite: Admission to the HSES Teacher Certification Program. LEC.

HSES 341. Instructional Strategies in Physical Education for Elementary Classroom Teachers. 1 Hour.
The application of child growth and development principles to physical education. The use of materials as related to a sequential physical education curriculum in the elementary school will also be included. Prerequisite: Prior or concurrent enrollment in CT 322 or equivalent. LEC.

HSES 350. Care and Prevention of Athletic Injuries. 3 Hours.
The introductory study of the prevention, immediate care, and treatment of athletic related injuries and illnesses. This course is designed to cover the basic fundamentals of injury/illness recognition as well as discuss the various strategies for the prevention and care of injuries to the physically active. Prerequisite: Courses in Human Anatomy and First Aid. LEC.

HSES 351. Foundations of Athletic Training. 1 Hour.
This course is designed to introduce the practical skills and psychomotor clinical competencies of the beginning student-athletic trainer. Emphasis will be placed on basic athletic training procedures including but not limited to preventative taping, bracing, and padding techniques as well as various other procedures and techniques related to the prevention, care, and management of athletic related injuries/illnesses. Prerequisite: Human Anatomy, First Aid, concurrent enrollment in HSES 350. Open to Athletic Training majors only. LEC.
HSES 352. Therapeutic Modalities. 3 Hours.
This course presents the theoretical and physiological foundations of pain and inflammation. Discussion of therapeutic agents to treat pain and inflammation are presented along with progressive planning and implementation of a comprehensive treatment for injuries/illnesses sustained by physically active individuals. Prerequisite: Admission into the Athletic Training Education program and HSES 250 or the transfer equivalent. LEC.

HSES 353. Athletic Training Practicum I. 2 Hours.
This course provides a practical experience for the student-athlete trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury/illness evaluation during their clinical and field experience. Specific skills addressed in HSES 352 will be practiced, applied, and mastered during this experience. Prerequisite: Admission to Athletic Training Education program and concurrent enrollment in HSES 352. FLD.

HSES 354. Lower Extremity Evaluation. 3 Hours.
This course provides a comprehensive study of the techniques used by the Athletic Trainer in regard to the assessment and evaluation of athletic injuries/illnesses of the lower extremity. Procedures for reporting and evaluating injuries/illnesses will be discussed so that appropriate injury management and referral may take place. The etiological factors common to athletic injuries, as well as specific signs and symptoms of various athletic related pathological conditions will be discussed. Prerequisite: Admission to the Athletic Training Program, HSES 352, and HSES 353. LEC.

HSES 355. Athletic Training Practicum II. 2 Hours.
This course provides a practical experience for the student-athlete trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury/illness evaluation during their clinical and field experience. Specific skills addressed in HSES 354 will be practiced, applied, and mastered during this experience. Prerequisite: Admission to Athletic Training Education program and concurrent enrollment in HSES 354. FLD.

HSES 358. Creative Movement and Dance Appreciation. 3 Hours.
An appreciation for dance will be developed through the study of the pioneers of dance and the critique of local dance performances. Students will experience the following types of dance: creative movement, basic rhythms, ballroom dance, and folk and square dance. Prerequisite: Admission to the School of Education. LEC.

HSES 365. Peer Health Education. 3 Hours.
The course is designed for peer education in college settings, and as trainers, training adolescents in community health settings for grades 6-12 peer health education. Subject content and teaching methodologies will be emphasized in the ten content areas of health with special emphasis on alcohol, drugs, tobacco, stress reduction, mental health and human sexuality. Prerequisite: HSES 260 or instructor consent. LEC.

HSES 369. Kinesiology. 3 Hours.
This course is designed primarily for students in the field of exercise science who already have taken an introductory course in human anatomy and who need a more detailed exposure to concepts of functional movement anatomy. This course will provide a detailed study of the skeletal and muscular systems to include identification of the origin, insertion, and action of the major muscles of the human body. Students will become proficient in the use of directional and movement terminology used to describe movement and be able to identify the plane/axis as well as the agonist and antagonist muscles involved in a movement. Prerequisite: A course in human anatomy, admission to School of Education. LEC.

HSES 375. Neuromuscular Exercise Physiology and Motor Control. 3 Hours.
This course explores the control of human movement from an exercise neurophysiology perspective. Emphasis will be placed on the understanding the interactions between the nervous system and muscular systems in the control of muscle force/power production and the control of movement under a variety of contexts. These contexts include responses and adaptations to exercise training, the aging process, and in a variety of neuromuscular disorders. Prerequisite: BIOL 240 and BIOL 246. LEC.

HSES 378. The Coaching of Volleyball. 2 Hours.
Theory of volleyball, including methods of teaching fundamentals, individual and team offense and defense. Various styles of play and methods of coaching. Efficient performance of the skills during game conditions will be emphasized. LEC.

HSES 379. The Coaching of Softball. 2 Hours.
Theory and fundamentals of coaching softball. Methods of coaching, as well as team offense, defense, and strategies will be stressed. Efficient performance of the skills during game conditions will be emphasized. Prerequisite: Consent of instructor. LEC.

HSES 380. Sociology of Sport. 3 Hours. GE3S.
A survey of the current literature concerning the scope of sociology in sport, the interaction of people in sport, the social systems controlling sport, and the small group dynamics in sport. Prerequisite: Admission to Sport Management program or permission of instructor. LEC.

HSES 382. Sport Facilities and Event Management. 3 Hours.
This course will provide students with a solid grasp of the fundamental skills in sport facility and event management and the knowledge base to apply those skills in a real world environment. Students will learn about planning, designing and financing the construction of new sport facilities, sport facility management of regular and special events, sporting event planning and game day operations. Prerequisite: Admission in the Sport Management program or permission of instructor. LEC.

HSES 384. Sport Law. 3 Hours.
This course is intended to introduce undergraduate students to the major legal issues in amateur and professional sports including dispute resolution, tort law, contract law, constitutional law, statutory law, labor and antitrust law and intellectual law. Students will also learn about risk management, gender equity, the Americans with Disabilities Act and agency law and sports agents. Prerequisite: Admission to Sport Management program or permission of instructor. LEC.

HSES 385. Psychological Aspects of Exercise. 3 Hours.
This course is designed for students interested in optimizing motivation and adherence to exercise among individuals in a wide range of physical activity settings (e.g., health clubs, corporate fitness, and physical therapy/rehab). The course content will include a review of the literature highlighting the psychological benefits of exercise, the theoretical
HSES 390. The Coaching of Track and Field. 2 Hours.
Designed to acquaint the student with the fundamentals of track and field athletics. LEC.

HSES 395. Concepts in Health and Wellness. 3 Hours.
This is designed as an introductory course into the profession of School and Community Health Education. Regardless of a person's areas of specialization in Health Education, there are commonalities shared by all of us who are charged with the responsibility of providing education about health. Course emphasis will focus on: defining health education; history of health education; roles and competencies of health educators; theoretical bases for the profession; planning, implementing, administering, and evaluating health programs; settings for health education; future issues. Prerequisite: HSES 260. LEC.

HSES 403. Health Behavior Theory. 3 Hours.
This class will be an introduction to the primary models and theories used in health behavior research and health promotion practice. These models and theories undergird the development of successful health-related programs and interventions, and will help guide educators in the development of innovative and effective programming. The course will cover individual, interpersonal, community-level, and ecological theories, and students will have the opportunity to apply these theories to health behaviors of interest. LEC.

HSES 410. Program Design in Physical Education. 3 Hours.
The study of physical education curriculum models and extraclass programs appropriate for students in grades PK-12. Students will receive practical and field experiences related to program design and implementation. They will learn techniques appropriate for program evaluation as well as the assessment of student sport skills and fitness. Prerequisite: Admission to the HSES Teacher Certification Program. LEC.

HSES 418. Health Aspects of Aging. 3 Hours.
This course will consist of a Holistic Health approach to the various components of the aging process. Special emphasis will be placed on the demographic aspects of aging; normal aging changes and deviations in the aging process (pathophysiology); the relationship between mental and physical health, and the implications for the promotion of risk reduction and prevention principles that can effectively improve the quality of life for older individuals. Prerequisite: A course in personal and community health. LEC.

HSES 434. Consumer Health. 3 Hours.
This course will be a comprehensive examination of the factors involved in the selection of health products and services. Topics of discussion will be: protection laws and services, fraudulent practices and products, consumerism, and traditional and alternative health care. There will also be an in-depth examination of how to assess and evaluate health based products that are available to consumers. Prerequisite: Admission to the Community Health Program or consent of instructor. LEC.

HSES 440. Applied Sport and Performance Psychology. 3 Hours.
This course will examine the psychological principles and techniques that are applied to improve sport performance and other fields of achievement (e.g., exercise and wellness, music, and academics). Special attention will be given to psychological aspects of injury and rehabilitation, psychological conditioning, psychological training methods, coaching philosophy, the social psychology of team members, and components of peak performances. LEC.

HSES 455. Manual Therapy Techniques and Emergency Care Instructor Training. 3 Hours.
The purpose of the course is to train students in a Manual Therapy Technique for use in the clinical setting. The course is also designed to certify students as instructors in American Red Cross First Aid, CPR and AED courses as well as instructors for the CPR/AED for the Healthcare Provider. Prerequisite: Completion of HSES 352, HSES 354, HSES 456 and HSES 459 or equivalency from an accredited Athletic Training Education Program or have current First Aid and CPR/AED for the Healthcare Provider certification. LEC.

HSES 456. General Medical/Pharmacology. 2 Hours.
The comprehensive study of the techniques used by the Athletic Trainer in regard to the assessment and evaluation of athletic injuries/illnesses of the upper extremity, head, and spine. Procedures for evaluating and reporting injuries/illnesses will be discussed as well as etiological factors and common signs/symptoms of various related pathological conditions. The purpose of this course is to prepare students with the skills necessary to accurately recognize the signs/symptoms of injuries and conditions in order to determine the nature and severity of the problems as well as establishing a proper care plan and medical referral when appropriate. Prerequisite: Admission into the Athletic Training Education program, HSES 354, and HSES 355. LEC.

HSES 457. Athletic Training Practicum III. 2 Hours.
This course provides a practical experience for the student-athlete trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury assessment and evaluation through a variety of techniques during their clinical and field experience. Specific skills addressed in HSES 456 will be practiced, applied, and mastered during this experience. Prerequisite: Admission into the Athletic Training Education program and concurrent enrollment in HSES 456. FLD.

HSES 458. Communicable and Degenerative Diseases. 3 Hours.
This course is designed to introduce the student to the study of the basic concepts/principles of disease process. Special emphasis will be placed on the etiology, origin, symptoms, treatment, body defenses, primary prevention, host, agent, (microbes) and environmental factors affecting disease occurrence, prevention and control measures. Topical application of the fundamental concepts of microbiology in school/community health practice will be critically discussed. The natural history of disease and disease classification will be highlighted. Many disease topics (both communicable and chronic, degenerative diseases) will be discussed. Prerequisite: A course in personal and community health. LEC.

HSES 459. Rehabilitation. 3 Hours.
This course discusses the planning involved and the implementation of a comprehensive rehabilitation program for injuries/illnesses sustained by the competitive athlete. Prerequisite: Admission into the Athletic Training program, HSES 456, and HSES 457. LEC.

HSES 460. Athletic Training Practicum IV. 2 Hours.
This course provides a practical experience for the athletic training student. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills obtained during previous coursework as well as apply rehabilitation skills obtained in HSES 459.
Prerequisite: Admission into the Athletic Training Education program, HSES 457, and concurrent enrollment in HSES 459. FLD.

HSES 461. Organization and Administration of Athletic Training. 2 Hours.
This course discusses the planning, coordinating, and supervising of all administrative components of an athletic training program. This includes public relations, athletic health counseling, and coach advisement about athletes’ health matters. Prerequisite: Admission to the Athletic Training Education program, HSES 459 and HSES 460, and concurrent enrollment in HSES 562. LEC.

HSES 462. Athletic Training Practicum V. 2 Hours.
This course will provide a practical hands-on experience for the athletic training students enrolled in HSES 561. Prerequisite: Admission into the Athletic Training Education Program and concurrent enrollment in HSES 561. FLD.

HSES 463. Senior Capstone in Athletic Training. 2 Hours.
This course is designed to allow senior Athletic Training Students to review previous content and prepare for the BOC certification exam as well as explore areas of professional development. Prerequisite: Admission into the Athletic Training program, HSES 561, and HSES 562. LEC.

HSES 464. Athletic Training Practicum VI. 2 Hours.
This course will provide a culminating practical experience for the athletic training students enrolled in HSES 563. Prerequisite: Admission into the Athletic Training Education program and concurrent enrollment in HSES 536. FLD.

HSES 465. Program Assessment and Evaluation. 3 Hours.
This course will offer an introduction and hands-on application of program assessment and evaluation techniques in health education. As health educators and program planners, we are required not only to develop innovative programs and interventions to address community- and school-based health concerns, but also to give evidence that our efforts are both adequate and effective. Successful program assessment and evaluation incorporate knowledge of basic research methods as well as the theoretical understanding of health behaviors. LEC.

HSES 466. Program Planning in Health Education. 3 Hours.
This course is designed to provide the students with an in-depth knowledge of proven health planning models that can be used for program development and intervention. Students will learn how to develop attainable program goals and objectives which will allow programs and interventions to evolve into useful forms of community based health education. Prerequisite: Students must be admitted to the School of Education and the Community Health Program. LEC.

HSES 467. Introduction to Health Education. 3 Hours.
This course will provide an overview of various health education professions. Topics emphasized in the course are: the nature of health education, an in-depth description of community health, the school health program, and identifying program and services of voluntary and services of voluntary and official health and welfare organizations. Prerequisite: Admission to the School of Education and the Community Health Program. LEC.

HSES 468. Methods and Materials in Health Education. 3 Hours.
Emphasis is placed on the presentation and preparation of health topics along with the recommended resources and materials available. The teaching method is emphasized and student participation is stressed. Students will observe health teachers in the public schools and identify and discuss these methods as they relate to the methods present in the class. Prerequisite: Admission to HPE teacher certification program or consent of instructor. LEC.

HSES 470. Biomechanics. 3 Hours.
The course is designed to cover a basic understanding of the anatomical and mechanical principles of human movement. Areas covered will be joint and segmental movement, muscle actions, time-displacement motion description, forces causing or inhibiting motion, and stability. Special attention will be given to the application of the theoretical concepts in movement activities. Prerequisite: Anatomy, admission to the Exercise Science program, or permission of instructor. LEC.

HSES 472. Exercise Physiology. 3 Hours.
A fundamental study of the physiological adjustments that occur within the body during exercise. The presentation of this material is particularly oriented toward a basic understanding of the physiological systems as they are affected by the activity of a normal coaching or teaching situation. The physiological values of exercise are also stressed. Prerequisite: Three hours of physiology. LEC.

HSES 473. Clinical Fitness Evaluation Techniques. 3 Hours.
This course will provide the student with the knowledge and skills to assess components of physical fitness in adults including cardiorespiratory fitness, body composition, strength, and flexibility. In addition, specific emphasis will be placed on the development of exercise and weight management prescriptions. Students completing the course will have the skills to take the Health Fitness Instructor Certification exam given by the American College of Sports Medicine. Prerequisite: Exercise physiology or equivalent. LEC.

HSES 474. Exercise Biochemistry. 3 Hours.
This course will examine the processes that underlies the use and production of energy for exercise. Topics that will be explored include glycoenerolysis and glycolysis in muscle, cellular oxidation of pyruvate, lipid metabolism, metabolism of proteins and amino acids, molecular biology, neural and endocrine control of metabolism, and local fatigue during exercise. Emphasis will be placed on carbohydrates, protein, and lipid metabolism and the acute and chronic effects that exercise has on these processes. Prerequisite: HSES 472. LEC.

HSES 480. Physical Activity and Exercise Management Individuals with Disabilities. 3 Hours. AE41.
An in-depth study of how physical activity and exercise can be a part of the treatment plan for people who have chronic disease or a disability. A variety of physical activity and exercise intervention programs and models will be presented and discussed, as well as protocols for baseline testing and post-treatment testing. A portion of this course will focus on how physical activity and exercise can prevent motor functioning deterioration in people who have a disability or limited functional movement. Prerequisite: Admission to the School of Education Exercise Science or Athletic Training programs and a course in human anatomy and physiology, or consent of instructor. LEC.

HSES 482. Drugs in Society. 3 Hours.
This course is designed to provide an in-depth exposure to basic drug classification, pharmacological effects, causes of drug abuse to society, common treatment modalities, and effective prevention/intervention strategies. In addition, consumer issues related to drug use, drug legislation, and drug education programs for school and community implementation will be discussed. Prerequisite: A course in personal and community health or consent of instructor. LEC.

HSES 483. Sport Finance and Economics. 3 Hours.
This course will help students gain an understanding of the critical importance of budgeting and financing sports-related industries based on sound financial principles and methods of financial control. Students will learn how economic principles shape the major national industry of sport. Prerequisite: Admission to Sport Management program or permission of
instructor and completion of or concurrent registration in FIN 305 or FIN 310. LEC.

HSES 484. Sport in Film. 3 Hours.
In the course, students will critically engage and interpret a series of popular sport-related films. By the end of the course, students will be able to write and think critically about the role that film in general, and sport-based films in particular, play in promoting and challenging dominant perceptions of gender, sexuality, nationalism, race, social class, and ability. LEC.

HSES 485. Sport Communication. 3 Hours.
This course examines the complex and evolving field of sport communication including personal, organizational, and external perspectives of sport communication. LEC.

HSES 486. Sport Marketing. 3 Hours.
This course is intended to provide undergraduate students with basic knowledge and competencies in definitions of marketing and sport marketing, understanding the unique aspects of sport marketing, marketing planning process, consumer demographics and psychographics, the marketing mix, segmentation and target marketing, marketing proposal preparation, sponsorship, endorsement, merchandising, fundraising, marketing goals and objectives, sport consumer and consumer behavior, industry segmentation, special events, ticket sales and their use in promotion, the role of the media, television marketing ratings and shares and venue and event marketing. The proposed content of this course will address each of these expectations. Prerequisite: Admission to the Sport Management program or permission of instructor. LEC.

HSES 487. Personnel Management in Sport. 3 Hours.
This course provides students with an overview of the requisite communication skills and concepts of leadership and management as they relate to sport managers. Students will learn how leadership and management practitioners, utilizing effective communication techniques, shape successful sport organizations. Additional emphasis will be placed on building and nurturing relationships with people as a key to effective management. Prerequisite: Admission to Sport Management program or permission of instructor. LEC.

HSES 488. Pre-Internship Seminar. 1 Hour.
This course will prepare students for their actual semester-long Internship experience. Students will be provided with background information on available internship sites to assist in their site-selection decision. Students will learn about different management styles they may encounter, the traits and characteristics of effective and productive employees, common rules of the workplace and internship experiences of previous HSES Interns. Prerequisite: All HSES students must be in final semester prior to Internship. LEC.

HSES 489. Health and Human Sexuality. 3 Hours.
The course is designed to encompass the various components of human sexuality as well as to demonstrate applicable teaching techniques for sex education. Included in the content of the course are: human sexual response, sexually transmitted diseases, family planning, sex roles, rape, sexual preferences, and topics such as sexuality and the handicapped, sexuality and the mass media, and sexuality and the church. Teaching techniques such as values clarification, non-verbal communications, role playing, tape recordings, and problem solving are demonstrated with appropriate topics. LEC.

HSES 497. Independent Study. 1-3 Hours.
Only one enrollment permitted each semester; a maximum of six hours will apply toward the bachelor's degree. This course cannot be taken as a substitute for a required course. Prerequisite: Recommendation of advisor and consent of instructor and department chairperson. IND.

HSES 499. Internship in Sport Management. 2-16 Hours. AE61.
A full-time work experience in the sport industry (40 hours per week). This experience is actual work in a sport management setting in which management practices are applied. Student interns are directed and evaluated by a faculty member with appropriate supervision by an on-site professional. Student interns must keep an accurate accounting of hours with a performance work diary. Grades/credit for the internship are determined by a faculty member with input from the on-site supervisor. Prerequisite: Completion of all Sport Management coursework. Admission to the Sport Management Internship program. FLD.

HSES 500. Student Teaching in: _____, 14 Hours. GE11.
A supervised teaching experience in an approved school setting, teaching physical education at the elementary level and health and physical education at the secondary level. The student must teach 8 weeks at the elementary level and 8 weeks at the secondary level. Prerequisite: A cumulative GPA of 2.75 or higher and admission to the HSES teacher certification program. FLD.

HSES 501. Seminar in Teaching Health and Physical Education. 2 Hours. AE61.
Student teachers will learn to analyze teaching styles and instructional methods that apply and/or relate to their student teaching experience. Discussions of various teaching practices will be facilitated by the university supervisor with input from the student teachers. Topics will include: curriculum, teaching methods, discipline, safety, equipment, and communicating with teachers, parents, and students. Prerequisite: Admission to the HSES Teacher Certification Program. LEC.

HSES 502. Camp Leadership and Counseling. 2 Hours.
Involves a complete study of the organization and administration of the various types of camps. It is designed to familiarize the student with camp leadership responsibilities; the development of the camp, the program involving camp crafts, outdoor cookery, hikes and outings, singing, and simple guidance of the individual camper. Prerequisite: General psychology plus three hours in sociology. LEC.

HSES 515. Assessment of Motor Development and Motor Control of Exceptional Children. 3 Hours.
Standardized motor assessment tools appropriate for use with exceptional children with motor difficulty will be critiqued and practiced. A battery of tests to measure developmental lag or structural deviation will be selected and administered to determine the motor control of exceptional children and the results will be interpreted. Prerequisite: Six hours of physical education course work. LEC.

HSES 528. Techniques of Athletic Training - 1 Lower Extremity. 3 Hours.
This course provides a comprehensive study of the techniques used by the Athletic Trainer in regard to the assessment and evaluation of athletic injuries/illnesses of the lower extremity, abdomen, and thorax, as well as the study of common illnesses/diseases that affect the physically active. Procedures for reporting and evaluating injuries/illnesses will be discussed so that appropriate injury management and referral may take place. The etiological factors common to athletic injuries, as well as specific signs and symptoms of various athletic related pathological conditions, will be discussed. Prerequisite: Human Anatomy, Human Anatomy Lab, Care and Prevention of Athletic Injuries, and admission to the Athletic Training Program. LEC.
HSES 529. Techniques of Athletic Training - II Upper Extremity. 3 Hours.
The comprehensive study of the techniques used by the Athletic Trainer in regard to the assessment and evaluation of athletic injuries/illnesses of the upper extremity, head, and spine. Procedures for evaluating and reporting injuries/illnesses will be discussed as well as etiological factors and common signs/symptoms of various related pathological conditions. The purpose of this course is to prepare students with the skills necessary to accurately recognize the signs/symptoms of injuries and conditions in order to determine the nature and severity of the problem as well as establishing a proper care plan and medical referral when appropriate. Prerequisite: HSES 528 Techniques of Athletic Training - I Lower Extremity. LEC.

HSES 578. Health Internship Seminar. 2 Hours.
Students enrolled in the internship will learn how to analyze professional health environments, examine intervention programs, and understand models used to develop health based programs. Discussions surrounding the internship experience will be facilitated by the health education faculty. Topics will relate to all phases of the internship experience. The intent of this course is to better prepare the student for entering the health profession. Discussions will be held on conflict resolution in the work place, professional development, professional behavior and etiquette. Prerequisite: Concurrent enrollment in HSES 580 Internship in Health. LEC.

HSES 580. Internship in: _____ 2-16 Hours.
A supervised internship experience in an approved setting. The specific type of internship experience and the credits for that particular experience will be outlined in the appropriate program of the student. Prerequisite: Admission to a HSES Internship Program. FLD.

HSES 581. Athletic Training Practicum I: Recognition and Evaluation. 4 Hours.
This course provides a practical experience for the student-athletic trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury/illness recognition and evaluation during their clinical and field experience. Specific skills addressed in HSES 528 will be practiced, applied, and mastered during this experience. Prerequisite: Admission to the Athletic Training program. Concurrent enrollment in HSES 528. LEC.

HSES 582. Athletic Training Practicum II: Management and Treatment. 4 Hours.
This course provides a practical experience for the student-athletic trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury/illness recognition and evaluation, and the management and treatment of athletic injuries through a variety of therapeutic modalities during their clinical and field experience. Specific skills addressed in HSES 529 and HSES 654 will be practiced, applied, and mastered during this experience. Prerequisite: HSES 581 and concurrent enrollment in HSES 529 and HSES 654. LEC.

HSES 583. Athletic Training Practicum III: Rehabilitation. 4 Hours.
This course provides a practical experience for the student-athletic trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury rehabilitation/reconditioning through a variety of therapeutic exercise techniques during their clinical and field experience. Specific skills addressed in HSES 656 will be practiced, applied, and mastered during this experience. Prerequisite: HSES 582, concurrent enrollment in HSES 656. LEC.

HSES 584. Athletic Training Practicum IV: Senior Sport Experience. 4 Hours.
This course provides a culminating practical experience for the student-athletic trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills obtained during previous coursework as well as apply administrative and management skills obtained in HSES 658. This course is intended to allow the Senior student more freedom and responsibility in decision making regarding the health care of an athletic team. Prerequisite: HSES 583, concurrent enrollment in HSES 658. LEC.

HSES 588. Special Course: _____ 1-5 Hours.
A special course of study to explore current trends and issues in health and physical education - primarily for undergraduates. LEC.

HSES 605. Administering Health Related Programs. 3 Hours.
This course will consist of an analysis of administration as it relates to both school and community health programs. The focus will be on administrative models and techniques used to establish and maintain sound health programs in school and community settings. Prerequisite: Six hours of health education or consent of instructor. LEC.

HSES 671. Applied Biomechanics. 3 Hours.
This course will examine the qualitative biomechanical analysis of human movement directed towards the goals of performance improvement and injury prevention and rehabilitation. Specifically, this course will provide students with a basis knowledge of the biomechanical foundations of human movement, the knowledge and skills necessary to complete a systematic analysis and evaluation of human motor performance, and the ability to determine and provide interventions that are likely to improve movement in athletic, clinical, educational, and work environments. Prerequisite: A course in human anatomy, admission to the HSES Teacher Certification Program or consent of instructor. LEC.

HSES 714. Motor Development During Growth. 3 Hours.
Motor development in childhood and adolescence and its relationship to physical growth. Factors influencing motor learning and development will be explored. This course provides basic understanding of the neuromuscular changes and abilities of children and adolescents. Prerequisite: A course in kinesiology and anatomy. LEC.

HSES 715. Understanding Research in HSES. 3 Hours.
This course introduces the concepts and skills involved in understanding and analyzing research in education and related areas. The course provides an overview of basic, general knowledge of various research methodologies. Students should expect to study much of this material in greater depth through additional work before being fully prepared to conduct independent research. However, this course should enhance their ability to locate, read, comprehend, and critically analyze research articles and reports. Topics in the course include quantitative and qualitative methods and designs, historical and descriptive research, and program evaluation. (This course fulfills the requirement of a research methods course in the first 12 hours of graduate study.) Prerequisite: Must be an admitted HSES graduate student. LEC.

HSES 730. Advanced Concepts in Nutrition. 3 Hours.
A study of the nutritional factors that affect health at all ages. Specific nutritional needs and effects of deficiency states on health will also be addressed. The course will also include the physiological and biochemical mechanisms involved in the use of nutrients for human growth and development as well as the production of energy through the metabolic
process. Prerequisite: HSES 330 or equivalent experience and permission of instructor. LEC.

HSES 771. Internship in Exercise Science. 6 Hours.
A supervised internship experience in an approved exercise science setting. Students will gain experience through a hands-on approach via clinical and/or research settings. The specific type of internship experience will be agreed upon by the student and their academic advisor. Prerequisite: Successful completion of at least 24 graduate credit hours. LEC.

HSES 777. Practicum in Health Education and Wellness Promotion. 1-3 Hours.
This course is designed to provide practical community health experiences in health education and wellness promotion, including: assessment, planning, implementation and program evaluation. With approval of the instructor, students may choose their practicum focus in any of the ten content areas of health: mental and emotional, family living, growth and development, nutrition, personal health, alcohol tobacco and other drugs, communicable and chronic diseases, injury prevention and safety, consumer health and environmental health. Prerequisite: Enrolled in graduate school and consent of the instructor. LAB.

HSES 779. Physiology of Functional Aging. 3 Hours.
The course has been designed to address issues and concepts relating to the biological aging process as a foundation for physical performance, general fitness, and health status. The biological concepts are applied to the human physiological aging process and the systems involved as well as the possible interventions that may effect that process. The several theories associated with physiological aging are also addressed as related to the physiological systems and current research that may impact the understanding of these theories. Prerequisite: A course in basic biology. LEC.

HSES 780. Internship in Teaching Physical Education: ______. 1-16 Hours.
A supervised internship experience leading to initial physical education teacher certification. The student assumes the total professional role as a teacher of physical education in an approved school setting. FLD.

HSES 795. Traditions and Principles in Health Education. 3 Hours.
This course is designed to explore the philosophy and principles which provide the foundation of health education as an academic discipline. Specific topics include: history of the profession, theories of health behavior and behavior change, principles of learning applied to health communications, health promotion practices, professional preparation, and the integration of philosophical and ethical ideals into program planning and implementation. LEC.

HSES 798. Special Course: ______. 1-5 Hours.
A special course of in-depth study exploring current trends and issues in health and physical education - primarily for undergraduates. LEC.

HSES 801. Sport Facilities. 3 Hours.
The purpose of this course is to study current developments and trends in the financing, programming, design, and construction of facilities for intercollegiate athletics and professional sports. Prerequisite: Admitted to graduate school. A course in the administration/management of sport or consent of the instructor. LEC.

HSES 803. Health Behavior Theory. 3 Hours.
Given that theories of health behavior drive research and practice in health education, the purpose of this course is to familiarize students with the major theories and planning models related to health behavior change. Particular focus will be applied to the role of theory in health promotion and critical analysis of the application of theory to guide research practices. Prerequisite: Health major or consent of the instructor. LEC.

HSES 804. Sport Psychology. 3 Hours.
This course is designed to introduce students to the current research and theoretical perspectives in the sport psychology literature. Specifically, students will gain a broad understanding of the three major areas of sport psychology: social psychology (e.g., motivation), performance enhancement (e.g., mental skills training), and psycho-physiology (e.g., impact of anxiety on performance). Prerequisite: Admission in the health program or consent of the instructor. LEC.

HSES 805. Laboratory Experiments and Analysis--Exercise Physiology. 3 Hours.
Students will learn the techniques of operating various types of laboratory equipment and will conduct small-scale lab experiments in areas such as respiration, circulation, metabolism, strength, neuromuscular function, cardiac function, and body composition. Special emphasis will be placed on laboratory techniques of assessing physical fitness. Prerequisite: A course in exercise physiology. LAB.

HSES 806. Stress Management. 3 Hours.
The long range objectives of this course are to assist students in gaining stress management knowledge; to help them to formulate improved perspectives on various stress management techniques; and consequently apply the developing constructs in their lives with a sense of purpose and self-responsibility. Prerequisite: Two courses in health education or consent of instructor. LEC.

HSES 807. Current Literature in Exercise Physiology. 2 Hours.
A wide range of topics from the exercise physiology literature will be discussed. Instructor and students will present reports to the group centered on current research findings with discussion aimed at application of these results to physical exercise and training. Prerequisite: A basic course in exercise physiology or consent of instructor. LEC.

HSES 808. Biomechanics of Human Movement. 3 Hours.
This course will examine the movements and the structure and function of human beings by means of the methods of mechanics. An emphasis will be placed on the two primary goals of biomechanics: performance improvement and injury prevention and rehabilitation. Topics to be covered include the kinematics and kinetics of human movement, muscle mechanics, bone and joint mechanics, and the biomechanics of musculoskeletal injury. Prerequisite: Courses in calculus, physics, anatomy, and biomechanics, or consent of instructor. LEC.

HSES 810. Advanced Exercise Physiology. 3 Hours.
An advanced study of the physiological and biomechanical aspects of muscular, cardiovascular, and respiratory function as the human is engaging in exercise. The topics of energy metabolism, hormones, and nutrition as related to exercise also are presented. Prerequisite: A basic course in exercise physiology. LEC.

HSES 812. Current Issues in Health. 3 Hours.
This course is designed to review and discuss current issues in various health related areas. The focus will be on relevant issues and topics that are guiding and directing the health profession. The range of topics discussed will vary from popular literature to scientific research and cover such areas as health education, community health, and health over the lifespan. Students in the course will be expected to report, discuss, and interact with each other concerning the issues as they are reported. Prerequisite: A graduate course in health or consent of the instructor. LEC.

HSES 814. Implementing Health Programs. 3 Hours.
The purpose of this course is to explore planning models used for designing, implementing and managing health promotion programs.
Students will be trained to develop objectives, assess determinants, select methods and strategies, pre-test program materials, and adopt and implement promotional plans. Problem based and community based learning experiences will be provided. Prerequisite: A health major or permission from the instructor. LEC.

HSES 817. Practical Aspects of Aerobic and Resistance Training. 3 Hours.
This course will be a discussion of various concepts related to aerobic and resistance training. By the end of the semester, the student should be able to demonstrate an understanding of information presented in this course by achieving satisfactory evaluations of presentations, papers, and an examination of the following topics: energy metabolism, general adaptations of aerobic and resistance training, exercise techniques for aerobic and resistance training, periodization of training, testing and evaluation of aerobic and resistance training performance, and exercise prescription for aerobic and resistance training. Prerequisite: Undergraduate course in exercise physiology or consent of instructor. LEC.

HSES 818. Legal Aspects of Public Health Education. 3 Hours.
This course is designed to enhance understanding of the variety of legal issues which affect health educators and their audiences. Specifically, this course will survey federal, state, and local public health laws and regulations which may proscribe health education content and the health educator's actions. Legislation will be analyzed and the practical impact of the health educator upon the legislative process will be emphasized. Prerequisite: A course in community health or consent of instructor. LEC.

HSES 823. Behavior Modification in Health and Exercise. 3 Hours.
This course will examine the behavioral principles that influence health and exercise practices. Theories of human behavior, reinforcement theory, and models of self-esteem will serve as the foundation for studying behavior change. Society influences will be strongly emphasized. Course topics will include exercise determinants, motivation, media representation, negative behaviors, self-efficacy, social support, and effective promotion strategies. Prerequisite: Admitted to Graduate School or consent of instructor. LEC.

HSES 824. Epidemiology and Concepts of Disease Causation. 3 Hours.
This course involves the study of the etiology and natural history of infectious and non-infectious diseases including vector control, host defenses and resistance, investigation of disease outbreaks, mental health and public health. The course deals with detailed analytic and descriptive epidemiology and their implications for improving our understanding of health and diseases; epidemiologic consequences of nuclear war and retrospective and prospective approaches in epidemiological research. Contemporary developmental methods for disease prevention will be critically reviewed. Prerequisite: HSES 573, or equivalent, or consent of instructor. LEC.

HSES 825. Skeletal Muscle Physiology. 3 Hours.
This course will provide the student with an in-depth study of the structure and development, contractile mechanics, and neuromuscular system as it relates to the skeletal musculature. Structure and Development - muscle fiber, motor neuron, neuromuscular junction, muscle receptors, muscle formation, development of muscle innervation. Putting Muscles to Work - ion channels, pumps, and binding proteins, axoplasmic transport, resting and action potentials, neuromuscular transmission, muscle contraction, motor units, exercise, muscle metabolism. The Adaptable Neuromuscular System - fatigue, loss of muscle innervation, recovery of muscle innervation, neurotrophism, disuse, muscle training, injury and repair, aging. Prerequisite: HSES 810 or equivalent. LEC.

HSES 828. Sport Finance. 3 Hours.
A study of the principles and applications of finance and economics in the sport industry. Strategic financial planning as a part of management responsibilities is highlighted. Prerequisite: Admitted to Graduate School. LEC.

HSES 830. Socio-Cultural Dimensions of Sport. 3 Hours.
Current literature concerning the impact of American social values and cultural patterns of sport and physical activity will be studied. Critiques of related research involving sport and social institutions, and socio-cultural groups in sport will be emphasized. Prerequisite: A course in Sociology of Sport or consent of instructor. LEC.

HSES 831. Ethics in the Sport Industry. 3 Hours.
This course is designed to help students learn to make morally reasoned decisions in various sport settings. This course will help prepare students to respond more responsibly when faced with challenging ethical dilemmas and guide them in learning to serve as role models for ethical conduct. LEC.

HSES 832. Physical Education Instructional and Assessment Methods. 3 Hours.
The study of research-based instructional and assessment methods appropriate for PK-12 physical education. Managerial, instructional, and supervisory skills will be developed. Traditional and alternative assessment tools will be discussed. Readings, observations (live and video), and practice teaching will prepare students to complete a practical experience and an action research project in a PK-12 school. Prerequisite: Admission to Graduate School. LEC.

HSES 833. Public Health Aspects of Exercise. 3 Hours.
This course describes the timeline for physiologic adaptations to long-term physical activity. It describes the effects of physical activity on chronic disease. It describes, from a population perspective, the effects of physical activity on the health of the nation. Prerequisite: 12 hours of HSES courses, or equivalent, or consent of instructor. LEC.

HSES 836. Physical Education Curriculum Models. 3 Hours.
An examination of the elements and processes of curriculum construction in physical education for elementary, secondary, and post-secondary institution, and the institutional and professional issues that affect these processes. A study of contemporary curricula structures in regard to planning, implementation, and evaluation of K-12 curricula and professional preparation curricula in physical education programs. Prerequisite: A course in physical education curriculum, or equivalent. LEC.

HSES 840. Organizational Behavior in Sport. 3 Hours.
This course utilizes a micro perspective to analyze the behavior and culture within sport organizations. Specifically, the student will study and learn how to apply management and leadership theories that have the potential to shape the work environment and will discuss how current topics in organizational behavior are particularly relevant to the sport industry. Prerequisite: Admitted to Graduate School. Consent of the instructor. LEC.

HSES 842. Sports Marketing. 3 Hours.
This course helps students gain a deeper understanding of sport marketing by examining in-depth the sport marketing mix of product, price, place, and promotion as well as marketing research, marketing strategy, market segmentation, branding, sponsorships, licensing, venue and event marketing, public relations, and global sport marketing. LEC.

HSES 850. Analysis Techniques for Health, Sport, and Exercise Sciences Laboratory and Field Data. 3 Hours.
Techniques for analyzing data gathered in Health, Sport, and Exercise Sciences laboratories and field studies will be presented in this course.
Techniques for the recording of raw data, appropriate organization of raw data, selection of test for analysis of data, use of computer software, and computer programming for analysis and reporting results of the data will also be included. Prerequisite: PRE 710, PRE 720, or PRE 725. LEC.

HSES 866. Contemporary Trends in Elementary and Secondary Physical Education. 3 Hours.
An in-depth study into the research and other forms of literature will be made to study and examine the latest trends in elementary and secondary school physical education. Games, activities, dances, and rhythms will be presented and discussed relative to developmental levels of students grades K-12. Prerequisite: A methods course in teaching physical education or consent of instructor. LEC.

HSES 872. Exercise and the Cardiovascular System. 3 Hours.
This course will be a discussion of various concepts specifically related to exercise and the cardiovascular system. By the end of the semester, the student should be able to demonstrate an understanding of the interaction of exercise and cardiovascular system by achieving satisfactory evaluations on examinations, abstracts, and classroom presentations. The following topics will be discussed as they relate specifically to exercise: homeostasis and cardiovascular transport mechanisms, basic structure and function; characteristics of cardiac cells; the heart as a pump; the peripheral vascular system; vascular control; venous return and cardiac output; regulation of arterial pressure; cardiovascular responses to stress; and cardiovascular function in pathological situations. Prerequisite: Undergraduate course in exercise physiology or consent of instructor. LEC.

HSES 880. Internship in Sport Management. 1-10 Hours.
This course will provide for supervised and directed experiences in selected sport management settings. The graduate advisor will schedule observations of the internship, as well as regular conferences with the student. Written summaries and evaluations of the internship will be prepared by the student, the agency supervisor, and the university graduate faculty member. Prerequisite: Admission to the Graduate Program in Sport Management. FLD.

HSES 884. Legal Aspects of Sport. 3 Hours.
This course is intended to introduce graduate students to the basic concepts of the American legal system and the application of them to intercollegiate and professional sports. Particular emphasis will be given to risk management and preventive law. Other topics include: governance issues in intercollegiate and professional sports, contract law, employment discrimination, labor relations and collective bargaining, agency law and athlete agents, regulation of participation in intercollegiate and high school athletics, sport facility and event issues, participant liability issues, product liability issues, premises and spectator liability, participant violence in sports, and intellectual property law. Prerequisite: Admission to graduate program in School of Education LEC.

HSES 890. Seminar in HSES. 3 Hours.
This course is designed to provide a general research seminar learning experience for graduate students in HSES. In particular, students will learn about faculty research activities and interests from a variety of specialty areas both within KU and outside of KU. Through faculty and guest presentations, students will be exposed to a variety of design and methodologies used to conduct research in the specialty areas of HSES. LEC.

HSES 892. Psychology of Physical Activity. 3 Hours.
This course is designed for students interested in optimizing motivation and adherence to exercise among individuals in a wide range of physical activity settings (e.g., health clubs, corporate fitness, physical therapy). The course content includes a review of the literature highlighting the psychological benefits of exercise, the theoretical advances in understanding the psychological aspects of individuals' participation in physical activity, and strategies and techniques for professionals attempting to foster motivation and adherence to exercise among their clients/members. Prerequisite: Admission in the health program or consent of the instructor. LEC.

HSES 897. Independent Study. 1-4 Hours. 
Prerequisite: Consent of advisor and instructor. RSH.

HSES 898. Master's Project. 1-4 Hours. 
RSH.

HSES 899. Master's Thesis. 1-6 Hours.
The University of Kansas

HSES 905. Advanced Concepts in Health Education. 3 Hours.
This course is designed as an in-depth study of the pedagogy of health education. It is concerned with the effects of various health education models, new materials, and innovative teaching techniques. The effectiveness of various media such as films, slides, transparencies, microcomputers, and assessment tools will be analyzed. Research concerning innovations in education will be investigated along with a study of future trends in the field. Timely issues of controversy about health education practices and the effectiveness of values clarification activities will also be discussed. LEC.

HSES 910. Biochemistry of Exercise. 3 Hours.
This course will include an in-depth examination of metabolic and endocrine principles as they relate to physical exercise and training. Specific topics will include: substrate utilization in exercise, metabolic controls, muscle biochemistry, body composition, nutritional aspects and hormonal influences in exercise. Both instructor and students will report on the most current literature relating to the topics. Prerequisite: Human biodynamics or a course in biochemistry. LEC.

HSES 926. Grant and Research Proposal Writing. 3 Hours.
This is a course for students to examine the sources and areas which provide financial support for research projects. The areas of study include types of research funding available on a local, state, and federal level, the elements and design of writing a proposal and strategies involved in securing financial support for research. A focus for the course will center upon preparing a research proposal for funding. Prerequisite: PRE 710. LEC.

HSES 940. Scientific Dimensions of Exercise and Health. 3 Hours.
This course has been designed to bring together the many scientific factors relating exercise and physical activity to health and human function. The course focuses on the interdisciplinary nature of this relationship and reviews the physiological, sociological, psychological, and behavioral factors involved. Prerequisite: Fifteen hours of graduate level course work in health or physical education and admission to health or physical education doctoral program. LEC.

HSES 980. Advanced Topics: ______. 1-3 Hours.
A special course of study to meet current needs of education professionals -- primarily for post-master's level students. LEC.

HSES 981. Current Issues in Health and Physical Education. 3 Hours.
This course will explore the latest philosophical issues and controversies which are impacting the fields of health, physical education, and athletics. The student will explore the current and future ramifications of each issue and its potential effects on the profession. Prerequisite: Admission to the Health, Sport, and Exercise Sciences Doctoral Program. LEC.

HSES 990. Doctoral Seminar. 3 Hours.
This seminar based course will be designed to prepare the doctoral student for academic careers or careers in industry after they graduate. The topics covered will be promotion and tenure procedures and
expectations, including but not limited to teaching, responsible conduct of research, professional ethics, historical ethical issues, evaluation of ethical dilemmas, and service expectations at research intensive institutions, regional comprehensive institutions and small liberal arts colleges. Industry career options will be discussed and guest speakers from various disciplines will be brought in to discuss options and expectations with this career path. Prerequisite: Doctoral student or permission of the instructor. LEC.

HSES 995. Field Experience in: _____. 1-5 Hours.
Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experiences will be prepared independently by the student, a representative of the cooperating agency, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours. FLD.

HSES 996. College Teaching Experience in: _____. 3 Hours.
To meet the college teaching experience requirement for doctoral programs, a student shall engage in a semester long, planned, instructional activity that shall include classroom teaching under supervision. Planning shall be done with the advisor and/or member of the faculty who will supervise the experience. The activity shall be done under the supervision of a member of the University of Kansas faculty or by an individual or individuals designated by the candidate’s committee. FLD.

HSES 997. Individual Study. 1-4 Hours.
Prerequisite: Prior graduate course work in the area of study and consent of instructor. RSH.

HSES 999. Doctoral Dissertation. 1-15 Hours.
THE.

Special Education Courses

SPED 261. Families and Professional Partnerships. 3 Hours.
This course provides information on issues and practices related to working together in partnership with families of young children including those who have a young child with special needs. Emphasis will be placed on taking a family systems prospective and a family-centered approach to family support. Strategies for effective communication for the purpose of information sharing and collaborative planning with families are provided. Relevant current scientifically based evidence will be reviewed and discussed pertaining to these topics. LEC.

SPED 326. Teaching Exceptional Children and Youth in General Education. 3 Hours.
This course is designed for general education teacher trainees. It will provide them information about students with disabilities that they will have in their classrooms and the law governing special education and its implications for them as general educators. The course will address Individualized Educational Plans that are developed for students with disabilities and how general educators contribute to these plans. Students will learn about planning instruction that is differentiated to meet various learner needs, universal design principles and instructional tools, providing meaningful access to general education classrooms and curriculum for students with disabilities and designing and delivering appropriate accommodations and modifications to assist student learning. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 362. Introduction to Early Education and Early Childhood Special Education. 3 Hours.
This course is designed to provide an overview of the field of early education including early childhood education and early childhood special education. The historical, philosophical, research-based, policy and legal foundations for the field are discussed to provide the students with the knowledge to become an advocate for early learning opportunities (birth through grade 3) for all children and their families. LEC.

SPED 425. Introduction to Exceptional Children and Youth. 3 Hours.
Designed for regular education teacher trainees, those in training for support roles in public schools and/or residential facilities (music educators/therapists, speech clinicians, etc.), and others interested in providing services for exceptional children and youth. Emphasis on the learning and adjustment problems of exceptional children and youth. Includes fieldwork experiences in residential and/or public school settings. LEC.

SPED 431. Introduction to the Exceptional Child/Adolescent. 1 Hour.
The course is designed to provide the student with knowledge of and direct experiences within instructional settings that include one or more exceptional children. Structured experiences will be provided to (a) ensure mastery of skills in differentiating normal from atypical patterns of behavior in children or adolescents, (b) promote acquisition of skill in understanding the educational needs of exceptional learners as well as the procedures used to identify and provide instruction for them, (c) ensure the generalization of communication skills to the unique needs of exceptional learners in instructional settings, and (d) promote a positive attitude toward atypical students. LEC.

SPED 439. Student Teaching: Unified Early Childhood. 1-6 Hours.
A supervised student teaching experience leading to initial teaching licensure in Kansas Unified Early Childhood (birth through grade 3). The student assumes the professional role as a teacher in an approved inclusive early childhood infant/toddler or preschool. Prerequisite: Admission to the Unified Early Childhood program. Approved application of intent to student teach. LEC.

SPED 450. Dis/ability in an American Context. 3 Hours.
This course is designed to introduce undergraduate students of any major to important theoretical and practical concepts regarding special education, disability, and diversity. Successful completion of this course fulfills one requirement for the School of Education minor in Education. LEC.

SPED 497. Independent Study. 1-2 Hours.
Only one enrollment permitted each semester, a maximum of four hours will apply toward a bachelor’s degree. Prerequisite: Recommendation of advisor and consent of instructor. IND.

SPED 500. Introduction to Sign Language. 3 Hours.
This is an introductory course in Sign Language and includes ASL and English sign vocabulary, a description of all manual sign systems, medical aspects of hearing loss, communication and language, and Deaf culture and community. LEC.

This course will cover the development of American Sign Language and its application within the Deaf Community. It is based on the functional-notational approach to learning sign language. This approach organizes language around communicative purposes of everyday interaction. LEC.

SPED 502. American Sign Language II (ASL II). 3 Hours.
This is the second level course in American Sign Language and its application within the Deaf Community. It is based on the functional-notational approach to learning sign language. This approach organizes language around communicative purposes of everyday interaction. Prerequisite: SPED 501. LEC.

SPED 503. American Sign Language III (ASL III). 3 Hours.
This is the third level course in American Sign Language. The primary objective of the American Sign Language III “Signing Naturally” Level 2
curriculum is for students to continue using the two basic language skills: visual listening and signing. Prerequisite: SPED 502. LEC.

**SPED 504. American Sign Language IV (ASL IV), 3 Hours.**
This is the fourth level course in American Sign Language. The primary objective of the American Sign Language IV “Signing Naturally” Level 3 curriculum is for students to continue using the two basic language skills -- visual listening and signing. Prerequisite: SPED 503. LEC.

**SPED 506. Advanced Practices for Children with Disabilities in the Elementary General Education Classroom. 3 Hours.**
This course is designed to enable novice teachers to master and apply the instructional and communicative skills that will facilitate appropriate and productive inclusion of children and youth with exceptionalities within general education classrooms and other school settings. Specific research-based strategies in curriculum content acquisition (content enhancements, learning strategies, classwide-peer tutoring), and specific research-based strategies in behavior management will be learned and applied to real teaching experiences. Novice teachers will learn about collaborative structures found in schools to support student learning in general education settings (co-teaching, collaborative consultation, teacher/student support teams) and roles and responsibilities of teachers within these structures. Prerequisite: Admission to the Teacher Education Program. LEC.

**SPED 507. Advanced Practices for Children with Disabilities Middle/Secondary General Education Classroom. 3 Hours.**
This course is designed to enable novice teachers to master and apply the instructional and communicative skills that will facilitate appropriate and productive inclusion of middle and secondary age students with disabilities within general education classrooms and other school settings. Specific research-based strategies in curriculum content acquisition (content enhancements, learning strategies, classwide-peer tutoring), and specific research-based strategies in behavior management will be learned and applied to real teaching experiences. Novice teachers will learn about collaborative structures found in schools to support student learning in general education settings (co-teaching, collaborative consultation, teacher/student support teams) and roles and responsibilities of teachers within these structures. Prerequisite: Admission to the Teacher Education Program. LEC.

**SPED 598. Special Course: ________. 1-5 Hours.**
A special course of study designed to meet current needs of education students; primarily for undergraduates. LEC.

**SPED 631. Characteristics of Students Needing an Adaptive Curriculum. 3 Hours.**
This course is designed as an introduction to the definition, characteristics, causes, assessment, and specific remedial techniques for students needing an adaptive curriculum. The needs for specialized services to meet specific learning and/or behavioral needs will be presented. Students will learn about the history of serving children and youth with high incidence disabilities associated with specific learning, emotional/behavioral, mild mental retardation and a range of physical and health needs. Key individuals in the research of specific disabilities associated with these needs and how they helped expand our understanding of who these individuals are and how to address specific needs, will also be addressed. Learning characteristics will be addressed in relation to why and how specialized instruction can meet the learning and developmental needs of these individuals, specifically in the areas of instructional and assistive technology. LEC.

**SPED 632. Characteristics of Students Needing a Functional Curriculum. 3 Hours.**
This introductory course provides an overview of the characteristics of learners with significant support needs. Students will learn to define and understand various classification systems and the implications of: low-incidence disabilities, significant cognitive disability, various vision and/or hearing impairments, including deaf-blindness motor disabilities, and health impairments. Students will be introduced to various etiologies: pre-, peri-, and post-natal causes, syndromes and chromosomal disorders, and biomedical causes of severe disability. Additional content includes anatomy of sensory organs, interpretation of pertinent medical reports, assessment procedures, and in school settings considerations (e.g., orientation and mobility, cochlear implants, medications, tube feeding, physical therapy, occupational therapy). Prerequisite: An introductory course in special education. LEC.

**SPED 633. Characteristics of Learners with Hearing Loss -- Deaf Studies. 3 Hours.**
Deaf Studies is the basic characteristics course for both the Master's degree in Deaf Education and for Kansas and Missouri endorsement in Deaf/HOH. The course includes medical aspects/etiology of hearing loss, history, pertinent laws, Deaf culture and community, issues in assessment and psychology, language and sign systems, multicultural education, multiple disabilities and hearing loss, and specific issues in the field. LEC.

**SPED 635. Introduction to Teaching Learners with Low-Incidence Disabilities in Inclusive Settings. 3 Hours.**
This course examines current principles and inclusive practices for learners with significant disabilities. The course will focus on the extant research base concerning inclusive practices, characteristics of learners with low-incidence disabilities, and instructional strategies. Prerequisite: SPED 326 or equivalent. LEC.

**SPED 641. Methods & Assessment: Literacy Interventions Struggling Learners & Students High-Incidence Disabilities. 3 Hours.**
This course will provide in depth learning experiences targeting literacy; both reading and writing. Students will learn about assessment tools and assessment systems used in tiered support frameworks to determine the required intensity of literacy support and instruction needed by children/adolescents with adaptive special education needs, and will learn about evidence-based instructional approaches and curriculum developed for students with disabilities and struggling students in general. The course is intended for persons working toward the Kansas teaching license in teaching students needing an adapted curriculum. Prerequisite: SPED 730, admittance into the Adaptive program in the Department of Special Education, or permission of the instructor. LEC.

**SPED 642. Assessment and Methods of Teaching Students with Low-Incidence Disabilities in Inclusive Settings. 3 Hours.**
This course prepares teacher candidates to assess students with disabilities using formal and informal measures, to use assessment information to develop a strengths-based inclusive Individual Education Program (IEP), to design instruction related to IEP goals and state standards, and to evaluate the effectiveness of that instruction using progress-monitoring techniques. Prerequisite: SPED 326. LEC.

**SPED 644. Assessment and Instructional Methods I: Learners with Hearing Loss. 3 Hours.**
This course will provide an introduction to appropriate instructional methodology for teaching students who are deaf or hard of hearing at the early childhood, elementary, and secondary levels. Upon completion students will be familiar with legal issues, teaming, assessment, IEP development, curriculum planning, instructional methods, and transition. LEC.

**SPED 650. Constructing Early Childhood Curriculum. 3 Hours.**
Students in this course will learn to design, implement and evaluate developmentally appropriate curricula and programs for children from birth through kindergarten. Issues of curriculum design and assessment are introduced as interrelated processes that include structuring learning
environments and experiences that are responsive to children’s interests and abilities. Students analyze and evaluate curriculum that focuses on the five developmental domains: a) social emotional development; b) cognitive development; c) language and communication development; d) adaptive behavior development; and e) gross and fine motor development and in addition the content domains of literacy, science, math, and fine art. Strategies for developing learning opportunities that are appropriate for young children, including children with special needs and children from diverse cultural, ethnic and linguistic backgrounds, will be explored. Prerequisite: Admission to School of Education UEC program. LEC.

SPED 660. Education of Children and Youth with Disabilities I: _____. 3 Hours.

This is a methods course that covers instructional approaches and procedures that offer developmentally appropriate, effective and inclusive early intervention for preschool and kindergarten age children who experience developmental delays, disabling conditions or who are at-risk for developmental problems and disabilities. It is directed toward: (a) “how” to teach, or the technical components of developing and delivering effective instruction that provide access to the general early childhood curriculum within recognized approaches to early childhood education for young children, and (b) the “what” to teach, or the selection of developmentally and individually appropriate child objectives as well as specific materials and specialized instructional approaches. The relationship of instructional planning to state and federal mandates will also be considered. The course is primarily intended for persons who are currently working toward certification in the ECSE program area. Prerequisite: SPED 425 or SPED 725, and SPED 735, which can be taken concurrently. LEC.

SPED 661. Supporting Children with Significant Learning and Behavioral Challenges. 3 Hours.

Students in this course will gain knowledge of the causes, and intervention and support approaches for young children with multiple and significant disabilities including neurological impairments, physical disabilities, sensory impairments, significant developmental disabilities and challenging behavior. Emphasis is placed on environmental adaptations and direct instructional techniques to maximize independence as determined through systematic ecological inventories tailored to the individual child’s strengths and needs. Information is also provided on assistive technology designed to provide appropriate supports. Functional behavioral assessment procedures, proactive intervention strategies, and developing collaborative support plans will be studied. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 663. Assessment Strategies in Early Education. 3 Hours.

Examines the practice of gathering information for the purpose of making individual referral and instructional decisions for infants, toddlers, and young children with and without special needs. Discusses effective informal assessment techniques and emphasizes an ecological approach to gathering information. Introduces standardized assessment and screening instruments and provides an overview of the purposes and limitations of such tests. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 664. Inclusive Strategies and Intervention for Infants and Toddlers. 3 Hours.

Emphasizes curriculum development and early intervention provision for infants and toddlers through the planning of appropriate learning experiences, the design of learning environments, developing Individual Family Service Plans (IFSP), promoting collaboration among families and the use of various methods of enhancing the child’s development across the five (social-emotional, adaptive, cognitive, physical/movement, communication) development domains. The role of the educator/early interventionist in relation to the family and the child is examined. Curriculum resources and intervention strategies for infants and toddlers with special needs are reviewed with emphasis on interdisciplinary planning and implementation. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 665. Inclusive Strategies and Intervention for Preschoolers. 3 Hours.

Provides the opportunity for students to develop and evaluate inclusive environments for young children. This course emphasizes meeting the needs of all young children through an integrated approach to planning, implementing and assessing instruction in all areas; linking assessment information to individualized instruction; developing Individual Educational Plans (IEPs) and promoting collaboration among families, schools and communities. Service delivery systems and transitions between early childhood programs are reviewed in relation to curriculum. Curriculum development for early childhood content areas (literacy and language, numeracy, science, social studies, physical education and the arts) and domains (language, social/emotional, physical, and cognitive) will be explored. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 667. Field Experience in Preschool. 1 Hour.

This supervised field experience is intended to allow the pre-service teacher to apply the knowledge gained in SPED 665 Inclusive Strategies and Intervention for Preschoolers, by working with infants and toddlers in early intervention settings/services. To be taken concurrently SPED 665. Prerequisite: Admission to the Teacher Education Program. FLD.

SPED 668. Field Experience Infant/Toddler. 1 Hour.

This supervised field experience is intended to allow the pre-service teacher to apply the knowledge gained SPED 664 Inclusive Strategies and Intervention for Infants and Toddlers, by working with infants and toddlers in early intervention settings/services. To be taken concurrently SPED 664. Prerequisite: Admission to the Teacher Education Program. FLD.

SPED 672. Field Experiences with Exceptional Children and Youth: _____. 1-3 Hours.

A course designed to provide experiences for students to participate with exceptional children in public schools and/or residential facilities and with professional personnel associated with the lives of exceptional students including special education teachers, child care workers, therapists, etc. Students will have opportunities to participate as aides, tutors, and instructors with individual and small groups of exceptional youth in one or more placements. Through weekly meetings with the instructor students are guided to relate their experiences to the needs and services for exceptional children and youth. Prerequisite: SPED 635. FLD.

SPED 675. Practicum with Children and Youth with Disabilities: _____. 1-10 Hours.

Intensive diverse and direct teaching experiences with children and youth with disabilities in educational settings. The course is differentiated from SPED 775 through the amount of scaffolding undergraduate students will receive when demonstrating skill application (e.g., undergraduates report and receive feedback on practicum experiences on a more frequent basis, reduced data collection requirements, more emphasis on cooperating teacher providing guidance, etc.). This practicum is a requirement for provisional endorsement according to KSDE. Students who have completed SPED 675 cannot enroll in SPED 775 within in same curricular area. Prerequisite: SPED 326. LEC.

SPED 700. Introduction to Sign Language. 3 Hours.

This is an introductory course in Sign Language and includes ASL and English sign vocabulary, a description of all manual sign systems, medical
aspects of hearing loss, communication and language, and Deaf culture and community. LEC.

SPED 701. American Sign Language I (ASL I). 3 Hours.
This course will cover the development of American Sign Language and its application within the Deaf Community. It is based on the functional-notational approach to learning sign language. This approach organizes language around communicative purposes of everyday interaction. LEC.

SPED 702. American Sign Language II (ASL II). 3 Hours.
This is the second level course American Sign Language and its application within the Deaf Community. It is based on the functional-notational approach to learning sign language. This approach organizes language around communicative purposes of everyday interaction. Prerequisite: SPED 701. LEC.

SPED 703. American Sign Language III (ASL III). 3 Hours.
This is the third level course in American Sign Language. The primary objective of the American Sign Language III “Signing Naturally” Level 2 curriculum is for students to continue using the two basic language skills: visual listening and signing. Prerequisite: SPED 702. LEC.

SPED 704. American Sign Language IV (ASL IV). 3 Hours.
This is the fourth level course in American Sign Language. The primary objective of the American Sign Language IV “Signing Naturally” Level 3 curriculum is for students to continue using the two basic language skills -- visual listening and signing. Prerequisite: SPED 703. LEC.

SPED 706. Advanced Practices for Children with Disabilities in the Elementary General Education Classroom. 3 Hours.
This course is designed to enable novice teachers to master and apply the instructional and communicative skills that will facilitate appropriate and productive inclusion of children and youth with exceptionalities within general education classrooms and other school settings. Specific research-based strategies in curriculum content acquisition (content enhancements, learning strategies, classwide-peer tutoring), and specific research-based strategies in behavior management will be learned and applied to real teaching experiences. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 707. Advanced Practices for Adolescents with Disabilities in the Middle/Secondary General Classroom. 3 Hours.
This course is designed to enable novice teachers to master and apply the instructional and communicative skills that will facilitate appropriate and productive inclusion of middle and secondary age students with disabilities within general education classrooms and other school settings. Specific research-based strategies in curriculum content acquisition (content enhancements, learning strategies, classwide-peer tutoring), and specific research-based strategies in behavior management will be learned and applied to real teaching experiences. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 708. Introduction to Hearing Impaired. 2 Hours.
A study of hearing defects and methods of diagnosis. The course also covers remedial work which teachers can use in treating such defects and meeting problems of hearing defective children. Prerequisite: Nine hours of education including educational psychology. LEC.

SPED 710. Methods of Teaching Language to the Deaf I. 3 Hours.
The effects of hearing loss on language acquisition and development. Systems for teaching language to individuals with hearing loss are introduced. Prerequisite: Course in normal language development and nine hours of education including educational psychology. LEC.

SPED 715. Understanding Research in Education. 3 Hours.
This course introduces concepts and skills involved in understanding and analyzing research in special education. The course provides an overview of basic, general knowledge of various research methodologies. In addition, this course will teach students to locate, read, comprehend, and critically analyze research articles and reports. Students will become familiar with the principles of educational research to become good “consumers” of this research. LEC.

SPED 717. Exceptional Children in Regular Classrooms. 3 Hours.
This course is designed to explore the relationship between regular and special education. Educational service delivery systems for exceptional children are identified and analyzed. Emphasis is placed upon procedures and special services that regular class teachers can use to provide instructional services to exceptional children assigned to regular classrooms. Procedures for enabling normal children to understand and appreciate the interaction with children who exhibit physical and behavioral variance from established norms are conveyed. Especially for regular class teachers and students desiring a career in teaching exceptional children. Will be offered by designated area sections or as a general overview of several areas. LEC.

SPED 718. Instructional Planning for Children and Youth with Disabilities: _____. 1-3 Hours.
This course provides knowledge and skills to select, adapt, and sequence instructional methods and materials to facilitate general education curriculum mastery. LEC.

SPED 719. Learning and Technology. 1 Hour.
The central framework of “human learning” provides a context for understanding technology-based educational innovations. The lessons in this course explore how various “features of learning” and “features of technology” intersect. They discuss realistic options for improving the learning of students, and the learning of teachers, as they use technology in education. (Life-span range of levels.) LEC.

SPED 724. Data-Driven Instructional Decision Making. 1 Hour.
The lessons in this course present research-based methods for monitoring student behavior and academic progress. They explain how teachers may use this information to evaluate current and plan future instructional and behavioral interventions following a decision making model. It is also explored how computer and information management technology tools support and facilitate the collection, storage, and analysis of observational data. LEC.

SPED 725. Introduction to the Psychology and Education of Children and Youth with Disabilities. 3 Hours.
This course provides an overview of current practices in the identification, placement, and education of students with disabilities. This course emphasizes on patterns of social, cognitive, language, and physical development. Social, political, and economic advocacy issues are also addressed. Prerequisite: One course in Child Development. LEC.

SPED 726. Exceptionality and Technology. 1 Hour.
Technology has the potential to dramatically improve the education and quality of life for people with disabilities. This course presents you with a basic foundation for understanding technology in special education, a functional model for selecting the best technology applications for students with special needs, and strategies for applying your knowledge to practical situations. LEC.
SPED 727. Designing Instruction for Diverse Learners. 3 Hours.
This course explores to design, development, and implementation of technology-based solutions for struggling learners in the preK-12 instructional environment. Throughout the course, students will (1) gain an understanding of the Principles of Universal Design for Learning, (2) examine how technology has and can be developed in a manner to meet multiple needs, especially those with disabilities, and (3) analyze how professionals can identify and assess what technology-based solution would meet the needs of a particular individual or group of individuals.
LEC.

SPED 729. Introduction to Computing in Special Education. 3 Hours.
This course is designed to provide an introduction to basic concepts of computer literacy, with particular emphasis on the uses of microcomputers in educational settings for individuals with special needs. Topics include an overview of computing specific to the needs of individuals with special needs including: a) applications and the impact of computers on society; b) an introduction to computer hardware and associated concepts; c) introductory programming concepts; d) a survey of instructional and instructional-support applications of computers including examples of related software; e) software evaluation techniques; and f) an overview of resources in educational computing. Students will acquire hands-on operating experience with microcomputers through scheduled laboratory periods. LEC.

SPED 730. Characteristics, Methods & Assessment: Intro Struggling Learners & Studnts High-Incidence Disabilities. 3 Hours.
The course is designed as an introduction to the characteristics, assessment and identification process, and initial instructional and behavioral interventions needed in meeting the needs of students with high-incidence disabilities under the Kansas Adaptive Teacher Education Standards. The needs for specialized services to meet specific learning and/or behavioral needs will be presented. Frameworks for instruction and conceptualizing best practice will be introduced including the principles of Universal Design for Learning and the Multi-Tier System of Support. The role of the educator in identifying, understanding and implementing evidence-based practices is also examined. Curriculum resources and intervention strategies for students with high-incidence disabilities will be introduced with emphasis on tiered planning and implementation. The course is intended for persons working toward the Kansas teaching endorsement in the Special Education Adaptive Area. Prerequisite: Admittance into the Adaptive endorsement teacher education program in the Department of Special Education or permission of the instructor. LEC.

SPED 731. Supporting Children with Significant Learning and Behavioral Concerns. 3 Hours.
Students in this course will gain knowledge of the causes, and intervention and support approaches for young children birth through 5 years with significant support needs. These include young learners with multiple and significant disabilities including neurological impairments, physical disabilities, sensory impairments including dual sensory impairments, complex health care needs, significant developmental disabilities and challenging behavior. Emphasis is placed on environmental adaptations and direct instructional techniques to maximize independence as determined through systematic ecological inventories tailored to the individual child's strengths and needs. Information is also provided on assistive technology designed to provide appropriate supports. Functional behavioral assessment procedures, proactive intervention strategies, and developing collaborative support plans will be studied. Prerequisite: Admittance into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. SPED 752 or its equivalent, SPED 734 or its equivalent, and SPED 755 or its equivalent. LEC.

SPED 733. Characteristics of Learners with Hearing Loss -- Deaf Studies. 3 Hours.
Deaf Studies is the basic characteristics course for both the Master's degree in Deaf Education and for Kansas and Missouri endorsement in Deaf/HOH. The course includes medical aspects/etiology of hearing loss, history, pertinent laws, Deaf culture and community, issues in assessment and psychology, language and sign systems, multicultural education, multiple disabilities and hearing loss, and specific issues in the field. LEC.

SPED 734. Inclusive Strategies and Intervention for Infants and Toddlers: ______. 3 Hours.
Emphasizes curriculum development and early intervention provision for infants and toddlers through the planning of appropriate learning experiences, the design of learning environments, developing Individual Family Service Plans (IFSP), promoting collaboration among families and the use of various methods of enhancing the child's development across the five (social-emotional, adaptive, cognitive, physical, communication) developmental domains. The role of the educator/early interventionist in relation to the family and the child is examined. Curriculum resources and intervention strategies for infants and toddlers with special needs are reviewed with emphasis on interdisciplinary planning and implementation. Prerequisite: Admittance into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. LEC.

SPED 735. Introduction to Teaching Learners with Low-Incidence Disabilities in Inclusive Settings. 3 Hours.
This course examines current principles and inclusive practices for learners with significant disabilities. The course will focus on the extant research base concerning inclusive practices, characteristics of learners with low-incidence disabilities, and instructional strategies. Prerequisite: SPED 326 or equivalent. LEC.

SPED 736. Unified Early Childhood Applied Research. 1 Hour.
This seminar is designed to facilitate the UEC teacher candidate's completion of a Teaching Work Sample during the UEC Student Teaching experience. The purpose of the seminar together with the UEC student teaching experience is to provide the UEC teacher candidate with the opportunity to study and experience the fundamentals of teaching young children with and without disabilities with the aim of evolving a set of values, principles, and skills which will guide future early education teaching situations. Prerequisite: Admission to UEC Student Teaching. Corequisite: SPED 739 UEC Student Teaching. LEC.

SPED 739. Early Childhood Unified Student Teaching/Practicum. 1-6 Hours.
A supervised student teaching experience leading to initial teaching licensure in unified early childhood (birth through grade 3). The student assumes the total professional role as a teacher in an approved inclusive early childhood program to include infant/toddler, preschool or kindergarten. Prerequisite: Admission to UEC Student Teaching. Corequisite: SPED 738 UEC Unified Early Childhood Applied Research. FLD.

SPED 740. Managing Classroom Behavior of Exceptional Children and Youth. 3 Hours.
Designed to acquaint regular and special education teachers, principals, school psychologists, counselors, and speech pathologists with principles and application of classroom management techniques applicable to exceptional children and youth. Methods of changing inappropriate behaviors and prompting the acquisition of adaptive behaviors through positive management procedures will be stressed. Includes an introduction to behavior analysis. Prerequisite: SPED 425 or SPED 725. LEC.
SPED 741. Methods & Assessment: Literacy Interventions Struggling Learners & Students High-Incidence Disabilities. 3 Hours.
This course will provide in-depth learning experiences targeting literacy; both reading and writing. Students will learn about assessment tools and assessment systems used in tiered support frameworks to determine the required intensity of literacy support and instruction needed by children/adolescents with adaptive special education needs, and will learn about evidence-based instructional approaches and curriculum developed for students with disabilities and struggling students in general. The course is intended for persons working toward the Kansas teaching license in teaching students needing an adapted curriculum. Prerequisite: SPED 730, admittance into the Adaptive program in the Department of Special Education, or permission of the instructor. LEC.

SPED 742. Assessment and Methods of Teaching Students with Low-Incidence Disabilities in Inclusive Settings. 3 Hours.
This course prepares teacher candidates to assess students with disabilities using formal and informal measures, to use assessment information to develop a strengths-based inclusive Individual Education Program (IEP), to design instruction related to IEP goals and state standards, and to evaluate the effectiveness of that instruction using progress-monitoring techniques. Prerequisite: SPED 635 or 735. LEC.

SPED 743. Methods: Functional Behavioral Assessment, Positive Behavior Support and Classroom Management. 3 Hours.
This course provides a problem-solving approach and the framework for teaching and assessment strategies to develop pro-social behavior in students with disabilities and their typical peers in classrooms and whole school contexts. Students assess problem behavior, discover the functions of problem behavior, and learn pro-social alternatives in home, school, and community settings. Prerequisite: SPED 631 or SPED 731, and SPED 632 or SPED 732. LEC.

SPED 744. Assessment and Instructional Methods I: Learners with Hearing Loss. 3 Hours.
This course will provide an introduction to appropriate instructional methodology for teaching students who are deaf or hard of hearing at the early childhood, elementary, and secondary levels. Upon completion students will be familiar with legal issues, teaming, assessment, IEP development, curriculum planning, instructional methods, and transition. LEC.

SPED 745. Audiology and Aural Rehabilitation. 3 Hours.
This course will provide a broad overview of the components of an aural rehabilitation service delivery model including audiological diagnostics and assessment, selection and fitting of a variety of listening devices, and intervention strategies for auditory training and speech perception training. The emphasis of this course will be on the aural habilitation of children; therefore, each of the components of an aural (re)habilitation plan will be considered in relation to the needs of individual children and their families. LEC.

SPED 750. Curriculum and Methods in Early Childhood. 3 Hours.
This is a curriculum and methods course that addresses how to design, implement and evaluate developmentally appropriate curricula and programs for children from birth to six years of age. Issues of curriculum design and assessment are introduced as interrelated processes that include structuring learning environments and experiences that are responsive to children's interests and abilities. Strategies for developing learning opportunities that are appropriate for young children, including children with special needs and children from diverse cultural, ethnic and linguistic backgrounds, will be explored. Students analyze and evaluate curriculum that focuses on facilitating progress in the domains of a) social emotional development; b) cognitive development; c) language and communication development; d) adaptive behavior development and e) gross and fine motor development. Students also analyze and evaluate curriculum standards and frameworks for the young child's acquisition of concepts, skills and dispositions that support the development of early competencies and interest in literacy, mathematics, the sciences, social studies, the arts and individual and group sports. Prerequisite: Admittance into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. SPED 752 or its equivalent (may be taken concurrently). LEC.

This course is designed for teachers seeking the Adaptive certification to teach students with High-Incidence Disabilities (Adaptive). Students will learn how to select, administer, score, and interpret formal and informal assessments; make data-based instructional decisions for students with specific learning disabilities, with social and emotional needs and disorders in behavior, mild mental retardation, and/or who experience other chronic health impairments. Individually chosen and administered tests, as well as high-stakes assessments, and will be discussed. Prerequisite: SPED 631 or SPED 731. LEC.

SPED 752. Overview of Early Childhood and Early Childhood Special Education. 3 Hours.
The course serves as an introduction to the profession including historical, philosophical, social and psychological foundations, awareness of value, ethical and legal issues, staff relations and the importance of becoming an advocate for children and families. Students will analyze/interpret trends in early education, including diversity, early childhood special education, family centered practices, legislation, public policy, and developmentally appropriate practice. The two key professional organizations, National Association for the Education of Young Children (NAEYC) and Division of Early Childhood for the Council for Exceptional Children (DEC), recommended practices serve as the foundation for understanding the roles, knowledge and competencies of the early educator. Prerequisite: Admittance into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. LEC.

SPED 753. Assessment in Early Education. 3 Hours.
This course examines the practice of gathering information for the purpose of making individual referral and instructional decisions for infants, toddlers, and young children with and without special needs. Discusses effective informal assessment techniques and emphasizes an ecological approach to gathering information. Introduces standardized assessment and screening instruments and provides an overview of the purposes and limitations of such tests. Prerequisite: Admittance into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. LEC.

SPED 755. Inclusive Strategies and Interventions for Preschoolers. 3 Hours.
This is a methods course that covers instructional approaches and procedures that offer developmentally appropriate, effective and inclusive early intervention for preschool and kindergarden age children who experience developmental delays, disabling conditions or who are at-risk for developmental problems and disabilities. It is directed toward: (a) "how" to teach, or the technical components of developing and delivering effective instruction that provide access to the general early childhood curriculum within recognized approaches to early childhood education for young children, and (b) the "what" to teach, or the selection of developmentally and individually appropriate child objectives as well as specific materials and specialized instructional approaches. The
ongoing learning, and collaborative problem solving processes within values and beliefs held by staff, policies and procedures that promote can be used to redesign the environment at a systems level. Considering

The purpose of this course is to describe how positive behavioral support can be used as part of a comprehensive positive behavioral support plan. An effective positive behavioral support plan contains multiple intervention strategies that address the function maintaining a student's problem behavior. This course contains lessons addressing setting events, antecedent interventions, replacing problem behavior, and consequence interventions. LEC.

SPED 765. Intervention Strategies for PBS-II. 1 Hour.
The purpose of this course is to introduce three types of interventions that can be used in positive behavioral support. An effective positive behavioral support plan contains multiple intervention strategies that address the function maintaining a student's problem behavior. This course contains a lesson on social skills education, crisis prevention, and interventions addressing physiological factors that influence a student's problem behavior. LEC.

SPED 766. Redesigning Environmental Systems. 1 Hour.
The purpose of this course is to describe how positive behavioral support can be used to redesign the environment at a systems level. Considering the larger issues within a system including the broader environment, the values and beliefs held by staff, policies and procedures that promote ongoing learning, and collaborative problem solving processes within a school will improve implementation of long-term positive behavioral support efforts. This course contains lessons on classroom management, staff development, and school-wide discipline. LEC.

SPED 767. Creating Positive Lifestyles through PBS. 1 Hour.
one of the most important outcomes of a positive behavioral support plan is an increase in the quality of life for both the student and everyone within the student's social network. The purpose of this course is to introduce topics related to creating positive lifestyles including person-centered planning, self-determination, and quality of life. LEC.

SPED 772. Participation with Children and Youth with Disabilities: ______. 1-3 Hours.
A course designed to provide field experiences with children and youth with disabilities in settings where educational services are provided. Students work directly with professionals such as special education teachers, general education teachers, therapists and other support personnel. Students participate as aides, tutors, and instructors with individual and small groups of children and youth. Ongoing meetings with supervisors are designed to facilitate both reflection and strategic learning. FLD.

SPED 777. Education of Secondary and Post-Secondary Level Exceptional Students: ______. 1-3 Hours.
A course based on the problems and needs of secondary and post-secondary level handicapped students with a focus on curriculum alternatives (academic and vocational), instructional planning options, instructional methods and materials and educational and community resources. The focus is on both mildly and moderately handicapped students. Prerequisite: Appropriate section of SPED 735 which may be taken concurrently. LEC.

SPED 775. Practicum with Children and Youth with Disabilities: ______. 1-10 Hours.
Intensive diverse and direct teaching experiences with children and youth with disabilities in educational settings. This practicum is a requirement for provisional endorsement according to KSDE. Students who have completed SPED 775 cannot enroll in SPED 675 within the same curricular area. Prerequisite: Varies by topic. FLD.

SPED 785. Application of Assessment Information for Exceptional Children and Youth. 3 Hours.
An analysis of information derived from assessment instruments and procedures appropriate to measuring the social and cognitive development of exceptional children and youth. Provides experiences in determining assessment data required in the development of individualized educational programs (IEP). Attention is also given to the design of informal assessment procedures, specific to the needs of exceptional children and youth. Experience is provided in the preparation and presentation of assessment data for use in instructional planning conferences. Prerequisite: An undergraduate or graduate course in educational measurement, and SPED 760. LEC.

SPED 790. Methods for Learners with Higher-Functioning Autism Spectrum Disorders. 3 Hours.
This is a methods course, with special emphasis on learners with high-functioning autism spectrum disorders. Particular attention is given effective practices and strategies for teaching, managing and promoting social skill and social communication development and proactive social interactions. LEC.

SPED 793. Psychology of Deafness. 2 Hours.
Reviews of the literature pertaining to psychological evaluations of the deaf and hard of hearing. Divergent views of deafness, type and degree of deafness are considered. Prerequisite: SPED 791. LEC.

SPED 798. Special Course: ______. 1-5 Hours.
A special course designed to address topical issues. LEC.
SPED 800. Classroom Intervention for Language Disorders of Handicapped Learners. 3 Hours.
Emphasis is given to milestones in normal language acquisition and variations from norms demonstrated by handicapped learners. Attention is also given to theoretical approaches to language training, formal and informal language assessment techniques, and instructional methods. Students design individualized instructional plans for incorporating language into the daily curriculum for handicapped learners. Prerequisite: SPED 425 or SPED 725. LEC.

SPED 801. Practicum in School Psychology. 4 Hours.
Supervised practice in the application of psychological theory to educational problems. Includes work useful with exceptional children as well as experiences in the application of such areas as mental hygiene and learning theory to problems involving the total school population. (Same as EPSY 910.) Prerequisite: Permission of advisor and instructor. FLD.

SPED 802. Advanced Practicum in School Psychology. 4 Hours.
A continuation of SPED 801 with special emphasis on remedial techniques associated with learning difficulties. (Same as EPSY 911.) Prerequisite: SPED 801 and permission of advisor and instructor. FLD.

SPED 804. Designing Online Instruction for E-Learning Environments. 3 Hours.
The focus of the course is on the status of e-learning at the K-12 and postsecondary levels and the process of designing content for e-learning applications. Attention will be given to design features, content structuring, instructional management, evaluation, and collaboration in the process of working with technicins in the process of developing online curriculum and instruction. Prerequisite: None. A background in education is preferred. LEC.

SPED 805. Practicum in Individual Intelligence Testing. 4 Hours.
Practicum training, by arrangement, in administration and interpretation of test results for school situations with particular emphasis on the Stanford-Binet. Prerequisite: Permission of instructor. FLD.

SPED 809. Language Assessment and Instruction II: Learners with Hearing Loss. 3-6 Hours.
This course covers assessment and instruction of speech skills for students who are deaf or hard of hearing. A historical review of the emphasis placed on speech development in deaf students will be provided. Students will learn formal and informal methods of assessment, developmental order and classification systems for English language sounds, and visual, auditory, and tactile facilitation techniques. Auditory training programs and techniques will be emphasized. LEC.

SPED 810. Speech Assessment and Instruction III: Learners with Hearing Loss. 3-6 Hours.
The purpose of this course is to prepare students to provide effective language assessment and instruction to students who are deaf or hard of hearing. This course focuses on the effect of hearing loss on assessment, language and reading, communication options, and instructional strategies. LEC.

SPED 811. Methods of Teaching Elementary School Subjects to the Deaf. 3 Hours.
Focus is on development of skills in adapting materials and methods of teaching science, math, social studies, spelling, and writing to hearing impaired students. Emphasis is placed on problems, trends and procedures used in career education specifically for the hearing impaired. Prerequisite: SPED 711. LEC.

SPED 812. Instructional Approaches in Inclusive Elementary Settings. 2 Hours.
This advanced method course provides curriculum design and instructional procedures appropriate for students at the elementary and middle school levels, including functional academic, social, and home and community life skills. NOTE: This is a 2 credit course to be offered during the first 8 weeks of a semester. It will precede SPED 814 in the same semester. Prerequisite: SPED 614 or SPED 714: Learning Styles and Instructional Accommodations. LEC.

SPED 814. Instructional Approaches in Inclusive Secondary Settings. 2 Hours.
This advanced method course provides curriculum design and instructional procedures for students at the secondary level, including career preparation and transition from school to adult life in the community. Prerequisite: SPED 614 or SPED 714: Learning Styles and Instructional Accommodations. LEC.

SPED 839. Management Principles and Assessment Procedures for the Young or Severely Handicapped. 2-3 Hours.
Examines basic learning procedures and techniques that are essential to programming efforts with the severely or young handicapped. Includes assessment scales, writing instructional programs, measuring operant behavior and evaluating operant behavior. Task and concept analysis related to treatment programs. Prerequisite: Students in the Early Childhood for the Handicapped program must enroll in one hour of practicum, SPED 775. Students in the Severely Handicapped Program must have completed SPED 726. LEC.

SPED 840. Program Planning in Special Education-Early Childhood. 3 Hours.
This course is designed to provide knowledge and skills to implement federal and state development mandates for special education and related services programs for young children from birth to five. It covers procedures for developing, implementing, and evaluating (a) instructional accountability for these children's participation in the general early childhood curriculum, (b) relationships between general and special early education personnel and programs; (c) roles and responsibilities; (d) interdisciplinary team planning including families; (e) coordinating, educating, and supervising paraeducators; and (f) general management responsibilities associated with instruction of young children with disabilities. Prerequisite: SPED 760 or SPED 860, which may be taken concurrently. LEC.

SPED 841. Advncd Methds&Asmnt:Learng Stratg&Contnt Mastery Struggling Learners&Stdnts High-Incidence Disabililt. 3 Hours.
This course is designed for graduate students enrolled in the Masters of Science Program with an emphasis in school-age populations primarily with high mild disabilities or seeking to obtain a license to teach students needing an adapted curriculum in Kansas. Course experiences focus on how to identify and implement evidenced-based practices designed to increase the success of students with mild disabilities in mathematics, social studies, science, and language arts through their participation in general and special education classrooms primarily in grades 4-12. This course emphasizes practices associated with understanding and evaluating curricular demands, monitoring student progress in content-area courses, providing tiered supports and accommodations in teaching, using assessment and grading alternatives, and incorporating the principles of explicit and strategic instruction to design instruction that will promote and enhance content-area learning. The course is intended for persons working toward the Kansas teaching license in teaching students needing an adapted curriculum. Prerequisite: SPED 730, SPED 741, admittance into the High Incidence Disabilities program in the Department of Special Education, or permission of the instructor. LEC.
SPED 842. Methods in Access and Inclusion in the Core Curriculum. 3 Hours.
This course focuses on foundational skills for setting up an inclusive program that meets the needs of students with low-incidence disabilities in general education settings. The course will emphasize many of the "behind-the-scenes" strategies and activities that must be completed on a regular basis to make inclusive education effective and efficient. Prerequisite: SPED 635 or SPED 735 and SPED 642 or SPED 742. LEC.

SPED 843. Advanced Methods & Assessment: Strategies for Students with Significant Behavior, Social & Emotional Need. 3 Hours.
This course is designed to introduce educators and related service professionals to prevention and intervention related to a broad range of antisocial, aggressive, and behavioral problems. Approaches focus on understanding and addressing the precipitating factors related to inappropriate behavior, short-term approaches for immediate crises, and problem-solving strategies for longer-term change. Course content will include antisocial, aggressive, and violent behavior; options for classroom interventions; school and system-oriented interventions, and ethical and legal issues involved in various prevention and intervention approaches. Class work will focus on literature, research-based intervention approaches, and case work illustrating specific approaches and programs. Prerequisite: SPED 631 or SPED 731, SPED 741, and SPED 743. LEC.

SPED 844. Advanced Methods in Access and Inclusion in the Core Curriculum. 3 Hours.
This course develops critical skills for implementing an inclusive program that meets the needs of students with low-incidence disabilities in general education settings. The course will emphasize many of the day-to-day strategies and activities that must be completed on a regular basis to make inclusive education effective and efficient for all learners. Prerequisite: SPED 635 or SPED 735 and SPED 642 or SPED 742. LEC.

SPED 850. Curriculum Planning for Exceptional Children and Youth. 3 Hours.
Provides experiences in applying information on identifying learning and behavioral characteristics of exceptional children and youth. Practices in adapting curriculum materials to meet the needs of the handicapped. Prerequisite: SPED 725 and SPED 735. LEC.

SPED 851. Law and Special Education. 3 Hours.
This course focuses on laws that apply to special education, especially "Individuals with Disabilities Education Act" and "No Child Left Behind Act." The American legal system, particularly in respect to special education, the constitutional and statutory provisions of federal and state law, and judicial decisions interpreting those laws are reviewed. The course relates equal protection, procedural due process, and substantive due process doctrines to school practices affecting students with disabilities and examines the six principles of P.L. 94-142 and similar principles in state legislation. (Same as ELPS 856.) LEC.

SPED 852. Citizens with Disabilities, Public Policy, and Policy Analysis. 3 Hours.
Students to analyze public policy that affects citizens with disabilities, various models of analysis are brought to bear on federal policy (e.g., education, transportation, housing, institutionalization, protection and advocacy, medical assistance, employment, vocational rehabilitation, and others). This course is not valid for core requirement in history and/or philosophy of education. (Same as ELPS 857.) Prerequisite: SPED 851 or permission of instructor. LEC.

SPED 853. Professional Ethics, Public Values, and Citizens with Disabilities. 3 Hours.
This course addresses the issues that professionals (e.g., educators, physicians, allied health providers, attorneys, and others) and families of persons with disabilities face in the context of public values, attitudes, and rules of law. The issues include education, treatment and nontreatment. This course is not valid for core requirement in history and/or philosophy of education. (Same as ELPS 858.) Prerequisite: SPED 850, SPED 852 or permission of instructor. LEC.

SPED 854. Family and Interprofessional Collaboration in Special Education. 3 Hours.
This course is designed to provide knowledge and skills to implement federal and state mandates for special education and related services programs as they relate to building and maintaining relationships with families of students with disabilities, and developing effective school programs. It covers procedures for developing, implementing, and evaluating (a) instructional accountability for special education students' participation in district and state assessment; (b) relationships between general and special education personnel and programs; (c) roles and responsibilities; (d) interdisciplinary team planning including families; (e) coordinating, educating, and supervising paraeducators; and (f) general management responsibilities associated with instruction of children and youth with disabilities. Course topics will include collaboration in schools, community systems and families, historical perspectives of family life and school involvement, effective relationships between home, school, community, communication among professionals and with families, school-based programs, home-based programs, and multicultural considerations. Prerequisite: SPED 631 or SPED 731, or SPED 632 or SPED 732, or SPED 735. LEC.

SPED 855. Transition Education and Services from Childhood through Adulthood. 3 Hours.
The purpose of this course is to provide a background in career development and transition education for persons with disabilities from middle school through adulthood. Emphasis is placed on IDEA requirements for transition services, career development and transition processes, transition services assessment, secondary special education curricular implications, career development and transition service needs, collaborative services in schools and communities to promote quality transition services, and issues and trends in transition education and services. LEC.

SPED 857. Career Development for Youth. 3 Hours.
The purpose of this course is to provide graduate students in special education and related areas who are specializing in secondary school/transition programs with an overview of career development for youth with disabilities. Emphasis is placed upon theory and practice related to career development, workbased learning, and school and community vocational training models. Prerequisite: SPED 856. LEC.

SPED 858. Assessment for Transition Planning. 3 Hours.
This course is designed to provide a review of psychometric principles and their utility as a foundation for quality assessment in transition assessment and planning for youth with disabilities. Formal and informal assessments across a range of transition planning areas are reviewed and evaluated. Skills in curriculum-based assessment, rating scales, situational assessment, and functional assessment are emphasized. Prerequisite: SPED 856 or permission of instructor. LEC.

SPED 859. Interagency Services for Transition to Adulthood. 3 Hours.
The purpose of this course is to provide an overview of interagency and community services and systems for adolescents and young adults with disabilities. Emphasis is placed on theory and practice related to interagency collaboration; systems change efforts in transition services; and state-of-art practices regarding supporting individuals with disabilities in community employment, living, socialization, community participation, and other areas of adult life. Prerequisite: SPED 856. LEC.
SPED 860. Education of Children and Youth with Disabilities II: ______. 3 Hours.
This course is designed to prepare students to implement specialized alternative strategies for individualized group instruction. Methods for developing and implementing overall treatment/educational programs, planning or selecting curriculum/service models for programs, and developing instructional materials are emphasized. Procedures for managing classroom staff and service resources, coordinating educational programs with families, other service personnel and program support staff, and monitoring overall program effectiveness are addressed. Prerequisite: SPED 760. LEC.

SPED 861. Blending Academics and Transition. 3 Hours.
The purpose of this course is to provide graduate students with research evidence of each of the components of universal design for learning within access to the general academic curriculum: multiple means of representation, expression, and engagement. Prerequisite: SPED 856. LEC.

SPED 862. Work-Based Learning. 3 Hours.
The purpose of this course is to provide graduate students with models and strategies to develop and coordinate meaningful work experiences for youth with disabilities. Emphasis is placed on practical strategies for engaging with community businesses, developing and customizing jobs and supporting youth in the workplace. Prerequisite: SPED 856. LEC.

SPED 863. Student Engagement in School and Community. 3 Hours.
The purpose of this course is to provide graduate students in special education and related areas who are specializing in secondary school/transition programs with an overview of models and issues pertaining to school and community engagement for secondary age youth. Prerequisite: SPED 856. LEC.

SPED 871. Advanced Practicum with Exceptional Children Needing an Autism Spectrum Curriculum. 3 Hours.
This is an advanced practicum experience for the graduate student teaching children and youth with autism spectrum disorders (ASD). The practicum is designed to provide intense, diverse and direct teaching experiences with children and youth who have learning and behavioral needs in the mild through moderate range and who have been identified with ASD including those who may have PDD-NOS, Asperger syndrome, autism and or high functioning autism. Prerequisite: SPED 760, SPED 785, SPED 743 and SPED 775. FLD.

SPED 874. Planning for Adult Outcomes: ______. 1-3 Hours.
The problems, trends, issues, and procedures used in planning life skills, occupational and vocational skills, and transition from school to adult living for persons with disabilities. Separate sections will be organized by topics pertaining to career/vocational development, assessment, and transition programs and services. These will include: (a) transitions from early childhood to adulthood, (B) application of assessment information, and (c) vocational preparation and employment. Prerequisite: SPED 725 (may be taken concurrently). LEC.

SPED 875. Practicum with Children and Youth with Disabilities: ______. 1-10 Hours.
This course is designed to provide intensive field work and direct teaching experiences with children and youth with disabilities in educational, residential, and clinical settings. Prerequisite: SPED 775. LEC.

SPED 879. Conferencing with Parents of Exceptional Children and Youth: ______. 3 Hours.
A course to develop knowledge and skills in the techniques of interviewing and conferencing, with special application to the professional, legal and ethical problems related to working with parents of exceptional children. Prerequisite: SPED 425 or SPED 725. LEC.

SPED 880. Coordination and Supervision of Services for Exceptional Children. 3 Hours.
An analysis of the role of the special education coordinator and supervisor. Particular attention will be given to: program development; planning, organizing, and delivering inservice training; personnel recruitment, selection, and evaluation; program management; and program evaluation. Students will relate the topical content to their specific area of expertise in special education. Prerequisite: SPED 425 or SPED 725 and six additional semester hours in special education. LEC.

SPED 889. Interdisciplinary Programming for Children and Youth with Disabilities. 3 Hours.
This course is designed to provide students a survey of disciplines which contribute to care and treatment of students with disabilities. Emphasis on professional roles, team participation, case management, and reporting and follow up. Disciplines include medicine, education, audiology, psychology, speech pathology, occupational therapy, physical therapy, music therapy and social work. Prerequisite: SPED 425 or SPED 725. LEC.

SPED 896. Capstone Adaptive Program Seminar. 3 Hours.
This course is designed to be a culminating experience for Adaptive Program students who choose to complete their masters programs with a comprehensive masters examination instead of one of the other program options (i.e., project or thesis). Students will complete this course during the final semester of their programs. Participants will review current issues, evidence-based practices, home-school considerations, state and federal regulations, and Kansas standards regarding appropriate education for students with mild to moderate disabilities (i.e., Adaptive category designation). The course is a prerequisite for the departmental comprehensive examination in the Adaptive area. LEC.

SPED 897. Independent Study. 1-4 Hours.
Prerequisite: Consent of advisor and instructor. RSH.

SPED 898. Master’s Project. 1-4 Hours.
RSH.

SPED 899. Master’s Thesis. 1-6 Hours.
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SPED 910. Advanced Application of Behavioral Management Techniques to Exceptional Children and Youth. 3 Hours.
Theory and principles of behavioral analysis. Emphasis will be given to observation, measurement, recording, and visual display techniques. Other topics include maintenance and generalization of behavior change. Students will be provided experience in the design and carrying out of research studies related to exceptional children and youth using principles and methods of behavioral analysis. Prerequisite: SPED 425 or SPED 725 and SPED 839. LEC.

SPED 915. Advanced Curriculum Development for Children and Youth with Disabilities. 3 Hours.
This course is designed to provide principles of development, needs assessment, evaluation and dissemination applied to curriculum products. Analysis of organizational and conceptual features of major curriculum development projects for students with disabilities are addressed; participants design curriculum procedures. Prerequisite: Twelve semester hours in special education and a general curriculum course. LEC.

SPED 920. Management of Instructional Resources for Exceptional Children and Youth. 3 Hours.
Designed for individuals with responsibilities for the operation of instructional resource centers and educational programs serving exceptional children and youth. Experiences relate to: selection, acquisition, circulation, and management of special education instructional media/materials and the delivery of inservice training specific to their
skills. Prerequisite: Professional preparation and/or experience in the Education of Exceptional Children and Youth and CI 616, Introduction to Educational Communications. LEC.

**SPED 925. Medical Aspects of Handicapping Conditions. 3 Hours.**
The organization of this course follows the chronology of an individual’s total development from genetic origin through fetal development, perinatal, infancy, childhood, and adolescence. Emphasis is given to etiology and implications of handicapping conditions on development. Attention is given to prevention, treatment, and habilitation or rehabilitation of various conditions. Prerequisite: SPED 725. LEC.

**SPED 930. Praxis Seminar: Scholarship and Writing. 3 Hours.**
Course assists first-year doctoral students in (a) developing a scholarly identity and technical skills in the areas of teaching, scholarship, and service, (b) developing a critical understanding of the scholarship informing special education practices and policies through course readings and seminar discussions, and (c) developing the skills to complete a comprehensive, critical review of a topic in the field of special education and disability. Prerequisite: Doctoral student status in Special Education. LEC.

**SPED 932. Praxis Seminar: Scholarship of Teaching. 3 Hours.**
Course assists doctoral students in learning (a) what is known about effective teacher education, (b) how that knowledge is translated into practice, and (c) what methodologies can be enlisted to conduct cutting-edge teacher education research. Prerequisite: Doctoral student status in Special Education. LEC.

**SPED 936. Cross-Spec I: Conceptual Issues in Special Education. 3 Hours.**
The focus of the seminar is current and historically-significant disability-related special education issues and problems (e.g., inclusive education, effective instruction, race and social class bias) that both intersect and implicate the various special education doctoral specializations. Because such problems tend to be intractable, the seminar is designed to build student capacity for conceptualizing and addressing them by exploring forms of disciplinary, interdisciplinary, and specialization scholarship and inquiry applicable to (re)framing and potentially resolving them. Prerequisite: Doctoral student status in Special Education. LEC.

**SPED 949. Specialist Research. 1-4 Hours.**
RSH.

**SPED 950. Civic Professionalism. 3 Hours.**
This course is concerned with the relationship between professions and society in a democracy, and specifically, with the ethics and practices associated with the professions of education, special education, and other disability-related fields. Models of professionalism are compared and advantages of civic professionalism for individuals with disabilities and their families, the professions, and society as a whole are explored. Lessons drawn from disagreements over questions such as the nature and social consequences of the professions are used to broaden understanding of what professionalism could and should be in a democracy. Prerequisite: Admission to doctoral program. LEC.

**SPED 970. Problems of Exceptionality: ____. 3 Hours.**
An extensive analysis of the literature and research pertinent to issues in a given disability. Separate sections are organized for various disabilities. Students may enroll in more than one section as a part of a graduate program. Prerequisite: Three courses in special education or permission of instructor. LEC.

**SPED 971. Organization and Administration of Services for Children and Youth with Disabilities. 3 Hours.**
This course is designed to prepare administrators and prospective administrators for organizing and administering educational programs for students with disabilities. Major topics include a review of current trends in special education, state and federal guidelines and regulations, legal and financing aspects of special education, program planning, and administration of special services. (Same as ELPS 959.) Prerequisite: Nine hours of education including educational psychology and SPED 725. LEC.

**SPED 972. Issues and Trends in Special Education I. 2 Hours.**
This course is designed to assist first-year special education doctoral students organize and synthesize a conceptual and substantive map of the field of special education and introduce them to corresponding faculty research interests and resources. Emphasis is placed on the academic writing expectations and resources of the field, university, and department, and on building a cohort of students to address common issues and to provide a foundation for peer support throughout the doctoral program. Prerequisite: Admission to special education doctoral program or permission of instructor. LEC.

**SPED 973. Issues and Trends in Special Education II. 2 Hours.**
This capstone seminar is designed to assist advanced doctoral students synthesize and evaluate information on a broad range of current and historically significant special education issues and trends in preparation for comprehensive examinations and future professional roles. Substantively, its primary focus is issues and trends that affect the entire field or cut across several areas of study and practice. Its secondary focus is significant issues and trends that affect particular categorical or functional sub-areas of study and practice within the field. Prerequisite: Completion of nine doctoral courses in special education, including 4 of 6 departmental Core courses. LEC.

**SPED 974. Issues and Trends: Students with Learning Disabilities. 3 Hours.**
This doctoral level course will explore current issues related to characteristics, educational methods and curricula, and questions, problems, concerns and movements connected to the education of children and youth with learning disabilities, emotional/behavioral disorders and autism spectrum disorders. Prerequisite: Doctoral program admission or permission of instructor. LEC.

**SPED 975. Advanced Practicum with Children and Youth with Disabilities: _____. 1-10 Hours.**
Advanced development of conceptual and practical field-based skills. Prerequisite: SPED 775. FLD.

**SPED 977. Learning Disabilities/Behavior Disorders Issues II. 3 Hours.**
This course is designed to provide students an opportunity to engage in an extensive analysis of the literature and research pertinent to critical issues in the field of learning and behavioral exceptionality. Prerequisite: SPED 970 LD/BD Issues I; SPED 972 Trends and Issues in Special Education I. LEC.

**SPED 980. Advanced Topics: _____. 1-3 Hours.**
A special course of study to meet current needs of education professionals -- primarily for post-master's level students. LEC.

**SPED 981. Changing Complex Systems. 3 Hours.**
This course is designed to provide students with an overview of seminal leadership and systems change literature. Prerequisite: Admission to doctoral program. LEC.

**SPED 982. Preparing Future Faculty. 3 Hours.**
This course is designed to give students an introduction and overview of academic life and the roles and responsibilities of an academic career. Its primary purpose is to help develop a realistic perspective of the expectations of academic life and the competencies required for a successful start in an academic career. Organized around the
broad themes of understanding the academy, faculty life and work, and academic career paths, course content addresses the roles and responsibilities of faculty life in different types of institutions and the issues faculty face as they pursue their academic careers. The course offers an opportunity for students to critically review their doctoral program in the context of preparing them for a successful start in an academic career and to explore options for academic career choices. Prerequisite: Doctoral program admission. LEC.

SPED 983. Proposal Development. 3 Hours.
This course is designed to teach a broad array of strategies associated with the development of successful proposals that will generate funds to support programmatic work. Among the topics covered in this course are sources of funding, strategies for conceptualizing and writing proposals, collaboration strategies, proposal peer-review process, and integrating proposal development activities into other professional responsibilities. Prerequisite: Admission to doctoral program and PRE 710. LEC.

SPED 984. School Reform and School Community Partnerships. 3 Hours.
This is an interprofessional course in public policy and school reform that is concerned with current policy and systems transformations in education and child/family services, including educational, social and health service systems and the movement toward school-linked service integration strategies and family partnerships, called the "community school" movement. Issues connected with comprehensive school reform including the role of special education and mental health in this process will be emphasized. Particular emphasis will be placed on urban, multicultural issues affecting community schools. Prerequisite: Doctoral program admission or permission of instructor. LEC.

SPED 985. Naturalistic Research. 3 Hours.
This course is designed to develop skills in naturalistic or constructivist research, while situating it theoretically within the broader framework of modern and postmodern social inquiry, and exploring its social, political and ethical implications. The course develops students' skills in using this form of interpretive qualitative research, provides a theoretical framework for selecting inquiry paradigms, compares and contrasts positivist and constructivist inquiry, and reviews social and political implications of constructivist inquiry. Prerequisite: Six hours of statistics, measurement, and/or large or small group research design. LEC.

SPED 986. Trends and Issues Associated with Online Instruction. 3 Hours.
The course examines the opportunities, challenges, cautions, and demands of web-based instruction in higher education. It explores the policy implications of web-based instruction, development of collaborative teaming skills utilizing telecommunications resources, and the design and technical aspects of online instruction. Particular attention is given to the implications of online instruction for accommodating needs presented by diverse learners through strategies such as universal designs. Prerequisite: Admission to doctoral program or permission of instructor. LEC.

SPED 990. Small Sample Empirical Research Methods. 3 Hours.
This course provides a detailed examination of research methods for advancing knowledge and validating hypothetically useful treatments in situations in which sufficient sample sizes to conduct formal experiments are lacking, the question of interest is better addressed by multiple observations of treatment effects over time, and/or the question is best addressed by taking a variety of observations of a single unit of interest. Specifically, two small sample research methods will be examined in depth with examples and practical application experience: interrupted time series design for small samples ("single case" design), and Yin's empirical case study method. Prerequisite: Doctoral program admission or permission of instructor. LEC.

SPED 991. Family Outcomes in Special Education. 3 Hours.
This course focuses on analyzing and synthesizing research literature focusing on intermediate outcomes (e.g., family-professional partnerships) and long-term outcomes (e.g., family quality of life) related to families of children, youth, and adults with disabilities. Key family theories are discussed and applied in the development and implementation of interventions that have potential to increase intermediate and long-term family outcomes. Prerequisite: Three courses in special education or permission of instructor. LEC.

SPED 992. Seminar in Early Childhood/Intervention. 3 Hours.
This seminar examines research to support evidence-based practices that currently exist in the areas of early intervention and early childhood special education. The primary objective is to learn how to read and critically analyze studies that form the evidence base for several early intervention and early childhood special education practices. Primary goals of the class include the development of skills for evaluating research studies in early intervention and early childhood special education, and increasing knowledge of evidence-based practices in the early intervention literature. Prerequisite: Three courses in special education or permission of instructor. LEC.

SPED 995. Field Experience in: 1-5 Hours.
Supervised and directed experiences in selected educational settings. Instructors conduct regular observations and conference with students. Written summaries and evaluations of field experiences are prepared independently by the student, a representative of the cooperating agency, and the instructor. Open only to advanced students and field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours. FLD.

SPED 996. College Teaching Experience. 2 Hours.
This course is designed to prepare students for college teaching. Enrolled students shall engage in semester-long, planned, instruction that includes college classroom teaching under supervision. Planning shall be done with a member of the faculty who will supervise the experience. FLD.

SPED 997. Individual Study. 1-4 Hours.
Prerequisite: Prior graduate course work in the area of study and consent of instructor. RSH.

SPED 998. Seminar in: 1-4 Hours.
LEC.

SPED 999. Doctoral Dissertation. 1-15 Hours.
THE.

Bachelor of Science in Education

Program Completion

Requirements for Program Completion

Completion of the Teacher Education program requires:

1. Successful completion of the B.S.E. degree. To complete this degree, the student must finish
   • An approved program of at least 120 hours with a cumulative grade-point average of at least 2.75.
   • Other general regulations of the school and university.

2. Successful completion of field experience (student teaching and/or internship). Admission to student teaching requires
• A minimum grade-point average of 2.5 in the content area.
• A minimum overall grade-point average of 2.75 with no grade lower than a C in any course in professional education.

Students must complete student teaching with a grade of C or higher to continue with their internships.
Students seeking elementary licensure complete field experiences at both primary (K-3) and intermediate (4-6) levels. Students seeking elementary licensure may not complete student teaching and internship in the same school except with special permission.

3. Completion of licensure requirements. To be licensed as a teacher in Kansas, a student must
  • Complete an application,
  • Pay a fee,
  • Pass the Kansas Performance Teaching Portfolio (KPTP),
  • Pass the Principles of Learning and Teaching Examination and Praxis content examination(s), and
  • Complete the academic requirements in items 1 and 2 above.

Information about licensure is available in the Licensure Office (http://www.soe.ku.edu/licensure) in J.R. Pearson Hall.

Note: Each state has its own licensure requirements. Being eligible for a license in Kansas does not ensure that the applicant is eligible for licensure in other states.

### Student Teaching/Internship Requirements

#### Unified Early Childhood Program

<table>
<thead>
<tr>
<th>Senior</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<td>SPED 439</td>
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<td>ELPS 537</td>
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<td>SPED 664</td>
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<td>SPED 506</td>
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<td>SPED 663</td>
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#### Elementary Program

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<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<td>SPED 506</td>
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#### Middle, Secondary, and K-12 Programs

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<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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### UEC

#### Unified Early Childhood (Birth–Grade 3) Major

<table>
<thead>
<tr>
<th>Admission Requirements (29-31)</th>
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<tbody>
<tr>
<td>ANTH 160</td>
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<tr>
<td>or SOG 130</td>
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<tr>
<td>C&amp;T 100</td>
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<tr>
<td>COMS 130</td>
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<td>ENGL 101</td>
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<td>ENGL 102</td>
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<td>GEG 104</td>
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<td>GEG 105</td>
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<tr>
<td>MATH 101</td>
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<tr>
<td>or MATH 104</td>
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<tr>
<td><strong>Select one of the following:</strong></td>
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<td>MATH 105</td>
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<tr>
<td>MATH 115</td>
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<tr>
<td>Higher mathematics class</td>
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<tr>
<td>PSYC 104</td>
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<tr>
<td><strong>Total Hours:</strong></td>
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#### General Education Courses (20-21)

| Select one of the following: | **3** |
| ENGL 203 | Topics in Reading and Writing: _____ |
| ENGL 209 | Introduction to Fiction |
| ENGL 210 | Introduction to Poetry |
| ENGL 211 | Introduction to the Drama |
| BIOL 100 | Principles of Biology |
| & BIOL 102 | and Principles of Biology Laboratory |
| HSES 260 | Personal and Community Health | 3 |
| HIST 128 | History of the United States Through the Civil War | 3 |
| LING 106 | Introductory Linguistics | 3 |
| or LING 110 | Language and Mind |
| **Select one of the following:** | **4-5** |
| PHSX 111 | Introductory Physics |
| & PHSX 116 | and Introductory Physics Laboratory |
| CHEM 110 | Introductory Chemistry |
| CHEM 130 | General Chemistry I |
| **Total Hours:** | **25** |

#### Teacher Education Courses (76-77)

| Select one of the following: | **3** |
| C&T 235 | Multicultural Education |
| SPED 261 | Families and Professional Partnerships |
| SPED 362 | Introduction to Early Education and Early Childhood Special Education |
| C&T 322 | Curriculum and the Learner in the Elementary School |
| C&T 344 | Children’s Literature in the Elementary School | 2 |
| MATH 109 | Mathematics for Elementary School Teachers I | 3 |
| SPED 560 | Constructing Early Childhood Curriculum |
| C&T 352 | Literacy Instruction in the Primary Grades (K-3) | 3 |
| C&T 353 | Literacy Practicum in the Primary Grades | 3 |
Elementary (K–6) Major

**Admission Requirements (32-34)**

- ANTH 160 The Varieties of Human Experience 3
- or SOC 130 Comparative Societies 3
- C&T 100 Introduction to the Education Profession 3
- COMS 130 Speaker-Audience Communication 3
- ENGL 101 Composition 3
- ENGL 102 Critical Reading and Writing 3
- GEOG 104 Principles of Physical Geography 3
- GEOG 105 Introductory Laboratory in Physical Geography 2
- HIST 128 History of the United States Through the Civil War 3
- MATH 101 College Algebra 3-5
- or MATH 104 Precalculus Mathematics 3
- Select one of the following: 3
  - MATH 105 Introduction to Topics in Mathematics
  - MATH 115 Calculus I
  - Higher mathematics class
- PSYC 104 General Psychology 3

**General Education Courses (23-24)**

Select one of the following: 3

- ENGL 203 Topics in Reading and Writing: ______
- ENGL 209 Introduction to Fiction

**Teacher Education Courses (75-76)**

Select one of the following: 2-3

- MEMT 341 Instructional Strategies in Music for Elementary Classroom Teachers
- VAE 341 Instructional Strategies in Art for Elementary Classroom Teachers
- THR 404 Children and Drama
- EPSY 305 Development and Learning of the Child 3
- SPED 326 Teaching Exceptional Children and Youth in General Education 3
- C&T 490 Student Teaching 6
- ELPS 301 Educational Technology in Elementary-Middle Education 3
- HSES 341 Instructional Strategies in Physical Education for Elementary Classroom Teachers 1
- MATH 105 Introduction to Topics in Mathematics 3
- MATH 115 Calculus I
- Higher mathematics class
- PSYC 104 General Psychology 3

**Course Descriptions**

- ENGL 209 Introduction to Fiction
- ENGL 210 Introduction to Poetry
- ENGL 211 Introduction to the Drama
- BIOL 100 Principles of Biology 3
- BIOL 102 Principles of Biology Laboratory 1
- HSES 260 Personal and Community Health 3
- HIST 308 Key Themes in Modern Global History 3
- or HIST 348 History of the Peoples of Kansas
- LING 106 Introductory Linguistics 3
- or LING 110 Language and Mind 4-5
- SPED 506 Advanced Practices for Children with Disabilities in the Elementary General Education Classroom 3
- C&T 494 Internship 6
- C&T 344 Children’s Literature in the Elementary School 2
- MATH 109 Mathematics for Elementary School Teachers I 3
- C&T 352 Literacy Instruction in the Primary Grades (K-3) 3
- C&T 353 Literacy Practicum in the Primary Grades 1
- MATH 110 Mathematics for Elementary School Teachers II 3
- C&T 330 Instructional Approaches for ESOL Learners in the Elementary/Early Childhood Classroom 3
- C&T 354 Literacy Instruction in the Intermediate Grades 2
- C&T 355 Literacy Practicum in the Intermediate Grades (4-6) 1
- C&T 347 Social Studies in the Elementary Classroom 3
- C&T 349 Science in the Elementary Classroom 3
- C&T 351 Mathematics for the Elementary Classroom 3
- ELPS 301 Educational Technology in Elementary-Middle Education 3
- HSES 341 Instructional Strategies in Physical Education for Elementary Classroom Teachers 1
- MEMT 341 Instructional Strategies in Music for Elementary Classroom Teachers
- VAE 341 Instructional Strategies in Art for Elementary Classroom Teachers
- THR 404 Children and Drama 3
- EPSY 305 Development and Learning of the Child 3
- SPED 326 Teaching Exceptional Children and Youth in General Education 3
- C&T 490 Student Teaching 6
- ELPS 301 Educational Technology in Elementary-Middle Education 3
- C&T 344 Children’s Literature in the Elementary School 2
- MATH 109 Mathematics for Elementary School Teachers I 3
- C&T 352 Literacy Instruction in the Primary Grades (K-3) 3
- C&T 353 Literacy Practicum in the Primary Grades 1
- MATH 110 Mathematics for Elementary School Teachers II 3
- C&T 330 Instructional Approaches for ESOL Learners in the Elementary/Early Childhood Classroom 3
- C&T 354 Literacy Instruction in the Intermediate Grades 2
- C&T 355 Literacy Practicum in the Intermediate Grades (4-6) 1
- C&T 347 Social Studies in the Elementary Classroom 3
- C&T 349 Science in the Elementary Classroom 3
- C&T 351 Mathematics for the Elementary Classroom 3
- ELPS 301 Educational Technology in Elementary-Middle Education 3
- HSES 341 Instructional Strategies in Physical Education for Elementary Classroom Teachers 1
- MEMT 341 Instructional Strategies in Music for Elementary Classroom Teachers
- VAE 341 Instructional Strategies in Art for Elementary Classroom Teachers
- THR 404 Children and Drama 3
- EPSY 305 Development and Learning of the Child 3
- SPED 326 Teaching Exceptional Children and Youth in General Education 3
- C&T 490 Student Teaching 6
- ELPS 301 Educational Technology in Elementary-Middle Education 3
- C&T 344 Children’s Literature in the Elementary School 2
- MATH 109 Mathematics for Elementary School Teachers I 3
- C&T 352 Literacy Instruction in the Primary Grades (K-3) 3
- C&T 353 Literacy Practicum in the Primary Grades 1
- MATH 110 Mathematics for Elementary School Teachers II 3
- C&T 330 Instructional Approaches for ESOL Learners in the Elementary/Early Childhood Classroom 3
- C&T 354 Literacy Instruction in the Intermediate Grades 2
- C&T 355 Literacy Practicum in the Intermediate Grades (4-6) 1
- C&T 347 Social Studies in the Elementary Classroom 3
- C&T 349 Science in the Elementary Classroom 3
- C&T 351 Mathematics for the Elementary Classroom 3
- ELPS 301 Educational Technology in Elementary-Middle Education 3
- HSES 341 Instructional Strategies in Physical Education for Elementary Classroom Teachers 1
- MEMT 341 Instructional Strategies in Music for Elementary Classroom Teachers
- VAE 341 Instructional Strategies in Art for Elementary Classroom Teachers
- THR 404 Children and Drama 3
- EPSY 305 Development and Learning of the Child 3
- SPED 326 Teaching Exceptional Children and Youth in General Education 3
- C&T 490 Student Teaching 6
- ELPS 301 Educational Technology in Elementary-Middle Education 3
- C&T 344 Children’s Literature in the Elementary School 2
- MATH 109 Mathematics for Elementary School Teachers I 3
- C&T 352 Literacy Instruction in the Primary Grades (K-3) 3
- C&T 353 Literacy Practicum in the Primary Grades 1
- MATH 110 Mathematics for Elementary School Teachers II 3
- C&T 330 Instructional Approaches for ESOL Learners in the Elementary/Early Childhood Classroom 3
- C&T 354 Literacy Instruction in the Intermediate Grades 2
English

Secondary (6-12) English Major

Admission Requirements (31-33)

ANTH 160 The Varieties of Human Experience 3
or SOC 130 Comparative Societies
BIOL 100 Principles of Biology 4
& BIOL 102 Principles of Biology Laboratory
C&T 100 Introduction to the Education Profession 3
COMS 130 Speaker-Audience Communication 3
ENGL 101 Composition 3
ENGL 102 Critical Reading and Writing 3
HIST 128 History of the United States Through the Civil War 3
or HIST 129 History of the United States After the Civil War
MATH 101 College Algebra 3-5
or MATH 104 Precalculus Mathematics
Select one of the following:
  MATH 105 Introduction to Topics in Mathematics
  MATH 115 Calculus I
  Higher mathematics class
PSYC 104 General Psychology 3

General and Major Requirements (40-41)

Select one of the following:
  ENGL 203 Topics in Reading and Writing: ______
  ENGL 209 Introduction to Fiction
  ENGL 210 Introduction to Poetry
  ENGL 211 Introduction to the Drama
  ENGL 312 Major British Writers to 1800 3
  ENGL 314 Major British Writers after 1800 3
  ENGL 320 American Literature I 3
  ENGL 322 American Literature II 3
  ENGL 332 Shakespeare 3
Select one of the following:
  ENGL 337 Introduction to U.S. Latino/a Literature
  ENGL 338 Introduction to African-American Literature
  ENGL 339 Introduction to Caribbean Literature
  ENGL 571 American Indian Literature: ______
  ENGL 573 U.S. Latina/o Literature: ______
  ENGL 574 African American Literature: ______
Select one of the following:
  ENGL 351 Fiction Writing I
  ENGL 355 Nonfiction Writing I
  ENGL 360 Advanced Composition: ______
  ENGL 555 Nonfiction Writing II
  ENGL 385 The Development of Modern English 3
or ENGL 387 Introduction to the English Language

ENGL 360 Advanced Composition: ______ 3
or ENGL 580 Rhetoric and Writing: ______

Select one of the following:
  HWC 304 World Literature I
  HWC 308 World Literature II
  HWC 312 World Literature III
  HSES 260 Personal and Community Health 3
Select one of the following: 3
  ATMO 105 Introductory Meteorology
  CHEM 110 Introductory Chemistry
  GEOG 104 Principles of Physical Geography
  & GEOG 105 and Introductory Laboratory in Physical Geography
  GEOG 101 World Regional Geography, Honors
  & GEOG 103 and Principles of Human Geography, Honors
  PHSX 114 College Physics I

Teacher Education Courses (55)

C&T 235 Multicultural Education 3
ELPS 250 Education and Society 3
ELPS 302 Educational Technology in Middle/Secondary Education 3
EPSY 306 Development and Learning of the Adolescent 3
SPED 326 Teaching Exceptional Children and Youth in General Education 3
C&T 324 Curriculum Learner in the Middle School and High School 3
C&T 430 Teaching Literature for Young Adults 3
EPSY 456 Managing and Motivating Learners in the Middle and Secondary Classroom 3
C&T 531 Instructional Approaches for ESOL Learners in the Middle/Secondary Classroom 3
C&T 533 Curriculum and Instruction in Middle & Secondary English/Language Arts Classrooms 3
C&T 540 Advanced Practices in Teaching English in the Middle and Secondary Schools 3
C&T 448 Reading and Writing Across the Curriculum 3
C&T 489 Advanced Teaching Practicum 1
ELPS 537 The Governance and Organization of Schools 3
SPED 507 Advanced Practices for Children with Disabilities 3
Middle/Secondary General Education Classroom 3
C&T 490 Student Teaching 6
C&T 495 Seminar: Developing the Teaching Portfolio 3
EPSY 520 Classroom Assessment 3

Math

Middle (5-8) Mathematics Major

Admission Requirements (31-35)

ANTH 160 The Varieties of Human Experience 3
or SOC 130 Comparative Societies
BIOL 100 Principles of Biology 4
& BIOL 102 Principles of Biology Laboratory
C&T 100 Introduction to the Education Profession 3
COMS 130 Speaker-Audience Communication 3
ENGL 101 Composition 3
ENGL 102  Critical Reading and Writing  3
HIST 128  History of the United States Through the Civil War  3
or HIST 129  History of the United States After the Civil War  3
MATH 101  College Algebra  3-5
or MATH 104  Precalculus Mathematics  3-5
Select one of the following:
  MATH 105  Introduction to Topics in Mathematics  3
  MATH 115  Calculus I  3
Higher mathematics course
PSYC 104  General Psychology  3

General Education and Major Requirements (37-41)
MATH 109  Mathematics for Elementary School Teachers I  3
MATH 110  Mathematics for Elementary School Teachers II  3
MATH 121  Calculus I  5
MATH 122  Calculus II  5
MATH 365  Elementary Statistics  3
MATH 409  Topics in Geometry for Secondary and Middle School Teachers  2
MATH 410  Topics in History of Mathematics for Secondary and Middle School Teachers  1
MATH 450  Discrete Mathematics  3
MATH 558  Introductory Modern Algebra  3
MATH elective (MATH 290 is recommended)  2-5
HSES 260  Personal and Community Health  3
Select one of the following physical science lecture and labs:  4-5
  ATMO 105  Introductory Meteorology  3
  CHEM 110  Introductory Chemistry  3
  GEOG 104  Principles of Physical Geography & GEOG 105  and Introductory Laboratory in Physical Geography  3
  GEOG 101  World Regional Geography, Honors & GEOG 103  and Principles of Human Geography, Honors  3
PHSX 114  College Physics I  3

Teacher Education Courses (52)
C&T 235  Multicultural Education  3
ELPS 250  Education and Society  3
ELPS 302  Educational Technology in Middle/Secondary Education  3
EPSY 306  Development and Learning of the Adolescent  3
SPED 326  Teaching Exceptional Children and Youth in General Education  3
C&T 324  Curriculum Learner in the Middle School and High School  3
EPSY 456  Managing and Motivating Learners in the Middle and Secondary Classroom  3
C&T 331  Instructional Approaches for ESOL Learners in the Middle/Secondary Classroom  3
C&T 539  Curriculum and Instruction in Middle and Secondary Mathematics Classrooms  3
C&T 543  Advanced Practices in Teaching Mathematics in the Middle and Secondary Schools  3
C&T 448  Reading and Writing Across the Curriculum  3
C&T 489  Advanced Teaching Practicum  1
ELPS 537  The Governance and Organization of Schools  3
SPED 507  Advanced Practices for Children with Disabilities  3
C&T 490  Student Teaching  6
C&T 495  Seminar: Developing the Teaching Portfolio  3
EPSY 520  Classroom Assessment  3

History/Gov't
Secondary (6-12) History and Government Major

Admission Requirements (35-37)
ANTH 160  The Varieties of Human Experience  3
or SOC 130  Comparative Societies  3
C&T 100  Introduction to the Education Profession  3
COMS 130  Speaker-Audience Communication  3
ENGL 101  Composition  3
ENGL 102  Critical Reading and Writing  3
GEOG 100  World Regional Geography  3
GEOG 104  Principles of Physical Geography  3
GEOG 105  Introductory Laboratory in Physical Geography  2
HIST 128  History of the United States Through the Civil War  3
MATH 101  College Algebra  3-5
or MATH 104  Precalculus Mathematics  3-5
Select one of the following:
  MATH 105  Introduction to Topics in Mathematics  3
  MATH 115  Calculus I  3
Higher mathematics course
PSYC 104  General Psychology  3

Major Requirements (51-52)
ECO 104  Introductory Economics  4
GEOG 100  World Regional Geography (Admission Requirement)  3
GEOG 104  Principles of Physical Geography (Admission Requirement)  3
GEOG 105  Introductory Laboratory in Physical Geography (Admission Requirement)  2
Select one of the following:  3-4
  GEOG 111  Maps and Mapping  3
  GEOG 210  Computers, Maps, and Geographical Analysis  3
  GEOG 311  Map Conception and Development  3
  GEOG 358  Principles of Geographic Information Systems  3
Select one of the following:  3
  GEOG 351  Africa's Human Geographies  3
  GEOG 396  East Asia  3
  GEOG 553  Geography of African Development  3
  GEOG 570  Geography of American Indians  3
HIST 128  History of the United States Through the Civil War (Admission Requirement)  3
HIST 129  History of the United States After the Civil War  3
An Asian or African history course  3
A course in Latin American area studies  3
HIST (300 level or higher) American history elective  3
HIST (300 level or higher) A course in European history  3
Science

Middle (5-8) Science Major

Admission Requirements (28-32)

ANTH 160  The Varieties of Human Experience  3
or SOC 130  Comparative Societies
BIOL 150  Principles of Molecular and Cellular Biology  4
C&T 100  Introduction to the Education Profession  3
COMS 130  Speaker-Audience Communication  3
ENGL 101  Composition  3
ENGL 102  Critical Reading and Writing  3
MATH 101  College Algebra  3
or MATH 104  Precalculus Mathematics
Select one of the following:  3-5
MATH 105  Introduction to Topics in Mathematics
MATH 115  Calculus I
Higher mathematics class
PSYC 104  General Psychology  3

Major Requirements (49)

ASTR 191  Contemporary Astronomy  3

ATMO 105  Introductory Meteorology  5
BIOL 152  Principles of Organismal Biology  4
CHEM 130  General Chemistry I  5
CHEM 135  General Chemistry II  5
GEOL 101  The Way The Earth Works  5
& GEOL 103  and Geology Fundamentals Laboratory
HIST 136  Early Science to 1700  3
or HIST 137  History of Modern Science
Select one of the following:  5
MATH 101  College Algebra
& MATH 103  and Trigonometry
MATH 104  Precalculus Mathematics
PHSX 114  College Physics I  4
PHSX 115  College Physics II  4
Elective in science (300 level or higher)  3
Undergraduate science research course (300 level or higher)  3

Teacher Education Courses (52)

C&T 235  Multicultural Education  3
ELPS 250  Education and Society  3
ELPS 302  Educational Technology in Middle/Secondary Education  3
EPSY 306  Development and Learning of the Adolescent  3
SPED 326  Teaching Exceptional Children and Youth in General Education  3
C&T 324  Curriculum Learner in the Middle School and High School  3
EPSY 456  Managing and Motivating Learners in the Middle and Secondary Classroom  3
C&T 331  Instructional Approaches for ESOL Learners in the Middle/Secondary Classroom  3
C&T 335  Curriculum and Instruction in Middle and Secondary History and Government Classrooms  3
C&T 420  Teaching Kansas Government and Contemporary Public Policy Issues: ______  3
C&T 541  Advanced Practices in Teaching Social Studies in Middle/Secondary Schools  3
C&T 448  Reading and Writing Across the Curriculum  3
C&T 489  Advanced Teaching Practicum  1
ELPS 537  The Governance and Organization of Schools  3
SPED 507  Advanced Practices for Children with Disabilities Middle/Secondary General Education Classroom  3
C&T 490  Student Teaching  6
C&T 495  Seminar: Developing the Teaching Portfolio  3
EPSY 520  Classroom Assessment  3

Foreign Langs.

Foreign Language Majors (PreK-12) Requirements

Admission Requirements (31-33)

ANTH 160  The Varieties of Human Experience  3
or SOC 130  Comparative Societies
BIOL 100  Principles of Biology  4
& BIOL 102  and Principles of Biology Laboratory
C&T 100  Introduction to the Education Profession  3
COMS 130  Speaker-Audience Communication  3
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENGL 101</td>
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<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>HIST 128</td>
<td>History of the United States Through the Civil War</td>
<td>3</td>
</tr>
<tr>
<td>or HIST 129</td>
<td>History of the United States After the Civil War</td>
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</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra</td>
<td>3-5</td>
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<tr>
<td>or MATH 104</td>
<td>Precalculus Mathematics</td>
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<tr>
<td>Select one of the following:</td>
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<td></td>
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<tr>
<td>MATH 105</td>
<td>Introduction to Topics in Mathematics</td>
<td>3</td>
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<tr>
<td>MATH 115</td>
<td>Calculus I</td>
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<td>Higher mathematics course</td>
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<td>PSYC 104</td>
<td>General Psychology</td>
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### Chinese Major Requirements

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<td>Elementary Chinese I</td>
<td>5</td>
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</tr>
<tr>
<td>CHIN 204</td>
<td>Intermediate Chinese I</td>
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<td>CHIN 208</td>
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<tr>
<td>CHIN 504</td>
<td>Advanced Modern Chinese I</td>
<td>5</td>
</tr>
<tr>
<td>CHIN 508</td>
<td>Advanced Modern Chinese II</td>
<td>5</td>
</tr>
<tr>
<td>LING 106</td>
<td>Introductory Linguistics</td>
<td>3</td>
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<tr>
<td>HSES 260</td>
<td>Personal and Community Health</td>
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Select one of the following Physical science lecture and laboratory: 4-5

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<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>ATMO 105</td>
<td>Introductory Meteorology</td>
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<tr>
<td>CHEM 110</td>
<td>Introductory Chemistry</td>
<td></td>
</tr>
<tr>
<td>GEOG 104</td>
<td>Principles of Physical Geography</td>
<td></td>
</tr>
<tr>
<td>&amp; GEOG 105</td>
<td>Introductory Laboratory in Physical Geography</td>
<td></td>
</tr>
<tr>
<td>GEOL 101</td>
<td>The Way The Earth Works</td>
<td></td>
</tr>
<tr>
<td>&amp; GEOL 103</td>
<td>Geology Fundamentals Laboratory</td>
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<td>PHSX 114</td>
<td>College Physics I</td>
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Select two of the following literature courses: 3

<table>
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<th>Course Title</th>
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<tbody>
<tr>
<td>CHIN 562</td>
<td>Modern Chinese Texts I</td>
<td></td>
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<tr>
<td>EALC 310</td>
<td>The Chinese Novel</td>
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</tr>
<tr>
<td>EALC 314</td>
<td>Traditional Chinese Literature in Translation</td>
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</tr>
<tr>
<td>EALC 318</td>
<td>Modern Chinese Fiction and Film</td>
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Select two of the following culture courses: 3

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EALC 368</td>
<td>The Peoples of China</td>
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<tr>
<td>EALC 420</td>
<td>Daily Life in China From the Opium War to the Present</td>
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<tr>
<td>EALC 530</td>
<td>Chinese Literature and Culture: Premodern Times</td>
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### French Major Requirements

<table>
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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>FREN 110</td>
<td>Elementary French I</td>
<td>5</td>
</tr>
<tr>
<td>or FREN 111</td>
<td>Introduction to French I</td>
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<tr>
<td>FREN 120</td>
<td>Elementary French II</td>
<td>5</td>
</tr>
<tr>
<td>FREN 230</td>
<td>Intermediate French I</td>
<td>3</td>
</tr>
<tr>
<td>or FREN 231</td>
<td>Intermediate French I, Honors</td>
<td></td>
</tr>
<tr>
<td>FREN 240</td>
<td>Intermediate French II</td>
<td>3</td>
</tr>
<tr>
<td>or FREN 241</td>
<td>Intermediate French II, Honors</td>
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</tr>
<tr>
<td>FREN 300</td>
<td>Intensive Review of French Grammar</td>
<td>3</td>
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<tr>
<td>FREN 310</td>
<td>French Phonetics</td>
<td>3</td>
</tr>
<tr>
<td>FREN 326</td>
<td>Introduction to French Literature</td>
<td>3</td>
</tr>
<tr>
<td>FREN 350</td>
<td>Applied French Grammar and Composition I</td>
<td>3</td>
</tr>
<tr>
<td>FREN 375</td>
<td>Intermediate French Conversation</td>
<td>3</td>
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<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>FREN 376</td>
<td>Advanced French Conversation</td>
<td>3</td>
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Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>FREN 450</td>
<td>French Literature of the Middle Ages</td>
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<tr>
<td>FREN 460</td>
<td>French Literature of the Seventeenth Century</td>
<td></td>
</tr>
<tr>
<td>FREN 465</td>
<td>French Literature of the 19th Century</td>
<td></td>
</tr>
<tr>
<td>FREN 470</td>
<td>French Literature of the Twentieth Century</td>
<td></td>
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<tr>
<td>FREN 480</td>
<td>Studies in French Literature: _____</td>
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</tr>
<tr>
<td>HSES 260</td>
<td>Personal and Community Health</td>
<td>3</td>
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</table>

Select one of the following Physical science lecture and laboratory: 4-5

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ATMO 105</td>
<td>Introductory Meteorology</td>
<td></td>
</tr>
<tr>
<td>CHEM 110</td>
<td>Introductory Chemistry</td>
<td></td>
</tr>
<tr>
<td>GEOG 104</td>
<td>Principles of Physical Geography</td>
<td></td>
</tr>
<tr>
<td>&amp; GEOG 105</td>
<td>Introductory Laboratory in Physical Geography</td>
<td></td>
</tr>
<tr>
<td>GEOL 101</td>
<td>The Way The Earth Works</td>
<td></td>
</tr>
<tr>
<td>&amp; GEOL 103</td>
<td>Geology Fundamentals Laboratory</td>
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<td>College Physics I</td>
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Select one of the following:

<table>
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<th>Course Title</th>
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<tbody>
<tr>
<td>FREN 410</td>
<td>Survey of French Culture I</td>
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<tr>
<td>FREN 420</td>
<td>Survey of French Culture II</td>
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<tr>
<td>FREN 430</td>
<td>La France d'Aujourd'Hui</td>
<td></td>
</tr>
<tr>
<td>FREN 431</td>
<td>French-Speaking World (Outside France)</td>
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<tr>
<td>FREN 440</td>
<td>Studies in French Culture: _____</td>
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### German Major Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>GERM 104</td>
<td>Elementary German I</td>
<td>5</td>
</tr>
<tr>
<td>GERM 108</td>
<td>Elementary German I</td>
<td>5</td>
</tr>
<tr>
<td>GERM 201</td>
<td>Intermediate German I</td>
<td>3</td>
</tr>
<tr>
<td>GERM 202</td>
<td>Intermediate German II</td>
<td>3</td>
</tr>
<tr>
<td>GERM 301</td>
<td>High Intermediate German I</td>
<td>3</td>
</tr>
<tr>
<td>GERM 302</td>
<td>High Intermediate German II</td>
<td>3</td>
</tr>
<tr>
<td>GERM 315</td>
<td>German Literature and the Modern Era</td>
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Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GERM 411</td>
<td>German Culture 1150-1750</td>
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<tr>
<td>GERM 412</td>
<td>German Culture 1750-Present</td>
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<tr>
<td>GERM 375</td>
<td>Topics in Film of German-Speaking Europe: _____</td>
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<tr>
<td>GERM 475</td>
<td>Topics in German Studies: _____</td>
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<tr>
<td>GERM 575</td>
<td>Topics in Genre: _____</td>
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<tr>
<td>GERM 480</td>
<td>Literature and Culture of German-Speaking Europe 1150-1750</td>
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<tr>
<td>GERM 481</td>
<td>Literature and Culture of German-Speaking Europe 1750-1830</td>
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<tr>
<td>GERM 482</td>
<td>Literature and Culture of German-Speaking Europe 1830-1918</td>
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<tr>
<td>GERM 483</td>
<td>Literature and Culture of German-Speaking Europe 1918-Present</td>
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Select one of the following:

<table>
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<th>Course Title</th>
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<tbody>
<tr>
<td>GERM 401</td>
<td>Advanced German I</td>
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<tr>
<td>GERM 402</td>
<td>Advanced German II</td>
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<tr>
<td>GERM 501</td>
<td>Advanced German III</td>
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<tr>
<td>GERM 550</td>
<td>German Language Seminar: History of the German Language</td>
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<tr>
<td>GERM 560</td>
<td>German Language Seminar: Structure of the German Language</td>
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</table>
### Bachelor of Science in Education

**Latin Major Requirements**

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<tr>
<td>LAT 104</td>
<td>Elementary Latin I</td>
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<tr>
<td>LAT 105</td>
<td>Elementary Latin I, Honors</td>
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<td>LAT 108</td>
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<td>5</td>
</tr>
<tr>
<td>LAT 109</td>
<td>Elementary Latin II, Honors</td>
<td>5</td>
</tr>
<tr>
<td>LAT 112</td>
<td>Readings in Latin Literature</td>
<td>3</td>
</tr>
<tr>
<td>LAT 113</td>
<td>Readings in Latin Literature, Honors</td>
<td>3</td>
</tr>
<tr>
<td>LAT 200</td>
<td>Vergil's Aeneid</td>
<td>3</td>
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<tr>
<td>LAT 201</td>
<td>Vergil's Aeneid, Honors</td>
<td>3</td>
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<tr>
<td>CLSX 148</td>
<td>Greek and Roman Mythology</td>
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<tr>
<td>CLSX 149</td>
<td>Greek and Roman Mythology Honors</td>
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**Japanese Major Requirements**

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<td>JPN 108</td>
<td>Elementary Japanese II</td>
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<tr>
<td>JPN 204</td>
<td>Intermediate Japanese I</td>
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<tr>
<td>JPN 208</td>
<td>Intermediate Japanese II</td>
<td>5</td>
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<tr>
<td>JPN 306</td>
<td>Advanced Japanese Conversation I</td>
<td>2</td>
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<tr>
<td>JPN 310</td>
<td>Advanced Japanese Conversation II</td>
<td>2</td>
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<tr>
<td>JPN 504</td>
<td>Advanced Modern Japanese I</td>
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</tr>
<tr>
<td>JPN 508</td>
<td>Advanced Modern Japanese II</td>
<td>3</td>
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<tr>
<td>LING 106</td>
<td>Introductory Linguistics</td>
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<tr>
<td>HSES 260</td>
<td>Personal and Community Health</td>
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Select one of the following Physical science lecture and laboratory: 4-5

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<tr>
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<th>Title</th>
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<tbody>
<tr>
<td>ATMO 105</td>
<td>Introductory Meteorology</td>
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<tr>
<td>CHEM 110</td>
<td>Introductory Chemistry</td>
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<tr>
<td>GEOG 104</td>
<td>Principles of Physical Geography</td>
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</tr>
<tr>
<td>&amp; GEOG 105</td>
<td>and Introductory Laboratory in Physical Geography</td>
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<tr>
<td>GEOL 101</td>
<td>The Way The Earth Works</td>
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<tr>
<td>&amp; GEOL 103</td>
<td>and Geology Fundamentals Laboratory</td>
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<td>PHSX 114</td>
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Select two of the following literature courses: 3

<table>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>JPN 562</td>
<td>Modern Japanese Texts I</td>
<td></td>
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<tr>
<td>EALC 312</td>
<td>Traditional Japanese Literature in Translation</td>
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</tr>
<tr>
<td>or EALC 575</td>
<td>Love, Sexuality and Gender in Japanese Literature</td>
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</tr>
<tr>
<td>EALC 314</td>
<td>Traditional Chinese Literature in Translation</td>
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<tr>
<td>EALC 318</td>
<td>Modern Chinese Fiction and Film</td>
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Select two of the following culture courses: 3

<table>
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<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>FMS 315</td>
<td>Survey of Japanese Film</td>
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<tr>
<td>HIST 398</td>
<td>Introduction to History of Japan: Anime to Zen</td>
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<tr>
<td>HIST 399</td>
<td>The Samurai</td>
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<tr>
<td>REL 509</td>
<td>Religion in Japan</td>
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**Russian Major Requirements**

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<tbody>
<tr>
<td>RUSS 104</td>
<td>Elementary Russian I</td>
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<td>Elementary Russian II</td>
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<td>RUSS 204</td>
<td>Intermediate Russian I</td>
<td>6</td>
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<td>RUSS 208</td>
<td>Intermediate Russian II</td>
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<td>RUSS 504</td>
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<td>RUSS 508</td>
<td>Advanced Russian II</td>
<td>3</td>
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<tr>
<td>RUSS 600</td>
<td>Classics of Russian Culture</td>
<td>3</td>
</tr>
<tr>
<td>RUSS 604</td>
<td>Contemporary Russian Culture</td>
<td>3</td>
</tr>
<tr>
<td>RUSS 612</td>
<td>Introduction to Russian Literature</td>
<td>3</td>
</tr>
<tr>
<td>RUSS 616</td>
<td>Stylistics</td>
<td>3</td>
</tr>
<tr>
<td>SLAV 140</td>
<td>Introduction to Russian Culture</td>
<td>3</td>
</tr>
<tr>
<td>SLAV 520</td>
<td>Russian Phonetics, Phonology, and Inflectional Morphology</td>
<td>3</td>
</tr>
<tr>
<td>or SLAV 340</td>
<td>Introduction to the Languages and Peoples of Russia and East-Central Europe</td>
<td></td>
</tr>
<tr>
<td>HSES 260</td>
<td>Personal and Community Health</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following Physical science lecture and laboratory: 4-5

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATMO 105</td>
<td>Introductory Meteorology</td>
<td></td>
</tr>
<tr>
<td>CHEM 110</td>
<td>Introductory Chemistry</td>
<td></td>
</tr>
<tr>
<td>GEOG 104</td>
<td>Principles of Physical Geography</td>
<td></td>
</tr>
<tr>
<td>&amp; GEOG 105</td>
<td>and Introductory Laboratory in Physical Geography</td>
<td></td>
</tr>
<tr>
<td>GEOL 101</td>
<td>The Way The Earth Works</td>
<td></td>
</tr>
<tr>
<td>&amp; GEOL 103</td>
<td>and Geology Fundamentals Laboratory</td>
<td></td>
</tr>
<tr>
<td>PHSX 114</td>
<td>College Physics I</td>
<td></td>
</tr>
</tbody>
</table>

**Spanish Major Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 104</td>
<td>Elementary Spanish I</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 108</td>
<td>Elementary Spanish II</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 212</td>
<td>Intermediate Spanish I</td>
<td>3</td>
</tr>
<tr>
<td>or SPAN 213</td>
<td>Honors Intermediate Spanish I</td>
<td></td>
</tr>
<tr>
<td>SPAN 216</td>
<td>Intermediate Spanish II</td>
<td>3</td>
</tr>
<tr>
<td>or SPAN 217</td>
<td>Honors Intermediate Spanish II</td>
<td></td>
</tr>
<tr>
<td>SPAN 324</td>
<td>Grammar and Composition</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 328</td>
<td>Intermediate Spanish Conversation</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
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<tr>
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<tr>
<td>SPAN 340</td>
<td>Textual Analysis and Critical Reading</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 424</td>
<td>Advanced Spanish Composition and Grammar</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 428</td>
<td>Advanced Spanish Conversation</td>
<td>2</td>
</tr>
<tr>
<td>SPAN 429</td>
<td>Spanish Phonetics</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 446</td>
<td>Spanish Culture</td>
<td>3</td>
</tr>
<tr>
<td>or SPAN 447</td>
<td>Latin American Cultures: ______</td>
<td></td>
</tr>
<tr>
<td>HSES 260</td>
<td>Personal and Community Health</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following Physical science lecture and laboratory: 4-5

- ATMO 105  Introductory Meteorology  
- CHEM 110  Introductory Chemistry  
- GEOG 104  Principles of Physical Geography  
- GEOG 105  and Introductory Laboratory in Physical Geography  
- GEOL 101  The Way The Earth Works  
- GEOL 103  and Geology Fundamentals Laboratory  
- PHSX 114  College Physics I

Select two of the following: 6

- SPAN 451  Early Modern Spanish Studies: ______    
- SPAN 453  Twentieth Century Spanish Studies: ______ (recommended)  
- SPAN 462  Twentieth Century Spanish-American Studies: ______
- SPAN 463  National Traditions in Spanish America: ______

## Teacher Education Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;T 235</td>
<td>Multicultural Education</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 250</td>
<td>Education and Society</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 302</td>
<td>Educational Technology in Middle/Secondary Education</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 306</td>
<td>Development and Learning of the Adolescent</td>
<td>3</td>
</tr>
<tr>
<td>SPED 326</td>
<td>Teaching Exceptional Children and Youth in General Education</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 324</td>
<td>Curriculum Learner in the Middle School and High School</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 456</td>
<td>Managing and Motivating Learners in the Middle and Secondary Classroom</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 331</td>
<td>Instructional Approaches for ESOL Learners in the Middle/Secondary Classroom</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 530</td>
<td>Curriculum and Instruction in Foreign Language Classrooms</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 544</td>
<td>Advanced Practices: Situating Foreign Language Content, Dispositions, Skills &amp; Tools Language Classroom</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 448</td>
<td>Reading and Writing Across the Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 489</td>
<td>Advanced Teaching Practicum</td>
<td>1</td>
</tr>
<tr>
<td>ELPS 537</td>
<td>The Governance and Organization of Schools</td>
<td>3</td>
</tr>
<tr>
<td>SPED 507</td>
<td>Advanced Practices for Children with Disabilities Middle/Secondary General Education Classroom</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 490</td>
<td>Student Teaching</td>
<td>6</td>
</tr>
<tr>
<td>C&amp;T 495</td>
<td>Seminar: Developing the Teaching Portfolio</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 520</td>
<td>Classroom Assessment</td>
<td>3</td>
</tr>
</tbody>
</table>

## Endorsements

### English for Speakers of Other Languages (ESOL)

The Kansas State Department of Education provides for an ESOL endorsement for teachers holding an initial Kansas teaching license, or for those in the process of completing their initial license requirements. It is recommended that undergraduates interested in the ESOL endorsement take LING 106/110 early in their program. The first ESOL course completed should be a methods course (C&T 330/331 for undergraduate; C&T 820 for graduate). Classes at the 700 level or higher are graduate level (which may help with pay in some districts and count towards a master's degree in the C&T Department).

**Faculty Advisors for ESOL:** Dr. Paul Markham, pmarkham@ku.edu; Dr. Lizette Peter, l peter@ku.edu; Dr. Hyesun Cho, h cho@ku.edu; Dr. M. Balia Thomas, m095@ku.edu; Karen Jorgensen, karenj@ku.edu

Choose one of the following: 3

- LING 106  Introductory Linguistics  
- or LING 110  Language and Mind  
- ENGL 387  Introduction to the English Language  
- LING 700  Introduction to Linguistic Science  
- ENGL 787  Modern English Grammar

Choose one of the following: 3

- C&T 826  Linguistic Analysis for Teaching English to Speakers of Other Languages Educators (TESOL)

Choose one of the following: 3

- ANTH 320  Language in Culture and Society  
- C&T 235  Multicultural Education  
- C&T 823  Intercultural Competence for Teaching English to Speakers of Other Languages Educators (TESOL)  
- C&T 807  Multicultural Education  
- ELPS 830  Foundations of Multicultural Education

Choose one of the following: 3

- C&T 330  Instructional Approaches for ESOL Learners in the Elementary/Early Childhood Classroom  
- or C&T 331  Instructional Approaches for ESOL Learners in the Middle/Secondary Classroom  
- C&T 620  Teaching English as a Second Language/Bilingual Education  
- C&T 820  Methods of Teaching English to Speakers of Other Languages (TESOL)

Choose one of the following: 3

- C&T 622  Second Language Acquisition  
- C&T 822  Second Language Acquisition for Teaching English to Speakers of Other Languages Educators (TESOL)

Choose one of the following: 3

- C&T 621  Diagnosis and Remediation in Second Language Education  
- C&T 821  Assessment in Teaching English to Speakers of Other Languages (TESOL)

**Practicum:** all courses listed above must be completed before Practicum. (3)
Undergraduate Admission to the School of Education

Undergraduates intending to transfer to the school as juniors must work closely with education advisors. Pre-education students must take specified courses in their first 1½ years. Students are admitted to C&T teaching programs once a year; online applications (https://www.applyweb.com/apply/kued) are due September 15 for admission the next spring semester. Students are admitted to the Health & Physical Education and Community Health programs once a year; online applications are due February 2 for admission the next fall semester. Students are admitted to the HSES Athletic Training program once a year; online applications (https://www.applyweb.com/apply/kued) are due February 2 and paper applications (http://hses.soe.ku.edu/academics/athletic-training/admission) are due May 1 for fall semester. Students are admitted to HSES Sport Management and Exercise Science programs twice a year; online applications are due February 2 for fall admission and September 15 for spring semester admission.

For information about initial admission to KU, visit the Office of Admissions (http://admissions.ku.edu/whyku/index.shtml). Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Undergraduate Admission

Students are admitted to the Teacher Education Program once a year for the following academic year. Complete an online application (https://www.applyweb.com/apply/kued) by September 15. Students are notified of decisions in writing on or before October 16. Kansas Board of Regents policy determines some admission requirements.

Competitive Programs

The number of admissions is limited in the following majors:

- Elementary (http://ct.soe.ku.edu/academics/elementary/bse/admission).

Open Programs

Admission is noncompetitive in these majors:


For all programs, not all students who meet the minimum requirements are admitted. Transfer students are also subject to these enrollment policies.

**Undergraduate First- and Second-Year Preparation**

Prospective undergraduates should contact the School of Education Welcome Center (http://soe.ku.edu/advising), 208 J.R. Pearson Hall, 785-864-3726, or the Health, Sport, and Exercise Sciences undergraduate office, 161 Robinson Center, 785-864-5552.

During the first 1½ to 2 years, all students are enrolled in the College of Liberal Arts and Sciences, where they meet a portion of the general education requirements. In the first year and a half, students planning to enter the teacher education program begin taking education courses (C&T 100 and ELPS 250) that provide a basis for a career decision and a foundation for professional education courses in the later years.

In the first year, students planning to enter the school as second-semester sophomores should enroll in C&T 100 Introduction to the Education Profession. During the second semester of the first year or the first semester of the sophomore year, students should enroll in ELPS 250 Education and Society.

Students who will apply for admission to the Health, Sport, and Exercise Sciences program are not required to take C&T 100 or ELPS 250.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;T 825</td>
<td>Advanced Practicum in Teaching English to Speakers of Other Languages (TESOL)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td>18</td>
</tr>
</tbody>
</table>

**Special Education Endorsement**

**Low Incidence Provisional Sequence**

- SPED 326 Teaching Exceptional Children and Youth in General Education | 3
- SPED 506 Advanced Practices for Children with Disabilities in the Elementary General Education Classroom | 3
- C&T 494 Internship
  & SPED 675 Practicum with Children and Youth with Disabilities: _____ | 9
  or SPED 775 Practicum with Children and Youth with Disabilities: _____
- SPED 642/742 Assessment and Methods of Teaching Students with Low-Incidence Disabilities in Inclusive Settings | 3

**High Incidence Provisional Sequence**

- SPED 326 Teaching Exceptional Children and Youth in General Education | 3
- SPED 506 Advanced Practices for Children with Disabilities in the Elementary General Education Classroom | 3
- C&T 494 Internship
  & SPED 675 Practicum with Children and Youth with Disabilities: _____ | 9
  or SPED 775 Practicum with Children and Youth with Disabilities: _____
- SPED 642/742 Assessment and Methods of Teaching Students with Low-Incidence Disabilities in Inclusive Settings | 3

**Total Hours** 18
Minimum Requirements

All students who apply for admission to the department must meet the following minimum requirements:

1. An applicant must have completed at least 24 hours by the time of application and at least 36 hours by the time of admission. The cumulative grade-point average must be at least 2.75.
2. Applicants must have cumulative grade-point averages of at least 2.75 in the core admission courses to qualify for the pool from which students are selected. No grade lower than a C is acceptable in English, communication studies, or mathematics.
3. A student must take the ACT, SAT or other comparable test.
4. Applicants must also submit personal essays and letters of support through the online application (https://www.applyweb.com/apply/kued) system.

Because enrollment in competitive programs is limited to prescribed numbers, students who meet minimum admission standards may not be accepted. Prospective teacher education students should consult an advisor early in the first year to ensure fulfillment of admission requirements and to plan efficient programs of study.

Curriculum and Teaching Courses

C&T 100. Introduction to the Education Profession. 3 Hours.
This course is designed to acquaint students with the profession of education by helping to increase an awareness of the role and characteristics of an effective teacher. Large and small group activities and assignments are dispersed throughout the semester to facilitate these outcomes. Students will be involved in observation of and participation with teachers and pupils in public school classrooms, which complement course activities and assignments. Students will work with a mentor pre-service teacher from the KU School of Education to provide discussions about each of the course objectives. CT 100 is a pre-professional course. Successful completion of the course does not guarantee eventual admission to the School of Education's Teacher Education Program. LEC.

C&T 235. Multicultural Education. 3 Hours. AE41.
The course is designed to provide the student with an awareness of and sensitivity of the concept of multicultural education. Topics related to the rationale for and processes of providing a multicultural perspective within the schools will be addressed. Field experiences will be structured to provide students with opportunities to observe the diversity within the educational setting. LEC.

C&T 322. Curriculum and the Learner in the Elementary School. 3 Hours.
Building on the experiences in CT 100 and CT 200, this course will focus on the learner in the elementary setting. Learning occurs as a result of interaction among learners, teacher and subject matter in the classroom within a school in a community. The impact of the interactions of these students of learning of young children is studied in this course. Emphasis is given to the factors that influence the curriculum, and the ways that goals for high school students are reflected in the high school curriculum. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 330. Instructional Approaches for ESOL Learners in the Elementary/Early Childhood Classroom. 3 Hours.
Teaching English as a Second or Additional Language/Bilingual Education is designed to provide preservice elementary teachers with an understanding of the history and methodology of teaching English to speakers of other languages, both as a foreign language and as an additional language within American English settings. Future ESL/EFL/EB teachers will be prepared to develop the investigative, decision-making, and reflective teaching skills needed to work with English language learners of elementary age, and to impart language instruction in the appropriate context. Emphasis is placed on developing a clear understanding of who English language learners are; what programs and services are or should be available to the ESOLs/EBs; the critical pedagogical aspects of teaching ESL/EFL/EB; and the preparation of teaching materials for classroom use. Prerequisite: Admission to the teacher education program. LEC.

C&T 331. Instructional Approaches for ESOL Learners in the Middle/Secondary Classroom. 3 Hours.
This course is designed to provide preservice middle/secondary discipline specific teachers with an understanding of the history and methodology of teaching English to speakers of other languages, both as a foreign language and as an additional language within American English settings. Future ESL/EFL/EB teachers will be prepared to develop the investigative, decision-making, and reflective teaching skills needed to work with English language learners of all ages, and to impart language instruction in the appropriate context. Emphasis is placed on developing a clear understanding of who English language learners are; what programs and services are or should be available to the ESOLs/EBs; the critical pedagogical aspects of teaching ESL/EFL/EB; and the preparation of teaching materials for classroom use. Prerequisite: Admission to the teacher education program. LEC.

C&T 335. Curriculum and Instruction in Middle and Secondary History and Government Classrooms. 3 Hours.
The purpose of this course is to help prepare students to teach social studies in the middle and secondary grades. Prerequisite: Admission to the teacher education program. LEC.

C&T 344. Children's Literature in the Elementary School. 2 Hours.
A study of literature (poetry, folk literature, fiction, and nonfiction) appropriate for elementary school children with a focus on contemporary children's books. Emphasis will be on selection of literature based on child development, literary quality, curriculum, and pluralism and the engagement of children in literature experiences from the interactive, reader response, and critical perspectives. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 347. Social Studies in the Elementary Classroom. 3 Hours.
A study of curricula, instructional strategies, and classroom organization for social studies education K-6. Emphasis is placed on the effective implementation of social studies programs in classroom settings. Prerequisite: Admission to the School of Education in elementary, middle, or secondary, or the Unified Early Childhood programs. LEC.

C&T 349. Science in the Elementary Classroom. 3 Hours.
In this course, you will develop an understanding of how children learn science and why science education is important. You will examine effective approaches to teaching, instructional materials, and student assessment and will learn how to plan and implement a science unit. The course will emphasize a guided-inquiry approach to science instruction.
appropriate for the abilities and interests of children in grades K-6. Prerequisite: Admission to the School of Education. LEC.

C&T 351. Mathematics for the Elementary Classroom. 3 Hours.
This course is a study of the curriculum, instructional strategies, and classroom organization for mathematics in grades K-6. Emphasis is placed on the effective implementation of mathematics programs in classroom settings. Prerequisite: Admission to the School of Education. LEC.

C&T 352. Literacy Instruction in the Primary Grades (K-3). 3 Hours.
This course is intended to develop the attitudes, knowledge, and skills necessary to effectively instruct primary grades (K-3) children through the development of literacy skills: reading, writing, listening, speaking, and handwriting. The major goals of this course are for the prospective teacher to develop an understanding of literacy development of the primary-grades child, current literacy theories, and the ability to work with a number of approaches to promote literacy learning and a positive attitude toward literacy in all primary-grades students who may have different needs due to language, culture, learning challenges, and/or differing stages of development. This course is to be taken concurrently with CT 353, Literacy Practicum in the Primary Grades. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 353. Literacy Practicum in the Primary Grades. 1 Hour.
This supervised practicum is intended to allow the pre-service teacher to apply the knowledge gained in CT 352, Literacy Instruction in the primary grades (K-3), by teaching children in the primary grades. To be taken concurrently with CT 352 Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 354. Literacy Instruction in the Intermediate Grades. 2 Hours.
This course is intended to develop the attitudes, knowledge, and skills necessary to effectively instruct intermediate-grades children (4-6) through the development of literacy skills: reading, writing, listening, speaking, and spelling. The major goals of this course are for the prospective teacher to develop an understanding of literacy development of the intermediate-grades child, current literacy theories, and the ability to work with a number of approaches to promote literacy learning and a positive attitude toward literacy in all intermediate-grades students who may have different needs due to language, culture, learning challenges, and/or differing stages of development. Prerequisite: Admission to the Teacher Education Program. This course is to be taken concurrently with CT 355, Literacy Practicum in the Intermediate Grades. LEC.

C&T 355. Literacy Practicum in the Intermediate Grades (4-6). 1 Hour.
This supervised practicum is intended to allow the preservice teacher to apply the knowledge gained in CT 354, Literacy Instruction in the intermediate grades (4-6), by teaching children in the intermediate grades. To be taken concurrently with CT 354. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 359. An introduction to reading in relation to specific areas of art, music and physical education. Focus on specialized vocabulary and literature related to each area. Introduction of specific strategies to teach vocabulary and comprehensions and to integrated units of study. Prerequisite: Admission to certification program in music education, art education, health education, or physical education. LEC.

C&T 360. Knowing and Learning in Mathematics and Science. 3 Hours.
This course focuses on issues of what it means to learn and know science and mathematics. What are the standards for knowing we will use? How is knowing and learning structured and how does what we know change and develop? For the science and mathematics educator, what are the tensions between general, cross-disciplinary characterizations of knowing (e.g. intelligence) and the specifics of coming to understand powerful ideas in mathematics and science? What are the links between knowing and developing in learning theory, and the content and evolution of scientific ideas. Also, current issues and tensions in education will be discussed, especially as it relates to mathematics and science instruction. LEC.

C&T 366. Classroom Interactions in Mathematics and Science. 3 Hours.
To make prospective teachers aware of multiple models of teaching (including direct instruction, inquiry teaching and use of small groups); the advantages, disadvantages and uses of each; and what each model requires of teachers. To allow prospective teachers to explore ways of probing student understanding through authentic assessment, evaluating student understanding through student artifacts, and enhancing student understanding through lesson plans built around models of how people learn. To make prospective teachers aware of equity and diversity issues in classroom teaching and ways of ensuring that all students have an opportunity to learn. To make students aware of the proficiencies for licensure recognized by UKanTeach and Kansas State Board of Education and facilitate students' demonstration and documentation of these through their development of a professional portfolio. To develop students' capacity to identify and evaluate best teaching practices as presented in research literature. Prerequisite: CT 360. LEC.

C&T 420. Teaching Kansas Government and Contemporary Public Policy Issues: ____. 3 Hours.
A study of the constitution, organization, functions, and processes of Kansas government, of contemporary public policy issues with local, state and national implications, and of strategies for teaching these in middle and secondary classrooms. Prerequisite: Admission to the School of Education and POLS 110. LEC.

C&T 430. Teaching Literature for Young Adults. 3 Hours.
Teaching literature (novel, short story, poetry, drama, nonfiction) suitable for students in the middle school, the junior high school, and the senior high school. Ethnic literature, censorship, bibliographies, and other relevant sources of information about books for young adults will be studied. Prerequisite: Admission to the School of Education. LEC.

C&T 448. Reading and Writing Across the Curriculum. 3 Hours.
Content area teachers do far more than impart information to students. They play an important role in guiding middle/secondary students as they use reading and writing as tools for learning. This course includes an overview of the state and national reading and writing scores of adolescents. Students will then be introduced to the basic processes or ways in which individuals may learn to read and write. The course continues with a focus on the instructional strategies and materials that promote the development of reading and writing in the context of teaching new information. Additionally, the course emphasizes the informal methods educators can use, on an on-going basis, to diagnose their students ability to comprehend content material. Finally, appropriate fix-up strategies will be modeled. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 460. Project Based Instruction in Mathematics and Science. 3 Hours.
This course will have three essential components. The first will be a theory driven perspective accounting for what we know of how people learn and how project-based instruction improves student learning in math and science. The second component will provide the students with support as they develop their own project-based unit. The third component will be field experiences consisting of two parts: 1) observation of well-implemented project-based instruction in local schools and
2) teaching project-based activities in an informal education setting. Prerequisite: CT 360. LEC.

C&T 489. Advanced Teaching Practicum. 1 Hour.
This supervised practicum is intended to allow the pre-service teacher to apply knowledge gained in SPED 507; CT 448, ELPS 537; and CT 540, CT 541, CT 542, CT 543 and CT 544: Advanced (Content Area) Methods by teaching children in the middle/secondary grades. To be taken concurrently with SPED 507; CT 448, ELPS 537; and CT 540, CT 541, CT 542, CT 543 and CT 544: Advanced (Content Area) Methods. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 490. Student Teaching. 6 Hours.
A supervised teaching experience in an approved school setting, with level and subject area to be selected according to the teaching field. Prerequisite: Successful completion of all practicum experiences and demonstration of appropriate professional dispositions. LEC.

C&T 491. TESOL Practicum for Kansas State Endorsement. 3 Hours.
The TESOL Practicum allows individuals to gain supervised experience in Teaching English to Speakers of Other Languages (TESOL) for a professional KSDE ESOL endorsement and advancement. Prerequisite: Completion of all TESOL endorsement courses. LEC.

C&T 494. Internship. 6 Hours.
A supervised internship experience leading to initial certification. The student assumes the total professional role as a teacher in an approved school setting, with level and subject area to be selected according to the teaching field. Prerequisite: Successful completion of all practicum experiences and demonstration of appropriate professional dispositions. LEC.

C&T 495. Seminar: Developing the Teaching Portfolio. 3 Hours.
This course serves to instruct students in the research, teaching, and writing components of developing a teaching portfolio. The seminar will provide a forum for discussion and deeper exploration into topics and issues related to working in the school setting, teaching, and developing a professional teaching philosophy. Course is graded on a satisfactory/fail basis. Prerequisite: Enrollment in Student Teaching or Internship during the Spring semester. LEC.

C&T 497. Independent Study in: ____. 1-2 Hours.
Only one enrollment permitted each semester. A maximum of four hours will apply toward the bachelor's degree. Prerequisite: Recommendation of advisor and consent of instructor. IND.

C&T 498. Bachelor's Project. 4-6 Hours.
A formal report of some aspect of the field experience that relates formal learning and in situ experience to program planning, implementation, and evaluation. Topic will be selected in consultation with the project advisor. Prerequisite: CT490 and CT 491 (CT 491 may be taken concurrently). IND.

C&T 500. Student Teaching in: ____. 1-6 Hours. AE61.
A supervised teaching experience in an approved school setting, with level and subject area to be selected according to the teaching field. Prerequisite: Admission to the Student Teaching program. FLD.

C&T 501. Student Teaching Practicum in: ____. 1-6 Hours.
A supervised classroom teaching experience under the direction of an experienced teacher and in close relationship with a university supervisor. Prerequisite: Admission to the Graduate Certification Program and approval of advisor. FLD.

C&T 503. International Perspectives in Primary and Secondary Education. 3 Hours.
This course is will expose students to a variety of debates and developments related to primary and secondary education in our globalized era. Students will survey educational systems from the US and selected world regions, comparing and contrasting them in terms of access, funding, curriculum, and pedagogy. They will investigate educational systems from the perspective of international development while addressing issues of local vs. national or international control, tradition vs. global advancement, and other challenges and trade-offs. Prerequisite: Junior standing or higher, or permission of instructor: The course is suitable for advanced undergraduate and master's degree seeking students. LEC.

C&T 530. Curriculum and Instruction in Foreign Language Classrooms. 3 Hours.
A study of philosophy, objectives, curriculum, instructional strategies, and evaluation in teaching foreign language at the K-12 levels. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 533. Curriculum and Instruction in Middle & Secondary English/Language Arts Classrooms. 3 Hours.
This is an English/Language Arts methods course that focuses on curriculum development and instructional strategies appropriate for teaching English/Language Arts in grades 5-12. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 537. Curriculum and Instruction in Middle and Secondary Science Classrooms. 3 Hours.
The purpose of this course is to help you prepare to teach science in the middle and secondary grades. The instructor designed the class sessions and learning tasks to enable you to make progress toward achieving the Kansas Science Teaching Standards and Kansas Professional Education Standards. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 539. Curriculum and Instruction in Middle and Secondary Mathematics Classrooms. 3 Hours.
This course is designed to provide focused study of curriculum development and instructional strategies appropriate for teaching mathematics in grades 5-12. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 540. Advanced Practices in Teaching English in the Middle and Secondary Schools. 3 Hours.
The course is designed to provide continued study of curriculum development and instructional strategies appropriate for teaching English/Language Arts in grades 5-12 and as a final readiness for the undergraduate student teaching experience. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 541. Advanced Practices in Teaching Social Studies in Middle/Secondary Schools. 3 Hours.
Advanced study of curriculum development and instructional strategies appropriate for teaching social studies in grades 6-12 and application of learning in a middle/secondary classroom. Prerequisite: CT 335; SPED 326 and, CT 324 LEC.

C&T 542. Advanced Practices in Teaching Science in the Middle and Secondary Schools. 3 Hours.
This course is designed as a final readiness for the semester-long student teaching experience and the Kansas Performance Teaching Portfolio to be completed during that student teaching experience. The course deals with the analysis, adaptation, and application of varied instructional designs to implement curricula in specific science areas in grades 5-12. Prerequisite: Admission to the middle-level licensure program in science education at the undergraduate level or one of the graduate licensure programs in middle/secondary science. Successful completion of CT 537. LEC.
C&T 543. Advanced Practices in Teaching Mathematics in the Middle and Secondary Schools. 3 Hours.
The course is designed to provide continued study of curriculum development and instructional strategies appropriate for teaching mathematics in grades 5-12 and as a final readiness for the undergraduate of GLP student teaching experience. Prerequisite: Admission to the middle-level licensure program in mathematics education at the undergraduate level or the GLP in middle or secondary mathematics. Successful completion of CT 539. LEC.

C&T 544. Advanced Practices: Situating Foreign Language Content, Dispositions, Skills & Tools Language Classroom. 3 Hours.
This is an advanced Foreign Language methods course that focuses on the critical importance of the socio-linguistic environment of foreign language classrooms. Prerequisite: Admission to the Teacher Education Program. LEC.

C&T 598. Special Course: _____, 1-5 Hours. AE61.
A special course of study to meet current needs of education students, primarily for undergraduates. LEC.

C&T 620. Teaching English as a Second Language/Bilingual Education. 3 Hours.
The purpose of this course is to study the objectives and methods of ESL/Bilingual education. Students will examine methods and techniques of teaching: listening, speaking, reading, and writing in the ESL/Bilingual Education settings. The course will also emphasize the importance of culture in second language teaching, and self-evaluation of teaching and instructional materials. Undergraduate course that will meet with CT 820 Teaching English as a Second Language/Bilingual Education. Prerequisite: Admission to the School of Education. LEC.

C&T 621. Diagnosis and Remediation in Second Language Education. 3 Hours.
This course provides an overview of diagnostic techniques and instruments used to identify and remediate specific learning difficulties associated with normal second language development in the area of listening, speaking, reading, and writing. The course includes a review of research concerning assessment as it relates to error analysis in the second language context. Prerequisite: Admission to the School of Education. LEC.

C&T 622. Second Language Acquisition. 3 Hours.
This course provides an intensive review of the theory and research base of second language acquisition. Particular attention is given to the influence of research trends in linguistics and psychology on second language education theory and practice. Current trends in second language education are examined in light of the historical theory base. Prerequisite: Admission to the School of Education. LEC.

C&T 630. Understanding the Nature of Talent in Children and Youth. 3 Hours.
This course addresses the social, cognitive, affective, and other developmental aspects of talent as manifested in children and youth with high potential. The course provides an opportunity to examine characteristics, strengths, and needs of children and their families. The course focuses on the foundational aspects of gifted/talented education: educational and political history of the field, etiology of extraordinary potential, and identification and assessment techniques, instruments, and systems. Included in the course are relevant research, policies and regulations, services, and information resources. Prerequisite: SPED 325, SPED 425, SPED 431, SPED 725 or equivalent. LEC.

C&T 631. Teaching for Talent Development. 3 Hours.
The course introduces key theories and basic principles of curriculum development and introduction for students with high potential and/or high achievement. Frameworks and models for modifying general education content, cognitive processes, and learning outcomes are applied to enhancing talent development. The course addresses affective considerations, peer relations, and working with families. Prerequisite: CT 640 or CT 730. LEC.

C&T 649. An International Teaching Experience. 3 Hours.
This study abroad focuses on professional growth in teaching and understanding education based on an international experience. Students learn about curriculum and teaching from an international perspective, and engage in professional discussions with Italian teachers and administrators. Students engage in culturally responsive teaching in preschool-secondary settings, they participate in family and community activities/events, and they visit renowned museums and cities. Prerequisite: Application through the Office of Study Abroad and interview with the director. LEC.

C&T 707. Project Based Instruction. 3 Hours.
This course will emphasize exploring, designing, and evaluating materials and pedagogy to work toward the design of project-based curriculum and instruction. Topics focus on the principles of project-based instruction as well as multiple models for its use in the classroom. LEC.

C&T 709. Foundations of Curriculum and Instruction. 3 Hours.
Basic concepts and processes of curriculum and instruction, including theories, planning models, resources for decision-making, current trends, research, and proposals for improvement of curriculum and instruction. LEC.

C&T 710. Writing, Language, and Learning. 3 Hours.
This course will situate issues about writing and learning in the context of more general inquiry about language and learning. We will read research related to classroom discourse and the teaching of writing in secondary classrooms. We will then connect this body of research to the teaching of English in middle/secondary classrooms. LEC.

C&T 711. Teaching Young Adult Literature (Grades 7-12). 3 Hours.
A study of the characteristics of adolescents with respect to their interest and reading habits; criteria for choosing books for junior and senior high school in-class and out-of-class reading; selection of materials; methods for helping poor readers; literary discrimination and appreciation; censorship; ethnic literature; techniques for presenting literary selection in class. Wide reading among best of current and classical literature. LEC.

C&T 730. Understanding Talent. 3 Hours.
This course addresses the social, cognitive, affective, and other developmental aspects of talent as manifested in children and youth with high potential. The course provides an opportunity to examine characteristics, strengths, and needs of these children and their families. The course focuses on the foundational aspects of gifted/talented education: educational and political history of the field, etiology of extraordinary potential, and identification and assessment techniques, instruments, and systems. Included in the course are relevant research, policies and regulations, services, and information resources. Prerequisite: SPED 425, SPED 431, SPED 725, or equivalent introductory course on exceptional children and youth. LEC.

C&T 731. Teaching for Talent Development. 3 Hours.
The course introduces key theories and basic principles of curriculum development and introduction for students with high potential and/or high achievement. Frameworks and models for modifying general education content, cognitive processes, and learning outcomes are applied to enhancing talent development. The course addresses affective considerations, peer relations, and working with families. Prerequisite: CT 640 or CT 730 or equivalent course on exceptional children and youth. LEC.
C&T 732. Teaching for Talent in General Education Settings. 3 Hours.
This course is for classroom teachers concerned about meeting the needs of students with high potential in their classrooms. Students will be introduced to various curriculum models and teaching strategies commonly employed in special programs for gifted/talented students. There will be opportunities to apply gifted education models to modify existing curriculum or to develop new curricula which enhances the abilities of all students. Prerequisite: CT 644 or CT 730 or equivalent introductory course on exceptional children and youth. LEC.

C&T 733. Practicum in Gifted and Talented Education. 1-10 Hours.
A course designed to provide experiences for students to work intensively and to teach identified gifted and high potential students in educational settings. Students will develop competencies relative to implementing individual group and individual education plans through a variety of instructional alternatives. Arranged service delivery options are possible. Prerequisite: CT 645, CT 731, CT 732, or equivalent course. FLD.

C&T 738. Applied Research in the Classroom. 3 Hours.
This course is designed to facilitate the implementation and completion of an action research project during the internship experience. Prerequisite: Successful completion of student teaching. LEC.

C&T 739. Internship in Teaching: ______. 1-15 Hours.
A supervised internship experience leading to initial certification. The student assumes the total professional role as a teacher in an approved school setting, with level and subject area to be selected according to the teaching field. Prerequisite: CT 500 and CT 736 appropriate to the student's teaching level and area, or equivalent. FLD.

C&T 740. Foundations of Reading: Process, Theory, and Instruction. 3 Hours.
It is the purpose of this course to introduce students to the foundations of the reading process, developmental levels, theory, models, and procedures at the emergent, elementary, and secondary levels. Elements of cultural, linguistic, and ethnic diversity that affect the reading process are included. Students work with research related to the reading process, remediation, and assessment. LEC.

C&T 741. Comprehension and Study Strategies for Use with Multiple Texts. 3 Hours.
It is the purpose of this course to examine research, theory, and practice in reading comprehension. Emphasis is placed on the application of strategies for various text types (expository, narrative, persuasive, and technical) for teaching reading comprehension and study skills across content areas in the K-12 classrooms. Prerequisite: CT 740 or permission of the instructor. LEC.

C&T 742. Language and Literature in the Reading Program. 3 Hours.
A study of linguistic and literary aspects of reading instruction, focusing on language and cognitive development as they relate to reading. Emphasis will be on approaches for differentiating reading instruction to provide for less proficient to gifted readers, research and issues related to reader response, techniques for assessing children's reading attitudes and interests, procedures for selecting literature, and strategies for integrating literature into the elementary school reading program. Prerequisite: CT 740 or permission of instructor. LEC.

C&T 743. Writing and Spelling Development and Instruction. 3 Hours.
A study of the research base on writing, spelling, speaking, and listening for teaching the language arts; an overview of development in writing and spelling, the writing and spelling processes and instruction, and strategies for integrating the language arts. Prerequisite: Admission to a masters program within the School of Education, CT 740 or permission of the instructor. LEC.

C&T 744. Teaching Literature to Children. 3 Hours.
An opportunity to survey the broad range of trade books published for children; criteria for book selection; children's reading interests and tastes; illustrations of children's books; sources for selecting literature; poetry; the role of children's literature in today's elementary curriculum. LEC.

C&T 745. Reading and the English Language Learner. 3 Hours.
LEC.

C&T 748. Reading and Writing Across the Curriculum. 3 Hours.
In CT 748, preservice content teachers, who have had no previous literacy courses, are introduced to the basic processes of reading and to instructional strategies and materials that promote the development of reading, writing, and studying in the context of teaching new information. Additionally, we discuss the ways in which teachers diagnose, in an informal, on-going basis, their students' abilities to comprehend the material they are teaching. LEC.

C&T 749. An International Teaching Experience. 3 Hours.
This study abroad focuses on professional growth in teaching and understanding education based on an international experience. Students learn about curriculum and teaching from an international perspective, and engage in professional discussions with Italian teachers and administrators. Students engage in culturally responsive teaching in preschool-secondary settings, they participate in family and community activities/events, and they visit renowned museums and cities. Prerequisite: Application through the Office of Study Abroad and interview with the director. LEC.

C&T 750. Connecting Research to Classroom Practice in Elementary Mathematics and Science. 3 Hours.
The primary purpose of this course is to examine current research on issues important to elementary mathematics and science programs. The course will explore issues important to the classroom practices of elementary mathematics and science teachers. Provides a broad background for understanding current issues related to elementary mathematics and science curriculum, instruction, and assessment. LEC.

C&T 760. Modern Approaches to Elementary Social Studies. 3 Hours.
A study of the purpose, content, psychology, and materials and methods for teaching the social sciences in the elementary school. Emphasis on principles and procedures for combining the social studies with other areas of the curriculum in broad unit instruction. Prerequisite: Nine hours of Education including educational psychology. LEC.

C&T 762. Modern Approaches to Middle/Secondary Social Studies. 3 Hours.
The purpose of the course is to offer preservice and practicing K-12 social studies educators the following: (1) an overview of theoretical bases for social studies education and of the social studies and discipline specific curriculum standards; (2) a review of the major curricular and extracurricular K-12 social studies programs; (3) strategies for the design, implementation, and evaluation of social studies programs; and (4) experience with the design, implementation, and/or evaluation of a social studies program. Prerequisite: Nine hours of Education including educational psychology. LEC.

C&T 763. Economic Education. 2-3 Hours.
An examination of the concepts, theories, and resource materials utilized in teaching economics in the K-12 curriculum. Particular attention is given to the functional integration of economic concepts into the elementary and secondary social studies curriculum. The use of economic resource material is considered. Participants develop projects for use in their own classrooms. LEC.
C&T 764. Teaching Economics in: _____ 3 Hours.
A critical analysis of the relationship between economics and a
designated school subject selected from history, geography, or
consumer education; a determination of the economic concepts that
can be appropriately integrated into the particular discipline; and a
comprehensive search of the particular curriculum area to identify the
most effective and efficient points at which the economic concepts can be
integrated. Prerequisite: CT 763. LEC.

C&T 765. Teaching with Community, Contemporary, and Primary
Resources. 3 Hours.
A practical course designed for grades 4-12 teachers who wish to utilize
community-based, mass media, and/or primary resources. The course
focuses on the use of community resources such as local historical
societies, museums, and government agencies; on the use of mass
media such as newspapers, magazines, organizations’ newsletters,
television, and film; and on the use of primary resources such as artifacts,
documents, recordings, and oral historians. Participants receive sample
resources from each of the three areas along with accompanying
activities. LEC.

C&T 797. Special Project in: _____ 2 Hours.
Implementation of the curriculum project planned in CT 734 or CT 735;
implementation and assessment of the special project will occur during
the internship. Prerequisite: CT 734, CT 735, and CT 736. RSH.

C&T 798. Special Course: _____ 1-5 Hours.
A special course of study to meet current needs of education
professionals—primarily for graduate students. LEC.

C&T 800. Foundations of Curriculum Development. 3 Hours.
This course is designed for students to gain a functional understanding
of the historical, philosophical, political, psychological, and cultural
factors which affect the designing and implementation of curriculum at
several levels: the individual classroom, the team, the school, the larger
administrative unit, the state, and the nation. Prerequisite: CT 709 or
permission of instructor. LEC.

C&T 801. Planning for School Improvement. 2-3 Hours.
The course will emphasize the latest research and practice related to
school improvement. Students will function as a member of a school
improvement team to assimilate and synthesize research and practice into
the development, revision, and/or assessment of a school improvement
plan for a specific school site. Corequisite: Enrollment in the summer
institute on school improvement. LEC.

C&T 802. Curriculum Planning for Educational Settings. 3 Hours.
A focus on organizing and managing curriculum development in
educational settings. Such curricular decisions as writing philosophies,
setting goals and objectives, selecting and organizing content, and
designing and monitoring evaluation procedures will be emphasized.
Providing leadership for the collaborative process of curriculum planning
in organizational settings will receive attention. Prerequisite: CT 709,
admission to Building Principal Certification program, or permission of
instructor. LEC.

C&T 803. Differentiating Curriculum and Instruction. 3 Hours.
This course is designed for educators interested in expanding curriculum
and instruction to accommodate diverse learners in the classroom,
K-12. Topics include: models, methods, and resources for differentiating
curriculum and instruction, designing and modifying differentiated
curriculum, evaluating student learning, and introducing students, parents
and colleagues to differentiation. An evidence-based, practical course for
teachers, administrators, and support personnel. Prerequisite: Admission
to Graduate School. LEC.

C&T 804. Trends and Issues in Middle Level Education. 3 Hours.
Information from current research, area specialists and exemplary
practitioners will be used to extend appropriate teaching strategies and
supplement background knowledge on special topics related to social,
emotional and physical development as it relates to the curricula and
young adolescents. LEC.

C&T 805. Planning Instruction and Instructional Strategies in Urban
Settings. 3 Hours.
This course will prepare students to become cognizant of the particular
contextual variables that pertain to the urban setting, engage in
instructional planning utilizing pertinent instructional strategies for urban
classrooms. Students will become familiar with conceptual frameworks
appropriate to education in the urban environment, review research
on education in the urban setting, and discuss goals and options for
effectively coping with the demands of the urban classroom. FLD.

C&T 806. Instructional Strategies and Models. 3 Hours.
Analysis of models of teaching which represent distinct orientations
toward students and how they learn. The application of these models is
complemented by the study of research evidence on effective teaching
strategies. Prerequisite: CT 709. LEC.

C&T 807. Multicultural Education. 3 Hours.
In order to provide the student with an understanding of multicultural
education, the course will examine the effects of such issues as ethnicity
in America, the melting pot theory, separatism, cultural pluralism, legal
issues, and bilingual education upon the curriculum and instruction in
today’s classrooms. It will include an evaluation of materials for bias and
stereotypes. Field experiences are a part of this course. LEC.

C&T 808. Qualitative Research: Curriculum Inquiry. 3 Hours.
Curriculum Inquiry provides an opportunity to reflect, explore, understand,
and broaden perspectives of curriculum through examining the theories,
methodologies, strategies, and design of qualitative research. This course
is designed to develop a common understanding of the major elements
of qualitative research, while offering each student an opportunity
to examine research topics and methods of personal interest, with
particular attention to curricular issues. The course also includes practical
experience with various modes of data collection and analysis. LEC.

C&T 809. Creative Thinking and Learning. 3 Hours.
This course provides an opportunity to investigate the nature of the creative
process in educational settings. The knowledge base for the
course builds from foundations of creativity, principles and theories of
identifying and enhancing creative production, and affective learner
variables. The course blends classic and contemporary works in creativity,
and features the application of theories and models of the origins and
development of creativity to promoting creative thinking and learning
among children, youth and adults. Participants learn about, apply, and
adapt techniques for defining and identifying creative potential and for
encouraging creative thinking in educational settings. Prerequisite:
Admission to graduate school. LEC.

C&T 810. Issues in Teaching Language Arts. 3 Hours.
A study of present curricula in junior and senior high school English and
speech; current thinking in grammar and usage; language development
in oral and written communication; problems of teaching reading
and literature in the junior and senior high school; construction and
reorganization of language arts courses. Students will be permitted to
make an intensive study of an individual problem relating to more effective
instruction in the language arts. LEC.
C&T 820. Methods of Teaching English to Speakers of Other Languages (TESOL). 3 Hours.
The purpose of this course is to study the objectives and methods of ESL/Bilingual education. Students will examine methods and techniques of teaching: listening, speaking, reading, and writing in the ESL/Bilingual Education settings. The course will also emphasize the importance of culture in second language teaching, and self-evaluation of teaching and instructional materials. Prerequisite or Corequisite: CT 709. LEC.

C&T 821. Assessment in Teaching English to Speakers of Other Languages (TESOL). 3 Hours.
This course provides an overview of diagnostic techniques and instruments used to identify and remediate specific learning difficulties associated with normal second language development in the area of listening, speaking, reading, and writing. The course includes a review of research concerning assessment as it relates to error analysis in the second language context. Corequisite: CT 820. LEC.

C&T 822. Second Language Acquisition for Teaching English to Speakers of Other Languages Educators (TESOL). 3 Hours.
This course provides an intensive review of the theory and research base of second language acquisition. Particular attention is given to the influence of research trends in linguistics and psychology on second language education theory and practice. Current trends in second language education are examined in light of the historical theory base. Prerequisite: CT 820. LEC.

C&T 823. Intercultural Competence for Teaching English to Speakers of Other Languages Educators (TESOL). 3 Hours.
This course includes the study of the interrelationship of language and culture and the use of multicultural training techniques to develop cultural awareness and positive attitudes in the second language classroom. Emphasis is on the integration of culture in the second language curriculum. Prerequisite: CT 820 or CT 803. LEC.

C&T 824. Problems in Second Language Instruction. 3 Hours.
This course presents a study of curricula and instruction in the second language setting at all levels with emphasis on educational research concerning these issues. Particular attention is given to developing competency in locating and utilizing sources of information and to preparing the research document. The course facilitates practical problem solving in the second language learning context. Prerequisite: CT 820. LEC.

C&T 825. Advanced Practicum in Teaching English to Speakers of Other Languages (TESOL). 3 Hours.
This course provides a supervised teaching experience in a setting appropriate to the goals of the prospective ESL/Bilingual teacher: elementary, secondary, or adult. Particular attention is given to lesson planning, classroom management, and the development of self-evaluation techniques. This course will also emphasize structured classroom observation prior to teaching and techniques for developing and maintaining positive working relationships with other professionals in the school setting. Prerequisite: CT 820, CT 821, and CT 822 or CT 824. FLD.

C&T 826. Linguistic Analysis for Teaching English to Speakers of Other Languages Educators (TESOL). 3 Hours.
This course offers pre- and in-service teachers the basic foundations of language analysis necessary for the teaching of second/foreign languages. The course covers basic linguistic topics common to all human languages (grammatical, phonological, and semantic aspects) with the intent to help teachers understand and address common languages problems that students face when learning English as a second/foreign language. LEC.

C&T 827. Teaching Pronunciation for Foreign Language/Teaching English to Speakers of Other Languages (TESOL). 3 Hours.
The objective of this course is to give prospective language teachers the requisite theoretical and practical background for making decisions concerning pronunciation teaching. This course provides second and foreign language teachers with the necessary knowledge and skills to address the teaching of pronunciation in the foreign/second language classroom. After a review of theoretical and practical research dealing with universal human speech perception and production, implications for the design of appropriate strategies and lessons to teaching pronunciation, both at the segmental and suprasegmental levels, are addressed. Prerequisite: CT 444, CT 820 or CT 822. LEC.

C&T 828. Language and Identity. 3 Hours.
This interdisciplinary seminar explores the interrelationship between language and identity, and the role of language in developing identities of second language learners. LEC.

C&T 829. Teaching English to Speakers of Other Languages in Global Context (TESOL). 3 Hours.
The purpose of this course is to investigate contemporary issues in and key concepts pertaining to Teaching English to Speakers of Other Languages (TESOL) throughout the world. We will examine primary research and employ a sociocultural lens to better understand how the phenomenon of globalization has shaped how, why, and the conditions under which English is taught and learned on different continents, as well as critiquing research methods and approaches to studying English language teaching and learning. LAB.

C&T 830. Classroom Applications of Assessment Information. 1 Hour.
The primary purpose of this course is to examine classroom-based practices for identifying intellectual and creative potential in school-aged children and youth, and to apply that information to classroom instruction as well as to individual education planning. Particular attention is paid to populations who are traditionally underserved due to language status, ethnicity, socio-economic status, geography, or multiple exceptionality. Parent and student roles are also emphasized. An evidence-based practice course for teachers, administrators, and support personnel. Prerequisite: Admission to Graduate School. LEC.

C&T 831. Personal Dimensions of Talent. 1 Hour.
The course focuses on affective aspects of individuals with high potential. Particular attention is paid to populations who are traditionally underserved due to ethnicity, socio-economic status, geography, or multiple exceptionality. The course focuses on theories, models and methods for understanding and addressing the successful personal development of talented individuals, supporting families, and personal issues linked to high potential. An evidence-based practice course for teachers, administrators, and support personnel. Prerequisite: Admission to Graduate School in Education. LEC.

C&T 840. Emergent Literacy and Beginning Reading. 3 Hours.
A study of emergent literacy through the beginning stages of literacy development. Course content focuses on the history, theory, and research that supports instructional reading practices for children Pre-kindergarten through grade 2. Prerequisite: CT 740, CT 741, or permission of instructor. LEC.

C&T 841. Early Intervention in Reading Practicum. 3 Hours.
A case study approach to the instruction of children in need of early intervention in reading. Requires assessment, instruction, and case reports of tutored children. Prerequisite: CT 740, CT 741, CT 840, or permission of instructor. FLD.
C&T 842. Supporting Striving Readers: Adolescent through Adult. 3 Hours.
A study of the characteristics and multiple causes of reading and writing difficulties, principles and procedures for diagnosing and remediating reading difficulties, how to provide individual and group intervention strategies, communicate diagnostic information, and gain awareness of the impact of research on instructional decision-making for students with reading difficulties. Prerequisite: Admission to a masters program within the School of Education, CT 740, CT 741, CT 840, and CT 841, or permission of instructor. LEC.

C&T 843. Supporting Striving Readers Practicum. 3 Hours.
Case study approach to the treatment of pre-adolescent through adults with reading disabilities. Requires diagnostic testing of the learner, compilation of case study reports, and participating in staffing for the purpose of designing remedial reading programs. Students also participate in implementation of remedial programs with pre-adolescent through adults through tutoring in either a clinical setting or a public school setting. Prerequisite: Admission to a masters program within the School of Education, CT 740, CT 741, CT 840, CT 841, CT 842, or permission of instructor. LEC.

C&T 844. The Reading Program: Coordination and Supervision. 3 Hours.
An overview of the role of the reading coordinator/mentor and that individual's responsibility for the components of a balanced reading program. Emphasis will be given to assessment of the reading program, strategies for change, improving the reading program, in-service programs, working with other school personnel, providing services, and public relations. Prerequisite: CT 740, CT 741, CT 840, CT 841, CT 842, and CT 843. LEC.

C&T 845. Reading Specialist Internship. 1-2 Hours.
Supervised and directed experiences to develop the necessary instructional and leadership competencies of a reading specialist. Activities will include district and building level needs assessment, data analysis, professional development of teachers and paraprofessionals, and cooperative planning with teachers and administrators around issues of literacy instruction and achievement. Prerequisite: Completion (at the University of Kansas) of course requirements for the Reading Specialist program. The Reading Specialist course requirements may be a part of a graduate degree. FLD.

C&T 850. Seminar in Science and Mathematics Educational Research. 3 Hours.
The primary purpose of this course is to examine literature in science and mathematics education in order to better understand research in these fields from both a historical and contemporary perspective. The process of examining literature in these fields will be used to help understand how to plan, conduct, and evaluate research in science and math education. This course emphasizes both qualitative and quantitative research in science and math education. LEC.

C&T 851. Modern Approaches to Middle/Secondary School Mathematics. 3 Hours.
A study of aspects of curriculum and instruction in middle/secondary school mathematics programs, including research on teaching and learning mathematics. Prerequisite: Teaching experience in middle-level or high school mathematics or permission of instructor. LEC.

C&T 852. Instruction in Mathematics and Science. 3 Hours.
In this course, students will explore a variety of research-based instructional theories, models, and strategies for teaching and learning of mathematics and science. They will apply and evaluate the usage of one instructional strategy in an action research project in their classrooms. Prerequisite: CT 709. LEC.

C&T 853. Connecting Research to Classroom Practice in Middle/Secondary Science. 3 Hours.
This course will explore current research on issues important to middle and high school science teachers so they can use research to support and improve their classroom practice. Prerequisite: Teaching experience in middle level or high school science or permission of instructor. LEC.

C&T 854. Assessment and Evaluation in Science and Mathematics. 3 Hours.
The primary purpose of this course is to examine assessment and evaluation in science and mathematics, including assessment of students, teachers, schools, and educational programs. The course will examine technical characteristics of various assessment methods including both traditional and alternative methods. In additional and alternative methods. In addition, the course will analyze and discuss various controversial issues in assessment such as authentic assessment, and large scale assessment, and large scale assessments, assessment for accountability, and equity issues. LEC.

C&T 855. Curriculum in Science and Mathematics. 3 Hours.
A survey of the concepts and processes that provide the focus of modern science and mathematics curricula will be central to the course. Students develop a standards-based framework for a school science or mathematics program. The course includes an analysis of national and state recommendations for the reform of science and mathematics education in the context of our state and local educational systems, which is applied by evaluating exemplary instructional materials and activities appropriate for classroom use. Prerequisite: CT 709. LEC.

C&T 856. Practicum in Science Education. 1-3 Hours.
Intensive supervised experience working with improvement of science curriculum and/or instruction in an educational setting. Credit in any one semester may range from one to three hours; and total credit may not exceed three hours. Prerequisite: Two graduate courses in science education and prior consent of practicum supervisor. FLD.

C&T 857. Practicum in Mathematics Education. 1-3 Hours.
Intensive supervised experience working with improvement of mathematics curriculum and/or instruction in an educational setting. Credit in any one semester may range from one to three hours; and total credit may not exceed three hours. Prerequisite: Two graduate courses in mathematics education and prior consent of practicum supervisor. FLD.

C&T 858. Connecting Research to Classroom Practice in Mathematics. 3 Hours.
This course will explore current research on issues important to mathematics teachers so they can use research to support and improve their classroom practice. Prerequisite: Teaching experience or permission of instructor. LEC.

C&T 859. Issues in Mathematics or Science Education: _____. 1-3 Hours.
A study of issues in a particular area of mathematics or science education. The course may be repeated for different topics. Prerequisite: Admission to graduate study. LEC.

C&T 860. Topics in Teaching and Learning Social Studies: _____. 3 Hours.
An examination of current topics and issues from social science perspectives. Special emphasis is given to effective integration of one of the social sciences, such as anthropology, geography, political science, science technology and society, and these topics affect issues of curriculum at both elementary and secondary levels. Students will need to confer with the instructor of record to determine which topic will be the current focus of the course. LEC.
C&T 861. Curriculum and Assessment in Social Studies Programs K-12. 3 Hours.
The purpose of the course is to offer preservice and practicing K-12 social studies educators the following: (1) an overview of theoretical bases for social studies education and of the social studies and discipline specific curriculum standards; (2) a review of the major curricular and extracurricular K-12 social studies programs; (3) strategies for the design, implementation, and evaluation of social studies programs; and (4) experience with the design, implementation, and/or evaluation of a social studies program. LEC.

C&T 862. Trends and Issues in Social Studies Instruction. 3 Hours.
A study of trends and issues relating to, and needed changes in the content, organization, emphasis, resources and equipment, methods, devices and evaluation in the social studies. Consideration of related problems such as achieving meaning and understanding, providing for individual differences, providing motivation, the cooperative assignment and socialized recitation. Students will be permitted to concentrate on those problems of particular interest to them. Prerequisite: Nine hours of Education including educational psychology. LEC.

C&T 863. Curriculum Development in Economic Education. 3 Hours.
Extension and application of economic concepts and theories through integration into the scope and sequence of the school curriculum. The process will include the development and field testing of a project that utilizes appropriate concepts, materials, community resources and techniques for integrating economics into the total curriculum. Prerequisite: CT 763. LEC.

C&T 864. International Issues in the K-12 Classroom. 3 Hours.
An examination of current international topics and issues from an economic education perspective. Special emphasis is given to effective integration of global topics and issues into the curriculum at both elementary and secondary levels. Students survey and analyze economic education resource materials and develop international lessons for use in their own classrooms. This course is offered during summer term, locally, and as a study abroad option. This course has been offered two times previously as TL 798-summer 1993 at the Regents Center and in Great Britain. Prerequisite: CT 763. LEC.

C&T 866. Connecting Research to Classroom Practice in Social Studies. 3 Hours.
The purpose of the course is to explore readings on effective practice and current research on issues important to social studies teachers. Knowledge gained from the exploration of readings will be used to develop a plan and implementation procedures for improving classroom practice. Prerequisite: Teaching experience in social studies education or permission of the instructor. LEC.

C&T 867. Seminar in: ______. 1-4 Hours.
LEC.

C&T 877. Independent Study. 1-4 Hours.
Prerequisite: Consent of advisor and instructor. RSH.

C&T 899. Master's Thesis. 1-6 Hours.
THE.

C&T 900. Current Trends & Issues in Curriculum & Instruction. 3 Hours.
The course, taught as a capstone seminar, will provide a review of current trends and issues in theories, practices, and events within curricular and instructional efforts in American education. Topics studied may include constructivism, connectivism in the digital age, contemporary theories and theorists such as Vygotsky, online instruction and the Internet's potential and growth, the new Cult of Efficiency, stigmatization and standardized testing, and charter schools. Student composition of each class will influence the final syllabus, which may include other topics reflective of student interests and goals. The class is designed for those in the final course phase of their doctoral studies. Students in their first or second semester of their programs will not be encouraged to enroll in the class. LEC.

C&T 901. Contemporary Research of Teaching Effectiveness. 3 Hours.
A review of recent research on the conceptualization, measurement, and improvement of teaching effectiveness. Particular attention is given to the history of efforts to improve teaching, to the reasons why such efforts have often been unsuccessful, and to the recent contributions of the "micro-criteria" approach to the problem. LEC.

C&T 903. Curriculum Supervision. 3 Hours.
An intensive study of the theoretical and research bases for curriculum supervision and improvement. Topics include models and practices in supervision and staff development, skills and instruments used in curriculum assessment, coordination of both human and material resources, and the dynamics of change strategies. LEC.

C&T 904. Philosophical Questions in Curriculum and Teaching. 3 Hours.
This course addresses philosophical questions pertaining to curriculum and teaching across a range of educational contexts. These questions center on epistemology, ethics, and the assumptions underlying alternative approaches to research in education. Students completing this course should be able to engage in philosophical inquiry and apply relevant philosophical literature and principles to the examination of curriculum and teaching. LEC.

C&T 905. Teacher Education in the U.S.. 2 Hours.
A study of the development, issues, and programs for the preparation of teachers. Open to all regular graduate students. LEC.

C&T 906. Qualitative and Curriculum Inquiry: Analysis and Interpretation. 3 Hours.
Supports novice researchers in extending their understanding of the theoretical frameworks underlying qualitative research, qualitative methodologies, the research process and its relationship with curriculum inquiry. During the course we will discuss various forms of qualitative research methods, approaches to research, and perspectives in methodology related to curriculum inquiry. We will explore the intertwining of data generation, analysis, and writing. In addition, we will focus on refining data generation techniques, strategies for data analysis, data interpretation, and various forms of reporting/writing. Prior coursework: Introduction to a graduate level qualitative research course or permission from the instructor. Prerequisite: Introduction to a graduate level qualitative research course or permission from the instructor. LEC.

C&T 907. Critical Pedagogies. 3 Hours.
This course examines the theories and practices of several educational orientations that comprise "critical pedagogy." Students examine the historical roots and evolution of this broad orientation toward education. Recurring themes in the class are relations between knowledge and curriculum, the school and society, and teachers and students. Students completing the course should be able to analyze educational phenomena through a critical theoretical lens. Open to all doctoral students and advanced masters students with instructor permission. LEC.

C&T 910. Research Seminar in English Education. 3 Hours.
This course will focus on both the conduct and findings of research related to English/Language Arts Education. Its purpose will be to foster
discussion among students concerning paradigms that have shaped the field of English/Language Arts as well as encourage critique of the ways in which these paradigms are enacted in research. In this course, each student will develop a reading list on a topic of interest related to research in English/Language Arts Education and/or pursue the writing of an individual research proposal. Prerequisite: Admission to master's or doctoral program in CT, emphasis in English/Language Arts Education. LEC.

C&T 940. Evaluation of Research in Reading. 3 Hours.
LEC.

C&T 944. Diagnosis and Evaluation of Instruction in Higher Education. 2-3 Hours.
The course will focus on (1) a review of the practical and theoretical problems of developing, in institutions of higher education, programs for the diagnosis and/or evaluation of classroom instruction, including use of videotape feedback for diagnosis, and the development of surveys for evaluation for diagnosis of teaching, and (2) the importance of careful administrative and review procedures as the evaluation becomes more formal and consequential. Three hours of credit will be awarded to those enrolled in the laboratory section of the course. LEC.

C&T 951. Research and Evaluation in Mathematics and Science. 3 Hours.
This course introduces students to the processes of planning, conducting, and evaluating mathematics and science research and evaluation in education. This course emphasizes the methods and techniques used in both quantitative mathematics and science research and evaluation methodologies. Prerequisite: A PRE course in statistics. LEC.

C&T 960. Theory and Research in Social Studies Education. 3 Hours.
The purpose of this graduate level course is to stimulate and communicate systematic research and thinking in Social Studies Education. Its purpose is to foster the creation and exchange of ideas and research findings that will expand knowledge about purposes, conditions, and effects of schooling and education about society and social relations. LEC.

C&T 968. Readings in Economic Education Research. 3 Hours.
A survey of research in elementary, secondary, and higher education economic education. After initial, mutual readings, and discussions, class members will determine a list of broad research questions around which we will focus our readings. Each student is responsible for developing a reading list on one of the topics and reporting on selected readings. Class meetings will focus on summarizing and critiquing published research. Purpose of this course is to prepare doctoral students for comprehensive examinations and dissertation research. LEC.

C&T 970. Fostering Teacher Growth and Inquiry. 3 Hours.
Students will explore theory and research related to professional learning with a focus on the professional learner, professional contexts, and professional learning activities. Students also will learn about and design a pilot study that is set in a relevant professional context. Prerequisite: Admission to the Ed.D. program in the Department of Curriculum Teaching or consent of instructor. LEC.

C&T 994. Advanced Topics: _____ 1-3 Hours.
A special course of study to meet current needs of education professionals -- primarily for post-master's level students. LEC.

C&T 995. Field Experience in: _____ 1-5 Hours.
Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experiences will be prepared independently by the student, a representative of the cooperating agencies, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours. FLD.

C&T 996. College Teaching Experience in: _____. 2 Hours.
To meet the college teaching experience requirement for doctoral programs, a student shall engage in a semester-long, planned, instructional activity that shall include college classroom teaching under supervision. Planning shall be done with the advisor and/or the member of the faculty who will supervise the experience. The activity shall be done under the supervision of a member of the University of Kansas faculty or by an individual or individuals designated by the candidate's committee. LEC.

C&T 997. Individual Study. 1-4 Hours.
Prerequisite: Prior graduate course work in the area of study and consent of instructor. RSH.

C&T 998. Seminar in: _____. 1-4 Hours.
LEC.

C&T 999. Doctoral Dissertation. 1-15 Hours.
THE.

Deaf Education Courses

DE 702. Intermediate Signing Exact English. 3 Hours.
Intermediate vocabulary (700 words) for basic school routines and subjects will be taught using curricular materials to practice SEE 2 vocabulary and affix markers. Two college sign classes of any kind. LEC.

DE 717. Pidgin Sign English/American Sign Language. 3 Hours.
An intermediate level, educationally oriented vocabulary (450 words) taught in PSE/ASL. Comparison of literally and conceptually signed sentences. Prerequisite: Any sign course, admittance into Deaf Education Masters Program. LEC.

DE 808. Family Focus With Young Hearing-Impaired Children. 3 Hours.
Focus on the family as the primary teachers of deaf and hard-of-hearing infants and toddlers. The purpose of the class is twofold: to develop an understanding of the effect of deafness and to develop skills to deal with its intervention. Future teachers, early-childhood specialists, and related service providers will participate in discussion, simulations, and applied exercises in acquiring course competencies. Prerequisite: Sign class of any type. LEC.

Educ Leadership Policy Stds Courses

ELPS 200. Making Connections Between Schools and Community. 3 Hours.
This course is designed to increase the students' awareness of learning in the classroom and to familiarize them with the role of the school and the community. Institutions and resources that support children and families will be addressed through large and small group sessions and field experiences. Emphasis is given to the diverse nature of schools, communities, and their populations. In addition, the course will acclimate students with the School of Education programs, admissions procedures, and curriculum offerings. Successful completion of this course does not guarantee eventual admission of the School of Education's Teacher Education Program. Prerequisite: Successful completion of CT 100. LEC.

ELPS 250. Education and Society. 3 Hours. AE41/AE51.
This course provides students with an introduction to key ideas and socio-historical forces that have shaped the contemporary educational system in the United States, drawing upon the disciplines of the historical, philosophical, and social foundations of education. The development of school and community relations will be a point of emphasis. LEC.
ELPS 301. Educational Technology in Elementary-Middle Education. 3 Hours.
The focus of this course is on developing integration strategies and acquiring computer skills for using instructional technology and educational software, digital media, and information technologies appropriate to middle school and high school teaching environments. Students will gain expertise in (a) the selection of appropriate instructional technologies and digital media for use in the classroom; (b) production of technology-based instructional materials; and (c) the evaluation and validation of a variety of electronic information sources. Prerequisite: Admission to the Teacher Education Program. LEC.

ELPS 302. Educational Technology in Middle/Secondary Education. 3 Hours.
The focus of this course is on developing integration strategies and acquiring computer skills for using instructional technology and educational software, digital media, and information technologies appropriate to middle school and high school teaching environments. Students will gain expertise in (a) the selection of appropriate instructional technologies and digital media for use in the classroom; (b) production of technology-based instructional materials; and (c) the evaluation and validation of a variety of electronic information sources. Prerequisite: Admission to the Teacher Education Program. LEC.

ELPS 437. Politics and Governance of Public Schools. 3 Hours.
This course introduces students not pursuing K-12 teaching or administrative positions to the organizational and legal foundations of the American educational system. LEC.

ELPS 450. Foundations of Education. 3 Hours.
A historical approach to the major social and philosophical foundations of American education, with an emphasis on the relation of educational theory to classroom practice. LEC.

ELPS 490. Senior Internship I. 4 Hours.
Supervised field experience in an on-site educational setting that provides the student an opportunity to study and participate in the professional activities of a designated educational setting with emphasis on the planning, implementation, and evaluation of such activities. Regular conferences with faculty to evaluate student progress will be scheduled. Prerequisite: Admission to the non-certificate baccalaureate program. LEC.

ELPS 491. Senior Internship II. 4 Hours.
Supervised field experience in an on-site educational setting with increasing emphasis placed on an integration of formal learning and in-site experience. Regular conferences with faculty will be scheduled. Prerequisite: Admission to the non-certificate baccalaureate program. FLD.

ELPS 497. Independent Study in:. 1-2 Hours.
Only one enrollment permitted each semester. A maximum of four hours will apply toward the bachelor’s degree. Prerequisite: Recommendation of advisor and consent of instructor. IND.

ELPS 537. The Governance and Organization of Schools. 3 Hours.
The course provides the prospective teacher with an overview of the legal foundations of the American educational system including the ways schools and school districts are organized and run; the role of various levels of government and various governmental and educational officials in controlling education; the rights of students and teachers; the terms, conditions, and responsibilities of teacher employment. Prerequisite: Admission to the Teacher Education Program. LEC.

ELPS 540. Ethics in Education. 3 Hours.
This course examines practices and policies occurring in k-12 and postsecondary educational institutions through the lenses provided by ethics. During the semester, we will read, discuss, and write about ethics in education from both theoretical and practical perspectives. Prerequisite: Junior standing or higher. The course is suitable for advanced undergraduate and master’s degree seeking students. LEC.

ELPS 550. Childhood and Youth in America. 3 Hours.
A study of the changing role and character of childhood and youth as stages of life in the context of American educational and cultural history. LEC.

ELPS 598. Special Course:. 1-5 Hours.
A special course of study to meet current needs of education students, primarily for undergraduates. LEC.

ELPS 627. Growing Up in Urbanizing America. 3 Hours.
A study of the changing role and character of childhood and youth as stages of life in the context of American urban and social history, with particular attention to education and human development. Prerequisite: Junior standing or higher. LEC.

ELPS 652. Residential Staff Skill Enhancement and Administration. 2-3 Hours.
This special course of study in residential staff skill enhancement and administration is an exploration of concepts and skills necessary for becoming an effective paraprofessional staff member in a residential living unit. Each class session will include presentations and experiential learning on topics to develop or improve interpersonal skills and skill in dealing with special concerns. The course is required or recommended for all residence and scholarship hall staff and open to upperclass or graduate students interested in student personnel work. LEC.

ELPS 715. Understanding Research in Education. 3 Hours.
This course introduces the concepts and skills involved in understanding and analyzing research in education and related areas. The course provides an overview of basic, general knowledge of various research methodologies. Students should expect to study much of this material in greater depth through additional course work before being prepared to conduct independent research. However, this course should enhance their ability to locate, read, comprehend, and critically analyze research articles and reports. Topics in the course include quantitative and qualitative methods and designs, historical and descriptive research, and program evaluation. Prerequisite: Admission to graduate standing in the School of Education. LEC.

ELPS 720. Foundations of Educational Technology. 3 Hours.
This course provides a comprehensive overview of the historical and theoretical foundations of educational technology. The goal of this course is to provide students with a survey of the research literature and definitions of terminology central to the field. Special emphasis is on current and emerging learning science research and how it can be applied to the creation of technology supported learning environments. LEC.

ELPS 750. Principalship. 3 Hours.
An introduction to the role, responsibilities, expectations and major duties of elementary, middle, and high school building administrators. Students are presented typical problems faced by school administrators through simulations and role playing and are expected, through reflection and discussion, to develop viable solutions. LEC.

ELPS 751. Educational Finance. 3 Hours.
A description and analysis of national, state, and local strategies for the financial support of education, utilizing social, economic, legal, and political frameworks. Particular attention to the principles of revenue acquisition and distribution at the local and state level for public school operations, with analysis of how these principles apply to Kansas. Designed for the wide variety of educational practitioners regardless of
organizational and degree levels. Prerequisite: Admission to graduate study. LEC.

**ELPS 752. Education Law. 3 Hours.**
A study of legal principles and issues affecting educational policy making and practice with emphasis on student and teacher rights, equity, and the administration of schools. Prerequisite: Admission to graduate study. LEC.

**ELPS 753. Introduction to Personnel Administration in Education. 3 Hours.**
An overview of the theory and practice of personnel administration. The course focuses on the processes of recruitment, selection, training and development, evaluation, compensation, equal employment opportunity, and labor relations. LEC.

**ELPS 754. Analysis of Administrative Problems. 3 Hours.**
An introduction to various methods of problem identification; strategies of information gathering; schemes for the analysis of qualitative and quantitative data; models of problem resolution and decision making; and communication methods appropriate for differing audiences. Students will build basic computer, library, decision and communication skills useful in future administrative practice and subsequent coursework. LEC.

**ELPS 755. Human Resource Management. 3 Hours.**
An overview of the theory and practice of the management, recruitment, selection, compensation, placement, and development of personnel in the school setting. LEC.

**ELPS 757. Education in American Society. 3 Hours.**
A study of the roles and goals of education in the United States, the interrelationships among schools and students, teachers, administrators, and parents, and the culture of schools. LEC.

**ELPS 760. Integration of Educational Technology. 3 Hours.**
This course focuses on strategies for integrating educational technology in K-12 schools, universities, government or industry. Topics include applying technology in: a) understanding basic technology operations b) planning and designing learning experiences, c) curriculum development, d) assessment and evaluation e) productivity and professional practices, and considering f) social, ethical, legal, and human issues. Students produce a comprehensive electronic portfolio that describes the theoretical perspectives that guide their technology integrations strategies and evidence that demonstrates their competencies. LEC.

**ELPS 766. Social Media Technologies. 3 Hours.**
This course provides students with an introduction to the history, theory, and uses of Social Media and Web 2.0 technologies. Social media technologies enable individuals to create, collaborate, and share information. This course will examine the affordances and constraints of social media and provide students with hands-on experience using multiple forms of social media technologies throughout the class. In this course students will be required to develop implementation strategies for the use of social media technologies in the context of organizational development and training. LEC.

**ELPS 772. Philosophical Problems in Comparative Education. 3 Hours.**
A study of significant philosophical problems encountered when comparing educational systems. Special emphasis on the implications of axiological analysis for educational theory and practice in different areas of the world. Relationships among the social sciences, philosophy, and the international or cross-cultural venture in education. The importance of systematic value-theory in comparative research and international education. LEC.

**ELPS 773. School and Society in Comparative Education. 3 Hours.**
Analysis of the role of social science in comparative education as perceived by different philosophies or schools of thought, such as Marxism, phenomenology, empiricism, pragmatism, and linguistic analysis. LEC.

**ELPS 774. Modern Educational Theorists. 3 Hours.**
An in-depth study of prominent European thinkers who have contributed to educational theory and practice (e.g., Rousseau, Pestalozzi, Herbert, Froebel, Montessori, Nietzsche, Freud, Piaget, Ortega Gasset, etc.). Prerequisite: ELPS 770 or ELPS 771 is recommended. LEC.

**ELPS 777. Problems in Contemporary Educational Theory. 3 Hours.**
Select explorations into such provocative and problematic trends in current educational theory as Marxism, behaviorism, phenomenology, existentialism, analytic philosophy, hedonism, nonverbal education, etc. Prerequisite: ELPS 770 or ELPS 771 is recommended. LEC.

**ELPS 780. Introduction to Higher Education Administration. 3 Hours.**
This course is designed for beginning master's degree students and for doctoral students who have had no previous administrative experience in college or university settings. Students will be introduced to the function and responsibilities of major administrative divisions of a college or university and to the major tasks of administration: planning, programming, budgeting, staffing, managing. An emphasis will be placed on current issues facing higher education and students will be introduced to the major journals of the field. As part of the course requirements, students will spend some time familiarizing themselves with one or more administrative offices on a college campus. Prerequisite: Admission to study in higher education at the graduate level. LEC.

**ELPS 781. Student Affairs Administration in Higher Education. 3 Hours.**
This course is designed to include the study of the history and development of student personnel services in higher education, the role and function of the student affairs administrator, contemporary issues and problems, and an understanding of the organization and role of student affairs administration within higher education settings. Prerequisite: Admission to the higher education program or permission of instructor. LEC.

**ELPS 798. Special Course:. 1-5 Hours.**
A special course of study to meet current needs of education professionals -- primarily for graduate students. LEC.

**ELPS 810. Educational Media Development. 3 Hours.**
Media surrounds today's learning environments. How can you effectively engage learners with multimedia, meaningful interactions, and motivational strategies? This course will take a hands-on practical approach to creating interactive educational multimedia products including, but not limited to, digital images, movies, podcast, Web publishing and educational games. Also, students will learn about the underlying learning theories of educational media development. LEC.

**ELPS 811. Constructivist Learning Technologies. 3 Hours.**
This course explores the design and use of new educational technologies to support constructivist learning. Throughout the course, students will (1) get hands-on experiences with emerging educational technologies, (2) examine how the underlying learning theories are reified into concrete learning environments, and (3) analyze how the affordances of new technologies (e.g., modeling and visualization) can facilitate the constructivist learning processes. This course is suitable for students who wish to develop greater knowledge about the ways emerging computer technologies can empower constructivist learning. Prerequisite: CT 770. LEC.
ELPS 812. Design of Educational Technology. 3 Hours.
This course introduces instructional design theory and production techniques for developing educational technology resources and systems. Students apply their understandings of design and education theories as they work in teams to develop real-world applications of educational technology for specific clients. LEC.

ELPS 814. Design and Development of Online Instruction. 3 Hours.
This course focuses on the design and development of online instruction for education, medicine, military, business, and industry. The major goal of the course is for students, working individually and/or in teams, to design and develop instruction and acquire the skills needed to facilitate both asynchronous and synchronous online learning. Special emphasis is on instructional systems design and the management of online learning solutions. LEC.

ELPS 816. Human Performance Technology. 3 Hours.
This course will provide an introduction to the field of human performance technology (HPT) and how it is applied to productivity and efficiency problems in the workplace. Performance improvement methods include data gathering, analysis, change management, implementation, measurement and the integration of technology. The goal of this course is to provide students with a survey of the research literature and definitions of terminology central to the field of performance improvement. Special emphasis is on current and emerging technology and how it can be applied to human performance improvement in education and the workplace. LEC.

ELPS 818. Game and Simulation Design. 3 Hours.
This course provides an introduction to the design and development of games, gamification, and simulations for learning and instruction. Emphasis is on the design and development of interactive learning environments for K-16 education and workforce training. Topics include a review of the essential elements of game design, rapid prototyping, the psychology of gaming, game technology, and research related to the use of games, gamification, and simulations in K-16 education and workforce training. LEC.

ELPS 820. Practicum in Educational Technology. 1-3 Hours.
Supervised practice in a media center in selection, classifying, designing, producing, and/or managing instructional materials. Prerequisite: CT 770 and CT 871. FLD.

ELPS 830. Foundations of Multicultural Education. 3 Hours.
This class provides students with an understanding multicultural education as an instructional concept, educational reform movement, and systemic process meant to ensure educational equity for all people, especially those who have been inadequately served and/or historically discriminated against because of their racial/ethnic or linguistic backgrounds, gender or sexual orientation, socio-economic status, and special needs. Students will examine different theoretical approaches that inform the practice of multicultural education and explore the contribution of various social sciences to the field. LEC.

ELPS 831. Sociology of Education. 3 Hours.
This course will provide an introduction to the sociology of education. This course is designed to fulfill the doctoral core requirement for social, historical and philosophical foundations of education. Specific topics will include: conflict over the purposes of education; how those purposes are or are not-translated into actual classroom life; how educational systems have developed historically, how status, and more specifically race, class and gender relations, affect student experiences; and contemporary policy and reform movements. LEC.

ELPS 832. History of Educational Thought. 3 Hours.
An examination of the major ideas that have shaped practice in the schools. Emphasis is placed on assisting the student with the development of a coherent and consistent personal philosophy of education upon which administrative practice can be based. LEC.

ELPS 833. Social Context of Urban Education. 3 Hours.
This course examines education in urban communities through the foundational disciplines of history, philosophy, and the social sciences. Particular attention is given to ways in which the changing social and political contexts of American cities affect the educational process. LEC.

ELPS 834. History and Philosophy of Education. 3 Hours.
A comprehensive study of influential persons and movements in the development of educational thought, Eastern and Western, from ancient times to the present. Emphasis on those ideas and historical roots which are relevant to contemporary issues in teaching and school administration. LEC.

ELPS 835. Philosophy of Education. 3 Hours.
An analytic inquiry into basic philosophical positions and issues relevant to education. The difference between ELPS 770 and ELPS 771 is that the latter is topically arranged and does not necessarily follow a historical sequence; it normally proceeds by problems and schools of thought. LEC.

ELPS 837. History of Education and Culture in America. 3 Hours.
A study of the relation between education and culture in America from colonial times to the present. American schools are considered in the wider context of cultural and social change. LEC.

ELPS 838. History of Childhood and Youth in America. 3 Hours.
An exploration of changing attitudes toward children and youth, their subjective experience, their impact on adults, and the conditions that shaped their development. Special attention will be given to the relationship between the changing nature of childhood as a social and cultural category and the development of the education profession. LEC.

ELPS 839. Historical Inquiry in Education. 3 Hours.
This course will provide an introduction to the methodology of historical research in education. This course is designed to fulfill the doctoral core requirement for research methods in education for students interested in doing this type of research. Specific topics will include: the historiography of education; working with primary and secondary documents; oral history as method and documentation, quantitative approaches to history; constructing historical narratives; the question of interpretation. LEC.

ELPS 850. Educational Facilities. 3 Hours.
A study of the principles and processes of developing functional educational facilities. Special emphasis placed on the educational planning that precedes and provides the basis for architectural planning. Among topics considered are plant utilization analysis, enrollment projections, site and equipment needs, fiscal and legal constraints, environmental factors, and the development of educational specifications. Designed for both building and central office level administrators. Prerequisite: Admission to graduate study. LEC.

ELPS 851. Supervision of Student Teaching. 2 Hours.
A study of the organization and functions of student-teaching programs. Emphasis on the development of effective interpersonal relationships among school administrators, cooperating teachers, university supervisors, and student teachers. Designed for both administrative and instructional personnel. Prerequisite: Admission to graduate study. LEC.

ELPS 852. School Resource Management. 3 Hours.
An examination of the sources and uses of fiscal resources in education including underlying concepts from economic theory, the impact of
values on fiscal policy, state funding formulas, and school budgeting and accounting practices. LEC.

ELPS 853. Staff Evaluation and Development. 3 Hours.
An examination of current trends in personnel evaluation with a focus on clinical supervision and adult development. Students will participate in simulation exercises to develop skills in classroom observation, conferencing techniques, evaluation of teaching artifacts, and the construction of staff development plans. LEC.

ELPS 854. The Student in Society. 3 Hours.
A study of children and youth with particular emphasis on demographic characteristics of the population served by schools and implications of those characteristics for schools and schooling. LEC.

ELPS 855. Teacher Evaluation. 3 Hours.
Teacher Evaluation is based on clinical, empirical and theoretical information related to effective teacher evaluation behavior from the administrative perspective. It is intended to provide exposure to competencies essential to effective evaluation of teaching performance. Evaluation knowledge, skill and performance are acquired and developed through reading, discussion, active teaching of content related to teacher evaluation and practicing observation, recording and conferencing skills. A variety of approaches is considered, but behaviorally-anchored measurement of teaching behavior is emphasized. Opportunities and needs for improvement are identified with the assistance of video-taped diagnosis of conferencing behavior. Prerequisite: Two of the following: ELPS 750, ELPS 752, ELPS 753, or CT 840. LEC.

ELPS 856. Law and Special Education. 3 Hours.
This course focuses on laws that apply to special education. The American legal system, particularly in respect to special education, the constitutional and statutory provisions of federal and state law and the judicial decisions interpreting those laws are reviewed. The course relates equal protection, procedural due process, and substantive due process doctrines to school practices affecting disabled children and examines the sex principles of P.L. 94-142 and similar principles in state legislation. This course is not the equivalent of or a substitute for ELPS 752. (Same as SPED 851.) Prerequisite: SPED 750 or permission of instructor. LEC.

ELPS 857. Disabled Citizens, Public Policy and Policy Analysis. 3 Hours.
To train students to analyze public policy that affects disabled citizens, various models of analysis are brought to bear on federal policy (education, transportation, housing, institutionalization, protection and advocacy, medical assistance, employment, vocational rehabilitation and others). Not valid for core requirement in history and/or philosophy of education. (Same as SPED 852.) Prerequisite: SPED 851 or SPED 750 or permission of instructor. LEC.

ELPS 858. Professional Ethics, Public Values and Disabled Citizens. 3 Hours.
This course addresses the issues that professionals (educators, physicians, allied health providers, attorneys and others) and families of disabled people face in the context of public values and attitudes and rules of law. The issues include, without limitation, education, treatment and non-treatment. Not valid for core requirement in history and/or philosophy of education. (Same as SPED 853.) Prerequisite: SPED 850, SPED 851, SPED 852 or permission of instructor. LEC.

ELPS 870. Philosophy of Education II. 3 Hours.
An exploration of select areas in philosophy, such as emphasis on value-theory or epistemology or metaphysics, and their implications for educational theory. Normally a limited number of authors will also be selected for monographic treatment. Prerequisite: ELPS 770 or ELPS 771 is recommended. LEC.

ELPS 871. Introduction to Qualitative Research. 3 Hours.
An introduction to the foundations of and techniques associated with qualitative research methods. Students will practice interview and participant observation skills and will analyze and interpret data. Additional topics include crafting qualitative research questions, ethics of fieldwork, and establishing trustworthiness of data. Common traditions of qualitative methods employed in education and other related fields will be introduced. LEC.

ELPS 880. The Community/Junior College. 3 Hours.
A survey of the history and development of the community/junior college. Particular emphasis will be given to the student, the faculty, the curricula, administration, and finance. The course is intended to provide a general understanding of the operation and concerns of today's community/junior college for the current or potential community/junior college staff member. LEC.

ELPS 881. Seminar in Leadership. 3 Hours.
The purpose of this seminar is to explore leadership in education, particularly higher education, from a variety of perspectives. Readings come from a variety of disciplinary perspectives, such as sociology, organizational behavior, and psychology. We consider various aspects of leadership and analyze the leader from a symbolic perspective, as a manager of meaning and critical change agent. We then challenge ourselves to deconstruct our leadership realities with the help of several critical perspectives as we prepare to examine who the leaders are as well as who they will, and need to, be in the educational organizations of tomorrow. LEC.

ELPS 882. Higher Education in the United States. 3 Hours.
The purpose of the course is to acquaint students in higher education, and students from other areas who intend to work in the post-secondary setting, with the history, philosophy and development of higher education in the United States. The course focuses on three periods: 1) the founding of Harvard to 1965; 2) dissent, disruption, and change, 1965-1979; and 3) the future and crucial issues, the 1980's. European higher education and its early influence on higher education in the United States is also examined. LEC.

ELPS 883. The College Student. 3 Hours.
The characteristics of college students; impact of college on student behavior, changing attitudes, values, beliefs, and the implications of recent research on traditional and new students for instructional and administrative practices. LEC.

ELPS 884. Research on College Students. 3 Hours.
Examination of the American college student from societal, development, research, and institutional perspectives and to review the policy implications of these findings for college and university administrators and faculty. Topics include research and theory concerning the college student experience, the diverse nature of the student body and its implications for institutional policy and practice, and formulation of individual philosophies and priorities applicable to working with college students. LEC.

ELPS 885. Assessment and Program Evaluation in Higher Education. 3 Hours.
Nature, objectives, and basic procedures of assessment and program evaluation as applied to the various aspects of higher education settings. In addition to basic procedures for evaluating programs, topics covered include accreditation, program review, benchmarking, student outcomes assessment, and evaluation of teaching in colleges and universities. Prerequisite: ELPS 715 or equivalent. LEC.

ELPS 886. Theory into Practice in Higher Education. 3 Hours.
This course is required as a final course for all master's students in higher education. It is designed to prepare students for professional life after
graduation. Using a case study approach, students will examine the reality of practice in a variety of higher educational settings including relevant political and ethical factors. Prerequisite: Higher education students in last semester of master's coursework. LEC.

ELPS 893. Advanced Building Leadership Internship. 2 Hours. Supervised and directed experiences to enhance the necessary leadership skills of a building/district leaders. Activities will include building/district level resource assessment, data analysis, professional development of teachers/principals (and district level professionals), and cooperative planning with teachers and administrators around responsibilities of curriculum, instruction, resource management and student achievement. Prerequisite: Completion (at the University of Kansas) of all certification program (MS/EdD) requirements for the Building/District Leadership Licenses. FLD.

ELPS 895. Internship. 1-5 Hours. The on site development of the skills necessary to effectively function as a school building leader. Activities will be tailored to the needs of individual students in consultation with a university advisor and a field advisor. FLD.

ELPS 896. Seminar in: 1-4 Hours. LEC.

ELPS 897. Independent Study. 1-4 Hours. Prerequisite: Consent of advisor and instructor. IND.

ELPS 898. Master's Project. 1-4 Hours. RSH.

ELPS 899. Master's Thesis. 1-6 Hours. THE.

ELPS 948. Research in Education Policy and Leadership. 3 Hours. This course is an introduction to methods of inquiry in education policy and leadership studies. It is designed to help doctoral students explore possible research interests, formulate research questions, and review a rich variety of approaches to inquiry in the field of education. Specific topics include: interview- and observation-driven studies, ethnography, feminist and narrative methods, legal and historical methods, questionnaire-driven studies, quantitative evaluation studies, and studies using administrative and large national data sources. LEC.

ELPS 950. Educational Policy Making and Reform. 3 Hours. An analysis of patterns of influence, organizations, and governmental agencies which impact education at the community, state and national levels. Particular emphasis is placed on analysis of policy development process and the relationship of policy to administration. Recommended to students in educational administration and higher education. LEC.

ELPS 951. Supervision of Instruction. 3 Hours. A study of the principles and techniques necessary for coordinating, monitoring, and improving the educational programs of elementary and secondary schools. LEC.

ELPS 952. School Finance: Policy and Practice. 3 Hours. The objective of this course is to understand the financial systems and mechanisms used by states in the funding of elementary and secondary education in the United States. In simple language, we will be concerned with five basic issues: (1) Where the money comes from; (2) How it is redistributed; (3) How it is spent; (4) The relative effectiveness of spending decisions including selected international comparisons; and (5) How the previous four financial activities participate in a common financial ecology. The course provides an overview of theory and concepts central to the understanding of school finance with an emphasis on policy issues. It also examines the mechanics of school finance funding in light of state policies. LEC.

ELPS 953. District Human Resource Management. 3 Hours. An in-depth study of theory and research in personnel administration. The focus will be on current literature dealing with empirical assessments of personnel theory and techniques. Specific concepts to be considered include the following: educator characteristics, job analysis and design, personnel recruitment, selection and evaluation techniques, staffing and development, and labor relations. Prerequisite: ELPS 753 or its equivalent. LEC.

ELPS 954. Sociology of Educational Organizations. 3 Hours. This class is an overview of basic and advanced sociological and political theories of organization, with specific application to issues and problems in K-12 education. It is designed for graduate students and practicing educational leaders and administrators who intend to utilize research on organizations in their studies of the governance of schools, the sociology and politics of education, and education policy. The topics covered include the origins and nature of modern bureaucracy, formal structure and function, organizational control, transaction cost economics, population ecology, resource dependence, the new institutionalism, organizational effectiveness and legitimacy, organizational culture, power and politics, and change. LEC.

ELPS 955. District Business Management. 3 Hours. This course emphasizes skills for effective and efficient business and financial management of school districts in a Kansas or Missouri context. Basic topics include: Short range and long range financial planning, analysis of financial statements, budget preparation, fund accounting and financial reporting, contracting of services including transportation and food services, staff salaries and benefits and insurance. The course also includes a number of strategic methods for institutional planning including: Cost Benefit Analysis, Cost Effectiveness Analysis, and enrollment, revenue and expenditure forecasting techniques. Prerequisite: ELPS 952. LEC.

ELPS 956. District Leadership. 3 Hours. The focus of the course is the role of the public school district superintendent. Organized study will include assigned readings, lectures, guest speakers, discussion, and the completion of a study project. The course will include consideration of such topics as boardmanship, community relations, district leadership, professional accountability, district maintenance and operations, professional employment and relationships with other agencies. The course is designed to serve the needs of those graduate students pursuing advanced study with the intention of completing requirements for district certification. Some students will also find the field appealing as an area for dissertation research. Prerequisite: Doctoral status in education administration or permission of instructor. LEC.

ELPS 957. Educational Policy, Ethics and Law. 3 Hours. Course focuses on use of legal and moral reasoning in analysis of educational policy issues. Specific topics will vary depending on interests of instructor and students and current controversy. Examples of possible topics to be included: school desegregation, teacher collective bargaining, separation of church and school, equal educational opportunity. Prerequisite: ELPS 752, equivalent, or consent of instructor. LEC.

ELPS 958. American Educational Reform Movements: Past and Present. 3 Hours. An examination of the origin, nature, and consequences of educational reform in the United States. The primary goal is to attain a balanced evaluation of current educational reform. LEC.

ELPS 959. Organization and Administration of Services for Exceptional Children. 3 Hours. To aid administrators and prospective administrators responsible for organizing and administering programs of education for exceptional
ELPS 960. Specialist Project. 1-4 Hours.

ELPS 969. Dissertation Seminar. 3 Hours.
This seminar is designed to facilitate proposal development for doctoral-level research in educational leadership and policy studies. The objective is to help students select and refine a topic, critically analyze existing research, set forth a theoretical framework, and design a research methodology suitable for your topic. LEC.

ELPS 970. Theory and Research in Administration. 3 Hours.
A survey of the theoretical and empirical literature in educational administration and the methods used to investigate these content areas. Major emphasis is devoted to developing research skills applicable in practice and to the identification of possible generic topics suitable for future dissertation work. LEC.

ELPS 971. Comparative Education. 2 Hours.
A factual, descriptive, and analytical study of national systems of formal education, or schooling, as exemplified in contemporary educational establishments. Organizational and administrative policies and teaching practices, with emphasis on Germany, France, England, U.S.S.R., People's Republic of China and Japan. Other nations may be examined on an individual project basis. The difference between ELPS 971 and ELPS 772 is the philosophical emphasis of the latter. LEC.

ELPS 972. Educational Problems in Latin America. 3 Hours.
Designed to meet the needs of students majoring in Latin American studies or interested in the area. Development of an awareness of the concept of cross-cultural confluence with Latin America as it relates to education. Survey of the main problems confronted by Latin American educational systems and examination of the difficulties experienced by North American educators when confronted with such problems. LEC.

ELPS 975. Education, Technology and Social Change. 3 Hours.
This interdisciplinary course provides an opportunity to read, reflect upon, and discuss ideas drawn from the emerging field of Science and Technology Studies (STS) in connection with education. Its focus is the interrelationships between technology, society, and education (defined broadly to include non-school and adult learning settings). It explores how knowledge, expertise, and authority are constructed within and across social and cultural groups, with particular attention social and economic inequality. It also considers the relationship between emerging technologies, educational experiences and the nature of "the self" in society, among other issues. Prerequisite: Admission to ELPS doctoral program, or permission of instructor. LEC.

ELPS 980. Postsecondary Finance. 3 Hours.
This course is designed for advanced doctoral students in higher education, particularly those who will be preparing unit budgets or budget presentations and those who make and implement fiscal policy (e.g., financial aid offers). The course material covers different types of college and university budgeting -- incremental, zero-based and formula -- and their impact on university revenues; statewide coordination and its impact on programs, program duplication and funding; retrenchment and quality issues; the legislative role in budget preparation; unified and comparative management systems (e.g., WICHE and NCHEMS); and the impact of federal contracting and student aid policies. LEC.

ELPS 981. Higher Education Law. 3 Hours.
An overview of the developing law of higher education, with emphasis on and analysis of employer-employee relationships, student-faculty/administration relationships, and the impact of federal and state regulation on these relationships. LEC.

ELPS 982. Faculty in Higher Education. 3 Hours.
This course considers the role and circumstances of faculty in higher education including variations among different types of institutions. Topics include the history and demographics of the professoriate, the academic work environment and labor market, the role of faculty in institutional governance and policy making, and the social and political context of academia. LEC.

ELPS 983. Curriculum Innovation in Higher Education. 3 Hours.
A study of contemporary post-secondary curriculum with particular emphasis on the nature of curriculum, the organization and structure of academic programs, the nature of change in academic communities and exemplary innovative institutions. LEC.

ELPS 984. Teacher Education in the United States. 2 Hours.
A study of the development, issues, and programs for the preparation of teachers. Open to all regular graduate students. LEC.

ELPS 985. Evaluations of Programs in Higher Education. 2 Hours.
Nature, objectives, and basic procedures of evaluation as applied to the various aspects of higher education. Open to all regular graduate students. LEC.

ELPS 986. The Governance and Administration of Higher Education. 3 Hours.
A theory-based course aimed at providing an understanding of the governance and administration of academic institutions -- particularly universities. Emphasis is directed toward an analysis of decision-making in these complex organizations. LEC.

ELPS 993. Advanced District Leadership Internship. 2 Hours.
Supervised and directed experiences to enhance the necessary leadership skills of a building/district leaders. Activities will include building/district level resource assessment, data analysis, professional development of teachers/principals (and district level professionals), and cooperative planning with teachers and administrators around responsibilities of curriculum, instruction, resource management and student achievement. Prerequisite: Completion (at the University of Kansas) of all certification program (MS/EdD) requirements for the Building/District Leadership Licenses. FLD.

ELPS 994. Advanced Topics:. 1-3 Hours.
A special course of study to meet current needs of education professionals -- primarily for post-master's level students. LEC.

ELPS 995. Field Experience in:. 1-5 Hours.
Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experience will be prepared independently by the student, a representative of the cooperating agencies, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours. FLD.

ELPS 996. College Teaching Experience in:. 2 Hours.
To meet the college teaching experience requirement for doctoral programs, a student shall engage in a semester-long, planned, instructional activity that shall include college classroom teaching under supervision. Planning shall be done with the advisor and/or the member of the faculty who will supervise the experience. The activity shall be done under the supervision of a member of the University of Kansas faculty or by an individual or individuals designated by the candidate's committee. FLD.
ELPS 997. Individual Study. 1-4 Hours.
Prerequisite: Prior graduate course work in the area of study and consent of instructor. RSH.

ELPS 998. Seminar in: ______. 1-4 Hours.
LEC.

ELPS 999. Doctoral Dissertation. 1-15 Hours.
THE.

Education Courses
EDUC 800. Education as a Field of Scholarship. 3 Hours.
An intensive interdisciplinary examination of classic and current scholarship in education, for students in Ph.D. programs in the School of Education. It surveys the interdisciplinary range of scholarship and inquiry in education, as preparation for careers in research. The course features discussion of exemplary studies, both for their contributions to various fields, but also with regard to research methods, related ethical issues and the responsible conduct of research. Prerequisite: Admission to Ph.D. in Education Program. LEC.

Health Sport Exercise Sci Courses
HSES 104. Physical Activity in: ______. 0.5-1 Hours.
(An accurate description of the activity or activities will be given in the Timetable.) Graded on a satisfactory/unsatisfactory basis. ACT.

HSES 108. Basic Skill Instruction in: ______. 0.5-2 Hours.
(An accurate description of the activity or activities will be given in the Timetable.) ACT.

HSES 110. Intermediate Skill Instruction in: ______. 0.5-2 Hours.
(An accurate description of the activity or activities will be given in the Timetable.) ACT.

HSES 112. Advanced Skill Instruction in: ______. 0.5-2 Hours.
(An accurate description of the activity or activities will be given in the Timetable.) ACT.

HSES 200. Coaching Certification for Youth Sports. 2 Hours.
This course will examine theories, practices, methods and techniques used to coach youth sports. Emphasis will be upon training, conditioning, sports psychology, nutrition, organization and management as prescribed by the National Federation of Interscholastic Coaches' Education Program. Students will have opportunity to receive coaching certification. Prerequisite: Open to physical education majors, or by consent of instructor. Students must pass the National Federation of Interscholastic Coaches' Education Program (NFICEP) examination before exiting the course. LEC.

HSES 201. Team Sports. 2 Hours.
This course will deal with Soccer, Touch Football, Basketball, Softball, and Volleyball. Practice in construction of lesson plans and unit plans, skill performance and peer teaching practicum are emphasized in each of the areas of team sports. Class meets three days per week with one hour being a laboratory session. Prerequisite: Basic fitness and knowledge of the activities. Open to HSES majors and minors, or by consent of instructor. LEC.

HSES 202. Individual and Dual Sports. 2 Hours.
Instruction and analysis in individual sports such as track and field, bowling or archery, and dual sports such as tennis, badminton or handball. Development of sport skills and rule knowledge are emphasized. Prerequisite: Basic fitness and knowledge of the activities. Prerequisite: Open to pre-HSES and HSES majors, or by consent of instructor. LEC.

HSES 204. Gymnastics. 2 Hours.
Instruction and analysis in the eleven gymnastics events for men and women. Skill performance, spotting and teaching techniques, lesson and unit plan construction, and teaching practicum constitute the basic focus of this course. Class meets three days per week with one hour being a laboratory session. Prerequisite: Basic fitness and gymnastics/tumbling experience. Open to HSES majors and minors, or by consent of instructor. LEC.

HSES 210. Instruction and Analysis in: ______. 1-16 Hours.
Study of the skills to be included in the instruction of the indicated activities and the analysis of skill performance involved. Presentation of instructional techniques and practice in construction of lesson and unit plans are included for each activity. Open to majors in physical education only. The activities included in the major program are as follows: (a) Swimming (b) Folk and Square Dance (c) Modern Dance and Women's Gymnastics (d) Weight-Training and Men's Gymnastics (e) Soccer-Speedball, Volleyball, Wrestling (f) Field Hockey, Soccer-Speedball, Volleyball (g) Golf, Tennis, Badminton, Archery (h) Basketball, Softball, Flag Football, Team Handball (i) Track and Field, Handball-Paddleball, Fencing. Prerequisite: Basic fitness and basic skill in the course activities shown through competency tests and/or credit in basic skill courses in the appropriate activity. LAB.

HSES 214. Physical Education Activities for Elementary School Children. 3 Hours.
This course will introduce the student to a variety of physical education activities that are appropriate for children in grades K-6. Age appropriate activities demonstrated in this course include: individual and group games, self testing games, stunts and tumbling experiences, physical fitness, modified sports, and movement exploration. Class participation will be expected for all students. Prerequisite: Open to pre-HPE and HPE majors. LEC.

HSES 218. Lifeguard Training. 2 Hours.
The course involves American Red Cross certification in lifeguarding which includes rescue techniques and safety procedures. It also includes first aid and CPR certifications. Each student will be asked to identify common hazards associated with various types of aquatic facilities and develop skills necessary to recognize a person in a distress or drowning situation and to effectively rescue that person. This course will help each student to understand the lifeguard/employer and lifeguard/patron relationship as well as provide explanations, demonstrations, practice and review of the rescue skills essential for lifeguards. Prerequisite: HSES 112 Advanced Skill Instruction in Swimming or consent of instructor. LEC.

HSES 220. Officiating of: ______. 1 Hour.
A study of the rules and techniques of officiating. Students will officiate during laboratory sessions. The activities offered in officiating are: basketball, football, gymnastics, softball, swimming, track and field, and volleyball. Prerequisite: Basic competency in the sport to be officiated, or consent of instructor. LEC.

HSES 222. Water Safety Instruction. 2 Hours.
This course is designed to train instructor candidates to teach American Red Cross Swimming and Water Safety courses. Through practice teaching sessions, students will plan and organize skill development utilizing the various educational methods and approaches applicable to swimming and water safety instruction. Students will also learn the correct swimming styles taught by the Red Cross. Prerequisite: HSES 112 Advanced Skill Instruction in Swimming or consent of instructor. LEC.

HSES 224. Lifeguard Training Instructor. 2 Hours.
This course is designed as a lecture/laboratory course, meeting for one hour three days per week. Each instructor candidate (student) will have an opportunity for skill development necessary to instruct American
Red Cross Lifeguard Training courses. Through practice teaching sessions, emphasis will be placed on enforcing safety precautions, identifying errors, providing effective instruction, and skills correction. After successful completion of this course, the student will be certified to instruct the following American Red Cross Aquatic courses: (1) Lifeguard training, (2) Waterfront Lifeguarding, (3) CPR for professional rescue, and (4) Community First Aid. Prerequisite: HSES 218 or Lifeguard training. LEC.

HSES 236. Practicum in: ____. 1-3 Hours.
A description of the activities offered will be provided in the Timetable. Prerequisite: Consent of instructor. LEC.

HSES 240. The Coaching of Football. 2 Hours.
A complete study of the theoretical aspects of the fundamentals of football. Study of defensive and offensive tactics for each position. Prerequisite: Sophomore standing. LEC.

HSES 244. Introduction to Physical Education and Sport Studies. 3 Hours. GE3H.
The study of the history, foundational concepts, and current principles of physical education and sport programs. LEC.

HSES 248. First Aid. 2 Hours.
This course is designed to teach emergency treatment of injuries, wounds, hemorrhage, burns, and poisoning. Emphasis is placed on the techniques of rescue breathing, CPR, and emergency bandaging. American Red Cross certification is included. LEC.

HSES 250. Introduction to Athletic Training. 3 Hours.
The introductory study of the prevention, immediate care, and treatment of athletic related injuries and illnesses. This course is designed for Athletic Training majors to cover the basic competencies of injury/illness recognition as well as discuss the various strategies for the prevention, evaluation, and care of injuries to the physically active. Prerequisite: Instructor consent and concurrent enrollment in HSES 251. LEC.

HSES 251. Introduction to Athletic Training Practicum. 1 Hour.
This course is designed to introduce the practical skills and psychomotor clinical competencies of the beginning student-athlete trainer. Emphasis will be placed on basic Athletic Training procedures including but not limited to preventative taping, bracing, and padding techniques as well as various other procedures and techniques related to the prevention, care, and management of athletic related injuries/illnesses. Prerequisite: Completed or enrolled in Human Anatomy, First Aid/CPR (or proof of current certification). Concurrent enrollment in HSES 250 or transfer credit. Open to Athletic Training majors only. LEC.

HSES 252. The Coaching of Basketball. 2 Hours.
Theory of basketball, including methods of teaching fundamentals; individual and team offense and defense; various styles of play and methods of coaching. Prerequisite: Sophomore standing. LEC.

HSES 260. Personal and Community Health. 3 Hours.
Emphasis on healthful and intelligent living and the application of the fundamental principles of health. LEC.

HSES 262. Life Skills Training for Intercollegiate Athletics. 2 Hours.
This course will focus on issues surrounding drug use, testing, and prevention in sports and will incorporate life skills training in the areas of career transition, stress and time management, performance enhancement, strategic learning skills, and the dynamics of communication and leadership. LEC.

HSES 264. The Coaching of Individual Sports. 2 Hours.
An analysis of coaching techniques and study of materials for the coaching of gymnastics, swimming, golf, tennis, and wrestling. LEC.

HSES 269. Introduction to Exercise Science. 3 Hours.
A study of the various components of physical fitness and the wellness and the implications for developing programs to promote good health and fitness. Lectures and laboratory sessions will be centered on practical knowledge and experiences designed to help individuals enhance their own health, as well as develop sound programs for others. The topics discussed include cardiovascular fitness, body composition, muscular strength, flexibility, evaluation of fitness components, training program design, nutrition, weight management, and facts and fallacies of nutrition and fitness. LEC.

HSES 289. Introduction to Sport Management. 3 Hours.
This course provides an overview of the field of sport management including the principles of leadership and management and the fundamentals of personnel management, financial management, marketing, strategic planning, sport ethics, sport law, time management, stress management, facility management, and event management applied to sport settings. LEC.

HSES 290. Safety Education. 3 Hours.
A survey of safety problems as they exist in society today, with emphasis on preventive, corrective, and compensatory procedures. LEC.

Emphasis will be on instructional techniques that are used for the inclusion of all students in health and physical education learning experiences. Students will develop an understanding of how to deliver health and physical education activities that may be part of an individual education program. As a part of this course, a practicum experience of 30 hours in a public school adaptive physical education setting will be required. LEC.

HSES 305. Methods of Strength Training and Conditioning. 3 Hours.
This course will provide the students with the scientific principles and the hands-on experience to develop resistance exercise and related conditioning programs for a wide range of populations, including those focusing on general fitness, rehabilitative, and athletic performance. Prerequisite: Anatomical, Physiological, admission to the Exercise Science or Athletic Training undergraduate programs, or permission of instructor. LEC.

HSES 308. Drugs and Diseases in Society. 3 Hours.
This course is an overview of human disease processes as well as legal and illegal use of drugs and narcotics for treatment or recreational purposes. Both communicable and degenerative diseases will be covered with regards to prevention, transmission, effects, management, and treatment. Legal drugs and illegal drugs will be discussed with regards to their treatment or abuse potential, legislative issues, and consumer education. Reflective thinking will be used to formulate improved perspectives on the roles of drugs and diseases in society. Prerequisite: Admission to Community Health Program or consent of instructor. LEC.

HSES 310. Research and Data Analysis in Health, Sport, and Exercise Sciences. 3 Hours.
This course provides formal instruction in the areas of test administration, general statistics, and basic research design. Emphasis will be placed upon the interpretation of statistical data, evaluation of data, and basic methodologies utilized in health, sport, and exercise sciences research. Data collection, analysis, and evaluation will be an integral part of the class. Prerequisite: Admission to the School of Education. LEC.

HSES 315. Health and Fitness Technology. 2 Hours.
The course will prepare health and physical education majors to use technology effectively to enhance teaching and learning. Students will explore the use of technology appropriate for communication,
organization, instruction, and assessment in health and physical education classrooms. Prerequisite: Admission to the HPE Teacher Licensure Program. LEC.

**HSES 320. Methods of Teaching Physical Education. 3 Hours.**
This course provides a systematic approach to the development of effective teaching skills in physical education. Students receive practical and field experiences that enable them to observe and practice managerial, instructional, and interpersonal skills necessary to produce student learning in K-12 physical education classrooms. Prerequisite: Admission to the HSES Teacher Certification Program. LEC.

**HSES 330. Principles of Nutrition and Health. 3 Hours.**
This course will provide an introduction to the basic principles of nutrition, with an emphasis on application of these principles to improve overall health. Topics include: guidelines for a balanced diet, index of nutritional quality, energy requirements and balance, weight management and obesity, nutritional quackery, sports nutrition, nutrition for children and elderly, and eating disorders. LEC.

**HSES 340. Instructional Strategies in Motor Development. 2 Hours.**
This course is designed to provide students with an examination of current theories of motor development throughout the life cycle. Emphasis is place on content regarding the development of fundamental motor skills, physical growth and development, and assessment. Prerequisite: Admission to the HSES Teacher Certification Program. LEC.

**HSES 341. Instructional Strategies in Physical Education for Elementary Classroom Teachers. 1 Hour.**
The application of child growth and development principles to physical education. The use of materials as related to a sequential physical education curriculum in the elementary school will also be included. Prerequisite: Prior or concurrent enrollment in CT 322 or equivalent. LEC.

**HSES 350. Care and Prevention of Athletic Injuries. 3 Hours.**
The introductory study of the prevention, immediate care, and treatment of athletic related injuries and illnesses. This course is designed to cover the basic fundamentals of injury/illness recognition as well as discuss the various strategies for the prevention and care of injuries to the physically active. Prerequisite: Courses in Human Anatomy and First Aid. LEC.

**HSES 351. Foundations of Athletic Training. 1 Hour.**
This course is designed to introduce the practical skills and psychomotor clinical competencies of the beginning student-athletic trainer. Emphasis will be placed on basic athletic training procedures including but not limited to preventative taping, bracing, and padding techniques as well as various other procedures and techniques related to the prevention, care, and management of athletic related injuries/illnesses. Prerequisite: Human Anatomy, First Aid, concurrent enrollment in HSES 350. Open to Athletic Training majors only. LEC.

**HSES 352. Therapeutic Modalities. 3 Hours.**
This course presents the theoretical and physiological foundations of pain and inflammation. Discussion of therapeutic agents to treat pain and inflammation are presented along with progressive planning and implementation of a comprehensive treatment for injuries/illnesses sustained by physically active individuals. Prerequisite: Admission into the Athletic Training Education program and HSES 250 or the transfer equivalent. LEC.

**HSES 353. Athletic Training Practicum I. 2 Hours.**
This course provides a practical experience for the student-athlete trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury/illness evaluation during their clinical and field experience. Specific skills addressed in HSES 352 will be practiced, applied, and mastered during this experience. Prerequisite: Admission to Athletic Training Education program and concurrent enrollment in HSES 352. FLD.

**HSES 354. Lower Extremity Evaluation. 3 Hours.**
This course provides a comprehensive study of the techniques used by the Athletic Trainer in regard to the assessment and evaluation of athletic injuries/illnesses of the lower extremity. Procedures for reporting and evaluating injuries/illnesses will be discussed so that appropriate injury management and referral may take place. The etiological factors common to athletic injuries, as well as specific signs and symptoms of various athletic related pathological conditions will be discussed. Prerequisite: Admission to the Athletic Training Program, HSES 352, and HSES 353. LEC.

**HSES 355. Athletic Training Practicum II. 2 Hours.**
This course provides a practical experience for the student-athlete trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury/illness evaluation during their clinical and field experience. Specific skills addressed in HSES 354 will be practiced, applied, and mastered during this experience. Prerequisite: Admission to Athletic Training Education program and concurrent enrollment in HSES 354. FLD.

**HSES 358. Creative Movement and Dance Appreciation. 3 Hours.**
An appreciation for dance will be developed through the study of the pioneers of dance and the critique of local dance performances. Students will experience the following types of dance: creative movement, basic rhythms, ballroom dance, and folk and square dance. Prerequisite: Admission to the School of Education. LEC.

**HSES 365. Peer Health Education. 3 Hours.**
The course is designed to train students in peer health education, as peer health educators in college settings, and as trainers, training adolescents in community health settings for grades 6-12 peer health education. Subject content and teaching methodologies will be emphasized in the ten content areas of health with special emphasis on alcohol, drugs, tobacco, stress reduction, mental health and human sexuality. Prerequisite: HSES 260 or instructor consent. LEC.

**HSES 369. Kinesiology. 3 Hours.**
This course is designed primarily for students in the field of exercise science who already have taken an introductory course in human anatomy and who need a more detailed exposure to concepts of functional movement anatomy. This course will provide a detailed study of the skeletal and muscular systems to include identification of the origin, insertion, and action of the major muscles of the human body. Students will become proficient in the use of directional and movement terminology used to describe movement and be able to identify the plane/axis as well as the agonist and antagonist muscles involved in a movement. Prerequisite: A course in human anatomy, admission to School of Education. LEC.

**HSES 375. Neuromuscular Exercise Physiology and Motor Control. 3 Hours.**
This course explores the control of human movement from an exercise neurophysiology perspective. Emphasis will be placed on the understanding the interactions between the nervous system and muscular systems in the control of muscle force/power production and the control of movement under a variety of contexts. These contexts include responses and adaptations to exercise training, the aging process, and in a variety of neuromuscular disorders. Prerequisite: BIOL 240 and BIOL 246. LEC.
HSES 378. The Coaching of Volleyball. 2 Hours.
Theory of volleyball, including methods of teaching fundamentals, individual and team offense and defense. Various styles of play and methods of coaching. Efficient performance of the skills during game conditions will be emphasized. LEC.

HSES 379. The Coaching of Softball. 2 Hours.
Theory and fundamentals of coaching softball. Methods of coaching, as well as team offense, defense, and strategies will be stressed. Efficient performance of the skills during game conditions will be emphasized. Prerequisite: Consent of instructor. LEC.

HSES 380. Sociology of Sport. 3 Hours. GE3S.
A survey of the current literature concerning the scope of sociology in sport, the interaction of people in sport, the social systems controlling sport, and the small group dynamics in sport. Prerequisite: Admission to Sport Management program or permission of instructor. LEC.

HSES 381. Sport Ethics. 3 Hours.
This course will help students develop their abilities to reason morally through an examination within competitive sports of ethical theories, moral values, intimidation, gamesmanship, and violence, eligibility, elimination, winning, commercialization, racial equity, performance-enhancing drugs, and technology. Students will develop a personal philosophy of sport and learn how to apply a principled decision-making process to issues in sport. Prerequisite: Admission to Sport Management program or permission of instructor. LEC.

HSES 382. Sport Facilities and Event Management. 3 Hours.
This course will provide students with a solid grasp of the fundamental skills in sport facility and event management and the knowledge base to apply those skills in a real world environment. Students will learn about planning, designing and financing the construction of new sport facilities, sport facility management of regular and special events, sporting event planning and game day operations. Prerequisite: Admission in the Sport Management program or permission of instructor. LEC.

HSES 384. Sport Law. 3 Hours.
This course is intended to introduce undergraduate students to the major legal issues in amateur and professional sports including dispute resolution, tort law, contract law, constitutional law, statutory law, labor and antitrust law and intellectual property. Students will also learn about risk management, gender equity, the Americans with Disabilities Act and agency law and sports agents. Prerequisite: Admission to Sport Management program or permission of instructor. LEC.

HSES 385. Psychological Aspects of Exercise. 3 Hours.
This course is designed for students interested in optimizing motivation and adherence to exercise among individuals in a wide range of physical activity settings (e.g., health clubs, corporate fitness, and physical therapy/rehab). The course content will include a review of the literature highlighting the psychological benefits of exercise, the theoretical advances in understanding the psychological aspects influencing individuals’ participation in physical activity, and an introduction to strategies and techniques for professionals attempting to foster motivation and adherence to exercise among their clients. Prerequisite: Admission to the Community Health program or instructor consent. LEC.

HSES 390. The Coaching of Track and Field. 2 Hours.
Designed to acquaint the student with the fundamentals of track and field athletics. LEC.

HSES 395. Concepts in Health and Wellness. 3 Hours.
This is designed as an introductory course into the profession of School and Community Health Education. Regardless of a person’s areas of specialization in Health Education, there are commonalities shared by all of us who are charged with the responsibility of providing education about health. Course emphasis will focus on: defining health education; history of health education; roles and competencies of health educators; theoretical bases for the profession; planning, implementing, administering, and evaluating health programs; settings for health education; future issues. Prerequisite: HSES 260. LEC.

HSES 403. Health Behavior Theory. 3 Hours.
This class will be an introduction to the primary models and theories used in health behavior research and health promotion practice. These models and theories undergird the development of successful health-related programs and interventions, and will help guide educators in the development of innovative and effective programming. The course will cover individual, interpersonal, community-level, and ecological theories, and students will have the opportunity to apply these theories to health behaviors of interest. LEC.

HSES 410. Program Design in Physical Education. 3 Hours.
The study of physical education curriculum models and extraclass programs appropriate for students in grades PK-12. Students will receive practical and field experiences related to program design and implementation. They will learn techniques appropriate for program evaluation as well as the assessment of student sport skills and fitness. Prerequisite: Admission to the HSES Teacher Certification Program. LEC.

HSES 418. Health Aspects of Aging. 3 Hours.
This course will consist of a Holistic Health approach to the various components of the aging process. Special emphasis will be placed on the demographic aspects of aging; normal aging changes and deviations in the aging process (pathophysiology); the relationship between mental and physical health, and the implications for the promotion of risk reduction and prevention principles that can effectively improve the quality of life for older individuals. Prerequisite: A course in personal and community health. LEC.

HSES 434. Consumer Health. 3 Hours.
This course will be a comprehensive examination of the factors involved in the selection of health products and services. Topics of discussion will be: protection laws and services, fraudulent practices and products, consumerism, and traditional and alternative health care. There will also be an in-depth examination of how to assess and evaluate health based products that are available to consumers. Prerequisite: Admission to the Community Health Program or consent of instructor. LEC.

HSES 440. Applied Sport and Performance Psychology. 3 Hours.
This course will examine the psychological principles and techniques that are applied to improve sport performance and other fields of achievement (e.g., exercise and wellness, music, and academics). Special attention will be given to psychological aspects of injury and rehabilitation, psychological conditioning, psychological training methods, coaching philosophy, the social psychology of team members, and components of peak performances. LEC.

HSES 453. Communicable and Degenerative Diseases. 3 Hours.
This course is designed to introduce the student to the study of the basic concepts/principles of disease process. Special emphasis will be placed on the etiology, origin, symptoms, treatment, body defenses, primary prevention, host, agent, (microbes) and environmental factors affecting disease occurrence, prevention and control measures. Topical application of the fundamental concepts of microbiology in school/community health practice will be critically discussed. The natural history of disease and disease classification will be highlighted. Many disease topics (both communicable and chronic, degenerative diseases) will be discussed. Prerequisite: A course in personal and community health. LEC.
HSES 455. Manual Therapy Techniques and Emergency Care Instructor Training. 3 Hours.
The purpose of the course is to train students in a Manual Therapy Technique for use in the clinical setting. The course is also designed to certify students as instructors in American Red Cross First Aid, CPR and AED courses as well as instructors for the CPR/AED for the Healthcare Provider. Prerequisite: Completion of HSES 352, HSES 354, HSES 456 and HSES 459 or equivalency from an accredited Athletic Training Education Program or have current First Aid and CPR/AED for the Healthcare Provider certification. LEC.

HSES 456. Upper Extremity Evaluation. 3 Hours.
The comprehensive study of the techniques used by the Athletic Trainer in regard to the assessment and evaluation of athletic injuries/illnesses of the upper extremity, head, and spine. Procedures for evaluating and reporting injuries/illnesses will be discussed as well as etiological factors and common signs/symptoms of various related pathological conditions. The purpose of this course is to prepare students with the skills necessary to accurately recognize the signs/symptoms of injuries and conditions in order to determine the nature and severity of the problems as well as establishing a proper care plan and medical referral when appropriate. Prerequisite: Admission into the Athletic Training Education program, HSES 354, and HSES 355. LEC.

HSES 457. Athletic Training Practicum III. 2 Hours.
This course provides a practical experience for the student-athlete trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury assessment and evaluation through a variety of techniques during their clinical and field experience. Specific skills addressed in HSES 456 will be practiced, applied, and mastered during this experience. Prerequisite: Admission into the Athletic Training Education program and concurrent enrollment in HSES 456. FLD.

HSES 458. General Medical/Pharmacology. 2 Hours.
This course will cover the general medical conditions/illnesses and pharmacological considerations commonly encountered in the field of Athletic Training. Prerequisite: Admission into the Athletic Training Education Program, HSES 456, and HSES 457. LEC.

HSES 459. Rehabilitation. 3 Hours.
This course discusses the planning involved and the implementation of a comprehensive rehabilitation program for injuries/illnesses sustained by the competitive athlete. Prerequisite: Admission into the Athletic Training program, HSES 456, and HSES 457. LEC.

HSES 460. Athletic Training Practicum IV. 2 Hours.
This course provides a practical experience for the athletic training student. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills obtained during previous coursework as well as apply rehabilitation skills obtained in HSES 459. Prerequisite: Admission into the Athletic Training Education program, HSES 457, and concurrent enrollment in HSES 459. FLD.

HSES 461. Organization and Administration of Athletic Training. 2 Hours.
This course discusses the planning, coordinating, and supervising of all administrative components of an athletic training program. This includes public relations, athletic health counseling, and coach advisement about athletes' health matters. Prerequisite: Admission to the Athletic Training Education program, HSES 459 and HSES 460, and concurrent enrollment in HSES 562. LEC.

HSES 462. Athletic Training Practicum V. 2 Hours.
This course will provide a practical hands-on experience for the athletic training students enrolled in HSES 561. Prerequisite: Admission into the Athletic Training Education Program and concurrent enrollment in HSES 561. FLD.

HSES 463. Senior Capstone in Athletic Training. 2 Hours.
This course is designed to allow senior Athletic Training Students to review previous content and prepare for the BOC certification exam as well as explore areas of professional development. Prerequisite: Admission into the Athletic Training program, HSES 561, and HSES 562. LEC.

HSES 464. Athletic Training Practicum VI. 2 Hours.
This course will provide a culminating practical experience for the athletic training students enrolled in HSES 563. Prerequisite: Admission into the Athletic Training Education program and concurrent enrollment in HSES 536. FLD.

HSES 465. Program Assessment and Evaluation. 3 Hours.
This course will offer an introduction and hands-on application of program assessment and evaluation techniques in health education. As health educators and program planners, we are required not only to develop innovative programs and interventions to address community- and school-based health concerns, but also to give evidence that our efforts are both adequate and effective. Successful program assessment and evaluation incorporate knowledge of basic research methods as well as the theoretical understanding of health behaviors. LEC.

HSES 466. Program Planning in Health Education. 3 Hours.
This course is designed to provide the students with an in-depth knowledge of proven health planning models that can be used for program development and intervention. Students will learn how to develop attainable program goals and objectives which will allow programs and interventions to evolve into useful forms of community based health education. Prerequisite: Students must be admitted to the School of Education and the Community Health Program. LEC.

HSES 467. Introduction to Health Education. 3 Hours.
This course will provide an overview the various health education professions. Topics emphasized in the course are: the nature of health education, an in-depth description of community health, the school health program, and identifying program and services of voluntary and services of voluntary and official health and welfare organizations. Prerequisite: Admission to the School of Education and the Community Health Program. LEC.

HSES 468. Methods and Materials in Health Education. 3 Hours.
Emphasis is placed on the presentation and preparation of health topics along with the recommended resources and materials available. The teaching method is emphasized and student participation is stressed. Students will observe health teachers in the public schools and identify and discuss these methods as they relate to the methods present in the class. Prerequisite: Admission to HPE teacher certification program or consent of instructor. LEC.

HSES 470. Biomechanics. 3 Hours.
The course is designed to cover a basic understanding of the anatomical and mechanical principles of human movement. Areas covered will be joint and segmental movement, muscle actions, time-displacement motion description, forces causing or inhibiting motion, and stability. Special attention will be given to the application of the theoretical concepts in movement activities. Prerequisite: Anatomy, admission to the Exercise Science program, or permission of instructor. LEC.
HSES 472. Exercise Physiology. 3 Hours.
A fundamental study of the physiological adjustments that occur within the body during exercise. The presentation of this material is particularly oriented toward a basic understanding of the physiological systems as they are affected by the activity of a normal coaching or teaching situation. The physiological values of exercise are also stressed. Prerequisite: Three hours of physiology. LEC.

HSES 473. Clinical Fitness Evaluation Techniques. 3 Hours.
This course will provide the student with the knowledge and skills to assess components of physical fitness in adults including cardiorespiratory fitness, body composition, strength, and flexibility. In addition, specific emphasis will be placed on the development of exercise and weight management prescriptions. Students completing the course will have the skills to take the Health Fitness Instructor Certification exam given by the American College of Sports Medicine. Prerequisite: Exercise physiology or equivalent. LEC.

HSES 474. Exercise Biochemistry. 3 Hours.
This course will examine the processes that underlies the use and production of energy for exercise. Topics that will be explored include glycogenolysis and glycolysis in muscle, cellular oxidation of pyruvate, lipid metabolism, metabolism of proteins and amino acids, molecular biology, neural and endocrine control of metabolism, and local fatigue during exercise. Emphasis will be placed on carbohydrates, protein, and lipid metabolism and the acute and chronic effects that exercise has on these processes. Prerequisite: HSES 472. LEC.

HSES 480. Physical Activity and Exercise Management Individuals with Disabilities. 3 Hours, AE41.
An in-depth study of how physical activity and exercise can be a part of the treatment plan for people who have chronic disease or a disability. A variety of physical activity and exercise intervention programs and models will be presented and discussed, as well as protocols for baseline testing and post-treatment testing. A portion of this course will focus on how physical activity and exercise can prevent motor functioning deterioration in people who have a disability or limited functional movement. Prerequisite: Admission to the School of Education Exercise Science or Athletic Training programs and a course in human anatomy and physiology, or consent of instructor. LEC.

HSES 482. Drugs in Society. 3 Hours.
This course is designed to provide an in-depth exposure to basic drug classification, pharmacological effects, causes of drug abuse to society, common treatment modalities, and effective prevention/intervention strategies. In addition, consumer issues related to drug use, drug legislation, and drug education programs for school and community implementation will be discussed. Prerequisite: A course in personal and community health or consent of instructor. LEC.

HSES 483. Sport Finance and Economics. 3 Hours.
This course will help students gain an understanding of the critical importance of budgeting and financing sports-related industries based on sound financial principles and methods of financial control. Students will learn how economic principles shape the major national industry of sport. Prerequisite: Admission to Sport Management program or permission of instructor and completion of or concurrent registration in FIN 305 or FIN 310. LEC.

HSES 484. Sport in Film. 3 Hours.
In the course, students will critically engage and interpret a series of popular sport-related films. By the end of the course, students will be able to write and think critically about the role that film in general, and sport-based films in particular, play in promoting and challenging dominant perceptions of gender, sexuality, nationalism, race, social class, and ability. LEC.

HSES 485. Sport Communication. 3 Hours.
This course examines the complex and evolving field of sport communication including personal, organizational, and external perspectives of sport communication. LEC.

HSES 486. Sport Marketing. 3 Hours.
This course is intended to provide undergraduate students with basic knowledge and competencies in definitions of marketing and sport marketing, understanding the unique aspects of sport marketing, marketing planning process, consumer demographics and psychographics, the marketing mix, segmentation and target marketing, marketing proposal preparation, sponsorship, endorsement, merchandising, fundraising, marketing goals and objectives, sport consumer and consumer behavior, industry segmentation, special events, ticket sales and their use in promotion, the role of the media, television marketing ratings and shares and venue and event marketing. The proposed content of this course will address each of these expectations. Prerequisite: Admission to the Sport Management program or permission of instructor. LEC.

HSES 487. Personnel Management in Sport. 3 Hours.
This course provides students with an overview of the requisite communication skills and concepts of leadership and management as they relate to sport managers. Students will learn how leadership and management practitioners, utilizing effective communication techniques, shape successful sport organizations. Additional emphasis will be placed on building and nurturing relationships with people as a key to effective management. Prerequisite: Admission to Sport Management program or permission of instructor. LEC.

HSES 488. Pre-Internship Seminar. 1 Hour.
This course will prepare students for their actual semester-long Internship experience. Students will be provided with background information on available internship sites to assist in their site-selection decision. Students will learn about different management styles they may encounter, the traits and characteristics of effective and productive employees, common rules of the workplace and internship experiences of previous HSES Interns. Prerequisite: All HSES students must be in final semester prior to Internship. LEC.

HSES 489. Health and Human Sexuality. 3 Hours.
The course is designed to encompass the various components of human sexuality as well as to demonstrate applicable teaching techniques for sex education. Included in the content of the course are: human sexual response, sexually transmitted diseases, family planning, sex roles, rape, sexual preferences, and topics such as sexuality and the handicapped, sexuality and the mass media, and sexuality and the church. Teaching techniques such as values clarification, non-verbal communications, role playing, tape recordings, and problem solving are demonstrated with appropriate topics. LEC.

HSES 497. Independent Study. 1-3 Hours.
Only one enrollment permitted each semester; a maximum of six hours will apply toward the bachelor's degree. This course cannot be taken as a substitute for a required course. Prerequisite: Recommendation of advisor and consent of instructor and department chairperson. IND.

HSES 499. Internship in Sport Management. 2-16 Hours. AE61.
A full-time work experience in the sport industry (40 hours per week). This experience is actual work in a sport management setting in which management practices are applied. Student interns are directed and evaluated by a faculty member with appropriate supervision by an on-site professional. Student interns must keep an accurate accounting of hours with a performance work diary. Grades/credit for the internship are determined by a faculty member with input from the on-site supervisor.
Prerequisite: Completion of all Sport Management coursework. Admission to the Sport Management Internship program. FLD.

HSES 500. Student Teaching in: ____. 14 Hours. GE11.
A supervised teaching experience in an approved school setting, teaching physical education at the elementary level and health and physical education at the secondary level. The student must teach 8 weeks at the elementary level and 8 weeks at the secondary level. Prerequisite: A cumulative GPA of 2.75 or higher and admission to the HSES teacher certification program. FLD.

HSES 501. Seminar in Teaching Health and Physical Education. 2 Hours. AE61.
Student teachers will learn to analyze teaching styles and instructional methods that apply and relate to their student teaching experience. Discussions of various teaching practices will be facilitated by the university supervisor with input from the student teachers. Topics will include: curriculum, teaching methods, discipline, safety, equipment, and communicating with teachers, parents, and students. Prerequisite: Admission to the HSES Teacher Certification Program. LEC.

HSES 502. Camp Leadership and Counseling. 2 Hours.
Involves a complete study of the organization and administration of the various types of camps. It is designed to familiarize the student with camp leadership responsibilities; the development of the camp, the program involving camp crafts, outdoor cookery, hikes and outings, singing, and simple guidance of the individual camper. Prerequisite: General psychology plus three hours in sociology. LEC.

HSES 515. Assessment of Motor Development and Motor Control of Exceptional Children. 3 Hours.
Standardized motor assessment tools appropriate for use with exceptional children with motor difficulty will be critiqued and practiced. A battery of tests to measure developmental lag or structural deviation will be selected and administered to determine the motor control of exceptional children and the results will be interpreted. Prerequisite: Six hours of physical education course work. LEC.

HSES 528. Techniques of Athletic Training - I Lower Extremity. 3 Hours.
This course provides a comprehensive study of the techniques used by the Athletic Trainer in regard to the assessment and evaluation of athletic injuries/illnesses of the lower extremity, abdomen, and thorax, as well as the study of common illnesses/diseases that affect the physically active. Procedures for reporting and evaluating injuries/illnesses will be discussed so that appropriate injury management and referral may take place. The etiological factors common to athletic injuries, as well as specific signs and symptoms of various athletic related pathological conditions, will be discussed. Prerequisite: Human Anatomy, Human Anatomy Lab, Care and Prevention of Athletic Injuries, and admission to the Athletic Training Program. LEC.

HSES 529. Techniques of Athletic Training - II Upper Extremity. 3 Hours.
The comprehensive study of the techniques used by the Athletic Trainer in regard to the assessment and evaluation of athletic injuries/illnesses of the upper extremity, head, and spine. Procedures for evaluating and reporting injuries/illnesses will be discussed as well as etiological factors and common signs/symptoms of various related pathological conditions. The purpose of this course is to prepare students with the skills necessary to accurately recognize the signs/symptoms of injuries and conditions in order to determine the nature and severity of the problem as well as establishing a proper care plan and medical referral when appropriate. Prerequisite: HSES 528 Techniques of Athletic Training - I Lower Extremity. LEC.

HSES 578. Health Internship Seminar. 2 Hours.
Students enrolled in the internship will learn how to analyze professional health environments, examine intervention programs, and understand models used to develop health based programs. Discussions surrounding the internship experience will be facilitated by the health education faculty. Topics will relate to all phases of the internship experience. The intent of this course is to better prepare the student for entering the health profession. Discussions will be held on conflict resolution in the workplace, professional development, professional behavior and etiquette. Prerequisite: Concurrent enrollment in HSES 580 Internship in Health. LEC.

HSES 580. Internship in: ____. 2-16 Hours.
A supervised internship experience in an approved setting. The specific type of internship experience and the credits for that particular experience will be outlined in the appropriate program of the student. Prerequisite: Admission to a HSES Internship Program. FLD.

HSES 581. Athletic Training Practicum I: Recognition and Evaluation. 4 Hours.
This course provides a practical experience for the student-athlete trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury/illness recognition and evaluation during their clinical and field experience. Specific skills addressed in HSES 528 will be practiced, applied, and mastered during this experience. Prerequisite: Admission to the Athletic Training program. Concurrent enrollment in HSES 528. LEC.

HSES 582. Athletic Training Practicum II: Management and Treatment. 4 Hours.
This course provides a practical experience for the student-athlete trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury/illness evaluation, and the management and treatment of athletic injuries through a variety of therapeutic modalities during their clinical and field experience. Specific skills addressed in HSES 529 and HSES 654 will be practiced, applied, and mastered during this experience. Prerequisite: HSES 581 and concurrent enrollment in HSES 529 and HSES 654. LEC.

HSES 583. Athletic Training Practicum III: Rehabilitation. 4 Hours.
This course provides a practical experience for the student-athlete trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury rehabilitation/reconditioning through a variety of therapeutic exercise techniques during their clinical and field experience. Specific skills addressed in HSES 556 and HSES 654 will be practiced, applied, and mastered during this experience. Prerequisite: HSES 582, concurrent enrollment in HSES 556. LEC.

HSES 584. Athletic Training Practicum IV: Senior Sport Experience. 4 Hours.
This course provides a culminating practical experience for the student-athlete trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills obtained during previous coursework as well as apply administrative and management skills obtained in HSES 556. This course is intended to allow the Senior student more freedom and responsibility in decision making regarding the health
A supervised internship experience in an approved exercise science setting. Students will gain experience through a hands-on approach via clinical and/or research settings. The specific type of internship experience will be agreed upon by the student and their academic advisor. Prerequisite: Successful completion of at least 24 graduate credit hours. LEC.

HSES 777. Practicum in Health Education and Wellness Promotion. 1-3 Hours.
This course is designed to provide practical community health experiences in health education and wellness promotion, including: assessment, planning, implementation and program evaluation. With approval of the instructor, students may choose their practicum focus in any of the ten content areas of health: mental and emotional, family living, growth and development, nutrition, personal health, alcohol tobacco and other drugs, communicable and chronic diseases, injury prevention and safety, consumer health and environmental health. Prerequisite: Enrolled in graduate school and consent of the instructor. LAB.

HSES 779. Physiology of Functional Aging. 3 Hours.
The course has been designed to address issues and concepts relating to the biological aging process as a foundation for physical performance, general fitness, and health status. The biological concepts are applied to the human physiological aging process and the systems involved as well as the possible interventions that may effect that process. The several theories associated with physiological aging are also addressed as related to the physiological systems and current research that may impact the understanding of these theories. Prerequisite: A course in basic biology. LEC.

HSES 780. Internship in Teaching Physical Education: _____. 1-16 Hours.
A supervised internship experience leading to initial physical education teacher certification. The student assumes the total professional role as a teacher of physical education in an approved school setting. FLD.

HSES 795. Traditions and Principles in Health Education. 3 Hours.
This course is designed to explore the philosophy and principles which provide the foundation of health education as an academic discipline. Specific topics include: history of the profession, theories of health behavior and behavior change, principles of learning applied to health communications, health promotion practices, professional preparation, and the integration of philosophical and ethical ideals into program planning and implementation. LEC.

HSES 798. Special Course: _____. 1-5 Hours.
A special course of in-depth study exploring current trends and issues in health and physical education - primarily for undergraduates. LEC.

HSES 801. Sport Facilities. 3 Hours.
The purpose of this course is to study current developments and trends in the financing, programming, design, and construction of facilities for intercollegiate athletics and professional sports. Prerequisite: Admitted to graduate school. A course in the administration/management of sport or consent of the instructor. LEC.

HSES 803. Health Behavior Theory. 3 Hours.
Given that theories of health behavior drive research and practice in health education, the purpose of this course is to familiarize students with the major theories and planning models related to health behavior change. Particular focus will be applied to the role of theory in health promotion and critical analysis of the application of theory to guide research practices. Prerequisite: Health major or consent of the instructor. LEC.

HSES 804. Sport Psychology. 3 Hours.
This course is designed to introduce students to the current research and theoretical perspectives in the sport psychology literature. Specifically, students will gain a broad understanding of the three major areas of sport psychology: social psychology (e.g., motivation), performance enhancement (e.g., mental skills training), and psycho-physiology (e.g., impact of anxiety on performance). Prerequisite: Admission in the health program or consent of the instructor. LEC.
HSES 805. Laboratory Experiments and Analysis--Exercise Physiology. 3 Hours.

Students will learn the techniques of operating various types of laboratory equipment and will conduct small-scale lab experiments in areas such as respiration, circulation, metabolism, strength, neuromuscular function, cardiac function, and body composition. Special emphasis will be placed on laboratory techniques of assessing physical fitness. Prerequisite: A course in exercise physiology. LAB.

HSES 806. Stress Management. 3 Hours.

The long range objectives of this course are to assist students in gaining stress management knowledge; to help them to formulate improved perspectives on various stress management techniques; and consequently apply the developing constructs in their lives with a sense of purpose and self-responsibility. Prerequisite: Two courses in health education or consent of instructor. LEC.

HSES 807. Current Literature in Exercise Physiology. 2 Hours.

A wide range of topics from the exercise physiology literature will be discussed. Instructor and students will present reports to the group centered on current research findings with discussion aimed at application of these results to physical exercise and training. Prerequisite: A basic course in exercise physiology or consent of instructor. LEC.

HSES 808. Biomechanics of Human Movement. 3 Hours.

This course will examine the movements and the structure and function of human beings by means of the methods of mechanics. An emphasis will be placed on the two primary goals of biomechanics: performance improvement and injury prevention and rehabilitation. Topics to be covered include the kinematics and kinetics of human movement, muscle mechanics, bone and joint mechanics, and the biomechanics of musculoskeletal injury. Prerequisite: Courses in calculus, physics, anatomy, and biomechanics, or consent of instructor. LEC.

HSES 810. Advanced Exercise Physiology. 3 Hours.

An advanced study of the physiological and biomechanical aspects of muscular, cardiovascular, and respiratory function as the human is engaging in exercise. The topics of energy metabolism, hormones, and nutrition as related to exercise also are presented. Prerequisite: A basic course in exercise physiology. LEC.

HSES 812. Current Issues in Health. 3 Hours.

This course is designed to review and discuss current issues in various health related areas. The focus will be on relevant issues and topics that are guiding and directing the health profession. The range of topics discussed will vary from popular literature to scientific research and cover such areas as health education, community health, and health over the lifespan. Students in the course will be expected to report, discuss, and interact with each other concerning the issues as they are reported. Prerequisite: A graduate course in health or consent of the instructor. LEC.

HSES 814. Implementing Health Programs. 3 Hours.

The purpose of this course is to explore planning models used for designing, implementing and managing health promotion programs. Students will be trained to develop objectives, assess determinants, select methods and strategies, pre-test program materials, and adopt and implement promotional plans. Problem based and community based learning experiences will be provided. Prerequisite: A health major or permission from the instructor. LEC.

HSES 817. Practical Aspects of Aerobic and Resistance Training. 3 Hours.

This course will be a discussion of various concepts related to aerobic and resistance training. By the end of the semester, the student should be able to demonstrate an understanding of information presented in this course by achieving satisfactory evaluations of presentations, papers, and an examination of the following topics: energy metabolism, general adaptations of aerobic and resistance training, exercise techniques for aerobic and resistance training, periodization of training, testing and evaluation of aerobic and resistance training performance, and exercise prescription for aerobic and resistance training. Prerequisite: Undergraduate course in exercise physiology or consent of instructor. LEC.

HSES 818. Legal Aspects of Public Health Education. 3 Hours.

This course is designed to enhance understanding of the variety of legal issues which affect health educators and their audiences. Specifically, this course will survey federal, state, and local public health laws and regulations which may proscribe health education content and the health educator's actions. Legislation will be analyzed and the practical impact of the health educator upon the legislative process will be emphasized. Prerequisite: A course in community health or consent of instructor. LEC.

HSES 823. Behavior Modification in Health and Exercise. 3 Hours.

This course will examine the behavioral principles that influence health and exercise practices. Theories of human behavior, reinforcement theory, and models of self-esteem will serve as the foundation for studying behavior change. Society influences will be strongly emphasized. Course topics will include exercise determinants, motivation, media representation, negative behaviors, self-efficacy, social support, and effective promotion strategies. Prerequisite: Admitted to Graduate School or consent of instructor. LEC.

HSES 824. Epidemiology and Concepts of Disease Causation. 3 Hours.

This course involves the study of the etiology and natural history of infectious and non-infectious diseases including vector control, host defenses and resistance, investigation of disease outbreaks, mental health and public health. The course deals with detailed analytic and descriptive epidemiology and their implications for improving our understanding of health and diseases; epidemiologic consequences of nuclear war and retrospective and prospective approaches in epidemiological research. Contemporary developmental methods for disease prevention will be critically reviewed. Prerequisite: HSES 573, or equivalent, or consent of instructor. LEC.

HSES 825. Skeletal Muscle Physiology. 3 Hours.

This course will provide the student with an in-depth study of the structure and development, contractile mechanics, and neuromuscular system as it relates to the skeletal musculature. Structure and Development - muscle fiber, motor neuron, neuromuscular junction, muscle receptors, muscle formation, development of muscle innervation. Putting Muscles to Work - ion channels, pumps, and binding proteins, axoplasmic transport, resting and action potentials, neuromuscular transmission, muscle contraction, motor units, exercise, muscle metabolism. The Adaptable Neuromuscular System - fatigue, loss of muscle innervation, recovery of muscle innervation, neurotnphism, disuse, muscle training, injury and repair, aging. Prerequisite: HSES 810 or equivalent. LEC.

HSES 828. Sport Finance. 3 Hours.

A study of the principles and applications of finance and economics in the sport industry. Strategic financial planning as a part of management responsibilities is highlighted. Prerequisite: Admitted to Graduate School. LEC.

HSES 830. Socio-Cultural Dimensions of Sport. 3 Hours.

Current literature concerning the impact of American social values and cultural patterns of sport and physical activity will be studied. Critiques of related research involving sport and social institutions, and socio-cultural groups in sport will be emphasized. Prerequisite: A course in Sociology of Sport or consent of instructor. LEC.
HSES 831. Ethics in the Sport Industry. 3 Hours.
This course is designed to help students learn to make morally reasoned decisions in various sport settings. This course will help prepare students to respond more responsibly when faced with challenging ethical dilemmas and guide them in learning to serve as role models for ethical conduct. LEC.

HSES 832. Physical Education Instructional and Assessment Methods. 3 Hours.
The study of research-based instructional and assessment methods appropriate for PK-12 physical education. Managerial, instructional, and supervisory skills will be developed. Traditional and alternative assessment tools will be discussed. Readings, observations (live and video), and practice teaching will prepare students to complete a practical experience and an action research project in a PK-12 school. Prerequisite: Admission to Graduate School. LEC.

HSES 833. Public Health Aspects of Exercise. 3 Hours.
This course describes the timeline for physiologic adaptations to long-term physical activity. It describes the effects of physical activity on chronic disease. It describes, from a population perspective, the effects of physical activity on the health of the nation. Prerequisite: 12 hours of HSES courses, or equivalent, or consent of instructor. LEC.

HSES 836. Physical Education Curriculum Models. 3 Hours.
An examination of the elements and processes of curriculum construction in physical education for elementary, secondary, and post-secondary institution, and the institutional and professional issues that affect these processes. A study of contemporary curricula structures in regard to planning, implementation, and evaluation of K-12 curricula and professional preparation curricula in physical education programs. Prerequisite: A course in physical education curriculum, or equivalent. LEC.

HSES 840. Organizational Behavior in Sport. 3 Hours.
This course utilizes a micro perspective to analyze the behavior and culture within sport organizations. Specifically, the student will study and learn how to apply management and leadership theories that have the potential to shape the work environment and will discuss how current topics in organizational behavior are particularly relevant to the sport industry. Prerequisite: Admitted to Graduate School. Consent of the instructor. LEC.

HSES 842. Sports Marketing. 3 Hours.
This course helps students gain a deeper understanding of sport marketing by examining in-depth the sport marketing mix of product, price, place, and promotion as well as marketing research, marketing strategy, market segmentation, branding, sponsorships, licensing, venue and event marketing, public relations, and global sport marketing. LEC.

HSES 850. Analysis Techniques for Health, Sport, and Exercise Sciences Laboratory and Field Data. 3 Hours.
Techniques for analyzing data gathered in Health, Sport, and Exercise Sciences laboratories and field studies will be presented in this course. Techniques for the recording of raw data, appropriate organization of raw data, selection of test for analysis of data, use of computer software, and computer programming for analysis and reporting results of the data will also be included. Prerequisite: PRE 710, PRE 720, or PRE 725. LEC.

HSES 866. Contemporary Trends in Elementary and Secondary Physical Education. 3 Hours.
An in-depth study into the research and other forms of literature will be made to study and examine the latest trends in elementary and secondary school physical education. Games, activities, dances, and rhythms will be presented and discussed relative to developmental levels of students grades K-12. Prerequisite: A methods course in teaching physical education or consent of instructor. LEC.

HSES 872. Exercise and the Cardiovascular System. 3 Hours.
This course will be a discussion of various concepts specifically related to exercise and the cardiovascular system. By the end of the semester, the student should be able to demonstrate an understanding of the interaction of exercise and cardiovascular system by achieving satisfactory evaluations on examinations, abstracts, and classroom presentations. The following topics will be discussed as they relate specifically to exercise: homeostasis and cardiovascular transport mechanisms, basic structure and function; characteristics of cardiac cells; the heart as a pump; the peripheral vascular system; vascular control; venous return and cardiac output; regulation of arterial pressure; cardiovascular responses to stress; and cardiovascular function in pathological situations. Prerequisite: Undergraduate course in exercise physiology or consent of instructor. LEC.

HSES 880. Internship in Sport Management. 1-10 Hours.
This course will provide for supervised and directed experiences in selected sport management settings. The graduate advisor will schedule observations of the internship, as well as regular conferences with the student. Written summaries and evaluations of the internship will be prepared by the student, the agency supervisor, and the university graduate faculty member. Prerequisite: Admission to the Graduate Program in Sport Management. FLD.

HSES 884. Legal Aspects of Sport. 3 Hours.
This course is intended to introduce graduate students to the basic concepts of the American legal system and the application of them to intercollegiate and professional sports. Particular emphasis will be given to risk management and preventive law. Other topics include: governance issues in intercollegiate and professional sports, contract law, employment discrimination, labor relations and collective bargaining, agency law and athlete agents, regulation of participation in intercollegiate and high school athletics, sport facility and event issues, participant liability issues, product liability issues, premises and spectator liability, participant violence in sports, and intellectual property law. Prerequisite: Admission to graduate program in School of Education LEC.

HSES 890. Seminar in HSES. 3 Hours.
This course is designed to provide a general research seminar learning experience for graduate students in HSES. In particular, students will learn about faculty research activities and interests from a variety of specialty areas both within KU and outside of KU. Through faculty and guest presentations, students will be exposed to a variety of design and methodologies used to conduct research in the specialty areas of HSES. LEC.

HSES 892. Psychology of Physical Activity. 3 Hours.
This course is designed for students interested in optimizing motivation and adherence to exercise among individuals in a wide range of physical activity settings (e.g., health clubs, corporate fitness, physical therapy). The course content includes a review of the literature highlighting the psychological benefits of exercise, the theoretical advances in understanding the psychological aspects of individuals’ participation in physical activity, and strategies and techniques for professionals attempting to foster motivation and adherence to exercise among their clients/members. Prerequisite: Admission in the health program or consent of the instructor. LEC.

HSES 897. Independent Study. 1-4 Hours.
Prerequisite: Consent of advisor and instructor. RSH.

HSES 898. Master's Project. 1-4 Hours.
RSH.
HSES 899. Master's Thesis. 1-6 Hours.

HSES 905. Advanced Concepts in Health Education. 3 Hours.
This course is designed as an in-depth study of the pedagogy of health education. It is concerned with the effects of various health education models, new materials, and innovative teaching techniques. The effectiveness of various media such as films, slides, transparencies, microcomputers, and assessment tools will be analyzed. Research concerning innovations in education will be investigated along with a study of future trends in the field. Timely issues of controversy about health education practices and the effectiveness of values clarification activities will also be discussed. LEC.

HSES 910. Biochemistry of Exercise. 3 Hours.
This course will include an in-depth examination of metabolic and endocrine principles as they relate to physical exercise and training. Specific topics will include: substrate utilization in exercise, metabolic controls, muscle biochemistry, body composition, nutritional aspects and hormonal influences in exercise. Both instructor and students will report on the most current literature relating to the topics. Prerequisite: Human biodynamics or a course in biochemistry. LEC.

HSES 926. Grant and Research Proposal Writing. 3 Hours.
This is a course for students to examine the sources and areas which provide financial support for research projects. The areas of study include types of research funding available on a local, state, and federal level, the elements and design of writing a proposal and strategies involved in securing financial support for research. A focus for the course will center upon preparing a research proposal for funding. Prerequisite: Human biodynamics or a course in biochemistry. LEC.

HSES 940. Scientific Dimensions of Exercise and Health. 3 Hours.
This course has been designed to bring together the many scientific factors relating exercise and physical activity to health and human function. The course focuses on the interdisciplinary nature of this relationship and reviews the physiological, sociological, psychological, and behavioral factors involved. Prerequisite: Fifteen hours of graduate level course work in health or physical education and admission to health or physical education doctoral program. LEC.

HSES 980. Advanced Topics: ____. 1-3 Hours.
A special course of study to meet current needs of education professionals -- primarily for post-master's level students. LEC.

HSES 981. Current Issues in Health and Physical Education. 3 Hours.
This course will explore the latest philosophical issues and controversies which are impacting the fields of health, physical education, and athletics. The student will explore the current and future ramifications of each issue and its potential effects on the profession. Prerequisite: Admission to the Health, Sport, and Exercise Sciences Doctoral Program. LEC.

HSES 990. Doctoral Seminar. 3 Hours.
This seminar based course will be designed to prepare the doctoral student for academic careers or careers in industry after they graduate. The topics covered will be promotion and tenure procedures and expectations, including but not limited to teaching, responsible conduct of research, professional ethics, historical ethical issues, evaluation of ethical dilemmas, and service expectations at research intensive institutions, regional comprehensive institutions and small liberal arts colleges. Industry career options will be discussed and guest speakers from various disciplines will be brought in to discuss options and expectations with this career path. Prerequisite: Doctoral student or permission of the instructor. LEC.

HSES 995. Field Experience in: ____. 1-5 Hours.
Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experiences will be prepared independently by the student, a representative of the cooperating agency, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours. FLD.

HSES 996. College Teaching Experience in: ____. 3 Hours.
To meet the college teaching experience requirement for doctoral programs, a student shall engage in a semester long, planned, instructional activity that shall include college classroom teaching under supervision. Planning shall be done with the advisor and/or member of the faculty who will supervise the experience. The activity shall be done under the supervision of a member of the University of Kansas faculty or by an individual or individuals designated by the candidate's committee. FLD.

HSES 997. Individual Study. 1-4 Hours.
Prerequisite: Prior graduate course work in the area of study and consent of instructor. RSH.

HSES 999. Doctoral Dissertation. 1-15 Hours.
THE.

Special Education Courses

SPED 261. Families and Professional Partnerships. 3 Hours.
This course provides information on issues and practices related to working together in partnership with families of young children including those who have a young child with special needs. Emphasis will be placed on taking a family systems prospective and a family-centered approach to family support. Strategies for effective communication for the purpose of information sharing and collaborative planning with families are provided. Relevant current scientifically based evidence will be reviewed and discussed pertaining to these topics. LEC.

SPED 326. Teaching Exceptional Children and Youth in General Education. 3 Hours.
This course is designed for general education teacher trainees. It will provide them information about students with disabilities that they will have in their classrooms and the law governing special education and its implications for them as general educators. The course will address Individualized Educational Plans that are developed for students with disabilities and how general educators contribute to these plans. Students will learn about planning instruction that is differentiated to meet various learner needs, universal design principles and instructional tools, providing meaningful access to general education classrooms and curriculum for students with disabilities and designing and delivering appropriate accommodations and modifications to assist student learning. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 362. Introduction to Early Education and Early Childhood Special Education. 3 Hours.
This course is designed to provide an overview of the field of early education including early childhood education and early childhood special education. The historical, philosophical, research- base, policy and legal foundations for the field are discussed to provide the students with the knowledge to become an advocate for early learning opportunities (birth through grade 3) for all children and their families. LEC.

SPED 425. Introduction to Exceptional Children and Youth. 3 Hours.
Designed for regular education teacher trainees, those in training for support roles in public schools and/or residential facilities (music educators/therapists, speech clinicians, etc.), and others interested in providing services for exceptional children and youth. Emphasis on the
learning and adjustment problems of exceptional children and youth. Includes fieldwork experiences in residential and/or public school settings.

**SPED 431. Introduction to the Exceptional Child/Adolescent. 1 Hour.**

The course is designed to provide the student with knowledge of and direct experiences within instructional settings that include one or more exceptional children. Structured experiences will be provided to (a) ensure mastery of skills in differentiating normal from atypical patterns of behavior in children or adolescents, (b) promote acquisition of skill in understanding the educational needs of exceptional learners as well as the procedures used to identify and provide instruction for them, (c) ensure the generalization of communication skills to the unique needs of exceptional learners in instructional settings, and (d) promote a positive attitude toward atypical students. LEC.

**SPED 439. Student Teaching: Unified Early Childhood. 1-6 Hours.**

A supervised student teaching experience leading to initial teaching licensure in Kansas Unified Early Childhood (birth through grade 3). The student assumes the professional role as a teacher in an approved inclusive early childhood infant/toddler or preschool. Prerequisite: Admission to the Unified Early Childhood program. Approved application of intent to student teach. LEC.

**SPED 450. Dis/ability in an American Context. 3 Hours.**

This course is designed to introduce undergraduate students of any major to important theoretical and practical concepts regarding special education, disability, and diversity. Successful completion of this course fulfills one requirement for the School of Education minor in Education. LEC.

**SPED 497. Independent Study. 1-2 Hours.**

Only one enrollment permitted each semester, a maximum of four hours will apply toward a bachelor's degree. Prerequisite: Recommendation of advisor and consent of instructor. IND.

**SPED 500. Introduction to Sign Language. 3 Hours.**

This is an introductory course in Sign Language and includes ASL and English sign vocabulary, a description of all main sign systems, medical aspects of hearing loss, communication and language, and Deaf culture and community. LEC.

**SPED 501. American Sign Language I (ASL I). 3 Hours.**

This course will cover the development of American Sign Language and its application within the Deaf Community. It is based on the functional-notational approach to learning sign language. This approach organizes language around communicative purposes of everyday interaction. LEC.

**SPED 502. American Sign Language II (ASL II). 3 Hours.**

This is the second level course in American Sign Language and its application within the Deaf Community. It is based on the functional-notational approach to learning sign language. This approach organizes language around communicative purposes of everyday interaction. Prerequisite: SPED 501. LEC.

**SPED 503. American Sign Language III (ASL III). 3 Hours.**

This is the third level course in American Sign Language. The primary objective of the American Sign Language III "Signing Naturally" Level 2 curriculum is for students to continue using the two basic language skills: visual listening and signing. Prerequisite: SPED 502. LEC.

**SPED 504. American Sign Language IV (ASL IV). 3 Hours.**

This is the fourth level course in American Sign Language. The primary objective of the American Sign Language IV "Signing Naturally" Level 3 curriculum is for students to continue using the two basic language skills -- visual listening and signing. Prerequisite: SPED 503. LEC.

**SPED 506. Advanced Practices for Children with Disabilities in the Elementary General Education Classroom. 3 Hours.**

This course is designed to enable novice teachers to master and apply the instructional and communicative skills that will facilitate appropriate and productive inclusion of children and youth with exceptionalities within general education classrooms and other school settings. Specific research-based strategies in curriculum content acquisition (content enhancements, learning strategies, classwide-peer tutoring), and specific research-based strategies in behavior management will be learned and applied to real teaching experiences. Novice teachers will learn about collaborative structures found in schools to support student learning in general education settings (co-teaching, collaborative consultation, teacher/student support teams) and roles and responsibilities of teachers within these structures. Prerequisite: Admission to the Teacher Education Program. LEC.

**SPED 507. Advanced Practices for Children with Disabilities Middle/Secondary General Education Classroom. 3 Hours.**

This course is designed to enable novice teachers to master and apply the instructional and communicative skills that will facilitate appropriate and productive inclusion of middle and secondary age students with disabilities within general education classrooms and other school settings. Specific research-based strategies in curriculum content acquisition (content enhancements, learning strategies, classwide-peer tutoring), and specific research-based strategies in behavior management will be learned and applied to real teaching experiences. Novice teachers will learn about collaborative structures found in schools to support student learning in general education settings (co-teaching, collaborative consultation, teacher/student support teams) and roles and responsibilities of teachers within these structures. Prerequisite: Admission to the Teacher Education Program. LEC.

**SPED 598. Special Course: _____. 1-5 Hours.**

A special course of study designed to meet current needs of education students; primarily for undergraduates. LEC.

**SPED 631. Characteristics of Students Needing an Adaptive Curriculum. 3 Hours.**

This course is designed as an introduction to the definition, characteristics, causes, assessment, and specific remedial techniques for students needing an adaptive curriculum. The needs for specialized services to meet specific learning and/or behavioral needs will be presented. Students will learn about the history of serving children and youth with high incidence disabilities associated with specific learning, emotional/behavioral, mild mental retardation and a range of physical and health needs. Key individuals in the research of specific disabilities associated with these needs and how they helped expand our understanding of who these individuals are and how to address specific needs, will also be addressed. Learning characteristics will be addressed in relation to why and how specialized instruction can meet the learning and developmental needs of these individuals, specifically in the areas of instructional and assistive technology. LEC.

**SPED 632. Characteristics of Students Needing a Functional Curriculum. 3 Hours.**

This introductory course provides an overview of the characteristics of learners with significant support needs. Students will learn to define and understand various classification systems and the implications of: low-incidence disabilities, significant cognitive disability, various vision and/or hearing impairments, including deaf-blindness motor disabilities, and health impairments. Students will be introduced to various etiologies: pre-, peri-, and post-natal causes, syndromes and chromosomal disorders, and biomedical causes of severe disability. Additional content includes anatomy of sensory organs, interpretation of pertinent medical reports,
assessment procedures, and in school settings considerations (e.g., orientation and mobility, cochlear implants, medications, tube feeding, physical therapy, occupational therapy). Prerequisite: An introductory course in special education. LEC.

SPED 633. Characteristics of Learners with Hearing Loss -- Deaf Studies. 3 Hours.
Deaf Studies is the basic characteristics course for both the Master's degree in Deaf Education and for Kansas and Missouri endorsement in Deaf/HOH. The course includes medical aspects/etiology of hearing loss, history, pertinent laws. Deaf culture and community, issues in assessment and psychology, language and sign systems, multicultural education, multiple disabilities and hearing loss, and specific issues in the field. LEC.

SPED 635. Introduction to Teaching Learners with Low-Incidence Disabilities in Inclusive Settings. 3 Hours.
This course examines current principles and inclusive practices for learners with significant disabilities. The course will focus on the extant research base concerning inclusive practices, characteristics of learners with low-incidence disabilities, and instructional strategies. Prerequisite: SPED 326 or equivalent. LEC.

SPED 641. Methods & Assessment: Literacy Interventions Struggling Learners & Students High-Incidence Disabilities. 3 Hours.
This course will provide in depth learning experiences targeting literacy; both reading and writing. Students will learn about assessment tools and assessment systems used in tiered support frameworks to determine the required intensity of literacy support and instruction needed by children/adolescents with adaptive special education needs, and will learn about evidence-based instructional approaches and curriculum developed for students with disabilities and struggling students in general. The course is intended for persons working toward the Kansas teaching license in teaching students needing an adapted curriculum. Prerequisite: SPED 730, admittance into the Adaptive program in the Department of Special Education, or permission of the instructor. LEC.

SPED 642. Assessment and Methods of Teaching Students with Low-Incidence Disabilities in Inclusive Settings. 3 Hours.
This course prepares teacher candidates to assess students with disabilities using formal and informal measures, to use assessment information to develop a strengths-based inclusive Individual Education Program (IEP), to design instruction related to IEP goals and state standards, and to evaluate the effectiveness of that instruction using progress-monitoring techniques. Prerequisite: SPED 326. LEC.

SPED 644. Assessment and Instructional Methods I: Learners with Hearing Loss. 3 Hours.
This course will provide an introduction to appropriate instructional methodology for teaching students who are deaf or hard of hearing at the early childhood, elementary, and secondary levels. Upon completion students will be familiar with legal issues, teaming, assessment, IEP development, curriculum planning, instructional methods, and transition. LEC.

SPED 650. Constructing Early Childhood Curriculum. 3 Hours.
Students in this course will learn to design, implement and evaluate developmentally appropriate curricula and programs for children from birth through kindergarten. Issues of curriculum design and assessment are introduced as interrelated processes that include structuring learning environments and experiences that are responsive to children's interests and abilities. Students analyze and evaluate curriculum that focuses on the five developmental domains a) social emotional development; b) cognitive development; c) language and communication development; d) adaptive behavior development; and e) gross and fine motor development and in addition the content domains of literacy, science, math, and fine art. Strategies for developing learning opportunities that are appropriate for young children, including children with special needs and children from diverse cultural, ethnic and linguistic backgrounds, will be explored. Prerequisite: Admission to School of Education UEC program. LEC.

SPED 660. Education of Children and Youth with Disabilities I: _____. 3 Hours.
This is a methods course that covers instructional approaches and procedures that offer developmentally appropriate, effective and inclusive early intervention for preschool and kindergarten age children who experience developmental delays, disabling conditions or who are at-risk for developmental problems and disabilities. It is directed toward: (a) "how" to teach, or the technical components of developing and delivering effective instruction that provide access to the general early childhood curriculum within recognized approaches to early childhood education for young children, and (b) the "what" to teach, or the selection of developmentally and individually appropriate child objectives as well as specific materials and specialized instructional approaches. The relationship of instructional planning to state and federal mandates will also be considered. The course is primarily intended for persons who are currently working toward certification in the ECSE program area. Prerequisite: SPED 425 or SPED 725, and SPED 735, which can be taken concurrently. LEC.

SPED 661. Supporting Children with Significant Learning and Behavioral Challenges. 3 Hours.
Students in this course will gain knowledge of the causes, and intervention and support approaches for young children with multiple and significant disabilities including neurological impairments, physical disabilities, sensory impairments, significant developmental disabilities and challenging behavior. Emphasis is placed on environmental adaptations and direct instructional techniques to maximize independence as determined through systematic ecological inventories tailored to the individual child's strengths and needs. Information is also provided on assistive technology designed to provide appropriate supports. Functional behavioral assessment procedures, proactive intervention strategies, and developing collaborative support plans will be studied. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 663. Assessment Strategies in Early Education. 3 Hours.
Examines the practice of gathering information for the purpose of making individual referral and instructional decisions for infants, toddlers, and young children with and without special needs. Discusses effective informal assessment techniques and emphasizes an ecological approach to gathering information. Introduces standardized assessment and screening instruments and provides an overview of the purposes and limitations of such tests. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 664. Inclusive Strategies and Intervention for Infants and Toddlers. 3 Hours.
Emphasizes curriculum development and early intervention provision for infants and toddlers through the planning of appropriate learning experiences, the design of learning environments, developing Individual Family Service Plans (IFSP), promoting collaboration among families and the use of various methods of enhancing the child's development across the five (social-emotional, adaptive, cognitive, physical/movement, communication) development domains. The role of the educator/early interventionist in relation to the family and the child is examined. Curriculum resources and intervention strategies for infants and toddlers with special needs are reviewed with emphasis on interdisciplinary planning and implementation. Prerequisite: Admission to the Teacher Education Program. LEC.
SPED 665. Inclusive Strategies and Intervention for Preschoolers. 3 Hours.
Provides the opportunity for students to develop and evaluate inclusive environments for young children. This course emphasizes meeting the needs of all young children through an integrated approach to planning, implementing and assessing instruction in all areas; linking assessment information to individualized instruction; developing Individual Educational Plans (IEPs) and promoting collaboration among families, schools and communities. Service delivery systems and transitions between early childhood programs are reviewed in relation to curriculum. Curriculum development for early childhood content areas (literacy and language, numeracy, science, social studies, physical education and the arts) and domains (language, social/emotional, physical, and cognitive) will be explored. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 667. Field Experience in Preschool. 1 Hour.
This supervised field experience is intended to allow the pre-service teacher to apply the knowledge gained in SPED 665 Inclusive Strategies and Intervention for Preschoolers, by working with infants and toddlers in early intervention settings/programs. To be taken concurrently SPED 665. Prerequisite: Admission to the Teacher Education Program. FLD.

SPED 668. Field Experience Infant/Toddler. 1 Hour.
This supervised field experience is intended to allow the pre-service teacher to apply the knowledge gained SPED 664 Inclusive Strategies and Intervention for Infants and Toddlers, by working with infants and toddlers in early intervention settings/programs. To be taken concurrently SPED 664. Prerequisite: Admission to the Teacher Education Program. FLD.

SPED 672. Field Experiences with Exceptional Children and Youth: ______. 1-3 Hours.
A course designed to provide experiences for students to participate with exceptional children in public schools and/or residential facilities and with professional personnel associated with the lives of exceptional students including special education teachers, child care workers, therapists, etc. Students will have opportunities to participate as aides, tutors, and instructors with individual and small groups of exceptional youth in one or more placements. Through weekly meetings with the instructor students are guided to relate their experiences to the needs and services for exceptional children and youth. Prerequisite: SPED 635. FLD.

SPED 675. Practicum with Children and Youth with Disabilities: ______. 1-10 Hours.
Intensive diverse and direct teaching experiences with children and youth with disabilities in educational settings. The course is differentiated from SPED 775 through the amount of scaffolding undergraduate students will receive when demonstrating skill application (e.g., undergraduates report and receive feedback on practicum experiences on a more frequent basis, reduced data collection requirements, more emphasis on cooperating teacher providing guidance, etc.). This practicum is a requirement for provisional endorsement according to KSDE. Students who have completed SPED 675 cannot enroll in SPED 775 within in same curricular area. Prerequisite: SPED 326. LEC.

SPED 700. Introduction to Sign Language. 3 Hours.
This is an introductory course in Sign Language and includes ASL and English sign vocabulary, a description of all manual sign systems, medical aspects of hearing loss, communication and language, and Deaf culture and community. LEC.

SPED 701. American Sign Language I (ASL I). 3 Hours.
This course will cover the development of American Sign Language and its application within the Deaf Community. It is based on the functional-notational approach to learning sign language. This approach organizes language around communicative purposes of everyday interaction. LEC.

SPED 702. American Sign Language II (ASL II). 3 Hours.
This is the second level course American Sign Language and its application within the Deaf Community. It is based on the functional-notational approach to learning sign language. This approach organizes language around communicative purposes of everyday interaction. Prerequisite: SPED 701. LEC.

SPED 703. American Sign Language III (ASL III). 3 Hours.
This is the third level course in American Sign Language. The primary objective of the American Sign Language III "Signing Naturally" Level 2 curriculum is for students to continue using the two basic language skills -- visual listening and signing. Prerequisite: SPED 702. LEC.

SPED 704. American Sign Language IV (ASL IV). 3 Hours.
This is the fourth level course in American Sign Language. The primary objective of the American Sign Language IV "Signing Naturally" Level 3 curriculum is for students to continue using the two basic language skills -- visual listening and signing. Prerequisite: SPED 703. LEC.

SPED 705. Introduction to Hearing Impaired. 2 Hours.
A study of hearing defects and methods of diagnosis. The course also covers remedial work which teachers can use in treating such defects and meeting problems of hearing defective children. Prerequisite: Nine hours of education including educational psychology. LEC.

SPED 706. Methods of Teaching Language to the Deaf I. 3 Hours.
The effects of hearing loss on language acquisition and development. Systems for teaching language to individuals with hearing loss are introduced. Prerequisite: Course in normal language development and nine hours of education including educational psychology. LEC.
SPED 715. Understanding Research in Education. 3 Hours.
This course introduces concepts and skills involved in understanding and analyzing research in special education. The course provides an overview of basic, general knowledge of various research methodologies. In addition, this course will teach students to locate, read, comprehend, and critically analyze research articles and reports. Students will become familiar with the principles of educational research to become good "consumers" of this research. LEC.

SPED 717. Exceptional Children in Regular Classrooms. 3 Hours.
This course is designed to explore the relationship between regular and special education. Educational service delivery systems for exceptional children are identified and analyzed. Emphasis is placed upon procedures and special services that regular class teachers can use to provide instructional services to exceptional children assigned to regular classrooms. Procedures for enabling normal children to understand and appreciate the interaction with children who exhibit physical and behavioral variance from established norms are conveyed. Especially for regular class teachers and students desiring a career in teaching exceptional children. Will be offered by designated area sections or as a general overview of several areas. LEC.

SPED 718. Instructional Planning for Children and Youth with Disabilities: ______. 1-3 Hours.
This course provides knowledge and skills to select, adapt, and sequence instructional methods and materials to facilitate general education curriculum mastery. LEC.

SPED 719. Learning and Technology. 1 Hour.
The central framework of "human learning" provides a context for understanding technology-based educational innovations. The lessons in this course explore how various "features of learning" and "features of technology" intersect. They discuss realistic options for improving the learning of students, and the learning of teachers, as they use technology in education. (Life-span range of levels.) LEC.

SPED 724. Data-Driven Instructional Decision Making. 1 Hour.
The lessons in this course present research-based methods for monitoring student behavior and academic progress. They explain how teachers may use this information to evaluate current and plan future instructional and behavioral interventions following a decision making model. It is also explored how computer and information management technology tools support and facilitate the collection, storage, and analysis of observational data. LEC.

SPED 725. Introduction to the Psychology and Education of Children and Youth with Disabilities. 3 Hours.
This course provides an overview of current practices in the identification, placement, and education of students with disabilities. This course emphasizes on patterns of social, cognitive, language, and physical development. Social, political, and economic advocacy issues are also addressed. Prerequisite: One course in Child Development. LEC.

SPED 726. Exceptionality and Technology. 1 Hour.
Technology has the potential to dramatically improve the education and quality of life for people with disabilities. This course presents you with a basic foundation for understanding technology in special education, a functional model for selecting the best technology applications for students with special needs, and strategies for applying your knowledge to practical situations. LEC.

SPED 727. Designing Instruction for Diverse Learners. 3 Hours.
This course explores to design, development, and implementation of technology-based solutions for struggling learners in the preK-12 instructional environment. Throughout the course, students will (1) gain an understanding of the Principles of Universal Design for Learning, (2) examine how technology has and can be developed in a manner to meet multiple needs, especially those with disabilities, and (3) analyze how professionals can identify and assess what technology-based solution would meet the needs of a particular individual or group of individuals. LEC.

SPED 729. Introduction to Computing in Special Education. 3 Hours.
This course is designed to provide an introduction to basic concepts of computer literacy, with particular emphasis on the uses of microcomputers in educational settings for individuals with special needs. Topics include an overview of computing specific to the needs of individuals with special needs including: a) applications and the impact of computers on society; b) an introduction to computer hardware and associated concepts; c) introductory programming concepts; d) a survey of instructional and instructional-support applications of computers including examples of related software; e) software evaluation techniques; and f) an overview of resources in educational computing. Students will acquire hands-on operating experience with microcomputers through scheduled laboratory periods. LEC.

SPED 730. Characteristics, Methods & Assessment: Intro Struggling Learners & Studnts High-Incidence Disabilities. 3 Hours.
The course is designed as an introduction to the characteristics, assessment and identification process, and initial instructional and behavioral interventions needed in meeting the needs of students with high-incidence disabilities under the Kansas Adaptive Teacher Education Standards. The needs for specialized services to meet specific learning and/or behavioral needs will be presented. Frameworks for instruction and conceptualizing best practice will be included introducing the principles of Universal Design for Learning and the Multi-Tier System of Support. The role of the educator in identifying, understanding and implementing evidence-based practices is also examined. Curriculum resources and intervention strategies for students with high-incidence disabilities will be introduced with emphasis on Tiered planning and implementation. The course is intended for persons working toward the Kansas teaching endorsement in the Special Education Adaptive Area. Prerequisite: Admittance into the Adaptive endorsement teacher education program in the Department of Special Education or permission of the instructor. LEC.

SPED 731. Supporting Children with Significant Learning and Behavioral Concerns. 3 Hours.
Students in this course will gain knowledge of the causes, and intervention and support approaches for young children birth through 5 years with significant support needs. These include young learners with multiple and significant disabilities including neurological impairments, physical disabilities, sensory impairments including dual sensory impairments, complex health care needs, significant developmental disabilities and challenging behavior. Emphasis is placed on environmental adaptations and direct instructional techniques to maximize independence as determined through systematic ecological inventories tailored to the individual child's strengths and needs. Information is also provided on assistive technology designed to provide appropriate supports. Functional behavioral assessment procedures, proactive intervention strategies, and developing collaborative support plans will be studied. Prerequisite: Admission into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. SPED 752 or its equivalent, SPED 734 or its equivalent, and SPED 755 or its equivalent, LEC.

SPED 733. Characteristics of Learners with Hearing Loss -- Deaf Studies. 3 Hours.
Deaf Studies is the basic characteristics course for both the Master's degree in Deaf Education and for Kansas and Missouri endorsement in
Deaf/HH. The course includes medical aspects/etiology of hearing loss, history, pertinent laws, Deaf culture and community, issues in assessment and psychology, language and sign systems, multicultural education, multiple disabilities and hearing loss, and specific issues in the field. LEC.

**SPED 734. Inclusive Strategies and Intervention for Infants and Toddlers: _____ 3 Hours.**

Emphasizes curriculum development and early intervention provision for infants and toddlers through the planning of appropriate learning experiences, the design of learning environments, developing Individual Family Service Plans (IFSP), promoting collaboration among families and the use of various methods of enhancing the child's development across the five (social-emotional, adaptive, cognitive, physical, communication) developmental domains. The role of the educator/early interventionist in relation to the family and the child is examined. Curriculum resources and intervention strategies for infants and toddlers with special needs are reviewed with emphasis on interdisciplinary planning and implementation. Prerequisite: Admittance into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. LEC.

**SPED 735. Introduction to Teaching Learners with Low-Incidence Disabilities in Inclusive Settings. 3 Hours.**

This course examines current principles and inclusive practices for learners with significant disabilities. The course will focus on the extant research base concerning inclusive practices, characteristics of learners with low-incidence disabilities, and instructional strategies. Prerequisite: SPED 326 or equivalent. LEC.

**SPED 738. Unified Early Childhood Applied Research. 1 Hour.**

This seminar is designed to facilitate the UEC teacher candidate’s completion of a Teaching Work Sample during the UEC Student Teaching experience. The purpose of the seminar together with the UEC student teaching experience is to provide the UEC teacher candidate with the opportunity to study and experience the fundamentals of teaching young children with and without disabilities with the aim of evolving a set of values, principles, and skills which will guide future early education teaching situations. Prerequisite: Admission to UEC Student Teaching. Corequisite: SPED 739 UEC Student Teaching. LEC.

**SPED 739. Early Childhood Unified Student Teaching/Practicum. 1-6 Hours.**

A supervised student teaching experience leading to initial teaching licensure in unified early childhood (birth through grade 3). The student assumes the total professional role as a teacher in an approved inclusive early childhood program to include infant/toddler, preschool or kindergarten. Prerequisite: Admission to UEC Student Teaching. Corequisite: SPED 739 UEC Student Teaching. LEC.

**SPED 740. Managing Classroom Behavior of Exceptional Children and Youth. 3 Hours.**

Designed to acquaint regular and special education teachers, principals, school psychologists, counselors, and speech pathologists with principles and application of classroom management techniques applicable to exceptional children and youth. Methods of changing inappropriate behaviors and prompting the acquisition of adaptive behaviors through positive management procedures will be stressed. Includes an introduction to behavior analysis. Prerequisite: SPED 425 or SPED 725. LEC.

**SPED 741. Methods & Assessment: Literacy Interventions Struggling Learners & Students High-Incidence Disabilities. 3 Hours.**

This course will provide in-depth learning experiences targeting literacy; both reading and writing. Students will learn about assessment tools and assessment systems used in tiered support frameworks to determine the required intensity of literacy support and instruction needed by children/adolescents with adaptive special education needs, and will learn about evidence-based instructional approaches and curriculum developed for students with disabilities and struggling students in general. The course is intended for persons working toward the Kansas teaching license in teaching students needing an adapted curriculum. Prerequisite: SPED 730, admittance into the Adaptive program in the Department of Special Education, or permission of the instructor. LEC.

**SPED 742. Assessment and Methods of Teaching Students with Low-Incidence Disabilities in Inclusive Settings. 3 Hours.**

This course prepares teacher candidates to assess students with disabilities using formal and informal measures, to use assessment information to develop a strengths-based inclusive Individual Education Program (IEP), to design instruction related to IEP goals and state standards, and to evaluate the effectiveness of that instruction using progress-monitoring techniques. Prerequisite: SPED 635 or 735. LEC.

**SPED 743. Methods: Functional Behavioral Assessment, Positive Behavior Support and Classroom Management. 3 Hours.**

This course provides a problem-solving approach and the framework for teaching and assessment strategies to develop pro-social behavior in students with disabilities and their typical peers in classrooms and whole school contexts. Students assess problem behavior, discover the functions of problem behavior, and learn pro-social alternatives in home, school, and community settings. Prerequisite: SPED 631 or SPED 731, and SPED 632 or SPED 732. LEC.

**SPED 744. Assessment and Instructional Methods I: Learners with Hearing Loss. 3 Hours.**

This course will provide an introduction to appropriate instructional methodology for teaching students who are deaf or hard of hearing at the early childhood, elementary, and secondary levels. Upon completion students will be familiar with legal issues, teaming, assessment, IEP development, curriculum planning, instructional methods, and transition. LEC.

**SPED 745. Audiology and Aural Rehabilitation. 3 Hours.**

This course will provide a broad overview of the components of an aural rehabilitation service delivery model including audiological diagnostics and assessment, selection and fitting of a variety of listening devices, and intervention strategies for auditory training and speech perception training. The emphasis of this course will be on the aural habilitation of children; therefore, each of the components of an aural (re)habilitation plan will be considered in relation to the needs of individual children and their families. LEC.

**SPED 746. Curriculum and Methods in Early Childhood. 3 Hours.**

This is a curriculum and methods course that addresses how to design, implement and evaluate developmentally appropriate curricula and programs for children from birth to six years of age. Issues of curriculum design and assessment are introduced as interrelated processes that include structuring learning environments and experiences that are responsive to children's interests and abilities. Strategies for developing learning opportunities that are appropriate for young children, including children with special needs and children from diverse cultural, ethnic and linguistic backgrounds, will be explored. Students analyze and evaluate curriculum that focuses on facilitating progress in the domains of a) social emotional development; b) cognitive development; c) language and communication development; d) adaptive behavior development and e) gross and fine motor development. Students also analyze and evaluate curriculum standards and frameworks for the young child's acquisition of concepts, skills and dispositions that support the development of early competencies and interest in literacy, mathematics, the sciences, social studies, the arts and individual and group sports. Prerequisite: Admittance
into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. SPED 752 or its equivalent (may be taken concurrently). LEC.

This course is designed for teachers seeking the Adaptive certification to teach students with High-Incidence Disabilities (Adaptive). Students will learn how to select, administer, score, and interpret formal and informal assessments; make data-based instructional decisions for students with specific learning disabilities, with social and emotional needs and disorders in behavior, mild mental retardation, and/or who experience other chronic health impairments. Individually chosen and administered tests, as well as high-stakes assessments, will be discussed. Prerequisite: SPED 631 or SPED 731. LEC.

SPED 752. Overview of Early Childhood and Early Childhood Special Education. 3 Hours.
The course serves as an introduction to the profession including historical, philosophical, social and psychological foundations, awareness of value, ethical and legal issues, staff relations and the importance of becoming an advocate for children and families. Students will analyze/interpret trends in early education, including diversity, early childhood special education, family centered practices, legislation, public policy, and developmentally appropriate practice. The two key professional organizations, National Association for the Education of Young Children (NAEYC) and Division of Early Childhood for the Council for Exceptional Children (DEC), recommended practices serve as the foundation for understanding the roles, knowledge and competencies of the early educator. Prerequisite: Admittance into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. LEC.

SPED 753. Assessment in Early Education. 3 Hours.
This course examines the practice of gathering information for the purpose of making individual referral and instructional decisions for infants, toddlers, and young children with and without special needs. Discusses effective informal assessment techniques and emphasizes an ecological approach to gathering information. Introduces standardized assessment and screening instruments and provides an overview of the purposes and limitations of such tests. Prerequisite: Admittance into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. LEC.

SPED 755. Inclusive Strategies and Interventions for Preschoolers: 3 Hours.
This is a methods course that covers instructional approaches and procedures that offer developmentally appropriate, effective and inclusive early intervention for preschool and kindergarten age children who experience developmental delays, disabling conditions or who are at risk for developmental problems and disabilities. It is directed toward: (a) "how" to teach, or the technical components of developing and delivering effective instruction that provide access to the general early childhood curriculum within recognized approaches to early childhood education for young children, and (b) the "what" to teach, or the selection of developmentally and individually appropriate child objectives as well as specific materials and specialized instructional approaches. The relationship of instructional planning to state and federal mandates will also be considered. The course is primarily intended for persons who are currently working toward certification in the ECSE program area. Prerequisite: Admittance into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. SPED 752 (may be taken concurrently). LEC.

SPED 760. Introduction to Autism Spectrum Disorders. 3 Hours.
An introductory graduate-level course on autism spectrum disorders. It addresses characteristics of children and youth with autism spectrum disorders; trends and issues associated with autism spectrum disorders; and effective practices and strategies for structuring, managing, and promoting social skill development and social interactions among learners with autism spectrum disorders. LEC.

The purpose of this course is to provide an introduction to positive behavioral support (PBS). The lessons contained within this course include an overview of positive behavioral support, the basics of behavior, an introduction to specific positive behavioral support strategies, and a lesson on preventing problem behavior. LEC.

This course introduces current functional assessment methods that are used to build effective behavioral support plans. A strong functional assessment is at the heart of Positive Behavioral Support. After completing this course, you will have a better understanding of how to implement functional assessment methods in your classroom. LEC.

SPED 763. Development and Implementation of PBS Plans. 1 Hour.
A positive behavioral support plan (PBS) describes how features of the environment associated with problem behavior will be modified, what and how skills and strategies will be taught, and how individuals supporting a student will respond to both positive and problematic behavior. This course contains lessons on designing PBS plans, implementing PBS plans, and modifying and assessing PBS plans. LEC.

SPED 764. Intervention Strategies for PBS-I. 1 Hour.
The purpose of this course is to introduce interventions that can be used as part of a comprehensive positive behavioral support plan. An effective positive behavioral support plan contains multiple intervention strategies that address the function maintaining a student's problem behavior. This course contains lessons addressing setting events, antecedent interventions, replacing problem behavior, and consequence interventions. LEC.

SPED 765. Intervention Strategies for PBS-II. 1 Hour.
The purpose of this course is to introduce three types of interventions that can be used in positive behavioral support. An effective positive behavioral support plan contains multiple intervention strategies that address the function maintaining a student's problem behavior. This course contains a lesson on social skills education, crisis prevention, and interventions addressing physiological factors that influence a student's problem behavior. LEC.

SPED 766. Redesigning Environmental Systems. 1 Hour.
The purpose of this course is to describe how positive behavioral support can be used to redesign the environment at a systems level. Considering the larger issues within a system including the broader environment, the values and beliefs held by staff, policies and procedures that promote ongoing learning, and collaborative problem solving processes within a school will improve implementation of long-term positive behavioral support efforts. This course contains lessons on classroom management, staff development, and school-wide discipline. LEC.

SPED 767. Creating Positive Lifestyles through PBS. 1 Hour.
One of the most important outcomes of a positive behavioral support plan is an increase in the quality of life for both the student and everyone within the student's social network. The purpose of this course is to introduce
topics related to creating positive lifestyles including person-centered planning, self-determination, and quality of life. LEC.

SPED 772. Participation with Children and Youth with Disabilities: _____ 1-3 Hours.
A course designed to provide field experiences with children and youth with disabilities in settings where educational services are provided. Students work directly with professionals such as special education teachers, general education teachers, therapists and other support personnel. Students participate as aides, tutors, and instructors with individual and small groups of children and youth. Ongoing meetings with supervisors are designed to facilitate both reflection and strategic learning. FLD.

SPED 774. Education of Secondary and Post-Secondary Level Exceptional Students: _____ 1-3 Hours.
A course based on the problems and needs of secondary and post-secondary level handicapped students with a focus on curriculum alternatives (academic and vocational), instructional planning options, instructional methods and materials and educational and community resources. The focus is on both mildly and moderately handicapped students. Prerequisite: Appropriate section of SPED 735 which may be taken concurrently. LEC.

SPED 775. Practicum with Children and Youth with Disabilities: _____ 1-10 Hours.
Intensive diverse and direct teaching experiences with children and youth with disabilities in educational settings. This practicum is a requirement for provisional endorsement according to KSDE. Students who have completed SPED 775 cannot enroll in SPED 675 within in same curricular area. Prerequisite: Varies by topic. FLD.

SPED 785. Application of Assessment Information for Exceptional Children and Youth. 3 Hours.
An analysis of information derived from assessment instruments and procedures appropriate to measuring the social and cognitive development of exceptional children and youth. Provides experiences in determining assessment data required in the development of individualized educational programs (IEP). Attention is also given to the design of informal assessment procedures, specific to the needs of exceptional children and youth. Experience is provided in the preparation and presentation of assessment data for use in instructional planning conferences. Prerequisite: An undergraduate or graduate course in educational measurement, and SPED 760. LEC.

SPED 790. Methods for Learners with Higher-Functioning Autism Spectrum Disorders. 3 Hours.
This is a methods course, with special emphasis on learners with high-functioning autism spectrum disorders. Particular attention is given effective practices and strategies for teaching, managing and promoting social skill and social communication development and proactive social interactions. LEC.

SPED 793. Psychology of Deafness. 2 Hours.
Reviews of the literature pertaining to psychological evaluations of the deaf and hard of hearing. Divergent views of deafness, type and degree of deafness are considered. Prerequisite: SPED 791. LEC.

SPED 798. Special Course: _____ 1-5 Hours.
A special course designed to address topical issues. LEC.

SPED 800. Classroom Intervention for Language Disorders of Handicapped Learners. 3 Hours.
Emphasis is given to milestones in normal language acquisition and variations from norms demonstrated by handicapped learners. Attention is also given to theoretical approaches to language training, formal and informal language assessment techniques, and instructional methods. Students design individualized instructional plans for incorporating language into the daily curriculum for handicapped learners. Prerequisite: SPED 425 or SPED 725. LEC.

SPED 801. Practicum in School Psychology. 4 Hours.
Supervised practice in the application of psychological theory to educational problems. Includes work useful with exceptional children as well as experiences in the application of such areas as mental hygiene and learning theory to problems involving the total school population. (Same as EPSY 910.) Prerequisite: Permission of advisor and instructor. FLD.

SPED 802. Advanced Practicum in School Psychology. 4 Hours.
A continuation of SPED 801 with special emphasis on remedial techniques associated with learning difficulties. (Same as EPSY 911.) Prerequisite: SPED 801 and permission of advisor and instructor. FLD.

SPED 804. Designing Online Instruction for E-Learning Environments. 3 Hours.
The focus of the course is on the status of e-learning at the K-12 and postsecondary levels and the process of designing content for e-learning applications. Attention will be given to design features, content structuring, instructional management, evaluation, and collaboration in the process of working with technicians in the process of developing online curriculum and instruction. Prerequisite: None. A background in education is preferred. LEC.

SPED 805. Practicum in Individual Intelligence Testing. 4 Hours.
Pacticum training, by arrangement, in administration and interpretation of test results for school situations with particular emphasis on the Stanford-Binet. Prerequisite: Permission of instructor. FLD.

SPED 809. Language Assessment and Instruction II: Learners with Hearing Loss. 3-6 Hours.
This course covers assessment and instruction of speech skills for students who are deaf or hard of hearing. A historical review of the emphasis placed on speech development in deaf students will be provided. Students will learn formal and informal methods of assessment, developmental order and classification systems for English language sounds, and visual, auditory, and tactile facilitation techniques. Auditory training programs and techniques will be emphasized. LEC.

SPED 810. Speech Assessment and Instruction III: Learners with Hearing Loss. 3-6 Hours.
The purpose of this course is to prepare students to provide effective language assessment and instruction to students who are deaf or hard of hearing. This course focuses on the effect of hearing loss on assessment, language and reading, communication options, and instructional strategies. LEC.

SPED 811. Methods of Teaching Elementary School Subjects to the Deaf. 3 Hours.
Focus is on development of skills in adapting materials and methods of teaching science, math, social studies, spelling, and writing to hearing impaired students. Emphasis is placed on problems, trends and procedures used in career education specifically for the hearing impaired. Prerequisite: SPED 711. LEC.

SPED 812. Instructional Approaches in Inclusive Elementary Settings. 2 Hours.
This advanced method course provides curriculum design and instructional procedures appropriate for students at the elementary and middle school levels, including functional academic, social, and home and community life skills. NOTE: This is a 2 credit course to be offered during the first 8 weeks of a semester. It will precede SPED 814 in the same semester. Prerequisite: SPED 614 or SPED 714: Learning Styles and Instructional Accommodations. LEC.
**SPED 814. Instructional Approaches in Inclusive Secondary Settings.** 2 Hours.
This advanced method course provides curriculum design and instructional procedures for students at the secondary level, including career preparation and transition from school to adult life in the community. Prerequisite: SPED 614 or SPED 714: Learning Styles and Instructional Accommodations. LEC.

**SPED 839. Management Principles and Assessment Procedures for the Young or Severely Handicapped.** 2-3 Hours.
Examines basic learning procedures and techniques that are essential to programming efforts with the severely or young handicapped. Includes assessment scales, writing instructional programs, measuring operant behavior and evaluating operant behavior. Task and concept analysis related to treatment programs. Prerequisite: Students in the Early Childhood for the Handicapped program must enroll in one hour of practicum, SPED 775. Students in the Severely Handicapped Program must have completed SPED 726. LEC.

**SPED 840. Program Planning in Special Education-Early Childhood.** 3 Hours.
This course is designed to provide knowledge and skills to implement federal and state development mandates for special education and related services programs for young children from birth to five. It covers procedures for developing, implementing, and evaluating (a) instructional accountability for these children's participation in the general early childhood curriculum, (b) relationships between general and special early education personnel and programs; (c) roles and responsibilities; (d) interdisciplinary team planning including families; (e) coordinating, educating, and supervising paraeducators; and (f) general management responsibilities associated with instruction of young children with disabilities. Prerequisite: SPED 760 or SPED 860, which may be taken concurrently. LEC.

**SPED 841. Advncd Methods&Asmnt:Learng Stratg&Contnt Mastery Struggling Learners&Stdnts High-Incidence Disabilt.** 3 Hours.
This course is designed for graduate students enrolled in the Masters of Science Program with an emphasis in school-age populations primarily with high mild disabilities or seeking to obtain a license to teach students needing an adapted curriculum in Kansas. Course experiences focus on how to identify and implement evidenced-based practices designed to increase the success of students with mild disabilities in mathematics, social studies, science, and language arts through their participation in general and special education classrooms primarily in grades 4-12. This course emphasizes practices associated with understanding and evaluating curricular demands, monitoring student progress in content-area courses, providing tiered supports and accommodations in teaching, using assessment and grading alternatives, and incorporating the principles of explicit and strategic instruction to design instruction that will promote and enhance content-area learning. The course is intended for persons working toward the Kansas teaching license in teaching students needing an adapted curriculum. Prerequisite: SPED 730, SPED 741, admittance into the High Incidence Disabilities program in the Department of Special Education, or permission of the instructor. LEC.

**SPED 842. Methods in Access and Inclusion in the Core Curriculum.** 3 Hours.
This course focuses on foundational skills for setting up an inclusive program that meets the needs of students with low-incidence disabilities in general education settings. The course will emphasize many of the "behind-the-scenes" strategies and activities that must be completed on a regular basis to make inclusive education effective and efficient. Prerequisite: SPED 635 or SPED 735 and SPED 642 or SPED 742. LEC.

**SPED 843. Advanced Methods&Assessment:Strategies for Students with Significant Behavior, Social&Emotional Need.** 3 Hours.
This course is designed to introduce educators and related service professionals to prevention and intervention related to a broad range of antisocial, aggressive, and behavioral problems. Approaches focus on understanding and addressing the precipitating factors related to inappropriate behavior, short-term approaches for immediate crises, and problem-solving strategies for longer-term change. Course content will include antisocial, aggressive, and violent behavior; options for classroom interventions; school and system-oriented interventions, and ethical and legal issues involved in various prevention and intervention approaches. Class work will focus on literature, research-based intervention approaches, and case work illustrating specific approaches and programs. Prerequisite: SPED 631 or SPED 731, SPED 741, and SPED 743. LEC.

**SPED 844. Advanced Methods in Access and Inclusion in the Core Curriculum.** 3 Hours.
This course develops critical skills for implementing an inclusive program that meets the needs of students with low-incidence disabilities in general education settings. The course will emphasize many of the day-to-day strategies and activities that must be completed on a regular basis to make inclusive education effective and efficient for all learners. Prerequisite: SPED 635 or SPED 735 and SPED 642 or SPED 742. LEC.

**SPED 850. Curriculum Planning for Exceptional Children and Youth.** 3 Hours.
Provides experiences in applying information on identifying learning and behavioral characteristics of exceptional children and youth. Practices in adapting curriculum materials to meet the needs of the handicapped. Prerequisite: SPED 725 and SPED 735. LEC.

**SPED 851. Law and Special Education.** 3 Hours.
This course focuses on laws that apply to special education, especially "individuals with Disabilities Education Act" and "No Child Left Behind Act." The American legal system, particularly in respect to special education, the constitutional and statutory provisions of federal and state law, and judicial decisions interpreting those laws are reviewed. The course relates equal protection, procedural due process, and substantive due process doctrines to school practices affecting students with disabilities and examines the six principles of P. L. 94-142 and similar principles in state legislation. (Same as ELPS 856.) LEC.

**SPED 852. Citizens with Disabilities, Public Policy, and Policy Analysis.** 3 Hours.
Students to analyze public policy that affects citizens with disabilities, various models of analysis are brought to bear on federal policy (e.g., education, transportation, housing, institutionalization, protection and advocacy, medical assistance, employment, vocational rehabilitation, and others). This course is not valid for core requirement in history and/or philosophy of education. (Same as ELPS 857.) Prerequisite: SPED 851 or permission of instructor. LEC.

**SPED 853. Professional Ethics, Public Values, and Citizens with Disabilities.** 3 Hours.
This course addresses the issues that professionals (e.g., educators, physicians, allied health providers, attorneys, and others) and families of persons with disabilities face in the context of public values, attitudes, and rules of law. The issues include education, treatment and non-treatment. This course is not valid for core requirement in history and/or philosophy of education. (Same as ELPS 858.) Prerequisite: SPED 850, SPED 852 or permission of instructor. LEC.
SPED 854. Family and Interprofessional Collaboration in Special Education. 3 Hours.
This course is designed to provide knowledge and skills to implement federal and state mandates for special education and related services programs as they relate to building and maintaining relationships with families of students with disabilities, and developing effective school programs. It covers procedures for developing, implementing, and evaluating (a) instructional accountability for special education students' participation in district and state assessment; (b) relationships between general and special education personnel and programs; (c) roles and responsibilities; (d) interdisciplinary team planning including families; (e) coordinating, educating, and supervising paraeducators; and (f) general management responsibilities associated with instruction of children and youth with disabilities. Course topics will include collaboration in schools, community systems and families, historical perspectives of family life and school involvement, effective relationships between home, school, community, communication among professionals and with families, school-based programs, home-based programs, and multicultural considerations. Prerequisite: SPED 631 or SPED 731, or SPED 632 or SPED 732, or SPED 735. LEC.

SPED 856. Transition Education and Services from Childhood through Adulthood. 3 Hours.
The purpose of this course is to provide a background in career development and transition education for persons with disabilities from middle school through adulthood. Emphasis is placed on IDEA requirements for transition services, career development and transition processes, transition services assessment, secondary special education curricular implications, career development and transition service needs, collaborative services in schools and communities to promote quality transition services, and issues and trends in transition education and services. LEC.

SPED 857. Career Development for Youth. 3 Hours.
The purpose of this course is to provide graduate students in special education and related areas who are specializing in secondary school/transition programs with an overview of career development for youth with disabilities. Emphasis is placed upon theory and practice related to career development, work-based learning, and school and community vocational training models. Prerequisite: SPED 856. LEC.

SPED 858. Assessment for Transition Planning. 3 Hours.
This course is designed to provide a review of psychometric principles and their utility as a foundation for quality assessment in transition assessment and planning for youth with disabilities. Formal and informal assessments across a range of transition planning areas are reviewed and evaluated. Skills in curriculum-based assessment, rating scales, situational assessment, and functional assessment are emphasized. Prerequisite: SPED 856 or permission of instructor. LEC.

SPED 859. Interagency Services for Transition to Adulthood. 3 Hours.
The purpose of this course is to provide an overview of interagency and community services and systems for adolescents and young adults with disabilities. Emphasis is placed on theory and practice related to interagency collaboration; systems change efforts in transition services; and state-of-art practices regarding supporting individuals with disabilities in community employment, living, socialization, community participation, and other areas of adult life. Prerequisite: SPED 856. LEC.

SPED 860. Education of Children and Youth with Disabilities II: _____. 3 Hours.
This course is designed to prepare students to implement specialized alternative strategies for individualized group instruction. Methods for developing and implementing overall treatment/educational programs, planning or selecting curriculum/service models for programs, and developing instructional materials are emphasized. Procedures for managing classroom staff and service resources, coordinating educational programs with families, other service personnel and program support staff, and monitoring overall program effectiveness are addressed. Prerequisite: SPED 760. LEC.

SPED 861. Blending Academics and Transition. 3 Hours.
The purpose of this course is to provide graduate students with research evidence of each of the components of universal design for learning within access to the general academic curriculum: multiple means of representation, expression, and engagement. Prerequisite: SPED 856. LEC.

SPED 862. Work-Based Learning. 3 Hours.
The purpose of this course is to provide graduate students with models and strategies to develop and coordinate meaningful work experiences for youth with disabilities. Emphasis is placed on practical strategies for engaging with community businesses, developing and customizing jobs and supporting youth in the workplace. Prerequisite: SPED 856. LEC.

SPED 863. Student Engagement in School and Community. 3 Hours.
The purpose of this course is to provide graduate students in special education and related areas who are specializing in secondary school/transition programs with an overview of models and issues pertaining to school and community engagement for secondary age youth. Prerequisite: SPED 856. LEC.

SPED 871. Advanced Practicum with Exceptional Children Needing an Autism Spectrum Curriculum. 3 Hours.
This is an advanced practicum experience for the graduate student teaching children and youth with autism spectrum disorders (ASD). The practicum is designed to provide intense, diverse and direct teaching experiences with children and youth who have learning and behavioral needs in the mild through moderate range and who have been identified with ASD including those who may have PDD-NOS, Asperger syndrome, autism and or high functioning autism. Prerequisite: SPED 760, SPED 785, SPED 743 and SPED 775. FLD.

SPED 874. Planning for Adult Outcomes: _____. 1-3 Hours.
The problems, trends, issues, and procedures used in planning life skills, occupational and vocational skills, and transition from school to adult living for persons with disabilities. Separate sections will be organized by topics pertaining to career/vocational development, assessment, and transition programs and services. These will include: (a) transitions from early childhood to adulthood, (B) application of assessment information, and (c) vocational preparation and employment. Prerequisite: SPED 725 (may be taken concurrently). LEC.

SPED 875. Practicum with Children and Youth with Disabilities: _____. 1-10 Hours.
This course is designed to provide intensive field work and direct teaching experiences with children and youth with disabilities in educational, residential, and clinical settings. Prerequisite: SPED 775. LEC.

SPED 879. Conferencing with Parents of Exceptional Children and Youth: _____. 3 Hours.
A course to develop knowledge and skills in the techniques of interviewing and conferencing, with special application to the professional, legal and ethical problems related to working with parents of exceptional children. Prerequisite: SPED 425 or SPED 725. LEC.

SPED 880. Coordination and Supervision of Services for Exceptional Children. 3 Hours.
An analysis of the role of the special education coordinator and supervisor. Particular attention will be given to: program development; planning, organizing, and delivering inservice training; personnel
recruitment, selection, and evaluation; program management; and program evaluation. Students will relate the topical content to their specific area of expertise in special education. Prerequisite: SPED 425 or SPED 725 and six additional semester hours in special education. LEC.

SPED 890. Interdisciplinary Programming for Children and Youth with Disabilities. 3 Hours.
This course is designed to provide students a survey of disciplines which contribute to care and treatment of students with disabilities. Emphasis on professional roles, team participation, case management, and reporting and follow up. Disciplines include medicine, education, audiology, psychology, speech pathology, occupational therapy, physical therapy, music therapy and social work. Prerequisite: SPED 425 or SPED 725. LEC.

SPED 896. Capstone Adaptive Program Seminar. 3 Hours.
This course is designed to be a culminating experience for Adaptive Program students who choose to complete their masters programs with a comprehensive masters examination instead of one of the other program options (i.e., project or thesis). Students will complete this course during the final semester of their programs. Participants will review current issues, evidence-based practices, home-school considerations, state and federal regulations, and Kansas standards regarding appropriate education for students with mild to moderate disabilities (i.e., Adaptive category designation). The course is a prerequisite for the departmental comprehensive examination in the Adaptive area. LEC.

SPED 897. Independent Study. 1-4 Hours.
Prerequisite: Consent of advisor and instructor. RSH.

SPED 898. Master’s Project. 1-4 Hours.
RSH.

SPED 899. Master’s Thesis. 1-6 Hours.
The.

SPED 910. Advanced Application of Behavioral Management Techniques to Exceptional Children and Youth. 3 Hours.
Theory and principles of behavioral analysis. Emphasis will be given to observation, measurement, recording, and visual display techniques. Other topics include maintenance and generalization of behavior change. Students will be provided experience in the design and carrying out of research studies related to exceptional children and youth using principles and methods of behavioral analysis. Prerequisite: SPED 425 and SPED 725. LEC.

SPED 915. Advanced Curriculum Development for Children and Youth with Disabilities. 3 Hours.
This course is designed to provide principles of development, needs assessment, evaluation and dissemination applied to curriculum products. Analysis of organizational and conceptual features of major curriculum development projects for students with disabilities are addressed; participants design curriculum procedures. Prerequisite: Twelve semester hours in special education and a general curriculum course. LEC.

SPED 920. Management of Instructional Resources for Exceptional Children and Youth. 3 Hours.
Designed for individuals with responsibilities for the operation of instructional resource centers and educational programs serving exceptional children and youth. Experiences relate to: selection, acquisition, circulation, and management of special education instructional media/materials and the delivery of inservice training specific to their skills. Prerequisite: Professional preparation and/or experience in the Education of Exceptional Children and Youth and CI 616, Introduction to Educational Communications. LEC.

SPED 925. Medical Aspects of Handicapping Conditions. 3 Hours.
The organization of this course follows the chronology of an individual's total development from genetic origin through fetal development, perinatal, infancy, childhood, and adolescence. Emphasis is given to etiology and implications of handicapping conditions on development. Attention is given to prevention, treatment, and habilitation or rehabilitation of various conditions. Prerequisite: SPED 725. LEC.

SPED 930. Praxis Seminar: Scholarship and Writing. 3 Hours.
Course assists first-year doctoral students in (a) developing a scholarly identity and technical skills in the areas of teaching, scholarship, and service, (b) developing a critical understanding of the scholarship informing special education practices and policies through course readings and seminar discussions, and (c) developing the skills to complete a comprehensive, critical review of a topic in the field of special education and disability. Prerequisite: Doctoral student status in Special Education. LEC.

SPED 932. Praxis Seminar: Scholarship of Teaching. 3 Hours.
Course assists doctoral students in learning (a) what is known about effective teacher education, (b) how that knowledge is translated into practice, and (c) what methodologies can be enlisted to conduct cutting-edge teacher education research. Prerequisite: Doctoral student status in Special Education. LEC.

SPED 936. Cross-Spec I: Conceptual Issues in Special Education. 3 Hours.
The focus of the seminar is current and historically-significant disability-related special education issues and problems (e.g., inclusive education, effective instruction, race and social class bias) that both intersect and implicate the various special education doctoral specializations. Because such problems tend to be intractable, the seminar is designed to build student capacity for conceptualizing and addressing them by exploring forms of disciplinary, interdisciplinary, and specialization scholarship and inquiry applicable to (re)framing and potentially resolving them. Prerequisite: Doctoral student status in Special Education. LEC.

SPED 949. Specialist Research. 1-4 Hours.
RSH.

SPED 950. Civic Professionalism. 3 Hours.
This course is concerned with the relationship between professions and society in a democracy, and specifically, with the ethics and practices associated with the professions of education, special education, and other disability-related fields. Models of professionalism are compared and advantages of civic professionalism for individuals with disabilities and their families, the professions, and society as a whole are explored. Lessons drawn from disagreements over questions such as the nature and social consequences of the professions are used to broaden understanding of what professionalism could and should be in a democracy. Prerequisite: Admission to doctoral program. LEC.

SPED 970. Problems of Exceptionality: ______. 3 Hours.
An extensive analysis of the literature and research pertinent to issues in a given disability. Separate sections are organized for various disabilities. Students may enroll in more than one section as a part of a graduate program. Prerequisite: Three courses in special education or permission of instructor. LEC.

SPED 971. Organization and Administration of Services for Children and Youth with Disabilities. 3 Hours.
This course is designed to prepare administrators and prospective administrators for organizing and administering educational programs for students with disabilities. Major topics include a review of current trends in special education, state and federal guidelines and regulations, legal and financing aspects of special education, program planning, and
SPED 972. Issues and Trends in Special Education I. 2 Hours.
This course is designed to assist first-year special education doctoral students organize and synthesize a conceptual and substantive map of the field of special education and introduce them to corresponding faculty research interests and resources. Emphasis is placed on the academic writing expectations and resources of the field, university, and department, and on building a cohort of students to address common issues and to provide a foundation for peer support throughout the doctoral program. Prerequisite: Admission to special education doctoral program or permission of instructor. LEC.

SPED 973. Issues and Trends in Special Education II. 2 Hours.
This capstone seminar is designed to assist advanced doctoral students synthesize and evaluate information on a broad range of current and historically significant special education issues and trends in preparation for comprehensive examinations and future professional roles. Substantively, its primary focus is issues and trends that affect the entire field or cut across several areas of study and practice. Its secondary focus is significant issues and trends that affect particular categorical or functional sub-areas of study and practice within the field. Prerequisite: Completion of nine doctoral courses in special education, including 4 of 6 departmental Core courses. LEC.

SPED 974. Issues and Trends: Students with Learning Disabilities. 3 Hours.
This doctoral level course will explore current issues related to characteristics, educational methods and curricula, and questions, problems, concerns and movements connected to the education of children and youth with learning disabilities, emotional/behavioral disorders and autism spectrum disorders. Prerequisite: Doctoral program admission or permission of instructor. LEC.

SPED 975. Advanced Practicum with Children and Youth with Disabilities: _____. 1-10 Hours.
Advanced development of conceptual and practical field-based skills. Prerequisite: SPED 775. FLD.

SPED 977. Learning Disabilities/Behavior Disorders Issues II. 3 Hours.
This course is designed to provide students an opportunity to engage in an extensive analysis of the literature and research pertinent to critical issues in the field of learning and behavioral exceptionality. Prerequisite: SPED 970 LD/BD Issues I; SPED 972 Trends and Issues in Special Education I. LEC.

SPED 980. Advanced Topics: _____. 1-3 Hours.
A special course of study to meet current needs of education professionals -- primarily for post-master's level students. LEC.

SPED 981. Changing Complex Systems. 3 Hours.
This course is designed to provide students with an overview of seminal leadership and systems change literature. Prerequisite: Admission to doctoral program. LEC.

SPED 982. Preparing Future Faculty. 3 Hours.
This course is designed to give students an introduction and overview of academic life and the roles and responsibilities of an academic career. Its primary purpose is to help develop a realistic perspective of the expectations of academic life and the competencies required for a successful start in an academic career. Organized around the broad themes of understanding the academy, faculty life and work, and academic career paths, course content addresses the roles and responsibilities of faculty life in different types of institutions and the issues faculty face as they pursue their academic careers. The course offers an opportunity for students to critically review their doctoral program in the context of preparing them for a successful start in an academic career and to explore options for academic career choices. Prerequisite: Doctoral program admission. LEC.

SPED 983. Proposal Development. 3 Hours.
This course is designed to teach a broad array of strategies associated with the development of successful proposals that will generate funds to support programmatic work. Among the topics covered in this course are sources of funding, strategies for conceptualizing and writing proposals, collaboration strategies, proposal peer-review process, and integrating proposal development activities into other professional responsibilities. Prerequisite: Admission to doctoral program and PRE 710. LEC.

SPED 984. School Reform and School Community Partnerships. 3 Hours.
This is an interprofessional course in public policy and school reform that is concerned with current policy and systems transformations in education and child/family services, including educational, social and health service systems and the movement toward school-linked service integration strategies and family partnerships, called the "community school" movement. Issues connected with comprehensive school reform including the role of special education and mental health in this process will be emphasized. Particular emphasis will be placed on urban, multicultural issues affecting community schools. Prerequisite: Doctoral program admission or permission of instructor. LEC.

SPED 985. Naturalistic Research. 3 Hours.
This course is designed to develop skills in naturalistic or constructivist research, while situating it theoretically within the broader framework of modern and postmodern social inquiry, and exploring its social, political and ethical implications. The course develops students' skills in using this form of interpretive qualitative research, provides a theoretical framework for selecting inquiry paradigms, compares and contrasts positivist and constructivist inquiry, and reviews social and political implications of constructivist inquiry. Prerequisite: Six hours of statistics, measurement, and/or large or small group research design. LEC.

SPED 986. Trends and Issues Associated with Online Instruction. 3 Hours.
The course examines the opportunities, challenges, cautions, and demands of web-based instruction in higher education. It explores the policy implications of web-based instruction, development of collaborative teaching skills utilizing telecommunications resources, and the design and technical aspects of online instruction. Particular attention is given to the implications of online instruction for accommodating needs presented by diverse learners through strategies such as universal designs. Prerequisite: Admission to doctoral program or permission of instructor. LEC.

SPED 990. Small Sample Empirical Research Methods. 3 Hours.
This course provides a detailed examination of research methods for advancing knowledge and validating hypothetically useful treatments in situations in which sufficient sample sizes to conduct formal experiments are lacking, the question of interest is better addressed by multiple observations of treatment effects over time, and/or the question is best addressed by taking a variety of observations of a single unit of interest. Specifically, two small sample research methods will be examined in depth with examples and practical application experience: interrupted time series design for small samples ("single case" design), and Yin's empirical case study method. Prerequisite: Doctoral program admission or permission of instructor. LEC.
SPED 991. Family Outcomes in Special Education. 3 Hours.
This course focuses on analyzing and synthesizing research literature focusing on intermediate outcomes (e.g., family-professional partnerships) and long-term outcomes (e.g., family quality of life) related to families of children, youth, and adults with disabilities. Key family theories are discussed and applied in the development and implementation of interventions that have potential to increase intermediate and long-term family outcomes. Prerequisite: Three courses in special education or permission of instructor. LEC.

SPED 992. Seminar in Early Childhood/Intervention. 3 Hours.
This seminar examines research to support evidence-based practices that currently exist in the areas of early intervention and early childhood special education. The primary objective is to learn how to read and critically analyze studies that form the evidence base for several early intervention and early childhood special education practices. Primary goals of the class include the development of skills for evaluating research studies in early intervention and early childhood special education, and increasing knowledge of evidence-based practices in the early intervention literature. Prerequisite: Three courses in special education or permission of instructor. LEC.

SPED 995. Field Experience in: ______. 1-5 Hours.
Supervised and directed experiences in selected educational settings. Instructors conduct regular observations and conference with students. Written summaries and evaluations of field experiences are prepared independently by the student, a representative of the cooperating agency, and the instructor. Open only to advanced students and field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours. FLD.

SPED 996. College Teaching Experience. 2 Hours.
This course is designed to prepare students for college teaching. Enrolled students shall engage in semester-long, planned, instruction that includes college classroom teaching under supervision. Planning shall be done with a member of the faculty who will supervise the experience. FLD.

SPED 997. Individual Study. 1-4 Hours.
Prerequisite: Prior graduate course work in the area of study and consent of instructor. RSH.

SPED 998. Seminar in: ______. 1-4 Hours.
LEC.

SPED 999. Doctoral Dissertation. 1-15 Hours.
THE.

Master of Arts in Curriculum and Instruction

Master of Arts in Curriculum and Instruction

Programs in Curriculum and Instruction prepare students to complete advanced degrees by addressing critical issues in learning, teaching, and curriculum, from local to global levels.

The Master of Arts candidate completes graduate courses both in education and in a content field (i.e., history, English, mathematics). This provides the candidates an opportunity to gain advanced knowledge in education as well as a content specific area. There are three options for completing the Master of Arts degree: thesis, project and examination. The thesis and project options each require a minimum of 30 graduate credit hours culminating in successful defense of a thesis or project. The examination option requires a minimum of 36 graduate credit hours culminating in successful completion of a comprehensive examination.

Students who select the thesis or project options must complete at least 20 of the credit hours in regular course work, as contrasted with independent study and similar enrollments. Students who select the examination option must complete at least 26 credit hours in regular course work, as contrasted with independent study and similar enrollments.

Graduate Admission to the School of Education

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees, as specified by the admitting departments, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a grade-point average of at least 3.0 on a 4.0 scale. Departments that offer provisional admission require a grade-point average of at least 2.5. Individual departments may require additional information and may have more stringent admission and retention requirements.

Some departments may offer special provisional admission categories to students who may not qualify under traditional admission criteria. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession. Exceptions to established policies must be sought individually by petition to the Graduate Division of the School of Education.

See Admission in the Graduate Studies (p. 2369) section of the online catalog for more information.

Each department in the School of Education sets its own application deadlines. Prospective graduate students should contact their departments for application deadlines.

Graduate Admission to the Department of Curriculum and Teaching

In addition to general requirements for admission to graduate study in the School of Education, master's degree programs in Curriculum and Instruction require completion of an appropriate undergraduate program and, in some instances, a teaching license. Materials describing all Curriculum and Instruction programs may be obtained from the department (http://ct.soe.ku.edu).

Deadlines for the master's application (domestic) are March 15 for summer or fall admission, July 1 for fall admission, and October 1 for spring admission. Deadlines for the master's application (international) are March 15 for summer or fall admission and October 1 for spring admission.

Admission to the Master of Arts in Curriculum and Instruction Program (Domestic Applicants)

The following materials must be submitted:

- A completed graduate application (http://www.graduate.ku.edu).
- 1 official transcript of all college records with at least a 3.0 grade-point average on a 4.0 scale.
- 3 letters of recommendation.
- A statement of career goals.
A vita or résumé.

Admission to the Master of Arts in Curriculum and Instruction Program (International Applicants)

The following materials must be submitted:

- A completed International Student online graduate application (http://www.graduate.ku.edu).
- 2 official transcripts of all undergraduate credit including degree conferral (1 in the original language and 1 in English translation) with at least a 3.0 grade-point average on a 4.0 scale.
- 3 letters of recommendation.
- A statement of career goals.
- A vita or résumé.

Please note: Meeting minimum admission standards does not guarantee admission to the program.

Once the graduate application has been submitted online, send any application materials that cannot be uploaded with the online application to the department:

The University of Kansas
Department of Curriculum and Teaching
Joseph R. Pearson Hall
1122 W. Campus Road, Room 321
Lawrence, KS 66045-3101

Contact us: ctdepartment@ku.edu

The Master of Arts (M.A.) in Curriculum and Instruction is available for individuals who hold the bachelor’s degree and seek to advance their knowledge and skills in their professional areas or areas of interest. A candidate for the Masters of Arts degree completes graduate courses both in education and in a content field (i.e., history, English, mathematics). This provides the candidates an opportunity to gain advanced knowledge in education as well as a content specific area.

There are three options for completing the M.A. degree: thesis, project and examination. The thesis and project options each require a minimum of 30 graduate credit hours culminating in successful defense of a thesis or project. The examination option requires a minimum of 36 graduate credit hours culminating in successful completion of a comprehensive examination.

The Curriculum and Instruction M.A. degree program is designed to produce graduates who possess a high level of knowledge of their subject area specialty and contemporary theories, procedures and research in curriculum and instruction. A student admitted to the M.A. degree program will work closely with her/his advisor to tailor a program plan using either the 30-hour Program Plan (http://ct.soe.ku.edu/sites/ct.soe.ku.edu/files/docs/academics/ct/C%26T%20M.A.%2030-hour%20Program%20Plan.pdf) or the 36-hour Program Plan (http://ct.soe.ku.edu/sites/ct.soe.ku.edu/files/docs/academics/ct/C%26T%20M.A.%2036-hour%20Program%20Plan.pdf).

Master of Science in Education in Curriculum and Instruction

Master of Science in Education in Curriculum and Instruction

Programs in Curriculum and Instruction prepare students to complete advanced degrees by addressing critical issues in learning, teaching, and curriculum, from local to global levels.

The Master of Science in Education candidate completes graduate courses in Curriculum and Instruction. This provides the candidates an opportunity to:

- Develop a thorough understanding of the relationship of content and content-specific pedagogy
- Demonstrate an in-depth understanding of the content that they plan to teach and provide multiple explanations and instructional strategies so that all students learn
- Apply the ability to critique research and theories related to pedagogy and learning
- Convey an in-depth knowledge of research-based instructional strategies and technologies that help all students learn based on their own applied research in the classroom.

There are three options for completing the Master of Science in Education degree: thesis, project and examination. The thesis and project options each require a minimum of 30 graduate credit hours culminating in successful defense of a thesis or project. The examination option with a minimum of 36 graduate credit hours culminating in successful completion of a comprehensive examination.

Students who select the thesis or project options must complete at least 20 of the credit hours in regular course work, as contrasted with independent study and similar enrollments. Students who select the examination option must complete at least 26 credit hours in regular course work, as contrasted with independent study and similar enrollments.

Graduate Admission to the School of Education

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees, as specified by the admitting
The following materials must be submitted:

Program (International Applicants)

Education in Curriculum and Instruction

Admission to the Master of Science in
Curriculum and Instruction

Deadlines for the master's application (international) are
spring admission.

summer or fall admission,

department  (http://ct.soe.ku.edu) .

all Curriculum and Instruction programs may be obtained from the
program and, in some instances, a teaching license. Materials describing
and Instruction require completion of an appropriate undergraduate
in the School of Education, master's degree programs in Curriculum
In addition to general requirements for admission to graduate study
Curriculum and Teaching

Graduate Admission to the Department of

Prospective graduate students should contact their
departments for application deadlines.

Graduate Admission to the Department of
Curriculum and Teaching

In addition to general requirements for admission to graduate study
in the School of Education, master's degree programs in Curriculum
and Instruction require completion of an appropriate undergraduate
program and, in some instances, a teaching license. Materials describing
all Curriculum and Instruction programs may be obtained from the
department (http://ct.soe.ku.edu).

Deadlines for the master's application (domestic) are March 15 for
summer or fall admission, July 1 for fall admission, and October 1 for
spring admission.

Deadlines for the master's application (international) are March 15 for
summer or fall admission and October 1 for spring admission.

Admission to the Master of Science in
Education in Curriculum and Instruction

Program (Domestic Applicants)

The following materials must be submitted:

• A completed graduate application (http://www.graduate.ku.edu).
• 1 official transcript of all college records with at least a 3.0 grade-point
  average on a 4.0 scale.
• 3 letters of recommendation.
• A statement of career goals.
• A vita or résumé.

Admission to the Master of Science in
Education in Curriculum and Instruction

Program (International Applicants)

The following materials must be submitted:

• A completed International Student online graduate application (http://
  www.graduate.ku.edu).
• 2 official transcripts of all undergraduate credit including degree
  conferral (1 in the original language and 1 in English translation) with
  at least a 3.0 grade-point average on a 4.0 scale.
• 3 letters of recommendation.

Please note: Meeting minimum admission standards does not guarantee
admission to the program.

Once the graduate application has been submitted online, send any
application materials that cannot be uploaded with the online application
to the department:

The University of Kansas
Department of Curriculum and Teaching
Joseph R. Pearson Hall
1122 W. Campus Road, Room 321
Lawrence, KS 66045-3101

Contact us: ctdepartment@ku.edu

Master of Science in Education in
Curriculum and Instruction

The Master of Science in Education (M.S.Ed.) in Curriculum and
Instruction is available for individuals who hold the bachelor's degree
and seek to advance their knowledge and skills in their professional
areas or areas of interest. There are three options for completing the
M.S.Ed. degree: thesis, project and examination. The thesis and project
options each require a minimum of 30 graduate credit hours culminating
in successful defense of a thesis or project. The examination option
requires a minimum of 36 graduate credit hours culminating in successful
completion of a comprehensive examination.

Areas of emphasis for advanced degrees may include Culturally
Responsive Pedagogy, Curriculum and Instruction, Economics Education,
Foreign Language Education, Gifted and Talented Education, Language
Arts/English Education, Literacy Education, Mathematics Education,
Science Education, Social Studies Education, or Teaching English to
Speakers of Other Languages (TESOL).

The Curriculum and Instruction M.S.Ed. degree program is designed to
produce graduates who possess expertise in contemporary theories,
procedures and research in curriculum and instruction, as well as in
educational foundations of curriculum and instruction. A student admitted
to the M.S.Ed. degree program will work closely with her/his advisor to
tailor a program plan using either the 30-hour Program Plan or the 36-hour Program Plan.

**Doctor of Education in Curriculum and Instruction**

**Introduction**

The Doctor of Education (Ed.D.), Curriculum and Instruction program prepares graduates for leadership positions working with teachers and other education professionals in a variety of settings that may include school districts, colleges and universities, state and federal education agencies, and educational companies. The Ed.D. program places an emphasis on preparing leaders who can translate theory and research into practice and to solve practical problems in an educational context. Graduates are prepared to be leaders in the profession by effectively fulfilling responsibilities in the areas of teaching, research, and service. The Ed.D. is a cohort program with required courses to help graduates achieve these goals; further, graduates work with an advisor and committee members to choose electives based on individual career goals.

**Graduate Admission to the School of Education**

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees, as specified by the admitting departments, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a grade-point average of at least 3.0 on a 4.0 scale. Departments that offer provisional admission require a grade-point average of at least 2.5. Individual departments may require additional information and may have more stringent admission and retention requirements.

Some departments may offer special provisional admission categories to students who may not qualify under traditional admission criteria. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession. Exceptions to established policies must be sought individually by petition to the Graduate Division of the School of Education.

See Admission in the Graduate Studies (p. 2369) section of the online catalog for more information.

Each department in the School of Education sets its own application deadlines. Prospective graduate students should contact their departments for application deadlines.

**Graduate Admission to the Department of Curriculum and Teaching**

In addition to general requirements for admission to graduate study in the School of Education, doctoral programs in Curriculum and Instruction require completion of appropriate undergraduate and graduate degree programs. Materials describing all Curriculum and Instruction programs may be obtained from the department (http://ct.soe.ku.edu).

Deadlines for doctoral application (domestic and international) are **March 15** for summer or fall admission and **October 1** for spring admission.

**Admission to the Doctor of Education, Curriculum and Instruction Program (Domestic Applicants)**

The following materials must be submitted:

- A completed online graduate application (http://www.graduate.ku.edu/application-process).
- 1 official transcript of all previous undergraduate and graduate credit. Doctoral applicants must have earned a Master's degree or equivalent with at least a 3.5 grade-point average on a 4.0 scale.
- Graduate Record Examination (GRE) general test scores (minimum scores of 153 on the Verbal, 144 on the Quantitative, and 4.0 on the General Analytical Writing sections).
- A statement of career goals addressing how this degree will help meet professional aspirations and areas of interest in curriculum and instruction.
- 3 letters of recommendation; the master's advisor is appropriate to include.
- Writing sample: an article, paper or other composition originated written by the applicant. An appropriate length is 8 to 10 pages.
- A vitae or resume.

**Admission to the Doctor of Education, Curriculum and Instruction Program (International Applicants)**

The following materials must be submitted:

- A completed International Student online graduate application (http://www.graduate.ku.edu/application-process).
- 2 official transcripts of all undergraduate and graduate credit including degree conferral (1 in the original language and 1 in English translation). Doctoral applicants must have earned a Master's degree or equivalent with at least a 3.5 grade-point average on a 4.0 scale.
- Graduate Record Examination (GRE) general test scores (minimum scores of 153 on the Verbal, 144 on the Quantitative, and 4.0 on the General Analytical Writing sections).
- A statement of career goals addressing how this degree will help meet professional aspirations and areas of interest in curriculum and instruction.
- 3 letters of recommendation; the master's advisor is appropriate to include.
- Writing sample: an article, paper or other composition originally written by the applicant. An appropriate length is 8 to 10 pages.
- A vitae or resume.
- A statement of account balance from the applicant's sponsor's bank. This statement must be on bank stationery. There must also be a letter of support from his/her sponsor if the bank statement is not in the applicant's name.
- For students whose first language is not English, official scores on the TOEFL of at least 92 total (IBT) with subscale scores of at least 23 in all areas must be submitted for consideration of admission to the Curriculum and Teaching Department. The IELTS official score is also accepted, with an overall score of at least 7.0, and no section score lower than 7.0. **The TOEFL or IELTS scores must have been achieved not more than two years prior to the semester of first enrollment.** TOEFL/IELTS scores are not required if the applicant provides official documentation of graduation with a baccalaureate degree (or higher) earned in residence from an accredited English-medium U.S. college or university or a college or university in the United Kingdom, Australia, New Zealand, Ireland, English-speaking province of Canada, or an English-speaking Caribbean country, with instruction conducted in English.
Doctor of Philosophy in Curriculum and Instruction

Introduction

The Doctor of Philosophy (Ph.D.), Curriculum and Instruction program prepares graduates for faculty positions at research or teaching universities and for positions as research scientists and post-doctoral fellows at universities or research centers. The Ph.D. program places an emphasis on preparing graduates whose primary interests are to engage in research and scholarship to advance the field of curriculum and instruction. Graduates are prepared to be leaders in the profession by effectively fulfilling responsibilities in the areas of research and scholarship, teaching, and service. Further, the Ph.D. may include a concentration discipline such as Culturally Responsive Pedagogy, Curriculum and Instruction, Economics Education, Foreign Language Education, Gifted and Talented Education, Language Arts/English Education, Literacy Education, Mathematics Education, Science Education, Social Studies Education, or Teachers of English to Speakers of Other Languages (TESOL). Doctoral work includes at least 36 credit hours in the major, additional hours in basic and applied research skills, and a dissertation involving original research in the student's specialization. Graduates work closely with an advisor and committee members to tailor a program based on their individual career goals.

Graduate Admission to the School of Education

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees, as specified by the admitting departments, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a grade-point average of at least 3.0 on a 4.0 scale. Departments that offer provisional admission require a grade-point average of at least 2.5. Individual departments may require additional information and may have more stringent admission and retention requirements.

Some departments may offer special provisional admission categories to students who may not qualify under traditional admission criteria. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession. Exceptions to established policies must be sought individually by petition to the Graduate Division of the School of Education.

See Admission in the Graduate Studies (p. 2369) section of the online catalog for more information.

Each department in the School of Education sets its own online application deadlines. Prospective graduate students should contact their departments for application deadlines.

Graduate Admission to the Department of Curriculum and Teaching

In addition to general requirements for admission to graduate study in the School of Education, doctoral programs in Curriculum and Instruction require completion of appropriate undergraduate and graduate degree programs. Materials describing all Curriculum and Instruction programs may be obtained from the department (http://ct.soe.ku.edu).
Deadlines for doctoral application (domestic and international) are **March 15** for summer or fall admission and **October 1** for spring admission.

**Admission to the Doctor of Philosophy, Curriculum and Instruction Program (Domestic Applicants)**

The following materials must be submitted:

- A completed online graduate application (http://www.graduate.ku.edu/application-process).
- 1 official transcript of all previous undergraduate and graduate credit. Doctoral applicants must have earned a Master’s degree or equivalent with at least a 3.5 grade-point average on a 4.0 scale.
- Graduate Record Examination (GRE) general test scores (minimum scores of 153 on the Verbal, 144 on the Quantitative, and 4.0 on the General Analytical Writing sections).
- A statement of career goals addressing how this degree will help meet professional aspirations and areas of interest in curriculum and instruction.
- 3 letters of recommendation; the master’s advisor is appropriate to include.
- Writing sample: an article, paper or other composition originally written by the applicant. An appropriate length is 8 to 10 pages.
- A vitae or resume.

**Admission to the Doctor of Education, Curriculum and Instruction Program (International Applicants)**

The following materials must be submitted:

- A completed International Student online graduate application (http://www.graduate.ku.edu/application-process).
- 2 official transcripts of all undergraduate and graduate credit including degree conferral (1 in the original language and 1 in English translation). Doctoral applicants must have earned a Master’s degree or equivalent with at least a 3.5 grade-point average on a 4.0 scale.
- Graduate Record Examination (GRE) general test scores (minimum scores of 153 on the Verbal, 144 on the Quantitative, and 4.0 on the General Analytical Writing sections).
- A statement of career goals addressing how this degree will help meet professional aspirations and areas of interest in curriculum and instruction.
- 3 letters of recommendation; the master’s advisor is appropriate to include.
- Writing sample: an article, paper or other composition originally written by the applicant. An appropriate length is 8 to 10 pages.
- A vitae or resume.

**Doctor of Philosophy, Curriculum and Instruction**

The Doctor of Philosophy (Ph.D.) in Curriculum and Instruction program prepares graduates for faculty positions at research or teaching universities and for positions as research scientists and post-doctoral fellows at universities or research centers.


Doctoral aspirants should develop a program plan at the first enrollment or promptly thereafter. The program plan must include:

- A minimum of 36 graduate credit hours in Curriculum and Instruction (18 of these hours must be at the 800 level or above and at least six of these hours must outside of the area of study)
- A minimum of 12 graduate credit hours in Research Skills (basic and applied research skills, including statistics, research design, and related requirements appropriate to the degree)
- Completion of EDUC 800, Education as a Field of Scholarship
- Completion of the Responsible Conduct of Research requirement
- Documentation of a supervised college teaching experience (completed during the student’s doctoral program)
- Successful completion of written and oral comprehensive exams
- A minimum of 18 credit hours of dissertation.

Although the courses and the research leading to the Ph.D. are necessarily specialized, the attainment of this degree should not be an isolated event in the enterprise of learning. A copy of this program should be filed with the Graduate Division of the School of Education.

**Note:** Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current Lawrence and Edwards Campus policies on Doctoral Research Skills and Responsible Scholarship (https://documents.ku.edu/policies/Graduate_Studies/
Research_Skills_and_Responsive_Scholarship.htm) are listed in the KU Policy Library.

Department of Educational Leadership and Policy Studies

Educational Leadership and Policy Studies Graduate Programs

The Department of Educational Leadership and Policy Studies (http://elps.soe.ku.edu) offers a broad range of graduate professional programs in educational leadership and policy. For complete program information, contact the department.

Graduate programs in educational leadership and policy studies promote the professional and intellectual development of practitioners, teachers, and scholars in this field at all levels of education. The department offers Master of Science in Education degrees in educational administration (K-12), social and cultural studies in education, higher education, and educational technology, as well as Ed.D. and Ph.D. degrees in educational leadership and policy studies with concentrations in educational administration, social and cultural studies in education, higher education, and policy studies, and a focus in educational technology.

Note: Prospective and current students should obtain the current degree requirements from the department.

Courses

ELPS 200. Making Connections Between Schools and Community. 3 Hours.
The course is designed to increase the students’ awareness of learning in the classroom and to familiarize them with the role of the school and the community. Institutions and resources that support children and families will be addressed through large and small group sessions and field experiences. Emphasis is given to the diverse nature of schools, communities, and their populations. In addition, the course will acclimate students with the School of Education programs, admissions procedures, and curriculum offerings. Successful completion of this course does not guarantee eventual admission of the School of Education’s Teacher Education Program. Prerequisite: Successful completion of CT 100. LEC.

ELPS 250. Education and Society. 3 Hours. AE41/AE51.
This course provides students with an introduction to key ideas and socio-historical forces that have shaped the contemporary educational system in the United States, drawing upon the disciplines of the historical, philosophical, and social foundations of education. The development of school and community relations will be a point of emphasis. LEC.

ELPS 301. Educational Technology in Elementary-Middle Education. 3 Hours.
The focus of this course is on developing integration strategies and acquiring computer skills for using instructional technology and educational software, digital media, and information technologies appropriate to elementary and middle school teaching environments. Students will gain expertise in (a) the selection of appropriate instructional technologies and digital media for use in the classroom; (b) production of technology-based instructional materials; and (c) the evaluation and validation of a variety of electronic information sources. Prerequisite: Admission to the Teacher Education Program. LEC.

ELPS 302. Educational Technology in Middle/Secondary Education. 3 Hours.
The focus of this course is on developing integration strategies and acquiring computer skills for using instructional technology and educational software, digital media, and information technologies appropriate to middle school and high school teaching environments. Students will gain expertise in (a) the selection of appropriate instructional technologies and digital media for use in the classroom; (b) production of technology-based instructional materials; and (c) the evaluation and validation of a variety of electronic information sources. Prerequisite: Admission to the Teacher Education Program. LEC.

ELPS 347. Politics and Governance of Public Schools. 3 Hours.
This course introduces students not pursuing K-12 teaching or administrative positions to the organizational and legal foundations of the American educational system. LEC.

ELPS 450. Foundations of Education. 3 Hours.
A historical approach to the major social and philosophical foundations of American education, with an emphasis on the relation of educational theory to classroom practice. LEC.

ELPS 490. Senior Internship I. 4 Hours.
Supervised field experience in an on-site educational setting that provides the student an opportunity to study and participate in the professional activities of a designated educational setting with emphasis on the planning, implementation, and evaluation of such activities. Regular conferences with faculty to evaluate student progress will be scheduled. Prerequisite: Admission to the non-certificate baccalaureate program. LEC.

ELPS 491. Senior Internship II. 4 Hours.
Supervised field experience in an on-site educational setting with increasing emphasis placed on an integration of formal learning and site experience. Regular conferences with faculty will be scheduled. Prerequisite: Admission to the non-certificate baccalaureate program. FLD.

ELPS 497. Independent Study in:. 1-2 Hours.
Only one enrollment permitted each semester. A maximum of four hours will apply toward the bachelor’s degree. Prerequisite: Recommendation of advisor and consent of instructor. IND.

ELPS 537. The Governance and Organization of Schools. 3 Hours.
The course provides the prospective teacher with an overview of the legal foundations of the American educational system including the ways schools and school districts are organized and run; the role of various levels of government and various governmental and educational officials in controlling education; the rights of students and teachers; the terms, conditions, and responsibilities of teacher employment. Prerequisite: Admission to the Teacher Education Program. LEC.

ELPS 540. Ethics in Education. 3 Hours.
This course examines practices and policies occurring in K-12 and postsecondary educational institutions through the lenses provided by ethics. During the semester, we will read, discuss, and write about ethics in education from both theoretical and practical perspectives. Prerequisite: Junior standing or higher. The course is suitable for advanced undergraduate and master’s degree seeking students. LEC.

ELPS 550. Childhood and Youth in America. 3 Hours.
A study of the changing role and character of childhood and youth as stages of life in the context of American educational and cultural history. LEC.
ELPS 598. Special Course:. 1-5 Hours.
A special course of study to meet current needs of education students, primarily for undergraduates. LEC.

ELPS 627. Growing Up in Urbanizing America. 3 Hours.
A study of the changing role and character of childhood and youth as stages of life in the context of American urban and social history, with particular attention to education and human development. Prerequisite: Junior standing or higher. LEC.

ELPS 652. Residential Staff Skill Enhancement and Administration. 2-3 Hours.
This special course of study in residential staff skill enhancement and administration is an exploration of concepts and skills necessary for becoming an effective paraprofessional staff member in a residential living unit. Each class session will include presentations and experiential learning on topics to develop or improve interpersonal skills and skill in dealing with special concerns. The course is required or recommended for all residence and scholarship hall staff and open to upperclass or graduate students interested in student personnel work. LEC.

ELPS 715. Understanding Research in Education. 3 Hours.
This course introduces the concepts and skills involved in understanding and analyzing research in education and related areas. The course provides an overview of basic, general knowledge of various research methodologies. Students should expect to study much of this material in greater depth through additional course work before being prepared to conduct independent research. However, this course should enhance their ability to locate, read, comprehend, and critically analyze research articles and reports. Topics in the course include quantitative and qualitative methods and designs, historical and descriptive research, and program evaluation. Prerequisite: Admission to graduate standing in the School of Education. LEC.

ELPS 720. Foundations of Educational Technology. 3 Hours.
This course provides a comprehensive overview of the historical and theoretical foundations of educational technology. The goal of this course is to provide students with a survey of the research literature and definitions of terminology central to the field. Special emphasis is on current and emerging learning science research and how it can be applied to the creation of technology supported learning environments. LEC.

ELPS 750. Principalship. 3 Hours.
An introduction to the role, responsibilities, expectations and major duties of elementary, middle, and high school building administrators. Students are presented typical problems faced by school administrators through simulations and role playing and are expected, through reflection and discussion, to develop viable solutions. LEC.

ELPS 751. Educational Finance. 3 Hours.
A description and analysis of national, state, and local strategies for the financial support of education, utilizing social, economic, legal, and political frameworks. Particular attention to the principles of revenue acquisition and distribution at the local and state level for public school operations, with analysis of how these principles apply to Kansas. Designed for the wide variety of educational practitioners regardless of organizational and degree levels. Prerequisite: Admission to graduate study. LEC.

ELPS 752. Education Law. 3 Hours.
A study of legal principles and issues affecting educational policy making and practice with emphasis on student and teacher rights, equity, and the administration of schools. Prerequisite: Admission to graduate study. LEC.

ELPS 753. Introduction to Personnel Administration in Education. 3 Hours.
An overview of the theory and practice of personnel administration. The course focuses on the processes of recruitment, selection, training and development, evaluation, compensation, equal employment opportunity, and labor relations. LEC.

ELPS 754. Analysis of Administrative Problems. 3 Hours.
An introduction to various methods of problem identification; strategies of information gathering; schemes for the analysis of qualitative and quantitative data; models of problem resolution and decision making; and communication methods appropriate for differing audiences. Students will build basic computer, library, decision and communication skills useful in future administrative practice and subsequent coursework. LEC.

ELPS 755. Human Resource Management. 3 Hours.
An overview of the theory and practice of the management, recruitment, selection, compensation, placement, and development of personnel in the school setting. LEC.

ELPS 757. Education in American Society. 3 Hours.
A study of the roles and goals of education in the United States, the interrelationships among schools and students, teachers, administrators, and parents, and the culture of schools. LEC.

ELPS 760. Integration of Educational Technology. 3 Hours.
This course focuses on strategies for integrating educational technology in K-12 schools, universities, government or industry. Topics include applying technology in: a) understanding basic technology operations b) planning and designing learning experiences, c) curriculum development, d) assessment and evaluation e) productivity and professional practices, and considering f) social, ethical, legal, and human issues. Students produce a comprehensive electronic portfolio that describes the theoretical perspectives that guide their technology integrations strategies and evidence that demonstrates their competencies. LEC.

ELPS 766. Social Media Technologies. 3 Hours.
This course provides students with an introduction to the history, theory, and uses of Social Media and Web 2.0 technologies. Social media technologies enable individuals to create, collaborate, and share information. This course will examine the affordances and constraints of social media and provide students with hands-on experience using multiple forms of social media technologies throughout the class. In this course students will be required to develop implementation strategies for the use of social media technologies in the context of organizational development and training. LEC.

ELPS 772. Philosophical Problems in Comparative Education. 3 Hours.
A study of significant philosophical problems encountered when comparing educational systems. Special emphasis on the implications of axiological analysis for educational theory and practice in different areas of the world. Relationships among the social sciences, philosophy, and the international or cross-cultural venture in education. The importance of systematic value-theory in comparative research and international education. LEC.

ELPS 773. School and Society in Comparative Education. 3 Hours.
Analysis of the role of social science in comparative education as perceived by different philosophies or schools of thought, such as Marxism, phenomenology, empiricism, pragmatism, and linguistic analysis. LEC.

ELPS 774. Modern Educational Theorists. 3 Hours.
An in-depth study of prominent European thinkers who have contributed to educational theory and practice (e.g., Rousseau, Pestalozzi, Herbert,
ELPS 777. Problems in Contemporary Educational Theory. 3 Hours.
Select explorations into such provocative and problematic trends in current educational theory as Marxism, behaviorism, phenomenology, existentialism, analytic philosophy, hedonism, nonverbal education, etc. Prerequisite: ELPS 770 or ELPS 771 is recommended. LEC.

ELPS 780. Introduction to Higher Education Administration. 3 Hours.
This course is designed for beginning master's degree students and for doctoral students who have had no previous administrative experience in college or university settings. Students will be introduced to the function and responsibilities of major administrative divisions of a college or university and to the major tasks of administration: planning, programming, budgeting, staffing, managing. An emphasis will be placed on current issues facing higher education and students will be introduced to the major journals of the field. As part of the course requirements, students will spend some time familiarizing themselves with one or more administrative offices on a college campus. Prerequisite: Admission to study in higher education at the graduate level. LEC.

ELPS 781. Student Affairs Administration in Higher Education. 3 Hours.
This course is designed to include the study of the history and development of student personnel services in higher education, the role and function of the student affairs administrator, contemporary issues and problems, and an understanding of the organization and role of student affairs administration within higher education settings. Prerequisite: Admission to the higher education program or permission of instructor. LEC.

ELPS 798. Special Course:. 1-5 Hours.
A special course of study to meet current needs of education professionals -- primarily for graduate students. LEC.

ELPS 810. Educational Media Development. 3 Hours.
Media surrounds today's learning environments. How can you effectively engage learners with multimedia, meaningful interactions, and motivational strategies? This course will take a hands-on practical approach to creating interactive educational multimedia products including, but not limited to, digital images, movies, podcast, Web publishing and educational games. Also, students will learn about the underlying learning theories of educational media development. LEC.

ELPS 811. Constructivist Learning Technologies. 3 Hours.
This course explores the design and use of new educational technologies to support constructivist learning. Throughout the course, students will (1) get hands-on experiences with emerging educational technologies, (2) examine how the underlying learning theories are reified into concrete learning environments, and (3) analyze how the affordances of new technologies (e.g., modeling and visualization) can facilitate the constructivist learning processes. This course is suitable for students who wish to develop greater knowledge about the ways emerging computer technologies can empower constructivist learning. Prerequisite: CT 770. LEC.

ELPS 812. Design of Educational Technology. 3 Hours.
This course introduces instructional design theory and production techniques for developing educational technology resources and systems. Students apply their understandings of design and education theories as they work in teams to develop real-world applications of educational technology for specific clients. LEC.

ELPS 814. Design and Development of Online Instruction. 3 Hours.
This course focuses on the design and development of online instruction for education, medicine, military, business, and industry. The major goal of the course is for students, working individually and/or in teams, to design and develop instruction and acquire the skills needed to facilitate both asynchronous and synchronous online learning. Special emphasis is on instructional systems design and the management of online learning solutions. LEC.

ELPS 816. Human Performance Technology. 3 Hours.
This course will provide an introduction to the field of human performance technology (HPT) and how it is applied to productivity and efficiency problems in the workplace. Performance improvement methods include data gathering, analysis, change management, implementation, measurement and the integration of technology. The goal of this course is to provide students with a survey of the research literature and definitions of terminology central to the field of performance improvement. Special emphasis is on current and emerging technology and how it can be applied to human performance improvement in education and the workplace. LEC.

ELPS 818. Game and Simulation Design. 3 Hours.
This course provides an introduction to the design and development of games, gamification, and simulations for learning and instruction. Emphasis is on the design and development of interactive learning environments for K-16 education and workforce training. Topics include a review of the essential elements of game design, rapid prototyping, the psychology of gaming, game technology, and research related to the use of games, gamification, and simulations in K-16 education and workforce training. LEC.

ELPS 820. Practicum in Educational Technology. 1-3 Hours.
Supervised practice in a media center in selection, classifying, designing, producing, and/or managing instructional materials. Prerequisite: CT 770 and CT 871. FLD.

ELPS 830. Foundations of Multicultural Education. 3 Hours.
This class provides students with an understanding multicultural education as an instructional concept, educational reform movement, and systemic process meant to ensure educational equity for all people, especially those who have been inadequately served and/or historically discriminated against because of their racial/ethnic or linguistic backgrounds, gender or sexual orientation, socio-economic status, and special needs. Students will examine different theoretical approaches that inform the practice of multicultural education and explore the contribution of various social sciences to the field. LEC.

ELPS 831. Sociology of Education. 3 Hours.
This course will provide an introduction to the sociology of education. This course is designed to fulfill the doctoral core requirement for social, historical and philosophical foundations of education. Specific topics will include: conflict over the purposes of education; how those purposes are-or are not-translated into actual classroom life; how educational systems have developed historically, how status, and more specifically race, class and gender relations, affect student experiences; and contemporary policy and reform movements. LEC.

ELPS 832. History of Educational Thought. 3 Hours.
An examination of the major ideas that have shaped practice in the schools. Emphasis is placed on assisting the student with the development of a coherent and consistent personal philosophy of education upon which administrative practice can be based. LEC.

ELPS 833. Social Context of Urban Education. 3 Hours.
This course examines education in urban communities through the foundational disciplines of history, philosophy, and the social sciences. Particular attention is given to ways in which the changing social and political contexts of American cities affect the educational process. LEC.
ELPS 834. History and Philosophy of Education. 3 Hours.  
A comprehensive study of influential persons and movements in the development of educational thought, Eastern and Western, from ancient times to the present. Emphasis on those ideas and historical roots which are relevant to contemporary issues in teaching and school administration. LEC.

ELPS 835. Philosophy of Education. 3 Hours.  
An analytic inquiry into basic philosophical positions and issues relevant to education. The difference between ELPS 770 and ELPS 771 is that the latter is topically arranged and does not necessarily follow a historical sequence; it normally proceeds by problems and schools of thought. LEC.

ELPS 837. History of Education and Culture in America. 3 Hours.  
A study of the relation between education and culture in America from colonial times to the present. American schools are considered in the wider context of cultural and social change. LEC.

ELPS 838. History of Childhood and Youth in America. 3 Hours.  
An exploration of changing attitudes toward children and youth, their subjective experience, their impact on adults, and the conditions that shaped their development. Special attention will be given to the relationship between the changing nature of childhood as a social and cultural category and the development of the education profession. LEC.

ELPS 839. Historical Inquiry in Education. 3 Hours.  
This course will provide an introduction to the methodology of historical research in education. This course is designed to fulfill the doctoral core requirement for research methods in education for students interested in doing this type of research. Specific topics will include: the historiography of education; working with primary and secondary documents; oral history as method and documentation, quantitative approaches to history; constructing historical narratives; the question of interpretation. LEC.

ELPS 850. Educational Facilities. 3 Hours.  
A study of the principles and processes of developing functional educational facilities. Special emphasis placed on the educational planning that precedes and provides the basis for architectural planning. Among topics considered are plant utilization analysis, enrollment projections, site and equipment needs, fiscal and legal constraints, environmental factors, and the development of educational specifications. Designed for both building and central office level administrators. Prerequisite: Admission to graduate study. LEC.

ELPS 851. Supervision of Student Teaching. 2 Hours.  
A study of the organization and functions of student-teaching programs. Emphasis on the development of effective interpersonal relationships among school administrators, cooperating teachers, university supervisors, and student teachers. Designed for both administrative and instructional personnel. Prerequisite: Admission to graduate study. LEC.

ELPS 852. School Resource Management. 3 Hours.  
An examination of the sources and uses of fiscal resources in education including underlying concepts from economic theory, the impact of values on fiscal policy, state funding formulas, and school budgeting and accounting practices. LEC.

ELPS 853. Staff Evaluation and Development. 3 Hours.  
An examination of current trends in personnel evaluation with a focus on clinical supervision and adult development. Students will participate in simulation exercises to develop skills in classroom observation, conferencing techniques, evaluation of teaching artifacts, and the construction of staff development plans. LEC.

ELPS 854. The Student in Society. 3 Hours.  
A study of children and youth with particular emphasis on demographic characteristics of the population served by schools and implications of those characteristics for schools and schooling. LEC.

ELPS 855. Teacher Evaluation. 3 Hours.  
Teacher Evaluation is based on clinical, empirical and theoretical information related to effective teacher evaluation behavior from the administrative perspective. It is intended to provide exposure to competencies essential to effective evaluation of teaching performance. Evaluation knowledge, skill and performance are acquired and developed through reading, discussion, active teaching of content related to teacher evaluation and practicing observation, recording and conferencing skills. A variety of approaches is considered, but behaviorally-anchored measurement of teaching behavior is emphasized. Opportunities and needs for improvement are identified with the assistance of video-taped diagnosis of conferencing behavior. Prerequisite: Two of the following: ELPS 750, ELPS 752, ELPS 753, or CT 840. LEC.

ELPS 856. Law and Special Education. 3 Hours.  
This course focuses on laws that apply to special education. The American legal system, particularly in respect to special education, the constitutional and statutory provisions of federal and state law and the judicial decisions interpreting those laws are reviewed. The course relates equal protection, procedural due process, and substantive due process doctrines to school practices affecting disabled children and examines the sex principles of P.L. 94-142 and similar principles in state legislation. This course is not the equivalent of or a substitute for ELPS 752. (Same as SPED 851.) Prerequisite: SPED 750 or permission of instructor. LEC.

ELPS 857. Disabled Citizens, Public Policy and Policy Analysis. 3 Hours.  
To train students to analyze public policy that affects disabled citizens, various models of analysis are brought to bear on federal policy (education, transportation, housing, institutionalization, protection and advocacy, medical assistance, employment, vocational rehabilitation and others). Not valid for core requirement in history and/or philosophy of education. (Same as SPED 852.) Prerequisite: SPED 851 or SPED 750 or permission of instructor. LEC.

ELPS 858. Professional Ethics, Public Values and Disabled Citizens. 3 Hours.  
This course addresses the issues that professionals (educators, physicians, allied health providers, attorneys and others) and families of disabled people face in the context of public values and attitudes and rules of law. The issues include, without limitation, education, treatment and non-treatment. Not valid for core requirement in history and/or philosophy of education. (Same as SPED 853.) Prerequisite: SPED 750, SPED 851, SPED 852 or permission of instructor. LEC.

ELPS 870. Philosophy of Education II. 3 Hours.  
An exploration of select areas in philosophy, such as emphasis on value-theory or epistemology or metaphysics, and their implications for educational theory. Normally a limited number of authors will also be selected for monographic treatment. Prerequisite: ELPS 770 or ELPS 771 is recommended. LEC.

ELPS 871. Introduction to Qualitative Research. 3 Hours.  
An introduction to the foundations of and techniques associated with qualitative research methods. Students will practice interview and participant observation skills and will analyze and interpret data. Additional topics include crafting qualitative research questions, ethics of fieldwork, and establishing trustworthiness of data. Common traditions of qualitative methods employed in education and other related fields will be introduced. LEC.
ELPS 880. The Community/Junior College. 3 Hours.
A survey of the history and development of the community/junior college. Particular emphasis will be given to the student, the faculty, the curricula, administration, and finance. The course is intended to provide a general understanding of the operation and concerns of today's community/junior college for the current or potential community/junior college staff member. LEC.

ELPS 881. Seminar in Leadership. 3 Hours.
The purpose of this seminar is to explore leadership in education, particularly higher education, from a variety of perspectives. Readings come from a variety of disciplinary perspectives, such as sociology, organizational behavior, and psychology. We consider various aspects of leadership and analyze the leader from a symbolic perspective, as a manager of meaning and critical change agent. We then challenge ourselves to deconstruct our leadership realities with the help of several critical perspectives as we prepare to examine who the leaders are as well as who they will, and need to be, in the educational organizations of tomorrow. LEC.

ELPS 882. Higher Education in the United States. 3 Hours.
The purpose of the course is to acquaint students in higher education, and students from other areas who intend to work in the post-secondary setting, with the history, philosophy and development of higher education in the United States. The course focuses on three periods: 1) the founding of Harvard to 1965; 2) dissent, disruption, and change, 1965-1979; and 3) the future and crucial issues, the 1980's. European higher education and its early influence on higher education in the United States is also examined. LEC.

ELPS 883. The College Student. 3 Hours.
The characteristics of college students; impact of college on student behavior, changing attitudes, values, beliefs, and the implications of recent research on traditional and new students for instructional and administrative practices. LEC.

ELPS 884. Research on College Students. 3 Hours.
Examination of the American college student from societal, development, research, and institutional perspectives and to review the policy implications of these findings for college and university administrators and faculty. Topics include research and theory concerning the college student experience, the diverse nature of the student body and its implications for institutional policy and practice, and formulation of individual philosophies and priorities applicable to working with college students. LEC.

ELPS 885. Assessment and Program Evaluation in Higher Education. 3 Hours.
Nature, objectives, and basic procedures of assessment and program evaluation as applied to the various aspects of higher education settings. In addition to basic procedures for evaluating programs, topics covered include accreditation, program review, benchmarking, student outcomes assessment, and evaluation of teaching in colleges and universities. Prerequisite: ELPS 715 or equivalent. LEC.

ELPS 886. Theory into Practice in Higher Education. 3 Hours.
This course is required as a final course for all master's students in higher education. It is designed to prepare students for professional life after graduation. Using a case study approach, students will examine the reality of practice in a variety of higher educational settings including relevant political and ethical factors. Prerequisite: Higher education students in last semester of master's coursework. LEC.

ELPS 893. Advanced Building Leadership Internship. 2 Hours.
Supervised and directed experiences to enhance the necessary leadership skills of a building/district leaders. Activities will include building/district level resource assessment, data analysis, professional development of teachers/principals (and district level professionals), and cooperative planning with teachers and administrators around responsibilities of curriculum, instruction, resource management and student achievement. Prerequisite: Completion (at the University of Kansas) of all certification program (MS/EdD) requirements for the Building/District Leadership Licenses. FLD.

ELPS 895. Internship. 1-5 Hours.
The on site development of the skills necessary to effectively function as a school building leader. Activities will be tailored to the needs of individual students in consultation with a university advisor and a field advisor. FLD.

ELPS 896. Seminar in:. 1-4 Hours.
LEC.

ELPS 897. Independent Study. 1-4 Hours.
Prerequisite: Consent of advisor and instructor. IND.

ELPS 898. Master's Project. 1-4 Hours.
RSH.

ELPS 899. Master's Thesis. 1-6 Hours.
THE.

ELPS 898. Research in Education Policy and Leadership. 3 Hours.
This course is an introduction to methods of inquiry in education policy and leadership studies. It is designed to help doctoral students explore possible research interests, formulate research questions, and to review a rich variety of approaches to inquiry in the field of education. Specific topics include: interview- and observation-driven studies, ethnography, feminist and narrative methods, legal and historical methods, questionnaire-driven studies, quantitative evaluation studies, and studies using administrative and large national data sources. LEC.

ELPS 850. Educational Policy Making and Reform. 3 Hours.
An analysis of patterns of influence, organizations, and governmental agencies which impact education at the community, state and national levels. Particular emphasis is placed on analysis of policy development process and the relationship of policy to administration. Recommended to students in educational administration and higher education. LEC.

ELPS 851. Supervision of Instruction. 3 Hours.
A study of the principles and techniques necessary for coordinating, monitoring, and improving the educational programs of elementary and secondary schools. LEC.

ELPS 852. School Finance: Policy and Practice. 3 Hours.
The objective of this course is to understand the financial systems and mechanisms used by states in the funding of elementary and secondary education in the United States. In simple language, we will be concerned with five basic issues: (1) Where the money comes from; (2) How it is redistributed; (3) How it is spent; (4) The relative effectiveness of spending decisions including selected international comparisons; and (5) How the previous four financial activities participate in a common financial ecology. The course provides an overview of theory and concepts central to the understanding of school finance with an emphasis on policy issues. It also examines the mechanics of school finance funding in light of state policies. LEC.

ELPS 853. District Human Resource Management. 3 Hours.
An in-depth study of theory and research in personnel administration. The focus will be on current literature dealing with empirical assessments of personnel theory and techniques. Specific concepts to be considered include the following: educator characteristics, job analysis and design, personnel recruitment, selection and evaluation techniques, staffing and development, and labor relations. Prerequisite: ELPS 753 or its equivalent. LEC.
ELPS 954. Sociology of Educational Organizations. 3 Hours.
This class is an overview of basic and advanced sociological and political theories of organization, with specific application to issues and problems in K-12 education. It is designed for graduate students and practicing educational leaders and administrators who intend to utilize research on organizations in their studies of the governance of schools, the sociology and politics of education, and education policy. The topics covered include the origins and nature of modern bureaucracy, formal structure and function, organizational control, transaction cost economics, population ecology, resource dependence, the new institutionalism, organizational effectiveness and legitimacy, organizational culture, power and politics, and change.
LEC.

ELPS 955. District Business Management. 3 Hours.
This course emphasizes skills for effective and efficient business and financial management of school districts in a Kansas or Missouri context. Basic topics include: Short range and long range financial planning, analysis of financial statements, budget preparation, fund accounting and financial reporting, contracting of services including transportation and food services, staff salaries and benefits and insurance. The course also includes a number of strategic methods for institutional planning including: Cost Benefit Analysis, Cost Effectiveness Analysis, and enrollment, revenue and expenditure forecasting techniques. Prerequisite: ELPS 952. LEC.

ELPS 956. District Leadership. 3 Hours.
The focus of the course is the role of the public school district superintendent. Organized study will include assigned readings, lectures, guest speakers, discussion, and the completion of a study project. The course will include consideration of such topics as boardmanship, community relations, district leadership, professional accountability, district maintenance and operations, professional employment and relationships with other agencies. The course is designed to serve the needs of those graduate students pursuing advanced study with the intention of completing requirements for district certification. Some students will also find the field appealing as an area for dissertation research. Prerequisite: Doctoral status in education administration or permission of instructor. LEC.

ELPS 957. Educational Policy, Ethics and Law. 3 Hours.
Course focuses on use of legal and moral reasoning in analysis of educational policy issues. Specific topics will vary depending on interests of instructor and students and current controversy. Examples of possible topics to be included: school desegregation, teacher collective bargaining, separation of church and school, equal educational opportunity. Prerequisite: ELPS 752, equivalent, or consent of instructor. LEC.

ELPS 958. American Educational Reform Movements: Past and Present. 3 Hours.
An examination of the origin, nature, and consequences of educational reform in the United States. The primary goal is to attain a balanced evaluation of current educational reform. LEC.

ELPS 959. Organization and Administration of Services for Exceptional Children. 3 Hours.
To aid administrators and prospective administrators responsible for organizing and administering programs of education for exceptional children, state and federal guidelines and regulations, legal aspects and financing of special education, planning a program, administering special services. (Same as SPED 971.) Prerequisite: Nine hours of Education including educational psychology and SPED 725. LEC.

ELPS 960. Specialist Project. 1-4 Hours.
RSH.

ELPS 969. Dissertation Seminar. 3 Hours.
This seminar is designed to facilitate proposal development for doctoral-level research in educational leadership and policy studies. The objective is to help students select and refine a topic, critically analyze existing research, set forth a theoretical framework, and design a research methodology suitable for your topic. LEC.

ELPS 970. Theory and Research in Administration. 3 Hours.
A survey of the theoretical and empirical literature in educational administration and the methods used to investigate these content areas. Major emphasis is devoted to developing research skills applicable in practice and to the identification of possible generic topics suitable for future dissertation work. LEC.

ELPS 971. Comparative Education. 2 Hours.
A factual, descriptive, and analytical study of national systems of formal education, or schooling, as exemplified in contemporary educational establishments. Organizational and administrative policies and teaching practices, with emphasis on Germany, France, England, U.S.S.R., People's Republic of China and Japan. Other nations may be examined on an individual project basis. The difference between ELPS 971 and ELPS 772 is the philosophical emphasis of the latter. LEC.

ELPS 972. Educational Problems in Latin America. 3 Hours.
Designed to meet the needs of students majoring in Latin American studies or interested in the area. Development of an awareness of the concept of cross-cultural confluence with Latin America as it relates to education. Survey of the main problems confronted by Latin American educational systems and examination of the difficulties experienced by North American educators when confronted with such problems. LEC.

ELPS 975. Education, Technology and Social Change. 3 Hours.
This interdisciplinary course provides an opportunity to read, reflect upon, and discuss ideas drawn from the emerging field of Science and Technology Studies (STS) in connection with education. Its focus is the interrelationships between technology, society, and education (defined broadly to include non-school and adult learning settings). It explores how knowledge, expertise, and authority are constructed within and across social and cultural groups, with particular attention social and economic inequality. It also considers the relationship between emerging technologies, educational experiences and the nature of "the self" in society, among other issues. Prerequisite: Admission to ELPS doctoral program, or permission of instructor. LEC.

ELPS 980. Postsecondary Finance. 3 Hours.
This course is designed for advanced doctoral students in higher education, particularly those who will be preparing unit budgets or budget presentations and those who make and implement fiscal policy (e.g., financial aid offers). The course material covers different types of college and university budgeting -- incremental, zero-based and formula -- and their impact on university revenues; statewide coordination and its impact on programs, program duplication and funding; retrenchment and quality issues; the legislative role in budget preparation; unified and comparative management systems (e.g., WICHE and NCHEMS); and the impact of federal contracting and student aid policies. LEC.

ELPS 981. Higher Education Law. 3 Hours.
An overview of the developing law of higher education, with emphasis on and analysis of employer-employee relationships, student-faculty/adadministration relationships, and the impact of federal and state regulation on these relationships. LEC.

ELPS 982. Faculty in Higher Education. 3 Hours.
This course considers the role and circumstances of faculty in higher education including variations among different types of institutions. Topics include the history and demographics of the professoriate, the academic
work environment and labor market, the role of faculty in institutional governance and policy making, and the social and political context of academia. LEC.

**ELPS 983. Curriculum Innovation in Higher Education.** 3 Hours.
A study of contemporary post-secondary curriculum with particular emphasis on the nature of curriculum, the organization and structure of academic programs, the nature of change in academic communities and exemplary innovative institutions. LEC.

**ELPS 984. Teacher Education in the United States.** 2 Hours.
A study of the development, issues, and programs for the preparation of teachers. Open to all regular graduate students. LEC.

**ELPS 985. Evaluations of Programs in Higher Education.** 2 Hours.
Nature, objectives, and basic procedures of evaluation as applied to the various aspects of higher education. Open to all regular graduate students. LEC.

**ELPS 986. The Governance and Administration of Higher Education.** 3 Hours.
A theory-based course aimed at providing an understanding of the governance and administration of academic institutions -- particularly universities. Emphasis is directed toward an analysis of decision-making in these complex organizations. LEC.

**ELPS 993. Advanced District Leadership Internship.** 2 Hours.
Supervised and directed experiences to enhance the necessary leadership skills of a building/district leaders. Activities will include building/district level resource assessment, data analysis, professional development of teachers/principals (and district level professionals), and cooperative planning with teachers and administrators around responsibilities of curriculum, instruction, resource management and student achievement. Prerequisite: Completion (at the University of Kansas) of all certification program (MS/EdD) requirements for the Building/District Leadership Licenses. FLD.

**ELPS 994. Advanced Topics.** 1-3 Hours.
A special course of study to meet current needs of education professionals -- primarily for post-master's level students. LEC.

**ELPS 995. Field Experience.** In: 1-5 Hours.
Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experience will be prepared independently by the student, a representative of the cooperating agencies, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours. FLD.

**ELPS 996. College Teaching Experience in: **______. 2 Hours.
To meet the college teaching experience requirement for doctoral programs, a student shall engage in a semester-long, planned, instructional activity that shall include college classroom teaching under supervision. Planning shall be done with the advisor and/or the member of the faculty who will supervise the experience. The activity shall be done under the supervision of a member of the University of Kansas faculty or by an individual or individuals designated by the candidate’s committee. FLD.

**ELPS 997. Individual Study.** 1-4 Hours.
Prerequisite: Prior graduate course work in the area of study and consent of instructor. RSH.

**ELPS 998. Seminar in: **______. 1-4 Hours.
LEC.

**ELPS 999. Doctoral Dissertation.** 1-15 Hours.
THE.

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### Master of Science in Education in Educational Leadership and Policy Studies

#### M.S.E. Degree Programs

The master’s program in educational administration prepares graduates for positions of public school leadership and licensure at the building level. The master’s program in higher education prepares graduates for entry-level positions in college and university settings. The master’s program in social and cultural studies in education is for school professionals and others who wish to study the history, philosophy, and sociology of education. Graduates of the master’s program in educational technology typically assume positions in K-12 schools, higher education, government, and industry as leaders in integrating, designing, and/or administrating educational technology.

#### Graduate Admission to the School of Education

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees, as specified by the admitting departments, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a grade-point average of at least 3.0 on a 4.0 scale. Departments that offer provisional admission require a grade-point average of at least 2.5. Individual departments may require additional information and may have more stringent admission and retention requirements.

Some departments may offer special provisional admission categories to students who may not qualify under traditional admission criteria. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession. Exceptions to established policies must be sought individually by petition to the Graduate Division of the School of Education.

See Admission in the Graduate Studies (p. 2369) section of the online catalog for more information.

Each department in the School of Education sets its own application deadlines. Prospective graduate students should contact their departments for application deadlines.

#### Graduate Admission

Applicants for all programs must submit the following materials:

1. Graduate application (http://www.graduate.ku.edu).
2. 1 official transcript from each degree-granting collegiate institution attended.
3. Original Graduate Record Examination general test scores for all doctoral applicants (Ed.D. and Ph.D.). The GRE is not required for master’s applicants in educational administration, higher education, social and cultural studies in education, or educational technology.
4. Statement of purpose/relevance of degree to career aspirations.
5. 3 letters of recommendation evaluating the applicant’s capacity for rigorous graduate study and qualifications for leadership positions in education and related fields.
6. A vita or resume.
Individual program concentrations may require additional application materials. Please consult the appropriate program advisor. The following application deadlines apply:

### Educational Administration
- **Summer**
  - Master’s and doctoral applicants
  - April 1

### Higher Education
- **Fall**
  - Master’s applicants seeking internships
  - Jan. 11
  - Master’s applicants seeking Housing internships only or already employed in higher education
  - Mar. 6
- **Fall**
  - Doctoral applicants
  - July 1
- **Spring**
  - Doctoral applicants
  - Nov. 1
- **Summer**
  - Doctoral applicants
  - Mar. 1

### Social and Cultural Studies in Education
- **Fall**
  - Master’s and doctoral applicants
  - July 1
- **Spring**
  - Master’s and doctoral applicants
  - Nov. 1
- **Summer**
  - Master’s and doctoral applicants
  - Mar. 1

### Educational Technology
- **Fall**
  - Master’s and doctoral applicants
  - June 1
- **Spring**
  - Master’s and doctoral applicants
  - Nov. 1
- **Summer**
  - Master’s and doctoral applicants
  - Apr. 1

### Policy Studies
- **Fall**
  - Doctoral applicants
  - July 1
- **Spring**
  - Doctoral applicants
  - Nov. 1
- **Summer**
  - Doctoral applicants
  - Mar. 1

Submit your graduate application online (http://www.graduate.ku.edu). Supporting materials, such as the résumé, statement of purpose, writing sample, and letters of reference may be uploaded to the application. Original transcripts from degree-granting institutions and official test scores should be sent directly to the department:

The University of Kansas
Department of Educational Leadership and Policy Studies
Joseph R. Pearson Hall
1122 W. Campus Road, Room 421
Lawrence, KS 66045-3101

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**Educational Administration**

This program is offered in a blended format and in an online format.

**Blended Format (Technology, Course of Instruction)**

The Master of Science in Educational Administration program is designed to prepare experienced teachers for leadership roles at the building level. The program stresses fundamental knowledge degrees in educational leadership and educational policy development necessary for effective leadership. It consists of a set of integrated courses Graduate programs in educational leadership and experiences that provide opportunities for participants to extend their knowledge of pedagogy policy studies promote the professional and leadership, to enlarge their understanding of schooling, and to develop an appreciation of the political, economic and social forces that influence the decisions of educational leaders.

**Program Format**

The program is designed for part-time students who currently hold teaching or other positions such as instructional coaches in the schools. Students enter the program as a cohort group and attend six consecutive semesters over a two-year period beginning in June. Two courses are scheduled in 16-week formats during each fall and spring semester. In the summer, courses are scheduled into two four-week blocks. Course work in each term is sequenced to build upon the skills and knowledge acquired in the previous terms.

**Blended Format**

The blended online/face-to-face class sessions are scheduled as follows:

- All summer courses (one in June and one in July) are blended, meeting face-to-face two or three sessions per course. These face-to-face class sessions meet as a cohort on the scheduled day, 10:00 a.m. to 2:00 p.m. with students responsible for their own lunch. All other coursework is online.
- All fall and spring semester courses are blended, meeting face-to-face the first and last Saturdays of the semester, with additional face-to-face meetings every four to six weeks for a total of only four face-to-face meetings per course per semester. Each of these face-to-face sessions are held on the same Saturday, with the first class meeting from 9:00 a.m. to Noon, followed by the second class meeting beginning at 1:00 p.m. and ending by 4:00 p.m. All other coursework is online.
- The online portion of each course will be completed at the student’s convenience within timeline requirements as determined by the instructor.
- The final comprehensive exams will be held during early April of year two of the program, face-to-face, 8:00 a.m. to 4:00 p.m. on the Lawrence campus.

**Technical Requirements**

- Macintosh or Windows PC
- Internet access (broadband)
- Web browser
- MS Office (i.e., Word, Excel, PowerPoint)
- Adobe Acrobat
- Video software (e.g., Media Player, QuickTime)
Course of Instruction

The M.S.E. in Educational Administration consists of a 36-hour block of course work. The course work is sequenced as described below, and builds upon itself as the student progresses through the program. Students take a comprehensive exam in the spring of the second year of the program that covers core coursework within the program.

The sequence of courses follows:
(Sequence subject to change)

Year 1

<table>
<thead>
<tr>
<th>Summer</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELPS 750 (June)</td>
<td>3 EPSY 715</td>
<td>3 ELPS 752</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 798 (Data-Driven Leadership (July))</td>
<td>1-5 ELPS 757</td>
<td>3 ELPS 755</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4-8</strong></td>
<td><strong>6</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

Year 2

<table>
<thead>
<tr>
<th>Summer</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELPS 852 (June)</td>
<td>3 C&amp;T 802</td>
<td>3 C&amp;T 806</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 854 (July)</td>
<td>3 ELPS 853</td>
<td>3 ELPS 895</td>
<td>1-5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
<td><strong>6</strong></td>
<td><strong>4-8</strong></td>
</tr>
</tbody>
</table>

Total Hours: 36

NOTE: EPSY = Educational Psychology, C&T = Curriculum & Teaching

Online Format

This flexible program is ideal for experienced K-12 educators who want the skills and knowledge needed to transition to leadership roles such as principals, department heads or directors.

There are two tracks for this program:

Master’s: Building Leadership Track* includes an internship for students who intend to acquire a license as a principal or other building leader, either immediately following the program or at some point in the future.

Master’s: Non-Licensure Track** substitutes coursework for the internship requirement with the expectation that participants want to earn their Master’s and gain knowledge about leadership, but are not pursuing a license.

ADMISSION REQUIREMENTS

To be considered for admission, prospective students must have completed a Bachelor’s degree with a GPA greater than 3.0. (Applicants with an Undergraduate GPA below 3.0 should contact an admissions advisor for information about provisional admissions.)

To apply to the online Master’s in Educational Administration, the first step is to complete the online application form. Prior to starting the form we recommend that you review our admissions guide.

WHAT YOU WILL LEARN

This program stresses the fundamental knowledge and policy development skills necessary for an administrator. Improve your knowledge of pedagogy and leadership, expand your understanding of schooling and develop an appreciation of the political, economic and social forces that influence the decisions of educational leaders.

COURSES INCLUDED IN THIS PROGRAM

- ELPS 750 – The Principalship
- ELPS 798 – Data-Driven Leadership
- EPSY 715 – Understanding Research in Education
- ELPS 757 – Education in American Society
- ELPS 752 – Education Law
- ELPS 755 – Human Resource Management
- ELPS 852 – School Resource Management
- ELPS 854 – Students in Society
- SPED XXX – Special Education Policy, Practice and Politics
- ELPS 853 – Staff Evaluation and Development
- C&T 806 – Instructional Strategies and Models
- ELPS 895 – Internship

*For Non-Licensure Track, the internship requirement is replaced by Differentiating Curriculum & Instruction (C&T803)

Please note: Course list and sequence is subject to change.

Higher Education Administration

The M.S.E. in Higher Education Administration consists of a set of integrated courses and experiences that provide an opportunity for participants to extend their knowledge of the histories, clienteles, and administrative functions of colleges and universities, and to gain relevant experience in higher education administration. The program consists of 36 hours of course work. Courses are scheduled in 16-week formats during the fall and spring semesters, usually scheduled after 4:30 p.m. The summer session classes vary in time and format. The course work provides a substantive knowledge base in higher education and student affairs administration. Students must hold an assistantship (http://elps.soe.ku.edu/academics/highered/mse/requirements/assistantships) or a full-time job in a related area while completing coursework. For the culminating activity, most students take a comprehensive examination. Completing a master’s project is optional (students choosing this option must take an additional research class in place of an elective). A sample sequence of courses is listed below:

Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELPS 780</td>
<td>3 ELPS 781</td>
<td>3 Elective</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 883</td>
<td>3 ELPS 882</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3 EPSY 715</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>9</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

Year 2

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELPS 885</td>
<td>3 ELPS 886</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 884</td>
<td>3 Elective</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

Total Hours: 36
Regularly offered electives include the following:

- Diversity Issues in Higher Education,
- Critical Readings in Higher Education,
- Faculty Issues in Higher Education,
- Postsecondary Finance
- Higher Education Law,
- The Community and Junior College,
- For-Credit Internship in Higher Education (http://elps.soe.ku.edu/academics/highered/mse/forcreditinternship),
- or any other graduate level course that the student and his/her advisor deem relevant (i.e., a course in counseling psychology).

**Social and Cultural Studies in Education**

The master’s in Social and Cultural Studies in Education is a 30 or 36 credit-hour degree.

1. Students in the SCSE Master’s Program can choose between two courses of study: 1) a thesis (or project) option that requires a total of 30 graduate credit hours; or a non-thesis option that requires a total of 36 graduate credit hours.

2. Students take a major concentration of courses related to the history, philosophy and sociology of education, with the advice of a faculty advisor and an advisory committee. Such courses should offer an opportunity for students to focus on a variety of theoretical and research-based questions. A minimum of 10 hours of coursework is required in the major concentration for the thesis option, and 12 hours in the non-thesis option.

3. Other aspects of the program are flexible. A minimum of 6 credit hours must be taken outside of the ELPS Department, although students typically take more than this. In particular students are urged to take coursework outside of the school of education, in conjunction with the principal SCSE field (history, philosophy, sociology, anthropology, political science or economics) that they are interested in. A course in educational research (EPSY 715) is also required. Each student in the non-thesis/project option must pass a comprehensive examination at the end of coursework, supervised by the student’s committee.

4. A typical master’s program in Social and Cultural Studies in Education thus will entail approximately 8 graduate courses, apart from thesis or project work (or additional coursework in the non-thesis option). Depending on the configuration of credit hours in the coursework and the student's prior record (up to 6 hours of appropriate graduate coursework may be transferred). Upon successful completion of coursework in the thesis (or project) option, focused thesis or project work begins.

5. For students choosing the thesis/project option, School of Education and Graduate Studies rules regarding the master’s thesis or project, an advisory committee, preparation of the thesis or project, and a defense are observed in the Social and Cultural Studies in Education program. The student’s thesis or project committee will include the major advisor and at least two other faculty members, with one member usually representing the non-ELPS coursework.

- **Summary of principal program elements:**
- Social and Cultural Studies in Education Coursework—At least 10 credit hours (typically 12 hours or 4 courses)
- Additional Coursework—typically at least 9 credit hours (3 courses, at least one of which is outside of ELPS)
- Education Research Methods Coursework—3 credit hours (EPSY 715 is required of all master’s students and can count as one of the courses outside of ELPS)
- Thesis or project research—6 (or 4 for a project) credit hours (for those selecting the thesis/project option)
- Thesis/project Defense, or comprehensive exam for non-thesis option.

**Educational Technology**

The Master of Science in Educational Technology program consists of 36 hours of coursework, a practicum, an exam and the production of a portfolio that reflects the student’s competencies. The program addresses the needs of professional specialties to foster leadership in the integration, administration and design of educational technology. It is intended for those who are currently working in areas related to corporate training, human resource management, government and education.

Along with the 27 credit hours of required courses, the student will work closely with their advisor to identify their interest and career goals related to their specialty area in selecting the required 9 hours of elective courses.

The Masters of Science in Educational Technology degree is offered both on the KU Edwards Campus in Overland Park, KS and the KU Lawrence Campus. Students are encouraged to work closely with their academic advisor on their campus to design their program.

**MSE in Educational Administration (online format)**

This flexible program is for experienced K-12 educators who want the skills and knowledge needed to transition to leadership roles such as principals, department heads or directors.

There are two tracks for this program:

**Master’s: Building Leadership Track** includes an internship for students who intend to acquire a license as a principal or other building leader, either immediately following the program or at some point in the future.

**Master’s: Non-Licensure Track** substitutes coursework for the internship requirement with the expectation that participants want to earn their Master’s and gain knowledge about leadership, but are not pursuing a license.

**ADMISSION REQUIREMENTS**

To be considered for admission, prospective students must have completed a Bachelor’s degree with a GPA greater than 3.0. (Applicants with an Undergraduate GPA below 3.0 should contact an admissions advisor for information about provisional admissions.)

To apply to the online Master’s in Educational Administration, the first step is to complete the online application form. Prior to starting the form we recommend that you review our admissions guide.

**WHAT YOU WILL LEARN**

This program stresses the fundamental knowledge and policy development skills necessary for an administrator. Improve your knowledge of pedagogy and leadership, expand your understanding of schooling and develop an appreciation of the political, economic and social forces that influence the decisions of educational leaders.
COURSES INCLUDED IN THIS PROGRAM

- ELPS 750 – The Principalship
- ELPS 798 – Data-Driven Leadership
- EPSY 715 – Understanding Research in Education
- ELPS 757 – Education in American Society
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- C&T 806 – Instructional Strategies and Models
- ELPS 895 – Internship

*For Non-Licensure Track, the internship requirement is replaced by Differentiating Curriculum & Instruction (C&T803)

Please note: Course list and sequence is subject to change.

Doctor of Education in Educational Leadership and Policy Studies

Educational Leadership and Policy Studies Graduate Programs

The Department of Educational Leadership and Policy Studies (http://elps.soe.ku.edu) offers a broad range of graduate professional programs in educational leadership and policy. For complete program information, contact the department.

Graduate programs in educational leadership and policy studies promote the professional and intellectual development of practitioners, teachers, and scholars in this field at all levels of education. The department offers Master of Science in Education degrees in educational administration (K-12), social and cultural studies in education, higher education, and educational technology, as well as Ed.D. and Ph.D. degrees in educational leadership and policy studies with concentrations in educational administration, social and cultural studies in education, higher education, policy studies, and a focus in educational technology.

Note: Prospective and current students should obtain the current degree requirements from the department.

Graduate Admission to the School of Education

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees, as specified by the admitting departments, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a grade-point average of at least 3.0 on a 4.0 scale. Departments that offer provisional admission require a grade-point average of at least 2.5. Individual departments may require additional information and may have more stringent admission and retention requirements.

Some departments may offer special provisional admission categories to students who may not qualify under traditional admission criteria. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession. Exceptions to established policies must be sought individually by petition to the Graduate Division of the School of Education.

See Admission in the Graduate Studies (p. 2369) section of the online catalog for more information.

Each department in the School of Education sets its own application deadlines. Prospective graduate students should contact their departments for application deadlines.

Graduate Admission

Applicants for all programs must submit the following materials:

1. Graduate application (http://www.graduate.ku.edu).
2. 1 official transcript from each degree-granting collegiate institution attended.
3. Original Graduate Record Examination general test scores for all doctoral applicants (Ed.D. and Ph.D.). The GRE is not required for master’s applicants in educational administration, higher education, social and cultural studies in education, or educational technology.
4. Statement of purpose/relevance of degree to career aspirations.
5. 3 letters of recommendation evaluating the applicant’s capacity for rigorous graduate study and qualifications for leadership positions in education and related fields.
6. A vita or resume.

Individual program concentrations may require additional application materials. Please consult the appropriate program advisor. The following application deadlines apply:

Educational Administration

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<tr>
<th>Summer</th>
<th>Master’s and doctoral applicants</th>
<th>April 1</th>
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| Higher Education

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<td>Doctoral applicants</td>
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</tr>
<tr>
<td>Summer</td>
<td>Doctoral applicants</td>
<td>Mar. 1</td>
</tr>
</tbody>
</table>

Social and Cultural Studies in Education

<table>
<thead>
<tr>
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<th>Master’s and doctoral applicants</th>
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</tr>
</thead>
<tbody>
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</tbody>
</table>

Educational Technology

<table>
<thead>
<tr>
<th>Fall</th>
<th>Master’s and doctoral applicants</th>
<th>June 1</th>
</tr>
</thead>
</table>
Spring | Master’s and doctoral applicants | Nov. 1
Summer | Master’s and doctoral applicants | Apr. 1

Policy Studies
Fall | Doctoral applicants | July 1
Spring | Doctoral applicants | Nov. 1
Summer | Doctoral applicants | Mar. 1

Submit your graduate application online (http://www.graduate.ku.edu). Supporting materials, such as the résumé, statement of purpose, writing sample, and letters of reference may be uploaded to the application. Original transcripts from degree-granting institutions and official test scores should be sent directly to the department:

The University of Kansas
Department of Educational Leadership and Policy Studies
Joseph R. Pearson Hall
1122 W. Campus Road, Room 421
Lawrence, KS 66045-3101

Ed.D. Degree Programs
The Ed.D. trains educational practitioners to understand and apply the most advanced knowledge to their work. All doctoral students must complete a program that provides a broad understanding of educational leadership and policy as well as a concentration in educational administration, higher education, social and cultural studies in education, or policy studies.

All Ed.D. students must complete a minimum of 27 hours in the major/concentration (e.g. educational administration, higher education administration), 9 hours of research, a 3 credit hour practicum or field experience, and a dissertation. In addition, all Ed.D. aspirants complete a responsible conduct of research component that is integrated with the required coursework.

Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current Lawrence and Edwards Campus policies on Doctoral Research Skills and Responsible Scholarship (https://documents.ku.edu/policies/Graduate_Studies/Research_Skills_and_Responsible_Scholarship.htm) are listed in the KU Policy Library.

A general description of each concentration is given here. Request the appropriate program brochure or visit the department's website (http://elps.soe.ku.edu) for specific information on courses and requirements for each area.

Educational Administration
The educational administration concentration prepares teachers and administrators for school district leadership roles. Studies stress fundamental fields of knowledge and educational policy development necessary for effective leadership of school districts. The Ed.D. leads to licensure at the district level. Students pursuing this concentration must take course work in the summer.

Social and Cultural Studies in Education
The social and cultural studies in education area features a broad examination of educational theory and its practical application on local, national, and international levels. Emphasis is placed on social, philosophical, historical, comparative, and interdisciplinary inquiry into the relationship between human aspirations and the aims and methods of education. Courses of study are flexible and reflect the particular needs and aspirations of each student.

Higher Education
The concentration in higher education provides current and prospective college or university staff members and administrators with theoretical and practical knowledge of higher education as a complex human activity. The Ed.D. program includes required and elective courses practicum or field research.

Policy Studies
The education policy studies concentration features a multidisciplinary approach to policy analysis. Students prepare for roles as researchers, policy analysts, higher education faculty, and educational leaders through individualized programs. Each student takes courses from 2 or more of the other doctoral concentrations in the department and, depending on interest, other relevant courses in social sciences.

Doctor of Philosophy in Educational Leadership and Policy Studies

Educational Leadership and Policy Studies Graduates Programs
The Department of Educational Leadership and Policy Studies (http://elps.soe.ku.edu) offers a broad range of graduate professional programs in educational leadership and policy. For complete program information, contact the department.

Graduate programs in educational leadership and policy studies promote the professional and intellectual development of practitioners, teachers, and scholars in this field at all levels of education. The department offers Master of Science in Education degrees in educational administration (K-12), social and cultural studies in education, higher education, and educational technology, as well as Ed.D. and Ph.D. degrees in educational leadership and policy studies with concentrations in educational administration, social and cultural studies in education, higher education, and policy studies, and a focus in educational technology.

Note: Prospective and current students should obtain the current degree requirements from the department.

Graduate Admission to the School of Education
Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees, as specified by the admitting departments, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a grade-point average of at least 3.0 on a 4.0 scale. Departments that offer provisional admission require a grade-point average of at least 2.5.
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1. Graduate application (http://www.graduate.ku.edu).
2. 1 official transcript from each degree-granting collegiate institution attended.
3. Original Graduate Record Examination general test scores for all doctoral applicants (Ed.D. and Ph.D.). The GRE is not required for master’s applicants in educational administration, higher education, social and cultural studies in education, or educational technology.
4. Statement of purpose/relevance of degree to career aspirations.
5. 3 letters of recommendation evaluating the applicant’s capacity for rigorous graduate study and qualifications for leadership positions in education and related fields.
6. A vita or resume.

Individual program concentrations may require additional application materials. Please consult the appropriate program advisor. The following application deadlines apply:

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<th>Program</th>
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<tr>
<td>Educational Administration</td>
<td>April 1</td>
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<tr>
<td>Higher Education</td>
<td>Jan. 11</td>
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<tr>
<td>Educational Technology</td>
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<td>Educational Technology</td>
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<td>Policy Studies</td>
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<tr>
<td>Summer</td>
<td>Mar. 1</td>
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Submit your graduate application online (http://www.graduate.ku.edu). Supporting materials, such as the résumé, statement of purpose, writing sample, and letters of reference may be uploaded to the application. Original transcripts from degree-granting institutions and official test scores should be sent directly to the department:

The University of Kansas
Department of Educational Leadership and Policy Studies
Joseph R. Pearson Hall
1122 W. Campus Road, Room 421
Lawrence, KS 66045-3101

Ph.D. Degree Programs

The Ph.D. prepares scholars for roles as professors, policy makers, or researchers who are qualified to contribute theoretically grounded, original research. All doctoral students must complete a program that provides a broad understanding of educational leadership and policy as well as a concentration in educational administration, higher education, social and cultural studies in education, or policy studies, or a focus in educational technology.

All Ph.D. students must complete a minimum of 36 hours in the major/concentration (e.g. higher education, social and cultural studies in education), 12 hours of research, EDUC 800, and complete a dissertation. Additionally, Ph.D. students are required to complete a Responsible Conduct of Research component and a college teaching requirement.

Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current Lawrence and Edwards Campus policies on Doctoral Research Skills and Responsible Scholarship (https://documents.ku.edu/policies/Graduate_Studies/Research_Skills_and_Responsible_Scholarship.htm) are listed in the KU Policy Library.

A general description of each concentration is given here. Request the appropriate program brochure or visit the department’s website (http://elps.soe.ku.edu) for specific information on courses and requirements for each area.

Educational Administration

The educational administration concentration prepares teachers and administrators for school district leadership roles. Studies stress fundamental fields of knowledge and educational policy development
necessary for effective leadership of school districts. Students pursuing this concentration must take course work in the summer.

**Social and Cultural Studies in Education**

The social and cultural studies in education area features a broad examination of educational theory and its practical application on local, national, and international levels. Emphasis is placed on social, philosophical, historical, comparative, and interdisciplinary inquiry into the relationship between human aspirations and the aims and methods of education. Courses of study are flexible and reflect the particular needs and aspirations of each student.

**Higher Education**

The concentration in higher education provides current and prospective college or university staff members and administrators with theoretical and practical knowledge of higher education as a complex human activity. The Ph.D. program includes required and elective courses in the concentration, in a cognate area.

**Policy Studies**

The education policy studies concentration features a multidisciplinary approach to policy analysis. Students prepare for roles as researchers, policy analysts, higher education faculty, and educational leaders through individualized programs. Each student takes courses from 2 or more of the other doctoral concentrations in the department and, depending on interest, other relevant courses in social sciences.

**Educational Technology**

The Ph.D. with a focus in educational technology advances research, theory, and practice in the design, development, and application of information technology in education. The focus includes required and elective course work in educational policy, educational technology, the School of Education core, research, and a cognate. Program graduates typically assume leadership positions as faculty in higher education, researchers or directors of educational technology in schools, and in corporate and governmental settings.

**Department of Educational Psychology**

**Educational Psychology Graduate Programs**

The Department of Educational Psychology (http://pre.soe.ku.edu) offers graduate training programs in counseling psychology, educational psychology, and research, and school psychology.

**Note:** Prospective and current students should obtain the current degree requirements from the department. Students are responsible for completing the program that is in effect at the time they enter their program.

**Courses**

**EPSY 106. Multicultural Student Leadership Seminar. 2 Hours.**

This course will introduce students of color to leadership theory and develop personal skills in the areas of organizational, career, and community leadership. Topics covered include public speaking, group process, time management, and discussion of the special challenges for leaders of color. Prerequisite: Must have taken Hawk Link UNIV 101 and fewer than 60 hours credit from the University of Kansas. LEC.

**EPSY 210. Career and Life Planning: Decision-Making for College Students. 3 Hours.**

The purpose of this course is to assist college students in career and life planning choices by first understanding the current theories of career decision-making and then by applying those theories to their own choices. The course will meet twice each week, the first being a lecture session, with the second session consisting of smaller groups of six to eight students. Students will be exposed to information related to the career development process, factors that affect the career choice process, knowledge of work environments, sex role socialization, career and decision making processes, and how to approach the job search. Experiential learnings will include exercises related to values clarification, self understanding, knowledge of interests, competencies and personality characteristics, decision making, use of career information, and implementing a plan of action. Weekly course assignments will include activities in class and homework units. Prerequisite: Enrollment in this course is limited to students with fewer than 60 hours of college credit. LEC.

**EPSY 305. Development and Learning of the Child. 3 Hours. GE3S.**

An introduction to the study of children's thinking, behavior, and development in school, home, and community settings. Classic and contemporary theories of developmental and educational psychology will be addressed; these theories will provide a foundation for thinking about important contemporary issues in child development. Specific topics covered will include research methods for studying children's development, cognitive development, intelligence, language, emotional development, aggression, moral development, and family and peer relationships. Emphasis will be placed the study of individuals and groups, describing the process of development, and considering educational implications of theory and research. LEC.

**EPSY 306. Development and Learning of the Adolescent. 3 Hours. GE3S.**

An introduction to the study of adolescence (puberty to roughly age 18), with a focus on implications and applications for optimal adolescent development. Approaching development from an applied lens, the course will cover foundational information on brain and biological changes that occur during adolescence, as well as on integrating this foundational knowledge with theories of learning, motivation, cognition, and emotional and social development. LEC.

**EPSY 450. Introduction to Counseling Psychology. 3 Hours.**

An historical and contemporary overview of the science and practice of counseling psychology, including trends in the roles and functions of counseling psychology practitioners, the research and scientific foundations of counseling practice, the psychological theories of counseling and psychotherapy that guide professional practice, and the ethical and professional issues confronting counseling practitioners. Prerequisite: PSYC 104. LEC.

**EPSY 455. Managing and Motivating Learners in the Pre K-6th Grade Classroom. 3 Hours.**

This course is designed to help elementary preservice teachers organize an enriched learning environment and develop strategies for managing and motivating students to help them become better and more responsible learners. Prerequisite: CT 322, EPSY 305 or equivalent. LEC.

**EPSY 456. Managing and Motivating Learners in the Middle and Secondary Classroom. 3 Hours.**

This course is designed to help middle and secondary preservice teachers organize an enriched learning environment and develop strategies for
managing and motivating students to help them become better and more responsible learners. Prerequisite: CT 324, EPSY 306 or equivalent. LEC.

EPSY 497. Independent Study. 1-2 Hours.
Only one enrollment permitted each semester, a maximum of four hours will apply toward the bachelor's degree. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Recommendation of advisor and consent of instructor. IND.

EPSY 515. Research Methods for McNair Scholars. 3 Hours.
This course provides participants in the McNair Scholars program with an understanding of research methods appropriate to their field so they can write proposals for their summer research projects. Prerequisite: Acceptance into the McNair Scholars Program. LEC.

EPSY 520. Classroom Assessment. 3 Hours.
This course is an introduction to the concepts and skills required to develop and evaluate various forms of formal and informal classroom assessments to determine student learning and teacher instructional effectiveness. LEC.

EPSY 575. Internship Exploration. 1-5 Hours. AE61.
This course provides academic credit for a supervised practical experience in an occupational area of interest. In addition to the work-related activity, students will complete reading and writing assignments, participate in on-line discussion and create a final portfolio of internship accomplishments. Credit hours (1-5) are based on number of hours at internship site in agreement with instructor. Prerequisite: Secured internship of 8 hours per week or more for semester in which student will be enrolled in the course; permission from instructor. FLD.

EPSY 580. Positive Psychology. 3 Hours.
An introduction to the core assumptions and research findings associated with human strengths and positive emotions. Also an exploration of interventions and applications informed by positive psychology in counseling and psychotherapy, and its application to school, work, family and other close relationships. (Same as PSYC 598.) Prerequisite: PSYC 104 or consent of instructor. LEC.

EPSY 598. Special Course: ____. 1-5 Hours. AE61.
A special course of study to meet current needs of education students--primarily for undergraduates. LEC.

EPSY 700. Advanced Educational Psychology: Development and Education of the Adolescent. 2-3 Hours.
An introduction, from a psychological perspective, to topics and problems in the development of adolescents and youth, with emphasis on application to educational issues. Note: To be offered annually. LEC.

EPSY 702. Advanced Educational Psychology: The Development and Education of the Child. 3 Hours.
Study of children from a cognitive developmental perspective. Changes in children are examined in light of environmental influences including social factors, educational practices, and child-rearing as they interact with conditions internal to children. Key issues include the study of cognition, language, motives, social-emotional issues, the self, and the problem of developmental delays. A major concern is the role of adults in supporting positive development, particularly in educational settings. LEC.

EPSY 703. Constructive Classroom Discipline. 3 Hours.
This course will examine concepts and techniques of constructive classroom management. Various theoretical orientations including humanism and behaviorism will be considered. Emphasis will be on the identification of strategies that teachers can use (1) to facilitate an environment that reduces the likelihood of misbehavior occurring, and (2) to cope constructively with individuals and groups of children to resolve difficulties that arise in the classroom. The class should have value to classroom teachers, school psychologists, counselors, and other school consultants. LEC.

EPSY 704. Advanced Educational Psychology: Learning Processes in Education. 3 Hours.
A study of the mental processes that influence learning and comprehension. The scope of the course will include individuals at all developmental levels and in a variety of educational settings. Key issues include the study of language, memory, concepts, motivation and social factors affecting learning processes. LEC.

EPSY 705. Human Development through the Lifespan. 3 Hours.
This course will cover the social, emotional, psychological, and cognitive changes that occur from conception through death. Methodological issues will also be addressed. Prerequisite: A graduate or undergraduate course in psychology. LEC.

EPSY 710. Introduction to Statistical Analysis. 3 Hours.
Emphasis on the conceptual underpinnings of statistical analysis of educational data. Includes univariate and bivariate descriptive statistics, sampling distributions, statistical estimation, hypothesis testing and procedures in testing statistical hypothesis for one and two sample designs. Prerequisite: Concurrent enrollment in EPSY 711 required, or with the permission of instructor on the basis of knowledge of statistical packages presented in EPSY 711. LEC.

EPSY 711. Lab for Introduction to Statistical Analysis. 1 Hour.
Creation and manipulation of data sets. Analysis of data with statistical packages, with an emphasis on descriptive statistics, graphical procedures, and univariate parametric methods. Graded on a satisfactory/fail basis. Prerequisite: Concurrent enrollment in EPSY 710 or EPSY 811 or with the permission of the instructor. LAB.

EPSY 715. Understanding Research in Education. 3 Hours.
This course introduces the concepts and skills involved in understanding and analyzing research in education and related areas. The course provides an overview of basic, general knowledge of various research methodologies. Students should expect to study much of this material in greater depth through additional course work before being fully prepared to conduct independent research. However this course should enhance their ability to locate, read, comprehend, and critically analyze research articles and reports. Topics in the course include quantitative and qualitative methods and designs, historical and descriptive research, and program evaluation. (This course fulfills the requirement of a research methods course in the first 12 hours of graduate study.) LEC.

EPSY 725. Educational Measurement. 3 Hours.
The course is an introduction to the application of the concepts of reliability, validity, and practicality to the development, selection, use, and interpretation of tests and other measuring instruments in the field of education. The concepts of norm referenced and criterion referenced tests; the interpretation and use of norms; standard scores, percentiles, quotients, and grade equivalents are among the topics covered. An understanding of the role of measurement in evaluation, diagnosis, selection and placement is included. LEC.

EPSY 740. Counseling and Interviewing Skills. 3 Hours.
An experiential and performance based course having three major objectives: 1) the acquisition of basic counseling skills and strategies by means of microcounseling training; 2) learning to use these skills effectively and appropriately in a simulated counseling session; 3) the students' understanding of their personal characteristics and how these characteristics relate to functioning as an effective helping professional. This course should normally be taken at the earliest possible time in the student's program. Open to counseling majors. Non-majors may
be admitted only by permission of the instructor, if space permits. Prerequisite: Permission of the instructor. LEC.

**EPSY 742. Counseling Theory and Techniques. 3 Hours.**
An introductory examination of several major theories of counseling and therapy including psychodynamic views, person-centered, behavioral, and cognitive-behavioral approaches. Attention given to research reviews and factors various theories have in common. Designed for graduate students in counseling psychology or allied fields. Prerequisite: Graduate student status or permission of the instructor. LEC.

**EPSY 760. Ethics, Law, and Professional Issues in School Psychology. 3 Hours.**
This course is intended to introduce the student to a) ethical principles, standards, and issues in the profession of psychology; b) legal issues involved in the practice of school psychology; c) problem-solving models to solve ethical and ethical-legal dilemmas; d) roles and functions of a school psychologist; and e) current topics in the field of school psychology. Prerequisite: Permission of the instructor. LEC.

**EPSY 770. Developmental Psychopathology: Diagnosis, Intervention, and Prevention. 3 Hours.**
Foundations of child and adolescent psychopathology from a developmental and educational perspective. Classification, assessment, and etiology of clinical disorders. Examination of risk and protective factors associated with these various disorders. Coverage of empirically-based intervention strategies and prevention programs. Graduate student standing. LEC.

**EPSY 790. Research and Evaluation Proposal Development. 3 Hours.**
A course for students designing a research or evaluation proposal leading to data collection. Specific topics considered include formulating a problem for study, reviewing the literature, and selecting appropriate research and evaluation designs, instrumentation, and data analysis issues. The goal of the course is to aid students in the preparation of research proposals at the master's level. LEC.

**EPSY 797. Independent Readings and Research in: ____. 1-3 Hours.**
Opportunity for students to participate in supervised reading and research in special topics of interest (for which regularly scheduled courses are not given). Topics and credit are arranged by advisement: May not be used to substitute for regularly scheduled course offerings. Intended for students with appropriate undergraduate or graduate preparation but without extensive graduate course background in the area of proposed study. (Students with extensive graduate work should enroll in EPSY 997; undergraduate students may enroll in EPSY 497.) Graded on a satisfactory/unsatisfactory basis. RSH.

**EPSY 798. Special Course: ____. 1-5 Hours.**
A special course of study to meet current needs of education professionals—primarily for graduate students. Course is graded on a satisfactory/fail basis. LEC.

**EPSY 800. Development during Youth and Adulthood. 3 Hours.**
An examination from a life-span perspective of major issues affecting changes after adolescence. Topics include intelligence, identity, intimacy, the role of work, and moral concepts. Theoretical issues, research findings, and educational and social policy implications will be examined. Students will prepare papers on significant issues in the field and survey extensively the research and theoretical literature. Prerequisite: Prior enrollment in a course on naturalistic or experimental research methods. LEC.

**EPSY 803. Computer Applications for Statistical Analyses. 3 Hours.**
Computer applications for a variety of statistical techniques. Emphasis may be with applications on microcomputers and/or mainframe. Prerequisite: EPSY 810 or EPSY 811 or equivalent course. LEC.

**EPSY 805. Individual Intelligence Testing. 1-3 Hours.**
Supervised experience in the administration, scoring, and interpretation of the major individual intelligence tests for children, adolescents, and adults. Other areas to be covered in this course will include models of intelligence and factors influencing intelligence; measurement characteristics of instruments used to assess cognitive abilities; ethical and legal issues in the use of intelligence tests; and the use of cognitive assessments for identification and diagnosis. Prerequisite: Permission of instructor. LEC.

**EPSY 806. Issues in Human Growth and Development. 3 Hours.**
An overview and analysis of selected issues in the field of human growth and development. The focus will be on current issues of a theoretical and methodological nature that affect the field of developmental psychology and applications to social and educational settings. Prerequisite: Prior completion of a course in developmental psychology. LEC.

**EPSY 807. Theories and Research in Human Learning. 3 Hours.**
An overview of important models, principles and research findings related to the learning process. Attention is given to theories of learning and information processing which attempt to explain perceptual behavior, verbal learning and memory and social learning processes. Emphasis is placed on student development of research proposals in the area of human learning and achievement. Prerequisite: Permission of instructor. LEC.

**EPSY 810. Regression Analysis. 3 Hours.**
Multiple correlation/regression techniques, including polynomials, analysis of interactions, dummy coding, non-orthogonal analysis of variance, and analysis of covariance. Prerequisite: EPSY 710 or equivalent course. LEC.

**EPSY 811. Analysis of Variance. 3 Hours.**
Analysis of variance techniques including one-way ANOVA, planned and post hoc comparisons, multway ANOVA, repeated measures ANOVA, and mixed designs. Prerequisite: EPSY 710 and EPSY 711. LEC.

**EPSY 812. Meta-Analysis. 3 Hours.**
Statistical methods to summarize results from multiple studies. Prerequisite: EPSY 811. LEC.

**EPSY 814. Nonparametric Statistics. 3 Hours.**
Methods of analysis for nominal and ranked data, multiway contingency table analysis. Prerequisite: EPSY 811. LEC.

**EPSY 816. Evaluating School Programs. 3 Hours.**
Methods and procedures for evaluating educational programs. Attention is given to the development and evaluation of goals and objectives, creation of designs to monitor processes and outcomes, utilization of test and measurement systems for assessing outcomes, establishing evaluation standards and criteria, and application of statistical analyses. Prerequisite: EPSY 710 or equivalent. LEC.

**EPSY 822. Educational Scales, Questionnaires, and Sampling. 3 Hours.**
Development, construction, validation and scaling of noncognitive instruments including questionnaires, surveys, checklists, rating scales and unobtrusive measures. The sampling methodology is emphasized. Item construction and analysis and the development of subscales are stressed. Prerequisite: EPSY 720 or EPSY 725 and EPSY 710. LEC.

**EPSY 830. Individual and Group Assessment. 3 Hours.**
A consideration of basic concepts pertaining to selection and interpretation of both standardized and non-standardized assessment procedures and devices with attention given to communicating assessment information within the context of the counseling relationship. Prerequisite: EPSY 725 or comparable undergraduate principles of measurement course. LEC.
EPSY 835. Clinical Techniques in Academic Assessment and Intervention. 3 Hours.
Students will learn techniques of formal and informal assessment of academic skills in school-aged students. In addition, students will learn consultation and intervention approaches and strategies for use with students who have academic delays. This course has a field-based practicum component. Prerequisite: Graduate student standing in the School Psychology program and permission of instructor. LEC.

EPSY 840. Guidance and Counseling in the Public Schools. 3 Hours.
This course is designed to provide information about the organization and administration of guidance and counseling programs in the public schools. Non-majors wishing to know more about the role of the counselor can be admitted with approval of the instructor. LEC.

EPSY 842. Counseling Practicum (Elementary, Secondary, Counseling Psychology). 6 Hours.
This course is taken as one of the last courses in the master's degree counseling program. The primary purpose of the course is for the student to develop individual counseling skills while functioning in a counseling setting. In addition to individual skills, students are also encouraged to participate in group counseling and other counseling related activities within the particular counseling setting. Students enroll in practicum for the level most closely related to their professional goals, i.e., elementary, secondary, counseling psychology. Graded on a satisfactory/fail basis. Prerequisite: EPSY 740, EPSY 742, and EPSY 880, and prior or concurrent enrollment in EPSY 830, EPSY 840, EPSY 844, and EPSY 846. Pre-enrollment with practicum coordinator. Students currently on academic probation will not be allowed to enroll in practicum. LEC.

EPSY 844. Theory of Group Counseling. 3 Hours.
Focuses on issues in group counseling. Topics covered are types of groups, theoretical orientation of groups, stages of group development, group leadership, selection of members, ethical issues, and effectiveness of groups. Prerequisite: Students must be admitted to the Program in Counseling Psychology. Nonmajors must have prior written consent of instructor. LEC.

EPSY 845. Substance Abuse Counseling. 3 Hours.
The aim of this course is to provide advanced training in the area of substance abuse and substance addictions counseling to graduate students in the helping professions. Topics covered include practical guidelines, specific intervention strategies, treatment principles, legal and ethical responsibilities, and issues within the field. Prerequisite: EPSY 740, EPSY 742. LEC.

EPSY 846. Career Development. 3 Hours.
Stresses the importance of career development in education, with an emphasis on developmental life planning. Course includes topics such as delivery systems, utility of career development theory, sexism and racism in career development and counseling, the effects of sex role socialization, nature of the world of work, evaluation of career information, use of career information in individual and group counseling, and the role of empirical research in career development theory and practice. LEC.

EPSY 850. Human Relationship Skills in the Classroom. 3 Hours.
The purpose of this course is to provide educators with an awareness and skill training in basic human relationship/communication skills. The course is focused on skills that provide educators with effective communication skills for working with students, educators, and parents. LEC.

EPSY 855. Psychoeducational Clinic I: Assessment, Consultation, and Intervention. 3 Hours.
This is a practical course where students apply previous learning and gain experience in assessment and intervention with children, families, and school consultation. Team collaboration, peer review, and case conferences are essential elements of this course. Students work with clients in the on campus learning center under supervision. Topical seminars also are included throughout the semester. Prerequisite: Graduate student standing in the School Psychology program and permission of instructor. LEC.

EPSY 860. Assessment of Behavior Problems and Personality. 3 Hours.
The purpose of this course is to examine appropriate assessment techniques for the evaluation of behavior problems. Interview procedures, behavioral observation strategies, behavior rating scales and checklists, self-report inventories, and rational theoretical techniques will be introduced. The intent is to place these assessment approaches in their theoretical contexts and to discuss how they could be used by pupil personnel specialists to understand the problem behavior and plan interventions to enhance students' personal adjustment and achievement in the classroom. Prerequisite: EPSY 770, graduate standing in the School of Psychology program, or permission of instructor. LEC.

EPSY 865. Psychoeducational Clinic 2: Assessment, Consultation, and Intervention. 3 Hours.
A continuation of School Psychology Clinic I where students will be performing the same activities at a higher level of autonomy and independence. Prerequisite: Graduate student standing in the School Psychology program, EPSY 855, and permission of instructor. LEC.

EPSY 870. Quantitative Methods for Research in Educational Leadership and Policy Studies. 3 Hours.
This course addresses the conceptual basis of statistical analysis with an emphasis on applied data analysis. The use of descriptive statistics, distributions, graphic displays, hypothesis testing, group comparison, and analyses of relationships among variables to explore research questions in education will be covered. This course is designed specifically for Ed.D. students in the School of Education. Students in other degree programs may not enroll. Prerequisite: This course is open only to Ed.D. students in the School of Education. LEC.

EPSY 871. Crisis and Disaster Counseling. 3 Hours.
This course provides advanced training in Crisis and Disaster Counseling to graduate students in the helping professions, providing students with the foundation, knowledge, and skills to effectively help those in crisis. Practical guidelines, specific intervention strategies, treatment principles, legal and ethical responsibilities, and self-care regarding crisis work will be discussed and integrated. Prerequisite: EPSY 740 and EPSY 742; or consent from instructor. LEC.

EPSY 875. Individual and Cultural Differences in Counseling Psychology. 3 Hours.
Examines the role of culture in human behavior and its influence in counseling theories, practice, and research. The course will assist students develop multicultural awareness, understanding, and skills in working with people from diverse racial, social, cultural, and individual backgrounds. The course will provide opportunities for self examination of cultural assumptions/values in order to develop multicultural competence. Prerequisite: EPSY 742 or equivalent. LEC.

EPSY 880. Ethical and Legal Issues in Professional Psychology. 3 Hours.
An examination of legal, ethical, and professional standards and issues affecting the practice of professional psychology. Topics include legislative regulation of professional psychology, ethical standards and codes of conduct for psychology and related mental health professions, standards of professional practice, and issue of practice liability and risk management. LEC.
EPSY 882. History and Systems of Psychology. 3 Hours.
A historical survey of the evolution of concepts, theories, and systems of thought in psychology with an emphasis on their relationship to contemporary issues in psychological theory, research, and practice. Prerequisite: Graduate standing in EPSY or consent of the instructor. LEC.

EPSY 885. Projective Assessment. 3 Hours.
The major goal of the course is to integrate information about a person from one or more projective tests into a useful summary. The projective assessment instruments to be used include the Rorschach (using the Exner system of scoring and interpretation), the Thematic Apperception Test, and projective drawings (e.g., Draw-A-Person test). Prerequisite: At least one graduate-level course in measurement and one graduate course in assessment plus consent of the instructor. LEC.

EPSY 888. Evidence Based Practice in Counseling Psychology. 3 Hours.
This course is an introduction to the skills involved in a small number of Evidence Based Treatments, in the context of understanding their place in the pursuit of Evidence Based Practice. The course includes readings, videos, and discussion of the treatments, with a heavy experiential component of role plays and reviews on video through the Center for Psychoeducational Services. The emphasis is on developing initial skills in the selected treatments. Prerequisite: Graduate student in Counseling Psychology or permission of the instructor. LEC.

EPSY 890. Diagnosis and Psychopathology. 3 Hours.
An examination of psychological disorders from a counseling psychology perspective that emphasizes strengths. The course will cover the current version of the Diagnostic and Statistical Manual (DSM), as well as alternative taxonomies, exploring personality as it ranges from normal personality styles to personality disorders, as well as Axis I disorders. The emphasis is on identifying and assessing these phenomena and understanding possible behavioral and treatment implications. Prerequisite: Degree seeking status in Counseling Psychology or consent of instructor. LEC.

EPSY 893. Internship in School Counseling. 2 Hours.
Two consecutive enrollments covering a period of one academic year. During this time the student prepares a portfolio of skills competencies, classroom guidance programs presented, and other experiences appropriate to the student's school level. Supervision will be conducted on an individual basis and will include a minimum of two site visits per semester. Prerequisite: Must have school counseling position and a completed Masters degree from K.U. in School Counseling. FLD.

EPSY 895. Field Experience in: ____. 1-5 Hours.
Supervised and directed experiences in selected educational or mental health settings. The campus-based instructor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experiences will be prepared independently by the student, a representative of the cooperating agency, and the campus-based instructor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit in this and additional field experience enrollments may not exceed eight hours. Graded on a satisfactory/fail basis. Prerequisite: EPSY 842 and consent of the practicum coordinator. FLD.

EPSY 896. Seminar in: ____. 1-3 Hours.
Prerequisite: Permission of instructor. LEC.

EPSY 897. Independent Study. 1-4 Hours.
Graded on a satisfactory/unsatisfactory basis. Prerequisite: Consent of advisor and instructor. RSH.

EPSY 898. Master's Project. 1-4 Hours.
Prerequisite: Prior or concurrent enrollment in EPSY 710, EPSY 715, or EPSY 790. RSH.

EPSY 899. Master's Thesis. 1-6 Hours.
Prerequisite: Prior or concurrent enrollment in EPSY 710. THE.

EPSY 900. Legal, Ethical, and Professional Issues in Professional Psychology. 3 Hours.
This proseminal is designed to examine the major legal and ethical principles and areas of concern that affect professional psychology. The course will also examine the historical development of professional psychology and current issues that affect the future direction of research and practice. Prerequisite: Doctoral status in counseling, clinical, clinical child, or school psychology, or consent of the instructor. LEC.

EPSY 901. Research Practicum in: ____. 1-3 Hours.
This course is designed to give students experience in conducting research. It is expected that students will take this course for at least two consecutive semesters. (This course fulfills the requirement by the School of Education for a two semester, research practicum course.) Prerequisite: Doctoral student status in a program in the Department of Educational Psychology. RSH.

EPSY 902. Research Methodology in Education. 3 Hours.
An examination and study of the problems and procedures which relate to the validity of research methods. Emphasis will be placed on reading the current literature on research methodology. Students are required to develop a research proposal. Prerequisite: EPSY 811 and EPSY 720 or EPSY 725. LEC.

EPSY 905. Multivariate Analysis. 3 Hours.
Multivariate analysis of variance, discriminant analysis, logistic regression, and exploratory factor analysis. Prerequisite: EPSY 810, EPSY 811 and experience with a statistical software package. LEC.

EPSY 906. Structural Equation Modeling I. 3 Hours.
The purpose of this course is to introduce students to Structural Equation Modeling (SEM). Topics to be covered include matrix algebra, correlation/covariation, regression, Path analysis, exploratory and confirmatory factor analysis, full structural equation models and multi-group models. Students will be exposed to the various statistical software programs available for SEM and will be expected to become proficient in utilizing EQS. Prerequisite: EPSY 710 or equivalent course. LEC.

EPSY 907. The Psychology of Instruction and Human Learning. 4 Hours.
A study of research and theory in the areas of cognitive learning and instruction, including such topics as motivation, problem solving, discovery learning, conceptualization, theory construction and task analysis. Emphasis placed on independent learning experiences and field-based experimentation with pilot study. Prerequisite: EPSY 807 and EPSY 715 or permission of instructor. LEC.

EPSY 908. Structural Equation Modeling II. 3 Hours.
The purpose of this course is to introduce students to advanced topics in Structural Equation Modeling. Topics to be covered include multi-level models, latent growth models, mixture models and approaches to handling missing and/or non-normal data. Students will be exposed to the various statistical software programs and will be expected to become proficient in utilizing EQS. Prerequisite: EPSY 906 or equivalent course. LEC.

EPSY 910. Practicum in School Psychology. 3 Hours.
Supervised practice in the application of psychological theory of educational problems. Includes work useful with exceptional children as well as experience in the application of such areas as mental hygiene and...
learning theory to problems involving the total school population. (Same as SPED 801.) Prerequisite: Permission of advisor and instructor. LEC.

**EPSY 911. Advanced Practicum in School Psychology. 3 Hours.**
A continuation of EPSY 910 with special emphasis on remedial techniques associated with learning difficulties. (Same as SPED 802.) Prerequisite: EPSY 910 and permission of advisor and instructor. LEC.

**EPSY 916. Educational Evaluation: Theory and Practice. 3 Hours.**
The course will treat an intensive critical study of various views of evaluation as it exists opposite the experimental research process, emphasizing the operational definitions of objectives, existing models, taxonomies, and structure, and goals and methods of obtaining and summarizing evaluation data. Prerequisite: EPSY 710 and EPSY 816 or equivalents or permission of instructor. LEC.

**EPSY 918. Seminar in Current Issues and Trends in: _____. 1-3 Hours.**
An examination of selected current issues and trends. (This course fulfills the requirement by the School of Education for a course in current issues and trends.) Prerequisite: Doctoral student status in a program in the Department of Educational Psychology. LEC.

**EPSY 921. Theory and Applications of Educational Measurement. 3 Hours.**
Application of theory including classical theories of reliability and validity, latent-trait theories, item sampling, and factor analysis to problems in educational test development and use in areas such as evaluation, research, placement, and selection. Prerequisite: EPSY 725 and EPSY 811. LEC.

**EPSY 922. Item Response Theory. 3 Hours.**
Theoretical foundations and practical applications of item response theory in educational measurement. Prerequisite: EPSY 921. LEC.

**EPSY 923. Advanced Theory and Applications of Item Response Theory. 3 Hours.**
This course is designed to acquaint students with knowledge of advanced theory and applications in the field of item response theory (IRT). Topics to be covered include: advanced IRT models for dichotomous and polytomous, multidimensional, rater effects, and testlet-based item response data, estimation of parameters for these models and related software, and goodness of fit tests. The course will also focus on some advanced applications using these models, including test development, test score equating, differential item functioning, scoring and score reporting, Monte Carlo simulation studies, and innovative test designs. Prerequisite: EPSY 922 or equivalent course. LEC.

**EPSY 925. Computer Programming and Applications for Educational Research, Measurement and Statistics. 3 Hours.**
The purpose of this course is to provide advanced students in the areas of educational research, psychometrics, and statistics with techniques for computer programming, analysis, and carrying out research using computer simulations. The topics covered are: Programming with Fortran languages, data manipulation and management, analysis, simulation of data according to statistical and psychometric models, numerical techniques for matrix operations, sampling from distributions, solutions for non-linear equations, and Markov-Chain Monte-Carlo techniques. There are no prerequisites for this course, but those students who have coursework through the multivariate statistics level will benefit most from this course. Other suggested courses include those related to psychological and educational measurement, classical test theory, item response theory, and research methods. LEC.

**EPSY 926. Hierarchical Linear Modeling. 3 Hours.**
This course provides students with an introductory background in the basic principles and applications of hierarchical linear modeling (HLM). The course will review both the conceptual issues and methodological issues in using hierarchical linear modeling by working step-by-step with real data sets. Prerequisite: EPSY 810 Regression Analysis (formerly EPSY 904). LEC.

**EPSY 931. Computer-Based Testing. 3 Hours.**
Computer-based testing holds the promise of increasing test validity and reliability while reducing the logistical problems associated with largescale assessment. This seminar will provide an overview of what we have learned about administering tests on computer between the 1960s and today. The focus will be on measurement issues, but depending on class interest topics will vary. A prior course in item response theory is desirable but not required. Prerequisite: EPSY 725 or equivalent course. LEC.

**EPSY 932. Diagnostic Testing. 3 Hours.**
There is a great demand for more useful, more actionable test scores. Traditional large-scale group administered tests do not provide this kind of information due to low reliabilities of, or high inter-correlations among, sub-scores. This course will explore approaches used by individually administered tests to provide diagnostic information, new psychometric models that hold promise of providing better diagnostic information, and implications for test design. A primary focus will be on how psychometric models can be used with diagnostic subscores that are more reliable and less correlated than traditional approaches. Prerequisite: PRE 922 or equivalent course. LEC.

**EPSY 940. Advanced Studies in Educational Psychology and Research. 3 Hours.**
A course designed to offer a comprehensive view of the field of educational psychology and research. The course will treat a series of thematic areas with a focus on latest developments and emerging theories in learning, development and quantitative methods. Intended for post-master's level students. Prerequisite: Prior graduate level course work in development, learning, measurement, and statistics. LEC.

**EPSY 945. Clinical Supervision and Consultation. 3 Hours.**
This course is designed to provide students with a knowledge foundation of clinical supervision and consultation theories and models, modes/ formats of supervision, the supervisory/consulting relationship, legal and ethical considerations in the provision of supervision/consultation, and supervision research issues. Prerequisite: EPSY 948. LEC.

**EPSY 947. Specialist Research. 1-4 Hours.**
RSH.

**EPSY 948. Advanced Practicum I. 3 Hours.**
Designed to be the initial advanced practicum for first year doctoral students. Attention is directed to development of a broad range of basic and advanced skills. Graded on a satisfactory/fail basis. Prerequisite: EPSY 842 or equivalent. LEC.

**EPSY 949. Advanced Practicum II. 3 Hours.**
Intensive counseling practice, including group and individual supervision, that may be taken either through Counseling and Psychological Services or an approved site outside of the university. Focus is on the acquisition and demonstration of advanced counseling skills. Two consecutive semesters (Fall, Spring) of enrollment are required of doctoral students. Responsibility to the site is for a continuous nine months, with fall semester responsibilities ending on the first day of spring semester classes. A grade of incomplete will be granted at the end of the regular fall grading period, with the regular fall grade being granted after completion of fall semester responsibilities. Graded on a satisfactory/fail basis. Prerequisite: Satisfactory completion of EPSY 948 and prior or concurrent enrollment in EPSY 951. LEC.
EPSY 950. Cognitive Theory and Strategies in Counseling Psychology. 3 Hours.
An examination of historical and contemporary cognitive theories and strategies used in the practice of counseling psychology. Consideration of theoretical positions and issues, research functions, assessment strategies, and application of techniques. Prerequisite: EPSY doctoral student status or consent of instructor. LEC.

EPSY 951. Psychodiagnostic Assessment. 3 Hours.
Survey of selected psychodiagnostic instruments currently in use and their administration, scoring, and interpretation. Emphasis will also be placed on the use of the clinical interview as an assessment tool, case conceptualization/diagnosis, and integrative report writing. Prerequisite: Completion of EPSY 830 and degree-seeking status in Counseling Psychology or consent of instructor. LEC.

EPSY 952. Advanced Counseling Theory and Research. 3 Hours.
An advanced treatment of theory, research, and practice issues central to Counseling Psychology. Topics include theoretical and research paradigms in Counseling Psychology; the relationship of theory and research to practice; and evidence on factors influencing counseling processes and outcomes. Prerequisite: Counseling Psychology doctoral student status or consent of instructor. LEC.

EPSY 953. Interational Perspectives on Counseling and Personality. 3 Hours.
A study of personality and therapeutic change from systems, interactional, and communications perspectives, with implications for research and assessment in counseling. Designed for graduate students at the specialist and doctoral levels. Prerequisite: Counseling Psychology doctoral student status or consent of instructor. LEC.

EPSY 954. Vocational Psychology. 3 Hours.
A survey of the major career development theories in counseling psychology. Models and methods of career counseling will be reviewed and integrated from the different theoretical perspectives. The empirical support of each theory and needed research will be identified. The course will include presentation of theories of career development and their specific applicability in counseling. The career development of special groups (women, the culturally different, non-whites) will be studied as well as alternative methods of delivery in career development and counseling. Prerequisite: Completion of EPSY 846 or equivalent, and Ph.D. degree-seeking status in Counseling Psychology or consent of instructor. LEC.

EPSY 955. Research Methods in Counseling Psychology. 3 Hours.
This course is a foundational course in research methods and design in counseling psychology. The course covers (a) design type and threats to design validity, (b) the formulation of research problems, (c) research instrumentation/measures, (d) data analytic methods, (e) interpreting data, and (f) ethical issues, research integrity, and the responsible conduct of research. Prerequisite: EPSY 710 and EPSY 711 or equivalent. Doctoral student in Counseling Psychology or consent of instructor. LEC.

EPSY 956. Theory of Couples and Family Counseling. 3 Hours.
A survey of contemporary systems of couples and family counseling. Consideration of couple and family function/dysfunction, theoretical models of family interaction, models of counseling practice and methods, and research on couples and family counseling. Prerequisite: Degree-seeking status in Counseling Psychology or consent of instructor. LEC.

EPSY 960. Assessment of Infants, Toddlers, and Young Children. 3 Hours.
The purpose of this course is to introduce the student to the assessment of various domains related to the development of infants, toddlers, and young children. The student will learn how to use formal and informal assessment techniques for screening, diagnostic, educational planning, and educational evaluation purposes. An emphasis will be placed on the linkage between assessment and intervention. This course is designed for students in the applied psychology fields (i.e., school psychology, counseling psychology, clinical child psychology, and clinical psychology). Prerequisite: EPSY 705, EPSY 725, EPSY 805 and permission from the instructor. LEC.

EPSY 965. Foundations of Psychoeducational Consultation. 3 Hours.
This is the first of a two semester sequence of courses on school-based consultation. The course is a combination lecture-laboratory experience that introduces the student to the literature, theory, and techniques of consultation. Prerequisite: Approval of instructor. LEC.

EPSY 970. Counseling with Adults. 3 Hours.
This course will focus on the utilization and integration of adult life span theory and issues with counseling theory and practice. Particular attention is given to the adaptation of counseling practices to the developmental concerns of adult male and female clients. Additional emphasis is given to encouraging research projects related to the adult lifespan and effective counseling practices. Prerequisite: Graduate student status as an advanced master's student or doctoral student in the Program in Counseling Psychology or written permission of instructor. LEC.

EPSY 975. Therapeutic Intervention: Home and School. 3 Hours.
The course includes a review of literature and theory as well as supervised practice. Therapeutic intervention is broadly conceived, including individual and group counseling, and parent and teacher consultation. The importance of the family-school relationship is stressed. Prerequisite: Permission of instructor and completion of course on counseling. LEC.

EPSY 980. Advanced Topics: ____. 1-3 Hours.
A special course of study to meet current need of education professionals--primarily for post-master's level students. LEC.

EPSY 990. Internship in Counseling Psychology. 1 Hour.
Three consecutive enrollments, covering a minimum of eleven months of experience in an approved counseling psychology field setting. Supervision and directed experiences coordinated by the student's adviser, the program training director, and internship setting supervisors. Required of all counseling psychology doctoral students. Prerequisite: Doctoral degree-seeking status in counseling psychology, completion of Ph.D. comprehensive examinations, and consent of counseling psychology faculty. FLD.

EPSY 991. Ed.S. Internship. 1-5 Hours.
This course has two components: 1) a supervised experience as a practicing school psychologist, and 2) a group supervision class emphasizing case presentations and other integrative practice elements. The student functions as a provisionally certified school psychologist. Prerequisite: Completion of Ed.S. degree. FLD.

EPSY 992. Ph.D. Internship in School Psychology. 5 Hours.
This is a one year, supervised experience in an approved setting. The student functions as a provisionally certified school psychologist. Prerequisite: Approval of School Psychology committee. FLD.

EPSY 995. Field Experience in: ____. 1-5 Hours.
Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experiences will be prepared independently by the student, a representative of the cooperating agency, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours. FLD.
EPSY 996. College Teaching Experience in: ______. 1-5 Hours.
To meet the college teaching experience requirement for doctoral programs, a student shall engage in a semester long, planned, instructional activity that shall include college classroom teaching under supervision. Planning shall be done with the advisor and/or member of the faculty who will supervise the experience. The activity shall be done under the supervision of a member of the University of Kansas faculty or by an individual or individuals designated by the candidate’s committee. FLD.

EPSY 997. Individual Study. 1-4 Hours.
Prerequisite: Prior graduate course work in the area of study and consent of instructor. Course is graded on a satisfactory/fail basis. RSH.

EPSY 998. Seminar in: ______. 1-4 Hours.
Course is graded on a satisfactory/fail basis. LEC.

THE.

Master of Science in Counseling Psychology

M.S. Degree Program

The master’s program in counseling psychology prepares individuals aspiring to work as counselors or in counseling-related fields or those hoping to proceed on into doctoral training. The curriculum provides a broad and general introduction to Counseling Psychology theory, research and clinical practice. For the Master of Science in counseling psychology degree, students earn a concentration in mental health counseling.

Graduate Admission to the School of Education

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees, as specified by the admitting departments, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a grade-point average of at least 3.0 on a 4.0 scale. Departments that offer provisional admission require a grade-point average of at least 2.5. Individual departments may require additional information and may have more stringent admission and retention requirements.

Some departments may offer special provisional admission categories to students who may not qualify under traditional admission criteria. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession. Exceptions to established policies must be sought individually by petition to the Graduate Division of the School of Education.

See Admission in the Graduate Studies (p. 2369) section of the online catalog for more information.

Each department in the School of Education sets its own application deadlines. Prospective graduate students should contact their departments for application deadlines.

Graduate Admission

Prerequisites for Regular Admission

Prerequisites include the following:

- Undergraduate grade-point average of 3.0 or higher on a 4.0 scale
- Graduate grade-point average of 3.5 or higher on a 4.0 scale
- Graduate Record Examination general test scores
- Completed bachelor’s or master’s degree in counseling, psychology, or a related area. (An applicant who does not have an undergraduate degree in education or psychology should have a minimum of 14 undergraduate credit hours in the behavioral sciences.)

At the first enrollment, a doctoral student reviews any previous graduate work with an advisor to identify any course work in which the student is deficient. Students holding master’s degrees in other areas should recognize that such course work may require up to a year to complete and, in some instances, must be taken before the actual doctoral course requirements.

See individual programs for specific admission requirements and deadlines.

Submit your graduate application online (http://www.graduate.ku.edu). Send 1 copy of all original transcripts to the department:

The University of Kansas
Department of Educational Psychology
Joseph R. Pearson Hall
1122 W. Campus Road, Room 621
Lawrence, KS 66045-3101

Admission Requirements

The admission deadline is December 15 to begin course work in the following summer or fall.

Required Admission Materials

1. Graduate application (http://www.graduate.ku.edu) and application fee. See Admission in the Graduate Studies (p. 2369) section of the online catalog.
2. 1 copy of official transcripts of all previous college work, sent directly to the Graduate Application Processing Center (http://www.graduate.ku.edu). The original transcript is forwarded to the School of Education to complete licensing and/or certification paperwork.
3. GRE (general test) scores: Institution code, R6871; Department code, 2005.
4. Letter of intent.
5. Résumé.
6. 3 letters of recommendation from people who can assess the applicant’s prospects for completing the program.

M.S. Degree Requirements

The mental health concentration requires about 60 credit hours of course work. Individuals wishing to become licensed professional counselors in Kansas need to meet additional requirements, described online (http://www.kbsrb.org). You also may wish to consult the American Counseling Association’s website (http://www.counseling.org) for additional information. Besides a core of work in counseling psychology (including counseling theory, career development, interviewing, assessment, group counseling, professional issues, and practicum), work is required in developmental psychology, research, and diagnosis and psychopathology. All students complete either a thesis, a research project, or a comprehensive examination. After entering the program,
students should meet with an advisor to plan a schedule for completing degree requirements. Students in the Kansas City area may take a few courses at the KU Edwards Campus (http://edwardscampus.ku.edu) in Overland Park.

**Doctor of Philosophy in Counseling Psychology**

The doctoral program in counseling psychology trains generalists who are able to engage in variety activities ranging from clinical treatment to academic research. Reflecting a "scientist-practitioner" model, the curriculum prepares clinicians who apply the best and most current theory and research to their practice, and academicians who are grounded in the realities of practice. Although preparing students to be able to assess and treat the full range of disorders that psychologists address, our emphasis as counseling psychologists is upon personal, social, and career development of the whole person, and upon enhancing the environments in which people learn and work. Students learn to critically evaluate major approaches, to evaluate, design, and conduct research, and gain clinical experience working with people of diverse cultural backgrounds and worldviews. The program coursework includes interviewing skills and intervention techniques, group counseling, career development and vocational a required internship in professional psychology, multicultural counseling, legal and ethical issues in professional psychology, supervision and consultation, supervised practica (field experiences), measurement, assessment, psychodiagnoses, lifespan development, a research core (statistics, research design, research practicum), a core sequence of coursework in the psychological foundations underlying professional practice, elective coursework, and an internship and dissertation. The program is intended for full-time students.

The Ph.D. program in Counseling Psychology is accredited by the Commission on Accreditation of the American Psychological Association in 1955. If you have questions about our program's accreditation status, please contact: American Psychological Association, 750 1st Street, NE, Washington, DC 20002-4242 Phone: (202) 336-5979.

**Graduate Admission to the School of Education**

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees, as specified by the admitting departments, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a grade-point average of at least 3.0 on a 4.0 scale. Departments that offer provisional admission require a grade-point average of at least 2.5. Individual departments may require additional information and may have more stringent admission and retention requirements.

Some departments may offer special provisional admission categories to students who may not qualify under traditional admission criteria. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession. Exceptions to established policies must be sought individually by petition to the Graduate Division of the School of Education.

See Admission in the Graduate Studies (p. 2369) section of the online catalog for more information.

Each department in the School of Education sets its own application deadlines. Prospective graduate students should contact their departments for application deadlines.

**Graduate Admission**

**Prerequisites for Regular Admission**

Prerequisites include the following:

- Undergraduate grade-point average of 3.0 or higher on a 4.0 scale
- Graduate grade-point average of 3.5 or higher on a 4.0 scale
- Graduate Record Examination general test scores
- Completed bachelor's or master's degree in counseling, psychology, or a related area. (An applicant who does not have an undergraduate degree in education or psychology should have a minimum of 14 undergraduate credit hours in the behavioral sciences.)

At the first enrollment, a doctoral student reviews any previous graduate work with an advisor to identify any course work in which the student is deficient. Students holding master's degrees in other areas should work with an advisor to identify any course work in which the student is deficient. Students holding master's degrees in other areas should recognize that such course work may require up to a year to complete and, in some instances, must be taken before the actual doctoral course requirements.

See individual programs for specific admission requirements and deadlines.

Submit your graduate application online (http://www.graduate.ku.edu). Send 1 copy of all original transcripts to the department:

**The University of Kansas**

Department of Educational Psychology
Joseph R. Pearson Hall
1122 W. Campus Road, Room 621
Lawrence, KS 66045-3101

**Admission**

The admission deadline is December 15 to begin course work the following fall.

**Admission Criteria**

The Counseling Psychology program accepts approximately 6-10 students each year. Both bachelor's level and master's level applicants are considered for admission.

**Recommended minimums for bachelor’s level applicants**

- Completion of bachelor's degree in psychology or related field
- GRE verbal, quantitative, and writing scores at 50th percentile, obtained within the past 5 years
- Cumulative undergraduate GPA of 3.0 or GPA of 3.25 for the major courses or the last 60 credits of the bachelor's degree
- Prior undergraduate course work in psychological research methods, measurement, and statistics (recommended).
Recommended minimums for master’s level applicants

- Completion of master’s degree in counseling or closely related field
- GRE verbal, quantitative, and writing scores at 50th percentile, obtained within the past 5 years
- Graduate GPA of 3.5 or above.

Alternative Criteria

Applicants may be admitted under alternative criteria provided there is evidence that regular criteria do not adequately reflect the student’s potential to succeed in the program. The faculty will review and make decisions on such applications on a case-by-case basis. The faculty reserves the right to require those who are admitted under the alternative criteria to take some background core courses before or during the first year of their doctoral training in the areas of general psychology, experimental psychology, and introductory statistics. This decision will be made by the admission committee and the student’s assigned advisor, and communicated to the student before he or she accepts admission to the program.

Required Admission Materials

1. Graduate application (http://www.graduate.ku.edu) and application fee. See Admission in the Graduate Studies (p. 2369) section of the online catalog.
2. 1 copy of official transcripts of all previous college work, sent directly to the Graduate Application Processing Center (http://www.graduate.ku.edu). The original transcript is forwarded to the School of Education to complete licensing and/or certification paperwork.
3. GRE (general test) scores: Institution code, R6871; Department code, 2005.
4. Letter of intent.
5. Résumé.
6. 3 letters of recommendation from people who can assess the applicant’s prospects for completing the program. If the applicant has completed a practicum in counseling or a related area, 1 recommendation should be completed by the practicum supervisor

Additional Requirement for Students whose First Language is not English

Students’ oral expression and communication skills play an important role in their success in counseling psychology training programs. Therefore, the counseling psychology program faculty requires that all non-native English speaking applicants (international or domestic applicants) demonstrate their English proficiency by following the guidelines listed below before their applications are reviewed by the admissions committee.

(1) Following are the acceptable means of verifying English proficiency for purposes of admitting international students to the CPSY MS or Ph.D. program. These guidelines also apply to U.S. citizens and permanent residents who are not native speakers of English.

Specifically, see KU’s policy on English Proficiency Requirements for International Students:

For Admission to the University (https://documents.ku.edu/policies/Graduate_Studies/EnglishProficiencyIntlStudents.htm)

For an English proficiency chart

For Board of Regents Policy on English proficiency requirements for GTAs (https://documents.ku.edu/policies/provost/SpokenEnglishLanguageCompetencyBORPolicy.htm)

Please note: The score requirement for admission to KU, set by KU international Student Affairs Office, may be different. Due to the high demand for English proficiency in conducting counseling, our program requires iBTOEFL – all part scores at least 25, which is higher than the University’s requirement for general admission.

(2) Skype interviews or interviews through other on-line media will be required if the applicant is unable to appear for an in-person interview in the admission process.

(3) All international students who are not native speakers of English must visit the Applied English Center upon arrival at KU for verification of their English language proficiency. A minimum score of 50 on the TSE or SPEAK tests. Until all the AEC tests are satisfactorily passed (per AEC standards), the student is not allowed to take degree related courses or be employed as a GRA.

Review of Graduate Status

At the beginning of each fall semester, the department formally evaluates the progress and status of all students in the program.

Ph.D. Degree Requirements

Course Work Requirements

In addition to any background competency deficiencies, each student must complete the following course work. This constitutes the minimal substantive requirement of the program.

Psychological Foundations

Students must take coursework in each of 6 general core psychology areas:

1. biological aspects of behavior,
2. cognitive aspect of behavior,
3. affective aspects of behavior,
4. social aspects of behavior,
5. individual aspects of behavior, and
6. history and systems of psychology.

Professional Core

Students complete a sequence of course work in counseling theories and practices, and in assessment. This course work includes interviewing skill and interventions techniques, group counseling, career development and vocational psychology, multicultural counseling, legal and ethical issues in professional psychology, supervision and consultation, supervised practica (field experiences), measurement, assessment, and psychodiag nostics.

Human Development

A graduate course in life span developmental psychology is required. See offerings in PRE, Psychology, or Applied Behavioral Science.
**Research Core**

Students complete coursework in research design and statistical analysis, including a research practicum.

**Elective Area**

Students complete 9 credit hours of elective course work from PRE or any related field or department. These are to be regularly scheduled courses (and may include seminars); the requirement cannot be fulfilled using field experiences, college teaching experiences, independent study, etc.

**College Teaching Experience**

EPSY 996 College Teaching Experience in: (Supervision) (minimum of 2 credit hours)

**Internship in Counseling Psychology**

EPSY 990 Internship in Counseling Psychology (1 credit hour for 3 consecutive terms)

**Dissertation**

EPSY 999 Doctoral Dissertation (minimum of 18 credit hours)

**Note:** Contact the EPSY department or Counseling Psychology program for more information about research skills and responsible scholarship, and the current requirements for doctoral students in the program. Current Lawrence and Edwards Campus policies on Doctoral Research Skills and Responsible Scholarship are listed in the KU Policy Library.

**Comprehensive Examination**

After completing course work, the student must pass a written comprehensive examination based on the curricular requirements of the counseling psychology program. After satisfactory completion of the written examination, the student must pass a comprehensive oral examination. The program defines the nature of this examination.

**Master of Science in Education in Educational Psychology and Research**

**M.S.E. in Educational Psychology and Research**

**M.S.E. in Educational Psychology and Research**

The department of Educational Psychology (EPSY) (http://pre.soe.ku.edu) offers the Educational Psychology and Research (EPR) program leading to a Master of Science in Education (M.S.Ed.) degree. This program includes instruction within two specialized areas of emphasis referred to as "tracks:" Development & Learning (D&L) and Research, Evaluation, Measurement and Statistics (REMS).

The Development & Learning track for the M.S.Ed. degree program prepares students for work in schools, nonprofit agencies, and other applied settings, or for future doctoral training. The program includes coursework in the areas of human development, learning and cognition, and educational research methods, as well as completion of a data-driven master's thesis. The M.S.Ed. is typically completed in 2-3 years of full-time study.

The Research, Evaluation, Measurement, and Statistics (REMS) track prepares students for careers in educational measurement and quantitative methods. The program includes coursework in research methods, psychometrics, and statistical analysis. Students typically complete the M.S.Ed. in 2-3 years of full-time study.

**Program Coordinator:** William Skorupski (Research, Evaluation, Measurement and Statistics), 639 J.R. Pearson, 785-864-9700, wps@ku.edu

**Program Coordinators** Development & Learning: Meagan Patterson (632 J.R. Pearson, mmputer@ku.edu, 785-864-9763) and David Hansen (642 J.R. Pearson, dhansen1@ku.edu, 785-864-1874).

**Graduate Admission to the School of Education**

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees, as specified by the admitting departments, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a grade-point average of at least 3.0 on a 4.0 scale. Departments that offer provisional admission require a grade-point average of at least 2.5. Individual departments may require additional information and may have more stringent admission and retention requirements.

Some departments may offer special provisional admission categories to students who may not qualify under traditional admission criteria. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession. Exceptions to established policies must be sought individually by petition to the Graduate Division of the School of Education.

See Admission in the Graduate Studies (p. 2369) section of the online catalog for more information.

Each department in the School of Education sets its own application deadlines. Prospective graduate students should contact their departments for application deadlines.

**Graduate Admission**

**Prerequisites for Regular Admission**

Prerequisites include the following:

- Undergraduate grade-point average of 3.0 or higher on a 4.0 scale
- Graduate grade-point average of 3.5 or higher on a 4.0 scale
- Graduate Record Examination general test scores
- Completed bachelor’s or master’s degree in counseling, psychology, or a related area. (An applicant who does not have an undergraduate degree in education or psychology should have a minimum of 14 undergraduate credit hours in the behavioral sciences.)

At the first enrollment, a doctoral student reviews any previous graduate work with an advisor to identify any course work in which the student is deficient. Students holding master’s degrees in other areas should recognize that such course work may require up to a year to complete and, in some instances, must be taken before the actual doctoral course requirements.

See individual programs for specific admission requirements and deadlines.

Submit your graduate application online (http://wwwgraduate.ku.edu). Send 1 copy of all original transcripts to the department:
Admission

In order to be eligible for admission to the M.S.Ed. degree program in EPR, students must first meet the admission requirements for graduate study at the University of Kansas. Admission to the degree program also requires recommendation for acceptance by the Educational Psychology and Research Program Committee.

December 15th is the application deadline for the M.S.Ed. program in Educational Psychology and Research. If accepted as an M.S.Ed. candidate, enrollment begins in the fall semester following the application deadline. The Educational Psychology and Research Program Committee can review only complete applications. It is the applicant’s responsibility to ensure that her or his application is complete. Applicants are encouraged to email the department at preadmit@ku.edu if they wish to check on the status of their application.

Required Admission Materials

**STEPS AND REQUIREMENTS FOR A COMPLETE APPLICATION**

1 Prepare First – The online application will require upload of several documents including your resume, statement of purpose, test scores, and transcripts. In addition, the form will ask you to submit the names and email address of those providing your references in support of your application. There is space for you to upload a writing sample however this is not a required part of the application process.

2 Submit the Graduate Studies online application (http://www.graduate.ku.edu/apply) and non-refundable application fee. Print a copy of your application for your personal files.

3 Statement of Purpose and Resume. For EPR applicants, be sure to note in your Statement of Purpose which track (D&L - Development and Learning or REMS – Research, Evaluation, Measurement and Statistics) you intend to pursue. In your Statement of Purpose, please:

   • Describe your career goals.
   • Describe how you see your career goals relating to this degree program; that is, describe how you see this program preparing you to meet your career objectives.
   • Describe past work or educational experiences related to this degree program.
   • Describe what skills/competencies and experiences you hope to gain in this program.
   • Describe any past research experiences and accomplishments.
   • Describe one research topic/issue that you would like to pursue in this program.
   • Please provide additional information concerning your background, experience, goals, or accomplishments/awards you believe are pertinent to your application.

4 Official GRE scores. Scores must be sent directly from the institution.

   • The GRE should have been taken within five years of the application date, and scores should typically equal or exceed the 50th percentile: 150-151 on Verbal and 149-150 on the Quantitative sections.
   • The institution code for the University of Kansas is 6871.
   • The major field codes for our department are: § 2005 for Counseling Psychology
   § 3403 for Educational Psychology and Research
   § 3406 for School Psychology

5 Official transcripts from each institution of higher education attended. You may upload a copy of your official transcripts for review purposes. However, if you are admitted, official transcripts, sent directly from the institution, will be required before second semester enrollment. If your school offers electronic transcripts, you may request the paperless version be sent directly to preadmit@ku.edu.

   • An undergraduate grade point average of 3.0 or higher is required for regular admission. If applicable, a graduate grade point average of 3.5 or higher is required for regular admission.
   • At the discretion of the university, an applicant may be admitted as a provisional graduate student when either the quality or kind of undergraduate preparation is deficient, i.e., the undergraduate grade-point average is below 3.0 or the student has not met the prerequisites for graduate study.

6 Three recommendation forms and/or letters from individuals in a position to evaluate the applicant’s qualifications for graduate study. Recommendation forms and letters can be solicited for three recommenders through the online application.

7 Official TOEFL or IELTS scores are required for non-native speakers of English. Scores must be sent directly from the institution. • TOEFL or IELTS scores must be achieved not more than two years prior to the semester of admission.

   • For Regular admission, all TOEFL part scores should be at least 20 -or- the minimum overall IELTS score should be 6.0 with no part score below 5.5.
   • In lieu of TOEFL or IELTS scores, English proficiency can be verified by graduation with a baccalaureate degree (or higher) earned in residence from an accredited US institution of higher education, or from such an institution whose medium of instruction is English.
   • KU’s English Proficiency Requirements can be found on the Graduate Studies website http://www.graduate.ku.edu/english-proficiency-requirements.

**ADDITIONAL REQUIREMENTS FOR INTERNATIONAL APPLICATIONS**

All international students are required to check-in at the Applied English Center (AEC) upon arrival to campus. At that time, the AEC will confirm the student’s level of English proficiency and determine if additional English courses are required.

Some degree programs, such as Counseling Psychology, set higher minimums for the TOEFL and may also require the applicant to submit SPEAK or TSE scores.
It takes approximately eight to twelve weeks to process requests for visa documents to enter the United States for incoming international students. These requests cannot be processed unless all documentation has been received. Please consult the KU web site for International Students and Scholar Services http://www.iss.ku.edu for important information.

M.S.E. Degree Requirements

Area of Focus

Students in the M.S.Ed. degree program select a track—D&L or REMS—on which to focus their studies.

M.S.Ed. students are required to:

- Take courses to satisfy our “Core Course Requirement” (16 credit hours),
- Take an additional two EPR courses (minimum of six credit hours) to establish an area of emphasis in one of the two tracks,
- Take an additional two courses (minimum of six credit hours) from departments other than PRE, one of which must be from a department in the School of Education,
- Complete a data-driven thesis.

Core Course Requirement

Students must take at least one course in each of the 5 core areas:

Learning and Instruction
Human Development
Research and Evaluation Methods*
Measurement
Statistics

Examples of courses that satisfy the core course requirements include, but are not limited to:

- Learning and Instruction
  EPSY 704 Advanced Educational Psychology: Learning Processes in Education
- Applied Human Development
  EPSY 705 Human Development Through the Life Span
- Research and Evaluation Methods: EPSY 715
  All students must take “EPSY 715: Understanding Research in Education” to satisfy this core course requirement.

- Measurement and Assessment
  EPSY 725 Educational Measurement
- Statistics

The Department of Educational Psychology (EPSY) offers the Educational Psychology and Research (EPR) program leading to a Doctor of Philosophy (Ph.D.) degree. This program includes instruction within two specialized areas of emphasis referred to as “tracks”: Development & Learning (D&L) and Research, Evaluation, Measurement and Statistics (REMS).

Ph.D. in Educational Psychology and Research

The Development & Learning track for the Doctor of Philosophy (Ph.D.) degree program prepares students for work as research scientists in educational psychology. Graduates work in a variety of settings, but most commonly seek faculty positions in higher education. The program includes coursework in the areas of human development (with a primary focus on child or adolescent development), learning and cognition, and educational research methods, as well as completion of a data-driven dissertation. Doctoral students develop their own research agenda around a relevant development and learning topic in collaboration with faculty. Research training includes presenting research at national conferences and publishing research in scientific journals. Teaching at the University is also an integral part of our doctoral education. The PhD is typically completed in 3 years of full-time study beyond the Master's degree.

The Research, Evaluation, Measurement, and Statistics (REMS) track prepares students for careers in educational measurement and quantitative research methods. The Ph.D. program includes coursework in research methods, psychometrics, and statistical analysis. Students typically complete the Ph.D. in 3-4 years of full-time study.

- REMS refers to the track of study that includes Research methods, Evaluation, Measurement, and Statistics.
Graduate Admission to the School of Education

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees, as specified by the admitting departments, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a grade-point average of at least 3.0 on a 4.0 scale. Departments that offer provisional admission require a grade-point average of at least 2.5. Individual departments may require additional information and may have more stringent admission and retention requirements.

Some departments may offer special provisional admission categories to students who may not qualify under traditional admission criteria. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession. Exceptions to established policies must be sought individually by petition to the Graduate Division of the School of Education.

See Admission in the Graduate Studies (p. 2369) section of the online catalog for more information.

Each department in the School of Education sets its own application deadlines. Prospective graduate students should contact their departments for application deadlines.

Graduate Admission

Prerequisites for Regular Admission

Prerequisites include the following:

- Undergraduate grade-point average of 3.0 or higher on a 4.0 scale
- Graduate grade-point average of 3.5 or higher on a 4.0 scale
- Graduate Record Examination general test scores
- Completed bachelor’s or master’s degree in counseling, psychology, or a related area. (An applicant who does not have an undergraduate degree in education or psychology should have a minimum of 14 undergraduate credit hours in the behavioral sciences.)

At the first enrollment, a doctoral student reviews any previous graduate work with an advisor to identify any course work in which the student is deficient. Students holding master’s degrees in other areas should work with an advisor to identify any course work in which the student is deficient. Students holding master’s degrees in other areas should recognize that such course work may require up to a year to complete and, in some instances, must be taken before the actual doctoral course requirements.

See individual programs for specific admission requirements and deadlines.

Submit your graduate application online (http://www.graduate.ku.edu). Send 1 copy of all original transcripts to the department:

The University of Kansas
Department of Educational Psychology
Joseph R. Pearson Hall
1122 W. Campus Road, Room 621
Lawrence, KS 66045-3101

In order to be eligible for admission into the Ph.D. degree program in EPR, students must first meet the admission requirements for graduate study at the University of Kansas. Admission to the degree program also requires recommendation for acceptance by the Educational Psychology and Research Program Committee.

December 15th is the application deadline for the Ph.D. program in Educational Psychology and Research. If accepted as a Ph.D. candidate, enrollment begins in the fall semester following the application deadline. The Educational Psychology and Research Program Committee can review only complete applications. It is the applicant’s responsibility to ensure that her or his application is complete. Applicants are encouraged to email the department at preadmit@ku.edu if they wish to check on the status of their application.

APPLICATION PROCESS OVERVIEW

Each EPSY program has an admissions committee composed of three to five faculty members who specialize in that particular program area. Completed applications are reviewed shortly after the program’s deadline date. The criteria for a complete application must be met, but are not the only conditions to assure an applicant’s admission to a departmental program. Program admission ultimately depends on committee members’ votes based on their perceptions of the applicant’s potential for successful completion of the requested degree program and the availability of faculty to advise and direct the applicant’s training.

Once the EPSY admissions committee has completed their review, a recommendation (to admit or deny) will be forwarded to the Office of Graduate Studies, where a final decision will be made. Applicants will then receive an official notification of the application decision by email.

STEPS AND REQUIREMENTS FOR A COMPLETE APPLICATION

1 Prepare First – The online application will require upload of several documents including your resume, statement of purpose, test scores, and transcripts. In addition, the form will ask you to submit the names and email address of those providing your references in support of your application. There is space for you to upload a writing sample however this is not a required part of the application process.

2 Submit the Graduate Studies online application (http://www.graduate.ku.edu/apply) and non-refundable application fee. Print a copy of your application for your personal files.

3 Statement of Purpose. For EPR applicants, be sure to note in your Statement of Purpose which track (D&L - Development and Learning or REMS – Research, Evaluation, Measurement and Statistics) you intend to pursue. In your Statement of Purpose, please:

- Describe your career goals.
- Describe how you see your career goals relating to this degree program; that is, describe how you see this program preparing you to meet your career objectives.
- Describe past work or educational experiences related to this degree program.
- Describe what skills/competencies and experiences you hope to gain in this program.
- Describe any past research experiences and accomplishments.
• Describe one research topic/issue that you would like to pursue in this program.

• Please provide additional information concerning your background, experience, goals, or accomplishments/awards you believe are pertinent to your application.

4 Official GRE scores. Scores must be sent directly from the institution.

• The GRE should have been taken within five years of the application date, and scores should typically equal or exceed the 50th percentile: 150-151 on Verbal and 149-150 on the Quantitative sections.

• The institution code for the University of Kansas is 6871.

• The major field codes for our department are: § 2005 for Counseling Psychology

§ 3403 for Educational Psychology and Research

§ 3406 for School Psychology

5 Official transcripts from each institution of higher education attended. You may upload a copy of your official transcripts for review purposes. However, if you are admitted, official transcripts, sent directly from the institution, will be required before second semester enrollment. If your school offers electronic transcripts, you may request the paperless version be sent directly to preadmit@ku.edu.

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Please consult http://travel.state.gov for useful information about visas.

Ph.D. Degree Requirements

Area of Focus

Students in the Ph.D. degree program select a track—D&L or REMS—on which to focus their studies.

Program Core Course Requirements

All doctoral students must enroll in at least one course at or above the 800 level in each of the following program core areas. Examples of courses commonly chosen to meet these requirements are shown below.

• Learning and Instruction
  Example: EPSY 807 Theories and Research in Human Learning

• Applied Human Development
  Examples: EPSY 800 Development during Youth and Adulthood
  EPSY 806 Issues in Human Development

• Research and Evaluation
  Examples: EPSY 902 Research Methodology in Education
  EPSY 816 Evaluating School Programs
  EPSY 812 Meta-analysis

• Measurement and Assessment
  Examples: EPSY 822 Educational Scales, Questionnaires and Sampling
  EPSY 921 Theory and Applications of Educational Measurement
  EPSY 922 Item Response Theory

• Statistics
  Examples: EPSY 810 Regression Analysis
  EPSY 811 Analysis of Variance
  EPSY 905 Multivariate Analysis
  EPSY 926 Hierarchical Linear Modeling

School of Education Core Course Requirements

Under School of Education policy, all Ph.D. students must complete “EDUC 800: Education as a Field of Scholarship.” This course must be taken during the first year of a student’s doctoral program.

Specialization Courses

All students must complete 8 courses (24 credit hours) in addition to the program and school core requirements. These “specialization courses” should complement a student’s growing research focus and agenda. At least two of the 8 courses must be taken from academic units other than...
EPSY. Students consult with their advisers to identify courses that support their major area of study.

**Dissertation Credit Hours**

Doctoral students must enroll in at least 18 hours of EPSY 999 Doctoral Dissertation. During the dissertation period, students must be enrolled continuously with a minimum of 3 credit hours each semester. Students may begin enrollment in dissertation hours the semester they pass the Comprehensive Examination.

**Additional Ph.D. Requirements**

**Research Skills**

Doctoral preparation in the Educational Psychology and Research program implies a strong emphasis on developing strong research skills. Accordingly, every doctoral student must demonstrate these skills by completing three projects or demonstrating competence in three skill areas. Examples of such skills include:

- the submission of a scholarly paper to an appropriate professional organization,
- the development of a position paper on an issue related to the field of educational psychology and research, or
- the application of statistical procedures to a dataset.

**Supervised College Teaching Experience**

All Ph.D. students in EPR are expected to have college teaching experience. This experience is often gained through Graduate Assistantships.

**Ph.D. Residence Agreement**

Doctoral students must be enrolled full-time for at least two consecutive semesters during their doctoral training. Consecutive full-time enrollment for two semesters can be attained from Fall, Spring, and Summer semesters.

**Comprehensive Examination**

Following completion of the majority of the specialization course work, a student must complete and pass a written preliminary comprehensive examination and then a comprehensive oral examination. The candidate, in consultation with his/her advisor, assembles a comprehensive examination committee. The program advisor and the exam committee define the nature of these examinations. During the semester in which students plan to take their comprehensive exams, they should begin enrolling in dissertation hours.

**Dissertation**

Upon passing the written and oral portions of the comprehensive examination, doctoral candidates, in consultation with their advisors, assemble a dissertation committee. For information on post-comprehensive enrollment and general information about doctoral programs, see the Doctor of Philosophy section in the Graduate Studies portion of the online catalog.

The minimum requirement for dissertation enrollment at the University of Kansas is 18 credit hours. However, typical doctoral students in the Educational Psychology and Research program enroll in 21 to 24 credit hours on average to complete the dissertation process.

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**Specialist in Education in School Psychology**

**Ed.S. in School Psychology**

**Training Director:** Matthew Reynolds, 130T J.R. Pearson, 785-864-9712, mreynolds@ku.edu

The program leads to the Specialist in Education (Ed.S.) degree. The curriculum prepares the student to function professionally as a school psychologist and to develop the skills of a psychoeducational consultant. The program emphasizes current issues and trends in school psychology.

**Graduate Admission to the School of Education**

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees, as specified by the admitting departments, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a grade-point average of at least 3.0 on a 4.0 scale. Departments that offer provisional admission require a grade-point average of at least 2.5. Individual departments may require additional information and may have more stringent admission and retention requirements.

Some departments may offer special provisional admission categories to students who may not qualify under traditional admission criteria. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession. Exceptions to established policies must be sought individually by petition to the Graduate Division of the School of Education.

See Admission in the Graduate Studies (p. 2369) section of the online catalog for more information.

Each department in the School of Education sets its own application deadlines. Prospective graduate students should contact their departments for application deadlines.

**Graduate Admission**

**Prerequisites for Regular Admission**

Prerequisites include the following:

- Undergraduate grade-point average of 3.0 or higher on a 4.0 scale
- Graduate grade-point average of 3.5 or higher on a 4.0 scale
- Graduate Record Examination general test scores
- Completed bachelor’s or master’s degree in counseling, psychology, or a related area. (An applicant who does not have an undergraduate degree in education or psychology should have a minimum of 14 undergraduate credit hours in the behavioral sciences.)

At the first enrollment, a doctoral student reviews any previous graduate work with an advisor to identify any course work in which the student is deficient. Students holding master’s degrees in other areas should recognize that such course work may require up to a year to complete and, in some instances, must be taken before the actual doctoral course requirements.

See individual programs for specific admission requirements and deadlines.
Submit your graduate application online (http://www.graduate.ku.edu).
Send 1 copy of all original transcripts to the department:

The University of Kansas
Department of Educational Psychology
Joseph R. Pearson Hall
1122 W. Campus Road, Room 621
Lawrence, KS 66045-3101

Admission
The admission deadline is December 15 to begin course work in the following summer or fall.

Required Admission Materials
1. Graduate application (http://www.graduate.ku.edu) and application fee. See Admission in the Graduate Studies (p. 2369) section of the online catalog.
2. 1 copy of official transcripts of all previous college work, sent directly to the Educational Psychology Department (http://pre.soe.ku.edu).
3. GRE (general test) scores: Institution code, R6871; Department code, 3406.
4. Letter of intent.
5. Résumé.
6. 3 letters of recommendation from people who can assess the applicant's prospects for completing the program.

Ed.S. Degree Requirements
The Ed.S. program prepares graduates to function effectively as school psychologists and to meet the recommendations of professional organizations and Kansas licensure requirements. The Ed.S. program is accredited by the National Association of School Psychologists (http://www.nasponline.org), the National Council for Accreditation of Teacher Education (http://www.ncate.org), and the Kansas State Department of Education (http://www.ksde.org).

Program Requirements
The Ed.S. program consists of 2 years of full-time graduate study (about 62 semester credit hours) followed by a third year of internship. Students completing the program are licensed for PK through grade 12.

All students obtain competence in school psychology primarily by completing a sequence of prescribed courses and field-based experiences. However, there may be room in a student’s program for electives, depending on previous experiences and course work. The standard course sequence for students in the Ed.S. program is as follows:

<table>
<thead>
<tr>
<th>Year 1 Fall</th>
<th>Hours Spring</th>
<th>Hours Summer</th>
<th>Hours</th>
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<tbody>
<tr>
<td>EPSY 715</td>
<td>3 EPSY 835</td>
<td>3 EPSY 710</td>
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<td>EPSY 725</td>
<td>3 EPSY 860</td>
<td>3 EPSY 711</td>
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<td>EPSY 770</td>
<td>3 EPSY 760</td>
<td>3 EPSY 705</td>
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<td>EPSY 805</td>
<td>1-3 EPSY 965</td>
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<tr>
<td>EPSY 798</td>
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<table>
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<tr>
<th>Year 1 Summer</th>
<th>Hours</th>
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<tr>
<td>EPSY 910</td>
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<tr>
<th>Year 2 Fall</th>
<th>Hours Spring</th>
<th>Hours Summer</th>
<th>Hours</th>
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<tbody>
<tr>
<td>SPED 725</td>
<td>3 EPSY 704</td>
<td>3 EPSY 947</td>
<td>1-4</td>
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<tr>
<td>EPSY 855</td>
<td>3 EPSY 798</td>
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<tr>
<td>EPSY 910</td>
<td>3 Consultation Systems &amp; Program Evaluation</td>
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<td>EPSY 975</td>
<td>3 EPSY 865</td>
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<th>Year 2 Summer</th>
<th>Hours</th>
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<tr>
<td>EPSY 911</td>
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<th>Year 3 Fall</th>
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<th>Hours</th>
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<tr>
<th>Year 3 Summer</th>
<th>Hours</th>
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<tbody>
<tr>
<td>EPSY 991</td>
<td>1-5</td>
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</table>

Total Hours: 55-76

1. EPSY 710 and EPSY 711 may be waived when the student has taken an undergraduate statistics course and successfully passes a qualifying test.
2. May be taken in 1- to 4-credit-hour segments.

Student Admission, Outcomes, and Other Data

Doctor of Philosophy in School Psychology
Ph.D. in School Psychology

Training Director: Matthew Reynolds, 130T J.R. Pearson, 785-864-9712, mreynolds@ku.edu (tlowe@ku.edu)

The program leads to the Doctor of Philosophy (Ph.D.) degree. The curriculum prepares the student to function professionally as a school psychologist and to develop the skills of a psychoeducational consultant. The program emphasizes current issues and trends in school psychology. The doctoral program adheres to a scientist-practitioner model of training that extends the student’s professional skills and theoretical understanding of school psychology issues. This approach helps the student to acquire competence in research and in the teaching of psychology. Completion of the program typically requires 4 years of full-time study followed by a year of internship.

The doctoral program is accredited by the American Psychological Association, the National Association of School Psychologists, the National Council for the Accreditation of Teacher Education, and the Kansas State Department of Education. If you have questions about our program’s APA accreditation status, please contact:
American Psychological Association (http://www.apa.org/ed/accreditation)
750 1st Street, NE
Washington, DC 20002-4242
Admission

The admission deadline is December 15 to begin course work in the following summer or fall.

Required Admission Materials

1. Graduate application (http://www.graduate.ku.edu) and application fee. See Admission in the Graduate Studies (p. 2369) section of the online catalog.
2. 1 copy of official transcripts of all previous college work, sent directly to the Educational Psychology Department (http://pre.soe.ku.edu).
3. GRE (general test) scores: Institution code, R6871; Department code, 3406.
4. Letter of intent.
5. Résumé.
6. 3 letters of recommendation from people who can assess the applicant’s prospects for completing the program.

The doctoral program adheres to a scientist-practitioner model of training. Doctoral study extends the student's applied, research, and teaching skills. Research skills are described under Doctor of Philosophy with a Major in Education. Completion of the program typically requires 4 years of full-time study followed by a full year of internship.

Research Skills and Responsible Scholarship

The student must complete course work and demonstrate computer analysis of research data. In addition, each doctoral student must submit a manuscript and have it accepted for presentation at a convention of a scholarly association or submit a manuscript for publication in a professional journal. Before proceeding to the comprehensive examination, doctoral students also must complete the requirement for responsible scholarship training. The responsible scholarship requirement is fulfilled by completing EPSY 760 Ethics, Law and Professional Issues in School Psychology, EPSY 880 Ethical and Legal Issues in Professional Psychology and the Research Skills requirement (see below).

Comprehensive Examination

After completing course work, a student must pass a written comprehensive examination that consists of three research products. Content is the three research products based on the curricular requirements of the school psychology program. After satisfactory completion of the written examination, the student must pass a comprehensive oral examination. The program defines the nature of these examinations.

Internship

The internship usually is finished in one year after completion of most course work, although it may extend over two years. It is a year of supervision in which the student extends skills and continues professional development while working professionally in an approved setting. The internship gives students an opportunity to integrate theory and practice as they field-test skills and concepts. Content, structure, and supervision requirements follow guidelines of the American Psychological Association and the Council of Directors of School Psychology Programs. Information on internship sites is available in the department office.
Dissertation

Upon passing the written and oral portions of the comprehensive examination, the candidate, in consultation with the adviser, assembles a dissertation committee. For information on post-comprehensive enrollment and general information about doctoral programs, see the pertinent sections of the online catalog.

Doctoral Program Requirements

Professional School Psychology (SPSY) Area

1. Psychodiagnostic Assessment, Consultation and Intervention, and Professional Practice

(all required unless indicated) 45 hrs

EPSY 760 Ethics, Law, and Professional Issues in School Psychology

EPSY 770 Developmental Psychopathology: Diagnosis, Intervention, and Prevention

EPSY 798 Special Course: Applied Behavior Analysis and Evidence-Based Interventions

in School Psychology

EPSY 798 Special Course: Consultation Systems and Program Evaluation

EPSY 805 Individual Intelligence Testing

EPSY 835 Clinical Techniques in Academic Assessment and Intervention

EPSY 855 Psychoeducational Clinic I: Assessment, Consultation, and Intervention

EPSY 860 Assessment of Behavior Problems and Personality

EPSY 865 Psychoeducational Clinic II: Assessment, Consultation, and Intervention

EPSY 880 Ethics and Law in Professional Psychology

EPSY 910 Practicum in School Psychology

EPSY 911 Advanced Practicum in School Psychology

EPSY 965 Foundations of Psychoeducational Consultation

EPSY 975 Therapeutic Intervention: Home and School

EPSY 995 Field Experience in __________________________

_______________

EPSY 992 Ph.D. Internship (10 hrs)

_______________

EPSY 960 Assessment of Infants, Toddlers, and Young Children (elective)

EPSY 885 Projective Assessment—not a SPSY course— (elective)

2. Learning and Development (must take one learning course and one development course) 6 hrs

EPSY 807 Theories and Research in Human Learning and

EPSY 705 Human Development Through the Life Span


(all four courses required) 10 hrs

*EPSY 710 Introduction to Statistical Analysis

*EPSY 711 Lab for Introduction to Statistical Analysis

EPSY 715 Understanding Research in Education

**EPSY 921 Theory and Application of Educational Measurement

4. Special Education (must take the course listed below) 3 hrs

SPED 725 Introduction to the Psychology and Education of Children and Youth with Disabilities

Psychological Foundations (all students must take coursework in the five psychological core areas)

1. Biological Bases of Behavior (one course required) 3 hrs

PSYC 961 Biological Foundations of Psychopathology

2. Cognitive-Affective Bases of Behavior (met through professional SPSY area and Learning Development area) ------

3. Social Bases of Behavior (met through professional SPSY area

plus one of the following) 3 hrs

PSYC 774 Advanced Social Psychology I or

PSYC 775 Advanced Social Psychology II or

PSYC 777 Social Psychology: Theory, Research and Clinical Applications

4. Individual Bases of Behavior (met through professional SPSY area) ------

5. History and Systems of Psychology (met through the professional SPSY area 3 hrs

plus one of the following courses)

EPSY 882 History and Systems of Psychology or

PSYC 805 History of Psychology

Research Skills (students must take EPSY 901 (4 semesters), EPSY 947, EPSY 810, EPSY 811, 27 hrs

and EPSY 902 plus 6 hours in measurement, statistics, evaluation, or research design)

EPSY 810 Regression Analysis

EPSY 811 Analysis of Variance

EPSY 901 Research Practicum

EPSY 902 Research Methodology in Education

EPSY 947 Specialist Research
EPSY 803 Computer Applications of Statistical Analyses (elective)
EPSY 812 Meta-analysis (elective)
EPSY 816 Evaluating School Programs (elective)
EPSY 822 Educational Scales, Questionnaires, and Sampling (elective)
EPSY 905 Multivariate Analyses (elective)
EPSY 906 Structural Equation Modeling I (elective)
EPSY 908 Structural Equation Modeling II (elective)
EPSY 921 Theory and Applications of Educational Measurement (elective)
EPSY 922 Item Response Theory (elective)
EPSY 926 Hierarchical Linear Modeling (elective)
PSYC 887 Factor Analysis (elective)
ABSC 735 Within Subjects Research and Methodology and Direct Observation (elective)

 Appreciation/Sensitivity to Ethnic and Cultural Diversity (must take one of the following) 3 hrs
EPSY 875 Understanding Individual and Cultural Diversity in Professional Psychology or
ELPS 830 Foundations in Multicultural Education

Supervised College Teaching (all students must take the following course) 2 hrs
EPSY 996 College Teaching Experience in ____________.

Ph.D. Internship (all students must complete a full-year internship) 10 hrs
EPSY 992 Ph.D. Internship in School Psychology

Additional Requirements (all students must complete the following)
Comprehensive exams - written and oral comprehensive exams

Dissertation 18 hrs

Total 133 hrs

* EPSY 710 and EPSY 711 may be waived when the student has taken an undergraduate statistics course and successfully passes a qualifying test.

** EPSY 725 may be taken in place of EPSY 921 if EPSY 921 is not available.

Department of Health, Sport, and Exercise Sciences

Health, Sport, and Exercise Sciences

The Department of Health, Sport, and Exercise Sciences (http://hses.soe.ku.edu) provides physical activity courses for all students and serves the community through clinics and laboratories. The department offers a full range of undergraduate and graduate degree programs.

Undergraduate Programs

The Academic Catalog is a guideline for policies and procedures in the School of Education. However, academic program requirements change. Students are strongly encouraged to check the school's website (http://www.soe.ku.edu) and the department for the most current information.

This catalog is in effect for undergraduates admitted to the School of Education for academic year 2015-16.

All undergraduate programs include a strong general education component with a focus on the biological sciences.

Undergraduates may enroll in the Professional Teacher Preparation Program in health and physical education. They also may enroll in Bachelor of Science programs in athletic training (http://hses.soe.ku.edu/academics/athletic-training), exercise science (http://hses.soe.ku.edu/academics/exercise-science/bse) and sport management (http://hses.soe.ku.edu/academics/sport-management/bs), or the B.S.E. option in community health (http://hses.soe.ku.edu/academics/community-health). The Health and Physical Education teacher program leads to teacher licensure, PK-12, in health & physical education. The Athletic Training program is a three-year program that prepares students for a career as an allied-health professional and prepares them for the BOC examination, the examination leading to certification and the credential of a certified athletic trainer. Students who complete the Exercise Science program are prepared to apply for admission to most physical therapy (PT) schools. The requirements of the Exercise Science program meet the prerequisites of the Kansas University Medical Center Physical Therapy Program. However, additional courses may be necessary to fulfill admission requirements for other PT programs. They may also work in agencies that dispense health- and fitness-related programs, such as commercial or private health and fitness centers, hospital exercise and cardiac rehabilitation programs, and corporate fitness centers or apply for graduate study in exercise physiology or Physician Assistant (PA). The Sport Management program prepares graduates for entry-level positions in intercollegiate athletics, professional sports, recreational programs, and the fitness industry. Students in Community Health prepare to work with public health agencies. All nonlicensure program students must complete an internship in their area of study.

Undergraduates may enter the School of Education by meeting the admission requirements. Undergraduates seeking admission to any Health, Sport, and Exercise Science program must have a minimum cumulative grade-point average of 2.75. However, achieving the minimum grade-point average is not a guarantee of admission. In addition to the minimum cumulative grade-point average, program admission is based on performance in core courses, academic preparation for the major, and the number of students that each program can admit. Consult the School of Education Welcome Center, 208 J.R. Pearson Hall, or the HSES Undergraduate Office, 161 Robinson Center, 785-864-5552.
Non-Western Culture Requirement
The Kansas State Department of Education requires undergraduates seeking teacher licensure to study both Western and non-Western cultures. To meet the non-Western culture requirement, students must complete at least 1 course classified as NW. This requirement also may count in the appropriate category (behavioral science, social sciences, or arts/humanities) of the general education requirements.

Laboratories and Facilities
HSES programs at all levels are supported by experiential education opportunities. The department maintains excellent laboratories for student and faculty research, including biomechanics, motor development/adaptive, applied physiology, sports management, and sport and exercise psychology. All students are exposed to the laboratories and clinics, which serve KU and the community. View (http://hses.soe.ku.edu/research) further information about HSES labs and clinics.

Graduate Programs
Graduate work in health, sport, and exercise sciences includes an offering of courses leading to the Master of Science in Education and Doctor of Philosophy degrees. Entrance requirements include completion of an undergraduate program and admission to graduate studies through the Graduate Division of the School of Education.

HSES provides concentrated graduate study in the following specializations: Exercise Science (M.S.E.), Exercise Physiology (Ph.D.), Health & Psychology of Physical Activity (M.S.E. and Ph.D.), Physical Education Pedagogy (M.S.E.), and Sport Management (M.S.E. and Ph.D.).

Laboratories and Facilities
HSES programs at all levels are supported by experiential education opportunities. The department maintains excellent laboratories for student and faculty research, including biomechanics, motor development/adaptive, applied physiology, sports management, and sport and exercise psychology. All students are exposed to the laboratories and clinics, which serve KU and the community. View (http://hses.soe.ku.edu/research) further information about HSES labs and clinics.

Courses
HSES 104. Physical Activity in: ______. 0.5-1 Hours. (An accurate description of the activity or activities will be given in the Timetable.) Graded on a satisfactory/unsatisfactory basis. ACT.

HSES 108. Basic Skill Instruction in: ______. 0.5-2 Hours. (An accurate description of the activity or activities will be given in the Timetable.) ACT.

HSES 110. Intermediate Skill Instruction in: ______. 0.5-2 Hours. (An accurate description of the activity or activities will be given in the Timetable.) ACT.

HSES 112. Advanced Skill Instruction in: ______. 0.5-2 Hours. (An accurate description of the activity or activities will be given in the Timetable.) ACT.

HSES 200. Coaching Certification for Youth Sports. 2 Hours. This course will examine theories, practices, methods and techniques used to coach youth sports. Emphasis will be upon training, conditioning, sports psychology, nutrition, organization and management as prescribed by the National Federation of Interscholastic Coaches’ Education Program. Students will have opportunity to receive coaching certification. Prerequisite: Open to physical education majors, or by consent of instructor. Students must pass the National Federation of Interscholastic Coaches’ Education Program (NFICEP) examination before exiting the course. LEC.

HSES 201. Team Sports. 2 Hours. This course will deal with Soccer, Touch Football, Basketball, Softball, and Volleyball. Practice in construction of lesson plans and unit plans, skill performance and peer teaching practicum are emphasized in each of the areas of team sports. Class meets three days per week with one hour being a laboratory session. Prerequisite: Basic fitness and knowledge of the activities. Open to HSES majors and minors, or by consent of instructor. LEC.

HSES 202. Individual and Dual Sports. 2 Hours. Instruction and analysis in individual sports such as track and field, bowling or archery, and dual sports such as tennis, badminton or handball. Development of sport skills and rule knowledge are emphasized. Prerequisite: Basic fitness and knowledge of the activities. Prerequisite: Open to pre-HSES and HSES majors, or by consent of instructor. LEC.

HSES 204. Gymnastics. 2 Hours. Instruction and analysis in the eleven gymnastics events for men and women. Skill performance, spotting and teaching techniques, lesson and unit plan construction, and teaching practical constitute the basic focus of this course. Class meets three days per week with one hour being a laboratory session. Prerequisite: Basic fitness and gymnastics/tumbling experience. Open to HSES majors and minors, or by consent of instructor. LEC.

HSES 210. Instruction and Analysis in: ______. 1-16 Hours. Study of the skills to be included in the instruction of the indicated activities and the analysis of skill performance involved. Presentation of instructional techniques and practice in construction of lesson and unit plans are included for each activity. Open to majors in physical education only. The activities included in the major program are as follows: (a) Swimming (b) Folk and Square Dance (c) Modern Dance and Women's Gymnastics (d) Weight-Training and Men's Gymnastics (e) Soccer-Speedball, Volleyball, Wrestling (f) Field Hockey, Soccer-Speedball, Volleyball (g) Golf, Tennis, Badminton, Archery (h) Basketball, Softball, Flag Football, Team Handball (i) Track and Field, Handball-Paddleball, Fencing. Prerequisite: Basic fitness and basic skill in the course activities shown through competency tests and/or credit in basic skill courses in the appropriate activity. LAB.

HSES 214. Physical Education Activities for Elementary School Children. 3 Hours. This course will introduce the student to a variety of physical education activities that are appropriate for children in grades K-6. Age appropriate activities demonstrated in this course include: individual and group games, self testing games, stunts and tumbling experiences, physical fitness, modified sports, and movement exploration. Class participation will be expected for all students. Prerequisite: Open to pre-HPE and HPE majors. LEC.

HSES 218. Lifeguard Training. 2 Hours. The course involves American Red Cross certification in lifeguarding which includes rescue techniques and safety procedures. It also includes first aid and CPR certifications. Each student will be asked to identify common hazards associated with various types of aquatic facilities and develop skills necessary to recognize a person in a distress or drowning situation and to effectively rescue that person. This course will help each student to understand the lifeguard/employer and lifeguard/patron relationship as well as provide explanations, demonstrations, practice and
review of the rescue skills essential for lifeguards. Prerequisite: HSES 112 Advanced Skill Instruction in Swimming or consent of instructor. LEC.

HSES 220. Officiating of: _______. 1 Hour.
A study of the rules and techniques of officiating. Students will officiate during laboratory sessions. The activities offered in officiating are: basketball, football, gymnastics, softball, swimming, track and field, and volleyball. Prerequisite: Basic competency in the sport to be officiated, or consent of instructor. LEC.

HSES 222. Water Safety Instruction. 2 Hours.
This course is designed to train instructor candidates to teach American Red Cross Swimming and Water Safety courses. Through practice teaching sessions, students will plan and organize skill development utilizing the various educational methods and approaches applicable to swimming and water safety instruction. Students will also learn the correct swimming styles taught by the Red Cross. Prerequisite: HSES 112 Advanced Skill Instruction in Swimming or consent of instructor. LEC.

HSES 224. Lifeguard Training Instructor. 2 Hours.
This course is designed as a lecture/laboratory course, meeting for one hour three days per week. Each instructor candidate (student) will have an opportunity for skill development necessary to instruct American Red Cross Lifeguard Training courses. Through practice teaching sessions, emphasis will be placed on enforcing safety precautions, identifying errors, providing effective instruction, and skills correction. After successful completion of this course, the student will be certified to instruct the following American Red Cross Aquatic courses: (1) lifeguard training, (2) waterfront lifeguarding, (3) CPR for professional rescue, and (4) community first aid. Prerequisite: HSES 218 or lifeguard training. LEC.

HSES 236. Practicum in: _______. 1-3 Hours.
A description of the activities offered will be provided in the Timetable. Prerequisite: Consent of instructor. LEC.

HSES 240. The Coaching of Football. 2 Hours.
A complete study of the theoretical aspects of the fundamentals of football. Study of defensive and offensive tactics for each position. Prerequisite: Sophomore standing. LEC.

HSES 244. Introduction to Physical Education and Sport Studies. 3 Hours. GE3H.
The study of the history, foundational concepts, and current principles of physical education and sport programs. LEC.

HSES 248. First Aid. 2 Hours.
This course is designed to teach emergency treatment of injuries, wounds, hemorrhage, burns, and poisoning. Emphasis is placed on the techniques of rescue breathing, CPR, and emergency bandaging. American Red Cross certification is included. LEC.

HSES 250. Introduction to Athletic Training. 3 Hours.
The introductory study of the prevention, immediate care, and treatment of athletic related injuries and illnesses. This course is designed for Athletic Training majors to cover the basic competencies of injury/illness recognition as well as discuss the various strategies for the prevention, evaluation, and care of injuries to the physically active. Prerequisite: Instructor consent and concurrent enrollment in HSES 251. LEC.

HSES 251. Introduction to Athletic Training Practicum. 1 Hour.
This course is designed to introduce the practical skills and psychomotor clinical competencies of the beginning student-athletic trainer. Emphasis will be placed on basic Athletic Training procedures including but not limited to preventative taping, bracing, and padding techniques as well as various other procedures and techniques related to the prevention, care, and management of athletic related injuries/illnesses. Prerequisite: Completed or enrolled in Human Anatomy, First Aid/CPR (or proof of current certification). Concurrent enrollment in HSES 250 or transfer credit. Open to Athletic Training majors only. LEC.

HSES 252. The Coaching of Basketball. 2 Hours.
Theory of basketball, including methods of teaching fundamentals; individual and team offense and defense; various styles of play and methods of coaching. Prerequisite: Sophomore standing. LEC.

HSES 260. Personal and Community Health. 3 Hours.
Emphasis on healthful and intelligent living and the application of the fundamental principles of health. LEC.

HSES 262. Life Skills Training for Intercollegiate Athletics. 2 Hours.
This course will focus on issues surrounding drug use, testing, and prevention in sports and will incorporate life skills training in the areas of career transition, stress and time management, performance enhancement, strategic learning skills, and the dynamics of communication and leadership. LEC.

HSES 264. The Coaching of Individual Sports. 2 Hours.
An analysis of coaching techniques and study of materials for the coaching of gymnastics, swimming, golf, tennis, and wrestling. LEC.

HSES 269. Introduction to Exercise Science. 3 Hours.
A study of the various components of physical fitness and the wellness and the implications for developing programs to promote good health and fitness. Lectures and laboratory sessions will be centered on practical knowledge and experiences designed to help individuals enhance their own health, as well as develop sound programs for others. The topics discussed include cardiovascular fitness, body composition, muscular strength, flexibility, evaluation of fitness components, training program design, nutrition, weight management, and facts and fallacies of nutrition and fitness. LEC.

HSES 289. Introduction to Sport Management. 3 Hours.
This course provides an overview of the field of sport management including the principles of leadership and management and the fundamentals of personnel management, financial management, marketing, strategic planning, sport ethics, sport law, time management, stress management, facility management, and event management applied to sport settings. LEC.

HSES 290. Safety Education. 3 Hours.
A survey of safety problems as they exist in society today, with emphasis on preventive, corrective, and compensatory procedures. LEC.

Emphasis will be on instructional techniques that are used for the inclusion of all students in health and physical education learning experiences. Students will develop an understanding of how to deliver health and physical education activities that may be part of an individual education program. As a part of this course, a practicum experience of 30 hours in a public school adaptive physical education setting will be required. LEC.

HSES 305. Methods of Strength Training and Conditioning. 3 Hours.
This course will provide the students with the scientific principles and the hands-on experience to develop resistance exercise and related conditioning programs for a wide range of populations, including those focusing on general fitness, therapeutic rehabilitation and sport performance. Prerequisite: Anatomy, Physiology, admission to the Exercise Science or Athletic Training undergraduate programs, or permission of instructor. LEC.

HSES 308. Drugs and Diseases in Society. 3 Hours.
This course is an overview of human disease processes as well as legal and illegal use of drugs and narcotics for treatment or recreational
pursposes. Both communicable and degenerative diseases will be covered with regards to prevention, transmission, effects, management, and treatment. Legal drugs and illegal drugs will be discussed with regards to their treatment or abuse potential, legislative issues, and consumer education. Reflective thinking will be used to formulate improved perspectives on the roles of drugs and diseases in society. Prerequisite: Admission to Community Health Program or consent of instructor. LEC.

HSES 310. Research and Data Analysis in Health, Sport, and Exercise Sciences. 3 Hours.
This course provides formal instruction in the areas of test administration, general statistics, and basic research design. Emphasis will be placed upon the interpretation of statistical data, evaluation of data, and basic methodologies utilized in health, sport, and exercise sciences research. Data collection, analysis, and evaluation will be an integral part of the class. Prerequisite: Admission to the School of Education. LEC.

HSES 315. Health and Fitness Technology. 2 Hours.
The course will prepare health and physical education majors to use technology effectively to enhance teaching and learning. Students will explore the use of technology appropriate for communication, organization, instruction, and assessment in health and physical education classrooms. Prerequisite: Admission to the HPE Teacher Licensure Program. LEC.

HSES 320. Methods of Teaching Physical Education. 3 Hours.
This course provides a systematic approach to the development of effective teaching skills in physical education. Students receive practical and field experiences that enable them to observe and practice managerial, instructional, and interpersonal skills necessary to produce student learning in K-12 physical education classrooms. Prerequisite: Admission to the HSES Teacher Certification Program. LEC.

HSES 330. Principles of Nutrition and Health. 3 Hours.
This course will provide an introduction to the basic principles of nutrition, with an emphasis on application of these principles to improve overall health. Topics include: guidelines for a balanced diet, index of nutritional quality, energy requirements and balance, weight management and obesity, nutritional quackery, sports nutrition, nutrition for children and elderly, and eating disorders. LEC.

HSES 340. Instructional Strategies in Motor Development. 2 Hours.
This course is designed to provide students with an examination of current theories of motor development throughout the life cycle. Emphasis is place don content regarding the development of fundamental motor skills, physical growth and development, and assessment. Prerequisite: Admission to the HSES Teacher Certification Program. LEC.

HSES 341. Instructional Strategies in Physical Education for Elementary Classroom Teachers. 1 Hour.
The application of child growth and development principles to physical education. The use of materials as related to a sequential physical education curriculum in the elementary school will also be included. Prerequisite: Prior or concurrent enrollment in CT 322 or equivalent. LEC.

HSES 350. Care and Prevention of Athletic Injuries. 3 Hours.
The introductory study of the prevention, immediate care, and treatment of athletic related injuries and illnesses. This course is designed to cover the basic fundamentals of injury/illness recognition as well as discuss the various strategies for the prevention and care of injuries to the physically active. Prerequisite: Courses in Human Anatomy and First Aid. LEC.

HSES 351. Foundations of Athletic Training. 1 Hour.
This course is designed to introduce the practical skills and psychomotor clinical competencies of the beginning student-athletic trainer. Emphasis will be placed on basic athletic training procedures including but not limited to preventative taping, bracing, and padding techniques as well as various other procedures and techniques related to the prevention, care, and management of athletic related injuries/illnesses. Prerequisite: Human Anatomy, First Aid, concurrent enrollment in HSES 350. Open to Athletic Training majors only. LEC.

HSES 352. Therapeutic Modalities. 3 Hours.
This course presents the theoretical and physiological foundations of pain and inflammation. Discussion of therapeutic agents to treat pain and inflammation are presented along with progressive planning and implementation of a comprehensive treatment for injuries/illnesses sustained by physically active individuals. Prerequisite: Admission into the Athletic Training Education program and HSES 250 or the transfer equivalent. LEC.

HSES 353. Athletic Training Practicum I. 2 Hours.
This course provides a practical experience for the student-athlete trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury/illness evaluation during their clinical and field experience. Specific skills addressed in HSES 352 will be practiced, applied, and mastered during this experience. Prerequisite: Admission to Athletic Training Education program and concurrent enrollment in HSES 352. FLD.

HSES 354. Lower Extremity Evaluation. 3 Hours.
This course provides a comprehensive study of the techniques used by the Athletic Trainer in regard to the assessment and evaluation of athletic injuries/illnesses of the lower extremity. Procedures for reporting and evaluating injuries/illnesses will be discussed so that appropriate injury management and referral may take place. The etiological factors common to athletic injuries, as well as specific signs and symptoms of various athletic related pathological conditions will be discussed. Prerequisite: Admission to the Athletic Training Program, HSES 352, and HSES 353. LEC.

HSES 355. Athletic Training Practicum II. 2 Hours.
This course provides a practical experience for the student-athlete trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury/illness evaluation during their clinical and field experience. Specific skills addressed in HSES 354 will be practiced, applied, and mastered during this experience. Prerequisite: Admission to Athletic Training Education program and concurrent enrollment in HSES 354. FLD.

HSES 358. Creative Movement and Dance Appreciation. 3 Hours.
An appreciation for dance will be developed through the study of the pioneers of dance and the critique of local dance performances. Students will experience the following types of dance: creative movement, basic rhythms, ballroom dance, and folk and square dance. Prerequisite: Admission to the School of Education. LEC.

HSES 365. Peer Health Education. 3 Hours.
The course is designed to train students in peer health education, as peer health educators in college settings, and as trainers, training adolescents in community health settings for grades 6-12 peer health education. Subject content and teaching methodologies will be emphasized in the ten content areas of health with special emphasis on alcohol, drugs, tobacco, stress reduction, mental health and human sexuality. Prerequisite: HSES 260 or instructor consent. LEC.

HSES 369. Kinesiology. 3 Hours.
This course is designed primarily for students in the field of exercise science who already have taken an introductory course in human
anatomy and who need a more detailed exposure to concepts of functional movement anatomy. This course will provide a detailed study of the skeletal and muscular systems to include identification of the origin, insertion, and action of the major muscles of the human body. Students will become proficient in the use of directional and movement terminology used to describe movement and be able to identify the plane/axis as well as the agonist and antagonist muscles involved in a movement. Prerequisite: A course in human anatomy, admission to School of Education. LEC.

HSES 375. Neuromuscular Exercise Physiology and Motor Control. 3 Hours.
This course explores the control of human movement from an exercise neurophysiology perspective. Emphasis will be placed on the understanding the interactions between the nervous system and muscular systems in the control of muscle force/power production and the control of movement under a variety of contexts. These contexts include responses and adaptations to exercise training, the aging process, and in a variety of neuromuscular disorders. Prerequisite: BIOL 240 and BIOL 246. LEC.

HSES 378. The Coaching of Volleyball. 2 Hours.
Theory of volleyball, including methods of teaching fundamentals, individual and team offense and defense. Various styles of play and methods of coaching. Efficient performance of the skills during game conditions will be emphasized. LEC.

HSES 379. The Coaching of Softball. 2 Hours.
Theory and fundamentals of coaching softball. Methods of coaching, as well as team offense, defense, and strategies will be stressed. Efficient performance of the skills during game conditions will be emphasized. Prerequisite: Consent of instructor. LEC.

HSES 380. Sociology of Sport. 3 Hours. GE3S.
A survey of the current literature concerning the scope of sociology in sport, the interaction of people in sport, the social systems controlling sport, and the small group dynamics in sport. Prerequisite: Admission to Sport Management program or permission of instructor. LEC.

HSES 381. Sport Ethics. 3 Hours.
This course will help students develop their abilities to reason morally through an examination within competitive sports of ethical theories, moral values, intimidation, gamesmanship, and violence, eligibility, elimination, winning, commercialization, racial equity, performance-enhancing drugs, and technology. Students will develop a personal philosophy of sport and learn how to apply a principled decision-making process to issues in sport. Prerequisite: Admission to Sport Management program or permission of instructor. LEC.

HSES 382. Sport Facilities and Event Management. 3 Hours.
This course will provide students with a solid grasp of the fundamental skills in sport facility and event management and the knowledge base to apply those skills in a real world environment. Students will learn about planning, designing and financing the construction of new sport facilities, sport facility management of regular and special events, sporting event planning and game day operations. Prerequisite: Admission to the Sport Management program or permission of instructor. LEC.

HSES 384. Sport Law. 3 Hours.
This course is intended to introduce undergraduate students to the major legal issues in amateur and professional sports including dispute resolution, tort law, contract law, constitutional law, statutory law, labor and antitrust law and intellectual law. Students will also learn about risk management, gender equity, the Americans with Disabilities Act and agency law and sports agents. Prerequisite: Admission to Sport Management program or permission of instructor. LEC.

HSES 385. Psychological Aspects of Exercise. 3 Hours.
This course is designed for students interested in optimizing motivation and adherence to exercise among individuals in a wide range of physical activity settings (e.g., health clubs, corporate fitness, and physical therapy/rehab). The course content will include a review of the literature highlighting the psychological benefits of exercise, the theoretical advances in understanding the psychological aspects influencing individuals’ participation in physical activity, and an introduction to strategies and techniques for professionals attempting to foster motivation and adherence to exercise among their clients. Prerequisite: Admission to the Community Health program or instructor consent. LEC.

HSES 390. The Coaching of Track and Field. 2 Hours.
Designed to acquaint the student with the fundamentals of track and field athletics. LEC.

HSES 395. Concepts in Health and Wellness. 3 Hours.
This is designed as an introductory course into the profession of School and Community Health Education. Regardless of a person’s areas of specialization in Health Education, there are commonalities shared by all of us who are charged with the responsibility of providing education about health. Course emphasis will focus on: defining health education; history of health education; roles and competencies of health educators; theoretical bases for the profession; planning, implementing, administering, and evaluating health programs; settings for health education; future issues. Prerequisite: HSES 260. LEC.

HSES 403. Health Behavior Theory. 3 Hours.
This class will be an introduction to the primary models and theories used in health behavior research and health promotion practice. These models and theories undergird the development of successful health-related programs and interventions, and will help guide educators in the development of innovative and effective programming. The course will cover individual, interpersonal, community-level, and ecological theories, and students will have the opportunity to apply these theories to health behaviors of interest. LEC.

HSES 410. Program Design in Physical Education. 3 Hours.
The study of physical education curriculum models and extraclass programs appropriate for students in grades PK-12. Students will receive practical and field experiences related to program design and implementation. They will learn techniques appropriate for program evaluation as well as the assessment of student sport skills and fitness. Prerequisite: Admission to the HSES Teacher Certification Program. LEC.

HSES 418. Health Aspects of Aging. 3 Hours.
This course will consist of a Holistic Health approach to the various components of the aging process. Special emphasis will be placed on the demographic aspects of aging; normal aging changes and deviations in the aging process (pathophysiology); the relationship between mental and physical health, and the implications for the promotion of risk reduction and prevention principles that can effectively improve the quality of life for older individuals. Prerequisite: A course in personal and community health. LEC.

HSES 434. Consumer Health. 3 Hours.
This course will be a comprehensive examination of the factors involved in the selection of health products and services. Topics of discussion will be: protection laws and services, fraudulent practices and products, consumerism, and traditional and alternative health care. There will also be an in-depth examination of how to assess and evaluate health based products that are available to consumers. Prerequisite: Admission to the Community Health Program or consent of instructor. LEC.
HSES 440. Applied Sport and Performance Psychology. 3 Hours.
This course will examine the psychological principles and techniques that are applied to improve sport performance and other fields of achievement (e.g., exercise and wellness, music, and academics). Special attention will be given to psychological aspects of injury and rehabilitation, psychological conditioning, psychological training methods, coaching philosophy, the social psychology of team members, and components of peak performances. LEC.

HSES 453. Communicable and Degenerative Diseases. 3 Hours.
This course is designed to introduce the student to the study of the basic concepts/principles of disease process. Special emphasis will be placed on the etiology, origin, symptoms, treatment, body defenses, primary prevention, host, agent, (microbes) and environmental factors affecting disease occurrence, prevention and control measures. Topical application of the fundamental concepts of microbiology in school/community health practice will be critically discussed. The natural history of disease and disease classification will be highlighted. Many disease topics (both communicable and chronic, degenerative diseases) will be discussed. Prerequisite: A course in personal and community health. LEC.

HSES 455. Manual Therapy Techniques and Emergency Care Instructor Training. 3 Hours.
The purpose of the course is to train students in a Manual Therapy Technique for use in the clinical setting. The course is also designed to certify students as instructors in American Red Cross First Aid, CPR and AED courses as well as instructors for the CPR/AED for the Healthcare Provider. Prerequisite: Completion of HSES 352, HSES 354, HSES 456 and HSES 459 or equivalency from an accredited Athletic Training Education Program or have current First Aid and CPR/AED for the Healthcare Provider certification. LEC.

HSES 456. Upper Extremity Evaluation. 3 Hours.
The comprehensive study of the techniques used by the Athletic Trainer in regard to the assessment and evaluation of athletic injuries/illnesses of the upper extremity, head, and spine. Procedures for evaluating and reporting injuries/illnesses will be discussed as well as etiological factors and common signs/symptoms of various related pathological conditions. The purpose of this course is to prepare students with the skills necessary to accurately recognize the signs/symptoms of injuries and conditions in order to determine the nature and severity of the problems as well as establishing a proper care plan and medical referral when appropriate. Prerequisite: Admission into the Athletic Training Education program, HSES 354, and HSES 355. LEC.

HSES 457. Athletic Training Practicum III. 2 Hours.
This course provides a practical experience for the student-athlete trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills obtained in previous coursework as well as apply rehabilitation skills obtained in HSES 459. Prerequisite: Admission into the Athletic Training Education program, HSES 457, and concurrent enrollment in HSES 459. FLD.

HSES 461. Organization and Administration of Athletic Training. 2 Hours.
This course discusses the planning, coordinating, and supervising of all administrative components of an athletic training program. This includes public relations, athletic health counseling, and coach advisement about athletes’ health matters. Prerequisite: Admission to the Athletic Training Education program, HSES 459 and HSES 460, and concurrent enrollment in HSES 562. LEC.

HSES 462. Athletic Training Practicum V. 2 Hours.
This course will provide a practical hands-on experience for the athletic training students enrolled in HSES 561. Prerequisite: Admission into the Athletic Training Education Program and concurrent enrollment in HSES 561. FLD.

HSES 463. Senior Capstone in Athletic Training. 2 Hours.
This course is designed to allow senior Athletic Training Students to review previous content and prepare for the BOC certification exam as well as explore areas of professional development. Prerequisite: Admission into the Athletic Training program, HSES 561, and HSES 562. LEC.

HSES 464. Athletic Training Practicum VI. 2 Hours.
This course will provide a culminating practical experience for the athletic training students enrolled in HSES 563. Prerequisite: Admission into the Athletic Training Education program and concurrent enrollment in HSES 536. FLD.

HSES 465. Program Assessment and Evaluation. 3 Hours.
This course will offer an introduction and hands-on application of program assessment and evaluation techniques in health education. As health educators and program planners, we are required not only to develop innovative programs and interventions to address community- and school-based health concerns, but also to give evidence that our efforts are both adequate and effective. Successful program assessment and evaluation incorporate knowledge of basic research methods as well as the theoretical understanding of health behaviors. LEC.

HSES 466. Program Planning in Health Education. 3 Hours.
This course is designed to provide the students with an in-depth knowledge of proven health planning models that can be used for program development and intervention. Students will learn how to develop attainable program goals and objectives which will allow programs and interventions to evolve into useful forms of community based health education. Prerequisite: Students must be admitted to the School of Education and the Community Health Program. LEC.

HSES 467. Introduction to Health Education. 3 Hours.
This course will provide an overview the various health education professions. Topics emphasized in the course are: the nature of health education, an in-depth description of community health, the school health program, and identifying program and services of voluntary and services of voluntary and official health and welfare organizations.
Prerequisite: Admission to the School of Education and the Community Health Program. LEC.

HSES 468. Methods and Materials in Health Education. 3 Hours.
Emphasis is placed on the presentation and preparation of health topics along with the recommended resources and materials available. The teaching method is emphasized and student participation is stressed. Students will observe health teachers in the public schools and identify and discuss these methods as they relate to the methods present in the class. Prerequisite: Admission to HPE teacher certification program or consent of instructor. LEC.

HSES 470. Biomechanics. 3 Hours.
The course is designed to cover a basic understanding of the anatomical and mechanical principles of human movement. Areas covered will be joint and segmental movement, muscle actions, time-displacement motion description, forces causing or inhibiting motion, and stability. Special attention will be given to the application of the theoretical concepts in movement activities. Prerequisite: Anatomy, admission to the Exercise Science program, or permission of instructor. LEC.

HSES 472. Exercise Physiology. 3 Hours.
A fundamental study of the physiological adjustments that occur within the body during exercise. The presentation of this material is particularly oriented toward a basic understanding of the physiological systems as they are affected by the activity of a normal coaching or teaching situation. The physiological values of exercise are also stressed. Prerequisite: Three hours of physiology. LEC.

HSES 473. Clinical Fitness Evaluation Techniques. 3 Hours.
This course will provide the student with the knowledge and skills to assess components of physical fitness in adults including cardiorespiratory fitness, body composition, strength, and flexibility. In addition, specific emphasis will be placed on the development of exercise and weight management prescriptions. Students completing the course will have the skills to take the Health Fitness Instructor Certification exam given by the American College of Sports Medicine. Prerequisite: Exercise physiology or equivalent. LEC.

HSES 474. Exercise Biochemistry. 3 Hours.
This course will examine the processes that underlies the use and production of energy for exercise. Topics that will be explored include glycolysis and glycolysis in muscle, cellular oxidation of pyruvate, lipid metabolism, metabolism of proteins and amino acids, molecular biology, neural and endocrine control of metabolism, and local fatigue during exercise. Emphasis will be placed on carbohydrates, protein, and lipid metabolism and the acute and chronic effects that exercise has on these processes. Prerequisite: HSES 472. LEC.

HSES 480. Physical Activity and Exercise Management Individuals with Disabilities. 3 Hours. AE41.
An in-depth study of how physical activity and exercise can be a part of the treatment plan for people who have chronic disease or a disability. A variety of physical activity and exercise intervention programs and models will be presented and discussed, as well as protocols for baseline testing and post-treatment testing. A portion of this course will focus on how physical activity and exercise can prevent motor functioning deterioration in people who have a disability or limited functional movement. Prerequisite: Admission to the School of Education Exercise Science or Athletic Training programs and a course in human anatomy and physiology, or consent of instructor. LEC.

HSES 482. Drugs in Society. 3 Hours.
This course is designed to provide an in-depth exposure to basic drug classification, pharmacological effects, causes of drug abuse to society, common treatment modalities, and effective prevention/intervention strategies. In addition, consumer issues related to drug use, drug legislation, and drug education programs for school and community implementation will be discussed. Prerequisite: A course in personal and community health or consent of instructor. LEC.

HSES 483. Sport Finance and Economics. 3 Hours.
This course will help students gain an understanding of the critical importance of budgeting and financing sports-related industries based on sound financial principles and methods of financial control. Students will learn how economic principles shape the major national industry of sport. Prerequisite: Admission to Sport Management program or permission of instructor and completion of or concurrent registration in FIN 305 or FIN 310. LEC.

HSES 484. Sport in Film. 3 Hours.
In the course, students will critically engage and interpret a series of popular sport-related films. By the end of the course, students will be able to write and think critically about the role that film in general, and sport-based films in particular, play in promoting and challenging dominant perceptions of gender, sexuality, nationalism, race, social class, and ability. LEC.

HSES 485. Sport Communication. 3 Hours.
This course examines the complex and evolving field of sport communication including personal, organizational, and external perspectives of sport communication. LEC.

HSES 486. Sport Marketing. 3 Hours.
This course is intended to provide undergraduate students with basic knowledge and competencies in definitions of marketing and sport marketing, understanding the unique aspects of sport marketing, marketing planning process, consumer demographics and psychographics, the marketing mix, segmentation and target marketing, marketing proposal preparation, sponsorship, endorsement, merchandising, fundraising, advertising goals and objectives, sport consumer and consumer behavior, industry segmentation, special events, ticket sales and their use in promotion, the role of the media, television marketing ratings and shares and venue and event marketing. The proposed content of this course will address each of these expectations. Prerequisite: Admission to the Sport Management program or permission of instructor. LEC.

HSES 487. Personnel Management in Sport. 3 Hours.
This course provides students with an overview of the requisite communication skills and concepts of leadership and management as they relate to sport managers. Students will learn how leadership and management practitioners, utilizing effective communication techniques, shape successful sport organizations. Additional emphasis will be placed on building and nurturing relationships with people as a key to effective management. Prerequisite: Admission to Sport Management program or permission of instructor. LEC.

HSES 488. Pre-Internship Seminar. 1 Hour.
This course will prepare students for their actual semester-long Internship experience. Students will be provided with background information on available internship sites to assist in their site-selection decision. Students will learn about different management styles they may encounter, the traits and characteristics of effective and productive employees, common rules of the workplace and internship experiences of previous HSES Interns. Prerequisite: All HSES students must be in final semester prior to Internship. LEC.

HSES 489. Health and Human Sexuality. 3 Hours.
The course is designed to encompass the various components of human sexuality as well as to demonstrate applicable teaching techniques for sex education. Included in the content of the course are: human sexual
response, sexually transmitted diseases, family planning, sex roles, rape, sexual preferences, and topics such as sexuality and the handicapped, sexuality and the mass media, and sexuality and the church. Teaching techniques such as values clarification, non-verbal communications, role playing, tape recordings, and problem solving are demonstrated with appropriate topics. LEC.

HSES 497. Independent Study. 1-3 Hours.
Only one enrollment permitted each semester; a maximum of six hours will apply toward the bachelor's degree. This course cannot be taken as a substitute for a required course. Prerequisite: Recommendation of advisor and consent of instructor and department chairperson. IND.

HSES 499. Internship in Sport Management. 2-16 Hours. AE61.
A full-time work experience in the sport industry (40 hours per week). This experience is actual work in a sport management setting in which management practices are applied. Student interns are directed and evaluated by a faculty member with appropriate supervision by an on-site professional. Student interns must keep an accurate accounting of hours with a performance work diary. Grades/credit for the internship are determined by a faculty member with input from the on-site supervisor. Prerequisite: Completion of all Sport Management coursework. Admission to the Sport Management Internship program. FLD.

HSES 500. Student Teaching in: ____. 14 Hours. GE61.
A supervised teaching experience in an approved school setting, teaching physical education at the elementary level and health and physical education at the secondary level. The student must teach 8 weeks at the elementary level and 8 weeks at the secondary level. Prerequisite: A cumulative GPA of 2.75 or higher and admission to the HSES teacher certification program. FLD.

HSES 501. Seminar in Teaching Health and Physical Education. 2 Hours. AE61.
Student teachers will learn to analyze teaching styles and instructional methods that apply and/or relate to their student teaching experience. Discussions of various teaching practices will be facilitated by the university supervisor with input from the student teachers. Topics will include: curriculum, teaching methods, discipline, safety, equipment, and communicating with teachers, parents, and students. Prerequisite: Admission to the HSES Teacher Certification Program. LEC.

HSES 502. Camp Leadership and Counseling. 2 Hours.
Involves a complete study of the organization and administration of the various types of camps. It is designed to familiarize the student with camp leadership responsibilities; the development of the camp, the program involving camp crafts, outdoor cookery, hikes and outings, singing, and simple guidance of the individual camper. Prerequisite: General psychology plus three hours in sociology. LEC.

HSES 515. Assessment of Motor Development and Motor Control of Exceptional Children. 3 Hours.
Standardized motor assessment tools appropriate for use with exceptional children with motor difficulty will be critiqued and practiced. A battery of tests to measure developmental lag or structural deviation will be selected and administered to determine the motor control of exceptional children and the results will be interpreted. Prerequisite: Six hours of physical education course work. LEC.

HSES 528. Techniques of Athletic Training - I Lower Extremity. 3 Hours.
This course provides a comprehensive study of the techniques used by the Athletic Trainer in regard to the assessment and evaluation of athletic injuries/illnesses of the lower extremity, abdomen, and thorax, as well as the study of common illnesses/diseases that affect the physically active. Procedures for reporting and evaluating injuries/illnesses will be discussed so that appropriate injury management and referral may take place. The etiological factors common to athletic injuries, as well as specific signs and symptoms of various athletic related pathological conditions, will be discussed. Prerequisite: Human Anatomy, Human Anatomy Lab, Care and Prevention of Athletic Injuries, and admission to the Athletic Training Program. LEC.

HSES 529. Techniques of Athletic Training - II Upper Extremity. 3 Hours.
The comprehensive study of the techniques used by the Athletic Trainer in regard to the assessment and evaluation of athletic injuries/illnesses of the upper extremity, head, and spine. Procedures for evaluating and reporting injuries/illnesses will be discussed as well as etiological factors and common signs/symptoms of various related pathological conditions. The purpose of this course is to prepare students with the skills necessary to accurately recognize the signs/symptoms of injuries and conditions in order to determine the nature and severity of the problem as well as establishing a proper care plan and medical referral when appropriate. Prerequisite: HSES 528 Techniques of Athletic Training - I Lower Extremity. LEC.

HSES 578. Health Internship Seminar. 2 Hours.
Students enrolled in the internship will learn how to analyze professional health environments, examine intervention programs, and understand models used to develop health based programs. Discussions surrounding the internship experience will be facilitated by the health education faculty. Topics will relate to all phases of the internship experience. The intent of this course is to better prepare the student for entering the health profession. Discussions will be held on conflict resolution in the work place, professional development, professional behavior and etiquette. Prerequisite: Concurrent enrollment in HSES 580 Internship in Health. LEC.

HSES 580. Internship in: ____. 2-16 Hours.
A supervised internship experience in an approved setting. The specific type of internship experience and the credits for that particular experience will be outlined in the appropriate program of the student. Prerequisite: Admission to a HSES Internship Program. FLD.

HSES 581. Athletic Training Practicum I: Recognition and Evaluation. 4 Hours.
This course provides a practical experience for the student-athletic trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury/illness recognition and evaluation during their clinical and field experience. Specific skills addressed in HSES 528 will be practiced, applied, and mastered during this experience. Prerequisite: Admission to the Athletic Training program. Concurrent enrollment in HSES 528. LEC.

HSES 582. Athletic Training Practicum II: Management and Treatment. 4 Hours.
This course provides a practical experience for the student-athletic trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury/illness evaluation, and the management and treatment of athletic injuries through a variety of therapeutic modalities during their clinical and field experience. Specific skills addressed in HSES 529 and HSES 654 will be practiced, applied, and mastered during this experience. Prerequisite: HSES 581 and concurrent enrollment in HSES 529 and HSES 654. LEC.
HSES 583. Athletic Training Practicum III: Rehabilitation. 4 Hours.
This course provides a practical experience for the student-athletic trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury rehabilitation/reconditioning through a variety of therapeutic exercise techniques during their clinical and field experience. Specific skills addressed in HSES 656 will be practiced, applied, and mastered during this experience. Prerequisite: HSES 582, concurrent enrollment in HSES 656. LEC.

HSES 584. Athletic Training Practicum IV: Senior Sport Experience. 4 Hours.
This course provides a culminating practical experience for the student-athletic trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills obtained during previous coursework as well as apply administrative and management skills obtained in HSES 658. This course is intended to allow the Senior student more freedom and responsibility in decision making regarding the health care of an athletic team. Prerequisite: HSES 583, concurrent enrollment in HSES 658. LEC.

HSES 598. Special Course: ______. 1-5 Hours.
A special course of study to explore current trends and issues in health and physical education - primarily for undergraduates. LEC.

HSES 605. Administrating Health Related Programs. 3 Hours.
This course will consist of an analysis of administration as it relates to both school and community health programs. The focus will be on administrative models and techniques used to establish and maintain sound health programs in school and community settings. Prerequisite: Six hours of health education or consent of instructor. LEC.

HSES 671. Applied Biomechanics. 3 Hours.
This course will examine the qualitative biomechanical analysis of human movement directed towards the goals of performance improvement and injury prevention and rehabilitation. Specifically, this course will provide students with a basis knowledge of the biomechanical foundations of human movement, the knowledge and skills necessary to complete a systematic analysis and evaluation of human motor performance, and the ability to determine and provide interventions that are likely to improve movement in athletic, clinical, educational, and work environments. Prerequisite: A course in human anatomy, admission to the HSES Teacher Certification Program or consent of instructor. LEC.

HSES 714. Motor Development During Growth. 3 Hours.
Motor development in childhood and adolescence and its relationship to physical growth. Factors influencing motor learning and development will be explored. This course provides basic understanding of the neuromuscular changes and abilities of children and adolescents. Prerequisite: A course in kinesiology and anatomy. LEC.

HSES 715. Understanding Research in HSES. 3 Hours.
This course introduces the concepts and skills involved in understanding and analyzing research in education and related areas. The course provides an overview of basic, general knowledge of various research methodologies. Students should expect to study much of this material in greater depth through additional work before being fully prepared to conduct independent research. However, this course should enhance their ability to locate, read, comprehend, and critically analyze research articles and reports. Topics in the course include quantitative and qualitative methods and designs, historical and descriptive research, and program evaluation. (This course fulfills the requirement of a research methods course in the first 12 hours of graduate study.) Prerequisite: Must be an admitted HSES graduate student. LEC.

HSES 730. Advanced Concepts in Nutrition. 3 Hours.
A study of the nutritional factors that affect health at all ages. Specific nutritional needs and effects of deficiency states on health will also be addressed. The course will also include the physiological and biochemical mechanisms involved in the use of nutrients for human growth and development as well as the production of energy through the metabolic process. Prerequisite: HSES 330 or equivalent experience and permission of instructor. LEC.

HSES 771. Internship in Exercise Science. 6 Hours.
A supervised internship experience in an approved exercise science setting. Students will gain experience through a hands-on approach via clinical and/or research settings. The specific type of internship experience will be agreed upon by the student and their academic advisor. Prerequisite: Successful completion of at least 24 graduate credit hours. LEC.

HSES 777. Practicum in Health Education and Wellness Promotion. 1-3 Hours.
This course is designed to provide practical community health experiences in health education and wellness promotion, including: assessment, planning, implementation and program evaluation. With approval of the instructor, students may choose their practicum focus in any of the ten content areas of health: mental and emotional, family living, growth and development, nutrition, personal health, alcohol tobacco and other drugs, communicable and chronic diseases, injury prevention and safety, consumer health and environmental health. Prerequisite: Enrolled in graduate school and consent of the instructor. LAB.

HSES 779. Physiology of Functional Aging. 3 Hours.
The course has been designed to address issues and concepts relating to the biological aging process as a foundation for physical performance, general fitness, and health status. The biological concepts are applied to the human physiological aging process and the systems involved as well as the possible interventions that may effect that process. The several theories associated with physiological aging are also addressed as related to the physiological systems and current research that may impact the understanding of these theories. Prerequisite: A course in basic biology. LEC.

HSES 780. Internship in Teaching Physical Education: ______. 1-16 Hours.
A supervised internship experience leading to initial physical education teacher certification. The student assumes the total professional role as a teacher of physical education in an approved school setting. FLD.

HSES 795. Traditions and Principles in Health Education. 3 Hours.
This course is designed to explore the philosophy and principles which provide the foundation of health education as an academic discipline. Specific topics include: history of the profession, theories of health behavior and behavior change, principles of learning applied to health communications, health promotion practices, professional preparation, and the integration of philosophical and ethical ideals into program planning and implementation. LEC.

HSES 798. Special Course: ______. 1-5 Hours.
A special course of in-depth study exploring current trends and issues in health and physical education - primarily for undergraduates. LEC.

HSES 801. Sport Facilities. 3 Hours.
The purpose of this course is to study current developments and trends in the financing, programming, design, and construction of facilities for intercollegiate athletics and professional sports. Prerequisite: Admitted to
graduate school. A course in the administration/management of sport or consent of the instructor. LEC.

HSES 803. Health Behavior Theory. 3 Hours.
Given that theories of health behavior drive research and practice in health education, the purpose of this course is to familiarize students with the major theories and planning models related to health behavior change. Particular focus will be applied to the role of theory in health promotion and critical analysis of the application of theory to guide research practices. Prerequisite: Health major or consent of the instructor. LEC.

HSES 804. Sport Psychology. 3 Hours.
This course is designed to introduce students to the current research and theoretical perspectives in the sport psychology literature. Specifically, students will gain a broad understanding of the three major areas of sport psychology: social psychology (e.g., motivation), performance enhancement (e.g., mental skills training), and psycho-physiology (e.g., impact of anxiety on performance). Prerequisite: Admission in the health program or consent of the instructor. LEC.

HSES 805. Laboratory Experiments and Analysis--Exercise Physiology. 3 Hours.
Students will learn the techniques of operating various types of laboratory equipment and will conduct small-scale lab experiments in areas such as respiration, circulation, metabolism, strength, neuromuscular function, cardiac function, and body composition. Special emphasis will be placed on laboratory techniques of assessing physical fitness. Prerequisite: A course in exercise physiology. LAB.

HSES 806. Stress Management. 3 Hours.
The long range objectives of this course are to assist students in gaining stress management knowledge; to help them to formulate improved perspectives on various stress management techniques; and consequently apply the developing constructs in their lives with a sense of purpose and self-responsibility. Prerequisite: Two courses in health education or consent of instructor. LEC.

HSES 807. Current Literature in Exercise Physiology. 2 Hours.
A wide range of topics from the exercise physiology literature will be discussed. Instructor and students will present reports to the group centered on current research findings with discussion aimed at application of these results to physical exercise and training. Prerequisite: A basic course in exercise physiology or consent of instructor. LEC.

HSES 808. Biomechanics of Human Movement. 3 Hours.
This course will examine the movements and the structure and function of human beings by means of the methods of mechanics. An emphasis will be placed on the two primary goals of biomechanics: performance improvement and injury prevention and rehabilitation. Topics to be covered include the kinematics and kinetics of human movement, muscle mechanics, bone and joint mechanics, and the biomechanics of musculoskeletal injury. Prerequisite: Courses in calculus, physics, anatomy, and biomechanics, or consent of instructor. LEC.

HSES 810. Advanced Exercise Physiology. 3 Hours.
An advanced study of the physiological and biomechanical aspects of muscular, cardiovascular, and respiratory function as the human is engaging in exercise. The topics of energy metabolism, hormones, and nutrition as related to exercise also are presented. Prerequisite: A basic course in exercise physiology. LEC.

HSES 812. Current Issues in Health. 3 Hours.
This course is designed to review and discuss current issues in various health related areas. The focus will be on relevant issues and topics that are guiding and directing the health profession. The range of topics discussed will vary from popular literature to scientific research and cover such areas as health education, community health, and health over the lifespan. Students in the course will be expected to report, discuss, and interact with each other concerning the issues as they are reported. Prerequisite: A graduate course in health or consent of the instructor. LEC.

HSES 814. Implementing Health Programs. 3 Hours.
The purpose of this course is to explore planning models used for designing, implementing and managing health promotion programs. Students will be trained to develop objectives, assess determinants, select methods and strategies, pre-test program materials, and adopt and implement promotional plans. Problem based and community based learning experiences will be provided. Prerequisite: A health major or permission from the instructor. LEC.

HSES 817. Practical Aspects of Aerobic and Resistance Training. 3 Hours.
This course will be a discussion of various concepts related to aerobic and resistance training. By the end of the semester, the student should be able to demonstrate an understanding of information presented in this course by achieving satisfactory evaluations of presentations, papers, and an examination of the following topics: energy metabolism, general adaptations of aerobic and resistance training, exercise techniques for aerobic and resistance training, periodization of training, testing and evaluation of aerobic and resistance training performance, and exercise prescription for aerobic and resistance training. Prerequisite: Undergraduate course in exercise physiology or consent of instructor. LEC.

HSES 818. Legal Aspects of Public Health Education. 3 Hours.
This course is designed to enhance understanding of the variety of legal issues which affect health educators and their audiences. Specifically, this course will survey federal, state, and local public health laws and regulations which may prescribe health education content and the health educator's actions. Legislation will be analyzed and the practical impact of the health educator upon the legislative process will be emphasized. Prerequisite: A course in community health or consent of instructor. LEC.

HSES 823. Behavior Modification in Health and Exercise. 3 Hours.
This course will examine the behavioral principles that influence health and exercise practices. Theories of human behavior, reinforcement theory, and models of self-esteem will serve as the foundation for studying behavior change. Society influences will be strongly emphasized. Course topics will include exercise determinants, motivation, media representation, negative behaviors, self-efficacy, social support, and effective promotion strategies. Prerequisite: Admitted to Graduate School or consent of instructor. LEC.

HSES 824. Epidemiology and Concepts of Disease Causation. 3 Hours.
This course involves the study of the etiology and natural history of infectious and non-infectious diseases including vector control, host defenses and resistance, investigation of disease outbreaks, mental health and public health. The course deals with detailed analytic and descriptive epidemiology and their implications for improving our understanding of health and diseases; epidemiologic consequences of nuclear war and retrospective and prospective approaches in epidemiological research. Contemporary developmental methods for disease prevention will be critically reviewed. Prerequisite: HSES 573, or equivalent, or consent of instructor. LEC.

HSES 825. Skeletal Muscle Physiology. 3 Hours.
This course will provide the student with an in-depth study of the structure and development, contractile mechanics, and neuromuscular system as it relates to the skeletal musculature. Structure and Development - muscle fiber, motor neuron, neuromuscular junction, muscle receptors,
marketing by examining in-depth the sport marketing mix of product, price, place, and promotion as well as marketing research, marketing strategy, market segmentation, branding, sponsorships, licensing, venue and event marketing, public relations, and global sport marketing. LEC.

HSES 850. Analysis Techniques for Health, Sport, and Exercise Sciences Laboratory and Field Data. 3 Hours. Techniques for analyzing data gathered in Health, Sport, and Exercise Sciences laboratories and field studies will be presented in this course. Techniques for the recording of raw data, appropriate organization of raw data, selection of test for analysis of data, use of computer software, and computer programming for analysis and reporting results of the data will also be included. Prerequisite: PRE 710, PRE 720, or PRE 725. LEC.

HSES 866. Contemporary Trends in Elementary and Secondary Physical Education. 3 Hours. An in-depth study into the research and other forms of literature will be made to study and examine the latest trends in elementary and secondary school physical education. Games, activities, dances, and rhythms will be presented and discussed relative to developmental levels of students grades K-12. Prerequisite: A methods course in teaching physical education or consent of instructor. LEC.

HSES 872. Exercise and the Cardiovascular System. 3 Hours. This course will be a discussion of various concepts specifically related to exercise and the cardiovascular system. By the end of the semester, the student should be able to demonstrate an understanding of the interaction of exercise and cardiovascular system by achieving satisfactory evaluations on examinations, abstracts, and classroom presentations. The following topics will be discussed as they relate specifically to exercise:

1. Homeostasis and cardiovascular transport mechanisms, basic structure and function; characteristics of cardiac cells; the heart as a pump; the peripheral vascular system; vascular control; venous return and cardiac output; regulation of arterial pressure; cardiovascular responses to stress; and cardiovascular function in pathological situations. Prerequisite: Undergraduate course in exercise physiology or consent of instructor. LEC.

HSES 880. Internship in Sport Management. 1-10 Hours. This course will provide for supervised and directed experiences in selected sport management settings. The graduate advisor will schedule observations of the internship, as well as regular conferences with the student. Written summaries and evaluations of the internship will be prepared by the student, the agency supervisor, and the university graduate faculty member. Prerequisite: Admission to the Graduate Program in Sport Management. FLD.

HSES 884. Legal Aspects of Sport. 3 Hours. This course is intended to introduce graduate students to the basic concepts of the American legal system and the application of them to intercollegiate and professional sports. Particular emphasis will be given to risk management and preventive law. Other topics include: governance issues in intercollegiate and professional sports, contract law, employment discrimination, labor relations and collective bargaining, agency law and athlete agents, regulation of participation in intercollegiate and high school athletics, sport facility and event issues, participant liability issues, product liability issues, premises and spectator liability, participant violence in sports, and intellectual property law. Prerequisite: Admission to graduate program in School of Education LEC.

HSES 890. Seminar in HSES. 3 Hours. This course is designed to provide a general research seminar learning experience for graduate students in HSES. In particular, students will learn about faculty research activities and interests from a variety of specialty areas both within KU and outside of KU. Through faculty and guest presentations, students will be exposed to a variety of design and
methodologies used to conduct research in the specialty areas of HSES. LEC.

**HSES 892. Psychology of Physical Activity. 3 Hours.**
This course is designed for students interested in optimizing motivation and adherence to exercise among individuals in a wide range of physical activity settings (e.g., health clubs, corporate fitness, physical therapy). The course content includes a review of the literature highlighting the psychological benefits of exercise, the theoretical advances in understanding the psychological aspects of individuals' participation in physical activity, and strategies and techniques for professionals attempting to foster motivation and adherence to exercise among their clients/members. Prerequisite: Admission in the health program or consent of the instructor. LEC.

**HSES 897. Independent Study. 1-4 Hours.**
Prerequisite: Consent of advisor and instructor. RSH.

**HSES 898. Master's Project. 1-4 Hours.**
RSH.

**HSES 899. Master's Thesis. 1-6 Hours.**
THE.

**HSES 905. Advanced Concepts in Health Education. 3 Hours.**
This course is designed as an in-depth study of the pedagogy of health education. It is concerned with the effects of various health education models, new materials, and innovative teaching techniques. The effectiveness of various media such as films, slides, transparencies, microcomputers, and assessment tools will be analyzed. Research concerning innovations in education will be investigated along with a study of future trends in the field. Timely issues of controversy about health education practices and the effectiveness of values clarification activities will also be discussed. LEC.

**HSES 910. Biochemistry of Exercise. 3 Hours.**
This course will include an in-depth examination of metabolic and endocrine principles as they relate to physical exercise and training. Specific topics will include: substrate utilization in exercise, metabolic controls, muscle biochemistry, body composition, nutritional aspects and hormonal influences in exercise. Both instructor and students will report on the most current literature relating to the topics. Prerequisite: Human biodynamics or a course in biochemistry. LEC.

**HSES 926. Grant and Research Proposal Writing. 3 Hours.**
This is a course for students to examine the sources and areas which provide financial support for research projects. The areas of study include types of research funding available on a local, state, and federal level, the elements and design of writing a proposal and strategies involved in securing financial support for research. A focus for the course will center upon preparing a research proposal for funding. Prerequisite: Human biodynamics or a course in biochemistry. LEC.

**HSES 940. Scientific Dimensions of Exercise and Health. 3 Hours.**
This course has been designed to bring together the many scientific factors relating exercise and physical activity to health and human function. The course focuses on the interdisciplinary nature of this relationship and reviews the physiological, sociological, psychological, and behavioral factors involved. Prerequisite: Fifteen hours of graduate level course work in health or physical education and admission to health or physical education doctoral program. LEC.

**HSES 980. Advanced Topics: _____. 1-3 Hours.**
A special course of study to meet current needs of education professionals -- primarily for post-master's level students. LEC.

**HSES 981. Current Issues in Health and Physical Education. 3 Hours.**
This course will explore the latest philosophical issues and controversies which are impacting the fields of health, physical education, and athletics. The student will explore the current and future ramifications of each issue and its potential effects on the profession. Prerequisite: Admission to the Health, Sport, and Exercise Sciences Doctoral Program. LEC.

**HSES 990. Doctoral Seminar. 3 Hours.**
This seminar based course will be designed to prepare the doctoral student for academic careers or careers in industry after they graduate. The topics covered will be promotion and tenure procedures and expectations, including but not limited to teaching, responsible conduct of research, professional ethics, historical ethical issues, evaluation of ethical dilemmas, and service expectations at research intensive institutions, regional comprehensive institutions and small liberal arts colleges. Industry career options will be discussed and guest speakers from various disciplines will be brought in to discuss options and expectations with this career path. Prerequisite: Doctoral student or permission of the instructor. LEC.

**HSES 995. Field Experience in: _____. 1-5 Hours.**
Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experiences will be prepared independently by the student, a representative of the cooperating agency, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours. FLD.

**HSES 996. College Teaching Experience in: _____. 3 Hours.**
To meet the college teaching experience requirement for doctoral programs, a student shall engage in a semester long, planned, instructional activity that shall include college classroom teaching under supervision. Planning shall be done with the advisor and/or member of the faculty who will supervise the experience. The activity shall be done under the supervision of a member of the University of Kansas faculty or by an individual or individuals designated by the candidate's committee. FLD.

**HSES 997. Individual Study. 1-4 Hours.**
Prerequisite: Prior graduate course work in the area of study and consent of instructor. RSH.

**HSES 999. Doctoral Dissertation. 1-15 Hours.**
THE.

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**Bachelor of Science in Education**

**Advising**

**Undergraduate Advising**

Information about assigned advisors is given in the letter of admission. Education staff members advise pre-education students individually and in group sessions.

**Undergraduate First- and Second-Year Preparation**

Prospective undergraduates should contact the School of Education Welcome Center (http://soe.ku.edu/advising), 208 J.R. Pearson Hall, 785-864-3726, or the Health, Sport, and Exercise Sciences undergraduate office, 161 Robinson Center, 785-864-5552.

During the first 1½ to 2 years, all students are enrolled in the College of Liberal Arts and Sciences, where they meet a portion of the general education requirements. In the first year and a half, students planning
to enter the teacher education program begin taking education courses (C&T 100 and ELPS 250) that provide a basis for a career decision and a foundation for professional education courses in the later years.

In the first year, students planning to enter the school as second-semester sophomores should enroll in C&T 100 Introduction to the Education Profession. During the second semester of the first year or the first semester of the sophomore year, students should enroll in ELPS 250 Education and Society.

Students who will apply for admission to the Health, Sport, and Exercise Sciences program are not required to take C&T 100 or ELPS 250.

Undergraduate Admission to the School of Education

Undergraduates intending to transfer to the school as juniors must work closely with education advisors. Pre-education students must take specified courses in their first 1½ years. Students are admitted to C&T teaching programs once a year; online applications (https://www.applyweb.com/apply/kued) are due September 15 for admission the next spring semester. Students are admitted to the Health & Physical Education and Community Health programs once a year; online applications are due February 2 for admission the next fall semester. Students are admitted to the HSES Athletic Training program once a year; online applications (https://www.applyweb.com/apply/kued) are due February 2 and paper applications (http://hses.soeku.edu/academics/athletic-training/admission) are due May 1 for fall semester. Students are admitted to HSES Sport Management and Exercise Science programs twice a year; online applications are due February 2 for fall admission and September 15 for spring semester admission.

For information about initial admission to KU, visit the Office of Admissions (http://admissions.ku.edu/whyku/index.shtml). Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Health and Physical Education

Health and Physical Education Teacher Licensure Program (PK–12)

Admission

Students may apply for admission to the Health and Physical Education program (http://hses.soeku.edu/academics/hpe/bse) once a year. Submit an application (http://hses.soeku.edu/academics/hpe/bse/admission) and all required materials by February 3 for fall semester admission. Students are notified of decisions in writing on or before March 13. Students who plan to teach health and physical education must meet the following requirements:

1. Applicants must have completed at least 48 hours by the time of admission. The cumulative grade-point average must be at least 2.75.
2. Students must take the ACT, SAT or other equivalent test.
3. The following courses (48-50 credit hours), or KU equivalents for transfer students, must be completed before the application deadline:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition (or exemption, must be a total of 6</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>hours of composition)</td>
<td></td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing (must be a total of</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>6 hours of composition)</td>
<td></td>
</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra</td>
<td>3-5</td>
</tr>
<tr>
<td>MATH 104</td>
<td>Precalculus Mathematics</td>
<td></td>
</tr>
<tr>
<td>MATH 105</td>
<td>Introduction to Topics in Mathematics (or a math</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>class above MATH 105)</td>
<td></td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 100</td>
<td>Principles of Biology</td>
<td>4</td>
</tr>
<tr>
<td>&amp; BIOL 102</td>
<td>and Principles of Biology Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 240</td>
<td>Fundamentals of Human Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 104</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 104</td>
<td>Elements of Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one humanities course to meet KU CORE Goal 3 & Teacher Licensure Non-Western Requirement

HSES 201 Team Sports 2 2
HSES 202 Individual and Dual Sports 2 2
HSES 214 Physical Education Activities for Elementary School Children 2
HSES 244 Introduction to Physical Education and Sport Studies 2 2
HSES 248 First Aid (or current certification) 0-2
HSES 260 Personal and Community Health 2 3

Select one of the following: 3

- HSES 308 Drugs and Diseases in Society 2 3
- HSES 330 Principles of Nutrition and Health 2
- HSES 489 Health and Human Sexuality 2

Total Hours 47-51

1 Must have a grade of a "C" or higher.
2 Must have a grade of a "B-" or higher.

General Education Requirements can be taken prior to admission

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSES 308</td>
<td>Drugs and Diseases in Society</td>
<td>3</td>
</tr>
<tr>
<td>or HSES 330</td>
<td>Principles of Nutrition and Health</td>
<td>3</td>
</tr>
<tr>
<td>or HSES 489</td>
<td>Health and Human Sexuality</td>
<td></td>
</tr>
</tbody>
</table>

Select one Social Science/Global Awareness Elective: 3

- AAAS 102 Arabic and Islamic Studies
- ANTH 100 General Anthropology
- ANTH 106 Introductory Linguistics
- ANTH 108 Introduction to Cultural Anthropology
- ANTH 160 The Varieties of Human Experience
- ANTH 300 General Anthropology
- ANTH 301 Anthropology Through Films
- AMS 100 Introduction to American Studies
- AMS 110 American Identities
- AMS 332 The United States in Global Context
- GEOG 100 World Regional Geography
- GEOG 102 Principles of Human Geography
- LAA 100 Latin American Culture and Society
- LAA 332 Language and Society in Latin America
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LING 106</td>
<td>Introductory Linguistics</td>
</tr>
<tr>
<td>LING 110</td>
<td>Language and Mind</td>
</tr>
<tr>
<td>REES 110</td>
<td>Understanding Russia and Eastern Europe</td>
</tr>
<tr>
<td>POLS 150</td>
<td>Introduction to Comparative Politics</td>
</tr>
<tr>
<td>POLS 170</td>
<td>Introduction to International Politics</td>
</tr>
<tr>
<td>SOC 130</td>
<td>Comparative Societies</td>
</tr>
<tr>
<td>SOC 332</td>
<td>The United States in Global Context</td>
</tr>
</tbody>
</table>

**Total Hours: 13-14**

1. Must have a grade of a "C" or higher.
2. Must have a grade of "B-" or higher.

### Block Courses

#### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Block 2:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block 1:</td>
<td></td>
<td>Block 1 Field Experience: Adapted PE Practicum&lt;sup&gt;2&lt;/sup&gt;</td>
<td>HSES 468</td>
<td>3</td>
</tr>
<tr>
<td>HSES 302&lt;sup&gt;1&lt;/sup&gt;</td>
<td>2</td>
<td>BIOL 246</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HSES 315&lt;sup&gt;1&lt;/sup&gt;</td>
<td>2</td>
<td>C&amp;T 359&lt;sup&gt;1&lt;/sup&gt;</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>HSES 340</td>
<td>2</td>
<td>HSES 108 (Fitness elective)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>HSES 369</td>
<td>3</td>
<td>HSES 210 (or certification)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>HSES 467</td>
<td>3</td>
<td>HSES 320&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SPED 326</td>
<td>3</td>
<td>HSES 358</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

#### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block 3:</td>
<td></td>
<td>Block 2 Field Experience: Health Teaching Practicum&lt;sup&gt;3&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>C&amp;T 235&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3</td>
<td>Field Experience:</td>
<td></td>
</tr>
<tr>
<td>ELPS 250&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3</td>
<td>HSES 500</td>
<td>14</td>
</tr>
<tr>
<td>HSES 380&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3</td>
<td>HSES 501</td>
<td>2</td>
</tr>
<tr>
<td>HSES 410&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HSES 472 or 269</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours: 61**

1. A grade of "C" or higher is required.
2. 20 clock hours. Serve as a teaching aide for an adapted physical educator in a local district.

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### Community Health

#### Community Health Admission

Students may apply for admission to the Community Health program once a year. Submit an application (http://hses.soe.ku.edu/academics/community-health/admission) by February 3 for fall semester admission.

#### Community Health Program

This option prepares students for health-related careers in county, state and federal health departments, non-profit agencies, private ventures or agencies focusing on health promotion, corporate wellness, crisis intervention, drug/alcohol recovery, adoption or the elderly. In addition to general education requirements, the program includes major requirements, electives from courses complementary to the program, and a 14 credit hour internship (40 hours a week for 15 weeks). A 2.75 cumulative grade-point average is required to apply for the internship and to graduate. Students must complete all KU requirements to graduate.

#### Program Requirements

**Admission Requirements (29)**

- **ENGL 101** Composition (or exemption)<sup>1</sup> 3
- **ENGL 102** Critical Reading and Writing<sup>1</sup> 3
- **MATH 101** College Algebra<sup>1</sup> 3

OR a MATH course higher than MATH 101 (Excluding MATH 103, MATH 109 or MATH 110)<sup>1</sup>

- **COMS 130** Speaker-Audience Communication<sup>1</sup> 3
- **COMS 201** Introduction to Leadership 2
- **PSYC 104** General Psychology 3
- **SOC 104** Elements of Sociology 3

Any course meeting KU CORE 3: Arts & Humanities 3

Any course meeting KU CORE goal 4: LO 1 (Diversity) 3

- **BIOL 100** Principles of Biology 3
- **BIOL 102** Principles of Biology Laboratory 1
- **HSES 248** First Aid (or current certification)<sup>2</sup> 2

**General Education Requirements can be taken prior to admission (21)**

- **SOC 104** Elements of Sociology 3
- **PSYC 104** General Psychology 3
- **COMS 246** Introduction to Intercultural Communication 3
- **COMS 342** Problem-Solving in Teams and Groups 3

Social Science principal course meeting KU CORE goal 4: LO 2 (Global Awareness) 3

- **BIOL 240** Fundamentals of Human Anatomy 3
- **BIOL 246** Principles of Human Physiology 3

---

3. 10 clock hours. Serve as a teaching aide for health educator in local district.
4. 30 clock hours. Serve as a teaching aide in an elementary, middle, or junior high PE classroom.
5. Progression to Block 4 requires that all coursework is completed with a minimum cumulative GPA of 2.75. A cumulative GPA of 2.75 is required for graduation.
**Science/Humanities Pre-Admission Requirements:**

Elective classes cannot be used to satisfy both electives and social science/humanities pre-admission requirements.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSES 385</td>
<td>Psychological Aspects of Exercise (Fall Junior)</td>
<td>3</td>
</tr>
<tr>
<td>HSES 403</td>
<td>Health Behavior Theory (Fall Junior)</td>
<td>3</td>
</tr>
<tr>
<td>HSES 467</td>
<td>Introduction to Health Education (Fall Junior)</td>
<td>3</td>
</tr>
<tr>
<td>HSES 465</td>
<td>Program Assessment and Evaluation (Spring Junior)</td>
<td>3</td>
</tr>
<tr>
<td>HSES 466</td>
<td>Program Planning in Health Education (Spring Junior)</td>
<td>3</td>
</tr>
<tr>
<td>HSES 489</td>
<td>Health and Human Sexuality (Spring Junior or summer)</td>
<td>3</td>
</tr>
<tr>
<td>HSES 310</td>
<td>Research and Data Analysis in Health, Sport, and Exercise Sciences (Fall Senior)</td>
<td>3</td>
</tr>
<tr>
<td>HSES 365</td>
<td>Peer Health Education (Fall Senior)</td>
<td>3</td>
</tr>
<tr>
<td>HSES 418</td>
<td>Health Aspects of Aging (Fall Senior)</td>
<td>3</td>
</tr>
<tr>
<td>HSES 578</td>
<td>Health Internship Seminar (Spring Senior)</td>
<td>2</td>
</tr>
<tr>
<td>HSES 580</td>
<td>Internship in: _____ (Community Health (Spring Senior))</td>
<td>14</td>
</tr>
</tbody>
</table>

**Electives (27-29)**

Required electives must be chosen from the list below. Elective classes CANNOT be used to satisfy both electives and social science/humanities pre-admission requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSES 236</td>
<td>Practicum in: _____ (must have faculty approval)</td>
<td>3</td>
</tr>
<tr>
<td>HSES 308</td>
<td>Drugs and Diseases in Society</td>
<td>3</td>
</tr>
<tr>
<td>HSES 330</td>
<td>Principles of Nutrition and Health</td>
<td>3</td>
</tr>
<tr>
<td>HSES 434</td>
<td>Consumer Health</td>
<td>3</td>
</tr>
<tr>
<td>HSES 440</td>
<td>Applied Sport and Performance Psychology</td>
<td>3</td>
</tr>
<tr>
<td>HSES 497</td>
<td>Independent Study (must have faculty approval)</td>
<td>3</td>
</tr>
<tr>
<td>AAAS 330</td>
<td>Black Leadership</td>
<td>3</td>
</tr>
<tr>
<td>AAAS 420</td>
<td>Intercultural Communication: The Afro-American Experience</td>
<td>3</td>
</tr>
<tr>
<td>ABOC 100</td>
<td>Introduction to Applied Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>ABOC 150</td>
<td>Community Leadership</td>
<td>3</td>
</tr>
<tr>
<td>ABOC 160</td>
<td>Introduction to Child Behavior and Development</td>
<td>3</td>
</tr>
<tr>
<td>ABOC 304</td>
<td>The Principles and Procedures of Behavior Modification and Therapy</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 235</td>
<td>Multicultural Education</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 210</td>
<td>Career and Life Planning: Decision-Making for College Students</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 580</td>
<td>Positive Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 360</td>
<td>Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 370</td>
<td>Behavioral Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 430</td>
<td>Cognitive Development</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 330</td>
<td>Introduction to Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>SOC 160</td>
<td>Social Problems and American Values</td>
<td>3</td>
</tr>
<tr>
<td>SOC 220</td>
<td>Sociology of Families</td>
<td>3</td>
</tr>
<tr>
<td>SOC 222</td>
<td>American Racial and Ethnic Relations</td>
<td>3</td>
</tr>
<tr>
<td>SOC 625</td>
<td>Work Roles in Health and Medicine</td>
<td>3</td>
</tr>
<tr>
<td>SW 410</td>
<td>Professional Writing Skills in Social Work</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours:** 120-122

1. Must have a grade of a "C" or higher.
2. Students presenting current certification in lieu of HSES 248 must take an additional two hours of course credit. Acceptable certifications: American Red Cross courses - Standard First Aid with CPR/AED or Aid-Responding to Emergencies with CPR/AED.
3. Internships must be completed at an approved site within a 50-mile radius of Lawrence. Students who have a 3.0 or greater cumulative GPA may petition to complete the internship at an approved site beyond the 50-mile radius. All coursework must be completed before the internship in approved. A 2.75 cumulative GPA is required before one can apply for the internship. Internship students are required to be present at the internship site a minimum of 40 hours per week for 15 weeks - NO EXCEPTIONS.
4. Required electives must be chosen from those listed and approved by your community health advisor or a faculty member before taking the course.

Elective classes cannot be used to satisfy both electives and social science/humanities pre-admission requirements.

**Bachelor of Science in Athletic Training, Exercise Science & Sport Management**

**Advising**

**Undergraduate Advising**

Information about assigned advisors is given in the letter of admission. Education staff members advise pre-education students individually and in group sessions.

**Undergraduate First- and Second-Year Preparation**

Prospective undergraduates should contact the School of Education Welcome Center (http://soe.ku.edu/advising), 208 J.R. Pearson Hall, 785-864-3726, or the Health, Sport, and Exercise Sciences undergraduate office, 161 Robinson Center, 785-864-5552.

During the first 1½ to 2 years, all students are enrolled in the College of Liberal Arts and Sciences, where they meet a portion of the general education requirements. In the first year and a half, students planning to enter the teacher education program begin taking education courses (C&T 100 and ELPS 250) that provide a basis for a career decision and a foundation for professional education courses in the later years.

In the first year, students planning to enter the school as second-semester sophomores should enroll in C&T 100 Introduction to the Education Profession. During the second semester of the first year or the first...
semester of the sophomore year, students should enroll in ELPS 250 Education and Society.

Students who will apply for admission to the Health, Sport, and Exercise Sciences program are not required to take C&T 100 or ELPS 250.

Undergraduate Admission to the School of Education

Undergraduates intending to transfer to the school as juniors must work closely with education advisors. Pre-education students must take specified courses in their first 1½ years. Students are admitted to C&T teaching programs once a year; online applications (https://www.applyweb.com/apply/kued) are due September 15 for admission the next spring semester. Students are admitted to the Health & Physical Education and Community Health programs once a year; online applications are due February 2 for admission the next fall semester. Students are admitted to the HSES Athletic Training program once a year; online applications (https://www.applyweb.com/apply/kued) are due February 2 and paper applications (http://hses.soe.ku.edu/academics/athletic-training/admission) are due May 1 for fall semester. Students are admitted to HSES Sport Management and Exercise Science programs twice a year; online applications are due February 2 for fall admission and September 15 for spring semester admission.

For information about initial admission to KU, visit the Office of Admissions (http://admissions.ku.edu/whyku/index.shtml). Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

B.S. in Athletic Training Program

Athletic Training Selective/Limited Admission Policies

Students apply to the School of Education and the Athletic Training Program concurrently. Students are selected for admission once a year. Submit an online application by February 3 and submit an application packet (http://hses.soe.ku.edu/sites/hses.soe.ku.edu/files/docs/academics/athletic-training/Application%20Packet%20-%20April%2020214.pdf) by May 1 for fall semester admission. Students may be admitted on a provisional basis pending completion of any remaining prerequisite course work. The number of openings depends on the ratio of students to clinical instructors and may vary depending on current enrollment. If the number of applicants exceeds available openings, applicants are ranked by cumulative grade-point average (2.75 minimum), final grades in HSES 250 (exception for transfers), supervisor evaluations from HSES 251 (exception for transfers), recommendations from 3 former supervisors/mentors/teachers, and outcome of on-campus staff interview. Selection begins with the highest ranking until all positions are filled.

Athletic Training Technical Standards for Admission

Athletic training is a rigorous and intense program that prepares graduates to enter a variety of employment settings and to render care to a wide spectrum of individuals. The program’s technical standards establish the qualities necessary for students to achieve the knowledge, skills, and competencies of entry-level athletic trainers. Students who cannot meet these standards, with or without reasonable accommodation, are not admitted. Students must comply with these standards to complete the program. Compliance with the technical standards and completion of this degree do not guarantee eligibility for the Board of Certification examination. Candidates must demonstrate

1. The mental capacity to assimilate, analyze, synthesize, integrate concepts, solve problems, formulate assessments and therapeutic judgments, and distinguish deviations from the norm.
2. Sufficient ability to perform appropriate accepted techniques of psychomotor skills and clinical proficiencies in athletic training.
3. Sufficient ability to use equipment and materials accurately, safely, and efficiently during assessment and treatment of patients.
4. The ability to communicate effectively and sensitively with patients and colleagues including those from different cultural and social backgrounds.
5. The capacity to maintain composure and continue to function well during periods of high stress.
6. The perseverance, diligence, and commitment to complete the program.
7. Flexibility and ability to adjust to changing situations and uncertainty in clinical situations.
8. Affective skills and appropriate demeanor and rapport that relate to professional education and good patient care.
9. The ability to record physical examination results and a treatment plan clearly and accurately.
10. Physical and mental health that permits meeting established technical standards (determined by physical examination).

Candidates must verify that they understand and meet these standards or that they can meet them with certain accommodations.

Athletic Training Transfer Student Policy

KU welcomes transfer students to the athletic training program if the following criteria are met:

- Follow the university’s policy on transfer of credit.
- Meet School of Education admission requirements and be accepted into the school.
- Meet athletic training program admission requirements.
- Be available for an on-campus interview in May.
- Have previous experience of at least one semester working under the direct supervision of a Certified Athletic Trainer, who serves as one of the three references for the application.
- Complete HSES 251 during the first spring semester on campus.
- Space must be available for additional students due to the program’s limited and selective admissions policy (if space is not available, the transfer student must apply during the next enrollment period).
- Complete 800 hours of clinical experience while at KU to meet state of Kansas athletic training registration requirements.

Due to the structure and sequence of the athletic training program, transfer students who meet these requirements are admitted and placed in the sophomore (Level I) class. The only core AT course that may be transferred is HSES 250 or its equivalent. Program authorities reserve the right to accept or deny transfer of credit for athletic training courses.

Athletic Training Program

The athletic training program prepares students for careers as allied-health professionals and for the Board of Certification examination, which leads to certification and the credential of a certified athletic trainer. Students learn the concepts and skills to manage health care
problems associated with physical activity. In cooperation with physicians and other health care personnel, the athletic trainer is an integral member of the health care team in secondary schools, colleges and universities, professional sports, sports medicine clinics, and health care settings. The professional preparation develops competencies in injury prevention and risk management, pathology of injuries and illnesses, assessment and evaluation, acute care of injury and illness, pharmacology, therapeutic modalities, therapeutic exercise, general medical conditions, nutritional aspects of injury and illness, psychosocial intervention and referral, professional development and responsibilities, and health care administration.

All students complete 48 hours of general education requirements and a 9-hour sport foundation core. Students complete a 67-hour core curriculum including six 2-hour practicum courses in which they participate in clinical education. Clinical education is the formal acquisition, practice, application, and evaluation of the entry-level athletic training clinical proficiencies. This is accomplished through classroom, laboratory, clinical, and field experiences under the supervision of a clinical instructor. Each practicum’s proficiencies provide a logical progression of learning. Students are assigned to a clinical instructor each semester for related clinical and field experience. The clinical and field experiences allow students to apply related skills in direct patient care at clinical affiliate sites, including area high schools, sports medicine/physical therapy clinics, and collegiate settings. Field experiences include exposure to upper- and lower-extremity injuries, general medical conditions, experiences with protective equipment, experiences with team and individual sports, and gender-specific opportunities. The clinical portion of the curriculum is a vital part of professional preparation. Students are expected to demonstrate mastery of clinical skills related to didactic course work. Students must earn a grade of 80% in all core courses. These courses must be taken at KU - no transfer credits allowed. All clinical education (practicum courses) must be completed at KU or at another site approved by the HSES department. A minimum of 124 credit hours with a cumulative grade-point average of at least 2.75 is required for graduation.

Students must demonstrate mastery of each competency skill to their approved clinical instructors and pass final evaluations with 80 percent proficiency. Students who do not meet these criteria do not progress to the next course in the program sequence.

Program Requirements

Admission Requirements (29-31)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition (on exemption)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra</td>
<td>3-5</td>
</tr>
<tr>
<td>MATH 103    &amp; MATH 104</td>
<td>Trigonometry</td>
<td>1</td>
</tr>
<tr>
<td>or MATH 115</td>
<td>Precalculus Mathematics</td>
<td>2</td>
</tr>
<tr>
<td>or MATH 121</td>
<td>Calculus I</td>
<td>2</td>
</tr>
<tr>
<td>or MATH 141</td>
<td>Calculus I: Honors</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 160</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 100</td>
<td>Principles of Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 102</td>
<td>Principles of Biology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 240</td>
<td>Fundamentals of Human Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>HSES 260</td>
<td>Personal and Community Health</td>
<td>3</td>
</tr>
<tr>
<td>HSES 269</td>
<td>Introduction to Exercise Science</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSES 250</td>
<td>Introduction to Athletic Training</td>
<td>3</td>
</tr>
<tr>
<td>HSES 251</td>
<td>Introduction to Athletic Training Practicum</td>
<td>1</td>
</tr>
</tbody>
</table>

General Education Requirements can be taken prior to admission (32)

Select one of the following English elective:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 203</td>
<td>Topics in Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 205</td>
<td>Freshman-Sophomore Honors Proseminar</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 209</td>
<td>Introduction to Fiction</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 210</td>
<td>Introduction to Poetry</td>
<td>3</td>
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<tr>
<td>ENGL 211</td>
<td>Introduction to the Drama</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 104</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Any course meeting KU CORE goal 4: LO 2 (Global Awareness)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 241</td>
<td>Human Anatomy Observation Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 246</td>
<td>Principles of Human Physiology</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>PHSX 114</td>
<td>College Physics I</td>
<td>4</td>
</tr>
<tr>
<td>HSES 244</td>
<td>Introduction to Physical Education and Sport Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

Post-Admission Requirements can only be taken after admission and must be taken at KU - no transfer credits allowed (60)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSES 305</td>
<td>Methods of Strength Training and Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>HSES 310</td>
<td>Research and Data Analysis in Health, Sport, and Exercise Sciences</td>
<td>3</td>
</tr>
<tr>
<td>HSES 330</td>
<td>Principles of Nutrition and Health</td>
<td>3</td>
</tr>
<tr>
<td>HSES 352</td>
<td>Therapeutic Modalities</td>
<td>3</td>
</tr>
<tr>
<td>HSES 353</td>
<td>Athletic Training Practicum I</td>
<td>2</td>
</tr>
<tr>
<td>HSES 354</td>
<td>Lower Extremity Evaluation</td>
<td>2</td>
</tr>
<tr>
<td>HSES 355</td>
<td>Athletic Training Practicum II</td>
<td>2</td>
</tr>
<tr>
<td>HSES 369</td>
<td>Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>HSES 440</td>
<td>Applied Sport and Performance Psychology</td>
<td>3</td>
</tr>
<tr>
<td>HSES 456</td>
<td>Upper Extremity Evaluation</td>
<td>2</td>
</tr>
<tr>
<td>HSES 457</td>
<td>Athletic Training Practicum III</td>
<td>2</td>
</tr>
<tr>
<td>HSES 458</td>
<td>General Medical/Pharmacology</td>
<td>2</td>
</tr>
<tr>
<td>HSES 459</td>
<td>Rehabilitation</td>
<td>3</td>
</tr>
<tr>
<td>HSES 460</td>
<td>Athletic Training Practicum IV</td>
<td>2</td>
</tr>
<tr>
<td>HSES 461</td>
<td>Organization and Administration of Athletic Training</td>
<td>2</td>
</tr>
<tr>
<td>HSES 462</td>
<td>Athletic Training Practicum V</td>
<td>2</td>
</tr>
<tr>
<td>HSES 463</td>
<td>Senior Capstone in Athletic Training</td>
<td>2</td>
</tr>
<tr>
<td>HSES 464</td>
<td>Athletic Training Practicum VI</td>
<td>2</td>
</tr>
<tr>
<td>HSES 470</td>
<td>Biomechanics</td>
<td>3</td>
</tr>
<tr>
<td>HSES 472</td>
<td>Exercise Physiology</td>
<td>3</td>
</tr>
<tr>
<td>HSES 473</td>
<td>Clinical Fitness Evaluation Techniques</td>
<td>3</td>
</tr>
<tr>
<td>HSES 480</td>
<td>Physical Activity and Exercise Management</td>
<td>3</td>
</tr>
<tr>
<td>HSES elective (300 level or higher)</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
Must earn a grade of a "C" or better.
2 Must earn a grade of 80% or better.

**B.S. in Exercise Science**

**Exercise Science Admission**

Students may apply for admission to the Exercise Science program (http://hses.soe.ku.edu/academics/exercise-science/bse) twice a year. Submit an application by February 3 for fall semester admission or September 15 for spring semester admission. A minimum of 28 credit hours and a 2.75 GPA is required. Completion of minimum requirements does not guarantee admission.

**Exercise Science Program**

KU's School of Education has expanded its department of Health, Sport and Exercise Sciences to the KU Edwards Campus. The exercise science program is now a degree completion program on both campuses, in Overland Park and in Lawrence. The Bachelor of Science in exercise science at the Edwards Campus will offer the same courses that the Lawrence Campus offers, only in a different location.

Regardless of location, students who complete the Exercise Science program are prepared to apply for admission to most physical therapy (PT) schools. (The requirements of the Exercise Science program meet the prerequisites of the Kansas University Medical Center Physical Therapy Program. Additional courses may be necessary to fulfill admission requirements for other PT programs.) They may also work in agencies that dispense health- and fitness-related programs, such as commercial or private health and fitness centers, hospital exercise and cardiac rehabilitation programs, and corporate fitness centers or apply for graduate study in exercise physiology.

**Program Requirements**

A cumulative GPA of 2.75 is required (including transfer hours). Effective Fall 2014, transfer grades of "D" or below will not be accepted. A minimum of 28 credit hours is required for admission and all courses must be completed for graduation (at least 120 hours). Students taking 3 credits of MATH may need to take an additional 2 credit hours in order to complete the 120 credit hours required for graduation.

**Admission Requirements (28-30)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition (or exemption)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>&amp; MATH 103</td>
<td>and Trigonometry</td>
<td></td>
</tr>
<tr>
<td>MATH 104</td>
<td>Precalculus Mathematics</td>
<td></td>
</tr>
<tr>
<td>MATH 115</td>
<td>Calculus I</td>
<td>1</td>
</tr>
<tr>
<td>MATH 121</td>
<td>Calculus I</td>
<td>1</td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 104</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 100</td>
<td>Principles of Biology</td>
<td></td>
</tr>
<tr>
<td>&amp; BIOL 102</td>
<td>and Principles of Biology Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 240</td>
<td>Fundamentals of Human Anatomy (BIOL 241 is also required for graduation)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 246</td>
<td>Principles of Human Physiology (BIOL 247 is also required for graduation)</td>
<td>3</td>
</tr>
<tr>
<td>HSES 269</td>
<td>Introduction to Exercise Science</td>
<td>3</td>
</tr>
</tbody>
</table>

**General Education Requirements can be taken prior to admission (39)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PHIL 160</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td>or PHIL 676</td>
<td>Medical Ethics: Life and Death Issues</td>
<td></td>
</tr>
<tr>
<td>BIOL 241</td>
<td>Human Anatomy Observation Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 247</td>
<td>Principles of Human Physiology Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>HSES 330</td>
<td>Principles of Nutrition and Health</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>PHSX 114</td>
<td>College Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHSX 115</td>
<td>College Physics II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 200</td>
<td>Basic Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 203</td>
<td>Introductory Microbiology Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>Elective:</td>
<td>Any course meeting KU CORE Goal 3: Arts &amp; Humanities</td>
<td>3</td>
</tr>
<tr>
<td>Elective:</td>
<td>Any course meeting KU CORE Goal 4: Learning Objective 2 (Global Awareness)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Post-Admission Requirements can only be taken after admission (51)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSES 305</td>
<td>Methods of Strength Training and Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>HSES 310</td>
<td>Research and Data Analysis in Health, Sport, and Exercise Sciences</td>
<td>3</td>
</tr>
<tr>
<td>HSES 350</td>
<td>Care and Prevention of Athletic Injuries</td>
<td>3</td>
</tr>
<tr>
<td>HSES 369</td>
<td>Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>HSES 375</td>
<td>Neuromuscular Exercise Physiology and Motor Control</td>
<td>3</td>
</tr>
<tr>
<td>HSES 470</td>
<td>Biomechanics</td>
<td>3</td>
</tr>
<tr>
<td>HSES 472</td>
<td>Exercise Physiology</td>
<td>3</td>
</tr>
<tr>
<td>HSES 473</td>
<td>Clinical Fitness Evaluation Techniques</td>
<td>3</td>
</tr>
<tr>
<td>HSES 474</td>
<td>Exercise Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>HSES 480</td>
<td>Physical Activity and Exercise Management</td>
<td>3</td>
</tr>
<tr>
<td>Select TWO required electives:</td>
<td>6</td>
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</tr>
<tr>
<td>BIOL 600</td>
<td>Introductory Biochemistry, Lectures</td>
<td></td>
</tr>
<tr>
<td>CHEM 310</td>
<td>Fundamentals of Organic Chemistry</td>
<td></td>
</tr>
<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 331</td>
<td>Organic Chemistry I Laboratory</td>
<td></td>
</tr>
<tr>
<td>CHEM 335</td>
<td>Organic Chemistry II</td>
<td></td>
</tr>
<tr>
<td>CHEM 336</td>
<td>Organic Chemistry II Laboratory</td>
<td></td>
</tr>
<tr>
<td>HSES 300+</td>
<td>level course</td>
<td></td>
</tr>
<tr>
<td>ABSC 160</td>
<td>Introduction to Child Behavior and Development</td>
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</tr>
<tr>
<td>PSYC 333</td>
<td>Child Development (Required for Pre-PT)</td>
<td></td>
</tr>
<tr>
<td>PSYC 350</td>
<td>Abnormal Psychology (Required for Pre-PT)</td>
<td></td>
</tr>
<tr>
<td>HSES 580</td>
<td>Internship in: _____ (Exercise Science)</td>
<td>15</td>
</tr>
</tbody>
</table>
B.S. in Sport Management

Sport Management Admission

Students may apply for admission to the Sport Management program (http://hses.soe.ku.edu/academics/sport-management/bs) twice a year. Submit an application by February 3 for fall semester admission or September 15 for spring semester admission. A minimum of 40-41 credit hours and a 2.75 GPA is required. Admission for all School of Education majors are competitive. Completion of minimum requirements does not guarantee admission.

Sport Management Program

The undergraduate program in sport management builds on general education and introductory courses through 7 core courses and an 18-semester hour business minor. Students complete courses in sociology of sport, sport ethics, sport facilities and event management, sport law, sport finance and economics, sport marketing, and personnel management. The culminating experience is a semester-long internship working in a student-selected area of sport management. This degree program prepares graduates for entry-level positions in intercollegiate athletics, professional sports, recreational programs, and the fitness industry.

Program Requirements

A cumulative GPA of 2.75 is required (including transfer hours). Effective Fall 2014, transfer grades of "D" or below will not be accepted. A minimum of 40 credit hours is required for graduation and all courses must be completed for graduation (at least 120 hours).

Admission Requirements (40-41)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 105</td>
<td>Freshman Honors English</td>
<td></td>
</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra (or higher excluding MATH 103, 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 109, MATH 110)</td>
<td>1</td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 104</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or SOC 104</td>
<td>Elements of Sociology</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>ECON 104</td>
<td>Introductory Economics</td>
<td></td>
</tr>
<tr>
<td>ECON 142</td>
<td>Principles of Microeconomics</td>
<td></td>
</tr>
<tr>
<td>ECON 144</td>
<td>Principles of Macroeconomics</td>
<td></td>
</tr>
<tr>
<td>PHIL 160</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 100</td>
<td>Principles of Biology</td>
<td>4</td>
</tr>
<tr>
<td>&amp; BIOL 102</td>
<td>and Principles of Biology Laboratory</td>
<td></td>
</tr>
<tr>
<td>ELPS 250</td>
<td>Education and Society</td>
<td>3</td>
</tr>
<tr>
<td>HSES 244</td>
<td>Introduction to Physical Education and Sport</td>
<td>3</td>
</tr>
</tbody>
</table>

Must have a minimum grade of "C" or better.

Internships must be completed at an approved site within a 50-mile radius of Lawrence. Students who have a 3.0 or greater cumulative GPA may petition to complete the internship at an approved site beyond the 50-mile radius. All coursework must be completed before the internship is approved. A 2.75 cumulative GPA is required before one can apply for an internship. Internship students are required to be present at the internship site a minimum of 40 hours per week for 15 weeks - NO EXCEPTIONS.

General Education Requirements (can be taken prior to admission) (19-20)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 105</td>
<td>Freshman Honors English</td>
<td></td>
</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra (or higher excluding MATH 103, 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 109, MATH 110)</td>
<td>1</td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 104</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or SOC 104</td>
<td>Elements of Sociology</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>ECON 104</td>
<td>Introductory Economics</td>
<td></td>
</tr>
<tr>
<td>ECON 142</td>
<td>Principles of Microeconomics</td>
<td></td>
</tr>
<tr>
<td>ECON 144</td>
<td>Principles of Macroeconomics</td>
<td></td>
</tr>
<tr>
<td>PHIL 160</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 100</td>
<td>Principles of Biology</td>
<td>4</td>
</tr>
<tr>
<td>&amp; BIOL 102</td>
<td>and Principles of Biology Laboratory</td>
<td></td>
</tr>
<tr>
<td>ELPS 250</td>
<td>Education and Society</td>
<td>3</td>
</tr>
<tr>
<td>HSES 244</td>
<td>Introduction to Physical Education and Sport</td>
<td>3</td>
</tr>
</tbody>
</table>

Must have a grade of "C" or better.

Internships must be completed at an approved site within a 50-mile radius of Lawrence. Students who have a 3.0 or greater cumulative GPA may petition to complete the internship at an approved site beyond the 50-mile radius. All coursework must be completed before the internship is approved. A 2.75 cumulative GPA is required before one can apply for internship. Internship students are required to be present at the internship site a minimum of 40 hours per week for 16 weeks - NO EXCEPTIONS.
Master of Science in Education in Health, Sport, and Exercise Sciences

Health, Sport and Exercise Science

Programs in the Department of Health, Sport, and Exercise Sciences (HSES) offer undergraduate and graduate degrees preparing students to work in health, sport, and exercise-related fields. HSES graduates apply their knowledge to serve as teachers, researchers, clinicians, managers, administrators and other professionals in academic, private, and public settings.

The Department of Health, Sport, and Exercise Sciences (HSES) offers the Masters of Science in Education (M.S.E.) degree with a major in Physical Education in the following specialization areas:

- Exercise Science
- Health Education and Psychology of Physical Activity
- Pedagogy
- Sport Management

Graduate Admission to the School of Education

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees, as specified by the admitting departments, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a grade-point average of at least 3.0 on a 4.0 scale. Departments that offer provisional admission require a grade-point average of at least 2.5. Individual departments may require additional information and may have more stringent admission and retention requirements.

Some departments may offer special provisional admission categories to students who may not qualify under traditional admission criteria. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession. Exceptions to established policies must be sought individually by petition to the Graduate Division of the School of Education.

See Admission in the Graduate Studies (p. 2369) section of the online catalog for more information.

Each department in the School of Education sets its own application deadlines. Prospective graduate students should contact their departments for application deadlines.

Admission Requirements for the Department of Health, Sport and Exercise Sciences

Supporting documents that should be sent to the department

1. One official copy of your academic transcript from each college or university attended sent directly to the department. Note: A final degree transcript will also be required if you submit your application before you graduate from your undergraduate or master’s program. (example: submit in March, graduate in May).
2. Official transcripts from an international university must include an English translation of all documents in addition to the official transcript in the original language, or documentation that the University’s mode of instruction is English.
3. GRE scores need to be sent directly to us from the Educational Testing Center (KU Institution code 6871, Department code 3909)

Supporting documents to upload to your application:

1. Your personal statement
2. Your resume
3. Three letters of recommendation-You will submit the names and email addresses when you apply. The system will automatically email them and request that they upload their letter to your online application.

Minimum Admission Requirements (M.S.E.)

- 3.0 GPA regular masters admission (2.75 - 2.99 GPA, provisional admission)
- Graduate Record Examination (GRE) Scores
- 150 on the verbal section, 141 on the quantitative section, and 4.0 on the written analytical section

Students applying for a M.S.E thesis option program must contact a faculty member in their specialization area for a required interview.

International Applicants

International applicants also need to provide:

- Official transcripts from an international university (must include an English translation of all documents in addition to the official transcript in the original language, or documentation that the University’s mode of instruction is English.)
- English Proficiency exams score, such as TOEFL, there will be no exceptions. Acceptable exams are TOEFL written score of 570 with all sections 57 or above; TOEFL computer score of 230 with all sections 23 or above and 40 on the essay or TOEFL internet score of 88 with all section 23 or above and 19 on essay; or IELTS with a band copy. Test scores should be sent directly to the department.
- You will need to provide an official bank statement that you have $32,311 in a bank account to support your studies at the University of Kansas. International students are not offered assistantships or other financial aid during their first year of study. You should be able and prepared to finance the entire stay. If someone else will be supporting you, we will need a bank statement and a letter signed by that person indicating that they will be responsible for you financially. These statements should be uploaded to the online application.

Deadlines

- June 30 for Fall admission.
- November 30 for Spring admission.
- April 30 for Summer admission.

Submit your graduate application online (http://www.graduate.ku.edu). All supporting application materials should be uploaded to the online application.

The University of Kansas
HSES Graduate Admissions
1301 Sunnyside Ave., Room 104
Lawrence, KS 66045-7520
M.S.E. Degree Programs

The Master of Science in Education with a major in Health, Sport, and Exercise Sciences is offered with specializations in exercise science, health education and psychology of physical activity, pedagogy, and sport management. The degree programs require 30 hours for the thesis option or 36 hours for the non-thesis option.

Any admitted master’s student who does not have a minimum grade-point average of 3.0 but has at least a 2.75 may be admitted on probationary status. These students must earn a minimum of a B in the first three courses (9 hours) they take (assigned by the advisor/mentor). Failure to achieve this level will result in dismissal.

Further information is available from the department (http://hses.soe.ku.edu).

Please note: Degree requirements are subject to change. Prospective and current students should obtain the current degree requirements from the department.

Specialization - Exercise Science

Thesis Option (30 Hours)

(Any changes to this program must be approved by your advisor.)

EPSY 715 Understanding Research in Education (fall & spring) (3)
EPSY 710 Introduction to Statistical Analysis (fall & spring) (3)
HSES 805 Lab Experiments & Analysis – Ex Phys (even fall) (3)
HSES 810 Advanced Exercise Physiology (odd fall) (3)
HSES 825 Skeletal Muscle Physiology (even spring) (3)
HSES 872 Exercise and the Cardiovascular System (odd spring) (3)
HSES 910 Biochemistry of Exercise (spring) (3)
HSES 995 Field Experience in Exercise Science (fall, spring & summer) (3)
HSES 899 Master’s Thesis (fall, spring & summer) (6)

Non-Thesis Option (36 Hours)

Required Courses (27 Hours)

EPSY 715 Understanding Research in Education (fall & spring) (3)
EPSY 710 Introduction to Statistical Analysis (fall & spring) (3)
HSES 730 Advanced Concepts in Nutrition (fall) (3)
HSES 805 Lab Experiments & Analysis – Ex Phys (even fall) (3)
HSES 810 Advanced Exercise Physiology (odd fall) (3)
HSES 825 Skeletal Muscle Physiology (even spring) (3)
HSES 872 Exercise and the Cardiovascular System (odd spring) (3)
HSES 910 Biochemistry of Exercise (spring) (3)
HSES 995 Field Experience in Exercise Science (fall, spring & summer) (3)
HSES 899 Master’s Thesis (fall, spring & summer) (6)

Suggested Electives (9 Hours total - Courses not on the list must be approved by your advisor.)

PSYC 779 Physiological Aspects of Health & Disease (3)
HSES 804 Sports Psychology (3)
HSES 806 Stress Management (3)
HSES 812 Current Issues in Health (3)
HSES 823 Behavior Modification in Health & Exercise (3)
HSES 831 Ethics in the Sport Industry (3)
HSES 840 Leadership and Management (3)
HSES 842 Sport Marketing (3)
HSES 892 Exercise Psychology (3)

Specialization – Health Education & Psychology of Physical Activity

Required Core: 7 Hours

Complete the following course: 4 hours
EPSY 710/711: Basic Stats class

Complete 1 of the following courses: 3 hours
EPSY 715: Understanding Research in Education
PSYCH 790: Research Methods

Required Core Courses [Students complete 5 of the following courses]: 15 hours
HSES 803 Health Behavior Theory (3)
HSES 804 Sport Psychology (3)
HSES 806 Stress Management (3)
HSES 812 Current Issues in Health Education (3)
HSES 814 Implementing Health Education Programs (3)
HSES 823 Behavior Modification in Health & Exercise (3)
HSES 826 Grant & Research Proposal Writing (3)
HSES 890 Seminar in HSES (3)
HSES 892 Exercise Psychology (3)
HSES 824* Epidemiology (3)
HSES 897 Independent Study (3)

Students complete a Master’s Thesis: 6 hours
HSES 899 Master’s Thesis

Thesis Option: 22 + 6 + 2-3 hours elective= 30 hours
Non-thesis Option: 22 + 14 hours of electives= 36 hours

Notes:

*Electives are chosen in consultation with student’s faculty advisor and must be approved by the advisor. A list of suggested electives is provided.
*Other courses above the 30 graduate credit hour requirement may be necessary to fulfill undergraduate course deficiencies as determined by an academic advisor.

**Suggested Electives for Health Education and Psychology of Physical Activity**

**Thesis and Non Thesis Options**

-Courses subject to availability and consent of instructor

**Available at the Lawrence Campus**

HSES 730 Advanced Concepts in Nutrition (3)
HSES 777 Practicum in Health Ed & Wellness Promotion (1-3)
HSES 824 Epidemiology & Concepts of Disease Causation (3)
HSES 833 Public Health Aspects of Exercise (3)
HSES 850 Analysis Techniques for HSES Lab & Field Data (3)
HDFL 710 Community Health & Development (3)
HDFL 723 Adolescent Adjustment (3)
HDFL 807 Design & Eval of Community Health Promotion Methods (1-5)
HDFL 820 Advanced Child Development (3)
PSYC 605 Health Psychology (3)
PSYC 779 Physiological Aspects of Health & Disease (3)
PSYC 784 Proseminar in Communication & Aging (1)
PSYC 787 Gerontology Proseminar (3)
PSYC 840 Psychology of Women’s Health (3)
PSYC 870 Cognitive Development (3)
PSYC 880 Social Development (3)
SOC 625 Sociology of Health & Medicine (3)
ELPS 837 History of Educational Thoughts (3)
ELPS 834 History and Philosophy of Education (3)
ELPS 835 Philosophy of Education (3)

**Available at KU Medical Center, Kansas City**

PRVM 805 Community Health Seminar (1)
PRVM 816 International Health (2)
PRVM 818 Social & Behavioral Aspects of Public Health (3)
PRVM 820 Community Health Promotion (2)
PRVM 830 Environmental Health (3)
PRVM 855 Seminar in Women’s Health (2)
PRVM 859 Tobacco & Public Health (2)
PRVM 860 Community Nutrition (3)
HP&M 810 The Health Care System (4)
HP&M 850 Women & Health Care (3)
HP&M 835 Health & Social Behavior (3)
HP&M 837 Health Care Policy & Administration (3)
HP&M 838 Rural Health Care (3)
HP&M 855 Seminar in Women’s Health (2)

**Specialization – Pedagogy**

30 Hour – Thesis Option

**Required Courses (27 hours)**

HSES 823 Behavior Modification in Health and Exercise (spring) (3)
HSES 831 Ethics in the Sport Industry (fall) (3)
HSES 832* PE Instructional Methods and Assessment (odd falls) (3)
HSES 836* Physical Education Curriculum Models, PK-12 (even falls) (3)
HSES 899 Master’s Thesis (6)
EPSY 715* Understanding Research in Education (3)
SPED 725* Intro to Psych & Ed of Exceptional Children and Youth (3)
ELPS 834* History & Philosophy of Education (3)
Or
ELPS 835* Philosophy of Education (3)

**Suggested Electives Take one of the following three credit hour courses**

HSES 804 Sport Psychology (spring)
HSES 806 Stress Management (fall)
HSES 830 Socio-Cultural Dimensions of Sport (spring)
ELPS 760* Integration of Educational Technology
OR
SPED 729 Intro to Computing in Special Education
C&T 807* Multicultural Education
OR
ELPS 830* Foundations of Multicultural Education
EPSY 704 Adv Ed Psych: Learning Processes in Education
EPSY 705 Human Development through Lifespan
ELPS 537 Governance & Organizational of Schools
Other advisor approved courses.

*Required courses in Graduate Licensure Program (GLP).

**Non-Thesis Option**

**Required Courses (30 hours)**
HSES 804 Sports Psychology (spring) (3)
HSES 823 Behavior Modification in Health and Exercise (spring) (3)
HSES 830 Socio-Cultural Dimensions of Sport (spring)
HSES 831 Ethics in the Sport Industry (fall) (3)
HSES 832* PE Instructional Methods and Assessment (odd falls) (3)
HSES 836* Physical Education Curriculum Models, PK-12 (even falls) (3)
ELPS 830* Foundations of Multicultural Education (3)

Or
C&T 807 Multicultural Education (3)
ELPS 834* History & Philosophy of Education (3)

Or
ELPS 835* Philosophy of Education (3)
EPSY 715* Understanding Research in Education (3)

SPED 725* Intro to Psych & Ed of Exceptional Children & Youth (3)

Suggested Electives - Take two of the following courses (6 hrs.)
HSES 806 Stress Management (fall) (3)
EPSY 704 Adv Ed Psyc: Learning Processes in Education (3)
EPSY 705 Human Development through Lifespan
ELPS 537 Governance and Organization of Schools (3)
ELPS 760* Integration of Educational Technology (3)
SPED 729 Intro to Computing in Special Education (3)

Other advisor approved courses

*Required courses in Graduate Licensure Program (GLP).

**Specialization - Sport Management**

**Thesis Option**

**Required Courses (27 Hours)**
EPSY 715 Understanding Research in Education (f, sp, su) (3)
HSES 828 Sport Finance (sp) (3)
HSES 830 Socio-Cultural Dimensions of Sport (f) (3)
HSES 831 Ethics in the Sport Industry (f) (3)
HSES 840 Organizational Behavior in Sport (f) (3)
HSES 842 Sport Marketing (sp) (3)
HSES 884 Legal Aspects in Sport (sp) (3)
HSES 995 Master's Thesis (f, sp, su) (3)

**Electives—3 hours must be approved by advisor**

**Non-Thesis Option**

**Required Courses (30 Hours)**
EPSY 715 Understanding Research in Education (f, sp, su) (3)
HSES 801 Sport Facilities (f) (3)
HSES 828 Sport Finance (sp) (3)
HSES 830 Socio-Cultural Dimensions of Sport (f) (3)
HSES 831 Ethics in the Sport Industry (f) (3)
HSES 840 Organizational Behavior in Sport (f) (3)
HSES 842 Sport Marketing (sp) (3)
HSES 884 Legal Aspects in Sport (sp) (3)
HSES 880 Internship in Sport Management (f, sp, su) (3)
HSES 897 Independent Study (f, sp, su) (3)

**Electives—6 hours**

Students will choose six hours of coursework outside the department with the approval of the advisor.

**Doctor of Philosophy in Health, Sport, and Exercise Sciences**

**Health, Sport, and Exercise Sciences**

Programs in the Department of Health, Sport, and Exercise Sciences (HSES) offer undergraduate and graduate degrees preparing students to work in health, sport, and exercise-related fields. HSES graduates apply their knowledge to serve as teachers, researchers, clinicians, managers, administrators and other professionals in academic, private, and public settings.

Doctoral students may pursue the Ph.D. degree with a major in Physical Education in the following specialization areas:

- Exercise Physiology
- Health Education & Psychology of Physical Activity
- Sport Management

**Graduate Admission to the School of Education**

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees, as specified by the admitting departments, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a grade-point average of at least 3.0 on a 4.0 scale. Departments that offer provisional admission require a grade-point average of at least 2.5. Individual departments may require additional information and may have more stringent admission and retention requirements.

Some departments may offer special provisional admission categories to students who may not qualify under traditional admission criteria. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.
Exceptions to established policies must be sought individually by petition to the Graduate Division of the School of Education.

See Admission in the Graduate Studies (p. 2369) section of the online catalog for more information.

Each department in the School of Education sets its own application deadlines. Prospective graduate students should contact their departments for application deadlines.

**Admission Requirements for the Department of Health, Sport and Exercise Sciences**

Supporting documents that should be sent to the department

1. One official copy of your academic transcript from each college or university attended sent directly to the department. Note: A final degree transcript will also be required if you submit your application before you graduate from your undergraduate or master’s program. (example: submit in March, graduate in May).

2. Official transcripts from an international university must include an English translation of all documents in addition to the official transcript in the original language, or documentation that the University’s mode of instruction is English.

3. GRE scores need to be sent directly to us from the Educational Testing Center (KU Institution code 6871, Department code 3909)

**Supporting documents to upload to your application:**

1. Your personal statement
2. Your resume
3. Three letters of recommendation-You will submit the names and email addresses when you apply. The system will automatically email them and request that they upload their letter to your online application.

**Minimum Admission Requirements (Ph.D.)**

- 3.5 GPA, regular doctoral admission (3.0 - 3.49 GPA, provisional admission)
- Ph.D. Admission: 153 on the verbal section, 144 on the quantitative section, and 4.5 on the written analytical section.

**Students applying for Ph.D. program must contact a faculty member in their specialization area for a required interview.**

**International Applicants**

International applicants also need to provide:

- Official transcripts from an international university (must include an English translation of all documents in addition to the official transcript in the original language, or documentation that the University’s mode of instruction is English.)
- English Proficiency exams score, such as TOEFL, there will be no exceptions. Acceptable exams are TOEFL written score of 570 with all sections 57 or above; TOEFL computer score of 230 with all sections 23 or above and 40 on the essay or TOEFL internet score of 88 with all section 23 or above and 19 on essay; or IELTS with a band copy. Test scores should be sent directly to the department.
- You will need to provide an official bank statement that you have $32,311 in a bank account to support your studies at the University of Kansas. International students are not offered assistantships or other financial aid during their first year of study. You should be able and prepared to finance the entire stay. If someone else will be supporting you, we will need a bank statement and a letter signed by that person indicating that they will be responsible for you financially. These statements should be uploaded to the online application.

**Deadlines**

- June 30 for Fall admission
- November 30 for Spring admission
- April 30 for Summer admission

The University of Kansas

HSES Graduate Admissions
1301 Sunnyside Ave., Room 104
Lawrence, KS 66045-7520

**Ph.D. Degree Programs**

The Doctor of Philosophy degree is offered with emphases in exercise physiology, health education and psychology of physical activity, and sport management. Students must interview with a faculty advisor in the intended emphasis before admission.

Pre-aspirant status requires the prospective doctoral student to earn a grade-point average of at least 3.5 in the first 12 credit hours.

With the advisor, each student develops a course of study consistent with the student's needs and the faculty's expertise. This includes major courses, minor courses, core courses, and research skills.

**Research Skills**

Research skills must be completed before the aspirant is admitted to the comprehensive examinations. Twelve hours of statistical methods and demonstration of statistical application techniques in a research problem are required as evidence of research skills. The Ph.D. requires competence in 2 of the following 3 research skills:

1. Reading knowledge of a foreign language;
2. Computer programming, analysis, and processing skills; or
3. Additional statistics including multivariate or nonparametric techniques.

**Note:** Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current Lawrence and Edwards Campus policies on Doctoral Research Skills and Responsible Scholarship (https://documents.ku.edu/policies/Graduate_Studies/Research_Skills_and_Responsible_Scholarship.htm) are listed in the KU Policy Library.

Students should obtain specific instructions and guidelines for graduate degrees from the department (http://hses.soe.ku.edu).

**Department of Special Education**

**Special Education Graduate Programs**

The Department of Special Education (http://specialedu.soe.ku.edu) offers graduate education for students interested in teaching, research, and professional service related to children, adolescents, and adults with disabilities and their families. Since the 1970s, the department’s master’s and doctoral programs have received national and international
recognition. The faculty is known for its field leadership and commitment to high-quality education for children and youth with disabilities, innovative field-based research, and preparation of highly effective program graduates. The annual U.S. News and World Report graduate program survey consistently ranks KU at the top when compared to more than 200 graduate programs in this field. As one of the most comprehensive special education preparation programs in the country, the department attracts students from many states and countries.

Graduate degrees associated with the department’s programs include the Master of Science in Education (M.S.E.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.). Students may pursue a master’s degree emphasizing teaching in one of 5 areas:

1. High-incidence disabilities
2. Autism spectrum disorders
3. Early childhood unified (birth through kindergarten)
4. Low-incidence disabilities/ significant intellectual disabilities
5. Secondary transition education and services

Students seeking Kansas State Department of Education teaching licensure can complete requirements for special education endorsement in the following areas:

1. Adaptive (high-incidence)
2. Functional (low-incidence/significant intellectual)
3. Early childhood unified (ECU, birth through kindergarten)

With the exception of ECU, all endorsement areas require current Kansas licensure in elementary, secondary, or early childhood education.

The doctoral program prepares experienced professionals for leadership roles as university faculty, researchers, and policymakers/administrators. Course work and field experience facilitate the development of advanced knowledge and skills in leadership, teacher education, research and scholarly writing, and disability advocacy. The following areas of specialization are offered:

- Policy analysis and research
- Teacher education (e.g., high-incidence disabilities, early childhood unified education, secondary special education transition, and low-incidence disabilities)
- Families and disability
- Educational technology

Graduate classes are taught on the main campus in Lawrence, the KU Edwards Campus (http://edwardscampus.ku.edu) in Overland Park in suburban Kansas City about 40 miles from Lawrence, and online and/or as hybrid classes. Master’s students can expect to complete some graduate work on each campus. The Secondary/Transition master/s program is fully online.

**Courses**

**SPED 261. Families and Professional Partnerships. 3 Hours.**
This course provides information on issues and practices related to working together in partnership with families of young children including those who have a young child with special needs. Emphasis will be placed on taking a family systems prospective and a family-centered approach to family support. Strategies for effective communication for the purpose of information sharing and collaborative planning with families are provided. Relevant current scientifically based evidence will be reviewed and discussed pertaining to these topics. LEC.

**SPED 326. Teaching Exceptional Children and Youth in General Education. 3 Hours.**
This course is designed for general education teacher trainees. It will provide them information about students with disabilities that they will have in their classrooms and the law governing special education and its implications for them as general educators. The course will address Individualized Educational Plans that are developed for students with disabilities and how general educators contribute to these plans. Students will learn about planning instruction that is differentiated to meet various learner needs, universal design principles and instructional tools, providing meaningful access to general education classrooms and curriculum for students with disabilities and designing and delivering appropriate accommodations and modifications to assist student learning. Prerequisite: Admission to the Teacher Education Program. LEC.

**SPED 362. Introduction to Early Education and Early Childhood Special Education. 3 Hours.**
This course is designed to provide an overview of the field of early education including early childhood education and early childhood special education. The historical, philosophical, research base, policy and legal foundations for the field are discussed to provide the students with the knowledge to become an advocate for early learning opportunities (birth through grade 3) for all children and their families. LEC.

**SPED 425. Introduction to Exceptional Children and Youth. 3 Hours.**
Designed for regular education teacher trainees, those in training for support roles in public schools and/or residential facilities (music educators/therapists, speech clinicians, etc.), and others interested in providing services for exceptional children and youth. Emphasis on the learning and adjustment problems of exceptional children and youth. Includes fieldwork experiences in residential and/or public school settings. LEC.

**SPED 431. Introduction to the Exceptional Child/Adolescent. 1 Hour.**
The course is designed to provide the student with knowledge of and direct experiences within instructional settings that include one or more exceptional children. Structured experiences will be provided to (a) ensure mastery of skills in differentiating normal from atypical patterns of behavior in children or adolescents, (b) promote acquisition of skill in understanding the educational needs of exceptional learners as well as the procedures used to identify and provide instruction for them, (c) ensure the generalization of communication skills to the unique needs of exceptional learners in instructional settings, and (d) promote a positive attitude toward atypical students. LEC.

**SPED 439. Student Teaching: Unified Early Childhood. 1-6 Hours.**
A supervised student teaching experience leading to initial teaching licensure in Kansas Unified Early Childhood (birth through grade 3). The student assumes the professional role as a teacher in an approved inclusive early childhood infant/toddler or preschool. Prerequisite: Admission to the Unified Early Childhood program. Approved application of intent to student teach. LEC.

**SPED 450. Dis/ability in an American Context. 3 Hours.**
This course is designed to introduce undergraduate students of any major to important theoretical and practical concepts regarding special education, disability, and diversity. Successful completion of this course fulfills one requirement for the School of Education minor in Education. LEC.

**SPED 497. Independent Study. 1-2 Hours.**
Only one enrollment permitted each semester, a maximum of four hours will apply toward a bachelor’s degree. Prerequisite: Recommendation of advisor and consent of instructor. IND.
SPED 500. Introduction to Sign Language. 3 Hours.
This is an introductory course in Sign Language and includes ASL and English sign vocabulary, a description of all manual sign systems, medical aspects of hearing loss, communication and language, and Deaf culture and community. LEC.

This course will cover the development of American Sign Language and its application within the Deaf Community. It is based on the functional-notational approach to learning sign language. This approach organizes language around communicative purposes of everyday interaction. LEC.

SPED 502. American Sign Language II (ASL II). 3 Hours.
This is the second level course in American Sign Language and its application within the Deaf Community. It is based on the functional-notational approach to learning sign language. This approach organizes language around communicative purposes of everyday interaction. Prerequisite: SPED 501. LEC.

SPED 503. American Sign Language III (ASL III). 3 Hours.
This is the third level course in American Sign Language. The primary objective of the American Sign Language II "Signing Naturally" Level 2 curriculum is for students to continue using the two basic language skills: visual listening and signing. Prerequisite: SPED 502. LEC.

SPED 504. American Sign Language IV (ASL IV). 3 Hours.
This is the fourth level course in American Sign Language. The primary objective of the American Sign Language IV "Signing Naturally" Level 3 curriculum is for students to continue using the two basic language skills -- visual listening and signing. Prerequisite: SPED 503. LEC.

SPED 506. Advanced Practices for Children with Disabilities in the Elementary General Education Classroom. 3 Hours.
This course is designed to enable novice teachers to master and apply the instructional and communicative skills that will facilitate appropriate and productive inclusion of children and youth with exceptionalities within general education classrooms and other school settings. Specific research-based strategies in curriculum content acquisition (content enhancements, learning strategies, classwide-peer tutoring), and specific research-based strategies in behavior management will be learned and applied to real teaching experiences. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 507. Advanced Practices for Children with Disabilities Middle/Secondary General Education Classroom. 3 Hours.
This course is designed to enable novice teachers to master and apply the instructional and communicative skills that will facilitate appropriate and productive inclusion of middle and secondary age students with disabilities within general education classrooms and other school settings. Specific research-based strategies in curriculum content acquisition (content enhancements, learning strategies, classwide-peer tutoring), and specific research-based strategies in behavior management will be learned and applied to real teaching experiences. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 508. Special Course: ______. 1-5 Hours.
A special course of study designed to meet current needs of education students; primarily for undergraduates. LEC.

SPED 631. Characteristics of Students Needing an Adaptive Curriculum. 3 Hours.
This course is designed as an introduction to the definition, characteristics, causes, assessment, and specific remedial techniques for students needing an adaptive curriculum. The needs for specialized services to meet specific learning and/or behavioral needs will be presented. Students will learn about the history of serving children and youth with high incidence disabilities associated with specific learning, emotional/behavioral, mild mental retardation and a range of physical and health needs. Key individuals in the research of specific disabilities associated with these needs and how they helped expand our understanding of who these individuals are and how to address specific needs, will also be addressed. Learning characteristics will be addressed in relation to why and how specialized instruction can meet the learning and developmental needs of these individuals, specifically in the areas of instructional and assistive technology. LEC.

SPED 632. Characteristics of Students Needing a Functional Curriculum. 3 Hours.
This introductory course provides an overview of the characteristics of learners with significant support needs. Students will learn to define and understand various classification systems and the implications of: low-incidence disabilities, significant cognitive disability, various vision and/or hearing impairments, including deaf-blindness motor disabilities, and health impairments. Students will be introduced to various etiologies: pre-, peri-, and post-natal causes, syndromes and chromosomal disorders, and biomedical causes of severe disability. Additional content includes anatomy of sensory organs, interpretation of pertinent medical reports, assessment procedures, and in school settings considerations (e.g., orientation and mobility, cochlear implants, medications, tube feeding, physical therapy, occupational therapy). Prerequisite: An introductory course in special education. LEC.

SPED 633. Characteristics of Learners with Hearing Loss -- Deaf Studies. 3 Hours.
Deaf Studies is the basic characteristics course for both the Master's degree in Deaf Education and for Kansas and Missouri endorsement in Deaf/HOH. The course includes medical aspects/etiologies of hearing loss, history, pertinent laws, Deaf culture and community, issues in assessment and psychology, language and sign systems, multicultural education, multiple disabilities and hearing loss, and specific issues in the field. LEC.

SPED 635. Introduction to Teaching Learners with Low-Incidence Disabilities in Inclusive Settings. 3 Hours.
This course examines current principles and inclusive practices for learners with significant disabilities. The course will focus on the extant research base concerning inclusive practices, characteristics of learners with low-incidence disabilities, and instructional strategies. Prerequisite: SPED 326 or equivalent. LEC.

SPED 641. Methods & Assessment: Literacy Interventions Struggling Learners & Students High-Incidence Disabilities. 3 Hours.
This course will provide in depth learning experiences targeting literacy; both reading and writing. Students will learn about assessment tools and assessment systems used in tiered support frameworks to determine the required intensity of literacy support and instruction needed by children/adolescents with adaptive special education needs, and will learn about evidence-based instructional approaches and curriculum developed for students with disabilities and struggling students in general. The course is intended for persons working toward the Kansas teaching license in teaching students needing an adapted curriculum. Prerequisite: SPED 730, admittance into the Adaptive program in the Department of Special Education, or permission of the instructor. LEC.
SPED 642. Assessment and Methods of Teaching Students with Low-Incidence Disabilities in Inclusive Settings. 3 Hours.
This course prepares teacher candidates to assess students with disabilities using formal and informal measures, to use assessment information to develop a strengths-based inclusive Individual Education Program (IEP), to design instruction related to IEP goals and state standards, and to evaluate the effectiveness of that instruction using progress-monitoring techniques. Prerequisite: SPED 326. LEC.

SPED 644. Assessment and Instructional Methods I: Learners with Hearing Loss. 3 Hours.
This course will provide an introduction to appropriate instructional methodology for teaching students who are deaf or hard of hearing at the early childhood, elementary, and secondary levels. Upon completion students will be familiar with legal issues, teaming, assessment, IEP development, curriculum planning, instructional methods, and transition. LEC.

SPED 650. Constructing Early Childhood Curriculum. 3 Hours.
Students in this course will learn to design, implement and evaluate developmentally appropriate curricula and programs for children from birth through kindergarten. Issues of curriculum design and assessment are introduced as interrelated processes that include structuring learning environments and experiences that are responsive to children's interests and abilities. Students analyze and evaluate curriculum that focuses on the five developmental domains: a) social emotional development; b) cognitive development; c) language and communication development; d) adaptive behavior development; and e) gross and fine motor development and in addition the content domains of literacy, science, math, and fine art. Strategies for developing learning opportunities that are appropriate for young children, including children with special needs and children from diverse cultural, ethnic and linguistic backgrounds, will be explored. Prerequisite: Admission to School of Education UEC program. LEC.

SPED 660. Education of Children and Youth with Disabilities I: _____ 3 Hours.
This is a methods course that covers instructional approaches and procedures that offer developmentally appropriate, effective and inclusive early intervention for preschool and kindergarten age children who experience developmental delays, disabling conditions or who are at risk for developmental problems and disabilities. It is directed toward: (a) "how" to teach, or the technical components of developing and delivering effective instruction that provide access to the general early childhood curriculum within recognized approaches to early childhood education for young children, and (b) the "what" to teach, or the selection of developmentally and individually appropriate child objectives as well as specific materials and specialized instructional approaches. The relationship of instructional planning to state and federal mandates will also be considered. The course is primarily intended for persons who are currently working toward certification in the ECSE program area. Prerequisite: SPED 425 or SPED 725, and SPED 735, which can be taken concurrently. LEC.

SPED 661. Supporting Children with Significant Learning and Behavioral Challenges. 3 Hours.
Students in this course will gain knowledge of the causes, and intervention and support approaches for young children with multiple and significant disabilities including neurological impairments, physical disabilities, sensory impairments, significant developmental disabilities and challenging behavior. Emphasis is placed on environmental adaptations and direct instructional techniques to maximize independence as determined through systematic ecological inventories tailored to the individual child's strengths and needs. Information is also provided on assistive technology designed to provide appropriate supports. Functional behavioral assessment procedures, proactive intervention strategies, and developing collaborative support plans will be studied. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 663. Assessment Strategies in Early Education. 3 Hours.
Examines the practice of gathering information for the purpose of making individual referral and instructional decisions for infants, toddlers, and young children with and without special needs. Discusses effective informal assessment techniques and emphasizes an ecological approach to gathering information. Introduces standardized assessment and screening instruments and provides an overview of the purposes and limitations of such tests. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 664. Inclusive Strategies and Intervention for Infants and Toddlers. 3 Hours.
Emphasizes curriculum development and early intervention provision for infants and toddlers through the planning of appropriate learning experiences, the design of learning environments, developing Individual Family Service Plans (IFSP), promoting collaboration among families and the use of various methods of enhancing the child's development across the five (social-emotional, adaptive, cognitive, physical/movement, communication) development domains. The role of the educator/early interventionist in relation to the family and the child is examined. Curriculum resources and intervention strategies for infants and toddlers with special needs are reviewed with emphasis on interdisciplinary planning and implementation. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 665. Inclusive Strategies and Intervention for Preschoolers. 3 Hours.
Provides the opportunity for students to develop and evaluate inclusive environments for young children. This course emphasizes meeting the needs of all young children through an integrated approach to planning, implementing and assessing instruction in all areas; linking assessment information to individualized instruction; developing Individual Educational Plans (IEPs) and promoting collaboration among families, schools and communities. Service delivery systems and transitions between early childhood programs are reviewed in relation to curriculum. Curriculum development for early childhood content areas (literacy and language, numeracy, science, social studies, physical education and the arts) and domains (language, social/emotional, physical, and cognitive) will be explored. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 667. Field Experience in Preschool. 1 Hour.
This supervised field experience is intended to allow the pre-service teacher to apply the knowledge gained in SPED 665 Inclusive Strategies and Intervention for Preschoolers, by working with infants and toddlers in early intervention settings/programs. To be taken concurrently SPED 665. Prerequisite: Admission to the Teacher Education Program. FLd.

SPED 668. Field Experience Infant/Toddler. 1 Hour.
This supervised field experience is intended to allow the pre-service teacher to apply the knowledge gained SPED 664 Inclusive Strategies and Intervention for Infants and Toddlers, by working with infants and toddlers in early intervention settings/programs. To be taken concurrently SPED 664. Prerequisite: Admission to the Teacher Education Program. FLd.

SPED 672. Field Experiences with Exceptional Children and Youth: _____ 1-3 Hours.
A course designed to provide experiences for students to participate with exceptional children in public schools and/or residential facilities and with professional personnel associated with the lives of exceptional students including special education teachers, child care workers, therapists,
etc. Students will have opportunities to participate as aides, tutors, and instructors with individual and small groups of exceptional youth in one or more placements. Through weekly meetings with the instructor students are guided to relate their experiences to the needs and services for exceptional children and youth. Prerequisite: SPED 635. FLD.

SPED 675. Practicum with Children and Youth with Disabilities: _____, 1-10 Hours.
Intensive diverse and direct teaching experiences with children and youth with disabilities in educational settings. The course is differentiated from SPED 775 through the amount of scaffolding undergraduate students will receive when demonstrating skill application (e.g., undergraduates report and receive feedback on practicum experiences on a more frequent basis, reduced data collection requirements, more emphasis on cooperating teacher providing guidance, etc.). This practicum is a requirement for provisional endorsement according to KSDE. Students who have completed SPED 675 cannot enroll in SPED 775 within the same curricular area. Prerequisite: SPED 326. LEC.

SPED 700. Introduction to Sign Language. 3 Hours.
This is an introductory course in Sign Language and includes ASL and English sign vocabulary, a description of all manual sign systems, medical aspects of hearing loss, communication and language, and Deaf culture and community. LEC.

SPED 701. American Sign Language I (ASL I). 3 Hours.
This course will cover the development of American Sign Language and its application within the Deaf Community. It is based on the functional-notational approach to learning sign language. This approach organizes language around communicative purposes of everyday interaction. LEC.

SPED 702. American Sign Language II (ASL II). 3 Hours.
This is the second level course American Sign Language and its application within the Deaf Community. It is based on the functional-notational approach to learning sign language. This approach organizes language around communicative purposes of everyday interaction. Prerequisite: SPED 701. LEC.

SPED 703. American Sign Language III (ASL III). 3 Hours.
This is the third level course in American Sign Language. The primary objective of the American Sign Language III “Signifying Naturally” Level 2 curriculum is for students to continue using the two basic language skills: visual listening and signing. Prerequisite: SPED 702. LEC.

SPED 704. American Sign Language IV (ASL IV). 3 Hours.
This is the fourth level course in American Sign Language. The primary objective of the American Sign Language IV “Signifying Naturally” Level 3 curriculum is for students to continue using the two basic language skills -- visual listening and signing. Prerequisite: SPED 703. LEC.

SPED 706. Advanced Practices for Children with Disabilities in the Elementary General Education Classroom. 3 Hours.
This course is designed to enable novice teachers to master and apply the instructional and communicative skills that will facilitate appropriate and productive inclusion of children and youth with exceptionalities within general education classrooms and other school settings. Specific research-based strategies in curriculum content acquisition (content enhancements, learning strategies, classwide-peer tutoring), and specific research-based strategies in behavior management will be learned and applied to real teaching experiences. Novice teachers will learn about collaborative structures found in schools to support student learning in general education settings (co-teaching, collaborative consultation, teacher/student support teams) and roles and responsibilities of teachers within these structures. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 707. Advanced Practices for Adolescents with Disabilities in the Middle/Secondary General Classroom. 3 Hours.
This course is designed to enable novice teachers to master and apply the instructional and communicative skills that will facilitate appropriate and productive inclusion of middle and secondary age students with disabilities within general education classrooms and other school settings. Specific research-based strategies in curriculum content acquisition (content enhancements, learning strategies, classwide-peer tutoring), and specific research-based strategies in behavior management will be learned and applied to real teaching experiences. Novice teachers will learn about collaborative structures found in schools to support student learning in general education settings (co-teaching, collaborative consultation, teacher/student support teams) and roles and responsibilities of teachers within these structures. Prerequisite: Admission to the Teacher Education Program. LEC.

SPED 708. Introduction to Hearing Impaired. 2 Hours.
A study of hearing defects and methods of diagnosis. The course also covers remedial work which teachers can use in treating such defects and meeting problems of hearing defective children. Prerequisite: Nine hours of education including educational psychology. LEC.

SPED 710. Methods of Teaching Language to the Deaf I. 3 Hours.
The effects of hearing loss on language acquisition and development. Systems for teaching language to individuals with hearing loss are introduced. Prerequisite: Course in normal language development and nine hours of education including educational psychology. LEC.

SPED 715. Understanding Research in Education. 3 Hours.
This course introduces concepts and skills involved in understanding and analyzing research in special education. The course provides an overview of basic research methodologies. In addition, this course will teach students to locate, read, comprehend, and critically analyze research articles and reports. Students will become familiar with the principles of educational research to become good "consumers" of this research. LEC.

SPED 717. Exceptional Children in Regular Classrooms. 3 Hours.
This course is designed to explore the relationship between regular and special education. Educational service delivery systems for exceptional children are identified and analyzed. Emphasis is placed upon procedures and services that regular class teachers can use to provide instructional services to exceptional children assigned to regular classrooms. Procedures for enabling normal children to understand and appreciate the interaction with children who exhibit physical and behavioral variance from established norms are conveyed. Especially for regular class teachers and students desiring a career in teaching exceptional children. Will be offered by designated area sections or as a general overview of several areas. LEC.

SPED 718. Instructional Planning for Children and Youth with Disabilities: ____, 1-3 Hours.
This course provides knowledge and skills to select, adapt, and sequence instructional methods and materials to facilitate general education curriculum mastery. LEC.

SPED 719. Learning and Technology. 1 Hour.
The central framework of "human learning" provides a context for understanding technology-based educational innovations. The lessons in this course explore how various "features of learning" and "features of technology" intersect. They discuss realistic options for improving the learning of students, and the learning of teachers, as they use technology in education. (Life-span range of levels.) LEC.
SPED 724. Data-Driven Instructional Decision Making. 1 Hour.
The lessons in this course present research-based methods for monitoring student behavior and academic progress. They explain how teachers may use this information to evaluate current and plan future instructional and behavioral interventions following a decision making model. It is also explored how computer and information management technology tools support and facilitate the collection, storage, and analysis of observational data. LEC.

SPED 725. Introduction to the Psychology and Education of Children and Youth with Disabilities. 3 Hours.
This course provides an overview of current practices in the identification, placement, and education of students with disabilities. This course emphasizes on patterns of social, cognitive, language, and physical development. Social, political, and economic advocacy issues are also addressed. Prerequisite: One course in Child Development. LEC.

SPED 726. Exceptionality and Technology. 1 Hour.
Technology has the potential to dramatically improve the education and quality of life for people with disabilities. This course presents you with a basic foundation for understanding technology in special education, a functional model for selecting the best technology applications for students with special needs, and strategies for applying your knowledge to practical situations. LEC.

SPED 727. Designing Instruction for Diverse Learners. 3 Hours.
This course explores to design, development, and implementation of technology-based solutions for struggling learners in the preK-12 instructional environment. Throughout the course, students will (1) gain an understanding of the Principles of Universal Design for Learning, (2) examine how technology has and can be developed in a manner to meet multiple needs, especially those with disabilities, and (3) analyze how professionals can identify and assess what technology-based solution would meet the needs of a particular individual or group of individuals. LEC.

SPED 729. Introduction to Computing in Special Education. 3 Hours.
This course is designed to provide an introduction to basic concepts of computer literacy, with particular emphasis on the uses of microcomputers in educational settings for individuals with special needs. Topics include an overview of computing specific to the needs of individuals with special needs including: a) applications and the impact of computers on society; b) an introduction to computer hardware and associated concepts; c) introductory programming concepts; d) a survey of instructional and instructional-support applications of computers including examples of related software; e) software evaluation techniques; and f) an overview of resources in educational computing. Students will acquire hands-on operating experience with microcomputers through scheduled laboratory periods. LEC.

SPED 730. Characteristics, Methods & Assessment: Intro Struggling Learners & Studnts High-Incidence Disabilities. 3 Hours.
The course is designed as an introduction to the characteristics, assessment and identification process, and initial instructional and behavioral interventions needed in meeting the needs of students with high-incidence disabilities under the Kansas Adaptive Teacher Education Standards. The needs for specialized services to meet specific learning and/or behavioral needs will be presented. Frameworks for instruction and conceptualizing best practice will be introduced including the principles of Universal Design for Learning and the Multi-Tier System of Support. The role of the educator in identifying, understanding and implementing evidence-based practices is also examined. Curriculum resources and intervention strategies for students with high-incidence disabilities will be introduced with emphasis on tiered planning and implementation. The course is intended for persons working toward the Kansas teaching endorsement in the Special Education Adaptive Area. Prerequisite: Admittance into the Adaptive endorsement teacher education program in the Department of Special Education or permission of the instructor. LEC.

SPED 731. Supporting Children with Significant Learning and Behavioral Concerns. 3 Hours.
Students in this course will gain knowledge of the causes, and intervention and support approaches for young children birth through 5 years with significant support needs. These include young learners with multiple and significant disabilities including neurological impairments, physical disabilities, sensory impairments including dual sensory impairments, complex health care needs, significant developmental disabilities and challenging behavior. Emphasis is placed on environmental adaptations and direct instructional techniques to maximize independence as determined through systematic ecological inventories tailored to the individual child's strengths and needs. Information is also provided on assistive technology designed to provide appropriate supports. Functional behavioral assessment procedures, proactive intervention strategies, and developing collaborative support plans will be studied. Prerequisite: Admittance into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. SPED 752 or its equivalent, SPED 734 or its equivalent, and SPED 755 or its equivalent. LEC.

SPED 733. Characteristics of Learners with Hearing Loss -- Deaf Studies. 3 Hours.
Deaf Studies is the basic characteristics course for both the Master's degree in Deaf Education and for Kansas and Missouri endorsement in Deaf/HOH. The course includes medical aspects/etiology of hearing loss, history, pertinent laws, Deaf culture and community, issues in assessment and psychology, language and sign systems, multicultural education, multiple disabilities and hearing loss, and specific issues in the field. LEC.

SPED 734. Inclusive Strategies and Intervention for Infants and Toddlers: _____. 3 Hours.
Emphasizes curriculum development and early intervention provision for infants and toddlers through the planning of appropriate learning experiences, the design of learning environments, developing Individual Family Service Plans (IFSP), promoting collaboration among families and the use of various methods of enhancing the child's development across the five (social-emotional, adaptive, cognitive, physical, communication) developmental domains. The role of the educator/early interventionist in relation to the family and the child is examined. Curriculum resources and intervention strategies for infants and toddlers with special needs are reviewed with emphasis on interdisciplinary planning and implementation. Prerequisite: Admittance into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. LEC.

SPED 735. Introduction to Teaching Learners with Low-Incidence Disabilities in Inclusive Settings. 3 Hours.
This course examines current principles and inclusive practices for learners with significant disabilities. The course will focus on the extent research base concerning inclusive practices, characteristics of learners with low-incidence disabilities, and instructional strategies. Prerequisite: SPED 326 or equivalent. LEC.

SPED 738. Unified Early Childhood Applied Research. 1 Hour.
This seminar is designed to facilitate the UEC teacher candidate's completion of a Teaching Work Sample during the UEC Student Teaching experience. The purpose of the seminar together with the UEC student teaching experience is to provide the UEC teacher candidate with the opportunity to study and experience the fundamentals of teaching young children with and without disabilities with the aim of evolving a set of
values, principles, and skills which will guide future early education teaching situations. Prerequisite: Admission to UEC Student Teaching. Corequisite: SPED 739 UEC Student Teaching. LEC.

SPED 739. Early Childhood Unified Student Teaching/Practicum. 1-6 Hours.
A supervised student teaching experience leading to initial teaching licensure in unified early childhood (birth through grade 3). The student assumes the total professional role as a teacher in an approved inclusive early childhood program to include infant/toddler, preschool or kindergarten. Prerequisite: Admission to UEC Student Teaching. Corequisite: SPED 738 UEC Unified Early Childhood Applied Research. LEC.

SPED 740. Managing Classroom Behavior of Exceptional Children and Youth. 3 Hours.
Designed to acquaint regular and special education teachers, principals, school psychologists, counselors, and speech pathologists with principles and application of classroom management techniques applicable to exceptional children and youth. Methods of changing inappropriate behaviors and prompting the acquisition of adaptive behaviors through positive management procedures will be stressed. Includes an introduction to behavior analysis. Prerequisite: SPED 425 or SPED 725. LEC.

SPED 741. Methods & Assessment: Literacy Interventions Struggling Learners & Students High-Incidence Disabilities. 3 Hours.
This course will provide in depth learning experiences targeting literacy; both reading and writing. Students will learn about assessment tools and assessment systems used in tiered support frameworks to determine the required intensity of literacy support and instruction needed by children/adolescents with adaptive special education needs, and will learn about evidence-based instructional approaches and curriculum developed for students with disabilities and struggling students in general. The course is intended for persons working toward the Kansas teaching license in teaching students needing an adapted curriculum. Prerequisite: SPED 730, admittance into the Adaptive program in the Department of Special Education, or permission of the instructor. LEC.

SPED 742. Assessment and Methods of Teaching Students with Low-Incidence Disabilities in Inclusive Settings. 3 Hours.
This course prepares teacher candidates to assess students with disabilities using formal and informal measures, to use assessment information to develop a strengths-based inclusive Individual Education Program (IEP), to design instruction related to IEP goals and state standards, and to evaluate the effectiveness of that instruction using progress-monitoring techniques. Prerequisite: SPED 635 or 735. LEC.

SPED 743. Methods: Functional Behavioral Assessment, Positive Behavior Support and Classroom Management. 3 Hours.
This course provides a problem-solving approach and the framework for teaching and assessment strategies to develop pro-social behavior in students with disabilities and their typical peers in classrooms and whole school contexts. Students assess problem behavior, discover the functions of problem behavior, and learn pro-social alternatives in home, school, and community settings. Prerequisite: SPED 631 or SPED 731, and SPED 632 or SPED 732. LEC.

SPED 744. Assessment and Instructional Methods I: Learners with Hearing Loss. 3 Hours.
This course will provide an introduction to appropriate instructional methodology for teaching students who are deaf or hard of hearing at the early childhood, elementary, and secondary levels. Upon completion students will be familiar with legal issues, teaming, assessment, IEP development, curriculum planning, instructional methods, and transition. LEC.

SPED 745. Audiology and Aural Rehabilitation. 3 Hours.
This course will provide a broad overview of the components of an aural rehabilitation service delivery model including audiological diagnostics and assessment, selection and fitting of a variety of hearing devices, and intervention strategies for auditory training and speech perception training. The emphasis of this course will be on the aural habilitation of children; therefore, each of the components of an aural (re)habilitation plan will be considered in relation to the needs of individual children and their families. LEC.

SPED 750. Curriculum and Methods in Early Childhood. 3 Hours.
This is a curriculum and methods course that addresses how to design, implement and evaluate developmentally appropriate curricula and programs for children from birth to six years of age. Issues of curriculum design and assessment are introduced as interrelated processes that include structuring learning environments and experiences that are responsive to children's interests and abilities. Strategies for developing learning opportunities that are appropriate for young children, including children with special needs and children from diverse cultural, ethical and linguistic backgrounds, will be explored. Students analyze and evaluate curriculum that focuses on facilitating progress in the domains of a) social emotional development; b) cognitive development; c) language and communication development; d) adaptive behavior development and e) gross and fine motor development. Students also analyze and evaluate curriculum standards and frameworks for the young child's acquisition of concepts, skills and dispositions that support the development of early competencies and interest in literacy, mathematics, the sciences, social studies, the arts and individual and group sports. Prerequisite: Admission into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. SPED 752 or its equivalent (may be taken concurrently). LEC.

This course is designed for teachers seeking the Adaptive certification to teach students with High-Incidence Disabilities (Adaptive). Students will learn how to select, administer, score, and interpret formal and informal assessments; make data-based instructional decisions for students with specific learning disabilities, with social and emotional needs and disorders in behavior, mild mental retardation, and/or who experience other chronic health impairments. Individually chosen and administered tests, as well as high-stakes assessments, and will be discussed. Prerequisite: SPED 631 or SPED 731. LEC.

SPED 752. Overview of Early Childhood and Early Childhood Special Education. 3 Hours.
The course serves as an introduction to the profession including historical, philosophical, social and psychological foundations, awareness of value, ethical and legal issues, staff relations and the importance of becoming an advocate for children and families. Students will analyze/interpret trends in early education, including diversity, early childhood special education, family centered practices, legislation, public policy, and developmentally appropriate practice. The two key professional organizations, National Association for the Education of Young Children (NAEYC) and Division of Early Childhood for the Council for Exceptional Children (DEC), recommended practices serve as the foundation for understanding the roles, knowledge and competencies of the early educator. Prerequisite: Admission into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. LEC.
SPED 753. Assessment in Early Education. 3 Hours.
This course examines the practice of gathering information for the purpose of making individual referral and instructional decisions for infants, toddlers, and young children with and without special needs. Discusses effective informal assessment techniques and emphasizes an ecological approach to gathering information. Introduces standardized assessment and screening instruments and provides an overview of the purposes and limitations of such tests. Prerequisite: Admittance into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. LEC.

SPED 755. Inclusive Strategies and Interventions for Preschoolers: _____ 3 Hours.
This is a methods course that covers instructional approaches and procedures that offer developmentally appropriate, effective and inclusive early intervention for preschool and kindergarten age children who experience developmental delays, disabling conditions or who are at risk for developmental problems and disabilities. It is directed toward: (a) "how" to teach, or the technical components of developing and delivering effective instruction that provide access to the general early childhood curriculum within recognized approaches to early childhood education for young children, and (b) the "what" to teach, or the selection of developmentally and individually appropriate child objectives as well as specific materials and specialized instructional approaches. The relationship of instructional planning to state and federal mandates will also be considered. The course is primarily intended for persons who are currently working toward certification in the ECSE program area. Prerequisite: Admittance into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. SPED 752 (may be taken concurrently). LEC.

SPED 760. Introduction to Autism Spectrum Disorders. 3 Hours.
An introductory graduate-level course on autism spectrum disorders. It addresses characteristics of children and youth with autism spectrum disorders; trends and issues associated with autism spectrum disorders; and effective practices and strategies for structuring, managing, and promoting social skill development and social interactions among learners with autism spectrum disorders. LEC.

The purpose of this course is to provide an introduction to positive behavioral support (PBS). The lessons contained within this course include an overview of positive behavioral support, the basics of behavior, an introduction to specific positive behavioral support strategies, and a lesson on preventing problem behavior. LEC.

This course introduces current functional assessment methods that are used to build effective behavioral support plans. A strong functional assessment is at the heart of Positive Behavioral Support. After completing this course, you will have a better understanding of how to implement functional assessment methods in your classroom. LEC.

SPED 763. Development and Implementation of PBS Plans. 1 Hour.
A positive behavioral support plan (PBS) describes how features of the environment associated with problem behavior will be modified, what and how skills and strategies will be taught, and how individuals supporting a student will respond to both positive and problematic behavior. This course contains lessons on designing PBS plans, implementing PBS plans, and modifying and assessing PBS plans. LEC.

SPED 764. Intervention Strategies for PBS-I. 1 Hour.
The purpose of this course is to introduce interventions that can be used as part of a comprehensive positive behavioral support plan. An effective positive behavioral support plan contains multiple intervention strategies that address the function maintaining a student's problem behavior. This course contains lessons addressing setting events, antecedent interventions, replacing problem behavior, and consequence interventions. LEC.

SPED 765. Intervention Strategies for PBS-II. 1 Hour.
The purpose of this course is to introduce three types of interventions that can be used in positive behavioral support. An effective positive behavioral support plan contains multiple intervention strategies that address the function maintaining a student's problem behavior. This course contains a lesson on social skills education, crisis prevention, and interventions addressing physiological factors that influence a student's problem behavior. LEC.

SPED 766. Redesigning Environmental Systems. 1 Hour.
The purpose of this course is to describe how positive behavioral support can be used to redesign the environment at a systems level. Considering the larger issues within a system including the broader environment, the values and beliefs held by staff, policies and procedures that promote ongoing learning, and collaborative problem solving processes within a school will improve implementation of long-term positive behavioral support efforts. This course contains lessons on classroom management, staff development, and school-wide discipline. LEC.

SPED 767. Creating Positive Lifestyles through PBS. 1 Hour.
One of the most important outcomes of a positive behavioral support plan is an increase in the quality of life for both the student and everyone within the student's social network. The purpose of this course is to introduce topics related to creating positive lifestyles including person-centered planning, self-determination, and quality of life. LEC.

SPED 772. Participation with Children and Youth with Disabilities: _____. 1-3 Hours.
A course designed to provide field experiences with children and youth with disabilities in settings where educational services are provided. Students work directly with professionals such as special education teachers, general education teachers, therapists and other support personnel. Students participate as aides, tutors, and instructors with individual and small groups of children and youth. Ongoing meetings with supervisors are designed to facilitate both reflection and strategic learning. FLD.

SPED 774. Education of Secondary and Post-Secondary Level Exceptional Students: _____. 1-3 Hours.
A course based on the problems and needs of secondary and post-secondary level handicapped students with a focus on curriculum alternatives (academic and vocational), instructional planning options, instructional methods and materials and educational and community resources. The focus is on both mildly and moderately handicapped students. Prerequisite: Appropriate section of SPED 735 which may be taken concurrently. LEC.

SPED 775. Practicum with Children and Youth with Disabilities: _____. 1-10 Hours.
Intensive diverse and direct teaching experiences with children and youth with disabilities in educational settings. This practicum is a requirement for provisional endorsement according to KSDE. Students who have completed SPED 775 cannot enroll in SPED 675 within in same curricular area. Prerequisite: Varies by topic. FLD.
SPED 785. Application of Assessment Information for Exceptional Children and Youth. 3 Hours.
An analysis of information derived from assessment instruments and procedures appropriate to measuring the social and cognitive development of exceptional children and youth. Provides experiences in determining assessment data required in the development of individualized educational programs (IEP). Attention is also given to the design of informal assessment procedures, specific to the needs of exceptional children and youth. Experience is provided in the preparation and presentation of assessment data for use in instructional planning conferences. Prerequisite: An undergraduate or graduate course in educational measurement, and SPED 760. LEC.

SPED 790. Methods for Learners with Higher-Functioning Autism Spectrum Disorders. 3 Hours.
This is a methods course, with special emphasis on learners with high-functioning autism spectrum disorders. Particular attention is given effective practices and strategies for teaching, managing and promoting social skill and social communication development and proactive social interactions. LEC.

SPED 793. Psychology of Deafness. 2 Hours.
Reviews of the literature pertaining to psychological evaluations of the deaf and hard of hearing. Divergent views of deafness, type and degree of deafness are considered. Prerequisite: SPED 791. LEC.

SPED 798. Special Course: ______. 1-5 Hours.
A special course designed to address topical issues. LEC.

SPED 800. Classroom Intervention for Language Disorders of Handicapped Learners. 3 Hours.
Emphasis is given to milestones in normal language acquisition and variations from norms demonstrated by handicapped learners. Attention is also given to theoretical approaches to language training, formal and informal language assessment techniques, and instructional methods. Students design individualized instructional plans for incorporating language into the daily curriculum for handicapped learners. Prerequisite: SPED 425 or SPED 725. LEC.

SPED 801. Practicum in School Psychology. 4 Hours.
Supervised practice in the application of psychological theory to educational problems. Includes work useful with exceptional children as well as experiences in the application of such areas as mental hygiene and learning theory to problems involving the total school population. (Same as EPSY 910.) Prerequisite: Permission of advisor and instructor. FLD.

SPED 802. Advanced Practicum in School Psychology. 4 Hours.
A continuation of SPED 801 with special emphasis on remedial techniques associated with learning difficulties. (Same as EPSY 911.) Prerequisite: SPED 801 and permission of advisor and instructor. FLD.

SPED 804. Designing Online Instruction for E-Learning Environments. 3 Hours.
The focus of the course is on the status of e-learning at the K-12 and postsecondary levels and the process of designing content for e-learning applications. Attention will be given to design features, content structuring, instructional management, evaluation, and collaboration in the process of working with technicians in the process of developing online curriculum and instruction. Prerequisite: None. A background in education is preferred. LEC.

SPED 805. Practicum in Individual Intelligence Testing. 4 Hours.
Practicum training, by arrangement, in administration and interpretation of test results for school situations with particular emphasis on the Stanford-Binet. Prerequisite: Permission of instructor. FLD.

SPED 809. Language Assessment and Instruction II: Learners with Hearing Loss. 3-6 Hours.
This course covers assessment and instruction of speech skills for students who are deaf or hard of hearing. A historical review of the emphasis placed on speech development in deaf students will be provided. Students will learn formal and informal methods of assessment, developmental order and classification systems for English language sounds, and visual, auditory, and tactile facilitation techniques. Auditory training programs and techniques will be emphasized. LEC.

SPED 810. Speech Assessment and Instruction III: Learners with Hearing Loss. 3-6 Hours.
The purpose of this course is to prepare students to provide effective language assessment and instruction to students who are deaf or hard of hearing. This course focuses on the effect of hearing loss on assessment, language and reading, communication options, and instructional strategies. LEC.

SPED 811. Methods of Teaching Elementary School Subjects to the Deaf. 3 Hours.
Focus is on development of skills in adapting materials and methods of teaching science, math, social studies, spelling, and writing to hearing impaired students. Emphasis is placed on problems, trends and procedures used in career education specifically for the hearing impaired. Prerequisite: SPED 711. LEC.

SPED 812. Instructional Approaches in Inclusive Elementary Settings. 2 Hours.
This advanced method course provides curriculum design and instructional procedures appropriate for students at the elementary and middle school levels, including functional academic, social, and home and community life skills. NOTE: This is a 2 credit course to be offered during the first 8 weeks of a semester. It will precede SPED 814 in the same semester. Prerequisite: SPED 614 or SPED 714: Learning Styles and Instructional Accommodations. LEC.

SPED 814. Instructional Approaches in Inclusive Secondary Settings. 2 Hours.
This advanced method course provides curriculum design and instructional procedures for students at the secondary level, including career preparation and transition from school to adult life in the community. Prerequisite: SPED 614 or SPED 714: Learning Styles and Instructional Accommodations. LEC.

SPED 839. Management Principles and Assessment Procedures for the Young or Severely Handicapped. 2-3 Hours.
Examines basic learning procedures and techniques that are essential to programming efforts with the severely or young handicapped. Includes assessment scales, writing instructional programs, measuring operant behavior and evaluating operant behavior. Task and concept analysis related to treatment programs. Prerequisite: Students in the Early Childhood for the Handicapped program must enroll in one hour of practicum, SPED 775. Students in the Severely Handicapped Program must have completed SPED 726. LEC.

SPED 840. Program Planning in Special Education-Early Childhood. 3 Hours.
This course is designed to provide knowledge and skills to implement federal and state development mandates for special education and related services programs for young children from birth to five. It covers procedures for developing, implementing, and evaluating (a) instructional accountability for these children’s participation in the general early childhood curriculum, (b) relationships between general and special early education personnel and programs; (c) roles and responsibilities; (d) interdisciplinary team planning including families; (e) coordinating, educating, and supervising paraeducators; and (f) general management
responsibilities associated with instruction of young children with disabilities. Prerequisite: SPED 760 or SPED 860, which may be taken concurrently. LEC.

**SPED 841. Advncd Methods&Asmnt:Learnng Stratg&Contnt Mastery Struggling Learners&Stdnts High-Incidence Disabilit. 3 Hours.**
This course is designed for graduate students enrolled in the Masters of Science Program with an emphasis in school-age populations primarily with high mild disabilities or seeking to obtain a license to teach students needing an adapted curriculum in Kansas. Course experiences focus on how to identify and implement evidenced-based practices designed to increase the success of students with mild disabilities in mathematics, social studies, science, and language arts through their participation in general and special education classrooms primarily in grades 4-12. This course emphasizes practices associated with understanding and evaluating curricular demands, monitoring student progress in content-area courses, providing tiered supports and accommodations in teaching, using assessment and grading alternatives, and incorporating the principles of explicit and strategic instruction to design instruction that will promote and enhance content-area learning. The course is intended for persons working toward the Kansas teaching license in teaching students needing an adapted curriculum. Prerequisite: SPED 730, SPED 741, admittance into the High Incidence Disabilities program in the Department of Special Education, or permission of the instructor. LEC.

**SPED 842. Methods in Access and Inclusion in the Core Curriculum. 3 Hours.**
This course focuses on foundational skills for setting up an inclusive program that meets the needs of students with low-incidence disabilities in general education settings. The course will emphasize many of the "behind-the-scenes" strategies and activities that must be completed on a regular basis to make inclusive education effective and efficient. Prerequisite: SPED 635 or SPED 735 and SPED 642 or SPED 742. LEC.

**SPED 843. Advanced Methods&Assessment: Strategies for Students with Significant Behavior, Social&Emotional Need. 3 Hours.**
This course is designed to introduce educators and related service professionals to prevention and intervention related to a broad range of antisocial, aggressive, and behavioral problems. Approaches focus on understanding and addressing the precipitating factors related to inappropriate behavior, short-term approaches for immediate crises, and problem-solving strategies for longer-term change. Course content will include antisocial, aggressive, and violent behavior; options for classroom interventions; school and system-oriented interventions, and ethical and legal issues involved in various prevention and intervention approaches. Class work will focus on literature, research-based intervention approaches, and case work illustrating specific approaches and programs. Prerequisite: SPED 631 or SPED 731, SPED 741, and SPED 743. LEC.

**SPED 844. Advanced Methods in Access and Inclusion in the Core Curriculum. 3 Hours.**
This course develops critical skills for implementing an inclusive program that meets the needs of students with low-incidence disabilities in general education settings. The course will emphasize many of the day-to-day strategies and activities that must be completed on a regular basis to make inclusive education effective and efficient for all learners. Prerequisite: SPED 635 or SPED 735 and SPED 642 or SPED 742. LEC.

**SPED 850. Curriculum Planning for Exceptional Children and Youth. 3 Hours.**
Provides experiences in applying information on identifying learning and behavioral characteristics of exceptional children and youth. Practices in adapting curriculum materials to meet the needs of the handicapped. Prerequisite: SPED 725 and SPED 735. LEC.

**SPED 851. Law and Special Education. 3 Hours.**
This course focuses on laws that apply to special education, especially "Individuals with Disabilities Education Act" and "No Child Left Behind Act." The American legal system, particularly in respect to special education, the constitutional and statutory provisions of federal and state law, and judicial decisions interpreting those laws are reviewed. The course relates equal protection, procedural due process, and substantive due process doctrines to school practices affecting students with disabilities and examines the six principles of P. L. 94-142 and similar principles in state legislation. (Same as ELPS 856.) LEC.

**SPED 852. Citizens with Disabilities, Public Policy, and Policy Analysis. 3 Hours.**
Students to analyze public policy that affects citizens with disabilities, various models of analysis are brought to bear on federal policy (e.g., education, transportation, housing, institutionalization, protection and advocacy, medical assistance, employment, vocational rehabilitation, and others). This course is not valid for core requirement in history and/or philosophy of education. (Same as ELPS 857.) Prerequisite: SPED 851 or permission of instructor. LEC.

**SPED 853. Professional Ethics, Public Values, and Citizens with Disabilities. 3 Hours.**
This course addresses the issues that professionals (e.g., educators, physicians, allied health providers, attorneys, and others) and families of persons with disabilities face in the context of public values, attitudes, and rules of law. The issues include education, treatment and nontreatment. This course is not valid for core requirement in history and/or philosophy of education. (Same as ELPS 858.) Prerequisite: SPED 850, SPED 852 or permission of instructor. LEC.

**SPED 854. Family and Interprofessional Collaboration in Special Education. 3 Hours.**
This course is designed to provide knowledge and skills to implement federal and state mandates for special education and related services programs as they relate to building and maintaining relationships with families of students with disabilities, and developing effective school programs. It covers procedures for developing, implementing, and evaluating (a) instructional accountability for special education students' participation in district and state assessment; (b) relationships between general and special education personnel and programs; (c) roles and responsibilities; (d) interdisciplinary team planning including families; (e) coordinating, educating, and supervising paraeducators; and (f) general management responsibilities associated with instruction of children and youth with disabilities. Course topics will include collaboration in schools, community systems and families, historical perspectives of family life and school involvement, effective relationships between home, school, community, communication among professionals and with families, school-based programs, home-based programs, and multicultural considerations. Prerequisite: SPED 631 or SPED 731, or SPED 632 or SPED 732, or SPED 735. LEC.

**SPED 856. Transition Education and Services from Childhood through Adulthood. 3 Hours.**
The purpose of this course is to provide a background in career development and transition education for persons with disabilities from middle school through adulthood. Emphasis is placed on IDEA requirements for transition services, career development and transition processes, transition services assessment, secondary special education curricular implications, career development and transition service needs, collaborative services in schools and communities to promote quality transition services, and issues and trends in transition education and services. LEC.
SPED 857. Career Development for Youth. 3 Hours.
The purpose of this course is to provide graduate students in special
education and related areas who are specializing in secondary school/
transition programs with an overview of career development for youth with
disabilities. Emphasis is placed upon theory and practice related to career
development, work-based learning, and school and community vocational
training models. Prerequisite: SPED 856. LEC.

SPED 858. Assessment for Transition Planning. 3 Hours.
This course is designed to provide a review of psychometric principles
and their utility as a foundation for quality assessment in transition
assessment and planning for youth with disabilities. Formal and informal
assessments across a range of transition planning areas are reviewed
and evaluated. Skills in curriculum-based assessment, rating scales,
situational assessment, and functional assessment are emphasized.
Prerequisite: SPED 856 or permission of instructor. LEC.

SPED 859. Interagency Services for Transition to Adulthood. 3
Hours.
The purpose of this course is to provide an overview of interagency
and community services and systems for adolescents and young adults
with disabilities. Emphasis is placed on theory and practice related to
interagency collaboration; systems change efforts in transition services;
and state-of-art practices regarding supporting individuals with disabilities
in community employment, living, socialization, community participation,
and other areas of adult life. Prerequisite: SPED 856. LEC.

SPED 860. Education of Children and Youth with Disabilities II:
3 Hours.
This course is designed to prepare students to implement specialized
alternative strategies for individualized group instruction. Methods for
developing and implementing overall treatment/educational programs,
planning or selecting curriculum/service models for programs, and
developing instructional materials are emphasized. Procedures for
managing classroom staff and service resources, coordinating educational
programs with families, other service personnel and program support
staff, and monitoring overall program effectiveness are addressed.
Prerequisite: SPED 760. LEC.

SPED 861. Blending Academics and Transition. 3 Hours.
The purpose of this course is to provide graduate students with research
evidence of each of the components of universal design for learning
within access to the general academic curriculum: multiple means of
representation, expression, and engagement. Prerequisite: SPED 856.
LEC.

SPED 862. Work-Based Learning. 3 Hours.
The purpose of this course is to provide graduate students with models
and strategies to develop and coordinate meaningful work experiences
for youth with disabilities. Emphasis is placed on practical strategies for
engaging with community businesses, developing and customizing jobs
and supporting youth in the workplace. Prerequisite: SPED 856. LEC.

SPED 863. Student Engagement in School and Community. 3 Hours.
The purpose of this course is to provide graduate students in special
education and related areas who are specializing in secondary school/
transition programs with an overview of models and issues pertaining
to school and community engagement for secondary age youth.
Prerequisite: SPED 856. LEC.

SPED 871. Advanced Practicum with Exceptional Children Needing
an Autism Spectrum Curriculum. 3 Hours.
This is an advanced practicum experience for the graduate student
teaching children and youth with autism spectrum disorders (ASD). The
practicum is designed to provide intense, diverse and direct teaching
experiences with children and youth who have learning and behavioral

SPED 874. Planning for Adult Outcomes:. 1-3 Hours.
The problems, trends, issues, and procedures used in planning life skills,
occupational and vocational skills, and transition from school to adult
living for persons with disabilities. Separate sections will be organized
by topics pertaining to career/vocational development, assessment, and
transition programs and services. These will include: (a) transitions from
early childhood to adulthood, (b) application of assessment information,
and (c) vocational preparation and employment. Prerequisite: SPED 725
(may be taken concurrently). LEC.

SPED 875. Practicum with Children and Youth with Disabilities:
1-10 Hours.
This course is designed to provide intensive field work and direct teaching
experiences with children and youth with disabilities in educational,
residential, and clinical settings. Prerequisite: SPED 775. LEC.

SPED 876. Conferencing with Parents of Exceptional Children and
Youth. 3 Hours.
A course to develop knowledge and skills in the techniques of interviewing
and conferencing, with special application to the professional, legal and
ethical problems related to working with parents of exceptional children.
Prerequisite: SPED 425 or SPED 725. LEC.

SPED 879. Interdisciplinary Programming for Children and Youth
with Disabilities. 3 Hours.
An analysis of the role of the special education coordinator and
supervisor. Particular attention will be given to: program development;
planning, organizing, and delivering inservice training; personnel
recruitment, selection, and evaluation; program management; and
program evaluation. Students will relate the topical content to their specific
area of expertise in special education. Prerequisite: SPED 425 or SPED
725 and six additional semester hours in special education. LEC.

SPED 880. Interdisciplinary Programming for Children and Youth
with Disabilities. 3 Hours.
This course is designed to provide students a survey of disciplines which
contribute to care and treatment of students with disabilities. Emphasis on
professional roles, team participation, case management, and reporting
and follow up. Disciplines include medicine, education, audiology,
psychology, speech pathology, occupational therapy, physical therapy,
music therapy and social work. Prerequisite: SPED 425 or SPED
725. LEC.

SPED 886. Capstone Adaptive Program Seminar. 3 Hours.
This course is designed to be a culminating experience for Adaptive
Program students who choose to complete their masters programs with a
comprehensive masters examination instead of one of the other program
options (i.e., project or thesis). Students will complete this course during
the final semester of their programs. Participants will review current
issues, evidence-based practices, home-school considerations, state
and federal regulations, and Kansas standards regarding appropriate
education for students with mild to moderate disabilities (i.e., Adaptive
category designation). The course is a prerequisite for the departmental
comprehensive examination in the Adaptive area. LEC.

SPED 887. Independent Study. 1-4 Hours.
Prerequisite: Consent of advisor and instructor. RSH.

SPED 888. Master's Project. 1-4 Hours.
RSH.
forms of disciplinary, interdisciplinary, and specialization scholarship and inquiry applicable to (re)framing and potentially resolving them. Prerequisite: Doctoral student status in Special Education. LEC.

SPED 949. Specialist Research. 1-4 Hours. RSH.

SPED 950. Civic Professionalism. 3 Hours. This course is concerned with the relationship between professions and society in a democracy, and specifically, with the ethics and practices associated with the professions of education, special education, and other disability-related fields. Models of professionalism are compared and advantages of civic professionalism for individuals with disabilities and their families, the professions, and society as a whole are explored. Lessons drawn from disagreements over questions such as the nature and social consequences of the professions are used to broaden understanding of what professionalism could and should be in a democracy. Prerequisite: Admission to doctoral program. LEC.

SPED 970. Problems of Exceptionality: ________ 3 Hours. An extensive analysis of the literature and research pertinent to issues in a given disability. Separate sections are organized for various disabilities. Students may enroll in more than one section as a part of a graduate program. Prerequisite: Three courses in special education or permission of instructor. LEC.

SPED 971. Organization and Administration of Services for Children and Youth with Disabilities. 3 Hours. This course is designed to prepare administrators and prospective administrators for organizing and administering educational programs for students with disabilities. Major topics include a review of current trends in special education, state and federal guidelines and regulations, legal and financing aspects of special education, program planning, and administration of special services. (Same as ELPS 959.) Prerequisite: Nine hours of education including educational psychology and SPED 725. LEC.

SPED 972. Issues and Trends in Special Education I. 2 Hours. This course is designed to assist first-year special education doctoral students organize and synthesize a conceptual and substantive map of the field of special education and introduce them to corresponding faculty research interests and resources. Emphasis is placed on the academic writing expectations and resources of the field, university, and department, and on building a cohort of students to address common issues and to provide a foundation for peer support throughout the doctoral program. Prerequisite: Admission to special education doctoral program or permission of instructor. LEC.

SPED 973. Issues and Trends in Special Education II. 2 Hours. This capstone seminar is designed to assist advanced doctoral students synthesize and evaluate information on a broad range of current and historically significant special education issues and trends in preparation for comprehensive examinations and future professional roles. Substantively, its primary focus is issues and trends that affect the entire field or cut across several areas of study and practice. Its secondary focus is significant issues and trends that affect particular categorical or functional sub-areas of study and practice within the field. Prerequisite: Completion of nine doctoral courses in special education, including 4 of 6 departmental Core courses. LEC.

SPED 974. Issues and Trends: Students with Learning Disabilities. 3 Hours. This doctoral level course will explore current issues related to characteristics, educational methods and curricula, and questions, problems, concerns and movements connected to the education of children and youth with learning disabilities, emotional/behavioral
disorders and autism spectrum disorders. Prerequisite: Doctoral program admission or permission of instructor. LEC.

SPED 975. Advanced Practicum with Children and Youth with Disabilities: ___. 1-10 Hours.
Advanced development of conceptual and practical field-based skills. Prerequisite: SPED 775. FLD.

SPED 977. Learning Disabilities/Behavior Disorders Issues II. 3 Hours.
This course is designed to provide students an opportunity to engage in an extensive analysis of the literature and research pertinent to critical issues in the field of learning and behavioral exceptionality. Prerequisite: SPED 970 LD/BD Issues I; SPED 972 Trends and Issues in Special Education I. LEC.

SPED 980. Advanced Topics: ___. 1-3 Hours.
A special course of study to meet current needs of education professionals -- primarily for post-master's level students. LEC.

SPED 981. Changing Complex Systems. 3 Hours.
This course is designed to provide students with an overview of seminal leadership and systems change literature. Prerequisite: Admission to doctoral program. LEC.

SPED 982. Preparing Future Faculty. 3 Hours.
This course is designed to give students an introduction and overview of academic life and the roles and responsibilities of an academic career. Its primary purpose is to help develop a realistic perspective of the expectations of academic life and the competencies required for a successful start in an academic career. Organized around the broad themes of understanding the academy, faculty life and work, and academic career paths, course content addresses the roles and responsibilities of faculty life in different types of institutions and the issues faculty face as they pursue their academic careers. The course offers an opportunity for students to critically review their doctoral program in the context of preparing them for a successful start in an academic career and to explore options for academic career choices. Prerequisite: Doctoral program admission. LEC.

SPED 983. Proposal Development. 3 Hours.
This course is designed to teach a broad array of strategies associated with the development of successful proposals that will generate funds to support programmatic work. Among the topics covered in this course are sources of funding, strategies for conceptualizing and writing proposals, collaboration strategies, proposal peer-review process, and integrating proposal development activities into other professional responsibilities. Prerequisite: Admission to doctoral program and PRE 710. LEC.

SPED 984. School Reform and School Community Partnerships. 3 Hours.
This is an interprofessional course in public policy and school reform that is concerned with current policy and systems transformations in education and child/family services, including educational, social and health service systems and the movement toward school-linked service integration strategies and family partnerships, called the “community school” movement. Issues connected with comprehensive school reform including the role of special education and mental health in this process will be emphasized. Particular emphasis will be placed on urban, multicultural issues affecting community schools. Prerequisite: Doctoral program admission or permission of instructor. LEC.

SPED 985. Naturalistic Research. 3 Hours.
This course is designed to develop skills in naturalistic or constructivist research, while situating it theoretically within the broader framework of modern and postmodern social inquiry, and exploring its social, political and ethical implications. The course develops students’ skills in using this form of interpretive qualitative research, provides a theoretical framework for selecting inquiry paradigms, compares and contrasts positivist and constructivist inquiry, and reviews social and political implications of constructivist inquiry. Prerequisite: Six hours of statistics, measurement, and/or large or small group research design. LEC.

SPED 986. Trends and Issues Associated with Online Instruction. 3 Hours.
The course examines the opportunities, challenges, cautions, and demands of web-based instruction in higher education. It explores the policy implications of web-based instruction, development of collaborative teaming skills utilizing telecommunications resources, and the design and technical aspects of online instruction. Particular attention is given to the implications of online instruction for accommodating needs presented by diverse learners through strategies such as universal design. Prerequisite: Admission to doctoral program or permission of instructor. LEC.

SPED 990. Small Sample Empirical Research Methods. 3 Hours.
This course provides a detailed examination of research methods for advancing knowledge and validating hypothetically useful treatments in situations in which sufficient sample sizes to conduct formal experiments are lacking, the question of interest is better addressed by multiple observations of treatment effects over time, and/or the question is best addressed by taking a variety of observations of a single unit of interest. Specifically, two small sample research methods will be examined in depth with examples and practical application experience: interrupted time series design for small samples (“single case” design), and Yin’s empirical case study method. Prerequisite: Doctoral program admission or permission of instructor. LEC.

SPED 991. Family Outcomes in Special Education. 3 Hours.
This course focuses on analyzing and synthesizing research literature focusing on intermediate outcomes (e.g., family-professional partnerships) and long-term outcomes (e.g., family quality of life) related to families of children, youth, and adults with disabilities. Key family theories are discussed and applied in the development and implementation of interventions that have potential to increase intermediate and long-term family outcomes. Prerequisite: Three courses in special education or permission of instructor. LEC.

SPED 992. Seminar in Early Childhood/Intervention. 3 Hours.
This seminar examines research to support evidence-based practices that currently exist in the areas of early intervention and early childhood special education. The primary objective is to learn how to read and critically analyze studies that form the evidence base for several early intervention and early childhood special education practices. Primary goals of the class include the development of skills for evaluating research studies in early intervention and early childhood special education. Increasing knowledge of evidence-based practices in the early intervention literature. Prerequisite: Three courses in special education or permission of instructor. LEC.

SPED 995. Field Experience in: ___. 1-5 Hours.
Supervised and directed experiences in selected educational settings. Instructors conduct regular observations and conference with students. Written summaries and evaluations of field experiences are prepared independently by the student, a representative of the cooperating agency, and the instructor. Open only to advanced students and field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours. FLD.

SPED 996. College Teaching Experience. 2 Hours.
This course is designed to prepare students for college teaching. Enrolled students shall engage in semester-long, planned, instruction that includes
Specialization are offered: scholarly writing, and disability advocacy. The following areas of knowledge and skills in leadership, teacher education, research and roles as university faculty, researchers, and policymakers/administrators. The doctoral program prepares experienced professionals for leadership licensure in elementary, secondary, or early childhood education. With the exception of ECU, all endorsement areas require current Kansas licensure can complete requirements for special education endorsement in the following areas:

1. High-incidence disabilities
2. Autism spectrum disorders
3. Early childhood unified (birth through kindergarten)
4. Low-incidence disabilities/ significant intellectual disabilities
5. Secondary transition education and services

Students seeking Kansas State Department of Education teaching licensure can complete requirements for special education endorsement in the following areas:

1. Adaptive (high-incidence)
2. Functional (low-incidence/significant intellectual)
3. Early childhood unified (ECU, birth through kindergarten)

With the exception of ECU, all endorsement areas require current Kansas licensure in elementary, secondary, or early childhood education.

The doctoral program prepares experienced professionals for leadership roles as university faculty, researchers, and policymakers/administrators. Course work and field experience facilitate the development of advanced knowledge and skills in leadership, teacher education, research and scholarly writing, and disability advocacy. The following areas of specialization are offered:

- Policy analysis and research
- Teacher education (e.g., high-incidence disabilities, early childhood unified education, secondary special education transition, and low-incidence disabilities)
- Families and disability
- Educational technology

Graduate classes are taught on the main campus in Lawrence, the KU Edwards Campus (http://edwardscampus.ku.edu) in Overland Park in suburban Kansas City about 40 miles from Lawrence, and online and/or as hybrid courses. Master’s students can expect to complete some graduate work on each campus. The Secondary/Transition master/s program is fully online.

Graduate Admission to the School of Education

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees, as specified by the admitting departments, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a grade-point average of at least 3.0 on a 4.0 scale. Departments that offer provisional admission require a grade-point average of at least 2.5. Individual departments may require additional information and may have more stringent admission and retention requirements.

Some departments may offer special provisional admission categories to students who may not qualify under traditional admission criteria. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession. Exceptions to established policies must be sought individually by petition to the Graduate Division of the School of Education.

See Admission in the Graduate Studies (p. 2369) section of the online catalog for more information.

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M.S.E. Degree Program

Graduates are employed as general educators, special educators, or consultants. Some hold teaching positions in clinics, hospitals, residential treatment centers, community-based centers, and early childhood programs. Many complete course work required for Kansas special education teaching endorsements. Some students work in related fields (e.g., general educators, speech therapists, social workers) and pursue this degree to expand their professional knowledge and skills by adding competence teaching children and youth with disabilities. These students may choose not to complete endorsement requirements.

The M.S.Ed. program ranges from 30 to 36 credit hours, depending on whether one pursues a thesis/project (30-hour) or nonthesis (36-hour) program option. The addition of professional endorsements will lengthen a student’s program to 35 to 42 credit hours, depending on the endorsement(s) chosen by the student. The degree requires courses in the area of study (plus any endorsement-related courses); a research class; and completion of a project, thesis, or written examination.

Further information is available from the department (http://specialedu.soe.ku.edu).

Doctor of Education in Special Education

Special Education Graduate Programs

The Department of Special Education (http://specialedu.soe.ku.edu) offers graduate education for students interested in teaching, research, and professional service related to children, adolescents, and adults with disabilities and their families. Since the 1970s, the department’s master’s and doctoral programs have received national and international recognition. The faculty is known for its field leadership and commitment to high-quality education for children and youth with disabilities, innovative field-based research, and preparation of highly effective program graduates. The annual U.S. News and World Report graduate program survey consistently ranks KU at the top when compared to more than 200 graduate programs in this field. As one of the most comprehensive special education preparation programs in the country, the department attracts students from many states and countries.

Graduate degrees associated with the department’s programs include the Master of Science in Education (M.S.E.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.). Students may pursue a master’s degree emphasizing teaching in one of 5 areas:

1. High-incidence disabilities
2. Autism spectrum disorders
3. Early childhood unified (birth through kindergarten)
4. Low-incidence disabilities/significant intellectual disabilities
5. Secondary transition education and services

Students seeking Kansas State Department of Education teaching licensure can complete requirements for special education endorsement in the following areas:

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**Ed.D. Degree Program**

The doctoral degree program encourages and supports students working with faculty in cutting-edge research and development related to effective education in the field of disabilities. The Ph.D. and Ed.D. programs are similar, but serve different needs for special educators seeking advanced knowledge and leadership skills. Both degrees require intensive and rigorous study in special education foundations, disability issues, curriculum, teaching, program development, and research. The Graduate Record Examination is required for admission.

**Doctor of Education**

This degree is designed for master special educators who seek leadership positions in public school and other agencies related to program leadership, administration, development, and evaluation. Students complete a sequence of courses emphasizing applied research knowledge and skills. Specific core and research courses for the Ed.D. are required. In addition to the special education and research skills cores, students complete a structured, supervised field internship and designated hours in one of the doctoral program's areas of specialization, and a dissertation.

**Note:** Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current Lawrence and Edwards Campus policies on Doctoral Research Skills and Responsible Scholarship (https://documents.ku.edu/policies/Graduate_Studies/Research_Skills_and_Responsible_Scholarship.htm) are listed in the KU Policy Library.

**Doctor of Philosophy in Special Education**

**Special Education Graduate Programs**

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Each department in the School of Education sets its own application deadlines. Prospective graduate students should contact their departments for application deadlines.

Graduate Admission to the School of Education

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees, as specified by the admitting departments, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a grade-point average of at least 3.0 on a 4.0 scale. Departments that offer provisional admission require a grade-point average of at least 2.5. Individual departments may require additional information and may have more stringent admission and retention requirements.

Some departments may offer special provisional admission categories to students who may not qualify under traditional admission criteria. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession. Exceptions to established policies must be sought individually by petition to the Graduate Division of the School of Education.

See Admission in the Graduate Studies (p. 2369) section of the online catalog for more information.

Ph.D. Degree Program

The doctoral degree program encourages and supports students working with faculty in cutting-edge research and development related to effective education in the field of disabilities. The Ph.D. and Ed.D. programs are similar, but serve different needs for special educators seeking advanced knowledge and leadership skills. Both degrees require intensive and rigorous study in special education foundations, disability issues, curriculum, teaching, program development, and research. The Graduate Record Examination is required for admission.

Doctor of Philosophy

This is a research degree. Graduates are prepared for roles as university faculty members, researchers, or policy analysts. Specific core and research skills for the Ph.D. are required. In addition to the special education and research cores, students complete course work in one of the areas of specialization, a 12-hour minor in a related field (at the discretion of the specialization area or advisor), and a dissertation based on original research.

Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current Lawrence and Edwards Campus policies on Doctoral Research Skills and Responsible Scholarship (https://documents.ku.edu/policies/Graduate_Studies/Research_Skills_and_Responsible_Scholarship.htm) are listed in the KU Policy Library.

Autism Spectrum Disorders Graduate Certificate

The online Graduate Certificate in Autism Spectrum Disorders has a focused curriculum designed to prepare you to effectively work with children and students across the autism spectrum.

Whether you are a special educator, a P-12 teacher, a concerned family member or an advocate, this certificate program gives you critical knowledge and practical skills to help you address a disorder that is estimated to affect approximately 1 in 68 children in the United States. In order to enroll in the online graduate certificate, a Bachelor’s degree is required.

Please note that this program does not lead to initial teacher certification or licensure.

Please find additional information on the online programs webpage:
http://educationonline.ku.edu/online-programs/autism-spectrum-disorder-graduate-certificate/

ADMISSION REQUIREMENTS

Our admissions advisors are here to help answer your questions regarding admission requirements and licensure. If you have questions, please email us (onlinestudents@ku.edu) or call us toll-free at 1-855-582-5565.

To be considered for admission, prospective students must have completed a Bachelor’s degree with a GPA greater than 3.0. Applicants with an Undergraduate GPA below 3.0 should contact an admission advisor for information about provisional admissions.

To apply to the Graduate Certificate in Autism Spectrum Disorders, your first step is completing the online application form. Prior to starting the form we recommend that you review our admissions guide (http://educationonline.ku.edu/wp-content/uploads/SPEDAdmissionsChecklist_November2014_Updated.pdf).

International applicants must meet English language proficiency requirements. These requirements are located here (http://sped.soe.ku.edu/academics/autism/mse/admission/international).

For more information about our admission requirements, visit the Department of Special Education (http://sped.soe.ku.edu) website.

COURSES INCLUDED IN THIS PROGRAM

• SPED 760 – Introduction to Autism Spectrum Disorders (3 credits)
• SPED 860 – Education of Children and Youth with Disabilities: Autism Spectrum Disorders (3 credits)
• SPED 790 – Methods for Learners with Higher-Functioning Autism Spectrum Disorders and Asperger Disorder (3 credits)
• SPED 785 – Application of Assessment Information for Exceptional Children & Youth: Autism Spectrum Disorder (3 credits)
• SPED 772 – Observation and Participation with Children and Youth with Autism Spectrum Disorder (1 credit)

Please note: Course list and sequence is subject to change.
Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your advisor (http://www.advising.ku.edu) for details). Other years’ catalogs (http://catalog.ku.edu/archives)

**Engineering**

Aerospace Engineering (p. 516)  
- Bachelor of Science in Aerospace Engineering (p. 522)  
- Master of Engineering in Aerospace Engineering (p. 524)  
- Master of Science in Aerospace Engineering (p. 527)  
- Doctor of Engineering in Aerospace Engineering (p. 529)  
- Doctor of Philosophy in Aerospace Engineering (p. 533)

Bioengineering (p. 536)  
- Master of Science in Bioengineering (p. 537)  
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Chemical & Petroleum Engineering (p. 541)  
- Bachelor of Science in Chemical Engineering (p. 546)  
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Civil, Environmental, and Architectural Engineering (p. 557)  
- Bachelor of Science in Architectural Engineering (p. 567)  
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Electrical Engineering and Computer Science (p. 578)  
- Bachelor of Science in Electrical Engineering (p. 590)  
- Bachelor of Science in Computer Engineering (p. 593)  
- Bachelor of Science in Computer Science (p. 596)  
- Bachelor of Science in Information Technology (p. 598)  
- Bachelor of Science in Interdisciplinary Computing (p. 601)  
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- Master of Science in Computer Engineering (p. 610)  
- Master of Science in Computer Science (p. 612)  
- Master of Science in Information Technology (p. 614)  
- Doctor of Philosophy in Computer Science (p. 616)  
- Doctor of Philosophy in Electrical Engineering (p. 618)

Engineering Management (p. 620)  
- Master of Science in Engineering Management (p. 626)  
- Master of Engineering in Project Management (p. 628)  
- Master of Science in Project Management (p. 628)

Engineering Physics (p. 629)  
- Bachelor of Science in Engineering Physics (p. 631)

Mechanical Engineering (p. 633)  
- Bachelor of Science in Mechanical Engineering (p. 639)  
- Master of Science in Mechanical Engineering (p. 642)  
- Doctor of Philosophy in Mechanical Engineering (p. 644)

**Introduction**

From communication systems to bridges, from satellites to manufacturing—society depends on engineers. A KU engineering education helps students understand technical principles and the background behind them and prepares them for the changes ahead. Most graduates assume responsible positions in business, industry, education, or government, but engineering programs also provide an excellent background for other careers. Many graduates are CEOs of major companies or enter fields like medicine or law.

**Mission**

The mission of the school is to provide students a high-quality educational experience, to generate and apply knowledge through research, development, and scholarly activity, and to serve society, the state of Kansas, and the engineering profession. In accordance with this mission and with KU’s mission, all undergraduate engineering programs and the computer science program must meet these objectives. Additional objectives are specified in program descriptions.
Facilities

Engineering faculty members and graduate students are major users of the facilities and services of many research laboratories and centers across campus and among our research partners at other universities:

- Bioengineering Research Center (http://www.berc.ku.edu)
- Biomechanics Research Laboratory (http://www.engr.ku.edu/~kubiomech/ejbrl)
- Biotechnology Innovation and Optimization Center (http://www2.ku.edu/~biocenter)
- Center for Environmentally Beneficial Catalysis (https://www.cebc.ku.edu)
- Center for Remote Sensing of Ice Sheets (https://www.cresis.ku.edu)
- Energy Council (http://kuenergycouncil.ku.edu)
- Higuchi Biosciences Center (http://www.hbc.ku.edu)
- Information and Telecommunication Technology Center (http://www.ittc.ku.edu)
  - Bioinformatics and Computational Life Sciences Laboratory
  - Communications and Networking Systems Laboratory
  - Computer Systems Design Laboratory
  - e-Learning Design Laboratory
  - Intelligent Systems Laboratory
  - Radar Systems and Remote Sensing Laboratory
- Institute for Policy and Social Research (http://www.ipsr.ku.edu)
- Tertiary Oil Recovery Project (https://www.torp.ku.edu)
- Transportation Research Institute (http://www.kutri.ku.edu)
  - Flight Research Laboratory
  - Infrastructure Research Institute
  - KU Transportation Center
- Kansas Biological Survey (http://kbs.ku.edu)
- Kansas Geological Survey (http://www.kgs.ku.edu)

School of Engineering

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Amy Lampe, Director, Undergraduate Student Academic Services
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Undergraduate Programs

The school offers 12 undergraduate degree programs:

- Aerospace engineering (p. 516)
- Architectural engineering (p. 557)
- Chemical engineering (p. 541)
- Civil engineering (p. 557)
- Computer engineering (p. 578)
- Computer science (p. 578)
- Electrical engineering (p. 578)
- Engineering physics (p. 629)
- Interdisciplinary computing (p. 578)
- Information technology (p. 541)
- Mechanical engineering (p. 633)
- Petroleum engineering (p. 541)

Engineering and computer science degree programs are accredited by the Accreditation Board for Engineering and Technology (http://www.abet.org).

High School Preparation

Preparation for an engineering career begins in high school with basic mathematics and science courses. Prospective engineering students should take mathematics through at least trigonometry and at least one year of both chemistry and physics. A well-rounded background in English, history, economics, and social studies, preferably with some computer operations and programming and advanced mathematics, affords flexibility in choosing a concentration. A strong college preparatory program provides a good background for the student who plans to major in engineering.

Honors Programs

The school encourages all qualified students to participate in the University Honors Program (http://www.honors.ku.edu). Students in engineering must meet with an engineering advisor every semester and should also meet with an honors program advisor.

Some engineering departments offer an option to graduate with departmental honors. Departments set these requirements.

Bachelor of Science in Engineering

Degree Requirements

The B.S. degree is offered with majors in aerospace engineering, architectural engineering, chemical engineering, civil engineering, computer engineering, electrical engineering, engineering physics, mechanical engineering, and petroleum engineering. The school also offers the B.S. degree in computer science, interdisciplinary computing, and information technology.

First- and Second-Year Preparation

Undergraduates usually enroll in engineering in their first year. The first few semesters of all the curricula contain a large proportion of common courses. Through proper planning with advisors, students may delay choosing specific fields for one or two semesters. Selecting the major by the beginning of the third semester is strongly encouraged so that the recommended schedule of classes can be followed.

Each engineering degree program includes courses in 5 general areas of study:
1. KU Core (communications, humanities, social sciences, ethics, etc.),
2. Basic sciences,
3. Basic engineering sciences,
4. Specialized engineering sciences, and
5. Engineering design.

The computer science degree program has a similar structure, but computer science courses replace some engineering courses. Courses taken during the first 2 years are largely from the first 2 areas, with a few courses in the basic engineering sciences or computer science. The basic sciences include mathematics, chemistry, and physics and further course work in the earth and life sciences in some of the curricula. Appropriate laboratory experience that combines elements of theory and practice is included in each student’s program, together with extensive computer-based experience. Completion of the KU Core is required in all majors. Each department recommends certain courses be used to fulfill the KU Core within each major to allow students the greatest flexibility in degree completion.

Requirements for Graduation

In addition to completing each of the required and elective courses listed in the curriculum,

1. A student must attain a cumulative grade-point average of at least 2.0 in the courses applied toward the degree. A student must also have a KU cumulative grade-point average of 2.0 whether or not all courses are being applied to the degree.
2. A student must attain a cumulative grade-point average of at least 2.0 in all courses taken in the school, including courses not applied toward a degree.
3. A student entering with advanced standing must attain a cumulative grade-point average of at least 2.0 in the resident courses applied toward the degree and at least a 2.0 in all courses taken in the school.
4. A student must take the last 30 hours of credit toward the degree at KU and be officially enrolled in the School of Engineering during this time.

General Education Component

Students in all engineering curricula must take courses that complement the technical content. These must include courses applicable to the KU Core and course work that

- Fosters an understanding of professional and ethical responsibility.
- Promotes the ability to communicate effectively.
- Develops an understanding of the impact of engineering solutions.
- Advances the student’s knowledge of contemporary issues.

Each engineering department specifies courses that fulfill these requirements.

Credit for ROTC Courses

A few credit hours from courses in aerospace studies, military science, or naval science may be applied toward graduation in lieu of certain required or elective courses. A student normally must complete the ROTC curriculum, whether or not it leads to a commission, to receive ROTC hours toward a bachelor’s degree in engineering. The student should submit a petition for substitution of courses to the department. The ROTC policy for each engineering degree program is listed with the information on each program.

Credit for Foreign Language Courses

Some foreign language courses may be applied toward graduation in engineering programs. A foreign language that is similar to the native language is not acceptable. Information on use of foreign language courses is available in each engineering program listing.

Petitions for Exceptions

A student seeking an exception to the rules and practices of the school should first consult an advisor and then petition the school to consider the exception. All petitions are approved by the Engineering Dean’s Office with the guidance of the student’s advisor and department.

Minors

Engineering students may minor in many liberal arts (p. 774) areas or in the schools of Business (http://www.business.ku.edu), Journalism and Mass Communications (http://www.journalism.ku.edu), or Music (http://www.music.ku.edu). To earn a minor, a student must take at least 18 credit hours, 12 of which must be 300-level courses or above. If the department or program has additional requirements for the minor, students must meet those requirements also. Interested students should see an advisor in the department offering the minor and complete a minor declaration form as early as possible.

Dual Enrollment

KU permits dual enrollment in 2 academic divisions. The student must plan carefully with special advisors in each area. Students should expect the minimum time required for 2 degrees to be at least 1 year longer than the minimum for 1 degree. The academically well-qualified student who is seriously considering dual enrollment might consider studying for the second degree at the graduate level. If the program is properly planned, it may be possible to earn 1 B.S. and 1 M.S. degree in about the same time required for 2 undergraduate degrees.

Limitation on Enrollment in Engineering Courses

After the fifth day of classes, enrollment in a course offered by the school is permissible only with approval of the instructor and permission of the dean. The school reserves the right to deny admission to courses offered by the school to any student who is officially enrolled in another division of the university and does not meet the school’s standards for admission or readmission and/or who does not have the proper prerequisite course work completed.

Preparation for Graduate Study

Undergraduates in the School of Engineering receive excellent preparation for pursuing graduate degrees. The school offers M.S. degrees as well as professional degrees. Students may apply for admission to graduate studies during the senior year and may be co-enrolled during the final undergraduate semester. Admission to graduate studies requires a minimum 3.0 grade-point average and completion of an ABET-accredited undergraduate degree.

Graduate Programs

The Master of Science (M.S.) degree is offered in 13 areas:

- Aerospace engineering (p. 516)
- Architectural engineering (p. 557)
• Bioengineering (p. 536)
• Chemical engineering (p. 541)
• Civil engineering (p. 557)
• Computer science (p. 578)
• Electrical and computer engineering (p. 578)
• Engineering management (p. 622)
• Environmental engineering or science (p. 557)
• Information technology (p. 578)
• Mechanical engineering (p. 633)
• Petroleum engineering (p. 541)
• Project management (http://pmgt.ku.edu)

The Master of Engineering (M.E.) is offered in aerospace engineering (p. 516) and project management (http://pmgt.ku.edu).

The Department of Civil, Environmental, and Architectural Engineering (p. 557) offers the Master of Civil Engineering (M.C.E.) and the Master of Construction Management (M.C.M.).

The school offers the Doctor of Philosophy (Ph.D.) degree in 8 areas:

• Aerospace engineering (p. 516)
• Bioengineering (p. 536)
• Chemical and petroleum engineering (p. 541)
• Civil engineering (p. 557)
• Computer science (p. 578)
• Electrical engineering (p. 578)
• Environmental engineering or science (p. 557)
• Mechanical engineering (p. 633)

Doctoral students interested in careers in research or teaching or both should consider the Ph.D. degree. Exceptionally qualified undergraduates may be admitted directly to a Fast-Track Ph.D. program.

For aerospace students interested in careers in engineering design or engineering project management, the school offers programs leading to the Doctor of Engineering (D.E.) degree in Aerospace engineering. (p. 516)

For information on graduate studies in petroleum management, contact the Department of Chemical and Petroleum Engineering (http://www.cpe.engr.ku.edu) or the School of Business (http://www.business.ku.edu).

**Graduate Grade-Point Average (GPA) Requirement**

In addition to completing a Plan of Study (https://gradplan.engr.ku.edu/accounts/login/?next=) that is formally approved by the advisory committee and other requirements appropriate to the graduate degree, a student must:

1. Attain and maintain at least a 3.0 grade-point average in all graduate courses and
2. Attain and maintain at least a 3.0 grade-point average in all course work, including undergraduate courses taken to make up background deficiencies, except for courses taken at the Applied English Center.

Please note, once you begin enrolling in your graduate career all courses 500 level and above will count towards your graduate GPA, even if you are not counting those courses towards your degree or are taking them as pre-requisite courses. Students who obtain a GPA below 3.0 will be placed on academic probation or dismissed from the School of Engineering.

**Plan of Study**

All graduate students must have an approved Plan of Study on file by the end of their second semester of graduate study. Click here (https://gradplan.engr.ku.edu/accounts/login/?next=) to create or update a plan. All students must have an up to date and approved Plan of Study on record in order to graduate.

**Undergraduate Advising**

Engineering students are advised by engineering faculty members. Students are assigned an advisor by their engineering departments.

Each entering student is encouraged to attend KU’s summer Orientation (http://firstyear.ku.edu/orientation) during June and July. At the summer orientation program, students are advised on course selection for the fall semester and given the opportunity to enroll. Students who cannot attend the orientation program confer with their advisors and enroll a day or two before classes start.

Enrollment holds are placed on all Engineering students’ accounts each semester before enrollment. Students see their faculty advisors to plan schedules and discuss academic and career interests. Once a student has met with an advisor, the enrollment hold is released. Students are encouraged to call on their advisors any time during the school year if they wish to change their schedules or discuss other matters. Consultation with an advisor is recommended before making schedule changes.

Undecided engineering majors are advised in the Office of the Dean, 1 Eaton Hall, 785-864-3881.

**Graduate Advising**

Graduate advising generally is done at the department and program level. Graduate students should contact the Director of Graduate Studies or Graduate Assistant in their department or program if they have not yet chosen an advisor or have general questions. Students just entering the graduate program should plan to attend orientation (each fall and spring semester during the week prior to the start of classes). More information is available here (http://enr.drupal.ku.edu/orientation).

**Plan of Study**

Graduate students should discuss their enrollment plans with their faculty advisor or Graduate Director to plan schedules and discuss academic and career interests. Once a student has met with an advisor, they should complete their Plan of Study online and submit the plan to their advisory committee for approval. Consultation with an advisor is recommended before making a Plan of Study. All graduate students, including those enrolled in courses at KU Medical Center and the Edwards campus, must have an approved Plan of Study on file by the beginning of their second semester in the graduate program. Enrollment holds are placed on students’ accounts after their first year of graduate study if they do not have an up to date and approved Plan of Study on file. Click here (https://gradplan.engr.ku.edu/accounts/login/?next=) to create or update a plan. All students must have an approved Plan of Study on record in order to graduate.
Undergraduate Scholarships and Financial Aid

The school has a scholarship program for entering freshmen students. Engineering scholarships are awarded competitively according to academic merit and without regard to financial need. Awards range from $1,000 to $3,000 per year, and scholarships are renewable for a total of four years of undergraduate study. All first-time freshmen who are admitted to the School of Engineering are considered for scholarships if they apply to the School of Engineering by the university's scholarship deadline (typically November 1).

Students with financial need should fill out the FAFSA (Free Application for Federal Student Aid) by March 1.

Graduate Funding and Assistantships

A variety of scholarships, fellowships, and assistantships are available to graduate students through the School of Engineering, KU, and outside sources. Many opportunities require that students be admitted to a graduate program before students are eligible to apply. Be sure to apply early, in order to meet eligibility requirements for funding (both internal and external) by posted deadlines. Graduate students are nominated by their department or program for School of Engineering funding each fall and spring.

The KU Office of Financial Aid & Scholarships offers a helpful calculator to estimate costs and search for scholarships. Financial Aid & Scholarships (http://affordability.ku.edu/steps/index.shtml) also administers grants, loans, and need-based financial aid. Students should contact the Graduate Director within their department or program or their advisor to inquire about research or teaching assistantships. Students must be admitted regularly or enrolling on regular status to be eligible for assistantships. Students admitted provisionally or placed on academic probation are ineligible for research or teaching assistantships. More information on graduate student funding is available here (http://www.engr.ku.edu/graduate/resources/funding.html).

Undergraduate University Regulations

For information about university regulations, see Regulations (p. 12) or visit the University of Kansas Policy Library (http://www.policy.ku.edu).

Absences

A student with excessive absences may be withdrawn from the course by the dean.

Academic Standing (Probation)

Good Academic Standing

Undergraduates must maintain both semester and cumulative grade-point averages of 2.0 or higher to remain in good standing. Students' academic standings are reviewed after each semester.

Probation

If a student’s semester or cumulative grade-point average falls below 2.0, the student is placed on probation. The student will return to good standing if

1. The following semester’s cumulative and engineering grade-point average is 2.0 or higher,
2. The cumulative grade-point average is 2.0 or higher, and
3. All other requirements described in the probation letter are met.

Students also may be placed on probation for failing to make progress toward an engineering degree or failing to be continuously enrolled in Applied English Center (http://www.aec.ku.edu) or English courses until all AEC and the KU Core Written Communications requirements are met.

Dismissal

A student on probation is dismissed if any of the following occur:

1. Any semester grade-point average is below 2.0 while the student is on probation.
2. The cumulative grade-point average is below 2.0 after two semesters on probation.
3. The student has failed to meet the other requirements stated in the probation letter.
4. The student on probation has failed to make progress toward an engineering degree or toward fulfilling all AEC and the KU Core Written Communications requirements.

Readmission

A student who has been dismissed from the School of Engineering for poor scholarship may apply for readmission by submitting a Change of School form to the Engineering Dean's Office in Eaton Hall, room 1. A student who has been dismissed from the University of Kansas may apply for admission or readmission to the School of Engineering by contacting the Office of Admissions and Scholarships (http://www.ku.edu/admission). A student does not automatically become eligible to re-enroll after a certain period of time. A student who is readmitted on probation must meet stringent academic requirements to be returned to good standing.

Change of School

To change from one school to another, KU students must submit a Change of School form in the dean’s office of the school they plan to enter.

Admission is competitive and students are considered on a case-by-case basis. Students must have an overall college grade-point average of 2.5 or better, with grades of “C” or better in those courses in mathematics, science, and engineering applicable to the engineering degree. Applications are due February 15 for summer or fall admission and September 15 for spring admission.

Credit/No Credit

A Credit/No Credit option is available to all degree-seeking undergraduates. You may enroll in one course a semester under the option, if the course is not in your major or minor. For more information, visit the KU Policy Library (https://documents.ku.edu/policies/governance/USRR.htm#art2sect2).

Warning: Certain undesirable consequences may result from exercising the option. Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of No Credit to F when computing grade-point averages.

Credit/No Credit is allowed for courses used to fulfill KU Core GE 2.1 Written Communication, GE 2.2 Oral Communication, GE 3H Arts & Humanities, GE 3S Social Sciences, AE 4.1 Human Diversity, AE 4.2 Cultural & Global Awareness, and AE 5 Social Responsibility and Ethics requirements only. If an Engineering department recommends that certain course work be used to fulfill any of these requirements, those
courses shall not be eligible for Credit/No Credit. Students should see their Engineering advisor.

Credit/No Credit is not an option for aerospace engineering students.

Dean's Honor Roll

Students with grade-point averages of 3.75 who have completed at least 14 hours are recognized on the honor roll or dean's list in fall and spring. An Honor Roll notation appears on the transcript.

Enrollment Holds

An Engineering Advising Hold (EAH) is placed on all Engineering students' accounts prior to enrollment each term. Students must meet with their assigned Engineering advisor to have the hold released.

A No Drop Hold (DRP) is placed on all Engineering students' accounts early in the term preventing students from dropping classes without the permission of their advisor and the Engineering Dean's Office. The No Drop Hold prevents students from withdrawing from essential classes without speaking with an advisor about the possible negative ramifications of a withdrawal.

Students voluntarily leaving the School of Engineering may have their Engineering Advising Hold or No Drop Hold released by signing an official Change of School form to leave the School of Engineering. Change of School forms are available in the Engineering Dean's Office, Eaton Hall, room 1.

Graduation with Departmental Honors

For students who complete their department's honors program, designation of honors appears on the transcript.

Graduation with Distinction and Highest Distinction

Students who fulfill the following requirements are eligible for graduation with distinction.

1. Students must rank in the upper 10 percent of the graduating class by KU grade-point average.
2. Students must have taken at least 64 hours in residence at KU.
3. Students with transfer credit must also have overall grade-point averages, including transfer credit, that fall into the upper 10 percent of the class.

The upper third of those awarded distinction graduate with highest distinction. The list is compiled each spring and includes July, December, and May graduates.

Maximum and Minimum Semester Enrollment

The normal course load is 15-17 hours a semester. A student may not enroll in more than 19 credit hours during any semester or more than 12 credit hours during the summer session except with approval of the major advisor and the dean.

Prerequisites and Corequisites

Students may be administratively dropped from courses for which they do not meet prerequisite or corequisite requirements.

Required Work in Residence

Students must be enrolled in the school for the last 30 hours of credit.

Transfer of Credit

CredTran (http://admissions.ku.edu/apply/credits) is a transfer course equivalency system that lists more than 2,200 colleges and universities from which KU has accepted transfer courses in the past. If your school or course is not listed, your evaluation will be completed when you are admitted to KU.

The School of Engineering does not routinely accept credits from foreign institutions or from vocational-technical programs in the United States. Before such courses may be added to a student's official KU record as transfer credits, they must be validated

1. By examination by the department or school offering the course on the KU campus.
2. By earning a grade of C or higher in a later course in the sequence of courses, or
3. By earning a grade of C or higher in a course.

Credits for English composition at a foreign institution of higher education are not accepted for the required English courses in any engineering curriculum.

Credits from courses completed at the secondary level (high school), whether from U.S. or from foreign schools, are not added to a student's official record unless the student obtains college credits through one of three examination programs:

1. The College Entrance Examination Board's Advanced Placement test,
2. KU's own credit by examination program, or
3. The College Level Examination Program.

A course from another college or university may apply toward the Bachelor of Science in Engineering degree as transfer or nonresident credit only if the grade received is at least C.

Transfer credit in engineering science and engineering design from institutions accredited by the Accreditation Board for Engineering and Technology (http://www.abet.org) and from institutions with which KU has approved articulation agreements may be applied toward the degree as appropriate in the particular engineering curriculum. Transfer credit in engineering from other institutions must be evaluated and validated on a case-by-case basis.

Graduate University Regulations

For information about university regulations, see the Graduate (p. 12) Regulations (p. 12) or visit the University of Kansas Policy Library.

Graduate Enrollment

The Graduate Studies policy for graduate enrollment is that all graduate students must be continuously enrolled in the fall and spring semesters. Note that this does not include the summer semester, unless you are a Ph.D. candidate (post-comprehensive enrollment) or have a GTA/GRA appointment. This includes part-time programs, but does not include non-degree seeking students. Review the general information in the Graduate Studies section of the online catalog for more information.
If you do not plan to enroll for a given semester, you will need to do one of the following:

Request a Leave of Absence – Use this option when you will be returning to your graduate study after one or more semesters. A leave of absence may be granted upon request to the graduate program in advance of leave. Leaves may be granted in cases of illness, emergency, to pursue family responsibilities, or to pursue full-time activities related to long-range professional goals. The time taken for a leave of absence does not count against the time limit for earning the degree. However, if the total time for the leave extends more than three semesters, you may lose your place in the program and have to re-apply for admission. To request a leave of absence, you must contact your department graduate assistant, who will submit a Progress-to-Degree (PtD) form. You will need to provide the assistant with the following information: non-ku email address, mailing address, first term of leave and the semester you plan to return, as well as a statement on the reason for the leave of absence (by email).

Request to Voluntarily Discontinue – Use this option if you do not plan to return to your graduate program in the School of Engineering. This means that you voluntarily resign from a program by requesting a discontinuance. If you choose to return at a later date, you must re-apply for admission. Discontinuance is requested through your department or program via email to the department graduate director or assistant.

Please note, students who do not request a leave of absence are discontinued in the system and will be required to apply for re-admission (application fee required). To prevent having to re-apply and pay additional fees, students are strongly encouraged to request a leave of absence and contact their departmental staff when they are ready to return.

Academic Status

Good Academic Standing

Graduate students must be admitted regularly and maintain cumulative grade-point averages (GPA) of 3.0 or higher to be considered in good standing. Students admitted provisionally must complete departmental / program requirements before they are considered in good standing. Students on academic probation can regain their good standing once they have a cumulative GPA of 3.0 or higher. Students’ academic standings are reviewed after each semester. All courses 500-level and above will count towards the graduate GPA, if enrolled in a graduate program.

Provisional Admittance / Academic Probation

Students who are admitted provisionally are given a set of requirements that must be completed, generally within the first year, before they will be moved to regular status. Students who are placed on academic probation due to their graduate GPA must obtain a cumulative GPA of 3.0 or higher within a given time frame, generally one semester, before they are moved to regular status. If you receive a cumulative grade point average below a 3.0 during your graduate career, you are considered ineligible for teaching and research assistantship positions or will need to petition the school and Graduate Studies office for approval.

Dismissal

Graduate students who are unable to meet their provisional or probationary requirements within the given time frame may be dismissed from the School of Engineering. When the particular circumstances are deemed to justify continuation, and upon the recommendation of the department or program, such a student may be continued on probation by the Graduate Division for one additional semester equivalent of full-time study. If a student decides to pursue another graduate degree within the School of Engineering, they are required to re-apply.

Change of Degree

A student who wants to change from one engineering degree program to another within the same department should see their department assistant to complete a progress-to-degree (PtD) form. Students who wish to change to a program outside of their home department must submit an application for admission. If a student changes or is accepted into another program and wishes to pursue only the new degree, the student should notify the department assistant, so that the old plan may be removed from the student’s record. Students are allowed to pursue multiple degrees, but should discuss these plans with both program advisors.

Credit/No Credit

Graduate students may select the Credit/No Credit option for certain courses. Students should follow the policy outlined in the University Senate Rules and Regulations, Section 2, article 2.27.

Honors

Graduate student can obtain honors only at the time of the final defense or final exam (and comprehensive exam for Ph.D. students). Students enrolling in coursework only degree programs do not have the opportunity to receive honors at the graduate level. Students who complete a project, thesis or dissertation will have the opportunity to receive honors at the time of the final exam or defense. Students should discuss the requirements for graduation with their program advisor if seeking honors. Only 10-15% of graduate students receive this high distinction.

Entry and Employment in the Profession

Initial Licensing

Formal study in an accredited engineering program is the principal means of becoming licensed to practice engineering in Kansas and other states. During the junior or senior year, a student may take the national Fundamentals of Engineering examination. After 4 or more years (licensing regulations vary among states) of practice satisfactory to the board, the student may take the examination to become a registered professional engineer.

Job Search Assistance

The Engineering Career Center (http://www.engr.ku.edu/career_center) offers a comprehensive array of services to students seeking permanent employment and career-related summer or co-op employment. These include on-campus interviewing; 2 career fairs each year; individual advising and group workshops on résumés; interviewing, and job search strategies; online interviewing sign-up; online job postings from many employers not interviewing on campus; a library of employer and career literature; and an online résumé book searchable by employers.

The Engineering Career Center offers services to all engineering students. Students are encouraged to visit the Engineering Career Center early in their undergraduate or graduate studies. Many employers actively seek KU engineering and computer science students. Some prefer to hire students as early as the first-year level for internships. The Career Center is in 1001 Eaton Hall; additional information is available from 785-864-3891.
Aerospace Engineering Courses

AE 211. Computing for Engineers. 3 Hours.
Introduction to computing concepts. Introduction to the MATLAB computing language using a suite of simulations in science and engineering in a progression which adds new MATLAB constructs - as well as logical and mathematical constructs - with each simulation. Simulations include numerical integration, coordinate transformations and primitive reinforcement learning constructs. Prerequisite: MATH 121 or MATH 125. LEC.

AE 221. Introduction to Global History of Aerospace Technologies. 1-3 Hours.
This History of Aerospace Technology starts in neolithic times with a description of a variety of flying implements being used for hunting and warfare. Their basic designs, mechanics, impact on human evolution, migration and societal development are brought forward to the development of gunpowder, ballistics and rocketry. Lighter than air flight innovations from 1783 forward show an intermingling of civil and military uses through WWI, shaping world events and the fortunes of nations. Heavier than air inhabited flight exploration begins with Cayley, includes the contributions of technologists Lilienthal, Chanute, visionaries and writers Mouillard and Verne, and concludes in a vertical exploration by region, nation and manufacturer, including: Douglas, Boeing, Lockheed, Fokker, Heinkel, Messerschmitt, Fairey, Handley Page, Piaggio, Tupelov, Mikoyan-Gurevich, Kamov, Mitsubishi, Hindustan Aeronautics, Sud Aviation and others. This course represents a very unique opportunity for students to study under one of the most important, famous and well published Aerospace Technologists and Historians ever to practice. LEC.

AE 241. Private Flight Course. 1 Hour.
One hour of academic credit is given upon the awarding of the private pilot's license by the Federal Aviation Administration. Required documentation includes a letter from the F.A.A. designated examiner giving the check ride and a copy of the private license. The Department of Aerospace Engineering provides no ground or flight instruction. Graded on a satisfactory/fail basis. Prerequisite: Aerospace Engineering students only, with consent of instructor. IND.

AE 242. Private Flight Aeronautics. 3 Hours.
Three hours of academic credit is given for the successful completion of the F.A.A. private pilot's written examination. Required documentation is a copy of the written score. Available only to Aerospace Engineering transfer students as a course substitute for AE 245. IND.

AE 245. Introduction to Aerospace Engineering. 3 Hours.
Basic systems of an aerospace vehicle, meteorology, vehicle performance, navigation and safety. Specific examples emphasize general aviation. Open enrollment. Corequisite: MATH 121. LEC.

AE 290. Aerospace Colloquium. 0.25 Hours.
This is a required course for all aerospace engineering majors each fall semester. Topics of importance and new developments are discussed by aerospace industry representatives and representatives of F.A.A., D.O.T., D.O.D., N.A.S.A., related sciences, and engineering disciplines. A forum for student activities at all levels. Technical films. Open enrollment. LEC.

AE 292. Aerospace Industrial Internship. 1 Hour.
Engineering internship in an approved company. Internship hours do not satisfy any course requirements for the bachelors degree in Aerospace Engineering but will appear on the official transcript. Credit assigned after review of report on internship experience. Graded on a satisfactory/fail basis. Prerequisite: Completion of freshman year. FLD.

AE 345. Fluid Mechanics. 3 Hours.
Study of fundamental aspects of fluid motions and basic principles of gas dynamics with application to the design and analysis of aircraft. Corequisite: CE 301 or MATH 220. LEC.

AE 360. Introduction to Astronautics. 3 Hours.
Introduction to astronautical engineering. The history of astronautics, including rocketry and space flight. Fundamentals of astronautics, including space environment, astrodynamics and the analysis and design of spacecraft systems. Design, construction and launch of a prototype earth-satellite using a high-altitude balloon. Prerequisite: MATH 122 or MATH 126. Corequisite: A course in computer programming. LEC.

AE 390. Aerospace Industrial Internship. 1 Hour.
Engineering internship in an approved company. Internship hours do not satisfy any course requirements for the bachelors degree in Aerospace Engineering but will appear on the official transcript. Credit assigned after review of report on internship experience. Graded on a satisfactory/fail basis. Prerequisite: Completion of Sophomore year. FLD.

AE 421. Aerospace Computer Graphics. 3 Hours.
Development of skills in depicting aerospace vehicles and their components and subsystems for the purpose of illustration, design, and analysis using traditional and modern (Computer Aided Design) drafting tools. LEC.

AE 430. Aerospace Instrumentation Laboratory. 3 Hours.
Review and hands-on laboratory experiments with basic electronic elements (resistors, capacitors, conductors, transistors, linear circuits, logic devices, and integrated circuits). Overview and hands-on laboratory experiments using various experimental techniques available to the aerospace engineers (pressure probes, thermocouples, strain gauges, hot-wire anemometer, laser Doppler velocimeter, and flow visualization techniques). Prerequisite: AE 445 and EECS 318. LAB.

AE 441. Advanced Flight Training. 1-3 Hours.
Academic credit is given for the successful completion of advanced flight training beyond the private pilot rating. One hour is given for each of the following: commercial, instrument rating, certified flight instructor. The Aerospace Engineering Department provides no ground or flight instruction. Graded on a satisfactory/fail basis. Prerequisite: AE 241. IND.

AE 445. Aircraft Aerodynamics and Performance. 3 Hours.
Study of airfoil and wing aerodynamics, component drag, static and special performance, and maneuvers of aircraft. Open enrollment. Prerequisite: AE 345, CE 301. LEC.

AE 490. Aerospace Industrial Internship. 1 Hour.
Engineering internship in an approved company. Internship hours do not satisfy any course requirements for the bachelors degree in Aerospace Engineering but will appear on the official transcript. Credit assigned after review of report on internship experience. Graded on a satisfactory/fail basis. Prerequisite: Completion of junior year. FLD.

AE 507. Aerospace Structures I. 3 Hours.
Analysis and design of aerospace structures from the standpoint of preliminary design. Deflection and stress analysis of structural components, including thin-walled beams and built-up (semimonocoque) structures. Material failure of highly stressed components, including connections. Buckling of thin-walled beams and semimonocoque structures. Durability and damage tolerance strategies for aerospace structures to avoid corrosion, fatigue, and fracture. Prerequisite: CE 310. LEC.
AE 508. Aerospace Structures II. 3 Hours.
Stress and deflection analysis of aerospace structures using the finite element method. Introduction to work-energy principles, including Castigliano's Theorems, for the analysis of statically indeterminate structures. Rod, beam, shaft, membrane, and plate finite elements. Prerequisite: AE 507. LEC.

AE 509. Honors Aerospace Structures. 3 Hours.
Indeterminate structures, principle of virtual work, Castigliano's theorems, displacement method of finite element analysis; rod, beam, shaft, and membrane elements; analysis of aerospace structures with the finite element method. Prerequisite: AE 507. LEC.

AE 510. Aerospace Materials and Processes. 4 Hours.
Properties and applications of aircraft materials, forming methods, and manufacturing processes. Ethics and social responsibility for engineers. Oral technical presentations. Prerequisite: AE 507 and CHEM 130 or CHEM 150. LEC.

Preliminary design techniques for an aerospace system. Aerodynamic design, drag prediction, stability and control criteria, civil and military specifications. Weight and balance, Configuration integration, design and safety, design and ethics, and social responsibility for engineers. Written technical reports. Prerequisite: AE 421, AE 508, AE 551, and AE 572. LEC.

Preliminary design project of a complete aircraft system. Technical written reports and oral presentations. Prerequisite: AE 521. LEC.

AE 523. Space Systems Design. 4 Hours. AE61.
Preliminary design project of a complete space system. Technical written reports and oral presentations. Prerequisite: AE 521 and AE 560. LEC.

Preliminary design project of a complete propulsion system, including the airframe. Technical written reports and oral presentations. Prerequisite: AE 521. LEC.

AE 545. Fundamentals of Aerodynamics. 4 Hours.
Basic gas dynamic equations, potential flow for airfoils and bodies, thin airfoil theory, finite wing, subsonic similarity rules, one and two dimensional supersonic flow, boundary layers, heat transfer, and laboratory experiments. Prerequisite: AE 445, ME 312, and MATH 220. LEC.

AE 546. Honors Aerodynamics. 5 Hours.
Basic gas dynamic equations, potential flow for airfoils and bodies, thin airfoil theory, finite wing, subsonic similarity rules, one and two dimensional supersonic flow, boundary layers and viscous flow, heat transfer, and laboratory experiments. A special project in aerodynamics for AE 546 students. Prerequisite: AE 445, ME 312, MATH 220 and MATH 290. LEC.

AE 550. Dynamics of Flight I. 4 Hours.

AE 551. Dynamics of Flight II. 4 Hours.
General equations of motion of rigid airplanes and reduction to perturbed state flight situations. Mathematical modeling of airplane and control system analysis in state space. Dynamic stability, phugoid, short period, dutch roll, roll, spiral, and other important modes. Transfer functions and their application. Relationships with handling quality requirements. Fundamentals of classical control theory and applications to automatic flight controls. Implications to airplane design. Prerequisite: AE 550. LEC.

AE 552. Honors Dynamics of Flight II. 4 Hours.
General equations of motion of rigid airplanes and reduction to perturbed state flight situations. Perturbed state forces and moments, stability derivatives, dynamic stability, phugoid, short period, dutch roll, roll, spiral, and other important modes. Transfer functions and their application. Relationships with handling quality requirements. Fundamentals of classical control theory and applications to automatic flight controls. Implications to airplane design. Prerequisite: AE 550 and a course in differential equations (MATH 220 or MATH 320). LEC.

AE 560. Spacecraft Systems. 3 Hours.
Fundamentals of spacecraft systems and subsystems. Spacecraft systems engineering, space environment; basic astrodynamics; and the following spacecraft subsystems; attitude determination and control; electrical power; thermal; propulsion; structures and mechanisms; command, telemetry, and data handling; and communications. Prerequisite: AE 360, AE 507, EECS 318, and ME 312. LEC.

AE 571. Fundamentals of Airplane Reciprocating Propulsion Systems. 3 Hours.
Study of the basic principles of operation and systems of internal and external combustion engines with emphasis on airplane reciprocating engines. Cycle analysis, propeller theory, propeller selection and performance analysis. Prerequisite: AE 445 and ME 312. LEC.

AE 572. Fundamentals of Jet Propulsion. 3 Hours.
Lecture and laboratory, study of basic principles of propulsion systems with emphasis on jets and fan systems. Study of inlets, compressors, burners, fuels, turbines, jets, methods of analysis, testing, performance; environmental considerations. Prerequisite: AE 545. LEC.

AE 573. Honors Propulsion. 3 Hours.
Lecture and laboratory, study of basic principles of propulsion systems with emphasis on jets and fan systems. Study of inlets, compressors, burners, fuels, turbines, jets, methods of analysis, testing, performance; environmental considerations. Prerequisite: AE 545 and AE 571. LEC.

AE 590. Aerospace Senior Seminar. 1 Hour.
Presentation and discussion of technical and professional paper reports. Methods for improving oral communication. Discussion of topics such as ethics, registration, interviewing, professional societies, personal planning. Prerequisite: Senior standing. LEC.

AE 592. Special Projects in Aerospace Engineering for Undergraduate Students. 1-5 Hours.
Directed design and research projects in aerospace engineering. Prerequisite: Consent of instructor. IND.

AE 593. Honors Research. 1-5 Hours.
Directed design and research projects in aerospace engineering. Prerequisite: Consent of instructor. IND.

AE 621. Advanced Aircraft Design Techniques I. 3 Hours.
The purpose of this course is to provide aerospace engineering students with an opportunity to gain more in-depth airplane design education through design work. This design work will involve detailed design of efforts in such areas as: landing gear design, systems design, propulsion system integration, structures design and aerodynamic design. Prerequisite: AE 507, AE 521, AE 545, AE 551, and AE 571. AE 521 may be taken concurrently. LEC.
AE 628. Wind Turbine Engineering. 3 Hours.
Course will cover the fundamentals of engineering wind-powered electric generators. Topics will include turbine configuration design, drive train engineering, composite rotor blade aerodynamic and structural design, characterizing the influence of the wind conditions on the operation, loads, and performance of a wind turbine, wind turbine controls systems engineering, and power electronic conversion. Prerequisite: AE 508, AE 545, and EECS 316 and EECS 318 or equivalent. LEC.

AE 670. Aerospace Propulsion III. 3 Hours.
Advanced theory of turbojet, fanjet (multi-spool), variable cycle engines, ramjet and bypass air breathing propulsion systems. Theory and design of inlets, compressors, burners and turbines. Component matching, cooling, regenerative systems, test methods and corrections. Prerequisite: AE 572. LEC.

AE 690. Professional Development for Graduate Studies. 0.25 Hours.
Professional development for graduate students. Presentation and discussion of graduate student research. Meets approximately monthly. Each meeting will include either a faculty-guided seminar on one of the core course topics or presentations by students on a research topic. Some class sessions will be devoted to 10-15 minute informal presentations on work in progress. Others will allow students to make informal presentations as a "dress rehearsal" for presentations to be given at a technical conference. Two semesters of enrollment required for all MS, ME PhD and DE aspirants and candidates. Graded on a satisfactory/unsatisfactory basis. LEC.

AE 701. Structural Design. 3 Hours.
Design and internal construction of major structural components: wing, fuselage, empennage, landing gear, engine pylons. Layout of major structures and system interfaces, internal geometry, material alternates, manufacturing alternates and design constraints. Certification and proof of design requirements. Prerequisite: AE 421, AE 508, and AE 510. LEC.

AE 704. Dynamics and Vibrations. 3 Hours.
Problems in engineering dynamics and vibrations. Topics include applications of generalized forces and coordinates, Lagrange equations, and a study of the performance of single and multiple degree of freedom in vibrational systems. (Same as CE 704.) Prerequisite: AE 508. LEC.

AE 705. Structural Vibrations and Modal Testing. 4 Hours.

AE 707. Aerospace Structural Loads. 3 Hours.
Steady state spanwise and chordwise airloads, windshears, gusts, landing gear loads, bird strike, traumatic loads, special commercial and military load requirements. Prerequisite: AE 507 and AE 545. LEC.

AE 708. Aerospace Structures III. 3 Hours.

AE 709. Structural Composites. 3 Hours.
Fiber materials, tapes, cloths, resin systems; general aeroeliptropic theory, elastic constants, matrix formulation; computer analysis, strength, theory of failure; introduction to design with composites, preliminary design, optimization, processing variables, product design. Prerequisite: CHEM 184 or CHEM 150, CPE 121, AE 508 or CE 781; and AE 510 or ME 346 or CE 710. LEC.

AE 710. Advanced Structural Composites. 3 Hours.
The course objectives are to provide each student with a more in-depth understanding of and practical hands-on experiences with available fiber and matrix materials, manufacturing methods, and the mechanical behavior of composite materials and structures. Modern software tools and manufacturing methods are addressed, to include optimization techniques and design for manufacturability. Classical plate theory, bending, buckling, and vibration of anisotropic plates is addressed. Damage tolerance and repairability, as well as nondestructive evaluation techniques are also covered. Skills learned in previous composite courses will be utilized to design, analyze, and fabricate structures of current industrial relevance. Prerequisite: AE 508 or similar, AE 709 or similar, or consent of instructor. LEC.

AE 712. Aircraft Design Laboratory II. 4 Hours.
The purpose of this course is to provide aerospace engineering students with an opportunity to gain more in-depth airplane design education through team design work. This team design work will involve detailed design efforts in such areas as: landing gear design, systems design, propulsion system integration, structures design, and aerodynamic design. Prerequisite: AE 507, AE 521, AE 545, AE 551, and AE 571. AE 521 may be taken concurrently. LAB.

AE 713. Stochastic Systems, Estimation and Identification in Aerospace Engineering. 3 Hours.
Stochastic adaptive control theory is concerned with recursive estimation of unknown parameters and control for systems with uncertainties modeled as random variables or random processes. The theory is motivated by applications in such diverse areas as aerospace guidance and control, signal processing and communications, manufacturing processes, and financial economics. Mathematical theory of stochastic adaptive control for models based on stochastic difference equations such as autoregressive processes and stochastic differential equations as Markov diffusion processes have been developed and will be presented. This course focuses on filtering and system identification theory. Prerequisite: AE 430, AE 550, AE 551, AE 750, MATH 590 and MATH 627 or equivalent. LEC.

AE 721. Aircraft Design Laboratory I. 4 Hours.
The purpose of this course is to provide aerospace engineering students with an opportunity to gain more in-depth airplane design education through team design work. This team design work will involve detailed design efforts in such areas as: landing gear design, systems design, propulsion system integration, structures design, and aerodynamic design. Prerequisite: AE 507, AE 521, AE 545, AE 551, and AE 571. AE 521 may be taken concurrently. LAB.

AE 722. Aircraft Design Laboratory II. 4 Hours.
The purpose of this course is to provide aerospace engineering students with an opportunity to gain more in-depth airplane design education through team design work. This team design work will involve detailed design efforts in such areas as: landing gear design, systems design, propulsion system integration, structures design, and aerodynamic design. Prerequisite: AE 507, AE 521, AE 545, AE 551, and AE 571. AE 521 may be taken concurrently. LAB.

AE 724. Propulsion System Design and Integration. 3 Hours.
Theory and design of propulsion systems for both low and high speed aircraft and their integration into the overall configuration. Internal and external design and analysis of inlets and nozzles including their effect on the external aerodynamics of the aircraft. Engine/inlet compatibility and the problems of matching both steady state and dynamic characteristics to obtain peak, stable performance. Prerequisite: AE 572. LEC.

AE 725. Numerical Optimization and Structural Design. 3 Hours.
Classical theories of unconstrained and constrained optimization. Numerical techniques for unconstrained optimization, including the steepest descent, conjugate gradient and "Newton's" methods. Numerical
AE 728. Wind Turbine Engineering. 3 Hours.
Course will cover the fundamentals of engineering wind-powered electric generators. Topics will include turbine configuration design, drive train engineering, composite rotor blade aerodynamic and structural design, characterizing the influence the wind conditions on the operation, loads, and performance of a wind turbine, wind turbine controls systems engineering, and power electronic conversion. Prerequisite: AE 507, AE 545, and EECS 316 and EECS 318 or consent of instructor. LEC.

AE 730. Advanced Experimental Fluid Dynamics. 3 Hours.
Theory, methods and data analysis of various modern flow measurement techniques including: hotwire cluster, laser-Doppler velocimetry, particle image velocimetry, holography, pressure detection, temperature probing, vorticity measurements, Lagrange particle tracking. Specific experimental technique covers optical measurements in turbulent flow, micromachined experiments, and spray and multiphase flow measurement. Prerequisite: AE 430, AE 545 or consent of instructor. LEC.

AE 731. Supersonic Aerodynamics Laboratory. 1 Hour.
Supersonic wind tunnel and shock tube operations, techniques, and instrumentation. Flow study and model testing. Prerequisite: AE 545. LAB.

AE 732. Introduction to Flight Test Engineering. 3 Hours.
Course presents flight test principles, instrumentation, planning, and operation of aerospace vehicle flight testing. Course is structured with lectures, laboratories, and flight experiments. Student teams plan and execute a series of flight test experiments including: familiarization with flight test measurements, static system calibration, rate-of-climb performance, and determination of vehicle flight dynamics. Prerequisite: AE 445 and AE 550 or consent of instructor. LEC.

AE 743. Compressible Aerodynamics. 3 Hours.
Compressible flow with heat and friction; shock polars, 1-D unsteady gas dynamics, shock tube, conical flows, methods of characteristics, hypersonic flow theory. Prerequisite: AE 545. LEC.

AE 744. Introduction to Turbulent Flow. 3 Hours.
Reynolds averaged equations for turbulent flow, basic energy relations and spectra in turbulent flow, analysis of turbulent boundary layer, turbulent pipe flow, turbulence models and simulation. Prerequisite: AE 545 or equivalent. LEC.

AE 745. Applied Wing and Airfoil Theory. 3 Hours.
Applications of potential flow theory to aerodynamics of airfoil sections; wings and wing-body combinations. Introduction to high angle-of-attack and transonic aerodynamics. Prerequisite: AE 545. LEC.

AE 746. Computational Fluid Dynamics. 3 Hours.
Applications of numerical techniques and digital computers to solving fluid flow problems. Solutions involving incompressible and compressible flows, inviscid and viscous flows. Finite difference techniques for different types of partial differential equations governing the fluid flow. Prerequisite: AE 545. LEC.

AE 747. Introduction to Transonic Aerodynamics. 3 Hours.
Review of Fundamental Equations, Transonic Similarity Laws, Shock-Expansion Theory, Method of Characteristics (MOC), Aerodynamics of Non-Lifting Bodies, Airfoil Aerodynamics and Aerodynamics of Swept Wings. Prerequisite: AE 545. LEC.

AE 748. Helicopter Aerodynamics. 3 Hours.
Helicopter components and their functioning; rotor aerodynamics, performance, stability and control, aeroelastic effects and vibrations. Prerequisite: AE 551. LEC.

AE 750. Applied Optimal Control. 3 Hours.
Introduction to optimal control analysis and design tools useful for the design of Multi-Input/Multi-Output controllers. Linear Quadratic Regulator problem extended by including advanced command techniques and advanced controller structures. The techniques are illustrated with aerospace applications. Prerequisite: AE 551 or ME 682 or consent of instructor. LEC.

AE 751. Advanced Airplane Dynamics. 2 Hours.

AE 752. Linear Multivariable Control. 3 Hours.
An introduction to the modeling and analysis of multi-input, multi-output control systems. Topics include state space representation, solutions of linear systems, stability analysis, state feedback controller design, LQR design, LQG design, cooperative controller design, etc. The successful completion of this course will prepare students for advanced studies in controls. Prerequisite: AE 551 or equivalent, or EECS 444 or equivalent; or by consent of instructor. LEC.

AE 753. Digital Flight Controls. 3 Hours.
Introduction to the classical Z-plane analysis and design tools useful for the design of control systems containing continuous dynamics and a digital computer. Mathematical modeling of the digital computer and design of digital compensators. Aerospace applications used to demonstrate the concepts. Prerequisite: AE 551 or ME 682 or consent of instructor. LEC.

AE 754. Missile Dynamics. 3 Hours.
Design of missile configurations. General equations of motion. Aerodynamics of missiles in subsonic through hypersonic flight regimes. Theory of missile trajectory. Linear and nonlinear theories of missile flight dynamics. Introduction to guidance and control. Launching problems and free flight dispersions. Prerequisite: AE 551. LEC.

AE 755. Robust and Nonlinear Control. 3 Hours.
The robustness is one of the most critical qualities of an appropriately designed feedback control system. In this course the ability of the closed-loop system to continue performing satisfactorily despite uncertainties in estimated state variables and/or large variations in the (open-loop) plant dynamics will be investigated. This course will lay down the mathematical and theoretical background needed for the analysis and design of robust feedback control systems. Modern controller design methods (e.g. H-inf control) will be used to design controller highly nonlinear and transient dynamics. Prerequisite: AE 550, AE 551, AE 750, MATH 590 or consent of instructor. LEC.

AE 756. Rule-Based Control Systems. 3 Hours.
The course will cover the fundamentals of engineering wind-powered electric generators. Topics will include turbine configuration design, drive train engineering, composite rotor blade aerodynamic and structural design, characterizing the influence the wind conditions on the operation, loads, and performance of a wind turbine, wind turbine controls systems engineering, and power electronic conversion. Prerequisite: AE 507, AE 545, and EECS 316 and EECS 318 or consent of instructor. LEC.

AE 757. Rule-Based UAV Control Lab. 1 Hour.
A guided experience on building an unmanned aircraft system. Uses and existing radio-controlled platform, and thus does not require an
expertise in fabrication. Focuses on building the communication hardware and software that enables the use of a rule-based control system on a computer to control the aircraft remotely. Corequisite: AE 756. LEC.

AE 758. Introduction to Robotics. 3 Hours.
An introduction to robotics covering spatial descriptions and transformations, manipulator kinematics, Jacobians, and dynamics and control of manipulators. The successful completion of this course will prepare students for advanced studies in robotics. Prerequisite: CE 301 or equivalent, AE 551 or equivalent, and MATH 290 or equivalent; or by consent of instructor. LEC.

AE 759. Estimation and Control of Unmanned Autonomous Systems. 3 Hours.
An introduction to the modeling, estimation and control of unmanned autonomous systems. Topics include model identification, complementary filters, Kalman filters, attitude estimation, position estimation, attitude keeping controller, path planning, etc. The successful completion of this course will prepare students for advanced studies in robotics controls. Prerequisite: MATH 627 or EECS 461 or equivalent, AE 551 or EECS 444 or equivalent; or by consent of instructor. LEC.

AE 760. Spacecraft Systems. 3 Hours.
Fundamentals of spacecraft systems and subsystems. Spacecraft systems engineering, space environment; basic astrodynamics; and the following spacecraft subsystems: attitude determination and control; electrical power; thermal; propulsion; structures and mechanisms; command, telemetry, and data handling; and communications. Same as AE 560 with the addition of a research paper. Not available for students that have taken AE 560. Prerequisite: AE 507, EECS 318, MATH 124, and ME 312 or equivalents. LEC.

AE 765. Orbital Mechanics. 3 Hours.
Motion of space vehicles under the influence of gravitational forces. Two body trajectories, orbit determination, orbit transfer, universal variables, mission planning using patched conics. Transfer orbits. Prerequisite: MATH 220, MATH 290, and CE 301 or equivalent. LEC.

AE 766. Spacecraft Attitude Dynamics and Control. 3 Hours.
Dynamics of rigid spacecraft, attitude control devices including momentum exchange, mass movement, gravity gradient and reactor rockets. Design of feedback control systems for linear and bang-bang control devices. Prerequisite: AE 551 or permission of instructor. LEC.

AE 767. Spacecraft Environments. 3 Hours.
Fundamentals of spacecraft environments. Description and analysis of the natural environment in which spacecraft operate post-launch. Includes optical, electromagnetic, corpuscular radiation, plasma and dust from low Earth orbit, through outer heliosphere. Prerequisite: PHSX 212 required, PHSX 313 or PHSX 351 recommended. LEC.

AE 768. Orbit Determination. 3 Hours.
Develops the theory of batch and sequential (Kalman filter) estimation theory related to orbit estimation, including a review of necessary concepts of probability and statistics. Course work includes a term project that allows students to apply classroom theory to an actual satellite orbit determination problem. Prerequisite: AE 360. Corequisite: AE 560 or AE 760. LEC.

AE 771. Rocket Propulsion. 3 Hours.
Basic elements of rocket propulsion; systems, propellants, and performance. Prerequisite: AE 545 or equivalent. LEC.

AE 772. Fluid Mechanics of Turbomachinery. 3 Hours.

AE 781. Introduction to Adaptive Aerostructures. 3 Hours.
This course covers the basic material properties and modeling techniques for structures that are capable of changing some physical property in response to a command signal. The course will be useful for students from nearly every branch of engineering and includes a fabrication and testing practicum introducing basic post processing and integration techniques used with piezoelectric, shape memory alloy and magnetorheological materials. The course concludes with an overview of applications and examples of adaptive products. Prerequisite: ME 311 or equivalent. LEC.

AE 790. Special Problems in Aerospace Engineering for Masters Students. 1-5 Hours.
Directed studies of advanced problems in aerospace engineering. Open only to graduate students with departmental approval. RSH.

AE 803. Aerelasticity. 3 Hours.
Introduction to self-excited vibrations, wing flutter, panel flutter, unsteady aerodynamics, launch vehicle structural vibrations. Prerequisite: AE 508, AE 545, AE 551, and AE 704. LEC.

AE 821. Advanced Aircraft Design I. 3 Hours.
Aerodynamic design optimization. Aircraft cost prediction methods: development, manufacturing, and operating. Minimization of operation costs and implications to configuration design. Design to minimize lifecycle costs. Design decision making on the basis of cost. LEC.

AE 822. Advanced Aircraft Design II. 3 Hours.
Design of flight control systems, fuel systems, hydraulic systems, and electrical systems. Weapon system integration problems, design for low radar cross sections. The kinematics of landing gear retraction systems. LEC.

AE 830. Aerospace Graduate Internship. 1-12 Hours.
One credit hour per month of approved aerospace engineering internship satisfying one of the requirements for the MS or PhD program. Graded on a satisfactory/unsatisfactory basis. FLD.

AE 840. Aerodynamics of Viscous Fluids. 3 Hours.
Concepts of boundary layer equations of viscous fluids. Various transformations for compressible boundary-layer equations. Approximate and exact finite-difference solutions, including effects of suction and blowing. Transitions. Concept of turbulent flow and solutions of turbulent boundary layer equations. Applications in aeronautics. Prerequisite: AE 545. LEC.

AE 845. Transonic Aerodynamics. 3 Hours.
Applications of potential flow, Euler and Navier-Stokes solvers to transonic and vortex-flow aerodynamics. Concept of rotated finite difference scheme. Convergence acceleration and multigrid techniques. Methods of flux vector splitting, upwind differencing, and approximate factorization. Turbulence modeling. Prerequisite: AE 746. LEC.

AE 846. Advanced Computational Fluid Dynamics and Heat Transfer. 3 Hours.
Present recent advances in computational fluid dynamics and heat transfer with a focus on numerical algorithms designed for unstructured grids, including grid generation, convergence acceleration techniques, high-order algorithms and parallel computing on CPU and GPU clusters. It is expected that the students will understand the basics of the finite volume method for unstructured grids, and be able to program a 2D Euler
solver for arbitrary grids after taking this class. Prerequisite: AE 746. This class is not open to undergraduate students. LEC.

AE 850. Advanced Control Seminar. 2 Hours. Extension of AE 750 covering digital optimal control, optimal estimation, and advanced control topics. Combination of lecture, seminar, and project format. Review of current journal articles. Development of analysis and design computer programs. Prerequisite: AE 750 and consent of instructor. LEC.

AE 890. ME Internship. 1-6 Hours. One credit per month of engineering internship. Prerequisite: Admission to Master of Engineering in Aerospace Engineering program and approved internship. FLD.

AE 892. Special Problems in Aerospace Engineering for Doctoral Students. 1-8 Hours. Directed studies of advanced problems in aerospace engineering. Open only to graduate students with consent of instructor. RSH.

AE 895. M.S. Thesis or Project. 1-6 Hours. Original research or project which satisfies the requirements for the degree of Master of Science in Aerospace Engineering. Restricted to Aerospace MS students. THE.

AE 896. ME Project. 3-6 Hours. A design problem or system study satisfying the project requirement for the Master of Engineering degree in Aerospace Engineering. Prerequisite: Admission to Master of Engineering in Aerospace Engineering program. THE.

AE 941. Hypersonic Aerodynamics I. 3 Hours. The gasdynamics of aerospace vehicles operating in the speed range above Mach 5. Rarified and dissociated gas flows; magnetogasdynamic and heat transfer problems. Prerequisite: Consent of instructor. LEC.

AE 990. DE Internship. 1-12 Hours. One credit per month of engineering internship. Prerequisite: Admission to DE program and approved internship. FLD.


AE 997. DE Project. 1-16 Hours. A major design problem or system study satisfying the project requirements for the Doctor of Engineering in Aerospace Engineering degree. Restricted to Aerospace DE candidates. Prerequisite: Successful completion of Comprehensive Oral Exam. THE.

Bioengineering Courses

BIOE 800. Bioengineering Colloquium. 0.5 Hours. A colloquium series featuring speakers from industry, government, other universities, research centers and research organizations of the university campus presenting talks on various topics related to bioengineering. LEC.

BIOE 801. Responsible Conduct of Research in Engineering. 1 Hour. Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis on practical topics of special importance in bioengineering. Topics include the nature of ethics, the roles of the scientist as a reviewer, entrepreneur, employer and teacher, research ethics in the laboratory, social responsibility and research ethics regulation. (Same as ME 801.) Prerequisite: Permission of instructor. LEC.

BIOE 802. Bioengineering Internship. 1-6 Hours. An approved bioengineering industrial or clinical internship. The student is supervised by a preceptor at the internship site. Biweekly reports and a final report detailing work performed are filed with the course instructor. Prerequisite: Permission of instructor. FLD.

BIOE 899. Independent Investigation. 1-6 Hours. An original and independent research or design investigation involving analytical, experimental and/or modeling methodology applied to solve a bioengineering problem as a part of the degree requirements for the Master of Science. THE.

BIOE 999. Independent Investigation. 1-12 Hours. An original and independent research or design investigation involving analytical, experimental and/or modeling methodology applied to solve a bioengineering problem as a part of the degree requirements for the Doctor of Philosophy. THE.

Chemical Petroleum Engr Courses

C&PE 111. Introduction to the Chemical Engineering Profession. 2 Hours. An introduction to the University of Kansas and work done by professional engineers. Students are introduced to the resources available to them at KU, in the School of Engineering, and in the Chemical and Petroleum Engineering Department. They are introduced to the curricula requirements and expectations of chemical engineering students. The career opportunities for chemical engineers are described. Students are introduced to engineering ethics, basic safety considerations, teamwork, and technical writing. The course includes fundamental calculations of material and energy balances and fluid flow. LEC.

C&PE 117. Energy in the Modern World. 1 Hour. A survey course on global energy supply and demand, production methods and energy economics. Course begins with the matrix of energy supply and demand focusing on fossil fuels and nuclear energy and includes transportation/ distribution patterns and issues and current production technologies. We then analyze alternate energy realities and potentials such as solar energy, wind energy, biomass utilization, hydrogen, fuel cells, hydroelectric, geothermal, wave/tidal, and others based on thermodynamic principles and economics. Course is also open to non-engineering students. LEC.

C&PE 121. Introduction to Computers in Engineering. 3 Hours. Formulation of engineering problems for machine computation with emphasis on good programming practices and the integration of appropriate computational and related tools. Solutions are computed using Excel, Visual Basic, and general purpose languages such as Mathcad and/or MATLAB. Computing methods are introduced as tools for developing solutions using elementary numerical techniques including linear interpolation, linear regression, numerical integration, and root finding. Microsoft Office is used with the computational tools to provide integrated report generation capability. Two lectures and weekly laboratory instruction. Prerequisite: MATH 121 or MATH 141. LEC.

C&PE 127. Introduction to Petroleum Engineering Profession. 1 Hour. An introduction to principles of reservoir engineering and an application of economic principles will be introduced along with the use of computer spreadsheets. A mini petroleum engineering design project will be assigned to illustrate the integration of petroleum engineering principles and the use of computers. CPE 127 is required of all Petroleum Engineering freshmen but is optional for others. Transfer students who don't take the course must substitute CPE 127 with one hour of engineering science. LEC.

C&PE 211. Material and Energy Balances. 4 Hours. The application of the laws of chemistry, physics, and mathematics to the solution of material and energy balance problems occurring in the process...
industries. Prerequisite: CPE 121; and CHEM 135 or CHEM 175 or CHEM 195; or consent of instructor. LEC.

C&PE 217. Introduction to Petroleum Drilling Engineering. 2 Hours. An introduction to modern rotary drilling. Topics covered include: rig systems/hardware, management practices, cost analysis, drilling fluid function formulations and testing, well control systems, cement formulation and placement, drilling bits. LEC.

C&PE 219. Drilling Fluids Laboratory. 1 Hour. Laboratory study of formulation and properties of drilling fluids. "Mud" measurements covered include density, solids content, filtration control and viscosity. Other measurements include compressive strength of cement and cuttings transport properties. Corequisite: CPE 217. LAB.

C&PE 221. Chemical Engineering Thermodynamics. 3 Hours. Fundamentals and applications of the First and Second Laws of Thermodynamics with strong emphasis on material, energy and entropy balances to solve engineering problems involving pure components. Topics include: Cycles (Rankine, Brayton, refrigeration, etc.), the calculus of thermodynamics, equations of state for realistic thermodynamic properties, departure functions, equilibrium and stability criteria, fugacity, and single component phase equilibrium (vaporization, melting, sublimation). Prerequisite: MATH 122 or MATH 142 or MATH 126 or MATH 146; CPE 121; and CPE 211. Prerequisite or Corequisite: PHSX 210, PHSX 211, or PHSX 213; or permission of instructor. LEC.

C&PE 327. Reservoir Engineering. 4 Hours. Properties of porous rocks, reservoir fluids, and fluid saturated rocks. Introduction to multiphase flow in porous media including concepts of wettability, capillary pressure and relative permeability. Prerequisite: CHEM 135 or CHEM 175. LEC.

C&PE 511. Momentum Transfer. 3 Hours. Solutions of continuity, momentum, and energy equations applied to fluids in confined flow or flowing past submerged objects. Laminar and turbulent flows of both incompressible and compressible fluids are considered. Engineering applications include pressure drop and network analysis of piping lines, flow measurements, fluid moving equipment including the performance of pumps. Prerequisite: CPE 221 or ME 312; CPE 121 (or equivalent), MATH 122 OR MATH 142 or MATH 127 or MATH 147, and a course in differential equations (MATH 220 or MATH 221 or MATH 320 or MATH 321). LEC.

C&PE 512. Chemical Engineering Thermodynamics II. 3 Hours. Further application of the laws of thermodynamics to multi-component mixtures and in multi-phase equilibria with focus on vapor-liquid, liquid-liquid, and solid-liquid equilibria. Mixture Fugacity expressions are developed using equations of state with mixing rules or Excess Gibbs Free Energy/activity coefficient models for data correlation or prediction. Chemical equilibrium of reactions is also discussed. Prerequisite: CPE 121; CPE 221; CPE 222; and CHEM 330 or CHEM 380 or CHEM 624; or permission of instructor. LEC.

C&PE 521. Heat Transfer. 3 Hours. An applied study of the various (conductive, convective, and radiative) heat transfer mechanisms in solid and fluid systems both transient and steady-state. Engineering applications include: conduction in solids and fluids, free and forced convection in fluids, radiation, boiling and condensing fluids, and design of heat exchangers. Prerequisite: CPE 121, Thermodynamics (CPE 221 or ME 312); CPE 511 or ME 510, MATH 122 or MATH 142, or MATH 127 or MATH 147; AND a course in differential equations (MATH 220 or MATH 221 or MATH 320 or MATH 321). LEC.

C&PE 522. Economic Appraisal of Chemical and Petroleum Projects. 2 Hours. Consideration of the economic factors important in the development of the chemical or petroleum enterprise. Applications of economic evaluation methods to engineering project development. Consideration of risk and uncertainty in project development. Prerequisite: MATH 122, or MATH 142; PHSX 210, PHSX 211, or PHSX 213; and CPE 121 or consent of instructor. LEC.

C&PE 523. Mass Transfer. 4 Hours. Includes one credit hour of calculations laboratory. Treatment of mass transfer phenomena with application to analysis and design of unit operations equipment such as distillation, extraction, absorption, and adsorption. Prerequisite: CPE 211, CPE 511, and CPE 512. Corequisite: CPE 521. LEC.

C&PE 524. Chemical Engineering Kinetics and Reactor Design. 3 Hours. Development and solution of the material and energy balance equations for continuous and batch reactors. These balance equations are applied in (a) the determination of intrinsic kinetics, (b) the design of reactors and (c) the analysis of reactor behavior. Both homogeneous and heterogeneous reaction systems are considered. Prerequisite: CPE 511, CPE 512, and a course in differential equations. Corequisite: CPE 521. LEC.

C&PE 527. Reservoir Engineering II. 4 Hours. Lectures on single phase flow and pressure distribution in reservoirs. Calculations in drawdown, buildup, multiple rate, fractured systems, gas and injection well testing. Material balance calculations for gas, gas-condensate, undersaturated, and saturated reservoirs. Prerequisite: CPE 327 or consent of instructor, a course in differential equations. LEC.

C&PE 528. Well Logging. 3 Hours. Analysis of well logs to determine properties of reservoir rocks, fluid saturations and lithology, and production logging. Prerequisite: CPE 327 or consent of instructor. LEC.

C&PE 601. Undergraduate Topics in Chemical and Petroleum Engineering. 1-4 Hours. Undergraduate study in various branches of Chemical and Petroleum Engineering on topics that may vary from year to year. Prerequisite: Varies. LEC.

C&PE 612. Environmental Assessment of Chemical Processes. 3 Hours. A discussion and project-based survey of environmental issues in chemical engineering, including environmentally conscious design, environmental fate and transport, green chemistry, and life cycle analysis. Focus will be on the design, implementation and management of comprehensive environmental assessments for existing and new industrial facilities with an emphasis on the technical and economic impacts of catalytic systems on pollution control strategies. LEC.

C&PE 613. Chemical Engineering Design I. 4 Hours. AE61. Synthesis, design and economic analysis of petrochemical, and chemical plants. Applications in computer-aided engineering applied to these topics. Prerequisite: CPE 511, CPE 512, CPE 521, CPE 522, CPE 523, and CPE 524. Corequisite: CPE 615. LEC.

C&PE 614. Reaction Engineering for Environmentally Benign Processes. 3 Hours. Principles of reaction engineering and green chemistry applied to processes of the future. With a case-based introduction to the design and optimization of catalytic processes and reaction systems, focus will be on key reaction engineering concepts, including catalysis, mechanisms, reaction kinetics, heterogeneous reactions, reactor types and economic
evaluation. Students will develop a multidisciplinary understanding of chemical, biological and molecular concepts and of the multiscale character of developing and designing processes from the micro level to the macro level. Prerequisite: Senior standing in engineering to the physical/biological sciences. LEC.

C&E 615. Introduction to Process Dynamics and Control. 3 Hours.
The behavior of chemical processing equipment in the presence of disturbances in operating conditions is analyzed. Control systems are designed based on the criteria of system stability and optional system performance. Prerequisite: CPE 511, CPE 512, CPE 521, CPE 523 and CPE 524. LEC.

C&E 616. Chemical Engineering Laboratory I. 3 Hours.
Laboratory study of chemical engineering concepts of thermodynamics, fluid flow, heat transfer, mass transfer, and reaction kinetics. Includes emphasis on technical communication skills. Prerequisite: CPE 511, CPE 512, CPE 521, CPE 523, and ENGL 102. LAB.

C&E 617. Drilling and Well Completion. 3 Hours.
Design and analysis of rotary drilling and well completion systems; casing design, cementing, and perforating. Safety and ethical considerations in drilling and fluid disposal operations. Prerequisite: CPE 517 and CPE 511 or ME 510 and CPE 217 or consent of instructor. LEC.

C&E 618. Secondary Recovery. 4 Hours.
Study of waterflooding based upon linear displacement theory. Extension to two and three dimensions through correlations and stream tube models. Design of waterfloods including preparation of a reservoir description for waterflooding evaluation. Prerequisite: CPE 527. LEC.

C&E 619. Petroleum Engineering Laboratory I. 3 Hours.
Laboratory study of methods to determine rock and fluid properties related to petroleum engineering including phase behavior, viscosity, permeability, porosity, capillary pressure, oil recovery, water/oil displacement, fluid flow, and heat transfer coefficients. Analysis of experimental uncertainty. Oral and written presentations are required. Prerequisite: ENGL 102 or ENGL 105; and CPE 511 or ME 510; and CPE 517; or consent of instructor. LAB.

C&E 620. Enhanced Oil Recovery. 3 Hours.
Enhanced Oil Recovery processes such as primary, secondary, and tertiary oil recovery techniques will be presented. This includes miscible/immiscible displacement, chemical processes such as polymerflood, surfactant and micellar flood, and thermal recovery techniques such as steam flooding, in-situ combustion, and other EOR techniques. Prerequisite: CPE 527 and CPE 618 or consent of instructor. LEC.

C&E 623. Chemical Engineering Design II. 2 Hours. AE61.
A continuation of CPE 613 with emphasis on individual student process design development and analysis. Prerequisite: CPE 613, CPE 615. LEC.

C&E 624. Plant and Environmental Safety. 3 Hours.
An introductory course designed to acquaint students to topics including chemical plant and environmental accident analysis; review of hazard evaluation procedures including fault tree, hazard and operability studies and human error analysis; safety equipment design; EPA and TOSCA criteria and ethical considerations. Prerequisite: CPE 613 and CPE 615. LEC.

C&E 626. Chemical Engineering Laboratory II. 3 Hours.
Laboratory study of chemical engineering concepts of thermodynamics, fluid flow, heat transfer, mass transfer, reaction kinetics, and process control. Includes emphasis on technical communication skills. Prerequisite: ENGL 102, CPE 511, CPE 512, CPE 521, CPE 523, CPE 524, CPE 615. LAB.

C&E 627. Petroleum Production. 3 Hours.
Design and analysis of natural production and artificial lift systems, including beam pumping, gas lift, and submersible pumps. Vertical and horizontal two phase flow, compression, metering, acidizing, fracturing, and pipe line flow systems. Treatment of ethics considerations in production contracts and leasing arrangements. Prerequisite: CPE 511 or ME 510, CPE 528; and CPE 327. LEC.

C&E 628. Petroleum Engineering Design. 3 Hours. AE61.
Design problems related to petroleum reservoir development such as selection of optimum well spacing for a specified reservoir, evaluation of a producing property or installation of a waterflood. Designs consider economic, uncertainty analysis, as well as conservation, environmental, and professional ethics factors. Prerequisite: CPE 522, CPE 527, CPE 528, GEOL 535, and CPE 618. LEC.

C&E 651. Undergraduate Problems. 1-6 Hours.
Investigation of a particular problem in the field of chemical or petroleum engineering. IND.

C&E 654. Biocatalysis. 3 Hours.
Introductory and advanced topics in biocatalysis with focus on enzymatic reactions. Enzymology will provide the fundamental basis for discussion of kinetics and bio-process development. Advanced topics include: enzymes in non-aqueous solvents, immobilization techniques, whole-cell transformations, bio-reactors. LEC.

C&E 655. Introduction to Semiconductor Processing. 3 Hours.
An overview of various processes to fabricate semiconductor devices and integrated circuits. Topics covered include crystal growth, oxidation, solid-state diffusion, ion implantation, photolithography, chemical vapor deposition, epitaxial growth, metallization, and plasma etching of thin films. (Same as EECS 670.) Prerequisite: Senior standing in CPE or EE or consent of instructor. LEC.

C&E 656. Introduction to Biomedical Engineering. 3 Hours.
An interdisciplinary introduction to the field of biomedical engineering. This course covers a breadth of topics including biotransport, biomechanics, biomaterials, tissue engineering, drug delivery, biomedical imaging, computational biology, and biotechnology. Students are exposed to these broad topics, and go further in depth in a topic of their choice with the semester project. Prerequisite: Junior or Senior-level standing in Engineering or consent of instructor. LEC.

C&E 657. Polymer Science and Technology. 3 Hours.
Polymer Science and Technology is a 3-hour introductory course to polymer chemistry, science, technology, and processing. The course targets junior, senior, and graduate chemical engineers and chemistry majors and is intended to provide a background which would allow young professionals to understand polymer chemistry and processes to which they would be exposed to in industry and literature. The course would also assist them in selecting polymers and polymer specifications. Prerequisite: Senior or graduate student standing in chemical or petroleum engineering, or consent of instructor. LEC.

C&E 661. Undergraduate Honors Research. 1-3 Hours.
This course involves the investigation of a particular problem in the field of chemical or petroleum engineering. C&E 661 should be taken, rather than CPE 651, for students seeking Departmental Honors in Chemical Petroleum Engineering. C&E 661 may also be used by students in the Honors Program to help satisfy the course requirement of this program. The design or research topic is identified jointly by the student and faculty research supervisor. Prerequisite: Completion of CPE 121, CPE 211, CPE 511, CPE 512, CPE 522, overall GPA >3.5, and engineering GPA >3.5, or permission of the department. IND.
C&PE 678. Applied Optimization Methods. 3 Hours.
Study of methods for solving optimization problems encountered in engineering and the natural sciences, with specific applications illustrating analytical and numerical techniques. Topics covered include methods, penalty functions, linear programming, nonlinear and integer programming, stochastic optimization approaches, and treatment of constrained problems. A semester project is required. Prerequisite: Senior standing. LEC.

C&PE 701. Methods of Chemical and Petroleum Calculations. 3 Hours.
The utilization of advanced mathematical methods and computing techniques in the solution of problems in these fields. LEC.

C&PE 710. Subsurface Methods in Formation Evaluation. 3 Hours.
Study of subsurface methods and their applications to exploration, evaluation, and production of hydrocarbon reservoirs. Emphasis is on fundamentals of quantitative well log interpretations and the use of well log data in solving geologic and reservoir engineering problems, e.g., porosity, hydrocarbon saturation, permeable bed thickness, permeability, correlation, structural mapping, and stratigraphic and paleoenvironmental studies. Laboratory. Prerequisite: GEOL 535 or CPE 517 or consent of instructor. LEC.

C&PE 712. Environmental Assessment of Chemical Processes. 3 Hours.
A discussion and project-based survey of environmental issues in chemical engineering, including environmental conscious design, environmental fate and transport, green chemistry, and life cycle analysis. Focus will be on the design, implementation and management of comprehensive environmental assessments for existing and new industrial facilities with in-depth analysis of the technical and economic impacts of catalytic systems on pollution control strategies. A comprehensive research paper is required as a final project. LEC.

C&PE 714. Reaction Engineering for Environmentally Benign Processes. 3 Hours.
Principles of reaction engineering and green chemistry applied to processes of the future. With a case-based introduction to the design and optimization of catalytic processes and reaction systems, focus will be on key reaction engineering concepts, including catalysis, mechanisms, reaction kinetics, heterogeneous reactions, reactor types and economic evaluation. Students will develop a multidisciplinary understanding of chemical, biological and molecular concepts, and will develop and design processes from the micro level to the macro level. A final research paper is required. LEC.

C&PE 715. Topics in Chemical and Petroleum Engineering: 1-4 Hours.
Study in various branches of Chemical and Petroleum Engineering on topics that may vary from year to year. LEC.

C&PE 721. Chemical Engineering Thermodynamics. 3 Hours.
Chemical engineering applications of advanced thermodynamics and physical chemistry. Prerequisite: CPE 512. LEC.

C&PE 722. Kinetics and Catalysis. 3 Hours.
Modeling and analysis of chemical reactors with emphasis on heterogenous catalytic reaction systems. Prerequisite: CPE 524. LEC.

C&PE 725. Molecular Cell Biology. 3 Hours.
Fundamentals and advanced concepts in cell biology and the molecular interactions responsible for cell functions, homeostasis and disease will be presented. Current analytical methods for examining cells and their molecular components will be discussed. Emphasis will be place on the chemical and physical properties of individual proteins, nucleic acids and lipids and their assembly into cellular and subcellular structures. (Same as PHCH 725) Prerequisite: Graduate standing or consent of instructor. LEC.

C&PE 731. Convective Heat and Momentum Transfer. 3 Hours.
The formulation and solution of steady- and unsteady-state convective heat and momentum transfer problems. Applications of boundary layer equations to free and forced convection with study of similarity and integral methods of solution for laminar and turbulent flow; development of analogies; transport properties from kinetic theory of gases viewpoint; introduction to numerical methods. Prerequisite: ME 610/CPE 511 and ME 612/CPE 521 or equivalent. A concurrent course in partial differential equations is helpful. LEC.

C&PE 732. Advanced Transport Phenomena II. 3 Hours.
The formulation and solution of steady- and unsteady-state mass transfer problems (including those complicated by momentum and heat transfer). This course is the sequel to CPE 731 and relies upon much of the material treated there. The mathematical approach predominates and the methods available for determining suitable mass transfer coefficients are covered. LEC.

C&PE 751. Basic Rheology. 3 Hours.
Basic rheology including classification of classical bodies based on their stress and strain tensors, rheological equation of state, material functions, generalized Newtonian and general linear viscoelastic fluids, mechanical models such as those of Jeffrey's and Maxwell. Prerequisite: CPE 511 or an equivalent course in fluid mechanics. LEC.

C&PE 752. Tissue Engineering. 3 Hours.
An introduction to the rapidly growing and continuously evolving field of tissue engineering. Tissue engineering applies principles and methods of engineering and life sciences toward understanding and development of biological substitutes to restore, maintain and improve tissues functions. In this course, students study the basic science, engineering and medicine required for tissue engineering, learn state-of-the-art technology and practice, and create a literature-based proposal for a tissue engineered medical product. Prerequisite: Senior or graduate standing in engineering; or consent of instructor. LEC.

C&PE 753. Introduction to Electrochemical Engineering. 3 Hours.
Basic principles of electrochemical engineering as they are applied to energy conversion and storage devices, industrial electrolytic processes and corrosion. Areas covered range from electrochemical thermodynamics, ionic phase equilibria, electro-kinetics and ionic mass transport to mathematical modeling of electrochemical systems. Prerequisite: Graduate standing; CPE 511, CPE 512, CPE 524 or equivalent; knowledge of a programming language. LEC.

C&PE 754. Biocatalysis. 3 Hours.
Introductory and advanced topics in biocatalysis with focus on enzymatic reactions. Enzymology will provide the fundamental basis for discussion of kinetics and bio-process development. Advanced topics include: enzymes in non-aqueous solvents, immobilization techniques, whole-cell transformations, bio-reactors. Knowledge of the theoretical basis for these techniques and processes will be demonstrated within a class project. LEC.

C&PE 755. Introduction to Semiconductor Processing. 3 Hours.
An overview of various processes to fabricate semiconductor devices and integrated circuits. Topics covered include crystal growth, oxidation, solid-state diffusion, ion implantation, photolithography, chemical vapor deposition, epitaxial growth, metallization, and plasma etching of thin films. A term paper on an approved topic of fabrication referencing current peer reviewed literature is required. LEC.
C&PE 756. Introduction to Biomedical Engineering. 3 Hours.
The graduate elective form of CPE 656. Additional assignments commensurate with the graduate-level course designation are required for this section. Prerequisite: Graduate-level standing in Engineering, or consent of instructor. LEC.

C&PE 757. Corrosion Engineering. 3 Hours.
Electrochemical basis of corrosion. Types of corrosion and corrosive atmospheres. Corrosion control measures and industrial problems. Prerequisite: ME 306 or CHEM 188. LEC.

C&PE 771. Advanced Reservoir Engineering. 2-3 Hours.
Physical principles of petroleum production; gas drive performance; partial water drive performance; pressure maintenance through gas and water injection. Prerequisite: CPE 527. LEC.

C&PE 778. Applied Optimization Methods. 3 Hours.
Study of methods for solving optimization problems encountered in engineering and the natural sciences, with specific applications illustrating analytical and numerical techniques. Topics covered include gradient methods, penalty functions, linear programming, nonlinear and integer programming, stochastic optimization approaches, and treatment of constrained problems. Homework problems involving theoretical concepts and a theoretically-based semester project are required. LEC.

C&PE 790. Introduction to Flow in Porous Media. 3 Hours.
Generalized Darcy's law, vector equations, solutions of partial differential equations with various boundary conditions as applied to the flow of fluids in porous media. Prerequisite: CPE 527. LEC.

C&PE 795. Enhanced Petroleum Recovery. 3 Hours.
A study of improved oil recovery processes such as miscible displacement, microemulsion displacement, and thermal methods. Prerequisite: CPE 618 or permission of instructor. LEC.

C&PE 798. Phase Equilibrium. 3 Hours.
A study of phase behavior and equilibrium from a molecular perspective. Focus will be on vapor-liquid, liquid-liquid and solid-liquid equilibrium with advanced topics in compressed and supercritical fluids, petroleum applications, ionic solutions and others. LEC.

C&PE 800. Seminar. 0.5-1 Hours.
Every fall, five to six seminar sessions will be devoted to providing incoming students information on available thesis/dissertation research projects, library resources, computing environment and topics related to the issues of responsible scholarship in the fields of Chemical and Petroleum Engineering. For the remainder of the year, the seminar will involve presentation of current research and other topics of interest to chemical and petroleum engineers. These presentations will be made by invited guests, faculty, and advanced graduate students. Student attendance is required. Graded on a satisfactory/unsatisfactory basis. LEC.

C&PE 801. Introduction to Research. 1 Hour.
One hour per week in which the staff introduces entering graduate students to research. Topics include discussion of research methods, methods of effectively tapping library resources, preparation of literature surveys, and presentation of results. Faculty members of the department will make presentations of their current research interests. Offered fall only. Corequisite: CPE 800. LEC.

C&PE 802. CEBC Colloquium. 0.5-1 Hours.
A forum in which graduate and postdoctoral students, and faculty present the results of CEBC research and literature surveys that support the mission of CEBC. LEC.

C&PE 803. Research. 1-6 Hours.
For M.S. candidates. THE.

C&PE 804. Petroleum Management Seminar. 1 Hour.
Structure, operation, and problems of the petroleum industry from a management viewpoint. Presentations will be made by faculty, advanced students, and invited guests. Prerequisite: Permission of instructor. LEC.

C&PE 825. Graduate Problems in Chemical and Petroleum Engineering. 1-5 Hours.
Advanced laboratory problems, special research problems, or library reading problems. Three hours maximum acceptable for master's degree. RSH.

C&PE 902. Preparation for the Ph.D. Comprehensive Examination. 3 Hours.
Preparation of a research proposal in an area assigned by the student's advisory committee. The grade received on the Ph.D. comprehensive examination will apply to this credit. RSH.

C&PE 904. Research. 1-12 Hours.
For Ph.D. candidates. THE.

C&PE 910. Industrial Development of Catalytic Processes. 3 Hours.
Students adopt an interdisciplinary team approach to developing strategies for the design and optimization of catalytic processes. Examples of case studies will be derived from industry or from research testbeds. Students collaborate in multiscale process development involving catalyst and reactor design, reaction system design, modeling and optimization, economic analysis and environmental assessment needed for the development of a catalytic process at either the pilot or production scale. LEC.

C&PE 911. Industrial Practicum. 1-3 Hours.
Graduate students engage in an industrial research internship experience with collaborators in industry. FLD.

C&PE 912. Teaching College Level Engineering and Science Practicum. 1 Hour.
Future university instructors learn how to critically examine course content and teaching strategies, and prepare courses that will address the learning needs of the diverse student populations of the future. Students participate in weekly in-class workshops and symposia, as well as a teaching practicum experience during this course. LEC.

C&PE 919. Advanced Topics in Process Modeling Simulation or Control: _____ 1-4 Hours.
Advanced study in process modeling, simulation or control on topics which may vary from year to year. LEC.

C&PE 929. Advanced Topics in Chemical and Petroleum Engineering: _____. 1-4 Hours.
Advanced study in various branches of chemical and petroleum engineering on topics which may vary from year to year. LEC.

C&PE 933. Heat and Mass Transport in Porous Media. 3 Hours.
A study of industrial problems involving heat and mass transport in porous media such as packed columns, catalyst beds, chemical reactors, and petroleum reservoirs. Mechanisms of interphase and intraphase transport, diffusion, and dispersion. Included are methods of solution of the describing differential equations. LEC.

C&PE 934. Heat Transport with Phase Change. 3 Hours.
A fundamental treatment of heat transfer occurring during boiling and condensation. Included are nucleate and film boiling, film and dropwise condensation, and two-phase flow. LEC.

C&PE 936. Industrial Separation Processes. 3 Hours.
Determination and treatment of vapor-liquid separations, including methods for obtaining and treating equilibrium data, procedures for calculating multi-component separations by distillation, absorption, extraction, and adsorption. LEC.
C&PE 937. Applied Rheology. 3 Hours.
Industrial applications of fluid mechanics including compressible flow, flow of non-Newtonian fluids, flow of drag reducing systems all to be considered in laminar and turbulent flow regimes, and within conduits, and porous media. LEC.

C&PE 939. Advanced Topics in the Transport Phenomena: ______. 1-4 Hours.
Advanced study in various branches of transport phenomena on topics which may vary from year to year. LEC.

C&PE 940. Data Analysis in Engineering and Natural Sciences. 3 Hours.
Statistical inference and data analysis, emphasizing interpretation of observations from areas of engineering and natural sciences where controlled experimentation is not possible. The basics of elementary statistics and matrix algebra are covered, followed by topics in time, series analysis, map analysis, including automatic contouring, and multivariate procedures such as principal components, discrimination and factor analysis. A suite of computer programs is provided. Students are encouraged to use data from their own graduate research in class projects. LEC.

Civil, Envr Arch Engineering Courses

ARCE 101. Introduction to Architectural Engineering. 2 Hours.
An introduction to the study of and careers in architectural engineering. Topics include problem solving and study skills, the building design and construction process, design documents, and professional practice issues such as licensing requirements and ethics. LEC.

ARCE 217. Computer-Assisted Building Design. 3 Hours.
Introduction to computer-aided design (CAD) tools for architectural engineering practice. The course covers building information modeling (BIM) including object-oriented 3D modeling, databases, virtual walkthroughs, basic customization, and creating BIM families. Prerequisite: ARCE 101 and MATH 104, or consent of instructor. LEC.

ARCE 350. Building Materials Science. 3 Hours.
An introduction to the structural, thermal, electrical, and optical properties of building materials. Manufacturing, testing, integration, and specification of materials with emphasis on commercial, institutional, and industrial buildings. Prerequisite: PHSX 212 and CHEM 130 or CHEM 150, or consent of instructor. LEC.

ARCE 390. Special Problems. 1-3 Hours.
Special problems in architectural engineering. The study of a particular problem involving individual research and report. Prerequisite: Students must submit, in writing, a proposal including a statement of the problem the student wishes to pursue, the methodology the student plans to use in the program, and objectives of the special problems. The student must also have a signed agreement with the faculty member proposed as instructor for the course. Consent of the instructor. IND.

ARCE 640. Power Systems Engineering I. 3 Hours.
This course introduces the design of commercial and industrial power systems. Emphasis is placed on the proper selection, specification, and installation of materials and equipment that comprise commercial and industrial power systems. This course covers the application of materials and equipment in accordance with industry standards, independent laboratory testing, and the National Electrical Code. Prerequisite: EECS 315 or consent of instructor. LEC.

ARCE 641. Power Systems Engineering II. 3 Hours.
A continuation of ARCE 640 that integrates system components into functional, safe, and reliable power distribution systems for commercial, industrial, and institutional (OII) facilities. Service entrance design, distribution system layout and reliability, emergency and standby power system design, medium-voltage distribution systems, symmetrical fault analysis, and special equipment and occupancies. (Same as EECS 441.) Prerequisite: ARCE 640, or EECS 212 and Upper-Level EECS Eligibility. LEC.

ARCE 642. Power System Protection. 3 Hours.
This course introduces techniques and methods used to analyze and predict the performance of commercial and industrial power systems and equipment under balanced and unbalanced fault conditions. Emphasis is placed on the selection, application, and coordination of protective devices to detect and clear power system faults in a safe and reliable manner. Prerequisite: ARCE 640 or EECS 212 or consent of instructor. LEC.

ARCE 644. Electric Machines and Drives. 3 Hours.
Introduction to electric machine theory, operation, and control. Electric machine covered include DC generators and motors, AC synchronous generators and motors, AC induction generators and motors, as well as fractional horsepower and special purpose motors. Motor starting and controls for both DC and AC machines are also covered including as introduction to power electronics and variable frequency drives (VFD). (Same as EECS 543.) Prerequisite: ARCE 640, or EECS 212 and Upper-Level EECS Eligibility. LEC.

ARCE 645. Electric Energy Production and Storage. 3 Hours.
An introduction to the design of utility scale and small scale (distributed generation) electric energy production and storage systems. This course addresses the technical, operational, economic, and environmental characteristics associated with both traditional and nontraditional electric energy production systems along with associated grid integration, energy delivery, and regulatory issues. Traditional energy production systems covered include fossil fuel, hydroelectric, and nuclear power plants. Non-traditional energy productions systems covered include fuel cells, photovoltaics (PV), concentrated solar power (CSP), wind, geothermal, and other emerging technologies. (Same as EECS 545.) Prerequisite: ARCE 640, or EECS 212 and Upper-Level EECS Eligibility. LEC.

ARCE 647. Power System Analysis I. 3 Hours.
Introduction to the analysis of commercial, industrial, and utility power systems. Emphasis is placed on modeling system components which include transmission and distribution lines, transformers, induction machines, and synchronous machines and the development of a power system model for analysis from these components. System modeling will be applied to short-circuit studies and used to analyze symmetrical faults, to develop sequence networks using symmetrical components, and analyze unsymmetrical faults. (Same as EECS 547.) Prerequisite: ARCE 640, or EECS 212 and Upper-Level EECS Eligibility. LEC.

ARCE 648. Power System Analysis II. 3 Hours.
Continuation of ARCE 647 that uses power system modeling developed in ARCE 647 to analyze power system load flow, operation and economic dispatch, stability, and transient response. The impact of alternative energy sources, energy storage, DC transmission and interties, and other emerging technologies on power system operation and reliability will be addressed throughout the course. (Same as EECS 548.) Prerequisite: ARCE 647 or consent of instructor. LEC.

ARCE 650. Illumination Engineering. 3 Hours.
Students are introduced to lighting fundamentals, measurement, and technology and to their application in the analysis and design of architectural lighting systems. Prerequisite: PHSX 212 or consent of instructor. LEC.
ARCE 660. Building Thermal Science. 3 Hours.
The fundamentals of moist air processes, air and moisture exchange, and building heat transfer. Determination of heating and cooling loads under steady-state and transient conditions. Prerequisite: ARCE 217, ME 312, and either ME 510, AE 345, CE 330, or CPE 511, or consent of instructor. LEC.

ARCE 661. HVAC&R Systems Design. 3 Hours.
Analysis and design of heating, ventilating, air-conditioning, and refrigeration equipment and systems. Prerequisite: ARCE 660 or consent of the instructor. LEC.

ARCE 662. Water Systems Design. 3 Hours.
The analysis and design of hydronic systems for buildings including piping, plumbing, pumping, and the water-side of heating, ventilating, and air-conditioning (HVAC). Prerequisite: ME 510, AE 345, CE 330, or CPE 511, or consent of the instructor. LEC.

ARCE 663. Energy Management. 3 Hours.
Energy usage in commercial buildings and industry, energy auditing methodology, utility analysis, management measures, and economic evaluation are covered. Includes fieldwork. Corequisite: ARCE 660, or consent of instructor. LEC.

ARCE 664. Fire Protection Engineering. 3 Hours.
An introduction to human response, fire science, combustion calculations, compartment fires, piping and sprinkler design, and smoke management. Analytical methods, experimental data, codes, case-studies, and videos are presented in this engineering design course. Prerequisite: ME 312 or CPE 221, and ME 510, AE 345, CE 330, or CPE 511, or consent of instructor. LEC.

ARCE 665. Solar Energy Systems Design. 3 Hours.
A quantitative and qualitative study of active, passive, wind, and photovoltaic energy conversion systems for buildings. Solar radiation and system performance prediction. Prerequisite: ME 312 or CPE 221, or consent of instructor. LEC.

ARCE 667. Sound and Vibration Control. 3 Hours.
An introduction to the physics and measurement of sound, wave phenomena, acoustics, and methods of noise and excessive vibration control for various applications. Prerequisite: PHSX 212, or ARCH 250, or consent of instructor. LEC.

ARCE 680. Architectural Engineering Design I. 6 Hours.
Capstone engineering design course that includes the analysis, design, and integration of structural, mechanical, electrical, and lighting systems for a commercial, industrial, or institutional building. Prerequisite: CMGT 500, ARCE 640, ARCE 650, ARCE 661, CE 562, and CE 563, or consent of instructors. Fifth year senior standing in architectural engineering. LAB.

ARCE 681. Architectural Engineering Design II. 6 Hours.
Comprehensive architectural engineering design project in a specific area of professional practice. Prerequisite: ARCE 680 or consent of instructor. Fifth year senior standing in architectural engineering. LAB.

ARCE 690. Special Problems. 1-3 Hours.
The study of a particular problem in architectural engineering involving individual research and presentation. Prerequisite: Student must submit, in writing, a proposal including a statement of the problem the student wishes to pursue, the methodology the student plans to use in the program, and objectives of the special problems. The student must also have a signed agreement with the faculty member proposed as instructor for the course. Consent of instructor. IND.

ARCE 691. Honors Research. 3 Hours.
Research a particular architectural engineering problem. Research will involve defining the problem, developing a research methodology, applying the research methodology and gathering data, analyzing and interpreting the data, and presenting the results of the research. The student must have a faculty sponsor and submit a proposal in writing stating the objective of the research, the planned research method that will be used, and the method of reporting the results. Prerequisite: Participation in the University Honors Program, consent of instructor, and approval of the chair are required. LEC.

ARCE 698. Comprehensive Design Project. 3 Hours.
Capstone architectural engineering design course that includes the analysis, design, and integration of a building's structural, mechanical, electrical, and lighting systems. Building codes, standards, performance, and sustainability are addressed, and BIM software utilized. Prerequisite: CMGT 357, CMGT 500, ARCE 640, ARCE 650, ARCE 661, and CE 562. LAB.

ARCE 700. Directed Readings in Architectural Engineering. 1-3 Hours.
Individual study of special topics and problems. May be repeated for credit. Prerequisite: Student must submit, in writing, a proposal including a statement of the problem the student wishes to pursue and a bibliography of the articles and books required to complete the project. The student must also have a signed agreement with the faculty member proposed as instructor for the course. Consent of instructor. RSH.

ARCE 705. Daylighting. 3 Hours.
This course will cover daylighting design concepts, solar position, daylight availability, sky luminance distribution models, daylight delivery methods, integration of daylighting and electric lighting controls, physical modeling, and computer analysis techniques. Prerequisite: PHSX 212, or ARCH 531, or consent of instructor LEC.

ARCE 750. Daylighting. 3 Hours.
Advanced analysis, design, and modeling of luminous environments. It covers impact of lighting on human perception and interaction with space, human factors in lighting, camera-aided light measurement technologies, advanced computer-aided lighting simulations, effective and efficient integration of natural and artificial lighting, modeling and analysis of light sources and spaces, simulation of lighting systems, and design of lighting control systems. Prerequisite: ARCE 217 and ARCE 650 or consent of instructor. LEC.

ARCE 751. Advanced Lighting Design. 3 Hours.
Advanced analysis, design, and modeling of luminous environments. It covers impact of lighting on human perception and interaction with space, human factors in lighting, camera-aided light measurement technologies, advanced computer-aided lighting simulations, effective and efficient integration of natural and artificial lighting, modeling and analysis of light sources and spaces, simulation of lighting systems, and design of lighting control systems. Prerequisite: ARCE 217 and ARCE 650 or consent of instructor. LEC.

ARCE 752. Lighting Measurement and Design. 3 Hours.
This course will cover conventional lighting and solid-state lighting measurement, daylighting measurement, camera-aided lighting measurement technologies and applications, and design and development of custom luminaries in an LED workshop and innovative lighting devices. Prerequisite: ARCE 650, or consent of instructor LEC.

ARCE 760. Automatic Controls for Building Mechanical Systems. 3 Hours.
An introduction to controls for building mechanical systems. Discussions of the theory, design, and equipment used for control systems. The benefits of pneumatic, electrical, and electronic (DDC) controls will be examined. Prerequisite: ARCE 660 or consent of instructor. LEC.

ARCE 764. Advanced Thermal Analysis of Buildings. 3 Hours.
Manual and computational methods for determining steady-state and transient thermal loads in buildings. Advanced analysis of energy consumption given choices in building materials and mechanical systems. Prerequisite: ARCE 217 and ARCE 660, or consent of instructor. LEC.

ARCE 890. Architectural Engineering Seminar: ______. 1-3 Hours.
Prerequisite: Graduate standing in Architectural Engineering and consent of instructor. RSH.
ARCE 895. Master's Project. 1-3 Hours.
Directed study and reporting of a specialized topic of interest to the architectural engineering profession. Prerequisite: Consent of instructor. RSH.

ARCE 899. Master's Thesis. 1-6 Hours.
Directed research and reporting of a specialized topic of interest to the architectural engineering profession. Prerequisite: Consent of instructor. THE.

CE 191. Introduction to Civil Engineering. 2 Hours.
A discussion of engineering logic through examination of current concepts in engineering education, practice and professional development. Not open to juniors and seniors. LEC.

CE 192. Civil Engineering Graphics. 3 Hours.
Introduction to computer-aided design (CAD) tools for civil and environmental engineering practice. This course covers 2D drafting and 3D modeling. Prerequisite: MATH 104. LEC.

CE 201. Statics. 2 Hours.
The principles of statics, with particular attention to engineering applications. Prerequisite: PHSX 210 and MATH 121. LEC.

CE 240. Surveying. 3 Hours.
A course for all students in the use of surveying instruments. Includes field and office problems involving land measurements, construction, layouts, stadia methods, areas, and U.S. Public Land Surveys. Two lecture periods and one field period per week. Prerequisite: MATH 121 or MATH 125, CE 192 or ARCE 217 or consent of instructor. LEC.

CE 300. Dynamics. 3 Hours.
The principles of kinematics and kinetics, with particular attention to engineering applications. Prerequisite: CE 201 or ME 201 and MATH 122. LEC.

CE 301. Statics and Dynamics. 5 Hours.
A combination of statics and dynamics covered in CE 201 and CE 300. This course must be taken as a five-hour unit. Prerequisite: PHSX 210 or PHSX 211, and MATH 122 or MATH 126. LEC.

CE 310. Strength of Materials. 4 Hours.
Three one-hour lectures and one two-hour laboratory. Principles of stress and deformation in structures and machines. Prerequisite: CE 201 or ME 201 or CE 301, and MATH 122 or MATH 127 or consent of the instructor. Co-Requisite: MATH 220. LEC.

CE 311. Strength of Materials. 3 Hours.
A course that includes a basic treatment of stress and deformation in elastic bodies. Prerequisite: CE 201 or ME 201, MATH 220 and MATH 290 or consent of instructor. LEC.

CE 330. Fluid Mechanics. 4 Hours.
Three one-hour lectures and one two-hour laboratory. A study of the basic principles of the mechanics of fluids and their application. The lecture material will be supplemented by demonstrations, experiments, and individual projects. Prerequisite: ENGL 101, ENGL 102, CE 300 or CE 301. LEC.

CE 412. Structural Engineering Materials. 3 Hours.
Study of the engineering properties of structural materials and their control with emphasis on timber, concrete, and steel. Two one-hour lectures and one three-hour laboratory. Prerequisite: CE 310 or consent of instructor and ENGL 102. LEC.

CE 450. Sustainability: Population, Energy and Water. 3 Hours.
The course will examine the concepts regarding the continued advancement of humankind while maintaining our ecological niche on earth. Key topics include: population growth, poverty, and impacts of development; energy consumption, sources, storage, conservation and policy; water quality and quantity; materials and building; and policy implications. Prerequisite: Junior standing or participation in KU Honors Program. LEC.

CE 455. Hydrology. 3 Hours.
An introduction to the fundamentals of hydrologic analysis. Subjects covered include collection and initial reduction of hydrologic data; rainfall-runoff relationships, hydrograph development; hydrologic routing, well equations and their application and hydrologic frequency analysis. Prerequisite: ENGL 101, ENGL 102, and CE 330. LEC.

CE 461. Structural Analysis. 4 Hours.
Three one-hour lectures and one two-hour laboratory. Analysis of statically determinate and indeterminate beams, frames, and trusses using classical methods and introducing computer-based methods. Prerequisite: CE 310. LEC.

CE 477. Introduction to Environmental Engineering and Science. 3 Hours.
Application of fundamental scientific principles to the protection of atmospheric, aquatic, and terrestrial environments through the use of pollution abatement processes, with consideration also given to economic, social, political, and legal aspects of pollution control. Prerequisite: ENGL 102, MATH 101 or MATH 104, and CHEM 135 or CHEM 150. LEC.

CE 480. Introduction to Transportation Engineering. 3 Hours.
An introductory study of the various modes of transportation, emphasizing highways, railroads, and air transport. The planning, design and operations of these modes are discussed. There is a multimodal project included in this course. Prerequisite: CE 240. LEC.

CE 484. Material for Transportation Facilities. 3 Hours.
Principles involved in the testing, behavior, and selection of materials for use in the transportation field. Emphasis is on bituminous materials, aggregate, and soil stabilization. Prerequisite: CE 310. LEC.

CE 487. Soil Mechanics. 4 Hours.
Three lecture periods and one laboratory period. Fundamental theories of soil mechanics and their applications in engineering. Prerequisite: CE 310, CE 330 or concurrent enrollment. LEC.

CE 490. Special Problems. 1-5 Hours.
An advanced study related to a special problem in the field of civil engineering or allied fields, for upper-division undergraduate students. IND.

CE 495. Special Topics: ______. 1-3 Hours.
A course or colloquium to present topics of special interest. Prerequisite: Varies by topic. LEC.

CE 498. Engineering Honors Seminar. 3 Hours.
Prerequisite: Participation in or eligibility for the University Honors Program. Sophomore or higher standing. LEC.

CE 499. Seminar. 1 Hour.
Concepts of professional development. LEC.

CE 535. Engineering Applications of GIS. 3 Hours.
This course introduces engineering applications of geographic information system (GIS) using ArcGIS. The focus of this course is on practical application of GIS to civil engineering problems. Prerequisite: Junior or Senior standing, or consent of instructor. LEC.

CE 552. Water Resources Engineering Design. 4 Hours.
Three one-hour lectures and one three-hour laboratory. Study of water resources structures and systems with design emphasis on the hydraulic features: dams, drainage, river engineering, pipelines, channels and hydraulic machinery. Prerequisite: CE 330 and CE 455. LEC.
CE 562. Design of Steel Structures. 3 Hours. AE61.
Two one-hour lectures and one three-hour laboratory. Fundamentals of structural design with steel. Prerequisite: CE 461. LEC.

CE 563. Design of Reinforced Concrete Structures. 3 Hours.
Two one-hour lectures and one three-hour laboratory. Fundamentals of structural design with reinforced concrete. Prerequisite: CE 461; CE 412 or CE 484 or consent of the instructor. LEC.

CE 570. Concepts of Environmental Chemistry. 2 Hours.
The fundamentals of aquatic chemistry, with emphasis on application to water purification and wastewater treatment. Prerequisite: Undergraduate standing, CE 477, and MATH 115 or MATH 121 or MATH 125. LEC.

CE 571. Environmental Chemical Analysis. 1 Hour.
A laboratory introducing the basic chemical tests used in the water and wastewater fields of environmental engineering and science. Prerequisite: Undergraduate standing, and credit or co-enrollment in CE 570. LAB.

CE 573. Biological Principles of Environmental Engineering. 3 Hours.
A basic study of the microorganisms of importance in environmental engineering. Emphasis is placed on the microbiology of dilute nutrient solutions. Microbial physiology, microbial ecology, and biochemistry will be discussed as they pertain to environmental engineering and science. Both biodegradation and public health aspects are included. (Two lecture hours and one three-hour laboratory per week.) Prerequisite: Undergraduate standing, CE 477 or equivalent, and MATH 115 or MATH 121 or MATH 125. LEC.

CE 574. Design of Air Pollution Control Systems. 3 Hours.
This course emphasizes understanding of air pollution problems and their solution through engineering design and science. Topics covered include: types of air pollutants; monitoring of air pollutants; transport of air pollutants in the atmosphere; and control of air pollution emissions from both stationary and mobile sources. Prerequisite: CE 330, CE 477, MATH 122, PHSX 212; or consent of instructor. LEC.

CE 576. Municipal Water Supply and Wastewater Treatment. 4 Hours. AE61.
The principles of public water supply design, including source selection, collection, purification, and distribution; for municipal wastewater, collection, treatment, and disposal. Prerequisite: CE 330, CE 455, and CE 477. LEC.

CE 577. Industrial Water and Wastes. 3 Hours.
A review of the methods of industrial water treatment and the fundamentals of industrial water pollution control. Topics include: water budgets, cooling tower and boiler treatment, corrosion control, government regulations, wastewater characterization, waste minimization, pilot plants, pretreatment, final treatment, and site selection. Prerequisite: Undergraduate standing, and CE 477 or equivalent. LEC.

CE 580. Transportation Planning and Management. 3 Hours.
The course covers the major technical aspects of traditional planning methodologies, computer applications in transportation and the impact of technology on the management and planning processes. Topics discussed will include origin-destination surveys, demand analysis models, supply analysis, traffic impact studies, computer simulation and modeling, economics, management systems, intelligent transportation systems (ITS), and geographic information systems (GIS). Prerequisite: CE 390 and senior standing. LEC.

CE 582. Highway Engineering. 3 Hours.
A comprehensive study of the planning, design, construction, operations, and maintenance of highway systems with emphasis on the design aspects of a highway. Prerequisite: CE 455 and CE 480. LEC.

CE 588. Foundation Engineering. 3 Hours.
A study of the interaction of the characteristics of soil or rocks and structures. The estimation of settlement and bearing capacity of foundation elements. Principles governing the choice and design of footings, rafts, piers, and piles. Prerequisite: CE 487. LEC.

CE 625. Applied Probability and Statistics. 3 Hours.
Course topics include data description, measures of central tendency and dispersion, sampling and sampling designs, quality control, persistence, periodicity, sampling distributions, hypothesis testing, ANOVA, correlation, linear regression, multiple correlation, and multiple regression. Applications and real world problems are stressed. Prerequisite: MATH 121 or MATH 115 and MATH 116. LEC.

CE 684. Materials for Transportation Facilities. 3 Hours.
Principles involved in the testing, behavior, and selection of materials for use in the transportation field. Emphasis is on bituminous materials, aggregate, and soil stabilization. Readings. Prerequisite: CE 310 and CE 487. LEC.

CE 704. Dynamics and Vibrations. 3 Hours.
Problems in engineering dynamics and vibrations. Topics include applications of generalized forces and coordinates, Lagrange equations, and a study of the performance of single and multiple degree of freedom vibrational systems. (Same as AE 704.) LEC.

CE 710. Structural Mechanics. 3 Hours.
Basic concepts in the analysis of stress and strain and the behavior of materials. Topics include elementary theory and problems in elasticity, theories of failure of materials including fracture mechanics and introduction to plasticity. LEC.

CE 715. Corrosion Engineering. 3 Hours.
Electrochemical basis of corrosion. Estimating probability and rate of corrosion. Identifying different conditions likely to cause specific types of corrosion. Corrosion mitigation techniques. Prerequisite: CHEM 135, CHEM 150 or equivalent. LEC.

CE 721. Experimental Stress Analysis. 3 Hours.
Introduction to experimental stress-analysis techniques. Theory and application of mechanical strain gages, electrical strain gages, photoelastic techniques, and brittle coatings. LEC.

CE 730. Intermediate Fluid Mechanics. 3 Hours.
Fall semester. Principles of steady and unsteady flows, theories of potential, viscous, and turbulent flows, and applications in water resources engineering. Prerequisite: CE 330 and MATH 320. LEC.

CE 735. Engineering Applications of GIS. 3 Hours.
This course introduces engineering applications of geographic information system (GIS) using ArcGIS. The focus of this course is on practical applications of GIS to civil engineering problems. LEC.

CE 746. Pavement Construction. 3 Hours.
Introduction to the equipment, materials, and construction practices employed in the construction of flexible and rigid highway and airfield pavements, and the relationship of each to pavement design and performance. The principles of statistical based quality control and quality assurance methods and specification writing will be introduced. Prerequisite: CE 484 or CE 412, CE 582, and CE 625 or equivalent. LEC.

CE 748. Asphalt Technology. 3 Hours.
An introduction to the production of asphalt cements and its use in pavement construction and maintenance applications. Pavement distress identification. Design and use of bituminous pavements and materials for other than highway applications. Prerequisite: CE 484 or consent of instructor. LEC.
CE 751. Watershed Hydrology. 3 Hours.
Study of hydrologic processes at the earth's surface: evaporation, transpiration, snowmelt, precipitation, infiltration, runoff, and streamflow. Modeling of hydrologic processes; statistical analysis of hydrologic data; applications to the analysis and design of engineering projects. Prerequisite: CE 455 or equivalent. LEC.

CE 752. Physical Hydrogeology. 3 Hours.
Study of fluid flow in subsurface hydrologic systems. Investigation of the ground water environment including porosity, and hydraulic conductivity and their relationship to typical geologic materials. Examination of Darcy's law and the continuity equation leading to the general flow equations. Discussion of typical hydraulic testing methods to estimate aquifer parameters in various situations and apply these to water resource problems. Study of the basic mechanisms that determine the behavior of typical regional flow systems. (Same as GEOL 751.) LEC.

CE 753. Chemical and Microbial Hydrogeology. 4 Hours.
Lecture and discussion of chemical and microbiological controls on groundwater chemistry. Topics include thermodynamic and microbiological controls on water-rock reactions; kinetics; and microbiological, chemical and isotopic tools for interpreting water chemistry with respect to chemical weathering and shallow diagenesis. Origins of water chemistry, changes along groundwater flow paths, and an introduction to contaminant biogeochemistry will be discussed through the processes of speciation, solubility, sorption, ion exchange, oxidation-reduction, elemental and isotopic partitioning, microbial metabolic processes and microbial ecology. An overview of the basics of environmental microbiology, including cell structure and function, microbial metabolism and respiration, microbial genetics and kinetics of microbial growth will be covered. (Same as GEOL 753.) Prerequisite: One year of chemistry, one year of calculus, one year of biology, an introductory course in hydrogeology, or consent of the instructors. LEC.

CE 754. Contaminant Transport. 3 Hours.
A study of the transport of conservative and non-conservative pollutants in subsurface waters. Case studies are used to illustrate and develop a conceptual understanding of such processes as diffusion, advection, dispersion, retardation, chemical reactions, and biodegradation. Computer models are developed and used to quantify these processes. (Same as GEOL 754.) Prerequisite: Introductory Hydrogeology or consent of instructor. LEC.

CE 755. Free Surface Flow I. 3 Hours.
A study of uniform and non-uniform steady flow of water in open channels, including backwater curves, the hydraulic jump, and the delivery of canals. Prerequisite: CE 330. LEC.

CE 756. Wetlands Hydrology and Introduction to Management. 3 Hours.
A study of the basic structure and functions of wetlands; the physical, chemical, and biological processes involved; and an introduction to the management of wetlands. Also a brief introduction to the legal aspects of wetlands, the Section 404 permitting processes, and mitigation requirements. Prerequisite: Senior or graduate standing in engineering or a science area, or consent of instructor. LEC.

CE 757. Pipe-Flow Systems. 3 Hours.
Hydraulic analysis and design of pipelines, pipe networks, and pumping systems. Analysis and control of hydraulic transients. Engineering of water distribution systems. Prerequisite: CE 330 or equivalent. LEC.

CE 759. Water Quality Modeling. 3 Hours.
Analytical and numerical modeling of transport and transformation processes in the aquatic environment. Mass balance principles and transport phenomena. Eutrophication of lakes. Transport and fate of conventional pollutants and toxic organic chemicals in rivers, lakes, and estuaries. Prerequisite: CE 330 and CE 477 or equivalent. LEC.

CE 760. Environmental Biotechnology. 3 Hours.
A study of the applications of microorganisms to the treatment of pollution. Emphasis is placed on the microbial processes of biotransformation and biodegradation. Prerequisites: CE 477, CE 330, and four hours of calculus or consent of instructor. LEC.

CE 761. Matrix Analysis of Framed Structures. 3 Hours.
Analysis of 2-D and 3-D frame and truss structures by the direct stiffness method. Computer techniques required to implement the analysis procedure. LEC.

CE 762. Design of Prestressed Concrete Structures. 3 Hours.
The theory and design of prestressed concrete structures based on service load and strength criteria. Prerequisite: CE 563. LEC.

CE 763. Advanced Design of Reinforced Concrete Structures. 3 Hours.
The theory and design of reinforced concrete members and structures with emphasis on frames and slabs. Introduction to bridge design and earthquake design. Prerequisite: CE 563. LEC.

CE 764. Advanced Steel Design - Building Structures. 3 Hours.
The theory and design of standard steel framed structures (primarily buildings). Design philosophies, stability, composite design, structural behavior, preliminary design, and connections. Prerequisite: CE 562 or equivalent. LEC.

CE 765. Advanced Steel Design - Bridge Structures. 3 Hours.
Introduction to simple plastic design principles. Analysis and design of steel bridges including composite and noncomposite plate girders, curved girders, box girders, and other specialized bridge types. Fatigue and connection design considered. Prerequisite: CE 562 or equivalent. LEC.

CE 766. Introduction to Fracture Mechanics. 3 Hours.
Theories and modes of structural failure as related to structural design. Application of fracture mechanics to failure analysis, fracture control plans, fatigue crack growth, and stress-corrosion crack growth. Prerequisite: CE 310 or CE 311 plus a structural or mechanical design course. LEC.

CE 770. Concepts of Environmental Chemistry. 2 Hours.
The fundamentals of aquatic chemistry, with emphasis on application to water purification and wastewater treatment. May not be taken for credit by students with credit in CE 570. Prerequisite: CE 477 or equivalent, calculus, and five hours of chemistry. LEC.

CE 771. Environmental Chemical Analysis. 1 Hour.
A laboratory introducing the basic chemical tests used in the water and wastewater fields of environmental engineering and science. May not be taken for credit by students with credit in CE 571. Prerequisite: Credit or co-enrollment in CE 770. LAB.

CE 772. Physical Principles of Environmental Engineering Processes. 3 Hours.
Physical principles of suspensions, kinetics, fluid flow, filtration, and gas transfer are applied to various environmental physical processes. Prerequisite: CE 477 or equivalent, calculus, and four hours of physics. LEC.

CE 773. Biological Principles of Environmental Engineering. 3 Hours.
A basic study of the microorganisms of importance in environmental engineering. Emphasis is placed on the microbiology of dilute nutrient solutions. Microbial physiology, microbial ecology, and biochemistry will be discussed as they pertain to environmental engineering and science. Both biodegradation and public health aspects are included. (Two lectures and one three-hour laboratory per week.) May not be taken for credit by students with credit in CE 573. Prerequisite: CE 477 or equivalent, calculus, and five hours of chemistry. LEC.
CE 774. Chemical Principles of Environmental Engineering Processes. 3 Hours.
Chemical principles of stoichiometry, thermodynamics, and kinetics are applied to various chemical processes having application in the field of environmental engineering and science, including adsorption, ion exchange, coagulation, oxidation, and precipitation. Prerequisite: CE 477 or equivalent, calculus, and credit or registration in CE 570 or CE 770. LEC.

CE 775. Stormwater Treatment Systems Design. 3 Hours.
This course will address the design of stormwater treatment systems to provide hydrological control and water quality improvement. Specific topics include common stormwater pollutants, contaminant loading during storm events, design of structural BMPs (detention basins, traps, filters, and vegetated control systems) and low impact development practices. Prerequisite: CE 477, either CE 455 or CPE 511 or consent of instructor. LEC.

CE 776. Water Reuse. 3 Hours.
This course addresses past and current water reclamation and reuse practices; health and environmental concerns associated with water reuse; technologies and systems for water treatment, reclamation, and reuse; water reuse applications, including agricultural reuse, direct and indirect potable reuse, landscape irrigation, industrial uses, urban non-irrigation applications, environmental and recreational uses, and groundwater recharge; and planning and implementation of water reuse systems. Prerequisite: CE 477 or equivalent. LEC.

CE 777. Industrial Water and Wastes. 3 Hours.
A review of the methods of industrial water treatment and the fundamentals of industrial wastewater pollution control. Topics include: water budgets, cooling tower and boiler treatment, corrosion control, government regulations, wastewater characterization, waste minimization, pilot plants, pretreatment, final treatment, and site selection. May not be taken for credit by students with credit in CE 577. Prerequisite: CE 477 or equivalent. LEC.

CE 778. Air Quality. 3 Hours.
The course is intended to provide a working knowledge of pollutant sources, effects, meteorological factors, measurements, modeling approaches, legislation and controls associated with air quality problems. Students work on problems drawn from typical industrial situations, and use models to address specific air pollution scenarios. Prerequisite: CE 477 or equivalent, and MATH 115 or MATH 121. LEC.

CE 779. Water Quality. 3 Hours.
Examination of water quality principles, policy, processes, practices, computer programs, laws and regulations as they relate to the integrated planning and control of point and nonpoint sources of pollution. Prerequisite: MATH 121 or equivalent, CE 477, and CE 570 or CE 770. LEC.

CE 780. Environmental Instrumental Analysis. 3 Hours.
The course will provide a basis for theoretical understanding and practical experience with state-of-the-art environmental analytical methods organic and inorganic analytes in aqueous matrices. Methods to be covered include liquid, gas and ion chromatography; mass spectrometry; spectrophotometric, FID, EC, and conductivity detection; atomic absorption; spectrophotometric methods; and potentiometric analysis. Statistical methods for analytical methods development, validation and interpretation will also be covered. Prerequisite: General chemistry, and graduate standing. Senior level undergraduates may enroll with consent of instructor. LEC.

CE 781. Traffic Engineering Characteristics. 3 Hours.
A study of fundamental traits and behavior patterns of the road user and his or her vehicle in traffic. The major content involves techniques for obtaining data, analyzing data and interpreting data on traffic speed, volume, streamflow, parking and accidents. Capacity analyses using the most up to date procedures for major traffic facilities such as undivided highways, city streets, freeways, interchanges and intersections are also discussed at length. Prerequisite: CE 582 or equivalent. LEC.

CE 782. Public Works Engineering. 3 Hours.
The functions of a public works director are presented. Topics discussed are concerns with the environment, solid waste, traffic drainage, maintenance of facilities, personnel, etc. LEC.

CE 783. Railroad Engineering. 3 Hours.
A comprehensive study of the railroad industry, including the development of the railway system, an overview of the railroad industry, basic track work, right-of-way and roadway concerns, drainage, track design, railroad structures, electrification, and rail passenger service. A final design project is required. Prerequisite: CE 240; CE 582 or equivalent. LEC.

CE 784. Airport Planning and Design. 3 Hours.
A comprehensive study of the planning design and operations of airports. Both ground side and air side capacity and design elements will be presented. Other topics covered are airport master planning, air traffic control passenger terminal design, and environmental impacts of airports. Prerequisite: CE 240, CE 582 or equivalent. LEC.

CE 785. Terrain Analysis. 3 Hours.
A study of the applications of the science of aerial-photographic interpretation as it pertains to the field of civil engineering including the recognition of soil types and classes, engineering materials surveys, route location, and the delineation of watersheds and estimates of runoff there from. Prerequisite: CE 487 or equivalent. LEC.

CE 786. Highway Safety. 3 Hours.
Several topics dealing with highway safety are presented and discussed. Typical topics are railroad/highway crossings, accident reconstruction, distractions to the drivers, speed and crashes, elderly drivers, traffic control devices, roadside design, access management, traffic calming devices, and crash rates. LEC.

CE 787. Advanced Soil Mechanics. 3 Hours.
Three lecture periods. A study of the strength and compression characteristics of cohesive and noncohesive soils under various loading conditions. Prerequisite: CE 487 or equivalent. LEC.

CE 788. Geotechnical Engineering Testing. 3 Hours.
Three lectures. Field testing techniques, sampling methods, and laboratory testing procedures used to determine soil properties for engineering projects. Prerequisite: CE 487. LAB.

CE 789. Pavement Management Systems. 3 Hours.
Basic components of pavement management systems. Emphasis is given to pavement evaluation, planning pavement investment, rehabilitation design alternatives, and pavement management program implementation. Prerequisite: CE 487, CE 484 or equivalent. LEC.

CE 791. Waste Facility Siting and Design. 3 Hours.
A review of current site characterization and design methods for solid and hazardous waste facilities with particular emphasis on working within the modern regulatory environment. Prerequisite: CE 487 or equivalent. LEC.

CE 792. Knowledge Based/Expert Systems in Engineering. 3 Hours.
Introduction to the use of knowledge-based systems for engineering problem solving. These systems have a separation between the facts and concepts (the knowledge base) and the reasoning process used to draw conclusions (the inference mechanism). A wide variety of applications
are addressed including civil, chemical and petroleum, computer, and aerospace engineering. Prerequisite: Computer literacy, bachelor's degree in engineering, or consent of instructor. LEC.

CE 793. Advanced Concepts in CADD. 3 Hours.
Advanced concepts related to the application of computer aided design and drafting to the practice of civil engineering are presented. This includes: developing macros, understanding CADD programming languages, and relating CADD and other civil engineering based programs. An engineering approach to Geographical Information Systems (GIS) will be presented. Prerequisite: Working knowledge of one computer aided design graphics software package. LEC.

CE 794. Environmental Graduate Student Orientation. 1 Hour.
An introductory graduate level course with emphasis on selecting a research topic and preparing a thesis or special problem report, technical reports, oral presentations, papers, and grant proposals. This course will also provide orientation information for new students and advice on preparing a plan of study. LEC.

CE 795. Scanning Electron Microscopy and X-Ray Microanalysis. 3 Hours.
The course covers electron optics, electron beam-specimen interaction, image formation, x-ray spectral measurement, qualitative and quantitative x-ray microanalysis, practical techniques of x-ray analysis and specimen preparation techniques. Emphasis is placed on materials, but most techniques apply to biological specimens as well. Prerequisite: PHSX 212. LEC.

CE 797. Environmental Engineering and Science in Developing Countries. 3 Hours.
This course begins with a focus on basic sanitation, including control of infectious diseases, water supply and treatment, and proper disposal of excreta, wastewater, and solid wastes. The course then delves into other environmental topics such as sustainability, wastewater reuse, project planning and implementation, air pollution, deforestation, hazardous waste disposal, and the roles of various governmental and non-governmental organizations in addressing environmental issues. The course topics are addressed by a combination of lectures, guest lectures, and student presentations, with each student choosing a presentation topic of personal or professional interest that is relevant to the course. Prerequisite: CE 477 or permission of instructor. LEC.

CE 800. Theory of Elasticity. 3 Hours.
The basic equations of the theory of elasticity; stress and strain transformation, strain-displacement, compatibility and stress-strain relations. Formulation of problems and exact solutions. Introduction to approximate solution methods based on energy methods and finite elements. LEC.

CE 801. Energy Methods. 3 Hours.
The methods of analysis by energy methods of mechanics problems. Includes variational energy principles, calculus of variations, stationary energy and complementary energy principles, and the principle of virtual work. Applications. Prerequisite: CE 310 and MATH 320. LEC.

CE 802. Nondestructive Evaluation of Materials and Structures. 3 Hours.
This course covers nondestructive methods and their application to engineered structures and components. Methods covered include: ultrasonic testing, acoustic emission, vibration, impact-echo, visual inspection, and frequency response. LEC.

CE 810. Theory of Elastic Stability. 3 Hours.
Buckling of columns in the elastic or hyperelastic region. Lateral and torsional buckling of straight and curved members. Buckling of plates and shells. LEC.

CE 848. Pavement Materials Characterization. 3 Hours.
Laboratory and field test methods for determining engineering properties of bituminous pavements. Asphalt mix design methods and the relationship between mix design and pavement structural design and performance. Prerequisite: CE 484 or consent of instructor. LEC.

CE 855. Free Surface Flow II. 3 Hours.
Continuation of CE 755 with concentration on computer modeling of open channel flow using HEC-RAS, WSPRO, and other programs. Analysis of bridge scour using FHWA methods is also considered. Prerequisite: CE 755. LEC.

CE 856. Wetland Design, Engineering, and Management. 3 Hours.
Introduction of design concepts in creating and restoring wetland systems. Review of wetland hydrology and hydraulics. Interaction of wetland hydrology, soils, and vegetation providing environmental benefits. Considerations in project planning, site selection and preparation, construction and operation, and maintenance. Use of state and local legal and management tools to protect and restore wetlands. Emerging concepts of mitigation and banking. Prerequisite: CE 756 or equivalent. LEC.

CE 857. Sediment Transport. 3 Hours.
A study of the transport of sediment in alluvial channels. Specific topics include properties of sediment, mechanics of bed forms, particle entrainment, scour analysis, prediction of suspended load and bed load, design of stable channels and diversion works, and sedimentation of reservoirs. Prerequisite: CE 755 or consent of instructor. LEC.

CE 858. Urban Hydrology and Stormwater Management. 3 Hours.
Hydrology of urban watersheds; floodplain management; hydrologic modeling; storm drainage; stormwater detention; water quality improvement; geomorphology of urban streams; stream corridor management and stream restoration. Prerequisite: CE 751. LEC.

CE 861. Finite Element Methods for Solid Mechanics. 3 Hours.
Stress analysis of 2-D and 3-D solids, plates, and shells by the finite element method. Element formulations and behavior with emphasis on the isoparametric concept. Computer modeling and interpretation of results. Introduction to material and geometric nonlinear analysis of solids. Prerequisite: CE 761 or equivalent. LEC.

CE 862. Behavior of Reinforced Concrete Members. 3 Hours.
This mechanics course covers in detail the constitutive behavior of reinforced concrete members subjected to various types of loading and presents the basis for modeling the response of reinforced concrete structures in the nonlinear range of response. Topics covered include: stress-strain behavior of concrete under multi axial states of stress; moment-curvature analysis; advanced analysis of r/c members subjected to shear (variable angle truss models, modified compression field theory, strut-and-tie models); behavior of r/c members subjected to cyclic loading; modeling and effects of slip at the interface between reinforcing steel and concrete. Suggested prerequisite CE 764 or equivalent. Prerequisite: CE 563. LEC.

CE 864. Seismic Performance of Structures. 3 Hours.
This course builds on topics from structural dynamics to introduce principles of structural performance during earthquake events. Emphasis is placed on estimating the response of building structures as represented by simple and complex models. Topics covered include strong ground motion, response of simple systems to ground motion, nonlinear response of building systems, and performance-based earthquake engineering. Prerequisite: CE 704. LEC.
CE 865. Structural Design for Dynamic Loads. 3 Hours.
The behavior and design of structural systems subjected to dynamic forces such as blasts, earthquakes, and wind loads. Prerequisite: CE 704 or equivalent. LEC.

CE 869. Plates and Shells. 3 Hours.
The analysis and design of plates and shells including thin and thick plates, membrane theory of shells and bending theories of shells. LEC.

CE 871. Fundamentals of Bioremediation. 3 Hours.
A study of microbial ecology and physiology as they relate to the degradation of environmental contaminants. Emphasis is placed on the interrelationship between the physiological traits or microorganisms, and the physical and chemical properties of the contaminants and the treatment environments. Case studies involving in-situ bioremediation and reactor design are discussed. Prerequisite: CE 573 or CE 773 or equivalent, and five hours of chemistry. LEC.

CE 873. Environmental Monitoring. 2 Hours.
A lecture-laboratory course to familiarize students with environmental monitoring techniques, regulations, and systems. Dimensions of environmental monitoring will be considered for air, soil, and water measurements. The major emphasis will be on monitoring techniques and their principles, utility, and limitations. LEC.

CE 874. Air Pollution Control. 3 Hours.
The design of control devices for the abatement of air pollutants, both gaseous and particulate, emitted from stationary sources. This includes the basic theory of control device operation and economic factors associated with each type of control device design. Prerequisite: CE 772 and CE 778 or equivalent. LEC.

CE 875. Solid and Hazardous Wastes. 3 Hours.
Fundamental issues associated with solid and hazardous wastes are presented. Topics include government regulations, waste characteristics and quantities, the transport and attenuation of wastes in the environment, risk assessment, and handling, treatment and disposal techniques. Special emphasis is placed on hazardous waste remediation strategies in terrestrial systems. Prerequisite: Graduate standing in the Environmental Science and Engineering program, or consent of instructor. CE 770 and CE 773 are recommended. LEC.

CE 876. Wastewater Treatment Plant Design. 3 Hours.
Application of physical, chemical, and biological principles to the design of wastewater treatment systems for domestic and other wastewaters. Special emphasis is placed on biological treatment processes. Prerequisite: CE 576 or equivalent, or CE 573 or CE 773 or equivalent. LEC.

CE 877. Water Treatment Plant Design. 3 Hours.
Application of physical, chemical, and biological principles to the design of water treatment plants and processes for domestic water supply from surface and ground water sources. Prerequisite: CE 774, or concurrent enrollment. LEC.

CE 878. Air Quality Modeling. 3 Hours.
Fundamental physical and mathematical principles applied to air quality modeling; considered as factors that influence the choice and application of air quality models, as well as the interpretation of model output data. Practical applications are stressed using standard models. Prerequisite: CE 778 or equivalent and MATH 121 or CE 625. LEC.

CE 879. Environmental Research Seminar. 1 Hour.
Discussion of current topics in environmental engineering and science and related fields by staff, students, and visiting lecturers. May be taken only once for credit. LEC.
CE 892. Structural Engineering and Mechanics Seminar. 1 Hour.
Presentation and discussion of current research and design in structural engineering and mechanics. LEC.

CE 895. Advanced Special Topics: _____. 1-3 Hours.
A graduate course or colloquium in a topic of civil engineering or an allied field. Prerequisite: Varies by topic, or with consent of instructor. LEC.

CE 899. Master's Thesis. 1-10 Hours.
Directed research and reporting of a specialize topic of interest in civil engineering or an allied field. Prerequisite: Consent of instructor. THE.

CE 902. Advanced Vibrations. 3 Hours.
Vibrations of mechanical systems and structures. Nonlinear vibrations. Random vibration. Prerequisite: CE 704 or AE 704. LEC.

CE 912. Theory of Plasticity. 3 Hours.
Plastic stress-strain relationships. Stress and deformation in thick-walled shells, rotating discs, and bars subjected to torsion and bending for ideally plastic materials. Plastic flow of strain-hardening materials. Theory of metal-forming processes including problems in drawing and extruding. LEC.

CE 913. Advanced Fracture Mechanics. 3 Hours.
Development of Griffith-Irwin crack theory and plane-strain stress intensity factors. Advanced analytical and experimental aspects of fracture and fatigue. Development of fracture control plans. Prerequisite: CE 767 or consent of instructor. LEC.

CE 927. Advanced Mechanics. 3 Hours.
The mechanics of continuous media. A unified treatment of the fundamental principles and theories governing applications in solid and fluid mechanics. Topics covered are stress, strain and deformation, general physical principles for the continuum, and various constitutive equations. LEC.

CE 929. Advanced Topics in Solid Mechanics. 2-4 Hours.
Topics such as thermal stresses, vibrations in elastic continuum, dynamic instability, and other advanced topics. LEC.

CE 961. Finite Element Methods for Nonlinear and Dynamic Systems. 3 Hours.
Advanced treatment of finite element techniques for structural analysis including material and geometric non-linearity and the solution of large scale dynamics problems. Prerequisite: CE 861 or ME 761 or equivalent. LEC.

CE 983. Implementation of the Urban Transportation Planning System--UTPS. 3 Hours.
A study of the principles and implementation skills of the most up-to-date versions of several urban transportation planning software packages. The course involves a two-hour lecture and a three-hour laboratory period. Prerequisite: CE 883, or UBPL 750, or equivalent. LEC.

CMGT 457. Construction Project Management. 3 Hours.
An introduction to the management of construction projects with an emphasis on engineering economics. This course addresses time value of money, cash flow and interest, financial analysis of alternatives, and taxes and depreciation. Also included are projects management fundamentals, project scheduling, and project controls. Prerequisite: MATH 122 or MATH 126 or consent of the instructor. LEC.

CMGT 500. Construction Engineering. 3 Hours.
An introduction to the construction industry, construction project management, and construction operations. Topics include project participant roles and responsibilities; project delivery systems; procurement of construction services; sustainable construction; contracts, bonds, and insurance; equipment selection and use; constructability and value engineering; estimating and bidding; planning and scheduling; operations management; safety; and project commissioning and closeout. Prerequisite: Junior or Senior standing in the School of Engineering, or consent of the instructor. LEC.

CMGT 700. Construction Project Management. 3 Hours.
An introduction to the management of construction projects. This course addresses project delivery systems, project organization, estimating and bidding, planning and scheduling, legal and safety issues, among other topics. Prerequisite: Graduate standing or consent of instructor. Not open to those with credit in CMGT 500. LEC.

CMGT 701. Construction Planning and Scheduling. 3 Hours.
An introduction to the planning and scheduling of projects, for both construction and design. Emphasis is placed on the critical path method including network development, production of time schedules, time-cost considerations, and the efficient utilization of resources. Manual and computer techniques are covered. Prerequisite: CMGT 500 or CMGT 700, and MATH 526 or EMTG 802, or consent of instructor. LEC.

CMGT 702. Construction Equipment and Methods. 3 Hours.
This course introduces the student to the multitude of construction equipment employed in construction. The underlying technology and engineering principles are reviewed. Principles of equipment selection, equipment utilization, and equipment economic analysis are covered. Prerequisite: CMGT 500 or CMGT 700, MATH 526 or EMTG 802, and CMGT 357 or EMTG 806, or consent of instructor. LEC.

CMGT 703. Construction Quality, Productivity, and Safety. 3 Hours.
Operations analysis for work improvement in construction using process charts, crew balancing, time-lapse photography, and planning techniques. Regulations, accident prevention, and safety management are covered. Prerequisite: CMGT 500 or CMGT 700, MATH 526 or EMTG 802, and CMGT 357 or EMTG 806, or consent of instructor. LEC.

CMGT 704. Construction Estimating and Bidding. 3 Hours.
A study of the quantity survey, cost estimating, scheduling and project controls; construction operations; and methods of building construction. Prerequisite: CMGT 500 or CMGT 700, MATH 526 or EMTG 802, and CMGT 357 or EMTG 806, or consent of instructor. LEC.

CMGT 705. Construction Contracts, Bonds, and Insurance. 3 Hours.
Legal doctrines relating to owners, design professionals, and contractors. Sources of law, forms of association, and agency. Contract formation, rights and duties, interpretation, performance problems, disputes, and claims. Surety bonds and insurance. Prerequisite: CMGT 500 or CMGT 700, or consent of instructor. LEC.

CMGT 357. Engineering Economics. 3 Hours.
Analysis of design alternatives and investment opportunities based on the time value of money. Topics include financial statements and accounting concepts related to economic analysis, time value of money and cash flow equivalence, cost of capital and minimum attractive rate of return (MARR), defining mutually exclusive alternatives, developing alternative after-tax cash flows, performing investment and replacement studies, and methods for addressing uncertainty and risk. Prerequisite: MATH 122 or MATH 126, or consent of the instructor. LEC.
CMGT 708. Introduction to Sustainable Design and Construction. 3 Hours.
This course introduces students to Sustainable Design Concepts that are applicable to Civil and Architectural Engineering. Prerequisite: Senior or graduate standing in Architectural Engineering, Architecture, or Civil Engineering or consent of instructor. LEC.

CMGT 709. International Construction Management. 3 Hours.
An introduction to the management of international construction projects. This course focuses on the areas where international construction project management differs from the management of domestic construction projects. Topics include project delivery systems including build-operate-transfer (BOT) and other systems unique to international construction contracts; the impact of the host country's language, demographics, laws, political structure, geography, economy, culture, and customs on project delivery; currency transfer and risk; procurement and expediting; designing construction means and methods that optimize available labor, material, and equipment; participant roles and responsibilities; among other topics. Prerequisite: CMGT 500 or CMGT 700, or consent of instructor. LEC.

CMGT 790. Construction Seminar: 3 Hours.
Prerequisite: Varies with topic. LEC.

CMGT 801. Directed Readings in Construction Management. 1-3 Hours.
Graduate-level directed readings on a topic in construction management mutually agreed upon by the student and instructor. Intended to build on one or more of the core course topics: project management; planning and scheduling; equipment and methods; quality; productivity and safety; estimating and bidding; contracts, bonds, and insurance. CMGT 801 may be repeated for credit to a maximum of three hours in the degree program. Mutually agreed course deliverable(s) required. Prerequisite: Approval of the course topic and deliverable(s) by the instructor, CMGT 500 or CMGT 700, CMGT 701, CMGT 702, CMGT 703, CMGT 704, and CMGT 705, or consent of instructor. IND.

CMGT 802. Special Problems in Construction Management. 1-3 Hours.
Graduate-level investigation requiring research of a topic in construction management mutually agreed upon by the student and instructor. Intended to build on one or more of the core course topics: project management; planning and scheduling; equipment and methods; quality; productivity and safety; estimating and bidding; contracts, bonds, and insurance. CMGT 802 may be repeated for credit to a maximum of three hours in the degree program. Mutually agreed course deliverable such as a paper summarizing the results of the investigation required. Prerequisite: Approval of the course topic and deliverable by the instructor, CMGT 500 or CMGT 700, CMGT 701, CMGT 702, CMGT 703, CMGT 704, and CMGT 705, or consent of instructor. IND.

CMGT 805. Construction Accounting and Finance. 3 Hours.
Project level cost control concepts and structure, time and cost integration, data collection and reporting, equipment cost, job overhead cost, and cost control. Integrating construction project level cost with construction company financial accounting and financial management. Prerequisite: CMGT 702 and CMGT 704 or consent of instructor. LEC.

CMGT 890. Construction Seminar: ____. 3 Hours.
Prerequisite: Varies with topic. LEC.

CMGT 895. Construction Management Project. 1-3 Hours.
Graduate-level investigation and report on a construction management topic mutually agreed on by the student and project advisor. This is the capstone course in the Master of Construction Management (MCM) degree program. Successful completion of this project requires acceptance of the written report and oral presentation to the student's graduate committee. Prerequisite: Approval of project topic by project advisor, CMGT 500 or CMGT 700, CMGT 701, CMGT 702, CMGT 703, CMGT 704, CMGT 705, and nine elective credit hours, or consent of instructor. IND.

Electrical Engr Computer Sci Courses

EECS 101. New Student Seminar. 1 Hour.
A seminar intended to help connect freshmen and transfer EECS students to the EECS department, their chosen profession, and each other. Topics include overviews of the various disciplines, curricula and advising, ethics and professionalism, student organizations and extracurricular activities, senior projects, and career planning. Graded on a satisfactory/unsatisfactory basis. LEC.

EECS 128. Foundations of Information Technology: ____. 3 Hours. NM.
Introduction to information technology and the computer as a general tool processing information. Topics include internet tools (including browsers, search engines and web page construction), networking, computer organization, algorithms, programming languages, data representation and manipulation, binary numbers and Boolean logic, system and application software (including word processors, spreadsheets and presentation software), operating systems, databases, artificial intelligence, social and ethical issues in computing, information security, and mobile computing. Prerequisite: MATH 101 or MATH 104 or eligibility to enroll in MATH 115 or MATH 121. LEC.

EECS 137. Visual Basic for Engineers. 3 Hours.
Introduction of computer-based problem solving techniques for engineering practice with emphasis on good programming practices and the integration of appropriate computational and related tools. Solutions are computed using Visual Basic, specifically VBA within Excel. Elementary numerical and statistical methods are applied to the solution of sets of linear and nonlinear algebraic equations, linear regression, and root finding. Microsoft Office is used with the computational tools to provide integrated report generation capability. Two lectures and a weekly laboratory instruction. Prerequisite: MATH 104. LEC.

EECS 138. Introduction to Computing: ____. 3 Hours. NM.
Algorithm development, basic computer organization, syntax and semantics of a high-level programming language, including testing and debugging. Concept of structure in data and programs, arrays, top-down design, subroutines and library programs. Abstract data types. System concepts such as compilation and files. Nature and scope of computer science. Prerequisite: MATH 101 or MATH 104, or meeting the requirements to enroll in MATH 115 or MATH 121 or MATH 125 or MATH 145. LEC.

EECS 140. Introduction to Digital Logic Design. 4 Hours.
An introductory course in digital logic circuits covering number representation, digital codes, Boolean Algebra, combinatorial logic design, sequential logic design, and programmable logic devices. Corequisite: MATH 104. LEC.

EECS 141. Introduction to Digital Logic: Honors. 4 Hours.
An introductory course in digital logic circuits covering number representation, digital codes, Boolean algebra, combinatorial logic design, sequential logic design, and programmable logic devices. This course is intended for highly motivated students and includes honors-level assignments. Prerequisite: Co-requisite: MATH 121, or MATH 125 or MATH 145, plus either acceptance into the KU Honors Program or consent of instructor. LEC.
EECS 168. Programming I. 4 Hours.
Problem solving using a high level programming language and object oriented software design. Fundamental stages of software development are discussed: problem specification, program design, implementation, testing, and documentation. Introduction to programming using an object oriented language: using classes, defining classes, and extending classes. Introduction to algorithms and data structures useful for problem solving: arrays, lists, files, searching, and sorting. Students will be responsible for designing, implementing, testing, and documenting independent programming projects. Professional ethics are defined and discussed in particular with respect to computer rights and responsibilities. Corequisite: MATH 104. LEC.

EECS 169. Programming I: Honors. 4 Hours.
Problem solving using a high level programming language and object oriented software design. Fundamental stages of software development are discussed: problem specification, program design, implementation, testing, and documentation. Introduction to programming using an object oriented language: using classes, defining classes, extending classes. Introduction to algorithms and data structures useful for problem solving: arrays, lists, files, searching, and sorting. Students will be responsible for designing, implementing, testing, and documenting independent programming projects. Professional ethics are defined and discussed in particular with respect to computer rights and responsibilities. This course is intended for highly motivated students and includes honors-level assignments. Prerequisite: Co-requisite: MATH 121 or MATH 125 or MATH 145, plus either acceptance into the KU Honors Program or consent of instructor. LEC.

EECS 210. Discrete Structures. 4 Hours.
Mathematical foundations including logic, sets and functions, general proof techniques, mathematical induction, sequences and summations, number theory, basic and advanced counting techniques, solution of recurrence relations, equivalence relations, partial order relations, lattices, graphs and trees, algorithmic complexity, and algorithm design and analysis. Throughout there will be an emphasis on the development of general problem solving skills including algorithmic specification of solutions and the use of discrete structures in a variety of applications. Prerequisite: EECS 168 or 169 (or equivalent) and MATH 122 or MATH 126 or MATH 146. LEC.

EECS 211. Circuits I. 3 Hours.
Analysis of linear electrical circuits: Kirchoff's laws; source, resistor, capacitor and inductor models; nodal and mesh analysis; network theorems; transient analysis; Laplace transform analysis; steady-state sinusoidal analysis; computer-aided analysis. Prerequisite: Co-requisite: Math 220 and MATH 290. LEC.

EECS 212. Circuits II. 4 Hours.
Continued study of electrical circuits: Steady-state power analysis, three-phase circuits, transformers, frequency response, and two-port network analysis. Prerequisite: EECS 211. LEC.

EECS 220. Electromagnetics I. 4 Hours.
Vector analysis. Electrostatic and magnetostatic fields in a vacuum and material media. Electromagnetic fields and Maxwell's equations for time-varying sources. The relationship between field and circuit theory. Simple applications of Maxwell's equations. Prerequisite: MATH 220, MATH 290, PHSX 211, and EECS 211. LEC.

EECS 221. Electromagnetics I. 3 Hours.
Electrostatic and magnetostatic fields in a vacuum and material media. Electromagnetic fields and Maxwell's equations for time-varying sources. The relationship between field and circuit theory. Simple applications of Maxwell's equations. Prerequisite: MATH 127, MATH 220, EECS 211, and either PHSX 210 or PHSX 211. LEC.

EECS 268. Programming II. 4 Hours.
This course continues developing problem solving techniques by focusing on the imperative and object-oriented styles using Abstract Data Types. Basic data structures such as queues, stacks, trees, and graphs will be covered. Recursion. Basic notions of algorithmic efficiency and performance analysis in the context of sorting algorithms. Basic Object-Oriented techniques. An associated laboratory will develop projects reinforcing the lecture material. Three class periods and one laboratory period per week. Prerequisite: EECS 168 or EECS 169. LEC.

EECS 312. Electronic Circuits I. 3 Hours.
Introduction to diodes, BJTs and MOSFETs, and their use in electronic circuits, especially digital circuits. Prerequisite: Upper-level eligibility. Corequisite: EECS 212. LEC.

EECS 315. Electric Circuits and Machines. 3 Hours.
Introduction to DC and AC electrical circuit analysis techniques, AC power calculations, transformers, three-phase systems, magnetic circuits, and DC and AC machines with a focus on applications. Not open to electrical or computer engineering majors. Prerequisite: A course in differential equations and eight hours of physics. LEC.

EECS 316. Circuits, Electronics and Instrumentation. 3 Hours.
Introduction to DC and AC electrical circuit analysis, operational amplifiers, semiconductors, digital circuits and systems, and electronic instrumentation and measurements with a focus on applications. Not open to electrical or computer engineering majors. Students may not receive credit for both EECS 316 and EECS 317. Prerequisite: A course in differential equations and eight hours of physics. LEC.

EECS 317. Electronics and Instrumentation. 2 Hours.
Introduction to operational amplifiers, semiconductors, digital circuits and systems, and electronic instrumentation and measurements with a focus on applications. Not open to electrical or computer engineering majors. Students may not receive credit for both EECS 316 and EECS 317. Prerequisite: EECS 315. LEC.

EECS 318. Circuits and Electronics Lab. 1 Hour.
Laboratory exercises intended to complement EECS 316 and EECS 317. Experiments include DC circuits, analog electronics, and digital electronics. Not open to electrical or computer engineering majors. Co-requisite: EECS 316 or EECS 317. LAB.

EECS 360. Signal and System Analysis. 4 Hours.
Fourier signal analysis (series and transform); linear system analysis (continuous and discrete); Z-transforms; analog and digital filter analysis. Analysis and design of continuous and discrete time systems using MATLAB. Prerequisite: Upper level of EECS Eligibility. Corequisite: EECS 212. LEC.

EECS 368. Programming Language Paradigms. 3 Hours.
The course is a survey of programming languages: their attributes, uses, advantages, and disadvantages. Topics include scopes, parameter passing, storage management, control flow, exception handling, encapsulation and modularization mechanism, reusability through genericity and inheritance, and type systems. In particular, several different languages will be studied which exemplify different language philosophies (e.g., procedural, functional, object-oriented, logic, scripting). Prerequisite: EECS 268 and upper-level EECS eligibility. LEC.

EECS 388. Embedded Systems. 4 Hours.
Internal organization of microprocessor and microcontroller systems; programming in assembly language; input and output system; controlling external devices. The course will focus on one or two specific microprocessors and computer systems. Prerequisite: EECS 140 or
EECS 141, EECS 168 or EECS 169, and upper-level EECS eligibility. LEC.

EECS 399. Projects. 1-5 Hours.
An electrical engineering, computer engineering, or computer science project pursued under the student's initiative, culminating in a comprehensive report, with special emphasis on orderly preparation and effective composition. Prerequisite: Upper-level EECS eligibility and consent of instructor. IND.

EECS 412. Electronic Circuits II. 4 Hours.
Discrete and integrated amplifier analysis and design. Introduction to feedback amplifier analysis and design. Introduction to feedback amplifiers. Prerequisite: EECS 312 and upper-level EECS eligibility. LEC.

EECS 420. Electromagnetics II. 4 Hours.
This course applies electromagnetic analysis to high frequency devices and systems where wave propagation effects cannot be neglected. Topics covered include transmission lines, space waves, waveguides, radiation, and antennas. Laboratory experiments include transmission line, waveguide, and antenna measurements and characterizations. 3 hours lecture, 1 hour laboratory. Prerequisite: EECS 220 and upper-level EECS eligibility. LEC.

EECS 441. Power Systems Engineering II. 3 Hours.
A continuation of ARCE 640 that integrates system components into functional, safe, and reliable power distribution systems for commercial, industrial and institutional (CII) facilities. Service entrance design, distribution system layout and reliability, emergency and standby power system design, medium-voltage distribution systems, symmetrical fault analysis, and special equipment and occupancies. (Same as ARCE 641.) Prerequisite: Either ARCE 640 or EECS 212, and Upper-Level EECS Eligibility. LEC.

EECS 443. Digital Systems Design. 4 Hours.
The design of computer systems from hardware point of view. The implementation of functional and control units. Introduction to VHDL, and its use in modeling and designing digital systems. Prerequisite: EECS 388. LEC.

EECS 444. Control Systems. 3 Hours.
An introduction to the modeling, analysis, and design of linear control systems. Topics include mathematical models, feedback concepts, state-space methods, time response, system stability in the time and transform domains, design using PID control and series compensation, and digital controller implementation. Prerequisite: EECS 212 and EECS 360. LEC.

EECS 448. Software Engineering I. 4 Hours.
This course is an introduction to software engineering, and it covers the systematic development of software products. It outlines the scope of software engineering, including life-cycle models, software process, teams, tools, testing, planning, and estimating. It concentrates on requirements, analysis, implementation, and maintenance of software products. The laboratory covers CASE tools, configuration control tools, UML diagrams, integrated development environments, and project specific components. Prerequisite: EECS 212 and upper-level EECS eligibility. LEC.

EECS 461. Probability and Statistics. 3 Hours.
Introduction to probability and statistics with applications. Reliability of systems. Discrete and continuous random variables. Expectations, functions of random variables, and linear regression. Sampling distributions, confidence intervals, and hypothesis testing. Joint, marginal, and conditional distribution and densities. Prerequisite: MATH 290, MATH 220 and upper-level EECS eligibility. LEC.

EECS 470. Electronic Devices and Properties of Materials. 3 Hours.
An introduction to crystal structures, and metal, insulator, and semiconductor properties. Topics covered include the thermal, electric, dielectric, and optical properties of these materials. A significant portion of this course is devoted to the properties of semiconductors and semiconductor devices. Prerequisite: PHSX 313 and upper-level EECS eligibility. LEC.

EECS 498. Honors Research. 1-2 Hours.
Arranged to allow students to satisfy the independent research requirement for graduation with departmental honors. Prerequisite: Consent of instructor and upper-level EECS eligibility. IND.

EECS 501. Senior Design Laboratory I. 3 Hours.
A lecture/laboratory course involving the design and implementation of prototypes of electrical and computer type products and systems. The project specifications require consideration of ethics, economics, manufacturing, and safety. Prerequisite: EECS 412. LEC.

EECS 502. Senior Design Laboratory II. 3 Hours. AE61.
A lecture/laboratory course involving the design and implementation of prototypes of electrical and computer type products and systems. The project specifications require consideration of ethics, economics, health, manufacturing, and safety. Prerequisite: EECS 501. LEC.

EECS 510. Introduction to the Theory of Computing. 3 Hours.
Finite state automata and regular expressions. Context-free grammars and pushdown automata. Turing machines. Models of computable functions and undecidable problems. The course emphasis is on the theory of computability, especially on showing limits of computation. May be taken for graduate credit. (Same as MATH 510.) Prerequisite: EECS 210 and upper-level EECS eligibility. LEC.

EECS 512. Electronic Circuits III. 3 Hours.
Feedback amplifier circuit analysis, power amplifiers, analog IC op-amp techniques and analysis, filter approximation and realization, oscillators, wave generators and shapers. Prerequisite: EECS 412. LEC.

EECS 541. Computer Systems Design Laboratory I. 3 Hours.
A two semester lecture/laboratory course involving the specification, design, implementation, analysis, and documentation of a significant hardware and software computer system. Laboratory work involves software, hardware, and hardware/software trade-offs. Project requirements include consideration of ethics, economics, manufacturing, safety, and health aspects of product development. Can be taken only during the senior year. Prerequisite: EECS 443 and EECS 448. LEC.

EECS 542. Computer Systems Design Laboratory II. 3 Hours. AE61.
A two semester lecture/laboratory course involving the specification, design, implementation, analysis, and documentation of a significant hardware and software computer system. Laboratory work involves software, hardware, and hardware/software trade-offs. Project requirements include consideration of ethics, economics, manufacturing, safety, and health aspects of product development. Can be taken only during the senior year. Prerequisite: EECS 541. LEC.

EECS 544. Electric Machines & Drives. 3 Hours.
Introduction to electric machine theory, operation, and control. Electric machines covered include DC generators and motors, AC synchronous generators and motors, AC induction generators and motors, as well as fractional horsepower and special purpose motors. Motor starting and controls for both DC and AC machines are also covered including an introduction to power electronics and variable frequency drives (VFD). (Same as ARCE 644.) Prerequisite: Either ARCE 640 or EECS 212, and Upper-Level EECS Eligibility. LEC.
EECS 545. Electric Energy Production and Storage. 3 Hours.
An introduction to utility scale and small scale (distributed generation) electric energy production and storage systems. This course addresses the technical, operational, economic, environmental, and social characteristics associated with both traditional and nontraditional electric energy production systems along with associated grid integration, energy delivery, and regulatory issues. Traditional energy production systems covered include fossil fuel, hydroelectric, and nuclear power plants. Non-traditional energy production systems covered include fuel cells, photovoltaics (PV), concentrated solar power (CSP), wind, geothermal, and other emerging technologies. (Same as ARCE 645.) Prerequisite: Either ARCE 640 or EECS 212, and Upper-Level EECS Eligibility. LEC.

EECS 546. Fundamentals of Electric Energy Systems. 3 Hours.
Continuation of EECS 545 that uses power system modeling developed in EECS 545 to analyze power system load flow, operation and economic dispatch, stability, and transient response. The impact of alternative energy sources, energy storage, DC transmission and interties, and other emerging technologies on power system operation and reliability will be addressed throughout the course. (Same as ARCE 646.) Prerequisite: Either ARCE 640 or EECS 212, and Upper-Level EECS Eligibility. LEC.

EECS 547. Power System Analysis I. 3 Hours.
Introduction to the analysis of commercial, industrial, and utility power systems. Emphasis is placed on modeling system components which include transmission and distribution lines, transformers, induction machines, and synchronous machines and the development of a power system model for analysis from these components. System modeling will be applied to short-circuit studies and used to analyze symmetrical faults, to develop sequence networks using symmetrical components, and analyze unsymmetrical faults. (Same as ARCE 647.) Prerequisite: Either ARCE 640 or EECS 212, and Upper-Level EECS Eligibility. LEC.

EECS 548. Power System Analysis II. 3 Hours.
Continuation of EECS 547 that uses power system modeling developed in EECS 547 to analyze power system load flow, operation and economic dispatch, stability, and transient response. The impact of alternative energy sources, energy storage, DC transmission and interties, and other emerging technologies on power system operation and reliability will be addressed throughout the course. (Same as ARCE 648.) Prerequisite: EECS 547 or consent of instructor. LEC.

EECS 550. E-Learning for Educators. 3 Hours.
The design and implementation phase of a two-semester, team-oriented lecture/lab course involving the specification, design, implementation, and documentation of a significant software system. The course includes the consideration of project management, ethics, economics, and technical writing. Can be taken only during the senior year. Prerequisite: EECS 448. Co-Requisite: EECS 510 and EECS 560. LEC.

EECS 552. Computer Science Design II. 3 Hours. AE61.
The design and implementation phase of a two-semester, team-oriented lecture/lab course involving the specification, design, implementation, and documentation of a significant software system. The course includes the consideration of project management, ethics, economics, and technical writing. Can be taken only during the senior year. Prerequisite: EECS 581. LEC.

EECS 553. Introduction to Communication Networks. 3 Hours.
An introduction to the principles used in communication networks is given in this course. Topics include a discussion of the uses of communications networks, network traffic, network impairments, standards, layered reference models for organizing network functions. Local Area Network technology and protocols are discussed. Link, network, transport layer protocols, and security are introduced. TCP/IP networks are stressed. VoIP is used as an example throughout the course. Basic concepts of network performance evaluation are studied, both analytical and simulation techniques are considered. Prerequisite: EECS 168 and either EECS 461 or MATH 526. LEC.

EECS 554. Introduction to Information and Computer Security. 3 Hours.
An introduction to the fundamentals of cryptography and information and computer security. Introduces the basic concepts, theories, and protocols in computer security. Discusses how to apply such knowledge to analyze, design and manage secure systems in the real world. Topic covered: the basics of cryptography, software security, operating system security, database security, network security, privacy and anonymity, social engineering, digital forensics, etc. Corequisite: EECS 678 and Prerequisite: Upper-Level EECS Eligibility. LEC.

EECS 556. Introduction to Information and Computer Security. 3 Hours.
An introduction to the fundamentals of cryptography and information and computer security. Introduces the basic concepts, theories, and protocols in computer security. Discusses how to apply such knowledge to analyze, design and manage secure systems in the real world. Topic covered: the basics of cryptography, software security, operating system security, database security, network security, privacy and anonymity, social engineering, digital forensics, etc. Corequisite: EECS 678 and Prerequisite: Upper-Level EECS Eligibility. LEC.

EECS 557. Information Systems and Applications. 3 Hours.
An introduction to the principles used in information systems and applications is given in this course. Topics include a discussion of the uses of information systems, information retrieval, database systems, expert systems, neural networks, and natural language processing. Local Area Network technology and protocols are discussed. Link, database, expert system, and neural network protocols, and security are introduced. TCP/IP networks are stressed. Information retrieval is used as an example throughout the course. Basic concepts of information system performance evaluation are studied, both analytical and simulation techniques are considered. Prerequisite: EECS 168 and either EECS 461 or MATH 526. LEC.

EECS 558. Computer Science Design I. 3 Hours.
The background and planning phase of a two-semester, team-oriented lecture/lab course involving the specification, design, implementation, and documentation of a significant software system. The course includes the consideration of project management, ethics, economics, and technical writing. Can be taken only during the senior year. Prerequisite: EECS 448. Co-Requisite: EECS 510 and EECS 560. LEC.

EECS 559. Electric Energetic Production and Storage. 3 Hours.
A study of unwanted generation and reception of radio-frequency radiation from analog and digital electronic systems and how these emissions/receptions can be reduced. Topics covered include sources of radiation, grounding, shielding, crosstalk, electrostatic discharge, and practical design and layout schemes for reducing unwanted radiation and reception. Also covered are the major governmental electromagnetic compatibility (EMC) regulations and standards that apply to commercial electronic devices and systems. Prerequisite: EECS 220 and EECS 312. LEC.

EECS 560. Data Structures. 4 Hours.
Data abstraction and abstract data types. Topics include the design and implementation of dictionary, priority queues, concatenated queue, disjoint set structures, graphs, and other advanced data structures based on balanced and unbalanced tree structures. Special emphasis will be placed on the implementations of these structures and their performance tradeoffs. Both asymptotic complexity analysis and experimental profiling techniques will be introduced. Labs will be used to provide students with hands-on experience in the implementations of various abstract data types and to perform experimental performance analysis. Prerequisite: EECS 210 and EECS 448. LEC.

EECS 561. Electromagnetic Compatibility. 3 Hours.
Introduction to radio transmission systems. Topics include radio transmitter and receiver design, radiowave propagation phenomenology, antenna performance and basic design, and signal detection in the presence of noise. Students will design radio systems to meet specified performance measure. Corequisite: EECS 420 and EECS 461. LEC.

EECS 562. Fiber Optic Communication Systems. 3 Hours.
Description and analysis of the key components in optical communication systems. Topics covered include quantum sources, fiber cable propagation and dispersion characteristics, receiver characteristics, and system gain considerations. Prerequisite: EECS 220 and PHSX 313 or equivalent and upper-level EECS eligibility. LEC.

EECS 563. Fundamentals of Expert Systems. 3 Hours.
Basic information about expert systems: architecture of an expert system, building expert systems, uncertainty in expert systems, taxonomy of expert systems. Knowledge representation: first order logic, production systems, semantic nets, frames. Uncertainty in expert systems, one-valued approaches: probability theory, systems using Bayes' rule, and systems using certainty theory; two-valued approaches: systems using Dempster-Shafer theory and system INFERNO; set-valued approaches: systems using fuzzy set theory and systems using rough set theory. Prerequisite: EECS 560 or consent of instructor. LEC.
**EECS 643. Advanced Computer Organization. 3 Hours.**
Principles and techniques of instruction level parallelism, Tomasulo’s algorithm, branch prediction, reservation stations, recorder buffers, memory hierarchies. Parallel and scalable architectures, global directory caches, synchronization primitives, memory consistency, multithreading. Only one of EECS 643 and EECS 645 may be used to satisfy EECS degree requirements. Prerequisite: EECS 443. LEC.

**EECS 644. Introduction to Digital Signal Processing. 3 Hours.**
Discrete time signal and systems theory, sampling theorem, z-transforms, digital filter design, discrete Fourier transform, FFT, and hardware considerations. Prerequisite: EECS 360. LEC.

**EECS 645. Computer Architecture. 3 Hours.**
The structure and design of computing systems. Examination and analysis of computing systems. Examination and analysis of instruction set architectures, pipelined control and arithmetic units, vector processors, memory hierarchies, and performance evaluation. Prerequisite: EECS 388. LEC.

**EECS 647. Introduction to Database Systems. 3 Hours.**
Introduction to the concept of databases and their operations. Basic concepts, database architectures, storage structures and indexing, data structures: hierarchical, network, and relational database organizations. Emphasis on relational databases and retrieval languages SQL, QBE, and ones based on relational algebra and relational calculus; brief description of predicate calculus. Theory of databases, normal forms, normalization, candidates keys, decomposition, functional dependencies, multi-valued dependencies. Introduction to the design of a simple database structure and a data retrieval language. Student cannot receive credit for both EECS 647 and EECS 746. Prerequisite: EECS 448. LEC.

**EECS 648. Software Engineering Tools. 3 Hours.**
This course focuses on the software engineering tools and practices currently in use in the industry, supporting the complete software development lifecycle. The course provides hands-on experience with current software development tools. Topics include software engineering artifacts, team structure and roles, work contracts, requirements elicitation and analysis, specifications, supplementary specifications, use-case models, activity diagrams, use-case specifications, traceability, technical design, design review meetings, coding standards, code quality, code reviews, and modern software engineering tools. Prerequisite: EECS 448. LEC.

**EECS 649. Introduction to Artificial Intelligence. 3 Hours.**
General concepts, search procedures, two-person games, predicate calculus and automated theorem proving, nonmonotonic logic, probabilistic reasoning, rule based systems, semantic networks, frames, dynamic memory, planning, machine learning, natural language understanding, neural networks. Corequisite: EECS 368. LEC.

**EECS 660. Fundamentals of Computer Algorithms. 3 Hours.**
Basic concepts and techniques in the design and analysis of computer algorithms. Models of computations. Simple lower bound theory and optimality of algorithms. Computationally hard problems and the theory of NP-Completeness. Introduction to parallel algorithms. Prerequisite: EECS 560 and either EECS 461 or MATH 526. LEC.

**EECS 662. Programming Languages. 3 Hours.**
Formal definition of programming languages including specification of syntax and semantics. Simple statements including precedence, infix, prefix, and postfix notation. Global properties of algorithmic languages including scope of declaration, storage allocation, grouping of statements, binding time of constituents, subroutines, coroutines, and tasks. Run-time representation of program and data structures. Prerequisite: EECS 388 and EECS 560. LEC.

**EECS 644. Introduction to Digital Communication Systems. 3 Hours.**
An introduction to building digital communication systems in discrete time, including lectures and integrated laboratory exercises. Topics covered include signal spaces, base-band modulation, bandpass modulation, phase-locked loops, carrier phase recovery, symbol timing recovery, and basic performance analysis. Prerequisite: EECS 360 and EECS 461. LAB.

**EECS 665. Compiler Construction. 4 Hours.**
Compilation of simple expressions and statements. Organization of a compiler including symbol tables, lexical analysis, syntax analysis, intermediate and object code generation, error diagnostics, code optimization techniques and run-time structures in a block-structured language such as PASCAL or C. Programming assignments include using tools for lexer and parser generator, and intermediate , and object code generation techniques. Laboratory exercises will provide hands-on experience with the tools and concepts required for the programming assignments. Prerequisite: EECS 368, EECS 448, and EECS 510. LEC.

**EECS 670. Introduction to Semiconductor Processing. 3 Hours.**
An overview of various processes to fabricate semiconductor devices and integrated circuits. Topics covered include crystal growth, oxidation, solid-state diffusion, ion implantation, photolithography, chemical vapor deposition, epitaxial growth, metallization, and plasma etching of thin films. (Same as CPE 655.) Prerequisite: Senior standing in CPE or EECS, or consent of instructor. LEC.

**EECS 672. Introduction to Computer Graphics. 3 Hours.**
Foundations of 2D and 3D computer graphics. Structured graphics application programming. Basic 2D and 3D graphics algorithms (modeling and viewing transformations, clipping, projects, visible line/surface determination, basic empirical lighting, and shading models), and aliasing. Prerequisite: EECS 448. LEC.

**EECS 678. Introduction to Operating Systems. 4 Hours.**
The objective of this course is to provide the students with the concepts necessary to enable them to: a) identify the abstract services common to all operating system, b) define the basic system components that support the operating system's machine independent abstractions on particular target architectures, c) consider how the design and implementation of different systems components interact and constrain one another, not merely how one or two important parts work in isolation, and d) understand the means by which fundamental problems in operating systems can be analyzed and addressed. Programming assignments address topics including process creation, inter-process communication, system call implementation, process scheduling and virtual memory. Laboratory exercises primarily focus on use of tools and concepts required for the programming assignments but include a small number of independent topics. Prerequisite: EECS 388 and EECS 448. LEC.

**EECS 690. Special Topics: ______, 1-3 Hours.**
Arranged as needed to present appropriate material to groups of students. May be repeated for additional credit. Prerequisite: Upper-level EECS eligibility and consent of instructor. LEC.

**EECS 692. Directed Reading. 1-3 Hours.**
Reading under the supervision of an instructor on a topic chosen by the student with the advice of the instructor. May be repeated for additional credit. Consent of the department required for enrollment. Prerequisite: Upper-level EECS eligibility and consent of instructor. IND.

**EECS 700. Special Topics: ______, 1-5 Hours.**
Courses on special topics of current interest in electrical engineering, computer engineering, or computer science, given as the need arises. May be repeated for additional credit. Prerequisite: Variable. LEC.
EECS 710. Information Security and Assurance. 3 Hours.
This introductory security course covers a wide range of topics in the area of information and network security, privacy, and risk: the basic concepts: confidentiality, integrity and availability; introduction to cryptography; authentication; security models; information and database security; computer systems security; network security; Internet and web security; risk analysis; social engineering; computer forensics. Prerequisite: Graduate standing in EECS, or permission of the instructor. LEC.

EECS 711. Security Management and Audit. 3 Hours.
Administration and management of security of information systems and networks, intrusion detection systems, vulnerability analysis, anomaly detection, computer forensics, auditing and data management, risk management, contingency planning and incident handling, security planning, e-business and commerce security, privacy, traceability and cyber-evidence, human factors and usability issues, policy, legal issues in computer security. Prerequisite: EECS 710. LEC.

EECS 712. Network Security and its Application. 3 Hours.
This course focuses on network-based information and communication systems, and examines network technologies and service applications to provide the students with a comprehensive introduction to the field of network security and its application. The course covers key concepts and critical network security services including authentication and access control, integrity and confidentiality of data, routing, firewalls, virtual private networks, web security, virus protection, and network security architecture and policy development. The students are expected to understand the technical vulnerabilities of networked systems and to develop methods to eliminate or mitigate those vulnerabilities. Prerequisite: EECS 710 and EECS 780, or the instructor's approval. LEC.

EECS 713. High-Speed Digital Circuit Design. 3 Hours.
Basic concepts and techniques in the design and analysis of high-frequency digital and analog circuits. Topics include: transmission lines, ground and power planes, layer stacking, substrate materials, terminations, vias, component issues, clock distribution, cross-talk, filtering and decoupling, shielding, signal launching. Prerequisite: EECS 312 and senior or graduate standing. EECS 420 recommended. LEC.

EECS 716. Formal Language Theory. 3 Hours.
Formal language generation by grammars, recognition by automata (finite and pushdown automata, Turing machines), and equivalence of these formulations; elementary containment and closure properties. Emphasis on context-free, deterministic context-free and regular languages. Prerequisite: EECS 510 or equivalent. LEC.

EECS 718. Graph Algorithms. 3 Hours.
This course introduces students to computational graph theory and various graph algorithms and their complexities. Algorithms and applications covered will include those related to graph searching, connectivity and distance in graphs, graph isomorphism, spanning trees, shortest paths, matching, flows in network, independent and dominating sets, coloring and covering, and Traveling Salesman and Postman problems. Prerequisite: EECS 560 or graduate standing with consent of instructor. LEC.

EECS 721. Antennas. 3 Hours.
Gain, Pattern, and Impedance concepts for antennas. Linear, loop, helical, and aperture antennas (arrays, reflectors, and lenses). Cylindrical and biconical antenna theory. Prerequisite: EECS 360 and EECS 420, or EECS 720, or permission of the instructor. LEC.

EECS 723. Microwave Engineering. 3 Hours.
Survey of microwave systems, techniques, and hardware. Guided-wave theory, microwave network theory, active and passive microwave components. Prerequisite: EECS 420. LEC.

EECS 725. Introduction to Radar Systems. 3 Hours.
Basic radar principles and applications. Radar range equation. Pulsed and CW modes of operation for detection, ranging, and extracting Doppler information. Prerequisite: EECS 360, EECS 420, EECS 461. EECS 622 recommended. LEC.

EECS 728. Fiber-optic Measurement and Sensors. 3 Hours.
The course will focus on fundamental theory and various methods and applications of fiber-optic measurements and sensors. Topics include: optical power and loss measurements, optical spectrum analysis, wavelength measurements, polarization measurements, dispersion measurements, PMD measurements, optical amplifier characterization, OTDR, optical components characterization and industrial applications of fiber-optic sensors. Prerequisite: EECS 628 or equivalent. LEC.

EECS 730. Introduction to Bioinformatics. 3 Hours.
This course provides an introduction to bioinformatics. It covers computational tools and databases widely used in bioinformatics. The underlying algorithms of existing tools will be discussed. Topics include: molecular biology databases, sequence alignment, gene expression data analysis, protein structure and function, protein analysis, and proteomics. Prerequisite: Data Structures class equivalent to EECS 560, and Introduction to Biology equivalent to BIOL 150, or consent of instructor. LEC.

EECS 735. Automated Theorem Proving. 3 Hours.
Computer-based theorem-proving methods for selected domains such as plane geometry, symbolic integral calculus, and propositional calculus are reviewed. Mechanical theorem-proving procedures for the first-order predicate calculus are studied in depth. Includes resolution, semantic resolution, hyper-resolution, linear resolution, and paramodulation. Applications of these procedures to areas such as proofs of program correctness, deductive question answering, problem solving, and program synthesis. Prerequisite: EECS 649 and a knowledge of mathematical logic equivalent to that supplied by EECS 210. Infrequently offered. LEC.

EECS 738. Machine Learning. 3 Hours.
“Machine learning is the study of computer algorithms that improve automatically through experience” (Tom Mitchell). This course introduces basic concepts and algorithms in machine learning. A variety of topics such as Bayesian decision theory, dimensionality reduction, clustering, neural networks, hidden Markov models, combining multiple learners, reinforcement learning, Bayesian learning etc. will be covered. Prerequisite: Graduate standing in CS or CoE or consent of instructor. LEC.

EECS 739. Scientific Parallel Computing. 3 Hours.
This course is concerned with the application of parallel processing to problems in the natural sciences and engineering. State-of-the-art computing methodologies are studied along with contemporary applications. The course takes a performance-oriented applied approach, with attention to parallel algorithms, parallel architecture, compilation issues, and system evaluation. Prerequisite: Graduate standing or consent of instructor and experience with C, C++, or FORTRAN. LEC.

EECS 740. Digital Image Processing. 3 Hours.
This course gives a hands-on introduction to the fundamentals of digital image processing. Topics include: image formation, image transforms, image enhancement, image restoration, image reconstruction, image compression, and image segmentation. Prerequisite: EECS 672 or EECS 744. LEC.

EECS 741. Computer Vision. 3 Hours.
This course gives a hands-on introduction to the fundamentals of computer vision. Topics include: image formation, edge detection, image segmentation, line-drawing interpretation, shape from shading, texture
analysis, stereo imaging, motion analysis, shape representation, object recognition. Prerequisite: EECS 672 or EECS 744. LEC.

**EECS 742. Static Analysis. 3 Hours.**
This course presents an introduction to techniques for statically analyzing programs. Converge includes theoretical analysis, definition and implementation of data flow analysis, control flow analysis, abstract interpretation, and type and effects systems. The course presents both the underlying definitions and pragmatic implementation of these systems. Prerequisite: EECS 665 or EECS 662 or equivalent. LEC.

**EECS 743. Advanced Computer Architecture. 3 Hours.**
This course will focus on the emerging technologies to build high-performance, low-power, and resilient microprocessors. Topics include multiprocessing, reliability-and-variability-aware computer architecture designs, energy-efficient computer systems, on-chip networks, 3D microprocessor designs, general-purpose computation on graphics processing units, and non-volatile computer memory. The course responds to VLSI technologies ability to provide increasing numbers of transistors and clock speeds to allow computer architects to build powerful microprocessors and computer systems and the challenges (e.g., resilience, energy-efficiency) that the growth in microprocessor performance is facing from the aggressive technology scaling. Prerequisite: EECS 643 or EECS 645, or equivalent. A good understanding of C/C++ and having basic Unix/Linux skills is required. LEC.

**EECS 744. Communications and Radar Digital Signal Processing. 3 Hours.**
The application of DSP techniques to specialized communications and radar signal processing subsystems. Topics include A-D converters, specialized digital filters, software receiver systems, adaptive subsystems and timing. Prerequisite: An undergraduate course in DSP such as EECS 644. LEC.

**EECS 745. Implementation of Networks. 3 Hours.**
EECS 745 is a laboratory-focused implementation of networks. Topics include direct link networks (encoding, framing, error detection, reliable transmission, SONET, FDDI, network adapters, Ethernet, 802.11 wireless networks); packet and cell switching (ATM, switching hardware, bridges and extended LANs); internetworking (Internet concepts, IPv6, multicast, naming/DNS); end-to-end protocols (UDP, TCP, APIs and sockets, RPCs, performance); end-to-end data (presentation formatting, data compression, security); congestion control (queueing disciplines, TCP congestion control and congestion avoidance); high-speed networking (issues, services, experiences); voice over IP (peer-to-peer calling, call managers, call signalling, PBX and call attendant functionality). Prerequisite: EECS 563 or EECS 780. LEC.

**EECS 746. Database Systems. 3 Hours.**
Introduction to the concept of databases and their operations. Basic database concepts, architectures, and data storage structures and indexing. Though other architectures are discussed, focus is on relational databases and the SQL retrieval language. Normalization, functional dependencies, and multivalued dependencies also covered. Culminates in the design and implementation of a simple database with a web interface. Prerequisite: EECS 448 or consent of instructor. Students cannot receive credit for both EECS 647 and EECS 746. LEC.

**EECS 747. Mobile Robotics. 3 Hours.**
Design, construction, and programming of mobile robots. Topics include computational hardware, designing and prototyping, sensors, mechanics, motors, power, robot programming, robot design principles, and current research in mobile robotics. Prerequisite: Knowledge of at least one modern programming language. LEC.

**EECS 749. Knowledge Based Systems. 3 Hours.**
General concepts of intelligent problem solving, rule-based systems, distributed AI, reasoning under uncertainty, case-based reasoning, subsymbolic techniques. Prerequisite: At least one class in Artificial Intelligence. LEC.

**EECS 750. Advanced Operating Systems. 3 Hours.**
In this course, we will study advanced topics in operating systems for modern hardware platforms. The topics include: multicore CPU scheduling, cache and DRAM management, flash-based storage systems and I/O management, power/energy management, and cloud systems. We will discuss classical and recent papers in each of these topics. We will also study advanced resource management capabilities in recent Linux kernels. The course will consist of lectures, student presentations, and a term project. Prerequisite: EECS 678. LEC.

**EECS 753. Embedded and Real Time Computer Systems. 3 Hours.**
This course will cover emerging and proposed techniques and issues in embedded and real time computer systems. Topics will include new paradigms, enabling technologies, and challenges resulting from emerging application domains. Prerequisite: EECS 645 and EECS 678. LEC.

**EECS 755. Software Modeling and Analysis. 3 Hours.**
Modern techniques for modeling and analyzing software systems. Course coverage concentrates on pragmatic, formal modeling techniques that support predictive analysis. Topics include formal modeling, static analysis, and formal analysis using model checking and theorem proving systems. Prerequisite: EECS 368 or equivalent. LEC.

**EECS 761. Programming Paradigms. 3 Hours.**
An investigation of alternative programming paradigms and their representative effect on programming expressiveness and style. Emphasis is on a comparative understanding of a spectrum of programming paradigms, with some facility in the use of at least one typical language representative of each paradigm studied. The course will review and investigate as appropriate imperative, functional, object-oriented, parallel, and logical programming paradigms, plus additional paradigms as relevant. Prerequisite: EECS 662 or equivalent, or consent of instructor. LEC.

**EECS 762. Programming Language Foundation I. 3 Hours.**
This course presents a basic introduction to the semantics of programming languages. The presentation begins with basic lambda calculus and mechanisms for evaluating lambda calculus terms. Types are introduced in the form of simply typed lambda calculus and techniques for type inference and defining type systems are presented. Finally, techniques for using lambda calculus to define, evaluate and type check common programming language constructs are presented. Prerequisite: EECS 662 or equivalent. LEC.

**EECS 763. Introduction to Multiprocessor Systems on Chip. 3 Hours.**
This course covers the latest trends in advanced computer architecture for multiprocessor systems on chip for embedded and real time systems (MPSoC). Topics covered include multicore architectures, modeling abstractions, run time systems, and Hw/Sw co-design techniques. Prerequisite: EECS 678 and EECS 645 or equivalents. LEC.

**EECS 764. Analysis of Algorithms. 3 Hours.**
Models of computations and performance measures; asymptotic analysis of algorithms; basic design paradigms including divide-and-conquer, dynamic programming, backtracking, branch-and-bound, greedy method and heuristics; design and analysis of approximation algorithms; lower bound theory; polynomial transformation and the theory of NP-Completeness; additional topics may be selected from arithmetic.
complexity, graph algorithms, string matching, and other combinatorial problems. Prerequisite: EECS 660 or equivalent. LEC.

EECS 765. Introduction to Cryptography and Computer Security. 3 Hours.
Comprehensive coverage to the fundamentals of cryptography and computer and communication security. This course serves as the first graduate level security course, which introduces the core concepts, theories, algorithms and protocols in computer and communication security, and also prepares students for advanced security courses. This course first covers the mathematical foundation of cryptography and its applications in computer security. The course also covers a wide range of topics: information and database security, software and computer systems security, network security, Internet and web security. Prerequisite: EECS 678 and EECS 563 or EECS 780, or the instructor's approval. LEC.

EECS 766. Resource Sharing for Broadband Access Networks. 3 Hours.
Connections between network customers and the network come in many forms, wireless data systems, e.g., IEEE 802.16, wireless cellular systems, e.g. 3G, coax cable networks, e.g., DOSCIS, fiber optic communications systems, e.g., EPON, copper twisted pair, e.g., DSL, and powerline communications systems. All of these systems use various resource sharing strategies. The resource sharing strategy is matched to the necessities of specific systems as well as their operating environments. There are commonalities between these strategies as well as differences. This course will look at resource sharing from a general perspective and then examine specific systems to underscore their commonalities and differences. Systems to be studied in detail include, DOSCIS, IEEE 802.16-Wi-Max, WCDMA, HSDPA/HSUPA, EV-DO, EPON, ZigBee/IEEE 802.15.4, powerline networks. The use of cognitive radio communications technologies in future access networks will be introduced. Prerequisite: EECS 461 and EECS 563 or EECS 780. LEC.

EECS 767. Information Retrieval. 3 Hours.
This class introduces algorithms and applications for retrieving information from large document repositories, including the Web. Topics span from classic information retrieval methods for text documents and databases, to recent developments in Web search, including: text algorithms, indexing, probabilistic modeling, performance evaluation, web structures, link analysis, multimedia information retrieval, social network analysis. Prerequisite: EECS 647 or permission of instructor. LEC.

EECS 768. Virtual Machines. 3 Hours.
Understand the fundamental principles and advanced implementation aspects of key virtual machine concepts. Topics include principles of virtualization, binary translation, process and system level virtual machines, JIT compilation and optimizations in managed environments, garbage collection, virtual machine implementation issues, and virtual machine security. Includes in-depth coverage of the latest developments and research issues in the field of virtual machines. Prerequisite: EECS 665 and either EECS 643 or EECS 645 or consent of instructor. LEC.

EECS 769. Information Theory. 3 Hours.
Information theory is the science of operations on data such as compression, storage, and communication. It is one of the few scientific fields fortunate enough to have an identifiable beginning - Claude Shannon's 1948 paper. The main topics of mutual information, entropy, and relative entropy are essential for students, researchers, and practitioners in such diverse fields as communications, data compression, statistical signal processing, neuroscience, and machine learning. The topics covered in this course include mathematical definitions and properties of information, mutual information, source coding theorem, lossless compression of data, optimal lossless coding, noisy communication channels, channel coding theorem, the source channel separation theorem, multiple access channels, broadcast channels, Gaussian noise, time-varying channels, and network information theory. Prerequisite: EECS 461 or an equivalent undergraduate probability course. LEC.

EECS 773. Advanced Graphics. 3 Hours.
Advanced topics in graphics and graphics systems. Topics at the state of the art are typically selected from: photorealistic rendering; physically-based lighting models; ray tracing; radiosity; physically-based modeling and rendering; animation; general texture mapping techniques; point-based graphics; collaborative techniques; and others. Prerequisite: EECS 672 or permission of instructor. LEC.

EECS 777. Functional Programming and Domain Specific Languages. 3 Hours.
An introduction to functional programming. Topics include learning how to program in Haskell; IO and purity in software engineering; functional data structures and algorithms; monads and applicative functors; parsing combinators; Domain Specific Languages (DSLs) and DSL construction; advanced type systems; making assurance arguments; testing and debugging. Prerequisite: EECS 368 or equivalent or consent of instructor. LEC.

EECS 778. Communication Networks. 3 Hours.
Comprehensive in-depth coverage to communication networks with emphasis on the Internet and the PSTN (wired and wireless). Extensive coverage of protocols and algorithms will be presented at all levels, including: social networking, overlay networks, client/server and peer-to-peer applications; session control; transport protocols, the end-to-end arguments and end-to-end congestion control; network architecture, forwarding, routing, signaling, addressing, and traffic management; quality of service, queuing and multimedia applications; LAN architecture, link protocols, access networks and MAC algorithms; physical media characteristics and coding; network security and information assurance; network management. Prerequisite: EECS 563 or equivalent or permission of instructor. LEC.

EECS 781. Numerical Analysis I. 3 Hours.
Finite and divided differences. Interpolation, numerical differentiation, and integration. Gaussian quadrature. Numerical integration of ordinary differential equations. Curve fitting. (Same as MATH 781.) Prerequisite: MATH 320 and knowledge of a programming language. LEC.

EECS 782. Numerical Analysis II. 3 Hours.
determination of eigenvectors and eigenvalues. Solution of nonlinear equations. (Same as MATH 782). Prerequisite: EECS 781. LEC.

EECS 800. Special Topics: ____. 1-5 Hours.
Advanced courses on special topics of current interest in electrical engineering, computer engineering, or computer science, given as the need arises. May be repeated for additional credit. Prerequisite: Variable. LEC.

EECS 801. Directed Graduate Readings. 1-3 Hours.
Graduate level directed readings on a topic in electrical engineering, computer engineering, or computer science, mutually agreed-on by the student and instructor. May be repeated for credit on another topic. Prerequisite: Consent of instructor. RSH.

EECS 802. Electrical Engineering and Computer Science Colloquium and Seminar on Professional Issues. 1 Hour.
A colloquium/seminar series in which presentation are provided on a broad variety of scholarly and professional topics. Topics related to the issues of responsible scholarship in the fields of computing and electrical engineering will be discussed. Student are also required to attend a series of colloquia and submit written reports. Course will be graded Satisfactory/Fail and is required for all EECS graduate students. Prerequisite: Graduate standing in the EECS Department. LEC.

EECS 810. Software Engineering and Management. 3 Hours.
Principal concepts in software engineering with a focus on formalism as well as managerial issues; software development models; software process models; software configuration management; software development life cycle activities; project management; planning and estimation; requirements engineering, software architecture, software modular design; software reusability; implementation strategies; testing techniques; software quality assurance; software evolution; metrics and measurements, ethics and professionalism. Prerequisite: Programming experience, preferably in Java or C++. LEC.

EECS 811. IT Project Management. 3 Hours.
Management issues in the creation, development, and maintenance of IT systems; effort and cost estimation techniques; project planning and scheduling; resource allocation; risk analysis and mitigation techniques; quality assurance; project administration; configuration management; organizational issues; software process modeling; process improvement; frameworks for quality software. LEC.

EECS 812. Software Requirements Engineering. 3 Hours.
Objectives, processes, and activities of requirements engineering and requirements management; characteristics of good requirements; types of requirements; managing changing requirements; languages, notations, and methodologies; formal and semi-formal methods of presenting and validating the requirements; requirements standards; traceability issues. Prerequisite: EECS 810. LEC.

EECS 814. Software Quality Assurance. 3 Hours.
Software quality engineering as an integral facet of development from requirements through delivery and maintenance; verification and validation techniques; manual and automated static analysis techniques; fundamental concepts in software testing; test case selection strategies such as black-box testing, white-box testing; formal verification; unit, integration, system, and acceptance testing; regression testing; designing for testability; models for quality assurance; reviews, inspection, documentation, and standards; industry and government standards for quality. Prerequisite: EECS 810. LEC.

EECS 816. Object-Oriented Software Development. 3 Hours.
Abstract data types, objects and classes, class associations, modeling with objects, domain modeling, use case modeling, interactive and incremental development, object-oriented analysis and design, components, frameworks, UML and Unified Process, reusability, design patterns, object management, and CORBA. Prerequisite: EECS 810. LEC.

EECS 818. Software Architecture. 3 Hours.
Designing architectures; software architectural styles and patterns; architectural components and connectors; architectural modeling and analysis, architectural deployment, designing for nonfunctional properties such as efficiency, scalability, adaptability, and security; domain-specific software architectures; architecture product lines; architecture description languages (ADLs); standards. Prerequisite: EECS 810. LEC.

EECS 819. Cryptography. 3 Hours.
Introduction to the mathematical background, basic concepts, components, and protocols to enforce secrecy, integrity, and privacy through cryptographic mechanisms. The concept of symmetric and asymmetric encryption, integrity verification, authentication, key establishment and update, and authorization. Emphasis on the design of protocols that apply and integrate various modules to achieve safety objectives: time-stamping, digital signature, bit commitment, fair coin-flip, zero knowledge proof, oblivious transfer, and digital cash. The policies for key generation and management, information storage and access control, legal issues, and design of protocols for real applications. Prerequisite: EECS 765. LEC.

EECS 820. Advanced Electromagnetics. 3 Hours.
A theorem-based approach to solving Maxwell's equations for modeling electromagnetic problems encountered in microwave systems, antennas, scattering. Topics include waves, source modeling, Scheinkunoff equivalence principle, scattered filed formulations, electromagnetic induction, reciprocity principles, Babinet's principle, and construction of solutions in various coordinate systems. Prerequisite: EECS 420. LEC.

EECS 823. Microwave Remote Sensing. 3 Hours.
Description and analysis of basic microwave remote sensing systems including radars and radiometers as well as the scattering and emission properties of natural targets. Topics covered include plane wave propagation, antennas, radiometers, atmospheric effects, radars, calibrated systems, and remote sensing applications. Prerequisite: EECS 420 and EECS 622. LEC.

EECS 824. Microwave Remote Sensing II. 3 Hours.
Description and analysis of basic microwave remote sensing systems including radars and radiometers as well as the scattering and emission properties of natural targets. Topics covered include measurement and discrimination, real-aperture side-looking airborne radars, synthetic-aperture side-looking airborne radar systems, scattering measurements, physical mechanisms and empirical models for scattering and emission. Prerequisite: EECS 823. LEC.

EECS 825. Radar Systems. 3 Hours.
Description and analysis of radars of various types. Resolution in angle, range, and speed. Ambiguities. Return from point and area targets. Detection in the presence of noise and fading. Tracking and MTI. Amplitude measurement. Imaging radars. Prerequisite: EECS 360, EECS 420, and EECS 461. LEC.

EECS 828. Advanced Fiber-Optic Communications. 3 Hours.
An advanced course in fiber-optic communications. The course will focus on various important aspects and applications of modern fiber-optic communications, ranging from photonic devices to systems and networks. Topics include: advanced semiconductor laser devices, external optical modulators, optical amplifiers, optical fiber nonlinearities and their impact in WDM and TDM optical systems, polarization effect in fiber-optic systems, optical receivers and high-speed optical system performance
evaluation, optical solution systems, lightweight analog video transmission, SONET ATM optical networking, and advanced multi-access lightweight networks. Prerequisite: EECS 628 or equivalent. LEC.

EECS 830. Advanced Artificial Intelligence. 3 Hours.
A detailed examination of computer programs and techniques that manifest intelligent behavior, with examples drawn from current literature. The nature of intelligence and intelligent behavior. Development of, improvement to, extension of, and generalization from artificially intelligent systems, such as theorem-provers, pattern recognizers, language analyzers, problem-solvers, question answerers, decision-makers, planners, and learners. Prerequisite: Graduate standing in the EECS department or Cognitive Science or permission of the instructor. LEC.

EECS 831. Introduction to Systems Biology. 3 Hours.
This course provides an introduction to systems biology. It covers computational analysis of biological systems with a focus on computational tools and databases. Topics include: basic cell biology, cancer gene annotation, micro RNA identification, Single Nucleotide Polymorphism (SNP) analysis, genetic marker identification, protein-DNA interaction, computational Neurology, vaccine design, cancer drug development, and computational development biology. Prerequisite: Introduction to Bioinformatics equivalent to EECS 730, or consent of instructor. LEC.

EECS 833. Neural Networks and Fuzzy Systems. 3 Hours.
Fundamental theory of adaptive systems. Evolution of artificial neural networks and training algorithms. Pattern classification, function approximation, and system optimization. Introduction to fuzzy set theory and neuro-fuzzy models for pattern classification. Application of neural networks in signal and image processing problems. Pattern classification for biological systems. Prerequisite: Graduate standing in the EECS department or permission of instructor. LEC.

EECS 835. Protein Bioinformatics. 3 Hours.
This course emphasizes the applications of computational algorithms to main problems in protein bioinformatics and molecular biology. A variety of topics, including protein sequence alignments, profiles and protein structure classification and prediction, will be either introduced briefly or discussed in detail. Students will be asked to present some selected research papers. Prerequisite: EECS 730. LEC.

EECS 837. Data Mining. 3 Hours.
Extracting data from data bases to data warehouses. Preprocessing of data: handling incomplete, uncertain, and vague data sets. Discretization methods. Methodology of learning from examples: rules of generalization, control strategies. Typical learning systems: ID3, AQ, C4.5, and LERS. Validation of knowledge. Visualization of knowledge bases. Data mining under uncertainty, using approaches based on probability theory, fuzzy set theory, and rough set theory. Prerequisite: Graduate standing in CS or CoE or consent of instructor. LEC.

EECS 838. Applications of Machine Learning in Bioinformatics. 3 Hours.
This course is introduction to the application of machine learning methods in bioinformatics. Major subjects include: biological sequence analysis, microarray interpretation, protein interaction analysis, and biological network analysis. Common biological and biomedical data types and related databases will also be introduced. Students will be asked to present some selected research papers. Prerequisite: EECS 730 and EECS 738. LEC.

EECS 839. Mining Special Data. 3 Hours.
Problems associated with mining incomplete and numerical data. The MLEM2 algorithm for rule induction directly from incomplete and numerical data. Association analysis and the Apriori algorithm. KNN and other statistical methods. Mining financial data sets. Problems associated with imbalanced data sets and temporal data. Mining medical and biological data sets. Induction of rule generations. Validation of data mining: sensitivity, specificity, and ROC analysis. Prerequisite: Graduate standing in CS or CoE or consent of instructor. LEC.

EECS 841. Computer Vision. 3 Hours.
The objective of this course is to give students a hands-on introduction to the fundamentals of computer vision. Topics include: Image Formation, Image Segmentation, Binary Image Analysis, Edge Detection, Line Drawing Interpretation, Shape from Shading, Motion Analysis, Stereo, Shape Representation, and Object Recognition. The objective of this course is to give students a hands-on introduction to the fundamentals of computer vision. Prerequisite: EECS 740 or equivalent. LEC.

EECS 843. Programming Language Foundation II. 3 Hours.
This course presents advanced topics in programming language semantics. Fixed point types are presented followed by classes of polymorphism and their semantics. System F and type variables are presented along with universal and existential types. The lambda cube is introduced along with advanced forms of polymorphism. Several interpreters are developed implementing various type systems and associated type inference algorithms. Prerequisite: EECS 762. LEC.

EECS 844. Adaptive Signal Processing. 3 Hours.
This course presents the theory and application of adaptive signal processing. Topics include adaptive filtering, mathematics for advanced signal processing, cost function modeling and optimization, signal processing algorithms for optimum filtering, array processing, linear prediction, interference cancellation, power spectrum estimation, steepest descent, and iterative algorithms. Prerequisite: EECS 861 and background in fundamental signal processing (such as EECS 644.) LEC.

EECS 861. Random Signals and Noise. 3 Hours.
Fundamental concepts in random variables, random process models, power spectral density. Application of random process models in the analysis and design of signal processing systems, communication systems and networks. Emphasis on signal detection, estimation, and analysis of queues. This course is a prerequisite for most of the graduate level courses in radar signal processing, communication systems and networks. Prerequisite: An undergraduate course in probability and statistics, and signal processing. LEC.

EECS 862. Principles of Digital Communication Systems. 3 Hours.
A study of communication systems using noisy channels. Principal topics are: information and channel capacity, baseband data transmission, digital carrier modulation, error control coding, and digital transmission of analog signals. The course includes a laboratory/computer aided design component integrated into the study of digital communication systems. Prerequisite: EECS 562. Corequisite: EECS 861. LEC.

EECS 863. Network Analysis, Simulation, and Measurements. 3 Hours.
Prediction of communication network performance using analysis, simulation, and measurement. Topics include: an introduction to queuing theory, application of theory to prediction of communication network and protocol performance, and analysis of scheduling mechanisms. Modeling communication networks using analytic and simulation approaches, model verification and validation through analysis and measurement, and deriving statistically significant results. Analysis, simulation, and measurement tools will be discussed. Prerequisite: EECS 461 or MATH 526, and EECS 563 or EECS 780. LEC.

EECS 864. Multiwavelength Optical Networks. 3 Hours.
Introduce methodologies for multiwavelength optical network analysis, design, control, and survivability. The focus of the course is formulating
the problem in the design of optical networks and studying several design methodologies. The control and management of optical networks are introduced as well as related protocols. Prerequisite: EECS 563 and EECS 780. LEC.

EECS 865. Wireless Communication Systems. 3 Hours.
The theory and practice of the engineering of wireless telecommunication systems. Topics include cellular principles, mobile radio propagation (including indoor and outdoor channels), radio link calculations, fading (including Rayleigh, Rician, and other models), packet radio, equalization, diversity, error correction coding, spread spectrum, multiple access techniques (including time, frequency, and code), and wireless networking. Current topics of interest will be covered. Corequisite: EECS 861. LEC.

EECS 866. Network Security. 3 Hours.
This course provides in-depth coverage on the concepts, principles, and mechanisms in network security and secure distributed systems. The topics that will be covered include: network security primitives, risks and vulnerabilities, authentication, key management, network attacks and defense, secure communication protocols, intrusion detection, exploit defenses, traffic monitoring and analysis, and privacy mechanisms. Prerequisite: EECS 765 and EECS 563 or EECS 780, or the instructor's approval. LEC.

EECS 869. Error Control Coding. 3 Hours.
A study of communication channels and the coding problem. An introduction to finite fields and linear block codes such as cyclic, Hamming, Golay, BCH, and Reed-Solomon. Convolutional codes and the Viterbi algorithm are also covered. Other topics include trellis coded modulation, iterative (turbo) codes, LDPC codes. Prerequisite: EECS: 562 or equivalent. LEC.

EECS 876. Advanced Topics in Functional Languages. 3 Hours.
Topics may include: type classes; concurrency and STMs; the IO and ST monads; template Haskell and quasi-quoting; precise data structures; tools and testing support; generics; grammarware and parsing; operational Haskell; compiling functional languages; correctness by construction; GADTs and dependent types; Rank-2 polymorphism and recursion schemes; tools and testing support; generics; grammarware and parsing; operational Haskell; compiling functional languages; correctness by construction; GADTs and dependent types; Rank-2 polymorphism and Rank-n polymorphism. Prerequisite: EECS 776 or equivalent or consent of instructor. LEC.

EECS 881. High-Performance Networking. 3 Hours.
Comprehensive coverage of the discipline of high-bandwidth low-latency networks and communication, including high bandwidth x-delay products, with an emphasis on principles, architecture, protocols, and system design. Topics include high-performance network architecture, control, and signalling; high-speed wired, optical, and wireless links; fast packet, IP, and optical switching; IP lookup, classification, and scheduling; network processors, end system design and protocol optimization, network interfaces; storage networks; end-to-end protocols, mechanisms, and optimizations; and high-bandwidth low-latency applications. Principles will be illustrated with many leading-edge and emerging protocols and architectures. Prerequisite: EECS 563 or EECS 780, or permission of the instructor. LEC.

EECS 882. Mobile Wireless Networking. 3 Hours.
Comprehensive coverage of the disciplines of mobile and wireless networking, with an emphasis on architecture and protocols. Topics include cellular telephony, MAC algorithms, wireless PANs, LANs, MANs, and WANS; wireless and mobile Internet; mobile ad hoc networking; mobility management, sensor networks; satellite networks; and ubiquitous computing. Prerequisite: EECS 563 or EECS 780, or permission of the instructor. LEC.

EECS 888. Internet Routing Architectures. 3 Hours.
A detailed study of routing in IP networks. Topics include evolution of the Internet architecture, IP services and network characteristics, an overview of routing protocols, the details of common interior routing protocols and interdomain routing protocols, and the relationship between routing protocols and the implementation of policy. Issues will be illustrated through laboratories based on common routing platforms. Prerequisite: EECS 745. LEC.

EECS 891. Graduate Problems. 1-5 Hours.
Directed studies of advanced phases of electrical engineering, computer engineering, computer science or information technology not covered in regular graduate courses, including advanced laboratory work, special research, or library reading. Prerequisite: Consent of instructor. RSH.

EECS 899. Master's Thesis or Report. 1-6 Hours.
THE.

EECS 900. Seminar. 0.5-3 Hours.
Group discussions of selected topics and reports on the progress of original investigations. Prerequisite: Consent of instructor. LEC.

EECS 929. Electromagnetic Propagation and Scattering in Random Media. 3 Hours.
Polarimetric plane-wave propagation, including the complex propagation matrix and Stokes vector representation. Electromagnetic scattering, including the scattering matrix, Mueller matrix, scattering cross-section, absorption cross-section, extinction cross-section, Mie scattering, and Rayleigh scattering. Volume scattering in random media, including the Born approximation, Rayleigh scattering statistics, multiple scattering mechanisms, Radiative transfer theory, and volume scattering above a dielectric half-space. Propagation through random media, including the extinction coefficient, the optical theorem, and the distorted Born approximation. Scattering from rough surfaces, including the Kirchhoff, Physical Optics and small-perturbation models. Prerequisite: EECS 720. LEC.

EECS 940. Theoretic Foundation of Data Science. 3 Hours.
A review of statistical and mathematical principles that are utilized in data mining and machine learning research. Covered topics include asymptotic analysis of parameter estimation, sufficient statistics, model selection, information geometry, function approximation and Hilbert spaces. Prerequisite: EECS 738, EECS 837, EECS 844 or equivalent. LEC.

EECS 955. Theoretical Foundations of Software Construction. 3 Hours.
This course presents the mathematical basis for software that is correct-by-construction. Students will learn basic mathematical techniques for representing, composing and refining software specifications and how they are realized in software systems. Prerequisite: EECS 762 or EECS 755. LEC.

EECS 965. Detection and Estimation Theory. 3 Hours.
Detection of signals in the presence of noise and estimation of signal parameters. Narrowband signals, multiple observations, signal detectability and sequential detection. Theoretical structure and performance of the receiver. Prerequisite: EECS 861. LEC.

EECS 967. Mathematical Optimization with Communications Applications. 3 Hours.
A mathematical study of the minimization (or maximization) of functions. The course provides an introduction to the mathematical theory and application of a variety of optimization techniques, with an emphasis on applications related to communication systems. Optimization problem formulation. Unconstrained and constrained minimization, including
conditions for optimal points. Specific techniques for solving linear and nonlinear programming problems. Convergence of algorithms. LEC.

EECS 983. Resilient and Survivable Networking. 3 Hours.
Graduate research seminar that provides an overview of the emerging field of resilient, survivable, disruption-tolerant, and challenged networks. These networks aim to remain operational and provide an acceptable level of service in the face of a number of challenges including: natural faults of network components; failures due to misconfiguration or operational errors; attacks against the network hardware, software, or protocol infrastructure; large-scale natural disasters; unpredictably long delay paths either due to length (e.g., satellite and interplanetary) or as a result of episodic connectivity; weak and episodic connectivity and asymmetry of wireless channels; high-mobility of nodes and subnetworks; unusual traffic load (e.g., flash crowds). Multi-level solutions that span all protocol layers, planes, and parts of the network will be systematically and systematically covered. In addition to lectures, students read and present summaries of research papers and execute a project. Prerequisite: EECS 780; previous experience in simulation desirable. LEC.

EECS 998. Post-Master's Research. 1-6 Hours.
RSH.

EECS 999. Doctoral Dissertation. 1-12 Hours.
THE.

IT 310. Computer Organization and Platform Technologies. 3 Hours.
Machine-level representation of data, digital logic and digital systems, computer architecture and organization, computing infrastructure, introduction to multiprocessors systems, firmware, software and hardware integration, introduction to intersystems communications, enterprise deployment, network administration, deployment, security management, network administration, backup management and disaster recovery, resource management, automation management, operating systems and Web domain management, operating systems and application version control management. A laboratory component will provide hands-on experience with system and network administration. Prerequisite: Knowledge of Linux/Unix operating systems, IT 310, and upper-level IT eligibility. LEC.

IT 330. Web Systems and Technologies. 3 Hours.
The objective of this course is to discuss how the Web systems are programmed and maintained and how online pages are created and delivered by Web servers and used by clients. Topics to be covered include: Unix and Windows operating systems installation, configuration, and maintenance, server administration and management, client and server services, user and group management and support, software systems installation and configuration, content management and deployment, security management, network administration, backup management and disaster recovery, resource management, automation management, operating systems and Web domain management, operating systems and application version control management. A laboratory component will provide hands-on experience with system and network administration. Prerequisite: Knowledge of Linux/Unix operating systems, IT 310, and upper-level IT eligibility. LEC.

IT 340. Computer and Information Security. 3 Hours.
Fundamentals of computer security, security mechanisms, information states, security attacks, threat analysis models, vulnerability analysis models, introduction to cryptography, authentication, intrusion detection, intrusion prevention (firewalls), operating systems security, database security, software security, host hardening, incident and disaster response. Prerequisite: Upper-level IT eligibility. LEC.

IT 342. Information Security Management. 3 Hours.
The objective of this course is to present topics related to the administration and management of information security. Topics to be covered include: security fundamentals, operational issues, cost-benefit analysis, asset management, security risk management, security policies and enforcement, risk avoidance, risk prevention, risk transfer, security services, security forensics, contingency planning, security auditing. A laboratory component will provide hands-on experience with security management and administration. Prerequisite: IT 340 and upper-level IT eligibility. LEC.

IT 399. Directed Reading in IT. 1-4 Hours.
Reading under the supervision of an instructor on a topic in Information Technology. The topic, expected outcome, evaluation criteria, and the number of credit hours must be mutually agreed upon by the student and the instructor. Course may not be used to fulfill major elective requirements. Consent of the department required for enrollment. Prerequisite: Consent of instructor and upper-level IT eligibility. LEC.

IT 410. Software Engineering and Management. 3 Hours.
This course introduces the software development life cycle and key concepts related to software engineering. Topics include software process models, software project management, software requirements engineering, formal and informal modeling, software architecture, software design, coding and implementation, software testing and quality assurance, software deployment, and software evolution. Additional topics such as software metrics and measures, application domains, software engineering standards, and software configuration management will also be presented. This is a project-driven course. Prerequisite: Knowledge of programming (comparable to EECS 288), SAD 402, and MATH 365, and upper-level IT eligibility. LEC.

IT 414. Database Design. 3 Hours.
The objective of this course is to present key concepts related to database design and implementation. Topics to be discussed include: database architecture, relational data model, SQL, database design life cycle, conceptual data modeling, relational database normalization, query processing, transaction processing, database security, and database administration. This is a project-driven course. Prerequisite: IT 310, senior standing, and upper-level IT eligibility. LEC.

IT 416. System Integration and Architecture. 3 Hours.
This course introduces system integration and architecture. Key concepts to be presented include: system architecture, system requirements, organizational context, acquisition and sourcing, system and component integration, middleware platforms, design patterns, integrative coding, scripting coding, testing and quality assurance, system deployment. Prerequisite: IT 410. LEC.

IT 420. Operating Systems. 3 Hours.
This course introduces operating systems principles and associated key concepts. Topics to be discussed include: processes and threads, concurrency, scheduling and dispatch, memory management, processor management, device management, security and protection, file system, disk scheduling, real-time and embedded systems, fault tolerance, scripting, and an introduction to virtualization. Prerequisite: MATH 365, IT 320, and IT 342, and upper-level IT eligibility. LEC.

IT 422. Computer Networks. 3 Hours.
Foundations of computer networking with practical applications and network administration, with emphasis on the Internet and wireless public switched telephone network. Topics to be covered include routing and switching, routing algorithms, physical layer, data link layer, network
layer, network security, network management, and application areas. Prerequisite: IT 320. LEC.

IT 424. Network Security. 3 Hours. This course covers the fundamental concepts, principles, and mechanisms in network and distributed system security. The topics that will be covered include: network security primitives, distributed authentication, key management, secure communication protocols, firewalls, intrusion detection, traffic monitoring and analysis, email and Web security, etc. Prerequisite: IT 340, IT 422, and senior standing. LEC.

IT 430. Human-Computer Interaction. 3 Hours. This course introduces principles of human-computer interaction. Important topics to be presented include: human factors, human-centered design and evaluation, graphical user interfaces, multimedia system integration, interactive systems development, computer-supported cooperative work, human cognitive skills, accessibility, alternative input/output media, and emerging technologies. Prerequisite: Consent of the instructor. LEC.

IT 450. Social and Professional Issues. 3 Hours. AE51. This course will provide an overview of the history of computing and presents key concepts related to the social and professional aspects of IT. Topics to be covered include: pervasive themes in IT, social context of computing, intellectual property, legal issues in computing, professional and ethical issues and responsibilities, privacy and civil liberties. Prerequisite: Consent of the instructor. LEC.

IT 452. Special Topics in IT: ______. 3 Hours. This course introduces a special topic of current interest in information technology, offered as the need arises. May be repeated for additional credit. Prerequisite: Upper-level IT eligibility and consent of instructor. LEC.

IT 490. IT Capstone I. 3 Hours. AE61. Capstone is a senior level course designed to allow a student to review, analyze, integrate, and apply technical knowledge in a meaningful and practical manner. The student will be expected to complete an approved academic project in IT that may be in collaboration with an industrial partner. Prerequisite: Senior standing. LEC.

IT 492. IT Capstone II. 3 Hours. IT Capstone II is a continuation of IT Capstone, is a senior level course designed to allow a student to review, analyze, integrate, and apply technical knowledge in a meaningful and practical manner. The student will be expected to complete an approved academic project in IT that may be in collaboration with an industrial partner. Prerequisite: Senior standing. LEC.

Engineering Management Courses

EMGT 608. Principles of Engineering Management. 3 Hours. A study of the principles used by the engineer in managing a technology-based enterprise. Topics include planning, organizing, staffing, directing, and controlling. Prerequisite: Senior or graduate standing in an engineering curriculum or consent of the instructor. LEC.

EMGT 800. Special Topics in Engineering Management. 1-4 Hours. Advanced or experimental work of a specialized nature representing unique or changing needs and resources in engineering management. RSH.

EMGT 801. Management Theory and Practice for Engineering Managers. 3 Hours. This course is intended to introduce the student to the basic concepts of management and motivation for the engineering manager and general behavior of technical organizations. This course presents a history of the schools of management thought through the modern research that began the participative management movement. The course will investigate classical motivational theories and management style principles. The student will perform research to determine how their employer or clients apply these theories. LEC.

EMGT 802. Statistical Analysis and Prediction of Engineering Systems. 3 Hours. Applied statistical methods to engineering systems will be introduced in this course for analyzing engineering and management systems. Emphasis will be given to applied regression analysis, analysis of variance, analysis of time dependence by smoothing, Bayes method, time series analysis, auto-regressive moving averages and forecasting model. Prerequisite: Skills in probability, statistics, and computer application. LEC.

EMGT 803. Technological Forecasting and Assessment. 3 Hours. This course focuses on the impact of technology on society. Techniques of technology forecasting such as Delphi, cross-impact analysis, trend projection, decision trees, and scenarios are discussed. Case studies of technology assessments are presented. Each student is asked to conduct a preliminary technology assessment which is a systematic study of the effects on society which may occur when a technology is introduced or modified. Prerequisite: Elementary skills in statistics, computer programming, and linear algebra. LEC.

EMGT 804. Business Development and Marketing of Professional Services. 3 Hours. Principles and theories of business development and marketing as applicable to professional engineering and architectural practices. LEC.

EMGT 805. Management of Innovation. 3 Hours. Management of technology and technological change through innovation, imitation, and obsolescence; planning, organizing, motivation, and control for innovation; organizational climate and its effects on innovative ideas and entrepreneurship; project/product decisions and RD strategies in small and large companies; innovation in multinational corporations. LEC.

EMGT 806. Finance for Engineers. 3 Hours. A study of finance including financial planning and management in technological based organizations. Topics covered include financial statement analysis, present value of financial markets, capital budgeting, taxes, investment decisions, replacement decisions, cash flow budgets, and sources of capital. LEC.

EMGT 807. Labor and Employee Relations for the Engineering Manager. 3 Hours. This course is an introduction to labor relations and human resources, including employment practices in unionized and non-union organizations. The course will examine labor relations, human relations and collective bargaining with emphasis on the negotiation and administration of labor agreements. Included will be a survey of the historical, legal, and structural environments that influence the collective bargaining process. Research topics focus on some of the most important issues in the workplace: protecting jobs, increasing productivity, computerization, worker participation, expanding and declining labor markets, and new methods of decision making in the human resources field. LEC.

EMGT 808. Quality Management. 3 Hours. The overwhelming challenge that faces the U.S. today is the need to regain its competitive position in the world marketplace. This course offers a broad view of Quality Management in that it focuses on the managerial aspects of quality, rather than just the technical. For example, students will learn the Malcolm Baldrige award criteria which focuses on leadership, data analysis, human resources, quality assurance, quality results, and customer satisfaction. In addition, a review of the theory
and approaches of the major quality leaders such as Deming, Juran, and Crosby will be covered. Practical applications of TQM concepts in a technological environment will be stressed throughout the course. LEC.

**EMGT 809. Personal Development for the Engineering Manager. 4 Hours.**
Includes the study of theories, tests for, and objectives of engineering and management ethics. Explores personal values. Measures personality profile and preferred communication style for each student. Includes management of stress, time, and career. Each student prepares career and personal development plans. Managerial writing and communication skills are developed through weekly projects including report and proposal preparation, internal correspondence concerning praise and reprimand, and organizational policy preparation. Interpersonal and nonverbal communication styles are studied. Relies heavily on instructor-assisted peer mediation of topics after introduction of constructive techniques of interpersonal communication. LEC.

**EMGT 810. Applications of Quantitative Analysis in Decision Making. 3 Hours.**
This course emphasizes the use of general system theory, classical optimization and optimality conditions, model development, and theory and application of mathematical programming, to include: linear programming, dynamic programming, queuing models, integer and non-linear programming, and introduction to decision analysis. Prerequisite: Elementary skills in linear algebra, probability, calculus, and computer application. LEC.

**EMGT 811. Engineering Systems Simulation. 3 Hours.**
Methods of developing, implementing, and using computer simulations for management processes such as inventory control, waiting lines, project monitoring, and capital investment decisions are covered. Extensive use is made of simulation languages and interactive graphic-supported gaming and decision analysis. Engineering systems and chemical processes are studied under deterministic and stochastic conditions. Two hours lecture, three hours laboratory per week. LEC.

**EMGT 812. Law and the Design Professional. 3 Hours.**
This course covers: legal doctrines relating to owners, design professionals, and contractors; sources of law, forms of association, and agency; contracts, including formation, rights and duties, interpretation, performance problems, disputes, and claims; standards of care and the management of construction claims; duties and obligations of the design professional, the owner, and the contractor; surety bonds and insurance. Prerequisite: Admission to graduate study in engineering or architecture. LEC.

**EMGT 813. Design Project Management in Professional Practice. 3 Hours.**
Includes planning, organizing, staffing, directing, and controlling design projects. Treats those topics from viewpoints of profit, cost control, client satisfaction, and project team human relations. Also covers delegation, motivation, team building, performance reviews, conflict resolution, and group dynamics. Presents the project manager's job from an augmented model of the Blake-Mouton grid. Prerequisite: Admission to graduate study in engineering or architecture. LEC.

**EMGT 814. Leadership Techniques and Methods for the Engineering Manager. 3 Hours.**
Leadership is a balancing act. It requires communicating a compelling vision, convincing others to buy in to that vision, and marshaling resources and talent to make it happen. This course will help new leaders master the complex art of the leadership role by improving decision making and communications, earning trust and building momentum, and inspiring and enabling others to excel. Managers are under increasing pressure to deliver better results faster than the competition. But meeting today's tough challenges requires complete mastery of a full array of management skills, form communications and coaching to public speaking and managing people. LEC.

**EMGT 818. Advanced Mathematics for the Engineering Manager. 2 Hours.**
This comprehensive math course is designed for the needs of the Engineering Manager who may need a "refresher" or to gain greater understanding of math concepts and the relationship to Engineering Management decision-making. LEC.

**EMGT 819. Advanced Mathematics for the Engineering Manager. 3 Hours.**
This math course is designed to supplement Engineering Management students’ math skill and knowledge that is relevant to both the program needs and career needs. This course begins with a higher level of trigonometry and ends with differential equations. LEC.

**EMGT 820. Engineering Systems Simulation. 3 Hours.**
A study of the economic feasibility of competing engineering projects including the application of break-even analysis, decisions under uncertainty, decision trees, stochastic models, risk vs. return, and forecasting. A study of the financial figures of merit used to evaluate competing engineering projects including the DuPont rate of return method, the accounting rate of return, the operating return method, return on equity, earnings per share, margin on sales, selling price of stock, corporate credit rating, total sales, market share, market entry, and proforma year-end statements. A study of the strategic evaluation of a project including the proposed product or service, the organization, the environment, and the venture in general. Prerequisite: Admission to the M.S. Engineering Management program or consent of instructor. EMGT 806, a course in applied statistics. LEC.

**EMGT 822. Management of Internal Engineering Projects. 3 Hours.**
The purpose of this course is to introduce the student to all aspects of managing a project within a company or organization. The entire project life cycle will be covered from inception to close-out, and many practical considerations will be discussed including material procurement, working with contractors and consultants, selecting software, and managing the project team. The course will focus on how to manage project scope, schedule budget, and resources using personal computer software. A semester project is required presenting an example of project management or investigating some aspect of project management in detail. LEC.
EMGT 824. Product Marketing for Engineering Managers. 3 Hours.
Basic principles of marketing as applicable to engineering managers in the production- or operations-based enterprise. Includes a broad overview of the major components of marketing (competition, product, price, promotion, and distribution). Also details the integration of those components into the marketing plan. The students will develop a group marketing plan for an agreed-upon product. Prerequisite: Admission to a graduate program in engineering or Pittsburgh State's technology management program. LEC.

EMGT 830. Case Studies in Engineering Management. 2-3 Hours.
A capstone course for the program which provides an integration of the material presented in the other courses through the utilization of several engineering management case studies. Note: Research paper and presentation are part of the 3 credit hour option. Prerequisite: Completion of a minimum of 21 credit hours in the Engineering Management program. LEC.

EMGT 835. Field Project (M.S.). 1-3 Hours.
A problem in engineering management, the satisfactory completion of which satisfies the project requirement for the degree of Master of Science in Engineering Management. THE.

EMGT 840. Systems Approach to Engineering. 3 Hours.
This is a first course at the graduate level introducing the formal methods and processes in bringing complex systems into being and improving existing systems. Systems include both products and services. Emphasis is placed on: the definition of customer needs, the entire life cycle of systems, and introduction to formal specification methods, the value to cost ratio and the management of the systems engineering process. LEC.

EMGT 844. Managing Software Development Projects. 3 Hours.
This course investigates the area of managing software development and presents the management process as a means of optimizing business considerations and project demands. Uncertainties in product/service specifications, technology risks, cost and delivery requirements impact the management functions. Cost and schedule estimation techniques are presented together with project planning, risk control and measurement technologies. The techniques presented in this course are directly applicable to management in other industry segments. Guest speakers are used to demonstrate applications in this course. LEC.

EMGT 848. Information Technology for Management. 3 Hours.
This course is intended to bring the student up to date on developments in the field of information technology (IT) and to prepare the student to apply those technologies in the workplace. To this end, the course is divided into two components. First, current hardware, software, and networking technologies will be presented. Topics include relational databases, object oriented design and programming, client-server technologies, the Internet, and emerging communication technologies. Second, approaches to evaluating and implementing the range of information technology alternatives available to business will be presented. Topics in this area include software development, management and evaluation, IT project management, information integrity and security, and the effects of IT on people and the organization. LEC.

EMGT 850. Environmental Issues for Engineering Managers. 3 Hours.
This course provides a survey of the environmental regulations, environmental problems, and environmental solutions that must be dealt with by engineering managers regardless of their function or industry. A historical perspective on the environment is presented followed by discussion of pollution generation (sources), transportation, fate, and effects. The quantity and quality of various types of pollutants emitted to various media and the risk posed by these pollutants is analyzed. The regulatory process is examined from the perspective of the legislator, the regulator, the regulated, the engineer, and the public. LEC.

EMGT 854. Management of Business Intelligence and Security for Strategic Planning. 3 Hours.
Management of competitive intelligence and security in business strategic planning is a first course at the graduate level that introduces the formal methods, concepts, and processes of competitive intelligence and security which are vital to both strategic business planning and day-to-day business operations. This course provides access to the tools used to identify what is happening in the business environment including legislation, economics, regulatory changes, competition, customers, etc. that affect a business' strategy and operations. Further, these tools are applied to determining what will likely happen in the future and how to use those forecasts to optimize strategic and operational plans. LEC.

EMGT 860. Special Problems in Engineering Management. 1-4 Hours.
Graduate-level investigation requiring original, independent research on problems or subjects of immediate interest to a student or faculty member. Intended to develop a student's capability in coordinating two or more of the following: technology, finance, economics, applied mathematics, and managerial communication. EMGT 860 may be repeated for credit to a maximum of four hours in the degree program. Prerequisite: Approval of an outline of the proposed project by the instructor and the program director. RSH.

EMGT 862. Manufacturing Systems Integration. 3 Hours.
This course develops the rationale and need for the integration of manufacturing systems, and deals with the multitude of practical problems involved with manufacturing systems integration. Topics covered include intelligent manufacturing subsystems and vendor-specific islands of automation, on-line and off-line information sources, and end users of information in the manufacturing enterprise. Engineering details covered include the types of communication links available between systems, communication standards, network and protocol alternatives, and hardware platform alternatives. Management concepts covered include the top-down design/bottom-up implementation approach to system integration, long-range planning and management of integration projects, reliability and security issues, and human factors. LEC.

EMGT 867. Advanced Operations Management. 3 Hours.
This course provides the student with up-to-date information of the management of manufacturing operations. Emphasis is on quantitative methods for designing and analyzing manufacturing processes, simulation of manufacturing processes, and recent paradigms in manufacturing including just-in-time production, synchronous manufacturing, and agile manufacturing. A semester project is required covering some aspect of operations management in detail. LEC.

PMGT 800. Special Topics: ____. 3 Hours.
Advanced or experimental work of specialized nature representing unique or changing needs and resources in project management. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified. LEC.

PMGT 806. Finance for Project Manager. 3 Hours.
A study of finance including financial planning and management in technological based organizations. Topics covered include financial statement analysis, present value of financial markets, capital budgeting, taxes, investment decisions, replacement decisions, cash flow budgets and sources of capital. LEC.

PMGT 809. Personal Development for Project Managers. 4 Hours.
Concepts and skills development in the primary areas of communication methods, ethical behavior, conflict resolution, workforce diversity, and continuous learning, and secondary areas of basic project and project
team contexts and related interpersonal relations. Career development is emphasized. LEC.

PMGT 816. Project Management Fundamentals I. 3 Hours.
Managerial concepts and skills development in relation to the project-oriented business environment, project lifecycle, integrated project management, project selection, and project initiation. Focus is on management of a single project. LEC.

PMGT 817. Project Management Fundamentals II. 3 Hours.
Planning concepts and skills development in relation to developing needed information on project scope, time, cost, and risk, and making direct use of such information to develop key documentation such as the project schedule and budget. Examples of specific topics considered include project work content and change, documentation, and resource requirements. Planning content is complementary to that of PMGT 818. Prerequisite: PMGT 816. LEC.

PMGT 818. Project Management Fundamentals III. 3 Hours.
Concepts and skills development in relation to planning for management of communications, human resource aspects of project team formation and development, procurement, and quality. Examples of specific topics considered include information handling, reporting, and stakeholder relationships. Planning content is complementary to that of PMGT 817. Prerequisite: PMGT 817. LEC.

PMGT 819. Project Management Fundamentals IV. 3 Hours.
Concepts and skills development in relation to project execution, including processes monitoring and controlling, and project closure. Examples of specific topics considered include handling change requests, procurement, teamwork and team development, and cost management. Course content represents systematic treatment of all aspects of project management beyond planning—but is, in project execution and closing phrases. Prerequisite: PMGT 818. LEC.

PMGT 820. Management of New Product Development Projects. 3 Hours.
This course discusses how to properly manage new product development processes using project management tools and techniques. New products are not projects until they are analyzed, planned, scheduled, budgeted, managed, and controlled by managers. It is not typically technical process issues that result in failed new product introductions, but rather a failure in their management and marketing. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, PMP Certified. LEC.

PMGT 821. Management of Consulting Projects. 3 Hours.
Application area course exposing students to specialized knowledge, standard, and regulations involved in managing consulting projects. Attention is directed to unique characteristics of consulting project environments, major project phases—from selection to closing and related management processes. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified. LEC.

PMGT 822. Management of Governmental Projects. 3 Hours.
Application area course exposing students to specialized knowledge, standards, and regulations involved in managing projects for governmental entities. Attention is directed to unique characteristics of the governmental project environments, major project phases—from selection to closing and related management processes. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified. LEC.

PMGT 823. Risk Management for Project Managers. 3 Hours.
Advanced study of risk management theory and practice as applied in managing projects. Basic concepts and methods of risk management are reviewed—such as qualitative and quantitative risk assessment—and details then examined. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified. LEC.

PMGT 824. Project Cost Estimation, Analysis, and Control. 3 Hours.
Advanced study of cost estimation methodology, cost engineering, and cost control applicable in project management. Includes review of commonly used supportive software. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified. LEC.

PMGT 825. Portfolio Analysis for Project Managers. 3 Hours.
Concepts and methods of intra- and inter-project finance including inter-organization funding, project evaluation and selection, project cost accounting, portfolio formulation and modification, and performance tracking. Introduces fundamentals of investment theory and real options analysis. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified. LEC.

PMGT 826. Program Management. 3 Hours.
Examination of program definition, structuring, and management in the context of organizational strategy, and the critical resources and skills required in long-term program evolution and execution. Facilitation of efforts across multi-tiered organizations will be stressed. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified. LEC.

PMGT 827. Project Team Management and Development. 3 Hours.
Concepts and methods of team and team member development, achieving higher-performance teams while satisfying organizational expectations. Specific topics include management concepts and practices, team dynamics, and interpersonal skills in negotiation and conflict resolution. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified. LEC.

PMGT 828. Management of Global Projects. 3 Hours.
Survey of management challenges in conducting international projects, emphasizing cross-culture issues. Differences across world regions and selected key countries in relation to communication and interpersonal norms, business conventions, and legal systems will receive particular attention. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified. LEC.

PMGT 829. Management of Distributed Project Teams. 3 Hours.
Concepts and methods of conducting high-performance, multi-site team operations, focusing on intra-team communication, coordination, and control. Incorporates review of practical technologies with emphasis on web-enabled approaches. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified. LEC.

PMGT 830. Case Studies in Project Management. 2 Hours.
Reinforcement and demonstration of developing project management skills through case analysis and discussion. Goal is integration of learning across all core courses, and also drawing on content from general management, applications area, and advanced project management elective courses taken. Emphasis is on integrated project management. The students will document their project in a written report and present their project during the final oral examination to the Project Management faculty and student's employer or representative if practical. LEC.

PMGT 833. Management of Internal Projects for Scientists and Technical Professionals. 3 Hours.
The purpose of this course is to introduce the student to all aspects of managing a project within a company or organization. The entire project life cycle will be covered from inception to close-out, and many practical considerations will be discussed including material procurement, working with contractors and consultants, selecting software, and managing the project team. The course will focus on how to manage project scope, schedule budget, and resources using personal computer
software. A semester project is required presenting an example of project management or investigating some aspect of project management in detail. LEC.

**PMGT 835. Project Management Capstone. 3 Hours.**
The capstone serves as a culminating experience for this degree. Students will develop an applied workforce project or benefit to in the student's place of employment for full time students. The students will document their project in a written report and present their project during the final oral examination to the Project Management facility and student's employer or representative if practical. Prerequisite: Must complete 21 credit hours. LEC.

**Engineering Physics Courses**

**EPHX 400. Topics in Engineering Physics: ____. 1-3 Hours.**
A course on special topics in engineering physics, given as the need arises. Course may be repeated for different topics. Each section may have additional prerequisites to be determined by the instructor. LEC.

**EPHX 501. Honors Research. 1-4 Hours. AE61.**
This course is for students seeking Departmental Honors in Astronomy, Engineering Physics, or Physics to fulfill the undergraduate research requirement. At the completion of the required four hours of total enrollment, a written and oral report of the research is required. (Same as PHSX 501.) Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics. IND.

**EPHX 503. Undergraduate Research. 1-4 Hours. AE61.**
This course is for students seeking to fulfill the undergraduate research requirement. Students are expected to participate in some area of ongoing research in the department, chosen with the help of their advisor. At the end of the term, students will present their results in a seminar to other students and faculty. (Same as ASTR 503 and PHSX 503.) Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics, or permission of instructor. IND.

**EPHX 511. Introductory Quantum Mechanics. 3 Hours.**
An introduction to quantum mechanics, emphasizing a physical overview. Topics should include the formalisms of non-relativistic quantum mechanics, the 3-dimensional Schrodinger equation with applications to the hydrogen atom; spin and angular momentum; multi-particle systems of Fermi-Dirac and Bose-Einstein particles; time-independent perturbation theory. (Same as PHSX 511.) Prerequisite: PHSX 313 and MATH 290. LEC.

**EPHX 516. Physical Measurements. 4 Hours.**
A laboratory course emphasizing experimental techniques and data analysis, as well as scientific writing and presentation skills. Experiments will explore a range of classical and modern physics topics. (Same as PHSX 516.) Prerequisite: PHSX 313, EPHX 316, and EPHX 521. (EPHX 521 may be taken concurrently.) LAB.

**EPHX 518. Mathematical Physics. 3 Hours. N.**
Applications of modern mathematical methods to problems in mechanics and modern physics. Techniques include application of partial differential equations and complex variables to classical field problems in continuous mechanics, unstable and chaotic systems, electrodynamics, hydrodynamics, and heat flow. Applications of elementary transformation theory and group theory, probability and statistics, and nonlinear analysis to selected problems in modern physics as well as to graphical representation of experimental data. Prerequisite: PHSX 313 and MATH 320 or permission of instructor. (Same as PHSX 518.) LEC.

**EPHX 521. Mechanics I. 3 Hours.**
Newton's laws of motion. Motion of a particle in one, two, and three dimensions. Motion of a system of particles. Moving coordinate systems. (Same as PHSX 521.) Prerequisite: PHSX 211 and PHSX 216, or PHSX 213; MATH 223; MATH 290; and MATH 220 or MATH 320. LEC.

**EPHX 531. Electricity and Magnetism. 3 Hours.**
The properties of electric and magnetic fields, including electrostatics, Gauss's Law, boundary value methods, electric fields in matter, electromagnetic induction, magnetic fields in matter, the properties of electric and magnetic dipoles and of dielectric and magnetic materials. (Same as PHSX 531.) Prerequisite: PHSX 214, or PHSX 212 and PHSX 236; PHSX 521 or special permission; MATH 223; MATH 290; and MATH 220 or MATH 320. LEC.

**EPHX 536. Electronic Circuit Measurement and Design. 4 Hours.**
A laboratory course that explores the theory and experimental techniques of analog and digital electronic circuit design and measurements. Topics include transient response, transmission lines, transistors, operational amplifiers, and digital logic. (Same as PHSX 536.) Prerequisite: PHSX 214 or PHSX 212 and PHSX 236; MATH 223; and MATH 290. PHSX 313 and 316 recommended. LEC.

**EPHX 600. Special Topics in Physics and Astrophysics: ____. 3 Hours.**
Different topics will be covered as needed. This course will address topics in physics and astrophysics not covered in regularly offered courses. May be repeated if topic differs. (Same as PHSX 600.) Prerequisite: Permission of instructor. LEC.

**EPHX 601. Design of Physical and Electronic Systems. 4 Hours. AE61.**
A laboratory course emphasizing the application of physical principles to the design of systems for research, monitoring, or control. Topics include the use of microcomputers as controllers, interfacing microcomputers with measurement devices, and use of approximations and/or computer simulation to optimize design parameters, linear control systems, and noise. (Same as PHSX 601.) Prerequisite: Twelve hours of junior-senior credit in physics or engineering, including one laboratory course. LEC.

**EPHX 615. Numerical and Computational Methods in Physics. 3 Hours.**
An introduction to the use of numerical methods in the solution of problems in physics for which simplifications allowing closed-form solutions are not applicable. Examples are drawn from mechanics, electricity, magnetism, thermodynamics, and optics. (Same as PHSX 615.) Prerequisite: PHSX 313, MATH 320 or equivalent, and EECS 138 or equivalent. LEC.

**EPHX 621. Mechanics II. 3 Hours.**
Continuation of PHSX 521. Lagrange's equations and generalized coordinates. Mechanics of continuous media. Tensor algebra and rotation of a rigid body. Special relativity and relativistic dynamics. (Same as PHSX 621.) Prerequisite: EPHX 521 or PHSX 521. LEC.

**EPHX 623. Physics of Fluids. 3 Hours.**
An introduction to basic fluid mechanics in which fundamental concepts and equations will be covered. Topics will include hydrostatics, hydrodynamics, wave propagation in fluids, and applications in the areas such as astrophysics, atmospheric physics, and geophysics. (Same as PHSX 623.) Prerequisite: MATH 223; MATH 290; PHSX 212 and PHSX 236 (or PHSX 214 can replace PHSX 212 and PHSX 236.) LEC.

**EPHX 631. Electromagnetic Theory. 3 Hours.**
Maxwell's equations, wave propagation, optics and waveguides, radiation, relativistic transformations of fields and sources, use of covariance, and invariance of relativity. Normally a continuation of PHSX 531. (Same as PHSX 631.) Prerequisite: EPHX 531 or PHSX 531. LEC.
EPHX 641. Introduction to Nuclear Physics. 3 Hours.
Experimental methods in nuclear physics, elementary concepts and simple considerations about nuclear forces, alpha and beta decay, gamma radiation, nuclear structure, and reaction systematics. (Same as PHSX 641.) Prerequisite: PHSX 313 and PHSX 511. LEC.

EPHX 655. Optics. 3 Hours.
Geometric optics. Wave properties of light: interference, diffraction, coherence. Propagation of light through matter. Selected topics in modern optics, e.g., lasers, fibers. (Same as PHSX 655.) Prerequisite: PHSX 313 and PHSX 316. LEC.

EPHX 661. Introduction to Elementary Particle Physics. 3 Hours.
Properties and interactions of quarks, leptons, and other elementary particles; symmetry principles and conservation laws; broken symmetry; gauge bosons; the fundamental interactions, grand unified theories of strong, electromagnetic, and weak interactions; the cosmological implications of elementary particle physics. (Same as PHSX 661.) Prerequisite: PHSX 313 and MATH 320. LEC.

EPHX 671. Thermal Physics. 3 Hours.
Development of thermodynamics from statistical considerations. Elementary techniques of calculating thermodynamic properties of systems. Application to classical problems of thermodynamics. Elementary kinetic theory of transport processes. Fermi-Dirac and Bose-Einstein systems. (Same as PHSX 671.) Prerequisite: PHSX 511. LEC.

EPHX 681. Concepts in Solids. 3 Hours.
Properties of common types of crystals and amorphous solids. Lattice vibrations and thermal properties of solids. Electrons and holes in energy bands of metals, semiconductors, superconductors, and insulators. (Same as PHSX 681.) Prerequisite: PHSX 313 and PHSX 511. LEC.

EPHX 691. Astrophysics I. 3 Hours.
An introduction to radiation processes, thermal processes, and radiative transfer in stellar atmospheres and the interstellar medium. (Same as ASTR 691 and PHSX 691.) Prerequisite: PHSX 313 or consent of instructor. LEC.

EPHX 693. Gravitation and Cosmology. 3 Hours.
An overview of topics relevant to gravitation and modern cosmology: special relativity, tensor notation, the equivalence principle, the Schwarzschild solution, black holes, and Friedmann models. Cosmic black body radiation, dark matter, and the formation of large-scale structure. The idea of quantum gravity and an introduction to the current literature in cosmology. (Same as PHSX 693.) Prerequisite: PHSX 313 or consent of instructor. LEC.

Engineering Courses

ENGR 101. Engineering Academic Success Seminar. 0-1 Hours.
This course will provide an introduction to the University and School of Engineering community and the value and role of higher education in our society, strategies for successful transition to and participation in that community, exploration of the University and School commitment to diversity and multiculturalism, and information about University and School resources and procedures. Prerequisite: Eligible students must have fewer than thirty credit hours from the University of Kansas. LEC.

ENGR 102. Engineering Academic Recovery Program. 0 Hours.
The Engineering Academic Recovery Program is a mandatory course for freshman engineering students who are placed on academic probation.

ENGR 108. Introduction to Engineering. 2 Hours.
An introductory level course with emphasis on engineering problem definition, methods simulation, and solution, including approaches to engineering design; engineering units and terminology; engineering disciplines and career areas, and engineering code of ethics. LEC.

ENGR 111. Freshman Self Seminar. 0-1 Hours.
This course will serve as an introduction to the Self Engineering Leadership Fellows Program and will focus on building student's skills in leadership, business, entrepreneurship, management, communication, engineering, and interpersonal skills. Prerequisite: Students must have applied, interviewed, and been accepted as a Self Engineering Leadership Fellow. LEC.

ENGR 112. Sophomore Self Seminar. 0-1 Hours.
This course will serve as an introduction to the Self Engineering Leadership Fellows Program and will focus on building student's skills in leadership, business, entrepreneurship, management, communication, engineering, and interpersonal skills. Prerequisite: Students must have applied, interviewed, and been accepted as a Self Engineering Leadership Fellow. LEC.

ENGR 113. Junior Self Seminar. 0-1 Hours.
This course will serve as an introduction to the Self Engineering Leadership Fellows Program and will focus on building student's skills in leadership, business, entrepreneurship, management, communication, engineering, and interpersonal skills. Prerequisite: Students must have applied, interviewed, and been accepted as a Self Engineering Leadership Fellow. LEC.

ENGR 114. Senior Self Seminar. 0-1 Hours.
This course will serve as an introduction to the Self Engineering Leadership Fellows Program and will focus on building student's skills in leadership, business, entrepreneurship, management, communication, engineering, and interpersonal skills. Prerequisite: Students must have applied, interviewed, and been accepted as a Self Engineering Leadership Fellow. LEC.

ENGR 177. First Year Seminar: ____. 3 Hours. GE11.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in mechanical engineering. May not contribute to major requirements for School of Engineering students. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

ENGR 180. Introduction to Naval Ships Systems I. 3 Hours.
The concept of weapons systems and the systems approach are explored. The techniques of linear analysis of basic components are introduced. The dynamics of the basic components of weapons control systems are investigated and stated as transfer functions. This course provides the tools for future development in the student's understanding of the basic principles that underlie all modern naval weapons systems. Approved for degree credit in the College of Arts and Sciences effective fall 1971. Such courses count within the limit of 25 hours accepted from other schools and divisions. (Same as NAVY 180.) Prerequisite: MATH 002. LEC.

ENGR 184. Introduction to Naval Ships Systems II. 3 Hours.
The concept of weapons systems and the systems approach are explored. The techniques of linear analysis of basic components are introduced. The dynamics of the basic components of weapons control systems are investigated and stated as transfer functions. This course provides the tools for future development in the student's understanding of the basic principles that underlie all modern naval weapons systems. Approved for degree credit in the College of Arts and Sciences effective Fall 1971. Such courses count within the limit of 25 hours accepted from other schools and divisions. (Same as NAVY 184.) LEC.
ENGR 300. Cooperative Engineering Education Experience. 1 Hour.
Engineering work experience with a recognized engineering organization.
The work must be professional in nature and not merely routine. A final
summary report must be submitted to the student's major department at
the conclusion of each continuous period of employment and may cover
more than one sequential semester or summer session. Credit for this
course cannot be used toward graduation requirements. Prerequisite:
Permission of major department. FLD.

ENGR 301. Navigation and Operations I. 3 Hours.
First semester juniors. Three hours classroom and two and one-half hours
laboratory per week. A comprehensive study of the theory, principles, and
procedures of ship navigation in coastal and open ocean environment.
Includes piloting, triangulation, ocean and tidal currents, navigational
astronomy, spherical trigonometry, sight reduction, publications and
logs; an introduction to electronic navigation, including theory of wave
propagation, hyperbolic and azimuthal systems, doppler, inertial, and
satellite systems. (Same as NAVY 300.) LEC.

ENGR 304. Technology: Its Past and Its Future. 3 Hours.
An examination of the role of technology and its influence on society. The
historical development of technology will be traced up to modern times
with an emphasis on its relations to the humanities. Attention will be given
to the future of different branches of technology and alternative programs
for their implementation. (Same as HIST 404.) LEC.

ENGR 305. Navigation and Operations II. 3 Hours.
Second semester juniors. Three hours classroom and two and one-half
hours laboratory per week. A study of laws for the prevention of
ship collisions; tactical formations and dispositions, relative motion,
and maneuvering board. Major portion of the semester is devoted
to operations research and analysis, with an introduction to discrete
probability theory, game theory, measures of effectiveness, active and
passive sonar equations, and review of systems analysis and cost
effectiveness. (Same as NAVY 304; Prerequisite: MATH 111 or higher.
LEC.

ENGR 360. Special Topics: _____. 1-5 Hours.
Courses on special topics of current interest to engineers, such as ethics,
engineering economics, engineering practice, communications, teamwork,
and professional and career development. Prerequisite: Approval of the
instructor. FLD.

ENGR 490. Engineering Internship. 1-6 Hours.
Engineering internship in an approved company. Internship hours do not
satisfy any course requirements for a bachelors degree in any School of
Engineering major, but will appear on the transcript. Credit assigned after
review of report on internship experience. FLD.

ENGR 504. Technical Writing for Engineers. 1-3 Hours.
The process of planning, organizing, initiating, drafting, and editing
engineering documents is covered through writing assignments and
discussion. Writing, editing, and publishing the Kansas Engineer
magazine, Graded on satisfactory/unsatisfactory basis. Prerequisite:
ENGL 102. FLD.

ENGR 515. Verbal Communications in Engineering. 1 Hour.
Meets one hour per week. Planning, preparing, and presenting speeches
on a variety of topics throughout the semester. Includes preparing
speeches, spontaneous speeches and the evaluation of speeches by
other students. Prerequisite: Two English courses and at least junior or
senior standing in engineering or consent of instructor. FLD.

ENGR 600. Engineering Applications in India: Technical, Business,
and implementation Issues. 3 Hours.
Business principles play a crucial role in shaping engineering solutions.
This course will communicate key differences between the United States
and India in how engineering challenges and opportunities are shaped
by these principles and by culture. Students will travel to India to attend
lectures from schools, visit companies, engage in class discussion/
debate, and attend cultural excursions. Prerequisite: Major in Engineering.
LEC.

ENGR 835. Project (ME). 3-6 Hours.
A design problem or system study satisfying the project requirement for
the Master of Engineering degree. THE.

ENGR 940. Project (DE). 1-16 Hours.
A major design problem or system study satisfying the project requirement
for the Doctor of Engineering degree. THE.

Mechanical Engineering Courses

ME 201. Statics. 2 Hours.
The principles of statics, with particular attention to engineering
applications. Prerequisite: PHSX 211. LEC.

ME 208. Introduction to Digital Computational Methods in
Mechanical Engineering. 3 Hours.
Digital computing methods for solving mechanical engineering problems
utilizing current programming languages and commercial software. Topics
from the course are applied through open-ended team projects throughout
the semester which also give students an introduction to mechanical
engineering. One lecture and lab meets with ME 228, therefore ME 208
cannot be taken concurrently with ME 228, but should be taken in back-to-
back semesters. Corequisite: MATH 116 or MATH 121 or MATH 125. LEC.

ME 210. Introduction to Mechanics. 1 Hour.
An introduction to mechanics of materials including stress, strain, and
axial loading. Prerequisite: ME 201. LEC.

ME 211. Statics and Introduction to Mechanics. 3 Hours.
The principles of statics, with particular attention to engineering
applications and an introduction to mechanics of materials. This course is
a combination of material covered in ME 201 and ME 210. Prerequisite:
PHSX 210 or PHSX 211. LEC.

ME 228. Computer Graphics. 3 Hours.
An introduction to solid modeling computer graphics used in mechanical
design. Visualization skills and drawing practices are developed. Topics
from the course are applied through open-ended team projects throughout
the semester which also give students an introduction to mechanical
engineering. One lecture and lab meets with ME 208, therefore ME 228
cannot be taken concurrently with ME 208, but should be taken in back-to-
back semesters. LEC.

ME 306. Science of Materials. 3 Hours.
An introductory course on materials. Emphasis is placed on structure
and the relation of structure to the behavior and properties of engineering
materials. Prerequisite: CHEM 150 or CHEM 130 or consent of instructor.
LEC.

Laboratory to supplement lecture on engineering materials properties
and selection, manufacturing processes, and design for manufacturing.
Prerequisite: CHEM 150 or CHEM 130. Corequisite: ME 306 and ME 311.
LAB.

ME 309. Introduction to Mechanical Design. 1 Hour.
An introduction to mechanical design after completing a course in
mechanics of materials. Topics include theories of failure and energy
methods. ME 201, CE 310, and ME 309 together are equivalent to ME
211 and ME 311. Prerequisite: Permission of instructor. LEC.
ME 311. Mechanics of Materials. 3 Hours.
The principles of mechanics of materials with particular emphasis on mechanical systems including theories of failure. Prerequisite: ME 211. Corequisite: MATH 220. LEC.

ME 312. Basic Engineering Thermodynamics. 3 Hours.
An introduction to the concepts of heat, work, the first and second laws of thermodynamics and equations of state. These concepts are applied to flow and nonflow systems including power and refrigeration cycles. Prerequisite: PHSX 211 or (Corequisite: PHSX 211 and CHEM 135 or CHEM 175). Corequisite: MATH 122 or MATH 127. LEC.

ME 320. Dynamics. 3 Hours.
Kinematics and kinetics of particles and of rigid bodies as applied to mechanical engineering problems. Prerequisite: ME 201 or ME 211, MATH 220, and MATH 290. LEC.

ME 321. Dynamics Simulations. 1 Hour.
Introduction to dynamics simulations on the computer. Corequisite: ME 320. LEC.

ME 360. Mechanical Engineering Problems. 1-3 Hours.
An analytical or experimental study of problems or subjects of immediate interest to a student and faculty member and which is intended to develop student capability for independent research or application of engineering science and technology. After completion of the project, a report is required. Maximum credit is three hours. Not open to students who have taken ME 361. Prerequisite: Approval of an outline of the proposed project by the instructor and department chair. IND.

ME 361. Undergraduate Honors Research. 1-3 Hours.
Investigation of a particular mechanical engineering problem. Research will involve defining the problem, developing a research methodology, applying the research methodology and gathering data, analyzing and interpreting the data, and presenting the results of the research. The student must have a faculty sponsor and submit a proposal in writing stating the objective of the research, the planned research method that will be used, and the method of reporting the results. Maximum credit is three hours. Not open to students who have taken ME 360. Prerequisite: Participation in the University Honors Program, consent of instructor, and approval of the chair required. IND.

ME 390. Special Topics: ____. 1-5 Hours.
Courses on special topics of current interest in mechanical engineering, given as the need arises. Prerequisite: Approval of instructor. LEC.

ME 412. Thermal Systems. 3 Hours.
Application of the principles of thermodynamics to the analysis and design of thermal systems. Prerequisite: ME 312. LEC.

ME 420. Mechanics. 3 Hours.
Design and analysis of mechanisms composed of linkages, cams, and gears. Mechanical vibration. Prerequisite: PHSX 211 and MATH 220. LEC.

ME 455. Mechanical Engineering Measurements and Experimentation. 4 Hours.
Lectures and laboratories on the basics of measurement, instrumentation, data acquisition, analysis, design and execution of experiments, and written and oral reports. Topics selected from heat transfer, fluid mechanics, thermodynamics, mechanics, strength of materials, and dynamics. Prerequisite: ME 208 and ME 311. Co-requisite: EECS 318, ME 510, ME 320, ME 612, and Statistics. LEC.

ME 501. Mechanical Engineering Design Process. 2 Hours.
The design process of a mechanical or thermal system. Establishment of specifications and consideration of realistic constraints such as safety, codes, economic factors, reliability, oral and written communications, and other factors as they impact the design process. Prerequisite: ME 311 and ME 312. Corequisite: ME 228 and ME 307. LEC.

ME 508. Numerical Analysis of Mechanical Engineering Problems. 3 Hours.
Introduction to numerical methods for solution of mechanical engineering problems by use of digital computers. Prerequisite: ME 208 or equivalent, MATH 220 and MATH 290. LEC.

ME 510. Fluid Mechanics. 3 Hours.
An introduction to the mechanics of fluid flow. The principles of conservation of mass, momentum, and energy are developed in differential and integral form. Laws of dimensional analysis and similitude are presented as the basis for empirical correlations. Engineering applications include: calculation of hydrostatic forces on submerged objects, analysis of flow and pressure loss in piping systems, estimation of aerodynamic lift and drag, and performance characteristics of pumps and fans. Prerequisite: ME 211, ME 201, or CE 201 and MATH 122 or MATH 127 and ME 312. Corequisite: MATH 220. LEC.

ME 590. Special Topics: ____. 1-5 Hours.
Courses on special topics of current interest in mechanical engineering, given as the need arises. Prerequisite: Approval of instructor. LEC.

ME 612. Heat Transfer. 3 Hours.
An applied study of conductive, convective, and radiative heat transfer mechanisms in solid and fluid systems. Engineering applications include solid conduction, free and forced convection in fluids, thermal radiation and heat exchangers, evaporators, and furnaces. Prerequisite: MATH 220 and ME 312. Corequisite: ME 510. LEC.

ME 627. Automotive Design. 3 Hours.
Design of mechanical components and systems. Prerequisite: ME 311. LEC.

ME 633. Basic Biomechanics. 3 Hours.
Provides an overview of musculoskeletal anatomy. Biodynamics includes linear and angular dynamics of human movement, energy expenditure and power required to perform a given activity. Students will learn to determine joint forces and torques (in 2-D) from kinematic data for body segments and force plate data. The tissue mechanics section builds on mechanics of materials. Students will learn about tissue properties, appropriate constitutive models and determination of stresses and strains in tissues and structures under normal loading conditions. Prerequisite: ME 311 and ME 320 or equivalent. LEC.

ME 636. Internal Combustion Engines. 3 Hours.
Study and analysis of internal combustion engine physical phenomena dynamic function, components, and system design. Emphasis on spark ignition and compression ignition engine analysis. Performance, current technology, thermodynamics, fluid-mechanics, combustion products and pollution, fuels and lubrication, and mechanical design. Prerequisite: ME 412. LEC.

ME 637. Steam Power Plants. 3 Hours.
A study of steam power plant equipment including thermodynamic analysis, design and performance of modern steam generators, prime movers, and auxiliaries. Prerequisite: ME 412 or permission of instructor. LEC.
ME 639. Alternative Energy Systems. 3 Hours.
This course is a survey of energy resources and the available technology for meeting current energy needs with alternative energy systems. An overview of the U.S. energy system and world-wide energy consumption is included to provide context. The primary course objective is to develop the students' ability to apply engineering fundamentals to the design and operation of alternative energy systems. The students will be introduced to databases and modeling methods used to represent alternative energy resources. Assignments will include: engineering problem analysis, group design projects, individual research papers, oral and written presentations. Prerequisite: ME 510, AE 345, or CPE 511 and (ME 412 or ME 612 or CPE 521). LEC.

ME 640. Design Project. 1-2 Hours.
Planning for a capstone design project. Development of a formal project proposal is required. Must be used with two credit hours of ME 641, ME 643, ME 644 or ME 645 in the subsequent semester to complete the capstone design requirements. Prerequisite: Approval of instructor. LEC.

ME 641. Design Project Option A. 2-3 Hours. AE61.
Design and development of a mechanical or thermal/fluid system. An individual or group report that includes designs, analysis/testing, drawings, and/or schematics is required. Establishment of specifications and consideration of realistic constraints such as safety, economic factors, design impact, aesthetics, and reliability are required. Prerequisite: ME 455, ME 501, and ME 628. LEC.

ME 642. Design Project Option B. 4 Hours. AE61.
Manufacturing and testing of a mechanical system designed and developed in ME 627 - Vehicle Design. A group report with individual assignments which details the manufacturing procedures and testing procedures and results is required. A completed, working project with a design file documenting all aspects of the project development must be submitted. Prerequisite: ME 627, ME 501 and ME 628. Corequisite: ME 412 and ME 455. LEC.

ME 643. Design Project Option C. 2-3 Hours. AE61.
Design and development of a mechanical system related to biomechanics that has been investigated in ME 633 - Basic Tissue Mechanics and Biodynamics. A report that includes designs, analysis/testing, drawings and/or schematics is required. Establishment of specifications and consideration of realistic constraints such as safety, ergonomics, economic factors, design impact, aesthetics, and reliability are required. Prerequisite: ME 501, ME 628, ME 633 and ME 640. Corequisite: ME 455. LEC.

ME 644. Design Project Option D. 2-3 Hours. AE61.
Design and development of a thermal or fluid system. A group report that includes designs, analysis/testing, drawings and/or schematics is required. Establishment of specifications and consideration of realistic constraints such as safety, economic factors, design impact, aesthetics, and reliability are required. Prerequisite: ME 412, ME 455, and ME 501. Corequisite: ME 628. LEC.

ME 645. Design Project Option E. 2-3 Hours. AE61.
Design and development of a mechanical, electrical or thermal/fluid system related to a sustainable approach to automobiles and energy infrastructure. This may include, but is not limited to alternative fuels, biomass, batteries and advanced vehicle powertrains along with solar/wind energy at various scales. An individual or group report that includes designs, analysis/testing, drawings and/or schematics is required. Establishment of specifications and consideration of realistic constraints such as safety, economic factors, design impact, aesthetics and reliability are required. Prerequisite: ME 501, ME 510, and ME 628. Corequisite: ME 412 and ME 455. LEC.

ME 661. The Finite Element Method. 3 Hours.
An introduction to the underlying theory of the finite element (FE) method and its application to linear solid and structural mechanics. FE formulations are derived for bars, beams, 2D formulations such as: plane stress, plane strain, and 3D solids. Basic issues are treated such as assembly and generation of FE equations, computation, post-processing, and interpretation of FE solutions (e.g. stresses and strains analysis). Prerequisite: ME 311, MATH 220, and MATH 290. LEC.

ME 662. System Dynamics and Control Systems. 3 Hours.
An introduction to the modeling and analysis of analog linear systems and the design of control systems. Topics include mathematical models of mechanical, electrical, fluid and thermal systems, feedback concepts, transient response, frequency response and vibration, system stability, and design of feedback control systems including PID. Prerequisite: ME 320. LEC.

ME 666. Design for Manufacturability. 3 Hours.
Tools to incorporate manufacturing and life-cycle concerns into the design of products. Prerequisite: ME 501 or equivalent. LEC.

ME 702. Mechanical Engineering Analysis. 3 Hours.
A study of advanced methods for engineering analysis of practical problems utilizing fundamental principles from engineering disciplines. The emphasis is on the solution of these problems and the interpretation and generalization of the results. Prerequisite: A course in differential equations. LEC.

ME 708. Microcomputer Applications in Mechanical Engineering. 3 Hours.
Design and implementation of interfaces of microcomputers to mechanical equipment. Includes laboratory experiments presenting selected industrial applications. Emphasis on human factors, functional design parameters and microprocessor interfaces. Includes instruction concerning specifications of practical hardware configurations and writing of programs necessary to accomplish mechanical systems applications. Prerequisite: Permission of instructor. LEC.

ME 711. Bearings and Bearing Lubrication. 3 Hours.
Theoretical aspects of lubrication, determination of pressure distribution in bearings from viscous flow theory, application of hydrodynamic and hydrostatic bearing theories to the design of bearings, high speed bearing design problems, properties of lubricants, methods of testing. Prerequisite: ME 510 and a course in differential equations. LEC.

ME 712. Advanced Engineering Thermodynamics. 3 Hours.
An advanced course in thermodynamics, mathematical in nature, with emphasis on a critical re-evaluation of the laws of thermodynamics, thermodynamics of one-dimensional gas flow, development of the classical thermodynamic relations and their application to engineering problems. Prerequisite: ME 508 and ME 412. LEC.

ME 714. Thin Film Flow. 3 Hours.
In thin film theory, the lubrication approximation (also called the long-wave approximation) is used to simplify the Navier-Stokes equations to study the flow of thin films. Even with this simplification, the thin film equation is still a challenging nonlinear PDE, and numerical and analytical methods are used to solve and analyze the equation. Similarly solutions, linear stability analysis, and travelling waves are useful tools for analysis. This course will focus on coating flows of thin films so the students can learn these techniques and discover the current knowledge gaps at the frontiers of this research area. Thin film flows are found in many applications, such as microchip production or biomedical applications, and experiments with thin film flows often yield stunning photos and videos. Prerequisite: ME 510, MATH 290, ME 508 or equivalents. LEC.
ME 720. Advanced Dynamics of Machinery. 3 Hours.
Dynamics of particles and of rigid bodies with advanced engineering applications; generalized coordinates; Hamilton's principles; Lagrange's equations; Hamilton-Jacobi theory. Prerequisite: ME 320 or equivalent. LEC.

ME 722. Modeling Dynamics of Mechanical Systems. 3 Hours.
Modeling, analysis and simulation of dynamic mechanical systems. Emphasis on the analysis of kinematics and dynamics of rigid mechanical multibody systems undergoing large overall motion using interactive computer simulation programs. Applications to the design and control of dynamic systems such as robots, machine tools, and artificial limbs. Prerequisite: ME 320 or equivalent. LEC.

ME 733. Gas Dynamics. 3 Hours.
A study of the thermodynamics and fluid dynamics of gaseous media. Emphasis is placed on the rigorous application of conservation laws to represent physical processes. Classical and statistical models for the thermodynamic and transport properties are examined. Applications include determination of gas properties, wave propagation, and high-speed flow. Prerequisite: ME 412 and ME 510 or equivalents. LEC.

ME 736. Catalytic Exhaust Aftertreatment Modeling. 3 Hours.
Fundamental concepts behind catalytic exhaust aftertreatment devices for automobiles including both monolithic catalysts and particulate filters. Studies of other catalytic devices intended for applications in the mechanical and chemical engineering fields. Topics covered are the development of governing equations based on conservation laws and their numerical solutions using finite difference methods. Studies will include a monolithic catalyst. Project assignments will be included. Prerequisite: ME 412 and ME 510 or permission of instructor. LEC.

ME 750. Biomechanics of Human Motion. 3 Hours.
Fundamental concepts of anatomy and physiology are introduced but the focus is on the biomechanics of human motion. Human body segment kinematics and joint kinematics are analyzed. An introduction to muscle mechanics is provided. Applications in balance and gait are covered. Corequisite: ME 320 or equivalent. LEC.

ME 751. Experimental Methods in Biomechanics. 3 Hours.
This course will focus on methods of experimental measurement and computational modeling used in biomechanics. Instrumentation used to measure three-dimensional motion, ground reaction forces, center of pressure and EMG measures are considered. Methods used for inverse dynamics, direct dynamics and simulation are introduced. Prerequisite: ME 320 or equivalent. LEC.

ME 752. Acoustics. 3 Hours.
This course will teach the production, propagation, and effects of sound waves. Detailed topics include plane wave, spherical wave, and cylindrical wave propagation in free space and waveguides, wave reflection and transmission on an interface, piston radiation, wave scattering and diffraction. Prerequisite: ME 320 or permission of instructor. LEC.

ME 753. Bone Biomechanics. 3 Hours.
Provides an in-depth knowledge of bone as a living mechanical system. Topics include the microstructure, biology, mechanical properties, mechanical modeling, adaptation of bone to the mechanical environment, and its simulation. Students assignments include homework, a poster presentation, basic finite element analysis laboratory, and bone remodeling simulations. Prerequisite: ME 311 or equivalent. LEC.

ME 754. Biomedical Optics. 3 Hours.
This course will cover the fundamentals of photon transport in biological tissues, including explanations of Rayleigh and Mie scattering, Monte Carlo simulations, the radiative transport equations and more. Also, the basic physics and engineering of various optical imaging techniques for biological tissues, including ballstic or quasi-ballstic imaging (such as confocal microscopy, and optical coherence tomography), diffuse imaging, photoacoustic imaging, will be introduced. Prerequisite: ME 508 or permission of instructor. LEC.

ME 755. Computer Simulation in Biomechanics. 3 Hours.
Provides an in-depth knowledge of 1) the process of developing a research question to be addressed with computer simulation, 2) various techniques for medical imaging to obtain model geometries (including hands-on experience with low-field MR imaging), 3) image segmentation techniques, 4) issues affecting geometric accuracy in model building, 5) the determination and specification of loading and/or kinematic boundary conditions, 6) the interpretation of model results in the context of the model limitations and the medical application. Knowledge and/or experience with finite elements is desirable, but not required. Prerequisite: ME 311 and ME 320 or equivalent. LEC.

ME 756. Biofluid Dynamics. 3 Hours.
An introduction to the fundamentals of biofluid dynamics, and the application of these principles to a variety of biological flows. Fluid flows in physiology, drug delivery, and biotechnology are investigated at a variety of scales, ranging from subcellular to organ groups. Topics include non-Newtonian constitutive equations, solution techniques, and principles of modeling and simulating. Prerequisite: ME 208 and ME 510 or equivalents. LEC.

ME 757. Biomechanical Systems. 3 Hours.
A course on the dynamics and motor control of human and animal motion. The course will focus on applying mechanical principles of dynamics, lumped parameter systems, and control theory to problems in biomechanics. Topics include muscle mechanics and dynamics, reflex and voluntary control, proprioception, anatomy of the muscular and nervous systems, and system dynamics in locomotion and other movements. Prerequisite: ME 682 or permission of instructor. LEC.

ME 758. Physiological System Dynamics. 3 Hours.
This course covers the use of engineering systems modeling approaches to understand the function of physiological systems. Systems covered include the cardiovascular system, the respiratory system, the renal system, the gastrointestinal system, and the musculoskeletal system. Prerequisite: ME 510, ME 320, Physics 212 or permission of instructor. LEC.

ME 760. Biomedical Product Development. 3 Hours.
Introduction to methods of taking medical product inventions from conception to initial stage production. Students work in cross-functional teams to investigate development potential of inventions. Topics covered include product development processes, regulatory issues with the FDA, quality system requirements, SBIR/STTR funding pathways, biomaterial and biomechanics issues in medical product design, and ethical considerations. Prerequisite: Senior or graduate student standing in engineering, business, industrial design, or an applicable life science field and permission of instructor. LEC.

ME 765. Biomaterials. 3 Hours.
An introductory course on biomaterials science and consideration of biomaterials in the design of biomedical implants. Topics including ethical considerations in biomaterials research and the role of the FDA in medical device design are also presented. Prerequisite: ME 306. LEC.

ME 770. Conductive Heat Transfer. 3 Hours.
The formulation of steady- and unsteady-state conduction heat transfer problems and their solution by analytical and numerical methods. Prerequisite: ME 612 or equivalent. LEC.
ME 774. Radiative Heat Transfer. 3 Hours.
The formulation of steady and unsteady radiation heat transfer problems and their solution by analytical and numerical methods. Prerequisite: ME 612 or equivalent. LEC.

ME 790. Special Topics: ______. 1-5 Hours.
Advanced courses on special topics of current interest in mechanical engineering, given as the need arises. Prerequisite: Approval of instructor. LEC.

ME 801. Responsible Conduct of Research in Engineering. 1 Hour.
Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis on practical topics of special importance in bioengineering. Topics include the nature of ethics, the roles of the scientist as a reviewer, entrepreneur, employer and teacher, research ethics in the laboratory, social responsibility and research ethics regulation. (Same as BiOE 801.) Prerequisite: Permission of instructor. LEC.

ME 808. Advanced Microprocessor Applications. 3 Hours.
Advanced design and development of microprocessor based mechanical systems. Individual and team projects involving the development and integration of hardware and software into a "smart" system which includes the sensing, processing, and controlling functions are accomplished. Emphasis is on the use of the latest sensors and development tools. Prerequisite: Permission of instructor. LEC.

ME 810. Advanced Fluid Mechanics. 3 Hours.
Topics include kinematic and dynamic behavior of fluids, derivation of Navier-Stokes equations, flow classification, solutions of viscous and inviscid flows for simple geometries, potential flow theory and laminar and turbulent boundary layer theory. Prerequisite: ME 510 or equivalent. LEC.

ME 831. Convective Heat and Momentum Transfer. 3 Hours.
The formulation and solution of steady and unsteady convective heat, mass, and momentum transfer problems. Topics include boundary layers, duct flows, natural convection with and without phase change, development of analogies, transport properties, numerical methods. Prerequisite: ME 612 or equivalent. LEC.

ME 832. Computational Fluid Dynamics and Heat Transfer. 3 Hours.
The fundamentals of the finite-difference method are presented and applied to the formulation of numerical models for heat and momentum transfer. The accuracy, stability, and computational efficiency of different algorithms are analyzed. Computer programs are developed for classical benchmark problems. Prerequisite: ME 508, ME 510, and ME 612 or equivalents. LEC.

ME 836. Hybrid and Electric Vehicles. 3 Hours.
Topics covered include history of electrified vehicles, vehicle modeling, battery chemistry, and electric motors. Review of fundamental electrical engineering concepts provided. Application of real world driving profiles through homework assignments. Laboratories will explore battery and motor fundamentals. Homework assignments will be included along with a semester project involving the design, construction, and testing of a scale electric vehicle. Prerequisite: ME 636 or permission of instructor. LEC.

ME 840. Continuum Mechanics I. 3 Hours.
Principles of Continuum Mechanics for solids, fluids, and gases. Frames of references, measures of motion, deformation, strains, stresses, their rates, objectivity and invariance. Conservation laws, constitutive equations, equations of state and thermodynamic principles for developing mathematical models of continuum matter. Theoretical solutions of model problems. Corequisite: MATH 647 or ME 702; or permission of instructor. LEC.

ME 841. Continuum Mechanics II. 3 Hours.
Fundamental principles of Continuum Plasticity, measures of plastic strains, stresses and constitutive equations for flow theory of plasticity. Internal variable theory of thermo-mechanical behaviors and endochronic theory of plasticity and viscoplasticity. Anisotropic plasticity and advanced topics. Continuum mechanics principles for viscoelastic solids with emphasis on constitutive equations. Development of complete mathematical models and solutions of selected model problems. Prerequisite: ME 840 or equivalent. LEC.

ME 854. Continuum Mechanics for Soft Tissues. 3 Hours.
An introductory course in the analysis of the mechanical behavior of materials modeled on the continuum assumption. The course will provide background on soft tissue properties and will focus on the tools necessary to model soft tissues, including the essential mathematics, stress principles, kinematics of deformation and motion, and viscoelasticity. Prerequisite: ME 311 or equivalent. LEC.

ME 860. Advanced Mechanical Engineering Problems. 1-3 Hours.
An analytical or experimental study of problems or subjects of immediate interest to a student and faculty member and which is intended to develop students capability for independent research or application of engineering science and technology. Maximum credit toward any degree is three hours unless waived in writing by the departmental chairperson. Prerequisite: Approval of instructor. RSH.

ME 861. Theory of the Finite Element Method. 3 Hours.
Finite element method for solid mechanics, heat transfer, fluid mechanics, and dynamics. Modeling techniques, software implementation, and solution of problems. Prerequisite: ME 508 or equivalent. LEC.

ME 862. Finite Element Method for Transient Analysis. 3 Hours.
Advanced treatment of dynamic and transient response for linear and nonlinear problems in solid mechanics. Formulation and solution of time dependent linear and nonlinear field problems using finite element techniques. Prerequisite: ME 861 or equivalent. LEC.

ME 864. Mesh Generation and Adaptivity for Finite Element Simulations in Engineering. 3 Hours.
The generation of Finite Element meshes in the analysis and simulation of engineering systems. Important topics are treated such as initial mesh generation and refinements (i.e. geometric modeling and mesh adaptivity or grading), choice of type of element, and assessment of solution accuracy (i.e. error estimation). Assignments include solving problems using FE software. Prerequisite: ME 661, ME 861, or equivalent. LEC.

ME 882. Advanced Control Systems. 3 Hours.
Advanced methods in the modeling, analysis and design of linear and nonlinear control systems. Topics include but not limited to digital controls methods, energy-based modeling, and state-space methods. Prerequisite: ME 682. LEC.

ME 889. Independent Investigation. 1-6 Hours.
An analytical or experimental investigation of an engineering problem requiring independent research. If the thesis option is selected six credit hours are required for the degree. If the project option is selected three credit hours are required for the degree. (See requirements for the Master of Science degree for additional details.) THE.
Achievement is measured through assessment of the performance of aerospace engineers and graduate study in aerospace engineering. Educational Objectives

Aerospace engineering prepares graduates for professional practice in aerospace engineering provides no ground or flight instruction. Graded courses on special topics of current interest in mechanical engineering, given as the need arises. Prerequisite: Approval of instructor. RSH.

ME 999. Independent Investigation. 1-16 Hours.

An analytical or experimental investigation of an engineering problem requiring independent research. Twenty four hours as a minimum are awarded for the Ph.D. dissertation. An original contribution suitable for publication in a referred journal is required of Ph.D. candidates. THE.

Department of Aerospace Engineering

Aerospace Engineering

The aerospace engineering discipline involves the design, production, operation, and support of aircraft and spacecraft. Aerospace engineers solve problems, design aircraft and spacecraft, conduct research, and improve processes for the aerospace industry.

Mission

KU aerospace engineering is an international leader in aerospace education and is committed to developing a global community of choice for students, educators, and researchers by strategically aligning teaching, research, and service missions. A world-class graduate and undergraduate education focused on designing, simulating, building, testing, and flying aerospace vehicles is provided. The department invests in research infrastructure and chooses outstanding students, faculty, and staff to conduct basic and applied research of relevance to aerospace vehicles and systems. The department supports the aerospace profession by educating the public, by maintaining the KU aerospace short-course program, and by advising policy-makers in government, industry, and disciplinary professional organizations.

Educational Objectives

Aerospace engineering prepares graduates for professional practice in the aerospace industry and graduate study in aerospace engineering. Achievement is measured through assessment of the performance of graduates three to six years after graduation. Graduates must demonstrate the following measurable learning outcomes:

1. Competence in the analysis, test, and design of aerospace systems and components using contemporary techniques, equipment, and software.
2. An understanding of the professional responsibilities associated with the special public safety and economic aspects of the aerospace industry.
3. The ability to communicate analysis test, and design results to engineers and nonengineers.
4. The ability to work effectively in interdisciplinary teams.
5. An understanding of the need for lifelong learning.

Undergraduate Programs

The curriculum includes traditional courses in aerodynamics, flight dynamics and control, propulsion, structures, manufacturing, instrumentation, and spacecraft systems. Capstone design courses are offered in aircraft, propulsion, and spacecraft design.

Graduate Programs

The department offers the Master of Science and Master of Engineering with a major in aerospace engineering and the Doctor of Philosophy and Doctor of Engineering in aerospace engineering.

Courses

AE 211. Computing for Engineers. 3 Hours.

Introduction to computing concepts. Introduction to the MATLAB computing language using a suite of simulations in science and engineering in a progression which adds new MATLAB constructs - as well as logical and mathematical constructs - with each simulation. Simulations include numerical integration, coordinate transformations and primitive reinforcement learning constructs. Prerequisite: MATH 121 or MATH 125. LEC.

AE 221. Introduction to Global History of Aerospace Technologies. 1-3 Hours.

This History of Aerospace Technology starts in neolithic times with a description of a variety of flying implements being used for hunting and warfare. Their basic designs, mechanics, impact on human evolution, migration and societal development are brought forward to the development of gunpowder, ballistics and rocketry. Lighter than air flight innovations from 1783 forward show an intermingling of civil and military uses through WWI, shaping world events and the fortunes of nations. Heavier than air inhabited flight exploration begins with Cayley, includes the contributions of technologists Lilienthal, Chanute, visionaries and writers Mouillard and Verne, and concludes in a vertical exploration by region, nation and manufacturer, including: Douglas, Boeing, Lockheed, Fokker, Heinkel, Messerschmitt, Fairey, Handley Page, Piaggio, Tupelov, Mikoyan-Gurevich, Kamov, Mitsubishi, Hindustan Aeronautics, Sud Aviation and others. This course represents a very unique opportunity for students to study under one of the most important, famous and well published Aerospace Technologists and Historians ever to practice. LEC.

AE 241. Private Flight Course. 1 Hour.

One hour of academic credit is given upon the awarding of the private pilot's license by the Federal Aviation Administration. Required documentation includes a letter from the F.A.A. designated examiner giving the check ride and a copy of the private license. The Department of Aerospace Engineering provides no ground or flight instruction. Graded
on a satisfactory/fail basis. Prerequisite: Aerospace Engineering students only, with consent of instructor. IND.

AE 242. Private Flight Aeronautics. 3 Hours.
Three hours of academic credit is given for the successful completion of the F.A.A. private pilot’s written examination. Required documentation is a copy of the written score. Available only to Aerospace Engineering transfer students as a course substitute for AE 245. IND.

AE 245. Introduction to Aerospace Engineering. 3 Hours.
Basic systems of an aerospace vehicle, meteorology, vehicle performance, navigation and safety. Specific examples emphasize general aviation. Open enrollment. Corequisite: MATH 121. LEC.

AE 290. Aerospace Colloquium. 0.25 Hours.
This is a required course for all aerospace engineering majors each fall semester. Topics of importance and new developments are discussed by aerospace industry representatives and representatives of F.A.A., D.O.T., D.O.D., N.A.S.A., related sciences, and engineering disciplines. A forum for student activities at all levels. Technical films. Open enrollment. LEC.

AE 292. Aerospace Industrial Internship. 1 Hour.
Engineering internship in an approved company. Internship hours do not satisfy any course requirements for the bachelor’s degree in Aerospace Engineering but will appear on the official transcript. Credit assigned after review of report on internship experience. Graded on a satisfactory/fail basis. Prerequisite: Completion of freshman year. FLD.

AE 345. Fluid Mechanics. 3 Hours.
Study of fundamental aspects of fluid motions and basic principles of gas dynamics with application to the design and analysis of aircraft. Corequisite: CE 301 or MATH 220. LEC.

AE 360. Introduction to Astronautics. 3 Hours.
Introduction to astronautical engineering. The history of astronautics, including rocketry and space flight. Fundamentals of astronautics, including space environment, astrodynamics and the analysis and design of spacecraft systems. Design, construction and launch of a prototype earth-satellite using a high-altitude balloon. Prerequisite: MATH 122 or MATH 126. Corequisite: A course in computer programming. LEC.

AE 390. Aerospace Industrial Internship. 1 Hour.
Engineering internship in an approved company. Internship hours do not satisfy any course requirements for the bachelor’s degree in Aerospace Engineering but will appear on the official transcript. Credit assigned after review of report on internship experience. Graded on a satisfactory/fail basis. Prerequisite: Completion of sophomore year. FLD.

AE 421. Aerospace Computer Graphics. 3 Hours.
Development of skills in depicting aerospace vehicles and their components and subsystems for the purpose of illustration, design, and analysis using traditional and modern (Computer Aided Design) drafting tools. LEC.

AE 430. Instrumentation Laboratory. 3 Hours.
Review and hands-on laboratory experiments with basic electronic elements (resistors, capacitors, conductors, transistors, linear circuits, logic devices, and integrated circuits). Overview and hands-on laboratory experiments using various experimental techniques available to the aerospace engineers (pressure probes, thermocouples, strain gauges, hot-wire anemometer, laser Doppler velocimeter, and flow visualization techniques). Prerequisite: AE 445 and EEC 318. LAB.

AE 441. Advanced Flight Training. 1-3 Hours.
Academic credit is given for the successful completion of advanced flight training beyond the private pilot rating. One hour is given for each of the following: commercial, instrument rating, certified flight instructor. The Aerospace Engineering Department provides no ground or flight instruction. Graded on a satisfactory/fail basis. Open enrollment. Prerequisite: AE 241. IND.

AE 445. Aircraft Aerodynamics and Performance. 3 Hours.
Study of airfoil and wing aerodynamics, component drag, static and special performance, and maneuvers of aircraft. Open enrollment. Prerequisite: AE 345, CE 301. LEC.

AE 490. Aerospace Industrial Internship. 1 Hour.
Engineering internship in an approved company. Internship hours do not satisfy any course requirements for the bachelor’s degree in Aerospace Engineering but will appear on the official transcript. Credit assigned after review of report on internship experience. Graded on a satisfactory/fail basis. Prerequisite: Completion of junior year. FLD.

AE 507. Aerospace Structures I. 3 Hours.
Analysis and design of aerospace structures from the standpoint of preliminary design. Deflection and stress analysis of structural components, including thin-walled beams and built-up (semimonocoque) structures. Material failure of highly stressed components, including connections. Buckling of thin-walled beams and semimonocoque structures. Durability and damage tolerance strategies for aerospace structures to avoid corrosion, fatigue, and fracture. Prerequisite: CE 310. LEC.

AE 508. Aerospace Structures II. 3 Hours.
Stress and deflection analysis of aerospace structures using the finite element method. Introduction to work-energy principles, including Castigliano’s Theorems, for the analysis of statically indeterminate structures. Rod, beam, shaft, membrane, and plate finite elements. Prerequisite: AE 507. LEC.

AE 509. Honors Aerospace Structures. 3 Hours.
Indeterminate structures, principle of virtual work, Castigliano’s theorems, displacement method of finite element analysis; rod, beam, shaft, and membrane elements; analysis of aerospace structures with the finite element method. Prerequisite: AE 507. LEC.

AE 510. Aerospace Materials and Processes. 4 Hours.
Properties and applications of aircraft materials, forming methods, and manufacturing processes. Ethics and social responsibility for engineers. Oral technical presentations. Prerequisite: AE 507 and CHEM 130 or CHEM 150. LEC.

Preliminary design techniques for an aerospace system. Aerodynamic design, drag prediction, stability and control criteria, civil and military specifications. Weight and balance, Configuration integration, design and safety, design and ethics, and social responsibility for engineers. Written technical reports. Prerequisite: AE 421, AE 508, AE 551, and AE 572. LEC.

Preliminary design project of a complete aircraft system. Technical written reports and oral presentations. Prerequisite: AE 521. LEC.

AE 523. Space Systems Design. 4 Hours. AE61.
Preliminary design project of a complete space system. Technical written reports and oral presentations. Prerequisite: AE 521 and AE 560. LEC.

Preliminary design project of a complete propulsion system, including the airframe. Technical written reports and oral presentations. Prerequisite: AE 521. LEC.

AE 545. Fundamentals of Aerodynamics. 4 Hours.
Basic gasdynamic equations, potential flow for airfoils and bodies, thin airfoil theory, finite wing, subsonic similarity rules, one and two dimensional supersonic flow, boundary layers, heat transfer, and
laboratory experiments. Prerequisite: AE 445, ME 312, and MATH 220. LEC.

AE 546. Honors Aerodynamics. 5 Hours.
Basic gas dynamic equations, potential flow for airfoils and bodies, thin airfoil theory, finite wing, subsonic similarity rules, one and two dimensional supersonic flow, boundary layers and viscous flow, heat transfer, and laboratory experiments. A special project in aerodynamics for AE 546 students. Prerequisite: AE 445, ME 312, MATH 220 and MATH 290. LEC.

AE 550. Dynamics of Flight I. 4 Hours.

AE 551. Dynamics of Flight II. 4 Hours.
General equations of motion of rigid airplanes and reduction to perturbed state flight situations. Mathematical modeling of airplane and control system analysis in state space. Dynamic stability, phugoid, short period, dutch roll, roll, spiral, and other important modes. Transfer functions and their application. Relationships with handling quality requirements. Fundamentals of classical control theory and applications to automatic flight controls. Implications to airplane design. Prerequisite: AE 550. LEC.

AE 552. Honors Dynamics of Flight II. 4 Hours.
General equations of motion of rigid airplanes and reduction to perturbed state flight situations. Perturbed state forces and moments, stability derivatives, dynamic stability, phugoid, short period, dutch roll, roll, spiral, and other important modes. Transfer functions and their application. Relationships with handling quality requirements. Fundamentals of classical control theory and applications to automatic flight controls. Implications to airplane design. Prerequisite: AE 550 and a course in differential equations (MATH 220 or MATH 320). LEC.

AE 560. Spacecraft Systems. 3 Hours.
Fundamentals of spacecraft systems and subsystems. Spacecraft systems engineering, space environment; basic astrodynamics; and the following spacecraft subsystems: attitude determination and control; electrical power; thermal; propulsion; structures and mechanisms; command, telemetry, and data handling; and communications. Prerequisite: AE 360, AE 507, EECS 318, and ME 312. LEC.

AE 571. Fundamentals of Airplane Reciprocating Propulsion Systems. 3 Hours.
Study of the basic principles of operation and systems of internal and external combustion engines with emphasis on airplane reciprocating engines. Cycle analysis, propeller theory, propeller selection and performance analysis. Prerequisite: AE 445 and ME 312. LEC.

AE 572. Fundamentals of Jet Propulsion. 3 Hours.
Lecture and laboratory, study of basic principles of propulsion systems with emphasis on jets and fan systems. Study of inlets, compressors, burners, fuels, turbines, jets, methods of analysis, testing, performance; environmental considerations. Prerequisite: AE 545. LEC.

AE 573. Honors Propulsion. 3 Hours.
Lecture and laboratory, study of basic principles of propulsion systems with emphasis on jets and fan systems. Study of inlets, compressors, burners, fuels, turbines, jets, methods of analysis, testing, performance; environmental considerations. Prerequisite: AE 545 and AE 571. LEC.

AE 590. Aerospace Senior Seminar. 1 Hour.
Presentation and discussion of technical and professional paper reports. Methods for improving oral communication. Discussion of topics such as ethics, registration, interviewing, professional societies, personal planning. Prerequisite: Senior standing. LEC.

AE 592. Special Projects in Aerospace Engineering for Undergraduate Students. 1-5 Hours.
Directed design and research projects in aerospace engineering. Prerequisite: Consent of instructor. IND.

AE 593. Honors Research. 1-5 Hours.
Directed design and research projects in aerospace engineering. Prerequisite: Consent of instructor. IND.

AE 621. Advanced Aircraft Design Techniques I. 3 Hours.
The purpose of this course is to provide aerospace engineering students with an opportunity to gain more in-depth airplane design education through design work. This design work will involve detailed design of efforts in such areas as: landing gear design, systems design, propulsion system integration, structures design and aerodynamic design. Prerequisite: AE 507, AE 521, AE 545, AE 551, and AE 571. AE 521 may be taken concurrently. LEC.

AE 628. Wind Turbine Engineering. 3 Hours.
Course will cover the fundamentals of engineering wind-powered electric generators. Topics will include turbine configuration design, drive train engineering, composite rotor blade aerodynamic and structural design, characterizing the influence of the wind conditions on the operation, loads, and performance of a wind turbine, wind turbine controls systems engineering, and power electronic conversion. Prerequisite: AE 508, AE 545, and EECS 316 and EECS 318 or equivalent. LEC.

AE 670. Aerospace Propulsion III. 3 Hours.
Advanced theory of turbojet, fanjet (multi-spool), variable cycle engines, ramjet and bypass air breathing propulsion systems. Theory and design of inlets, compressors, burners and turbines. Component matching, cooling, regenerative systems, test methods and corrections. Prerequisite: AE 572. LEC.

AE 690. Professional Development for Graduate Studies. 0.25 Hours.
Professional development for graduate students. Presentation and discussion of graduate student research. Meets approximately monthly. Each meeting will include either a faculty-guided seminar on one of the core course topics or presentations by students on a research topic. Some class sessions will be devoted to 10-15 minute informal presentations on work in progress. Others will allow students to make informal presentations as a “dress rehearsal” for presentations to be given at a technical conference. Two semesters of enrollment required for all MS, ME PhD and DE aspirants and candidates. Graded on a satisfactory/unsatisfactory basis. LEC.

AE 701. Structural Design. 3 Hours.
Design and internal construction of major structural components: wing, fuselage, empennage, landing gear, engine pylons. Layout of major structures and system interfaces, internal geometry, material alternates, manufacturing alternates and design constraints. Certification and proof of design requirements. Prerequisite: AE 421, AE 508, and AE 510. LEC.

AE 704. Dynamics and Vibrations. 3 Hours.
Problems in engineering dynamics and vibrations. Topics include applications of generalized forces and coordinates, Lagrange equations, and a study of the performance of single and multiple degree of freedom in vibrational systems. (Same as CE 704.) Prerequisite: AE 508. LEC.
AE 705. Structural Vibrations and Modal Testing. 4 Hours.

AE 706. Propulsion System Design and Integration. 3 Hours.
The purpose of this course is to provide aerospace engineering students with an opportunity to gain more in-depth airplane design education through team design work. This team design work will involve detailed design efforts in such areas as: landing gear design, systems design, propulsion system integration, structures design, and aerodynamic design. Prerequisite: AE 507, AE 521, AE 545, AE 551, and AE 571. AE 521 may be taken concurrently. LAB.

AE 722. Aircraft Design Laboratory II. 4 Hours.
The purpose of this course is to provide aerospace engineering students with an opportunity to gain more in-depth airplane design education through team design work. This team design work will involve detailed design efforts in such areas as: landing gear design, systems design, propulsion system integration, structures design, and aerodynamic design. Prerequisite: AE 507, AE 521, AE 545, AE 551, and AE 571. AE 521 may be taken concurrently. LAB.

AE 706. Propulsion System Design and Integration. 3 Hours.
The purpose of this course is to provide aerospace engineering students with an opportunity to gain more in-depth airplane design education through team design work. This team design work will involve detailed design efforts in such areas as: landing gear design, systems design, propulsion system integration, structures design, and aerodynamic design. Prerequisite: AE 507, AE 521, AE 545, AE 551, and AE 571. AE 521 may be taken concurrently. LAB.

AE 723. Aircraft Design Laboratory II. 4 Hours.
The purpose of this course is to provide aerospace engineering students with an opportunity to gain more in-depth airplane design education through team design work. This team design work will involve detailed design efforts in such areas as: landing gear design, systems design, propulsion system integration, structures design, and aerodynamic design. Prerequisite: AE 507, AE 521, AE 545, AE 551, and AE 571. AE 521 may be taken concurrently. LAB.

AE 707. Aerospace Structural Loads. 3 Hours.
Steady state spanwise and chordwise airloads, windshears, gusts, landing gear loads, bird strike, traumatic loads, special commercial and military load requirements. Prerequisite: AE 507 and AE 545. LEC.

AE 708. Aerospace Structures III. 3 Hours.

AE 709. Structural Composites. 3 Hours.
Fiber materials, tapes, cloths, resin systems; general anisotropic theory, elastic constants, matrix formulation; computer analysis, strength, theory of failure; introduction to design with composites, preliminary design, optimization, processing variables, product design. Prerequisite: CHEM 184 or CHEM 150, CPE 121, AE 508 or CE 761; and AE 510 or ME 346 or CE 710. LEC.

AE 710. Advanced Structural Composites. 3 Hours.
The course objectives are to provide each student with a more in-depth understanding of and practical hands-on experiences with available fiber and matrix materials, manufacturing methods, and the mechanical behavior of composite materials and structures. Modern software tools and manufacturing methods are addressed, to include optimization techniques and design for manufacturability. Classical plate theory, bending, buckling, and vibration of anisotropic plates is addressed. Damage tolerance and repairability, as well as nondestructive evaluation techniques are also covered. Skills learned in previous composite courses will be utilized to design, analyze, and fabricate structures of current industrial relevance. Prerequisite: AE 508 or similar, AE 709 or similar, or consent of instructor. LEC.

AE 711. Techniques of Engineering Evaluation. 3 Hours.
The formulation of problems arising in aerodynamics, heat transfer, stress analysis, thermodynamics, and vibrations. The expression of these problems in a form amenable to quantitative evaluation by dimensional reasoning, analog techniques, relaxation methods, and classical analysis. LEC.

AE 712. Stochastic Systems, Estimation and Identification in Aerospace Engineering. 3 Hours.
Stochastic adaptive control theory is concerned with recursive estimation of unknown parameters and control for systems with uncertainties modeled as random variables or random processes. The theory is motivated by applications in such diverse areas as aerospace guidance and control, signal processing and communications, manufacturing processes, and financial economics. Mathematical theory of stochastic adaptive control for models based on stochastic difference equations such as autoregressive processes and stochastic differential equations as Markov diffusion processes have been developed and will be presented. This course focuses on filtering and system identification theory. Prerequisite: AE 430, AE 550, AE 551, AE 750, MATH 590 and MATH 627 or equivalent. LEC.

AE 713. Aircraft Design Laboratory I. 4 Hours.
The purpose of this course is to provide aerospace engineering students with an opportunity to gain more in-depth airplane design education through team design work. This team design work will involve detailed design efforts in such areas as: landing gear design, systems design, propulsion system integration, structures design, and aerodynamic design. Prerequisite: AE 507, AE 521, AE 545, AE 551, and AE 571. AE 521 may be taken concurrently. LAB.

AE 724. Propulsion System Design and Integration. 3 Hours.
The course is designed to provide students with a more in-depth understanding of the principles of propulsion system design. It covers the design of propulsion systems for both low and high speed aircraft and their integration into the overall configuration. Internal and external design and analysis of inlets and nozzles including their effect on the external aerodynamics of the aircraft. Engine/inlet compatibility and the problems of matching both steady state and dynamic characteristics to obtain peak, stable performance. Prerequisite: AE 572. LEC.

AE 725. Numerical Optimization and Structural Design. 3 Hours.
Classical theories of unconstrained and constrained optimization. Numerical techniques for constrained optimization, including sequential approximate problem techniques as well as the method of feasible directions. Computer aided solutions to practical design problems in aerospace engineering. Final design project. Prerequisite: MATH 220 and MATH 290 or junior status. LEC.

AE 726. Wind Turbine Engineering. 3 Hours.
The course will cover the fundamentals of engineering wind-powered electric generators. Topics will include turbine configuration design, drive train engineering, composite rotor blade aerodynamic and structural design, characterizing the influence the wind conditions on the operation, loads, and performance of a wind turbine, wind turbine controls systems engineering, and power electronic conversion. Prerequisite: AE 507, AE 545, and EECS 316 and EECS 318 or consent of instructor. LEC.

AE 730. Advanced Experimental Fluid Dynamics. 3 Hours.
Theory, methods and data analysis of various modern flow measurement techniques including: hotwire cluster, laser-Doppler velocimetry, particle image velocimetry, holography, pressure detection, temperature probing, vorticity measurements, Lagrange particle tracking. Specific experimental technique covers optical measurements in turbulent flow, microfluidic experiments, and spray and multiphase flow measurement. Prerequisite: AE 430, AE 545 or consent of instructor. LEC.

AE 731. Supersonic Aerodynamics Laboratory. 1 Hour.
Supersonic wind tunnel and shock tube operations, techniques, and instrumentation. Flow study and model testing. Prerequisite: AE 545. LAB.

AE 732. Introduction to Flight Test Engineering. 3 Hours.
The course presents flight test principles, instrumentation, planning, and operation of aerospace vehicle flight testing. Course is structured with lectures, laboratories, and flight experiments. Student teams plan and execute a series of flight test experiments including: familiarization with flight test measurements, system identification and hardware, rate-of-climb performance, and determination of vehicle flight dynamics. Prerequisite: AE 445 and AE 550 or consent of instructor. LEC.

AE 733. Compressible Aerodynamics. 3 Hours.
Compressible flow with heat and friction; shock polars, 1-D unsteady gas dynamics, shock tube, conical flows, methods of characteristics, hypersonic flow theory. Prerequisite: AE 545. LEC.
AE 744. Introduction to Turbulent Flow. 3 Hours.
Reynolds averaged equations for turbulent flow, basic energy relations and spectra in turbulent flow, analysis of turbulent boundary layer, turbulent pipe flow, turbulence models and simulation. Prerequisite: AE 545 or equivalent. LEC.

AE 745. Applied Wing and Airfoil Theory. 3 Hours.
Applications of potential flow theory to aerodynamics of airfoil sections; wings and wing-body combinations. Introduction to high angle-of-attack and transonic aerodynamics. Prerequisite: AE 545. LEC.

AE 746. Computational Fluid Dynamics. 3 Hours.
Applications of numerical techniques and digital computers to solving fluid flow problems. Solutions involving incompressible and compressible flows, inviscid and viscous flows. Finite difference techniques for different types of partial differential equations governing the fluid flow. Prerequisite: AE 545. LEC.

AE 747. Introduction to Transonic Aerodynamics. 3 Hours.
Review of Fundamental Equations, Transonic Similarity Laws, Shock-Expansion Theory, Method of Characteristics (MOC), Aerodynamics of Non-Lifting Bodies, Airfoil Aerodynamics and Aerodynamics of Swept Wings. Prerequisite: AE 545. LEC.

AE 748. Helicopter Aerodynamics. 3 Hours.
Helicopter components and their functioning: rotor aerodynamics, performance, stability and control, aeroelastic effects and vibrations. Prerequisite: AE 551. LEC.

AE 750. Applied Optimal Control. 3 Hours.
Introduction to optimal control analysis and design tools useful for the design of Multi-Input/Multi-Output controllers. Linear Quadratic Regulator problem extended by including advanced command techniques and advanced controller structures. The techniques are illustrated with aerospace applications. Prerequisite: AE 551 or ME 682 or consent of instructor. LEC.

AE 751. Advanced Airplane Dynamics. 2 Hours.

AE 752. Linear Multivariable Control. 3 Hours.
An introduction to the modeling and analysis of multi-input, multi-output control systems. Topics include state space representation, solutions of linear systems, stability analysis, state feedback controller design, LQR design, LQG design, cooperative controller design, etc. The successful completion of this course will prepare students for advanced studies in controls. Prerequisite: AE 551 or equivalent, or EECS 444 or equivalent; or by consent of instructor. LEC.

AE 753. Digital Flight Controls. 3 Hours.
Introduction to the classical Z-plane analysis and design tools useful for the design of control systems containing continuous dynamics and a digital computer. Mathematical modeling of the digital computer and design of digital compensators. Aerospace applications used to demonstrate the concepts. Prerequisite: AE 551 or ME 682 or consent of instructor. LEC.

AE 754. Missile Dynamics. 3 Hours.
Design of missile configurations. General equations of motion. Aerodynamics of missiles in subsonic through hypersonic flight regimes. Theory of missile trajectory. Linear and nonlinear theories of missile flight dynamics. Introduction to guidance and control. Launching problems and free flight dispersions. Prerequisite: AE 551. LEC.

AE 755. Robust and Nonlinear Control. 3 Hours.
The robustness is one of the most critical qualities of an appropriately designed feedback control system. In this course the ability of the closed-loop system to continue performing satisfactorily despite uncertainties in estimated state variables and/or large variations in the (open-loop) plant dynamics will be investigated. This course will lay down the mathematical and theoretical background needed for the analysis and design of robust feedback control systems. Modern controller design methods (e.g. H-inf control) will be used to design controller highly nonlinear and transient dynamics. Prerequisite: AE 550, AE 551, AE 750, MATH 590 or consent of instructor. LEC.

AE 756. Rule-Based Control Systems. 3 Hours.
Introduction to rule-based systems with an emphasis on a cognitive architecture. Realistic examples of using such systems will be covered in the context of unmanned aircraft control. A brief review of programming in LISP language, on which the cognitive architecture is based. Prerequisite: EECS 316 and EECS 318, AE 550, AE 551 or equivalent. LEC.

AE 757. Rule-Based UAV Control Lab. 1 Hour.
A guided experience on building an unmanned aircraft system. Uses and existing radio-controlled platform, and thus does not require an expertise in fabrication. Focuses on building the communication hardware and software that enables the use of a rule-based control system on a computer to control the aircraft remotely. Corequisite: AE 756. LEC.

AE 758. Introduction to Robotics. 3 Hours.
An introduction to robotics covering spatial descriptions and transformations, manipulator kinematics, Jacobians, and dynamics and control of manipulators. The successful completion of this course will prepare students for advanced studies in robotics. Prerequisite: CE 301 or equivalent, AE 551 or equivalent, and MATH 290 or equivalent; or by consent of instructor. LEC.

AE 759. Estimation and Control of Unmanned Autonomous Systems. 3 Hours.
An introduction to the modeling, estimation and control of unmanned autonomous systems. Topics include model identification, complementary filters, Kalman filters, attitude estimation, position estimation, attitude keeping controller, path planning, etc. The successful completion of this course will prepare students for advanced studies in robotics controls. Prerequisite: MATH 627 or EECS 461 or equivalent, AE 551 or EECS 444 or equivalent; or by consent of instructor. LEC.

AE 760. Spacecraft Systems. 3 Hours.
Fundamentals of spacecraft systems and subsystems. Spacecraft systems engineering, space environment; basic astrodynamics; and the following spacecraft subsystems: attitude determination and control; electrical power; thermal; propulsion; structures and mechanisms; command, telemetry, and data handling; and communications. Same as AE 560 with the addition of a research paper. Not available for students that have taken AE 560. Prerequisite: AE 507, EECS 318, MATH 124, and ME 312 or equivalents. LEC.

AE 765. Orbit Mechanics. 3 Hours.
Motion of space vehicles under the influence of gravitational forces. Two body trajectories, orbit determination, orbit transfer, universal variables, mission planning using patched conics. Transfer orbits. Prerequisite: MATH 220, MATH 290, and CE 301 or equivalent. LEC.

AE 766. Spacecraft Attitude Dynamics and Control. 3 Hours.
Dynamics of rigid spacecraft, attitude control devices including momentum exchange, mass movement, gravity gradient and reactor rockets. Design
of feedback control systems for linear and bang-bang control devices. Prerequisite: AE 551 or permission of instructor. LEC.

**AE 767. Spacecraft Environments. 3 Hours.**
Fundamentals of spacecraft environments. Description and analysis of the natural environment in which spacecraft operate post-launch. Includes optical, electromagnetic, corpuscular radiation, plasma and dust from low Earth orbit, through outer heliosphere. Prerequisite: PHSX 212 required, PHSX 313 or PHSX 351 recommended. LEC.

**AE 768. Orbit Determination. 3 Hours.**
Develops the theory of batch and sequential (Kalman filter) estimation theory related to orbit estimation, including a review of necessary concepts of probability and statistics. Course work includes a term project that allows students to apply classroom theory to an actual satellite orbit determination problem. Prerequisite: AE 360. Corequisite: AE 560 or AE 760. LEC.

**AE 771. Rocket Propulsion. 3 Hours.**
Basic elements of rocket propulsion: systems, propellants, and performance. Prerequisite: AE 545 or equivalent. LEC.

**AE 772. Fluid Mechanics of Turbomachinery. 3 Hours.**

**AE 781. Introduction to Adaptive Aerostructures. 3 Hours.**
This course covers the basic material properties and modeling techniques for structures that are capable of changing some physical property in response to a command signal. The course will be useful for students from nearly every branch of engineering and includes a fabrication and testing practicum introducing basic post processing and integration techniques used with piezoelectric, shape memory alloy and magnetorheological materials. The course concludes with an overview of applications and examples of adaptive products. Prerequisite: ME 311 or equivalent. LEC.

**AE 790. Special Problems in Aerospace Engineering for Masters Students. 1-5 Hours.**
Directed studies of advanced problems in aerospace engineering. Open only to graduate students with departmental approval. RSH.

**AE 803. Aeroelasticity. 3 Hours.**
Introduction to self-excited vibrations, wing flutter, panel flutter, unsteady aerodynamics, launch vehicle structural vibrations. Prerequisite: AE 508, AE 545, AE 551, and AE 704. LEC.

**AE 821. Advanced Aircraft Design I. 3 Hours.**
Aerodynamic design optimization. Aircraft cost prediction methods: development, manufacturing, and operating. Minimization of operation costs and implications to configuration design. Design to minimize lifecycle costs. Design decision making on the basis of cost. LEC.

**AE 822. Advanced Aircraft Design II. 3 Hours.**
Design of flight control systems, fuel systems, hydraulic systems, and electrical systems. Weapon system integration problems, design for low radar cross sections. The kinematics of landing gear retraction systems. LEC.

**AE 830. Aerospace Graduate Internship. 1-12 Hours.**
One credit hour per month of approved aerospace engineering internship satisfying one of the requirements for the MS or PhD program. Graded on a satisfactory/unsatisfactory basis. FLD.

**AE 840. Aerodynamics of Viscous Fluids. 3 Hours.**
Concepts of boundary layer equations of viscous fluids. Various transformations for compressible boundary-layer equations. Approximate and exact finite-difference solutions, including effects of suction and blowing. Transitions. Concept of turbulent flow and solutions of turbulent boundary layer equations. Applications in aeronautics. Prerequisite: AE 545. LEC.

**AE 845. Transonic Aerodynamics. 3 Hours.**
Applications of potential flow, Euler and Navier-Stokes solvers to transonic and vortex-flow aerodynamics. Concept of rotated finite difference scheme. Convergence acceleration and multigrid techniques. Methods of flux vector splitting, upwind differencing, and approximate factorization. Turbulence modeling. Prerequisite: AE 746. LEC.

**AE 846. Advanced Computational Fluid Dynamics and Heat Transfer. 3 Hours.**
Present recent advances in computational fluid dynamics and heat transfer with a focus on numerical algorithms designed for unstructured grids, including grid generation, convergence acceleration techniques, high-order algorithms and parallel computing on CPU and GPU clusters. It is expected that the students will understand the basics of the finite volume method for unstructured grids, and be able to program a 2D Euler solver for arbitrary grids after taking this class. Prerequisite: AE 746. This class is not open to undergraduate students. LEC.

**AE 850. Advanced Control Seminar. 2 Hours.**
Extension of AE 750 covering digital optimal control, optimal estimation, and advanced control topics. Combination of lecture, seminar, and project format. Review of current journal articles. Development of analysis and design computer programs. Prerequisite: AE 750 and consent of instructor. LEC.

**AE 890. ME Internship. 1-6 Hours.**
One credit per month of engineering internship. Prerequisite: Admission to Master of Engineering in Aerospace Engineering program and approved internship. FLD.

**AE 892. Special Problems in Aerospace Engineering for Doctoral Students. 1-6 Hours.**
Directed studies of advanced problems in aerospace engineering. Open only to graduate students with consent of instructor. RSH.

**AE 895. M.S. Thesis or Project. 1-6 Hours.**
Original research or project which satisfies the requirements for the degree of Master of Science in Aerospace Engineering. Restricted to Aerospace MS students. THE.

**AE 896. ME Project. 3-6 Hours.**
A design problem or system study satisfying the project requirement for the Master of Engineering degree in Aerospace Engineering. Prerequisite: Admission to Master of Engineering in Aerospace Engineering program. THE.

**AE 941. Hypersonic Aerodynamics I. 3 Hours.**
The gasdynamics of aerospace vehicles operating in the speed range above Mach 5. Rarefied and dissociated gas flows; magnetogasdynamic and heat transfer problems. Prerequisite: Consent of instructor. LEC.

**AE 990. DE Internship. 1-12 Hours.**
One credit per month of engineering internship. Prerequisite: Admission to DE program and approved internship. FLD.

**AE 996. Ph.D. Dissertation. 1-15 Hours.**
Restricted to Aerospace Ph.D. candidates. Prerequisite: Successful completion of Comprehensive Oral Exam. THE.
AE 997. DE Project. 1-16 Hours.
A major design problem or system study satisfying the project requirements for the Doctor of Engineering in Aerospace Engineering degree. Restricted to Aerospace DE candidates. Prerequisite: Successful completion of Comprehensive Oral Exam. THE.

Bachelor of Science in Aerospace Engineering

Careers

Professional Opportunities
Aerospace engineers design, develop, and test aircraft, spacecraft, and missiles and supervise manufacture of these products. They explore advances in air flight and space exploration. Aerospace engineers typically work for aircraft, guided missile and space vehicle industries, national research laboratories, commercial airlines, and federal government agencies.

Undergraduate Admission to the School of Engineering

First-year undergraduate students may be admitted, but all admissions, both in-state and out-of-state, are selective. Visit the Office of Admissions (http://admissions.ku.edu/whyku/index.shtml) for admission requirements. Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Applications are judged on several factors, including but not limited to high school record, scores on national tests, academic record at college or university level, and trend of grades. High school transcripts and ACT scores are required. Equivalent SAT scores may be substituted.

Minimum Academic Standards for Admission
To be considered for admission to the School of Engineering, beginning first-year students must meet or exceed the following minimum standards:

- 3.0 grade-point average on a 4.0 scale on the Kansas Board of Regents Qualified Admissions (http://admissions.ku.edu/apply/ regents_curriculum.shtml) college-preparatory curriculum.
- Top 50 percent of the graduating class of an accredited high school or the equivalent.
- Mathematics ACT score of 22 (or mathematics SAT score of 540). Some engineering degree programs may require a higher mathematics ACT score.

These minimum admission standards apply to all departments. Meeting minimum requirements does not guarantee admission.

Transfer Admission Standards
Applications from all transfer students, whether from other institutions or from other KU units, are evaluated on a case-by-case basis. In general, students with grade-point averages under 2.5 are not considered. Students must submit mathematics ACT or SAT scores or proof of competence in calculus (grade of C or higher). No upper-level engineering credits from non-ABET-accredited engineering programs are acceptable as transfer credit for engineering programs. Admission is selective, and meeting the minimum requirements does not guarantee admission.

Four Year Degree Completion Plan
The following are recommended enrollments:

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<tr>
<th>Freshman</th>
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<td>Fall</td>
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<tr>
<td>MATH 125 (KU Core GE 1.2)</td>
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<td>ENGL 101 (KU Core GE 2.1)</td>
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<td>CHEM 150 (KU Core GE 3N)</td>
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<td>AE 245 (part of KU Core AE 5)</td>
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<tr>
<td>AE 290 (part of KU Core GE 2.2 or AE 5)</td>
<td>0.25 AE 290 (part of KU Core GE 2.2 or AE 5)</td>
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<tr>
<td>KU Core</td>
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<td>17.25</td>
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<tr>
<td>Sophomore</td>
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<tr>
<td>Fall</td>
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<tr>
<td>MATH 220</td>
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<td>3 AE 445</td>
</tr>
<tr>
<td>CE 301</td>
<td></td>
<td>5 AE 360</td>
</tr>
<tr>
<td>MATH 127</td>
<td></td>
<td>4 PHSX 212</td>
</tr>
<tr>
<td>AE 345</td>
<td></td>
<td>3 PHSX 236</td>
</tr>
<tr>
<td>AE 211</td>
<td></td>
<td>3 CE 310</td>
</tr>
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<td>AE 290 (part of KU Core GE 2.2 or AE 5)</td>
<td>0.25 ME 312</td>
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<td>0.25</td>
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<td>18.25</td>
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<td></td>
<td></td>
<td>17.25</td>
</tr>
<tr>
<td>Junior</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AE 507 (part of KU Core AE 5)</td>
<td>3 AE 508 (part of KU Core GE 2.2 or AE 5)</td>
<td>3</td>
</tr>
<tr>
<td>AE 550 (part of KU Core GE 2.2)</td>
<td>4 AE 551</td>
<td>4</td>
</tr>
<tr>
<td>MATH 290</td>
<td></td>
<td>2 AE 572</td>
</tr>
<tr>
<td>AE 571 (part of KU Core GE 2.2)</td>
<td>3 AE 421</td>
<td>3</td>
</tr>
<tr>
<td>AE 545</td>
<td></td>
<td>4 EEC 316</td>
</tr>
<tr>
<td>AE 290 (part of KU Core GE 2.2 or AE 5)</td>
<td>0.25 EEC 318</td>
<td>1</td>
</tr>
<tr>
<td>AE 290 (part of KU Core GE 2.2 or AE 5)</td>
<td></td>
<td>0.25</td>
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<td>Senior</td>
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<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AE 521 (KU Core AE 6)</td>
<td></td>
<td>4 AE 522, 523, or 524 (part of KU Core GE 2.2 or AE 6)</td>
</tr>
<tr>
<td>AE 510 (part of KU Core AE 5)</td>
<td>4 AE 430</td>
<td>3</td>
</tr>
<tr>
<td>AE 560 (or Technical Elective)</td>
<td></td>
<td>3 Technical Electives</td>
</tr>
<tr>
<td>AE 590 (part of KU Core AE 5)</td>
<td>1 KU Core</td>
<td>3</td>
</tr>
</tbody>
</table>
Requirements for Enrollment in Junior-Level Aerospace Courses

Enrollment in junior-level aerospace courses is limited to students who have received grades of C or higher in all first- and second-year courses in mathematics, physics, ME 312, CE 301, CE 310, AE 245, AE 345, and AE 445.

Bachelor of Science in Aerospace Engineering Degree Requirements

A minimum of 133 credit hours is required for the B.S. in aerospace engineering, distributed as follows:

Aerospace Engineering Courses (34)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE 245</td>
<td>Introduction to Aerospace Engineering</td>
<td>3</td>
</tr>
<tr>
<td>AE 290</td>
<td>Aerospace Colloquium</td>
<td>2</td>
</tr>
<tr>
<td>AE 345</td>
<td>Fluid Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>AE 360</td>
<td>Introduction to Astronautics</td>
<td>3</td>
</tr>
<tr>
<td>AE 421</td>
<td>Aerospace Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>AE 430</td>
<td>Aerospace Instrumentation Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>AE 445</td>
<td>Aircraft Aerodynamics and Performance</td>
<td>3</td>
</tr>
<tr>
<td>AE 507</td>
<td>Aerospace Structures I</td>
<td>3</td>
</tr>
<tr>
<td>AE 508</td>
<td>Aerospace Structures II</td>
<td>3</td>
</tr>
<tr>
<td>AE 510</td>
<td>Aerospace Materials and Processes</td>
<td>4</td>
</tr>
<tr>
<td>AE 521</td>
<td>Aerospace Systems Design I</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one of the following: (23)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE 522</td>
<td>Aerospace Systems Design II</td>
<td>4</td>
</tr>
<tr>
<td>AE 523</td>
<td>Space Systems Design</td>
<td></td>
</tr>
<tr>
<td>AE 524</td>
<td>Propulsion Systems Design I</td>
<td></td>
</tr>
<tr>
<td>AE 545</td>
<td>Fundamentals of Aerodynamics</td>
<td>4</td>
</tr>
<tr>
<td>AE 550</td>
<td>Dynamics of Flight I</td>
<td>4</td>
</tr>
<tr>
<td>AE 551</td>
<td>Dynamics of Flight II</td>
<td>4</td>
</tr>
<tr>
<td>AE 571</td>
<td>Fundamentals of Airplane Reciprocating</td>
<td>3</td>
</tr>
<tr>
<td>AE 572</td>
<td>Fundamentals of Jet Propulsion</td>
<td>3</td>
</tr>
<tr>
<td>AE 590</td>
<td>Aerospace Senior Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

Engineering Science Courses (19)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE 211</td>
<td>Computing for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CE 301</td>
<td>Statics and Dynamics</td>
<td>5</td>
</tr>
<tr>
<td>CE 310</td>
<td>Strength of Materials</td>
<td>4</td>
</tr>
<tr>
<td>ME 312</td>
<td>Basic Engineering Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>EECS 316</td>
<td>Circuits, Electronics and Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>EECS 318</td>
<td>Circuits and Electronics Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

Science Courses (13)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 150</td>
<td>Chemistry for Engineers</td>
<td>5</td>
</tr>
<tr>
<td>PHSX 210</td>
<td>General Physics I for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 216</td>
<td>General Physics I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>PHSX 212</td>
<td>General Physics II</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 236</td>
<td>General Physics II Laboratory</td>
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</table>

Mathematics Courses (17)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 125</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 126</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Applied Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 127</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 290</td>
<td>Elementary Linear Algebra</td>
<td>2</td>
</tr>
</tbody>
</table>

KU Core (12-13)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>KU Core GE 2.1</td>
<td>English courses</td>
<td>6</td>
</tr>
<tr>
<td>KU Core AE 4.1</td>
<td>Aerospace courses</td>
<td>3</td>
</tr>
<tr>
<td>KU CORE 4.2</td>
<td>ECON 104 Introductory Economics</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>or ECON 142 Principles of Microeconomics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or ECON 144 Principles of Macroeconomics</td>
<td></td>
</tr>
</tbody>
</table>

Technical Electives (9)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Technical Electives</td>
<td>9</td>
</tr>
</tbody>
</table>

Total Hours: 127-128

Credit for ROTC Courses. A student enrolled in one of the ROTC programs can receive 3 hours of technical electives if the ROTC program is completed.

Departmental Honors

To complete the departmental honors program, an aerospace engineering undergraduate student must

- Graduate with a KU grade-point average of 3.5.
- Take at least one departmental honors course. The departmental honors courses are

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE 546</td>
<td>Honors Aerodynamics</td>
<td>5</td>
</tr>
<tr>
<td>AE 573</td>
<td>Honors Propulsion</td>
<td>3</td>
</tr>
<tr>
<td>AE 509</td>
<td>Honors Aerospace Structures</td>
<td>3</td>
</tr>
<tr>
<td>AE 552</td>
<td>Honors Dynamics of Flight II</td>
<td>4</td>
</tr>
<tr>
<td>AE 593</td>
<td>Honors Research</td>
<td>1-5</td>
</tr>
</tbody>
</table>

Students who intend to use departmental honors courses to meet the requirements of the University Honors Program or the departmental
Aerospace Engineering

The aerospace engineering discipline involves the design, production, operation, and support of aircraft and spacecraft. Aerospace engineers solve problems, design aircraft and spacecraft, conduct research, and improve processes for the aerospace industry.

Educational Objectives

Aerospace engineering prepares graduates for professional practice in the aerospace industry and graduate study in aerospace engineering. Achievement is measured through assessment of the performance of graduates three to six years after graduation. Graduates must demonstrate the following measurable learning outcomes:

1. Competence in the analysis, test, and design of aerospace systems and components using contemporary techniques, equipment, and software.
2. An understanding of the professional responsibilities associated with the special public safety and economic aspects of the aerospace industry.
3. The ability to communicate analysis test, and design results to engineers and nonengineers.
4. The ability to work effectively in interdisciplinary teams.
5. An understanding of the need for lifelong learning.

Graduate Admission to the Department of Aerospace Engineering

Application Requirements

In order for applications to be considered complete, the following materials must be submitted online with the application by the posted deadline:

1. Transcripts from all degree granting institutions (If admitted, official transcripts must be sent for all applicants - including KU undergraduate students). In order for transcripts to be considered official, they must be sent from the institution either by mail or e-mailed directly to the university. KU does not consider transcripts that come from applicants or that have been in the applicant’s possession as official. You may be admitted by the department with the transcript you uploaded to the application; however, University Graduate Admissions must receive your official transcript - sent directly from your institution – before you will be officially admitted to the University. Degree conferral transcripts must be received by the end of your first semester of graduate enrollment to be eligible to continue enrollment. The official transcript must show that your undergraduate degree has been conferred.
2. Three letters of recommendation with completed form (Graduate Letter of Recommendation Form). Recommenders will receive instructions on submission at the time the application is submitted.
3. Resume or CV
4. GRE score report
5. Statement of Objectives Form (Statement of Objectives Form)
6. TOEFL or IELTS score report (International students only)
7. Statement of Financial Resources (International students only)

* Please note: All application materials must be received before any kind of decision is made. Documentation sent in addition to that requested above is not required and may be destroyed. Do not send paper documents unless requested.

Admissions Deadline

Our department priority deadlines for admission are:

Fall Admission: December 15 (all applicants)
Spring Admission: September 30 (all applicants)
Summer Admission: April 1 (all applicants)

For full consideration for fellowships, scholarships and research/teaching assistantships, applications should be received by January 1st (for fall admissions). Application materials should indicate the interest in financial assistance or research/teaching assistantships.

Application Fees

Domestic: $55
International: $75

Document Specifications

Letters of Recommendation

The letter of recommendation form should be completed and sent with a signed document from your chosen references (Graduate Letters of Recommendation Form). Recommenders will receive instructions on submission at the time the application is submitted.

Statement of Purpose

The essay should be brief and to the point.

Statement of Financial Resources

As a part of the application process, all students must submit credible evidence of financial support for the first year of study. Financial documents must be less than 6 months old, indicating the type and amount of currency in US dollars. If the bank account is not in the applicant’s name, please attach a statement signed by the account holder indicating the relationship to the student for whom the support will be provided. There is no form for the Statement of Financial Resources, please send only the form(s) of documentation listed below. Applications
cannot be submitted for consideration without the proper financial documentation.

Acceptable evidence includes:

- Bank statement from checking, savings, stock holdings and/or certificate of deposit
- Bank letter on letterhead indicating date account opened, average balance and current balance
- Scholarship or sponsorship letter verifying amount, source and dates of award

Contact Information

Aerospace Engineering Graduate Director:

Graduate Program Director
The University of Kansas
Aerospace Engineering
2120 Learned Hall
1530 W. 15th Street
Lawrence, Kansas, 66045

E-mail Graduate Program Director, Dr. Charlie Zheng, at aerohawk@ku.edu

KU Office of Graduate Studies:

The University of Kansas
Graduate Applications Processing Center
1450 Jayhawk Blvd. Room 313
Lawrence, Kansas 66045-7535
785-864-8040

E-mail the main university Office of Graduate Studies at Graduate@ku.edu or contact the School of Engineering Research & Graduate Studies office at GradEngr@ku.edu with general questions about admission.

KU (http://www.graduate.ku.edu) Graduate Studies Website (http://www.graduate.ku.edu)

Admissions Standards

GPA Requirements

Applicants must have a minimum GPA of 3.0 for a regular admission status. In exceptional cases applicants with a GPA between 2.75-2.99 may be granted provisional admission. In such instances the student must maintain a GPA of at least 3.0 during the first semester of graduate study at KU. Grades of D and F are not accepted. A student failing to maintain these standards will be dismissed from the graduate program. On rare occasions and as supported by other strong evidence of achievement (e.g., significant industrial experience), a provisional admission status may be granted to students with a cumulative GPA below 2.75. After one semester of full-time graduate studies and maintaining a GPA of at least 3.0, a provisionally-admitted students must file a petition to change his/her status to regular status.

Applicants from outside KU must submit Graduate Record Examination (GRE) scores and three letters of recommendation from individuals familiar with their academic performance.

Transfer Credit for Graduate Courses

Up to six hours of approved graduate work may be transferred to KU from other universities. Students with a B.S. degree from KU may transfer up to eight hours of approved graduate work from other universities.

GRE Requirements

Applicants must have a minimum of 50% on the Verbal and Analytical sections of the GRE and 85% on the Quantitative section. Applicants with lower scores, but otherwise exceptional record, will be considered for provisional admission.

Non-English Speaking Students

Refer to link for university policy.

Receipt of an official copy (not student's copy) of an applicant's English proficiency standardized test scores (e.g. TOEFL) achieved not more than two years prior to the semester of first enrollment.

All students who are not native speakers of English and/or international students and who are admitted to campus-based programs are required to check in at the Applied English Center (AEC) upon arrival on campus. At that time, the AEC will confirm the student's level of English proficiency and determine if English courses are required.

Funding

Scholarships/Fellowships - The Aerospace Engineering department nominates applicants for University and School of Engineering scholarships and fellowships based on academic merit and other selection criteria.

Graduate Teaching Assistantships (GTAs) - Teaching Assistantships are available and are awarded competitively based on academic qualifications through the department or school.

Graduate Research Assistantships (GRAs) - Students work with their potential academic advisor/mentor to obtain a funded position on a research project.

A variety of scholarships, fellowships, and assistantships are available to graduate students through the School of Engineering and KU. Learn more at http://www.engr.ku.edu/prospective/graduate/scholarships.html

English Proficiency Requirement

All graduate students in the School of Engineering who are required to take courses at the Applied English Center (http://www.aec.ku.edu) must pass the AEC’s English Proficiency Examination within 3 semesters of their initial enrollment. Failure to complete the English proficiency requirement within this time limit may result in dismissal from the graduate engineering program.

Visit Us

The graduate program staff is happy to work with all prospective students in determining the fit between the student and the program. In order to determine this, we feel that visiting our campus in Lawrence is a very important step. In order to facilitate your visit to KU, there are two main options:

The first, and most preferred, option entails simply applying for admission to the program. All prospective students are welcome to attend our Open House in early November and some highly qualified admitted students may be invited to participate in Visitation Days in late February or early
March (prior to the fall semester of your intended matriculation). These organized visitation opportunities will allow you time to gather a great deal of first-hand information which we hope will help you in making a final decision about whether to attend KU.

The second option is making arrangements to visit us on your own, outside of organized events. With early notification, we will do our best to work with you to provide information and schedule appointments with faculty when possible. Please contact us if you feel that this is the best option for you.

**Contact Information**

Please contact the AE Program Assistant at aerohawk@ku.edu or (785) 864-4267, to schedule a visit or with questions about the application process.

The University of Kansas
Department of Aerospace Engineering
Learned Hall
1530 W. 15th St., Room 2120
Lawrence, KS 66045-7618

**M.E. Degree Requirements**

The Master of Engineering (M.E.) program in Aerospace Engineering (AE) is a program which emphasizes systems design and management skills and procedures rather than the more analytical emphasis of the M.S. program. The M.E. program requires a total of 36 semester hours of graduate work, including a 6 hour requirement for an industrial internship in an industry or government organization. The internship is a degree requirement, and because neither the University nor the Department of Aerospace Engineering can guarantee internship employment, students must indicate in writing before they have completed their first semester how the internship requirement will be satisfied.

**General Description**

To earn the M.E. in AE degree the student must:

1. Complete the technical course requirements;
2. Complete the design, technology and management course requirements (all according to an approved plan of study);
3. Prepare and defend a design project report approved by the student's M.E. Committee;
4. Complete a minimum of 6 months of industrial internship.

A seven-step outline of a typical M.E. program in AE is as follows:

**Step 1:** After earning the B.S. in Aerospace Engineering (or equivalent), the student applies for admission to the M.E. program in AE.

**Step 2:** The student selects or (upon request) is assigned a major advisor.

**Step 3:** The student applies for admission to the M.E. program in AE.

**Step 4:** The student prepares a final plan of study, finishes the required course work with a GPA of at least 3.0/4.0 (grades of D or F will not count toward the graduate degree).

**Step 5:** The student completes the project research in accordance with the original research plan of Step 4 and writes a project report. The thesis or project must be approved by the thesis/project committee.

**Step 6:** The student completes the 6-month industrial internship requirement.

**Step 7:** After approval by the project committee the student defends the project.

**Project Committee**

As part of the Plan of Study (https://gradplan.engr.ku.edu/accounts/login/?next=) a student is required to form a Project Committee with a minimum of two AE faculty members and one Engineering Management faculty member. Additional committee members may be selected by the student from either AE or other School of Engineering faculty members. The chairman of the Project Committee must be an AE faculty member.

Example of an M.E. Course Distribution that satisfies all requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE 712</td>
<td>Techniques of Engineering Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>AE 732</td>
<td>Introduction to Flight Test Engineering</td>
<td>3</td>
</tr>
<tr>
<td>AE 743</td>
<td>Compressible Aerodynamics</td>
<td>3</td>
</tr>
<tr>
<td>AE 745</td>
<td>Applied Wing and Airfoil Theory</td>
<td>3</td>
</tr>
<tr>
<td>AE 724</td>
<td>Propulsion System Design and Integration</td>
<td>3</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>AE 821</td>
<td>Advanced Aircraft Design I</td>
<td>3</td>
</tr>
<tr>
<td>AE 830</td>
<td>Aerospace Graduate Internship</td>
<td>1-12</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>AE 890</td>
<td>ME Project</td>
<td>3-6</td>
</tr>
<tr>
<td>AE 890</td>
<td>ME Internship</td>
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</tr>
<tr>
<td>TOTAL HOURS</td>
<td></td>
<td>36</td>
</tr>
</tbody>
</table>

**Plan of Study**

Before the end of the first semester of graduate study the student must complete an online Plan of Study (https://gradplan.engr.ku.edu/accounts/login/?next=) which includes the following information:

1. Names of the three members of the design project committee. One member must be from the Engineering Management (EMGT) Program. As a general rule the other committee members will be drawn from the AE faculty but exceptions may be approved.
2. Proposed design project title or, at least, the proposed area; and
3. Proposed sequence of courses (Blank forms for the plan of study can be obtained from the AE department secretary.)

The minimum course requirements for the M.E. degree are:

1. At least 15 semester credit hours in technical courses beyond the B.S. in AE;
2. At least 9 semester hours of design, technology and management courses;
3. At least 6 semester hours of design project; and
4. At least 6 hours of industrial internship.

The plan of study shall indicate for each course which requirement is being satisfied. Unique situations can be accommodated with the
combined approval of the AE department graduate advisor and the students major advisor.

A letter stating how the student intends to satisfy the internship requirement must be attached to the plan of study.

If a student enters the M.E. program without an equivalent B.S. in Aerospace Engineering the department graduate advisor may require the student to make up certain undergraduate courses in AE to achieve B.S. equivalence. Such make-up courses do not count toward the M.E. degree.

Master of Science in Aerospace Engineering

Aerospace Engineering

The aerospace engineering discipline involves the design, production, operation, and support of aircraft and spacecraft. Aerospace engineers solve problems, design aircraft and spacecraft, conduct research, and improve processes for the aerospace industry.

Mission

KU aerospace engineering is an international leader in aerospace education and is committed to developing a global community of choice for students, educators, and researchers by strategically aligning teaching, research, and service missions. A world-class graduate and undergraduate education focused on designing, simulating, building, testing, and flying aerospace vehicles is provided. The department invests in research infrastructure and chooses outstanding students, faculty, and staff to conduct basic and applied research of relevance to aerospace vehicles and systems. The department supports the aerospace profession by educating the public, by maintaining the KU aerospace short-course program, and by advising policy-makers in government, industry, and disciplinary professional organizations.

Educational Objectives

Aerospace engineering prepares graduates for professional practice in the aerospace industry and graduate study in aerospace engineering. Achievement is measured through assessment of the performance of graduates three to six years after graduation. Graduates must demonstrate the following measurable learning outcomes:

1. Competence in the analysis, test, and design of aerospace systems and components using contemporary techniques, equipment, and software.
2. An understanding of the professional responsibilities associated with the special public safety and economic aspects of the aerospace industry.
3. The ability to communicate analysis, test, and design results to engineers and nonengineers.
4. The ability to work effectively in interdisciplinary teams.
5. An understanding of the need for lifelong learning.

Graduate Admission to the Department of Aerospace Engineering

Application Requirements

In order for applications to be considered complete, the following materials must be submitted online with the application by the posted deadline:

1. Transcripts from all degree granting institutions (If admitted, official transcripts must be sent for all applicants - including KU undergraduate students). In order for transcripts to be considered official, they must be sent directly from the institution either by mail or e-mailed directly to the university. KU does not consider transcripts that come from applicants or that have been in the applicant's possession as official. You may be admitted by the department with the transcript you uploaded to the application; however, University Graduate Admissions must receive your official transcript - sent directly from your institution - before you will be officially admitted to the University. Degree conferral transcripts must be received by the end of your first semester of graduate enrollment to be eligible to continue enrollment. The official transcript must show that your undergraduate degree has been conferred.
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Application Fees

Domestic: $55
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Statement of Purpose
The essay should be brief and to the point.

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Contact Information
Aerospace Engineering Graduate Director:
Graduate Program Director
The University of Kansas
Aerospace Engineering
2120 Learned Hall
1530 W. 15th Street
Lawrence, Kansas, 66045

E-mail Graduate Program Director, Dr. Charlie Zheng, at aerohawk@ku.edu

KU Office of Graduate Studies:
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785-864-8040

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KU (http://www.graduate.ku.edu) Graduate Studies Website (http://www.graduate.ku.edu)

Admissions Standards
GPA Requirements
Applicants must have a minimum GPA of 3.0 for a regular admission status. In exceptional cases applicants with a GPA between 2.75-2.99 may be granted provisional admission. In such instances the student must maintain a GPA of at least 3.0 during the first semester of graduate study at KU. Grades of D and F are not accepted. A student failing to maintain these standards will be dismissed from the graduate program. On rare occasions and as supported by other strong evidence of achievement (e.g., significant industrial experience), a provisional admission status may be granted to students with a cumulative GPA below 2.75. After one semester of full-time graduate studies and maintaining a GPA of at least 3.0, a provisionally-admitted students must file a petition to change his/her status to regular status.

Applicants from outside KU must submit Graduate Record Examination (GRE) scores and three letters of recommendation from individuals familiar with their academic performance.

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Applicants must have a minimum of 50% on the Verbal and Analytical sections of the GRE and 85% on the Quantitative section. Applicants with lower scores, but otherwise exceptional record, will be considered for provisional admission.

Non-English Speaking Students
Refer to link (http://policy.ku.edu/graduate-studies/english-proficiency-international-students) to for university policy.

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All students who are not native speakers of English and/or international students and who are admitted to campus-based programs are required to check in at the Applied English Center (http://www.aec.ku.edu) (AEC) upon arrival on campus. At that time, the AEC will confirm the student's level of English proficiency and determine if English courses are required.

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Research project (results of the independent investigation) is defended. The candidate must pass a final oral examination in which the thesis or

development for graduate students. students must take at least one semester of AE 690, professional coursework, including undergraduate "make-up" courses, will appear on

A student to enroll in selected undergraduate courses in AE and achieve a grade of C or higher in each, to achieve B.S. in AE degree equivalency.

If a student enters the M.S. program in AE without an equivalent B.S. in AE background the department graduate advisor may require the student to form an advisory committee which includes the following information:

1. Names of the three members of the thesis/project committee. As a general rule these committee members will be drawn from the AE faculty but exceptions may be approved.
2. Proposed thesis/project title or, at least proposed area of thesis/project research.
3. Proposed sequence of courses through the semester of graduation.
4. Proposed semester of graduation.

The plan of study shall indicate for each course which requirement is being satisfied. Unique situations can be accommodated with the combined approval of the AE department graduate advisor and the student's major advisor.

Doctor of Engineering in Aerospace Engineering

Aerospace Engineering

The aerospace engineering discipline involves the design, production, operation, and support of aircraft and spacecraft. Aerospace engineers solve problems, design aircraft and spacecraft, conduct research, and improve processes for the aerospace industry.

Mission

KU aerospace engineering is an international leader in aerospace education and is committed to developing a global community of choice for students, educators, and researchers by strategically aligning teaching, research, and service missions. A world-class graduate and undergraduate education focused on designing, simulating, building, testing, and flying aerospace vehicles is provided. The department invests in research infrastructure and chooses outstanding students, faculty, and staff to conduct basic and applied research of relevance to aerospace vehicles and systems. The department supports the aerospace profession by educating the public, by maintaining the KU aerospace short-course program, and by advising policy-makers in government, industry, and disciplinary professional organizations.

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2. An understanding of the professional responsibilities associated with the special public safety and economic aspects of the aerospace industry.

3. The ability to communicate analysis test, and design results to engineers and nonengineers.

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### Graduate Admission to the Department of Aerospace Engineering

#### Application Requirements

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### Contact Information

**Aerospace Engineering Graduate Director:**

Graduate Program Director  
The University of Kansas  
Aerospace Engineering  
2120 Learned Hall  
1530 W. 15th Street  
Lawrence, Kansas, 66045  
785-864-8040  
E-mail Graduate Program Director, Dr. Charlie Zheng, at aerohawk@ku.edu

**KU Office of Graduate Studies:**

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Graduate Applications Processing Center  
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Students applying for admission to the Ph.D. or D.E. programs must have as a minimum an M.S. or M.E. in Aerospace Engineering, unless they are admitted on a Fast Track basis with a bachelor degree in engineering. The department graduate advisor will evaluate the total academic preparation to determine if additional courses are required to prepare the student for graduate work in aerospace engineering. Any undergraduate courses which must be taken do not carry graduate credit. Internships are not guaranteed.

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Visit Us

The graduate program staff is happy to work with all prospective students in determining the fit between the student and the program. In order to determine this, we feel that visiting our campus in Lawrence is a very important step. In order to facilitate your visit to KU, there are two main options:

The first, and most preferred, option entails simply applying for admission to the program. All prospective students are welcome to attend our Open House in early November and some highly qualified admitted students may be invited to participate in Visitation Days in late February or early March (prior to the fall semester of your intended matriculation). These organized visitation opportunities will allow you time to gather a great deal of first-hand information which we hope will help you in making a final decision about whether to attend KU.

The second option is making arrangements to visit us on your own, outside of organized events. With early notification, we will do our best to work with you to provide information and schedule appointments with faculty when possible. Please contact us if you feel that this is the best option for you.

Contact Information

Please contact the AE Program Assistant at aerohawk@ku.edu or (785) 864-4267, to schedule a visit or with questions about the application process.

The University of Kansas
Doctor of Engineering in Aerospace Engineering

The Department of Aerospace Engineering emphasizes systems design and management skills and requires 66 credit hours beyond the B.S. degree. These 66 hours consist of 36 credit hours of course work, 18 credit hours of project and 12 credit hours of industrial internship. Breadth courses of at least 12 credit hours must be distributed outside the area of specialization in aerodynamics, structures and materials, dynamics and controls, design, propulsion and astronautics. Depth courses of at least 15 credit hours of technical courses (600 and above) in the area of specialization are required.

Core courses of at least 9 credit hours of graduate mathematics beyond the B.S. are required. The 9 credit hours must include a minimum of 6 credit hours of graduate-level mathematics courses. AE 712 is considered a mathematics-intensive engineering course. Graduate mathematics courses are MATH 590 or any other math course 600 level or above.

Credit hours earned completing a master's degree can satisfy a portion of these requirements when appropriate. Unique situations can be accommodated with the approval of the graduate advisor and the major professor.

In addition to general rules and regulations, a student must meet the following departmental requirements. After 2 semesters following completion of M.S. or M.E. requirements (or at a comparable level for non-M.S. or non-M.E. students), the student is evaluated. To be allowed to continue, the student must:

1. Have a minimum grade-point average of 3.5 in M.S. course work,
2. Pass a qualifying examination, and
3. Submit a Plan of Study.

The qualifying examination tests breadth of knowledge and determines the student's ability to formulate mathematical representations of real physical situations. The examination covers mathematics and 2 of these 5 areas:

- Aerodynamics,
- Astronautics,
- Structures and materials
- Dynamics and controls,
- Propulsion.

A student is allowed only 2 attempts to pass this examination.

The aspirant forms a project committee and completes a Plan of Study after the first semester and before the end of the second semester. The project committee must have at least 5 members, including 3 tenured or tenure-track faculty from aerospace engineering and at least 1 member from engineering management. The committee approves the aspirant's program and administers the comprehensive examination and the formal oral defense and project.

When the aspirant has completed most of the course work and satisfied the research skills, responsible scholarship and residency requirements, he or she must take the comprehensive examination. Before being admitted to the comprehensive examination, the aspirant must satisfy the department's basic research skills, responsible scholarship and residency requirements. The research skill requirement provides the aspirant with a research skill distinct from, but strongly supportive of, the dissertation research. One research skill is required. Possible research skills include computer science, mathematics, statistics, specific laboratory skills, and specific skills in the physical or biological sciences. The selected research skill must be listed on the Plan of Study form. A separate statement attached to the Plan of Study must list the work to be completed to obtain the research skill. The responsible scholarship requirement serves to ensure that students are trained in responsible research practices. Aspirants can satisfy the responsible scholarship requirement by enrolling in 2 semesters of AE 690. Professional Development for Graduate Students. This course covers ethical behavior for graduate students, intellectual property, and technical writing. The residency requirement is met by completing 2 semesters, which may include 1 summer session, in resident study and enrollment in 6 credit hours or more. During the period of residence the student must be involved full time in academic pursuits, which may include up to half-time teaching or research.

The comprehensive exam is made up of two parts. The first part must consist of a written project proposal outlining in some detail the work to be done for the project. The second part is an oral examination in which she or he must defend the project plans and demonstrate competence in his or her particular and related areas. Upon passing the comprehensive examination, the aspirant becomes a candidate for the D.E. The project committee directs preparation of the approved project topic. A formal oral and public defense of the project is required before the committee, any other interested members of the Graduate Faculty, and the general public. Candidates for the D.E. must satisfy the university's general requirements for the degree.

A 12-month continuous internship in an industrial or governmental organization is required before assumption of the project responsibilities. This internship must be under joint guidance of a preceptor, who is appointed to the adjunct faculty and a regular faculty member. The internship requirement cannot be satisfied by working in any KU facility.

Because the internship is a degree requirement and because KU cannot guarantee internship employment, the student must indicate in writing how the internship requirement is to be satisfied before completing the first semester after passing the qualifying examination. This can be a letter from the faculty advisor indicating a grant availability, notice of a project appointment or assignment, or a letter from a company or agency (U.S. or abroad) expressing willingness to sponsor the student in an internship.

To be awarded the D.E. degree in Aerospace Engineering all the following requirements must be satisfied:

1. Complete all D.E. course requirements with a GPA of at least 3.50. Grades of C-, D, and F are not allowed.
2. Pass the Qualifying Examination.
3. Complete the Research Skills and Responsible Scholarship requirements.
4. Satisfy the residency requirements.
5. Pass the Comprehensive Exam.
6. Prepare and defend an approved D.E. project report which must contain an original contribution to the field by the candidate.

Maximum Tenure

The dissertation must be completed within eight years after being admitted to the D.E. program in AE. In cases which require more than
eight years, the dissertation committee may grant an appeal for an extension of this period.

Doctor of Philosophy in Aerospace Engineering

Aerospace Engineering

The aerospace engineering discipline involves the design, production, operation, and support of aircraft and spacecraft. Aerospace engineers solve problems, design aircraft and spacecraft, conduct research, and improve processes for the aerospace industry.

Mission

KU aerospace engineering is an international leader in aerospace education and is committed to developing a global community of choice for students, educators, and researchers by strategically aligning teaching, research, and service missions. A world-class graduate and undergraduate education focused on designing, simulating, building, testing, and flying aerospace vehicles is provided. The department invests in research infrastructure and chooses outstanding students, faculty, and staff to conduct basic and applied research of relevance to aerospace vehicles and systems. The department supports the aerospace profession by educating the public, by maintaining the KU aerospace short-course program, and by advising policy-makers in government, industry, and disciplinary professional organizations.

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Graduate Admission to the Department of Aerospace Engineering

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**Aerospace Engineering Graduate Advisor:**

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A variety of scholarships, fellowships, and assistantships are available and are awarded competitively based on academic qualifications through the department or school.

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All graduate students in the School of Engineering who are required to take courses at the Applied English Center (http://www.aec.ku.edu) must pass the AEC’s English Proficiency Examination within 3 semesters of their initial enrollment. Failure to complete the English proficiency
requirement within this time limit may result in dismissal from the graduate engineering program.

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The second option is making arrangements to visit us on your own, outside of organized events. With early notification, we will do our best to work with you to provide information and schedule appointments with faculty when possible. Please contact us if you feel that this is the best option for you.

Contact Information

Please contact the AE Program Assistant at aerohawk@ku.edu or (785) 864-4267, to schedule a visit or with questions about the application process.

The University of Kansas
Department of Aerospace Engineering
Learned Hall
1530 W. 15th St., Room 2120
Lawrence, KS 66045-7618

Ph.D. Degree Requirements

The Ph.D. program requires 60 credit hours beyond the B.S. These 60 credit hours consist of 36 credit hours of course work and at least 24 credit hours of dissertation. Breadth courses of at least 12 credit hours must be distributed outside the area of specialization in aerodynamics, structures and materials, dynamics and controls, design, propulsion and astronautics. Depth courses of at least 15 credit hours of technical courses (600 and above) in the area of specialization is required.

Core courses of at least 9 credit hours of graduate mathematics beyond the B.S. are required. The 9 credit hours must include a minimum of 6 credit hours of graduate-level mathematics courses. AE 712 is considered a mathematics-intensive engineering course. Graduate mathematics courses include MATH 590 or any math course 600 level or above.

Credit hours earned in completing a master’s degree can be used to satisfy a portion of these requirements when appropriate. Unique situations can be accommodated with the approval of the graduate advisor and the candidate’s major professor.

In addition to general rules and regulations, a student must meet departmental Ph.D. requirements. After 2 semesters following the completion of M.S. requirements (or at a comparable level for non-M.S. students), the student is evaluated. To be allowed to continue for the Ph.D., the student must 1. Have a minimum grade-point average of 3.5 in M.S. course work, 2. Pass a qualifying examination, and 3. Submit a Plan of Study.

The qualifying examination tests breadth of knowledge and determines the student’s ability to formulate mathematical representations of real physical situations. The examination covers mathematics and 2 of these 5 areas:

- Aerodynamics,
- Astronautics,
- Structures and materials
- Dynamics and controls, and
- Propulsion.

A student is allowed only 2 attempts to pass this examination.

The aspirant forms a dissertation committee and completes a Plan of Study after the first semester and before the end of the second semester. The dissertation committee must have 5 members, including 3 tenured or tenure-track faculty from aerospace engineering and at least 1 member from a department other than aerospace engineering. The committee approves the aspirant’s program and administers the comprehensive examination and the formal oral defense and dissertation.

When the aspirant has completed most of the course work and satisfied the research skills, responsible scholarship and residency requirements, he or she must take the comprehensive examination. The research skill requirement provides the aspirant with a research skill distinct from, but strongly supportive of, the dissertation research. One research skill is required. Possible research skills include computer science, mathematics, statistics, specific laboratory skills, and specific skills in the physical or biological sciences. The selected research skill must be listed on the Plan of Study form. A separate statement attached to the Plan of Study must list the work to be completed to obtain the research skill. The responsible scholarship requirement serves to ensure that students are trained in responsible research practices. Aspirants can satisfy the responsible scholarship requirement by enrolling in 2 semesters of AE 690, Professional Development for Graduate Students. This course covers ethical behavior for graduate students, intellectual property, and technical writing. The residency requirement is met by completing 2 semesters, which may include 1 summer session, in resident study and enrollment in 6 credit hours or more. During the period of residence the student must be involved full time in academic pursuits, which may include up to half-time teaching or research.

The comprehensive examination is made up of two parts. The first part must consist of a written research proposal outlining in some detail the work to be done for the dissertation. The second part is an oral examination in which she or he must defend the research plans and demonstrate competence in her or his particular and related areas. Upon passing the comprehensive oral examination the aspirant becomes a candidate for the PhDAE degree. The dissertation committee directs preparation of the approved dissertation topic and research. The candidate now completes the dissertation work or research and writes the dissertation. The dissertation must contain an original contribution made by the candidate to the field. In addition, a comprehensive review of the pertinent literature must be included. This dissertation must be approved by the candidates’ dissertation committee. A formal oral and public defense of the dissertation is required before the candidate’s committee, any other interested members of the Graduate Faculty, and the general
public. Candidates for the Ph.D. must also satisfy the university’s general requirements for the degree.

Some examples of experimental and computational courses are

**Bioengineering Graduate Program**

**Bioengineering**

The bioengineering graduate program prepares students to become leading researchers, educators, and entrepreneurs. The program provides knowledge breadth in engineering and the biological sciences and knowledge depth in the student’s area of research interest. The program offers the Master of Science and Doctor of Philosophy degrees in bioengineering and the M.D./Ph.D. combined degree in conjunction with the KU School of Medicine (http://medicine.kumc.edu). Students have access to innovative research and educational facilities on KU’s Lawrence and KU Medical Center campuses. The student selects from 6 tracks:

## Experimental Courses (13)

- **AE 705** Structural Vibrations and Modal Testing 4
- **AE 730** Advanced Experimental Fluid Dynamics 3
- **AE 732** Introduction to Flight Test Engineering 3
- **CE 721** Experimental Stress Analysis 3

## Computational Courses (15)

- **EECS 744** Communications and Radar Digital Signal Processing 3
- **ME 861** Theory of the Finite Element Method 3
- **MATH 781** Numerical Analysis I 3
- **MATH 782** Numerical Analysis II 3
- **MATH 783** Applied Numerical Methods for Partial Differential Equations 3

To be awarded the Ph.D. degree a student must:

1. Complete all course work with a 3.0/4.0. Grades of D and F are not allowed.
2. Satisfy residence requirements.
3. Pass the Qualifying Examination.
4. Satisfy the Research Skills and Responsible Scholarship requirements.
5. Pass the Comprehensive Exam.
6. Prepare and defend a Ph.D. dissertation which must contain an original contribution to the field by the candidate.

**Note well:**

a. The dissertation must be publicly defended in the presence of the candidates dissertation committee. Public notice of this defense must be given at least two weeks before the defense. The dissertation defense must be public and reasonable questions from the public must be addressed by the candidate.

b. At least five months must elapse between passing the comprehensive oral examination and conducting the dissertation defense.

**Maximum Tenure**

The dissertation must be completed within eight years after being admitted to the PhD program in AE. In cases which require more than eight years, the dissertation committee may grant an appeal for an extension of this period.

**Financial Aid**

Once admitted, students become eligible for financial aid. Graduate students in the bioengineering graduate program are most often supported through research assistantships, teaching assistantships, or fellowships (e.g., the Madison and Lila Self Fellowship). Research assistantships are arranged by the student and faculty advisor with assistance from the Bioengineering Academic Director if needed. Teaching assistantships are arranged by the Bioengineering Academic Director. Highly qualified applicants are considered for additional support and fellowships. For more information about external and other KU funding options, please visit http://www. engr.ku.edu/prospective/graduate/ scholarships.html.

**Courses**

**BIOE 800. Bioengineering Colloquium. 0.5 Hours.**

A colloquium series featuring speakers from industry, government, other universities, research centers and research organizations of the university campus presenting talks on various topics related to bioengineering. LEC.

**BIOE 801. Responsible Conduct of Research in Engineering. 1 Hour.**

Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis on practical topics of special importance in bioengineering. Topics include the nature of ethics, the roles of the scientist as a reviewer, entrepreneur, employer and teacher, research
The program's goals are:

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2. To train students to apply basic sciences to biological problems using engineering principles;
3. To train students to do bioengineering research and solve problems related to the design and development of diagnostic and therapeutic technologies that improve human health; and
4. To train students to apply bioengineering research to commercially viable technologies.

Bioengineering research projects typically focus on 1 of 2 broad categories:

1. The development of fundamental scientific knowledge and
2. The development and application of materials, devices, and systems with the goal of improving biological processes, systems, and health care.

Bioengineering students are often involved in measurements, analysis, modeling, computations, design, and development. The program prepares students for careers in industry, academia, health care settings, and government.

Financial Aid

Once admitted, students become eligible for financial aid. Graduate students in the bioengineering graduate program are most often supported through research assistantships, teaching assistantships, or fellowships (e.g., the Madison and Lila Self Fellowship (http://selfgraduate.ku.edu)). Research assistantships are arranged by the student and faculty advisor with assistance from the Bioengineering Academic Director if needed. Teaching assistantships are arranged by the Bioengineering Academic Director. Highly qualified applicants are considered for additional support and fellowships. For more information about external and other KU funding options, please visit http://www.engr.ku.edu/prospective/graduate/scholarships.html.

Graduate Admission to the Department of Bioengineering

M.S. applicants are expected to have at least a 3.0 grade point average on a 4.0 scale from an accredited post-secondary institution. Ph.D. applicants are expected to have an undergraduate grade point average of 3.5 or higher on a 4.0 scale. The appropriate academic preparation includes both general and track prerequisites. General prerequisites include calculus I and II, differential equations, linear algebra, general physics I and II, chemistry, and biology. Track prerequisites depend on the student's track of study. More complete details about academic preparation can be found on the program's website (http://www.bio.engr.ku.edu).

Applicants normally have a B.S. and/or an M.S. degree in an engineering discipline, physical sciences, the life sciences, or a closely related field. Students with a degree in an engineering discipline outside of bioengineering may be required to take additional courses (e.g., in the life sciences). Students with a degree from outside engineering may be required to take additional courses (e.g., in the physical sciences, mathematics, and engineering). These additional courses generally do not count toward the graduate degree.

A highly qualified applicant (with a grade-point average higher than 3.75) may apply for admission directly into the Ph.D. program after completing the B.S. degree. Generally, a student who does not have an undergraduate degree in an engineering discipline must complete the M.S. before entering the Ph.D. program.

A student may enter the bioengineering graduate program before meeting all the prerequisites if approved by the Graduate Studies Committee. This student must plan to complete the prerequisites during the program in addition to the degree requirements. Consultation with the academic director is required to determine which courses satisfy these requirements. Course credits from prerequisites generally do not apply...
toward the graduate degree; they must be completed with a grade of B or higher.

The application deadline for fall admission is December 15th and the deadline for spring admission is September 30th. A complete application should include: completed online application, application fee payment, transcripts of all college-level work, 3 letters of recommendation, a letter of intent or statement of purpose, and scores from the Graduate Record Examination (verbal, quantitative, and analytical). A strong applicant should have outstanding academic credentials, some formal research experience, research interests that fit one of the tracks of study, and a strong potential for advanced study.

Unless the applicant’s native language is English or the applicant has received a baccalaureate degree or higher from an accredited U.S. institution of higher education, he or she must meet the program’s standard for the Test of English as a Foreign Language (TOEFL). Applicants for graduate teaching assistantships must obtain satisfactory scores on the Test of Spoken English (SPEAK).

Submit your graduate application online (http://www.graduate.ku.edu).

Application Instructions

CLICK HERE FOR DETAILED INSTRUCTIONS ON THE APPLICATION PROCESS

General Information

Admissions to the Bioengineering Graduate Program is granted to domestic and international students who have a superior record of achievement in their previous studies and show strong potential to succeed in study and research at the graduate level.

Applicants normally have a Bachelors of Science degree or a Masters of Science degree in an engineering discipline, physical sciences (e.g. Chemistry, Physics, etc.), the life sciences (e.g. Biology, Biochemistry, etc.), or a closely related field.

Highly qualified undergraduate students may apply for admission directly into our Ph.D. program after completing their B.S. degree. Students who do not have an undergraduate degree in an Engineering discipline will generally be admitted to the MS degree.

Application Deadlines

In order to receive full consideration for fellowships and other awards, a complete application package should be submitted by the following deadlines:

Fall Admission: December 15 (all applicants)
Spring Admission: September 30 (all applicants)

Funding

Scholarships/Fellowships - The Bioengineering graduate admissions committee nominates applicants for University and School of Engineering scholarships and fellowships based on academic merit and other selection criteria, as specified by the fellowship selection committees.

Graduate Teaching Assistantships (GTAs) - Teaching Assistantships are available and are awarded competitively based on academic qualifications. You do not need a separate application to be considered.

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The second option is making arrangements to visit us on your own, outside of organized events. With early notification, we will do our best to work with you to provide information and schedule appointments with faculty when possible. Please contact us if you feel that this is the best option for you.

Contact Information

Please contact the Bioengineering Program Assistant, bioe@ku.edu or (785) 864-5258, to schedule a visit or with questions about the bioengineering application process.

The University of Kansas
Bioengineering Graduate Program
Eaton Hall
1520 W. 15th Street, Room 1
Lawrence, KS 66045-7605

M.S. Degree Requirements

In addition to general rules and regulations, the student must meet the program’s M.S. requirements. Requirements for the M.S. include course work, a thesis, and a final oral examination.

In the first semester, the student selects a track of study, an advisor, and an advisory committee. The advisory committee guides the student’s development through the Plan of Study (https://gradplan.engr.ku.edu/accounts/login/?next=) in the chosen track, helps the student select a topic for research leading to the thesis, and participates in the final oral examination. Should the student’s interests change, the advisory committee membership may be changed accordingly, with the approval of the program’s Graduate Studies Director.

The student’s advisory committee consists of a minimum of 3 graduate faculty members and is chaired by the student’s advisor. A more detailed description is available on the program’s website (http://www.bio.engr.ku.edu).
Course Requirements

The M.S. program requires a minimum of 30 credit hours beyond the B.S. to meet degree requirements.

- Core Courses (6 hours)
- Track Courses (18 hours) Students must complete the depth, breadth, and elective courses required in the chosen track (see the program’s website [http://www.bio.engr.ku.edu] for track requirements).
- Research (6 hours)

Plan of Study

Students are expected to complete a Plan of Study before beginning the second semester of graduate study. To complete a Plan of Study, a student should have identified a research advisor and thesis committee. Students should work with their research advisors to identify an appropriate list of courses that fulfill degree requirements and support the student’s educational and research objectives. A Plan of Study can be completed online ([https://gradplan.engr.ku.edu/accounts/login/?next=](https://gradplan.engr.ku.edu/accounts/login/?next=)). The advisor, committee members, and graduate studies director must approve the Plan of Study. The Plan of Study can be modified later, if needed, with approval of the advisor, committee members, and Graduate Studies Director. Students are required to complete their masters degree within 7 years from initial enrollment in the program, but typically finish within 2-3 years. A timeline is available [here](https://gradplan.engr.ku.edu/

Thesis and Final Examination

The M.S. student is expected to conduct original research, prepare a written thesis detailing the results, and defend the thesis in a final oral examination. The research generally is expected to be of sufficient quality to permit publication in reputable scientific journals. The final oral examination is scheduled when the advisory committee agrees that the research is complete.

Doctor of Philosophy in Bioengineering

Bioengineering Graduate Programs

The bioengineering graduate program prepares students to become leading researchers, educators, and entrepreneurs. The program provides knowledge breadth in engineering and the biological sciences and knowledge depth in the student’s area of research interest. The program offers the Master of Science and Doctor of Philosophy degrees in bioengineering and the M.D./Ph.D. combined degree in conjunction with the KU School of Medicine ([http://medicine.kumc.edu](http://medicine.kumc.edu)). Students have access to innovative research and educational facilities on KU’s Lawrence and KU Medical Center campuses. The student selects from 6 tracks:

1. Bioimaging,
2. Bioinformatics,
3. Biomaterials and tissue engineering,
4. Biomechanics and neural engineering,
5. Biomedical product design and development, and

The student, in consultation with his or her advisor and advisory committee, develops a Plan of Study ([https://gradplan.engr.ku.edu/accounts/login/?next=](https://gradplan.engr.ku.edu/accounts/login/?next=)) and a research program to satisfy degree requirements.

The program’s goals are:

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Bioengineering Graduate Program
Eaton Hall
1520 W. 15th Street, Room 1
Lawrence, KS 66045-7605

Ph.D. Degree Requirements

In addition to general rules and regulations, the student must meet the program’s Ph.D. requirements. Requirements for the Ph.D. include coursework, a doctoral qualifying examination, research skills and residence requirement, a comprehensive examination, a dissertation, and a final oral examination.

In the first semester, the student selects a track of study, an advisor, and an advisory committee. The advisory committee guides the student’s development through the Plan of Study (https://gradplan.engr.ku.edu/accounts/login/?next=) in the chosen track, participates in the comprehensive and final examination, and helps the student select a topic for research leading to the dissertation. Should the student’s interests change, the advisory committee membership may be changed.
accordingly, with the approval of the program’s Graduate Studies Director. The student’s advisory committee consists of a minimum of 5 graduate faculty members and is chaired by the student’s advisor. A more detailed description is available on the program’s website (http://www.bio.engr.ku.edu).

Course Requirements
The Ph.D. program requires a minimum of 60 credit hours beyond the B.S. to meet degree requirements.

- Core Courses (6 hours)
- Track Courses (30-36 hours) Students must complete the number of hours, including the depth and breadth courses, required in the chosen track (see the program’s website (http://www.bio.engr.ku.edu) for track requirements).
- Research (18-24 hours).

Plan of Study
Students are expected to complete a Plan of Study before beginning the second semester of graduate study. To complete a Plan of Study, a student should have identified a research advisor and dissertation committee. Students should work with their research advisors to identify an appropriate list of courses that fulfill degree requirements and support the student’s educational and research objectives. A Plan of Study can be completed online (https://gradplan.engr.ku.edu/accounts/login/?next=). The advisor, committee members, and graduate studies director must approve the Plan of Study. The Plan of Study can be modified later, if needed, with approval of the advisor, committee members, and Graduate Studies Director. Students are required to complete their PhD degree within 8 years from initial enrollment in the program, but typically finish within 4-5 years. A timeline is available here (http://www.engr.ku.edu/graduate/steps.html).

Qualifying Examination
Each doctoral student must pass the doctoral qualifying examination, normally taken at the end of the first year of graduate study. The written and oral examination measures the student’s ability to comprehend and communicate technical literature in the chosen track of study. The qualifying examination may be taken twice in a student’s graduate career. A more detailed description of the examination is available on the program’s website (http://www.bio.engr.ku.edu).

Research Skills and Responsible Scholarship
In addition to passing the qualifying examination, the doctoral student is required to demonstrate proficiency in research skills and responsible scholarship. The research skill requirement is fulfilled through successfull completion of BIOE 800, Bioengineering Colloquium. The responsible scholarship requirement is fulfilled through successful completion of BIOE 801, Responsible Conduct of Research in Engineering.

Residence Requirement
Doctoral students must spend a minimum of 2 semesters, which may include the summer session, involved in full-time academic or professional pursuits beyond the baccalaureate degree in graduate study at KU. This may include an appointment for teaching or research and requires that the student be enrolled in a minimum of 6 credit hours a semester. More information can be found in the general doctoral degree requirements of the graduate catalog.

Comprehensive Examination
Doctoral students must take the comprehensive examination after passing the qualifying examination, completing the research skills requirement, residency requirement, responsible scholarship requirement, and at least ¾ of the course work required in the Plan of Study. The examining committee for the comprehensive examination is generally the student’s doctoral advisory committee. Before the examination, the student must submit a written proposal to the committee, which will be reviewed and approved by the student’s doctoral advisory committee. The examining committee evaluates the student’s ability to write an original research proposal, design experiments, and interpret results in a sound and critical manner. A more detailed description of the examination is available on the program’s website (http://www.bio.engr.ku.edu).

Passing the examination advances the student to doctoral candidacy.

Dissertation and Final Examination
The doctoral candidate is expected to conduct original research, prepare a written dissertation detailing the results, and defend the dissertation in a final oral examination. The research is expected to be of sufficient quality to permit publication in reputable scientific journals. The final oral examination is scheduled when the advisory committee agrees that the research is complete.

M.D./Ph.D. Combined Degree Requirements
The Bioengineering Graduate Program offers the combined M.D./Ph.D. degrees, in conjunction with the School of Medicine, for the student who wishes to combine a focus on medicine with interests in bioengineering research. The requirements for the Ph.D. component of the M.D./Ph.D. program are the same as for the Ph.D. program. Completion of the M.D./Ph.D. degrees is expected to take approximately 7 years. The M.D./Ph.D. student is encouraged to defend the dissertation before clinical rotations. Scholarships are available for both the M.D. and Ph.D. components of the program.

Department of Chemical & Petroleum Engineering

Chemical and Petroleum Engineering
Chemical engineering has grown out of a combination of chemistry and engineering associated with industrial processes. Today, it comprises knowledge used in processes that change the physical state or composition of materials. Chemical engineers hold key roles in the design, development, production, and purification of materials that are considered essential to human life and well-being, such as food products, fuels and lubricants, pharmaceuticals, fertilizers, synthetic fibers, microelectronic components, and plastics. Chemical engineers are involved in reducing the use of energy to make these products in safe and sustainable ways. They are responsible for minimizing environmental effects of chemical production on the environment.

Petroleum engineering is concerned with the drilling, recovery, production, and distribution of petroleum and natural gas. Petroleum engineers use knowledge of fluid and rock properties in subsurface environments with methods of producing oil and gas safely and economically. At the University of Kansas, the focus is on reservoir engineering to improve production from oil and gas reservoirs. Reservoir engineers use
geological detection with computerized mathematical analysis to produce these valuable raw materials. Through such techniques, petroleum engineers continue to extract oil and gas from reservoirs that were considered uneconomical only a few years ago. Petroleum engineering is uniquely challenging in that the raw product must be recovered far from observation.

**Undergraduate Programs**

The Department of Chemical and Petroleum Engineering offers the Bachelor of Science degree in chemical engineering and petroleum engineering.

The B.S. program in chemical engineering offers a General Program, a Biomedical concentration, a Petroleum concentration, a Premedical concentration, and an Environmental concentration, as well as a Co-Op program.

**Graduate Programs**

C&PE graduate programs provide an in-depth academic understanding of chemical engineering and petroleum engineering for students who plan careers in academia, research, or development. The department offers the M.S. degree in chemical engineering and petroleum engineering and the Ph.D. degree in chemical and petroleum engineering. See the Graduate Studies (p. 2369) section of the online catalog for requirements for admission and degrees.

In the master's programs, the primary emphasis is on formal course work in engineering and related subjects. Students take a sequence of core courses in heat, mass and momentum transport, thermodynamics, reaction kinetics, applied mathematics, reservoir engineering, and petroleum recovery.

In the doctoral program, the student completes an independent and novel research project in a significant engineering area. Specific Ph.D. course work depends on the research area and the specific education needed by the student for the project. The general research area reflects the research interests of the faculty. In addition to specialized courses in the department, advanced courses in mathematics and computer science, life sciences, physical sciences, and other branches of engineering may be used to prepare the Ph.D. student for the research project.

These guidelines include departmental requirements and are intended to assist the student and advisory committee in preparing a Plan of Study for the graduate degree.

**Courses**

**C&PE 111. Introduction to the Chemical Engineering Profession. 2 Hours.**

An introduction to the University of Kansas and work done by professional engineers. Students are introduced to the resources available to them at KU, in the School of Engineering, and in the Chemical and Petroleum Engineering Department. They are introduced to the curricular requirements and expectations of chemical engineering students. The career opportunities for chemical engineers are described. Students are introduced to engineering ethics, basic safety considerations, teamwork, and technical writing. The course includes fundamental calculations of material and energy balances and fluid flow. LEC.

**C&PE 117. Energy in the Modern World. 1 Hour.**

A survey course on global energy supply and demand, production methods and energy economics. Course begins with the matrix of energy supply and demand focusing on fossil fuels and nuclear energy and includes transportation/distribution patterns and issues and current production technologies. We then analyze alternate energy realities and potentials such as solar energy, wind energy, biomass utilization, hydrogen, fuel cells, hydroelectric, geothermal, wave/tidal, and others based on thermodynamic principles and economics. Course is also open to non-engineering students. LEC.

**C&PE 121. Introduction to Computers in Engineering. 3 Hours.**

Formulation of engineering problems for machine computation with emphasis on good programming practices and the integration of appropriate computational and related tools. Solutions are computed using Excel, Visual Basic, and general purpose languages such as Mathcad and/or MATLAB. Computing methods are introduced as tools for developing solutions using elementary numerical techniques including linear interpolation, linear regression, numerical integration, and root finding. Microsoft Office is used with the computational tools to provide integrated report generation capability. Two lectures and weekly laboratory instruction. Prerequisite: MATH 121 or MATH 141. LEC.

**C&PE 127. Introduction to Petroleum Engineering Profession. 1 Hour.**

An introduction to principles of reservoir engineering and an application of economic principles will be introduced along with the use of computer spreadsheets. A mini petroleum engineering design project will be assigned to illustrate the integration of petroleum engineering principles and the use of computers. CPE 127 is required of all Petroleum Engineering freshmen but is optional for others. Transfer students who don't take the course must substitute CPE 127 with one hour of engineering science. LEC.

**C&PE 211. Material and Energy Balances. 4 Hours.**

The application of the laws of chemistry, physics, and mathematics to the solution of material and energy balance problems occurring in the process industries. Prerequisite: CPE 121; and CHEM 135 or CHEM 175 or CHEM 195; or consent of instructor. LEC.

**C&PE 217. Introduction to Petroleum Drilling Engineering. 2 Hours.**

An introduction to modern rotary drilling. Topics covered include: rig systems/hardware, management practices, cost analysis, drilling fluid function formulations and testing, well control systems, cement formulation and placement, drilling bits. LEC.

**C&PE 219. Drilling Fluids Laboratory. 1 Hour.**

Laboratory study of formulation and properties of drilling fluids. "Mud" measurements covered include density, solids content, filtration control and viscosity. Other measurements include compressive strength of cement and cuttings transport properties. Corequisite: CPE 217. LAB.

**C&PE 221. Chemical Engineering Thermodynamics. 3 Hours.**

Fundamentals and applications of the First and Second Laws of Thermodynamics with strong emphasis on material, energy and entropy balances to solve engineering problems involving pure components. Topics include: Cycles (Rankine, Brayton, refrigeration, etc.), the calculus of thermodynamics, equations of state for realistic thermodynamic properties, departure functions, equilibrium and stability criteria, fugacity, and single component phase equilibrium (vaporization, melting, sublimation). Prerequisite: MATH 122 or MATH 142 or MATH 126 or MATH 146; CPE 121; and CPE 211. Prerequisite or Corequisite: PHSX 210, PHSX 211, or PHSX 213; or permission of instructor. LEC.

**C&PE 327. Reservoir Engineering. 4 Hours.**

Properties of porous rocks, reservoir fluids, and fluid saturated rocks. Introduction to multiphase flow in porous media including concepts of wettability, capillary pressure and relative permeability. Prerequisite: CHEM 135 or CHEM 175. LEC.
C&PE 511. Momentum Transfer. 3 Hours.
Solutions of continuity, momentum, and energy equations applied to fluids in confined flow or flowing past submerged objects. Laminar and turbulent flows of both incompressible and compressible fluids are considered. Prerequisite: CPE 221 or ME 312; CPE 121 (or equivalent), MATH 122 OR MATH 142 or MATH 127 or MATH 147, and a course in differential equations (MATH 220 or MATH 221 or MATH 320 or MATH 321). LEC.

C&PE 512. Chemical Engineering Thermodynamics II. 3 Hours.
Further application of the laws of thermodynamics to multi-component mixtures and in multi-phase equilibria with focus on vapor-liquid, liquid-liquid, and solid-liquid equilibria. Mixture Fugacity expressions are developed using equations of state with mixing rules or Excess Gibbs Free Energy/activity coefficient models for data correlation or prediction. Chemical equilibrium of reactions is also discussed. Prerequisite: CPE 121; CPE 211; CPE 221; and CHEM 330 or CHEM 380 or CHEM 624; or permission of instructor. LEC.

C&PE 521. Heat Transfer. 3 Hours.
An applied study of the various (conductive, convective, and radiative) heat transfer mechanisms in solid and fluid systems both transient and steady-state. Engineering applications include: conduction in solids and fluids, free and forced convection in fluids, radiation, boiling and condensing fluids, and design of heat exchangers. Prerequisite: CPE 121, Thermodynamics (CPE 221 or ME 312); CPE 511 or ME 510, MATH 122 or MATH 142, or MATH 127 or MATH 147; AND a course in differential equations (MATH 220 or MATH 221 or MATH 320 or MATH 321). LEC.

C&PE 522. Economic Appraisal of Chemical and Petroleum Projects. 2 Hours.
Consideration of the economic factors important in the development of the chemical or petroleum enterprise. Applications of economic evaluation methods to engineering project development. Consideration of risk and uncertainty in project development. Prerequisite: MATH 122, or MATH 142; PHSX 210, PHSX 211, or PHSX 213; and CPE 121 or consent of instructor. LEC.

C&PE 523. Mass Transfer. 4 Hours.
Includes one credit hour of calculations laboratory. Treatment of mass transfer phenomena with application to analysis and design of unit operations equipment such as distillation, extraction, absorption, and adsorption. Prerequisite: CPE 211, CPE 511, and CPE 512. Corequisite: CPE 521. LEC.

C&PE 524. Chemical Engineering Kinetics and Reactor Design. 3 Hours.
Development and solution of the material and energy balance equations for continuous and batch reactors. These balance equations are applied in (a) the determination of intrinsic kinetics, (b) the design of reactors and (c) the analysis of reactor behavior. Both homogeneous and heterogeneous reaction systems are considered. Prerequisite: CPE 511, CPE 512, and a course in differential equations. Corequisite: CPE 521. LEC.

C&PE 527. Reservoir Engineering II. 4 Hours.
Lectures on single phase flow and pressure distribution in reservoirs. Calculations in drawdown, buildup, multiple rate, fractured systems, gas and injection well testing. Material balance calculations for gas, gas-condensate, undersaturated, and saturated reservoirs. Prerequisite: CPE 327 or consent of instructor, a course in differential equations. LEC.

C&PE 528. Well Logging. 3 Hours.
Analysis of well logs to determine properties of reservoir rocks, fluid saturations and lithology, and production logging. Prerequisite: CPE 327 or consent of instructor. LEC.

C&PE 601. Undergraduate Topics in Chemical and Petroleum Engineering. 1-4 Hours.
Undergraduate study in various branches of Chemical and Petroleum Engineering on topics that may vary from year to year. Prerequisite: Varies. LEC.

C&PE 612. Environmental Assessment of Chemical Processes. 3 Hours.
A discussion and project-based survey of environmental issues in chemical engineering, including environmentally conscious design, environmental fate and transport, green chemistry, and life cycle analysis. Focus will be on the design, implementation and management of comprehensive environmental assessments for existing and new industrial facilities with an emphasis on the technical and economic impacts of catalytic systems on pollution control strategies. LEC.

C&PE 613. Chemical Engineering Design I. 4 Hours. AE61.
Synthesis, design and economic analysis of petrochemical, and chemical plants. Applications in computer aided engineering applied to these topics. Prerequisite: CPE 511, CPE 512, CPE 521, CPE 522, CPE 523, and CPE 524. Corequisite: CPE 615. LEC.

C&PE 614. Reaction Engineering for Environmentally Benign Processes. 3 Hours.
Principles of reaction engineering and green chemistry applied to processes of the future. With a case-based introduction to the design and optimization of catalytic processes and reaction systems, focus will be on key reaction engineering concepts, including catalysis, mechanisms, reaction kinetics, heterogeneous reactions, reactor types and economic evaluation. Students will develop a multidisciplinary understanding of chemical, biological and molecular concepts and of the multiscale character of developing and designing processes from the micro level to the macro level. Prerequisite: Senior standing in engineering to the physical/biological sciences. LEC.

C&PE 615. Introduction to Process Dynamics and Control. 3 Hours.
The behavior of chemical processing equipment in the presence of disturbances in operating conditions is analyzed. Control systems are designed based on the criteria of system stability and optional system performance. Prerequisite: CPE 511, CPE 512, CPE 521, CPE 523, and CPE 524. LEC.

C&PE 616. Chemical Engineering Laboratory I. 3 Hours.
Laboratory study of chemical engineering concepts of thermodynamics, fluid flow, heat transfer, mass transfer, and reaction kinetics. Includes emphasis on technical communication skills. Prerequisite: CPE 511, CPE 512, CPE 521, CPE 523, CPE 524, and ENGL 102. LAB.

C&PE 617. Drilling and Well Completion. 3 Hours.
Design and analysis of rotary drilling and well completion systems; casing design, cementing, and perforating. Safety and ethical considerations in drilling and fluid disposal operations. Prerequisite: CPE 517 and CPE 511 or ME 510 and CPE 217 or consent of instructor. LEC.

C&PE 618. Secondary Recovery. 4 Hours.
Study of waterflooding based upon linear displacement theory. Extension to two and three dimensions through correlations and stream tube models. Design of waterfloods including preparation of a reservoir description for waterflood evaluation. Prerequisite: CPE 527. LEC.
C&PE 619. Petroleum Engineering Laboratory I. 3 Hours.
Laboratory study of methods to determine rock and fluid properties related to petroleum engineering including phase behavior, viscosity, permeability, porosity, capillary pressure, oil recovery, water/oil displacement, fluid flow, and heat transfer coefficients. Analysis of experimental uncertainty. Oral and written presentations are required. Prerequisite: ENGL 102 or ENGL 105; and CPE 511 or ME 510; and CPE 517; or consent of instructor. LAB.

C&PE 620. Enhanced Oil Recovery. 3 Hours.
Enhanced Oil Recovery processes such as primary, secondary, and tertiary oil recovery techniques will be presented. This includes miscible/immiscible displacement, chemical processes such as polymer flood, surfactant and micellar flood, and thermal recovery techniques such as steam flooding, in-situ combustion, and other EOR techniques. Prerequisite: CPE 527 and CPE 618 or consent of instructor. LAB.

A continuation of CPE 613 with emphasis on individual student process design development and analysis. Prerequisite: CPE 613, CPE 615. LEC.

C&PE 624. Plant and Environmental Safety. 3 Hours.
An introductory course designed to acquaint students to topics including chemical plant and environmental accident analysis; review of hazard evaluation procedures including fault tree, hazard and operability studies and human error analysis; safety equipment design; EPA and TOSCA criteria and ethical considerations. Prerequisite: CPE 613 and CPE 615. LEC.

C&PE 626. Chemical Engineering Laboratory II. 3 Hours.
Laboratory study of chemical engineering concepts of thermodynamics, fluid flow, heat transfer, mass transfer, reaction kinetics, and process control. Includes emphasis on technical communication skills. Prerequisite: ENGL 102, CPE 511, CPE 512, CPE 521, CPE 523, CPE 524, CPE 615. LAB.

C&PE 627. Petroleum Production. 3 Hours.
Design and analysis of natural production and artificial lift systems, including beam pumping, gas lift, and submersible pumps. Vertical and horizontal two phase flow, compression, metering, acidizing, fracturing, and pipe line flow systems. Treatment of ethics considerations in production contracts and leasing arrangements. Prerequisite: CPE 511 or ME 510, CPE 528; and CPE 527. LEC.

C&PE 628. Petroleum Engineering Design. 3 Hours. AE61.
Design problems related to petroleum reservoir development such as selection of optimum well spacing for a specified reservoir, evaluation of a producing property or installation of a waterflood. Designs consider economic, uncertainty analysis, as well as conservation, environmental, and professional ethics factors. Prerequisite: CPE 522, CPE 527, CPE 528, GEOL 535, and CPE 618. LEC.

C&PE 651. Undergraduate Problems. 1-6 Hours.
Investigation of a particular problem in the field of chemical or petroleum engineering. IND.

C&PE 654. Biocatalysis. 3 Hours.
Introductory and advanced topics in biocatalysis with focus on enzymatic reactions. Enzymology will provide the fundamental basis for discussion of kinetics and bio-process development. Advanced topics include: enzymes in non-aqueous solvents, immobilization techniques, whole-cell transformations, bio-reactors. LEC.

C&PE 655. Introduction to Semiconductor Processing. 3 Hours.
An overview of various processes to fabricate semiconductor devices and integrated circuits. Topics covered include crystal growth, oxidation, solid-state diffusion, ion implantation, photolithography, chemical vapor deposition, epitaxial growth, metalization, and plasma etching of thin films. (Same as EECS 670.) Prerequisite: Senior standing in CPE or EE or consent of instructor. LEC.

C&PE 656. Introduction to Biomedical Engineering. 3 Hours.
An interdisciplinary introduction to the field of biomedical engineering. This course covers a breadth of topics including biotransport, biomechanics, biomaterials, tissue engineering, drug delivery, biomedical imaging, computational biology, and biotechnology. Students are exposed to these broad topics, and go further in depth in a topic of their choice with the semester project. Prerequisite: Junior or Senior-level standing in Engineering or consent of instructor. LEC.

C&PE 657. Polymer Science and Technology. 3 Hours.
Polymer Science and Technology is a 3-hour introductory course to polymer chemistry, science, technology, and processing. The course targets junior, senior, and graduate chemical engineers and chemistry majors and is intended to provide a background which would allow young professionals to understand polymer chemistry and processes to which they would be exposed to in industry and literature. The course would also assist them in selecting polymers and polymer specifications. Prerequisite: Senior or graduate student standing in chemical or petroleum engineering, or consent of instructor. LEC.

C&PE 661. Undergraduate Honors Research. 1-3 Hours.
This course involves the investigation of a particular problem in the field of chemical or petroleum engineering. CPE 661 should be taken, rather than CPE 651, for students seeking Departmental Honors in Chemical Petroleum Engineering. CPE 661 may also be used by students in the Honors Program to help satisfy the course requirement of this program. The design or research topic is identified jointly by the student and faculty research supervisor. Prerequisite: Completion of CPE 121, CPE 211, CPE 511, CPE 512, CPE 522, overall GPA >3.5, and engineering GPA >3.5, or permission of the department. IND.

C&PE 678. Applied Optimization Methods. 3 Hours.
Study of methods for solving optimization problems encountered in engineering and the natural sciences, with specific applications illustrating analytical and numerical techniques. Topics covered include methods, penalty functions, linear programming, nonlinear and integer programming, stochastic optimization approaches, and treatment of constrained problems. A semester project is required. Prerequisite: Senior standing. LEC.

C&PE 701. Methods of Chemical and Petroleum Calculations. 3 Hours.
The utilization of advanced mathematical methods and computing techniques in the solution of problems in these fields. LEC.

C&PE 710. Subsurface Methods in Formation Evaluation. 3 Hours.
Study of subsurface methods and their applications to exploration, evaluation, and production of hydrocarbon reservoirs. Emphasis is on fundamentals of quantitative well log interpretations and the use of well log data in solving geologic and reservoir engineering problems, e.g., porosity, hydrocarbon saturation, permeable bed thickness, permeability, correlation, structural mapping, and stratigraphic and paleoenvironmental studies. Laboratory. Prerequisite: GEOL 535 or CPE 517 or consent of instructor. LEC.

C&PE 712. Environmental Assessment of Chemical Processes. 3 Hours.
A discussion and project-based survey of environmental issues in chemical engineering, including environmental conscious design, environmental fate and transport, green chemistry, and life cycle analysis. Focus will be on the design, implementation and management of comprehensive environmental assessments for existing and
new industrial facilities with in-depth analysis of the technical and economic impacts of catalytic systems on pollution control strategies. A comprehensive research paper is required as a final project. LEC.

C&PE 714. Reaction Engineering for Environmentally Benign Processes. 3 Hours.
Principles of reaction engineering and green chemistry applied to processes of the future. With a case-based introduction to the design and optimization of catalytic processes and reaction systems, focus will be on key reaction engineering concepts, including catalysis, mechanisms, reaction kinetics, heterogeneous reactions, reactor types and economic evaluation. Students will develop a multidisciplinary understanding of chemical, biological and molecular concepts, and will develop and design processes from the micro level to the macro level. A final research paper is required. LEC.

C&PE 715. Topics in Chemical and Petroleum Engineering: ______. 1-4 Hours.
Study in various branches of Chemical and Petroleum Engineering on topics that may vary from year to year. LEC.

C&PE 721. Chemical Engineering Thermodynamics. 3 Hours.
Chemical engineering applications of advanced thermodynamics and physical chemistry. Prerequisite: CPE 512. LEC.

C&PE 722. Kinetics and Catalysis. 3 Hours.
Modeling and analysis of chemical reactors with emphasis on heterogenous catalytic reaction systems. Prerequisite: CPE 524. LEC.

C&PE 725. Molecular Cell Biology. 3 Hours.
Fundamentals and advanced concepts in cell biology and the molecular interactions responsible for cell functions, homeostasis and disease will be presented. Current analytical methods for examining cells and their molecular components will be discussed. Emphasis will be place on the chemical and physical properties of individual proteins, nucleic acids and lipids and their assembly into cellular and subcellular structures. (Same as PHCH 725) Prerequisite: Graduate standing or consent of instructor. LEC.

C&PE 731. Convective Heat and Momentum Transfer. 3 Hours.
The formulation and solution of steady- and unsteady-state convective heat and momentum transfer problems. Applications of boundary layer equations to free and forced convection with study of similarity and integral methods of solution for laminar and turbulent flow; development of analogies; transport properties from kinetic theory of gases viewpoint; introduction to numerical methods. Prerequisite: ME 610/CPE 511 and ME 612/CPE 521 or equivalent. A concurrent course in partial differential equations is helpful. LEC.

C&PE 732. Advanced Transport Phenomena II. 3 Hours.
The formulation and solution of steady- and unsteady-state mass transfer problems (including those complicated by momentum and heat transfer). This course is the sequel to CPE 731 and relies upon much of the material treated there. The mathematical approach predominates and the methods available for determining suitable mass transfer coefficients are covered. LEC.

C&PE 751. Basic Rheology. 3 Hours.
Basic rheology including classification of classical bodies based on their stress and strain tensors, rheological equation of state, material functions, generalized Newtonian and general linear viscoelastic fluids, mechanical models such as those of Jeffreys and Maxwell. Prerequisite: CPE 511 or an equivalent course in fluid mechanics. LEC.

C&PE 752. Tissue Engineering. 3 Hours.
An introduction to the rapidly growing and continuously evolving field of tissue engineering. Tissue engineering applies principles and methods of engineering and life sciences toward understanding and development of biological substitutes to restore, maintain and improve tissues functions. In this course, students study the basic science, engineering and medicine required for tissue engineering, learn state-of-the-art technology and practice, and create a literature-based proposal for a tissue engineered medical product. Prerequisite: Senior or graduate standing in engineering; or consent of instructor. LEC.

C&PE 753. Introduction to Electrochemical Engineering. 3 Hours.
Basic principles of electrochemical engineering as they are applied to energy conversion and storage devices, industrial electrolytic processes and corrosion. Areas covered range from electrochemical thermodynamics, ionic phase equilibria, electro-kinetics and ionic mass transport to mathematical modeling of electrochemical systems. Prerequisite: Graduate standing; CPE 511, CPE 512, CPE 524 or equivalent; knowledge of a programming language. LEC.

C&PE 754. Biocatalysis. 3 Hours.
Introductory and advanced topics in biocatalysis with focus on enzymatic reactions. Enzymology will provide the fundamental basis for discussion of kinetics and bio-process development. Advanced topics include: enzymes in non-aqueous solvents, immobilization techniques, whole-cell transformations, bio-reactors. Knowledge of the theoretical basis for these techniques and processes will be demonstrated within a class project. LEC.

C&PE 755. Introduction to Semiconductor Processing. 3 Hours.
An overview of various processes to fabricate semiconductor devices and integrated circuits. Topics covered include crystal growth, oxidation, solid-state diffusion, ion implantation, photolithography, chemical vapor deposition, epitaxial growth, metallization, and plasma etching of thin films. A term paper on an approved topic of fabrication referencing current peer reviewed literature is required. LEC.

C&PE 756. Introduction to Biomedical Engineering. 3 Hours.
The graduate elective form of CPE 656. Additional assignments commensurate with the graduate-level course designation are required for this section. Prerequisite: Graduate-level standing in Engineering, or consent of instructor. LEC.

C&PE 757. Advanced Reservoir Engineering. 3-3 Hours.
Physical principles of petroleum production; gas drive performance; partial water drive performance; pressure maintenance through gas and water injection. Prerequisite: CPE 527. LEC.

C&PE 778. Applied Optimization Methods. 3 Hours.
Study of methods for solving optimization problems encountered in engineering and the natural sciences, with specific applications illustrating analytical and numerical techniques. Topics covered include gradient methods, penalty functions, linear programming, nonlinear and integer programming, stochastic optimization approaches, and treatment of constrained problems. Homework problems involving theoretical concepts and a theoretically-based semester project are required. LEC.

C&PE 779. Enhanced Petroleum Recovery. 3 Hours.
A study of improved oil recovery processes such as miscible displacement, microemulsion displacement, and thermal methods. Prerequisite: CPE 618 or permission of instructor. LEC.
C&PE 798. Phase Equilibrium. 3 Hours.
A study of phase behavior and equilibrium from a molecular perspective. Focus will be on vapor-liquid, liquid-liquid and solid-liquid equilibrium with advanced topics in compressed and supercritical fluids, petroleum applications, ionic solutions and others. LEC.

C&PE 800. Seminar. 0.5-1 Hours.
Every fall, five to six seminar sessions will be devoted to providing incoming students information on available thesis/dissertation research projects, library resources, computing environment and topics related to the issues of responsible scholarship in the fields of Chemical and Petroleum Engineering. For the remainder of the year, the seminar will involve presentation of current research and other topics of interest to chemical and petroleum engineers. These presentations will be made by invited guests, faculty, and advanced graduate students. Student attendance is required. Graded on a satisfactory/unsatisfactory basis. LEC.

C&PE 801. Introduction to Research. 1 Hour.
One hour per week in which the staff introduces entering graduate students to research. Topics include discussion of research methods, methods of effectively tapping library resources, preparation of literature surveys, and presentation of results. Faculty members of the department will make presentations of their current research interests. Offered fall only. Corequisite: CPE 800. LEC.

C&PE 802. CEBC Colloquium. 0.5-1 Hours.
A forum in which graduate and postdoctoral students, and faculty present the results of CEBC research and literature surveys that support the mission of CEBC. LEC.

C&PE 803. Research. 1-6 Hours.
For M.S. candidates. THE.

C&PE 804. Petroleum Management Seminar. 1 Hour.
Structure, operation, and problems of the petroleum industry from a management viewpoint. Presentations will be made by faculty, advanced students, and invited guests. Prerequisite: Permission of instructor. LEC.

C&PE 825. Graduate Problems in Chemical and Petroleum Engineering. 1-5 Hours.
Advanced laboratory problems, special research problems, or library reading problems. Three hours maximum acceptable for master’s degree. RSH.

C&PE 902. Preparation for the Ph.D. Comprehensive Examination. 3 Hours.
Preparation of a research proposal in an area assigned by the student’s advisory committee. The grade received on the Ph.D. comprehensive examination will apply to this credit. RSH.

C&PE 904. Research. 1-12 Hours.
For Ph.D. candidates. THE.

C&PE 910. Industrial Development of Catalytic Processes. 3 Hours.
Students adopt an interdisciplinary team approach to developing strategies for the design and optimization of catalytic processes. Examples of case studies will be derived from industry or from research testbeds. Students collaborate in multiscale process development involving catalyst and reactor design, reaction system design, modeling and optimization, economic analysis and environmental assessment needed for the development of a catalytic process at either the pilot or production scale. LEC.

C&PE 911. Industrial Practicum. 1-3 Hours.
Graduate students engage in an industrial research internship experience with collaborators in industry. FLD.

C&PE 912. Teaching College Level Engineering and Science Practicum. 1 Hour.
Future university instructors learn how to critically examine course content and teaching strategies, and prepare courses that will address the learning needs of the diverse student populations of the future. Students participate in weekly in-class workshops and symposia, as well as a teaching practicum experience during this course. LEC.

C&PE 919. Advanced Topics in Process Modeling Simulation or Control: , 1-4 Hours.
Advanced study in process modeling, simulation or control on topics which may vary from year to year. LEC.

C&PE 929. Advanced Topics in Chemical and Petroleum Engineering: , 1-4 Hours.
Advanced study in various branches of chemical and petroleum engineering on topics which may vary from year to year. LEC.

C&PE 932. Heat and Mass Transport in Porous Media. 3 Hours.
A study of industrial problems involving heat and mass transport in porous media such as packed columns, catalyst beds, chemical reactors, and petroleum reservoirs. Mechanisms of interphase and intraphase transport, diffusion, and dispersion. Included are methods of solution of the describing differential equations. LEC.

C&PE 934. Heat Transport with Phase Change. 3 Hours.
A fundamental treatment of heat transfer occurring during boiling and condensation. Included are nucleate and film boiling, film and dropwise condensation, and two-phase flow. LEC.

C&PE 936. Industrial Separation Processes. 3 Hours.
Determination and treatment of vapor-liquid separations, including methods for obtaining and treating equilibrium data, procedures for calculating multi-component separations by distillation, absorption, extraction, and adsorption. LEC.

C&PE 937. Applied Rheology. 3 Hours.
Industrial applications of fluid mechanics including compressible flow, flow of non-Newtonian fluids, flow of drag reducing systems all to be considered in laminar and turbulent flow regimes, and within conduits, and porous media. LEC.

C&PE 939. Advanced Topics in the Transport Phenomena: , 1-4 Hours.
Advanced study in various branches of transport phenomena on topics which may vary from year to year. LEC.

C&PE 940. Data Analysis in Engineering and Natural Sciences. 3 Hours.
Statistical inference and data analysis, emphasizing interpretation of observations from areas of engineering and natural sciences where controlled experimentation is not possible. The basics of elementary statistics and matrix algebra are covered, followed by topics in time series analysis, map analysis, including automatic contouring, and multivariate procedures such as principal components, discrimination and factor analysis. A suite of computer programs is provided. Students are encouraged to use data from their own graduate research in class projects. LEC.

Bachelor of Science in Chemical Engineering

B.S. in Chemical Engineering Program

Chemical engineering has grown out of a combination of chemistry and engineering associated with industrial processes. Today, it possesses...
First-year students must meet or exceed the following minimum standards:

To be considered for admission to the School of Engineering, beginning minimum academic standards for admission scores are required. Equivalent SAT scores may be substituted or university level, and trend of grades. High school transcripts and ACT high school record, scores on national tests, academic record at college.

Applications are judged on several factors, including but not limited to academic record, letters of recommendation, extracurricular activities, and self-written essay. High school transcripts and ACT scores are required. Equivalent SAT scores may be substituted.

Educational Objective

The objective of the program is to prepare graduates for professional practice in industry, government, or post-undergraduate training in chemical engineering, medicine, and other related disciplines.

Professional Opportunities

Chemical engineers are concerned with the chemical processes that turn raw materials into valuable products. They serve industrial and other activities where processes occur in which materials undergo a chemical or physical change. Chemical engineers build a bridge between science and manufacturing, applying the principles of chemistry, biology and engineering to solve problems involving the production or use of chemicals. Chemical engineers typically work for manufacturing companies, environmental companies, health care and pharmaceuticals, petroleum industry, biotechnology, or consulting firms.

Undergraduate Admission to the School of Engineering

First-year undergraduate students may be admitted, but all admissions, both in-state and out-of-state, are selective. Visit the Office of Admissions (http://admissions.ku.edu/whyku/index.shtml) for admission requirements. Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Applications are judged on several factors, including but not limited to high school record, scores on national tests, academic record at college or university level, and trend of grades. High school transcripts and ACT scores are required. Equivalent SAT scores may be substituted.

Minimum Academic Standards for Admission

To be considered for admission to the School of Engineering, beginning first-year students must meet or exceed the following minimum standards:

- 3.0 grade-point average on a 4.0 scale on the Kansas Board of Regents Qualified Admissions (http://admissions.ku.edu/apply/regents_curriculum.shtml) college-preparatory curriculum.
- Top 50 percent of the graduating class of an accredited high school or the equivalent.
- Mathematics ACT score of 22 (or mathematics SAT score of 540). Some engineering degree programs may require a higher mathematics ACT score.

These minimum admission standards apply to all departments. Meeting minimum requirements does not guarantee admission.

Transfer Admission Standards

Applications from all transfer students, whether from other institutions or from other KU units, are evaluated on a case-by-case basis. In general, students with grade-point averages under 2.5 are not considered. Students must submit mathematics ACT or SAT scores or proof of competence in calculus (grade of C or higher). No upper-level engineering credits from non-ABET-accredited engineering programs are acceptable as transfer credit for engineering programs. Admission is selective, and meeting the minimum requirements does not guarantee admission.

General Education Requirements

The KU Core is the university-wide curriculum that all incoming undergraduate students will complete as part of their degree requirements. It comprises three general education goals and three advanced education goals. Associated with each goal are one or more learning outcomes:

- GE 1.1, Goal 1, Outcome 1, Critical Thinking;
- GE 1.2, Goal 1, Outcome 2, Quantitative Literacy;
- GE 2.1, Goal 2, Outcome 1, Written Communication;
- GE 2.2, Goal 2, Outcome 2, Oral Communication;
- GE 3H, Goal 3, Outcome 1, Arts & Humanities;
- GE 3N Goal 3, Outcome 2, Natural Sciences;
- GE 3S Goal 3, Outcome 3, Social Sciences;
- AE 4.1, Goal 4, Outcome 1, Diversity;
- AE 4.2 Goal 4, Outcome 2 Culture;
- AE 5.1, Goal 5, Outcome 1, Social Responsibility & Ethics (course);
- AE 5.2, Goal 5, Outcome 2, Social Responsibility & Ethics (practice);
- AE 6.1, Goal 6, Outcome 1 and 2, Integration & Creativity.

Details of the KU Core can be found at kucore.ku.edu. Some required courses in the Chemical Engineering curricula satisfy a KU Core goal and/or outcome. For these courses, the goal/outcome code is given in parentheses after the course on the pages below. Where required courses do NOT specially satisfy KU Core goals (Goals GE 3H, GE 3S, AE 4.1, and AE 4.2) students must choose from a list of several courses to satisfy the required goals.

First- and Second-Year Preparation

Recommended enrollments for the first 2 years are as follows:

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<thead>
<tr>
<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td>15</td>
<td>C&amp;PE 111</td>
<td>2 ENGL 102 (KU Core GE 2.1)</td>
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<td>4</td>
<td>ENGL 101 (KU Core GE 2.1)</td>
<td>3 MATH 126</td>
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<td>3</td>
<td>CHEM 130 or 170 (KU Core GE 3N)</td>
<td>5 C&amp;PE 121</td>
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<td>MATH 125</td>
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### Bachelor of Science in Chemical Engineering Degree Requirements

Following are descriptions of the General Program, the Biomedical concentration, the Petroleum concentration, the Premedical concentration, and the Environmental concentration, as well as the Co-Op program.

1. A student must achieve a combined 2.0 GPA in C&PE 211 and C&PE 221 to progress to junior-level core courses.
2. A student must attain a cumulative grade-point average of at least 2.0 in required C&PE courses taken at KU through the junior year before being admitted to senior-level courses.
3. A student must attain a cumulative grade-point average of at least 2.0 in required C&PE courses taken at KU for graduation with a B.S. degree in chemical or petroleum engineering.

### General Program

A total of 131 hours is required:

**Chemical Engineering Science (17)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;PE 111</td>
<td>Introduction to the Chemical Engineering Profession</td>
<td>2</td>
</tr>
<tr>
<td>C&amp;PE 121</td>
<td>Introduction to Computers in Engineering</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 211</td>
<td>Material and Energy Balances</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 221</td>
<td>Chemical Engineering Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 511</td>
<td>Momentum Transfer</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 521</td>
<td>Heat Transfer</td>
<td>3</td>
</tr>
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</table>

**Chemical Engineering Sciences and Design (13)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;PE 512</td>
<td>Chemical Engineering Thermodynamics II</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 523</td>
<td>Mass Transfer</td>
<td>4</td>
</tr>
<tr>
<td>C&amp;PE 524</td>
<td>Chemical Engineering Kinetics and Reactor Design</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 615</td>
<td>Introduction to Process Dynamics and Control</td>
<td>3</td>
</tr>
</tbody>
</table>

**Chemical and Petroleum Engineering Design and Integrating Courses (17)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;PE 522</td>
<td>Economic Appraisal of Chemical and Petroleum Projects (KU Core Goal 5)</td>
<td>2</td>
</tr>
<tr>
<td>C&amp;PE 613</td>
<td>Chemical Engineering Design I (KU Core Goal 2.2, Goal 6)</td>
<td>4</td>
</tr>
<tr>
<td>C&amp;PE 616</td>
<td>Chemical Engineering Laboratory I (KU Core Goal 2.2)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 623</td>
<td>Chemical Engineering Design II</td>
<td>2</td>
</tr>
<tr>
<td>C&amp;PE 624</td>
<td>Plant and Environmental Safety (KU Core Goal 5)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 626</td>
<td>Chemical Engineering Laboratory II (KU Core Goal 2.2)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Engineering Science/Design Electives (12)**

7 hours of engineering science are required from any field of engineering. The remaining 5 hours may be engineering science or design. At least 5 elective hours must be in engineering areas outside the department, and 3 hours must be in chemical and petroleum engineering. A maximum of 6 hours may be taken in environmental engineering. All electives must be selected from an approved list available in the department.

**Basic Sciences (16-18)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>or CHEM 170</td>
<td>Chemistry for the Chemical Sciences I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>or CHEM 175</td>
<td>Chemistry for the Chemical Sciences II</td>
<td>5</td>
</tr>
<tr>
<td>PHSX 210</td>
<td>General Physics I for Engineers (KU Core GE 1.1)</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 216</td>
<td>General Physics I Laboratory (KU Core AE 5)</td>
<td>1</td>
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<td>PHSX 212</td>
<td>General Physics II</td>
<td>1-3</td>
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<tr>
<td>PHSX 236</td>
<td>General Physics II Laboratory</td>
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</table>

### Advanced Chemistry (15)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 331</td>
<td>Organic Chemistry I Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>Chemistry or biochemistry electives, selected from courses numbered 300 and above or approved natural science courses.</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHEM 530</td>
<td>Physical Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 535</td>
<td>Physical Chemistry II</td>
<td>4</td>
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</tbody>
</table>

### Mathematics (17)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>MATH 125</td>
<td>Calculus I</td>
<td>4</td>
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<tr>
<td>MATH 126</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 127</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Applied Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 290</td>
<td>Elementary Linear Algebra</td>
<td>2</td>
</tr>
</tbody>
</table>

### General Education Component (18)

Students with an initial term of Fall 2014 or later must meet the minimum requirements of the KU Core. Learn more about KU Core requirements at http://kucore.ku.edu

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition (KU Core GE 2.1)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing (KU Core GE 2.2)</td>
<td>3</td>
</tr>
<tr>
<td>KU Core GE 3S</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>KU Core GE 3H</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>KU Core AE 4.1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>KU Core AE 4.2</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

### Biomedical Concentration

The student in the biomedical concentration takes the same courses specified for the General Program, with the following additions or specifications:

**Advanced Chemistry (4)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 600</td>
<td>Introductory Biochemistry, Lectures</td>
<td>4</td>
</tr>
</tbody>
</table>

**Basic Sciences (8)**

(Add 6 hours in restricted electives)
BIOL 150  Principles of Molecular and Cellular Biology  4
BIOL 646  Mammalian Physiology  4

Engineering Science/Design Electives (11)
7 hours of engineering science are required from any engineering field. The remaining 4 hours may be engineering science or design. At least 5 elective hours must be taken from engineering areas outside the department, and 3 hours must be taken in chemical and petroleum engineering. A maximum of 6 hours may be taken from chemical and petroleum engineering. Electives, in all cases, must be selected from an approved list available in the department.

C&PE 651  Undergraduate Problems (recommended, not required)  3
C&PE 656  Introduction to Biomedical Engineering  3

5 hours of engineering science/design electives subject to 5 requirements above

Petroleum Engineering Concentration
The petroleum engineering concentration in chemical engineering is distinct from the B.S. in petroleum engineering degree (see below). A total of 131 credit hours is required for this concentration. The student takes the same courses specified for the General Program, with the following additions or specifications:

Geology (5)
GEOL 101  The Way The Earth Works  5
& GEOL 103  and Geology Fundamentals Laboratory (meets Advanced Chemistry requirement of Chemical Engineering BS)

Engineering Science (2)
C&PE 117  Energy in the Modern World  1
C&PE 127  Introduction to Petroleum Engineering Profession  1
(Recommended instead of C&PE 111.)

Engineering Science/Design Electives (14)
C&PE 327  Reservoir Engineering  4
C&PE 527  Reservoir Engineering II  4
Petroleum engineering elective  3
Engineering elective  3

Premedical Concentration
A total of 137 credit hours is required for a B.S. in chemical engineering for students who plan to apply for admission to medical school. Additional hours are recommended (see Biological Science below). Premedical students take the same courses specified for the general program with the following additions or specifications:

Engineering Science/Design Electives (11)
7 hours of engineering science are required from any field of engineering. The remaining 4 hours may be engineering science or design. At least 5 elective hours must be in engineering areas outside the department, and 3 hours must be in chemical and petroleum engineering. A maximum of 6 hours may be taken in chemical engineering. All electives must be selected from an approved list available in the department.

Social Sciences (6)
PSYC 104  General Psychology (KU Core GE 3S)  3
SOC 104  Elements of Sociology (KU Core AE 4.1)  3

Advanced Chemistry (5)

CHEM 335  Organic Chemistry II  3
CHEM 336  Organic Chemistry II Laboratory  2

Biological Science (20-21)
BIOL 150  Principles of Molecular and Cellular Biology  4
BIOL 152  Principles of Organismal Biology  4

Select one of the following:  5-6
BIOL 646  Mammalian Physiology

The following courses are recommended but not required:
BIOL 350  Principles of Genetics  4
BIOL 416  Cell Structure and Function  3

Environmental Concentration
The student in the environmental concentration takes the same courses specified for the General Program, with the following additions or specifications:

Engineering Science/Design Electives (12)
CE 477  Introduction to Environmental Engineering and Science  3

Select 6 hours from the following principles courses:  6
CE 570/770  Concepts of Environmental Chemistry
CE 571/771  Environmental Chemical Analysis
CE 772  Physical Principles of Environmental Engineering Processes
CE 573/773  Biological Principles of Environmental Engineering
CE 774  Chemical Principles of Environmental Engineering Processes

Select 3 hours from other environmental elective courses or any course chosen in consultation with the advisor  3

Co-Op Program
The Co-Op Program is essentially the same as the General Program with the timing modified to include Co-Op employment.

Credit for ROTC Courses
Only ROTC courses qualifying as engineering electives and humanities/social sciences may be used.

Departmental Honors
An undergraduate may receive departmental honors by completing the B.S. with an overall grade-point average of 3.5 in courses taken at KU and 3.5 in KU engineering courses and by completing C&PE 661 Undergraduate Honors Research for a minimum of 3 credit hours with a grade of A or B. Students with overall grade-point averages of 3.5 in courses taken at KU and 3.5 in KU engineering courses are allowed to enroll in C&PE 661 in the second semester of the junior year. Enrollment in C&PE 661 constitutes acceptance into the honors program. The departmental honors designation appears in the commencement program and on the transcript.
Bachelor of Science in Petroleum Engineering

B.S. in Petroleum Engineering Program

Petroleum engineering is the branch of engineering concerned with the drilling, recovery, production, and distribution of petroleum and natural gas. It includes knowledge of the properties of fluids and rocks in surface and subsurface environments as well as methods of exploiting the economic production of oil and gas from petroleum reservoirs. A major subdivision at KU is reservoir engineering, or the development of processes to improve production from oil and gas reservoirs. Reservoir engineers use sophisticated mathematical techniques and computer technology to obtain optimum production. Through such techniques, petroleum engineers continue to extract oil and gas from reservoirs that only a few years ago would have been considered uneconomical. This branch of engineering is somewhat different from the other in that production is far removed from physical observation.

The curriculum develops fundamental concepts that describe the properties of fluids and rocks in surface and subsurface environments. These are integrated with courses covering fluid flow in reservoirs along with drilling and production equipment to develop a broad understanding of how fundamental concepts are used to solve technical problems. The development of engineering design concepts begins with the application of fundamental principles and concepts to solve engineering problems in these courses and culminates in a series of senior-level design courses that require comprehensive integration of technical knowledge as well as consideration of economic, environmental, safety, and societal concerns. This experience is essential in the preparation of graduates for entry-level positions.

Educational Objective

The objective of the program is to prepare graduates for professional practice in industry, government, or post-undergraduate training in petroleum engineering and other related disciplines.

Professional Opportunities

Petroleum engineers search the world for reservoirs containing oil and natural gas. Once these resources are discovered, petroleum engineers work to understand the geologic formation and properties of the rock containing the reservoir, determine the drilling methods to be used, and monitor drilling and production operations. They design equipment and processes to achieve the maximum profitable recovery of oil and gas. Petroleum engineers typically work for major oil companies, independent oil exploration, and production and service companies.

Undergraduate Admission to the School of Engineering

First-year undergraduate students may be admitted, but all admissions, both in-state and out-of-state, are selective. Visit the Office of Admissions (http://admissions.ku.edu/whyku/index.shtml) for admission requirements. Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Applications are judged on several factors, including but not limited to high school record, scores on national tests, academic record at college or university level, and trend of grades. High school transcripts and ACT scores are required. Equivalent SAT scores may be substituted.

Minimum Academic Standards for Admission

To be considered for admission to the School of Engineering, beginning first-year students must meet or exceed the following minimum standards:

- 3.0 grade-point average on a 4.0 scale on the Kansas Board of Regents Qualified Admissions (http://admissions.ku.edu/apply/regents_curriculum.shtml) college-preparatory curriculum.
- Top 50 percent of the graduating class of an accredited high school or the equivalent.
- Mathematics ACT score of 22 (or mathematics SAT score of 540). Some engineering degree programs may require a higher mathematics ACT score.

These minimum admission standards apply to all departments. Meeting minimum requirements does not guarantee admission.

Transfer Admission Standards

Applications from all transfer students, whether from other institutions or from other KU units, are evaluated on a case-by-case basis. In general, students with grade-point averages under 2.5 are not considered. Students must submit mathematics ACT or SAT scores or proof of competence in calculus (grade of C or higher). No upper-level engineering credits from non-ABET-accredited engineering programs are acceptable as transfer credit for engineering programs. Admission is selective, and meeting the minimum requirements does not guarantee admission.

General Education Requirements

The KU Core is the university-wide curriculum that all incoming undergraduate students will complete as part of their degree requirements. It comprises three general education goals and three advanced education goals. Associated with each goal are one or more learning outcomes:

- GE 1.1, Goal 1, Outcome 1, Critical Thinking;
- GE 1.2, Goal 1, Outcome 2, Quantitative Literacy;
- GE 2.1, Goal 2, Outcome 1, Written Communication;
- GE 2.2, Goal 2, Outcome 2, Oral Communication;
- GE 3H, Goal 3, Outcome 1, Arts & Humanities;
- GE 3N Goal 3, Outcome 2, Natural Sciences;
- GE 3S Goal 3, Outcome 3, Social Sciences;
- AE 4.1, Goal 4, Outcome 1, Diversity;
- AE 4.2 Goal 4, Outcome 2 Culture;
- AE 5.1, Goal 5, Outcome 1, Social Responsibility & Ethics (course);
- AE 5.2, Goal 5, Outcome 2, Social Responsibility & Ethics (practice);
- AE 6.1, Goal 6, Outcome 1 and 2, Integration & Creativity.

Details of the KU Core can be found at kucore.ku.edu. Some required courses in the Petroleum Engineering curriculum satisfy a KU Core goal and/or outcome. For these courses, the goal/outcome code is given in parentheses after the course on the pages below. Where required courses do NOT satisfy KU Core goals (GE 2.2, GE 3H, GE 3S, AE 4.1, and AE 4.2) students must choose from a list of several courses to satisfy each of the required goals.

Plan of Study

Recommended enrollments are as follows, but may vary according to existing credits:

Bachelor of Science in Petroleum Engineering

B.S. in Petroleum Engineering Program

Petroleum engineering is the branch of engineering concerned with the drilling, recovery, production, and distribution of petroleum and natural gas. It includes knowledge of the properties of fluids and rocks in surface and subsurface environments as well as methods of exploiting the economic production of oil and gas from petroleum reservoirs. A major subdivision at KU is reservoir engineering, or the development of processes to improve production from oil and gas reservoirs. Reservoir engineers use sophisticated mathematical techniques and computer technology to obtain optimum production. Through such techniques, petroleum engineers continue to extract oil and gas from reservoirs that only a few years ago would have been considered uneconomical. This branch of engineering is somewhat different from the other in that production is far removed from physical observation.

The curriculum develops fundamental concepts that describe the properties of fluids and rocks in surface and subsurface environments. These are integrated with courses covering fluid flow in reservoirs along with drilling and production equipment to develop a broad understanding of how fundamental concepts are used to solve technical problems. The development of engineering design concepts begins with the application of fundamental principles and concepts to solve engineering problems in these courses and culminates in a series of senior-level design courses that require comprehensive integration of technical knowledge as well as consideration of economic, environmental, safety, and societal concerns. This experience is essential in the preparation of graduates for entry-level positions.

Educational Objective

The objective of the program is to prepare graduates for professional practice in industry, government, or post-undergraduate training in petroleum engineering and other related disciplines.

Professional Opportunities

Petroleum engineers search the world for reservoirs containing oil and natural gas. Once these resources are discovered, petroleum engineers work to understand the geologic formation and properties of the rock containing the reservoir, determine the drilling methods to be used, and monitor drilling and production operations. They design equipment and processes to achieve the maximum profitable recovery of oil and gas. Petroleum engineers typically work for major oil companies, independent oil exploration, and production and service companies.

Undergraduate Admission to the School of Engineering

First-year undergraduate students may be admitted, but all admissions, both in-state and out-of-state, are selective. Visit the Office of Admissions (http://admissions.ku.edu/whyku/index.shtml) for admission requirements. Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Applications are judged on several factors, including but not limited to high school record, scores on national tests, academic record at college or university level, and trend of grades. High school transcripts and ACT scores are required. Equivalent SAT scores may be substituted.

Minimum Academic Standards for Admission

To be considered for admission to the School of Engineering, beginning first-year students must meet or exceed the following minimum standards:

- 3.0 grade-point average on a 4.0 scale on the Kansas Board of Regents Qualified Admissions (http://admissions.ku.edu/apply/regents_curriculum.shtml) college-preparatory curriculum.
- Top 50 percent of the graduating class of an accredited high school or the equivalent.
- Mathematics ACT score of 22 (or mathematics SAT score of 540). Some engineering degree programs may require a higher mathematics ACT score.

These minimum admission standards apply to all departments. Meeting minimum requirements does not guarantee admission.

Transfer Admission Standards

Applications from all transfer students, whether from other institutions or from other KU units, are evaluated on a case-by-case basis. In general, students with grade-point averages under 2.5 are not considered. Students must submit mathematics ACT or SAT scores or proof of competence in calculus (grade of C or higher). No upper-level engineering credits from non-ABET-accredited engineering programs are acceptable as transfer credit for engineering programs. Admission is selective, and meeting the minimum requirements does not guarantee admission.

General Education Requirements

The KU Core is the university-wide curriculum that all incoming undergraduate students will complete as part of their degree requirements. It comprises three general education goals and three advanced education goals. Associated with each goal are one or more learning outcomes:

- GE 1.1, Goal 1, Outcome 1, Critical Thinking;
- GE 1.2, Goal 1, Outcome 2, Quantitative Literacy;
- GE 2.1, Goal 2, Outcome 1, Written Communication;
- GE 2.2, Goal 2, Outcome 2, Oral Communication;
- GE 3H, Goal 3, Outcome 1, Arts & Humanities;
- GE 3N Goal 3, Outcome 2, Natural Sciences;
- GE 3S Goal 3, Outcome 3, Social Sciences;
- AE 4.1, Goal 4, Outcome 1, Diversity;
- AE 4.2 Goal 4, Outcome 2 Culture;
- AE 5.1, Goal 5, Outcome 1, Social Responsibility & Ethics (course);
- AE 5.2, Goal 5, Outcome 2, Social Responsibility & Ethics (practice);
- AE 6.1, Goal 6, Outcome 1 and 2, Integration & Creativity.

Details of the KU Core can be found at kucore.ku.edu. Some required courses in the Petroleum Engineering curriculum satisfy a KU Core goal and/or outcome. For these courses, the goal/outcome code is given in parentheses after the course on the pages below. Where required courses do NOT satisfy KU Core goals (GE 2.2, GE 3H, GE 3S, AE 4.1, and AE 4.2) students must choose from a list of several courses to satisfy each of the required goals.

Plan of Study

Recommended enrollments are as follows, but may vary according to existing credits:
### Bachelor of Science in Petroleum Engineering Degree Requirements

A student must have an average GPA for the highest grade earned in ME 312 (or C&PE 221) and C&PE 327 of at least 2.0 to be eligible for the junior year courses: C&PE 527 and 528.

A student must attain a cumulative grade-point average of at least 2.0 in required C&PE courses taken at KU through the junior year before being admitted to senior-level courses.

A student must attain a cumulative grade-point average of at least 2.0 in C&PE courses taken at KU for graduation with a B.S. degree in chemical or petroleum engineering.

A total of 131 hours is required, as follows:

#### Petroleum Engineering Science (25)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;PE 117</td>
<td>Energy in the Modern World</td>
<td>1</td>
</tr>
<tr>
<td>C&amp;PE 127</td>
<td>Introduction to Petroleum Engineering Profession</td>
<td>1</td>
</tr>
<tr>
<td>C&amp;PE 121</td>
<td>Introduction to Computers in Engineering</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 217</td>
<td>Introduction to Petroleum Drilling Engineering</td>
<td>2</td>
</tr>
<tr>
<td>C&amp;PE 219</td>
<td>Drilling Fluids Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ME 312</td>
<td>Basic Engineering Thermodynamics</td>
<td>4</td>
</tr>
<tr>
<td>C&amp;PE 327</td>
<td>Reservoir Engineering</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 511</td>
<td>Momentum Transfer</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 521</td>
<td>Heat Transfer</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 527</td>
<td>Reservoir Engineering II</td>
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#### Design and Integrating Courses (24)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>C&amp;PE 522</td>
<td>Economic Appraisal of Chemical and Petroleum Projects (KU Core AEI 5)</td>
<td>2</td>
</tr>
<tr>
<td>C&amp;PE 528</td>
<td>Well Logging</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 617</td>
<td>Drilling and Completion (KU Core AE 5)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 618</td>
<td>Secondary Recovery</td>
<td>4</td>
</tr>
<tr>
<td>C&amp;PE 619</td>
<td>Petroleum Engineering Laboratory I</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 620</td>
<td>Enhanced Oil Recovery</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 627</td>
<td>Petroleum Production</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 628</td>
<td>Petroleum Engineering Design (KU Core AE 6)</td>
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#### Engineering Science Electives (12)

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>CE 201</td>
<td>Statics</td>
<td>2</td>
</tr>
<tr>
<td>EECS 315</td>
<td>Electric Circuits and Machines</td>
<td>3</td>
</tr>
<tr>
<td>CE 310</td>
<td>Strength of Materials</td>
<td>4</td>
</tr>
<tr>
<td>Basic Science or Engineering Elective</td>
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<td>3</td>
</tr>
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</table>

#### Basic Sciences (34)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 170</td>
<td>Chemistry for the Chemical Sciences I (KU Core GE 3N)</td>
<td>5</td>
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<tr>
<td>or CHEM 130</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 175</td>
<td>Chemistry for the Chemical Sciences II</td>
<td>5</td>
</tr>
<tr>
<td>or CHEM 135</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>PHSX 210</td>
<td>General Physics I for Engineers (KU Core GE 1.1)</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 216</td>
<td>General Physics I Laboratory (KU Core GE 5)</td>
<td>1</td>
</tr>
<tr>
<td>PHSX 212</td>
<td>General Physics II</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 236</td>
<td>General Physics II Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>Basic science or engineering science elective</td>
<td></td>
<td>3</td>
</tr>
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</table>

#### Mathematics Courses (20)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 125</td>
<td>Calculus I</td>
<td>4</td>
</tr>
</tbody>
</table>
Through such techniques, petroleum engineers continue to extract oil with computerized mathematical analysis to produce raw materials. Kansas, the focus is on reservoir engineering and improving production in producing oil and gas safely and economically. At the University of use knowledge of fluid and rock properties in subsurface environments.

Petroleum engineering is concerned with the drilling, recovery, production, and minimizing environmental effects.

Chemical and Petroleum Engineering

Chemical engineering has grown out of a combination of chemistry and engineering associated with industrial processes. Today, it comprises knowledge used in processes that change the physical state or composition of materials. Chemical engineers hold key roles in the design, development, production, and purification of materials considered essential to human life and well-being, such as food products, fuels and lubricants, pharmaceuticals, fertilizers, synthetic fibers, microelectronic components, and plastics. Chemical engineers are involved in reducing the use of energy to make products in a safe and sustainable way, and minimizing environmental effects.

Petroleum engineering is concerned with the drilling, recovery, production, and distribution of petroleum and natural gas. Petroleum engineers use knowledge of fluid and rock properties in subsurface environments in producing oil and gas safely and economically. At the University of Kansas, the focus is on reservoir engineering and improving production from oil and gas reservoirs. Reservoir engineers use geological detection with computerized mathematical analysis to produce raw materials. Through such techniques, petroleum engineers continue to extract oil and gas from reservoirs considered uneconomical only a few years ago. Petroleum engineering is uniquely challenging in that the raw material must be recovered far from direct observation.

**Graduate Admission**

Applicants are considered for admission by the department’s graduate faculty on recommendation by the Graduate Standards Committee (GSC). Admission is based on demonstrated potential to complete a graduate degree successfully. The measures of performance used in the decision process are undergraduate and graduate grade-point averages, Graduate Record Examination (GRE) scores, letters of recommendation, and research performance. A student who has not received a degree from a university in an English-based nation also must submit scores from the Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) and is expected to meet general KU requirements.

**Application Deadlines**

Fall Priority Deadline: December 15

Spring Priority Deadline: September 30

Applications will be accepted after the fall priority deadline listed above, but fellowships and assistantships may not be available at a later date. All application materials must be submitted by the final deadlines, March 1 for fall and September 30 for spring, to be considered for admission. See the Graduate Studies website (http://www.graduate.ku.edu) for the application procedure and fees.

**Application Materials**

- Application (online only)
- Statement of objectives
- Resume
- Official transcript
- Three letters of recommendation
- GRE scores (school code 6871)
- TOFEL or IELTS scores (international students)

Students admitted with baccalaureate degrees in chemical or petroleum engineering are usually able to enroll in the graduate core courses listed below. Students with degrees in other branches of engineering or in mathematics, chemistry, physics, or other sciences, usually must take undergraduate course work to provide the necessary background for the graduate courses, and are admitted provisionally. See undergraduate prerequisite courses listed in the M.S. Degree Requirements section.

All graduate applications must be submitted online.

**Visit Us**

Graduate program staff can assist prospective students in determining the fit between the student and the program. Staff can facilitate a campus visit if you would like to schedule a visit. There are two main options:

The first, and most preferred, entails simply applying for admission to the program. All prospective students are welcome to attend our Open House in early November and some highly qualified admitted students may be

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 126</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 127</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 290</td>
<td>Elementary Linear Algebra</td>
<td>2</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Applied Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 526</td>
<td>Applied Mathematical Statistics I</td>
<td>3</td>
</tr>
</tbody>
</table>

**General Education Component (21)**

Students with an initial term of Fall 2014 or later must meet the minimum requirements of the KU Core. Learn more about KU Core requirements at http://kucore.ku.edu.

- ENGL 101  Composition (KU Core GE 2.1)  3
- ENGL 102  Critical Reading and Writing (KU Core GE 2.1)  3
- COMS 130  Speaker-Audience Communication (KU Core GE 2.2)  3

- KU Core GE 3H (Humanities)  3
- KU Core GE 3S (Social Science)  3
- KU Core AE 4.1 (Human Diversity)  3
- KU Core AE 4.2 (Global Awareness)  3

**Credit for ROTC Courses**

Only ROTC courses qualifying as engineering electives and humanities/social sciences may be used.

**Departmental Honors**

An undergraduate may receive departmental honors by completing the B.S. with an overall grade-point average of 3.5 in courses taken at KU and 3.5 in KU engineering courses and by completing C&PE 661 Undergraduate Honors Research for a minimum of 3 credit hours with a grade of A or B. Students with overall grade-point averages of 3.5 in courses taken at KU and 3.5 in KU engineering courses are allowed to enroll in C&PE 661 in the second semester of the junior year. Enrollment in C&PE 661 constitutes acceptance into the honors program. The departmental honors designation appears in the commencement program and on the transcript.

**Master of Science in Chemical and Petroleum Engineering**

Students admitted with baccalaureate degrees in chemical or petroleum engineering are usually able to enroll in the graduate core courses listed below. Students with degrees in other branches of engineering or in mathematics, chemistry, physics, or other sciences, usually must take undergraduate course work to provide the necessary background for the graduate courses, and are admitted provisionally. See undergraduate prerequisite courses listed in the M.S. Degree Requirements section.

All graduate applications must be submitted online.

**Visit Us**

Graduate program staff can assist prospective students in determining the fit between the student and the program. Staff can facilitate a campus visit if you would like to schedule a visit. There are two main options:

The first, and most preferred, entails simply applying for admission to the program. All prospective students are welcome to attend our Open House in early November and some highly qualified admitted students may be
invited to participate in Visitation Days in late February or early March (prior to the fall semester of your intended matriculation). These organized visitation opportunities will allow you time to gather a great deal of first-hand information which we hope will help you in making a final decision about whether to attend KU.

The second option is making arrangements to visit us on your own, outside of organized events. With early notification, we will do our best to work with you to provide information and schedule appointments with faculty when possible.

**Contact Information**

Please contact the CPE Program Assistant at cpe@ku.edu or (785) 864-2900, if you would like to schedule a campus visit, or have questions about the program or the application process.

The University of Kansas  
CPE Graduate Program  
4132 Learned Hall  
1530 W. 15th Street  
Lawrence, KS 66045-7605

**M.S. in Chemical Engineering**

**M.S. Degree Requirements**

Two degree options, Option A or Option B, are available for the M.S. degree in chemical engineering.

**Option A** requires a thesis, and students in Option A are considered for departmental research assistantships, teaching assistantships, and fellowships.

**Option B** does not require a thesis, but does require a written report on a 3-hour special project. Students in Option B are not eligible for departmental research assistantships and fellowships, but may be considered for teaching assistantships, although priority is given to students in Option A.

Once admitted, students may change from one option to the other only with the Graduate Standards Committee approval.

For an M.S. in chemical engineering, the undergraduate prerequisite courses are C&PE 511, C&PE 521, C&PE 523, and C&PE 524. Depending on a student’s academic background and proposed Plan of Study, additional undergraduate prerequisite courses may be required. Up to 3 credit hours of the undergraduate prerequisite courses (numbered 500 or above) may be counted toward the M.S. degree as elective hours.

The following tables represent typical plans of study that might be established by a student and their advisor. Rarely are exceptions in C&PE course work allowed.

**M.S. in Chemical Engineering: Option A**

<table>
<thead>
<tr>
<th>Chemical Engineering Graduate Core Courses (15)</th>
</tr>
</thead>
</table>
| C&PE 701 Methods of Chemical and Petroleum Calculations | 3  
| C&PE 721 Chemical Engineering Thermodynamics | 3  
| C&PE 722 Kinetics and Catalysis | 3  
| C&PE 731 Convective Heat and Momentum Transfer | 3  
| C&PE 732 Advanced Transport Phenomena II | 3  
| Electives (6) | 6

It is recommended that part of the elective hours be from other departments.

<table>
<thead>
<tr>
<th>Research (9)</th>
</tr>
</thead>
</table>
| C&PE 800 Seminar (or 1.5 credits C&PE 800 and 1.5 credit for another seminar series if mandatory for fellowship or academic center involvement, etc.) | 3  
| C&PE 803 Research | 6

Only the first 6 hours of enrollment in C&PE 803 meet degree requirements.

Includes the thesis and final oral defense or examination (0)

**Total Hours** 30

**M.S. in Chemical Engineering Graduate Core Courses (15)**

| C&PE 701 Methods of Chemical and Petroleum Calculations | 3  
| C&PE 721 Chemical Engineering Thermodynamics | 3  
| C&PE 722 Kinetics and Catalysis | 3  
| C&PE 731 Convective Heat and Momentum Transfer | 3  
| C&PE 732 Advanced Transport Phenomena II | 3  
| Electives (15) | 15

No more than 2 elective courses numbered below 700.

No more than 3 elective courses in Engineering Management or Business or both.

**Research (3)**

| C&PE 825 Graduate Problems in Chemical and Petroleum Engineering | 3

**Total Hours** 33

**M.S. in Petroleum Engineering**

For an M.S. in petroleum engineering, the undergraduate prerequisite courses are C&PE 511, C&PE 521, C&PE 527, and C&PE 618.

Depending on a student’s academic background and proposed Plan of Study, additional undergraduate prerequisite courses may be required. Up to 3 credit hours of undergraduate prerequisite courses (numbered 500 or above) may be counted toward the M.S. degree as elective hours. If a student has not completed an advanced-level, reservoir-related course in geology as an undergraduate, such a course must be taken as an elective. GEOL 535 Petroleum and Subsurface Geology is recommended.

The following table represents a typical plan of study that might be established by a student and his or her advisor.

**M.S. in Petroleum Engineering**

<table>
<thead>
<tr>
<th>Petroleum Engineering Graduate Core Courses (12)</th>
</tr>
</thead>
</table>
| C&PE 701 Methods of Chemical and Petroleum Calculations | 3  
| C&PE 731 Convective Heat and Momentum Transfer | 3  
| C&PE 771 Advanced Reservoir Engineering | 3  
| C&PE 795 Enhanced Petroleum Recovery | 3  
| Electives (9) | 9

It is recommended that part of the electives be from other departments.

<table>
<thead>
<tr>
<th>Research (9)</th>
</tr>
</thead>
</table>
| C&PE 800 Seminar (or 1.5 credits C&PE 800 and 1.5 credit for another seminar series if mandatory for fellowship or academic center involvement, etc.) | 3

Total Hours 33
Doctor of Philosophy in Chemical and Petroleum Engineering

Chemical and Petroleum Engineering

Chemical engineering has grown out of a combination of chemistry and engineering associated with industrial processes. Today, it comprises knowledge used in processes that change the physical state or composition of materials. Chemical engineers hold key roles in the design, development, production, and purification of materials considered essential to human life and well-being, such as food products, fuels and lubricants, pharmaceuticals, fertilizers, synthetic fibers, microelectronic components, and plastics. Chemical engineers are involved in reducing the use of energy to make products in a safe and sustainable way, and minimize environmental effects.

Petroleum engineering is concerned with the drilling, recovery, production, and distribution of petroleum and natural gas. Petroleum engineers use knowledge of fluid and rock properties in subsurface environments in producing oil and gas safely and economically. At the University of Kansas, the focus is on reservoir engineering and improving production from oil and gas reservoirs. Reservoir engineers use geological detection with computerized mathematical analysis to produce raw materials. Through such techniques, petroleum engineers continue to extract oil and gas from reservoirs considered uneconomical only a few years ago. Petroleum engineering is uniquely challenging in that the raw material must be recovered far from direct observation.

Graduate Admission to the School of Engineering

Procedure

Admission requirements for the School of Engineering follow the general KU requirements plus those of each engineering graduate program. All applicants must apply online (http://www.graduate.ku.edu/apply). Detailed information about supplemental application materials for each program is listed here (http://www.engr.ku.edu/prospective/graduate/apply). Important information for prospective international students is available from International Student & Scholar Services (http://www2.ku.edu/~issfacts). Download a PDF (http://www.engr.ku.edu/prospective/graduate/apply/grad_app_process.pdf) for more information about the review process for graduate applications.

Some departments and programs require the Graduate Record Examination. Applications must be accompanied by a nonrefundable fee. See Admission (p. 2369) in the Graduate Studies section of the online catalog.

Baccalaureate Preparation

To qualify for graduate work in any field of engineering, a student generally must hold an accredited baccalaureate degree in that field and have at least a 3.0 grade-point average. A student with good preparation in such fields as mathematics, chemistry, or physics, or in a related engineering field, may be admitted on the basis of performance in specific undergraduate courses, determined by the department of interest to the prospective student. Undergraduate hours do not count as part of a student’s Plan of Study, but they must be completed with grades of B or higher.

Exceptionally qualified undergraduates may be admitted directly to a Fast-Track Ph.D. program, which does not require the master’s as an intermediate degree. Students who wish to earn a Ph.D. and believe that they meet this criterion are encouraged to contact the graduate advisor in their field of interest.

English Proficiency Requirement

All graduate students in the School of Engineering who are required to take courses at the Applied English Center (http://www.aec.ku.edu) must pass the AEC’s English Proficiency Examination within 3 semesters of their initial enrollment. Failure to complete the English proficiency requirement within this time limit may result in dismissal from the graduate engineering program.

Ph.D. Admission Requirements

Applicants are considered for admission by the department’s graduate faculty on recommendation by the Graduate Standards Committee (GSC). Admission is based on demonstrated potential to complete a graduate degree successfully. The measures of performance used in the decision process are undergraduate and graduate grade-point averages, Graduate Record Examination (GRE) scores, letters of recommendation, and research performance. A student who has not received a degree from a university in an English-based nation also must submit scores from the Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) and is expected to meet general KU requirements.

Application Deadlines

Fall Priority Deadline: December 15

Spring Priority Deadline: September 30

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Application Materials

- Application (online only)
- Statement of objectives
- Resume
- Official transcript
- Three letters of recommendation
- GRE scores (school code 6871).
- TOFEL or IELTS scores (international students)

All application materials must be submitted online (http://www.graduate.ku.edu).

Students admitted to the program usually complete the M.S. in chemical or petroleum engineering before pursuing the Ph.D. Students with
a completed M.S. degree take the graduate core courses based on their previous course work and training, as specified by the Graduate Standards Committee. In some cases, a student may be admitted directly to the Ph.D. program without an M.S. degree. Such admission normally is granted only when the applicant has clearly demonstrated exceptional performance in an undergraduate program and in graduate courses.

An M.S. student in the thesis option (Option A) may apply for a change of status to Fast Track Ph.D. aspirant if they have fulfilled the following criteria:

1. Has achieved a minimum grade-point average (GPA) of 3.2 in the 5 chemical engineering graduate core courses and a minimum of 3.25 GPA in the 4 petroleum engineering graduate core courses, with a minimum of 3.25 overall GPA.
2. Has earned, at most, only one C grade.
3. Has passed the preliminary examination of research.

These criteria are evaluated during the third semester of residence by the department’s Graduate Faculty on recommendation of the Graduate Standards Committee. Students who do not meet these criteria must complete the M.S. degree before applying to the Ph.D. program.

Visit Us

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The first, and most preferred, entails simply applying for admission to the program. All prospective students are welcome to attend our Open House in early November and some highly qualified admitted students may be invited to participate in Visitation Days in late February or early March (prior to the fall semester of your intended matriculation). These organized visitation opportunities will allow you time to gather a great deal of first-hand information which we hope will help you in making a final decision about whether to attend KU.

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Contact Information

Please contact the CPE Program Assistant at cpe@ku.edu or (785) 864-2900, if you would like to schedule a visit. There are two main options:

The University of Kansas
CPE Graduate Program
4132 Learned Hall
1530 W. 15th Street
Lawrence, KS 66045-7605

Ph.D. Degree Requirements

One of the goals of the department is to develop quality Ph.D. researchers who are well prepared for vocational and personal success. This policy sets forth a balanced program to develop and evaluate students in an efficient and fair manner. Equal consideration is given to the academic and the research ability, as both areas are required for success in industry or academia.

An advisory committee of 5 or more members is formed for each Ph.D. aspirant: at least 3 tenure / tenure track faculty from the department and 1 member from outside the department at KU are required. The student's research advisor normally serves as the committee chair. See the Graduate Catalog for doctoral committee composition requirements. The committee works with the aspirant to develop a plan of study and monitors the progress of the student throughout the remainder of the Ph.D. program.

A plan of study must be approved by the student’s advisor, the examining advisory committee, and the departmental Graduate Studies director by the end of the first semester. Before scheduling the comprehensive examination, the aspirant must satisfy residency, basic research skills, and the responsible scholarship requirements.

The research skill requirement provides the aspirant with a research skill distinct from, but strongly supportive of, the dissertation research. Work done to fulfill this requirement should involve study in an area complementary to the dissertation research and should enhance the student's ability to carry out the research.

Preliminary Examination of Research - B.S. to Ph.D.

The Preliminary Examination of Research is administered to students requesting admission to the Ph.D. program without earning the M.S. degree. Successful completion of the preliminary examination admits the student into the Ph.D. program with aspirant status. Students taking this examination must have completed the graduate core courses at KU with the required GPA. The examination determines the student’s aptitudes for: (a) Independent, original, critical thinking; (b) Planning and organizing a research program; (c) Use of previous work and background literature to demonstrate understanding of the planned research within the scope of the larger project and ability to conduct that research; (d) Application of fundamental theory (e.g., equations) to the proposed work and; (e) Effective communication of technical work. The preliminary examination consists of a written report (5 pages maximum), oral presentation (15 minutes maximum), and questions by the examining committee (25 minutes maximum). The written and oral portions are prepared by the student only, with no review or editing by the research advisor or any other person. The written report is submitted to the committee one week before the oral examination. Questions are directed toward determining the 5 aptitudes listed above. A rubric for the oral and written portions will be provided to the student beforehand.

Comprehensive Examination

The Ph.D. aspirant takes the comprehensive examination after the completion of a majority of the course work for the Ph.D. and all department, school, and general requirements prerequisite to this examination, including residency, research skills, and responsible scholarship requirements. To prepare the aspirant for the comprehensive examination, the advisory committee may require enrollment in C&PE 902. Preparation for the Ph.D. Comprehensive Examination. The examination consists of 2 parts: a written proposal for research and an oral examination based on, but not limited to, the research proposal.

For the research proposal, the student is assigned a topic of current interest to the chemical and/or petroleum engineering profession. This assignment is made by an examining committee of at least 5 persons, at least 3 must be tenure / tenure track faculty from within the department including the advisor and at least 1 person from outside the department at KU. The aspirant identifies a research problem in the assigned topic area and prepares a written proposal for research on this problem. Normally, the written proposal must be prepared over a specified time period of 30
consecutive days. Except in unusual circumstances, the problem must be distinctly different from the dissertation problem.

The examining committee evaluates the research proposal upon completion. If the committee judges it satisfactory, the oral examination part of the comprehensive examination is held. The oral examination is based on the research proposal but may also cover areas peripheral to the proposal.

A student must pass both parts of the examination. Failure of either part constitutes an unsatisfactory grade on the entire examination. An aspirant who receives a grade of unsatisfactory may repeat the examination upon the recommendation of the examining committee, but the exam may not be taken more than twice. The examination may not be repeated until at least 90 days have elapsed since the unsuccessful attempt. On receipt of a grade of Honors or Satisfactory on the comprehensive examination, the aspirant is admitted to candidacy for the degree of Doctor of Philosophy.

Ph.D. Dissertation and Final Oral Examination

The doctoral dissertation, based on independent research conducted by the candidate, constitutes the final phase of the doctoral work and must be completed within the prescribed time constraints. Upon acceptance of the dissertation by the advisory committee, the candidate defends the dissertation in a final oral examination. The examining committee consists of at least 5 persons, including the advisory committee members and at least 1 person from outside the department.

**MS to PhD Program**

If a student obtains their MS degree in Chemical or Petroleum Engineering from the University of Kansas and plans to continue on into the doctoral program, then the GPA from the core courses will be used as the basis for entering the PhD program. If the student obtained their MS degree in Chemical or Petroleum Engineering (or very closely related fields) from another university, then the student's MS course work is evaluated by:

The Graduate Standards Committee (GSC) to determine if 1 to 5 (4 PE) of their MS core courses will count toward the requirements to become a PhD aspirant.

**Course Requirements:**

**Core Courses:** See list of Graduate Core Courses in the MS Degree section (or equivalent as approved by GSC)

**Elective Courses (15 hours):** 3 CPE Courses; 2 from outside CPE (7XX or greater)

**Graduate Seminar:** Every semester while in residence

**Research:** 30-34 hours

- PhD Aspirants: Average GPA of **3.2 (5 course core) or 3.25 (4 course core)** in core courses from KU MS degree. A student below the required GPA will need to decide with Advisor to 1) retake courses until GPA is obtained; 2) obtain the MS degree while pursuing the PhD program.
- 3.25 Overall GPA required in all courses
- Only one C may be permitted
- **Preliminary Examination:** See Policy and Rubric on departmental website.

**BS to PhD Program (Fast track PhD)**

**Course Requirements:**

**Core Courses:** See list of Graduate Core Courses in the MS Degree section

**Elective Courses (15 hours):** 3 CPE Courses; 2 from outside CPE (7XX or greater)

**Graduate Seminar:** Every semester while in residence

**Research:** 30-34 hours

- PhD Aspirants: average GPA of **3.2 (5 course core) or 3.25 (4 course core)** in core courses from KU MS degree. A student below the required GPA will need to decide with Advisor to 1) retake courses until GPA is obtained; 2) obtain the MS degree while pursuing the PhD program.
- 3.25 Overall GPA required in all courses
- Only one C may be permitted
- **Preliminary Examination:** See Policy and Rubric on departmental website.

**Graduate Certificate in Petroleum Management**

The engineering petroleum management certificate program is offered to concurrently enrolled graduate students in the School of Business MBA Petroleum Management Program. Completion of the program awards a certificate for academic accomplishment in the Petroleum Management area.

Applicants must have been admitted to the School of Business MBA Petroleum Management Program before they are considered for admission to the Engineering Petroleum Certificate program. Enrollment is concurrent.

**Certificate Requirements**

Total Engineering Required Credit Hours: (15)

**Courses:**

C&PE 511 – Momentum Transfer (fall semester) (3)

or AE 345 Fluid Mechanics (summer semester)

or ME 510 Fluid Mechanics (spring semester)

C&PE 522 – Economic Appraisal of Chemical and Petroleum Projects (2)

C&PE 624 – Plant and Environmental Safety (3)

or Engineering Elective

C&PE 765 – Corrosion Engineering (3)

C&PE 804/BUS 825 – Petroleum Management Seminar (1)

with Summer Industry Tour

C&PE 825 Final Thesis (3)
Department of Civil, Environmental, and Architectural Engineering

Civil, Environmental, and Architectural Engineering

Civil engineering (CE) is the oldest engineering program at KU. The first graduating class in 1873 included a civil engineer. Civil engineers design roads, water systems, bridges, dams, and other structures, providing nearly all the infrastructure needed by modern society. Civil engineers were the first engineers to address environmental issues and are the lead engineering discipline in treating water supplies to protect public health. In recognition of the significant issues concerning the environment, the department name was changed in 1992 to civil and environmental engineering.

Architectural engineering (ARCE) combines study in architecture with engineering science and design courses in structures, illumination, power, mechanical, energy, and construction to prepare students for building design projects of all kinds. Architectural engineering dates to 1912 at KU, and the first female graduate of the School of Engineering was an architectural engineering major. Architectural engineering merged with civil and environmental engineering in 2001 to form the the Department of Civil, Environmental, and Architectural Engineering (CEAE).

Mission

CEAE’s mission is to provide students with an outstanding engineering education and be a leader in research and service. This mission is supported by the following three goals:

1. Prepare students for productive engineering careers
2. Maintain and grow strong research programs
3. Serve the profession

Undergraduate Programs

Civil, environmental, and architectural engineering offers undergraduate degree programs in both civil engineering and architectural engineering. Each bachelor of science program is EAC/ABET-accredited (www.abet.org (http://www.abet.org)). The B.S. in civil engineering is a 4-year, 132-hour degree. The B.S. in architectural engineering is a 4-year, 128-hour program.

Students in civil engineering can identify either civil or environmental engineering as their concentration. Students in architectural engineering can specialize in one of four areas of emphasis: mechanical/energy systems, lighting/electrical systems, building structures, or construction, or a hybrid such as pre-architecture, sustainable buildings, acoustics, or fire protection.

Both degree programs require a student to take the Fundamentals of Engineering examination, part of the process toward registration as a Professional Engineer (P.E.), to graduate. To help students complete their degrees efficiently and to aid with professional development, all undergraduates in CEAE have individual faculty members as their academic advisors.

Graduate Programs

The department offers graduate programs leading to the following degrees:

- Master of Science in Architectural Engineering
- Master of Science in Civil Engineering
- Master of Science in Environmental Engineering
- Master of Science in Environmental Science
- Master of Civil Engineering
- Master of Construction Management
- Doctor of Philosophy in Civil Engineering
- Doctor of Philosophy in Environmental Engineering
- Doctor of Philosophy in Environmental Science

An ABET-accredited baccalaureate degree in engineering, or the equivalent from abroad, is required for admission to the graduate degree programs in civil, environmental and architectural engineering. The graduate degree programs in environmental science and construction management are intended primarily for students with baccalaureate degrees in fields other than engineering.

Graduate students in the civil engineering degree programs can specialize in structural engineering, environmental engineering, water resources engineering, geotechnical engineering, transportation engineering, construction, or engineering mechanics.

Students in the Master of Science (M.S.) degree in architectural engineering program can specialize in mechanical/energy systems, lighting/electrical systems, building structures, or construction, or a hybrid such as sustainable buildings, acoustics, or fire protection. M.S. ARCE students often have bachelor degrees from other engineering disciplines.

The M.S. degree programs in civil and architectural engineering include a Design Option, which can be completed in 2 semesters of full-time study. Students in the Design Option take 4 regular academic courses each semester and work together as a consulting group on the design of a major engineering project. The Design Option is open to students in all areas of interest. Students in the Design Option must start in the fall semester and complete 15 credit hours, including the design project, in the fall and spring semesters.

The Master of Civil Engineering degree provides a course-work-only option for working professionals who do not need the research component of the M.S. degrees. This degree requires 2 courses in engineering management (EMGT) to complement the engineering graduate courses. The courses for the M.C.E. degree are offered in the evening.

The interdisciplinary Master of Science degree in environmental science is intended primarily for students with baccalaureate degrees in fields other than engineering.

The Master of Construction Management is a professional non-thesis degree intended for part-time graduate students employed in the construction industry or for full-time students. Graduate courses in construction management (CMGT) are taught in the evening.

The department’s doctoral degrees are the Doctor of Philosophy degrees in civil engineering, environmental engineering, and environmental science. Most doctoral students hold M.S. degrees, but direct admission to a doctoral program is possible for especially well-qualified engineering B.S. holders.
Courses

ARCE 101. Introduction to Architectural Engineering. 2 Hours.
An introduction to the study of and careers in architectural engineering. Topics include problem solving and study skills, the building design and construction process, design documents, and professional practice issues such as licensing requirements and ethics. LEC.

ARCE 217. Computer-Assisted Building Design. 3 Hours.
Introduction to computer-aided design (CAD) tools for architectural design and construction. Course covers building information modeling (BIM) including object-oriented 3D modeling, databases, virtual walkthroughs, basic customization, and creating BIM families. Prerequisite: ARCE 101 and MATH 104, or consent of instructor. LEC.

ARCE 350. Building Materials Science. 3 Hours.
An introduction to the structural, thermal, electrical, and optical properties of building materials. Manufacturing, testing, integration, and specification of materials with emphasis on commercial, institutional, and industrial buildings. Prerequisite: PHSX 212 and CHEM 130 or CHEM 150, or consent of instructor. LEC.

ARCE 390. Special Problems. 1-3 Hours.
Special problems in architectural engineering. The study of a particular problem involving individual research and report. Prerequisite: Students must submit, in writing, a proposal including a statement of the problem the student wishes to pursue, the methodology the student plans to use in the program, and objectives of the special problems. The student must also have a signed agreement with the faculty member proposed as instructor for the course. Consent of the instructor. IND.

ARCE 640. Power Systems Engineering I. 3 Hours.
This course introduces the design of commercial and industrial power systems. Emphasis is placed on the proper selection, specification, and installation of materials and equipment that comprise commercial and industrial power systems. This course covers the application of materials and equipment in accordance with industry standards, independent laboratory testing, and the National Electrical Code. Prerequisite: EECS 315 or consent of instructor. LEC.

ARCE 641. Power Systems Engineering II. 3 Hours.
A continuation of ARCE 640 that integrates system components into functional, safe, and reliable power distribution systems for commercial, industrial, and institutional (CII) facilities. Service design, distribution system layout and reliability, emergency and standby power system design, medium-voltage distribution systems, symmetrical fault analysis, and special equipment and occupancies. (Same as EECS 441.) Prerequisite: ARCE 640, or EECS 212 and Upper-Level EECS Eligibility. LEC.

ARCE 642. Power System Protection. 3 Hours.
This course introduces techniques and methods used to analyze and predict the performance of commercial and industrial power systems and equipment under balanced and unbalanced fault conditions. Emphasis is placed on the selection, application, and coordination of protective devices to detect and clear power system faults in a safe and reliable manner. Prerequisite: ARCE 640 or EECS 212 or consent of instructor. LEC.

ARCE 644. Electric Machines and Drives. 3 Hours.
Introduction to electric machine theory, operation, and control. Electric machines covered include DC generators and motors, AC synchronous generators and motors, AC induction generators and motors, and fractional horsepower and special purpose motors. Motor starting and controls for both DC and AC machines are also covered including as introduction to power electronics and variable frequency drives (VFD).

ARCE 645. Electric Energy Production and Storage. 3 Hours.
An introduction to the design of utility scale and small scale (distributed generation) electric energy production and storage systems. This course addresses the technical, operational, economic, and environmental characteristics associated with both traditional and nontraditional electric energy production systems along with associated grid integration, energy delivery, and regulatory issues. Traditional energy production systems covered include fossil fuel, hydroelectric, and nuclear power plants. Non-traditional energy productions systems covered include fuel cells, photovoltaics (PV), concentrated solar power (CSP), wind, geothermal, and other emerging technologies. (Same as EECS 545.) Prerequisite: ARCE 640, or EECS 212 and Upper-Level EECS Eligibility. LEC.

ARCE 646. Water Systems Design. 3 Hours.
The analysis and design of hydronic systems for buildings including piping, plumbing, pumping, and the water-side of heating, ventilating, and air-conditioning (HVAC). Prerequisite: ME 510, AE 345, CE 330, or CPE 511, or consent of the instructor. LEC.

ARCE 660. Building Thermal Science. 3 Hours.
The fundamentals of moist air processes, air and moisture exchange, and building heat transfer. Determination of heating and cooling loads under steady-state and transient conditions. Prerequisite: ARCE 217, ME 312, and either ME 510, AE 345, CE 330, or CPE 511, or consent of instructor. LEC.

ARCE 661. HVAC&R Systems Design. 3 Hours.
Analysis and design of heating, ventilating, air-conditioning, and refrigeration equipment and systems. Prerequisite: ARCE 660 or consent of the instructor. LEC.

ARCE 662. Energy Management. 3 Hours.
Energy usage in commercial buildings and industry, energy auditing methodology, utility analysis, management measures, and economic evaluation are covered. Includes fieldwork. Corequisite: ARCE 660, or consent of instructor. LEC.
ARCE 664. Fire Protection Engineering. 3 Hours.
An introduction to human response, fire science, combustion calculations, compartment fires, piping and sprinkler design, and smoke management. Analytical methods, experimental data, codes, case-studies, and videos are presented in this engineering design course. Prerequisite: ME 312 or CPE 221, and ME 510, AE 345, CE 330, or CPE 511, or consent of instructor. LEC.

ARCE 665. Solar Energy Systems Design. 3 Hours.
A quantitative and qualitative study of active, passive, wind, and photovoltaic energy conversion systems for buildings. Solar radiation and system performance prediction. Prerequisite: ME 312 or CPE 221, or consent of instructor. LEC.

ARCE 675. Sound and Vibration Control. 3 Hours.
An introduction to the physics and measurement of sound, wave phenomena, acoustics, and methods of noise and excessive vibration control for various applications. Prerequisite: PHSX 212 and MATH 220 or MATH 320, or consent of instructor. LEC.

ARCE 680. Architectural Engineering Design I. 6 Hours.
Capstone engineering design course that includes the analysis, design, and integration of structural, mechanical, electrical, and lighting systems for a commercial, industrial, or institutional building. Prerequisite: CMGT 500, ARCE 640, ARCE 650, ARCE 661, CE 562, and CE 563, or consent of instructors. Fifth year senior standing in architectural engineering. LAB.

ARCE 681. Architectural Engineering Design II. 6 Hours.
Comprehensive architectural engineering design project in a specific area of professional practice. Prerequisite: ARCE 680 or consent of instructor. Fifth year senior standing in architectural engineering. LAB.

ARCE 690. Special Problems. 1-3 Hours.
The study of a particular problem in architectural engineering involving individual research and presentation. Prerequisite: Student must submit, in writing, a proposal including a statement of the problem the student wishes to pursue, the methodology the student plans to use in the program, and objectives of the special problems. The student must also have a signed agreement with the faculty member proposed as instructor for the course. Consent of instructor. IND.

ARCE 691. Honors Research. 3 Hours.
Research a particular architectural engineering problem. Research will involve defining the problem, developing a research methodology, applying the research methodology and gathering data, analyzing and interpreting the data, and presenting the results of the research. The student must have a faculty sponsor and submit a proposal in writing stating the objective of the research, the planned research method that will be used, and the method of reporting the results. Prerequisite: Participation in the University Honors Program, consent of instructor, and approval of the chair are required. LEC.

ARCE 698. Comprehensive Design Project. 3 Hours.
Capstone architectural engineering design course that includes the analysis, design, and integration of a building’s structural, mechanical, electrical, and lighting systems. Building codes, standards, performance, and sustainability are addressed, and BIM software utilized. Prerequisite: CMGT 357, CMGT 500, ARCE 640, ARCE 650, ARCE 661, and CE 562. LAB.

ARCE 700. Directed Readings in Architectural Engineering. 1-3 Hours.
 Individual study of special topics and problems. May be repeated for credit. Prerequisite: Student must submit, in writing, a proposal including a statement of the problem the student wishes to pursue and a bibliography of the articles and books required to complete the project. The student must also have a signed agreement with the faculty member proposed as instructor for the course. Consent of instructor. RSH.

ARCE 750. Daylighting. 3 Hours.
This course will cover daylighting design concepts, solar position, daylight availability, sky luminance distribution models, daylight delivery methods, integration of daylighting and electric lighting controls, physical modeling, and computer analysis techniques. Prerequisite: PHSX 212, or ARCH 531, or consent of instructor LEC.

ARCE 751. Advanced Lighting Design. 3 Hours.
Advanced analysis, design, and modeling of luminous environments. It covers impact of lighting on human perception and interaction with space, human factors in lighting, camera-aided light measurement technologies, advanced computer-aided lighting simulations, effective and efficient integration of natural and artificial lighting, modeling and analysis of light sources and spaces, simulation of lighting systems, and design of lighting control systems. Prerequisite: ARCE 217 and ARCE 650 or consent of instructor. LEC.

ARCE 752. Lighting Measurement and Design. 3 Hours.
This course will cover conventional lighting and solid-state lighting measurement, daylighting measurement, camera-aided lighting measurement technologies and applications, and design and development of custom luminaries in an LED workshop and innovative daylighting devices. Prerequisite: ARCE 650, or consent of instructor LEC.

ARCE 760. Automatic Controls for Building Mechanical Systems. 3 Hours.
An introduction to controls for building mechanical systems. Discussions of the theory, design, and equipment used for control systems. The benefits of pneumatic, electrical, and electronic (DDC) controls will be examined. Prerequisite: ARCE 660 or consent of instructor. LEC.

ARCE 764. Advanced Thermal Analysis of Buildings. 3 Hours.
Manual and computational methods for determining steady-state and transient thermal loads in buildings. Advanced analysis of energy consumption given choices in building materials and mechanical systems. Prerequisite: ARCE 217 and ARCE 660, or consent of instructor. LEC.

ARCE 890. Architectural Engineering Seminar: ____. 1-3 Hours.
Individual or group studies in building engineered systems or construction engineering. Prerequisite: Graduate standing in Architectural Engineering and consent of instructor. RSH.

ARCE 895. Master’s Project. 1-3 Hours.
Directed study and reporting of a specialized topic of interest to the architectural engineering profession. Prerequisite: Consent of instructor. RSH.

ARCE 899. Master’s Thesis. 1-6 Hours.
Directed research and reporting of a specialized topic of interest to the architectural engineering profession. Prerequisite: Consent of instructor. THE.

CE 191. Introduction to Civil Engineering. 2 Hours.
A discussion of engineering logic through examination of current concepts in engineering education, practice and professional development. Not open to juniors and seniors. LEC.

CE 192. Civil Engineering Graphics. 3 Hours.
Introduction to computer-aided design (CAD) tools for civil and environmental engineering practice. This course covers 2D drafting and 3D modeling. Prerequisite: MATH 104. LEC.

CE 201. Statics. 2 Hours.
The principles of statics, with particular attention to engineering applications. Prerequisite: PHSX 210 and MATH 121. LEC.
CE 240. Surveying. 3 Hours.
A course for all students in the use of surveying instruments. Includes field and office problems involving land measurements, construction, layouts, stadia methods, areas, and U.S. Public Land Surveys. Two lectures periods and one field period per week. Prerequisite: MATH 121 or MATH 125, CE 192 or ARCE 217 or consent of instructor. LEC.

CE 300. Dynamics. 3 Hours.
The principles of kinematics and kinetics, with particular attention to engineering applications. Prerequisite: CE 201 or ME 201 and MATH 122. LEC.

CE 301. Statics and Dynamics. 5 Hours.
A combination of statics and dynamics covered in CE 201 and CE 300. This course must be taken as a five-hour unit. Prerequisite: PHSX 210 or PHSX 211, and MATH 122 or MATH 126. LEC.

CE 310. Strength of Materials. 4 Hours.
Three one-hour lectures and one two-hour laboratory. Principles of stress and deformation in structures and machines. Prerequisite: CE 201 or ME 201 or CE 301, and MATH 122 or MATH 127 or consent of the instructor. Co-Requisite: MATH 220. LEC.

CE 311. Strength of Materials. 3 Hours.
A course that includes a basic treatment of stress and deformation in elastic bodies. Prerequisite: CE 201 or ME 201, MATH 220 and MATH 290 or consent of instructor. LEC.

CE 330. Fluid Mechanics. 4 Hours.
Three one-hour lectures and one two-hour laboratory. A study of the basic principles of the mechanics of fluids and their application. The lecture material will be supplemented by demonstrations, experiments, and individual projects. Prerequisite: ENGL 101, ENGL 102, CE 300 or CE 301. LEC.

CE 412. Structural Engineering Materials. 3 Hours.
Study of the engineering properties of structural materials and their control with emphasis on timber, concrete, and steel. Two one-hour lectures and one three-hour laboratory. Prerequisite: CE 310 or consent of instructor and ENGL 102. LEC.

CE 450. Sustainability: Population, Energy and Water. 3 Hours.
The course will examine the concepts regarding the continued advancement of humankind while maintaining our ecological niche on earth. Key topics include: population growth, poverty, and impacts of development; energy consumption, sources, storage, conservation and policy; water quality and quantity; materials and building; and policy implications. Prerequisite: Junior standing or participation in KU Honors Program. LEC.

CE 455. Hydrology. 3 Hours.
An introduction to the fundamentals of hydrologic analysis. Subjects covered include collection and initial reduction of hydrologic data; rainfall-runoff relationships, hydrograph development; hydrologic routing, well equations and their application and hydrologic frequency analysis. Prerequisite: ENGL 101, ENGL 102, and CE 330. LEC.

CE 461. Structural Analysis. 4 Hours.
Three one-hour lectures and one two-hour laboratory. Analysis of statically determinate and indeterminate beams, frames, and trusses using classical methods and introducing computer-based methods. Prerequisite: CE 310. LEC.

CE 477. Introduction to Environmental Engineering and Science. 3 Hours.
Application of fundamental scientific principles to the protection of atmospheric, aquatic, and terrestrial environments through the use of pollution abatement processes, with consideration also given to economic, social, political, and legal aspects of pollution control. Prerequisite: ENGL 102, MATH 101 or MATH 104, and CHEM 135 or CHEM 150. LEC.

CE 480. Introduction to Transportation Engineering. 3 Hours.
An introductory study of the various modes of transportation, emphasizing highways, railroads, and air transport. The planning, design and operations of these modes are discussed. There is a multimodal project included in this course. Prerequisite: CE 240. LEC.

CE 484. Material for Transportation Facilities. 3 Hours.
Principles involved in the testing, behavior, and selection of materials for use in the transportation field. Emphasis is on bituminous materials, aggregate, and soil stabilization. Prerequisite: CE 310. LEC.

CE 487. Soil Mechanics. 4 Hours.
Three lecture periods and one laboratory period. Fundamental theories of soil mechanics and their applications in engineering. Prerequisite: CE 310, CE 330 or concurrent enrollment. LEC.

CE 490. Special Problems. 1-5 Hours.
An advanced study related to a special problem in the field of civil engineering or allied fields, for upper-division undergraduate students. IND.

CE 495. Special Topics. 1-3 Hours.
A course or colloquium to present topics of special interest. Prerequisite: Varies by topic. LEC.

CE 498. Engineering Honors Seminar. 3 Hours.
Prerequisite: Participation in or eligibility for the University Honors Program. Sophomore or higher standing. LEC.

CE 499. Seminar. 1 Hour.
Concepts of professional development. LEC.

CE 535. Engineering Applications of GIS. 3 Hours.
This course introduces engineering applications of geographic information system (GIS) using ArcGIS. The focus of this course is on practical application of GIS to civil engineering problems. Prerequisite: Junior or Senior standing, or consent of instructor. LEC.

CE 552. Water Resources Engineering Design. 4 Hours.
Three one-hour lectures and one three-hour laboratory. Study of water resources structures and systems with design emphasis on the hydraulic features: dams, drainage, river engineering, pipelines, channels and hydraulic machinery. Prerequisite: CE 330 and CE 455. LEC.

CE 562. Design of Steel Structures. 3 Hours. AE61.
Two one-hour lectures and one three-hour laboratory. Fundamentals of structural design with steel. Prerequisite: CE 461. LEC.

CE 563. Design of Reinforced Concrete Structures. 3 Hours.
Two one-hour lectures and one three-hour laboratory. Fundamentals of structural design with reinforced concrete. Prerequisite: CE 461; CE 412 or CE 484 or consent of the instructor. LEC.

CE 570. Concepts of Environmental Chemistry. 2 Hours.
The fundamentals of aquatic chemistry, with emphasis on application to water purification and wastewater treatment. Prerequisite: Undergraduate standing, CE 477, and MATH 115 or MATH 121 or MATH 125. LEC.

CE 571. Environmental Chemical Analysis. 1 Hour.
A laboratory introducing the basic chemical tests used in the water and wastewater fields of environmental engineering and science. Prerequisite: Undergraduate standing, and credit or co-enrollment in CE 570. LAB.

CE 573. Biological Principles of Environmental Engineering. 3 Hours.
A basic study of the microorganisms of importance in environmental engineering. Emphasis is placed on the microbiology of dilute nutrient solutions. Microbial physiology, microbial ecology, and biochemistry will be discussed as they pertain to environmental engineering and
science. Both biodegradation and public health aspects are included. (Two lecture hours and one three-hour laboratory per week.) Prerequisite: Undergraduate standing, CE 477 or equivalent, and MATH 115 or MATH 121 or MATH 125. LEC.

CE 574. Design of Air Pollution Control Systems. 3 Hours.
This course emphasizes understanding of air pollution problems and their solution through engineering design and science. Topics covered include: types of air pollutants; monitoring of air pollutants; transport of air pollutants in the atmosphere; and control of air pollution emissions from both stationary and mobile sources. Prerequisite: CE 330, CE 477, MATH 122, PHSX 212; or consent of instructor. LEC.

CE 576. Municipal Water Supply and Wastewater Treatment. 4 Hours.
AE61.
The principles of public water supply design, including source selection, collection, purification, and distribution; for municipal wastewater, collection, treatment, and disposal. Prerequisite: CE 330, CE 455, and CE 477. LEC.

CE 577. Industrial Water and Wastes. 3 Hours.
A review of the methods of industrial water treatment and the fundamentals of industrial water pollution control. Topics include: water budgets, cooling tower and boiler treatment, corrosion control, government regulations, wastewater characterization, waste minimization, pilot plants, pretreatment, final treatment, and site selection. Prerequisite: Undergraduate standing, and CE 477 or equivalent. LEC.

CE 580. Transportation Planning and Management. 3 Hours.
The course covers the major technical aspects of planning methodologies, computer applications in transportation and the impact of technology on the management and planning processes. Topics covered will include origin-destination surveys, demand analysis models, supply analysis, traffic impact studies, computer simulation and modeling, economics, management systems, intelligent transportation systems (ITS), and geographic information systems (GIS). Prerequisite: CE 390 and senior standing. LEC.

CE 582. Highway Engineering. 3 Hours.
A comprehensive study of the planning, design, construction, operations, and maintenance of highway systems with emphasis on the design aspects of a highway. Prerequisite: CE 455 and CE 480. LEC.

CE 588. Foundation Engineering. 3 Hours.
A study of the interaction of the characteristics of soil or rocks and structures. The estimation of settlement and bearing capacity of foundation elements. Principles governing the choice and design of footings, rafts, piers, and piles. Prerequisite: CE 487. LEC.

CE 625. Applied Probability and Statistics. 3 Hours.
Course topics include data description, measures of central tendency and dispersion, sampling and sampling designs, quality control, persistence, periodicity, sampling distributions, hypothesis testing, ANOVA, correlation, linear regression, multiple correlation, and multiple regression. Applications and real world problems are stressed. Prerequisite: MATH 121 or MATH 115 and MATH 116. LEC.

CE 684. Materials for Transportation Facilities. 3 Hours.
Principles involved in the testing, behavior, and selection of materials for use in the transportation field. Emphasis is on bituminous materials, aggregate, and soil stabilization. Readings. Prerequisite: CE 487. LEC.

CE 704. Dynamics and Vibrations. 3 Hours.
Problems in engineering dynamics and vibrations. Topics include applications of generalized forces and coordinates, Lagrange equations, and a study of the performance of single and multiple degree of freedom vibrational systems. (Same as AE 704.) LEC.

CE 710. Structural Mechanics. 3 Hours.
Basic concepts in the analysis of stress and strain and the behavior of materials. Topics include elementary theory and problems in elasticity, theories of failure of materials including fracture mechanics and introduction to plasticity. LEC.

CE 715. Corrosion Engineering. 3 Hours.
Electrochemical basis of corrosion. Estimating probability and rate of corrosion. Identifying different conditions likely to cause specific types of corrosion. Corrosion mitigation techniques. Prerequisite: CHEM 135, CHEM 150 or equivalent. LEC.

CE 721. Experimental Stress Analysis. 3 Hours.
Introduction to experimental stress-analysis techniques. Theory and application of mechanical strain gages, electrical strain gages, photoelastic techniques, and brittle coatings. LEC.

CE 730. Intermediate Fluid Mechanics. 3 Hours.
Fall semester. Principles of steady and unsteady flows, theories of potential, viscous, and turbulent flows, and applications in water resources engineering. Prerequisite: CE 330 and MATH 320. LEC.

CE 735. Engineering Applications of GIS. 3 Hours.
This course introduces engineering applications of geographic information system (GIS) using ArcGIS. The focus of this course is on practical application of GIS to civil engineering problems. LEC.

CE 746. Pavement Technology. 3 Hours.
An introduction to the production of asphalt cements and its use in pavement construction and maintenance applications. Pavement distress identification. Design and use of bituminous pavements and materials for other than highway applications. Prerequisite: CE 484 or consent of instructor. LEC.

CE 751. Watershed Hydrology. 3 Hours.
Study of hydrologic processes at the earth's surface: evaporation, transpiration, snowmelt, precipitation, infiltration, runoff, and streamflow. Modeling of hydrologic processes; statistical analysis of hydrologic data; applications to the analysis and design of engineering projects. Prerequisite: CE 455 or equivalent. LEC.

CE 752. Physical Hydrogeology. 3 Hours.
Study of fluid flow in subsurface hydrologic systems. Investigation of the ground water environment including porosity, and hydraulic conductivity and their relationship to typical geologic materials. Examination of Darcy's law and the continuity equation leading to the general flow equations. Discussion of typical hydraulic testing methods to estimate aquifer parameters in various situations and apply these to water resource problems. Study of the basic mechanisms that determine the behavior of typical regional flow systems. (Same as GEOL 751.) LEC.

CE 753. Chemical and Microbiological Hydrogeology. 4 Hours.
Lecture and discussion of chemical and microbiological controls on groundwater chemistry. Topics include thermodynamic and microbiological controls on water-rock reactions; kinetics; and microbiological, chemical and isotopic tools for interpreting water chemistry with respect to chemical weathering and shallow diagenesis.
Origins of water chemistry, changes along groundwater flow paths, and an introduction to contaminant biogeochemistry will be discussed through the processes of speciation, solubility, sorption, ion exchange, oxidation-reduction, elemental and isotopic partitioning, microbial metabolic processes and microbial ecology. An overview of the basics of environmental microbiology, including cell structure and function, microbial metabolism and respiration, microbial genetics and kinetics of microbial growth will be covered. (Same as GEOL 753.) Prerequisite: One year of chemistry, one year of calculus, one year of biology, an introductory course in hydrogeology, or consent of the instructors. LEC.

CE 754. Contaminant Transport. 3 Hours.
A study of the transport of conservative and non-conservative pollutants in subsurface waters. Case studies are used to illustrate and develop a conceptual understanding of such processes as diffusion, advection, dispersion, retardation, chemical reactions, and biodegradation. Computer models are developed and used to quantify these processes. (Same as GEOL 754.) Prerequisite: Introductory Hydrogeology or consent of instructor. LEC.

CE 755. Free Surface Flow I. 3 Hours.
A study of uniform and non-uniform steady flow of water in open channels, including backwater curves, the hydraulic jump, and the delivery of canals. Prerequisite: CE 330. LEC.

CE 756. Wetlands Hydrology and Introduction to Management. 3 Hours.
A study of the basic structure and functions of wetlands; the physical, chemical, and biological processes involved; and an introduction to the management of wetlands. Also a brief introduction to the legal aspects of wetlands, the Section 404 permitting processes, and mitigation requirements. Prerequisite: Senior or graduate standing in engineering or a science area, or consent of instructor. LEC.

CE 757. Pipe-Flow Systems. 3 Hours.
Hydraulic analysis and design of pipelines, pipe networks, and pumping systems. Analysis and control of hydraulic transients. Engineering of water distribution systems. Prerequisite: CE 330 or equivalent. LEC.

CE 759. Water Quality Modeling. 3 Hours.
Analytical and numerical modeling of transport and transformation processes in the aquatic environment. Mass balance principles and transport phenomena. Eutrophication of lakes. Transport and fate of conventional pollutants and toxic organic chemicals in rivers, lakes, and estuaries. Prerequisite: CE 330 and CE 477 or equivalent. LEC.

CE 761. Matrix Analysis of Framed Structures. 3 Hours.
Analysis of 2-D and 3-D frame and truss structures by the direct stiffness method. Computer techniques required to implement the analysis procedure. LEC.

CE 763. Design of Prestressed Concrete Structures. 3 Hours.
The theory and design of prestressed concrete structures based on service load and strength criteria. Prerequisite: CE 563. LEC.

CE 764. Advanced Design of Reinforced Concrete Structures. 3 Hours.
The theory and design of reinforced concrete members and structures with emphasis on frames and slabs. Introduction to bridge design and earthquake design. Prerequisite: CE 563. LEC.

CE 765. Advanced Steel Design - Building Structures. 3 Hours.
The theory and design of standard steel framed structures (primarily buildings). Design philosophies, stability, composite design, structural behavior, preliminary design, and connections. Prerequisite: CE 562 or equivalent. LEC.

CE 766. Advanced Steel Design - Bridge Structures. 3 Hours.
Introduction to simple plastic design principles. Analysis and design of steel bridges including composite and noncomposite plate girders, curved girders, box girders, and other specialized bridge types. Fatigue and connection design considered. Prerequisite: CE 562 or equivalent. LEC.

CE 767. Introduction to Fracture Mechanics. 3 Hours.
Theories and modes of structural failure as related to structural design. Application of fracture mechanics to failure analysis, fracture control plans, fatigue crack growth, and stress-corrosion crack growth. Prerequisite: CE 310 or CE 311 plus a structural or mechanical design course. LEC.

CE 770. Concepts of Environmental Chemistry. 2 Hours.
The fundamentals of aquatic chemistry, with emphasis on application to water purification and wastewater treatment. May not be taken for credit by students with credit in CE 570. Prerequisite: CE 477 or equivalent, calculus, and five hours of chemistry. LEC.

CE 771. Environmental Chemical Analysis. 1 Hour.
A laboratory introducing the basic chemical tests used in the water and wastewater fields of environmental engineering and science. May not be taken for credit by students with credit in CE 571. Prerequisite: Credit or co-enrollment in CE 770. LAB.

CE 772. Physical Principles of Environmental Engineering Processes. 3 Hours.
Physical principles of suspensions, kinetics, fluid flow, filtration, and gas transfer are applied to various environmental physical processes. Prerequisite: CE 477 or equivalent, calculus, and four hours of physics. LEC.

CE 773. Biological Principles of Environmental Engineering. 3 Hours.
A basic study of the microorganisms of importance in environmental engineering. Emphasis is placed on the microbiology of dilute nutrient solutions. Microbial physiology, microbial ecology, and biochemical processes will be discussed as they pertain to environmental engineering and science. Both biodegradation and public health aspects are included. (Two lectures and one three-hour laboratory per week.) May not be taken for credit by students with credit in CE 573. Prerequisite: CE 477 or equivalent, calculus, and five hours of chemistry. LEC.

CE 774. Chemical Principles of Environmental Engineering Processes. 3 Hours.
Chemical principles of stoichiometry, thermodynamics, and kinetics are applied to various chemical processes having application in the field of environmental engineering and science, including adsorption, ion exchange, coagulation, oxidation, and precipitation. Prerequisite: CE 477 or equivalent, calculus, and credit or registration in CE 570 or CE 770. LEC.

CE 775. Stormwater Treatment Systems Design. 3 Hours.
This course will address the design of stormwater treatment systems to provide hydrological control and water quality improvement. Specific topics include common stormwater pollutants, contaminant loading during storm events, design of structural BMPs (detention basins, traps, filters, and vegetated control systems) and low impact development practices. Prerequisite: CE 477, either CE 455 or CPE 511 or consent of instructor. LEC.

CE 776. Water Reuse. 3 Hours.
This course addresses past and current water reclamation and reuse practices; health and environmental concerns associated with water reuse; technologies and systems for water treatment, reclamation, and reuse; water reuse applications, including agricultural reuse, direct and indirect potable reuse, landscape irrigation, industrial uses, urban non-irrigation applications, environmental and recreational uses, and
groundwater recharge; and planning and implementation of water reuse systems. Prerequisite: CE 477 or equivalent. LEC.

CE 777. Industrial Water and Wastes. 3 Hours.
A review of the methods of industrial water treatment and the fundamentals of industrial wastewater pollution control. Topics include: water budgets, cooling tower and boiler treatment, corrosion control, government regulations, wastewater characterization, waste minimization, pilot plants, pretreatment, final treatment, and site selection. May not be taken for credit by students with credit in CE 577. Prerequisite: CE 477 or equivalent. LEC.

CE 778. Air Quality. 3 Hours.
The course is intended to provide a working knowledge of pollutant sources, effects, meteorological factors, measurements, modeling approaches, legislation and controls associated with air quality problems. Students work on problems drawn from typical industrial situations, and use models to address specific air pollution scenarios. Prerequisite: CE 477 or equivalent, and MATH 115 or MATH 121. LEC.

CE 779. Water Quality. 3 Hours.
Examination of water quality principles, policy, processes, practices, computer programs, laws and regulations as they relate to the integrated planning and control of point and nonpoint sources of pollution. Prerequisite: MATH 121 or equivalent, CE 477, and CE 570 or CE 770. LEC.

CE 780. Environmental Instrumental Analysis. 3 Hours.
The course will provide a basis for theoretical understanding and practical experience with state-of-the-art environmental analytical methods organic and inorganic analytes in aqueous matrices. Methods to be covered include liquid, gas and ion chromatography; mass spectrometry; spectrophotometric, FID, EC, and conductivity detection; atomic absorption; spectrophotometric methods; and potentiometric analysis. Statistical methods for analytical methods development, validation and interpretation will also be covered. Prerequisite: General chemistry, and graduate standing. Senior level undergraduates may enroll with consent of instructor. LEC.

CE 781. Traffic Engineering Characteristics. 3 Hours.
A study of fundamental traits and behavior patterns of the road user and his or her vehicle in traffic. The major content involves techniques for obtaining data, analyzing data and interpreting data on traffic speed, volume, streamflow, parking and accidents. Capacity analyses using the most up to date procedures for major traffic facilities such as undivided highways, city streets, freeways, interchanges and intersections are also discussed at length. Prerequisite: CE 582 or equivalent. LEC.

CE 782. Public Works Engineering. 3 Hours.
The functions of a public works director are presented. Topics discussed are concerns with the environment, solid waste, traffic drainage, maintenance of facilities, personnel, etc. LEC.

CE 783. Railroad Engineering. 3 Hours.
A comprehensive study of the railroad industry, including the development of the railway system, an overview of the railroad industry, basic track work, right-of-way and roadway concerns, drainage, track design, railroad structures, electrification, and rail passenger service. A final design project is required. Prerequisite: CE 240; CE 582 or equivalent. LEC.

CE 784. Airport Planning and Design. 3 Hours.
A comprehensive study of the planning design and operations of airports. Both ground side and air side capacity and design elements will be presented. Other topics covered are airport master planning, air traffic control passenger terminal design, and environmental impacts of airports. Prerequisite: CE 240, CE 582 or equivalent. LEC.

CE 785. Terrain Analysis. 3 Hours.
A study of the applications of the science of aerial-photographic interpretation as it pertains to the field of civil engineering including the recognition of soil types and classes, engineering materials surveys, route location, and the delineation of watersheds and estimates of runoff there from. Prerequisite: CE 487 or equivalent. LEC.

CE 786. Highway Safety. 3 Hours.
Several topics dealing with highway safety are presented and discussed. Typical topics are railroad/highway crossings, accident reconstruction, distractions to the drivers, speed and crashes, elderly drivers, traffic control devices, roadside design, access management, traffic calming devices, and crash rates. LEC.

CE 787. Advanced Soil Mechanics. 3 Hours.
A comprehensive study of the railroad industry, including the development of the railway system, an overview of the railroad industry, basic track work, right-of-way and roadway concerns, drainage, track design, railroad structures, electrification, and rail passenger service. A final design project is required. Prerequisite: CE 240; CE 582 or equivalent. LEC.

CE 788. Geotechnical Engineering Testing. 3 Hours.
Three lecture periods. A study of the strength and compression characteristics of cohesive and noncohesive soils under various loading conditions. Prerequisite: CE 487 or equivalent. LEC.

CE 789. Pavement Management Systems. 3 Hours.
Basic components of pavement management systems. Emphasis is given to pavement evaluation, planning pavement investment, rehabilitation design alternatives, and pavement management program implementation. Prerequisite: CE 487, CE 484 or equivalent. LEC.

CE 790. Knowledge Based/Expert Systems in Engineering. 3 Hours.
An introductory graduate level course with emphasis on selecting a research topic and preparing a thesis or special problem report, technical conclusions (the inference mechanism). A wide variety of applications are addressed including civil, chemical and petroleum, computer, and aerospace engineering. Prerequisite: Computer literacy, bachelor's degree in engineering, or consent of instructor. LEC.

CE 791. Waste Facility Siting and Design. 3 Hours.
A review of current site characterization and design methods for solid and hazardous waste facilities with particular emphasis on working within the modern regulatory environment. Prerequisite: CE 487 or equivalent. LEC.

CE 792. Advanced Concepts in CADD. 3 Hours.
Advanced concepts related to the application of computer aided design and drafting to the practice of civil engineering are presented. This includes: developing macros, understanding CADD programming languages, and relating CADD and other civil engineering based programs. An engineering approach to Geographical Information Systems (GIS) will be presented. Prerequisite: Working knowledge of one computer aided design graphics software package. LEC.

CE 793. Environmental Graduate Student Orientation. 1 Hour.
An introductory graduate level course with emphasis on selecting a research topic and preparing a thesis or special problem report, technical reports, oral presentations, papers, and grant proposals. This course will also provide orientation information for new students and advice on preparing a plan of study. LEC.

CE 795. Scanning Electron Microscopy and X-Ray Microanalysis. 3 Hours.
The course covers electron optics, electron beam-specimen interaction, image formation, x-ray spectral measurement, qualitative and quantitative x-ray microanalysis, practical techniques of x-ray analysis and specimen preparation techniques. Emphasis is placed on materials, but most
techniques apply to biological specimens as well. Prerequisite: PHSX 212. LEC.

CE 797. Environmental Engineering and Science in Developing Countries. 3 Hours.
This course begins with a focus on basic sanitation, including control of infectious diseases, water supply and treatment, and proper disposal of excreta, wastewater, and solid wastes. The course then delves into other environmental topics such as sustainability, wastewater reuse, project planning and implementation, air pollution, deforestation, hazardous waste disposal, and the roles of various governmental and non-governmental organizations in addressing environmental issues. The course topics are addressed by a combination of lectures, guest lectures, and student presentations, with each student choosing a presentation topic of personal or professional interest that is relevant to the course. Prerequisite: CE 477 or permission of instructor. LEC.

CE 800. Theory of Elasticity. 3 Hours.
The basic equations of the theory of elasticity; stress and strain transformation, strain-displacement, compatibility and stress-strain relations. Formulation of problems and exact solutions. Introduction to approximate solution methods based on energy methods and finite elements. LEC.

CE 801. Energy Methods. 3 Hours.
The methods of analysis by energy methods of mechanics problems. Includes variational energy principles, calculus of variations, stationary energy and complementary energy principles, and the principle of virtual work. Applications. Prerequisite: CE 310 and MATH 320. LEC.

CE 802. Nondestructive Evaluation of Materials and Structures. 3 Hours.
This course covers nondestructive methods and their application to engineered structures and components. Methods covered include: ultrasonic testing, acoustic emission, vibration, impact-echo, visual inspection, and frequency response. LEC.

CE 810. Theory of Elastic Stability. 3 Hours.
Buckling of columns in the elastic or hyperelastic region. Lateral and torsional buckling of straight and curved members. Buckling of plates and shells. LEC.

CE 848. Pavement Materials Characterization. 3 Hours.
Laboratory and field test methods for determining engineering properties of bituminous pavements. Asphalt mix design methods and the relationship between mix design and pavement structural design and performance. Prerequisite: CE 484 or consent of instructor. LEC.

CE 855. Free Surface Flow II. 3 Hours.
Continuation of CE 755 with concentration on computer modeling of open channel flow using HEC-RAS, WSPRO, and other programs. Analysis of bridge scour using FHWA methods is also considered. Prerequisite: CE 755. LEC.

CE 856. Wetland Design, Engineering, and Management. 3 Hours.
Introduction of design concepts in creating and restoring wetland systems. Review of wetland hydrology and hydraulics. Interaction of wetland hydrology, soils, and vegetation providing environmental benefits. Considerations in project planning, site selection and preparation, construction and operation, and maintenance. Use of state and local legal and management tools to protect and restore wetlands. Emerging concepts of mitigation and banking. Prerequisite: CE 756 or equivalent. LEC.

CE 857. Sediment Transport. 3 Hours.
A study of the transport of sediment in alluvial channels. Specific topics include properties of sediment, mechanics of bed forms, particle entrainment, scour analysis, prediction of suspended load and bed load, design of stable channels and diversion works, and sedimentation of reservoirs. Prerequisite: CE 755 or consent of instructor. LEC.

CE 858. Urban Hydrology and Stormwater Management. 3 Hours.
Hydrology of urban watersheds; floodplain management; hydrologic modeling; storm drainage; stormwater detention; water quality improvement; geomorphology of urban streams; stream corridor management and stream restoration. Prerequisite: CE 751. LEC.

CE 861. Finite Element Methods for Solid Mechanics. 3 Hours.
Stress analysis of 2-D and 3-D solids, plates, and shells by the finite element method. Element formulations and behavior with emphasis on the isoparametric concept. Computer modeling and interpretation of results. Introduction to material and geometric nonlinear analysis of solids. Prerequisite: CE 761 or equivalent. LEC.

CE 862. Behavior of Reinforced Concrete Members. 3 Hours.
This mechanics course covers in detail the constitutive behavior of reinforced concrete members subjected to various types of loading and presents the basis for modeling the response of reinforced concrete structures in the nonlinear range of response. Topics covered include: stress-strain behavior of concrete under multi axial states of stress; moment-curvature analysis; advanced analysis of r/c members subjected to shear (variable angle truss models, modified compression field theory, strut-and-tie models); behavior of r/c members subjected to cyclic loading; modeling and effects of slip at the interface between reinforcing steel and concrete. Suggested prerequisite CE 764 or equivalent. Prerequisite: CE 563. LEC.

CE 864. Seismic Performance of Structures. 3 Hours.
This course builds on topics from structural dynamics to introduce principles of structural performance during earthquake events. Emphasis is placed on estimating the response of building structures as represented by simple and complex models. Topics covered include strong ground motion, response of simple systems to ground motion, nonlinear response of building systems, and performance-based earthquake engineering. Prerequisite: CE 704. LEC.

CE 865. Structural Design for Dynamic Loads. 3 Hours.
The behavior and design of structural systems subjected to dynamic forces such as blasts, earthquakes, and wind loads. Prerequisite: CE 704 or equivalent. LEC.

CE 869. Plates and Shells. 3 Hours.
The analysis and design of plates and shells including thin and thick plates, membrane theory of shells and bending theories of shells. LEC.

CE 871. Fundamentals of Bioremediation. 3 Hours.
A study of microbial ecology and physiology as they relate to the degradation of environmental contaminants. Emphasis is placed on the interrelationship between the physiological traits or microorganisms, and the physical and chemical properties of the contaminants and the treatment environments. Case studies involving in-situ bioremediation and reactor design are discussed. Prerequisite: CE 573 or CE 773 or equivalent, and five hours of chemistry. LEC.

CE 873. Environmental Monitoring. 2 Hours.
A lecture-laboratory course to familiarize students with environmental monitoring techniques, regulations, and systems. Dimensions of environmental monitoring will be considered for air, soil, and water measurements. The major emphasis will be on monitoring techniques and their principles, utility, and limitations. LEC.

CE 874. Air Pollution Control. 3 Hours.
The design of control devices for the abatement of air pollutants, both gaseous and particulate, emitted from stationary sources. This includes
the basic theory of control device operation and economic factors associated with each type of control device design. Prerequisite: CE 772 and CE 778 or equivalent. LEC.

CE 875. Solid and Hazardous Wastes. 3 Hours.
Fundamental issues associated with solid and hazardous wastes are presented. Topics include government regulations, waste characteristics and quantities, the transport and attenuation of wastes in the environment, risk assessment, and handling, treatment and disposal techniques. Special emphasis is placed on hazardous waste remediation strategies in terrestrial systems. Prerequisite: Graduate standing in the Environmental Science and Engineering program, or consent of instructor. CE 770 and CE 773 are recommended. LEC.

CE 876. Wastewater Treatment Plant Design. 3 Hours.
Application of physical, chemical, and biological principles to the design of wastewater treatment systems for domestic and other wastewaters. Special emphasis is placed on biological treatment processes. Prerequisite: CE 576 or equivalent, or CE 573 or CE 773 or equivalent. LEC.

CE 877. Water Treatment Plant Design. 3 Hours.
Application of physical, chemical, and biological principles to the design of water treatment plants and processes for domestic water supply from surface and ground water sources. Prerequisite: CE 774, or concurrent enrollment. LEC.

CE 878. Air Quality Modeling. 3 Hours.
Fundamental physical and mathematical principles applied to air quality modeling; considered are factors that influence the choice and application of air quality models, as well as the interpretation of model output data. Practical applications are stressed using standard models. Prerequisite: CE 778 or equivalent and MATH 121 or CE 625. LEC.

CE 879. Environmental Research Seminar. 1 Hour.
Discussion of current topics in environmental engineering and science and related fields by staff, students, and visiting lecturers. May be taken only once for credit. LEC.

CE 880. Traffic Engineering Operations. 3 Hours.
A study of theory and practical applications of a number of traffic operational and management tools to achieve the convenient, safe and efficient movement of people and goods in urban street networks. The major content involves signalized intersection capacity, design and operation; signalized intersection coordination; and modern roundabout design. Prerequisite: CE 582 or equivalent. LEC.

CE 881. Geometric Design of Traffic Facilities. 3 Hours.
A study of basic principles in the design of freeways, urban street systems, parking terminal and other traffic facilities with emphasis on capacity, safety, level of service, and dynamic design concept. Prerequisite: CE 781 or equivalent. LEC.

CE 882. Urban Transportation Planning. 3 Hours.
A detailed study of the comprehensive transportation planning process which involves the determination of urban travel characteristics and needs from studies of traffic, social-economical, and environmental factors, as well as the applications of land use, trip generation, trip distribution, model split, and traffic assignment models. Prerequisite: CE 781 or equivalent. LEC.

CE 883. Principles of Pavement Design. 3 Hours.
A study of the scientific principles of pavement design as applied to airfield and highway pavements, considering loading conditions, stress distribution, and the properties of the various pavement components, for both rigid and flexible pavements. Prerequisite: CE 487 or equivalent. LEC.

CE 884. Advanced Foundation Engineering. 3 Hours.
A study in the design, construction, and behavior of footings and rafts, piles and drilled shafts founded on soils and rocks. Prerequisite: CE 588 or equivalent. LEC.

CE 885. Engineering Rock Mechanics. 3 Hours.
Rock properties and behavior; theories of failure of brittle, jointed, and anisotropic rocks; rock support; laboratory and in-situ testing techniques. Prerequisite: A course in physical geology and CE 487 or equivalent. LEC.

CE 886. Earth Structures. 3 Hours.
Current theory and practice relating to the design of retaining walls, earth slopes, large embankments, and landslide mitigation. Application of geotextiles to the design of earth retaining structures and slope stabilization. Prerequisite: CE 588 or consent of instructor. LEC.

CE 888. Ground Improvement. 3 Hours.
Basic descriptions, classification, principles, advantages, and limitations of ground improvement techniques. Design, construction, and quality assurance/control of ground improvement techniques. Prerequisite: CE 588 or equivalent. LEC.

CE 889. Designing with Geosynthetics. 3 Hours.
Basic description and properties of geosynthetics including geotextiles, geogrids, geomembranes, geonets, geocomposites, and geosynthetic clay liners. Geosynthetic functions and mechanisms including separation, filtration, drainage, reinforcement, and containment. Design with geosynthetics for roadways, embankments/slopes, earth retaining structures, and landfills. Prerequisite: CE 588 or equivalent. LEC.

CE 890. Master's Project. 1-4 Hours.
Directed study and reporting of a specialized topic of interest in civil engineering or an allied field. Prerequisite: Consent of instructor. RSH.

CE 891. Advanced Special Problems. 1-3 Hours.
A directed study of a particular complex problem in an area of civil engineering or an allied field. Prerequisite: Varies by topic, or with consent of instructor. LEC.

CE 892. Structural Engineering and Mechanics Seminar. 1 Hour.
Presentation and discussion of current research and design in structural engineering and mechanics. LEC.

CE 893. Advanced Special Topics: _____. 1-3 Hours.
A graduate course or colloquium in a topic of civil engineering or an allied field. Prerequisite: Varies by topic, or with consent of instructor. LEC.

CE 895. Master's Thesis. 1-10 Hours.
A directed study and reporting of a specialized topic of interest in civil engineering or an allied field. Prerequisite: Consent of instructor. THE.

CE 896. Advanced Vibrations. 3 Hours.
Vibrations of mechanical systems and structures. Nonlinear vibrations. Random vibration. Prerequisite: CE 704 or AE 704. LEC.

CE 902. Theory of Plasticity. 3 Hours.
Plastic stress-strain relationships. Stress and deformation in thick-walled shells, rotating discs, and bars subjected to torsion and bending for ideally plastic materials. Plastic flow of strain-hardening materials. Theory of metal-forming processes including problems in drawing and extruding. LEC.

CE 905. Advanced Fracture Mechanics. 3 Hours.
Development of Griffith-Irwin crack theory and plane strain-stress intensity factors. Advanced analytical and experimental aspects of fracture and fatigue. Development of fracture control plans. Prerequisite: CE 767 or consent of instructor. LEC.
CE 927. Advanced Mechanics. 3 Hours.
The mechanics of continuous media. A unified treatment of the fundamental principles and theories governing applications in solid and fluid mechanics. Topics covered are stress, strain and deformation, general physical principles for the continuum, and various constitutive equations. LEC.

CE 929. Advanced Topics in Solid Mechanics. 2-4 Hours.
Topics such as thermal stresses, vibrations in elastic continuum, dynamic instability, and other advanced topics. LEC.

CE 961. Finite Element Methods for Nonlinear and Dynamic Systems. 3 Hours.
Advanced treatment of finite element techniques for structural analysis including material and geometric non-linearity and the solution of large scale dynamics problems. Prerequisite: CE 861 or ME 761 or equivalent. LEC.

CE 983. Implementation of the Urban Transportation Planning System--UTPS. 3 Hours.
A study of the principles and implementation skills of the most up-to-date versions of several urban transportation planning software packages. The course involves a two-hour lecture and a three-hour laboratory period. Prerequisite: CE 883, or UBPL 750, or equivalent. LEC.

CE 991. Research. 1-15 Hours.
An investigation of a special problem directly related to civil engineering. RSH.

Restricted to Ph.D. candidates. Before candidacy, aspirants performing their research should enroll in CE 991. Prerequisite: Consent of instructor. THE.

CMGT 357. Engineering Economics. 3 Hours.
Analysis of design alternatives and investment opportunities based on the time value of money. Topics include financial statements and accounting concepts related to economic analysis, time value of money and cash flow equivalence, cost of capital and minimum attractive rate of return (MARR), defining mutually exclusive alternatives, developing alternative after-tax cash flows, performing investment and replacement studies, and methods for addressing uncertainty and risk. Prerequisite: MATH 122 or MATH 126, or consent of the instructor. LEC.

CMGT 457. Construction Project Management. 3 Hours.
An introduction to the management of construction projects with an emphasis on engineering economics. This course addresses time value of money, cash flow and interest, financial analysis of alternatives, and taxes and depreciation. Also included are projects management fundamentals, project scheduling, and project controls. Prerequisite: MATH 122 or MATH 126 or consent of the instructor. LEC.

CMGT 500. Construction Engineering. 3 Hours.
An introduction to the construction industry, construction project management, and construction operations. Topics include project participant roles and responsibilities; project delivery systems; procurement of construction services; sustainable construction; contracts, bonds, and insurance; equipment selection and use; constructability and value engineering; estimating and bidding; planning and scheduling; operations management; safety; and project commissioning and closeout. Prerequisite: Junior or Senior standing in the School of Engineering, or consent of the instructor. LEC.

CMGT 700. Construction Project Management. 3 Hours.
An introduction to the management of construction projects. This course addresses project delivery systems, project organization, estimating and bidding, planning and scheduling, legal and safety issues, among other topics. Prerequisite: Graduate standing or consent of instructor. Not open to those with credit in CMGT 500. LEC.

CMGT 701. Construction Planning and Scheduling. 3 Hours.
An introduction to the planning and scheduling of projects, for both construction and design. Emphasis is placed on the critical path method including network development, production of time schedules, time-cost considerations, and the efficient utilization of resources. Manual and computer techniques are covered. Prerequisite: CMGT 500 or CMGT 700, and MATH 526 or EMGT 802, or consent of instructor. LEC.

CMGT 702. Construction Equipment and Methods. 3 Hours.
This course introduces the student to the multitude of construction equipment employed in construction. The underlying technology and engineering principles are reviewed. Principles of equipment selection, equipment utilization, and equipment economic analysis are covered. Prerequisite: CMGT 500 or CMGT 700, MATH 526 or EMGT 802, and CMGT 357 or EMGT 806, or consent of instructor. LEC.

CMGT 703. Construction Quality, Productivity, and Safety. 3 Hours.
Operations analysis for work improvement in construction using process charts, crew balancing, time-lapse photography, and planning techniques. Regulations, accident prevention, and safety management are covered. Prerequisite: CMGT 500 or CMGT 700, MATH 526 or EMGT 802, and CMGT 357 or EMGT 806, or consent of instructor. LEC.

CMGT 704. Construction Estimating and Bidding. 3 Hours.
A study of the quantity survey, cost estimating, scheduling and project controls; construction operations; and methods of building construction. Prerequisite: CMGT 500 or CMGT 700, MATH 526 or EMGT 802, and CMGT 357 or EMGT 806, or consent of instructor. LEC.

CMGT 705. Construction Contracts, Bonds, and Insurance. 3 Hours.
Legal doctrines relating to owners, design professionals, and contractors. Sources of law, forms of association, and agency. Contract formation, rights and duties, interpretation, performance problems, disputes, and claims. Surety bonds and insurance. Prerequisite: CMGT 500 or CMGT 700, or consent of instructor. LEC.

CMGT 706. Introduction to Sustainable Design and Construction. 3 Hours.
This course introduces students to Sustainable Design Concepts that are applicable to Civil and Architectural Engineering. Prerequisite: Senior or graduate standing in Architectural Engineering, Architecture, or Civil Engineering or consent of instructor. LEC.

CMGT 709. International Construction Management. 3 Hours.
An introduction to the management of international construction projects. This course focuses on areas where international construction project management differs from the management of domestic construction projects. Topics include project delivery systems including build-operate-transfer (BOT) and other systems unique to international construction contracts; the impact of the host country’s language, demographics, laws, political structure, geography, economics, culture, and customs on project delivery; currency transfer and risk; procurement and expediting; designing construction means and methods that optimize available labor, material, and equipment; participant roles and responsibilities; among other topics. Prerequisite: CMGT 500 or CMGT 700, or consent of instructor. LEC.

CMGT 701. Directed Readings in Construction Management. 1-3 Hours.
Graduate-level directed readings on a topic in construction management mutually agreed on by the student and instructor. Intended to build on
one or more of the core course topics: project management; planning and scheduling; equipment and methods; quality; productivity and safety; estimating and bidding; contracts, bonds, and insurance. CMGT 801 may be repeated for credit to a maximum of three hours in the degree program. Mutually agreed course deliverable(s) required. Prerequisite: Approval of the course topic and deliverable(s) by the instructor, CMGT 500 or CMGT 700, CMGT 701, CMGT 702, CMGT 703, CMGT 704, and CMGT 705, or consent of instructor. IND.

CMGT 802. Special Problems in Construction Management. 1-3 Hours.
Graduate-level investigation requiring research of a topic in construction management mutually agreed on by the student and instructor. Intended to build on one or more of the core course topics: project management; planning and scheduling; equipment and methods; quality; productivity and safety; estimating and bidding; contracts, bonds, and insurance. CMGT 802 may be repeated for credit to a maximum of three hours in the degree program. Mutually agreed course deliverable such as a paper summarizing the results of the investigation required. Prerequisite: Approval of the course topic and deliverable by the instructor, CMGT 500 or CMGT 700, CMGT 701, CMGT 702, CMGT 703, CMGT 704, and CMGT 705, or consent of instructor. IND.

CMGT 805. Construction Accounting and Finance. 3 Hours.
Project level cost control concepts and structure, time and cost integration, data collection and reporting, equipment cost, job overhead cost, and cost control. Integrating construction project level cost with construction company financial accounting and financial management. Prerequisite: CMGT 702 and CMGT 704 or consent of instructor. LEC.

CMGT 890. Construction Seminar: _____ 3 Hours.
Prerequisite: Varies with topic. LEC.

CMGT 895. Construction Management Project. 1-3 Hours.
Graduate-level investigation and report on a construction management topic mutually agreed on by the student and project advisor. This is the capstone course in the Master of Construction Management (MCM) degree program. Successful completion of this project requires acceptance of the written report and oral presentation to the student's graduate committee. Prerequisite: Approval of project topic by project advisor, CMGT 500 or CMGT 700, CMGT 701, CMGT 702, CMGT 703, CMGT 704, CMGT 705, and nine elective credit hours, or consent of instructor. IND.

Bachelor of Science in Architectural Engineering

B.S. in Architectural Engineering Program

Students in the B.S. in architectural engineering (ARCE) program are admitted by and must fulfill the graduation requirements of the School of Engineering. The program is administered by the School of Engineering's Department of Civil, Environmental, and Architectural Engineering (CEAE).

In KU's ARCE program students learn to analyze and design the engineered systems that make buildings perform their intended functions. After their basic preparatory courses in all areas, they may choose an emphasis in

1. Structural design and analysis,
2. Illumination and power systems,
3. Building mechanical and energy systems,
4. Construction management, or
5. A hybrid such as pre-architecture, sustainability, acoustics, or fire protection.

To use this knowledge, the graduate must have a good foundation in engineering science and design as these relate to building engineered systems and construction, as well as an appreciation for architectural design and history.

Educational Objective

Graduates who pursue a career in architectural engineering will be successfully engaged in professional engineering practice or graduate study in the analysis, design, construction, and operation of building engineered systems.

Careers

Professional Registration and Licensing

Architectural engineers are involved in building projects that directly affect the health and safety of the public. Graduates are strongly encouraged to become registered professional engineers as soon as possible after graduation. In Kansas, and many other states with similar registration laws, this involves completing an ABET-accredited B.S. degree in architectural engineering, passing the Fundamentals of Engineering (FE) and Professional Engineering (PE) examinations, and obtaining four years of satisfactory engineering experience under the supervision of a professional engineer. Students in architectural engineering must take the FE examination before graduation. Architectural engineering graduates can also practice as architects after completing an NAAB-accredited professional undergraduate or graduate architecture degree program and becoming registered architects. Students with this interest should consider the available tracks leading to a Master of Architecture degree in addition to their B.S. in architectural engineering.

Professional Opportunities

Architectural engineering focuses on building engineered systems analysis and design, including structural, illumination, power, mechanical, and energy systems, and construction methods applied to buildings. Increasingly, architectural engineers are interested in specializations such as green buildings, acoustics, and fire protection. Architectural engineers center their attention on the performance, safety, sustainability, cost-effectiveness, and construction of these systems. They typically work for engineering consulting firms, construction companies, or government agencies. After earning their Ph.D.s in engineering, careers in research and academia are also options.

Undergraduate Admission to the School of Engineering

First-year undergraduate students may be admitted, but all admissions, both in-state and out-of-state, are selective. Visit the Office of Admissions (http://admissions.ku.edu/whyku/index.shtml) for admission requirements. Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Applications are judged on several factors, including but not limited to high school record, scores on national tests, academic record at college or university level, and trend of grades. High school transcripts and ACT scores are required. Equivalent SAT scores may be substituted.
Minimum Academic Standards for Admission

To be considered for admission to the School of Engineering, beginning first-year students must meet or exceed the following minimum standards:

- 3.0 grade-point average on a 4.0 scale on the Kansas Board of Regents Qualified Admissions (http://admissions.ku.edu/apply/regents_curriculum.shtml) college-preparatory curriculum.
- Top 50 percent of the graduating class of an accredited high school or the equivalent.
- Mathematics ACT score of 22 (or mathematics SAT score of 540). Some engineering degree programs may require a higher mathematics ACT score.

These minimum admission standards apply to all departments. Meeting minimum requirements does not guarantee admission.

Transfer Admission Standards

Applications from all transfer students, whether from other institutions or from other KU units, are evaluated on a case-by-case basis. In general, students with grade-point averages under 2.5 are not considered. Students must submit mathematics ACT or SAT scores or proof of competence in calculus (grade of C or higher). No upper-level engineering credits from non-ABET-accredited engineering programs are acceptable as transfer credit for engineering programs. Admission is selective, and meeting the minimum requirements does not guarantee admission.

Architectural Engineering 4-Year Graduation Plan

The following are recommended enrollments:

**Freshman**

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<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
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<tr>
<td>ARCE 101</td>
<td>2</td>
<td>ARCE 217</td>
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<tr>
<td>ENGL 101</td>
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<td>ENGL 102 (KU Core GE 2.1)</td>
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<td>MATH 125 (KU Core GE 1.2)</td>
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<td>CHEM 150</td>
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**Sophomore**

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<tr>
<td>CE 301</td>
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<td>KU Core GE 2.2 Oral Communication</td>
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**Junior**

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<td>ARCH 540 (KU Core GE 3H)</td>
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**Senior**

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<tr>
<td>Architectural Design Studio</td>
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<td>Architectural or Engineering elective</td>
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<tr>
<td>CE 562 (KU Core AE 6.1)</td>
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<td>CE 563</td>
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<td>ARCE 640</td>
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<td>KU Core AE 4.1 Human Diversity</td>
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<td>ARCH 541 (KU Core AE 4.2)</td>
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<td>KU Core AE 5.1 Ethics &amp; Social Responsibility</td>
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Total Hours: 128

Bachelor of Science in Architectural Engineering Degree Requirements

A total of 128 credit hours is required for the degree. Substitutions may be made only by submitting a petition to the academic advisor for the department's and school's consideration. The student's design experience is developed throughout all four years of the undergraduate curriculum, beginning with the introductory course and continuing with required architectural, structural, illumination, power, HVAC, and construction management courses. Each student also takes an elective course in his or her selected emphasis; a list of elective courses is available on the CEAE website (http://www.ceae.engr.ku.edu). In the fourth year, an ARCE capstone design course is required; it integrates the overall design experience for the student. In this course, the student designs the structural, mechanical, illumination, and power distribution systems for a building.

Students who want to earn a professional Master of Architecture degree in addition to the B.S. in architectural engineering should apply for the “Track III Professional” program via the School of Architecture, Design, and Planning and discuss it each year with their ARCE advisor so that electives can be chosen carefully.

Mathematics (20)

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<th>Title</th>
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<tr>
<td>MATH 125</td>
<td>Calculus I (GE 1.2)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 126</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 127</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Applied Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 290</td>
<td>Elementary Linear Algebra</td>
<td>2</td>
</tr>
<tr>
<td>MATH 526</td>
<td>Applied Mathematical Statistics I</td>
<td>3</td>
</tr>
</tbody>
</table>

Basic Sciences (14)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 211</td>
<td>General Physics I (GE 1.1)</td>
<td>4</td>
</tr>
<tr>
<td>PHSX 216</td>
<td>General Physics I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>PHSX 212</td>
<td>General Physics II</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 236</td>
<td>General Physics II Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 150</td>
<td>Chemistry for Engineers (GE 3N)</td>
<td>5</td>
</tr>
</tbody>
</table>

English (6)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition (GE 2.1)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing (GE 2.1)</td>
<td>3</td>
</tr>
</tbody>
</table>

Humanities/Social Science/KU Core (18)
Civil engineering, the oldest and broadest of the divisions of engineering, implements a range of public and private projects for improving society's physical infrastructure and the environment. The civil engineer integrates scientific principles with engineering experience to plan, design, and construct networks of highways and railroads, airports, bridges and dams, environmental pollution control systems, industrial structures, water purification and distribution systems, and urban transportation systems that maintain, protect, and enhance the quality of life. Civil engineers are trained to consider the social effects as well as the physical and environmental factors that constrain the planning, design, construction, and operation of their projects. Environmental engineering, a technical specialization with its origins in civil engineering, is a growing discipline dedicated to the protection of the environment.

The undergraduate program gives students the theoretical background, instruction in engineering application of scientific principles, and professional attitude to serve the public. It typically leads to entry-level positions or to graduate work in technical specialties (e.g., environmental, geotechnical, structural, and transportation), business administration, or other professions.

Courses that address the behavior and design of steel and reinforced concrete structures, environmental pollution, control systems, water resources systems, foundations, and surface transportation systems are integrated into the curriculum, culminating in a series of senior-level professional design courses. These simulate the design processes used in the major areas of civil engineering and prepare students for entry-level positions. Most faculty members are licensed professional engineers. KU graduates have successful records in professional practice, research in academic institutions, government and private laboratories, and in managing firms and corporations of all sizes.

**Educational Objective**

Graduates who pursue a career in civil engineering will successfully engage in professional engineering practice or graduate studies in the analysis, design, construction, and operation of public and private infrastructure systems.

**Combined Civil Engineering and Business Program**

A student who wants to combine business with engineering may enroll in a program leading to a B.S. degree in both fields. Full-time enrollment enables the student to earn the 2 degrees in 5 years. During the first 2 years, the student enrolls in the School of Engineering. After that, the student enrolls simultaneously in the schools of Business (http://www.business.ku.edu) and of Engineering (http://www.engr.ku.edu).

**Careers**

**Professional Registration and Licensing**

Engineers are involved in projects that directly affect the health and safety of the public. Graduates are strongly encouraged to become registered Professional Engineers. This involves completing a B.S. degree in civil engineering, completing the Fundamentals of Engineering (FE) and Professional Engineering (PE) examinations, and obtaining 4 years of satisfactory engineering experience under the supervision of a professional engineer. Students in civil engineering must take the FE examination before graduation.

**Professional Opportunities**

Civil engineers plan, design, construct, and oversee public and private infrastructure systems as well as maintain essential structures such as bridges, buildings, tunnels, roads, and water supply and sewage systems. Civil engineers typically work for major industrial and commercial centers, construction industry, state departments of transportation, manufacturing companies, oil or electrical companies, aerospace industries, or consulting firms.
Undergraduate Admission to the School of Engineering

First-year undergraduate students may be admitted, but all admissions, both in-state and out-of-state, are selective. Visit the Office of Admissions (http://admissions.ku.edu/whyku/index.shtml) for admission requirements. Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Applications are judged on several factors, including but not limited to high school record, scores on national tests, academic record at college or university level, and trend of grades. High school transcripts and ACT scores are required. Equivalent SAT scores may be substituted.

Minimum Academic Standards for Admission

To be considered for admission to the School of Engineering, beginning first-year students must meet or exceed the following minimum standards:

- 3.0 grade-point average on a 4.0 scale on the Kansas Board of Regents Qualified Admissions (http://admissions.ku.edu/apply/regents_curriculum.shtml) college-preparatory curriculum.
- Top 50 percent of the graduating class of an accredited high school or the equivalent.
- Mathematics ACT score of 22 (or mathematics SAT score of 540). Some engineering degree programs may require a higher mathematics ACT score.

These minimum admission standards apply to all departments. Meeting minimum requirements does not guarantee admission.

Transfer Admission Standards

Applications from all transfer students, whether from other institutions or from other KU units, are evaluated on a case-by-case basis. In general, students with grade-point averages under 2.5 are not considered. Students must submit mathematics ACT or SAT scores or proof of competence in calculus (grade of C or higher). No upper-level engineering credits from non-ABET-accredited engineering programs are acceptable as transfer credit for engineering programs. Admission is selective, and meeting the minimum requirements does not guarantee admission.

Civil Engineering (general emphasis) 4-Year Graduation Plan

The following are recommended enrollments:

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 125 (KU Core GE1.2)</td>
<td>4</td>
<td>MATH 126</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 101 (KU Core GE 2.1)</td>
<td>3</td>
<td>ENGL 102 (KU Core GE 2.1)</td>
<td>3</td>
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<tr>
<td>CHEM 150 (KU Core GE 3N)</td>
<td>5</td>
<td>CE 192</td>
<td>3</td>
</tr>
<tr>
<td>CE 191</td>
<td>2</td>
<td>PHSX 210</td>
<td>3</td>
</tr>
<tr>
<td>KU Core GE 3H Arts &amp; Humanities</td>
<td>3</td>
<td>PHSX 216</td>
<td>1</td>
</tr>
<tr>
<td>KU Core GE 2.2 Oral Communication</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 301</td>
<td>5</td>
<td>CE 240</td>
<td>3</td>
</tr>
<tr>
<td>MATH 127</td>
<td>4</td>
<td>CE 310</td>
<td>4</td>
</tr>
<tr>
<td>PHSX 212</td>
<td>3</td>
<td>MATH 220</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 236</td>
<td>1</td>
<td>ECON 104, 142, or 144 (KU Core GE 3S)</td>
<td>4</td>
</tr>
<tr>
<td>EECS 137 or 138 (C++, Matlab, or Fortran)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 330</td>
<td>4</td>
<td>CE 455</td>
<td>3</td>
</tr>
<tr>
<td>CE 412 or 477</td>
<td>3</td>
<td>CE 477 or 484</td>
<td>3</td>
</tr>
<tr>
<td>CE 461</td>
<td>4</td>
<td>CE 480</td>
<td>3</td>
</tr>
<tr>
<td>MATH 290</td>
<td>2</td>
<td>CE 487</td>
<td>4</td>
</tr>
<tr>
<td>KU Core AE 4.1 Human Diversity</td>
<td>3</td>
<td>MATH 526</td>
<td>3</td>
</tr>
</tbody>
</table>

### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 562 (KU Core AE 6)</td>
<td>3</td>
<td>CE 563</td>
<td>3</td>
</tr>
<tr>
<td>CE 552 or 576</td>
<td>4</td>
<td>Civil Engineering Design Elective</td>
<td>3</td>
</tr>
<tr>
<td>CMGT 357</td>
<td>3</td>
<td>KU Core AE 4.2 Global Awareness</td>
<td>3</td>
</tr>
<tr>
<td>Civil Engineering Design Elective</td>
<td>3</td>
<td>KU Core AE 5 Ethics &amp; Social Responsibility</td>
<td>3</td>
</tr>
<tr>
<td>Basic Engineering Science Elective</td>
<td>3</td>
<td>General Electives</td>
<td>5</td>
</tr>
</tbody>
</table>

Total Hours: 132

Bachelor of Science in Civil Engineering Degree Requirements

Students take required courses and select electives that best fulfill their personal goals from the following general areas of study. A total of 132 credit hours is required for graduation.

### Mathematics (20)

- MATH 125 Calculus I (KU Core GE 1.2) | 4 |
- MATH 126 Calculus II | 4 |
- MATH 127 Calculus III | 4 |
- MATH 220 Applied Differential Equations | 3 |
- MATH 290 Elementary Linear Algebra | 2 |
- MATH 526 Applied Mathematical Statistics I | 3 |

### Basic Sciences (16)

- PHSX 210 General Physics I for Engineers (KU Core GE 1.1) | 3 |
- PHSX 216 General Physics I Laboratory | 1 |
- PHSX 212 General Physics II | 3 |
- PHSX 236 General Physics II Laboratory | 1 |
- CHEM 150 Chemistry for Engineers (KU Core GE 3N) | 5 |

Science elective (minimum of 3 hours). Select one of the following: 3
General Civil Engineering students select from:

- GEOL 101 The Way The Earth Works
- GEOL 105 History of the Earth
- GEOL 351 Environmental Geology
- GEOL 551 Engineering Geology

Or an approved physics or chemistry elective

Environmental Engineering students select from:

- ATMO 105 Introductory Meteorology
- ATMO 521 Microclimatology
- BIOL 100 Principles of Biology
- BIOL 400 Fundamentals of Microbiology
- BIOL 414 Principles of Ecology
- BIOL 661 Ecology of Rivers and Lakes
- CHEM 310 Fundamentals of Organic Chemistry
- CHEM 530 Physical Chemistry I
- GEOG 358 Principles of Geographic Information Systems
- GEOG 521 Microclimatology
- GEOL 101 The Way The Earth Works
- GEOL 302 Oceanography
- GEOL 351 Environmental Geology
- GEOL 551 Engineering Geology

KU Core Component (24-25)

Written Communication (KU Core GE 2.1) 6
KU Core GE 2.2 Oral Communication 3
Economics electives, Select one of the following: 3-4
- ECON 104 Introductory Economics (KU Core GE 3S)
- ECON 142 Principles of Microeconomics (KU Core GE 3S)
- ECON 144 Principles of Macroeconomics (KU Core GE 3S)

KU Core GE 3H Arts & Humanities 3
KU Core AE 4.1 Human Diversity 3
KU Core AE 4.2 Global Awareness 3
KU Core AE 5 Ethics & Social Responsibility 3

Basic Engineering Sciences (19)

Select one of the following: 5
- CE 301 Statics and Dynamics
- CE 201 Statics & CE 300 and Dynamics
- CE 310 Strength of Materials
- CE 330 Fluid Mechanics
- CMGT 357 Engineering Economics
- CE 192 Civil Engineering Graphics

Computer Programming Elective (3)

EECS 138 Introduction to Computing: _______(C++, Fortran, or Matlab) *

or EECS 137 Visual Basic for Engineers

Engineering Science (select one of the following) (3)

- ME 312 Basic Engineering Thermodynamics
- or C&PE 221 Chemical Engineering Thermodynamics
- ME 306 Science of Materials
- or ARCE 350 Building Materials Science
- EECS 315 Electric Circuits and Machines
- or EECS 316 Circuits, Electronics and Instrumentation

*EECS 137 is preferred; EECS 138 Web option is not allowed.

Undergraduate Concentrations

Students may identify broad concentrations in either general civil engineering or environmental engineering. Within these, students may choose elective courses to permit additional exposure to selected areas of civil or environmental engineering such as transportation, structural, geotechnical, environmental, and water resources engineering. In environmental engineering, electives may be selected to focus on water quality and treatment, bioremediation, solid and hazardous wastes, air quality, and air pollution control.

Civil and Environmental Engineering Sciences and Introduction to Design

General Civil Engineering Option (23)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 240</td>
<td>Surveying</td>
<td>3</td>
</tr>
<tr>
<td>CE 455</td>
<td>Hydrology</td>
<td>3</td>
</tr>
<tr>
<td>CE 461</td>
<td>Structural Analysis</td>
<td>4</td>
</tr>
<tr>
<td>CE 477</td>
<td>Introduction to Environmental Engineering and Science</td>
<td>3</td>
</tr>
<tr>
<td>CE 487</td>
<td>Soil Mechanics</td>
<td>4</td>
</tr>
<tr>
<td>CE 480</td>
<td>Introduction to Transportation Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CE 484/684</td>
<td>Material for Transportation Facilities</td>
<td>3</td>
</tr>
<tr>
<td>or CE 412</td>
<td>Structural Engineering Materials</td>
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</table>

Environmental Engineering Option (20)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 240</td>
<td>Surveying</td>
<td>3</td>
</tr>
<tr>
<td>CE 455</td>
<td>Hydrology</td>
<td>3</td>
</tr>
<tr>
<td>CE 461</td>
<td>Structural Analysis</td>
<td>4</td>
</tr>
<tr>
<td>CE 477</td>
<td>Introduction to Environmental Engineering and Science</td>
<td>3</td>
</tr>
<tr>
<td>CE 487</td>
<td>Soil Mechanics</td>
<td>4</td>
</tr>
<tr>
<td>CE 484/684</td>
<td>Material for Transportation Facilities</td>
<td>3</td>
</tr>
<tr>
<td>or CE 412</td>
<td>Structural Engineering Materials</td>
<td></td>
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</tbody>
</table>

Engineering Analysis and Design

General Civil Engineering Concentration (16 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 562</td>
<td>Design of Steel Structures (KU Core AE 6)</td>
<td>3</td>
</tr>
<tr>
<td>CE 563</td>
<td>Design of Reinforced Concrete Structures</td>
<td>3</td>
</tr>
<tr>
<td>CE 576</td>
<td>Municipal Water Supply and Wastewater Treatment (KU Core AE 6)</td>
<td>4</td>
</tr>
<tr>
<td>or CE 552</td>
<td>Water Resources Engineering Design</td>
<td></td>
</tr>
</tbody>
</table>

Elective Courses (6)

Select two of the following: 6

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMGT 500</td>
<td>Construction Engineering</td>
</tr>
<tr>
<td>CE 582</td>
<td>Highway Engineering</td>
</tr>
<tr>
<td>CE 588</td>
<td>Foundation Engineering</td>
</tr>
<tr>
<td>CE 576</td>
<td>Municipal Water Supply and Wastewater Treatment (if not taken as Water Resources and Environmental Elective)</td>
</tr>
</tbody>
</table>
Bachelor of Science in Civil Engineering

Environmental Engineering Concentration (20 hours)

Water Resources and Environmental Engineering (8)
CE 552 Water Resources Engineering Design 4
CE 576 Municipal Water Supply and Wastewater Treatment 4

Structural Design Elective (3)
CE 562 Design of Steel Structures (KU Core AE 6) 3
or CE 563 Design of Reinforced Concrete Structures

Civil Engineering Design Elective (3)
Select one of the following:
CMGT 500 Construction Engineering 3
CE 582 Highway Engineering
CE 588 Foundation Engineering

Environmental Engineering Principles Elective (3)
Select one of the following:
CE 570 Concepts of Environmental Chemistry 3
& CE 571 and Environmental Chemical Analysis
CE 573 Biological Principles of Environmental Engineering

Environmental Design Elective (3)
Select one of the following:
CE 574 Design of Air Pollution Control Systems 3
CE 755 Free Surface Flow I
CE 757 Pipe-Flow Systems
CE 791 Waste Facility Siting and Design

Electives in Selected Areas of Emphasis

A student who completes the minimum requirements in each of the four areas of the curriculum will have earned 125-126 hours in the general civil concentration and 126-127 hours in the environmental concentration (depending on the ECON choice). Both concentrations require a total of 132 hours for graduation. The remaining hours may be any courses that qualify for inclusion in one or more of the four curricular areas in accordance to the restrictions outlined below.

The content of an elective course must differ substantially from the content of any course taken to fulfill a degree requirement.

Suggested Electives (5)
CE 191 Introduction to Civil Engineering 2
ENGL 362 Foundations of Technical Writing 3

Introductory Courses

CE 191 Introduction to Civil Engineering, ENGR 108 Introduction to Engineering, or an introduction to engineering course from another engineering department will count as an elective course. Credit hours from only one introduction-to-the-profession course may be applied toward graduation.

Mathematics and Basic Sciences

Students may take elective courses designated as natural sciences and mathematics (N). Elective courses in mathematics must require MATH 126 as a prerequisite. Physics courses numbered below 211 and chemistry courses numbered below 130 are not accepted as general electives.

General Education Courses

Students may take elective courses designated as humanities (H) and social sciences (S). The humanities and social sciences courses are identified in the online timetable and in the Undergraduate Catalog with the letters H for humanities and S for social science courses. Western Civilization courses count as general electives. English courses taken as general electives must have ENGL 102 as a prerequisite. Any communication studies course (COMS) may be taken as a general elective.

Architectural Engineering Courses

Any course number above 300 is acceptable.

Architecture Courses

Up to five credit-hours of building technology and site planning courses numbered 250 or above may be used.

Business Courses

Any course offered by the KU School of Business is acceptable. Business courses offered at other colleges or universities will be accepted only if the courses are substantially equivalent to business courses taught at KU.

Urban Planning Courses

Any course offered by the KU Department of Urban Planning is acceptable.

Graduate Courses in Civil and Environmental Engineering

A student who wishes to study a particular civil engineering area in greater depth can take courses at the 600 or 700 level. The 700-level courses are primarily for graduate students but are open to seniors who have completed the prerequisites. The 700-level courses are not recommended for students with low grade point averages. A student not wishing to specialize can attain a broader background in civil engineering design by taking additional courses beyond the minimum requirements in area IV.

Engineering Courses

Any course offered by the various departments of the School of Engineering is acceptable except AE 241 Private Flight Course and AE 242 Private Flight Aeronautics

Honors Courses

Courses with the honors program designation (HNRS) will be accepted as general electives.

ROTC Courses

Students completing the ROTC program may count a maximum of 6 hours of ROTC courses as general electives. A maximum of six hours of ROTC courses in social sciences or humanities may be counted in excess of the 24 hrs required in the general education area. Up to six hours of ROTC courses may be counted as general electives if related to the physical sciences or engineering, and up to 3 credit hours may be used as electives in engineering technology and design.
Master of Science in Architectural, Civil, and Environmental Engineering and Environmental Science

Civil, Environmental, and Architectural Engineering

Civil engineering is the oldest engineering program at KU. The first graduating class in 1873 included a civil engineer. Civil engineers design roads, water systems, bridges, dams, and other structures, providing nearly all the infrastructure needed by modern society. Civil engineers were the first engineers to address environmental issues and are the lead engineering discipline in treating water supplies to protect public health. In recognition of the significant issues concerning the environment, the department name was changed in 1992 to civil and environmental engineering.

Architectural engineering combines study in architecture with engineering science and design courses in electrical, mechanical, construction, and structures to prepare students for building design projects of all kinds. Architectural engineering dates to 1913 at KU, and the first female graduate of the School of Engineering was an architectural engineering major. Architectural engineering merged with civil and environmental engineering in 2001 to form the the Department of Civil, Environmental, and Architectural Engineering (CEAE).

Mission

CEAE’s mission is to provide students with an outstanding engineering education and be a leader in research and service. This mission is supported by the following 3 goals:

1. Prepare students for productive engineering careers.
2. Maintain and grow strong research programs.
3. Serve the profession.

Graduate Admission to the School of Engineering

Procedure

Admission requirements for the School of Engineering follow the general KU requirements plus those of each engineering graduate program. All applicants must apply online (http://www.graduate.ku.edu/apply). Detailed information about supplemental application materials for each program is listed here (http://www.engr.ku.edu/prospective/graduate/apply). Important information for prospective international students is available from International Student & Scholar Services (http://www2.ku.edu/~issfacts). Download a PDF (http://www.engr.ku.edu/prospective/graduate/apply/grad_app_process.pdf) for more information about the review process for graduate applications.

Some departments and programs require the Graduate Record Examination. Applications must be accompanied by a nonrefundable fee. See Admission (p. 2369) in the Graduate Studies section of the online catalog.

Baccalaureate Preparation

To qualify for graduate work in any field of engineering, a student generally must hold an accredited baccalaureate degree in that field and have at least a 3.0 grade-point average. A student with good preparation in such fields as mathematics, chemistry, or physics, or in a related engineering field, may be admitted on the basis of performance in specific undergraduate courses, determined by the department of interest to the prospective student. Undergraduate hours do not count as part of a student’s Plan of Study, but they must be completed with grades of B or higher.

Exceptionally qualified undergraduates may be admitted directly to a Fast-Track Ph.D. program, which does not require the master’s as an intermediate degree. Students who wish to earn a Ph.D. and believe that they meet this criterion are encouraged to contact the graduate advisor in their field of interest.

English Proficiency Requirement

All graduate students in the School of Engineering who are required to take courses at the Applied English Center (http://www.aec.ku.edu) must pass the AEC’s English Proficiency Examination within 3 semesters of their initial enrollment. Failure to complete the English proficiency requirement within this time limit may result in dismissal from the graduate engineering program.

Graduate Admission

The department admits for all semesters. Students may pursue degrees full-time or part-time. An ABET-accredited baccalaureate degree in engineering is required for admission to the M.S. degree programs in civil engineering, environmental engineering, and architectural engineering. Applicants with baccalaureate degrees in engineering are expected to have undergraduate grade-point averages of 3.0 or higher on a 4.0 scale for regular admission to a master’s program. Applicants with slightly lower grade-point averages may be admitted on provisional status. Graduate Record Examination scores are required and are used in the evaluation process, but minimum scores for admission have not been established. The GRE engineering and other subject examinations are not required. The Test of English as a Foreign Language is required for international applicants. Applicants should take the GRE and TOEFL examinations as early as possible to expedite the admission process.

Graduate applications should be submitted online (http://www.graduate.ku.edu).

Priority Application Deadlines

Fall Admission: December 15 (all applicants)
Spring Admission: September 30 (all applicants)
Summer Admission: April 1 (all applicants)

The priority deadline is for full consideration for fellowships, scholarships and research/teaching assistantship. Applications submitted after the priority deadline will be accepted if received by January 15th (for fall and summer admissions) and by November 1st (for spring admission). Applications submitted after those deadlines listed above may be considered on a case by case basis.

Application Fees

Domestic: $55
International: $75

Visiting Us

The graduate program staff is happy to work with all prospective students in determining the fit between the student and the program. In order to determine this, we feel that visiting our campus in Lawrence is a very important step. In order to facilitate your visit to KU, there are two main options:

The first, and most preferred, option entails simply applying for admission to the program. All prospective students are welcome to attend our Open House in early November and some highly qualified admitted students may be invited to participate in Visit Days in late February or early March (prior to the fall semester of your intended matriculation). These organized visitation opportunities will allow you time to gather a great deal of first-hand information which we hope will help you in making a final decision about whether to attend KU.

The second option is making arrangements to visit us on your own, outside of organized events. With early notification, we will do our best to work with you to provide information and schedule appointments with faculty when possible. Please contact us if you feel that this is the best option for you.

Contact Information

Please contact the CEAE Program Assistant at sbscott@ku.edu (s523s307@ku.edu) or (785) 864-3826, to schedule a visit or with questions about the application process.

The University of Kansas
Department of Civil, Environmental, and Architectural Engineering
Graduate Administrative Assistant
Learned Hall
1530 W. 15th St., Room 2150
Lawrence, KS 66045-7618

M.S. Degree Requirements

Candidates for the Master of Science degrees have 2 options. **Option A** requires 30 credit hours including a thesis of 6 hours (6 to 10 hours for the environmental degrees) and a final oral examination including defense of the thesis. **Option B** requires 30 hours including a 3- or 4-hour special problem investigation in the specialization and a final oral examination. It does not require a thesis.

The M.S. degree in civil engineering requires a minimum of 9 hours of graduate-level courses in one of the following seven areas: structural engineering, environmental engineering, water resources engineering, geotechnical engineering, transportation engineering, construction engineering/management, and engineering mechanics.

In addition, a minimum of 6 hours of graduate-level work is required in any of the other above departmental areas.

The M.S. degrees in environmental engineering and environmental science require an understanding of chemical, biological, and physical principles of environmental engineering processes, i.e., satisfactory completion of CE 770, CE 772, CE 773, and CE 774 or equivalents. Substitutions require the approval of both the student’s committee and the graduate advisor.

The M.S. degree in architectural engineering is intentionally flexible in its course requirements because graduate study in architectural engineering requires specialization in one of many areas of professional practice. Each student works with his or her committee to select appropriate graduate courses that support the research project and the student's career goals. Students can pursue specializations in, for example, building mechanical, energy, electrical, lighting, or structural systems, or construction engineering. Emerging or hybrid specializations such as sustainability, acoustics, or fire protection are also encouraged.

Courses for any of the M.S. degrees must be listed on a Plan of Study and approved by the student’s major professor, examining committee, and the departmental graduate advisor. All graduate students must have an approved Plan of Study by the beginning of their second semester of study. No more than 9 hours of courses from other departments or more than 6 hours of courses numbered below 700 (of which only 3 hours may be within the department) may be applied toward any of the M.S. degrees without approval of the departmental graduate studies committee. No more than 4 hours of special-problem credit may be applied toward any of the master's degrees without approval of the department’s graduate advisor.

Master of Civil Engineering

Civil, Environmental, and Architectural Engineering

Civil engineering is the oldest engineering program at KU. The first graduating class in 1873 included a civil engineer. Civil engineers design roads, water systems, bridges, dams, and other structures, providing nearly all the infrastructure needed by modern society. Civil engineers were the first engineers to address environmental issues and are the lead engineering discipline in treating water supplies to protect public health. In recognition of the significant issues concerning the environment, the department name was changed in 1992 to civil and environmental engineering.

Architectural engineering combines study in architecture with engineering science and design courses in electrical, mechanical, construction, and structures to prepare students for building design projects of all kinds. Architectural engineering dates to 1913 at KU, and the first female graduate of the School of Engineering was an architectural engineering major. Architectural engineering merged with civil and environmental engineering in 2001 to form the Department of Civil, Environmental, and Architectural Engineering (CEAE).

Mission

CEAE's mission is to provide students with an outstanding engineering education and be a leader in research and service. This mission is supported by the following 3 goals:

1. Prepare students for productive engineering careers.
2. Maintain and grow strong research programs.
3. Serve the profession.

Graduate Admission to the School of Engineering

Procedure

Admission requirements for the School of Engineering follow the general KU requirements plus those of each engineering graduate program. All applicants must apply online (http://www.graduate.ku.edu/apply). Detailed information about supplemental application materials for each program is
listed here (http://www.engr.ku.edu/prospective/graduate/apply). Important information for prospective international students is available from International Student & Scholar Services (http://www2.ku.edu/~issfacts). Download a PDF (http://www.engr.ku.edu/prospective/graduate/apply/grad_app_process.pdf) for more information about the review process for graduate applications.

Some departments and programs require the Graduate Record Examination. Applications must be accompanied by a nonrefundable fee. See Admission (p. 2369) in the Graduate Studies section of the online catalog.

Baccalaureate Preparation
To qualify for graduate work in any field of engineering, a student generally must hold an accredited baccalaureate degree in that field and have at least a 3.0 grade-point average. A student with good preparation in such fields as mathematics, chemistry, or physics, or in a related engineering field, may be admitted on the basis of performance in specific undergraduate courses, determined by the department of interest to the prospective student. Undergraduate hours do not count as part of a student’s Plan of Study, but they must be completed with grades of B or higher.

Exceptionally qualified undergraduates may be admitted directly to a Fast-Track Ph.D. program, which does not require the master’s as an intermediate degree. Students who wish to earn a Ph.D. and believe that they meet this criterion are encouraged to contact the graduate advisor in their field of interest.

English Proficiency Requirement
All graduate students in the School of Engineering who are required to take courses at the Applied English Center (http://www.aec.ku.edu) must pass the AEC’s English Proficiency Examination within 3 semesters of their initial enrollment. Failure to complete the English proficiency requirement within this time limit may result in dismissal from the graduate engineering program.

Graduate Admission
The department admits for all semesters. Only part-time (evening) students may pursue the M.C.E. degree. An ABET-accredited baccalaureate degree in engineering is required. Applicants are expected to have undergraduate grade-point averages of 3.0 or higher on a 4.0 scale for regular admission. Applicants with slightly lower grade-point averages may be admitted on provisional status. Graduate Record Examination scores are not required. The GRE engineering and other subject examinations are not required. The Test of English as a Foreign Language is required for international applicants. International applicants should take the TOEFL examination as early as possible to expedite the admission process.

Graduate applications should be submitted online (http://www.gradplan.engr.ku.edu)

Priority Application Deadlines
Fall Admission: December 15 (all applicants)
Spring Admission: September 30 (all applicants)
Summer Admission: April 1 (all applicants)
The priority deadline is for full consideration for fellowships, scholarships and research/teaching assistantship. Applications submitted after the priority deadline will be accepted if received by January 15th (for fall and summer admissions) and by November 1st (for spring admission). Applications submitted after those deadlines listed above may be considered on a case by case basis.

Application Fees
Domestic: $55
International: $75

Contact Information
Please contact the CEAE Program Assistant at sbscott@ku.edu (s523s307@ku.edu) or (785) 864-3826, to schedule a visit or with questions about the application process.

The University of Kansas
Department of Civil, Environmental, and Architectural Engineering
Graduate Administrative Assistant
Learned Hall
1530 W. 15th St., Room 2150
Lawrence, KS 66045-7618

M.C.E. Degree Requirements
The Master of Civil Engineering degree requires 31 semester hours of graduate courses, of which a minimum of 7 hours must be in engineering management core courses. The core courses are EMGT 777, EMGT 806, EMGT 809, EMGT 810, EMGT 811, EMGT 813, EMGT 821, EMGT 823, and EMGT 830. EMGT 809 is required, and only one of either EMGT 813 or EMGT 823 is accepted. The remaining 27 hours of courses are subject to the same criteria requirements as the Master of Science degree in civil engineering, except that the limit on courses from other departments (including EMGT courses) is 10 hours rather than 9 hours. A final examination is required in the student’s concentration. The final exam requirement can also be met by passing the Professional Engineer examination.

Courses to be applied toward the M.C.E. degree must be listed on a Plan of Study form approved by the student’s major professor, examining committee, and department graduate advisor. All graduate students must have an approved Plan of Study (https://gradplan.engr.ku.edu/accounts/login/?next=) on file by the beginning of their second semester of study.

Master of Construction Management
Civil, Environmental, and Architectural Engineering
Civil engineering is the oldest engineering program at KU. The first graduating class in 1873 included a civil engineer. Civil engineers design roads, water systems, bridges, dams, and other structures, providing nearly all the infrastructure needed by modern society. Civil engineers were the first engineers to address environmental issues and are the lead engineering discipline in treating water supplies to protect public health. In recognition of the significant issues concerning the environment, the department name was changed in 1992 to civil and environmental engineering.

Architectural engineering combines study in architecture with engineering science and design courses in electrical, mechanical, construction, and structures to prepare students for building design projects of all kinds.
Architectural engineering dates to 1913 at KU, and the first female graduate of the School of Engineering was an architectural engineering major. Architectural engineering merged with civil and environmental engineering in 2001 to form the Department of Civil, Environmental, and Architectural Engineering (CEAE).

Mission
CEAE’s mission is to provide students with an outstanding engineering education and be a leader in research and service. This mission is supported by the following 3 goals:

1. Prepare students for productive engineering careers.
2. Maintain and grow strong research programs.
3. Serve the profession.

Graduate Admission to the School of Engineering

Procedure
Admission requirements for the School of Engineering follow the general KU requirements plus those of each engineering graduate program. All applicants must apply online (http://www.graduate.ku.edu/apply). Detailed information about supplemental application materials for each program is listed here (http://www.engr.ku.edu/prospective/graduate/apply). Important information for prospective international students is available from International Student & Scholar Services (http://www2.ku.edu/~issfacts). Download a PDF (http://www.engr.ku.edu/prospective/graduate/apply/grad_app_process.pdf) for more information about the review process for graduate applications.

Some departments and programs require the Graduate Record Examination. Applications must be accompanied by a nonrefundable fee. See Admission (p. 2369) in the Graduate Studies section of the online catalog.

Baccalaureate Preparation
To qualify for graduate work in any field of engineering, a student generally must hold an accredited baccalaureate degree in that field and have at least a 3.0 grade-point average. A student with good preparation in such fields as mathematics, chemistry, or physics, or in a related engineering field, may be admitted on the basis of performance in specific undergraduate courses, determined by the department of interest to the prospective student. Undergraduate hours do not count as part of a student’s Plan of Study, but they must be completed with grades of B or higher.

Exceptionally qualified undergraduates may be admitted directly to a Fast-Track Ph.D. program, which does not require the master’s as an intermediate degree. Students who wish to earn a Ph.D. and believe that they meet this criterion are encouraged to contact the graduate advisor in their field of interest.

English Proficiency Requirement
All graduate students in the School of Engineering who are required to take courses at the Applied English Center (http://www.aec.ku.edu) must pass the AEC’s English Proficiency Examination within 3 semesters of their initial enrollment. Failure to complete the English proficiency requirement within this time limit may result in dismissal from the graduate engineering program.

Graduate Admission

The department admits for all semesters. Usually, only part-time (evening) students pursue M.C.M. degrees. Applicants with baccalaureate degrees in engineering are expected to have undergraduate grade-point averages of 3.0 or higher on a 4.0 scale for regular admission to a master’s program. An undergraduate grade-point average of 3.3 or higher is expected for applicants with baccalaureate degrees in other fields. Applicants with slightly lower grade-point averages may be admitted on provisional status. Graduate Record Examination scores are required and are used in the evaluation process, but minimum scores for admission have not been established. The GRE engineering and other subject examinations are not required. The Test of English as a Foreign Language is required for international applicants. Applicants should take the GRE and TOEFL examinations as early as possible to expedite the admission process.

Graduate applications should be submitted online (http://www.graduate.ku.edu).

Priority Application Deadlines

Fall Admission: December 15 (all applicants)
Spring Admission: September 30 (all applicants)
Summer Admission: April 1 (all applicants)

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Application Fees

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International: $75

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Graduate Administrative Assistant
Learned Hall
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Lawrence, KS 66045-7618

M.C.M. Degree Requirements

The Master of Construction Management degree requires 33 credit hours, consisting of 18 hours of core courses, 12 hours of electives, and 3 hours of master’s project. Core courses are CMGT 700, CMGT 701, CMGT 702, CMGT 703, CMGT 704, and CMGT 705.

Courses for the M.C.M. degree must be listed on a Plan of Study approved by the student’s major professor, examining committee, and department graduate advisor. All graduate students must have an approved Plan of Study (https://gradplan.engr.ku.edu/accounts/login/?next=) by the beginning of their second semester of study.
Doctor of Philosophy in Civil Engineering, Environmental Engineering, and Environmental Science

Civil, Environmental, and Architectural Engineering

Civil engineering is the oldest engineering program at KU. The first graduating class in 1873 included a civil engineer. Civil engineers design roads, water systems, bridges, dams, and other structures, providing nearly all the infrastructure needed by modern society. Civil engineers were the first engineers to address environmental issues and are the lead engineering discipline in treating water supplies to protect public health. In recognition of the significant issues concerning the environment, the department name was changed in 1992 to civil and environmental engineering.

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Graduate Admission to the School of Engineering

Procedure

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Exceptionally qualified undergraduates may be admitted directly to a Fast-Track Ph.D. program, which does not require the master’s as an intermediate degree. Students who wish to earn a Ph.D. and believe that they meet this criterion are encouraged to contact the graduate advisor in their field of interest.

English Proficiency Requirement

All graduate students in the School of Engineering who are required to take courses at the Applied English Center (http://www.aec.ku.edu) must pass the AEC’s English Proficiency Examination within 3 semesters of their initial enrollment. Failure to complete the English proficiency requirement within this time limit may result in dismissal from the graduate engineering program.

Graduate Admission

The department admits for all semesters. Students may pursue degrees full or part time. An ABET-accredited baccalaureate degree in engineering is required for admission to the Ph.D. degree programs in civil engineering and environmental engineering. Applicants are expected to have undergraduate grade-point averages of 3.0 or higher on a 4.0 scale for regular admission. Graduate Record Examination scores are required and are used in the evaluation process, but minimum scores for admission have not been established. The GRE engineering and other subject examinations are not required. The Test of English as a Foreign Language is required for international applicants. Applicants should take the GRE and TOEFL examinations as early as possible to expedite the admission process.

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Application Fees

Domestic: $55
International: $75
Visiting Us

The graduate program staff is happy to work with all prospective students in determining the fit between the student and the program. In order to determine this, we feel that visiting our campus in Lawrence is a very important step. In order to facilitate your visit to KU, there are two main options:

The first, and most preferred, option entails simply applying for admission to the program. All prospective students are welcome to attend our Open House in early November and some highly qualified admitted students may be invited to participate in Visitation Days in late February or early March (prior to the fall semester of your intended matriculation). These organized visitation opportunities will allow you time to gather a great deal of first-hand information which we hope will help you in making a final decision about whether to attend KU.

The second option is making arrangements to visit us on your own, outside of organized events. With early notification, we will do our best to work with you to provide information and schedule appointments with faculty when possible. Please contact us if you feel that this is the best option for you.

Contact Information

Please contact the CEAE Program Assistant at sbscott@ku.edu (s523s307@ku.edu) or (785) 864-3826, to schedule a visit or with questions about the application process.

The University of Kansas
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Graduate Administrative Assistant
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Lawrence, KS 66045-7618

Ph.D. Degree Requirements

Candidates for the Ph.D. degree must satisfy the University’s general requirements for the degree. A Plan of Study must be approved by the student’s major professor, examining committee, and departmental graduate studies committee.

An aspirant for the Ph.D. degree must pass a qualifying examination. The department normally gives this examination upon completion of the aspirant’s M.S. work or at a comparable level for non-M.S. students.

Before being admitted to the comprehensive examination, the aspirant must satisfy the research skill, residency, and responsible scholarship requirements for the degree. The research skill requirement provides the aspirant with a research skill distinct from, but strongly supportive of, the dissertation research. One research skill is required. Possible research skills include foreign language, computer science, mathematics, statistics, specific laboratory skills, and specific skills in the physical or biological sciences. The foreign language skill can be obtained by taking a 2-course sequence in the selected language or demonstrated by passing an examination. The selected research skill must be listed on the Plan of Study form. A separate statement attached to the Plan of Study must list the work to be completed to obtain the research skill. The responsible scholarship requirement serves to ensure that students are trained in responsible research practices and is fulfilled by attending a Responsible Scholarship Training Seminar offered each fall semester.

All graduate students must have an approved Plan of Study (https://gradplan.engr.ku.edu/accounts/login/?next=) on file by the beginning of their second semester of study.

Department of Electrical Engineering and Computer Science

Electrical Engineering and Computer Science

The technological advances that have made our society what it is today are due largely to the efforts of electrical engineers, computer engineers, and computer scientists. Among these advances are radio, television, telephones, wireless and mobile communications, personal computers, workstations, mainframe computers, aircraft avionics, satellite electronics, automobile electronics, office machinery, medical electronic equipment, video games, electric power generation and distribution systems, telecommunications, computer networks (including the Internet), personal entertainment products, radar, defense electronics, artificial intelligence, and a variety of computer software.

Vision and Mission

The vision of the EECS department is to provide a stimulating and challenging intellectual environment.

- To have classes populated by outstanding students.
- To be world class in an increasing number of selected areas of research.
- To have faculty members with high visibility among their peers.

The mission of the EECS department is

- To educate the next generation of electrical engineers, computer engineers, and computer scientists.
- To discover, apply, and disseminate knowledge.
- To be an asset to the community and to society.

Undergraduate Programs

The department offers 5 Bachelor of Science (B.S.) degrees:

- Electrical Engineering,
- Computer Engineering,
- Computer Science,
- Interdisciplinary Computing, and
- Information Technology.

Each features a firm grounding in mathematics, basic science, computer and engineering science, and advanced studies in the theory and design of various systems as well as hands-on experience. Degree programs in electrical engineering, computer engineering and computer science are accredited. The recently approved interdisciplinary computing and information technology degree programs are not yet eligible for accreditation review.

Graduate Programs

The department offers Ph.D. degrees in electrical engineering and computer science; and M.S. degrees in electrical engineering, computer
engineering, computer science, and information technology. The M.S. degree in information technology can be completed at the KU Edwards Campus (http://edwardscampus.ku.edu) in the Kansas City area.

The department has graduate focus areas in applied electromagnetics, communications systems, computer systems design, computing in the biosciences, information assurance and management, intelligent informatics, internet engineering and management, languages and semantics, network engineering, network systems, radar systems and remote sensing, RF systems engineering, security and assurance, signal processing, software engineering and management and theory of computing. Class lists and teaching schedules are available in the graduate office or on the department's website (http://www.eecs.ku.edu). Other areas of study can be constructed, in conjunction with a faculty advisor, to fit individual student needs.

### Courses

**EECS 101. New Student Seminar. 1 Hour.**
A seminar intended to help connect freshmen and transfer EECS students to the EECS department, their chosen profession, and each other. Topics include overviews of the various disciplines, curricula and advising, ethics and professionalism, student organizations and extracurricular activities, senior projects, and career planning. Graded on a satisfactory/unsatisfactory basis. LEC.

**EECS 128. Foundations of Information Technology: ______. 3 Hours. NM.**
Introduction to information technology and the computer as a general tool processing information. Topics include internet tools (including browsers, search engines and web page construction), networking, computer organization, algorithms, programming languages, data representation and manipulation, binary numbers and Boolean logic, system and application software (including word processors, spreadsheets and presentation software), operating systems, databases, artificial intelligence, social and ethical issues in computing, information security, and mobile computing. Prerequisite: MATH 101 or MATH 104 or eligibility to enroll in MATH 115 or MATH 121. LEC.

**EECS 137. Visual Basic for Engineers. 3 Hours.**
Introduction of computer-based problem solving techniques for engineering practice with emphasis on good programming practices and the integration of appropriate computational and related tools. Solutions are computed using Visual Basic, specifically VBA within Excel. Elementary numerical and statistical methods are applied to the solution of sets of linear and nonlinear algebraic equations, linear regression, and root finding. Microsoft Office is used with the computational tools to provide integrated report generation capability. Two lectures and a weekly laboratory instruction. Prerequisite: MATH 104. LEC.

**EECS 138. Introduction to Computing: ______. 3 Hours. NM.**
Algorithm development, basic computer organization, syntax and semantics of a high-level programming language, including testing and debugging. Concept of structure in data and programs, arrays, top-down design, subroutines and library programs. Abstract data types. System concepts such as compilation and files. Nature and scope of computer science. Prerequisite: MATH 101 or MATH 104, or meeting the requirements to enroll in MATH 115 or MATH 121 or MATH 125 or MATH 145. LEC.

**EECS 140. Introduction to Digital Logic Design. 4 Hours.**
An introductory course in digital logic circuits covering number representation, digital codes, Boolean Algebra, combinatorial logic design, sequential logic design, and programmable logic devices. Corequisite: MATH 104. LEC.

**EECS 141. Introduction to Digital Logic: Honors. 4 Hours.**
An introductory course in digital logic circuits covering number representation, digital codes, Boolean algebra, combinatorial logic design, sequential logic design, and programmable logic devices. This course is intended for highly motivated students and includes honors-level assignments. Prerequisite: Co-requisite: MATH 121, or MATH 125 or MATH 145, plus either acceptance into the KU Honors Program or consent of instructor. LEC.

**EECS 168. Programming I. 4 Hours.**
Problem solving using a high level programming language and object oriented software design. Fundamental stages of software development are discussed: problem specification, program design, implementation, testing, and documentation. Introduction to programming using an object oriented language: using classes, defining classes, and extending classes. Introduction to algorithms and data structures useful for problem solving: arrays, lists, files, searching, and sorting. Students will be responsible for designing, implementing, testing, and documenting independent programming projects. Professional ethics are defined and discussed in particular with respect to computer rights and responsibilities. Corequisite: MATH 104. LEC.

**EECS 169. Programming I: Honors. 4 Hours.**
Problem solving using a high level programming language and object oriented software design. Fundamental stages of software development are discussed: problem specification, program design, implementation, testing, and documentation. Introduction to programming using an object oriented language: using classes, defining classes, extending classes. Introduction to algorithms and data structures useful for problem solving: arrays, lists, files, searching, and sorting. Students will be responsible for designing, implementing, testing, and documenting independent programming projects. Professional ethics are defined and discussed in particular with respect to computer rights and responsibilities. This course is intended for highly motivated students and includes honors-level assignments. Prerequisite: Co-requisite: MATH 121 or MATH 125 or MATH 145, plus either acceptance into the KU Honors Program or consent of instructor. LEC.

**EECS 210. Discrete Structures. 4 Hours.**
Mathematical foundations including logic, sets and functions, general proof techniques, mathematical induction, sequences and summations, number theory, basic and advanced counting techniques, solution of recurrence relations, equivalence relations, partial order relations, lattices, graphs and trees, algorithmic complexity, and algorithm design and analysis. Throughout there will be an emphasis on the development of general problem solving skills including algorithmic specification of solutions and the use of discrete structures in a variety of applications. Prerequisite: EECS 168 or 169 (or equivalent) and MATH 122 or MATH 126 or MATH 146. LEC.

**EECS 211. Circuits I. 3 Hours.**
Analysis of linear electrical circuits: Kirchoff's laws; source, resistor, capacitor and inductor models; nodal and mesh analysis; network theorems; transient analysis; Laplace transform analysis; steady-state sinusoidal analysis; computer-aided analysis. Prerequisite: Co-requisite: Math 220 and MATH 290. LEC.

**EECS 212. Circuits II. 4 Hours.**
Continued study of electrical circuits: Steady-state power analysis, three-phase circuits, transformers, frequency response, and two-port network analysis. Prerequisite: EECS 211. LEC.

**EECS 220. Electromagnetics I. 4 Hours.**
Vector analysis. Electrostatic and magnetostatic fields in a vacuum and material media. Electromagnetic fields and Maxwell's equations for time-varying sources. The relationship between field and circuit theory. Simple
different languages will be studied which exemplify different language
genericity and inheritance, and type systems. In particular, several
encapsulation and modularization mechanism, reusability through
storage management, control flow, exception handling,
advantages, and disadvantages. Topics include scopes, parameter
calculations, transformers, three-phase systems, magnetic circuits, and
DC and AC machines with a focus on applications. Not open to electrical
or computer engineering majors. Prerequisite: A course in differential
equations and eight hours of physics. LEC.

EECS 316. Circuits, Electronics and Instrumentation. 3 Hours.
Introduction to DC and AC electrical circuit analysis techniques, AC power
calculations, transformers, three-phase systems, magnetic circuits, and
DC and AC machines with a focus on applications. Not open to electrical
or computer engineering majors. Students may not receive credit for both EECS 316 and EECS 317. Prerequisite: A course in differential equations and eight hours of physics. LEC.

EECS 317. Electronics and Instrumentation. 2 Hours.
Introduction to operational amplifiers, semiconductors, digital circuits and systems, and electronic instrumentation and measurements with a focus on applications. Not open to electrical or computer engineering majors. Students may not receive credit for both EECS 316 and EECS 317. Prerequisite: EECS 315. LEC.

EECS 318. Circuits and Electronics Lab. 1 Hour.
Laboratory exercises intended to complement EECS 316 and EECS 317. Experiments include DC circuits, analog electronics, and digital electronics. Not open to electrical or computer engineering majors. Co-
require: EECS 316 or EECS 317. LAB.

EECS 360. Signal and System Analysis. 4 Hours.
Fourier signal analysis (series and transform); linear system analysis
(continuous and discrete); Z-transforms; analog and digital filter analysis.
Analysis and design of continuous and discrete time systems using
MATLAB. Prerequisite: Upper level of EECS Eligibility. Corequisite: EECS 212. LEC.

EECS 368. Programming Language Paradigms. 3 Hours.
The course is a survey of programming languages: their attributes, uses, advantages, and disadvantages. Topics include scopes, parameter
passing, storage management, control flow, exception handling,
capsulation and modularization mechanism, reusability through
genericity and inheritance, and type systems. In particular, several
different languages will be studied which exemplify different language
philosophies (e.g., procedural, functional, object-oriented, logic, scripting).
Prerequisite: EECS 268 and upper-level EECS eligibility. LEC.

EECS 388. Embedded Systems. 4 Hours.
Internal organization of microprocessor and microcontroller systems;
programming in assembly language; input and output system;
controlling external devices. The course will focus on one or two specific
microprocessors and computer systems. Prerequisite: EECS 140 or
EECS 141, EECS 168 or EECS 169, and upper-level EECS eligibility.

EECS 399. Projects. 1-5 Hours.
An electrical engineering, computer engineering, or computer
science project pursued under the student's initiative, culminating in a
comprehensive report, with special emphasis on orderly preparation and
effective composition. Prerequisite: Upper-level EECS eligibility and
consent of instructor. IND.

EECS 412. Electronic Circuits II. 4 Hours.
Discrete and integrated amplifier analysis and design. Introduction to
feedback amplifier analysis and design. Introduction to feedback
amplifiers. Prerequisite: EECS 312 and upper-level EECS eligibility. LEC.

EECS 420. Electromagnetics II. 4 Hours.
This course applies electromagnetic analysis to high frequency devices
and systems where wave propagation effects cannot be neglected.
Topics covered include transmission lines, space waves, waveguides,
radiation, and antennas. Laboratory experiments include transmission
line, waveguide, and antenna measurements and characterizations. 3 hours lecture, 1 hour laboratory. Prerequisite: EECS 220 and upper-level
EECS eligibility. LEC.

EECS 441. Power Systems Engineering II. 3 Hours.
A continuation of ARCE 640 that integrates system components into
functional, safe, and reliable power distribution systems for commercial,
industrial and institutional (CII) facilities. Service entrance design,
distribution system layout and reliability, emergency and standby power
system design, medium-voltage distribution systems, symmetrical fault
analysis, and special equipment and occupancies. (Same as ARCE 641.)
Prerequisite: Either ARCE 640 or EECS 212, and Upper-Level EECS Eligibility. LEC.

EECS 443. Digital Systems Design. 4 Hours.
The design of computer systems from hardware point of view. The
implementation of functional and control units. Introduction to VHDL, and
its use in modeling and designing digital systems. Prerequisite: EECS 388. LEC.

EECS 444. Control Systems. 3 Hours.
An introduction to the modeling, analysis, and design of linear control
systems. Topics include mathematical models, feedback concepts, state-
space methods, time response, system stability in the time and transform
domains, design using PID control and series compensation, and digital
controller implementation. Prerequisite: EECS 212 and EECS 360. LEC.

EECS 448. Software Engineering I. 4 Hours.
This course is an introduction to software engineering, and it covers
the systematic development of software products. It outlines the scope
of software engineering, including life-cycle models, software process,
teams, tools, testing, planning, and estimating. It concentrates on
requirements, analysis, design, implementation, and maintenance of
software products. The laboratory covers CASE tools, configuration
tools, UML diagrams, integrated development environments, and
project specific components. Prerequisite: EECS 268 and upper-level
EECS eligibility. LEC.
EECS 461. Probability and Statistics. 3 Hours.
Introduction to probability and statistics with applications. Reliability of systems. Discrete and continuous random variables. Expectations, functions of random variables, and linear regression. Sampling distributions, confidence intervals, and hypothesis testing. Joint, marginal, and conditional distribution and densities. Prerequisite: MATH 290, MATH 220 and upper-level EECS eligibility. LEC.

EECS 470. Electronic Devices and Properties of Materials. 3 Hours.
An introduction to crystal structures, and metal, insulator, and semiconductor properties. Topics covered include the thermal, electric, dielectric, and optical properties of these materials. A significant portion of this course is devoted to the properties of semiconductors and semiconductor devices. Prerequisite: PHSX 313 and upper-level EECS eligibility. LEC.

EECS 498. Honors Research. 1-2 Hours.
Arranged to allow students to satisfy the independent research requirement for graduation with departmental honors. Prerequisite: Consent of instructor and upper-level EECS eligibility. IND.

EECS 501. Senior Design Laboratory I. 3 Hours.
A lecture/laboratory course involving the design and implementation of prototypes of electrical and computer type products and systems. The project specifications require consideration of ethics, economics, manufacturing, and safety. Prerequisite: EECS 412. LEC.

EECS 502. Senior Design Laboratory II. 3 Hours. AE61.
A lecture/laboratory course involving the design and implementation of prototypes of electrical and computer type products and systems. The project specifications require consideration of ethics, economics, health, manufacturing, and safety. Prerequisite: EECS 501. LEC.

EECS 510. Introduction to the Theory of Computing. 3 Hours.
Finite state automata and regular expressions. Context-free grammars and pushdown automata. Turing machines. Models of computable functions and undecidable problems. The course emphasis is on the theory of computability, especially on showing limits of computation. May be taken for graduate credit. (Same as MATH 510.) Prerequisite: EECS 210 and upper-level EECS eligibility. LEC.

EECS 512. Electronic Circuits III. 3 Hours.
Feedback amplifier circuit analysis, power amplifiers, analog IC op-amp techniques and analysis, filter approximation and realization, oscillators, wave generators and shapers. Prerequisite: EECS 412. LEC.

EECS 541. Computer Systems Design Laboratory I. 3 Hours.
A two semester lecture/laboratory course involving the specification, design, implementation, analysis, and documentation of a significant hardware and software computer system. Laboratory work involves software, hardware, and hardware/software trade-offs. Project requirements include consideration of ethics, economics, manufacturing, safety, and health aspects of product development. Can be taken only during the senior year. Prerequisite: EECS 443 and EECS 448. LEC.

EECS 542. Computer Systems Design Laboratory II. 3 Hours. AE61.
A two semester lecture/laboratory course involving the specification, design, implementation, analysis, and documentation of a significant hardware and software computer system. Laboratory work involves software, hardware, and hardware/software trade-offs. Project requirements include consideration of ethics, economics, manufacturing, safety, and health aspects of product development. Can be taken only during the senior year. Prerequisite: EECS 541. LEC.

EECS 544. Electric Machines & Drives. 3 Hours.
Introduction to electric machine theory, operation, and control. Electric machines covered include DC generators and motors, AC synchronous generators and motors, AC induction generators and motors, as well as fractional horsepower and special purpose motors. Motor starting and controls for both DC and AC machines are also covered including an introduction to power electronics and variable frequency drives (VFD). (Same as ARCE 644). Prerequisite: Either ARCE 640 or EECS 212, and Upper-Level EECS Eligibility. LEC.

EECS 545. Electric Energy Production and Storage. 3 Hours.
An introduction to utility scale and small scale (distributed generation) electric energy production and storage systems. This course addresses the technical, operational, economic, environmental, and social characteristics associated with both traditional and nontraditional electric energy production systems along with associated grid integration, energy delivery, and regulatory issues. Traditional energy production systems covered include fossil fuel, hydroelectric, and nuclear power plants. Non-traditional energy production systems covered include fuel cells, photovoltaics (PV), concentrated solar power (CSP), wind, geothermal, and other emerging technologies. (Same as ARCE 645.) Prerequisite: Either ARCE 640 or EECS 212, and Upper-Level EECS Eligibility. LEC.

EECS 547. Power System Analysis I. 3 Hours.
Introduction to the analysis of commercial, industrial, and utility power systems. Emphasis is placed on modeling system components which include transmission and distribution lines, transformers, induction machines, and synchronous machines and the development of a power system model for analysis from these components. System modeling will be applied to short-circuit studies and used to analyze symmetrical faults, to develop sequence networks using symmetrical components, and analyze unsymmetrical faults. (Same as ARCE 647.) Prerequisite: Either ARCE 640 or EECS 212, and Upper-Level EECS Eligibility. LEC.

EECS 548. Power System Analysis II. 3 Hours.
Continuation of EECS 547 that uses power system modeling developed in EECS 547 to analyze power system load flow, operation and economic dispatch, stability, and transient response. The impact of alternative energy sources, energy storage, DC transmission and interties, and other emerging technologies on power system operation and reliability will be addressed throughout the course. (Same as ARCE 648.) Prerequisite: ARCE 647 or EECS 547 or consent of instructor. LEC.

EECS 550. Data Structures. 4 Hours.
Data abstraction and abstract data types. Topics include the design and implementation of dictionary, priority queues, concatenated queue, disjoint set structures, graphs, and other advanced data structures based on balanced and unbalanced tree structures. Special emphasis will be placed on the implementations of these structures and their performance tradeoffs. Both asymptotic complexity analysis and experimental profiling techniques will be introduced. Labs will be used to provide students with hands-on experience in the implementations of various abstract data types and to perform experimental performance analysis. Prerequisite: EECS 210 and EECS 448. LEC.

EECS 562. Introduction to Communication Systems. 4 Hours.
A first course in communications, including lectures and integrated laboratory experiments. After a review of spectral analysis and signal transmission, analog and digital communications are studied. Topics include: sampling, pulse amplitude modulation, and pulse code modulation; analog and digital amplitude, frequency, and phase modulation; frequency and time division multiplexing; and noise performance of analog modulation techniques. Prerequisite: EECS 212 and EECS 360. LEC.

EECS 563. Introduction to Communication Networks. 3 Hours.
An introduction to the principles used in communication networks is given in this course. Topics include a discussion of the uses of communications networks, network traffic, network impairments, standards, layered
reference models for organizing network functions. Local Area Network technology and protocols are discussed. Link, network, transport layer protocols, and security are introduced. TCP/IP networks are stressed. VoIP is used as an example throughout the course. Basic concepts of network performance evaluation are studied, both analytical and simulation techniques are considered. Prerequisite: EECS 168 and either EECS 461 or MATH 526. LEC.

EECS 565. Introduction to Information and Computer Security. 3 Hours.
An introduction to the fundamentals of cryptography and information and computer security. Introduces the basic concepts, theories, and protocols in computer security. Discusses how to apply such knowledge to analyze, design and manage secure systems in the real world. Topic covered: the basics of cryptography, software security, operating system security, database security, network security, privacy and anonymity, social engineering, digital forensics, etc. Corequisite: EECS 678 and Prerequisite: Upper-Level EECS Eligibility. LEC.

EECS 581. Computer Science Design I. 3 Hours.
The background and planning phase of a two-semester, team-oriented lecture/laboratory course involving the specification, design, implementation, and documentation of a significant software system. The course includes the consideration of project management, ethics, economics, and technical writing. Can be taken only during the senior year. Prerequisite: EECS 448. Co-Requisite: EECS 510 and EECS 560. LEC.

EECS 582. Computer Science Design II. 3 Hours. AE61.
The design and implementation phase of a two-semester, team-oriented lecture/laboratory course involving the specification, design, implementation, and documentation of a significant software system. The course includes the consideration of project management, ethics, economics, and technical writing. Can be taken only during the senior year. Prerequisite: EECS 581. LEC.

EECS 611. Electromagnetic Compatibility. 3 Hours.
A study of unwanted generation and reception of radio-frequency radiation from analog and digital electronic systems and how these emissions/receptions can be reduced. Topics covered include sources of radiation, grounding, shielding, crosstalk, electrostatic discharge, and practical design and layout schemes for reducing unwanted radiation and reception. Also covered are the major governmental electromagnetic compatibility (EMC) regulations and standards that apply to commercial electronic devices and systems. Prerequisite: EECS 220 and EECS 312. LEC.

EECS 622. Microwave and Radio Transmission Systems. 3 Hours.
Introduction to radio transmission systems. Topics include radio transmitter and receiver design, radiowave propagation phenomenology, antenna performance and basic design, and signal detection in the presence of noise. Students will design radio systems to meet specified performance measure. Corequisite: EECS 420 and EECS 461. LEC.

EECS 628. Fiber Optic Communication Systems. 3 Hours.
Description and analysis of the key components in optical communication systems. Topics covered include quantum sources, fiber cable propagation and dispersion characteristics, receiver characteristics, and system gain considerations. Prerequisite: EECS 220 and PHSX 313 or equivalent and upper-level EECS eligibility. LEC.

EECS 638. Fundamentals of Expert Systems. 3 Hours.
Basic information about expert systems: architecture of an expert system, building expert systems, uncertainty in expert systems, taxonomy of expert systems. Knowledge representation: first order logic, production systems, semantic nets, frames. Uncertainty in expert systems, one-valued approaches: probability theory, systems using Bayes' rule, and systems using certainty theory; two-valued approaches: systems using Dempster-Shafer theory and system INFERNO; set-valued approaches: systems using fuzzy set theory and systems using rough set theory. Prerequisite: EECS 560 or consent of instructor. LEC.

EECS 643. Advanced Computer Organization. 3 Hours.
Principles and techniques of instruction level parallelism, Tomusulo's algorithm, branch prediction, reservation stations, recorder buffers, memory hierarchies. Parallel and scalable architectures, global directory caches, synchronization primitives, memory consistency, multithreading. Only one of EECS 643 and EECS 645 may be used to satisfy EECS degree requirements. Prerequisite: EECS 443. LEC.

EECS 644. Introduction to Digital Signal Processing. 3 Hours.
Discrete time signal and systems theory, sampling theorem, z-transforms, digital filter design, discrete Fourier transform, FFT, and hardware considerations. Prerequisite: EECS 360. LEC.

EECS 645. Computer Architecture. 3 Hours.
The structure and design of computing systems. Examination and analysis of computing systems. Examination and analysis of instruction set architectures, pipelined control and arithmetic units, vector processors, memory hierarchies, and performance evaluation. Prerequisite: EECS 388. LEC.

EECS 647. Introduction to Database Systems. 3 Hours.
Introduction to the concept of databases and their operations. Basic concepts, database architectures, storage structures and indexing, data structures: hierarchical, network, and relational database organizations. Emphasis on relational databases and retrieval languages SQL, QBE, and ones based on relational algebra and relational calculus; brief description of predicate calculus. Theory of databases, normal forms, normalization, candidates keys, decomposition, functional dependencies, multi-valued dependencies. Introduction to the design of a simple database structure and a data retrieval language. Student cannot receive credit for both EECS 647 and EECS 746. Prerequisite: EECS 448. LEC.

EECS 648. Software Engineering Tools. 3 Hours.
This course focuses on the software engineering tools and practices currently in use in the industry, supporting the complete software development lifecycle. The course provides hands-on experience with current software development tools. Topics include software engineering artifacts, team structure and roles, work contracts, requirements elicitation and analysis, specifications, supplementary specifications, use-case models, activity diagrams, use-case specifications, traceability, technical design, design review meetings, coding standards, code quality, code reviews, and modern software engineering tools. Prerequisite: EECS 448. LEC.

EECS 649. Introduction to Artificial Intelligence. 3 Hours.
General concepts, search procedures, two-person games, predicate calculus and automated theorem proving, nonmonotonic logic, probabilistic reasoning, rule based systems, semantic networks, frames, dynamic memory, planning, machine learning, natural language understanding, neural networks. Corequisite: EECS 368. LEC.

EECS 660. Fundamentals of Computer Algorithms. 3 Hours.
Basic concepts and techniques in the design and analysis of computer algorithms. Models of computations. Simple lower bound theory and optimality of algorithms. Computationally hard problems and the theory of NP-Completeness. Introduction to parallel algorithms. Prerequisite: EECS 560 and either EECS 461 or MATH 526. LEC.

EECS 662. Programming Languages. 3 Hours.
Formal definition of programming languages including specification of syntax and semantics. Simple statements including precedence, infix,
prefix, and postfix notation. Global properties of algorithmic languages including scope of declaration, storage allocation, grouping of statements, binding time of constituents, subroutines, coroutines, and tasks. Run-time representation of program and data structures. Prerequisite: EECS 368 and EECS 388 and EECS 560. LEC.

EECS 664. Introduction to Digital Communication Systems. 3 Hours. An introduction to building digital communication systems in discrete time, including lectures and integrated laboratory exercises. Topics covered include signal spaces, base-band modulation, bandpass modulation, phase-locked loops, carrier phase recovery, symbol timing recovery, and basic performance analysis. Prerequisite: EECS 360 and EECS 461. LAB.

EECS 665. Compiler Construction. 4 Hours. Compilation of simple expressions and statements. Organization of a compiler including symbol tables, lexical analysis, syntax analysis, intermediate and object code generation, error diagnostics, code optimization techniques and run-time structures in a block-structured language such as PASCAL or C. Programming assignments include using tools for lexer and parser generator, and intermediate, and object code generation techniques. Laboratory exercises will provide hands-on experience with the tools and concepts required for the programming assignments. Prerequisite: EECS 368, EECS 448, and EECS 510. LEC.

EECS 670. Introduction to Semiconductor Processing. 3 Hours. An overview of various processes to fabricate semiconductor devices and integrated circuits. Topics covered include crystal growth, oxidation, solid-state diffusion, ion implantation, photolithography, chemical vapor deposition, epitaxial growth, metalization, and plasma etching of thin films. (Same as CPE 655.) Prerequisite: Senior standing in CPE or EECS, or consent of instructor. LEC.

EECS 672. Introduction to Computer Graphics. 3 Hours. Foundations of 2D and 3D computer graphics. Structured graphics application programming. Basic 2D and 3D graphics algorithms (modeling and viewing transformations, clipping, projects, visible line/surface determination, basic empirical lighting, and shading models), and aliasing. Prerequisite: EECS 448. LEC.

EECS 678. Introduction to Operating Systems. 4 Hours. The objective of this course is to provide the students with the concepts necessary to enable them to: a) identify the abstract services common to all operating system, b) define the basic system components that support the operating system’s machine independent abstractions on particular target architectures, c) consider how the design and implementation of different systems components interact and constrain one another, not merely how one or two important parts work in isolation, and d) understand the means by which fundamental problems in operating systems can be analyzed and addressed. Programming assignments address topics including process creation, inter-process communication, system call implementation, process scheduling and virtual memory. Laboratory exercises primarily focus on use of tools and concepts required for the programming assignments but include a small number of independent topics. Prerequisite: EECS 388 and EECS 448. LEC.

EECS 690. Special Topics: _____. 1-3 Hours. Arranged as needed to present appropriate material to groups of students. May be repeated for additional credit. Prerequisite: Upper-level EECS eligibility and consent of instructor. LEC.

EECS 692. Directed Reading. 1-3 Hours. Reading under the supervision of an instructor on a topic chosen by the student with the advice of the instructor. May be repeated for additional credit. Consent of the department required for enrollment. Prerequisite: Upper-level EECS eligibility and consent of instructor. IND.

EECS 700. Special Topics: _____. 1-5 Hours. Courses on special topics of current interest in electrical engineering, computer engineering, or computer science, given as the need arises. May be repeated for additional credit. Prerequisite: Variable. LEC.

EECS 710. Information Security and Assurance. 3 Hours. This introductory security course covers a wide range of topics in the area of information and network security, privacy, and risk: the basic concepts: confidentiality, integrity and availability; introduction to cryptography; authentication; security models; information and database security; computer systems security; network security; Internet and web security; risk analysis; social engineering; computer forensics. Prerequisite: Graduate standing in EECS, or permission of the instructor. LEC.

EECS 711. Security Management and Audit. 3 Hours. Administration and management of security of information systems and networks, intrusion detection systems, vulnerability analysis, anomaly detection, computer forensics, auditing and data management, risk management, contingency planning and incident handling, security planning, e-business and commerce security, privacy, traceability and cyber-evidence, human factors and usability issues, policy, legal issues in computer security. Prerequisite: EECS 710. LEC.

EECS 712. Network Security and its Application. 3 Hours. This course focuses on network-based information and communication systems, and examines network technologies and service applications to provide the students with a comprehensive introduction to the field of network security and its applications. The course covers key concepts and critical network security services including authentication and access control, integrity and confidentiality of data, routing, firewalls, virtual private networks, web security, virus protection, and network security architecture and policy development. The students are expected to understand the technical vulnerabilities of networked systems and to develop methods to eliminate or mitigate those vulnerabilities. Prerequisite: EECS 710 and EECS 780, or the instructor’s approval. LEC.

EECS 713. High-Speed Digital Circuit Design. 3 Hours. Basic concepts and techniques in the design and analysis of high-frequency digital and analog circuits. Topics include: transmission lines, ground and power planes, layer stacking, substrate materials, terminations, vias, component issues, clock distribution, cross-talk, filtering and decoupling, shielding, signal launching. Prerequisite: EECS 312 and senior or graduate standing. EECS 420 recommended. LEC.

EECS 716. Formal Language Theory. 3 Hours. Formal language generation by grammars, recognition by automata (finite and pushdown automata, Turing machines), and equivalence of these formulations; elementary containment and closure properties. Emphasis on context-free, deterministic context-free and regular languages. Prerequisite: EECS 510 or equivalent. LEC.

EECS 718. Graph Algorithms. 3 Hours. This course introduces students to computational graph theory and various graph algorithms and their complexities. Algorithms and applications covered will include those related to graph searching, connectivity and distance in graphs, graph isomorphism, spanning trees, shortest paths, matching, flows in network, independent and dominating sets, coloring and covering, and Traveling Salesman and Postman problems. Prerequisite: EECS 560 or graduate standing with consent of instructor. LEC.

EECS 721. Antennas. 3 Hours. Gain, Pattern, and Impedance concepts for antennas. Linear, loop, helical, and aperture antennas (arrays, reflectors, and lenses). Cylindrical and biconical antenna theory. Prerequisite: EECS 360 and EECS 420, or EECS 720, or permission of the instructor. LEC.
EECS 723. Microwave Engineering. 3 Hours.
Survey of microwave systems, techniques, and hardware. Guided-wave theory, microwave network theory, active and passive microwave components. Prerequisite: EECS 420. LEC.

EECS 725. Introduction to Radar Systems. 3 Hours.
Basic radar principles and applications. Radar range equation. Pulsed and CW modes of operation for detection, ranging, and extracting Doppler information. Prerequisite: EECS 360, EECS 420, EECS 461. EECS 622 recommended. LEC.

EECS 728. Fiber-optic Measurement and Sensors. 3 Hours.
The course will focus on fundamental theory and various methods and applications of fiber-optic measurements and sensors. Topics include: optical power and loss measurements, optical spectrum analysis, wavelength measurements, polarization measurements, dispersion measurements, PMD measurements, optical amplifier characterization, OTDR, optical components characterization and industrial applications of fiber-optic sensors. Prerequisite: EECS 628 or equivalent. LEC.

EECS 730. Introduction to Bioinformatics. 3 Hours.
This course provides an introduction to bioinformatics. It covers computational tools and databases widely used in bioinformatics. The underlying algorithms of existing tools will be discussed. Topics include: molecular biology databases, sequence alignment, gene expression data analysis, protein structure and function, protein analysis, and proteomics. Prerequisite: Data Structures class equivalent to EECS 560, and Introduction to Biology equivalent to BIOL 150, or consent of instructor. LEC.

EECS 735. Automated Theorem Proving. 3 Hours.
Computer-based theorem-proving methods for selected domains such as plane geometry, symbolic integral calculus, and propositional calculus are reviewed. Mechanical theorem-proving procedures for the first-order predicate calculus are studied in depth. Includes resolution, semantic resolution, hyper-resolution, linear resolution, and paramodulation. Applications of these procedures to areas such as proofs of program correctness, deductive question answering, problem solving, and program synthesis. Prerequisite: EECS 649 and a knowledge of mathematical logic equivalent to that supplied by EECS 210. Infrequently offered. LEC.

EECS 738. Machine Learning. 3 Hours.
"Machine learning is the study of computer algorithms that improve automatically through experience" (Tom Mitchell). This course introduces basic concepts and algorithms in machine learning. A variety of topics such as Bayesian decision theory, dimensionality reduction, clustering, neural networks, hidden Markov models, combining multiple learners, reinforcement learning, Bayesian learning etc. will be covered. Prerequisite: Graduate standing in CS or CoE or consent of instructor. LEC.

EECS 739. Scientific Parallel Computing. 3 Hours.
This course is concerned with the application of parallel processing to problems in the natural sciences and engineering. State-of-the-art computing methodologies are studied along with contemporary applications. The course takes a performance-oriented approach, with attention to parallel algorithms, parallel architecture, compilation issues, and system evaluation. Prerequisite: Graduate standing or consent of instructor and experience with C, C++, or FORTRAN. LEC.

EECS 740. Digital Image Processing. 3 Hours.
This course gives a hands-on introduction to the fundamentals of digital image processing. Topics include: image formation, image transforms, image enhancement, image restoration, image reconstruction, image compression, and image segmentation. Prerequisite: EECS 672 or EECS 744. LEC.

EECS 741. Computer Vision. 3 Hours.
This course gives a hands-on introduction to the fundamentals of computer vision. Topics include: image formation, edge detection, image segmentation, line-drawing interpretation, shape from shading, texture analysis, stereo imaging, motion analysis, shape representation, object recognition. Prerequisite: EECS 672 or EECS 744. LEC.

EECS 742. Static Analysis. 3 Hours.
This course presents an introduction to techniques for statically analyzing programs. Converge includes theoretical analysis, definition and implementation of data flow analysis, control flow analysis, abstract interpretation, and type and effects systems. The course presents both the underlying definitions and pragmatic implementation of these systems. Prerequisite: EECS 665 or EECS 662 or equivalent. LEC.

EECS 743. Advanced Computer Architecture. 3 Hours.
This course will focus on the emerging technologies to build high-performance, low-power, and resilient microprocessors. Topics include multiprocessing, reliability-and Variability-aware computer architecture designs, energy-efficient computer systems, on-chip networks, 3D microprocessor designs, general-purpose computation on graphics processing units, and non-volatile computer memory. The course responds to VLSI technologies ability to provide increasing numbers of transistors and clock speeds to allow computer architects to build powerful microprocessors and computer systems and the challenges (e.g. resilience, energy-efficiency) that the growth in microprocessor performance is facing from the aggressive technology scaling. Prerequisite: EECS 643 or EECS 645, or equivalent. A good understanding of C/C++ and having basic Unix/Linux skills is required. LEC.

EECS 744. Communications and Radar Digital Signal Processing. 3 Hours.
The application of DSP techniques to specialized communications and radar signal processing subsystems. Topics include A-D converters, specialized digital filters, software receiver systems, adaptive subsystems and timing. Prerequisite: An undergraduate course in DSP such as EECS 644. LEC.

EECS 745. Implementation of Networks. 3 Hours.
EECS 745 is a laboratory-focused implementation of networks. Topics include direct link networks (encoding, framing, error detection, reliable transmission, SONET, FDDI, network adapters, Ethernet, 802.11 wireless networks); packet and cell switching (ATM, switching hardware, bridges and extended LANs); internetworking (Internet concepts, IPv6, multicast, naming/DNS); end-to-end protocols (UDP, TCP, APIs and sockets, RPCs, performance); end-to-end data (presentation formatting, data compression, security); congestion control (queuing disciplines, TCP congestion control and congestion avoidance); high-speed networking (issues, services, experiences); voice over IP (peer-to-peer calling, call managers, call signalling, PBX and call attendant functionality). Prerequisite: EECS 563 or EECS 780. LEC.

EECS 746. Database Systems. 3 Hours.
Introduction to the concept of databases and their operations. Basic database concepts, architectures, and data storage structures and indexing. Though other architectures are discussed, focus is on relational databases and the SQL retrieval language. Normalization, functional dependencies, and multivalued dependencies also covered. Culminates in the design and implementation of a simple database with a web interface. Prerequisite: EECS 448 or consent of instructor. Students cannot receive credit for both EECS 647 and EECS 746. LEC.

EECS 747. Mobile Robotics. 3 Hours.
Design, construction, and programming of mobile robots. Topics include computational hardware, designing and prototyping, sensors, mechanics,
motors, power, robot programming, robot design principles, and current research in mobile robotics. Prerequisite: Knowledge of at least one modern programming language. LEC.

EECS 749. Knowledge Based Systems. 3 Hours.
General concepts of intelligent problem solving, rule-based systems, distributed AI, reasoning under uncertainty, case-based reasoning, subsymbolic techniques. Prerequisite: At least one class in Artificial Intelligence. LEC.

EECS 750. Advanced Operating Systems. 3 Hours.
In this course, we will study advanced topics in operating systems for modern hardware platforms. The topics include: multicore CPU scheduling, cache and DRAM management, flash-based storage systems and I/O management, power/energy management, and cloud systems. We will discuss classical and recent papers in each of these topics. We will also study advanced resource management capabilities in recent Linux kernels. The course will consist of lectures, student presentations, and a term project. Prerequisite: EECS 678. LEC.

EECS 753. Embedded and Real Time Computer Systems. 3 Hours.
This course will cover emerging and proposed techniques and issues in embedded and real time computer systems. Topics will include new paradigms, enabling technologies, and challenges resulting from emerging application domains. Prerequisite: EECS 645 and EECS 678. LEC.

EECS 755. Software Modeling and Analysis. 3 Hours.
Modern techniques for modeling and analyzing software systems. Course coverage concentrates on pragmatic, formal modeling techniques that support predictive analysis. Topics include formal modeling, analysis of software systems using model checking and theorem proving systems. Prerequisite: EECS 368 or equivalent. LEC.

EECS 761. Programming Paradigms. 3 Hours.
An investigation of alternative programming paradigms and their representative effect on programming expressiveness and style. Emphasis is on a comparative understanding of a spectrum of programming paradigms, with some facility in the use of at least one typical language representative of each paradigm studied. The course will review and investigate as appropriate imperative, functional, object-oriented, parallel, and logical programming paradigms, plus additional paradigms as relevant. Prerequisite: EECS 662 or equivalent, or consent of instructor. LEC.

EECS 762. Programming Language Foundation I. 3 Hours.
This course presents a basic introduction to the semantics of programming languages. The presentation begins with basic lambda calculus and mechanisms for evaluating lambda calculus terms. Types are introduced in the form of simply typed lambda calculus and techniques for type inference and defining type systems are presented. Finally, techniques for using lambda calculus to define, evaluate and type check common programming language constructs are presented. Prerequisite: EECS 662 or equivalent. LEC.

EECS 763. Introduction to Multiprocessor Systems on Chip. 3 Hours.
This course covers the latest trends in advanced computer architecture for multiprocessor systems on chip for embedded and real time systems (MPSoC). Topics covered include multicore architectures, modeling abstractions, run time systems, and Hw/Sw co-design techniques. Prerequisite: EECS 678 and EECS 645 or equivalents. LEC.

EECS 764. Analysis of Algorithms. 3 Hours.
Models of computations and performance measures; asymptotic analysis of algorithms; basic design paradigms including divide-and-conquer, dynamic programming, backtracking, branch-and-bound, greedy method and heuristics; design and analysis of approximation algorithms; lower bound theory; polynomial transformation and the theory of NP-Completeness; additional topics may be selected from arithmetic complexity, graph algorithms, string matching, and other combinatorial problems. Prerequisite: EECS 660 or equivalent. LEC.

EECS 765. Introduction to Cryptography and Computer Security. 3 Hours.
Comprehensive coverage to the fundamentals of cryptography and computer and communication security. This course serves as the first graduate level security course, which introduces the core concepts, theories, algorithms and protocols in computer and communication security, and also prepares students for advanced security courses. This course first covers the mathematical foundation of cryptography and its applications in computer security. The course also covers a wide range of topics: information and database security, software and computer systems security, network security, Internet and web security. Prerequisite: EECS 678 and EECS 563 or EECS 780, or the instructor’s approval. LEC.

EECS 766. Resource Sharing for Broadband Access Networks. 3 Hours.
Connections between network customers and the network come in many forms, wireless data systems, e.g., IEEE 802.16, wireless cellular systems, e.g. 3G, coax cable networks, e.g., DOSCIS, fiber optic communications systems, e.g., EPON, copper twisted pair, e.g., DSL, and powerline communications systems. All of these systems use various resource sharing strategies. The resource sharing strategy is matched to the necessities of specific systems as well as their operating environments. There are commonalities between these strategies as well as differences. This course will look at resource sharing from a general perspective and then examine specific systems to underscore their commonalities and differences. Systems to be studied in detail include, DOSCIS, IEEE 802.16/802.11, WCDMA, HSDPA/HSUPA, EV-DO, EPON, ZigBee/IEEE 802.15.4, powerline networks. The use of cognitive radio communications technologies in future access networks will be introduced. Prerequisite: EECS 461 and EECS 563 or EECS 780. LEC.

EECS 767. Information Retrieval. 3 Hours.
This class introduces algorithms and applications for retrieving information from large document repositories, including the Web. Topics span from classic information retrieval methods for text documents and databases, to recent developments in Web search, including: text algorithms, indexing, probabilistic modeling, performance evaluation, web structures, link analysis, multimedia information retrieval, social network analysis. Prerequisite: EECS 647 or permission of instructor. LEC.

EECS 768. Virtual Machines. 3 Hours.
Understand the fundamental principles and advanced implementation aspects of key virtual machine concepts. Topics include principles of virtualization, binary translation, process and system level virtual machines, JIT compilation and optimizations in managed environments, garbage collection, virtual machine implementation issues, and virtual machine security. Includes in-depth coverage of the latest developments and research issues in the field of virtual machines. Prerequisite: EECS 665 and either EECS 643 or 663 or EECS 765 or consent of instructor. LEC.

EECS 769. Information Theory. 3 Hours.
Information theory is the science of operations on data such as compression, storage, and communication. It is one of the few scientific fields fortunate enough to have an identifiable beginning - Claude Shannon's 1948 paper. The main topics of mutual information, entropy, and relative entropy are essential for students, researchers, and practitioners in such diverse fields as communications, data compression, statistical signal processing, neuroscience, and machine learning. The topics covered in this course include mathematical definitions and properties of information, mutual information, source coding
ECE 782. Numerical Analysis II. 3 Hours.

ECE 800. Special Topics. 1-5 Hours.
Advanced courses on special topics of current interest in electrical engineering, computer engineering, or computer science, given as the need arises. May be repeated for additional credit. Prerequisite: Variable. LEC.

ECE 801. Directed Graduate Readings. 1-3 Hours.
Graduate level directed readings on a topic in electrical engineering, computer engineering, or computer science, mutually agreed-on by the student and instructor. May be repeated for credit on another topic. Prerequisite: Consent of instructor. RSH.

ECE 802. Electrical Engineering and Computer Science Colloquium and Seminar on Professional Issues. 1 Hour.
A colloquium/seminar series in which presentation are provided on a broad variety of scholarly and professional topics. Topics related to the issues of responsible scholarship in the fields of computing and electrical engineering will be discussed. Student are also required to attend a series of colloquia and submit written reports. Course will be graded Satisfactory/Fail and is required for all EEC graduate students. Prerequisite: Graduate standing in the EEC Department. LEC.

ECE 810. Software Engineering and Management. 3 Hours.
Principal concepts in software engineering with a focus on formalism as well as managerial issues; software development models; software process models; software configuration management; software development life cycle activities; project management; planning and estimation; requirements engineering, software architecture, software modular design; software reusability; implementation strategies; testing techniques; software quality assurance; software evolution; metrics and measurements, ethics and professionalism. Prerequisite: Programming experience, preferably in Java or C++. LEC.

ECE 811. IT Project Management. 3 Hours.
Management issues in the creation, development, and maintenance of IT systems; effort and cost estimation techniques; project planning and scheduling; resource allocation; risk analysis and mitigation techniques; quality assurance; project administration; configuration management; organizational issues; software process modeling; process improvement; frameworks for quality software. LEC.

ECE 812. Software Requirements Engineering. 3 Hours.
Objectives, processes, and activities of requirements engineering and requirements management; characteristics of good requirements; types of requirements; managing changing requirements; languages, notations, and methodologies; formal and semi-formal methods of presenting and validating the requirements; requirements standards; traceability issues. Prerequisite: ECE 810. LEC.

ECE 814. Software Quality Assurance. 3 Hours.
Software quality engineering as an integral facet of development from requirements through delivery and maintenance; verification and validation techniques; manual and automated static analysis techniques; fundamental concepts in software testing; test case selection strategies such as black-box testing, white-box testing; formal verification; unit, integration, system, and acceptance testing; regression testing; designing for testability; models for quality assurance; reviews, inspection, documentation, and standards; industry and government standards for quality. Prerequisite: ECE 810. LEC.
EECS 816. Object-Oriented Software Development. 3 Hours.
Abstract data types, objects and classes, class associations, modeling with objects, domain modeling, use case modeling, interactive and incremental development, object-oriented analysis and design, components, frameworks, UML and Unified Process, reusability, design patterns, object management, and CORBA. Prerequisite: EECS 810. LEC.

EECS 818. Software Architecture. 3 Hours.
Designing architectures; software architectural styles and patterns; architectural components and connectors; architectural modeling and analysis, architectural deployment, designing for nonfunctional properties such as efficiency, scaleability, adaptability, and security; domain-specific software architectures; architecture product lines; architecture description languages (ADLs); standards. Prerequisite: EECS 810. LEC.

EECS 819. Cryptography. 3 Hours.
Introduction to the mathematical background, basic concepts, components, and protocols to enforce secrecy, integrity, and privacy through cryptographic mechanisms. The concept of symmetric and asymmetric encryption, integrity verification, authentication, key establishment and update, and authorization. Emphasis on the design of protocols that apply and integrate various modules to achieve safety objectives: time-stamping, digital signature, bit commitment, fair coin-flip, zero knowledge proof, oblivious transfer, and digital cash. The policies for key generation and management, information storage and access control, legal issues, and design of protocols for real applications. Prerequisite: EECS 765. LEC.

EECS 820. Advanced Electromagnetics. 3 Hours.
A theorem-based approach to solving Maxwell's equations for modeling electromagnetic problems encountered in microwave systems, antennas, scattering. Topics include waves, source modeling, Schelkunoff equivalence principle, scattered field formulations, electromagnetic induction, reciprocity principles, Babinet's principle, and construction of solutions in various coordinate systems. Prerequisite: EECS 420. LEC.

EECS 823. Microwave Remote Sensing. 3 Hours.
Description and analysis of basic microwave remote sensing systems including radars and radiometers as well as the scattering and emission properties of natural targets. Topics covered include plane wave propagation, antennas, radiometers, atmospheric effects, radars, calibrated systems, and remote sensing applications. Prerequisite: EECS 420 and EECS 622. LEC.

EECS 824. Microwave Remote Sensing II. 3 Hours.
Description and analysis of basic microwave remote sensing systems including radars and radiometers as well as the scattering and emission properties of natural targets. Topics covered include measurement and discrimination, real-aperture side-looking airborne radars, synthetic-aperture side-looking airborne radar systems, scattering measurements, physical mechanisms and empirical models for scattering and emission. Prerequisite: EECS 823. LEC.

EECS 825. Radar Systems. 3 Hours.
Description and analysis of radars of various types. Resolution in angle, range, and speed. Ambiguities. Return from point and area targets. Detection in the presence of noise and fading. Tracking and MTI. Amplitude measurement. Imaging radars. Prerequisite: EECS 360, EECS 420, and EECS 461. LEC.

EECS 828. Advanced Fiber-Optic Communications. 3 Hours.
An advanced course in fiber-optic communications. The course will focus on various important aspects and applications of modern fiber-optic communications, ranging from photonic devices to systems and networks. Topics include: advanced semiconductor laser devices, external optical modulators, optical amplifiers, optical fiber nonlinearities and their impact in WDM and TDM optical systems, polarization effect in fiber-optic systems, optical receivers and high-speed optical system performance evaluation, optical solution systems, lightweight analog video transmission, SONET ATM optical networking, and advanced multi-access lightwave networks. Prerequisite: EECS 628 or equivalent. LEC.

EECS 830. Advanced Artificial Intelligence. 3 Hours.
A detailed examination of computer programs and techniques that manifest intelligent behavior, with examples drawn from current literature. The nature of intelligence and intelligent behavior. Development of, improvement to, extension of, and generalization from artificially intelligent systems, such as theorem-provers, pattern recognizers, language analyzers, problem-solvers, question answerers, decision-makers, planners, and learners. Prerequisite: Graduate standing in the EECS department or Cognitive Science or permission of the instructor. LEC.

EECS 831. Introduction to Systems Biology. 3 Hours.
This course provides an introduction to systems biology. It covers computational analysis of biological systems with a focus on computational tools and databases. Topics include: basic cell biology, cancer gene annotation, micro RNA identification, Single Nucleotide Polymorphism (SNP) analysis, genetic marker identification, protein-DNA interaction, computational Neurology, vaccine design, cancer drug development, and computational development biology. Prerequisite: Introduction to Bioinformatics equivalent to EECS 730, or consent of instructor. LEC.

EECS 833. Neural Networks and Fuzzy Systems. 3 Hours.
Fundamental theory of adaptive systems. Evolution of artificial neural networks and training algorithms. Pattern classification, function approximation, and system optimization. Introduction to fuzzy set theory and neuro-fuzzy models for pattern classification. Application of neural networks in signal and image processing problems. Pattern classification for biological systems. Prerequisite: Graduate standing in the EECS department or permission of instructor. LEC.

EECS 835. Protein Bioinformatics. 3 Hours.
This course emphasizes the applications of computational algorithms to main problems in protein bioinformatics and molecular biology. A variety of topics, including protein sequence alignments, profiles and protein structure classification and prediction, will be either introduced briefly or discussed in detail. Students will be asked to present some selected research papers. Prerequisite: EECS 730. LEC.

EECS 837. Data Mining. 3 Hours.
Extracting data from data bases to data warehouses. Preprocessing of data: handling incomplete, uncertain, and vague data sets. Discretization methods. Methodology of learning from examples: rules of generalization, control strategies. Typical learning systems: ID3, AQ, C4.5, and LERS. Validation of knowledge. Visualization of knowledge bases. Data mining under uncertainty, using approaches based on probability theory, fuzzy set theory, and rough set theory. Prerequisite: Graduate standing in CS or CoE or consent of instructor. LEC.

EECS 838. Applications of Machine Learning in Bioinformatics. 3 Hours.
This course is introduction to the application of machine learning methods in bioinformatics. Major subjects include: biological sequence analysis, microarray interpretation, protein interaction analysis, and biological network analysis. Common biological and biomedical data types and related databases will also be introduced. Students will be asked to present some selected research papers. Prerequisite: EECS 730 and EECS 738. LEC.
EECS 839. Mining Special Data. 3 Hours.
Problems associated with mining incomplete and numerical data. The MLEM2 algorithm for rule induction directly from incomplete and numerical data. Association analysis and the Apriori algorithm. KNN and other statistical methods. Mining financial data sets. Problems associated with imbalanced data sets and temporal data. Mining medical and biological data sets. Induction of rule generations. Validation of data mining: sensitivity, specificity, and ROC analysis. Prerequisite: Graduate standing in CS or CoE or consent of instructor. LEC.

EECS 841. Computer Vision. 3 Hours.
The objective of this course is to give students a hands-on introduction to the fundamentals of computer vision. Topics include: Image Formation, Image Segmentation, Binary Image Analysis, Edge Detection, Line Drawing Interpretation, Shape from Shading, Motion Analysis, Stereo, Shape Representation, and Object Recognition. The objective of this course is to give students a hands-on introduction to the fundamentals of computer vision. Prerequisite: EECS 740 or equivalent. LEC.

EECS 843. Programming Language Foundation II. 3 Hours.
This course presents advanced topics in programming language semantics. Fixed point types are presented followed by classes of polymorphism and their semantics. System F and type variables are presented along with universal and existential types. The lambda cube is introduced along with advanced forms of polymorphism. Several interpreters are developed implementing various type systems and associated type inference algorithms. Prerequisite: EECS 762. LEC.

EECS 844. Adaptive Signal Processing. 3 Hours.
This course presents the theory and application of adaptive signal processing. Topics include adaptive filtering, mathematics for advanced signal processing, cost function modeling and optimization, signal processing algorithms for optimum filtering, array processing, linear prediction, interference cancellation, power spectrum estimation, steepest descent, and iterative algorithms. Prerequisite: EECS 861 and background in fundamental signal processing (such as EECS 644.) LEC.

EECS 861. Random Signals and Noise. 3 Hours.
Fundamental concepts in random variables, random process models, power spectral density. Application of random process models in the analysis and design of signal processing systems, communication systems and networks. Emphasis on signal detection, estimation, and analysis of queues. This course is a prerequisite for most of the graduate level courses in radar signal processing, communication systems and networks. Prerequisite: An undergraduate course in probability and statistics, and signal processing. LEC.

EECS 862. Principles of Digital Communication Systems. 3 Hours.
A study of communication systems using noisy channels. Principal topics are: information and channel capacity, baseband data transmission, digital carrier modulation, error control coding, and digital transmission of analog signals. The course includes a laboratory/computer aided design component integrated into the study of digital communication systems. Prerequisite: EECS 562. Corequisite: EECS 861. LEC.

EECS 863. Network Analysis, Simulation, and Measurements. 3 Hours.
Prediction of communication network performance using analysis, simulation, and measurement. Topics include: an introduction to queuing theory, application of theory to prediction of communication network and protocol performance, and analysis of scheduling mechanisms. Modeling communication networks using analytic and simulation approaches, model verification and validation through analysis and measurement, and deriving statistically significant results. Analysis, simulation, and measurement tools will be discussed. Prerequisite: EECS 461 or MATH 526, and EECS 563 or EECS 780. LEC.

EECS 864. Multiwavelength Optical Networks. 3 Hours.
Introduce methodologies for multiwavelength optical network analysis, design, control, and survivability. The focus of the course is formulating the problem in the design of optical networks and studying several design methodologies. The control and management of optical networks are introduced as well as related protocols. Prerequisite: EECS 563 and EECS 780. LEC.

EECS 865. Wireless Communication Systems. 3 Hours.
The theory and practice of the engineering of wireless telecommunication systems. Topics include cellular principles, mobile radio propagation (including indoor and outdoor channels), radio link calculations, fading (including Rayleigh, Rician, and other models), packet radio, equalization, diversity, error correction coding, spread spectrum, multiple access techniques (including time, frequency, and code), and wireless networking. Current topics of interest will be covered. Corequisite: EECS 861. LEC.

EECS 866. Network Security. 3 Hours.
This course provides in-depth coverage on the concepts, principles, and mechanisms in network security and secure distributed systems. The topics that will be covered include: network security primitives, risks and vulnerabilities, authentication, key management, network attacks and defense, secure communication protocols, intrusion detection, exploit defenses, traffic monitoring and analysis, and privacy mechanisms. Prerequisite: EECS 765 and EECS 563 or EECS 780, or the instructor’s approval. LEC.

EECS 869. Error Control Coding. 3 Hours.
A study of communication channels and the coding problem. An introduction to finite fields and linear block codes such as cyclic, Hamming, Golay, BCH, and Reed-Solomon. Convolutional codes and the Viterbi algorithm are also covered. Other topics include trellis coded modulation, iterative (turbo) codes, LDPC codes. Prerequisite: EECS: 562 or equivalent. LEC.

EECS 876. Advanced Topics in Functional Languages. 3 Hours.
Topics may include: type classes; concurrency and STMs; the IO and ST monads; template Haskell and quasi-quoting; precise data structures; tools and testing support; generics; grammarware and parsing; operational Haskell; compiling functional languages; correctness by construction' GADTs and dependent types; Rank-2 polymorphism and Rank-n polymorphism. Prerequisite: EECS 776 or equivalent or consent of instructor. LEC.

EECS 881. High-Performance Networking. 3 Hours.
Comprehensive coverage of the discipline of high-bandwidth-low-latency networks and communication, including high bandwidth-x-delay products, with an emphasis on principles, architecture, protocols, and system design. Topics include high-performance network architecture, control, and signalling; high-speed wired, optical, and wireless links; fast packet, IP, and optical switching; IP lookup, classification, and scheduling; network processors, end system design and protocol optimization, network interfaces; storage networks; end-to-end protocols, mechanisms, and optimizations; and high-bandwidth low-latency applications. Principles will be illustrated with many leading-edge and emerging protocols and architectures. Prerequisite: EECS 563 or EECS 780, or permission of the instructor. LEC.

EECS 882. Mobile Wireless Networking. 3 Hours.
Comprehensive coverage of the disciplines of mobile and wireless networking, with an emphasis on architecture and protocols. Topics include cellular telephony, MAC algorithms, wireless PANs, LANs, MANs, and WANs; wireless and mobile Internet; mobile ad hoc networking; mobility management, sensor networks; satellite networks; and ubiquitous
The course provides an introduction to the mathematical theory and applications related to communication systems. Optimization problem formulation. Unconstrained and constrained minimization, including conditions for optimal points. Specific techniques for solving linear and nonlinear programming problems. Convergence of algorithms. LEC.

**EECS 888. Internet Routing Architectures. 3 Hours.**
A detailed study of routing in IP networks. Topics include evolution of the Internet architecture, IP services and network characteristics, an overview of routing protocols, the details of common interior routing protocols and interdomain routing protocols, and the relationship between routing protocols and the implementation of policy. Issues will be illustrated through laboratories based on common routing platforms. Prerequisite: EECS 745. LEC.

**EECS 891. Graduate Problems. 1-5 Hours.**
Directed studies of advanced phases of electrical engineering, computer engineering, computer science or information technology not covered in regular graduate courses, including advanced laboratory work, special research, or library reading. Prerequisite: Consent of instructor. RSH.

**EECS 899. Master’s Thesis or Report. 1-6 Hours.**
The University of Kansas
models, introduction to cryptography, authentication, intrusion detection, intrusion prevention (firewalls), operating systems security, database security, software security, host hardening, incident and disaster response. Prerequisite: Upper-level IT eligibility. LEC.

**IT 342. Information Security Management. 3 Hours.**
The objective of this course is to present topics related to the administration and management of information security. Topics to be covered include: security fundamentals, operational issues, cost-benefit analysis, asset management, security risk management, security policies and enforcement, risk avoidance, risk prevention, risk transfer, security services, security forensics, contingency planning, security auditing. A laboratory component will provide hands-on experience with security management and administration. Prerequisite: IT 340 and upper-level IT eligibility. LEC.

**IT 399. Directed Reading in IT. 1-4 Hours.**
Reading under the supervision of an instructor on a topic in Information Technology. The topic, expected outcome, evaluation criteria, and the number of credit hours must be mutually agreed on by the student and the instructor. Course may not be used to fulfill major elective requirements. Consent of the department required for enrollment. Prerequisite: Consent of instructor and upper-level IT eligibility. LEC.

**IT 410. Software Engineering and Management. 3 Hours.**
This course introduces the software development life cycle and key concepts related to software engineering. Topics include software process models, software project management, software requirements engineering, formal and informal modeling, software architecture, software design, coding and implementation, software testing and quality assurance, software deployment, and software evolution. Additional topics such as software metrics and measures, application domains, software engineering standards, and software configuration management will also be presented. This is a project-driven course. Prerequisite: Knowledge of programming (comparable to EECS 268), SAD 402, and MATH 365, and upper-level IT eligibility. LEC.

**IT 414. Database Design. 3 Hours.**
The objective of this course is to present key concepts related to database design and implementation. Topics to be discussed include: database architecture, relational data model, SQL, database design life cycle, conceptual data modeling, relational database normalization, query processing, transaction processing, database security, and database administration. This is a project-driven course. Prerequisite: IT 310, senior standing, and upper-level IT eligibility. LEC.

**IT 416. System Integration and Architecture. 3 Hours.**
This course introduces system integration and architecture. Key concepts to be presented include: system architecture, system requirements, organizational context, acquisition and sourcing, system and component integration, middleware platforms, design patterns, integrative coding, scripting coding, testing and quality assurance, system deployment. Prerequisite: IT 410. LEC.

**IT 420. Operating Systems. 3 Hours.**
This course introduces operating systems principles and associated key concepts. Topics to be discussed include: processes and threads, concurrency, scheduling and dispatch, memory management, processor management, device management, security and protection, file system, disk scheduling, real-time and embedded systems, fault tolerance, scripting, and an introduction to virtualization. Prerequisite: MATH 365, IT 320, and IT 342, and upper-level IT eligibility. LEC.

**IT 422. Computer Networks. 3 Hours.**
Foundations of computer networking with practical applications and network administration, with emphasis on the Internet and wireless public switched telephone network. Topics to be covered include routing and switching, routing algorithms, physical layer, data link layer, network layer, network security, network management, and application areas. Prerequisite: IT 320. LEC.

**IT 424. Network Security. 3 Hours.**
This course covers the fundamental concepts, principles, and mechanisms in network and distributed system security. The topics that will be covered include: network security primitives, distributed authentication, key management, secure communication protocols, firewalls, intrusion detection, traffic monitoring and analysis, email and Web security, etc. Prerequisite: IT 340, IT 422, and senior standing. LEC.

**IT 430. Human-Computer Interaction. 3 Hours.**
This course introduces principles of human-computer interaction. Important topics to be presented include: human factors, human-centered design and evaluation, graphical user interfaces, multimedia system integration, interactive systems development, computer-supported cooperative work, human cognitive skills, accessibility, alternative input/output media, and emerging technologies. Prerequisite: Consent of the instructor. LEC.

**IT 450. Social and Professional Issues. 3 Hours.**
This course will provide an overview of the history of computing and presents key concepts related to the social and professional aspects of IT. Topics to be covered include: pervasive themes in IT, social context of computing, intellectual property, legal issues in computing, professional and ethical issues and responsibilities, privacy and civil liberties. Prerequisite: Consent of the instructor. LEC.

**IT 452. Special Topics in IT: ____. 3 Hours.**
This course introduces a special topic of current interest in information technology, offered as the need arises. May be repeated for additional credit. Prerequisite: Upper-level IT eligibility and consent of instructor. LEC.

**IT 490. IT Capstone I. 3 Hours.**
Capstone is a senior level course designed to allow a student to review, analyze, integrate, and apply technical knowledge in a meaningful and practical manner. The student will be expected to complete an approved academic project in IT that may be in collaboration with an industrial partner. Prerequisite: Senior standing. LEC.

**IT 492. IT Capstone II. 3 Hours.**
IT Capstone II is a continuation of IT Capstone, is a senior level course designed to allow a student to review, analyze, integrate, and apply technical knowledge in a meaningful and practical manner. The student will be expected to complete an approved academic project in IT that may be in collaboration with an industrial partner. Prerequisite: Senior standing. LEC.

**Bachelor of Science in Electrical Engineering**

**B.S. in Electrical Engineering Program**

**Educational Objectives**

Graduates who have earned the bachelor’s degree in electrical engineering, within a few years following graduation, will have demonstrated technical proficiency, collaborative activities, and professional development.
Technical Proficiency
Graduates will have achieved success and visibility in their chosen careers as shown by technical accomplishments in industry, government, entrepreneurial activities, or academia.

Collaborative Activities
Graduates will have exercised shared responsibilities through activities such as contributions to multiperson or multidisciplinary technical projects, participation in professional society/organization functions, or performing collaborative research. In all such cases, graduates will have contributed to documentation of the collaborative activities.

Professional Development
Graduates will have demonstrated continual updating to extend their expertise and adapt to a changing environment through graduate studies; short courses, conferences, and seminars; or professional self-study. In addition, graduates will have demonstrated evidence of increasing technical and/or managerial impact.

Careers
Professional Opportunities
Electrical engineers may work in circuit design, electronic devices, electrical and optical communications, control and automation, electromagnetics, instrumentation, energy and power, or signal processing. Electrical engineers may work in telecommunications, consumer electronics, or public utility companies; government agencies; and defense-related or consulting firms.

Undergraduate Admission to the School of Engineering

First-year undergraduate students may be admitted, but all admissions, both in-state and out-of-state, are selective. Visit the Office of Admissions (http://admissions.ku.edu/whyku/index.shtml) for admission requirements. Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Applications are judged on several factors, including but not limited to high school record, scores on national tests, academic record at college or university level, and trend of grades. High school transcripts and ACT scores are required. Equivalent SAT scores may be substituted.

Minimum Academic Standards for Admission
To be considered for admission to the School of Engineering, beginning first-year students must meet or exceed the following minimum standards:

- 3.0 grade-point average on a 4.0 scale on the Kansas Board of Regents Qualified Admissions (http://admissions.ku.edu/apply/regents_curriculum.shtml) college-preparatory curriculum.
- Top 50 percent of the graduating class of an accredited high school or the equivalent.
- Mathematics ACT score of 22 (or mathematics SAT score of 540). Some engineering degree programs may require a higher mathematics ACT score.

These minimum admission standards apply to all departments. Meeting minimum requirements does not guarantee admission.

Transfer Admission Standards
Applications from all transfer students, whether from other institutions or from other KU units, are evaluated on a case-by-case basis. In general, students with grade-point averages under 2.5 are not considered. Students must submit mathematics ACT or SAT scores or proof of competence in calculus (grade of C or higher). No upper-level engineering credits from non-ABET-accredited engineering programs are acceptable as transfer credit for engineering programs. Admission is selective, and meeting the minimum requirements does not guarantee admission.

Bachelor of Science in Electrical Engineering Degree Requirements

The KU Core
This is the university-wide curriculum that all incoming undergraduate students will complete as part of their degree requirements. It comprises three general education goals and three advanced education goals. Associated with each goal is one or more learning outcomes:

- GE 1.1, Goal 1/Outcome 1, Critical Thinking;
- GE 1.2, Goal 1/Outcome 2, Quantitative Literacy;
- GE 2.1, Goal 2/Outcome 1, Written Communication (2 units);
- GE 2.2, Goal 2/Outcome 2, Oral Communication;
- GE 3H, Goal 3/Outcome 1, Arts & Humanities;
- GE 3N Goal 3/Outcome 2, Natural Sciences;
- GE 3S Goal 3/Outcome 3, Social Sciences;
- AE 4.1, Goal 4/Outcome 1, Diversity;
- AE 4.2 Goal 4/Outcome 2, Culture;
- AE 5.1/5.2, Goal 5/Outcome 1/2, Social Responsibility & Ethics (course and/or practice);
- AE 6.1/6.2, Goal 6/Outcome 1/2, Integration & Creativity.

Details of the KU Core can be found at kucore.ku.edu. Some required courses in the EECS curricula satisfy a KU Core goal and/or outcome. For these courses, the goal/outcome code is given in parentheses after the course on the pages below. Where required courses do NOT specifically satisfy KU Core goals (Goals 2, 3, and 4) students must choose from a list of several means to satisfy the required goals.

A total of 130 credit hours \(^1\) is required for the B.S. degree in electrical engineering, as follows:

**Electrical Engineering (64)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 101</td>
<td>New Student Seminar (Part of KU Core AE 5.1)</td>
<td>1</td>
</tr>
<tr>
<td>EECS 140</td>
<td>Introduction to Digital Logic Design</td>
<td>4</td>
</tr>
<tr>
<td>EECS 168</td>
<td>Programming</td>
<td>4</td>
</tr>
<tr>
<td>EECS 211</td>
<td>Circuits I</td>
<td>3</td>
</tr>
<tr>
<td>EECS 212</td>
<td>Circuits II</td>
<td>4</td>
</tr>
<tr>
<td>EECS 312</td>
<td>Electronic Circuits I</td>
<td>3</td>
</tr>
<tr>
<td>EECS 360</td>
<td>Signal and System Analysis</td>
<td>4</td>
</tr>
<tr>
<td>EECS 388</td>
<td>Embedded Systems</td>
<td>4</td>
</tr>
<tr>
<td>EECS 412</td>
<td>Electronic Circuits II</td>
<td>4</td>
</tr>
<tr>
<td>EECS 420</td>
<td>Electromagnetics II</td>
<td>4</td>
</tr>
<tr>
<td>EECS 443</td>
<td>Digital Systems Design</td>
<td>4</td>
</tr>
<tr>
<td>EECS 444</td>
<td>Control Systems</td>
<td>3</td>
</tr>
<tr>
<td>EECS 470</td>
<td>Electronic Devices and Properties of Materials</td>
<td>3</td>
</tr>
</tbody>
</table>
## Bachelor of Science in Electrical Engineering

### EECS 501
Senior Design Laboratory I (Part of KU Core AE 5.1) 3

### EECS 502
Senior Design Laboratory II (KU Core AE 6.1) 3

### EECS 562
Introduction to Communication Systems 4

**Senior electives** (Any EECS course numbered 400 or above excluding EECS 498 and EECS 692. Only one of EECS 643 and EECS 645 may be used to satisfy EE degree requirements. Under unusual circumstances other courses can be considered but only with an accompanying petition.) 9

**Mathematics (20)**

- MATH 125  Calculus I (KU Core GE 1.2) 4
- MATH 126  Calculus II 4
- MATH 127  Calculus III 4
- MATH 220  Applied Differential Equations 3
- MATH 290  Elementary Linear Algebra 2
- EECS 461  Probability and Statistics 3

**Basic Science (16)**

- CHEM 130  General Chemistry I 5
- or CHEM 150  Chemistry for Engineers 5
- CHEM 221  General Chemistry II 5
- PHSX 211  General Physics I for Engineers 3
- PHSX 313  General Physics III (KU Core GE 3N) 3
- EECS 221  Electromagnetics I 3
- PHSX 316  Intermediate Physics Laboratory I 1

**Professional Electives (6)**

- EECS: Any course except EECS 128, EECS 137, EECS 138, EECS 315, EECS 316, EECS 317, EECS 318, EECS 498 and 692. Only one of EECS 643 or EECS 645 may be used.
- Engineering: Any course from any engineering department numbered 200 or above, except AE211, ENGR 300, ENGR 490, ENGR 504, ME 208, ME 228, and CE 390.
- Natural science: Any course designated GE3N, except PHSX 111, PHSX 112, PHSX 114, PHSX 115, PHSX 212, PHSX 236, and CHEM 110.
- Mathematics: Any MATH course numbered 500 or above, except MATH 701.
- Business: Any course from the School of Business that applies toward a business major or minor except for statistics and computing.

**ROTC Courses:** Up to 6 hours of ROTC may be petitioned to count toward the professional elective requirement.

**Communications (9)**

- Satisfy KU Core GE 2.1 1 6
- Satisfy KU Core GE 2.2 1 3

**Arts/Humanities/Social Science (9)**

- Economics elective: 3
  - Select one of the following:
    - ECON 142  Principles of Microeconomics (KU Core GE 3S, preferred) 3
    - ECON 144  Principles of Macroeconomics (KU Core GE 3S) 3
  - Satisfy KU Core GE 3H Arts & Humanities 1 3

**Additional Arts, Humanities, and Social Sciences (from KU Core GE 3H or GE 3S lists)**

**Satisfy KU Core GE 4.1 and AE 4.2 (6) 1** 6

1. Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu). Hours listed are assuming the goals are satisfied with course work.

### Course Prerequisites and Corequisites

- Students must pass (at the appropriate grade level) all prerequisite courses for a given course before taking the subsequent course. If Course A is a Corequisite for Course B, Course A must be taken in the same semester as Course B or be completed prior to taking Course B.

### Upper Level Eligibility

- In addition to prerequisites and co-requisites, EECS undergraduates are required to earn **Upper Level Course Eligibility** by attaining grades of C or better in each of the following 15 courses:
  - GE 21 (both)
  - PHSX 210 & 216
  - MATH 125, 126, 127, 220, 290
  - EECS 101, 140, 168, 211, 212, 221
  - CHEM 130 or 150

- If students earn less than a C in any of the above listed courses, they must repeat the course at the next available opportunity and must not take a course for which that course is a prerequisite. It is the students’ responsibility to contact their advisors before beginning the new semester regarding any required repetitions and the associated enrollment adjustments (drops and adds).

- To enroll in any upper-level EECS course (numbered 300 and above), students must have fulfilled the **Upper Level Eligibility Requirements** detailed above. Exceptions: EECS 312, EECS 360, EECS 368 and EECS 388 may be taken in the same semester as students are completing their upper level eligibility. Students may also petition for a **Partial Waiver of Upper Level Eligibility Requirements** by completing the appropriate petition, found in the EECS office or at www.eecs.ku.edu.

### Double Major

- If students wish to double-major (earn two degrees), they must fulfill all the requirements for the degrees in question. They must also consult the Engineering Dean’s office and the department and/or school of the second major to find out if there are any additional requirements. If they wish to obtain two degrees offered by the EECS department, the following rule applies: a course that is required for one EECS degree program may not be used to satisfy a Senior Elective or General Elective requirement of another EECS degree program.

### Electrical Engineering 4-Year Graduation Plan

**Freshman**

<table>
<thead>
<tr>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 101 (Part of KU Core AE 5.1)</td>
<td>1 EECS 168 or 140</td>
</tr>
</tbody>
</table>

4
Bachelor of Science in Computer Engineering

B.S. in Computer Engineering Program

Educational Objectives

Graduates who have earned the bachelor’s degree in computer engineering, within a few years following graduation, will have demonstrated technical proficiency, collaborative activities, and professional development.

Technical Proficiency

Graduates will have achieved success and visibility in their chosen careers as shown by technical accomplishments in industry, government, entrepreneurial activities, or academia.

Collaborative Activities

Graduates will have exercised shared responsibilities through activities such as contributions to multiperson or multidisciplinary technical projects, participation in professional society/organization functions, or performing collaborative research. In all such cases, graduates will have contributed to documentation of the collaborative activities.

Professional Development

Graduates will have demonstrated continual updating to extend their expertise and adapt to a changing environment through graduate studies; short courses, conferences, and seminars; or professional self-study. In addition, graduates will have demonstrated evidence of increasing technical and/or managerial impact.

Careers

Professional Opportunities

Computer engineers may work in computer elements and architectures, very large-scale integrated circuits for data processing and storage, embedded and real-time computer systems, or computer networking. Computer engineers may work in the computer industry, telecommunications, government and defense, software companies or consulting firms.

Undergraduate Admission to the School of Engineering

First-year undergraduate students may be admitted, but all admissions, both in-state and out-of-state, are selective. Visit the Office of Admissions (http://admissions.ku.edu/whyku/index.shtml) for admission requirements. Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Applications are judged on several factors, including but not limited to high school record, scores on national tests, academic record at college or university level, and trend of grades. High school transcripts and ACT scores are required. Equivalent SAT scores may be substituted.

Minimum Academic Standards for Admission

To be considered for admission to the School of Engineering, beginning first-year students must meet or exceed the following minimum standards:
• 3.0 grade-point average on a 4.0 scale on the Kansas Board of Regents Qualified Admissions (http://admissions.ku.edu/apply/ regents_curriculum.shtml) college-preparatory curriculum.
• Top 50 percent of the graduating class of an accredited high school or the equivalent.
• Mathematics ACT score of 22 (or mathematics SAT score of 540). Some engineering degree programs may require a higher mathematics ACT score.

These minimum admission standards apply to all departments. Meeting minimum requirements does not guarantee admission.

Transfer Admission Standards
Applications from all transfer students, whether from other institutions or from other KU units, are evaluated on a case-by-case basis. In general, students with grade-point averages under 2.5 are not considered. Students must submit mathematics ACT or SAT scores or proof of competence in calculus (grade of C or higher). No upper-level engineering credits from non-ABET-accredited engineering programs are acceptable as transfer credit for engineering programs. Admission is selective, and meeting the minimum requirements does not guarantee admission.

Bachelor of Science in Computer Engineering Degree Requirements

The KU Core
This is the university-wide curriculum that all incoming undergraduate students will complete as part of their degree requirements. It comprises three general education goals and three advanced education goals. Associated with each goal is one or more learning outcomes:

- GE 1.1, Goal 1/Outcome 1, Critical Thinking;
- GE 1.2, Goal 1/Outcome 2, Quantitative Literacy;
- GE 2.1, Goal 2/Outcome 1, Written Communication (2 units);
- GE 2.2, Goal 2/Outcome 2, Oral Communication;
- GE 3H, Goal 3/Outcome 1, Arts & Humanities;
- GE 3N Goal 3/Outcome 2, Natural Sciences;
- GE 3S Goal 3/Outcome 3, Social Sciences;
- AE 4.1, Goal 4/Outcome 1, Diversity;
- AE 4.2 Goal 4/Outcome 2, Culture;
- AE 5.1/5.2, Goal 5/Outcome 1/2, Social Responsibility & Ethics (course and/or practice);
- AE 6.1/6.2, Goal 6/Outcome 1/2, Integration & Creativity.

Details of the KU Core can be found at kucore.ku.edu. Some required courses in the EECS curricula satisfy a KU Core goal and/or outcome. For these courses, the goal/outcome code is given in parentheses after the course on the pages below. Where required courses do NOT specifically satisfy KU Core goals (Goals 2, 3, and 4) students must choose from a list of several means to satisfy the required goals.

A total of 129 credit hours is required for the B.S. degree in computer engineering, as follows:

### Computer Engineering (67)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EECS 101</td>
<td>New Student Seminar (Part of KU Core AE 5.1)</td>
<td>1</td>
</tr>
<tr>
<td>EECS 140</td>
<td>Introduction to Digital Logic Design</td>
<td>4</td>
</tr>
<tr>
<td>EECS 168</td>
<td>Programming I</td>
<td>4</td>
</tr>
<tr>
<td>EECS 211</td>
<td>Circuits I</td>
<td>3</td>
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### Mathematics (24)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 125</td>
<td>Calculus I (KU Core GE 1.2)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 126</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 127</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Applied Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 290</td>
<td>Elementary Linear Algebra</td>
<td>2</td>
</tr>
<tr>
<td>EECS 210</td>
<td>Discrete Structures</td>
<td>4</td>
</tr>
<tr>
<td>EECS 461</td>
<td>Probability and Statistics</td>
<td>3</td>
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</table>

### Basic Science (11)

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 210</td>
<td>General Physics I for Engineers (KU Core GE 1.1)</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 216</td>
<td>General Physics I Laboratory (Part of AE51)</td>
<td>1</td>
</tr>
<tr>
<td>EECS 221</td>
<td>Electromagnetics I</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 313</td>
<td>General Physics III (KU Core GE 3N)</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 316</td>
<td>Intermediate Physics Laboratory I</td>
<td>1</td>
</tr>
</tbody>
</table>

### Professional Elective (3)

To be taken from the following list of approved technical, scientific, and professional courses:

- EECS: Any course except EECS 128, EECS 137, EECS 138, EECS 315, EECS 316, EECS 317, EECS 318, EECS 498, EECS 645, and EECS 692.

### Engineering

- Any course from any engineering department numbered 200 or above, except AE 222, ENGR 300, ENGR 490, ENGR 504, ME 208, ME 228, and any computing courses.

### Natural science

- Any course designated GE3N, except PHSX 111, PHSX 112, PHSX 114, PHSX 115, PHSX 212, PHSX 236, and CHEM 110 if CHEM 130 or CHEM 150 has already been taken or will be taken.

### Mathematics

- Any MATH course numbered 500 or above, except MATH 701.

### Business

- Any course from the School of Business that applies toward a business major or minor except for statistics and computing.

### ROTC Courses:

- Up to 6 hours of ROTC may be petitioned to count toward the professional elective requirement.

### Communications (9)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfy KU Core GE 2.1</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>
Satisfy KU Core GE 2.2  
Arts/Humanities/Social Science (9)
Economics elective. Select one of the following:
- ECON 142 Principles of Microeconomics (KU Core GE 3S, preferred)
- ECON 144 Principles of Macroeconomics (KU Core GE 3S)
Satisfy KU Core GE 3H  
Additional Arts, Humanities, and Social Sciences (from KU Core GE 3H or GE 3S lists)
Satisfy KU Core AE 4.1 and AE 4.2 (6)  

1 **Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu).** Hours listed are assuming the goals are satisfied with course work.

**Course Prerequisites and Corequisites**
Students must pass (at the appropriate grade level) all prerequisite courses for a given course before taking the subsequent course. If Course A is a Corequisite for Course B, Course A must be taken in the same semester as Course B or be completed prior to taking Course B.

**Upper Level Eligibility**
In addition to prerequisites and co-requisites, EECS undergraduates are required to earn **Upper Level Course Eligibility** by attaining grades of C or better in each of the following 16 courses:
- KU Core GE 2.1 (both)
- PHSX 210 & 216
- MATH 125, 126, 127, 220, 290
- EECS 101, 140, 168, 210, 211, 221, 268

If students earn less than a C in any of the above listed courses, they must repeat the course at the next available opportunity and must **not** take a course for which that course is a prerequisite. It is the students’ responsibility to contact their advisors before beginning the new semester regarding any required repetitions and the associated enrollment adjustments (drops and adds).

To enroll in any upper-level EECS course (numbered 300 and above), students must have fulfilled the **Upper Level Eligibility Requirements** detailed above. Exceptions: EECS 312, EECS 360, EECS 368 and EECS 388 may be taken in the same semester as students are completing their upper level eligibility. Students may also petition for a **Partial Waiver of Upper Level Eligibility Requirements** by completing the appropriate petition, found in the EECS office or at www.eecs.ku.edu.

**Double Major**
If students wish to double-major (earn two degrees), they must fulfill all the requirements for the degrees in question. They must also consult the Engineering Dean’s office and the department and/or school of the second major to find out if there are any additional requirements. If they wish to obtain two degrees offered by the EECS department, the following rule applies: a course that is required for one EECS degree program may not be used to satisfy a Senior Elective or General Elective requirement of another EECS degree program.

---

**Computer Engineering 4-Year Graduation Plan**

**Freshman**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 101 (Part of KU Core AE 5.1)</td>
<td>1 KU Core GE 2.1 (second)</td>
<td>3</td>
</tr>
<tr>
<td>KU Core GE 2.1 (first)</td>
<td>3 MATH 126</td>
<td>4</td>
</tr>
<tr>
<td>MATH 125 (KU Core GE 1.2)</td>
<td>4 PHSX 210 (KU Core GE 1.1)</td>
<td>3</td>
</tr>
<tr>
<td>EECS 140 or 168</td>
<td>4 PHSX 216 (Part of KU Core AE 5.1)</td>
<td>1</td>
</tr>
<tr>
<td>ECON 142 or 144</td>
<td>3 EECS 168 or 140</td>
<td>4</td>
</tr>
</tbody>
</table>

**Sophomore**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 211</td>
<td>3 EECS 210</td>
<td>4</td>
</tr>
<tr>
<td>EECS 268</td>
<td>4 EECS 212</td>
<td>4</td>
</tr>
<tr>
<td>MATH 127</td>
<td>4 EECS 221</td>
<td>3</td>
</tr>
<tr>
<td>MATH 220</td>
<td>3 KU Core GE 2.2</td>
<td>3</td>
</tr>
<tr>
<td>MATH 290</td>
<td>2 KU Core GE 3H</td>
<td>3</td>
</tr>
</tbody>
</table>

**Junior**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 312</td>
<td>3 EECS 360</td>
<td>4</td>
</tr>
<tr>
<td>EECS 368</td>
<td>3 EECS 443</td>
<td>4</td>
</tr>
<tr>
<td>EECS 388</td>
<td>4 EECS 461</td>
<td>3</td>
</tr>
<tr>
<td>EECS 448</td>
<td>4 KU Core AE 4.1</td>
<td>3</td>
</tr>
<tr>
<td>Additional Arts/Humanities/Social Science (from KU Core GE 3H or GE 3S lists)</td>
<td>3 Professional elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Senior**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 541 (Part of KU Core AE 5.1)</td>
<td>3 EECS 542 (KU Core AE 6.1)</td>
<td>3</td>
</tr>
<tr>
<td>EECS 563</td>
<td>3 EECS 678</td>
<td>4</td>
</tr>
<tr>
<td>EECS 643</td>
<td>3 Senior elective 2</td>
<td>3</td>
</tr>
<tr>
<td>Senior elective 1</td>
<td>3 Senior elective 3</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 313 &amp; PHSX 316 (KU Core GE 3N)</td>
<td>4 KU Core AE 4.2</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours: 129**

1 **Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu).** Hours listed are assuming the goals are satisfied with course work.

**Departmental Honors**
An undergraduate student may graduate with departmental honors in electrical engineering, computer engineering, computer science, or interdisciplinary computing by graduating with a minimum grade-point average requirement while maintaining full-time status. In addition,
students must enroll in EECS 498 Honors Research for their last 2 semesters and must complete an independent research project paper and oral presentation to a panel of 3 judges. See the EECS Undergraduate Handbook for full details.

**Bachelor of Science in Computer Science**

**B.S. in Computer Science Program**

**Educational Objectives**

Graduates who have earned the bachelor’s degree in computer science, within a few years following graduation, will have demonstrated technical proficiency, collaborative activities, and professional development.

**Technical Proficiency**

Graduates will have achieved success and visibility in their chosen careers as shown by technical accomplishments in industry, government, entrepreneurial activities, or academia.

**Collaborative Activities**

Graduates will have exercised shared responsibilities through activities such as contributions to multiperson or multidisciplinary technical projects, participation in professional society/organization functions, or performing collaborative research. In all such cases, graduates will have contributed to documentation of the collaborative activities.

**Professional Development**

Graduates will have demonstrated continual updating to extend their expertise and adapt to a changing environment through graduate studies; short courses, conferences, and seminars; or professional self-study. In addition, graduates will have demonstrated evidence of increasing technical and/or managerial impact.

**Careers**

**Professional Opportunities**

Computer scientists may pursue the design, analysis, and implementation of computer algorithms; study the theory of programming methods and languages; or design and develop software systems. They also may work in artificial intelligence, database systems, parallel and distributed computation, human-computer interaction, computer graphics, operating systems, or computer systems analysis and administration. Computer scientists may work for software companies, government and defense, telecommunications, or consulting firms.

**Undergraduate Admission to the School of Engineering**

First-year undergraduate students may be admitted, but all admissions, both in-state and out-of-state, are selective. Visit the Office of Admissions (http://admissions.ku.edu/whyku/index.shtml) for admission requirements. Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Applications are judged on several factors, including but not limited to high school record, scores on national tests, academic record at college or university level, and trend of grades. High school transcripts and ACT scores are required. Equivalent SAT scores may be substituted.

**Minimum Academic Standards for Admission**

To be considered for admission to the School of Engineering, beginning first-year students must meet or exceed the following minimum standards:

- 3.0 grade-point average on a 4.0 scale on the Kansas Board of Regents Qualified Admissions (http://admissions.ku.edu/apply/regents_curriculum.shtml) college-preparatory curriculum.
- Top 50 percent of the graduating class of an accredited high school or the equivalent.
- Mathematics ACT score of 22 (or mathematics SAT score of 540). Some engineering degree programs may require a higher mathematics ACT score.

These minimum admission standards apply to all departments. Meeting minimum requirements does not guarantee admission.

**Transfer Admission Standards**

Applications from all transfer students, whether from other institutions or from other KU units, are evaluated on a case-by-case basis. In general, students with grade-point averages under 2.5 are not considered. Students must submit mathematics ACT or SAT scores or proof of competence in calculus (grade of C or higher). No upper-level engineering credits from non-ABET-accredited engineering programs are acceptable as transfer credit for engineering programs. Admission is selective, and meeting the minimum requirements does not guarantee admission.

**Bachelor of Science in Computer Science Degree Requirements**

**The KU Core**

This is the university-wide curriculum that all incoming undergraduate students will complete as part of their degree requirements. It comprises three general education goals and three advanced education goals. Associated with each goal are one or more learning outcomes:

- GE 1.1, Goal 1/Outcome 1, Critical Thinking;
- GE 1.2, Goal 1/Outcome 2, Quantitative Literacy;
- GE 2.1, Goal 2/Outcome 1, Written Communication (2 units);
- GE 2.2, Goal 2/Outcome 2, Oral Communication;
- GE 3H, Goal 3/Outcome 1, Arts & Humanities;
- GE 3N Goal 3/Outcome 2, Natural Sciences;
- GE 3S Goal 3/Outcome 3, Social Sciences;
- AE 4.1, Goal 4/Outcome 1, Diversity;
- AE 4.2 Goal 4/Outcome 2, Culture;
- AE 5.1/5.2, Goal 5/Outcome 1/2, Social Responsibility & Ethics (course and/or practice);
- AE 6.1/6.2, Goal 6/Outcome 1/2, Integration & Creativity.

Details of the KU Core can be found at kucore.ku.edu. Some required courses in the EECS curricula satisfy a KU Core goal and/or outcome. For these courses, the goal/outcome code is given in parentheses after the course on the pages below. Where required courses do NOT specifically satisfy KU Core goals (Goals 2, 3, and 4) students must choose from a list of several means to satisfy the required goals.

A total of 128 credit hours\(^1\) is required for the B.S. degree in computer science, as follows:
Select one of the following Natural science electives:

- PHSX 236
- PHSX 216
- PHSX 210
- Basic Science (11)
  - EECS 210
  - MATH 526
  - MATH 126
  - MATH 127
  - MATH 125
- Mathematics (21)
  - EECS 581
  - EECS 582
  - EECS 645
  - EECS 662
  - EECS 665
  - EECS 678

Select 12 credits of the following Senior electives. Under unusual circumstances, other courses can be considered but only with an accompanying petition.

- EECS 563
- EECS 565
- EECS 638
- EECS 647
- EECS 648
- EECS 649
- EECS 672
- EECS 690
- Any EECS course numbered 700 or above

Mathematics (21)

- MATH 125
- MATH 126
- MATH 127
- MATH 290
- MATH 526
- EECS 210

Basic Science (11)

- PHSX 210
- PHSX 216
- PHSX 212
- PHSX 236

Select one of the following Natural science electives:

- ASTR 391
- BIOL 150
- BIOL 152
- CHEM 130
- CHEM 135
- CHEM 150
- GEOG 104
- GEOG 105

GEOG 304
GEOL 101

Professional Elective (3)

To be taken from the following list of approved technical, scientific, and professional courses:

- EECS: Any course except EECS 128, EECS 137, EECS 138, EECS 315, EECS 316, EECS 317, EECS 318, EECS 461, EECS 498, EECS 643, and EECS 692.
- Engineering: Any course from any engineering department numbered 200 or above, except AE 211, ENGR 300, ENGR 490, ENGR 504, ME 208, ME 228, and any computing courses.
- Natural science: Any course designated GE3N, except PHSX 111, PHSX 112, PHSX 114, PHSX 115, and CHEM 110 if CHEM 130 or CHEM 150 has already been taken or will be taken.
- Mathematics: Any MATH course numbered 500 or above, except MATH 701.
- Business: Any course from the School of Business that applies toward a business major or minor except for statistics and computing.
- ROTC Courses: Up to 6 hours of ROTC may be petitioned to count toward the professional elective requirement.

Communications (9)

Satisfy KU Core GE 2.1
Satisfy KU Core GE 2.2

Arts/Humanities/Social Science (12)

Satisfy KU Core GE 3H
Satisfy KU Core GE 3S

Additional Arts/Humanities (from KU Core GE 3H list)
Additional Social Science (from KU Core GE 3S list)

Satisfy KU Core AE 4.1 and AE 4.2 (6)

1 Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu). Hours listed are assuming the goals are satisfied with course work.

Course Prerequisites and Corequisites

Students must pass (at the appropriate grade level) all prerequisite courses for a given course before taking the subsequent course. If Course A is a Corequisite for Course B, Course A must be taken in the same semester as Course B or be completed prior to taking Course B.

Upper Level Eligibility

In addition to prerequisites and co-requisites, EECS undergraduates are required to earn Upper Level Course Eligibility by attaining grades of C or better in each of the following 15 courses:

- GE21 (both)
- PHSX 210 & 216, 212 & 236
- MATH 125, 126, 127, 290
- EECS 101, 140, 168, 210, 268

If students earn less than a C in any of the above listed courses, they must repeat the course at the next available opportunity and must not take a course for which that course is a prerequisite. It is the students’ responsibility to contact their advisors before beginning the new semester.
regarding any required repetitions and the associated enrollment adjustments (drops and adds).

To enroll in any upper level EECS course (numbered 300 and above), students must have fulfilled the Upper Level Eligibility Requirements detailed above. Exceptions: EECS 312, EECS 360, EECS 368 and EECS 388 may be taken in the same semester as students are completing their upper level eligibility. Students may also petition for a Partial Waiver of Upper Level Eligibility Requirements by completing the appropriate petition, found in the EECS office or at www.eecs.ku.edu.

Double Major

If students wish to double-major (earn two degrees), they must fulfill all the requirements for the degrees in question. They must also consult the Engineering Dean’s office and the department and/or school of the second major to find out if there are any additional requirements. If they wish to obtain two degrees offered by the EECS department, the following rule applies: a course that is required for one EECS degree program may not be used to satisfy a Senior Elective or General Elective requirement of another EECS degree program.

Computer Science 4-Year Graduation Plan

### Freshman

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 101 (Part of KU Core AE 5.1)</td>
<td>1 168 or 140</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>KU Core GE 2.1 (first)¹</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EECS 140 or 168</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 125 (KU Core GE 1.2)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>KU Core GE 3H¹</td>
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<td></td>
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</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>15</td>
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</table>

### Sophomore

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 268</td>
<td>4</td>
<td>210</td>
<td></td>
</tr>
<tr>
<td>MATH 127</td>
<td>4</td>
<td>368</td>
<td></td>
</tr>
<tr>
<td>MATH 290</td>
<td>2</td>
<td>388</td>
<td></td>
</tr>
<tr>
<td>PHSX 212 (KU Core GE 3N)</td>
<td>3</td>
<td>Natural science course</td>
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</tr>
<tr>
<td>PHSX 236</td>
<td>1</td>
<td>Additional Arts/Humanities (from KU Core GE 3H list)</td>
<td></td>
</tr>
<tr>
<td>KU Core GE 3S¹</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
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</tr>
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</table>

### Junior

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Notes</th>
</tr>
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<tbody>
<tr>
<td>EECS 448</td>
<td>4</td>
<td>560</td>
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<tr>
<td>EECS 510</td>
<td>3</td>
<td>678</td>
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<tr>
<td>EECS 645</td>
<td>3</td>
<td>526</td>
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<tr>
<td>KU Core GE 2.2¹</td>
<td>3</td>
<td>Professional elective</td>
<td></td>
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<tr>
<td>Additional Social Science (from KU Core GE 3S list)</td>
<td>3</td>
<td>KU Core AE 4.1¹</td>
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<tr>
<td>Total</td>
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### Senior

<table>
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<tr>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 581 (Part of KU Core AE 5.1)</td>
<td>3</td>
<td>582</td>
<td></td>
</tr>
<tr>
<td>EECS 662</td>
<td>3</td>
<td>660</td>
<td></td>
</tr>
<tr>
<td>EECS 665</td>
<td>4</td>
<td>Senior elective 3</td>
<td>3</td>
</tr>
<tr>
<td>Senior elective 1</td>
<td>3</td>
<td>Senior elective 4</td>
<td>3</td>
</tr>
<tr>
<td>Senior elective 2</td>
<td>3</td>
<td>KU Core AE 4.2¹</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours: 128

¹ Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu). Hours listed are assuming the goals are satisfied with course work.

Departmental Honors

An undergraduate student may graduate with departmental honors in electrical engineering, computer engineering, computer science, or interdisciplinary computing by graduating with a minimum grade-point average requirement while maintaining full-time status. In addition, students must enroll in EECS 498 Honors Research for their last 2 semesters and must complete an independent research project paper and oral presentation to a panel of 3 judges. See the EECS Undergraduate Handbook for full details.

Bachelor of Science in Information Technology

### Bachelor of Science in Information Technology Program

Graduates who have earned a bachelor’s degree in information technology will combine technical expertise with modern problem-solving and communication skills to plan, configure, implement, integrate, and maintain computing and information technology solutions for an organization’s computing infrastructure.

The undergraduate program in Information Technology is offered in its entirety only at the KU Edwards Campus, 12600 Quivira Rd., Overland Park, KS 66213. Students considering this degree option should contact the Information Technology advisor on the Edwards Campus, Sharla Cruse, bsit@ku.edu, 785-864-8623 (from Lawrence) or 913-897-8623 (outside Lawrence), for advising.

This program is funded by the Education and Research Triangle (http://edwardscampus.ku.edu/johnson-county-education-research-triangle) initiative.

### Careers

#### Professional Opportunities

Information technology (IT) professionals are needed in nearly every business sector. They may find careers in information security, software development, platform technologies, network and system administration, Web system development, and IT project management.
Undergraduate Admission to the B.S. in Information Technology Program

Applications to the B.S. in Information Technology program will generally be considered under the guidelines of the Transfer Admission Standards. In addition, to be considered for admission, students will need to complete the B.S. in Information Technology prerequisite course work listed below.

Transfer Admission Standards

Applications from all transfer students, whether from other institutions or from other KU units, are evaluated on a case-by-case basis. In general, students with grade-point averages under 2.5 are not considered. No upper-level engineering credits from non-ABET-accredited engineering programs are acceptable as transfer credit for engineering programs. Admission is selective, and meeting the minimum requirements does not guarantee admission.

First-year Students

First-year undergraduate students may be admitted, but all admissions, both in-state and out-of-state, are selective. Visit the Office of Admissions (http://admissions.ku.edu/whyku/index.shtml) for admission requirements. Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Applications are judged on several factors, including but not limited to high school record, scores on national tests, academic record at college or university level, and trend of grades. High school transcripts and ACT scores are required. Equivalent SAT scores may be substituted.

Minimum Academic Standards for Admission

To be considered for admission to the School of Engineering, beginning first-year students must meet or exceed the following minimum standards:

• 3.0 grade-point average on a 4.0 scale on the Kansas Board of Regents Qualified Admissions (http://admissions.ku.edu/apply/ regents_curriculum.shtml) college-preparatory curriculum.
• Top 50 percent of the graduating class of an accredited high school or the equivalent.
• Mathematics ACT score of 22 (or mathematics SAT score of 540). Some engineering degree programs may require a higher equivalent.

These minimum admission standards apply to all School of Engineering departments. Meeting minimum requirements does not guarantee admission.

B.S. in Information Technology Prerequisite Course Work

The successful completion of the following requirements is needed for admission into the B.S. in Information Technology program:

Satisfy GE21 (Typically completed with ENGL 101 and ENGL 102.) 1 6
Satisfy GE22 (Typically completed with COMS 130.) 1 3
MATH 101 College Algebra 3
PHSX 114 College Physics I 4
Discrete Structures I 2 3
Discrete Structures II 2 3
BIOL 150 Principles of Molecular and Cellular Biology 4-5

or CHEM 130 General Chemistry I 4
Programming Fundamentals 2 4
EECS 168 Programming I 4
EECS 268 Programming II 4
UNIX Scripting and Utilities 3 3
Database Management 3 4
PSYC 104 General Psychology 3
ECON 104 Introductory Economics (or equivalent) 3-4
or ECON 142 Principles of Microeconomics
or ECON 144 Principles of Macroeconomics
ACCT 205 Survey of Accounting (or equivalent) 3-4
or ACCT 200 Fundamentals of Financial Accounting 3

1 Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu). Hours listed are assuming the goals are satisfied with course work.
2 This specific course is not offered at KU, however an equivalent course from KU may be substituted. Consult your advisor.
3 No equivalent course is offered at KU; it must be transferred from a different college or university. Consult your advisor.

Bachelor of Science in Information Technology Degree Requirements

The KU Core

This is the university-wide curriculum that all incoming undergraduate students will complete as part of their degree requirements. It comprises three general education goals and three advanced education goals. Associated with each goal is one or more learning outcomes:

• GE11, Goal 1/Outcome 1, Critical Thinking;
• GE12, Goal 1/Outcome 2, Quantitative Literacy;
• GE21, Goal 2/Outcome 1, Written Communication;
• GE22, Goal 2/Outcome 2, Oral Communication;
• GE3H, Goal 3/Outcome 1, Arts & Humanities;
• GE3N Goal 3/Outcome 2, Natural Sciences;
• GE3S Goal 3/Outcome 3, Social Sciences;
• AE41, Goal 4/Outcome 1, Diversity;
• AE42 Goal 4/Outcome 2 Culture;
• AE51, Goal 5/Outcome 1, Social Responsibility & Ethics (course);
• AE52, Goal 5/Outcome 2, Social Responsibility & Ethics (practice);
• AE61, Goal 6/Outcome 1/2, Integration & Creativity.

Details of the KU Core can be found at kucore.ku.edu. Some required courses in the IT curricula satisfy a KU Core goal and/or outcome. For these courses, the goal/outcome code is given in parentheses after the course on the pages below. Where required courses do NOT specifically satisfy KU Core goals (Goals 2, 3, and 4) students must choose from a list of several means to satisfy the required goals.

A minimum of 120 credit hours is required for the B.S. in Information Technology, as follows:

Information Technology (64)
Programming Fundamentals 2 4
EECS 168 Programming I 4
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 268</td>
<td>Programming II</td>
<td>4</td>
</tr>
<tr>
<td>UNIX Scripting and Utilities</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Database Management</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>IT 310</td>
<td>Computer Organization and Platform Technologies</td>
<td>3</td>
</tr>
<tr>
<td>IT 320</td>
<td>System and Network Administration</td>
<td>3</td>
</tr>
<tr>
<td>IT 330</td>
<td>Web Systems and Technologies</td>
<td>3</td>
</tr>
<tr>
<td>IT 340</td>
<td>Computer and Information Security</td>
<td>3</td>
</tr>
<tr>
<td>IT 342</td>
<td>Information Security Management</td>
<td>3</td>
</tr>
<tr>
<td>IT 410</td>
<td>Software Engineering and Management</td>
<td>3</td>
</tr>
<tr>
<td>IT 416</td>
<td>System Integration and Architecture</td>
<td>3</td>
</tr>
<tr>
<td>IT 420</td>
<td>Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>IT 422</td>
<td>Computer Networks</td>
<td>3</td>
</tr>
<tr>
<td>IT 430</td>
<td>Human-Computer Interaction</td>
<td>3</td>
</tr>
<tr>
<td>IT 450</td>
<td>Social and Professional Issues</td>
<td>3</td>
</tr>
<tr>
<td>Senior IT elective 1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Senior IT elective 2</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>IT 490</td>
<td>IT Capstone I (AE61)</td>
<td>3</td>
</tr>
<tr>
<td>IT 492</td>
<td>IT Capstone II</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics (12)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra (GE12)</td>
<td>3</td>
</tr>
<tr>
<td>Discrete Structures I</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Discrete Structures II</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MATH 365</td>
<td>Elementary Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Basic Science (8-9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology (GE3N)</td>
<td>4-5</td>
</tr>
<tr>
<td>or CHEM 130</td>
<td>General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>PHSX 114</td>
<td>College Physics I</td>
<td>4</td>
</tr>
<tr>
<td>Business and Management (9-10)</td>
<td></td>
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</tr>
<tr>
<td>ACCT 205</td>
<td>Survey of Accounting (or equivalent)</td>
<td>3-4</td>
</tr>
<tr>
<td>or ACCT 200</td>
<td>Fundamentals of Financial Accounting</td>
<td></td>
</tr>
<tr>
<td>MGMT 305</td>
<td>Survey of Management and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>BBA 410</td>
<td>Project Management</td>
<td>3</td>
</tr>
<tr>
<td>Written and Oral Communication (12)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfy GE21 (Typically completed by ENGL 101 and ENGL 102.)</td>
<td>1</td>
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</tr>
<tr>
<td>ENGL 362</td>
<td>Foundations of Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>Satisfy GE22 (Typically completed by COMS 130.)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Social Science and Humanities (9-10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 104</td>
<td>Introductory Economics (or equivalent)</td>
<td>3-4</td>
</tr>
<tr>
<td>or ECON 142</td>
<td>Principles of Microeconomics</td>
<td></td>
</tr>
<tr>
<td>or ECON 144</td>
<td>Principles of Macroeconomics</td>
<td></td>
</tr>
<tr>
<td>PSYC 104</td>
<td>General Psychology (GE3S)</td>
<td>3</td>
</tr>
<tr>
<td>Satisfy GE3H</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Culture and Diversity (6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfy AE41</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Satisfy AE42</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

1. Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu). Hours listed are assuming the goals are satisfied with course work.
2. This specific course is not offered at KU, however an equivalent course from KU may be substituted. Consult your advisor.

3. No equivalent course is offered at KU; it must be transferred from a different college or university. Consult your advisor.
4. Two required courses in the IT curricula are currently under review to satisfy GE11 and AE51. Please check with an advisor for current information on completing these KU Core goals.

### Upper Level Eligibility

In addition to prerequisites and co-requisites, Information Technology undergraduates are required to earn **Upper Level Course Eligibility** by attaining grades of C or better in each of the following 8 courses:

- **GE 21** (both)
- PHSX 114
- MATH 101
- Discrete Structures I and II (EECS 210, MATH 450, or equivalent)
- EECS 168
- EECS 268

If students earn less than a C in any of the above listed courses, they must repeat the course at the next available opportunity and must **not** take a course for which that course is a prerequisite. It is the students' responsibility to contact their advisors before beginning the new semester regarding any required repetitions and the associated enrollment adjustments (drops and adds).

To enroll in any upper-level IT course (numbered 300 and above), students must have fulfilled the **Upper Level Eligibility Requirements** detailed above. Students may also petition for a **Partial Waiver of Upper Level Eligibility Requirements** by completing the appropriate petition; contact the BSIT advisor at bsit@ku.edu for more information.

### Information Technology 4-Year Graduation Plan

The undergraduate program in Information Technology is offered in its entirety only at the KU Edwards Campus in Overland Park, 12600 Quivira Rd., Overland Park, KS 66213. This program is designed for students who have earned an associate’s degree or equivalent hours and wish to complete the upper-level courses necessary for a bachelor’s degree. Students planning to attain the degree will need to transfer key credits from other academic institutions as not all required courses are available through KU.

### First and Second Year Preparation

The first two years of study for this degree program are typically completed at Johnson County Community College. Students considering this degree option should contact the Information Technology advisor on the KU Edwards Campus, Sharla Cruse, bsit@ku.edu, 864-8623 (from Lawrence) or 913-897-8623 (outside Lawrence), for advising on the first two years of study.

<table>
<thead>
<tr>
<th>Year 1 Semester 1</th>
<th>Hours Semester 2</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE21 (first)</td>
<td>GE21 (second)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101 (GE12)</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Programming</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Fundamentals</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note:  
- First and Second Year Preparation:
  - Satisfy GE21 and AE51. Please check with an advisor for current information on completing these KU Core goals.
  - Minimum of 15 credit hours are required each semester.
  - No credit is given for courses completed with grades below a C. Repeat courses as necessary.
  - If a course is repeated, the highest grade will be accepted.
  - Students are required to maintain a minimum GPA of 2.0 to progress through the program.
  - Students are encouraged to consult with an advisor to ensure timely completion of the degree requirements.

---

For full details, refer to the KU Core Goals and the KU Edwards Campus website.
ACCT 205 or 200 (or equivalent) 3-4 BIOL 150 or CHEM 130 (GE3N) 4-5
GE22\(^1\) 3

Year 2
Semester 1 | Hours | Semester 2 | Hours
--- | --- | --- | ---
Discrete Structures \(^2\) | 3 | EECS 268 | 4
PSYC 104 (GE3S) | 3 | AE41 or AE42\(^1\) | 3
Database Management\(^3\) | 4 | Discrete Structures \(^2\) | 3
ECON 104, 142, or 144 (or equivalent) | 3 | PHSX 114 | 4
UNIX Scripting and Utilities\(^3\) | 3 |

Total Hours: 16-17 14-15

Third and Fourth Year at the KU Edwards Campus in Overland Park

Year 3
Semester 1 | Hours | Semester 2 | Hours
--- | --- | --- | ---
ENGL 362 | 3 | AE41 or AE42\(^1\) | 3
IT 310 | 3 | IT 320 | 3
IT 340 | 3 | IT 330 | 3
MATH 365 | 3 | IT 342 | 3
MGMT 305 | 3 | BBA 410 | 3

Year 4
Semester 1 | Hours | Semester 2 | Hours
--- | --- | --- | ---
IT 410 | 3 | IT 416 | 3
IT 420 | 3 | IT 430 | 3
IT 422 | 3 | IT 450 | 3
Senior IT elective 1 | 3 | Senior IT elective 2 | 3
IT 490 | 3 | IT 492 | 3

Total Hours: 16-17 14

Bachelor of Science in Interdisciplinary Computing

B.S. in Interdisciplinary Computing Program

Educational Objectives

Graduates who have earned the bachelor’s degree in interdisciplinary computing, within a few years following graduation, will have demonstrated technical proficiency, collaborative activities, and professional development.

Technical Proficiency

Graduates will have achieved success and visibility in their chosen careers as shown by technical accomplishments in industry, government, entrepreneurial activities, or academia.

Collaborative Activities

Graduates will have exercised shared responsibilities through activities such as contributions to multiperson or multidisciplinary technical projects, participation in professional society/organization functions, or performing collaborative research. In all such cases, graduates will have contributed to documentation of the collaborative activities.

Professional Development

Graduates will have demonstrated continual updating to extend their expertise and adapt to a changing environment through graduate studies; short courses, conferences, and seminars; or professional self-study. In addition, graduates will have demonstrated evidence of increasing technical and/or managerial impact.

Undergraduate Admission to the School of Engineering

First-year undergraduate students may be admitted, but all admissions, both in-state and out-of-state, are selective. Visit the Office of Admissions (http://admissions.ku.edu/whyku/index.shtml) for admission requirements. Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Applications are judged on several factors, including but not limited to high school record, scores on national tests, academic record at college or university level, and trend of grades. High school transcripts and ACT scores are required. Equivalent SAT scores may be substituted.

Minimum Academic Standards for Admission

To be considered for admission to the School of Engineering, beginning first-year students must meet or exceed the following minimum standards:

- 3.0 grade-point average on a 4.0 scale on the Kansas Board of Regents Qualified Admissions (http://admissions.ku.edu/apply/regents_curriculum.shtml) college-preparatory curriculum.
- Top 50 percent of the graduating class of an accredited high school or the equivalent.
- Mathematics ACT score of 22 (or mathematics SAT score of 540). Some engineering degree programs may require a higher mathematics ACT score.

These minimum admission standards apply to all departments. Meeting minimum requirements does not guarantee admission.

Transfer Admission Standards

Applications from all transfer students, whether from other institutions or from other KU units, are evaluated on a case-by-case basis. In general, students with grade-point averages under 2.5 are not considered. Students must submit mathematics ACT or SAT scores or proof of competence in calculus (grade of C or higher). No upper-level engineering credits from non-ABET-accredited engineering programs are acceptable.
as transfer credit for engineering programs. Admission is selective, and meeting the minimum requirements does not guarantee admission.

**Bachelor of Science in Interdisciplinary Computing Degree Requirements**

Through the recently approved interdisciplinary computing major, students receive an enriched computer science experience, with a focus in one of 5 fields:

1. Astronomy,
2. Biology,
3. Chemistry,
4. Geography,
5. Journalism, or
6. Physics

**The KU Core**

This is the university-wide curriculum that all incoming undergraduate students will complete as part of their degree requirements. It comprises three general education goals and three advanced education goals. Associated with each goal is one or more learning outcomes:

- GE 1.1, Goal 1/Outcome 1, Critical Thinking;
- GE 1.2, Goal 1/Outcome 2, Quantitative Literacy;
- GE 2.1, Goal 2/Outcome 1, Written Communication (2 units);
- GE 2.2, Goal 2/Outcome 2, Oral Communication;
- GE 3H, Goal 3/Outcome 1, Arts & Humanities;
- GE 3N Goal 3/Outcome 2, Natural Sciences;
- GE 3S Goal 3 /Outcome 3, Social Sciences;
- AE 4.1, Goal 4/Outcome 1, Diversity;
- AE 4.2 Goal 4/Outcome 2, Culture;
- AE 5.1/5.2, Goal 5/Outcome 1/2, Social Responsibility & Ethics (course and/or practice);
- AE 6.1/6.2, Goal 6/Outcome 1/2, Integration & Creativity.

Details of the KU Core can be found at kucore.ku.edu. Some required courses in the EECS curricula satisfy a KU Core goal and/or outcome. For these courses, the goal/outcome code is given in parentheses after the course on the pages below. Where required courses do NOT specifically satisfy KU Core goals (Goals 2, 3, and 4) students must choose from a list of several means to satisfy the required goals.

A minimum of 125 to 128 credit hours is required for the B.S. degree in interdisciplinary computing, as follows:

**Core Courses**

**Computer Science (50)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 101</td>
<td>New Student Seminar (Part of KU Core AE 5.1)</td>
<td>1</td>
</tr>
<tr>
<td>EECS 140</td>
<td>Introduction to Digital Logic Design</td>
<td>4</td>
</tr>
<tr>
<td>EECS 168</td>
<td>Programming I</td>
<td>4</td>
</tr>
<tr>
<td>EECS 268</td>
<td>Programming II</td>
<td>4</td>
</tr>
<tr>
<td>EECS 368</td>
<td>Programming Language Paradigms</td>
<td>3</td>
</tr>
<tr>
<td>EECS 388</td>
<td>Embedded Systems</td>
<td>4</td>
</tr>
<tr>
<td>EECS 448</td>
<td>Software Engineering I</td>
<td>4</td>
</tr>
<tr>
<td>EECS 510</td>
<td>Introduction to the Theory of Computing</td>
<td>3</td>
</tr>
<tr>
<td>EECS 560</td>
<td>Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>EECS 581</td>
<td>Computer Science Design I (Part of KU Core AE 5.1)</td>
<td>3</td>
</tr>
<tr>
<td>EECS 582</td>
<td>Computer Science Design II (KU Core AE 6.1)</td>
<td>3</td>
</tr>
<tr>
<td>EECS 678</td>
<td>Introduction to Operating Systems</td>
<td>4</td>
</tr>
</tbody>
</table>

Select 9 credits of the following Senior electives: 9

- EECS 563 Introduction to Communication Networks
- EECS 565 Introduction to Information and Computer Security
- EECS 638 Fundamentals of Expert Systems
- EECS 645 Computer Architecture
- EECS 647 Introduction to Database Systems
- EECS 648 Software Engineering Tools
- EECS 649 Introduction to Artificial Intelligence
- EECS 660 Fundamentals of Computer Algorithms
- EECS 662 Programming Languages
- EECS 665 Compiler Construction
- EECS 672 Introduction to Computer Graphics
- EECS 690 Special Topics: _____

Any EECS course numbered 700 or above

**Mathematics (21)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 125</td>
<td>Calculus I (KU Core GE 1.2)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 126</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 127</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 290</td>
<td>Elementary Linear Algebra</td>
<td>2</td>
</tr>
<tr>
<td>MATH 526</td>
<td>Applied Mathematical Statistics I (KU Core GE 1.1 for BIOL focus only)</td>
<td>3</td>
</tr>
</tbody>
</table>

**EECS 210** Discrete Structures 4

**Communications (9)**

- Satisfy KU Core GE 2.1 1 6
- Satisfy KU Core GE 2.2 1 3

**Arts/Humanities/Social Science (6)**

- Satisfy KU Core GE 3H 1 3
- Satisfy KU Core GE 3S 1 3

**Satisfy KU Core AE 4.1 and AE 4.2 (6) 1 6**

1 Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu.). Hours listed are assuming the goals are satisfied with course work. EXCEPTIONS FOR IC JOURNALISM: GE 2.1-2 (second GE 2.1 course) is fulfilled by JOUR 304; GE 2.2 is fulfilled by JOUR 150; JOUR 101 MAY be chosen to fulfill GE 3S; AE 4.1 is fulfilled by JOUR 534.

**Astronomy Concentration**

In addition to the core courses above, students in the astronomy concentration take the following courses:

**Natural Science and Other Disciplines (34)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 220</td>
<td>Applied Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 210</td>
<td>General Physics I for Engineers (KU Core GE 1.1)</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 216</td>
<td>General Physics I Laboratory (Part of KU Core AE 5.1)</td>
<td>1</td>
</tr>
<tr>
<td>PHSX 212</td>
<td>General Physics II (KU Core GE 3N)</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 236</td>
<td>General Physics II Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>PHSX 313</td>
<td>General Physics III</td>
<td>3</td>
</tr>
</tbody>
</table>
PHSX 316 Intermediate Physics Laboratory I 1
ASTR 391 Physical Astronomy, Honors 3
ASTR 503 Undergraduate Research 2
ASTR 591 Stellar Astronomy 3
ASTR 592 Galactic and Extragalactic Astronomy 3
ASTR 596 Observational Astrophysics 2
Select one of the following Astronomy electives: 6
ASTR courses numbered 500 and above
MATH 581 Numerical Methods
MATH 611 Time Series Analysis
PHSX 615 Numerical and Computational Methods in Physics

Biology Concentration
In addition to the core courses above, students in the biology concentration take the following courses:

Natural Science and Other Disciplines (35)
BIOL 150 Principles of Molecular and Cellular Biology (KU Core GE 3N) 4
BIOL 152 Principles of Organismal Biology 4
BIOL 350 Principles of Genetics 4
BIOL 400 Fundamentals of Microbiology 3
or BIOL 435 Introduction to Neurobiology
BIOL 408 Physiology of Organisms 3
BIOL 412 Evolutionary Biology 4
Select one of the following Biology electives: 3
BIOL 413 History and Diversity of Organisms
BIOL 414 Principles of Ecology
BIOL 416 Cell Structure and Function
BIOL 417 Biology of Development
BIOL 428 Introduction to Systematics
CHEM 130 General Chemistry I 5
CHEM 135 General Chemistry II 5
Social Responsibility and Ethics (3) 3
PHIL 375/320/160

Chemistry Concentration
In addition to the core courses above, students in the chemistry concentration take the following courses:

Natural Science and Other Disciplines (35)
MATH 220 Applied Differential Equations 3
PHSX 210 General Physics I for Engineers 3
PHSX 216 General Physics I Laboratory (Part of KU Core AE 5.1) 1
PHSX 212 General Physics II (KU Core GE 3N) 3
PHSX 236 General Physics II Laboratory 1
CHEM 130 General Chemistry I 5
CHEM 135 General Chemistry II 5
CHEM 330 Organic Chemistry I 3
CHEM 530 Physical Chemistry I 3
CHEM 531 Physical Chemistry I Laboratory 2
CHEM 535 Physical Chemistry II 4
CHEM 698 Undergraduate Research Problems 2

Geography Concentration
In addition to the core courses above, students in the geography concentration take the following courses:

Natural Science and Other Disciplines (33)
PHSX 210 General Physics I for Engineers (KU Core GE 1.1) 3
PHSX 216 General Physics I Laboratory (Part of KU Core AE 5.1) 1
Geography basics (300 level and above courses in categories defined in the Undergraduate Study in Geography and Atmospheric Science Handbook as Physical Studies, Geographic Information Science, Human Studies, Regional Studies, and Atmospheric Science.)
GEOG 311 Map Conception and Development (KU Core GE 3N) 4
GEOG 358 Principles of Geographic Information Systems 4
GEOG 526 Remote Sensing of Environment I 4
GEOG 558 Intermediate Geographical Information Systems 4
Select 7 credits of the following Geography electives: 7
GEOG 513 Cartographic Design
GEOG 517 Data Handling and Map Symbolization
GEOG 560 GIS Application Programming
GEOG 726 Remote Sensing of Environment II
GEOG 758 Geographic Information Science

Journalism Concentration (27)
In addition to the core courses above, students in the journalism concentration take the following courses:

JOUR 150 Stand and Deliver (KU Core GE 2.2) 3
JOUR 300 Visual Storytelling 3
JOUR 302 Infomania: Information Management 3
JOUR 304 Media Writing (KU Core GE 2.1-2) 3
JOUR 534 Diversity in Media (KU Core AE 4.1) 3
JOUR 580 Environmental Journalism 3
JOUR 608 Ethics and Professional Practice (KU Core AE 5.1) 3
JOUR 618 First Amendment and Society 3
JOUR 690 Media Innovation-Advanced Media 3

Journalism Concentration-Emphasis 1: News/Information (12)
In addition to the core courses and journalism basics courses above, students in the news/information emphasis of the journalism concentration take the following courses:

JOUR 415 Multimedia Reporting 3
JOUR 419 Multimedia Editing 3
JOUR 500+ News/Info Elective 3
JOUR 621 Data Reporting and Visualization-Advanced Media 3
Journalism Concentration-Emphasis 2: Strategic Communication (12)

In addition to the core courses and journalism basics courses above, students in the strategic communication emphasis of the journalism concentration take the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 320</td>
<td>Strategic Communication I: Introduction to Strategic Communication</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 420</td>
<td>Strategic Communication II: Principles of Advertising and Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 460</td>
<td>Research Methods in Strategic Communication</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 500+</td>
<td>Elective in Strategic Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Journalism concentration-Emphasis 3: Combined News/StratComm (12)

In addition to the core courses and journalism basics courses above, students in the combined news/strategic communication emphasis of the journalism concentration take the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 320</td>
<td>Stratcom I: Introduction to Strategic Communication</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 415</td>
<td>Multimedia Reporting</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 460</td>
<td>Research Methods in Strategic Communication</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 621</td>
<td>Data Reporting and Visualization-Advanced Media</td>
<td>3</td>
</tr>
</tbody>
</table>

Physics Concentration

In addition to the core courses above, students in the physics concentration take the following courses:

<table>
<thead>
<tr>
<th>Natural Science and Other Disciplines (32)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 220</td>
</tr>
<tr>
<td>PHSX 210</td>
</tr>
<tr>
<td>PHSX 216</td>
</tr>
<tr>
<td>PHSX 212</td>
</tr>
<tr>
<td>PHSX 236</td>
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<td>PHSX 313</td>
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<td>PHSX 316</td>
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<tr>
<td>PHSX 503</td>
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<tr>
<td>PHSX 511</td>
</tr>
<tr>
<td>PHSX 521</td>
</tr>
<tr>
<td>PHSX 531</td>
</tr>
<tr>
<td>Physics electives (chosen from PHSX courses numbered 600 and above)</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
</tr>
</tbody>
</table>

**Course Prerequisites and Corequisites**

Students must pass (at the appropriate grade level) all prerequisite courses for a given course before taking the subsequent course. If Course A is a Corequisite for Course B, Course A must be taken in the same semester as Course B or be completed prior to taking Course B.

**Upper Level Eligibility**

In addition to prerequisites and co-requisites, EECS undergraduates are required to earn Upper Level Course Eligibility by attaining grades of C or better in each of the following courses:

- IC ASTR: (16 courses) GE 2.1 (both); PHSX 210, & 216, 212 & 236; MATH 125, 126, 127, 220, 290; EECS 101, 140, 168, 210, 268
- IC BIOL: (15 courses) GE 2.1 (both); MATH 125, 126, 127, 290; EECS 101, 140, 168, 210, 268; CHEM 130, 135; BIOL 150, 152
- IC CHEM: (18 courses) GE 2.1 (both); PHSX 210 & 216, 212 & 236; MATH 125, 126, 127, 220, 290; EECS 101, 140, 168, 210, 268; CHEM 130, 135
- IC GEOG: (13 courses) GE 2.1 (both); PHSX 210 & 216; MATH 125, 126, 127, 290; EECS 101, 140, 168, 210, 268
- IC JOUR: (11 courses) GE 2.1, JOUR 304, MATH 125, 126, 127, 290; EECS 101, 140, 168, 210, 268
- IC PHSX: (16 courses) GE 2.1 (both); PHSX 210 & 216, 212 & 236; MATH 125, 126, 127, 220, 290; EECS 101, 140, 168, 210, 268

If students earn less than a C in any of the above listed courses, they must repeat the course at the next available opportunity and must not take a course for which that course is a prerequisite. It is the students' responsibility to contact their advisors before beginning the new semester regarding any required repetitions and the associated enrollment adjustments (drops and adds).

To enroll in any upper level EECS course (numbered 300 and above), students must have fulfilled the Upper Level Eligibility Requirements detailed above. Exceptions: EECS 312, EECS 360, EECS 368 and EECS 388 may be taken in the same semester as students are completing their upper level eligibility. Students may also petition for a Partial Waiver of Upper Level Eligibility Requirements by completing the appropriate petition, found in the EECS office or at www.eecs.ku.edu.

**Double Major**

If students wish to double-major (earn two degrees), they must fulfill all the requirements for the degrees in question. They must also consult the Engineering Dean's office and the department and/or school of the second major to find out if there are any additional requirements. If they wish to obtain two degrees offered by the EECS department, the following rule applies: a course that is required for one EECS degree program may not be used to satisfy a Senior Elective or General Elective requirement of another EECS degree program.

**Interdisciplinary Computing with Astronomy 4-Year Graduation Plan**

**Students Entering in Fall of Odd Years**

**Freshman**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 101 (Part of KU Core AE 5.1)</td>
<td>1 EECS 168 or 140</td>
<td>4</td>
</tr>
<tr>
<td>KU Core GE 2.1 (first)</td>
<td>3 KU Core GE 2.1 (second)</td>
<td>3</td>
</tr>
<tr>
<td>EECS 140 or 168</td>
<td>4 MATH 126</td>
<td>4</td>
</tr>
<tr>
<td>MATH 125 (KU Core GE 1.2)</td>
<td>4 PHSX 210 (KU Core GE 1.1)</td>
<td>3</td>
</tr>
<tr>
<td>Semester</td>
<td>Course</td>
<td>Fall Hours</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Sophomore</td>
<td>EECS 268</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 127</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 220</td>
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<tr>
<td></td>
<td>MATH 290</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>PHSX 212 (KU Core GE 3N)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHSX 216 (Part of KU Core AE 5.1)</td>
<td>1</td>
</tr>
<tr>
<td>Sophomore</td>
<td>EECS 268</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 127</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 220</td>
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<td></td>
<td>MATH 290</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>PHSX 212 (KU Core GE 3N)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHSX 216 (Part of KU Core AE 5.1)</td>
<td>1</td>
</tr>
<tr>
<td>Junior</td>
<td>EECS 448</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>EECS 510</td>
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<tr>
<td></td>
<td>MATH 526</td>
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<td></td>
<td>KU Core GE 2.2</td>
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<tr>
<td></td>
<td>KU Core AE 4.1</td>
<td>3</td>
</tr>
<tr>
<td>Senior</td>
<td>EECS 581 (Part of KU Core AE 5.1)</td>
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<tr>
<td></td>
<td>Senior elective 1</td>
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<tr>
<td></td>
<td>ASTR 591</td>
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<td></td>
<td>ASTR 596</td>
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<tr>
<td></td>
<td>KU Core AE 4.1</td>
<td>3</td>
</tr>
<tr>
<td>Total Hours:</td>
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</tr>
</tbody>
</table>

1 Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu). Hours listed are assuming the goals are satisfied with course work.

### Interdisciplinary Computing with Biology Concentration 4-Year Graduation Plan

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>EECS 101 (Part of KU Core AE 5.1)</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>EECS 140 or 168</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>KU Core GE 2.1 (first)</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 125 (KU Core GE 1.2)</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>CHEM 130</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Sophomore</td>
<td>EECS 268</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 127</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MATH 290</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>BIOL 150 (KU Core GE 3N)</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>BIOL 152</td>
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<td>Total Hours:</td>
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</tr>
</tbody>
</table>

1 Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu). Hours listed are assuming the goals are satisfied with course work.

### Students Entering in Fall of Even Years

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>EECS 101 (Part of KU Core AE 5.1)</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>EECS 140 or 168</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>KU Core GE 2.1 (first)</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 125 (KU Core GE 1.2)</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>CHEM 130</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Sophomore</td>
<td>EECS 268</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 127</td>
<td>4</td>
<td>3</td>
</tr>
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<td></td>
<td>MATH 290</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>BIOL 150 (KU Core GE 3N)</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>BIOL 152</td>
<td>4</td>
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<tr>
<td>Total Hours:</td>
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</tbody>
</table>
Bachelor of Science in Interdisciplinary Computing

Interdisciplinary Computing with Chemistry Concentration 4-Year Graduation Plan

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EECS 101 (Part of KU Core AE 5.1)</td>
<td>1</td>
<td>EECS 168 or 140</td>
</tr>
<tr>
<td>EECS 140 or 168</td>
<td>4</td>
<td>KU Core GE 2.1 (second)</td>
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<td>KU Core GE 2.1 (first)</td>
<td>3</td>
<td>MATH 126</td>
</tr>
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<td>MATH 125 (KU Core GE 1.2)</td>
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<td>CHEM 135</td>
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<td>Sophomore</td>
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<tr>
<td>Fall</td>
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<td>EECS 268</td>
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<td>EECS 210</td>
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<td>MATH 127</td>
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<td>EECS 368</td>
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<td>MATH 290</td>
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<td>EECS 388</td>
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<td>PHSX 210 (KU Core GE 1.1)</td>
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<td>MATH 220</td>
</tr>
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<td>PHSX 216 (Part of KU Core AE 5.1)</td>
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<td>PHSX 212 (KU Core GE 3N)</td>
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<td>PHSX 236</td>
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<tr>
<td>Fall</td>
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</tr>
<tr>
<td>EECS 448</td>
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<td>EECS 560</td>
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<td>EECS 678</td>
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<td>KU Core GE 2.2</td>
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<td>CHEM 531</td>
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<td>Fall</td>
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<td>EECS 581 (Part of KU Core AE 5.1)</td>
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<td>CHEM 535</td>
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<td>CHEM 530</td>
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<td>Total Hours: 127</td>
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</tbody>
</table>

1 Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu). Hours listed are assuming the goals are satisfied with course work.

Interdisciplinary Computing with Geography Concentration 4-Year Graduation Plan

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EECS 101 (Part of KU Core AE 5.1)</td>
<td>1</td>
<td>EECS 168 or 140</td>
</tr>
<tr>
<td>EECS 140 or 168</td>
<td>4</td>
<td>KU Core GE 2.1 (second)</td>
</tr>
<tr>
<td>KU Core GE 2.1 (first)</td>
<td>3</td>
<td>MATH 126</td>
</tr>
<tr>
<td>MATH 125 (KU Core GE 1.2)</td>
<td>4</td>
<td>PHSX 210 (KU Core GE 1.1)</td>
</tr>
<tr>
<td>KU Core GE 3H</td>
<td>3</td>
<td>PHSX 216 (Part of KU Core AE 5.1)</td>
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<td>Sophomore</td>
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<tr>
<td>Fall</td>
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</tr>
<tr>
<td>EECS 268</td>
<td>4</td>
<td>EECS 210</td>
</tr>
<tr>
<td>MATH 127</td>
<td>4</td>
<td>EECS 368</td>
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<td>MATH 290</td>
<td>2</td>
<td>EECS 388</td>
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<tr>
<td>KU Core GE 3S</td>
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<td>KU Core GE 4.1</td>
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<tr>
<td>GEOG BASICS I</td>
<td>3</td>
<td>GEOG BASICS II</td>
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<tr>
<td>Fall</td>
<td></td>
<td></td>
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<tr>
<td>EECS 448</td>
<td>4</td>
<td>EECS 560</td>
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<td>EECS 510</td>
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<td>EECS 678</td>
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<td>KU Core GE 2.2</td>
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</tr>
<tr>
<td>EECS 581 (Part of KU Core AE 5.1)</td>
<td>3</td>
<td>EECS 582 (KU Core AE 6.1)</td>
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</tbody>
</table>

Total Hours: 130

1 Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu). Hours listed are assuming the goals are satisfied with course work.
### Interdisciplinary Computing with Journalism Concentration 4-Year Graduation Plan-News/Information Emphasis

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>EECS 101</td>
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<td>1</td>
<td>EECS 168 or 140</td>
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</tr>
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<td>EECS 140 or 168</td>
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<td>4</td>
<td>MATH 126</td>
<td>4</td>
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<tr>
<td>KU Core GE 2.1(^1)</td>
<td></td>
<td>3</td>
<td>KU Core GE 3N(^1)</td>
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</tr>
<tr>
<td>MATH 125 (KU Core GE 1.2)</td>
<td>3</td>
<td>KU Core GE 3S(^1)</td>
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</tr>
<tr>
<td>KU Core GE 3H(^1)</td>
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Total Hours: 15

<table>
<thead>
<tr>
<th>Sophomore</th>
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<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>EECS 268</td>
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<td>4</td>
<td>EECS 368</td>
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<tr>
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<td></td>
<td>2</td>
<td>EECS 388</td>
<td>4</td>
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<tr>
<td>JOUR 300</td>
<td></td>
<td>3</td>
<td>JOUR 304 (KU Core GE 1.2-2)</td>
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</tr>
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<td>JOUR 302</td>
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Total Hours: 16

<table>
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<tbody>
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<td>EECS 678</td>
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<td>MATH 526</td>
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<td>3</td>
<td>JOUR 320</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 534 (KU Core AE 4.1)</td>
<td>3</td>
<td>JOUR 608 (KU Core AE 5.1)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>JOUR 580</td>
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<td>JOUR 618</td>
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Total Hours: 16

<table>
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<th>Fall</th>
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<th>Spring</th>
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<tbody>
<tr>
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</tr>
<tr>
<td>JOUR 500+</td>
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<td>KU Core AE 4.2(^1)</td>
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<td>JOUR 690</td>
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Total Hours: 15

Total Hours: 125

### Interdisciplinary Computing with Journalism Concentration 4-Year Graduation Plan-Strategic Communication Emphasis

<table>
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<tr>
<th>Freshman</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
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<tr>
<td>EECS 101</td>
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<td>1</td>
<td>EECS 168 or 140</td>
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</tr>
<tr>
<td>EECS 140 or 168</td>
<td></td>
<td>4</td>
<td>MATH 126</td>
<td>4</td>
</tr>
<tr>
<td>KU Core GE 2.1(^1)</td>
<td></td>
<td>3</td>
<td>KU Core GE 3N(^1)</td>
<td>3</td>
</tr>
<tr>
<td>KU Core GE 3H(^1)</td>
<td></td>
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<td>JOUR 150 (KU Core GE 2.2)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 15

<table>
<thead>
<tr>
<th>Sophomore</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>EECS 268</td>
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<tr>
<td>MATH 127</td>
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<td>EECS 368</td>
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<td>MATH 290</td>
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<td>2</td>
<td>EECS 388</td>
<td>4</td>
</tr>
<tr>
<td>JOUR 300</td>
<td></td>
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<td>JOUR 304 (KU Core GE 1.2-2)</td>
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<td>JOUR 302</td>
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<table>
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<tr>
<th>Junior</th>
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<th>Spring</th>
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<tbody>
<tr>
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<td>EECS 560</td>
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<td>EECS 510</td>
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<td>EECS 678</td>
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<tr>
<td>MATH 526</td>
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<td>JOUR 320</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 534 (KU Core AE 4.1)</td>
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<td>JOUR 608 (KU Core AE 5.1)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>JOUR 580</td>
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<td>JOUR 618</td>
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Total Hours: 16

<table>
<thead>
<tr>
<th>Senior</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 581</td>
<td></td>
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<td>EECS 582 (KU Core AE 6.1)</td>
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<tr>
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<td>3</td>
<td>Senior Elective 2</td>
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<tr>
<td>JOUR 420</td>
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<td>Senior Elective 3</td>
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<tr>
<td>JOUR 500+</td>
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<td>KU Core AE 4.2(^1)</td>
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<tr>
<td>JOUR 690</td>
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<td>3</td>
<td>JOUR 460</td>
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</table>

Total Hours: 15

Total Hours: 125

---

1. Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu). Hours listed are assuming the goals are satisfied with course work.
### Master of Science in Electrical Engineering

#### Electrical Engineering and Computer Science

The technological advances that have made our society what it is today are due largely to the efforts of electrical engineers, computer engineers, and computer scientists. Among these advances are radio, television, telephones, wireless and mobile communications, personal computers, workstations, mainframe computers, aircraft avionics, satellite electronics, automobile electronics, office machinery, medical electronic equipment, video games, electric power generation and distribution systems, telecommunications, computer networks (including the Internet), personal

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### Interdisciplinary Computing with Physics Concentration 4-Year Graduation Plan

#### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
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**Total Hours: 125**

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### Sophomore

<table>
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<tr>
<th>Fall</th>
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### Junior

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<th>Fall</th>
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<th>Spring</th>
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<tbody>
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<td>EECS 560</td>
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<td>EECS 510</td>
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<td>EECS 678</td>
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<td>JOUR 534 (KU Core AE 4.1)</td>
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### Senior

<table>
<thead>
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<th>Spring</th>
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<tr>
<td>EECS 581</td>
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<td>Senior Elective 1</td>
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**Total Hours: 124**

1. Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu). Hours listed are assuming the goals are satisfied with course work.

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### Departmental Honors

An undergraduate student may graduate with departmental honors in electrical engineering, computer engineering, computer science, or interdisciplinary computing by graduating with a minimum grade-point average requirement while maintaining full-time status. In addition, students must enroll in EECS 498 Honors Research for their last 2 semesters and must complete an independent research project paper and oral presentation to a panel of 3 judges. See the EECS Undergraduate Handbook for full details.

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### Master of Science in Electrical Engineering

#### Electrical Engineering and Computer Science

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entertainment products, radar, defense electronics, artificial intelligence, and a variety of computer software.

Vision and Mission
The vision of the EECS department is to provide a stimulating and challenging intellectual environment.

- To have classes populated by outstanding students.
- To be world class in an increasing number of selected areas of research.
- To have faculty members with high visibility among their peers.

The mission of the EECS department is

- To educate the next generation of electrical engineers, computer engineers, and computer scientists.
- To discover, apply, and disseminate knowledge.
- To be an asset to the community and to society.

Graduate Admission to the Department of Electrical Engineering and Computer Science
Applicants for the Master of Science degree in Electrical Engineering (M.S.E.E.) normally possess a degree in electrical engineering or computer engineering. However, a student with good preparation in some other field of engineering, mathematics, business, or science may qualify by taking appropriate additional undergraduate courses. Such courses normally do not count toward the graduate degree. A list of specific prerequisite courses for the M.S. in Electrical Engineering degree is available in the graduate office or on the department's website. http://www.eecs.ku.edu/prospective_students/graduate/deficiency_courses

Applicants must demonstrate evidence of aptitude for graduate work, as shown by suitable performance in undergraduate and any graduate course work, by aptitude test scores on the Graduate Record Examination, and by academic letters of reference.

Application Deadlines
Fall Priority Deadline: December 15
Spring Priority Deadline: September 30

Applications will be accepted after the priority deadlines listed above, but those applicants may not be considered for fellowships and assistantships. All application materials must be submitted by March 1 for fall and October 1 for spring to be considered for admission. See the Graduate Studies website (http://www.graduate.ku.edu) for the application procedure and fees.

Application Materials
- Application
- GRE scores (school code 6871)
- Statement of objectives and resume
- Official transcript
- Letters of recommendation
- TOFEL scores (international students)
- Financial statement (international students only)

Submit all supporting documents and your graduate application online (http://www.graduate.ku.edu).

Visiting Us
The graduate program staff is happy to work with all prospective students in determining the fit between the student and the program. In order to determine this, we feel that visiting our campus in Lawrence is a very important step. In order to facilitate your visit to KU, there are two main options:

The first, and most preferred, option entails simply applying for admission to the program. All prospective students are welcome to attend our Open House in early November and some highly qualified admitted students may be invited to participate in Visitation Days in late February or early March (prior to the fall semester of your intended matriculation). These organized visitation opportunities will allow you time to gather a great deal of first-hand information which we hope will help you in making a final decision about whether to attend KU.

The second option is making arrangements to visit us on your own, outside of organized events. With early notification, we will do our best to work with you to provide information and schedule appointments with faculty when possible. Please contact us if you feel that this is the best option for you.

Contact Information
Please contact the EECS Program Assistant at eecs_graduate@ku.edu or (785) 864-4487, to schedule a visit or with questions about the application process.

The University of Kansas
Department of Electrical Engineering and Computer Science
Graduate Office
Eaton Hall
1520 W. 15th Street, Suite 2001E
Lawrence, KS 66045-7605

M.S. Degree Requirements
The master’s program in Electrical Engineering offers a thesis and nonthesis option. The thesis option requires a minimum of 8 approved graduate courses, 6 hours of Master’s Thesis, EECS 802 and an oral defense of the thesis in the final semester. A master’s thesis should address an open problem in EECS. After evaluating current literature related to the problem of interest, students must design, build, and evaluate hardware or software systems or system models to prove or disprove their research hypothesis. Completing a thesis typically takes 2 semesters and produces results that could be published as a paper in conference proceedings or a professional journal. The nonthesis option requires a minimum of 9 approved graduate courses, 3 hours of Graduate Seminar, EECS 802 and an oral defense of the project report in the final semester.

Electrical engineering students are encouraged to choose a focus area for their project or thesis topic early in their graduate career, and identify a faculty advisor who is interested in supervising their work.

Associated Focus Areas
- Applied Electromagnetics
- Communications Systems
- Network Engineering
• Radar Systems and Remote Sensing
• RF Systems Engineering
• Signal Processing

Central to the master’s program in electrical engineering is the development of each student’s Plan of Study. The plan must be approved by a committee of 3 EECS Graduate Faculty members. The majority of the committee (2 out of 3) members must be tenured or tenured track members of the department graduate faculty, including the Chair of the committee. The plan must be developed and approved by the graduate office during the first semester, and must be consistent with the identified degree and goals. The Plan of Study outlines all course work and designates the thesis or nonthesis option. All plans must include at least 1 semester of EECS 802 Electrical Engineering and Computer Science Colloquium and Seminar on Professional Issues.

The student may select a set of courses from one of the predefined areas, or work in conjunction with an adviser to customize the course selection. A current list of the areas and their requirements is available on the EECS website (http://www.eecs.ku.edu/current_students/graduate/areas). The graduate faculty members who approve the plan verify that courses selected meet the guidelines and are appropriate for the M.S. degree program. Modifications to the plan must be approved by the student’s committee and resubmitted to the graduate office for approval.

If an M.S. Plan of Study does not follow a predefined course listing, students will be required to have the EECS graduate committee assess the submitted Plan of Study, goals and justification for approval. The plan must include a minimum of 5 EECS courses numbered 700 or higher, excluding EECS 801 Directed Graduate Readings, EECS 891 Graduate Problems, and EECS 899 Master’s Thesis or Report. A maximum of 3 courses outside the department and a maximum of 2 courses numbered below 700 may be counted toward the requirements for the degree. Courses numbered below 500 do not count toward the degree. All plans of study must include at least one semester of EECS 802 Electrical Engineering and Computer Science Colloquium and Seminar on Professional Issues.

Subject to the general restrictions on M.S. course work, the thesis option requires a minimum of 8 courses approved in a Plan of Study, 6 hours of EECS 899 Master’s Thesis or Report, EECS 802 Electrical Engineering and Computer Science Colloquium and Seminar on Professional Issues, and a general oral examination. For students completing the thesis option, EECS 891 Graduate Problems does not count toward the 8 courses required for the degree. Before thesis work begins, the student selects a thesis adviser who is a graduate faculty member of the department. A thesis proposal of research into a specific research question is to be submitted to and accepted by the student’s graduate committee at least one semester before completion of the program.

Subject to the general restrictions on M.S. course work, the nonthesis option requires a minimum of 9 courses approved in a Plan of Study, 3 hours of EECS 891 Graduate Problems, EECS 802 Electrical Engineering and Computer Science Colloquium and Seminar on Professional Issues, and a general oral examination. The nonthesis option requires the execution and completion of a substantial project whose topic and scope is agreed to between the student and adviser. A project is a creative endeavor such as designing and implementing hardware, software system or the integration of existing knowledge.

The general oral examination must be taken in the last semester. It is conducted by an examining committee consisting of the student’s adviser and at least 2 other Graduate Faculty members of the department selected by the student and adviser. The committee determines if the written thesis or project report, oral presentation of research, and general knowledge of the discipline meet the department’s standards.

**Master of Science in Computer Engineering**

**Electrical Engineering and Computer Science**

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- To discover, apply, and disseminate knowledge.
- To be an asset to the community and to society.

**Graduate Admission to the School of Engineering**

**Procedure**

Admission requirements for the School of Engineering follow the general KU requirements plus those of each engineering graduate program. All applicants must apply online (http://www.graduate.ku.edu/apply). Detailed information about supplemental application materials for each program is listed here (http://www.engr.ku.edu/prospective/graduate/apply). Important information for prospective international students is available from International Student & Scholar Services (http://www2.ku.edu/~issfacts). Download a PDF (http://www.engr.ku.edu/prospective/graduate/apply/grad_app_process.pdf) for more information about the review process for graduate applications.

Some departments and programs require the Graduate Record Examination. Applications must be accompanied by a nonrefundable fee. See Admission (p. 2369) in the Graduate Studies section of the online catalog.

**Baccalaureate Preparation**

To qualify for graduate work in any field of engineering, a student generally must hold an accredited baccalaureate degree in that field and
have at least a 3.0 grade-point average. A student with good preparation in such fields as mathematics, chemistry, or physics, or in a related engineering field, may be admitted on the basis of performance in specific undergraduate courses, determined by the department of interest to the prospective student. Undergraduate hours do not count as part of a student’s Plan of Study, but they must be completed with grades of B or higher.

Exceptionally qualified undergraduates may be admitted directly to a Fast-Track Ph.D. program, which does not require the master’s as an intermediate degree. Students who wish to earn a Ph.D. and believe that they meet this criterion are encouraged to contact the graduate advisor in their field of interest.

**English Proficiency Requirement**

All graduate students in the School of Engineering who are required to take courses at the Applied English Center (http://www.aec.ku.edu) must pass the AEC’s English Proficiency Examination within 3 semesters of their initial enrollment. Failure to complete the English proficiency requirement within this time limit may result in dismissal from the graduate engineering program.

**Graduate Admission**

Applicants for the Master of Science degree in Computer Engineering (M.S. Co.E.) normally possess a degree in computer engineering or electrical engineering. However, a student with good preparation in some other field of engineering, mathematics, business, or science may qualify by taking appropriate additional undergraduate courses. Such courses normally do not count toward the graduate degree. A list of specific prerequisite courses for the M.S. in Computer Engineering degree is available in the graduate office or on the department’s website. http://www.eecs.ku.edu/prospective_students/graduate/deficiency_courses

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**Application Materials**

- Application
- GRE scores (school code 6871)
- Statement of objectives and resume
- Official transcript
- Letters of recommendation
- TOFEL scores (international students)
- Financial statement (international students only)

Submit all supporting documents and your graduate application online (http://www.graduate.ku.edu).

**Visiting Us**

The graduate program staff is happy to work with all prospective students in determining the fit between the student and the program. In order to determine this, we feel that visiting our campus in Lawrence is a very important step. In order to facilitate your visit to KU, there are two main options:

The first, and most preferred, option entails simply applying for admission to the program. All prospective students are welcome to attend our Open House in early November and some highly qualified admitted students may be invited to participate in Visitation Days in late February or early March (prior to the fall semester of your intended matriculation). These organized visitation opportunities will allow you time to gather a great deal of first-hand information which we hope will help you in making a final decision about whether to attend KU.

The second option is making arrangements to visit us on your own, outside of organized events. With early notification, we will do our best to work with you to provide information and schedule appointments with faculty when possible. Please contact us if you feel that this is the best option for you.

**Contact Information**

Please contact the EECS Program Assistant at eecs_graduate@ku.edu or (785) 864-4487, to schedule a visit or with questions about the application process.

The University of Kansas
Department of Electrical Engineering and Computer Science
Graduate Office
Eaton Hall
1520 W. 15th Street, Suite 2001E
Lawrence, KS 66045-7605

**M.S. Degree Requirements**

The master’s program in computer engineering offers a thesis and nonthesis option. The thesis option requires a minimum of 8 approved graduate courses, 6 hours of Master’s Thesis, EECS 802 and an oral defense of the thesis in the final semester. A master’s thesis should address an open problem in EECS. After evaluating current literature related to the problem of interest, students must design, build, and evaluate hardware or software systems or system models to prove or disprove their research hypothesis. Completing a thesis typically takes 2 semesters and produces results that could be published as a paper in conference proceedings or a professional journal. The nonthesis option requires a minimum of 9 approved graduate courses, 3 hours of Graduate Conference Proceedings or a Professional Journal. The nonthesis option requires a minimum of 9 approved graduate courses, 3 hours of Graduate Problems, EECS 802, and an oral defense of the project report in the final semester.

Computer engineering students are encouraged to choose a focus area for their project or thesis topic early in their graduate career, and identify a faculty advisor who is interested in supervising their work.

**Associated Focus Areas**

- Computer Systems Design
- Computing in the Biosciences
- Network Engineering
• Network Systems
• Security and Assurance

Central to the master's program in computer engineering is the development of each student's Plan of Study. The plan must be approved by a committee of 3 EECS Graduate Faculty members. The Chair of the committee and at least 1 member of the committee must be tenured or tenure track members of the department graduate faculty. The plan must be developed and approved by the graduate office during the first semester, and must be consistent with the identified degree and goals. The Plan of Study outlines all course work and designates the thesis or nonthesis option. All plans must include at least 1 semester of EECS 802 Electrical Engineering and Computer Science Colloquium and Seminar on Professional Issues.

The student may select a set of courses from one of the predefined areas, or work in conjunction with an adviser to customize the course selection. A current list of the areas and their requirements is available on the EECS website (http://www.eecs.ku.edu/current_students/graduate/focus_areas). The 3 graduate faculty members who approve the plan verify that courses selected meet the guidelines and are appropriate for the M.S. degree program. Modifications to the plan must be approved by the student's committee and resubmitted to the graduate office for approval.

If an M.S. Plan of Study does not follow a predefined course listing, students will be required to have the EECS graduate committee assess the submitted Plan of Study, goals and justification for approval. The plan must include a minimum of 5 EECS courses numbered 700 or higher, excluding EECS 801 Directed Graduate Readings, EECS 891 Graduate Problems, and EECS 899 Master's Thesis or Report. A maximum of 3 courses outside the department and a maximum of 2 courses numbered below 700 may be counted toward the requirements for the degree. Courses numbered below 500 do not count toward the degree. All plans of study must include at least one semester of EECS 802 Electrical Engineering and Computer Science Colloquium and Seminar on Professional Issues.

Subject to the general restrictions on M.S. course work, the thesis option requires a minimum of 8 courses approved in a Plan of Study, 6 hours of EECS 899 Master's Thesis or Report, EECS 802 Electrical Engineering and Computer Science Colloquium and Seminar on Professional Issues, and a general oral examination. For students completing the thesis option, EECS 891 Graduate Problems does not count toward the 8 courses required for the degree. Before thesis work begins, the student selects a thesis advisor who is a graduate faculty member of the department. A thesis proposal of research into a specific research question is to be submitted to and accepted by the student's graduate committee at least one semester before completion of the program.

Subject to the general restrictions on M.S. course work, the nonthesis option requires a minimum of 9 courses approved in a Plan of Study, 3 hours of EECS 891 Graduate Problems, EECS 802 Electrical Engineering and Computer Science Colloquium and Seminar on Professional Issues, and a general oral examination. The nonthesis option requires the execution and completion of a substantial project whose topic and scope is agreed to between the student and adviser. A project is a creative endeavor such as designing and implementing hardware/software systems or the integration of existing knowledge.

The general oral examination must be taken in the last semester. It is conducted by an examining committee consisting of the student's adviser and at least 2 other Graduate Faculty members of the department selected by the student and adviser. The committee determines if the written thesis or project report, oral presentation of research, and general knowledge of the discipline meet the department's standards.

**Master of Science in Computer Science**

**Electrical Engineering and Computer Science**

The technological advances that have made our society what it is today are due largely to the efforts of electrical engineers, computer engineers, and computer scientists. Among these advances are radio, television, telephones, wireless and mobile communications, personal computers, workstations, mainframe computers, aircraft avionics, satellite electronics, automobile electronics, office machinery, medical electronic equipment, video games, electric power generation and distribution systems, telecommunications, computer networks (including the Internet), personal entertainment products, radar, defense electronics, artificial intelligence, and a variety of computer software.

**Vision and Mission**

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**Graduate Admission to the School of Engineering**

**Procedure**

Admission requirements for the School of Engineering follow the general KU requirements plus those of each engineering graduate program. All applicants must apply online (http://www.graduate.ku.edu/apply). Detailed information about supplemental application materials for each program is listed here (http://www.engr.ku.edu/prospective/graduate/apply). Important information for prospective international students is available from International Student & Scholar Services (http://www2.ku.edu/~issfacts). Download a PDF (http://www.engr.ku.edu/prospective/graduate/apply/grad_app_process.pdf) for more information about the review process for graduate applications.

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in such fields as mathematics, chemistry, or physics, or in a related engineering field, may be admitted on the basis of performance in specific undergraduate courses, determined by the department of interest to the prospective student. Undergraduate hours do not count as part of a student’s Plan of Study, but they must be completed with grades of B or higher.

Exceptionally qualified undergraduates may be admitted directly to a Fast-Track Ph.D. program, which does not require the master’s as an intermediate degree. Students who wish to earn a Ph.D. and believe that they meet this criterion are encouraged to contact the graduate advisor in their field of interest.

**English Proficiency Requirement**

All graduate students in the School of Engineering who are required to take courses at the Applied English Center (http://www.aec.ku.edu) must pass the AEC’s English Proficiency Examination within 3 semesters of their initial enrollment. Failure to complete the English proficiency requirement within this time limit may result in dismissal from the graduate engineering program.

**Graduate Admission**

Applicants for the Master of Science degree in Computer Science (M.S.C.S.) normally possess a degree in computer science. However, a student with good preparation in some other field of engineering, mathematics, business, or science may qualify by taking appropriate additional undergraduate courses. Such courses normally do not count toward the graduate degree. A list of specific prerequisite courses for the M.S. in Computer Science degree is available in the graduate office or on the department’s website. http://www.eecs.ku.edu/prospective_students/graduate/deficiency_courses

Applicants must demonstrate evidence of aptitude for graduate work, as shown by suitable performance in undergraduate and any graduate course work, by aptitude test scores on the Graduate Record Examination, and by academic letters of reference.

**Application Deadlines**

Fall Priority Deadline: December 15

Spring Priority Deadline: September 30

Applications will be accepted after the priority deadlines listed above, but those applicants may not be considered for fellowships and assistantships. All application materials must be submitted by March 1 for fall and October 1 for spring to be considered for admission. See the Graduate Studies website (http://www.graduate.ku.edu) for the application procedure and fees.

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Computer science students are encouraged to choose a focus area for their project or thesis topic early in their graduate career, and identify a faculty adviser who is interested in supervising their work.

**Associated Focus Areas**

- Computer Systems Design
- Computing in the Biosciences
- Intelligent Informatics
• Language and Semantics
• Network Systems
• Security and Assurance
• Theory of Computing

Central to the master’s program in computer science is the development of each student’s Plan of Study. The plan must be approved by a committee of 3 EECS Graduate Faculty members. The majority of the committee (2 out of 3 members must be tenured or tenured track members of the department graduate faculty, including the Chair of the committee. The plan must be developed and approved by the graduate office during the first semester, and must be consistent with the identified degree and goals. The Plan of Study outlines all course work and designates the thesis or nonthesis option. All plans must include at least 1 semester of EECS 802 Electrical Engineering and Computer Science Colloquium and Seminar on Professional Issues.

The student may select a set of courses from one of the predefined areas, or work in conjunction with an adviser to customize the course selection. A current list of the areas and their requirements is available on the EECS website (http://www.eecs.ku.edu/current_students/graduate/focus_areas). The 3 EECS Graduate Faculty members who approve the plan verify that courses selected meet the guidelines and are appropriate for the M.S. degree program. Modifications to the plan must be approved by the student’s committee and resubmitted to the graduate office for approval.

If an M.S. Plan of Study does not follow a predefined course listing, students will be required to have the EECS graduate committee assess the submitted Plan of Study, goals and justification for approval. The plan must include a minimum of 5 EECS courses numbered 700 or higher, excluding EECS 801 Directed Graduate Readings, EECS 891 Graduate Problems, and EECS 899 Master’s Thesis or Report. A maximum of 3 courses outside the department and a maximum of 2 courses numbered below 700 may be counted toward the requirements for the degree. Courses numbered below 500 do not count toward the degree. All plans of study must include at least one semester of EECS 802 Electrical Engineering and Computer Science Colloquium and Seminar on Professional Issues.

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Subject to the general restrictions on M.S. course work, the nonthesis option requires a minimum of 9 courses approved in a Plan of Study, 3 hours of EECS 891 Graduate Problems, EECS 802 Electrical Engineering and Computer Science Colloquium and Seminar on Professional Issues, and a general oral examination. The nonthesis option requires the execution and completion of a substantial project whose topic and scope is agreed to between the student and advisor. A project is a creative endeavor such as designing and implementing hardware, software system or the integration of existing knowledge.

The general oral examination must be taken in the last semester. It is conducted by an examining committee consisting of the student's adviser and at least 2 other Graduate Faculty members of the department selected by the student and adviser. The committee determines if the written thesis or project report, oral presentation of research, and general knowledge of the discipline meet the department’s standards.

**Master of Science in Information Technology**

**Electrical Engineering and Computer Science**

The technological advances that have made our society what it is today are due largely to the efforts of electrical engineers, computer engineers, and computer scientists. Among these advances are radio, television, telephones, wireless and mobile communications, personal computers, workstations, mainframe computers, aircraft avionics, satellite electronics, automobile electronics, office machinery, medical electronic equipment, video games, electric power generation and distribution systems, telecommunications, computer networks (including the Internet), personal entertainment products, radar, defense electronics, artificial intelligence, and a variety of computer software.

**Vision and Mission**

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- To have classes populated by outstanding students.
- To be world class in an increasing number of selected areas of research.
- To have faculty members with high visibility among their peers.

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**Graduate Admission to the School of Engineering**

**Procedure**

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Some departments and programs require the Graduate Record Examination. Applications must be accompanied by a nonrefundable fee. See Admission (p. 2369) in the Graduate Studies section of the online catalog.
Baccalaureate Preparation
To qualify for graduate work in any field of engineering, a student generally must hold an accredited baccalaureate degree in that field and have at least a 3.0 grade-point average. A student with good preparation in such fields as mathematics, chemistry, or physics, or in a related engineering field, may be admitted on the basis of performance in specific undergraduate courses, determined by the department of interest to the prospective student. Undergraduate hours do not count as part of a student’s Plan of Study, but they must be completed with grades of B or higher.

Exceptionally qualified undergraduates may be admitted directly to a Fast-Track Ph.D. program, which does not require the master’s as an intermediate degree. Students who wish to earn a Ph.D. and believe that they meet this criterion are encouraged to contact the graduate advisor in their field of interest.

English Proficiency Requirement
All graduate students in the School of Engineering who are required to take courses at the Applied English Center (http://www.aec.ku.edu) must pass the AEC’s English Proficiency Examination within 3 semesters of their initial enrollment. Failure to complete the English proficiency requirement within this time limit may result in dismissal from the graduate engineering program.

Admission
The Master of Science degree in Information Technology (M.S.I.T.) is designed for IT professionals in the Kansas City area. Courses are offered in the evening on the Edwards Campus, which is conveniently located in Johnson County. The M.S.I.T. program is intended for students who have a bachelor’s degree in information technology, computer science, computer information systems, computer engineering, or a related field who enter the program for advanced studies, or for those who seek additional academic studies for professional growth or career advancement. A student with good preparation in some other field of engineering, mathematics, business, or science may qualify by taking appropriate additional undergraduate courses. Such courses normally do not count toward the graduate degree. http://www.eecs.ku.edu/prospective_students/graduate/deficiency_courses

Applicants who hold an undergraduate degree in information technology, computer science, computer information systems, computer engineering, or related discipline are required to have a minimum of 2 years of professional work experience in I.T. Applications without an undergraduate degree in a computer-related field must have 4 years of relevant professional work experience in I.T. The professional work experience requirement may be waived for recent graduates with an undergraduate degree in I.T. Applicants must be able to demonstrate knowledge of programming via experience or equivalent coursework in data structures and a modern programming language. As an applicant for a technology-based degree that requires probability, statistics, and advanced algebra, an applicant must be able to demonstrate sufficient mathematics aptitude via academic background, GRE scores, and work history.

Application Deadlines
Fall Priority Deadline: December 15
Spring Priority Deadline: September 30

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M.S. Degree Requirements
Individuals completing the M.S.I.T. program are expected to understand fundamental principles and underlying technologies of IT. Individuals must

- Understand fundamental principles and underlying technologies of IT.
- Understand how to realize an IT infrastructure, from defining requirements, design, implementation, deployment, integration, and on through its lifecycle.
- Understand how to apply IT within an organizational context to increase productivity and competitiveness and to meet business goals.
- Understand the policy, security, privacy, ethical, and legal aspects of IT and its evolution and future trends.
- Have the ability to effectively communicate to affect technological decisions.

All M.S.I.T. students are required to choose a focus area as early in the graduate program as possible and identify a tenured/tenure track EECS faculty adviser who is interested in supervising their work. Students are required to take their courses from the focus area of their choice. To deviate from the core and elective courses defined for the M.S.I.T. program requires advisor concurrence, petition and approval of the EECS graduate committee, and for other EECS courses, permission of the instructor.

Associated Focus Areas
- Information Assurance and Management
- Internet Engineering and Management
• Software Engineering and Management

Central to the master’s program in Information Technology is the development of each student’s Plan of Study. The plan must be developed and approved by the graduate office during the first semester. The Plan of Study outlines all course work and the student’s adviser. It must include 6 core courses, 4 courses from the associated elective list and at least one semester of EECS 802 Electrical Engineering and Computer Science Colloquium and Seminar on Professional Issues. A current list of the areas and their requirements is available on the EECS website (http://www.eecs.ku.edu/current_students/graduate/focus_areas). The faculty adviser who approves the plan verifies that courses selected meet the guidelines and are appropriate for the M.S.I.T. degree program. Modifications to the plan must be approved by the student’s adviser and resubmitted to the graduate office for approval.

Subject to the general restrictions on M.S. course work, a general oral examination must be taken in the last semester. It is conducted by the Graduate Director of Information Technology. The director determines if the oral presentation of research, and general knowledge of the discipline meet the department’s standards.

Doctor of Philosophy in Computer Science

Electrical Engineering and Computer Science

The technological advances that have made our society what it is today are due largely to the efforts of electrical engineers, computer engineers, and computer scientists. Among these advances are radio, television, telephones, wireless and mobile communications, personal computers, workstations, mainframe computers, aircraft avionics, satellite electronics, automobile electronics, office machinery, medical electronic equipment, video games, electric power generation and distribution systems, telecommunications, computer networks (including the Internet), personal entertainment products, radar, defense electronics, artificial intelligence, and a variety of computer software.

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Graduate Admission to the School of Engineering

Procedure

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Exceptionally qualified undergraduates may be admitted directly to a Fast-Track Ph.D. program, which does not require the master’s as an intermediate degree. Students who wish to earn a Ph.D. and believe that they meet this criterion are encouraged to contact the graduate advisor in their field of interest.

English Proficiency Requirement

All graduate students in the School of Engineering who are required to take courses at the Applied English Center (http://www.aec.ku.edu) must pass the AEC’s English Proficiency Examination within 3 semesters of their initial enrollment. Failure to complete the English proficiency requirement within this time limit may result in dismissal from the graduate engineering program.

Graduate Admission

Admission is open to college and university graduates whose previous records indicate an ability to succeed with graduate work in the chosen discipline. Applicants with strong academic credentials may be admitted directly into the Ph.D. computer science program without an M.S. in the requisite field.

Applicants must demonstrate evidence of aptitude for graduate work, as shown by suitable performance in undergraduate and any graduate course work, by aptitude test scores on the Graduate Record Examination, and by academic letters of reference.

Unless the applicant’s native language is English or the applicant has received a baccalaureate degree or higher from an accredited U.S. institution of higher education, he or she must meet the department’s standard for the Test of English as a Foreign Language, which is higher
than the general KU requirement. Applicants for graduate teaching assistantships must earn satisfactory scores on the Test of Spoken English.

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Ph.D. Degree Requirements

Requirements for the doctoral degree programs include a written doctoral qualifying examination, course work, a research skills requirement, a responsible scholarship requirement, a comprehensive oral examination, a dissertation, and a final oral examination. Doctoral students also must take at least one semester of EECS 802 Electrical Engineering and Computer Science Colloquium and Seminar on Professional Issues.

In the first semester, the student must select a major adviser and a committee. The student’s committee consists of a minimum of 5 graduate faculty members and is chaired by the major adviser. The adviser and at least 2 other members of the committee must be tenured or tenure-track members of the graduate faculty in EECS, and 1 committee member must be the Graduate Studies Representative, a regular KU graduate faculty member outside of the EECS department. The role of this member as the Graduate Studies representative is designed to assure the appropriate standard of fairness, professionalism, judgment, and skill are applied throughout the examination process for the benefit of the institution and in the best interest of the student. As an independent participant observer, this member should have no personal or professional duality/conflict of interest with other members of the committee or the student that would prevent him or her from the unbiased fulfillment of these responsibilities (for more information, see the policy here (https://policy.ku.edu/graduate-studies/graduate-studies-representative-on-doctoral-exam-committees)).

This committee guides the student’s selection of courses, participates in the comprehensive and final examinations, and helps the student select a topic for research leading to the dissertation. Should the student’s interests change, the committee membership may be changed accordingly, with the approval of the department’s graduate studies committee.

All doctoral students must have an approved Plan of Study (https://gradplan.engr.ku.edu/accounts/login/?next=) on file by the beginning of their second semester of study.

Each doctoral student must pass a doctoral qualifying examination, which also meets the research skills requirement. This is a written examination taken within a single day that measures the student’s ability to comprehend and interpret technical literature in an unfamiliar topical area in the discipline. The examination is offered once a year, in the spring semester, and the student must take it at the first opportunity after completing the M.S. or after initial enrollment in the doctoral program. It may be retaken once, in the following spring semester. A more detailed description of the examination, including samples, is available in the graduate office (http://www.eecs.ku.edu).

Programs leading to the Ph.D. in computer science require a minimum of 18 semester credit hours of course work beyond the requirements for the M.S. degree and a minimum of 18 credit hours of dissertation research. A minimum of 15 of these 18 hours must be EECS classes numbered 700 and above, excluding EECS 801 Directed Graduate Readings and EECS 891 Graduate Problems.

Students admitted to a doctoral program without an M.S. in the intended field also must meet the 24-hour course work requirement for the M.S. thesis option, for a total of 42 credit hours of course work. In this case, 30 of the 42 hours must be EECS classes numbered 700 and above, excluding EECS 801 Directed Graduate Readings and EECS 891 Graduate Problems and EECS 899. Waiver of required hours on the basis of graduate work done elsewhere may be allowed by petition to
the graduate studies committee. Each aspirant to the Ph.D. degree must complete a responsible scholarship requirement, which is met by completing and passing EECS 802.

The student must take the doctoral comprehensive examination after passing the qualifying examination, completing the research skills and responsible scholarship requirements, and completing at least ¾ of the course work requirement beyond the M.S. The student must complete the comprehensive examination before detailed work on the Ph.D. dissertation begins. Before the examination, the student must submit in writing to the committee a detailed proposal for a possible Ph.D. dissertation. In the comprehensive examination, the student is examined upon the proposal and on knowledge and insight in the specialization, and a dissertation committee is formed.

The student’s committee consists of a minimum of 5 Graduate Faculty members and is chaired by the major adviser. The adviser and at least 2 other members of the committee must be tenured or tenure-track members of the EECS Graduate Faculty, and 1 committee member must be the Graduate Studies Representative, a regular KU Graduate Faculty member outside of the EECS department.

Following completion of the Ph.D. dissertation, the candidate must defend the dissertation in an oral final examination. The examining committee is once again constituted as in the comprehensive oral examination.

Doctor of Philosophy in Electrical Engineering

Electrical Engineering and Computer Science

The technological advances that have made our society what it is today are due largely to the efforts of electrical engineers, computer engineers, and computer scientists. Among these advances are radio, television, telephones, wireless and mobile communications, personal computers, workstations, mainframe computers, aircraft avionics, satellite electronics, automobile electronics, office machinery, medical electronic equipment, video games, electric power generation and distribution systems, telecommunications, computer networks (including the Internet), personal entertainment products, radar, defense electronics, artificial intelligence, and a variety of computer software.

Vision and Mission

The vision of the EECS department is to provide a stimulating and challenging intellectual environment.

- To have classes populated by outstanding students.
- To be world class in an increasing number of selected areas of research.
- To have faculty members with high visibility among their peers.

The mission of the EECS department is

- To educate the next generation of electrical engineers, computer engineers, and computer scientists.
- To discover, apply, and disseminate knowledge.
- To be an asset to the community and to society.

Graduate Admission to the School of Engineering

Procedure

Admission requirements for the School of Engineering follow the general KU requirements plus those of each engineering graduate program. All applicants must apply online (http://www.graduate.ku.edu/apply). Detailed information about supplemental application materials for each program is listed here (http://www.engr.ku.edu/prospective/graduate/apply). Important information for prospective international students is available from International Student & Scholar Services (http://www2.ku.edu/~issfacts). Download a PDF (http://www.engr.ku.edu/prospective/graduate/apply/grad_app_process.pdf) for more information about the review process for graduate applications.

Some departments and programs require the Graduate Record Examination. Applications must be accompanied by a nonrefundable fee. See Admission (p. 2369) in the Graduate Studies section of the online catalog.

Baccalaureate Preparation

To qualify for graduate work in any field of engineering, a student generally must hold an accredited baccalaureate degree in that field and have at least a 3.0 grade-point average. A student with good preparation in such fields as mathematics, chemistry, or physics, or in a related engineering field, may be admitted on the basis of performance in specific undergraduate courses, determined by the department of interest to the prospective student. Undergraduate hours do not count as part of a student’s Plan of Study, but they must be completed with grades of B or higher.

Exceptionally qualified undergraduates may be admitted directly to a Fast-Track Ph.D. program, which does not require the master’s as an intermediate degree. Students who wish to earn a Ph.D. and believe that they meet this criterion are encouraged to contact the graduate advisor in their field of interest.

English Proficiency Requirement

All graduate students in the School of Engineering who are required to take courses at the Applied English Center (http://www.aec.ku.edu) must pass the AEC’s English Proficiency Examination within 3 semesters of their initial enrollment. Failure to complete the English proficiency requirement within this time limit may result in dismissal from the graduate engineering program.

Graduate Admission

Admission is open to college and university graduates whose previous records indicate an ability to succeed with graduate work in the chosen discipline. Applicants with strong academic credentials may be admitted directly into the Ph.D. program without an M.S. in the requisite field.

Applicants must demonstrate evidence of aptitude for graduate work, as shown by suitable performance in undergraduate and any graduate course work, by aptitude test scores on the Graduate Record Examination, and by academic letters of reference.

Unless the applicant’s native language is English or the applicant has received a baccalaureate degree or higher from an accredited U.S. institution of higher education, he or she must meet the department’s standard for the Test of English as a Foreign Language, which is higher than the general KU requirement. Applicants for graduate teaching
assistantships must earn satisfactory scores on the Test of Spoken English.

**Application Deadlines**

Fall Priority Deadline: December 15  
Spring Priority Deadline: September 30

Applications will be accepted after the priority deadlines listed above, but those applicants may not be considered for fellowships and assistantships. All application materials must be submitted by March 1 for fall and October 1 for spring to be considered for admission. See the Graduate Studies website (http://www.graduate.ku.edu) for the application procedure and fees.

**Application Materials**

- Application  
- GRE scores (school code 6871)  
- Statement of objectives and resume  
- Official transcript  
- Letters of recommendation  
- TOEFL scores (international students)  
- Financial statement (international students only)

All application materials should be submitted online (http://www.graduate.ku.edu).

**Visiting Us**

The graduate program staff is happy to work with all prospective students in determining the fit between the student and the program. In order to determine this, we feel that visiting our campus in Lawrence is a very important step. In order to facilitate your visit to KU, there are two main options:

The first, and most preferred, option entails simply applying for admission to the program. All prospective students are welcome to attend our Open House in early November and some highly qualified admitted students may be invited to participate in Visitation Days in late February or early March (prior to the fall semester of your intended matriculation). These organized visitation opportunities will allow you time to gather a great deal of first-hand information which we hope will help you in making a final decision about whether to attend KU.

The second option is making arrangements to visit us on your own, outside of organized events. With early notification, we will do our best to work with you to provide information and schedule appointments with faculty when possible. Please contact us if you feel that this is the best option for you.

**Contact Information**

Please contact the EECS Program Assistant at eecs_graduate@ku.edu or (785) 864-4487, to schedule a visit or with questions about the application process.

The University of Kansas  
Department of Electrical Engineering and Computer Science  
Graduate Office  
Eaton Hall  
1520 W. 15th Street, Suite 2001E  
Lawrence, KS 66045-7605

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**Ph.D. Degree Requirements**

Requirements for the doctoral degree in electrical engineering include a written doctoral qualifying examination, course work, a research skills requirement, a responsible scholarship requirement, a comprehensive oral examination, a dissertation, and a final oral examination. Doctoral students also must take at least one semester of EECS 802 Electrical Engineering and Computer Science Colloquium and Seminar on Professional Issues.

In the first semester, the student must select a major adviser and a committee. The student’s committee consists of a minimum of 5 graduate faculty members and is chaired by the major adviser. The adviser and at least 2 other members of the committee must be tenured or tenure-track members of the graduate faculty in EECS, and 1 committee member must be the Graduate Studies Representative, a regular KU graduate faculty member outside of the EECS department. The role of this member as the Graduate Studies representative is designed to assure the appropriate standard of fairness, professionalism, judgment, and skill are applied throughout the examination process for the benefit of the institution and in the best interest of the student. As an independent participant observer, this member should have no personal or professional duality/conflict of interest with other members of the committee or the student that would prevent him or her from the unbiased fulfillment of these responsibilities. More information on this policy is available here (https://policy.ku.edu/graduate-studies/graduate-studies-representative-on-doctoral-exam-committees). This committee guides the student’s selection of courses, participates in the comprehensive and final examinations, and helps the student select a topic for research leading to the dissertation. Should the student’s interests change, the committee membership may be changed accordingly, with the approval of the department’s graduate studies committee.

All doctoral students must have an approved Plan of Study (https://gradplan.engr.ku.edu/accounts/login/?next=) on file by the beginning of their second semester of study.

Each doctoral student must pass a doctoral qualifying examination, which also meets the research skills requirement. This is a written examination taken within a single day that measures the student’s ability to comprehend and interpret technical literature in an unfamiliar topical area in the discipline. The examination is offered once a year, in the spring semester, and the student must take it at the first opportunity after completing the M.S. or after initial enrollment in the doctoral program. It may be retaken once, in the following spring semester. A more detailed description of the examination, including samples, is available in the graduate office (http://www.eecs.ku.edu).

Programs leading to the Ph.D. in electrical engineering require a minimum of 18 semester credit hours of course work beyond the requirements for the M.S. degree and a minimum of 18 credit hours of dissertation research http://www.eecs.ku.edu/current_students/courses. A minimum of 15 of these 18 hours must be EECS classes numbered 700 and above, excluding EECS 801 Directed Graduate Readings and EECS 891 Graduate Problems.

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Following completion of the Ph.D. dissertation, the candidate must defend the dissertation in an oral final examination. The examining committee is once again constituted as in the comprehensive oral examination.

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Engineering

Engineering Courses (ENGR)

No academic program is offered in this area, but some ENGR courses may be taken to count toward degrees in engineering.

Courses

ENGR 101. Engineering Academic Success Seminar. 0-1 Hours.
This course will provide an introduction to the University and School of Engineering community and the value and role of higher education in our society, strategies for successful transition to and participation in that community, exploration of the University and School commitment to diversity and multiculturalism, and information about University and School resources and procedures. Prerequisite: Eligible students must have fewer than thirty credit hours from the University of Kansas. LEC.

ENGR 102. Engineering Academic Recovery Program. 0 Hours.
The Engineering Academic Recovery Program is a mandatory course for freshman engineering students who are placed on academic probation (https://policy.ku.edu/graduate-studies/graduate-studies-representative-on-doctoral-exam-committees).

ENGR 108. Introduction to Engineering. 2 Hours.
An introductory level course with emphasis on engineering problem definition, methods simulation, and solution, including approaches to engineering design; engineering units and terminology; engineering disciplines and career areas, and engineering code of ethics. LEC.

ENGR 111. Freshman Self Seminar. 0-1 Hours.
This course will serve as an introduction to the Self Engineering Leadership Fellows Program and will focus on building student’s skills in leadership, business, entrepreneurship, management, communication, engineering, and interpersonal skills. Prerequisite: Students must have applied, interviewed, and been accepted as a Self Engineering Leadership Fellow. LEC.
ENGR 112. Sophomore Self Seminar. 0-1 Hours.
This course will serve as an introduction to the Self Engineering Leadership Fellows Program and will focus on building student's skills in leadership, business, entrepreneurship, management, communication, engineering, and interpersonal skills. Prerequisite: Students must have applied, interviewed, and been accepted as a Self Engineering Leadership Fellow. LEC.

ENGR 113. Junior Self Seminar. 0-1 Hours.
This course will serve as an introduction to the Self Engineering Leadership Fellows Program and will focus on building student's skills in leadership, business, entrepreneurship, management, communication, engineering, and interpersonal skills. Prerequisite: Students must have applied, interviewed, and been accepted as a Self Engineering Leadership Fellow. LEC.

ENGR 114. Senior Self Seminar. 0-1 Hours.
This course will serve as an introduction to the Self Engineering Leadership Fellows Program and will focus on building student's skills in leadership, business, entrepreneurship, management, communication, engineering, and interpersonal skills. Prerequisite: Students must have applied, interviewed, and been accepted as a Self Engineering Leadership Fellow. LEC.

ENGR 177. First Year Seminar: ______, 3 Hours. GE11.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in mechanical engineering. May not contribute to major requirements for School of Engineering students. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

ENGR 180. Introduction to Naval Ships Systems I. 3 Hours.
The concept of weapons systems and the systems approach are explored. The techniques of linear analysis of ballistics and weapons are introduced. The dynamics of the basic components of weapons control systems are investigated and stated as transfer functions. This course provides the tools for the future development in the student's understanding of the basic principles that underlie all modern naval weapons systems. Approved for degree credit in the College of Liberal Arts and Sciences effective fall 1971. Such courses count within the limit of 25 hours accepted from other schools and divisions. (Same as NAVY 180.) Prerequisite: MATH 002. LEC.

ENGR 184. Introduction to Naval Ships Systems II. 3 Hours.
The concept of weapons systems and the systems approach are explored. The techniques of linear analysis of ballistics and weapons are introduced. The dynamics of the basic components of weapons control systems are investigated and stated as transfer functions. This course provides the tools for the future development in the student's understanding of the basic principles that underlie all modern naval weapons systems. Approved for degree credit in the College of Liberal Arts and Sciences effective Fall 1971. Such courses count within the limit of 25 hours accepted from other schools and divisions. (Same as NAVY 184.) LEC.

ENGR 300. Cooperative Engineering Education Experience. 1 Hour.
Engineering work experience with a recognized engineering organization. The work must be professional in nature and not merely routine. A final summary report must be submitted to the student's major department at the conclusion of each continuous period of employment and may cover more than one sequential semester or summer session. Credit for this course cannot be used toward graduation requirements. Prerequisite: Permission of major department. FLD.

ENGR 301. Navigation and Operations I. 3 Hours.
First semester juniors. Three hours classroom and two and one-half hours laboratory per week. A comprehensive study of the theory, principles, and procedures of ship navigation in coastal and open ocean environment. Includes piloting, triangulation, ocean and tidal currents, navigational astronomy, spherical trigonometry, sight reduction, publications and logs; an introduction to electronic navigation, including theory of wave propagation, hyperbolic and azimuthal systems, doppler, inertial, and satellite systems. (Same as NAVY 300.) LEC.

ENGR 304. Technology: Its Past and Its Future. 3 Hours.
An examination of the role of technology and its influence on society. The historical development of technology will be traced up to modern times with an emphasis on its relations to the humanities. Attention will be given to the future of different branches of technology and alternative programs for their implementation. (Same as HIST 404.) LEC.

ENGR 305. Navigation and Operations II. 3 Hours.
Second semester juniors. Three hours classroom and two and one-half hours laboratory per week. A study of laws for the prevention of ship collisions; tactical formations and dispositions, relative motion, and maneuvering board. Major portion of the semester is devoted to operations research and analysis, with an introduction to discrete probability theory, game theory, measures of effectiveness, active and passive sonar equations, and review of systems analysis and cost effectiveness. (Same as NAVY 304.) Prerequisite: MATH 111 or higher. LEC.

ENGR 360. Special Topics: ______, 1-5 Hours.
Courses on special topics of current interest to engineers, such as ethics, engineering economics, engineering practice, communications, teamwork, and professional and career development. Prerequisite: Approval of the instructor. FLD.

ENGR 490. Engineering Internship. 1-6 Hours.
Engineering internship in an approved company. Internship hours do not satisfy any course requirements for a bachelors degree in any School of Engineering major, but will appear on the transcript. Credit assigned after review of report on internship experience. FLD.

ENGR 504. Technical Writing for Engineers. 1-3 Hours.
The process of planning, organizing, initiating, drafting, and editing engineering documents is covered through writing assignments and discussion. Writing, editing, and publishing the Kansas Engineer magazine. Graded on satisfactory/unsatisfactory basis. Prerequisite: ENGL 102. FLD.

ENGR 515. Verbal Communications in Engineering. 1 Hour.
Meets one hour per week. Planning, preparing, and presenting speeches on a variety of topics throughout the semester. Includes preparing speeches, spontaneous speeches and the evaluation of speeches by other students. Prerequisite: Two English courses and at least junior or senior standing in engineering or consent of instructor. FLD.

ENGR 600. Engineering Applications in India: Technical, Business, and Implementation Issues. 3 Hours.
Business principles play a crucial role in shaping engineering solutions. This course will communicate key differences between the United States and India in how engineering challenges and opportunities are shaped by these principles and by culture. Students will travel to India to attend lectures from schools, visit companies, engage in class discussion/ debate, and attend cultural excursions. Prerequisite: Major in Engineering. LEC.

ENGR 835. Project (ME). 3-6 Hours.
A design problem or system study satisfying the project requirement for the Master of Engineering degree. THE.
ENGR 940. Project (DE). 1-16 Hours.
A major design problem or system study satisfying the project requirement for the Doctor of Engineering degree. THE.

Engineering Management
Graduate Program

Engineering Management Graduate Programs

KU Edwards Campus

KU’s Engineering Management (EMGT) program is pioneering global education by teaming with industry to provide a delivery method that will allow professionals to access the highest quality training regardless of their location or current job assignment.

The M.S. program provides a superior graduate education for technical managers from engineering, science, mathematics, and computer science. EMGT graduates are more effective managers in technology-based organizations and are better able to promote entrepreneurial activities for new businesses.

The EMGT program integrates management with technology by focusing on three dimensions:

1. Technical: an understanding of and proficiency in engineering and science.
2. Human: the ability to build a collaborative effort within a group.
3. Conceptual: the ability to apply analytical thought to the management process and to the enterprise as a total system.

The EMGT program offers these emphasis areas: consulting engineering services, manufacturing/process engineering and systems and information technology.

The Project Management (PMGT) program will help fill the rising demand for project management expertise in science, information technology, manufacturing, business, construction, and engineering.

Project Management responsibilities include creating clear and attainable project objectives, building the project requirements, and managing the triple constraint for projects: cost, time, and scope. Project Management uses cross-functional teams to assist in the process of planning, organizing, securing, leading, delegating and controlling of resources to achieve specific goals to meet project objectives. A project manager is often also a client representative and has to determine and implement the exact needs of the client based on knowledge of the firm they are representing.

Program Options:

Master of Engineering, Project Management (M.E.) provides the engineering manager with the skills and knowledge to successfully bridge the fields of engineering, technology, people, and business.

Master of Science, Project Management (M.S.) provides the management knowledge and performance competencies which can be used by graduates from multiple disciplines involved in managing a variety of projects.

Courses are taught on weekday evenings or Saturdays on the KU Edwards Campus (http://edwardscampus.ku.edu) by Graduate Faculty members of the School of Engineering. All courses are available by e-learning.

Courses

EMGT 608. Principles of Engineering Management. 3 Hours.
A study of the principles used by the engineer in managing a technology-based enterprise. Topics include planning, organizing, staffing, directing, and controlling. Prerequisite: Senior or graduate standing in an engineering curriculum or consent of the instructor. LEC.

EMGT 800. Special Topics in Engineering Management. 1-4 Hours.
Advanced or experimental work of a specialized nature representing unique or changing needs and resources in engineering management. RSH.

EMGT 801. Management Theory and Practice for Engineering Managers. 3 Hours.
This course is intended to introduce the student to the basic concepts of management and motivation for the engineering manager and general behavior of technical organizations. This course presents a history of the schools of management thought through the modern research that began the participative management movement. The course will investigate classical motivational theories and management style principles. The student will perform research to determine how their employer or clients apply these theories. LEC.

Applied statistical methods to engineering systems will be introduced in this course for analyzing engineering and management systems. Emphasis will be given to applied regression analysis, analysis of variance, analysis of time dependence by smoothing, Bayes method, time series analysis, auto-regressive moving averages and forecasting model. Prerequisite: Skills in probability, statistics, and computer application. LEC.

EMGT 803. Technological Forecasting and Assessment. 3 Hours.
This course focuses on the impact of technology on society. Techniques of technology forecasting such as Delphi, cross-impact analysis, trend projection, decision trees, and scenarios are discussed. Case studies of technology assessments are presented. Each student is asked to conduct a preliminary technology assessment which is a systematic study of the effects on society which may occur when a technology is introduced or modified. Prerequisite: Elementary skills in statistics, computer programming, and linear algebra. LEC.

EMGT 804. Business Development and Marketing of Professional Services. 3 Hours.
Principles and theories of business development and marketing as applicable to professional engineering and architectural practices. LEC.

EMGT 805. Management of Innovation. 3 Hours.
Management of technology and technological change through innovation, imitation, and obsolescence; planning, organizing, motivation, and control for innovation; organizational climate and its effects on innovative ideas and entrepreneurship; project/product decisions and RD strategies in small and large companies; innovation in multinational corporations. LEC.

EMGT 806. Finance for Engineers. 3 Hours.
A study of finance including financial planning and management in technological based organizations. Topics covered include financial statement analysis, present value of financial markets, capital budgeting, taxes, investment decisions, replacement decisions, cash flow budgets, and sources of capital. LEC.
EMGT 807. Labor and Employee Relations for the Engineering Manager. 3 Hours.
This course is an introduction to labor relations and human resources, including employment practices in unionized and non-union organizations. The course will examine labor relations, human relations and collective bargaining with emphasis on the negotiation and administration of labor agreements. Included will be a survey of the historical, legal, and structural environments that influence the collective bargaining process. Research topics focus on some of the most important issues in the workplace: protecting jobs, increasing productivity, computerization, worker participation, expanding and declining labor markets, and new methods of decision making in the human resources field. LEC.

EMGT 808. Quality Management. 3 Hours.
The overwhelming challenge that faces the U.S. today is the need to regain its competitive position in the world marketplace. This course offers a broad view of Quality Management in that it focuses on the managerial aspects of quality, rather than just the technical. For example, students will learn the Malcolm Baldridge award criteria which focuses on leadership, data analysis, human resources, quality assurance, quality results, and customer satisfaction. In addition, a review of the theory and approaches of the major quality leaders such as Deming, Juran, and Crosby will be covered. Practical applications of TOM concepts in a technological environment will be stressed throughout the course. LEC.

EMGT 809. Personal Development for the Engineering Manager. 4 Hours.
Includes the study of theories, tests for, and objectives of engineering and management ethics. Explores personal values. Measures personality profile and preferred communication style for each student. Includes management of stress, time, and career. Each student prepares career and personal development plans. Managerial writing and communication skills are developed through weekly projects including report and proposal preparation, internal correspondence concerning praise and reprimand, and organizational policy preparation. Interpersonal and nonverbal communication styles are studied. Relies heavily on instructor-assisted peer mediation of topics after introduction of constructive techniques of interpersonal communication. LEC.

EMGT 810. Applications of Quantitative Analysis in Decision Making. 3 Hours.
This course emphasizes the use of general system theory, classical optimization and optimality conditions, model development, and theory and application of mathematical programming, to include: linear programming, dynamic programming, queuing models, integer and non-linear programming, and introduction to decision analysis. Prerequisite: Elementary skills in linear algebra, probability, calculus, and computer application. LEC.

EMGT 811. Engineering Systems Simulation. 3 Hours.
Methods of developing, implementing, and using computer simulations for management processes such as inventory control, waiting lines, project monitoring, and capital investment decisions are covered. Extensive use is made of simulation languages and interactive graphic-supported gaming and decision analysis. Engineering systems and chemical processes are studied under deterministic and stochastic conditions. Two hours lecture, three hours laboratory per week. LEC.

EMGT 812. Law and the Design Professional. 3 Hours.
This course covers: legal doctrines relating to owners, design professionals, and contractors; sources of law, forms of association, and agency; contracts, including formation, rights and duties, interpretation, performance problems, disputes, and claims; standards of care and the management of construction claims; duties and obligations of the design professional, the owner, and the contractor; surety bonds and insurance.

EMGT 813. Design Project Management in Professional Practice. 3 Hours.
Includes planning, organizing, staffing, directing, and controlling design projects. Treats those topics from viewpoints of profit, cost control, client satisfaction, and project team human relations. Also covers delegation, motivation, team building, performance reviews, conflict resolution, and group dynamics. Presents the project manager's job from an augmented model of the Blake-Mouton grid. Prerequisite: Admission to graduate study in engineering or architecture. LEC.

EMGT 814. Leadership Techniques and Methods for the Engineering Manager. 3 Hours.
Leadership is a balancing act. It requires communicating a compelling vision, convincing others to buy in to that vision, and marshaling resources and talent to make it happen. This course will help new leaders master the complex art of the leadership role by improving decision making and communications, earning trust and building momentum, and inspiring and enabling others to excel. Managers are under increasing pressure to deliver better results faster than the competition. But meeting today's tough challenges requires complete mastery of a full array of management skills, form communications and coaching to public speaking and managing people. LEC.

EMGT 815. Business Relationships and Selling Skills. 3 Hours.
This course will introduce students to the Fundamentals of Business Relationships and Professional Selling. It is suitable for any technical professional who would like to be more effective in "getting their message across" to external or internal customers. Students will learn and connect through class lectures on relationship management including ethical issues in business relationships, experimental exercises on conducting and evaluating dialogues/presentations with groups of Customers/Internal Audiences/Upper Management and through assignments via Blackboard. LEC.

EMGT 816. Energy Management. 3 Hours.
One of the most critical topics for an engineering manager is effective energy cost cutting. This class will be an introduction to the latest strategies for improving lighting, combustion processes, steam generation/distribution, and industrial waste re-utilization. Topics include distributed generation, energy auditing, rate structures, economic evaluation techniques, lighting efficiency improvement, HVAC optimization, combustion and use of industrial wastes, steam generation and distribution system performance, control systems and computers, energy systems maintenance, and renewable energy. LEC.

EMGT 817. Mathematics for the Engineering Manager. 3 Hours.
This comprehensive math course is designed for the needs of the Engineering Manager who may need a "refresher" or to gain greater understanding of math concepts and the relationship to Engineering Management decision-making. LEC.

EMGT 818. Advanced Mathematics for the Engineering Manager. 2 Hours.
This math course is designed to supplement Engineering Management students' math skill and knowledge that is relevant to both the program needs and career needs. This course begins with a higher level of trigonometry and ends with differential equations. LEC.

EMGT 821. Strategic Analysis of Technology Projects. 3 Hours.
A study of the economic feasibility of competing engineering projects including the application of break-even analysis, decisions under uncertainty, decision trees, stochastic models, risk vs. return, and forecasting. A study of the financial figures of merit used to evaluate
competing engineering projects including the DuPont rate of return method, the accounting rate of return, the operating return method, return on equity, earnings per share, margin on sales, selling price of stock, corporate credit rating, total sales, market share, market entry, and pro forma year-end statements. A study of the strategic evaluation of a project including the proposed product or service, the organization, the environment, and the venture in general. Prerequisite: Admission to the M.S. Engineering Management program or consent of instructor, EMGT 806, a course in applied statistics. LEC.

EMGT 823. Management of Internal Engineering Projects. 3 Hours.
The purpose of this course is to introduce the student to all aspects of managing a project within a company or organization. The entire project life cycle will be covered from inception to close-out, and many practical considerations will be discussed including material procurement, working with contractors and consultants, selecting software, and planning the project team. The course will focus on how to manage project scope, schedule budget, and resources using personal computer software. A semester project is required presenting an example of project management or investigating some aspect of project management in detail. LEC.

EMGT 824. Product Marketing for Engineering Managers. 3 Hours.
Basic principles of marketing as applicable to engineering managers in the production- or operations-based enterprise. Includes a broad overview of the major components of marketing (competition, product, price, promotion, and distribution). Also details the integration of those components into the marketing plan. The students will develop a group marketing plan for an agreed-upon product. Prerequisite: Admission to a graduate program in engineering or Pittsburgh State's technology management program. LEC.

EMGT 830. Case Studies in Engineering Management. 2-3 Hours.
A capstone course for the program which provides an integration of the material presented in the other courses through the utilization of several engineering management case studies. Note: Research paper and presentation are part of the 3 credit hour option. Prerequisite: Completion of a minimum of 21 credit hours in the Engineering Management program. LEC.

EMGT 835. Field Project (M.S.). 1-3 Hours.
A problem in engineering management, the satisfactory completion of which satisfies the project requirement for the degree of Master of Science in Engineering Management. THE.

EMGT 840. Systems Approach to Engineering. 3 Hours.
This is a first course at the graduate level introducing the formal methods and processes in bringing complex systems into being and improving existing systems. Systems include both products and services. Emphasis is placed on: the definition of customer needs, the entire life cycle of systems, and introduction to formal specification methods, the value to cost ratio and the management of the systems engineering process. LEC.

EMGT 844. Managing Software Development Projects. 3 Hours.
This course investigates the area of managing software development and presents the management process as a means of optimizing business considerations and project demands. Uncertainties in product/service specifications, technology risks, cost and delivery requirements impact the management functions. Cost and schedule estimation techniques are presented together with project planning, risk control and measurement technologies. The techniques presented in this course are directly applicable to management in other industry segments. Guest speakers are used to demonstrate applications in this course. LEC.

EMGT 848. Information Technology for Management. 3 Hours.
This course is intended to bring the student up to date on developments in the field of information technology (IT) and to prepare the student to apply those technologies in the workplace. To this end, the course is divided into two components. First, current hardware, software, and networking technologies will be presented. Topics include relational databases, object oriented design and programming, client-server technologies, the Internet, and emerging communication technologies. Second, approaches to evaluating and implementing the range of information technology alternatives available to business will be presented. Topics in this area include software development, management and evaluation, IT project management, information integrity and security, and the effects of IT on people and the organization. LEC.

EMGT 850. Environmental Issues for Engineering Managers. 3 Hours.
This course provides a survey of the environmental regulations, environmental problems, and environmental solutions that must be dealt with by engineering managers regardless of their function or industry. A historical perspective on the environment is presented followed by discussion of pollution generation (sources), transportation, fate, and effects. The quantity and quality of various types of pollutants emitted to various media and the risk posed by these pollutants is analyzed. The regulatory process is examined from the perspective of the legislator, the regulator, the regulated, the engineer, and the public. LEC.

EMGT 854. Management of Business Intelligence and Security for Strategic Planning. 3 Hours.
Management of competitive intelligence and security in business strategic planning is a first course at the graduate level that introduces the formal methods, concepts, and processes of competitive intelligence and security which are vital to both strategic business planning and day-to-day business operations. This course provides access to the tools used to identify what is happening in the business environment including legislation, economics, regulatory changes, competition, customers, etc. that affect a business' strategy and operations. Further, these tools are applied to determining what will likely happen in the future and how to use those forecasts to optimize strategic and operational plans. LEC.

EMGT 860. Special Problems in Engineering Management. 1-4 Hours.
Graduate-level investigation requiring original, independent research on problems or subjects of immediate interest to a student or faculty member. Intended to develop a student's capability in coordinating two or more of the following: technology, finance, economics, applied mathematics, and managerial communication. EMGT 860 may be repeated for credit to a maximum of four hours in the degree program. Prerequisite: Approval of an outline of the proposed project by the instructor and the program director. RSH.

EMGT 862. Manufacturing Systems Integration. 3 Hours.
This course develops the rationale and need for the integration of manufacturing systems, and deals with the multitude of practical problems involved with manufacturing systems integration. Topics covered include intelligent manufacturing subsystems and vendor-specific islands of automation, on-line and off-line information sources, and end users of information in the manufacturing enterprise. Engineering details covered include the types of communication links available between systems, communication standards, network and protocol alternatives, and hardware platform alternatives. Management concepts covered include the top-down design/bottom-up implementation approach to system integration, long-range planning and management of integration projects, reliability and security issues, and human factors. LEC.
EMGT 867. Advanced Operations Management. 3 Hours.
This course provides the student with up-to-date information of the management of manufacturing operations. Emphasis is on quantitative methods for designing and analyzing manufacturing processes, simulation of manufacturing processes, and recent paradigms in manufacturing including just-in-time production, synchronous manufacturing, and agile manufacturing. A semester project is required covering some aspect of operations management in detail. LEC.

PMGT 800. Special Topics: _____. 3 Hours.
Advanced or experimental work of specialized nature representing unique or changing needs and resources in project management. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified. LEC.

PMGT 806. Finance for Project Manager. 3 Hours.
A study of finance including financial planning and management in technological based organizations. Topics covered include financial statement analysis, present value of financial markets, capital budgeting, taxes, investment decisions, replacement decisions, cash flow budgets and sources of capital. LEC.

PMGT 809. Personal Development for Project Managers. 4 Hours.
Concepts and skills development in the primary areas of communication methods, ethical behavior, conflict resolution, workforce diversity, and continuous learning, and secondary areas of basic project and project team contexts and related interpersonal relations. Career development is emphasized. LEC.

PMGT 816. Project Management Fundamentals I. 3 Hours.
Managerial concepts and skills development in relation to the project-oriented business environment, project lifecycle, integrated project management, project selection, and project initiation. Focus is on management of a single project. LEC.

PMGT 817. Project Management Fundmmts II. 3 Hours.
Planning concepts and skills development in relation to developing needed information on project scope, time, cost, and risk, and making direct use of such information to develop key documentation such as the project schedule and budget. Examples of specific topics considered include project work content and change, documentation, and resource requirements. Planning content is complementary to that of PMGT 818. Prerequisite: PMGT 816. LEC.

PMGT 818. Project Management Fundamentals III. 3 Hours.
Concepts and skills development in relation to planning for management of communications, human resource aspects of project team formation and development, procurement, and quality. Examples of specific topics considered include information handling, reporting, and stakeholder relationships. Planning content is complementary to that of PMGT 817. Prerequisite: PMGT 817. LEC.

PMGT 819. Project Management Fundamentals IV. 3 Hours.
Concepts and skills development in relation to project execution, including processes monitoring and controlling, and project closure. Examples of specific topics considered include handling change requests, procurement, teamwork and team development, and cost management. Course content represents systematic treatment of all aspects of project management beyond planning—but is, in project execution and closing phrases. Prerequisite: PMGT 818. LEC.

PMGT 820. Management of New Product Development Projects. 3 Hours.
This course discusses how to properly manage new product development processes using project management tools and techniques. New products are not projects until they are analyzed, planned, scheduled, budgeted, managed, and controlled by managers. It is not typically technical process issues that result in failed new product introductions, but rather a failure in their management and marketing. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, PMP Certified. LEC.

PMGT 821. Management of Consulting Projects. 3 Hours.
Application area course exposing students to specialized knowledge, standard, and regulations involved in managing consulting projects. Attention is directed to unique characteristics of consulting project environments, major project phases-from selection to closing-and related management processes. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified. LEC.

PMGT 822. Management of Governmental Projects. 3 Hours.
Application area course exposing students to specialized knowledge, standards, and regulations involved in managing projects for governmental entities. Attention is directed to unique characteristics of the governmental project environments, major project phases-from selection to closing-and related management processes. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified. LEC.

PMGT 823. Risk Management for Project Managers. 3 Hours.
Advanced study of risk management theory and practice as applied in managing projects. Basic concepts and methods of risk management are reviewed—such as qualitative and quantitative risk assessment—and details then examined. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified. LEC.

PMGT 824. Project Cost Estimation, Analysis, and Control. 3 Hours.
Advanced study of cost estimation methodology, cost engineering, and cost control applicable in project management. Includes review of commonly used supportive software. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified. LEC.

PMGT 825. Portfolio Analysis for Project Managers. 3 Hours.
Concepts and methods of intra-and inter-project finance including inter-organization funding, project evaluation and selection, project cost accounting, portfolio formulation and modification, and performance tracking. Introduces fundamentals of investment theory and real options analysis. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified. LEC.

PMGT 826. Program Management. 3 Hours.
Examination of program definition, structuring, and management in the context of organizational strategy, and the critical resources and skills required in long-term program evolution and execution. Facilitation of efforts across multi-tiered organizations will be stressed. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified. LEC.

PMGT 827. Project Team Management and Development. 3 Hours.
Concepts and methods of team and team member development, achieving higher-performance teams while satisfying organizational expectations. Specific topics include management concepts and practices, team dynamics, and interpersonal skills in negotiation and conflict resolution. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified. LEC.

PMGT 828. Management of Global Projects. 3 Hours.
Survey of management challenges in conducting international projects, emphasizing cross-culture issues. Differences across world regions and selected key countries in relation to communication and interpersonal norms, business conventions, and legal systems will receive particular attention. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified. LEC.
PMGT 829. Management of Distributed Project Teams. 3 Hours.
Concepts and methods of conducting high-performance, multi-site team operations, focusing on intra-team communication, coordination, and control. Incorporates review of practical technologies with emphasis on web-enabled approaches. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified. LEC.

PMGT 830. Case Studies in Project Management. 2 Hours.
Reinforcement and demonstration of developing project management skills through case analysis and discussion. Goal is integration of learning across all core courses, and also drawing on content from general management, applications area, and advanced project management elective courses taken. Emphasis is on integrated project management. The students will document their project in a written report and present their project during the final oral examination to the Project Management faculty and student's employer or representative if practical. LEC.

PMGT 833. Management of Internal Projects for Scientists and Technical Professionals. 3 Hours.
The purpose of this course is to introduce the student to all aspects of managing a project within a company or organization. The entire project life cycle will be covered from inception to close-out, and many practical considerations will be discussed including material procurement, working with contractors and consultants, selecting software, and managing the project team. The course will focus on how to manage project scope, schedule budget, and resources using personal computer software. A semester project is required presenting an example of project management or investigating some aspect of project management in detail. LEC.

PMGT 835. Project Management Capstone. 3 Hours.
The capstone serves as a culminating experience for this degree. Students will develop an applied workforce project or benefit to in the student's place of employment for full time students. The students will document their project in a written report and present their project during the final oral examination to the Project Management facility and student's employer or representative if practical. Prerequisite: Must complete 21 credit hours. LEC.

Master of Science in Engineering Management

Engineering Management Graduate Program
KU Edwards Campus

The M.S. program provides a superior graduate education for technical managers from engineering, science, mathematics, and computer science. EMGT graduates are more effective managers in technology-based organizations and are better able to promote entrepreneurial activities for new businesses.

The EMGT program integrates management with technology by focusing on 3 dimensions:

1. Technical: an understanding of and proficiency in engineering and science.
2. Human: the ability to build a collaborative effort within a group.
3. Conceptual: the ability to apply analytical thought to the management process and to the enterprise as a total system.

The EMGT program offers these emphasis areas: consulting engineering services, manufacturing/process engineering and systems and information technology.

Courses are taught on weekday evenings or Saturdays on the KU Edwards Campus (http://edwardscampus.ku.edu) by Graduate Faculty members of the School of Engineering. All courses are available by e-learning.

Graduate Admission to the School of Engineering

Procedure
Admission requirements for the School of Engineering follow the general KU requirements plus those of each engineering graduate program. All applicants must apply online (http://www.graduate.ku.edu/apply). Detailed information about supplemental application materials for each program is listed here (http://www.engr.ku.edu/graduate-prospective/apply). Information for prospective international students is available from International Student & Scholar Services (http://www2.ku.edu/~issfacts). Download a PDF (http://www.engr.ku.edu/graduate-prospective/apply/grad_app_process.pdf) for more information about the review process for graduate applications.

Some departments and programs require the Graduate Record Examination. Applications must be accompanied by a nonrefundable fee. See Admission (p. 2369) in the Graduate Studies section of the online catalog.

Baccalaureate Preparation
To qualify for graduate work in any field of engineering, a student generally must hold an accredited baccalaureate degree in that field and have at least a 3.0 grade-point average. A student with good preparation in such fields as mathematics, chemistry, or physics, or in a related engineering field, may be admitted on the basis of performance in specific undergraduate courses, determined by the department of interest to the prospective student. Undergraduate hours do not count as part of a student's Plan of Study, but they must be completed with grades of B or higher.

Exceptionally qualified undergraduates may be admitted directly to a Fast-Track Ph.D. program, which does not require the master's as an intermediate degree. Students who wish to earn a Ph.D. and believe that they meet this criterion are encouraged to contact the graduate advisor in their field of interest.

English Proficiency Requirement
All graduate students in the School of Engineering who are required to take courses at the Applied English Center (http://www.aec.ku.edu) must pass the AEC's English Proficiency Examination within 3 semesters of their initial enrollment. Failure to complete the English proficiency requirement within this time limit may result in dismissal from the graduate engineering program.

Graduate Admission
KU Edwards Campus

To enter KU's Master of Science in Engineering Management program, applicants must have:
1. Bachelor of Science undergraduate degree in engineering or related science from an accredited institution. Technology degrees are considered only with a very high (e.g. 3.8) GPA and substantial experience (8-10 years).

2. A 3.0 or higher undergraduate grade point average (on a 4.0 scale). Admission may be granted on a provisional basis if an applicant’s GPA is between 2.50 and 2.99.

3. Two year’s full-time, post-undergraduate work experience in a technological environment.

4. International students must also meet the English requirement by taking either the Test of English as a Foreign Language (TOEFL), the International English Language Testing System (IELTS) or have a degree from an English speaking institution. Financial support requirements must also be met.

Engineering Management (EMGT) does not require the GRE or GMAT.

A completed application includes the application fee, application form, résumé, 1 original transcript, and 3 recommendation forms. International students must also meet English and financial requirements. Course schedules, faculty biographical information, and other program information may be requested from the EMGT office or downloaded from the program’s website.

Admissions Deadline

Our program priority deadlines for admission are:

Fall Admission: December 15 (all applicants)

Spring Admission: September 30 (all applicants)

*The department will accept applications after the priority deadline, but those applicants will not be considered for additional funding options.

Graduate applications should be submitted online (http://www.graduate.ku.edu).

The University of Kansas Edwards Campus

Engineering Management

12600 Quivira Road

Overland Park, KS 66213-2402

M.S. Degree Requirements

KU Edwards Campus

The Master of Science program in Engineering Management has two options available:

Option A requires 30 hours of credits (21 credits in required core courses, 6 credits in electives and a field project of 3 hours) with a final oral examination. This option is recommended for students who plan to pursue additional degrees or who have a specific work-related project that needs further exploration.

Option B requires 34 hours of credits (22 credits in required core courses and 12 credits in elective courses) with an oral examination. It does not require a field project.

Option A (Field project) Research Option - TOTAL 30 CREDITS

Required Core Courses including the Field Project - 24 Credits
**Required Electives (12 credits)**

**Electives**

All elective courses outside of the EMGT program must be listed as graduate courses, taken for graduate credit, and approved by an EMGT faculty member in order to apply toward the Master of Science in Engineering Management degree. Approved EMGT elective courses are listed below:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMTG 801</td>
<td>Management Theory and Practice for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 802</td>
<td>Statistical Analysis and Prediction of Engineering Systems</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 803</td>
<td>Technological Forecasting and Assessment</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 804</td>
<td>Business Development and Marketing of Professional Services</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 805</td>
<td>Management of Innovation</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 807</td>
<td>Labor and Employee Relations for the Engineering Manager</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 808</td>
<td>Quality Management</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 812</td>
<td>Law and the Design Professional</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 814</td>
<td>Leadership Techniques and Methods for the Engineering Manager</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 815</td>
<td>Business Relationships and Selling Skills</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 816</td>
<td>Energy Management</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 817</td>
<td>Mathematics for the Engineering Manager</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 818</td>
<td>Advanced Mathematics for the Engineering Manager</td>
<td>2</td>
</tr>
<tr>
<td>EMTG 824</td>
<td>Product Marketing for Engineering Managers</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 840</td>
<td>Systems Approach to Engineering</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 850</td>
<td>Environmental Issues for Engineering Managers</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 860</td>
<td>Special Problems in Engineering Management</td>
<td>1-4</td>
</tr>
<tr>
<td>EMTG 862</td>
<td>Manufacturing Systems Integration</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 867</td>
<td>Advanced Operations Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Project Management (M.E. & M.S.)**

**Project Management Graduate Program**

**Master of Engineering (M.E.) or Master of Science (M.S.)**

**KU Edwards Campus**

Project Management (http://www.pmgt.ku.edu) is driven by globalization, the internet, and the rapid advancement for work processes. Organizations must implement projects faster than ever before. These organizations are looking for technically oriented and highly skilled project managers. The Project Management degree addresses workforce needs by providing those individuals from multiple disciplines with the skills, confidence, and competence to manage a variety of projects, as well as bridge the fields of engineering, technology, people, and business. Individuals may opt for a Master of Engineering (http://www.pmgt.ku.edu/me-pm) (M.E.) in Project Management or a Master of Science (http://www.pmgt.ku.edu/ms-pm) (M.S.) in Project Management depending on their undergraduate discipline.

The Project Management (PMGT) Fundamentals courses will strengthen one's knowledge and ability to apply the theory and concepts of Project Management in the real world. Electives will be offered on a rotational basis and will remain current with Project Management trends, demands, and the interests of our students.

Courses can be completed in Overland Park on the KU Edwards Campus (http://edwardscampus.ku.edu) on weekday evenings and are also available by e-learning with permission from the instructor. Classes are taught by Graduate Faculty members of the School of Engineering and members of the professional community.

**Graduate Admission Requirements**

**KU Edwards Campus**

To enter KU's Master of Engineering in Project Management, applicants must have:

1. An undergraduate degree in engineering or related science from an accredited institution.
2. A 3.0 or higher undergraduate grade point average (on a 4.0 scale).
3. Two year’s full-time, post-undergraduate work experience in a technological environment.
4. International students must also meet the English requirement by taking either the Test of English as a Foreign Language (TOEFL), the International English Language Testing System (IELTS) or have a degree from an English speaking institution. Financial support requirements must also be met.

All applications are completed online. A complete application includes the application fee, application form, résumé, 1 original transcript showing degree conferral, and 3 recommendation forms. Course schedules, faculty biographical information, and other program information may be requested from the PMGT office or downloaded from the Project Management website.

Graduate applications should be submitted online (http://www.graduate.ku.edu).

To enter KU's Master of Science in Project Management, applicants must have:

1. Bachelor of Science degree from an accredited institution.
2. A 3.0 or higher undergraduate grade point average (on a 4.0 scale).
3. GRE score, sent directly to the Project Management Program Coordinator.
4. International students must also meet the English requirement by taking either the Test of English as a Foreign Language (TOEFL), the International English Language Testing System (IELTS) or have a degree from an English speaking institution. Financial support requirements must also be met.

All applications are completed online. A complete application includes the application fee, application form, résumé, 1 original transcript showing degree conferral, and 3 recommendation forms. Course schedules, faculty biographical information, and other program information may be requested from the PMGT office or downloaded from the Project Management website.

**Admissions Deadline**

Our program priority deadlines for admission are:

Fall Admission: December 15 (all applicants)
Spring Admission: September 30 (all applicants)
Summer Admission: April 1 (all applicants)

*The program will accept applications after the priority deadline, but those applicants will not be considered for additional funding options.

Graduate applications should be submitted online (http://www.graduate.ku.edu).

Degree Requirements

The Masters in Project Management requires a total of 33 semester hours of graduate work. A total of 12 hours will be completed in Project Management (PMGT) fundamentals for both the Master of Engineering and Master of Science, while the remaining 21 hours will be completed in varying required course work and electives depending on the degree program. Please refer to the Plan of Study below for the corresponding degree program. Students will work with their faculty advisor and the program coordinator to finalize course selections to meet department and university requirements for degree completion and complete their Plan of Study (https://gradplan.engr.ku.edu/accounts/login/?next=).

Master of Engineering in Project Management

Required Courses (19)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMGT 816</td>
<td>Project Management Fundamentals I</td>
<td>3</td>
</tr>
<tr>
<td>PMGT 817</td>
<td>Project Management Fundamentals II</td>
<td>3</td>
</tr>
<tr>
<td>PMGT 818</td>
<td>Project Management Fundamentals III</td>
<td>3</td>
</tr>
<tr>
<td>PMGT 819</td>
<td>Project Management Fundamentals IV</td>
<td>3</td>
</tr>
<tr>
<td>PMGT 806</td>
<td>Finance for Project Manager</td>
<td>3</td>
</tr>
<tr>
<td>PMGT 809</td>
<td>Personal Development for Project Managers</td>
<td>4</td>
</tr>
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Research & Practica (2)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMGT 830</td>
<td>Case Studies in Project Management</td>
<td>2</td>
</tr>
</tbody>
</table>

PMGT Electives (12)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
</table>

Total Hours 33

Please note that electives may be taken outside of PMGT with the pre-approval of advisors for the Master of Engineering degree program.

Master of Science in Project Management

Concentration Courses (12)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMGT 816</td>
<td>Project Management Fundamentals I</td>
<td>3</td>
</tr>
<tr>
<td>PMGT 817</td>
<td>Project Management Fundamentals II</td>
<td>3</td>
</tr>
<tr>
<td>PMGT 818</td>
<td>Project Management Fundamentals III</td>
<td>3</td>
</tr>
<tr>
<td>PMGT 819</td>
<td>Project Management Fundamentals IV</td>
<td>3</td>
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</tbody>
</table>

Core Courses (12)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 708</td>
<td>Accounting and Finance for Professionals</td>
<td>3</td>
</tr>
<tr>
<td>ENTR 701</td>
<td>Starting Your Own Business</td>
<td>3</td>
</tr>
<tr>
<td>COMS 730</td>
<td>Writing and Speaking for Decision Makers</td>
<td>3</td>
</tr>
<tr>
<td>COMS 930</td>
<td>Seminar in Speech: ______ (Applied Organizational Communication)</td>
<td>3</td>
</tr>
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Capstone (3)

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>PMGT 835</td>
<td>Project Management Capstone</td>
<td>3</td>
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</table>

PMGT Electives (6)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
</table>

Total Hours 33

Engineering Physics Undergraduate Program

Engineering Physics Undergraduate Program

The engineering physics program is designed for undergraduates with an interest in both science and engineering. The program is focused on those students who wish to work in areas of rapid technological change, where a good background in the underlying science is an important ingredient to success in their careers. The curriculum includes classical and modern physics, mathematics, and their applications to one or more areas of engineering. The student learns the physical science and engineering principles underlying modern technology. Four design concentrations are offered:

- Aerospace systems
- Chemical systems
- Digital electronic systems
- Electromechanical control systems

Each option incorporates a significant design component and provides a strong base in one or more engineering disciplines. The degree is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

For programs in physics, see Physics and Astronomy (p. 1904) in the College of Liberal Arts and Sciences section of the online catalog.

Educational Objectives

Engineering physics graduates will be capable of

- Completing or successfully progressing toward completion of an advanced degree in graduate or professional school,
- Using their analytical, problem-solving, and communications skills to conduct research or contribute to technology development projects, individually or as a team member,
- Using their background knowledge in physics and engineering fundamentals as a foundation for developing new knowledge and experience in their chosen disciplines.

Careers

Professional Opportunities

Engineering physics enables graduates to combine an extensive background in physics, the science that underlies modern technology, with an engineering degree. Their broad training and technical breadth provide a unique flexibility. They have the science background to pursue pure research opportunities, the engineering degree and design concentration to solve practical problems in industry or a variety of other settings, and the understanding to act as a communication link between highly diversified divisions of an organization. Engineering physics graduates typically work in aerospace and avionic industries, electronics industries, research and development laboratories, telecommunications, design and consulting firms, and government agencies, and as defense contractors. Many engineering physics graduates attend graduate or professional school before entering the work force.
Courses

EPHX 400. Topics in Engineering Physics: _____. 1-3 Hours.
A course on special topics in engineering physics, given as the need arises. Course may be repeated for different topics. Each section may have additional prerequisites to be determined by the instructor. LEC.

EPHX 501. Honors Research. 1-4 Hours. AE61.
This course is for students seeking Departmental Honors in Astronomy, Engineering Physics, or Physics to fulfill the undergraduate research requirement. At the completion of the required four hours of total enrollment, a written and oral report of the research is required. (Same as PHSX 501.) Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics. IND.

EPHX 503. Undergraduate Research. 1-4 Hours. AE61.
This course is for students seeking to fulfill the undergraduate research requirement. Students are expected to participate in some area of ongoing research in the department, chosen with the help of their advisor. At the end of the term, students will present their results in a seminar to other students and faculty. (Same as ASTR 503 and PHSX 503.) Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics, or permission of instructor. IND.

EPHX 511. Introductory Quantum Mechanics. 3 Hours.
An introduction to quantum mechanics, emphasizing a physical overview. Topics should include the formalisms of non-relativistic quantum mechanics, the 3-dimensional Schrodinger equation with applications to the hydrogen atom; spin and angular momentum; multi-particle systems of Fermi-Dirac and Bose-Einstein particles; time-independent perturbation theory. (Same as PHSX 511.) Prerequisite: PHSX 313 and MATH 290. LEC.

EPHX 516. Physical Measurements. 4 Hours.
A laboratory course emphasizing experimental techniques and data analysis, as well as scientific writing and presentation skills. Experiments will explore a range of classical and modern physics topics. (Same as PHSX 516.) Prerequisite: PHSX 313, EPHX 316, and EPHX 521. (EPHX 521 may be taken concurrently.) LAB.

EPHX 518. Mathematical Physics. 3 Hours. N.
Applications of modern mathematical methods to problems in mechanics and modern physics. Techniques include application of partial differential equations and complex variables to classical field problems in continuous mechanics, unstable and chaotic systems, electrodynamics, hydrodynamics, and heat flow. Applications of elementary transformation theory and group theory, probability and statistics, and nonlinear analysis to selected problems in modern physics as well as to graphical representation of experimental data. Prerequisite: PHSX 313 and MATH 320 or permission of instructor. (Same as PHSX 518.) LEC.

EPHX 521. Mechanics I. 3 Hours.
Newton's laws of motion. Motion of a particle in one, two, and three dimensions. Motion of a system of particles. Moving coordinate systems. (Same as PHSX 521.) Prerequisite: PHSX 211 and PHSX 216, or PHSX 213; MATH 223; MATH 290; and MATH 220 or MATH 320. LEC.

EPHX 531. Electricity and Magnetism. 3 Hours.
The properties of electric and magnetic fields, including electrostatics, Gauss' Law, boundary value methods, electric fields in matter, electromagnetic induction, magnetic fields in matter, the properties of electric and magnetic dipoles and of dielectric and magnetic materials. (Same as PHSX 531.) Prerequisite: PHSX 214, or PHSX 212 and PHSX 236; PHSX 521 or special permission; MATH 223; MATH 290; and MATH 220 or MATH 320. LEC.

EPHX 536. Electronic Circuit Measurement and Design. 4 Hours.
A laboratory course that explores the theory and experimental techniques of analog and digital electronic circuit design and measurements. Topics include transient response, transmission lines, transistors, operational amplifiers, and digital logic. (Same as PHSX 536.) Prerequisite: PHSX 214 or PHSX 212 and PHSX 236; MATH 223; and MATH 290. PHSX 313 and 316 recommended. LEC.

EPHX 600. Special Topics in Physics and Astrophysics: _____. 3 Hours.
Different topics will be covered as needed. This course will address topics in physics and astrophysics not covered in regularly offered courses. May be repeated if topic differs. (Same as PHSX 600.) Prerequisite: Permission of instructor. LEC.

EPHX 601. Design of Physical and Electronic Systems. 4 Hours. AE61.
A laboratory course emphasizing the application of physical principles to the design of systems for research, monitoring, or control. Topics include the use of microcomputers as controllers, interfacing microcomputers with measurement devices, and use of approximations and/or computer simulation to optimize design parameters, linear control systems, and noise. (Same as PHSX 601.) Prerequisite: Twelve hours of junior-senior credit in physics or engineering, including at least one laboratory course. LEC.

EPHX 615. Numerical and Computational Methods in Physics. 3 Hours.
An introduction to the use of numerical methods in the solution of problems in physics for which simplifications allowing closed-form solutions are not applicable. Examples are drawn from mechanics, electricity, magnetism, thermodynamics, and optics. (Same as PHSX 615.) Prerequisite: PHSX 313, MATH 320 or equivalent, and EECS 138 or equivalent. LEC.

EPHX 621. Mechanics II. 3 Hours.
Continuation of PHSX 521. Lagrange's equations and generalized coordinates. Mechanics of continuous media. Tensor algebra and rotation of a rigid body. Special relativity and relativistic dynamics. (Same as PHSX 621.) Prerequisite: EPHX 521 or PHSX 521. LEC.

EPHX 623. Physics of Fluids. 3 Hours.
An introduction to basic fluid mechanics in which fundamental concepts and equations will be covered. Topics will include hydrostatics, hydrodynamics, wave propagation in fluids, and applications in the areas such as astrophysics, atmospheric physics, and geophysics. (Same as PHSX 623.) Prerequisite: MATH 223; MATH 290; PHSX 212 and PHSX 236 (or PHSX 214 can replace PHSX 212 and PHSX 236.) LEC.

EPHX 631. Electromagnetic Theory. 3 Hours.
Maxwell's equations, wave propagation, optics and waveguides, radiation, relativistic transformations of fields and sources, use of covariance, and invariance of relativity. Normally a continuation of PHSX 531. (Same as PHSX 631.) Prerequisite: EPHX 531 or PHSX 531. LEC.

EPHX 641. Introduction to Nuclear Physics. 3 Hours.
Experimental methods in nuclear physics, elementary concepts and simple considerations about nuclear forces, alpha and beta decay, gamma radiation, nuclear structure, and reaction systematics. (Same as PHSX 641.) Prerequisite: PHSX 313 and PHSX 511. LEC.

EPHX 655. Optics. 3 Hours.
Geometric optics. Wave properties of light: interference, diffraction, coherence. Propagation of light through matter. Selected topics in modern optics, e.g., lasers, fibers. (Same as PHSX 655.) Prerequisite: PHSX 313 and PHSX 316. LEC.
EPHX 661. Introduction to Elementary Particle Physics. 3 Hours. Properties and interactions of quarks, leptons, and other elementary particles; symmetry principles and conservation laws; broken symmetry; gauge bosons; the fundamental interactions, grand unified theories of strong, electromagnetic, and weak interactions; the cosmological implications of elementary particle physics. (Same as PHSX 661.) Prerequisite: PHSX 313 and MATH 320. LEC.

EPHX 671. Thermal Physics. 3 Hours. Development of thermodynamics from statistical considerations. Elementary techniques of calculating thermodynamic properties of systems. Application to classical problems of thermodynamics. Elementary kinetic theory of transport processes. Fermi-Dirac and Bose-Einstein systems. (Same as PHSX 671.) Prerequisite: PHSX 511. LEC.

EPHX 681. Concepts in Solids. 3 Hours. Properties of common types of crystals and amorphous solids. Lattice vibrations and thermal properties of solids. Electrons and holes in energy bands of metals, semiconductors, superconductors, and insulators. (Same as PHSX 681.) Prerequisite: PHSX 313 and PHSX 511. LEC.

EPHX 691. Astrophysics I. 3 Hours. An introduction to radiation processes, thermal processes, and radiative transfer in stellar atmospheres and the interstellar medium. (Same as ASTR 691 and PHSX 691.) Prerequisite: PHSX 313 or consent of instructor. LEC.

EPHX 693. Gravitation and Cosmology. 3 Hours. An overview of topics relevant to gravitation and modern cosmology: special relativity, tensor notation, the equivalence principle, the Schwarzschild solution, black holes, and Friedman models. Cosmic black body radiation, dark matter, and the formation of large-scale structure. The idea of quantum gravity and an introduction to the current literature in cosmology. (Same as PHSX 693.) Prerequisite: PHSX 313 and MATH 320. LEC.

Bachelor of Science in Engineering Physics

Engineering Physics Undergraduate Program

The engineering physics program is designed for undergraduates with an interest in both science and engineering. The program is focused on those students who wish to work in areas of rapid technological change, where a good background in the underlying science is an important ingredient to success in their careers. The curriculum includes classical and modern physics, mathematics, and their applications to one or more areas of engineering. The student learns the physical science and engineering principles underlying modern technology. Four design concentrations are offered:

- Aerospace systems
- Chemical systems
- Digital electronic systems
- Electromechanical control systems

Each option incorporates a significant design component and provides a strong base in one or more engineering disciplines. The degree is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

For programs in physics, see Physics and Astronomy (p. 1904) in the College of Liberal Arts and Sciences section of the online catalog.

Educational Objectives

Engineering physics graduates will be capable of

- Completing or successfully progressing toward completion of an advanced degree in graduate or professional school,
- Using their analytical, problem-solving, and communications skills to conduct research or contribute to technology development projects, individually or as a team member,
- Using their background knowledge in physics and engineering fundamentals as a foundation for developing new knowledge and experience in their chosen disciplines.

Careers

Professional Opportunities

Engineering physics enable graduates to combine an extensive background in physics, the science that underlies modern technology, with an engineering degree. Their broad training and technical breadth provide a unique flexibility. They have the science background to pursue pure research opportunities, the engineering degree and design concentration to solve practical problems in industry or a variety of other settings, and the understanding to act as a communication link between highly diversified divisions of an organization. Engineering physics graduates typically work in aerospace and avionic industries, electronics industries, research and development laboratories, telecommunications, design and consulting firms, and government agencies, and as defense contractors. Many engineering physics graduates attend graduate or professional school before entering the work force.

Undergraduate Admission to the School of Engineering

First-year undergraduate students may be admitted, but all admissions, both in-state and out-of-state, are selective. Visit the Office of Admissions (http://admissions.ku.edu/whyku/index.shtml) for admission requirements. Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Applications are judged on several factors, including but not limited to high school record, scores on national tests, academic record at college or university level, and trend of grades. High school transcripts and ACT scores are required. Equivalent SAT scores may be substituted.

Minimum Academic Standards for Admission

To be considered for admission to the School of Engineering, beginning first-year students must meet or exceed the following minimum standards:

- 3.0 grade-point average on a 4.0 scale on the Kansas Board of Regents Qualified Admissions (http://admissions.ku.edu/apply/regents_curriculum.shtml) college-preparatory curriculum.
- Top 50 percent of the graduating class of an accredited high school or the equivalent.
- Mathematics ACT score of 22 (or mathematics SAT score of 540). Some engineering degree programs may require a higher mathematics ACT score.
These minimum admission standards apply to all departments. Meeting minimum requirements does not guarantee admission.

**Transfer Admission Standards**

Applications from all transfer students, whether from other institutions or from other KU units, are evaluated on a case-by-case basis. In general, students with grade-point averages under 2.5 are not considered. Students must submit mathematics ACT or SAT scores or proof of competence in calculus (grade of C or higher). No upper-level engineering credits from non-ABET-accredited engineering programs are acceptable as transfer credit for engineering programs. Admission is selective, and meeting the minimum requirements does not guarantee admission.

**First- and Second-Year Preparation**

Recommended enrollments for the first 2 years vary with the design concentration selected (see below). Consult a departmental advisor as early as possible. Courses common to all concentrations are

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 150, 130, or 170</td>
<td>5</td>
<td>KU Core Goal 2.1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>KU Core Goal 2.1</td>
<td>3</td>
<td>PHSX 211, and PHSX 216, or PHSX 213</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>PHSX 150</td>
<td>0.5</td>
<td>MATH 126</td>
<td>4</td>
<td></td>
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<tr>
<td>MATH 125</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Hours:</strong></td>
<td>12.5</td>
<td></td>
<td>12</td>
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<table>
<thead>
<tr>
<th>Sophomore</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>MATH 290</td>
<td>2</td>
<td>PHSX 313</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHSX 212, and PHSX 236, or PHSX 214</td>
<td>4</td>
<td>PHSX 316</td>
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</tr>
<tr>
<td>MATH 220 or 320</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>MATH 127</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Hours:</strong></td>
<td>13</td>
<td></td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

**Bachelor of Science in Engineering Physics Degree Requirements**

Each student takes a common core of courses and selects 1 of 4 design concentrations.

**Common Core**

<table>
<thead>
<tr>
<th>Physics</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 150</td>
<td>Seminar in Physics, Astronomy and Engineering Physics</td>
</tr>
<tr>
<td>PHSX 211</td>
<td>General Physics I</td>
</tr>
<tr>
<td>&amp; PHSX 216</td>
<td>and General Physics I Laboratory</td>
</tr>
<tr>
<td>or PHSX 213</td>
<td>General Physics I Honors</td>
</tr>
<tr>
<td>PHSX 212</td>
<td>General Physics II</td>
</tr>
<tr>
<td>&amp; PHSX 236</td>
<td>and General Physics II Laboratory</td>
</tr>
<tr>
<td>or PHSX 214</td>
<td>General Physics II Honors</td>
</tr>
<tr>
<td>PHSX 313</td>
<td>General Physics III</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mathematics</th>
<th>Hours</th>
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<tbody>
<tr>
<td>MATH 125</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 126</td>
<td>Calculus II</td>
</tr>
<tr>
<td>MATH 127</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MATH 290</td>
<td>Elementary Linear Algebra</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Applied Differential Equations</td>
</tr>
<tr>
<td>or MATH 320</td>
<td>Elementary Differential Equations</td>
</tr>
</tbody>
</table>

**KU Core Curriculum Goals 2.1, 2.2, 3H, 3S, 4.1, & 4.2 (21) | 21**

**Design Concentrations**

**Aerospace Systems**

| AE 245 | Introduction to Aerospace Engineering | 3 |
| AE 345 | Fluid Mechanics | 3 |
| AE 421 | Aerospace Computer Graphics | 4 |
| AE 445 | Aircraft Aerodynamics and Performance | 3 |
| AE 507 | Aerospace Structures I | 3 |
| AE 545 | Fundamentals of Aerodynamics | 4 |
| AE 550 | Dynamics of Flight I | 4 |
| AE 551 | Dynamics of Flight II | 4 |
| AE 572 | Fundamentals of Jet Propulsion | 3 |
| C&PE 121 | Introduction to Computers in Engineering | 3 |
| C&PE 221 | Chemical Engineering Thermodynamics | 3 |
| CE 301 | Statics and Dynamics | 5 |
| CE 310 | Strength of Materials | 4 |
| EPHX 536 | Electronic Circuit Measurement and Design | 4 |

Select one of the following tracks:

For the aircraft track

| AE 508 | Aerospace Structures II (3) | |
| AE 521 | Aerospace Systems Design I (4) | |

Or for the spacecraft track

| AE 560 | Spacecraft Systems (3) | |
| AE 523 | Space Systems Design (4) | |

**Chemical Systems**

| C&PE 121 | Introduction to Computers in Engineering | 3 |
| C&PE 211 | Material and Energy Balances | 3 |
| C&PE 221 | Chemical Engineering Thermodynamics | 3 |
| C&PE 511 | Momentum Transfer | 3 |
| C&PE 512 | Chemical Engineering Thermodynamics II | 3 |
| C&PE 521 | Heat Transfer | 3 |
| C&PE 522 | Economic Appraisal of Chemical and Petroleum Projects | 2 |
| C&PE 523 | Mass Transfer | 4 |
The mission of the Mechanical Engineering Department is to provide our students with a high quality education, to generate and apply knowledge, and to serve both society and the engineering profession.

In support of our mission, upon graduation our undergraduate students will be:

1. technically skilled in the application of the principles of mechanical engineering, and will demonstrate the ability to work collaboratively and in teams;

2. successful in their chosen career paths, demonstrating the attitudes, abilities, and personal leadership to effectively adapt to our changing global society while maintaining and promoting the highest engineering, professional, and ethical standards; and

Foreign language courses are not applicable to this degree program.

A suggested graduation plan for each of the design concentrations is available on the Physics and Astronomy website (http://www.physics.ku.edu/~physics/undergraduate/underg.shtml).

**Departmental Honors**

Engineering physics undergraduates may graduate with departmental honors by achieving a minimum grade-point average of 3.5 in major courses taken in residence and at other institutions, by completing at least 1 credit hour of undergraduate research with a grade of B or better in EPHX 501 or EPHX 503, and the results presented in a manner specified by the Department. Please see your advisor for details.

### Mechanical Engineering

The broad discipline of mechanical engineering enables students to have productive and rewarding careers, and to develop and improve new technologies in both traditional and emerging fields. Mechanical engineers apply fundamental principles to develop, design, manufacture, and test machines and other mechanical devices. Such devices include but are not limited to power-producing machines as well as power-consuming machines. Mechanical engineers are employed in diverse areas including but not limited to: the energy and power industries, the automotive and aerospace industries, and industrial manufacturing. Mechanical Engineering graduates also have careers in medicine and medical device development, patent law, engineering and corporate management, forensic engineering, and engineering sales.

The mission of the Mechanical Engineering Department is to provide our students with a high quality education, to generate and apply knowledge, and to serve both society and the engineering profession.

In support of our mission, upon graduation our undergraduate students will be:

1. technically skilled in the application of the principles of mechanical engineering, and will demonstrate the ability to work collaboratively and in teams;

2. successful in their chosen career paths, demonstrating the attitudes, abilities, and personal leadership to effectively adapt to our changing global society while maintaining and promoting the highest engineering, professional, and ethical standards; and
3. actively engaged in continuous learning and professional growth throughout their careers while productively contributing to their organizations and communities.

In support of our mission, upon graduation our graduate students will be:

1. capable of performing research at the highest possible level and contribute valuable advances to their chosen areas of specialization;
2. enthusiastic and have a strong desire to instruct young engineers in their chosen areas of specialization; and
3. qualified to work at the most prestigious research institutions and universities in the world.

Undergraduate Programs
The Department of Mechanical Engineering offers a 128-hour bachelor of science degree in mechanical engineering and is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org. Students interested in biomedical engineering or applying to medical school after graduation may elect to complete a concentration in biomechanics (or follow a pre-medicine plan). There is also a five-year dual degree program in which students earn a B.S. in mechanical engineering as well as a bachelor of business administration degree. Depending on the employer, mechanical engineering graduates might be expected to become licensed. Formal study in an accredited engineering program, such as at the University of Kansas, is the first step to becoming licensed in Kansas and other states. After completion of a majority of coursework, students are encouraged to take the Fundamentals of Engineering examination which is necessary to become a licensed Professional Engineer (P.E.).

The mechanical engineering curriculum builds on the basic foundation of mathematics and physical sciences, and focuses on engineering design and analysis in 2 primary areas:

1. Mechanical systems.
2. Thermal, fluids, and energy systems.

Engineering science, analysis, and design is integrated throughout the curriculum, culminating in a senior capstone design project where students complete a year-long, hands-on design and build experience in one of four areas:

- Formula SAE vehicle design.
- Alternative energy & transportation (EcoHawks).
- Biomechanics, and
- Industrial sponsored topics.

Graduate Programs
The University of Kansas Department of Mechanical Engineering offers the Master of Science in Mechanical Engineering degree and the Doctor of Philosophy. Areas of study in Mechanical Engineering include:

1. Biomechanics and Biomaterials: biomechanics of human motion, biomaterials, orthopedic biomechanics and biomedical product design, transport phenomena, and drug delivery.
2. Computational Mechanics and Mathematics of Computations: computational mechanics, finite element analysis, finite element methods and software
3. Thermal-Fluid Systems and Heat Transfer: energy and thermal-power system design, heat transfer and computational fluid dynamics
4. Mechanical Design, Manufacturing, and Microprocessor Applications: computer-aided mechanical design, continuum mechanics, computer-integrated manufacturing, computational mechanics, finite element analysis, machine stress analysis, microcomputer applications, and automatic control systems

Graduate Admission
Please review the corresponding pages for admission to the MS or PhD programs:

- Master of Science (p. 642)
- Doctor of Philosophy (p. 645)

Graduate Financial Aid
Graduate students may apply for financial aid in the form of scholarships, fellowships, research assistantships, and teaching assistantships. Fellowships and scholarships are available for outstanding students. Information on financial support for the current year is available in the Departmental office. Applications for scholarships, fellowships or assistantships should be submitted to the Department prior to the academic year for which the appointment is desired. Applications for teaching assistantships should be submitted prior to May 15 for the Fall semester and October 15 for the Spring semester. In general, these awards are offered to 1st year graduate students.

Most scholarships, fellowships and other forms of financial support require the student to maintain a minimum cumulative grade point average. This grade point average is always computed only with plan-of-study course grades, and excludes independent study credit.

KU pays the tuition and 3 hours of campus fees of graduate students who receive appointments as graduate teaching assistants (GTAs). The percentage paid by KU depends on the level of appointment.

Where applicable, staff (resident) rates are assessed before tuition is paid. Only graduate students involved in direct classroom or laboratory instruction are eligible for appointments as graduate teaching assistants and for the tuition payment program. Eligibility is limited to the term during which students have instructional appointments. The tuition payment program covers only tuition, including any differential tuition assessed, and 3 hours of campus fees. It is not applicable to the remaining hours of campus fees; KU Edwards Campus construction fee, union fee, and required fees; mediated and Continuing Education course fees; optional fees; housing costs; or other specialized fees.

Further information about tuition (http://www.tuition.ku.edu) and fees is available from the Office of the University Registrar (http://www.registrar.ku.edu/fees/index.shtml).

Courses
ME 201. Statics. 2 Hours.
The principles of statics, with particular attention to engineering applications. Prerequisite: PHSX 211. LEC.

ME 208. Introduction to Digital Computational Methods in Mechanical Engineering. 3 Hours.
Digital computing methods for solving mechanical engineering problems utilizing current programming languages and commercial software. Topics from the course are applied through open-ended team projects throughout the semester which also give students an introduction to mechanical engineering. One lecture and lab meets with ME 228, therefore ME 208
cannot be taken concurrently with ME 228, but should be taken in back-to-
back semesters. Corequisite: MATH 116 or MATH 121 or MATH 125. LEC.

ME 210. Introduction to Mechanics. 1 Hour.
An introduction to mechanics of materials including stress, strain, and
axial loading. Prerequisite: ME 201. LEC.

ME 211. Statics and Introduction to Mechanics. 3 Hours.
The principles of statics, with particular attention to engineering
applications and an introduction to mechanics of materials. This course is
a combination of material covered in ME 201 and ME 210. Prerequisite:
PHSX 210 or PHSX 211. LEC.

ME 228. Computer Graphics. 3 Hours.
An introduction to solid modeling computer graphics used in mechanical
design. Visualization skills and drawing practices are developed. Topics
from the course are applied through open-ended team projects throughout
the semester which also give students an introduction to mechanical
engineering. One lecture and lab meets with ME 208, therefore ME 228
cannot be taken concurrently with ME 208, but should be taken in back-to-
back semesters. LEC.

ME 306. Science of Materials. 3 Hours.
An introductory course on materials. Emphasis is placed on structure
and the relation of structure to the behavior and properties of engineering
materials. Prerequisite: CHEM 150 or CHEM 130 or consent of instructor.
LEC.

Laboratory to supplement lecture on engineering materials properties
and selection, manufacturing processes, and design for manufacturing.
Prerequisite: CHEM 150 or CHEM 130. Corequisite: ME 306 and ME 311.
LAB.

ME 309. Introduction to Mechanical Design. 1 Hour.
An introduction to mechanical design after completing a course in
mechanics of materials. Topics include theories of failure and energy
methods. ME 201, CE 310, and ME 309 together are equivalent to ME
211 and ME 311. Prerequisite: Permission of instructor. LEC.

ME 311. Mechanics of Materials. 3 Hours.
The principles of mechanics of materials with particular emphasis on
mechanical systems including theories of failure. Prerequisite: ME 211.
Corequisite: MATH 220. LEC.

ME 312. Basic Engineering Thermodynamics. 3 Hours.
An introduction to the concepts of heat, work, the first and second laws
of thermodynamics and equations of state. These concepts are applied
to flow and nonflow systems including power and refrigeration cycles.
Prerequisite: PHSX 211 or (Corequisite: PHSX 211 and CHEM 135 or
CHEM 175). Corequisite: MATH 122 or MATH 127. LEC.

ME 320. Dynamics. 3 Hours.
Kinematics and kinetics of particles and of rigid bodies as applied to
mechanical engineering problems. Prerequisite: ME 201 or ME 211,
MATH 220, and MATH 290. LEC.

ME 321. Dynamics Simulations. 1 Hour.
Introduction to dynamics simulations on the computer. Corequisite: ME
320. LEC.

ME 360. Mechanical Engineering Problems. 1-3 Hours.
An analytical or experimental study of problems or subjects of immediate
interest to a student and faculty member and which is intended to develop
student capability for independent research or application of engineering
science and technology. After completion of the project, a report is
required. Maximum credit is three hours. Not open to students who have
taken ME 361. Prerequisite: Approval of an outline of the proposed project
by the instructor and department chair. IND.

ME 361. Undergraduate Honors Research. 1-3 Hours.
Investigation of a particular mechanical engineering problem. Research
will involve defining the problem, developing a research methodology,
applying the research methodology and gathering data, analyzing and
interpreting the data, and presenting the results of the research. The
student must have a faculty sponsor and submit a proposal in writing
stating the objective of the research, the planned research method that
will be used, and the method of reporting the results. Maximum credit
is three hours. Not open to students who have taken ME 360. Prerequisite:
Participation in the University Honors Program, consent of instructor, and
approval of the chair required. IND.

ME 390. Special Topics: ______. 1-5 Hours.
Courses on special topics of current interest in mechanical engineering,
given as the need arises. Prerequisite: Approval of instructor. LEC.

ME 412. Thermal Systems. 3 Hours.
Application of the principles of thermodynamics to the analysis and design
of thermal systems. Prerequisite: ME 312. LEC.

ME 420. Mechanisms. 3 Hours.
Design and analysis of mechanisms composed of linkages, cams, and
gears. Mechanical vibration. Prerequisite: PHSX 211 and MATH 220.
LEC.

ME 455. Mechanical Engineering Measurements and
Experimentation. 4 Hours.
Lectures and laboratories on the basics of measurement, instrumentation,
data acquisition, analysis, design and execution of experiments, and
written and oral reports. Topics selected from heat transfer, fluid
mechanics, thermodynamics, mechanics, strength of materials, and
dynamics. Prerequisite: ME 208 and ME 311. Corequisite: EECS 318,
ME 510, ME 320, ME 612, and Statistics. LEC.

ME 501. Mechanical Engineering Design Process. 2 Hours.
The design process of a mechanical or thermal system. Establishment
of specifications and consideration of realistic constraints such as safety,
codes, economic factors, reliability, oral and written communications, and
other factors as they impact the design process. Prerequisite: ME 311 and
ME 312. Corequisite: ME 228 and ME 307. LEC.

ME 508. Numerical Analysis of Mechanical Engineering Problems. 3
Hours.
Introduction to numerical methods for solution of mechanical engineering
problems by use of digital computers. Prerequisite: ME 208 or equivalent,
MATH 220 and MATH 290. LEC.

ME 510. Fluid Mechanics. 3 Hours.
An introduction to the mechanics of fluid flow. The principles of
conservation of mass, momentum, and energy are developed in
differential and integral form. Laws of dimensional analysis and similitude
are presented as the basis for empirical correlations. Engineering
applications include: calculation of hydrostatic forces on submerged
objects, analysis of flow and pressure loss in piping systems, estimation of
aerodynamic lift and drag, and performance characteristics of pumps and
fans. Prerequisite: ME 211, ME 201, or CE 201 and MATH 122 or MATH
127 and ME 312. Corequisite: MATH 220. LEC.

ME 590. Special Topics: _____. 1-5 Hours.
Courses on special topics of current interest in mechanical engineering,
given as the need arises. Prerequisite: Approval of instructor. LEC.

ME 612. Heat Transfer. 3 Hours.
An applied study of conductive, convective, and radiative heat transfer
mechanisms in solid and fluid systems. Engineering applications include
solid conduction, free and forced convection in fluids, thermal radiation
and heat exchangers, evaporators, and furnaces. Prerequisite: MATH 220 and ME 312. Corequisite: ME 510. LEC.

ME 627. Automotive Design. 3 Hours.
Basic concepts of automotive design and manufacture. Primary focus of course on vehicle design and performance. Design is subdivided into vehicle components of frame, suspension, front and rear axle, steering power train, front and rear wheel drive, and braking. Integration of these ideas into a vehicle design project with analysis of its performance culminates the course. Prerequisite: Permission of instructor. LEC.

ME 628. Mechanical Design. 3 Hours.
Design of mechanical components and systems. Prerequisite: ME 311. LEC.

ME 633. Basic Biomechanics. 3 Hours.
Provides an overview of musculoskeletal anatomy. Biomechanics includes linear and angular dynamics of human movement, energy expenditure and power required to perform a given activity. Students will learn to determine joint forces and torques (2-D) from kinematic data for body segments and force plate data. The tissue mechanics section builds on mechanics of materials. Students will learn about tissue properties, appropriate constitutive models and determination of stresses and strains in tissues and structures under normal loading conditions. Prerequisite: ME 311 and ME 320 or equivalent. LEC.

ME 636. Internal Combustion Engines. 3 Hours.
Study and analysis of internal combustion engine physical phenomena dynamic function, components, and system design. Emphasis on spark ignition and compression ignition engine analysis. Performance, current technology, thermodynamics, fluid-mechanics, combustion products and pollution, fuels and lubrication, and mechanical design. Prerequisite: ME 412. LEC.

ME 637. Steam Power Plants. 3 Hours.
A study of steam power plant equipment including thermodynamic analysis, design and performance of modern steam generators, prime movers, and auxiliaries. Prerequisite: ME 412 or permission of instructor. LEC.

ME 639. Alternative Energy Systems. 3 Hours.
This course is a survey of energy resources and the available technology for meeting current energy needs with alternative energy systems. An overview of the U.S. energy system and world-wide energy consumption is included to provide context. The primary course objective is to develop the students' ability to apply engineering fundamentals to the design and operation of alternative energy systems. The students will be introduced to databases and modeling methods used to represent alternative energy resources. Assignments will include: engineering problem analysis, group design projects, individual research papers, oral and written presentations. Prerequisite: ME 510, AE 345, or CPE 511 and (ME 412 or ME 612 or CPE 521). LEC.

ME 640. Design Project. 1-2 Hours.
Planning for a capstone design project. Development of a formal project proposal is required. Must be used with two credit hours of ME 641, ME 643, ME 644 or ME 645 in the subsequent semester to complete the capstone design requirements. Prerequisite: Approval of instructor. LEC.

ME 641. Design Project Option A. 2-3 Hours. AE61.
Design and development of a mechanical or thermal/fluid system. An individual or group report that includes designs, analysis/testing, drawings, and/or schematics is required. Establishment of specifications and consideration of realistic constraints such as safety, economic factors, design impact, aesthetics, and reliability are required. Prerequisite: ME 455, ME 501, and ME 628. LEC.

ME 642. Design Project Option B. 4 Hours. AE61.
Manufacturing and testing of a mechanical system designed and developed in ME 627 - Vehicle Design. A group report with individual assignments which details the manufacturing procedures and testing procedures and results is required. A completed, working project with a design file documenting all aspects of the project development must be submitted. Prerequisite: ME 627, ME 501 and ME 628. Corequisite: ME 412 and ME 455. LEC.

ME 643. Design Project Option C. 2-3 Hours. AE61.
Design and development of a mechanical system related to biomechanics that has been investigated in ME 633 - Basic Tissue Mechanics and Biodynamics. A report that includes designs, analysis/testing, drawings and/or schematics is required. Establishment of specifications and consideration of realistic constraints such as safety, ergonomics, economic factors, design impact, aesthetics, and reliability are required. Prerequisite: ME 501, ME 628, ME 633 and ME 640. Corequisite: ME 455. LEC.

ME 644. Design Project Option D. 2-3 Hours. AE61.
Design and development of a thermal or fluid system. A group report that includes design, analysis/testing, drawings, and/or schematics is required. Establishment of specifications and consideration of realistic constraints such as safety, economic factors, design impact, aesthetics and reliability are required. Prerequisite: ME 412, ME 455, and ME 501. Corequisite: ME 628. LEC.

ME 645. Design Project Option E. 2-3 Hours. AE61.
Design and development of a mechanical, electrical or thermal/fluid system related to a sustainable approach to automobiles and energy infrastructure. This may include, but is not limited to alternative fuels, biomass, batteries and advanced vehicle powertrains along with solar/ wind energy at various scales. An individual or group report that includes designs, analysis/testing, drawings and/or schematics is required. Establishment of specifications and consideration of realistic constraints such as safety, economic factors, design impact, aesthetics and reliability are required. Prerequisite: ME 501, ME 510, and ME 628. Corequisite: ME 412 and ME 455. LEC.

ME 661. The Finite Element Method. 3 Hours.
An introduction to the underlying theory of the finite element (FE) method and its application to linear solid and structural mechanics. FE formulations are derived for bars, beams, 2D formulations such as: plane stress, plane strain, and 3D solids. Basic issues are treated such as assembly and generation of FE equations, computation, post-processing, and interpretation of FE solutions (e.g. stresses and strains analysis). Prerequisite: ME 311, MATH 220, and MATH 290. LEC.

ME 682. System Dynamics and Control Systems. 3 Hours.
An introduction to the modeling and analysis of analog linear systems and the design of control systems. Topics include mathematical models of mechanical, electrical, fluid and thermal systems, feedback concepts, transient response, frequency response and vibration, system stability, and design of feedback control systems including PID. Prerequisite: ME 320. LEC.

ME 696. Design for Manufacturability. 3 Hours.
Tools to incorporate manufacturing and life-cycle concerns into the design of products. Prerequisite: ME 501 or equivalent. LEC.

ME 702. Mechanical Engineering Analysis. 3 Hours.
A study of advanced methods for engineering analysis of practical problems utilizing fundamental principles from engineering disciplines. The emphasis is on the solution of these problems and the interpretation and generalization of the results. Prerequisite: A course in differential equations. LEC.
ME 708. Microcomputer Applications in Mechanical Engineering. 3 Hours.
Design and implementation of interfaces of microcomputers to mechanical equipment. Includes laboratory experiments presenting selected industrial applications. Emphasis on human factors, functional design parameters and microprocessor interfaces. Includes instruction concerning specifications of practical hardware configurations and writing of programs necessary to accomplish mechanical systems applications. Prerequisite: Permission of instructor. LEC.

ME 711. Bearings and Bearing Lubrication. 3 Hours.
Theoretical aspects of lubrication, determination of pressure distribution in bearings from viscous flow theory, application of hydrodynamic and hydrostatic bearing theories to the design of bearings, high speed bearing design problems, properties of lubricants, methods of testing. Prerequisite: ME 510 and a course in differential equations. LEC.

ME 712. Advanced Engineering Thermodynamics. 3 Hours.
An advanced course in thermodynamics, mathematical in nature, with emphasis on a critical re-evaluation of the laws of thermodynamics, thermodynamics of one-dimensional gas flow, development of the classical thermodynamic relations and their application to engineering problems. Prerequisite: ME 508 and ME 412. LEC.

ME 714. Thin Film Flow. 3 Hours.
In thin film theory, the lubrication approximation (also called the long-wave approximation) is used to simplify the Navier-Stokes equations to study the flow of thin films. Even with this simplification, the thin film equation is still a challenging nonlinear PDE, and numerical and analytical methods are used to solve and analyze the equation. Similarity solutions, linear stability analysis, and travelling waves are useful tools for analysis. This course will focus on coating flows of thin films so the students can learn these techniques and discover the current knowledge gaps at the frontiers of this research area. Thin film flows are found in many applications, such as microchip production or biomedical applications, and experiments with thin film flows often yield stunning photos and videos. Prerequisite: ME 510, MATH 290, ME 508 or equivalents. LEC.

ME 720. Advanced Dynamics of Machinery. 3 Hours.
Dynamics of particles and of rigid bodies with advanced engineering applications; generalized coordinates; Hamilton's principles; Lagrange's equations; Hamilton-Jacobi theory. Prerequisite: ME 320 or equivalent. LEC.

ME 722. Modeling Dynamics of Mechanical Systems. 3 Hours.
Modeling, analysis and simulation of dynamic mechanical systems. Emphasis on the analysis of kinematics and dynamics of rigid mechanical multibody systems undergoing large overall motion using interactive computer simulation programs. Applications to the design and control of dynamic systems such as robots, machine tools, and artificial limbs. Prerequisite: ME 320 or CE 300. LEC.

ME 733. Gas Dynamics. 3 Hours.
A study of the thermodynamics and fluid dynamics of gaseous media. Emphasis is placed on the rigorous application of conservation laws to represent physical processes. Classical and statistical models for the thermodynamic and transport properties are examined. Applications include determination of gas properties, wave propagation, and high-speed flow. Prerequisite: ME 412 and ME 510 or equivalents. LEC.

ME 736. Catalytic Exhaust Aftertreatment Modeling. 3 Hours.
Fundamental concepts behind catalytic exhaust aftertreatment devices for automobiles including both monolithic catalysts and particulate filters. Studies of other catalytic devices intended for applications in the chemical and chemical engineering fields. Topics covered are the development of governing equations based on conservation laws and their numerical solutions using finite difference methods. Studies will include a monolithic catalyst. Project assignments will be included. Prerequisite: ME 412 and ME 510 or permission of instructor. LEC.

ME 750. Biomechanics of Human Motion. 3 Hours.
Fundamental concepts of anatomy and physiology are introduced but the focus is on the biomechanics of human motion. Human body segment kinematics and joint kinematics are analyzed. An introduction to muscle mechanics is provided. Applications in balance and gait are covered. Corequisite: ME 320 or equivalent. LEC.

ME 751. Experimental Methods in Biomechanics. 3 Hours.
This course will focus on methods of experimental measurement and computational modeling used in biomechanics. Instrumentation used to measure three-dimensional motion, ground reaction forces, center of pressure and EMG measures are considered. Methods used for inverse dynamics, direct dynamics and simulation are introduced. Prerequisite: ME 320 or equivalent. LEC.

ME 752. Acoustics. 3 Hours.
This course will teach the production, propagation, and effects of sound waves. Detailed topics include plane wave, spherical wave, and cylindrical wave propagation in free space and waveguides, wave reflection and transmission on an interface, piston radiation, wave scattering and diffraction. Prerequisite: ME 320 or permission of instructor. LEC.

ME 753. Bone Biomechanics. 3 Hours.
Provides an in-depth knowledge of bone as a living mechanical system. Topics include the microstructure, biology, mechanical properties, mechanical modeling, adaptation of bone to the mechanical environment, and its simulation. Students assignments include homework, a poster presentation, basic finite element analysis laboratory, and bone remodeling simulations. Prerequisite: ME 311 or equivalent. LEC.

ME 754. Biomedical Optics. 3 Hours.
This course will cover the fundamentals of photon transport in biological tissues, including explanations of Rayleigh and Mie scattering. Monte Carlo simulations, the radiative transport equations and more. Also, the basic physics and engineering of various optical imaging techniques for biological tissues, including ballistic or quasi-ballistic imaging (such as confocal microscopy, and optical coherence tomography), diffuse imaging, photoacoustic imaging, will be introduced. Prerequisite: ME 508 or permission of instructor. LEC.

ME 755. Computer Simulation in Biomechanics. 3 Hours.
Provides an in-depth knowledge of 1) the process of developing a research question to be addressed with computer simulation, 2) various techniques for medical imaging to obtain model geometries (including hands-on experience with low-field MR imaging), 3) image segmentation techniques, 4) issues affecting geometric accuracy in model building, 5) the determination and specification of loading and/or kinematic boundary conditions, 6) the interpretation of model results in the context of the model limitations and the medical application. Knowledge and/or experience with finite elements is desirable, but not required. Prerequisite: ME 311 and ME 320 or equivalent. LEC.

ME 756. Biofluid Dynamics. 3 Hours.
An introduction to the fundamentals of biofluid dynamics, and the application of these principles to a variety of biological flows. Fluid flows in physiology, drug delivery, and biotechnology are investigated at a variety of scales, ranging from subcellular to organ groups. Topics include non-Newtonian constitutive equations, solution techniques, and principles of modeling and simulating. Prerequisite: ME 208 and ME 510 or equivalents. LEC.
ME 757. Biomechanical Systems. 3 Hours.
A course on the dynamics and motor control of human and animal motion. The course will focus on applying mechanical principles of dynamics, lumped parameter systems, and control theory to problems in biomechanics. Topics include muscle mechanics and dynamics, reflex and voluntary control, proprioception, anatomy of the muscular and nervous systems, and system dynamics in locomotion and other movements. Prerequisite: ME 682 or permission of instructor. LEC.

ME 758. Physiological System Dynamics. 3 Hours.
This course covers the use of engineering systems modeling approaches to understand the function of physiological systems. Systems covered include the cardiovascular system, the respiratory system, the renal system, the gastrointestinal system, and the musculoskeletal system. Prerequisite: ME 510, ME 320, Physics 212 or permission of instructor. LEC.

ME 760. Biomedical Product Development. 3 Hours.
Introduction to methods of taking medical product inventions from conception to initial stage production. Students work in cross-functional teams to investigate development potential of inventions. Topics covered include product development processes, regulatory issues with the FDA, quality system requirements, SBIR/STTR funding pathways, biomaterial and biomechanics issues in medical product design, and ethical considerations. Prerequisite: Senior or graduate student standing in engineering, business, industrial design, or an applicable life science field and permission of instructor. LEC.

ME 765. Biomaterials. 3 Hours.
An introductory course on biomaterials science and consideration of biomaterials in the design of biomedical implants. Topics include ethical considerations in biomaterials research and the role of the FDA in medical device design are also presented. Prerequisite: ME 306. LEC.

ME 770. Conductive Heat Transfer. 3 Hours.
The formulation of steady- and unsteady-state conduction heat transfer problems and their solution by analytical and numerical methods. Prerequisite: ME 612 or equivalent. LEC.

ME 774. Radiative Heat Transfer. 3 Hours.
The formulation of steady and unsteady radiation heat transfer problems and their solution by analytical and numerical methods. Prerequisite: ME 612 or equivalent. LEC.

ME 790. Special Topics: ______. 1-5 Hours.
Advanced courses on special topics of current interest in mechanical engineering, given as the need arises. Prerequisite: Approval of instructor. LEC.

ME 801. Responsible Conduct of Research in Engineering. 1 Hour.
Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis on practical topics of special importance in bioengineering. Topics include the nature of ethics, the roles of the scientist as a reviewer, entrepreneur, employer and teacher, research ethics in the laboratory, social responsibility and research ethics regulation. (Same as BIOE 801.) Prerequisite: Permission of instructor. LEC.

ME 808. Advanced Microprocessor Applications. 3 Hours.
Advanced design and development of microprocessor based mechanical systems. Individual and team projects involving the development and integration of hardware and software into a “smart” system which includes the sensing, processing, and controlling functions are accomplished. Emphasis is on the use of the latest sensors and development tools. Prerequisite: Permission of instructor. LEC.

ME 810. Advanced Fluid Mechanics. 3 Hours.
Topics include kinematic and dynamic behavior of fluids, derivation of Navier-Stokes equations, flow classification, solutions of viscous and inviscid flows for simple geometries, potential flow theory and laminar and turbulent boundary layer theory. Prerequisite: ME 510 or equivalent. LEC.

ME 831. Convective Heat and Momentum Transfer. 3 Hours.
The formulation and solution of steady and unsteady convective heat, mass, and momentum transfer problems. Topics include boundary layers, duct flows, natural convection with and without phase change, development of analogies, transport properties, numerical methods. Prerequisite: ME 612 or equivalent. LEC.

ME 832. Computational Fluid Dynamics and Heat Transfer. 3 Hours.
The fundamentals of the finite-difference method are presented and applied to the formulation of numerical models for heat and momentum transfer. The accuracy, stability, and computational efficiency of different algorithms are analyzed. Computer programs are developed for classical benchmark problems. Prerequisite: ME 508, ME 510, and ME 612 or equivalents. LEC.

ME 836. Hybrid and Electric Vehicles. 3 Hours.
Topics covered include history of electrified vehicles, vehicle modeling, battery chemistry, and electric motors. Review of fundamental electrical engineering concepts provided. Application of real world driving profiles through homework assignments. Laboratories will explore battery and motor fundamentals. Homework assignments will be included along with a semester project involving the design, construction, and testing of a scale electric vehicle. Prerequisite: ME 636 or permission of instructor. LEC.

ME 840. Continuum Mechanics I. 3 Hours.
Principles of Continuum Mechanics for solids, fluids, and gases. Frames of references, measures of motion, deformation, strains, stresses, their rates, objectivity and invariance. Conservation laws, constitutive equations, equations of state and thermodynamic principles for developing mathematical models of continuum matter. Theoretical solutions of model problems. Corequisite: MATH 647 or ME 702; or permission of instructor. LEC.

ME 841. Continuum Mechanics II. 3 Hours.
Fundamental principles of Continuum Plasticity, measures of plastic strains, stresses and constitutive equations for flow theory of plasticity. Internal variable theory of thermo-mechanical behaviors and endochronic theory of plasticity and viscoplasticity. Anisotropic plasticity and advanced topics. Continuum mechanics principles for viscoelastic solids with emphasis on constitutive equations. Development of complete mathematical models and solutions of selected model problems. Prerequisite: ME 840 or equivalent. LEC.

ME 854. Continuum Mechanics for Soft Tissues. 3 Hours.
An introductory course in the analysis of the mechanical behavior of materials modeled on the continuum assumption. The course will provide background on soft tissue properties and will focus on the tools necessary to model soft tissues, including the essential mathematics, stress principles, kinematics of deformation and motion, and viscoelasticity. Prerequisite: ME 311 or equivalent. LEC.

ME 860. Advanced Mechanical Engineering Problems. 1-3 Hours.
An analytical or experimental study of problems or subjects of immediate interest to a student and faculty member and which is intended to develop students capability for independent research or application of engineering science and technology. Maximum credit toward any degree is three hours unless waived in writing by the departmental chairperson. Prerequisite: Approval of instructor. RSH.
**Bachelor of Science in Mechanical Engineering**

The 128-hour bachelor of science degree in mechanical engineering offered by the Department of Mechanical Engineering is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org. Students typically take four years to complete the program. The mechanical engineering curriculum builds on the basic foundation of mathematics and physical sciences learned in the first three semesters, and then focuses on engineering design and analysis in mechanical, thermal, fluids, and energy systems. First-year students are quickly immersed in hands-on design/build team projects as part of the cornerstone mechanical engineering courses. Engineering science, analysis, and design is integrated throughout the curriculum, culminating in a senior capstone design project where students complete a year-long hands-on design and build experience in one of four areas:

- Formula SAE vehicle design,
- Alternative energy transportation, EcoHawks,
- Biomechanics, and
- Industrial sponsored topics.

Students interested in biomedical engineering or applying to medical school after graduation may elect to complete a concentration in biomechanics (or follow a pre-medicine plan). There is also a five-year dual degree program in which students earn a B.S. in mechanical engineering as well as a bachelor of business administration degree. Students are encouraged to be active with the different engineering societies including The American Society of Mechanical Engineers, The Society of Automotive Engineers, Engineers Without Borders, The Biomedical Engineering Society, The Society of Women Engineers, The National Society of Black Engineers, and The Society of Hispanic Engineers. KU also has active chapters of Tau Beta Pi, the national engineering society, and Pi Tau Sigma, the national mechanical engineering honor society. Study abroad is strongly encouraged and generally does not delay students’ graduation since they will be taking engineering classes abroad.

**Professional Licensing**

Formal study in an accredited engineering program is the principal means of becoming licensed to practice engineering in Kansas and other states. During the junior or senior year, a student may take the national Fundamentals of Engineering examination. After 4 or more years (licensing regulations vary among states) of practice satisfactory to the board, the student may take the examination to become a registered professional engineer.

**Job Search Assistance**

The Engineering Career Center (http://www.engr.ku.edu/career_center) offers a comprehensive array of services to students seeking permanent employment and career-related summer or co-op employment. These include on-campus interviewing; 2 career fairs each year; individual advising and group workshops on résumés; interviewing, and job search strategies; online interviewing sign-up; online job postings from many
employers not interviewing on campus; a library of employer and career literature; and an online résumé book searchable by employers.

The Engineering Career Center offers services to all engineering students. Students are encouraged to visit the Engineering Career Center early in their undergraduate or graduate studies. Many employers actively seek KU engineering and computer science students. Some prefer to hire students as early as the first-year level for internships. The Career Center is in 1001 Eaton Hall; additional information is available from 785-864-3891.

**Undergraduate Admission to the School of Engineering**

First-year undergraduate students may be admitted, but all admissions, both in-state and out-of-state, are selective. Visit the Office of Admissions (http://admissions.ku.edu/whyku/index.shtml) for admission requirements. Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Applications are judged on several factors, including but not limited to high school record, scores on national tests, academic record at college or university level, and trend of grades. High school transcripts and ACT scores are required. Equivalent SAT scores may be substituted.

**Minimum Academic Standards for Admission**

To be considered for admission to the School of Engineering, beginning first-year students must meet or exceed the following minimum standards:

- 3.0 grade-point average on a 4.0 scale on the Kansas Board of Regents Qualified Admissions (http://admissions.ku.edu/apply/regents_curriculum.shtml) college-preparatory curriculum.
- Top 50 percent of the graduating class of an accredited high school or the equivalent.
- Mathematics ACT score of 22 (or mathematics SAT score of 540). Some engineering degree programs may require a higher mathematics ACT score.

These minimum admission standards apply to all departments. Meeting minimum requirements does not guarantee admission.

**Transfer Admission Standards**

Applications from all transfer students, whether from other institutions or from other KU units, are evaluated on a case-by-case basis. In general, students with grade-point averages under 2.5 are not considered. Students must submit mathematics ACT or SAT scores or proof of competence in calculus (grade of C or higher). No upper-level engineering credits from non-ABET-accredited engineering programs are acceptable as transfer credit for engineering programs. Admission is selective, and meeting the minimum requirements does not guarantee admission.

**Bachelor of Science in Mechanical Engineering 4-Year Graduation Plan**

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<tr>
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<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
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<tr>
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<td>PHSX 236</td>
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<td>ME 306</td>
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**Total Hours: 128**

**Bachelor of Science in Mechanical Engineering Degree Requirements**

**Mathematics and Basic Sciences (36)**

Mathematics:

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<td>MATH 127</td>
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<tr>
<td>MATH 220</td>
<td>Applied Differential Equations</td>
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<td>MATH 290</td>
<td>Elementary Linear Algebra</td>
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### Electives and KU Core Requirements (30)

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<td>ME 643</td>
<td>Design Project Option A</td>
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<td>ME 644</td>
<td>Design Project Option B</td>
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<td>ME 645</td>
<td>Design Project Option C</td>
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<td>ME 646</td>
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<td>ME 647</td>
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<td>EECS 316</td>
<td>Circuits, Electronics and Instrumentation</td>
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<td>ME 683</td>
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<td>ME 684</td>
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<td>ME 686</td>
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<td>ME 687</td>
<td>Introduction to Digital Computational Methods in Mechanical Engineering</td>
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<td>ME 688</td>
<td>Circuits and Electronics Lab</td>
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<td>ME 689</td>
<td>Mechanical Engineering Measurements and Experimentation</td>
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<td>ME 690</td>
<td>Computer Graphics</td>
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<tr>
<td>ME 692</td>
<td>Mechanical Engineering Design Process</td>
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</table>

### Approved General and Advanced Engineering Electives (12 hours)

A maximum of 6 credits of General Electives (and a minimum of 0) can be applied toward the B.S.M.E. degree and are meant to allow a student to broaden their education. These electives are taken throughout a student's curriculum and include mathematics, basic science (ASTR, ATMO, BIOL, CHEM, EVRN, GEOL, and PHSX,) and engineering courses beyond what is already required for the degree (without replicating content). Also included are any courses satisfying a KU Core requirement beyond what is already required for the degree (e.g. a second GE3H course). Any course from a foreign language department (in a non-native language) can satisfy the requirements. Up to 6 credit hours of ROTC may be applied toward general electives for students who complete the ROTC program. Courses in business, economics, music, design, visual art, and honors can also be used to satisfy the elective requirement. A complete list of current approved General Electives can be found at the KUME office.

A minimum of 6 hours of Advanced Engineering Electives (and a maximum of 12) can be applied toward the B.S.M.E. degree and are designed to provide students with additional technical depth in the discipline. These electives are usually taken by seniors in the program and consist of advanced topics in the field of mechanical engineering. These courses tend to be all 700- and 600-level ME courses not explicitly named above. A complete list of current approved Advanced Engineering Electives can be found at the KUME office.

In a case where an experience has been used to satisfy a KU Core requirement without an accompanying credit-hour load, the student will be allowed to use any course to fulfill the number of credit hours required for graduation.

The Mechanical Engineering Department requires six credits of ENGL courses to satisfy the English requirement, regardless of whether the student was exempted from taking ENGL 101 on admission and has satisfied the KU Core GE21 through some other means.

### Pre- and Co-requisites

A grade of C or better is required in the following courses and for courses substituted for these courses to satisfy pre- and co-requisites: MATH 125, MATH 126, MATH 127, MATH 220, MATH 290, MATH 365, CHEM 150, PHSX 210, PHSX 212, ME 228, ME 208, ME 312, ME 211, ME 311, and ME 320.

Students can be removed from a Mechanical Engineering course for failing to meet the pre- and co-requisites for the course, including earning a C or better in the courses listed above.

### Chemistry

CHEM 130 can also be used to fulfill the Chemistry requirement for Mechanical Engineering.
Mission

The broad discipline of mechanical engineering enables students to have productive and rewarding careers, and to develop and improve new technologies in both traditional and emerging fields. Mechanical engineers apply fundamental principles to develop, design, manufacture, and test machines and other mechanical devices. Such devices include but are not limited to: the energy and power industries, automotive and aerospace industries, and industrial manufacturing. Mechanical Engineering graduates also have careers in medicine and medical device development, patent law, engineering and corporate management, forensic engineering, and engineering sales.

The mission of the Mechanical Engineering Department is to provide our students with a high quality education, to generate and apply knowledge, and to serve both society and the engineering profession.

In support of our mission, upon graduation our graduate students will be:

1. capable of performing research at the highest possible level and contribute valuable advances to their chosen areas of specialization;
2. enthusiastic and have a strong desire to instruct young engineers in their chosen areas of specialization; and
3. qualified to work at the most prestigious research institutions and universities in the world.

Admission Requirements

To qualify for graduate study in any of the graduate programs in the Department of Mechanical Engineering, a student generally must have earned a baccalaureate degree from an accredited mechanical engineering program. However, a student with good preparation in some other engineering discipline or a related program, such as physics, may qualify by taking appropriate undergraduate courses specified by the Mechanical Engineering Department Graduate Admissions Committee.

Application Deadlines

Fall Priority Deadline: December 15
Spring Priority Deadline: September 30

Applications may be accepted after the priority deadlines listed above, but those applicants may not be considered for fellowships and assistantships. All application materials must be submitted by March 31st for fall and November 1st for spring to be considered for admission. See the Graduate Studies website (http://www.graduate.ku.edu) for the application procedure and fees.

Application Materials

- Application
- GRE scores (school code 6871)
- Statement of objectives and resume
- Official transcript
- Three letters of recommendation
- TOEFL scores (international students)
- Financial statement (international students only)

Submit all supporting documents and your graduate application online (http://www.graduate.ku.edu).

Regular Status

- For admission to regular status in the masters program, the student must have an undergraduate grade point average of at least B (3.0/4.0).

Graduate Record Examination (GRE) scores are required for all applicants and are used in the evaluation process.

Provisional Status

- For masters applicants whose undergraduate GPA is below 3.0/4.0, but no lower than 2.75/4.0, admission on provisional status will be considered on a case-by-case basis.

After the equivalent of one semester of full-time study as a provisional graduate student, the performance of the student is reviewed and will be (1) transferred to regular status, (2) dropped from the Graduate School, or (3) allowed to continue the equivalent of another semester as a provisional student. It is ordinarily expected that provisional status will not exceed two semesters. Provisional students are not eligible for GTA.

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**Admission:**

The following are acceptable means for verifying English proficiency for purposes of admitting students – whether domestic or international – to graduate study who are not native speakers of English:

- Graduation with a baccalaureate degree (or higher) earned in residence from an accredited English-medium U.S. college or university or a college or university in the United Kingdom, Australia, New Zealand, Ireland, English-speaking province of Canada, or an English-speaking Caribbean country, with instruction conducted in English.
- Degrees earned online may not be used to verify English proficiency.
- Receipt of an official copy (not student’s copy) of an applicant’s English proficiency standardized test scores (e.g. TOEFL) achieved not more than two years prior to the semester of first enrollment.

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- The second option is making arrangements to visit us on your own, outside of organized events. With early notification, we will do our best to work with you to provide information and schedule appointments with faculty when possible. Please contact us if you feel that this is the best option for you.

**Contact Information**

Please contact the Mechanical Engineering Program Assistant at kume@ku.edu or (785) 864-3181, to schedule a visit or with questions about the application process.

**The University of Kansas**

**Mechanical Engineering Graduate Program**

3138 Learned Hall

1530 W. 15th Street

Lawrence, KS 66045-7605

**Master of Science (M.S.) Degree Requirements**

The Department of Mechanical Engineering offers both a thesis option and a non-thesis option leading to the M.S. degree. Both options require a minimum of 30 credit hours of graduate work. The thesis option must include a thesis for at least six hours of credit. The non-thesis option must include at least three-credit hours of independent investigation.

A maximum of 6 hours of mechanical engineering courses numbered between 500 and 699 may be included in the program. Other courses outside of mechanical engineering (besides mathematics) between 500 and 699 require approval by the Graduate Director prior to enrolling. Courses either required or used for the B.S. degree may not be used to fulfill M.S. degree requirements.

**Major**

The major will be selected from the energy and thermal-fluids category, the mechanical design category, the computational mechanics category or the biomechanics category. A maximum of six hours of Mechanical Engineering courses numbered between 500 and 699 may be included in the program of study. Courses either required or used for the B.S. degree may not be used to fulfill M.S. degree requirements. At least half of the graduate level coursework must be taught by graduate faculty employed full-time by the Department of Mechanical Engineering.

**Plan of Study**

The M.S. degree student selects an adviser in the first semester of graduate study. The student and the student’s advisory committee determine a program of study during the first semester of enrollment. The program of study must include (1) a minimum of 12 credit hours in a major selected from Mechanical Engineering courses (excluding credit for mathematics and the independent investigation or thesis) and (2) no fewer than three credit hours dealing with advanced mathematics. The complete plan of study must be approved by the Advisory Committee and
the Graduate Director before the beginning of the second semester of graduate enrollment and filed electronically with the Department and the Graduate Division of the School of Engineering. The online Plan of Study can be found at https://gradplan.engr.ku.edu/accounts/login/.

Thesis Option
The program of study for the thesis option includes the requirements above plus a minimum of six credit hours of thesis.

A thesis-option student is expected to do original work that would be the basis of a paper suitable for publication in a refereed journal. After the final oral examination has been passed, and after any changes required by the examination committee have been made in the theses, the thesis should be submitted electronically in PDF Format to ProQuest/UMI on or before the date specified by the Graduate Studies Office. Supplementary materials may be added in other formats. (See Section 4, Publication Requirement.) You are responsible for submitting any bound copies that may be required by your department and/or advisor. Recommended binding services for personal or departmental copies may be found at http://www.graduate.ku.edu/etd/submitting.

Non-Thesis Option
The program of study for the non-thesis option includes the requirements above plus a minimum of three credit hours of independent investigation.

A non-thesis-option student must do an analytical or experimental study acceptable to the advisory committee. An oral presentation of the results of the independent investigation before Mechanical Engineering graduate students and faculty is required. A typed unbound project report must also be provided to the advisory committee.

Final Examination
Each Masters’ degree candidate must pass a final examination that may be oral, or both written and oral, as determined by the advisory committee. The examination must be publicized at least one week before the date of the examination. The examination will cover the field of mechanical engineering for both the thesis and non-thesis options and emphasize the thesis for the thesis option.

The thesis presentation portion of the examination shall be open. The written portion of the examination, if required, will be composed and evaluated by the examination committee. The examination committee, which is normally the advisory committee, must consist of at least three members of the Graduate Faculty and at least two must be Mechanical Engineering Faculty.

The request to schedule the examination must be submitted to the Mechanical Engineering Department at least two weeks prior to the examination date. Unbound or electronic thesis copies are to be submitted to the examination committee two weeks before the examination.

Note: Masters Candidates must be enrolled for at least one credit hour during the semester in which the Masters’ final examination is taken, or the semester prior if meeting the early graduation deadline in a given semester.

Only two attempts to pass the Masters’ examination are allowed. If the examination is not passed in two attempts, the student will be terminated from the program and will not receive the degree.

Note: see the online KU Electronic Thesis and Dissertation Page (http://www.graduate.ku.edu/ETD).

Program Time Constraints
Masters’ degree students are allowed seven years for completion of all requirements for the degree. In cases in which compelling reasons or circumstances recommend a one-year extension, the Graduate Division, on recommendation of the department/committee, has authority to grant the extension. In cases where more than eight years are requested, the appropriate appeals body of the school or division considers petitions for further extensions and, where evidence of continuous progress, currency of knowledge, and other reasons are compelling, may grant them.

Credit by Transfer
Six hours of graduate credit taken at a regionally accredited graduate school may be transferred and applied to the Masters’ degree, provided that the transfer has the approval of the Department and of the Dean of Engineering. Eight hours may be approved for transfer if the student holds a baccalaureate degree from the University of Kansas. Transfer credit may not be the last hours required for the degree. Only work graded A or B may be transferred. The University of Kansas does not accept the transfer of credit from other institutions for graduate-level courses completed in institutes and workshops or given for life/work experience.

Doctor of Philosophy in Mechanical Engineering

Doctor of Philosophy (Ph.D.) Degree
The Department of Mechanical Engineering offers a dissertation option for a Doctor of Philosophy degree. Areas of study in Mechanical Engineering include:

1. Biomechanics and Biomaterials: biomechanics of human motion, biomaterials, orthopedic biomechanics and biomedical product design, transport phenomena, and drug delivery.
2. Computational Mechanics and Mathematics of Computations: computational mechanics, finite element analysis, finite element methods and software
3. Thermal-Fluid Systems and Heat Transfer: energy and thermal-power system design, heat transfer and computational fluid dynamics
4. Mechanical Design, Manufacturing, and Microprocessor Applications: computer-aided mechanical design, continuum mechanics, computer-integrated manufacturing, computational mechanics, finite element analysis, machine stress analysis, microcomputer applications, and automatic control systems

Mission
The broad discipline of mechanical engineering enables students to have productive and rewarding careers, and to develop and improve new technologies in both traditional and emerging fields. Mechanical engineers apply fundamental principles to develop, design, manufacture, and test machines and other mechanical devices. Such devices include but are not limited to power-producing machines as well as power-consuming machines. Mechanical engineers are employed in diverse areas including the energy and power industries, the automotive and aerospace industries, and industrial manufacturing. Mechanical Engineering graduates also have careers in medicine and medical device development, patent law, engineering and corporate management, forensic engineering, and engineering sales.
The mission of the Mechanical Engineering Department is to provide our students with a high quality education, to generate and apply knowledge, and to serve both society and the engineering profession.

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Admission

To qualify for graduate study in any of the graduate programs in the Department of Mechanical Engineering, a student generally must have earned a baccalaureate degree from an accredited mechanical engineering program. However, a student with good preparation in some other engineering discipline or a related program, such as physics, may qualify by taking appropriate undergraduate courses specified by the Mechanical Engineering Department Graduate Admissions Committee.

Regular Status

• For admission to regular status in the PhD program, the student must have an undergraduate grade point average of at least 3.75/4.0 for direct admission into the PhD program (“Fast Track”) or 3.5/4.0 for admission with an MS degree.

Graduate Record Examination (GRE) scores are required for all applicants and are used in the evaluation process.

Provisional Status

• For PhD applicants whose MS GPA is below 3.5/4.0, admission on provisional status will be considered on a case-by-case basis.

• For PhD “Fast Track” applicants whose undergraduate grade point average is below 3.75/4.0, admission on provisional status will be considered on a case-by-case basis.

After the equivalent of one semester of full-time study as a provisional graduate student, the performance of the student is reviewed and will be (1) transferred to regular status, (2) dropped from the Graduate School, or (3) allowed to continue the equivalent of another semester as a provisional student. It is ordinarily expected that provisional status will not exceed two semesters. Provisional students are not eligible for GTA or GRA appointments, but may be considered for scholarship/fellowship funding based on need and available funding.

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• Graduation with a baccalaureate degree (or higher) earned in residence from an accredited English-medium U.S. college or university or a college or university in the United Kingdom, Australia, New Zealand, Ireland, English-speaking province of Canada, or an English-speaking Caribbean country, with instruction conducted in English.

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Doctor of Philosophy (Ph.D.) Degree
A minimum of three full academic years, or the equivalent, beyond the baccalaureate degree must be spent in graduate study at the University of Kansas or some other approved university to complete requirements for the Ph.D. degree.

A minimum grade point average of 3.5/4.0 in Masters' degree work is normally required for admission to a doctoral program.

Doctoral Qualifying Examination
For a student with a master's degree, a qualifying examination will normally be taken in the first semester of participation in the doctoral program on regular status. It may not be taken later than the end of the second semester. For a direct admit with a bachelor's degree, a qualifying examination will typically be taken after completion of 30 hours of graduate course work. The Doctoral Qualifying Examination is defined below.

The Qualifying Examination Committee consists of three or more members of the graduate faculty within the area of emphasis and are normally expected to be members of the Research and Graduate Studies Committee of the Department of Mechanical Engineering. A grade of pass or fail will be assigned and be kept in the departmental records.

Three evaluation criteria for the Qualifying Examination were established by the faculty on August 15, 2008.

Criterion #1: The student must demonstrate an understanding in a core set of fundamental undergraduate mechanical engineering knowledge.

Criterion #2: The student must demonstrate an understanding in a subset of core advanced mechanical engineering knowledge.

Criterion #3: The student must demonstrate the ability to communicate effectively through writing, oral presentation, and open questioning.

The faculty from the four areas of study in Mechanical Engineering, as defined by the Graduate Student Handbook, are responsible for developing separate methods to evaluate the criteria. The areas of study are: Biomechanics and Biomaterials; Computational Mechanics and Mathematics of Computations; Thermal-Fluid Systems and Heat Transfer; and Mechanical Design, Manufacturing, and Microprocessor Applications. The methods for the four areas to assess the three criteria area listed below.

Criterion #1
Assessment #1 (all four groups the same): This criterion will be assessed and satisfied with the current policies for entrance to the KUME graduate program. This includes the current requirements for satisfying deficiencies in the undergraduate mechanical engineering curriculum. At the time of the Ph.D. qualifying exam, the student must have satisfied and completed all requirements and conditions specified by the Department of Mechanical Engineering and the SOE to address deficiencies.

Criterion #2
Biomechanics and Biomaterials Criterion #2: The student will select three 3 credit mechanical engineering courses numbered 700-990 (excluding ME 702, ME 860, ME 899, ME 901, and ME 999) with the approval of his/her advisor and the qualifying committee chair. The chosen courses should reflect the student's interest in the area(s) of biomechanics and biomaterials. To satisfy this criterion, the student must complete the three qualifying courses with an average GPA of 3.5 or above.

Computational Mechanics and Mathematics of Computations Criterion #2: The student is required to demonstrate an understanding of 1) the fundamentals of mechanics, 2) the theory of finite-element methods and 3) applied mathematics, by passing written exams in each of these areas. The series of three written exams will be scheduled during one week each spring semester. Each exam will be graded separately. A student must pass all three exams to pass the qualifying requirement. A CONDITIONAL PASS may be awarded in the case of a student passing in two areas and failing in just one area. Additional conditions that must be satisfied may include extra coursework and/or a repeat of the exam in the area that failed. A student failing to pass in at least two areas must repeat the entire exam sequence the following year.

Thermal-Fluid Systems and Heat Transfer Criterion #2: A student must demonstrate that they have an understanding in a core advanced thermal-fluid systems and heat transfer knowledge by completing a graduate level course with grade "A" in the following areas: Fluids, Heat Transfer, Applied Thermodynamics and Advanced Mathematics. A course from each area may be selected from the following.

Fluids Heat Transfer Applied Thermodynamics
ME 711 ME 770 ME 636
ME 810 ME 774 ME 637
*ME 733 *ME 831 or C&PE 731 ME 712
*ME 831 or C&PE 731 *ME 733
* Course will count in one area only

Advanced Mathematics
Courses selected from approved list

Equivalent graduate courses that are completed at other institutions may be used to satisfy the requirements. For a conditional pass, a student must complete with an “A” grade courses in at least two areas and obtain a “B” grade in each of the remaining areas. The student will be required to pass courses with “A” grades in the areas in which he/she obtained “B” grades, within a year or before taking the Ph.D. comprehensive examination.

Mechanical Design, Manufacturing, and Microprocessor Applications Criterion #2: The student will select three 3 credit mechanical engineering courses numbered 700-990 (excluding ME 702, ME 860, ME 899, ME 901, and ME 999) with the approval of his/her advisor and the qualifying committee chair. The chosen courses should reflect the student’s interest in the area(s) of design, manufacturing, and microprocessor applications.
To satisfy this criterion, the student must complete the three qualifying courses with an average GPA of 3.5 or above.

**Criterion #3**

**Biomechanics and Biomaterials** Criterion #3: This assessment will be done over a three day period. On the morning of the first day, the student will be provided three published manuscripts within his/her research area. The student will briefly review the articles and then select one for the examination. There are two steps to the examination.

Within the first three hours of the examination:

- The student will write and submit a one page summary of the chosen manuscript. No outside help or resources are allowed. A computer with word processing will be provided. The written examination will last 3 hours or less.

Within the next three days of the examination:

- The student will prepare a PowerPoint presentation to be presented to the qualifying examination committee. The presentation should include a discussion of the manuscript content and an evaluation of its strengths and weaknesses. No outside help will be allowed, although the student may utilize resources such as published manuscripts, textbooks, and references as needed to clarify the manuscript content. This is not an examination of research methods. It is also not an examination of the student's ability to assimilate a broad research topic. This is an examination of the student's ability to effectively communicate the information contained within the chosen manuscript. Therefore, no other manuscripts should be referred to during the presentation. The oral presentation will last 20 minutes or less. The presentation, including questions on the manuscript content, will last 60 minutes or less.

Note: A set of SAMPLE questions corresponding to a SAMPLE manuscript (i.e. not the manuscript selected by the student) will be provided prior to the exam to give the student insight into the types of questions he/she should expect on the manuscript content during the exam.

**Computational Mechanics and Mathematics of Computations** Criterion #3: Under development.

**Thermal-Fluid Systems and Heat Transfer** Criterion #3: The student will give a 20 minute oral presentation to the qualifying examination committee. The material for the presentation will be from one of the following: the results of the student’s MS thesis research, the manuscript of the student’s published paper, or the results of a special research project assigned by the student’s major advisor. The student must provide to the committee an abstract of the presentation ahead of the examination. To receive a grade of pass, the student must demonstrate to the committee his/her ability to effectively communicate the information. For a student that receives a grade of conditional pass, the committee will recommend appropriate remedies. If a student receives a grade of fail, a second and final attempt will be granted.

**Mechanical Design, Manufacturing, and Microprocessor Applications** Criterion #3: This assessment will be done over a three day period. On the morning of the first day, the student will be provided three published manuscripts within his/her research area. The student will briefly review the articles and then select one for the examination. There are two steps to the examination.

Within the first three hours of the examination:

- The student will write and submit a one page summary of the chosen manuscript. No outside help or resources are allowed. A computer with word processing will be provided. The written examination will last 3 hours or less.

Within the next three days of the examination:

- The student will prepare a PowerPoint presentation to be presented to the qualifying examination committee. The presentation should include a discussion of the manuscript content and an evaluation of its strengths and weaknesses. No outside help will be allowed, although the student may utilize resources such as published manuscripts, textbooks, and references as needed to clarify the manuscript content. This is not an examination of research methods. It is also not an examination of the student’s ability to assimilate a broad research topic. This is an examination of the student’s ability to effectively communicate the information contained within the chosen manuscript. Therefore, no other manuscripts should be referred to during the presentation. The oral presentation will last 20 minutes or less. The presentation, including questions on the manuscript content, will last 60 minutes or less.

Note: A set of SAMPLE questions corresponding to a SAMPLE manuscript (i.e. not the manuscript selected by the student) will be provided prior to the exam to give the student insight into the types of questions he/she should expect on the manuscript content during the exam.

**Plan of Study**

On successful completion of the qualifying examination, the student selects a major professor from the Department to serve as the chairperson of the advisory committee and to direct the research. An advisory committee of at least five Graduate Faculty members from the School of Engineering with at least three from the Mechanical Engineering faculty is then selected by the student and his adviser to assist the student in preparing the plan of study (see following two pages), to conduct the comprehensive examination and to assist the student in planning research.

Courses completed without an approved program of study filed will not necessarily count toward the degree. The complete plan of study must be submitted before the end of the first semester and include the specific courses and all other requirements (research skills, research topic, etc.), and filed electronically with the Department and the Graduate Division of the School of Engineering.

A minimum of 72 credit hours of graduate credit beyond the bachelor’s degree is required for a Ph.D. For students with a 30-credit Masters’ degree in Mechanical Engineering, a minimum of an additional 18 credits of graduate course work and a 24-hour dissertation are required. If a Masters’ degree is not sought, 42 hours of graduate course work beyond the bachelor’s degree and a 30-hour dissertation are required. A minimum of 9 credit hours of advanced mathematics beyond the bachelor’s degree is required.

**Proficiency in Research Skill Area and Responsible Scholarship**

The responsible scholarship requirement may be met by taking ME 801, in addition to all other course and credit requirements.
The Ph.D. student must demonstrate proficiency in at least one research skill area. Since the needs of students differ, the research skills are determined with the advice and approval of the advisory committee. Possible areas may include:

1. **Foreign Language.** The aspirant may demonstrate a reading knowledge in a foreign language in either of two ways:
   a. Receive a score in the language on the Educational Testing Service Graduate School Foreign Language Test at, or above, the minimal level prescribed by the Graduate Studies Office.
   b. Complete a language course approved by the advisory committee with a grade of B or better.

2. **Computer Science.** To establish competence in computer science, it is necessary to satisfy the advisory committee by demonstrating proficiency in a commonly used programming language and creating at least one original program.

3. **Laboratory Training.** Specific training on research skills relevant to the topic of dissertation by the advisor in their respective laboratory with the help of senior students.

All research skill and responsible scholarship requirements must be satisfied prior to the comprehensive examination and reported to the Graduate Division.

**Doctoral Comprehensive Examination**

Following the completion of at least 18 credit hours of coursework beyond the master’s degree, a comprehensive or candidacy examination must be passed. The comprehensive examination shall consist of a presentation of the student's proposal for research on a topic previously approved by the advisor, followed by a public oral examination based on the aspirant's academic background. Through the Progress to Degree (PtD) system, the Department must request a record review from the School of Engineering Graduate Division as a pre-approval process for the comprehensive oral examination in advance of the examination date by a minimum of two weeks. The committee (typically the advising committee) for the comprehensive oral examination must consist of at least five members, all of whom must be members of the Graduate Faculty and at least three of whom must be tenured / tenure track Mechanical Engineering Faculty (including the committee chair). Members are nominated to serve on the Graduate Faculty by their department in the form of a request sent to the Graduate Studies Office via the Progress to Degree system. At least one of the members must be from a department other than Mechanical Engineering. This member represents the Graduate Studies Office and must be a regular member of the Graduate Faculty at KU. The examination may be scheduled if no less than five months have elapsed from the time of the aspirant's first enrollment at this university considering that the Qualifying Exam has been successfully completed. The schedule for the examination should be announced (by email, web, and posted notices) throughout the Department at least 7 days in advance.

For every scheduled examination, the department will report a grade of satisfactory or unsatisfactory. If the aspirant receives a grade of unsatisfactory on the comprehensive oral examination, it may be repeated upon the recommendation of the Department and the request of the aspirant. The examination may not be repeated until at least 90 days have elapsed since the last unsuccessful attempt and no later than one year from the date of the first attempt. Normally, the aspirant will be terminated from the doctoral program if the comprehensive examination is not passed after two attempts.

After passing the comprehensive oral examination for a doctoral degree, the candidate must be continuously enrolled, including summer sessions, until all requirements for the degree are completed, and each enrollment must reflect, as accurately as possible the candidate's demands on faculty time and university facilities. During this time, until all requirements for the degree are completed OR until 18 post-comprehensive hours have been completed (whichever comes first), the candidate must enroll for a minimum of 6 hours each fall and spring semester and 3 hours a summer session. Post-comprehensive enrollment may include enrollment during the semester or summer session in which the comprehensive oral examination has been passed. If after 18 hours of post-comprehensive enrollment, the degree is not completed, the candidate must continue to enroll each semester and each summer session until all requirements for the degree have been met. The number of hours of each enrollment must be determined by the candidate's dissertation advisor and must reflect as accurately as possible the candidate's demands on faculty time and university facilities.

**Dissertation and Final Examination**

A dissertation is required of each doctoral candidate. The Ph.D. dissertation presents the results of the student's research investigation. It is expected to make an original contribution to technical knowledge of sufficient quality to merit publication(s) in refereed journals. A candidate for a doctoral degree must satisfy all Graduate School requirements (https://documents.ku.edu/policies/Graduate_Studies/doctoraldegerequirements.htm) for the degree and must submit to the major professor a paper or papers, based on the dissertation, suitable for publication in a refereed journal.

When the student passes the comprehensive oral examination, the Graduate Division identifies the candidate's Dissertation Committee based on the recommendations of the Department. The Dissertation Committee must consist of at least three members and may include members from other departments and divisions or, on occasion, members from outside the university. All members of the Committee must be chosen from the Graduate Faculty, and the chairperson must, in addition, be authorized to chair doctoral dissertations. A prospective member of the Committee from outside the university must have gained appointment as an ad hoc member of the Graduate Faculty prior to appointment to the Committee.

When the completed dissertation has been accepted by the Dissertation Committee, and all other degree requirements have been satisfied, the chairperson of the Dissertation Committee requests, three weeks in advance of the desired examination, the Graduate Division to schedule the final oral examination. The examination must be publicized at least 7 days prior to the date of the examination in the Department. At least five months must elapse between the successful completion of the comprehensive oral examination and the date of the final oral examination.

The committee for the final oral examination must consist of at least five members (the members of the Dissertation Committee plus at least two other members of the Graduate Faculty recommended by the chair of the dissertation committee and the Department and appointed by the Graduate Division). At least one of the members must be from an academic department other than the Department. This member represents the Graduate School and must be a regular member of the Graduate Faculty. The Department will report to the Graduate Division (by Do-All form) for every scheduled final oral examination a grade of satisfactory or unsatisfactory for the candidate's performance. If a grade of unsatisfactory is reported, the candidate may be allowed to repeat the examination upon the recommendation of the Department.
When the final oral examination has been passed and the dissertation has been signed by the members of the dissertation committee, a copy needs to be submitted electronically (http://dissertations.umi.com/ku) to the Graduate School, one bound copy to the major professor, and one bound copy to the Mechanical Engineering Department (with the funds needed to bind the two copies). In addition, the candidate must make arrangements for publication of the dissertation abstract in "Dissertation Abstracts International" Information on publication procedures may be secured from the Graduate Division. Recommended binding services for personal or departmental copies may be found at http://www.graduate.ku.edu/etd/submitting.

Program Time Constraints

Residence Requirement

Two semesters, which may include one summer session, must be spent in resident study at the University of Kansas. During this period of residence the student must be involved full-time in academic or professional pursuits, which may include appointments in this university for teaching or research if it is directed specifically toward the student's degree objectives. In this latter case, the student must be enrolled in a minimum of 6 hours per semester, and the increased research involvement must be fully supported and documented by the dissertation supervisor as being contributory to the student's dissertation or program objectives. The research work must be performed under the direct supervision of the major adviser if on campus, or with adequate liaison if off campus.

Maximum Tenure

The following time constraints apply for completion of doctoral programs:

1. A student who enters graduate studies at this university with a masters' degree from another university must complete all the work for the doctoral degree within eight years of the time of the initial enrollment in graduate work at this university.

2. A student who leaves after having received the masters' degree from this university, and later decides to pursue the doctorate, may apply through the Department and Graduate Division for readmission to the Graduate School. If readmission is granted, the student must complete all the work for the doctoral degree within eight years of the time of the first enrollment after readmission.

3. A student who enters graduate studies at this university to pursue both a master's degree and doctoral degree (consecutively) must complete all the work for both degrees within ten years of the time of initial enrollment in graduate work at the university.

Extension of the tenure periods specified above may be granted in exceptional circumstances for one year at a time by the Graduate Division upon receipt of a satisfactorily documented petition from the student concerned, supported by the Department.

A student in any of the categories listed above may petition the Graduate Division through the Department for a leave of absence during either the pre- or post-comprehensive period to pursue full-time professional activities related to the student's doctoral program and long-range professional goals. Leaves of absence may also be granted because of illness or other emergency. Ordinarily a leave of absence is granted for one year, with the possibility of extension upon request. After an absence of five years, however, a doctoral aspirant or candidate loses status as such and, in order to continue, must apply for readmission to the Department and to the Graduate Division.
Health Professions

Located on the KU Medical Center campus in Kansas City, Kan., the School of Health Professions (http://healthprofessions.kumc.edu) offers more than 25 academic programs, from undergraduate and graduate degrees to certificate programs, that prepare students for careers in health care, research and leadership. Admission and degree requirements vary by program.

- **Audiology and Speech-Language Pathology** (p. 678)
  - Clinical Doctor of Speech-Language Pathology (p. 683)
  - Doctor of Audiology (p. 684)
  - Doctor of Philosophy in Speech-Language Pathology or Audiology (p. 2043)
  - Master of Arts in Speech-Language Pathology (p. 2042)

- **Clinical Laboratory Sciences** (p. 685)
  - Bachelor of Science in Clinical Laboratory Science (http://catalog.ku.edu/health-professions/clinical-laboratory-sciences-bs)

- **Diagnostic Cardiac Sonography** (p. 691)
  - Certificate in Diagnostic Cardiac Sonography (p. 691)

- **Diagnostic Ultrasound Technology (General and Vascular)** (p. 692)
  - Certificate in Diagnostic Ultrasound Technology (General and Vascular) (p. 692)

- **Dietetics and Nutrition** (p. 693)
  - Dietetic Internship Graduate Certificate (p. 698)
  - Dietetics and Integrative Medicine Graduate Certificate (p. 699)
  - Master of Science in Dietetics and Nutrition (p. 700)
  - Doctor of Philosophy in Medical Nutrition Science (p. 701)

- **Health Information Management** (p. 702)
  - Bachelor of Science in Health Information Management (p. 704)

- **Molecular Biotechnology** (p. 706)
  - Master of Science in Molecular Biotechnology (p. 707)

- **Nuclear Medicine Technology** (p. 707)
  - Certificate in Nuclear Medicine Technology (p. 708)

- **Nurse Anesthesia** (p. 709)
  - Doctor of Nursing Practice (p. 711)

- **Occupational Therapy** (p. 712)
  - Master of Occupational Therapy (Bachelor of Science in Occupational Studies) (p. 717)
  - Doctor of Occupational Therapy (p. 719)

- **Physical Therapy and Rehabilitation Science** (p. 719)
  - Doctor of Physical Therapy (p. 724)
  - Doctor of Philosophy in Rehabilitation Science (p. 726)

- **Respiratory Care** (p. 726)
  - Bachelor of Science in Respiratory Care (p. 729)

- **Therapeutic Science** (p. 731)
  - Doctor of Philosophy in Therapeutic Science (p. 731)

The Office of Graduate Studies reviews and approves matters related to graduate study, including admission, course work and degree requirements. Each college or school at the University of Kansas has a graduate division reporting to KU Lawrence Graduate Studies. The Office of Graduate Studies (http://www.kumc.edu/academic-affairs/graduate-studies.html) serves as the graduate division for the schools located on the medical center campus.

The School of Health Professions offers bachelor's degrees in the following fields:

- Clinical laboratory science
- Health information management
- Respiratory care

In addition, certificate programs are available in cardiac sonography, diagnostic ultrasound technology (general and vascular), and nuclear medicine technology.

### University Honors Program

The school encourages qualified students to participate in the University Honors Program (http://www.honors.ku.edu).

The School of Health Professions offers graduate programs in the fields of dietetics and nutrition, molecular biotechnology, nurse anesthesia, occupational therapy, physical therapy, rehabilitation science, and therapeutic science. In addition, programs in audiology and speech-language pathology are offered cooperatively with the Lawrence campus via the Intercampus Program in Communicative Disorders.

Basic admission requirements are listed in the Graduate Studies (p. 2369) section of the online catalog; however, individual graduate programs have specific additional requirements.

The School of Health Professions (p. 650) offers the following graduate degrees:

- Master of Arts
- Master of Occupational Therapy
- Master of Science
- Doctor of Audiology
- Doctor of Nursing Practice
- Doctor of Occupational Therapy
- Doctor of Physical Therapy
- Doctor of Philosophy
- Doctor of Speech-Language Pathology

Also available are certificate programs at the graduate level in the Department of Dietetics and Nutrition.

It is strongly recommended that students seek advising from the academic program of interest as soon as possible in his or her college study. Please refer to the specific academic program for appropriate contact information and advising availability.

Undergraduates on the KU Lawrence campus who are interested in health professions programs should consult Robin Merritt, health professions advisor in the Undergraduate Advising Center (http://advising.ku.edu), 785-864-2805, robing@ku.edu.

For information about university regulations, see Regulations (p. 12) or visit the University of Kansas Policy Library (http://www.policy.ku.edu). All students in the School of Health Professions are required to follow and abide by policies stated in the KU School of Health Professions Student Handbook (http://www.kumc.edu/school-of-health-professions/student-
handbook.html) as well as those defined in the handbook of the student's academic program.

**Undergraduate Regulations**

**Credit/No Credit**

A Credit/No Credit option is available to all degree-seeking undergraduates. You may enroll in one course a semester under the option, if the course is not in your major or minor. For more information, visit the KU Policy Library (https://documents.ku.edu/policies/governance/USRR.htm#art2sect2).

**Warning:** Certain undesirable consequences may result from exercising the option. Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of No Credit to F when computing grade-point averages.

Check with your department before electing the Credit/No Credit option because most programs will NOT accept this for prerequisite courses.

**Grading**

The Departments of Clinical Laboratory Sciences, Health Information Management, and Respiratory Care recognize only grades of A, B, or C as passing. Grades of D and F are not considered passing for the purpose of advancing in the curriculum.

**Graduation with Distinction and Highest Distinction**

The School of Health Professions awards the Highest Distinction honor to undergraduates who have achieved the highest grade-point average among the programs in the school upon graduation. Distinction honors are bestowed upon those with the next highest final grade-point average. The total number of these 2 categories combined may exceed 10 percent of that year's graduating class.

**Honor Roll**

Students with grade-point averages of 3.5 who have completed at least 12 hours with letter grades are recognized on the honor roll or dean's list in fall and spring. An Honor Roll notation appears on the transcript.

**Transfer of Credit**

Only transfer grades of C or higher apply toward graduation from the School of Health Professions at KU. Not all programs in the school accept transfer students. Please check with the appropriate program for full eligibility requirements.

CredTran (http://admissions.ku.edu/apply/credits) is a transfer course equivalency system that lists more than 2,200 colleges and universities from which KU has accepted transfer courses in the past. If your school or course is not listed, your evaluation will be completed when you are admitted to KU.

**Graduate Regulations**

Programs at the graduate level follow policies administered by the Office of Graduate Studies (p. 2410) in addition to those indicated in the KU School of Health Professions Student Handbook (http://www.kumc.edu/school-of-health-professions/student-handbook.html) in the handbook of the specific academic program.

**Credit/No Credit**

Graduate students may select the Credit/No Credit option for certain courses. Students should follow the policy outlined in the University Senate Rules and Regulations, Section 2, article 2.27, and contact the department or program for more information.

**Anatomy and Cell Biology Courses**

**ANTM 380. Special Topics In Anatomy. 1-5 Hours.**

Advanced instruction is offered in the form of tutorials for a limited number of undergraduate students with prior experience in anatomical sciences. The emphasis of the course will be advanced study of a specific area of gross anatomy, neuroanatomy, or histology. In gross anatomy and neuroanatomy, students will do a complete, detailed dissection of a specific area of the body and present it to the faculty with a term paper on a clinically significant aspect of the dissection. In histology, students will prepare specific organs for special histological and immunocytochemical techniques with an oral presentation and term paper. Prerequisite: Permission of instructor. LEC.

**Clinical Lab Sciences Courses**

**CLS 210. Introduction to Clinical Laboratory Sciences. 1 Hour.**

An introductory overview of the professions of Clinical Laboratory Sciences and Cytotechnology including types of analyses performed, specialties, interrelationships in the health care system and a visit to a clinical laboratory. This course will enable those considering a major in the Clinical Laboratory Sciences to have a clear definition of the professions. (Same as BIOL 210.) LEC.

**CLS 520. Phlebotomy. 1 Hour.**

Principles and practice of collecting blood specimens for clinical laboratory analyses. Includes specimen identification, equipment, anticoagulants, safety precautions, specimen transport, and processing. Hepatitis immunization required. Prerequisite: Admission to the Clinical Laboratory Science Program or consent of instructor. LAB.

**CLS 523. Fundamentals of Analytical Techniques Laboratory. 3 Hours.**

Student laboratory with recitation addressing techniques and methodologies used in the clinical laboratory. Laboratory skills include laboratory math, quality control, pipetting, and instrumentation used in analysis of body fluids. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor. LAB.

**CLS 530. Clinical Chemistry I. 3 Hours.**

Introduction to human physiology and pathophysiology I with emphasis on proteins, carbohydrates, lipids, enzymes, liver kidney function, blood gases and body fluids. The related clinical chemistry tests, their principles, analysis, interpretation, and significance are included. Prerequisite: CLS 523 or consent of instructor. LEC.

**CLS 532. Clinical Microbiology I Laboratory. 3 Hours.**

Pathogenesis and disease processes of pathogenic, opportunistic, and saprophytic bacteria; composition and preparation of media; sterilization and disinfection; antimicrobial agents and susceptibility testing; topics related to theory and applications. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor. LEC.

**CLS 533. Clinical Microbiology I Laboratory. 3 Hours.**

A laboratory with recitation addressing diagnostic procedures used for isolation and identification of clinically significant bacteria. Prerequisite: CLS 532 or CLS 532 concurrently, or consent of the instructor. LAB.
CLS 536. Hematology I. 3 Hours.
Fundamentals of hematopoiesis; the physiology, function, and cytochemistry of normal and abnormal blood cells; the theory and performance of clinical laboratory methods related to these parameters. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor. LEC.

CLS 537. Hematology I Laboratory. 2 Hours.
A laboratory with recitation emphasizing basic hematologic techniques and identification of normal and abnormal cells in peripheral blood and bone marrow. Prerequisite: CLS 536, or CLS 536 concurrently, or consent of the instructor. LAB.

CLS 538. Immunology. 3 Hours.
Covers basic theory of molecular and cellular immunology of innate and adaptive immune systems. Lectures include: structure and function of antibodies, complement, major histocompatibility complexes, B- and T-cells and their receptors, cellular and molecular basis of the immune response and immune regulation, hypersensitivity, and immune tolerance. Clinical applications and methodologies will be incorporated into lectures. Prerequisites: Admission to the Department of Clinical Laboratory Sciences or consent of instructor. LEC.

CLS 540. Clinical Chemistry II. 2 Hours.
Introduction to human physiology and pathophysiology II with emphasis on hormones, therapeutic drugs, clinical toxicology, tumor markers, vitamins and trace elements. The related clinical chemistry tests, their principles, analysis, interpretation, and significance are included. Prerequisite: CLS 530 or consent of instructor. LEC.

CLS 541. Professional Development. 2 Hours.
This course combines lectures and projects to give students an introduction to and practice in the following: resume writing and interviewing skills; the components of and the production of a scholarly product; the basic principles involved in education with the identification and writing of educational objectives; the activities and responsibilities involved in laboratory management. Prerequisite: CLS 530 or consent of instructor. LEC.

CLS 542. Clinical Microbiology II. 2 Hours.
Pathogenesis, disease processes, and diagnostic protocols for parasites, medically important fungi and mycobacteria. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor. LEC.

CLS 543. Clinical Microbiology II Laboratory. 2 Hours.
A laboratory with recitation addressing diagnostic procedures used for isolation and identification of parasites, medically important fungi, and mycobacteria. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor. LAB.

CLS 544. Immunohematology I. 3 Hours.
Principles of immunohematology as applied to transfusion services, donor services, component preparation and storage, and transfusion therapy. Includes problem solving for transfusion related situations and evaluation of problems related to hemolytic disease of the newborn, autoimmune hemolytic disorders, and transfusion reactions. Prerequisite: BIOL 503 or CLS 538, CLS 546, or consent of instructor. LEC.

CLS 545. Immunohematology I Laboratory. 2 Hours.
Principles of immunohematology as applied to transfusion services, donor services, component preparation and storage, and transfusion therapy. Includes problem solving for transfusion related situations and evaluation of problems related to hemolytic disease of the newborn, autoimmune hemolytic disorders, and transfusion reactions. Prerequisite: BIOL 503 or CLS 538, CLS 546, or consent of instructor. LAB.

CLS 546. Hematology II. 3 Hours.
Lectures on hematopoiesis, the physiology, function, and cytochemistry of normal and abnormal blood cells, normal and abnormal hemostasis, and the theory and performance of laboratory methods related to these parameters. Prerequisite: CLS 536 and CLS 537 or consent of instructor. LEC.

CLS 547. Hematology II Laboratory. 2 Hours.
A laboratory with recitation involving performance of hematology laboratory procedures with emphasis on basic hematologic and coagulation techniques and the identification of normal and abnormal cells in the peripheral blood and bone marrow. Prerequisite: CLS 536, CLS 537 and CLS 546 or CLS 546 concurrently, or consent of the instructor. LAB.

CLS 549. Clinical Immunology I Laboratory. 2 Hours.
A laboratory with recitation involving performance of immunoassays. Emphasis on theory, methodologies, and clinical correlations. Prerequisites: CLS 523, BIOL 503 or CLS 538, or consent of instructor. LEC.

CLS 600. Introductory Biochemistry. 4 Hours.
An introduction to the chemistry and metabolism of carbohydrates, lipids, proteins, nucleic acids, and other biologically important molecules. Topics include cellular processes, reactions and interactions occurring in living organisms. Prerequisite: Admission to the Department of Clinical Laboratory Sciences or consent of instructor. LEC.

CLS 605. Introduction to Molecular Diagnostics I. 1 Hour.
An introduction to molecular biology and molecular biological methodologies and technologies commonly used in basic, applied, and diagnostic laboratories. An emphasis is placed on molecular biology principles and techniques used in the clinical laboratory for diagnosis, prognosis, and treatment of disease. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor. LEC.

CLS 607. Introduction to Molecular Diagnostics I Laboratory. 1 Hour.
An introduction to molecular diagnostic methodologies and technologies commonly used in clinical laboratories. Principles and performance of nucleic acid isolation, restriction enzyme digestion, electrophoresis, amplification, hybridization, and analysis. Applications in infectious and genetic disease. Prerequisite: Admission to the Clinical Laboratory Science program or Cytotechnology program or consent of the instructor. LEC.

CLS 610. Advanced Biotechniques Lecture. 3 Hours.
A lecture course covering the theory behind a variety of current molecular, biochemical and immunologic techniques utilized in today's research and diagnostic laboratories. Material presented will include proper specimen preparation and handling; technique set-up and quality control; trouble shooting and technique modification. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor. LEC.

CLS 611. Advanced Biotechniques Laboratory. 2 Hours.
Student Laboratory course with practical application of selected molecular, biochemical, and immunologic techniques. Designed to provide limited experience with advanced chromatographic techniques (DEAE-cellulose, affinity columns, HPLC, and gas); multiple electrophoresis techniques (starch-gel, SDS-page, Southern blot); nucleic acid analysis and manipulation; ligand production and utilization; cell culture, including appropriate sterilization methods, aseptic handling, and steps to ensure attachment. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor. LAB.

CLS 615. Journal Club. 1 Hour.
Introduction to analysis of journal articles. Initial sessions will place an emphasis upon reading the article with an eye to replicating a described method or specific technique; analyzing data presented for
validity; acceptance or rejection of the researchers’ conclusions. Follow-up sessions will involve analyzing and presenting selected articles. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor. LEC.

**CLS 620. Radiation Safety. 1 Hour.**
A lecture course covering the structure of the atom, isotopes, and radioactivity. Emphasis will be on radiation protection and safe handling of isotopes. In addition, the student will be introduced to methods for detection and quantification of radioactivity in biological materials. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor. LEC.

**CLS 621. Biotechnology Methodologies Practicum. 4 Hours.**
Placement of the student in a biotechnology core facility supporting molecular biological research from multiple laboratories. Such a core facility would provide, but not to be restricted to, the following methodologies: amino acid analysis; protein/peptide sequencing; peptide synthesis; DNA/RNA sequencing; oligonucleotide synthesis. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor. LAB.

**CLS 622. Problems in Molecular Diagnostics. 2 Hours.**
Provides a targeted review of current theory, techniques and application of molecular techniques in the diagnosis of infectious disease, and hereditary and acquired genetic disease. Prerequisite: Admission to the Clinical Laboratory Science or Cytotechnology program, or consent of instructor. LEC.

**CLS 623. Molecular Genetics Practicum. 4 Hours.**
Placement of the student in a molecular genetics research laboratory (utilizing either prokaryotic or eucaryotic organisms or both) working with laboratory staff on an on-going small project within the laboratory. Molecular genetics laboratories utilized could be involved in, but not restricted to, any of the following activities: gene sequencing, cloning or splicing; elucidation of the mechanisms that regulate gene expression; proto-oncogene activation. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor. LAB.

**CLS 633. Special Topics Practicum. 4 Hours.**
Placement of the student in any of a variety of research laboratories actively participating in molecular biological projects utilizing advanced genetic, biochemical immunologic, or other molecular techniques. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor. LAB.

**CLS 639. Urinalysis. 1 Hour.**
Tutorial instruction and clinical laboratory experience in urinalysis with the application of knowledge and skills to methodology, instrumentation, and quality control. Advanced content on renal disorders with emphasis on pathological mechanisms, interpretation, and clinical correlation of test results. Prerequisite: CLS 540, or consent of instructor. LEC.

**CLS 640. Clinical Chemistry III. 2 Hours.**
Tutorial instruction in advanced clinical chemistry focusing on correlation of laboratory analysis and pathophysiology. Addresses organ system disease, metabolic disease, nutrition, and other special topics. Prerequisite: CLS 540, or consent of instructor. LEC.

**CLS 641. Clinical Chemistry and Immunology Practicum. 3 Hours.**
Tutorial instruction and clinical laboratory experience in the chemistry of body fluids, with the application of knowledge and skills to methodology, instrumentation, and quality control. Involves correlation of chemical and immunological analyses to pathophysiology. Prerequisites: CLS 540 and CLS 549, or consent of instructor. LAB.

**CLS 642. Clinical Microbiology III. 2 Hours.**
Tutorial instruction addressing pathophysiology and diagnostic protocols of viruses, rickettsia, chlamydia, mycoplasma, and other unusual organisms. Prerequisites: CLS 532, CLS 533, CLS 542 and CLS 543, or consent of instructor. LEC.

**CLS 643. Clinical Microbiology Practicum. 3 Hours.**
Tutorial instruction and clinical laboratory experience in diagnostic microbiology, with the application of knowledge and skills to methodology, instrumentation, and quality control. Prerequisites: CLS 532, CLS 533, CLS 542 and CLS 543, or consent of instructor. LAB.

**CLS 644. Immunohematology II. 2 Hours.**
Tutorial instruction addressing advanced transfusion medicine theory and concepts. Focuses on hospital transfusion services, blood utilization, management, legal and regulatory issues, and special topics. Prerequisites: CLS 544 and CLS 545, or consent of instructor. LEC.

**CLS 645. Immunohematology Practicum. 2 Hours.**
Tutorial instruction and clinical laboratory experience in transfusion medicine, with the application of knowledge and skills to methodology, instrumentation, and quality control. Prerequisites: CLS 544, CLS 545, or consent of instructor. LAB.

**CLS 646. Hematology III. 2 Hours.**
Tutorial instruction and clinical laboratory experience in hematology, with the application of knowledge and skills to methodology, instrumentation, and quality control. Prerequisites: CLS 546 and CLS 547, or consent of instructor. LAB.

**CLS 647. Hematology Practicum. 3 Hours.**
Tutorial instruction and clinical laboratory experience in hematology, with the application of knowledge and skills to methodology, instrumentation, and quality control. Prerequisites: CLS 546 and CLS 547, or consent of instructor. LAB.

**CLS 648. Clinical Immunology II. 1 Hour.**
Tutorial instruction on immune system involvement in disease processes, immune dysfunction and correlation of laboratory data with disease states. Prerequisite: CLS 549, or consent of instructor. LEC.

**CLS 650. Clinical Laboratory Science Review. 1 Hour.**
This review will enable students to identify areas of weakness in their understanding of clinical laboratory science in preparation for clinical rotations and comprehensive examination. Students will participate in classroom and laboratory sessions in order to evaluate their performance in meeting required competencies. Prerequisite: CLS 520-CLS 548 inclusive, CLS 605, CLS 607, CLS 661, and CLS 639-CLS 648 inclusive, or consent of instructor. LEC.

**CLS 655. Molecular Biotechnology Review Course. 1 Hour.**
Situation and problem solving oriented web based course that reviews material taught. This course will enable students to identify areas of weakness in their understanding of molecular biotechniques and their applications. Interactive question-answer format and a comprehensive, certification-type exam will aid students in evaluating their performance in meeting required competencies. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor. LEC.

**CLS 661. Management Principles in Health Care. 3 Hours.**
Introduction to basic principles of management, education, and research and their application in the current health care environment. Course content includes management theory, scope of management, quality issues, budgeting, personnel issues, evaluation and application of management concepts; introductory research methods and evaluation of journal articles. Cross listed with HEIM 661 and RESP 661. Prerequisite:
Admission to the Clinical Laboratory Sciences program or consent of the instructor. LEC.

CLS 670. Principles of Education in Clinical Laboratory Science. 1 Hour.
Educational concepts including principles of learning, curriculum design, evaluation, teaching methodologies, audiovisual and library resources, accreditation, student services, and legal considerations. Prerequisite: Admission to the Clinical Laboratory Science program or consent of instructor. LEC.

CLS 690. Special Topics. 1-5 Hours.
A course of study offering the student the opportunity for acquisition of additional knowledge and skills in one of the clinical laboratory routine areas or a specialty area, e.g., cytogenetics, metabolic analysis, or supervision; or at another clinical site. Course requirements designed in cooperation with student. Prerequisite: Admission to the Clinical Laboratory Science program or consent of instructor. LEC.

CLS 705. Fundamentals of Pathophysiology. 3 Hours.
Review of integrative human physiology with an emphasis upon homeostatic mechanisms and etiologies of disease. The interrelationships of function and dysfunction at the molecular, cellular and tissue level (pathology), organ and systemic level (impaired), and to the total human body (functional limitations) will be applied in each of the body systems. Discussions and applied materials will be tailored to the professional student population. Prerequisite: Admission to the Dietetics and Nutrition program or permission of the instructor(s). LEC.

CLS 710. Molecular Techniques I. 2 Hours.
A lecture course covering the theory underlying molecular techniques involving nucleic acids and mammalian cell culture. Topics include purification and analysis of nucleic acids, recombinant DNA, construction and screening of genetic libraries, genetic engineering, control of gene expression, construction of gene fusions, amplification, hybridization, and nucleic acid databases and bioinformatic analysis. Prerequisite: Admission to the MS in Molecular Biotechnology program or consent of instructor. LEC.

CLS 711. Molecular Techniques Laboratory I. 2 Hours.
A laboratory course emphasizing the application, practice, and troubleshooting of molecular techniques involving nucleic acids and mammalian cell culture. Topics include purification and analysis of nucleic acids, recombinant DNA, genetic engineering, control of gene expression, construction of gene fusions, amplification, and hybridization. Topics are covered through a project-based approach. Prerequisite: Admission to the MS in Molecular Biotechnology program or consent of instructor. LAB.

CLS 720. Molecular Techniques II. 2 Hours.
Lecture and discussion course covering the theory and practice of molecular techniques for protein analysis. General topics include: protein detection, quantification, and characterization; protein separation and identification; protein expression systems; protein extraction, fractionation, solubilization and purification; analysis of protein-protein interactions; proteomics; and mass spectroscopy. Prerequisite: Admission to the MS in Molecular Biotechnology program or consent of instructor. LAB.

CLS 721. Molecular Techniques Laboratory II. 2 Hours.
Laboratory course for the practice and application of molecular techniques for analyzing and manipulating proteins. Techniques will include: bioinformatics analyses; expression, purification and solubilization of epitope tagged fusion proteins, protein-protein interactions; protein quantification; protein separation by electrophoresis and column chromatography; protein detection by chemical and immunological methods; and LC-MS. Prerequisite: Admission to the MS in Molecular Biotechnology program or consent of instructor. LAB.

CLS 720. Current Issues in Biotechnology. 1 Hour.
A seminar course that addresses topics including scientific, business, legal, social, and ethical issues in biotechnology. Students explore these topics through literature discussions, student presentations, and discussions with speakers from biotechnology-related academic and industry sectors. This course is meant for graduate students in the Molecular Biotechnology program. Prerequisite: Consent of instructor. SEM.

CLS 740. Journal Club. 1 Hour.
This course is an introduction to the critical reading of journal articles from the current literature in molecular biotechnology. Discussions will emphasize the analysis of experimental design and technique, as well as the significance of the results and validity of the author's conclusions. Students will learn how to search for articles and background information pertaining to selected topics, an how to present a polished, professional summary of that literature. Assigned papers for discussion and student presentations will focus on new strategies and technologies in molecular biotechnology of wide fundamental importance, or on hypothesis-based research that uses molecular biotechnological approaches. Prerequisite: Completion of (or concurrent enrollment in) CLS 710 and CLS 720. LEC.

CLS 742. Scientific Writing. 1 Hour.
Formats, techniques, and styles of scientific writing. Emphasis will be placed on clear, concise, and effective writing. The class will focus on the process of writing scientific manuscripts and grant proposals. Students will identify and define the sections of scientific manuscripts as well as grant proposals. During the course, each student will write an R21-type (NIH Exploratory/Developmental Research Grant) proposals as could be submitted to the most appropriate NIH Institute. This course is intended for students enrolled in their final semester of the Master of Science in Molecular Biotechnology program. Prerequisite: Consent of Instructor LEC.

CLS 744. Topics in Molecular Biotechnology. 1-5 Hours.
Advanced course on special topics in molecular biotechnology, offered by arrangement. May include lectures, discussions, readings, laboratory techniques, and supervised research experience. This course is intended for graduate students in the Molecular Biotechnology program. Prerequisite: Consent of instructor. LEC.

CLS 750. Practicum I. 4 Hours.
Advanced practical experience in a selected laboratory pursuing applied, basic, or diagnostic research projects utilizing genetic, biochemical, or other molecular biology-related approaches. Students apply and extend their knowledge and skills by performing a research and/or development project under the supervision of a site mentor. This practicum is performed at a site other than those utilized for CLS 751 (Practicum II) and CLS 752 (Practicum III). Prerequisite: Completion of CLS 710, CLS 711, CLS 720, and CLS 721, and consent of the instructor. PRA.

CLS 751. Practicum II. 5 Hours.
Advanced practical experience in a selected laboratory pursuing applied, basic, or diagnostic research projects utilizing genetic, biochemical, or other molecular biology-related approaches. Students apply and extend their knowledge and skills by performing a research and/or development project under the supervision of a site mentor. This practicum is performed at a site other than those utilized for CLS 750 (Practicum I) and CLS 752 (Practicum III). Prerequisites: Completion of CLS 710, CLS 711, CLS 720, and CLS 721, and consent of the instructor. PRA.

CLS 752. Practicum III. 5 Hours.
Advanced practical experience in a selected laboratory pursuing applied, basic, or diagnostic research projects utilizing genetic, biochemical, or other molecular biology-related approaches. Students apply and extend their knowledge and skills by performing a research and/or development project under the supervision of a site mentor. This practicum is
performed at a site other than those utilized for CLS 750 (Practicum I) and CLS 751 (Practicum II). Prerequisites: Completion of CLS 710, CLS 711, CLS 720, and CLS 721, and consent of the instructor. PRA.

Cytotechnology Courses

CYTO 300. Introduction to Cytology. 5 Hours.
Orientation to the profession of cytotechnology including basic cell biology, ethics, the microscope, history of the profession. Also basic concepts of pathology are introduced including normal, benign proliferative, inflammatory, and reparative processes. The cellular alterations caused by these processes are introduced using the female genital system. The histology, anatomy, and endocrine system of the female genital tract are also covered. Microscopy of this section includes proper use and care of the microscope, hormonal cytology, and the range of normal reparative reactions. The recognition of specific infectious agents and/or their cellular manifestations is also included using the female genital tract as the body system under investigations. Prerequisite: Admissions to the Cytotechnology Program or permission of instructor. LEC.

CYTO 321. Neoplasia in the Female Genital Tract I. 5 Hours.
The pathologic concepts of neoplasia, the morphogenesis of carcinoma, and the cellular changes associated with both premalignant and malignant changes of squamous cell lesions in the cervix are studied. Microscopy in this section includes pre-screening of clinical care load identifying normal and abnormal cellular criteria. Prerequisite: CYTO 300 or instructor’s permission. LEC.

CYTO 322. Neoplasia in the Female Genital Tract II. 6 Hours.
A continuation of CYTO 321 with the emphasis on lesions of the uterine corpus, metastatic lesions, and lesions of the vulva and vagina. Also treatment effect and pregnancy change are included in this section. Practical microscopy is also continued with the pre-screening of clinical cases. Prerequisite: CYTO 321 or instructor's permission. LEC.

CYTO 355. Cytology Lab Management, Respiratory Cytology and Oral Cytology. 4 Hours.
Cytology lab regulations and QC requirements. Management requirements regarding safety, quality improvement, and personnel. Also, the normal, benign, and malignant changes of the upper and lower respiratory tract and the oral cavity. The anatomy, histology, and cytology of each of the body sites is studied as well as infectious agents common to these sites. Microscopy includes prescreening gynecologic material while further increasing speed and accuracy. Respiratory and oral specimens are also included in the practical microscopy. Students rotate through the processing laboratory. Prerequisite: CYTO 322 or permission of the instructor. LEC.

CYTO 370. Effusions, C.S.F., and Miscellaneous Cytology. 3 Hours.
This course includes the cytology of the reticulo-endothelial system, effusions, CSF, and other miscellaneous fluids. Normal, benign, and malignant cellular criteria are covered as well as the anatomy and histology of each body site. Microscopy includes further practice in gyn material and all non-gyn specimens studied to this point. Students continue to use the processing laboratory on a rotating basis. Prerequisite: CYTO 355 or instructor's permission. LEC.

CYTO 380. Gastrointestinal, Breast, G.U. and F.N.A. Cytology. 6 Hours.
This course includes the cytology of the GI system, the breast, the urinary tract, and other miscellaneous body sites. The anatomy and histology of each of the body sites is studied; cellular criteria for benign, normal, and malignant changes are introduced. Advanced topics such as aspiration cytology will also be covered. Microscopy includes further practice in the pre-screening of gyn material as well as all non-gyn material studied and non-gyn material studied to professional entry levels of speed and accuracy. Students continue to use the processing laboratory on a rotating basis and participate in case conference. Prerequisite: CYTO 380 or instructor's permission. LEC.

CYTO 385. Scientific Method and Literature in Cytology. 1 Hour.
This course will include lectures on advanced topics in cytology. A comprehensive final examination completes the course. Students continue to increase speed and accuracy in microscopy to at least professional entry levels. Prerequisite: CYTO 420 or instructor’s permission. LEC.

CYTO 402. Advanced Practicum in Cytology. 2 Hours.
Microscopy includes further practice in the screening of all gyn and non-gyn material at professional entry levels of speed and accuracy. Students continue to use the processing laboratory on a rotating basis and participate in case conference. Prerequisite: CYTO 380 or instructor’s permission. LEC.

CYTO 450. Advanced Topics in Cytology. 2 Hours.
This course will include lectures on advanced topics in cytology. A comprehensive final examination completes the course. Students continue to increase speed and accuracy in microscopy to at least professional entry levels. Prerequisite: CYTO 420 or instructor’s permission. LEC.

Dietetics and Nutrition Courses

DIET 660. Management of Human Resources in Dietetics. 6 Hours.
Focus on human resource development and utilization as the student works with food service personnel. Learning encompasses recruiting, training, supervision, and evaluation of employees in a food service system. Open only to seniors majoring in dietetics. Prerequisite: Management concepts or personnel administration. LEC.

DIET 661. Management of Food Processing and Service. 6 Hours.
Application of theories and concepts pertaining to management functions and interdepartmental relationships in a variety of clinical food service settings. Consideration is given to the newer technological developments in the administration of food services. Open only to seniors majoring in dietetics. Prerequisite: Food service systems and management in dietetics. FLD.

DIET 662. Special Problems in Food Service Management. 3 Hours.
Advanced experience in the practice of dietetics in an assigned setting. Problems and procedures will vary with interest and needs of the students. Open only to seniors majoring in dietetics. Prerequisite: Food service systems. FLD.

DIET 672. Nutrition Care of Patients. 6 Hours.
Directed observation and supervised experience in nutritional care of patients. Nutrition principles studied in DIET 670, Applied Normal Nutrition, and DIET 671, Nutrition in Medical Science, are applied in clinical situations. Open only to seniors majoring in dietetics. Prerequisite: Principles of nutrition; and nutrition throughout the life cycle. LEC.

DIET 675. Seminar in Dietetics and Nutrition. 1 Hour.
Involves study and discussion of text and general materials pertaining to philosophy and methodology in the field of dietetics and nutrition. Guest lecturers will participate. May be repeated for credit providing no
course duplication takes place. Open only to seniors majoring in dietetics. Prerequisite: Introduction to dietetics. FLD.

DIET 800. Selected Topics in Dietetics. 1-3 Hours.
An elective course to allow student credit hours in special issues or problems in dietetics offered by individual faculty. Course content can provide students with investigation of problems and/or issues relevant to theory, research investigation and/or practice related to the field of nutrition and dietetics. LEC.

DIET 801. Current Issues or Trends. 3 Hours.
Review of current issues in the economic, social, ethical, political, legal, technological, and ecological environments and the effects of these changes on dietetics practice. LEC.

DIET 802. Foods Writing for Professionals. 3 Hours.
A course focusing on the writing skills needed by the food professional in order to communicate effectively in writing about food and food-related topics. Student experiences include hands-on projects in research and writing for various audiences and types of publications. LEC.

DIET 803. Accounting Concepts & Analysis. 3 Hours.
An emphasis on financial statement analysis is the main objective of the course. A review of all major accounts in the income statement, balance sheet and statement of cash flow is made in determining a firm's performance and financial condition in relation to what matters most to shareholders and investors. Prerequisites: General Calculus and Linear Algebra LEC.

DIET 805. Entrepreneurship Theory and Practice. 3 Hours.
Development and management of small businesses or private practice within the dietetics industry. Business plan development, marketing, cost considerations. Overview of consulting to health care and hospitality operations and examination of skills required for success. LEC.

DIET 819. Grant and Scientific Writing for the Professional. 3 Hours.
Grant writing, identifying external funding, managing grants, preparing manuscripts for peer-reviewed publication, and preparing papers and poster for presentation at professional meetings. Prerequisite: Enrolled GPIDEA. LEC.

DIET 822. Healthcare Administration. 3 Hours.
A comprehensive review of today's health care institutions and their response to the economic, social/ethical, political/legal, technological, and ecological environments. LEC.

DIET 824. Financial Management and Cost Controls in Dietetics. 3 Hours.
This course overviews the fundamental knowledge of financial management, managerial accounting, and operational cost controls for dietetics professionals. Topics include a review of managerial accounting concepts for not-for-profit organizations and for-profit organizations based on the Uniform System of Accounts, value and risk analyses, budgeting, asset management, franchising and management contracts, cost-volume-profit analyses, and operational applications for financial performance. LEC.

DIET 829. Nutrition and Aging. 3 Hours.
An overview of nutrition and the aging process. Physiological, psychological, and sociological aspects of aging, theories of aging, internal and external factors related to nutrient intake, and nutrient needs will be considered. Physical activity and practical application to community settings is addressed. LEC.

DIET 830. Nutrition: a Focus on Life Stages. 3 Hours.
The influence of normal physiological stresses on nutritional needs throughout the life span will be explored. Evaluating nutritional status at different stages of life and identifying appropriate needs and services will be included while, at the same time, consideration given for specific characteristics such as physiological condition and cultural heritage. LEC.

DIET 832. Functional Foods for Chronic Disease Prevention. 3 Hours.
Integrate and evaluate the regulatory principles, food science, nutrient science and nutritional metabolism for the development of functional foods, nutraceuticals, and dietary supplements for chronic disease prevention. Prerequisites: Biochemistry, Human Nutrition, Basic Food Science or consent of instructor. LEC.

DIET 833. Principles of Statistics. 3 Hours.
A basic course in statistics: Statistical methods applied to experimental and survey data from social or natural sciences; test of hypotheses concerning treatment means; linear regression; product-moment, rank, and bi-serial correlations; contingency tables and chi-square tests. LEC.

DIET 834. Methods of Research in Nutrition. 3 Hours.
A study of basic research terminology and designs commonly used in nutrition research. Topics include: research on animals, tissue culture and human subjects; qualitative, quantitative and outcomes research; ethical issues in research; dissemination of research findings; and appropriate use of research findings. Prerequisite: Consent of instructor. LEC.

DIET 836. Biochemical, Physiological, and Genetic Aspects of Human Nutrition. 3 Hours.
The topics covered will examine the integration of biochemistry, physiology, genetics, and nutrition. Emphasis will be placed on developing an understanding of how the combination cellular structure and function is related to the metabolic needs of the cell and its response to the environment. The integrated approach will form a basis for evaluating nutritional needs in humans. Prerequisite: courses in nutrition, physiology, and biochemistry, or consent of instructor. LEC.

DIET 838. Advanced Medical Nutrition Therapy. 3 Hours.
This course will discuss the role of diet in disease including diet as a factor related to prevention of diseases or illness, diet as an etiologic agent in illness and diet as a treatment for disease. Medical nutrition therapy is the use of specific nutrition services to treat an illness, injury or condition and involves two phases: 1) assessment and 2) treatment, which includes diet therapy, counseling and/or the use of specialized nutrition supplements. LEC.

DIET 839. Clinical Aspects of Nutrition Support. 3 Hours.
The course content provides in depth study of specialized visceral and somatic nutrition assessment of the critically ill patient. Content includes extensive review of methods for determining energy expenditure and substrate utilization during specific disease states. Discussion of the aspects of feeding the critically ill patient including timing, enteral and parenteral feeding methodology, specialized medical foods, equipment requirements, feeding complications and prevention, and pharmacological issues. Students will be expected to calculate formulas for both types feeding modalities and provide discussion of the evidence based guidelines for administration of these nutrition therapies. Prerequisite: minimum of 3 cr hours in Medical Nutrition Therapy. LEC.

DIET 841. International Nutrition and World Hunger. 3 Hours.
Advanced study of the magnitude, cause, and nature of hunger and undernutrition in low income countries; emphasis on programs, policies and planning directed toward alleviating hunger. LEC.

DIET 842. Nutrition and Wellness. 3 Hours.
Course will address wellness promotion through nutrition. Nutritional risk and protective factors will be examined as they relate to public health and individual nutrition. LEC.
DIET 843. Nutrition Education in the Community. 3 Hours.
Principles and practices of teaching individuals and groups to translate nutrition knowledge into action. Emphasis on research in and evaluation of nutrition education. LEC.

DIET 844. Behavior Management Theory. 3 Hours.
An in-depth analysis of the development of the behavioral basis of individual and group behavior in business, governmental, educational, and other organizations with emphasis on current research literature and applications. LEC.

DIET 845. Nutritional Aspects of Oncology. 3 Hours.
A course focusing on current research examining the role of nutrition in specific cancers. Topics include basic cancer biology, pathology and nutritional research methodology. Sources of information for cancer prevention programs and the application of translational research to clinical patient populations will be discussed. LEC.

DIET 850. Operations Management and Analysis. 3 Hours.
The study of the role of operations systems in the provision of value for the customer. Operations systems design; capacity determination, resource requirements planning and control, theory of constraints, supply chain management, quality management and control and project management are discussed and analyzed. Prerequisite: Basic graduate statistics course LEC.

DIET 854. Non-Thesis Research. 1-3 Hours.
Directed study of special problems in nutrition or nutrition care. This course provides for the individual or group study of special problems. Through directed readings, investigations and projects, the student acquires information with reference to questions in dietetics and nutrition not covered in organized courses. This course fulfills the research requirements for the Non-Thesis Option. RSC.

DIET 856. Maternal and Child Nutrition. 3 Hours.
Critical examination of behavioral, physiological, and public health issues impacting dietary and nutritional factors that support normal growth and development. Course content focuses on the early stages of the life cycle: gestation, lactation, infancy, preschool, school age, and adolescence. Topics include the fetal programming hypothesis, growth and nutritional requirements, breast and formula feeding of infants, infant weaning, and eating behaviors that lead to normal growth, growth faltering, and pediatric obesity. Cross-listed with DN 862. Prerequisite: Registered Dietitian, or registry eligible dietitian. LEC.

DIET 865. Nutrition and Human Performance. 3 Hours.
This course is designed to develop an understanding of nutrition, based upon knowledge of the biochemical and physiological process and functions of specific nutrients in meeting nutritional requirements. Emphasis will be placed upon the relationship of optimal nutrition and physical efficiency and performance. LEC.

DIET 870. Nutrition Counseling and Education Methods. 3 Hours.
Nutrition education for groups and individuals in clinical and community settings. Includes discussion and experience in applying learning theory, assessing educational needs, stating goals and objectives, selecting learning activities, implementing and evaluating instruction, and documenting care provided. LEC.

DIET 875. Pediatric Clinical Nutrition. 3 Hours.
Examines physiological, biochemical and nutritional aspects of disease processes relevant to infants and children up to 18 years of age. Medical nutrition therapy for a variety of medicine conditions found in this population will be discussed including inborn errors of metabolism, food hypersensitivity, obesity, and diseases of the major organ systems. Cross-listed with DN 875. Prerequisite: Registered Dietitian or registry eligible dietitian. LEC.

DIET 876. Intervention for the Prevention & Management of Obesity. 3 Hours.
This course emphasizes obesity in a population group ranging from childhood to the adult. Course materials will examine the impact of obese conditions on disease development throughout the life cycle. The course will critically analyze current evidence focused on interventions used in the behavioral and clinical management of overweight and obese individuals in community and clinical settings. Prerequisites: Consent of instructor. LEC.

DIET 880. Dietary and Herbal Supplements. 3 Hours.
Explore the safety and efficacy of botanical/herbal and dietary supplements in health applications including dietary supplementation in the prevention and treatment of chronic disease. Prerequisite: Human physiology is advisable. LEC.

DIET 881. Phytochemicals. 3 Hours.
The course is an overview on phytochemicals (non-nutritive biologically active compounds which may have health benefits) from fruits, vegetables, cereals and oilseeds. The course will include discussions of functional foods which are designer foods providing these compounds to the public. It will cover recent findings on chemistry, physiological functions, potential health implications of phytochemicals. LEC.

DIET 886. Advanced Nutrition: Nutrigenomics, Nutrigenetics and Advanced Lipid Metabolism in Human Nutrition. 3 Hours.
This course integrates topics related to current biochemical issues in nutritional science. The course will examine topics ranging from the cellular, molecular, and biochemical aspects of nutritional science to translational and applied research at the clinical and educational level. The goal is to emphasize the integrative and complex nature of human nutrition research ranging from basic science to clinical studies to translational and applied studies. LEC.

DIET 887. Nutrition and Immunology. 3 Hours.
This course examines the mechanisms underlying the modulation of immune responses by nutritional, naturally occurring and orally active food compounds. The role of nutritional status and changes in the life stages which impact immune response impacting disease initiation and progression. Contributions of the GI system and changes in life stages impacting immunity and their relationship to immune response will be discussed. LEC.

DIET 896. Micronutrients in Human Nutrition. 3 Hours.
Interrelationships of micronutrients in terms of biochemistry, physiology, genetics, and nutrition. Emphasis will be placed on developing an understanding of how the coordination of structure and function is related to the metabolic needs of the cell and its response to the environment. This integrated approach will form the basis for evaluating the micronutrient needs of humans in both normal and altered metabolic states. LEC.

DIET 899. Thesis. 1-6 Hours.
Scholarly essay based research, written under the guidance of the student's adviser. Credit given upon meeting thesis requirements for the master's program. THE.

Dietetics and Nutrition Courses
An overview of the nutritional therapies used for various disease disorders. The course emphasizes the nutritional care and treatment related to state of the art practice. LEC.
DN 670. Applied Normal Nutrition. 3 Hours.
Applied study of the relationship of normal food and nutrition principles to health promotion in select stages of the lifecycle. LEC.

DN 671. Nutrition in Medical Science. 6 Hours.
Study of the science of medical nutrition therapy and evidence based practice in the nutritional management of disease during specific stages of the life cycle. Prerequisite: Consent of Instructor LEC.

DN 796. Social and Cultural Aspects of Dietetics and Nutrition. 2-4 Hours.
A study of the aspects of society, culture and personality related diet, food habits, and nutrition. The role of the community and its agencies will be considered. Includes field work. Prerequisite: Consent of instructor. LEC.

DN 800. Selected Topics in Clinical Dietetics. 1-6 Hours.
A learner-centered, self paced study of topics in applied clinical dietetics. Independent modules are offered to address the science and art of nutritional care relating to specific issues to clinical dietetics. Topics will be grouped in various combinations to provide flexibility of choice. Students may enroll in one or more topics for a total of six credit hours. Prerequisite: By permission of instructor only. LEC.

DN 810. Nutrition Assessment. 3 Hours.
Methods and tools used in screening and assessment of nutritional status of individuals and population groups are studied. Assessment methodology includes dietary surveys, computerized dietary intake analysis, anthropometric measures, biochemical measures and clinical evaluations. Laboratory experiences are provided to allow students practice time for learning and applying assessment techniques. Prerequisite: Permission of instructor only. LEC.

DN 817. Seminar in Dietetics & Nutrition I. 1 Hour.
Seminar designed to promote effectiveness of professional written and oral communication, increase knowledge of research, and review content information in selected topics in dietetics. LEC.

DN 818. Seminar in Dietetics & Nutrition II. 1 Hour.
To promote effectiveness of professional written and oral communication, to increase knowledge of research, and to review content information in selected areas in dietetics. SEM.

DN 819. Scientific Writing for the Nutritional Sciences. 1 Hour.
Research proposal preparation and / or scientific manuscript writing experience. This course will provide the student with an overview of the steps used in proposal writing and / or the steps in preparation of a scientific manuscript for publication. LEC.

DN 820. Nutrition Education Skills for School Teachers. 3 Hours.
This graduate level course will expand understanding of nutrition and healthy eating for classroom teachers and other professionals who work with children. The course has a special emphasis on child and adolescent nutrition and how to translate nutrition facts into classroom applications and school-based interventions. Course topics will include healthy food choices, nutrition guidelines, nutrients, energy balance and weight, child and adolescent nutrition, and nutrition education in the classroom, school-based nutrition interventions, and measuring outcomes of nutrition interventions. Prerequisite: Student must be classroom teacher or consent of instructor. LEC.

DN 822. Management Dietetics & Nutrition I. 2 Hours.
Managerial skills in health care quality improvement and food service are practiced. Students are typically enrolled in DN 827 Practicum supervised practice experiences associated with the dietetic internship. Prerequisite: food service systems or commensurate practical experience. LEC.

DN 823. Management Dietetics & Nutrition II. 2 Hours.
Managerial style is related to food policy, financial benchmarking and applied nutrition practice. Students are typically enrolled in DN 827 Practicum supervised practice experiences associated with the dietetic internship. Prerequisite: food service systems or commensurate practical experience. LEC.

DN 825. Medical Nutrition Therapy I. 3 Hours.
Course content introduces the student into the concepts of an intermediate study of nutritional therapy of disease. Course content includes evidence-based practice in prevention and nutritional management of diseases. Patient assessment and medical chart documentation are covered. Elements of pathology and biochemistry of the nutrition-related problems are integrated into course topics. This course is designed for students enrolled in the dietetic internship, but students from other departments may enroll with consent of instructor. Prerequisite: Undergraduate coursework in nutrition, diet therapy, biochemistry and physiology or consent of instructor. LEC.

DN 826. Medical Nutrition Therapy II. 3 Hours.
Course content includes current nutrition theory and evidence-based practice in prevention and treatment of disease. Advanced therapies and patient management in nutrition support will be discussed. Course topics include pediatric nutrition, obesity, cardiovascular disease, diabetes, cancer, renal disease, and gastrointestinal diseases. Elements of pathology and biochemistry of the nutrition-related problems are integrated into course topics. This course is designed for students enrolled in the dietetic internship, but students from other departments may enroll with consent of instructor. Prerequisite: Undergraduate coursework in nutrition, diet therapy, biochemistry and physiology; DN 825; or consent of instructor. LEC.

DN 827. Practicum: Process in Clinical Dietetics. 1-7 Hours.
Supervised practice experience for graduate level students to fulfill the requirements for the Dietetic Internship. Experiences take place in hospitals, clinics, community health care agencies, and other practice settings in which dietetics and nutrition services are provided. Prerequisite: Admission to the graduate program, permission of dietetic internship director or course instructor. LEC.

DN 828. Clinical Education in Dietetics. 2-3 Hours.
A study of teaching methods appropriate for use in a clinical setting. Emphasis on development of instructional objectives, learning situations, and methods of evaluations to be used in clinical teaching in dietetics. Prerequisite: Consent of instructor. LEC.

DN 829. Nutrition and Aging. 3 Hours.
An overview of nutrition and the aging process. Physiological, psychological, and sociological aspects of aging, theories of aging, internal and external factors related to nutrient intake, and nutrient needs will be considered. LEC.

DN 830. Food Technology. 2-3 Hours.
Consideration of current food processing methods and the factors affecting the palatability and nutritive values of human foods. Course includes pertinent information regarding the protection of the food supply. LEC.

DN 834. Methods of Research in Nutrition. 3 Hours.
A study of basic research terminology and designs commonly used in nutrition research. Topics include: research on animals, tissue culture and human subjects; qualitative, quantitative and outcomes research; ethical issues in research; dissemination of research findings; and appropriate use of research findings. Prerequisite: Consent of instructor. Same as DIET 834. LEC.
DN 836. Biochemical, Physiological, and Genetic Aspects of Human Nutrition. 3 Hours.
The topics covered will examine the integration of biochemistry, physiology, genetics, and nutrition. Emphasis will be placed on developing an understanding of how the combination cellular structure and function is related to the metabolic needs of the cell and its response to the environment. The integrated approach will form a basis for evaluating nutritional needs in humans. Prerequisite: courses in nutrition, physiology, and biochemistry, or consent of instructor. Same as DIET 836. LEC.

DN 838. Advanced Medical Nutrition Therapy. 3 Hours.
This course evaluates current issues in medical nutrition therapy. Course content includes evidence based analysis, the role of diet in disease management including factors related to disease pathophysiology, nutritional assessment and medical nutrition management of specific disease states. Prerequisite: undergraduate medical nutrition therapy, biochemistry, physiology, or consent of the instructor. Same as DIET 838. LEC.

DN 839. Clinical Aspects of Nutrition Support. 3 Hours.
Specialized nutrition assessment and support. Review of energy expenditure and substrate utilization in specific disease states. Current methods for the initiation and management of enteral and parenteral nutrition therapy including access, metabolic and mechanical complications. Evaluation nutrition support methodology in selected disease states. LEC.

DN 840. Advanced Topics in Nutrition. 1-2 Hours.
Reading and preparation of a paper and/or oral presentation on a selected subject in nutrition. Prerequisite: Consent of instructor. LEC.

DN 841. International Nutrition. 1-3 Hours.
A study of global public health and nutrition concerns in various nations, assessment of nutritional status of diverse populations, international health and nutrition organizations, policies, and interventions. We explore the roles of dietitians, nutritionists, and others in creating and implementing international public health and nutrition policies and interventions. To enroll in the course, you must be a student in the Graduate Certificate Dietetic Internship Program, the Dietetics and Nutrition Master of Science Program, or the Great Plains IDEA, or have the consent of the instructor. Cross-listed with DIET 841. LEC.

DN 842. United States Public Health Nutrition. 1-3 Hours.
A study of US public health and nutrition concerns in diverse US populations, assessment of nutritional status in commonalities, health communication, nutrition policies and community based nutrition interventions. Exploration of the roles of dietitians, nutritionists, and others in developing and delivering nutrition policies and interventions in US communities. Prerequisite: Must be a student in the Graduate Certificate Dietetic Internship Program, the Dietetics and Nutrition Master of Science Program, or the Great Plains IDEA, or have the consent of the instructor. LEC.

DN 854. Special Problems in Dietetics and Nutrition. 1-4 Hours.
Directed study of special problems in nutrition or nutrition care. This course provides for the individual or group study of special problems. Through directed readings, investigations, and projects, the student acquires information with reference to questions in dietetics and nutrition not covered in organized courses. LEC.

DN 857. Motivational Interviewing in Public Health Settings. 1 Hour.
The course is designed to introduce participants to Motivational Interviewing, its concepts, and to the subsequent skills required for helping people to change. This course will be cross-listed with PRVM 857. LEC.

DN 860. Collaboration Strategies in Health Care. 1 Hour.
Persuasion and negotiation techniques: skills to evaluate and promote collaboration and goal achievement in a multidisciplinary health care team; analysis of communication styles and strategies to achieve mutual beneficial outcomes. LEC.

DN 862. Maternal and Child Nutrition. 3 Hours.
Critical examination of behavioral, physiological, and public health issues impacting dietary and nutritional factors that support normal growth and development. Course content focuses on the early stages of the life cycle: gestation, lactation, infancy, preschool, school age and adolescence. Topics include the fetal programming hypothesis, growth and nutritional requirements, breast and formula feeding of infants, infant weaning, and eating behaviors that lead to normal growth, growth faltering, and pediatric obesity. Prerequisite: Consent of the instructor. LEC.

DN 865. Nutrition in Sports and Exercise. 3 Hours.
Exercise physiology and nutrient requirements in sports and exercise: macronutrient, micronutrient and fluid needs of athletes engaged in specific sports, pre/post exercise meals, gender specific requirements, role of ergogenic aids, eating disorders, and role of exercise in weight management and chronic disease. Prerequisite: Biochemistry and/or exercise physiology class or permission of the instructor. LEC.

DN 870. Health Behavior Counseling. 3 Hours.
Theoretical and applied issues in health behavior counseling. Students will learn the theories of behavior change and how to apply these to health care issues. Specific health behaviors (i.e., dietary changes, smoking cessation, exercise adherence) will be discussed in the context of chronic disease for children, adults, and the elderly. Effective methods of counseling patients and promoting changes on an individual and small group basis will be presented. LEC.

DN 875. Pediatric Clinical Nutrition. 3 Hours.
Examines physiological, biochemical and nutritional aspects of disease processes relevant to infants and children up to 18 years of age. Medical nutrition therapy for a variety of medicine conditions found in this population will be discussed including inborn errors of metabolism, food hypersensitivity, obesity, and diseases of the major organ systems. Prerequisites: DN 826: Applied Clinical Nutrition or equivalent or consent of instructor. LEC.

DN 876. Intervention for the Prevention & Management of Obesity. 3 Hours.
This course emphasizes obesity in a population group ranging from childhood to the adult. Course materials will examine the impact of obese conditions on disease development throughout the life cycle. The course will critically analyze current evidence focused on interventions used in the behavioral and clinical management of overweight and obese individuals in community and clinical settings. Prerequisites: Consent of instructor. Same as DIET 876. LEC.

DN 880. Dietary and Herbal Supplements. 2-3 Hours.
Explores the safety and efficacy of botanical/herbal and dietary supplements in health applications including dietary supplementation in the prevention and treatment of chronic disease. Prerequisite: Human physiology is advisable. LEC.

DN 881. Introduction to Dietetics and Integrative Medicine. 3 Hours.
Introduction to principles guiding integrative and functional Medical Nutrition Therapy; assessing, diagnosing, intervening, monitoring, and evaluating an individual client to restore function; focusing on the unique nutritional imbalances characteristic of chronic disease pathophysiology; supporting individuals with persistent symptoms; preventing chronic disease. Prerequisites: Introductory genetics, medical nutrition therapy, or consent of instructor. LEC.
DN 882. A Nutrition Approach to Inflammation and Immune Regulation. 3 Hours.
Inflammation and immune system dysregulation is common in chronic disease. The course presents the integrative nutrition approach to identify the underlying causes of inflammatory and immune-related conditions and associated nutritional influences; applies individualized nutritional interventions, as powerful modulators of the pathophysiology of inflammatory and immune responses. Prerequisites: Medical nutrition therapy, genetics or consent of instructor. LEC.

DN 884. Diet, Physical Activity & Cancer. 3 Hours.

DN 885. Nutritional Biochemistry. 3 Hours.
Course content facilitates the understanding of advanced biochemical principles applied to human nutrition. Topics include protein structure, bioenergetics, enzyme function, nutrient digestion, absorption and metabolism, metabolic regulation and intermediary metabolism, cellular signaling, and genomics encompassing nucleotide metabolism, gene expression and gene regulation. Prerequisite: Undergraduate biochemistry or consent of instructor LEC.

DN 890. Graduate Research. 1-4 Hours.
Individual investigation of special problems in dietetics and nutrition or hospital dietary administration approved by the student's advisor or advisory committee. Investigation involves original research. Prerequisite: Consent of instructor. RSH.

DN 895. Advanced Macronutrients and Integrated Metabolism. 3 Hours.
Energy containing macronutrients and fiber presented from the perspective of their importance in human nutrition. Structural properties, digestion, absorption and metabolism are emphasized. Fuel utilization in response to food intake and exercise, cellular and whole-animal energetic and energy balance integrate metabolism. Students take an active role in presenting and discussing and exhibit advanced skills in analysis and presentation. Prerequisites: BCHM 702 or Equivalent. LEC.

DN 896. Advanced Micronutrients and Integrated Metabolism. 3 Hours.
Vitamins and minerals presented from the perspective of their requirements as nutrients for normal human physiological functions with emphasis on their underlying roles in structure, function and metabolism. Students take an active role in selecting, presenting and discussing recent published research and to exhibit advanced skills in analysis and presentation. Prerequisites: BCHM 702 or equivalent. LEC.

DN 897. Micronutrient Research in Human Nutrition. 1 Hour.
This course requires students to design a research study on a vitamin or mineral. Students submit a written proposal and present it orally and defend the proposal in class. Students will be evaluated on the basis of plausibility, feasibility and originality of the proposed research. Prerequisite: Consent of instructor. LEC.

DN 899. Thesis. 1-6 Hours.
Scholarly essay based on research, written under the guidance of the student's advisor. Credit given upon meeting thesis requirements for the master's degree. Prerequisite: Consent of advisor. THE.

DN 900. Techniques in Nutrition Research. 3 Hours.
A series of seven laboratory modules emphasizing quantitative methods and experimental analysis. The series of modules will be team taught by departmental faculty. Each module requires data collection, data analysis, and written interpretation or report. Instrumentation, dietary assessment software utilization and cellular microtechniques will be emphasized. Students will be responsible for learning one technique practiced in an outside laboratory setting. Students will rotate between the module sequence based on the number of students enrolled in the class. Prerequisite: DN 895 and DN 896 or permission of instructor of record. LEC.

DN 901. Graduate Seminar in Nutrition. 1 Hour.
Advanced course examining current research topics in nutrition. Extensive student and faculty interaction is emphasized utilizing lectures, class discussion of selected scientific readings and oral presentations. Prerequisite: Admission to PhD program in Dietetics and Nutrition or permission of instructor. LEC.

DN 980. Nutrigenomics and Nutrigenetics in Health and Disease. 3 Hours.
Nuclear receptors and their mechanisms of action, nutritional control of gene expression and functional genomic studies with relationships to nutrient intake and polymorphisms. Prerequisites: DN 836, DN 895, DN 896 or permission of instructor. LEC.

DN 990. Doctoral Research. 1-9 Hours.
Original and independent investigation approved by and conducted under the supervision of the student's advisor or advisory committee. This course is in partial fulfillment of the requirements for the Ph.D. degree. Prerequisite or corequisite: Restricted to Dietetics Nutrition Ph.D. candidates, or consent of DN advisor. Students must have completed the qualifying exam. LEC.

DN 999. Dissertation. 1-6 Hours.
Preparation of the written dissertation based upon original research and in partial fulfillment of the requirements for the Ph.D. degree. Prerequisite: DN 990 or consent of advisor. LEC.

Health Information Mgmt Courses

HEIM 210. Introduction to Healthcare. 1 Hour.
This course is an introductory overview of the healthcare system in the United States. The content includes information on the organizational structure of healthcare, the healthcare team, reimbursement, the importance of data quality, legal aspects of healthcare including privacy and security, and the electronic health record. This course is taught in a HYBRID format and requires access to a computer. Open to all students. LEC.

HEIM 230. Medical Terminology. 3 Hours.
A study of the language of medicine including word construction, definitions, medical abbreviations, and use of terms related to various areas of medical science and health professions. Course requires students to be able to break down medical terms and understand their meanings. This online course is designed for students interested in clinical and health professions. LEC.

HEIM 301. Health Information Management Orientation. 1-2 Hours.
This course is designed to prepare student for the HIM program, professional practice experiences and the HIM profession. Student will learn to apply communication, collaboration and project management skills. This course has a special emphasis on professionalism, self-awareness and critical thinking. Student will also focus on interprofessional education and working effectively in teams. LEC.

HEIM 325. Pharmacology. 2 Hours.
This introduction to pharmacology course is intended to provide the student with the background information necessary to practice within the field of Health Information Management. The course covers the fundamentals of pharmacology, including pharmacokinetics and
HEIM 401. Introduction to Health Information Management (HIM). 3 Hours.
This course introduces students to the foundational concepts of health record content, characteristics and requirements, along with the operational processes designed to support and safeguard the healthcare data and information contained therein. Joint Commission survey process is also included. Industry standard software applications are used for applied, hands-on learning in this course. LEC.

HEIM 415. Healthcare Delivery Systems. 3 Hours.
This course provides an introduction to the wide spectrum of healthcare delivery systems in which health information management and other healthcare professionals use their organizational and management skills. Special emphasis is placed on acute care, ambulatory care, home health, hospice care, long-term care, and managed care. The student will focus on how each delivery system is structured, their function, what data sets are collected, the reimbursement schemes used, health policy that shapes the system, outcomes (cost, quality, access) and how each system is integrated into the current delivery of healthcare in the United States. LEC.

HEIM 420. Legal Aspects of Healthcare. 3 Hours.
This course introduces the student to some of the basic legal principles found in healthcare and health information management (HIM). Fundamentals of law including statutory, regulatory, and judiciary practices are reviewed in the context of HIM including tort and liability. Emphasis is placed on HIPAA regulations. Patient legal rights and responsibilities as related to their healthcare are included, as well as fraud and abuse prevention and compliance. The basics of corporate liability and contracts are also covered. LEC.

HEIM 435. Pathophysiology for Health Professionals. 3 Hours.
An in-depth study of the fundamentals of medical science, medical essentials and the language of medicine, signs, symptoms, and test findings of disease processes and the current therapy employed in the treatment of diseases. Prerequisites: Courses in Anatomy lab, Physiology lab, and Medical Terminology or consent of the instructor. LEC.

HEIM 450. Introduction to Professional Practices Experiences. 1 Hour.
This course is designed to prepare students and develop the skills required for experiences outside of the classroom environment. The emphasis is on professional behavior for health information management professionals in the workplace. The course also introduces students to the application of electronic health record concepts. The content is intended to prepare students for site visits, professional practice experiences, the internship, as well as their future careers. LEC.

HEIM 485. Independent Study in Health Information Management. 1-10 Hours.
The content will vary depending on material appropriate to students. May be repeated for additional credit utilizing a variety of projects and special assignments. Prerequisite: Permission of the program director. FLD.

HEIM 501. Information Resources for Health Professions. 1 Hour.
This course is designed to prepare students to effectively utilize information resources and technology on an academic medical center campus. Students will learn to apply computer skills, information technologies and literacy skills in an academic health care setting. The course also teaches students the foundations of information literacy - to recognize when information is needed, and to effectively locate, evaluate and use health information resources. Students will learn best practices to find the most relevant information using search strategies, databases (public and private), evaluative skills, and technology to apply and synthesize responses. Finally, this course will equip students with successful presentation skills and guidance on communicating with social technology. LEC.

HEIM 510. Professional Practice Experience / Lab I. 1 Hour.
Through supervised learning situations, students are given opportunities to visit different types of healthcare facilities in the area. These opportunities vary from year-to-year based upon availability. Opportunities might include (but not be limited to) developing competence while practicing a specific HIM function in an actual HIM department, exploring nontraditional HIM career roles, or visiting with and interviewing a long term care, behavioral health, rehabilitation, or managed care HIM department manager. Prerequisite: Successful completion of Junior-level HIM academic courses or permission from instructor. LEC.

HEIM 525. Healthcare Database & Architecture. 3 Hours.
This course is designed to help students understand databases and database management systems. Students will learn to model and understand database design, in conjunction with learning methods to structure data as records, tables, or objects. Students will also learn how query languages are used for searching, sorting, reporting, and other “decision support” activities to best utilize the available data. Along with acquiring knowledge fundamental to management of the electronic health record (EHR), students will develop general technical knowledge to become capable health information professionals. LEC.

HEIM 540. Health Information Systems. 3 Hours.
This course will provide students the knowledge and competence required to manage healthcare and clinical information systems. Students will receive hands-on application of the system development lifecycle using project management concepts. LEC.

HEIM 565. Healthcare Coding Systems I. 4 Hours.
This course introduces classification systems and terminologies used in healthcare and the relationship of these systems to patient care, research, and reimbursement systems. Course content provides study and application of coding guidelines, conventions, and rules of coding systems. Prerequisite: HEIM 435 or permission of the instructor. LEC.

HEIM 567. Quality and Performance Improvement in Healthcare. 3 Hours.
This course provides instruction on the principles of quality (QI) and performance improvement (PI) in the context of healthcare. PI drivers, models, techniques, and processes are covered including workflow reengineering. QI program organization, management and effectiveness are addressed. This course also includes content on patient safety, risk management, resource management and assessment of provider competence. LEC.

HEIM 570. Introduction to Healthcare Management. 1-3 Hours.
This course introduces theoretical and applicable concepts of management with an emphasis on managing in healthcare organizations. Students explore traditional management roles as well as leadership concepts. Course content depicts management in the context of a complex stakeholder environment evidenced in the healthcare system of the United States. LEC.

HEIM 571. Human Resource Management in Healthcare. 3 Hours.
Through the course students will have the opportunity to obtain working knowledge of human resource management. Technology and the continuing uncertainty of the economy have affected many aspects of human resource management; a number of tasks formerly performed by
an HR office are now the purview of department managers. The course will familiarize students with the environment in which HR functions and the tasks involved in managing people. Topics include: social sustainability, culture, vision, staffing needs analysis, recruiting and selecting, training, developing, retaining, motivating, and legal rights of the people within the rapidly changing business environment. Prerequisite: HEIM 570 Healthcare Management. LEC.

HEIM 575. Applied Statistics and Research Methods in Healthcare. 3 Hours.
Emphasis is on the statistical analysis of healthcare data. Content includes hospital-based statistics, an introduction to epidemiological concepts, research design and methodology, research ethics and protocol, hypothesis testing, data management, analysis and presentation. Prerequisites: MATH 365 Elementary Statistics, or similar. LEC.

HEIM 585. Healthcare Reimbursement & Financing. 3 Hours.
This course examines complex financial systems within the United States healthcare system. Students explore content related to healthcare financing, reimbursement, and revenue cycle management, to include regulatory and/or policy initiatives and operational considerations for healthcare organizations. Prerequisite: Accounting or permission from instructor. LEC.

HEIM 604. Professional Practice Experience / Lab II. 2 Hours.
Provides a laboratory/professional practice experience setting for the application of coding, reimbursement and revenue cycle management-related practices with potential opportunity to participate in interprofessional activities. This is a two-credit hour lab. Prerequisite: HEIM 565, HEIM 585, and HEIM 635 or permission of the instructor. LAB FLD.

HEIM 635. Healthcare Coding Systems II. 3 Hours.
This course offers continued study of classification systems and terminologies used in healthcare and the relationship of these systems to patient care, research, and reimbursement systems. This course includes an introduction to the role of mapping between the various classification systems, nomenclatures and clinical terminologies used in healthcare. Prerequisite: HEIM 565 or permission of the instructor. LEC.

HEIM 661. Management Principles in Health Care. 3 Hours.
Introduction to basic principles of management and education and their application in the current healthcare environment. Course content includes: management, quality issues, budgeting, personnel issues, evaluation and application of management concepts, and educational methodologies. Cross listed with CLS 661 and RESP 661. Prerequisite: Admission to the Health Information Management Program or permission of the instructor. LEC.

HEIM 665. Topics in Health Information Management. 1-2 Hours.
This course will utilize case studies and guest presentations to address the latest developments in the management of health information. Knowledge and skills will be applied to real-world problems. Students will examine key issues and trends within HIM through a series of seminar topics and presentations. LEC.

HEIM 670. Independent Study in Health Information Management. 1-10 Hours.
The content will vary depending on material appropriate to students. May be repeated for additional credit utilizing a variety of projects and special assignments. Prerequisite: Permission of the program director. LEC.

HEIM 671. Strategic Leadership in Healthcare. 3 Hours.
This course applies key concepts in personal, professional and organizational leadership for healthcare management. Special emphasis is on strategic leadership and planning for enterprise-wide health information strategies. Student will focus on leadership styles with an emphasis on self-discovery and professional development within an ever-changing environment. LEC.

HEIM 676. Healthcare Analytics. 3 Hours.
This course covers data-driven, computer-based tools and data analysis techniques that aid decision-making in healthcare. Effective use of data analysis increases the quality of strategic and operative planning and reduces the time used for decision-making processes. The course focuses on data-driven techniques and tools including such topics as medical coding systems, database fundamentals, business performance monitoring (managerial dashboards), and data mining applied to the healthcare industry. A number of data mining and predictive modeling approaches are discussed to address specific issues in healthcare. LEC.

HEIM 679. Information Governance in Healthcare. 3 Hours.
This course examines the role of health information managers as facilitators and champions of information governance in healthcare organizations. Course content includes an exploration of the topic of information governance, as well as introduces strategic considerations for enterprise processes, policies and procedures, standards, and metrics to support information governance efforts. Information is considered throughout the course as a strategic asset for organizational optimization. External users of information and related implications are also discussed. LEC.

HEIM 680. Management Internship. 3 Hours.
This internship experience provides the student with a management capstone experience in the activities and responsibilities of the health information administrator. Students are responsible for all costs to include: room, board, and transportation. Management sites are selected based on the experience and credentials of the student. Prerequisite: Successful completion of all HIM professional coursework and/or permission of the instructor. LEC.

HEIM 681. Management Practicum. 3 Hours.
This practicum experience provides the student with a management capstone experience in the activities and responsibilities of the health information administrator. The specific practicum topics are selected based on the experience and credentials of the student. Prerequisites: Successful completion of all HIM professional coursework and/or permission of the instructor. LEC.

Hearing and Speech Courses

AUD 805. Introduction to Clinical Research. 1 Hour.
The course will provide a comprehensive overview to clinical research. The student will gain an understanding of how to develop clinical research questions including protocol design and the factors that should be considered in initiating a clinical research study. This will include biostatistical considerations, the recruitment of study participants, regulatory issues, and data management, and defining measures and instruments. Students will gain knowledge of how to define clinical research among the various institutional entities involved with clinical research at the University of Kansas Medical Center such as the Research Institute (RI), General Clinical Research Center (GCRC) and the Human Subjects Committee (HSC). Additionally, one component of the course will focus on how to apply for funding (grantsmanship), critical appraisal of research studies, and how to present research data. Prerequisite: Consent of instructor. LEC.

AUD 810. Diagnostic Audiology. 4 Hours.
Audiometric calibration, pure tone and speech testing, analysis of audiograms, middle ear testing. Prerequisite: AUD 697. LAB.
AUD 811. Hearing Disorders. 3 Hours.
A study of disorders of the auditory system including anatomical, physiological, perceptual, and audiological manifestations of pathologies affecting hearing. Prerequisite: AUD 810 and AUD 829. LAB.

AUD 813. Psychoacoustics and Theories of Hearing. 3 Hours.
A study of relations between common acoustic stimuli and the responses they elicit; consideration of sensory scales, noise phenomena, and speech intelligibility. Prerequisite: AUD 697 and AUD 829. LEC.

AUD 814. Hearing Conservation. 2 Hours.
A study of the major components of hearing conservation programs in industrial, educational, and military settings. Forensic audiology issues related to occupational hearing loss are included. Prerequisite: AUD 697 and AUD 829. LAB.

AUD 816. Speech Perception. 2 Hours.
Acoustic and perceptual characteristics of phonemes, words, and connected speech for normal-hearing adults and infants; how speech perception is assessed clinically and is affected by hearing loss, aging, use of amplification, talker differences, and linguistic factors. LEC.

AUD 817. Pediatric Audiology. 3 Hours.
Normal and pathological development of the auditory system; pediatric audiometric testing; auditory and communication aspects in the habilitation of hearing-impaired children. Prerequisite: AUD 697 and AUD 810. LAB.

AUD 818. Vestibular Systems and Disorders. 3 Hours.
Study of the anatomy and physiology of the normal peripheral and central vestibular system; clinical assessment of vestibular disorders; vestibular rehabilitation. LEC.

AUD 819. Hearing Aids I. 3 Hours.
Study of the components, function, fitting, and performance characteristics of hearing aids, applications of amplification in rehabilitative audiology. Prerequisite: AUD 697 and AUD 810. LEC.

AUD 820. Rehabilitative Audiology and Counseling. 3 Hours.
Principles and methods of auditory, communication, and social assessment and intervention with hard of hearing and deaf adults, children, and their families. Prerequisite: AUD 810 and AUD 819 or equivalent. LEC.

AUD 821. Hearing Aids II. 3 Hours.
The advanced study of the theoretical bases, techniques, and clinical application of hearing aids and their assessment. Participants will review, present, and discuss contemporary issues in hearing aid literature and research. Prerequisite: AUD 819. LEC.

AUD 822. Electro-Acoustics and Instrumentation. 3 Hours.
A study of the generation, control and measurement of the simple and complex sounds essential to clinical audiology and hearing research. LAB.

AUD 823. Cochlear Implants and Hearing Assistance Technologies. 2 Hours.
Through lecture and discussion format, this course will cover the principles and methods of assessment, candidacy, surgery, programming and rehabilitation of patients receiving cochlear implants. In addition, hearing assistance technologies such as large area systems and alerting devices will be covered with emphasis on classroom amplification. Prerequisites: AUD 819 and AUD 821 or permission of instructor. LEC.

AUD 824. Central Auditory Processing. 2 Hours.
The study of the anatomy and physiology of the central auditory system. Analysis and review of the diagnostic procedures and the therapeutic strategies for central auditory processing disorders. LEC.

AUD 828. Genetics and Hearing Loss. 2 Hours.
The fundamentals of human genetics as related to hearing loss, including patterns of inheritance, genotypic and phenotypic characteristics of the major forms of syndromic and nonsyndromic hearing loss; genetic counseling, genetic testing, possible genetic treatment, and issues related to them; resources for keeping up with this rapidly changing field. Prerequisite: Permission of instructor. LEC.

AUD 829. Anatomy and Physiology of the Hearing and Vestibular Mechanisms. 3 Hours.
Advanced study of the anatomical and physiological properties of the human hearing and vestibular mechanisms. LEC.

AUD 843. Clinical Practice in Audiology. 1-6 Hours.
Supervised clinical work at the University and/or University Medical Center audiology clinics, or affiliated, off-campus practicum sites. Prerequisite: Permission of instructor. FLD.

AUD 846. Independent Study in Problems in Audiology. 1-10 Hours. IND.

AUD 851. Auditory Evoked Potentials. 3 Hours.
Theoretical bases, techniques, and clinical applications for auditory evoked potentials including electrocochleography, auditory brainstem response, middle and late latency and cognitive responses. Prerequisite: AUD 810, AUD 822, AUD 829, or permission of instructor. LEC.

AUD 853. Pharmacology for Audiology. 2 Hours.
Presentation and discussion topics including: basic pharmacology (pharmacokinetics and pharmacodynamics), mechanisms of ototoxicity, selected ototoxic agents, drugs used in otolaryngology, and a review of patient management strategies. Prerequisites: enrollment in the Au.D. or Ph.D. audiology program or permission of instructor. LEC.

AUD 858. Business Audiology. 2 Hours.
An introduction to audiology business practice principles. Operational functions of the audiology clinic will be reviewed, including human resources, marketing, legal and ethical practice concerns, billing, coding and reimbursement. Prerequisites: enrollment in the Au.D. or Ph.D. audiology program or permission of instructor. LEC.

AUD 899. Thesis. 1-10 Hours.
THE.

AUD 940. Seminar in Audiology: _______. 1-4 Hours.
Advanced study of selected topics in audiology such as (but not limited to): cochlear micromechanics and other physiological processes; psychoacoustics, speech perception, cochlear implants, etc. Prerequisite: Enrollment in the Audiology Ph.D. program or permission of instructor. LEC.

AUD 941. Grand Rounds in Audiology. 1 Hour.
Presentations/discussion of clinical case studies and professional issues in Audiology. Au. D. students and audiology faculty members will participate in these sessions. DIS.

AUD 944. Clinical Rotation. 1-6 Hours.
Supervised clinical work at the University and/or University Medical Center Audiology Clinics, or affiliated off-campus sites. The Clinical Rotation is intended to prepare students for entry into their Clinical Externship and foster increasing independence. Clinical skills required are defined in standards set forth by the American Speech-Language Association. FLD.

AUD 945. Clinical Externship. 1-9 Hours.
Supervised clinical work at the University of Kansas and/or KUMC audiology clinics, or affiliated, off-campus sites. The Clinical Externship is intended to refine clinical skills, increase clinical independence, and ensure that clinical skills meet the certification standards in audiology set...
forth by the American speech-Language-Hearing Association. Open to 3rd and 4th year Au.D. students. Approval from Instructor needed for 3rd year students. PRA.

AUD 999. Doctoral Dissertation. 1-12 Hours.
THE.

SLPD 801. Seminar on Evidence-Based Practice in Speech-Language Pathology and Other Health Sciences I. 3 Hours.
This course is designed to give students a thorough understanding of evidence-based principles and procedures so that they could provide evidence-based services in a clinical setting. It is also designed to prepare students to assume a position of leadership in which they would be required to promote and teach evidence-based practices to their staff clinicians. Prerequisite: Consent of instructor. SEM.

SLPD 804. Clinical Practice in Speech-Language Pathology: Advanced Training for the Experienced Clinician. 1-3 Hours.
Students participate in clinical experiences (assessment and/or treatment) related to their primary and/or secondary area of concentration. Clinical experiences in which the student learns about a particular patient population, standardized and non-standardized assessment measures, instrumentation, computer software, devices, and/or treatment techniques and strategies are possible. Prerequisite: certification in speech-language pathology from the American Speech-Language-Hearing Association. CLN.

SLPD 805. Independent Study in Speech-Language Pathology. 1-3 Hours.
Investigation of special topics by individual SLPD students. Prerequisite: Consent of Instructor. LEC.

Nurse Anesthesia Courses

NURA 800. Professional Aspects of Anesthesia. 3 Hours.
This course includes orientation to the profession of nurse anesthesia. The student will gain an understanding of the anesthesia department management and organization. The history of anesthesia will be discussed. Ethical, psychological, professional adjustments and legal responsibilities of the nurse anesthetist will be presented. LEC.

NURA 801. Introduction to Clinical Practicum. 1 Hour.
Students will engage in clinical practice that involves introduction to basic anesthesia skills. Emphasis is given to patient assessment, anesthetic planning and management of the patient population of low risk categories. The course includes introduction to clinical problem solving and "call" experiences that address the trauma patient and emergency surgical/anesthetic interventions for pathological states. Prerequisite: Permission of Instructor. CLN.

NURA 805. Clinical Anatomy. 4 Hours.
An intensive study of the major anatomical systems and regions of the body which have clinical significance for anesthetists and others. Particular attention devoted to the respiratory, cardiovascular, and nervous systems. Regional topics include the anatomy of the head, neck, vertebral column, thorax, axilla, and femoral triangle. Involves both lectures and cadaver dissection, plus appropriate models, x-ray films, and audiovisual materials. Prerequisite: Admission to the Nurse Anesthesia Program or permission of instructor. LEC.

NURA 806. Advanced Physiology. 4 Hours.
A course designed to lead to an advanced comprehension of the physiology of organ systems in the human in both cellular and organ processes. Physiology subject matter relevant to clinical health sciences include membrane transport, muscle, cardiovascular, respiratory, renal, water and electrolyte balance, gastrointestinal, and endocrine physiology as well as neurophysiology. Cellular mechanisms include the structure and function of ion channels and pumps, mechanisms of calcium regulation, excitation-coupling processes and mechanisms of oxidative cell damage and apoptosis. Prerequisite: Permission of instructor. LEC.

NURA 811. Advanced Theory in Anesthesia I. 2 Hours.
This is the first of five successive courses relative to the didactic study of the art and science of nurse anesthesia. Students will acquire the knowledge base pertinent to the perioperative anesthetic management of ophthalmology and otolaryngology procedures and patients with alterations in the endocrine system. Students enhance their critical thinking, problem-solving skills and ability to synthesize didactic information to the clinical environment. In addition, students will be required to engage in analysis of currently published research to identify "best practices" based on research evidence. Prerequisite: Permission of Instructor. LEC.

NURA 812. Advanced Theory in Anesthesia II. 3 Hours.
This is the second of five successive courses relative to the didactic study of the art and science of nurse anesthesia. Students will acquire the knowledge base pertinent to the perioperative anesthetic management of critical care and trauma patients, acid base and electrolytes, and hematology needs of patients during surgical interventions. Students enhance their critical thinking, problem-solving skills and ability to synthesize didactic information to the clinical environment. In addition, students will be required to engage in analysis of currently published research to identify "best practices" based on research evidence. Prerequisite: Permission of Instructor. LEC.

NURA 813. Advanced Theory in Anesthesia III. 2 Hours.
This is the third of five successive courses relative to the didactic study of the art and science of nurse anesthesia. Students will acquire the knowledge base pertinent to the perioperative anesthetic management of obstetrical, neonatal and pediatric patients. Students enhance their critical thinking, problem-solving skills and ability to synthesize didactic information to the clinical environment. In addition, students will be required to engage in analysis of currently published research to identify "best practices" based on research evidence. Prerequisite: Permission of Instructor. LEC.

NURA 814. Advanced Theory in Anesthesia IV. 3 Hours.
This is the fourth of five successive courses relative to the didactic study of the art and science of nurse anesthesia. Students will acquire the knowledge base pertinent to the perioperative anesthetic management of neurosurgical, cardiovascular, thoracic, and transplantation patients. Students enhance their critical thinking, problem-solving skills and ability to synthesize didactic information to the clinical environment. In addition, students will be required to engage in analysis of currently published research to identify "best practices" based on research evidence. Prerequisite: Permission of Instructor. LEC.

NURA 815. Advanced Theory in Anesthesia V. 3 Hours.
This is the fifth of five successive courses relative to the didactic study of the art and science of nurse anesthesia. Students will acquire the knowledge base pertinent to the perioperative anesthetic management of the orthopedic patient and disease processes of the myoneuroskeletal disease processes, the geriatric and urological patient during surgical interventions. Students enhance their critical thinking, problem-solving skills and ability to synthesize didactic information to the clinical environment. In addition, students will be required to engage in analysis of currently published research to identify "best practices" based on research evidence. Prerequisite: Permission of Instructor. LEC.

NURA 820. Information Systems and Data Management in Anesthesia. 1 Hour.
Information systems, data management concepts, and their applications will be explored. This will enable the doctoral prepared nurse anesthetists
to utilize resources to facilitate quality improvement, increase patient safety through outcome measurements, and improve resource utilization in the perioperative period. Prerequisite: Permission of instructor. LEC.

NURA 821. Advanced Practicum in Anesthesia I. 2 Hours.
This is the first of six courses relative to the application of the art and science of nurse anesthesia. Each section is designed to address specific surgical categories and the relevant patient care needs and risks. Completion of each course requires acquisition and refinement of clinical skills. Students will demonstrate progression in cognitive, psychomotor and affective skills appropriate to a professional nurse anesthetist. Prerequisite: Permission of Instructor. PRA.

NURA 822. Advanced Practicum in Anesthesia II. 2 Hours.
This is the second of six courses relative to the application of the art and science of nurse anesthesia. Each section is designed to address specific surgical categories and the relevant patient care needs and risks. Completion of each course requires acquisition and refinement of clinical skills. Students will demonstrate progression in cognitive, psychomotor and affective skills appropriate to a professional nurse anesthetist. Prerequisite: Permission of Instructor. PRA.

NURA 823. Advanced Practicum in Anesthesia III. 2 Hours.
This is the third of six courses relative to the application of the art and science of nurse anesthesia. Each section is designed to address specific surgical categories and the relevant patient care needs and risks. Completion of each course requires acquisition and refinement of clinical skills. Students will demonstrate progression in cognitive, psychomotor, and affective skills appropriate to a professional nurse anesthetist. Prerequisite: Permission of Instructor. PRA.

NURA 831. Advanced Chemistry and Physics. 2 Hours.
Chemical and physical principles including states and properties of matter, laws governing the behavior of gases, flow and vaporization, oxidation and combustion; principles of electricity and electrical safety; and chemical properties and structure-activity relationships as a foundation for pharmacology. Course will also cover pertinent areas of organic chemistry. Prerequisite: Permission of instructor. LEC.

NURA 833. Basic Principles of Anesthesia Practice. 3 Hours.
This course introduces students to the introductory principles and theories regarding the art and science of anesthesia practice. Students will develop a conceptual basis for practice gained through a systems approach applied to development of anesthesia care based upon a strong foundation in physical assessment, physiological monitoring, applications of pharmacology, anesthesia systems, physical and chemical basic sciences. Prerequisite: Admission to the nurse anesthesia program or permission of instructor. LEC.

NURA 835. Advanced Physical Assessment and Patient Care Technology for Anesthesia. 3 Hours.
This course is designed to develop and refine the physical assessment skills of the practitioner as well as enhance their understanding, interpretation, and application of laboratory measurements and advanced diagnostic procedures in the perioperative setting. The course is arranged in a systems approach with emphasis placed on the cardiovascular, pulmonary, renal, neurological, and endocrine. Diagnostic procedures and laboratory values specific to each of these systems and their relevance to anesthesia principles and practice will be discussed. The selection of appropriate monitoring devices specific to each system related to individual patient needs will be discussed. Prerequisite: Permission of instructor. LEC.

NURA 839. Regional Anesthesia/Pain Management. 3 Hours.
Includes study of conductive anesthesia techniques, pharmacokinetics of local anesthetics, anatomical placement, and physiologic response. The course is inclusive of acute and chronic pain management techniques. Prerequisite: Permission of instructor. LEC.

NURA 880. Advanced Topics: ____, 1-4 Hours.
Special study allowing a student to pursue a particular subject through readings, directed assignments, and conferences with a faculty member. Prerequisite: Consent of instructor. LEC.

NURA 889. Introduction to Theory, Research Methods and Evidence-Based Practice. 3 Hours.
Methods of theory development and analysis provide the foundation for the study of concepts and theories from nursing, anesthesiaology and related scientific disciplines. Historical, scientific and philosophical frameworks relevant to the theoretical basis of nurse anesthesia are explored. The fundamentals of research methodology are examined including elements of design, measurement, statistical analysis and dissemination. The relationships between research, theory and practice are developed to create an awareness of how "best practice" resources support professional growth, competence and quality. Prerequisite: Permission of instructor. LEC.

NURA 892. Applied Statistics and Analysis in Health Care. 3 Hours.
Concepts include graduate-level statistical reasoning, statistical principles, and the role as the scientific basis for clinical and public health research and practice. Content includes hospital-based statistics, introduction to epidemiology, relationship of research design to statistical methods, research ethics/protocol, hypothesis testing, and data management. Prerequisite: Permission of instructor. LEC.

NURA 901. Evaluation and Application of Evidence-Based Practice in Anesthesia I. 1 Hour.
First of four courses in which the student will use analytic methods to critically appraise existing literature from nurse anesthesiaology and other disciplines to determine and implement the best evidence for practice. An exploration of the design, implementation and evaluation of quality improvement methodologies will lead the student to an appreciation of the safe, effective, efficient and timely delivery of patient-centered anesthesia care. Previous student knowledge in the domain of research analysis will be applied to the design of evidence-based interventions in current anesthesia practice. Prerequisite: Permission of instructor. LEC.

NURA 902. Evaluation and Application of Evidence-Based Practice in Anesthesia II. 1 Hour.
Second of four courses in which the student will use analytic methods to critically appraise existing literature from nurse anesthesiaology and other disciplines to determine and implement the best evidence for practice. An exploration of the design, implementation and evaluation of quality improvement methodologies will lead the student to an appreciation of the safe, effective, efficient and timely delivery of patient-centered anesthesia care. Previous student knowledge in the domain of research analysis will be applied to the design of evidence-based interventions in current anesthesia practice. Prerequisite: Permission of instructor. LEC.

NURA 903. Evaluation and Application of Evidence-Based Practice in Anesthesia III. 1 Hour.
Third of four courses in which the student will use analytic methods to critically appraise existing literature from nurse anesthesiaology and other disciplines to determine and implement the best evidence for practice. An exploration of the design, implementation and evaluation of quality improvement methodologies will lead the student to an appreciation of the safe, effective, efficient and timely delivery of patient-centered anesthesia care. Previous student knowledge in the domain of research analysis will be applied to the design of evidence-based interventions in current anesthesia practice. Prerequisite: Permission of instructor. LEC.
NURA 904. Evaluation and Application of Evidence-Based Practice in Anesthesia IV. 1 Hour.
Fourth of four courses in which the student will use analytic methods to critically appraise existing literature from nurse anesthesiology and other disciplines to determine and implement the best evidence for practice. An exploration of the design, implementation and evaluation of quality improvement methodologies will lead the student to an appreciation of the safe, effective, efficient and timely delivery of patient-centered anesthesia care. Previous student knowledge in the domain of research analysis will be applied to the design of evidence-based interventions in current anesthesia practice. Prerequisite: Permission of instructor. LEC.

NURA 912. Leadership in Nurse Anesthesia I. 1 Hour.
First of two courses which focus the students on leadership projects which were designed in NURA 800, Professional Aspects of Anesthesia. Students will apply a variety of leadership theories as they conduct the projects with nurse anesthesia faculty supervision. At the conclusion of NURA 913, students will evaluate the projects and determine if goals were met, recognize which principles of leadership theory(ies) were utilized in the projects, and prepare an action plan for revisions. Presentations and self-analysis of the projects will be posted as VOPPTs on the ANGEL course site. Prerequisite: Permission of instructor. FLD.

NURA 913. Leadership in Nurse Anesthesia II. 1 Hour.
Second of two courses which focus the students on leadership projects which were designed in NURA 800, Professional Aspects of Anesthesia. Students will apply a variety of leadership theories as they conduct the projects with nurse anesthesia faculty supervision. At the conclusion of NURA 913, students will evaluate the projects and determine if goals were met, recognize which principles of leadership theory(ies) were utilized in the projects, and prepare an action plan for revisions. Presentations and self-analysis of the projects will be posted as VOPPTs on the ANGEL course site. Prerequisite: Permission of instructor. FLD.

NURA 924. Advanced Practicum IV. 2 Hours.
Fourth of six clinically-based courses related to the art and science of advanced nurse anesthesia practice and care of patients with specialized anesthesia care. The courses are divided into sequential clinical practicum related to diverse patient types in both normal and abnormal states and for those requiring anesthesia care in specialized areas (cardiothoracic, obstetrics, neurosurgical, etc.) Participation in case presentations may be required as warranted by clinical events. An opportunity is provided to apply advanced clinical decision making skills and evidence-based research to the assessment, management, and evaluation of complex health care problems of a diverse patient population in the perianesthesia care setting. Prerequisite: Permission of instructor. PRA.

NURA 925. Advanced Practicum V. 2 Hours.
Fifth of six clinically-based courses related to the art and science of advanced nurse anesthesia practice and care of patients with specialized anesthesia care. The courses are divided into sequential clinical practicum related to diverse patient types in both normal and abnormal states and for those requiring anesthesia care in specialized areas (cardiothoracic, obstetrics, neurosurgical, etc.) Participation in case presentations may be required as warranted by clinical events. An opportunity is provided to apply advanced clinical decision making skills and evidence-based research to the assessment, management, and evaluation of complex health care problems of a diverse patient population in the perianesthesia care setting. Prerequisite: Permission of instructor. PRA.

NURA 926. Advanced Practicum VI. 2 Hours.
Sixth of six clinically-based courses related to the art and science of advanced nurse anesthesia practice and care of patients with specialized anesthesia care. The courses are divided into sequential clinical practicum related to diverse patient types in both normal and abnormal states and for those requiring anesthesia care in specialized areas (cardiothoracic, obstetrics, neurosurgical, etc.) Participation in case presentations may be required as warranted by clinical events. An opportunity is provided to apply advanced clinical decision making skills and evidence-based research to the assessment, management, and evaluation of complex health care problems of a diverse patient population in the perianesthesia care setting. Prerequisite: Permission of instructor. PRA.

Occupational Therapy (MS) Courses

OTMS 699. Special Projects. 1-6 Hours.
(1-6) An elective course to allow student investigation of special issues or problems relevant to applied research and/or practice, under the direction of a faculty member chosen by the student. Systematic coverage of current issues may include a research investigation or study related to pertinent sociocultural trends, practice factors, or emerging issues in service provision. Students will complete special projects such as oral presentations, written papers, or case analysis as negotiate with the faculty mentor. May be repeated for credit. Prerequisite: Enrollment as a non-degree seeking student and permission of the instructor. IND.

OTMS 701. Professional Development. 3 Hours.
With an emphasis on leadership skills and professionalism, this course will include mentoring, supervising, managing, organizing presentations, and teaching, writing, and contributing through professional organizations (interdisciplinary and occupational therapy). Students professionalism on issues of concern to administrators, staff therapists, educators, or those in private practice. Prerequisite: Permission of Instructor. LEC.

OTMS 705. Multidisciplinary Theoretical Perspectives. 3 Hours.
Students will identify and explore the key theories in occupational therapy and those more specific to their emphasis area with an emphasis on those currently influencing clinical reasoning. Students will demonstrate an understanding of contemporary theories and be able to compare and contrast key theories. Students will develop rationales for theory guided interventions. Furthermore, they will develop an impact summary in their identified area of emphasis. Prerequisite: Permission of Instructor. LEC.

OTMS 735. Practice Models for Applied Science. 3 Hours.
Issues and trends relative to advanced application of theory, assessment and intervention with emphasis on pediatrics will be presented in lecture and discussion. Special projects will emphasize the student's special interests. Although faculty directed, student presentation will be emphasized. LEC.

OTMS 799. Special Topics in Occupational Therapy. 1-6 Hours.
An elective course to allow student investigation of special issues or problems relevant to applied research and/or practice, under the direction of a faculty member chosen by the student. Systematic coverage of current issues may include a research investigation or study related to pertinent sociocultural trends, practice factors, or emerging issues in service provision. Students will complete special projects such as oral presentations, written papers, or case analyses as negotiate with the faculty mentor. May be repeated for credit. Prerequisite: Permission of instructor. IND.

OTMS 800. Research Proseminar. 1 Hour.
A proseminar conducted by the core graduate faculty in Occupational Therapy and Therapeutic Science. Twice-monthly meeting will involve student and faculty presentations of their current research, as well as provide more opportunities to obtain feedback on research proposals. May be taken more than once for a total of fours credits. (Same as TS 800.) RSH.
OTMS 801. Applied Neuroscience. 3 Hours.
The course will address the major functions of the systems within the central nervous system and how they interact to produce responses to environmental demands. Sensory input, central processing, and output mechanisms will be analyzed. The student will then appraise human behavior in relation to function and dysfunction of the nervous system, both in formulating potential behavioral signs when a specific neurological site is presented, and in hypothesizing about neurological involvement when analyzing a particular individuals problems. Prerequisite: Undergraduate neuroscience course or permission of instructor. LEC.

OTMS 835. Interpreting Research for Applied Science. 3 Hours.
This on-line course examines selected research studies, analysis methods and results employed, and applies research findings to practical problems. Students will design their own research project reflecting their area of interest. RSH.

OTMS 890. Graduate Research. 1-6 Hours.
Students investigate an empirical question relevant to occupational therapy and write a literature review and a research proposal under the guidance of a faculty advisor. Pending approval of the proposal, the student will carry out initial phases of the project, including materials preparation and data collection. RSH.

OTMS 899. Thesis. 1-6 Hours.
Course requires data analyses, interpretation, and scholarly writing based on individual original research carried out under the guidance of the student's adviser. These activities, along with an oral presentation of research, must meet with approval of the student's advisory committee to complete thesis requirements. Prerequisite: OTMS 890. THE.

Occupational Therapy Courses

OCTH 101. Introduction to Occupational Therapy. 1 Hour.
Survey of the profession of occupational therapy. Includes information on academic and professional requirements, career opportunities, general description, and history of the profession. Open to all students. LEC.

OCTH 601. Human Anatomy. 6 Hours.
In OCTH 601, the study of gross anatomy and neuroanatomy in relation to human function and behavior will introduce students to how occupational therapists use anatomical knowledge to gather information about clients. Learning opportunities include lecture and laboratory. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

OCTH 602. Orientation to the Occupational Therapy Profession. 3 Hours.
In OCTH 602, we will examine occupation, explore the underlying philosophy and history of the occupational therapy profession, and implications for current practice and future directions. We will establish expectations for professionalism and practice application of ethical and professional behaviors within the context of occupational therapy practice. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

OCTH 605. Theory and Practice in Occupational Therapy. 2 Hours.
In OCTH 605, we will present established and emerging conceptual models of occupational therapy to guide students in exploration and discussion of assessment and intervention practices. Emerging professional reasoning skills and strategies will support individuals and small groups in synthesis and integration of theoretical concepts applied to diverse practice settings. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

In OCTH 622, we will study the role of occupations and factors influencing occupational performance using the “top-down/bottom-up” analytic approach recommended by the WHO and reinforced by the OT Practice Framework. This course will use service learning as the context for synthesizing an understanding of occupation, the occupational therapy process, and person-centered practice. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

OCTH 630. Practicum - I. 2 Hours.
In OCTH 630, we will support students to experience and demonstrate person-centered and strength-based approaches when engaging individuals in their natural context, and to use observation, interview, and documentation skills to guide OT practice with children and families. Students will explore individual leadership strengths and styles to better understand individual roles within a complex system. Students as individuals and in small groups will undertake leadership assessment, reflection and application. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

OCTH 635. Lifespan Development from an Occupational Perspective. 4 Hours.
In OCTH 635, we will examine in detail developmental theories and how they intersect with changes in occupations across the lifespan. We will promote an advanced understanding of participation in meaningful activities by practical experiences with real people in authentic settings. Students will gain an understanding and appreciation of the qualitative differences between typical and atypical occupational performance across the lifespan. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

OCTH 645. Contexts of Occupation. 2 Hours.
In OCTH 645, contextual supports and features of physical, social, and other environments will be explored as potential tools to facilitate maintaining or enhancing occupational performance irrespective of disability status. The interaction of person, context, and environment will be explored through guided discussion, reflection, and extra-mural exploratory assignments. A culminating activity inspires teams of students to assemble course elements to develop a cohesive summary project with practical application. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

OCTH 655. Neuroscience Analysis of Occupational Performance. 3 Hours.
In OCTH 655, we will build upon prior knowledge of neuroanatomy gained through OCTH 601. Principles of neuroscience will be interpreted in clinical application using a strength-based approach to advance understanding of nervous system function. The integration and function of neural systems will be considered in relation to specific challenges and capacity of the nervous system as a whole to support behavior. A practical application and problem-based perspective will be encouraged throughout the course, with students invited to consider consumer perspective and availability of potential supports. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

OCTH 662. Physical Considerations in Facilitating Occupational Performance. 4 Hours.
In OCTH 662, we will appraise the impact of select medical conditions on person factors and occupational performance in everyday life using scientific reasoning. Students will implement occupational therapy assessment and intervention strategies integrated with knowledge
of injury and disease processes to facilitate an understanding of occupational performance outcomes. Particular consideration will be given to addressing complex comorbidities within the context occupational performance. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

OCTH 670. Practicum - II. 2 Hours.
In OCTH 670, we will employ the occupational therapy process, to participate in service provision to individuals through level I fieldwork experiences. We will build upon skills from OCTH 630 to advance leadership development and effective communication. This course will use both classroom and community-based practicum experiences. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

OCTH 672. Psychiatric Considerations in Facilitating Occupational Performance. 3 Hours.
In OCTH 672, we will examine in detail occupational performance as influenced by psychological conditions using evidence-based practices and principles of mental health. We will emphasize the importance of considering individuals, groups and organizations with the context of occupational performance. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

OCTH 680. Independent Study, 1-6 Hours.
An elective course to allow students to pursue areas of special interest under direction of faculty of his or her choice. Investigation of special issues relevant to an aspect of occupational therapy practice will include study of pertinent practice factors. Student will complete special projects relevant to the practice areas, such as oral presentation, written paper or case analyses. May be repeated for credit. Prerequisite: Permission of department and instructor (offered Spring, Summer and Fall). IND.

OCTH 682. Analysis and Adaptation of Occupations - II. 2 Hours.
In OCTH 682, we will support students in service learning settings to expand OCTH 622 task analysis outcomes to include the occupational therapy practice framework to further analyze and apply the occupational therapy process using person-centered practice. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

OCTH 690. Evaluation and Assessment of Occupational Performance. 2 Hours.
In OCTH 690, we will examine in detail principles of the evaluation process to analyze occupational performance across the lifespan. We will differentiate, select, interpret, and document both formal and informal measures within a person-centered and contextually relevant approach. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

OCTH 704. Planning and Intervention in Occupational Therapy. 2 Hours.
This course will use professional reasoning to analyze cases across the lifespan. We will work in small groups using a problem-based format with faculty mentors as we develop an occupational profile, occupational analysis and evidence-based intervention plans for each case. LEC.

OCTH 710. Service Management: Delivery Systems. 1 Hour.
This course will explore how service delivery systems influence pragmatic reasoning and occupational therapy practice. We will examine American and global health care systems along with occupational therapy health care delivery settings with a focus on quality, cost, and access related to service delivery. Teaching and learning experiences occur through lecture, on-line materials, class discussion and small group activities. LEC.

OCTH 715. Supervision, Team Relations, and Management Communication. 1 Hour.
This course emphasizes entry level skills related to supervision, teamwork, and communication within practice environments. LEC.

OCTH 720. Occupational Therapy Practice Models. 7 Hours.
This course will use practice models to guide evaluation and intervention in occupational therapy practice. Students will gain an understanding of historical and contemporary models, learn the evidence underlying each model and conduct assessments with a consumer from each of the contemporary models. LEC.

OCTH 725. The Research Process. 1 Hour.
This course will transition from understanding and appraising research (OCTH 783) to generating research (OCTH 790). The purpose of this course is to guide students through planning research by introducing the components of research and describing ways in which research may be conducted. The course reviews research ethics, writing research questions and hypotheses, sampling, measurement and data collection, components of quantitative and qualitative research, and information about disseminating research. LEC.

OCTH 730. Practicum III. 2 Hours.
This course will build upon practicum and level I fieldwork experiences to continue developing necessary skills for level II fieldwork experiences. We will determine the relevant variables for intervention, work collaboratively with others within each setting, analyze, and reflect upon the experience. We will analyze principles of evidence-based practice and occupation-based intervention. LEC.

OCTH 738. Special Topics in Practice. 1-2 Hours.
Focused study of theory application, professional topics and skills, and emerging practice questions. Learning experiences may be in the form of guided readings and discussion, directed projects, seminars, or community/clinical experience with focus on advanced supplemental or exploratory learning. Specific topics and formats will vary as they are generated by student interest and faculty expertise. LEC.

OCTH 750. Case-Based Clinical Reasoning. 2 Hours.
This course will apply the professional reasoning process to understand individuals’ occupational performance and analyze services provided based on cases from level II fieldwork experiences. We will participate in small group discussion using a problem-based format to conduct case analysis and develop evidence-based intervention plans. LEC.

OCTH 755. Issues and Trends Seminar. 1 Hour.
This course will analyze key professional, political, and cultural issues and trends that impact service provision and the populations served by occupational therapists. This seminar format incorporates student-driven service experiences, discussion forums, and small group work to examine issues/trends and recognize opportunities to shape the future of the occupational therapy profession. LEC.

OCTH 760. Professional Development and Leadership in Service Management. 3 Hours.
This course will discuss professional responsibilities and career development opportunities as they relate to leadership, administration, and management of occupational therapy services. We will use reflective assessments to identify professional leadership strengths and career paths. Students working in small work groups will apply management principles to develop and propose community-based health promotion programs. LEC.
OCTH 765. Family and Community Service Systems. 2 Hours.
This course will use professional reasoning to examine occupational practice within various delivery systems. We will use lecture and small group seminars to analyze systems from level II fieldwork experiences and develop a program evaluation plan based on collaborations between students and fieldwork supervisors. LEC.

OCTH 770. Level II Fieldwork, Part 1. 6 Hours.
A required full-time, three-month supervised experience in a facility meeting specified criteria. Qualified occupational therapists supervise the experience. Students will be exposed to a variety of age ranges and disabilities within different service delivery systems. Prerequisite: Satisfactory completion of required academic coursework. LEC.

OCTH 775. Level II Fieldwork, Part 2. 6 Hours.
A required full-time, three-month supervised experience in a facility meeting specified criteria. Qualified occupational therapists will supervise this experience. Students will be exposed to a variety of age ranges and disabilities within different service delivery systems. Ages, disabilities, and service provision systems for this course will differ from the student's prior fieldwork experience. Prerequisite: Satisfactory completion of required academic coursework. LEC.

OCTH 776. Population-Based Clinical Reasoning. 3 Hours.
This course will consider population-based concepts and theories to identify, prioritize and meet the health and life participation needs of populations. Within an interprofessional online learning context, students collaborate to develop community-based assessment and intervention emphasizing promotion, maintenance and restoration of health and wellness and disease prevention for specific populations. LEC.

OCTH 780. Elective Level II Fieldwork. 3-6 Hours.
An elective (optional) supervised experience in a facility meeting specific criteria. Qualified occupational therapist will supervise this experience. This fieldwork would allow students to pursue areas of special interest. Length and time commitment of experience will be commensurate with credit hours (e.g. each credit requires 80 hours of fieldwork contact at specified site). Prerequisite: Satisfactory completion of required academic coursework and OCTH 770. LEC.

OCTH 783. Evidence-Based Practice. 2 Hours.
This course will review, appraise, and integrate various levels of evidence to inform occupational therapy practice. Students will learn where and how to find relevant evidence as well as what factors should be considered in the assessment of evidence. We will review statistics and their use in interpreting outcome data. Students will also learn to synthesize and translate evidence into useful information for practice. LEC.

OCTH 790. Research Practicum and Professional Writing. 3 Hours.
This course will explore how the process of conducting a faculty-mentored research project becomes a platform for developing occupational therapy principles and for guiding practice, and how conveying meaning through professional writing is essential for communicating outcomes, interpretations, and instructions. Prerequisite: OCTH 727. Students from programs outside the MS in Occupational Therapy or PhD in Therapeutic Science need to contact the Occupational Therapy Department for permission to enroll. LEC.

OccupationalTherapy(Doctorate) Courses

OTD 750. Clinical Reasoning and Problem Based Learning. 3 Hours.
Students will apply a clinical reasoning process to individuals with occupational performance needs. Cases will be presented from students' clinical experiences. In a problem solving format, students will evaluate models of service delivery, evaluation and intervention delivery and dissemination of information received by the individual. Students will identify and discuss alternatives given a variety of situations and environments. PREREQUISITE: Permission of Department. LEC.

OTD 770. Knowledge For Specialty Practice Area. 3 Hours.
This course is designed to support and correspond with OTD 780. Students will be matched with a faculty mentor as they develop a literature review in an area of clinical interest. This experience is designed to supplement students' ongoing clinical practice as they develop a library of pertinent empirical readings. Students will be mentored as they develop skills in analytical reading and identification of information that informs best practice. PREREQUISITE: Admission to OTD Program or Permission of Instructor. LEC.

OTD 776. Population Based Health Care. 3 Hours.
This course will coordinate with OCTH 776. The purpose of this course is to introduce concepts and theories related to providing health care to complex systems and aggregates in the community, state and nation. Emphasis is placed on the promotion, maintenance and restoration of health and wellness and the prevention of disease. Internal and external environmental components which include historical, political, social, cultural and economic factors are presented. The role of the health care provider in identifying, prioritizing and meeting the health and life participation needs of aggregates is discussed. PREREQUISITE: Permission of department. LEC.

OTD 780. Practicum in Specialty Practice Area. 3 Hours.
This course is designed to support and correspond with OTD 770. Students will complete this course as they work in a clinical environment. They will meet with a faculty mentor to support the analysis and dissemination of their empirical information gathered during OTD 770. They will present their empirical literature findings to their professional colleagues via a clinical research forum. Students will be expected to create three forms of information dissemination and critically review the professional feedback they receive. PREREQUISITE: Permission of department. LAB.

OTD 783. Evidence Based Practice. 3 Hours.
This course will coordinate with OTCH 783. Students will address the parameters and criteria for evidence-based practice. They will build a library of information that facilitates their evaluation of the status, beliefs, and practice of Occupational Therapy. They will develop skill in the synthesis of empirical evidence and explore dissemination options to service recipients. Students' work will culminate in the formulation of a decision-making paradigm for their future practice decisions. PREREQUISITE: Permission of Department. LEC.

OTD 799. Practice and Research. 3 Hours.
This is an elective course that allows students to pursue areas of special interest under the direction of a faculty member of his or her choice. This course is designed to support students’ learning as they complete their pre-doctoral studies. Investigation of special issues relevant to an aspect of occupational therapy practice will include study of pertinent practice factors. Students will complete special projects relevant to the practice areas of interest, such as an oral presentation, written paper, or case analysis. May be repeated for credit. PREREQUISITE: Permission of Department. LEC.

OTD 825. Qualitative Research Methods. 3 Hours.
This course is an introduction to qualitative research techniques. Students will have several opportunities to gain hands-on experience using fundamental qualitative research techniques to sharpen their data collection, analysis and write-up skills. The goals of this course are to better understand the role qualitative techniques play in research, identify various ethical issues, sharpen interview and observation skills, and develop foundation skills for collecting, analyzing and interpreting
qualitative data. Prerequisite: Permission of Department. Lecture course. LEC.

OTD 835. Quantitative Research for Applied Science. 3 Hours.
Research relevant to therapeutic intervention comes from a variety of disciplines involving varied research designs and analysis strategies. Students in this course will examine selected research studies and gain skill in analyzing methods and results as well as in applying research findings to practical problems. Students will conduct a systematic review on a specific area of occupational therapy practice. LEC.

OTD 850. Teaching Practicum. 1-3 Hours.
The purpose of this course is to provide practical learning whereby students receive individual mentorship for the development, implementation and evaluation of a teaching experience. Students will be responsible for developing the material, instructing students, grading assignments and evaluating the teaching experience. The teaching experience is expected to include at least 12 hours of face to face instruction (or the equivalent in on-line teaching or written materials). Teaching experiences can include MOT program lectures or labs, continuing education workshops, patient education programs, or staff inservices or another experience that meets the time and competency requirements. Prerequisite: A graduate level teaching methods course such as NSG 873, NSG 874, C T 740, C T 840 PRA.

OTD 860. Theory and Practice in Occupational Therapy. 3 Hours.
This course will cover major theoretical frameworks and practice models in occupational therapy. The history of occupational therapy will be included to provide a basis for understanding the evolution of the profession as well as past and current issues and trends. Students will learn how to critically analyze theories, evaluate research evidence related to specific theories and practice models, and assess pragmatic issues in applying practice models to specific settings and populations. LEC.

OTD 865. Theory Based Practice. 3 Hours.
This course is designed to critically review Occupational Therapy theories, research, practice models and frameworks using the tenets of occupation based practice. Students will analyze seminal literature from occupational science and relate theory and evidence to practice. Students will review their specified area of practice to develop a proposed method of practice that incorporates empirical evidence and practice methods. Finally, students will select a mentor from their practice area to review their proposal. Critical feedback will be incorporated into a final presentation and paper. PREREQUISITE: Permission of Department. LEC.

OTD 875. Professional Development. 3 Hours.
This course will explore professional development from an advanced practice perspective. Students will examine aspects of advanced practice such as leadership (both work and professional), management, group and system communication and change agency. They will explore these topics within their current practice settings and select an area of advanced skills to explore in more depth. Students will develop an understanding of how they can impact systems and contribute to the development of the occupational therapy profession. LEC.

OTD 880. Program Evaluation. 3 Hours.
Leadership in areas of specialty practice will require our graduates to critically evaluate their practice programs. In this course, students will explore the traditional and innovative ways to evaluate professional services and systems, and they will develop skills to conduct program evaluations. Students will examine the purpose and process of program evaluations in a variety of clinical settings. Through lecture, discussion and a project they will develop and execute a program evaluation in their area of practice. PREREQUISITE: Permission of Department. LEC.

OTD 885. Advanced Practicum. 1-3 Hours.
This practicum is designed to span 400 hours. Students will identify an area of practice through which they want to develop clinical initiatives and leadership. Selected field experiences will provide opportunities for program development, leadership, and information dissemination. Upon completion, the students will provide his or her clinical team with a program, or research based initiative, along with specified program evaluation methods. PREREQUISITE: Permission of Department and continuous enrollment until completion of competencies. LAB.

OTD 890. Capstone Project. 1-3 Hours.
The capstone project will comprise a written report that involves both literature and field research activity. A capstone project report represents the application of knowledge as well as the search for it, and differs from a thesis such that student opinion and experience is involved. The student must negotiate capstone objectives, evaluation standards and any potential approvals prior to his or her practicum. PREREQUISITE: Permission of Department and continuous enrollment until competencies totaling 6 credit hours are completed. IND.

OTD 899. Special Projects. 3 Hours.
This is an elective course that allows students to pursue areas of special interest under the direction of a doctoral faculty member of his or her choice. This course is designed to support doctoral training. Academic options range from research based studies and/or activities to critical analysis of clinical practice methods. Students will complete special projects relevant to their designated practice area of interest. Students must negotiate learning objectives, academic projects and evaluation standards with their mentor. May be repeated for credit. PREREQUISITE: Permission of department. LEC RSH.

Physical Therapy Rehab Sci Courses

PTRS 701. Professional Interactions. 1 Hour.
Introduces the student to the physical therapy profession and professional role expectations. The history of physical therapy as it relates to the professionalization process, including ethical and legal obligations, as well as student responsibilities. It also addresses the development of effective communication and interpersonal skills and appreciation for individual and cultural differences within clinical settings. Professional responsibilities in physical therapy are introduced, including codes of ethical conduct and awareness of appropriate professional behaviors directed by organizational and legislative regulations. The development of medical terminology recall and recognition skills is also covered in the course. Prerequisite: Admission into the DPT program or permission of instructor. LEC.

PTRS 702. Physical Therapy Documentation and Health Informatics. 1 Hour.
Emphasizes the development of effective documentation skills, including exposure to a variety of documentation formats across various practice setting and implications for proper reimbursement. Concepts of healthcare informatics are introduced including use of an electronic documentation systems and the capability of information systems to support quality care. Disablement classification models, behavioral objectives, and functional outcome concepts are applied to organize patient data and identify treatment goals. Prerequisite: Successful completion of semester 1 of the DPT curriculum or permission of instructor. LEC.

PTRS 703. Applied Anatomy. 1 Hour.
This course introduces the learner to how physical therapists use anatomical knowledge to gather basic examination information about the patient. Learning opportunities include lecture and laboratory. Prerequisite: Admission into the DPT program or permission of instructor. LEC.
PTRS 704. Physical Therapy Interventions I. 3 Hours.
Skills required by the physical therapist in the generalist acute care environment. A series of patient care related lectures, demonstrations, videotapes and laboratories are integrated to teach proper body mechanics, infection control and sterile technique, basic assessment, transfers, positioning, tubes, ostomies, clinical safety procedures, tilt table usage, prescribing a proper wheelchair, applying proper therapeutic range of motion exercises, and using appropriate assistive devices for gait and transfers. Prerequisite: Successful completion of semester 1 of the DPT curriculum or permission of instructor. LEC.

PTRS 705. Physical Therapy Interventions II. 4 Hours.
Students will apply the skills obtained in clinical coursework and begin clinical problem-solving using common physical therapy treatment interventions. Topics include intersegmental management for wound healing interventions, therapeutic modalities with an emphasis on the healing process and electrical modalities. Learning opportunities include lecture and laboratory. Prerequisite: Successful completion of the first 2 semesters of the DPT curriculum or permission of the instructor. LEC.

PTRS 710. Advanced Topics in Human Anatomy. 6 Hours.
The student will obtain a basic understanding of human gross anatomy with specific knowledge of upper and lower extremities, head and neck, back and neural structures. At the end of this course the student will be able to apply this knowledge of anatomy to functional and clinical situations. Prerequisite: Admission into the DPT program or permission of instructor. LEC.

PTRS 711. Applied Kinesiology and Biomechanics. 4 Hours.
This course involves a study of joint structure and function, and biomechanical principles underlying human motion. Emphasis is placed on the application of kinesiological principles to clinical physical therapy situations. Learning opportunities include lecture and laboratory. Prerequisite: Successful completion of semester 1 of DPT curriculum or permission of instructor. LEC.

PTRS 712. Pathophysiology and the Physical Therapy Diagnosis. 4 Hours.
Review of integrative human physiology and pathophysiology with an emphasis upon homeostatic mechanisms and etiologies of disease. The interrelationships of function and dysfunction at the molecular, cellular and tissue level (pathology), organ and systemic level (impairment) and to the total human body (functional limitations) will be applied in each of the body systems. Discussions and applied materials will be tailored to the physical therapist with an emphasis on PT-specific diagnoses. Prerequisite: Admission into the post-professional DPT program, or consent of instructor. LEC.

PTRS 715. Applied Musculoskeletal Anatomy. 3 Hours.
The course involves a study of joint structure, joint function, and the biomechanical principles underlying human motion. All major peripheral joints and the spine will be studied. Application of functional anatomy to clinical physical therapy situations will be emphasized. Prerequisite: admission into post-professional DPT program, or consent of instructor. LEC.

PTRS 720. Integrated Clinical Experience I. 1 Hour.
This course consists of supervised experiences in a clinical setting and seminar sessions that provide preliminary opportunities for application of didactic course work. Emphasis will be placed on the development of communication and interpersonal skills in the clinical setting, as well as documentation and physical therapy skills and procedures that have been introduced in courses. Prerequisite: Successful completion of semester 1 of the DPT curriculum or permission of instructor. CLN.

PTRS 730. Integrated Clinical Experience II. 1 Hour.
This course consists of supervised experiences in a clinical setting and seminar sessions that provide preliminary opportunities for application of didactic course work. Emphasis will be placed on the development of communication and interpersonal skills in the clinical setting, as well as documentation and physical therapy skills and procedures that have been introduced in courses. Prerequisite: Successful completion of the first 2 semesters of the DPT curriculum or permission of instructor. CLN.

PTRS 740. Evidence-Based Orthopedic Rehab. 3 Hours.
Students will apply the concepts taught in PTRS 715 (Applied Musculoskeletal Anatomy) and skills obtained in their individual clinical practice. This course will include discussion related to current treatment approaches affecting peripheral and spinal joints. The course activities include review of the current evidence based scientific literature related to orthopedic conditions and interventions, web-based discussion related to individual patient case scenarios and lab activities associated with treatment techniques including mobilization/manipulation, self-mobilization and therapeutic exercise. Prerequisite: Entry into post-professional DPT program or permission of instructor. LEC.

PTRS 745. Orthopedic Physical Therapy I. 6 Hours.
Builds on the foundation from anatomy, kinesiology and biomechanics. Examination skills and treatment interventions that apply specifically to the musculoskeletal system are provided. Basic examination skills for all peripheral joints, gait analysis, and therapeutic exercise are discussed and reviewed for common orthopedic conditions. The course will integrate instruction with case-based clinical problem solving. Learning opportunities include lecture and laboratory. Prerequisite: Successful completion of the first 2 semesters of the DPT curriculum or permission of instructor. LEC.

PTRS 746. Musculoskeletal Conditions and Management. 3 Hours.
Mastery of physical therapy subjective and objective examination and treatment intervention for patients of all ages who present with a musculoskeletal problem with emphasis on amputation, prosthetics, upper and lower extremity orthoses, fracture management and connective tissue disorders. Emphasis will be placed on the most common clinical problems and physical therapy diagnoses. Learning opportunities include lecture and laboratory. Prerequisite: Successful completion of the first 2 semesters of the DPT curriculum or permission of instructor. LEC.

PTRS 747. Musculoskeletal Rehabilitation II. 2 Hours.
This course will provide students with the applied knowledge to medically screen patients for symptoms and signs that require the expertise of other health care professionals. Patient cases currently treated by the practicing physical therapist will be used to compare diagnostic tests and values. The course will focus on comorbidities and their implications in diagnosis and treatment. The course will be delivered via the web. Prerequisite: Admission into the post-professional DPT program, or approval by the instructor. LEC.

PTRS 810. Case Studies in PT Diagnosis. 2 Hours.
This course will provide students with the applied knowledge to medically screen patients for symptoms and signs that require the expertise of other health care professionals. Patient cases currently treated by the practicing physical therapist will be used to compare diagnostic tests and values. The course will focus on comorbidities and their implications in diagnosis and treatment. The course will be delivered via the web. Prerequisite: Admission into the post-professional DPT program, or approval by the instructor. LEC.
PTRS 815. Case Studies in Pathophysiology. 2 Hours.
Physical therapists need skills to relate human pathophysiology to its clinical presentation. The interrelationships of function and dysfunction at the molecular, cellular and tissue level (pathology), organ and systemic level (impairment) and to the total human body (functional limitations) will be applied in each of the body systems. Discussions and applied materials will be tailored to the patient population served by the therapist. Prerequisite: Admission into post-professional DPT program, or consent of instructor. LEC.

PTRS 817. Ethics in Health Care. 2 Hours.
Basic ethical concepts, principles, relevant theories and ethical decision making models applied to major contemporary health care issues and dilemmas facing health professionals. Development of skills for ethical clinical decision making is the focus. Prerequisite: Successful completion of the first 3 semesters of the DPT curriculum or permission of instructor. CLN.

PTRS 820. Integrated Clinical Experience III. 2 Hours.
This course consists of supervised experiences in a clinical setting and seminar sessions that provide intermediate opportunities for application of didactic course work. Emphasis will be placed on the development of communication and interpersonal skills in the clinical setting, as well as documentation and physical therapy skills and procedures that have been introduced in courses. Prerequisite: Successful completion of the first 3 semesters of the DPT curriculum or permission of instructor. CLN.

PTRS 825. Exercise Physiology. 3 Hours.
This course will provide entry-level DPT students with the knowledge of the physiological functions and adaptations of the human body with exercise. Emphasis will be placed on familiarizing students with sound medical rationale and the basis for treatment considering the immediate and long-term effects of exercise. Prerequisite: Successful completion of the first 3 semesters of the DPT curriculum or consent of the instructor. LEC.

PTRS 826. Cardiopulmonary Physical Therapy. 4 Hours.
Anatomy, physiology and pathophysiology of the cardiovascular and pulmonary systems are studied and related to clinical signs and symptoms. Students are introduced to common evaluation and treatment techniques, as well as the rationale for including physical therapy in the management of cardiopulmonary conditions. These topics are discussed in conjunction with case studies and current research. Learning opportunities include lecture and laboratory. Prerequisite: Successful completion of the first 5 semesters of the DPT curriculum or permission of instructor. LEC.

PTRS 828. Medical Imaging. 1 Hour.
An introduction to medical imaging and an overview of its role in the health care delivery system. Topics include an introduction to basic imaging equipment with an emphasis on digital acquisition and processing. Factors affecting the quality of images and limitations to the techniques are reviewed. Imaging techniques covered include: X-rays, CT scans, Nuclear medicine, ultrasound, MRI and PET. This course will also include a component covering the microscopic anatomy of cells. Prerequisite: Admission to the DPT program or permission of instructor. LEC.

PTRS 830. Integrated Clinical Experience IV. 3 Hours.
This course consists of supervised experiences in a clinical setting and seminar sessions that provide intermediate opportunities for application of didactic course work. Emphasis will be placed on the development of communication and interpersonal skills in the clinical setting, as well as documentation and physical therapy skills and procedures that have been introduced in courses. Prerequisite: Successful completion of the first 4 semesters of the DPT curriculum or permission of instructor. CLN.

PTRS 832. Health Promotion Through the Lifespan. 2 Hours.
This course focuses on the role of the physical therapist in health promotion across the lifespan and in specific populations. Prerequisite: Successful completion of the first 5 semesters of the DPT curriculum, or permission of instructor. LEC.

PTRS 833. Pediatric Physical Therapy. 3 Hours.
This course introduces fundamental concepts necessary for the entry-level physical therapist to examine, evaluate, and treat the pediatric client. Lecture and lab experiences emphasize a problem oriented approach to physical therapy management of children with musculoskeletal, neurologic, and/or cardiopulmonary impairments. Students will learn to recognize components of normal and abnormal development, particularly during the first year of life. Prerequisite: Successful completion of the first 5 semesters of the DPT curriculum or permission of instructor. LEC.

PTRS 835. Rehabilitation Administration I. 3 Hours.
The first course of two three-credit hour management classes designed to review the American health care system as a whole, and to examine the specific areas that rehabilitation health care managers must understand in order to succeed in an increasingly competitive and financially driven system. Some of these areas include the system of health care delivery, legal issues, human resource principles, accounting, reimbursement, payors, Medicare/Medicaid, regulations, outcomes information management, etc. This course will apply all of the above items to real world examples in numerous health care settings so the student understands the complexities of many settings which physical therapy personnel may work. Each unit will build on the last so that at the end of the second management course the student will be capable of proposing, building, opening, and successfully running rehabilitation services in a multitude of settings. Prerequisite: Admission into the post-professional DPT program, or consent of instructor. LEC.

PTRS 836. Rehabilitation Administration II. 3 Hours.
The second course of two three-credit hour management classes designed to review the American health care system as a whole and to examine the specific areas that rehabilitation health care managers must understand in order to succeed in an increasingly competitive and financially driven system. Some of these areas include the system of health care delivery, legal issues, human resource principles accounting, reimbursement, payors, Medicare/Medicaid, regulations, outcomes information management, etc. This course focuses on reimbursement, legal and regulation issues and will apply presented principles to real world examples in numerous health care settings so the student understands the complexities of many settings in which physical therapy personnel may work. Each unit will build on the last so that at the end of the second management course the student will have the tools to propose, build, open and successfully run rehabilitation services in a multitude of settings. Prerequisite: Admission into the post-professional DPT program, or consent of instructor. LEC.

PTRS 838. Research Concepts in Evidence-Based Physical Therapy Practice. 3 Hours.
An applied research course with emphasis on evidence-based physical therapy practice including library and multimedia resources, research process, measurement theory (reliability and validity), research designs, experimental design principles, research ethics, critical review and analysis of research publications, writing of a research report and/or research proposal, and statistical concepts and data analysis. Throughout, emphasis is placed on clinical research pertinent to physical therapy. Prerequisite: Admission into the post-professional DPT program, or consent of instructor. LEC.
PTRS 839. Advanced Topics in Pediatric Practice. 2 Hours.
This web-based course will involve study of current clinical decision-making frameworks, service delivery models, and treatment approaches for children age birth through 21 with or at risk for developmental delay and/or disability. Course activities will include review of current scientific literature and online discussion of individual patient case scenarios. Prerequisite: For the DPT program: successful completion of PTRS 833 or consent of instructor. For the post-professional DPT program: admission into the program or consent of instructor. LEC.

PTRS 840. Integrated Clinical Experience V. 3 Hours.
This course consists of supervised experiences in a clinical setting and seminar sessions that provide intermediate opportunities for application of didactic course work. Emphasis will be placed on the development of communication and interpersonal skills in the clinical setting, as well as documentation and physical therapy skills and procedures that have been introduced in courses. Prerequisite: Successful completion of the first 5 semesters of the DPT curriculum or permission of instructor. CLN.

PTRS 845. Orthopedic Physical Therapy II. 6 Hours.
Incorporates concepts from anatomy, kinesiology, basic biomechanics and knowledge of peripheral joint examination and treatment. Terminology, examination, evaluation, development of a treatment plan and treatment techniques and basic differential diagnosis skills for the spine and the temporomandibular joint (TMJ) are taught. Learning opportunities include lecture and laboratory. Prerequisite: Successful completion of the first 4 semesters of the DPT curriculum or permission of instructor. CLN.

PTRS 846. Orthopedic Physical Therapy III. 3 Hours.
Incorporates concepts from anatomy, kinesiology, biomechanics, and Orthopedic Physical Therapy I and Orthopedic Physical Therapy II courses. Terminology, examination, evaluation, development of a treatment plan and treatment techniques and advanced differential diagnosis skills for complex peripheral and/or spinal disorders are taught. Learning opportunities include lecture and laboratory. Prerequisite: Successful completion of the first 6 semesters of the DPT curriculum or permission of instructor. LEC.

PTRS 851. Lifespan Development. 4 Hours.
Examines physiological, neurological, and psychological factors that contribute to development across the lifespan. This course will explore developmental theories and changes in development of cognition, communication, physical, social/emotional, and adaptive skills. Emphasis will be on understanding healthy growth and development and learning how to help children, adolescents, and adults manage developmental challenges. This course will emphasize the need to examine participation in meaningful activities within authentic contexts with considerations for the impact of a disability on functional performance. Prerequisite: Successful completion of the first 4 semesters of the DPT curriculum or permission of instructor. LEC.

PTRS 852. Neurologic Physical Therapy and Rehabilitation I. 6 Hours.
This course will introduce the principles of neuroscience and describe their application as relevant to physical therapists. The course will introduce the terminology of the nervous system and cover the major functions of the nervous systems. This course will also integrate neurophysiology and neuroanatomy into the clinical presentation of adults with neurologic pathology. The etiology, epidemiology signs, and symptoms of selected neurological conditions will be presented. The medical management of patients with nervous system disorders will be presented in relationship to the practice of physical therapy. The course will introduce examination of impairments for persons with neuromuscular pathologies. Students will be presented with simple case studies and progress to more complex patient problems. Learning opportunities include lecture and laboratory. Prerequisite: Successful completion of the first 4 semesters of the DPT curriculum or permission of instructor. LEC.

PTRS 853. Neurologic Physical Therapy and Rehabilitation II. 6 Hours.
This course will focus on rehabilitation approaches for people with neurologic pathology. Students will examine factors that contribute to the control of voluntary movement and the learning of motor skills, and develop an understanding of the relationship between the brain and the purposeful movements that make us human. Students will acquire the skills to hypothesize about the relationship of health conditions and body function/structure to limitations in activities and participation in adults with neurologic pathology. A clinical decision making approach will combine contemporary rehabilitation approaches, consideration of psychosocial and cognitive factors, and research evidence in the discussion of complex patient cases. After completing this course, students will demonstrate novice-level knowledge and skills necessary to complete a physical therapy examination and develop a comprehensive treatment plan for adults with neurologic pathology. Learning opportunities include lecture and laboratory. Prerequisite: Successful completion of the first 5 semesters of the DPT curriculum or permission of the instructor. LEC.

PTRS 855. Pharmacology for Physical Therapists. 1 Hour.
Pharmacological background for the clinical treatment of patients referred to physical therapy. Fundamentals of the actions of drugs including mechanisms of therapeutic and adverse effects. Prerequisite: Successful completion of semester 1 of the DPT curriculum or permission of instructor. LEC.

PTRS 858. Evidence-Based Rehabilitation of Patients Post-CVA. 3 Hours.
This course will provide students with the applied knowledge to medically screen patients for symptoms and signs that require the expertise of other health care professionals. Patient cases currently treated by the practicing physical therapist will be used to compare diagnostic tests and values. The course will focus on comorbidities and their implications in diagnosis and treatment. The course will be delivered through the web. Prerequisite: Admission into the post-professional DPT program, or approval of the instructor. LEC.

PTRS 859. Evidence-Based Research Practicum I. 1 Hour.
Supervised and directed experiences in conducting evidence-based research activities. The research activities involved in this course are broadly defined with emphasis on the enhancement of evidence-based physical therapy practice. The student will be supervised by a member of the faculty. This is a two-semester course. Prerequisite: Successful completion of the first 5 semesters of the DPT curriculum or permission of instructor. RSH.

PTRS 860. Evidence-Based Research Practicum II. 1 Hour.
Supervised and directed experiences in conducting evidence-based research activities. The research activities involved in this course are broadly defined with emphasis on the presentation and communication of an evidence-based research project. The student will be supervised by a member of the faculty. Prerequisite: Successful completion of the first 6 semesters of the DPT curriculum, or consent of instructor. RSH.

PTRS 861. Evidence-Based Research Practicum III. 1 Hour.
Supervised and directed experiences in conducting evidence-based research activities. The research activities involved in this course are broadly defined with emphasis on the presentation and communication of an evidence-based research project. The student will be supervised by a member of the faculty. Prerequisite: Successful completion of the first 6 semesters of the DPT curriculum, or consent of instructor. RSH.

PTRS 865. Independent Study. 1-3 Hours.
Individually negotiated learning experiences appropriate to the interests and background of the student. Prerequisite: Admission to the DPT program, post-professional DPT program, or permission of instructor. IND.

PTRS 877. Administration in Physical Therapy. 2 Hours.
Designed to familiarize the entry-level therapist with contemporary issues in health care which impact the practice of physical therapy in
the health care system. Changes in the US health care system will be discussed, including managed care, plus essential elements and principles of management in health care organizations, and an overview of human resources and operational management. Financial management specifically reimbursement for patient services, risk management, information management, and compliance will be discussed. Discussion of professional development is intertwined throughout the course. Students will be exposed to business development and entrepreneurial skills needed to expand or start up a physical therapy practice. Prerequisite: Successful completion of the first 6 semesters of the DPT curriculum or permission of instructor.

**PTRS 880. Differential Diagnosis of General Medical Conditions. 3 Hours.**

Designed to provide students with the knowledge and clinical tools to medically screen patients for the presence of symptoms and signs that require the expertise of other health care professionals. It will focus on diagnoses that are not covered by common PT practice including diseases of the endocrine system, the immune system, GI system, and neoplasms. Prerequisite: Admission into the post-professional DPT program, or consent of instructor. LEC.

**PTRS 882. Pathophysiology and Physical Therapist Screens. 6 Hours.**

Review of integrative human pathophysiology with an emphasis upon homeostatic mechanisms and etiologies of disease. The interrelationships of function and dysfunction at the molecular, cellular and tissue level (pathology), organ and systemic level (impairment) and to the total human body (functional limitations) will be applied in each of the body systems. Discussions and applied materials will be tailored to the physical therapist with an emphasis on clinical tools to medically screen patients for the presence of symptoms and signs. Prerequisite: Successful completion of semester 1 of the DPT curriculum or permission of instructor. LEC.

**PTRS 888. Interprofessional Physical Therapy Practice. 1 Hour.**

This course is designed to develop collaborative practice competent physical therapy learners through interprofessional classroom and clinical experiences. Prerequisite: Successful completion of the first 4 semesters of the DPT curriculum or permission of instructor. LEC.

**PTRS 890. Specialties in Physical Therapy Practice. 2 Hours.**

Requires students to apply the five elements of patient/client management for addressing multi-system impairments across diverse and complex patient populations. Exposure to physical therapy advanced practice specialty areas included, but not limited to, sport medicine, women's health, neurology, pediatrics, geriatrics, and oncology. Seminar format instruction incorporating case-based instruction, group discussion, and speakers with advanced clinical credentials. Prerequisite: Successful completion of the first 6 semesters of the DPT curriculum or permission of instructor. LEC.

**PTRS 920. Clinical Internship I. 6-8 Hours.**

Nine to twelve weeks of clinical internship. During the clinical internship, the student will have the opportunity to develop the patient care skills needed for successful practice as a physical therapist. The student will work under the supervision of an experienced physical therapist in clinical settings affiliated with the program. Prerequisite: Successful completion of the first 7 semesters of the DPT curriculum or permission of instructor. CLN.

**PTRS 922. Clinical Internship III. 6-8 Hours.**

Nine to twelve weeks of clinical internship. During the clinical internship, the student will have the opportunity to develop the patient care skills needed for successful practice as a physical therapist. The student will work under the supervision of an experienced physical therapist in clinical settings affiliated with the program. Prerequisite: Successful completion of the first 7 semesters of the DPT curriculum or permission of instructor. CLN.

**PTRS 923. Clinical Internship IV. 2-6 Hours.**

Three to nine weeks of clinical internship. During the clinical internship, the student will have the opportunity to develop the patient care skills needed for successful practice as a physical therapist. The student will work under the supervision of an experienced physical therapist in clinical settings affiliated with the program. Prerequisite: Successful completion of the first 7 semesters of the DPT curriculum or permission of instructor. CLN.

**PTRS 924. Specialized Internship. 2-6 Hours.**

Three to nine weeks of clinical internship. During the clinical internship, the student will have the opportunity to have exposure to a different health care system such as an international clinical experience, or a specialized area of physical therapy practice. The student will be under the supervision of an experienced physical therapist in clinical settings affiliated with the program. Prerequisite: Successful completion of the first 7 semesters of the DPT curriculum or permission of instructor. CLN.

**REHS 760. Introduction to Matlab Programming. 1 Hour.**

Introduction: matlab windows, input-output, file types, general commands; interactive computation; matrices and vectors, matrix and array operations, scripts and functions applications, graphics. Prerequisite: None LEC.

**REHS 805. Seminar in Rehabilitation Research. 0.5-3 Hours.**

Students will be instructed in the planning and presentation of a 45 minute scientific seminar on topics outside their thesis area and on their thesis work. Students will learn how to design and produce effective poster presentations. Prerequisite: Entry in the PhD program in Rehabilitation Science or consent of instructor. SEM.

**REHS 850. Neuroscience. 4 Hours.**

This course will introduce the principles of neuroscience and describe their application as relevant to rehabilitation scientists. The course will begin with the terminology of the nervous system, then cover the major functions of the peripheral, autonomic and central nervous systems. The manner with which these systems interact to produce appropriate responses to external demands will be discussed. The behavioral consequences of damage to each systems will be integrated throughout. Particular emphasis will be placed on the sensorimotor role in perception and the control of movement. Lecture and Lab. Prerequisite: Entry in the PhD in Rehabilitation Science Program. LEC.

**REHS 856. Research Design and Methods I. 2 Hours.**

An introduction to research design and methods including library and multimedia resources; research process; measurement theory (reliability and validity); experimental design principles; single subject design and other non-experimental design; critical thinking skill and procedure; critical review and analysis of a research article; basic scientific writing skills; and skills in writing a research report/manuscript. Prerequisite: Entry into the PhD in Rehabilitation Science program or permission of instructor. LEC.

**REHS 857. Research Design and Methods II. 2 Hours.**

An introduction to research design and method including critically appraising the state of art on a research topic; conducting a systematic review of literature; basic concept of statistical analysis, performing
and interpreting data analysis using parametric, non-parametric, or correlational analyses; preparation of a research proposal focusing on study rational, novelty, and research questions and hypotheses; ethical issues related to research; basic knowledge of bioinformatics; meta-analysis; and writing of a research proposal. Prerequisite: Entry into the PhD in Rehabilitation Science program or permission of instructor. LEC.

REHS 862. Cellular and Molecular Basis of Rehabilitation. 2 Hours.
A study of the biology, at the cellular and molecular levels, of pathological processes that impair human function will highlight the mechanisms by which cells/tissues repair and/or adapt following disease/injury or aging. Emphasis will be placed on the body's edogenous ability for rehabilitation or adaptation to disease/injury. Prerequisite: Entry into the PhD in Rehabilitation Science program or permission of instructor. LEC.

REHS 863. Pathobiology of Human Function II. 4 Hours.
A study of biology and pathological processes that impair human function with emphasis on neuromuscular diseases, injury and diseases of the central and peripheral nervous systems, and neurological disorders associated with development and aging. Prerequisite: Entry into the PhD in Rehabilitation Science program, or consent of instructor. LEC.

REHS 865. Independent Study. 1-3 Hours.
Individually negotiated learning experiences appropriate to the interests and background of the student. Prerequisite: Entry in the PhD in Rehabilitation Science program, or permission of instructor. IND IND.

REHS 870. Teaching Practicum. 1-3 Hours.
Directed experiences in a planned instructional activity. Student will write course objectives, plan and deliver lectures, produce practical and written exams and assign grades. Prerequisite: Entry in the PhD in Rehabilitation Science program or consent of instructor. LEC.

REHS 873. Research Practicum. 1-3 Hours.
This course is designed to provide supervised research experience in various laboratories in the department. Prerequisite: Entry in the PhD in Rehabilitation Science program, or consent of instructor. RSH.

REHS 875. Clinical Practicum. 1-3 Hours.
Specialized clinical training in a highly specific area of specialization. The primary purpose of this course is for the student to develop advanced clinical skills in his/her area of specialization. Prerequisite: Admission to the PhD in Rehabilitation Science program, and permission of instructor. CLN.

REHS 962. Advanced Studies in Rehabilitation Science. 3 Hours.
This course will explore the state of art of clinical and basic scientific research in rehabilitation. Students will learn how to critically analyze the research literature in the neuromotor, musculoskeletal, cardiopulmonary, and other rehabilitation fields. The course will cover the topics including but not limited to rehabilitation to improve balance and gait, rehabilitation in stroke survivors and patients with neurodegenerative diseases, rehabilitation in patients with injury/pathological conditions to ligament, tendon, and bone/cartilage, rehabilitation in patients with cardiopulmonary disease, rehabilitation in cancer patients/survivors, etc. Current literature in each topic area will be investigated to determine the features of the pathological condition and targeted subjects, factors that contribute to the outcomes of the rehabilitation, research tools and measurements, potential optimal rehabilitation techniques, and directions of future research. Prerequisite: Entry into the PhD in Rehabilitation Science program or permission of instructor. Basic knowledge in pathobiology and neuroscience in required. LEC.

REHS 970. Instrumented Analysis of Human Biomechanical Function. 3 Hours.
An in-depth study that provides critical analysis of equipment and other resources used in analyzing human motion, balance, strength, electrophysiological responses, and cardiorespiratory function. Students will be required to conduct a preliminary study, including design, methodology and data collection using one or more of these instruments. Prerequisite: Entry in the PhD in Rehabilitation Science program, or consent of instructor. LEC.

REHS 980. Graduate Research. 1-10 Hours.
Original laboratory investigation conducted under the supervision of a senior staff member. Prerequisite: Entry in the PhD in Rehabilitation Science program, or consent of instructor. RSH.

REHS 990. Dissertation in Rehabilitation Science. 1-10 Hours.
For students in advanced standing enrolled in the PhD in Rehabilitation Science program. THE.

Respiratory Care Courses
RESP 303. Introduction to Respiratory Care Procedures. 5 Hours.
An introductory course designed to acquaint the student with the fundamental theory, procedures, and equipment used in respiratory therapy. Emphasis is placed on understanding application of equipment and procedures to the patient, and the respiratory therapy treatment of patients requiring non-continuous ventilatory assistance. This course introduces such topics as cardiopulmonary resuscitation, bronchopulmonary hygiene, airway care, oxygen therapy, and cleaning and sterilization of equipment. Prerequisite: Concurrent enrollment in RESP 318 and RESP 325. LEC.

RESP 310. Clinical Pharmacology I. 1 Hour.
The student will learn about adrenergic and parasympatholytic bronchodilators, corticosteroids, mucus-controlling drugs, surfactant agents, antitussives, and the anti-infective drugs used for the treatment of respiratory disorder. LEC.

RESP 311. Clinical Pharmacology II. 1 Hour.
Content of this course includes neuromuscular blocking agents, cardiac agents, diuretics, anti-hypertensives, and central nervous system drugs. LEC.

RESP 318. Pulmonary Pathology. 3 Hours.
A course consisting of lecture and group discussion designed to introduce the student to pulmonary pathology. Special emphasis is placed on the etiology, pathophysiology, and treatment of pulmonary diseases. This course includes such topics as signs and symptoms of lung disease, chronic obstructive pulmonary diseases, pleural and mycotic diseases. Prerequisite/Corequisite: RESP 303, RESP 325, RESP 330, or permission of instructor. LEC.

RESP 325. Clinical Process. 2 Hours.
This course serves to introduce the beginning respiratory therapy student to the clinical environment. The student spends sixteen hours per week participating in either a clinically-oriented workshop or performing the fundamentals of respiratory therapy in the clinical setting. Typically meets Monday-Wednesday/Friday. FLD.

RESP 330. Cardiopulmonary Physiology. 4 Hours.
Designed to introduce the student to the basics of physiology of the cardiovascular and pulmonary systems. This course contains such topics as regulation of respiration and pH homeostasis, ventilation and perfusion relationships, and hemodynamics of the cardiovascular system. LEC.

RESP 340. Mechanical Ventilators. 5 Hours.
This course contains such topics as arterial puncture, classification of mechanical ventilators and adjunct devices, and their application to the patient. Four hours of lecture/discussion and a 3 hour weekly laboratory acquainting the student with the rationale for continuous mechanical ventilation and the basic operation of adult, pediatric and neonatal
mechanical ventilators. Emphasis is placed on the selection of appropriate equipment and assessment of its effect on the patient. Prerequisite: RESP 303, RESP 318, RESP 325 and RESP 330. LEC.

RESP 345. Adult Critical Care. 3 Hours.
This course introduces the student to the different types of traumatic injuries in the critically ill adult patient. Topics such as shock syndrome, multi-organ traumas including chest, head, spinal cord and thermal injuries will be discussed. Discussion of cardiac life support, fluid resuscitation, monitoring and ventilatory management are integrated into each topic. Prerequisite: Completion of RESP 303, RESP 310, RESP 318 and RESP 330 or their equivalent. LEC.

RESP 350. Clinical Application I. 1 Hour.
This course provides the intermediate respiratory therapy student with opportunities to practice basic respiratory therapy procedures. Emphasis placed on performance of respiratory therapy procedures and application of equipment. This course emphasizes such topics as oxygen therapy, aerosol therapy, incentive spirometry, patient assessment, and IPPB therapy. The student will assume limited patient care responsibilities. Prerequisite: RESP 303, RESP 310, RESP 318, RESP 325, and RESP 330 or their equivalent. FLD.

RESP 355. Clinical Application II. 1 Hour.
This course provides the respiratory therapy student with an introduction to the critical care setting. The student will begin to apply the procedures and equipment most often utilized in the intensive care areas. Emphasis is placed on continuous mechanical ventilation, artificial airways, airway care, and bedside pulmonary function testing. The student will assume limited patient care responsibility in the critical care areas. Prerequisite: RESP 303, RESP 310, RESP 318, RESP 325 and RESP 330 or their equivalent. LEC.

RESP 375. Clinical Application III. 2 Hours.
This course provides the advanced respiratory therapy student with opportunities to refine procedural and evaluative skills in the critical care areas. The student will spend a minimum of twenty-four hours per week in the clinical setting. Emphasis is placed upon the students' ability to evaluate the patients' clinical situation and recommend appropriate therapy modalities to the clinical supervisor. During this course the student will assume wider-ranging patient care responsibilities. Prerequisite: RESP 340, RESP 345, RESP 350, RESP 355, RESP 395 or their equivalent. FLD.

RESP 390. Pulmonary Function. 2 Hours.
Lecture and laboratory introducing the student to basic pulmonary function procedures. This course allows the student to practice pulmonary function tests and interpret the results. Lecture and laboratory topics include such topics as the measurement of lung volumes and capacities, body plethysmography, blood gas analysis, and flow volume loops. Prerequisite: RESP 318, RESP 325, and RESP 330. LEC.

RESP 395. Pediatric Critical Care. 1 Hour.
Study of common neonatal and pediatric disorders/diseases for the beginning respiratory care student. Lectures on basic fetal lung development, assessment of both the pediatric and neonatal patient and disorders/diseases such as respiratory distress syndrome, bronchopulmonary dysplasia, bronchiolitis, epiglottis and croup, and other commonly seen problems. Prerequisite: RESP 303, RESP 310, RESP 318 and RESP 330 or their equivalent. LEC.

RESP 399. Generalist Practice. 3 Hours.
This course is designed to allow students the opportunity to improve and perfect skills acquired in the junior year clinical courses. Emphasis will be given to refining the students' abilities to assess patient status and administer appropriate therapy modalities. This course may also be used to assess respiratory therapy knowledge and skills of students transferring from other programs. Prerequisite: Permission of instructor. FLD.

RESP 400. Advanced Critical Care. 4 Hours.
Concepts of the diseases and disorders that effect the critically ill adult are explored. Emphasis is placed on understanding common illnesses such as cardiac dysrhythmias, acute coronary syndrome, trauma of the chest and head, organ failure and toxin exposure as well as the other medical challenges of the critically ill patient. LEC.

RESP 401. Neonatal Respiratory Care. 4 Hours.
This course is designed to provide the student with an introductory knowledge of fetal and newborn cardiorespiratory anatomy, physiology, development, pathophysiology, and care. Prerequisite: Senior year standing or permission of instructor. LEC.

RESP 402. Chronic Respiratory Disease Management: The Evolving Role of the Respiratory Therapist. 3 Hours.
This course is an introduction to the evolving role of respiratory therapists in health care, especially in the area of chronic disease management. The students will explore various trends that are contributing to the role respiratory therapy may play in patient care. Topics covered in this course include COPD and asthma management, pulmonary rehabilitation, cardiopulmonary exercise testing, home care, elderly care, nutritional care of the pulmonary patient, and communication skills necessary for patient education. Students in this course will gain an understanding of how they can contribute to an inter-professional team in order to provide safe and effective patient care. Presentation of topics in this course may include lecture, group work/discussion, audiovisual, computer and other multimedia aids. LEC.

RESP 403. Physical Science for Health Professions. 3 Hours.
This course is an introduction to the fundamental concepts and principles of physics, chemistry, and the earth sciences. Topics include forces, energy, electricity, magnetism, modern physics, and chemical bonding. This course will provide respiratory therapists and students an applicable level of knowledge that aids in their understanding of therapies and equipment used in everyday clinical practice. The course includes presentation of material using audiovisual, computer and other multimedia aids. LEC.

RESP 405. Health Care Management, Ethics and Law. 3 Hours.
This course provides an overview of fundamental concepts in healthcare management, law, and ethics. Students will learn the skills and knowledge necessary to be successful in management leadership, management design, and managing diversity. Ethical concerns relevant to the healthcare manager will be addressed. Current and historical controversies in healthcare will be discussed. Upon completion of this course, students will have the knowledge to understand laws, ethics, and management principles of the complex healthcare landscape. LEC.

RESP 425. Advanced Critical Care Procedures. 2 Hours.
This course is the capstone of the critical care experience and concentrates on advanced practice and assessment skills in the critical care setting. Emphasis is placed on quantitative assessment and monitoring procedures, advanced ventilator management and interpretation of data. This course requires access to the medical information of an intensive care patient. Prerequisite: RESP 375 or equivalent. LEC.

RESP 490. Special Studies or Projects. 1-9 Hours.
This course involves individual study, research or projects in the field of respiratory care under instructor guidance. Written reports and periodic conferences are required. Content and unit credit will be determined by student-instructor conferences and/or departmental conferences. This
course may be repeated for a maximum of nine credits. Prerequisite: Admission to the respiratory care program and consent of instructor. LEC.

RESP 661. Management Principles in Health Care. 3 Hours.
An introduction to basic principles of management and their application in the current health care environment. Course content includes management theory, scope of management, quality issues, budgeting, personnel issues, evaluation and application of management concepts. Cross listed with HEIM 661 and CLS 661. Prerequisite: Senior year standing or permission of the instructor. LEC.

RESP 662. Education Principles in Health Care. 2 Hours.
An introduction to basic principles of education and their application in the current health care environment. Information on course content includes: Course design, inservice education and patient education. The focus is on educational needs, instructional media and course quality improvement. LEC.

RESP 663. Scientific Investigation Part I. 1 Hour.
This course is designed to provide the participant with an introduction to research skills culminating in a group Proposal of a bench study or chart review. The Proposal will consist of three sections: Introduction, Review of the Literature and Methods. The three sections will be developed through a series of progress reports with the aid of a faculty advisor. Students will work in groups to develop a research question about their daily practice that can only be answered by conducting research. This course will include discussions of the types of research data and the structure of a research manuscript. Students will have opportunities to read, interpret and analyze research reports and practice in writing critical evaluations of the literature as it applies to their research question. Prerequisite: Statistics LEC.

RESP 664. Scientific Investigation Part II. 1 Hour.
This course is designed to teach the student how to read, interpret and analyze research reports. Prerequisite: Senior year standing and a course in statistics. LEC.

RESP 665. Scientific Investigation Part III. 1 Hour.
Each study group will write the Discussion and Conclusion sections of their paper and share their findings in a poster presentation. The final version of each group's study manuscript must be submitted to course instructor prior to graduation. The quality of the manuscript will be appropriate for submission to the journal of Respiratory Care. Prerequisites: RESP 663, 664. LEC.

RESP 667. Registry Review. 2 Hours.
This course involves individual student under instructor guidance. A series of practice exams are taken and discussed including a secured practice registry exam and clinical simulation exam. Prerequisite: Admission to the respiratory care program and consent of instructor. LEC.

RESP 668. Research in Health Care. 3 Hours.
Online version combines the on-campus series of courses: RESP 663, RESP 664 and RESP 665, for the individual student. The first half of the semester will produce a study proposal for a chart review that will require a faculty-assisted search of our database of de-identified patient information. The second half of the semester will be analyzing results of search and with the aid of a faculty advisor, writing a quality manuscript suitable for submission to Respiratory Care that will be submitted to course instructor, at the very least. Prerequisites: statistics. LEC.

RESP 670. Clinical Specialty Practicum. 10 Hours.
Provides the student with a capstone experience in the activities and responsibilities related to clinical processes in one of the specific advanced practice specialties: critical care, neonatal, pediatrics, pulmonary rehabilitation, pulmonary function, sleep, hyperbaric oxygen, management or education. Prerequisite: Permission of the instructor. FLD.

RESP 671. Clinical Specialty Projects I. 6 Hours.
Designed to give the student the opportunity to develop clinically-related projects in the areas of quality improvement, health care organizational structures and current processes in patient management. Prerequisite: Permission of the instructor. FLD.

RESP 672. Clinical Specialty Projects II. 6 Hours.
Designed to have the student demonstrate competency related to clinical processes in one of the specific advanced practice specialties: critical care, neonatal, pediatrics, pulmonary rehabilitation, pulmonary function, sleep, hyperbaric oxygen, management or education. Prerequisite: Permission of the instructor. FLD.

Therapeutic Science Courses

TS 800. Research Proseminar. 1 Hour.
A proseminar conducted by the core graduate faculty in Occupational Therapy and Therapeutic Science. Twice-monthly meetings will involve student and faculty presentations of their current research, as well as provide more opportunities to obtain feedback on research proposals. May be taken more than once for a total of four credits. (Same as OTMS 800.) LEC.

TS 805. Multidisciplinary Theoretical Perspectives. 3 Hours.
Students will identify and explore key theories in behavioral and social science with an emphasis on those currently influencing clinical reasoning. Students will demonstrate an understanding of contemporary theories and be able to compare and contrast key theories, while also developing knowledge about theory guided research and interventions. LEC.

TS 850. From Beliefs to Evidence. 1 Hour.
Analysis of the role of beliefs about practice in professional culture and how beliefs are affected by the accumulation of research evidence. Topics include the nature of science and beliefs, the nature of evidence, and the debate over evidence-based practice. Students will use topics from their own professional interests for class presentations and written assignments. May be taken more than once for a total of two credits. LEC.

TS 880. Special Projects. 1-6 Hours.
An elective course to allow student investigation of special issues or problems relevant to applied research and/or practice, under the direction of a faculty member chosen by the student. Systematic coverage of current issues may include a research investigation or study related to pertinent sociocultural trends, practice factors, or emerging issues in service provision. Students will complete special projects such as oral presentations, written papers, or case analysis as negotiate with the faculty member. May be repeated for credit. Prerequisite: Permission of instructor. IND.

TS 900. Evolving Interdisciplinary Views of Disablement. 1 Hour.
Assessment of how our social and cultural context defines notions of disability and disablement in our society. Topics include historical constructs of disability, public policy related to disability, and social paradigms of disability. Students will evaluate views of disablement from the perspective of their own discipline. May be taken more than once for a total of two credits. LEC.

TS 950. Designing Effective Knowledge Transfer. 1 Hour.
Examination of the principles of knowledge transfer and diffusion of innovation as they relate to practices in therapeutic professions. Topics include the diffusion process, change agents, innovation adoption, and current diffusion methods. Students will evaluate diffusion processes that
have occurred within their own professions. May be taken more than once for a total of two credits. LEC.

**TS 980. Advanced Study in Therapeutic Science. 1-6 Hours.**
Students engage in advanced study of a topic of their interest, guided by an appropriate mentor. Methods include directed readings, interpretation of evidence, discussions, and written syntheses of existing literature. Course culminates in a written proposal for original research and an oral defense of that proposal. Credit is given only after the dissertation proposal is accepted by the student's advisory committee. Prerequisite: Permission of instructor. SEM.

**TS 990. Dissertation in Therapeutic Science. 1-9 Hours.**
Research experience leading to dissertation for doctoral students in Therapeutic Science. TH.E.

### Intercampus Program in Communicative Disorders

KU offers a doctorate in audiology, a master's degree in speech-language pathology, a doctorate in speech-language pathology and Ph.D. degrees in audiology and speech-language pathology through its Intercampus Program in Communicative Disorders.

### About the Intercampus Program in Communicative Disorders

The Intercampus Program in Communicative Disorders consists of the Department of Speech-Language-Hearing: Sciences and Disorders (http://splh.ku.edu) on the Lawrence campus and the Department of Hearing and Speech (http://splh.ku.edu/ipcd) on the KU Medical Center campus. The Department of Speech-Language-Hearing is part of the College of Liberal Arts and Sciences, while the Department of Hearing and Speech is part of the KU School of Health Professions.

Students pursuing these graduate degrees take course work on the Medical Center campus in Kansas City and on the main campus in Lawrence. A student may live in either community. Block scheduling of courses reduces the frequency of commuting. A committee of faculty from both departments is responsible for instruction, curriculum planning, student selection and advising, clinical practicum policies, and course scheduling.

The College of Liberal Arts and Sciences also offers undergraduate programs in Speech-Language-Hearing: Sciences and Disorders (http://splh.ku.edu). The Lawrence department collaborates with the departments of Applied Behavioral Science, Linguistics, and Psychology to offer a Ph.D. in child language (p. 1544).

### Hearing and Speech Courses

**AUD 805. Introduction to Clinical Research. 1 Hour.**
The course will provide a comprehensive overview to clinical research. The student will gain an understanding of how to develop clinical research questions including protocol design and the factors that should be considered in initiating a clinical research study. This will include biostatistical considerations, the recruitment of study participants, regulatory issues, and data management, and defining measures and instruments. Students will gain knowledge of how to define clinical research among the various institutional entities involved with clinical research at the University of Kansas Medical Center such as the Research Institute (RI), General Clinical Research Center (GCRC) and the Human Subjects Committee (HSC). Additionally, one component of the course will focus on how to apply for funding (grantsmanship), critical appraisal of research studies, and how to present research data. Prerequisite: Consent of instructor. LEC.

**AUD 810. Diagnostic Audiology. 4 Hours.**
Audiometric calibration, pure tone and speech testing, analysis of audiograms, middle ear testing. Prerequisite: AUD 697. LAB.

**AUD 811. Hearing Disorders. 3 Hours.**
A study of disorders of the auditory system including anatomical, physiological, perceptual, and audiological manifestations of pathologies affecting hearing. Prerequisite: AUD 810 and AUD 829. LAB.

**AUD 813. Psychoacoustics and Theories of Hearing. 3 Hours.**
A study of relations between common acoustic stimuli and the responses they elicit; consideration of sensory scales, noise phenomena, and speech intelligibility. Prerequisite: AUD 697 and AUD 829. LEC.

**AUD 814. Hearing Conservation. 2 Hours.**
A study of the major components of hearing conservation programs in industrial, educational, and military settings. Forensic audiology issues related to occupational hearing loss are included. Prerequisite: AUD 697 and AUD 829. LAB.

**AUD 816. Speech Perception. 2 Hours.**
Acoustic and perceptual characteristics of phonemes, words, and connected speech for normal-hearing adults and infants; how speech perception is assessed clinically and is affected by hearing loss, aging, use of amplification, talker differences, and linguistic factors. LEC.

**AUD 817. Pediatric Audiology. 3 Hours.**
Normal and pathological development of the auditory system; pediatric audiological testing; auditory and communication aspects in the habilitation of hearing-impaired children. Prerequisite: AUD 697 and AUD 810. LAB.

**AUD 818. Vestibular Systems and Disorders. 3 Hours.**
Study of the anatomy and physiology of the normal peripheral and central vestibular system; clinical assessment of vestibular disorders; vestibular rehabilitation. LEC.

**AUD 819. Hearing Aids I. 3 Hours.**
Study of the components, function, fitting, and performance characteristics of hearing aids, applications of amplification in rehabilitative audiology. Prerequisite: AUD 697 and AUD 810. LEC.

**AUD 820. Rehabilitative Audiology and Counseling. 3 Hours.**
Principles and methods of auditory, communication, and social assessment and intervention with hard of hearing and deaf adults, children, and their families. Prerequisite: AUD 810 and AUD 819 or equivalent. LEC.

**AUD 821. Hearing Aids II. 3 Hours.**
The advanced study of the theoretical bases, techniques, and clinical application of hearing aids and their assessment. Participants will review, present, and discuss contemporary issues in hearing aid literature and research. Prerequisite: AUD 819. LEC.

**AUD 822. Electro-Acoustics and Instrumentation. 3 Hours.**
A study of the generation, control and measurement of the simple and complex sounds essential to clinical audiology and hearing research. LAB.

**AUD 823. Cochlear Implants and Hearing Assistance Technologies. 2 Hours.**
Through lecture and discussion format, this course will cover the principles and methods of assessment, candidacy, surgery, programming and rehabilitation of patients receiving cochlear implants. In addition, hearing assistance technologies such as large area systems and alerting...
devices will be covered with emphasis on classroom amplification. Prerequisites: AUD 819 and AUD 821 or permission of instructor. LEC.

**AUD 824. Central Auditory Processing. 2 Hours.**
The study of the anatomy and physiology of the central auditory system. Analysis and review of the diagnostic procedures and the therapeutic strategies for central auditory processing disorders. LEC.

**AUD 828. Genetics and Hearing Loss. 2 Hours.**
The fundamentals of human genetics as related to hearing loss, including patterns of inheritance, genotypic and phenotypic characteristics of the major forms of syndromic and nonsyndromic hearing loss; genetic counseling, genetic testing, possible genetic treatment, and issues related to them; resources for keeping up with this rapidly changing field. Prerequisite: Permission of instructor. LEC.

**AUD 829. Anatomy and Physiology of the Hearing and Vestibular Mechanisms. 3 Hours.**
Advanced study of the anatomical and physiological properties of the human hearing and vestibular mechanisms. LEC.

**AUD 843. Clinical Practice in Audiology. 1-6 Hours.**
Supervised clinical work at the University and/or University Medical Center audiology clinics, or affiliated, off-campus practicum sites. Prerequisite: Permission of instructor. FLD.

**AUD 846. Independent Study in Problems in Audiology. 1-10 Hours.**
IND.

**AUD 851. Auditory Evoked Potentials. 3 Hours.**
Theoretical bases, techniques, and clinical applications for auditory evoked potentials including electrocochleography, auditory brainstem response, middle and late latency and cognitive responses. Prerequisite: AUD 810, AUD 822, AUD 829, or permission of instructor. LEC.

**AUD 853. Pharmacology for Audiology. 2 Hours.**
Presentation and discussion topics including: basic pharmacology (pharmacokinetics and pharmacodynamics), mechanisms of ototoxicity, selected ototoxic agents, drugs used in otolaryngology, and a review of patient management strategies. Prerequisites: Enrollment in the Au.D. or Ph.D. audiology program or permission of instructor. LEC.

**AUD 858. Business Audiology. 2 Hours.**
An introduction to audiology business practice principles. Operational functions of the audiology clinic will be reviewed, including human resources, marketing, legal and ethical practice concerns, billing, coding and reimbursement. Prerequisites: enrollment in the Au.D. or Ph.D. audiology program or permission of instructor. LEC.

**AUD 899. Thesis. 1-10 Hours.**
THE.

**AUD 940. Seminar in Audiology: _____. 1-4 Hours.**
Advanced study of selected topics in audiology such as (but not limited to): cochlear micromechanics and other physiological processes; psychoacoustics, speech perception, cochlear implants, etc. Prerequisite: Enrollment in the Audiology Ph.D. program or permission of instructor. LEC.

**AUD 941. Grand Rounds in Audiology. 1 Hour.**
Presentations/discussion of clinical case studies and professional issues in Audiology. Au. D. students and audiology faculty members will participate in these sessions. DIS.

**AUD 944. Clinical Rotation. 1-6 Hours.**
Supervised clinical work at the University and/or University Medical Center Audiology Clinics, or affiliated off-campus sites. The Clinic Rotation is intended to prepare students for entry into their Clinical Externship and foster increasing independence. Clinical skills required are defined in standards set forth by the American Speech-Language Association. FLD.

**AUD 945. Clinical Externship. 1-9 Hours.**
Supervised clinical work at the University of Kansas and/or KUMC audiology clinics, or affiliated, off-campus sites. The Clinical Externship is intended to refine clinical skills, increase clinical independence, and ensure that clinical skills meet the certification standards in audiology set forth by the American speech-Language-Hearing Association. Open to 3rd and 4th year Au.D. students. Approval from Instructor needed for 3rd year students. PRA.

**AUD 999. Doctoral Dissertation. 1-12 Hours.**
The.

**SLPD 801. Seminar on Evidence-Based Practice in Speech-Language Pathology and Other HealthSciences I. 3 Hours.**
This course is designed to give students a thorough understanding of evidence-based principles and procedures so that they could provide evidence-based services in a clinical setting. It is also designed to prepare students to assume a position of leadership in which they would be required to promote and teach evidence-based practices to their staff clinicians. Prerequisite: Consent of instructor. SEM.

**SLPD 804. Clinical Practice in Speech-Language Pathology: Advanced Training for the Experienced Clinician. 1-3 Hours.**
Students participate in clinical experiences (assessment and/or treatment) related to their primary and/or secondary area of concentration. Clinical experiences in which the student learns about a particular patient population, standardized and non-standardized assessment measures, instrumentation, computer software, devices, and/or treatment techniques and strategies are possible. Prerequisite: certification in speech-language pathology from the American Speech-Language-Hearing Association. CLN.

**SLPD 805. Independent Study in Speech-Language Pathology. 1-3 Hours.**
Investigation of special topics by individual SLPD students. Prerequisite: Consent of Instructor. LEC.

**Speech-Language-Hearing Courses**

**SLPH 120. The Physics of Speech. 4 Hours. N.**
An introduction to the acoustic structure of speech intended for nonscience majors. Emphasis will be placed on the methods and standards by which scientists measure and evaluate the physical characteristics of speech. Topics will include: simple harmonic motion, the propagation of sound waves, aerodynamic aspects of vocal fold vibration, resonance, digital speech processing, frequency analysis, and speech synthesis. Three class hours and one laboratory per week. (Same as LING 120.) Prerequisite: MATH 101 or 104 or equivalent. LEC.

**SLPH 177. First Year Seminar: _____. 3 Hours. GE11 / U.**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Speech-Language and Hearing. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

**SLPH 250. Study Abroad Topics in: _____. 1-5 Hours. S.**
A course designed to enhance international experience in topic areas related to speech-language-hearing at the freshman/sophomore level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission. LEC.
SPLH 261. Survey of Communication Disorders. 3 Hours. SI GE3S / S.
Provides a general understanding of normal and deviant speech, language, and hearing in adults and children. This course considers the normal development of communication behavior, the nature of communication disorders, and the interaction of speech pathology and audiology with allied fields (e.g., education, medicine, psychology, special education). LEC.

SPLH 320. The Communicating Brain: The Ultimate Personal Computer. 3 Hours. U.
This course introduces the study of human neuroscience with a particular focus on human communication. The course provides an overview of the relevant anatomical structures and function along with an introduction to the basic methods used to investigate central nervous system function. Students are introduced to the study of perceptual, motor, and language function in the nervous system through a series of examples drawn from normal function and clinical cases. The examples are selected to highlight how these systems develop and are influenced by experience, implantable devices developed to interface with the nervous system, and how computers and animals are used as models to learn about nervous system function. LEC.

SPLH 418. Introduction to Cognitive Science. 3 Hours. S.
Examines the data and methodologies of the disciplines that comprise Cognitive Science, an inter-disciplinary approach to studying the mind and brain. Topics may include: consciousness, artificial intelligence, linguistics, education and instruction, neural networks, philosophy, psychology, anthropology, evolutionary theory, cognitive neuroscience, human-computer interaction, and robotics. (Same as LING 418, PHIL 418, and PSYC 418.) Prerequisite: Consent of instructor. LEC.

SPLH 432. Human Behavioral Genetics. 3 Hours. S.
A survey of human behavioral genetics for upper division undergraduates. Emphasis is on how the methods and theories of quantitative, population, medical, and molecular genetics can be applied to individual and group differences in humans. Both normal and abnormal behaviors are covered, including intelligence, mental retardation, language and language disorders, communication, learning, personality, and psychopathology. (Same as ANTH 447, BIOL 432, PSYC 432.) Prerequisite: Introductory courses in biology/genetics or biological anthropology and psychology are recommended. LEC.

SPLH 449. Laboratory/Field Work in Human Biology. 1-3 Hours. AE61 / N.
Faculty supervised laboratory or field research for Human Biology majors. Students design and complete a research project in collaboration with a Human Biology faculty member. (Same as ANTH 449, BIOL 449, and PSYC 449.) Prerequisite: Consent of instructor and Human Biology major. FLD.

SPLH 450. Study Abroad Topics in: ____. 1-5 Hours. S.
A course designed to enhance international experience in topic areas related to speech-language-hearing at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission. LEC.

SPLH 451. Directed Study Abroad in Speech-Language Hearing. 1-3 Hours. S.
An independent study designed to enhance international experience in topic areas related to speech-language hearing. Investigation of special topic or project selected by the student with advice, approval, and supervision by a KU SPLH instructor and an authorized agent of the study abroad site. Experience must be arranged through the Office of KU Study Abroad. Such study may take the form of directed reading and/or directed research/clinical observation. A daily journal and final report is required. A maximum of six hours of credit may be counted, with no more than three in a single area of study. Prerequisite: Consent of instructor IND.

SPLH 462. Principles of Speech Science. 3 Hours. N.
Survey of the physiology of speech production, and the physics of sound. Emphasis upon methodologies in the laboratory study of normal speech. Prerequisite: SPLH 120, or concurrent enrollment in SPLH 120 or consent of instructor. LEC.

SPLH 463. Principles of Hearing Science. 3 Hours. N.
This class discusses the concepts and principles relevant to normal hearing processing: anatomy, psychophysical methods, and basic subjective correlates of the auditory system. Prerequisite: SPLH 120, or concurrent enrollment in SPLH 120, or consent of instructor. LEC.

SPLH 464. Undergraduate Seminar in: ____. 1-3 Hours. S.
Course organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. (Distribution credit given for two-three hours only.) LEC.

SPLH 465. Fundamentals of Clinical Phonetics. 1 Hour. S.
Introduction to classification of American English speech sounds based on articulatory phonetics. Practice in phonetic transcription and analysis of normal and abnormal speech. Laboratory exercises to give students hands-on experience with selected topics from lecture. Prerequisite or Corequisite: SPLH 120. LEC.

SPLH 466. Language Science. 3 Hours. S.
Introduction to structure/function of human languages as it relates to language development and disorders; processes involved in the expression and reception of language and the methodologies employed to study these processes. LEC.

SPLH 467. Mentored Research Experience. 2-8 Hours. AE61 / S.
Study may be directed toward either reading for integration of knowledge and insight in Speech-Language Hearing, or original research in the field. Course organized any given semester for research/clinical observation. A daily journal and final report is required. A maximum of six hours of credit may be counted, with no more than three in a single area of study. Prerequisite: Consent of instructor IND.

SPLH 469. Laboratory/Field Work in Speech-Language Hearing. 1-3 Hours. AE61 / N.
Faculty supervised laboratory or field research for Speech-Language Hearing majors. Students design and complete a research project in collaboration with a Speech-Language Hearing faculty member. (Same as KU 449, KU 449, and PSYC 449.) Prerequisite: Consent of instructor and Speech-Language Hearing major. FLD.

SPLH 470. Study Abroad Topics in: ____. 1-5 Hours. S.
A course designed to enhance international experience in topic areas related to speech-language-hearing at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission. LEC.

SPLH 471. Directed Study Abroad in Speech-Language Hearing. 1-3 Hours. S.
An independent study designed to enhance international experience in topic areas related to speech-language hearing. Investigation of special topic or project selected by the student with advice, approval, and supervision by a KU SPLH instructor and an authorized agent of the study abroad site. Experience must be arranged through the Office of KU Study Abroad. Such study may take the form of directed reading and/or directed research/clinical observation. A daily journal and final report is required. A maximum of six hours of credit may be counted, with no more than three in a single area of study. Prerequisite: Consent of instructor IND.
SPLH 499. Directed Study in Speech-Language-Hearing. 1-3 Hours. AE61 / S.
Investigation of special topic or project selected by the student with advice, approval, and supervision of an instructor. Such study may take the form of directed reading and/or directed research/clinical observation. Individual reports and conferences. (Distribution credit given for two-three hours only.) A maximum of six hours of credit may be counted, with not more than four in a single area of study.) Prerequisite: Consent of instructor. IND.

SPLH 565. Language Sample Analysis Lab. 1 Hour. S.
The study of the analysis of language produced by children with respect to its phonological, lexical, morphological, syntactic, and pragmatic characteristics. Prerequisite or corequisite: SPLH 566. LAB.

SPLH 566. Language Development. 3 Hours. SI GE3S / S.
Study of language acquisition in children, including phonologic, morphologic, syntactic, and semantic components. Methods of language measurement, the role of comprehension, and pragmatic aspects of language use are included. May be taught in lecture or online format. LEC.

SPLH 568. Introduction to Audiological Assessment and Rehabilitation. 4 Hours. U.
Introduction to methods for assessing and treating hearing disorders in adults and children, as well as conditions that result in hearing loss. Course includes clinical observation and extensive hands-on experience with clinical techniques. Prerequisite: SPLH 663. LEC.

SPLH 571. Introduction to Speech-Language Pathology. 4 Hours. U.
This course provides training in clinical management of communicative disorders in children and adults. Principles of evaluation, application of diagnostic information, intervention planning, intervention process, data collection and application, report writing, and interactions with parents and other professionals are examined. Participation in observation and laboratory activities is required. LEC.

Research Methods is about the methods used to conduct, describe and evaluate science in communication disorders. Goals for learner outcomes include: 1) evaluation of research including adequacy of research to address scientific and clinical problems, 2) reading, summarizing and describing research through a literature review, 3) describing a hypothetical research study that addresses a specific question or hypothesis identified by the student, and 4) providing constructive peer reviews of research paper drafts. Prerequisite: 9 credits of SPLH course work; English 101 and ENGL 102 (or course meeting core skill in written communication); or consent of instructor. LEC.

SPLH 670. Beginning Clinical Practice in Audiology. 1-3 Hours. N.
Testing of hearing using pure tone air and bone conduction tests with both normal and hearing-impaired individuals. Prerequisite: Completion of or concurrent enrollment in SPLH 668. FLD.

SPLH 672. Clinical Practice in Speech-Language Pathology. 3 Hours. S.
Clinical practice with children and adults. Group and individual conferences with staff required. Repeatable once for credit. Prerequisite: SPLH 671 and overall GPA of 3.0. FLD.

SPLH 699. Speech-Language Pathology. 3 Hours. S.
Concepts and principles relevant to the perception of speech with emphasis on the auditory system; acoustics, psychophysical methods, and basic subjective correlates of speech perception. Prerequisite: SPLH 662 and SPLH 663, or consent of instructor. LEC.

SPLH 761. Aural Rehabilitation. 3 Hours.
Study of the communication problems associated with hearing loss. Introduction to aural habilitative intervention related to speech, language, and academic achievement in children with early hearing loss, as well as, communication strategies training for adults with acquired hearing loss. Prerequisite: SPLH 669 or equivalent. LEC.

SPLH 764. Seminar in: _____. 1-3 Hours.
The subject matter of this seminar will be special topics from speech pathology and audiology. Special prerequisite may be established for a given topic. LEC.

SPLH 784. Proseminar in Communication and Aging. 1 Hour.
A weekly forum for students and faculty to discuss professional issues and interdisciplinary research in communication and aging. May be repeated for credit. (Same as COMS 784.) (Same as PSYC 784.) Prerequisite: Consent of instructor. LEC.

SPLH 799. Proseminar in Child Language. 2 Hours.
a review and discussion of current issues in children's language acquisition. May be repeated for credit. Students are graded S/F. (Same as ABSC 797, LING 799 and PSYC 799.) (Formerly HDFL 797.) LEC.

SPLH 816. Language Development. 3 Hours.
Study of language acquisition in children, including the morphologic, syntactic, and semantic components. Methods of language measurement, the role of comprehension, and pragmatic aspects of language use will be included. Not open to students who have credit for SPLH 566. Laboratory by appointment. LEC.

SPLH 820. Developmental Phonological Disorders. 2 Hours.
Focuses on speech and non-speech characteristics of children with developmental phonological disorders. Emphasis placed on collection and phonetic transcription of speech samples, phonological analysis of transcribed data, and decision-making processes in assessment and intervention. LEC.

SPLH 822. Dysarthria/Apraxia. 2 Hours.
This course describes the neuroanatomic bases of motor-speech processes, the diagnosis, classification, assessment, prognosis, and treatment of dysarthria(s) and apraxia(s). LEC.

SPLH 824. Fluency Disorders. 2 Hours.
The nature of stuttering in children and adults is discussed. Theories regarding etiology, development, and maintenance of the disorder are presented. Emphasis is placed on various clinical approaches to assessment, measurement, and treatment. LEC.

SPLH 826. Phonatory Disorders. 2 Hours.
This course reviews the function of the laryngeal and respiratory mechanisms including the parameters and processes of phonation. Primary content addresses diagnosis, description, and treatment of organic and non-organic disorders of phonation. LEC.

SPLH 828. Speech Disorders in Special Populations. 2 Hours.
This course reviews anatomy and physiology of the velopharyngeal mechanism. Diagnosis and management of velopharyngeal dysfunction and associated problems considered. Anatomy, physiology, and rehabilitation associated with certain oral, pharyngeal, and laryngeal abnormalities discussed. Emphasis is on the speech problems of adults following medical management. Populations include individuals with laryngectomies, glossectomies, and tracheotomies. LEC.

SPLH 832. Dysphagia. 2 Hours.
This course covers normal and disordered swallowing. Evaluation and treatment of swallowing disorders, dysphagia team, and dysphagia in special populations are considered. LEC.
SPLH 836. Genetics of Communication and Learning Disorders. 2 Hours.
This course focuses on the description, assessment, and treatment of communication problems associated with particular genetic syndromes (e.g., Down's, Turner's syndromes). Also covered are current data about the genetic factors involved in nonsyndromic communication and learning problems, such as those commonly seen in the schools. Ethical and practical issues in these areas are discussed. LEC.

SPLH 840. Language Disorders of Children: Infants and Toddlers. 2 Hours.
This course examines factors relating to language disorders in the birth to three population. At-risk populations, as well as those with known etiologies, are considered. Information on assessment, intervention, and service delivery models is addressed. Issues relating to Public Law 99-457 are also examined. LEC.

SPLH 842. Language Disorders of Children: Preschool. 2 Hours.
This course examines language disorders of preschool-age children in the late preschool years. The course includes information on incidence, characteristics, assessment, and intervention. Theoretical issues and their implication for language intervention are also examined. LEC.

SPLH 844. Language Disorders of Children: School Age. 2 Hours.
This course examines language development during the school years and how problems in this development interact with school performance. Emphasis is placed on the role of the speech-language pathologist in the early identification, assessment, and remediation of language-learning problems. LEC.

SPLH 846. Language Disorders of Adults. 2 Hours.
Neurological aspects of language processes, classification of aphasia, and assessment of language deficits are discussed. Management approaches including intervention strategies and rehabilitation are also considered. LEC.

SPLH 848. Language Disorders of Special Populations. 2 Hours.
This course focuses on the unique language impairments of individuals with mental retardation, autism, cerebral palsy, hearing impairments, dual sensory impairments, and other communication disorders (e.g., ADD). Language characteristics as well as assessment and intervention strategies are studied. LEC.

SPLH 850. Language Disorders Secondary to Closed Head Injury and Dementia. 2 Hours.
Neuroanatomy and physiology relevant to diffuse brain injury are discussed. Characteristics and intervention strategies relating to traumatic brain injury and dementia are studied. LEC.

SPLH 852. Augmentative and Alternative Communication. 2 Hours.
This course describes augmentative and alternative communication (AAC) assessment and intervention issues as they apply to children and adults with both congenital and acquired speech and/or language disabilities. Areas of study include AAC systems, assessment strategies and procedures, intervention strategies, and AAC information resources. LEC.

SPLH 854. Reading Disorders. 2 Hours.
This course addresses the perceptual, linguistic, and cognitive processes utilized in written communication. Acquired and developmental disorders of written language are examined in relation to issues concerning characteristics, etiology, early identification, assessment, and remediation. LEC.

SPLH 860. Evaluation of Speech and Language. 2 Hours.
Provides a general framework for speech and language evaluations. Issues related to initiation and termination of treatment are discussed. Practice is provided in evaluating norm- and criterion-referenced information used in diagnostic, referral, and treatment decisions. LEC.

SPLH 861. Seminar in Research Methodology in Speech Pathology and Audiology: ______. 3 Hours.
This seminar is concerned with the design, instrumentation, execution, and reporting of research in audiology and speech pathology. SPLH 760 or its equivalent and some statistics are recommended before entering this seminar. LEC.

SPLH 862. Clinical Processes. 1 Hour.
Orients student to clinical procedures, policies, requirements, and expectations of program. Therapy models, planning, and philosophies are discussed along with implementation and evaluation of therapy procedures. Professional issues are also considered. May be repeated for credit. LEC.

SPLH 864. Advanced Clinical Practice in Speech-Language Pathology. 1-6 Hours.
Students conduct supervised clinical work in a variety of settings. May be repeated for credit. Prerequisite: Department approval. Group and individual conferences with staff required. FLD.

SPLH 866. Field Study in Speech-Language Pathology. 5-12 Hours.
The field study provides work experiences in clinical and/or research activities. The student takes this course near the end of the degree program. Assignments include supervised work in a variety of approved settings. May be repeated for credit. Prerequisite: Advisor's consent. FLD.

SPLH 868. Professional Seminar. 1 Hour.
Forum for the presentation and discussion of scientific and professional issues by faculty and advanced graduate students. May be repeated for credit. LEC.

SPLH 874. Research Practicum. 1-3 Hours.
Application of research methodology in a laboratory situation. Emphasis is on direct participation in designing and conducting an experimental investigation in speech, language, or hearing. May be repeated for up to a maximum of 3 credits. Prerequisite: SPLH 660 or equivalent research methods course. RSH.

Investigation of special topics by individual master's level students. Paper required. Prerequisite: Consent of instructor. RSH.

SPLH 880. Seminar in Speech-Language Pathology: ______. 1-3 Hours.
May be repeated for credit. LEC.

SPLH 886. Investigation and Conference (For Master's Candidates). 1-8 Hours.
(Limited to eight hours credit toward the M.A. degree.) Directed research and experimentation for M.A. students in some phase of speech science. RSH.

SPLH 889. Master's Thesis. 1-6 Hours.
THE.

SPLH 900. Proseminar in Communicative Disorders. 1 Hour.
A weekly forum for students and faculty to discuss professional issues and interdisciplinary research in communicative disorders and related fields. May be repeated for credit. Limited to two hours credit counted toward an MA or AuD degree. Limited to four hours credit counted toward the PhD degree. Graded on satisfactory/unsatisfactory basis. SEM.

SPLH 961. Experimental Phonetics I. 3 Hours.
This course will provide a description of the acoustic properties of the major classes of speech sounds, and will describe how these properties
SPLH 962. Experimental Phonetics II. 3 Hours.
This course will examine the current methodologies utilized in speech physiology research, and will review the findings of recent research into the movement patterns of individual speech articulators. The course will emphasize the interpretation of individual research results in terms of an overall theory of speech motor timing and control. LEC.

SPLH 963. Seminar in Hearing Science. 3 Hours.
Considers more advanced research problems in hearing science including psychoacoustics, speech perception, physiology. Prerequisite: Consent of instructor. LEC.

SPLH 964. Seminar in: _________. 1-3 Hours.
The subject matter of this seminar will be special topics from speech pathology and audiology, including those related to research methodology and research or academic careers. Special prerequisites may be established for a given topic. LEC.

SPLH 966. Seminar in Language Development. 3 Hours.
The course pertains to relevant research regarding infant speech development, vocabulary development, linguistic development, articulation development, and language retardation. (Same as ABSC 920, formerly HDFL 920.) LEC.

SPLH 967. Seminar in Articulation. 3 Hours.
Research and important clinical procedures pertaining to discrimination, structural, and physiological considerations, causal factors in defective articulation, and principal therapeutic approaches are carefully examined. LEC.

SPLH 968. Seminar in Communication Disorders. 3 Hours.
Study in depth of the communication behavior associated with brain injury and/or oral anomalies. LEC.

SPLH 969. Laboratory Instrumentation for Speech and Hearing Research. 3 Hours.
Instruments for speech and hearing research, their design and application. Experimental projects using laboratory equipment. Designing equipment for special purposes. Prerequisite: SPLH 962. SPLH 962. LEC.

SPLH 970. Independent Study in Problems of Speech and Hearing. 1-6 Hours.
Investigation of special topics by individual students. Paper required. RSH.

SPLH 972. Extensions of Clinical Management. 3 Hours.
This course is designed to provide didactic and practical experience in methods of obtaining diagnostic information and generalization of speech and language responses away from the clinical setting. Models for effecting behavioral change and data collection will be discussed and utilized. FLD.

SPLH 974. Research Practicum. 1-6 Hours.
Application of research methodology in a laboratory situation. Emphasis is on direct participation in designing and conducting an experimental investigation in speech or hearing. FLD.

SPLH 975. Directed Teaching: Speech Pathology and Audiology. 1-3 Hours.
Provides experiences in classroom and laboratory instruction under supervision of graduate faculty. Variable credit to reflect amount of instructional responsibility assumed. May be repeated up to a maximum of six semester hours. FLD.

SPLH 976. Independent Study in Grant Writing. 1-3 Hours.
Students will identify a funding agency appropriate for their research, learn the application procedures for that agency, and draft a grant application following the identified agency's format. The faculty mentor will arrange for a review of the grant application following the agency's review criteria and format. May be repeated up to a maximum of three credits. IND.

SPLH 982. Issues in Scientific Conduct. 3 Hours.
Lectures and discussion on issues in the conduct of a scientific career, with emphasis on practical topics of special importance in behavioral science. Topics will include the academic and scientific roles of behavioral scientists, establishing a research lab, communicating research findings, tenure processes, gender equity, ethical conduct, and good scientific citizenship. Discussions will highlight important case studies. (Same as PSYC 982.) LEC.

SPLH 998. Investigation and Conference (For Doctoral Candidates). 1-8 Hours.
(Limited to eight hours credit towards the Ph.D. degree.) Directed research and experimentation for Ph.D. students in some phase of speech science. RSH.

SPLH 999. Doctoral Dissertation. 1-12 Hours.
THER.

Clinical Doctor of Speech-Language Pathology

The SLPD program is designed for post-master's speech-language pathologists holding the ASHA Certificate of Clinical Competence and wanting to specialize in an area of interest with a clinical doctoral degree. At this time, the SLPD program does not require accreditation from ASHA.

Master's Degree and GPA

Admission to the SLPD program requires a master's degree in speech-language pathology from an ASHA accredited university program (http://www.asha.org/uploadedFiles/CAAAccreditedPrograms.pdf) with a cumulative grade point average of a minimum of 3.0 on a 4.0 scale. Note that applicants with higher GPAs may receive admissions preference.

ASHA Certification

In addition, applicants must present evidence of current ASHA Certificate of Clinical Competence (http://www.asha.org/certification).

English Language Requirement

All students are subject to the TOEFL requirement if his/her native language is not English. The requirement is posted in the Academic Catalog (p. 2395) and on the International Programs (http://www.kumc.edu/international-programs/academic-english-requirements.html) website.

Background Check

The Joint Commission requires all incoming students to pay for a background check, (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html) and this may affect eligibility to enter the program. Applicants will be asked to provide information and make the payment once officially accepted into the program. For more information, please see the School of Health Professions background check instructions. (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html) A drug screening is required of all students participating in clinical settings.
Technical Standards and Accommodations
Please read the program technical standards (http://www.kumc.edu/school-of-health-professions/ipcd/speech-language-pathology-(slpd)/technical-standards.html) carefully. Signed verification will be required of students after they have been accepted. Reasonable accommodations will be made for any accepted student who has a documented disability and can meet program expectations. Applicants with documented disabilities can request reasonable accommodations if needed during the admissions process.

International Students:
An applicant is considered an international student if he or she requires a visa, or currently resides in the U.S. with non-immigrant status, or currently resides in the U.S. while applying for permanent residency. Additional requirements and documentation, such as proof of English language proficiency, are required for international students to become eligible for KU programs. Please visit the KU Office of International Student Services before applying. More information: information for international students in the School of Health Professions. (http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html)

Contact ipcd@ku.edu (hearingspeech@kumc.edu) with any questions.

Curriculum
What does an SLPD plan of study look like?
All students complete an evidence-based course sequence and a capstone project of their own design. Remaining elective courses are taken within and outside of the department and are tailored to the student’s interests and career goals.

All plans of study are individualized to student interests and are created through collaboration between the student and the mentor. A minimum 30 credit hours are required to complete the SLPD program requirements.

Is there an opportunity for distance learning?
Yes, although it is not possible at the moment to complete the full SLPD curriculum remotely. Course work within the program is, in some cases, accessible without being physically in the classroom. Depending on a student’s plan of study, course work or other experiences could also be done offsite or via distance education. However, at the moment, there are no plans to offer the SLPD in a completely online or distance education format.

Is a dissertation required?
A dissertation is not required. SLPD students will complete a capstone project. Capstone projects may take a wide variety of forms, but most are long-term investigative projects relating to the student’s professional interests and with clinical applicability in the work setting. Capstone projects will be in written form, with a final presentation to the student’s committee. The project must include a plan for dissemination to relevant audiences/readers.

Will I be required to complete additional clinical experiences?
Because SLPD students enter this program with ASHA certification, no additional clinical experiences are required. However, students may choose to include further clinical experiences as a part of their identified plan of study. Additionally, students may be asked to apply clinical methodologies discussed in course work in their professional settings, and subsequently report on the outcomes.

Doctor of Audiology
The Doctor of Audiology (Au.D.) degree is intended to produce audiologists for clinical practice and is designed to be completed in four years (including summers).

This program has been planned to meet the academic and clinical requirements of the American Speech-Language-Hearing Association (ASHA). The ASHA Council on Academic Accreditation in Audiology and Speech-Language Pathology accredits this program.

A combined Au.D./Ph.D. track also is available. This track facilitates the completion of both degrees in a 6-year post-baccalaureate period. Students who wish to earn both Au.D. and Ph.D. degrees should contact their advisor.

A baccalaureate degree with a cumulative 3.0 GPA on all courses taken is required. It is expected that students will have obtained a broad general education to serve as a background prior to their graduate study. Undergraduate course work in mathematics and in basic and applied sciences is strongly encouraged. Official scores from the Graduate Record Examination must be submitted prior to admission.

If the baccalaureate degree is not in the area of audiology or communication sciences and disorders, applicants should have 12 hours of basic sciences and mathematics in addition to courses in the following content areas (or their equivalents):

- Survey/Overview of Communication Disorders
- Language Science/Development
- Introductory Acoustics
- Research Methods
- Speech and Hearing Science
- Phonetics/Phonological Development
- Audiology (introductory level)
- Speech-Language Pathology (introductory level)

Background Check
The Joint Commission on Accreditation of Healthcare Organizations requires all incoming students to pay for a background check (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html). This one-time fee must be paid directly to the company performing the background investigation. You will be asked to provide information and make the payment once you have been officially accepted into the program. For more information, please see the School of Health Professions Background Check Instructions. (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html) A drug screening may be required prior to work in clinical settings.

Technical Standards and Accommodations
Please read the program technical standards (http://www.kumc.edu/school-of-health-professions/ipcd/audiology-%28aud%29/technical-standards.html) carefully. Signed verification will be required of students after they have been accepted. Reasonable accommodations will be made for any accepted student who has a documented disability and can meet program expectations. Applicants with documented disabilities can request reasonable accommodations if needed during the admissions process.

International Students:
An applicant is considered an international student if he or she requires a visa, or currently resides in the U.S. with non-immigrant status, or currently resides in the U.S. while applying for permanent residency. Additional requirements and documentation, such as proof of English language proficiency, are required for international students to become eligible for KU programs. Please review the information for international students (http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html) before applying.

International students or those for whom English is a second language must meet minimum English proficiency (p. 2395) requirements, as indicated by TOEFL or equivalent exam scores. International students may have additional requirements for visa, residency, and citizenship status. Students should contact the Office of International Programs (http://www.kumc.edu/international-programs.html) for guidance regarding these issues during the application process.

For more information or to contact the program, please visit the IPCD website (http://hearing.kumc.edu).

The Au.D. program prepares students to meet the academic and clinical requirements for the ASHA Certificate of Clinical Competence. The degree is designed to be completed in 4 years (including summers, with a common entry point in fall semester). A minimum of 102 credit hours including academic course work, independent research, and clinical practicum is required.

To obtain the Certificate of Clinical Competence in Audiology, a minimum of 1820 clock hours of supervised clinical experience must be completed while enrolled in an accredited educational program. KU’s Au.D. program is designed to provide the required clinical experience. Specific guidelines for certification are contained in the ASHA Certification and Membership Handbook, available on the ASHA website http://www.asha.org/.

### Audiology Didactic Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUD 810</td>
<td>Diagnostic Audiology</td>
<td>4</td>
</tr>
<tr>
<td>AUD 811</td>
<td>Hearing Disorders</td>
<td>3</td>
</tr>
<tr>
<td>AUD 813</td>
<td>Psychoacoustics and Theories of Hearing</td>
<td>3</td>
</tr>
<tr>
<td>AUD 814</td>
<td>Hearing Conservation</td>
<td>2</td>
</tr>
<tr>
<td>AUD 816</td>
<td>Speech Perception</td>
<td>2</td>
</tr>
<tr>
<td>AUD 817</td>
<td>Pediatric Audiology</td>
<td>3</td>
</tr>
<tr>
<td>AUD 818</td>
<td>Vestibular Systems and Disorders</td>
<td>3</td>
</tr>
<tr>
<td>AUD 819</td>
<td>Hearing Aids I</td>
<td>3</td>
</tr>
<tr>
<td>AUD 820</td>
<td>Rehabilitative Audiology and Counseling</td>
<td>3</td>
</tr>
<tr>
<td>AUD 821</td>
<td>Hearing Aids II</td>
<td>3</td>
</tr>
<tr>
<td>AUD 822</td>
<td>Electro-Acoustics and Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>AUD 823</td>
<td>Cochlear Implants and Hearing Assistance Technologies</td>
<td>2</td>
</tr>
<tr>
<td>AUD 824</td>
<td>Central Auditory Processing</td>
<td>2</td>
</tr>
<tr>
<td>AUD 828</td>
<td>Genetics and Hearing Loss</td>
<td>2</td>
</tr>
<tr>
<td>AUD 829</td>
<td>Anatomy and Physiology of the Hearing and Vestibular Mechanisms</td>
<td>3</td>
</tr>
<tr>
<td>AUD 851</td>
<td>Auditory Evoked Potentials</td>
<td>3</td>
</tr>
<tr>
<td>AUD 853</td>
<td>Pharmacology for Audiology</td>
<td>2</td>
</tr>
<tr>
<td>AUD 858</td>
<td>Business Audiology</td>
<td>2</td>
</tr>
<tr>
<td>AUD 940</td>
<td>Seminar in Audiology: _______</td>
<td>1-4</td>
</tr>
<tr>
<td>AUD 941</td>
<td>Grand Rounds in Audiology (taken fall and spring of Years 1-2 for a total of 6 credits)</td>
<td>6</td>
</tr>
</tbody>
</table>

### Audiology Clinical Courses

A minimum of 29 credit hours is required:

- During Years 1 and 2: AUD 843 Clinic Practice in Audiology (minimum of 9 credit hours; 1 credit hour equals 1-half day in clinic during fall and spring, 1 day a week in summer)
- During Year 3: AUD 944 Clinical Rotation (minimum of 5 credit hours; 1 credit hour equals 1 day in clinic during fall and spring, 2 days a week in summer).
- During Year 4: AUD 945 Clinical Externship (40 hours per week in clinic: 6 credit hours in fall and spring, 3 credit hours in summer).

### Elective Courses

The Au.D. curriculum requires a total of 4-5 elective courses (12 credits); a minimum of two of these (6 credits) must be statistics courses.

Choice of statistics and elective courses will be determined in consultation with the academic advisor.

### PRAXIS Examination and Research Project

In addition to didactic, clinical, and elective courses, students must successfully complete the PRAXIS examination at the end of 3 full years of graduate study and a research project completed through enrollment in a minimum of 4 hours of AUD 846 Independent Study in Problems in Audiology. Projects are to be completed and presented to a faculty-student forum in the spring of Year 3.

### Oral Comprehensive Exam

Students must successfully complete an oral, comprehensive examination during Year 3 through enrollment in AUD 846 Independent Study in Problems in Audiology.

Note: Contact your department or program for more information about the Research Skills and Responsible Scholarship requirement for doctoral students. Also, please see this policy listed in the Graduate Studies section of the online catalog and in the KU Policy Library.

### Clinical Laboratory Sciences

#### General Information

The department offers a bachelor's degree in clinical laboratory science with a concentration in clinical laboratory science or molecular biotechnology as preparation for entry-level positions as medical laboratory scientists or molecular biotechnologists. The undergraduate program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (http://www.naaccs.org), 5600 N. River Road, Suite 720, Rosemont, IL 60018, 773-714-8880.

The department also offers a master's degree in molecular biotechnology. This program prepares students for advanced careers in molecular biotechnology-oriented clinical, industrial, and research laboratories. The application of these skills to research and development is emphasized.

Located at the region's premier academic health center, the Department of Clinical Laboratory Sciences is a part of the School of Health Professions (http://healthprofessions.kumc.edu) on the Medical Center campus of the University of Kansas. KU Medical Center (http://www.kumc.edu) is located in the heart of the Kansas City metropolitan area.
area at 39th and Rainbow Boulevard – about 40 minutes away from the main KU campus (http://www.ku.edu) in Lawrence, Kansas.

Advising and FAQ
For information about undergraduate clinical laboratory science at KU, please visit the department’s website (http://cls.kumc.edu). Students interested in entering this field should contact an advisor as early in their collegiate careers as possible to ensure prerequisite course work will be completed on schedule. Advising and campus visits are available Monday-Friday by appointment. Please email clsed@kumc.edu for information. For advising on the KU Lawrence campus, please see the KU Undergraduate Advising Center (http://advising.ku.edu) or visit Strong Hall Room 132.

Courses

CLS 210. Introduction to Clinical Laboratory Sciences. 1 Hour.
An introductory overview of the professions of Clinical Laboratory Sciences and Cytotechnology including types of analyses performed, specialties, interrelationships in the health care system and a visit to a clinical laboratory. This course will enable those considering a major in the Clinical Laboratory Sciences to have a clear definition of the professions. (Same as BIOL 210.) LEC.

CLS 520. Phlebotomy. 1 Hour.
Principles and practice of collecting blood specimens for clinical laboratory analyses. Includes specimen identification, equipment, anticoagulants, safety precautions, specimen transport, and processing. Hepatitis immunization required. Prerequisite: Admission to the Clinical Laboratory Science Program or consent of instructor. LAB.

CLS 523. Fundamentals of Analytical Techniques Laboratory. 3 Hours.
Student laboratory with recitation addressing techniques and methodologies used in the clinical laboratory. Laboratory skills include laboratory math, quality control, pipetting, and instrumentation used in analysis of body fluids. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor. LAB.

CLS 530. Clinical Chemistry I. 3 Hours.
Introduction to human physiology and pathophysiology I with emphasis on proteins, carbohydrates, lipids, enzymes, liver kidney function, blood gases and body fluids. The related clinical chemistry tests, their principles, analysis, interpretation, and significance are included. Prerequisite: CLS 523 or consent of instructor. LEC.

CLS 532. Clinical Microbiology I. 3 Hours.
Pathogenesis and disease processes of pathogenic, opportunistic, and saprophytic bacteria; composition and preparation of media; sterilization and disinfection; antimicrobial agents and susceptibility testing; topics related to theory and applications. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor. LEC.

CLS 533. Clinical Microbiology I Laboratory. 3 Hours.
A laboratory with recitation addressing diagnostic procedures used for isolation and identification of clinically significant bacteria. Prerequisite: CLS 532 or CLS 532 concurrently, or consent of the instructor. LAB.

CLS 536. Hematology I. 3 Hours.
Fundamentals of hematopoiesis; the physiology, function, and cytochemistry of normal and abnormal blood cells; the theory and performance of clinical laboratory methods related to these parameters. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor. LEC.

CLS 537. Hematology I Laboratory. 2 Hours.
A laboratory with recitation emphasizing basic hematologic techniques and identification of normal and abnormal cells in peripheral blood and bone marrow. Prerequisite: CLS 536, or CLS 536 concurrently, or consent of the instructor. LAB.

CLS 538. Immunology. 3 Hours.
Covers basic theory of molecular and cellular immunology of innate and adaptive immune systems. Lectures include: structure and function of antibodies, complement, major histocompatibility complexes, B- and T-cells and their receptors, cellular and molecular basis of the immune response and immune regulation, hypersensitivity, and immune tolerance. Clinical applications and methodologies will be incorporated into lectures. Prerequisites: Admission to the Department of Clinical Laboratory Sciences or consent of instructor. LEC.

CLS 540. Clinical Chemistry II. 2 Hours.
Introduction to human physiology and pathophysiology II with emphasis on hormones, therapeutic drugs, clinical toxicology, tumor markers, vitamins and trace elements. The related clinical chemistry tests, their principles, analysis, interpretation, and significance are included. Prerequisite: CLS 530 or consent of instructor. LEC.

CLS 541. Professional Development. 2 Hours.
This course combines lectures and projects to give students an introduction to and practice in the following: resume writing and interviewing skills; the components of and the production of a scholarly product; the basic principles involved in education with the identification and writing of educational objectives; the activities and responsibilities involved in laboratory management. Prerequisite: CLS 520 - CLS 549 or consent of instructor. LEC.

CLS 542. Clinical Microbiology II. 2 Hours.
Pathogenesis, disease processes, and diagnostic protocols for parasites, medically important fungi and mycobacteria. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor. LEC.

CLS 543. Clinical Microbiology II Laboratory. 2 Hours.
A laboratory with recitation addressing diagnostic procedures used for isolation and identification of parasites, medically important fungi, and mycobacteria. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor. LAB.

CLS 544. Immunohematology I. 3 Hours.
Principles of immunohematology as applied to transfusion services, donor services, component preparation and storage, and transfusion therapy. Includes problem solving for transfusion related situations and evaluation of problems related to hemolytic disease of the newborn, autoimmune hemolytic disorders, and transfusion reactions. Prerequisite: BIOL 503 or CLS 538, CLS 546, or consent of instructor. LEC.

CLS 545. Immunohematology I Laboratory. 2 Hours.
Principles of immunohematology as applied to transfusion services, donor services, component preparation and storage, and transfusion therapy. Includes problem solving for transfusion related situations and evaluation of problems related to hemolytic disease of the newborn, autoimmune hemolytic disorders, and transfusion reactions. Prerequisite: BIOL 503 or CLS 538, CLS 546, or consent of instructor. LAB.

CLS 546. Hematology II. 3 Hours.
Lectures on hematopoiesis, the physiology, function, and cytochemistry of normal and abnormal blood cells, normal and abnormal hemostasis, and the theory and performance of laboratory methods related to these parameters. Prerequisite: CLS 536 and CLS 537 or consent of instructor. LEC.
CLS 547. Hematology II Laboratory. 2 Hours.
A laboratory with recitation involving performance of hematology laboratory procedures with emphasis on basic hematologic and coagulation techniques and the identification of normal and abnormal cells in the peripheral blood and bone marrow. Prerequisite: CLS 536, CLS 537 and CLS 546 or CLS 546 concurrently, or consent of the instructor. LAB.

CLS 549. Clinical Immunology I Laboratory. 2 Hours.
A laboratory with recitation involving performance of immunoassays. Emphasis on theory, methodologies, and clinical correlations. Prerequisites: CLS 523, BIOL 503 or CLS 538, or consent of instructor. LEC.

CLS 600. Introductory Biochemistry. 4 Hours.
An introduction to the chemistry and metabolism of carbohydrates, lipids, proteins, nucleic acids, and other biologically important molecules. Topics include cellular processes, reactions and interactions occurring in living organisms. Prequisite: Admission to the Department of Clinical Laboratory Sciences or consent of instructor. LEC.

CLS 605. Introduction to Molecular Diagnostics I. 1 Hour.
An introduction to molecular biology and molecular biological methodologies and technologies commonly used in basic, applied, and diagnostic laboratories. An emphasis is placed on molecular biology principles and techniques used in the clinical laboratory for diagnosis, prognosis, and treatment of disease. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor. LEC.

CLS 607. Introduction to Molecular Diagnostics I Laboratory. 1 Hour.
An introduction to molecular diagnostic methodologies and technologies commonly used in clinical laboratories. Principles and performance of nucleic acid isolation, restriction enzyme digestion, electrophoresis, amplification, hybridization, and analysis. Applications in infectious and genetic disease. Prerequisite: Admission to the Clinical Laboratory Science program or Cytotechnology program or consent of the instructor. LEC.

CLS 610. Advanced Biotechniques Lecture. 3 Hours.
A lecture course covering the theory behind a variety of current molecular, biochemical and immunologic techniques utilized in today's research and diagnostic laboratories. Material presented will include proper specimen preparation and handling; technique set-up and quality control; trouble shooting and technique modification. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor. LEC.

CLS 611. Advanced Biotechniques Laboratory. 2 Hours.
Student Laboratory course with practical application of selected molecular, biochemical, and immunologic techniques. Designed to provide limited experience with advanced chromatographic techniques (DEAE-cellulose, affinity columns, HPLC, and gas); multiple electrophoresis techniques (starch-gel, SDS-page, Southern blot); nucleic acid analysis and manipulation; ligand production and utilization; cell culture, including appropriate sterilization methods, aseptic handling, and steps to ensure attachment. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor. LAB.

CLS 615. Journal Club. 1 Hour.
Introduction to analysis of journal articles. Initial sessions will place an emphasis upon reading the article with an eye to replicating a described method or specific technique; analyzing data presented for validity; acceptance or rejection of the researchers' conclusions. Follow-up sessions will involve analyzing and presenting selected articles. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor. LEC.

CLS 620. Radiation Safety. 1 Hour.
A lecture course covering the structure of the atom, isotopes, and radioactivity. Emphasis will be on radiation protection and safe handling of isotopes. In addition, the student will be introduced to methods for detection and quantitation of radioactivity in biological materials. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor. LEC.

CLS 621. Biotechnology Methodologies Practicum. 4 Hours.
Placement of the student in a biotechnology core facility supporting molecular biological research from multiple laboratories. Such a core facility would provide, but not to be restricted to, the following methodologies: amino acid analysis; protein/peptide sequencing; peptide synthesis; DNA/RNA sequencing; oligonucleotide synthesis. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor. LAB.

CLS 622. Problems in Molecular Diagnostics. 2 Hours.
Provides a targeted review of current theory, techniques and application of molecular techniques in the diagnosis of infectious disease, and hereditary and acquired genetic disease. Prerequisite: Admission to the Clinical Laboratory Science or Cytotechnology program, or consent of instructor. LEC.

CLS 623. Molecular Genetics Practicum. 4 Hours.
Placement of the student in a molecular genetics research laboratory (utilizing either prokaryotic or eucaryotic organisms or both) working with laboratory staff on an on-going small project within the laboratory. Molecular genetics laboratories utilized could be involved in, but not restricted to, any of the following activities: gene sequencing, cloning or splicing; elucidation of the mechanisms that regulate gene expression; proto-oncogene activation. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor. LAB.

CLS 633. Special Topics Practicum. 4 Hours.
Placement of the student in any of a variety of research laboratories actively participating in molecular biological projects utilizing advanced genetic, biochemical immunologic, or other molecular techniques. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor. LAB.

CLS 639. Urinalysis. 1 Hour.
Tutorial instruction and clinical laboratory experience in urinalysis with the application of knowledge and skills to methodology, instrumentation, and quality control. Advanced content on renal disorders with emphasis on pathological mechanisms, interpretation, and clinical correlation of test results. Prerequisite: CLS 540, or consent of instructor. LEC.

CLS 640. Clinical Chemistry III. 2 Hours.
Tutorial instruction in advanced clinical chemistry focusing on correlation of laboratory analysis and pathophysiology. Addresses organ system disease, metabolic disease, nutrition, and other special topics. Prerequisite: CLS 540, or consent of instructor. LEC.

CLS 641. Clinical Chemistry and Immunology Practicum. 3 Hours.
Tutorial instruction and clinical laboratory experience in the chemistry of body fluids, with the application of knowledge and skills to methodology, instrumentation, and quality control. Involves correlation of chemical and immunological analyses to pathophysiology. Prerequisites: CLS 540 and CLS 549, or consent of instructor. LAB.

CLS 642. Clinical Microbiology III. 2 Hours.
Tutorial instruction addressing pathophysiology and diagnostic protocols of viruses, rickettsia, chlamydia, mycoplasma, and other unusual organisms. Prerequisites: CLS 532, CLS 533, CLS 542 and CLS 543, or consent of instructor. LEC.
CLS 643. Clinical Microbiology Practicum. 3 Hours.
Tutorial instruction and clinical laboratory experience in diagnostic microbiology, with the application of knowledge and skills to methodology, instrumentation, and quality control. Prerequisites: CLS 532, CLS 533, CLS 542 and CLS 543, or consent of instructor. LAB.

CLS 644. Immunohematology II. 2 Hours.
Tutorial instruction addressing advanced transfusion medicine theory and concepts. Focuses on hospital transfusion services, blood utilization, management, legal and regulatory issues, and special topics. Prerequisites: CLS 544 and CLS 545, or consent of instructor. LEC.

CLS 645. Immunohematology Practicum. 2 Hours.
Tutorial instruction and clinical laboratory experience in transfusion medicine, with the application of knowledge and skills to methodology, instrumentation, and quality control. Prerequisites: CLS 544, CLS 545, or consent of instructor. LAB.

CLS 646. Hematology III. 2 Hours.
Tutorial instruction on hematologic and hemorrhagic disorders with emphasis on pathological mechanisms, interpretation, and clinical correlation of test results. Prerequisites: CLS 546 and CLS 547, or consent of instructor. LEC.

CLS 647. Hematology Practicum. 3 Hours.
Tutorial instruction and clinical laboratory experience in hematology, with the application of knowledge and skills to methodology, instrumentation, and quality control. Prerequisites: CLS 546 and CLS 547, or consent of instructor. LAB.

CLS 648. Clinical Immunology II. 1 Hour.
Tutorial instruction on immune system involvement in disease processes, immune dysfunction and correlation of laboratory data with disease states. Prerequisite: CLS 549, or consent of instructor. LEC.

CLS 650. Clinical Laboratory Science Review. 1 Hour.
This review will enable students to identify areas of weakness in their understanding of clinical laboratory science in preparation for clinical rotations and comprehensive examination. Students will participate in classroom and laboratory sessions in order to evaluate their performance in meeting required competencies. Prerequisite: CLS 520-CLS 549 inclusive, CLS 605, CLS 607, CLS 661, and CLS 639-CLS 648 inclusive, or consent of instructor. LEC.

CLS 655. Molecular Biotechnology Review Course. 1 Hour.
Situation and problem solving oriented web based course that reviews material taught. This course will enable students to identify areas of weakness in their understanding of molecular biotechniques and their applications. Interactive question-answer format and a comprehensive, certification-type exam will aid students in evaluating their performance in meeting required competencies. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor. LEC.

CLS 661. Management Principles in Health Care. 3 Hours.
Introduction to basic principles of management, education, and research and their application in the current health care environment. Course content includes: management theory, scope of management, quality issues, budgeting, personnel issues, evaluation and application of management concepts; introductory research methods and evaluation of journal articles. Cross listed with HEIM 661 and RESP 661. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor. LEC.

CLS 670. Principles of Education in Clinical Laboratory Science. 1 Hour.
Educational concepts including principles of learning, curriculum design, evaluation, teaching methodologies, audiovisual and library resources, accreditation, student services, and legal considerations. Prerequisite: Admission to the Clinical Laboratory Science program or consent of instructor. LEC.

CLS 690. Special Topics. 1-5 Hours.
A course of study offering the student the opportunity for acquisition of additional knowledge and skills in one of the clinical laboratory routine areas or a specialty area, e.g., cytogenetics, metabolic analysis, or supervision; or at another clinical site. Course requirements designed in cooperation with student. Prerequisite: Admission to the Clinical Laboratory Science program or consent of instructor. LEC.

CLS 705. Fundamentals of Pathophysiology. 3 Hours.
Review of integrative human physiology with an emphasis upon homeostatic mechanisms and etiologies of disease. The interrelationships of function and dysfunction at the molecular, cellular and tissue level (pathology), organ and systemic level (impairment), and to the total human body (functional limitations) will be applied in each of the body systems. Discussions and applied materials will be tailored to the professional student population. Prerequisite: Admission to the Dietetics and Nutrition program or permission of the instructor(s). LEC.

CLS 710. Molecular Techniques I. 2 Hours.
A lecture course covering the theory underlying molecular techniques involving nucleic acids and mammalian cell culture. Topics include purification and analysis of nucleic acids, recombinant DNA, construction and screening of genetic libraries, genetic engineering, control of gene expression, construction of gene fusions, amplification, hybridization, and nucleic acid databases and bioinformatic analysis. Prerequisite: Admission to the MS in Molecular Biotechnology program or consent of instructor. LEC.

CLS 711. Molecular Techniques Laboratory I. 2 Hours.
A laboratory course emphasizing the application, practice, and trouble-shooting of molecular techniques involving nucleic acids and mammalian cell culture. Topics include purification and analysis of nucleic acids, recombinant DNA, genetic engineering, control of gene expression, construction of gene fusions, amplification, and hybridization. Topics are covered through a project-based approach. Prerequisite: Admission to the MS in Molecular Biotechnology program or consent of instructor. LAB.

CLS 720. Molecular Techniques II. 2 Hours.
Lecture and discussion course covering the theory and practice of molecular techniques for protein analysis. General topics include: protein detection, quantification, and characterization; protein separation and identification; protein expression systems; protein extraction, fractionation, solubilization and purification; analysis of protein-protein interactions; proteomics; and mass spectroscopy. Prerequisite: Admission to the MS in Molecular Biotechnology program or consent of instructor. LEC.

CLS 721. Molecular Techniques Laboratory II. 2 Hours.
Laboratory course for the practice and application of molecular techniques for analyzing and manipulating proteins. Techniques will include: bioinformatics analyses; expression, purification and solubilization of epitope tagged fusion proteins, protein-protein interactions; protein quantification; protein separation by electrophoresis and column chromatography; protein detection by chemical and immunological methods; and LC-MS. Prerequisite: Admission to the MS in Molecular Biotechnology program or consent of instructor. LEC.

CLS 730. Current Issues in Biotechnology. 1 Hour.
A seminar course that address topics including scientific, business, legal, social, and ethical issues in biotechnology. Students explore these topics through literature discussions, student presentations, and discussions with speakers from biotechnology-related academic and industry sectors.
This course is meant for graduate students in the Molecular Biotechnology program. Prerequisite: Consent of instructor. SEM.

CLS 740. Journal Club. 1 Hour.
This course is an introduction to the critical reading of journal articles from the current literature in molecular biotechnology. Discussions will emphasize the analysis of experimental design and technique, as well as the significance of the results and validity of the author's conclusions. Students will learn how to search for articles and background information pertaining to selected topics, and how to present a polished, professional summary of that literature. Assigned papers for discussion and student presentations will focus on new strategies and technologies in molecular biotechnology of wide fundamental importance, or on hypothesis-based research that uses molecular biotechnological approaches. Prerequisite: Completion of (or concurrent enrollment in) CLS 710 and CLS 720. LEC.

CLS 742. Scientific Writing. 1 Hour.
Formats, techniques, and styles of scientific writing. Emphasis will be placed on clear, concise, and effective writing. The class will focus on the process of writing scientific manuscripts and grant proposals. Students will identify and define the sections of scientific manuscripts as well as grant proposals. During the course, each student will write an R21-type (NIH Exploratory/Developmental Research Grant) proposals as could be submitted to the most appropriate NIH Institute. This course is intended for students enrolled in their final semester of the Master of Science in Molecular Biotechnology program. Prerequisite: Consent of Instructor LEC.

CLS 744. Topics in Molecular Biotechnology. 1-5 Hours.
Advanced course on special topics in molecular biotechnology, offered by arrangement. May include lectures, discussions, readings, laboratory techniques, and supervised research experience. This course is intended for graduate students in the Molecular Biotechnology program. Prerequisite: Consent of instructor. LEC.

CLS 750. Practicum I. 4 Hours.
Advanced practical experience in a selected laboratory pursuing applied, basic, or diagnostic research projects utilizing genetic, biochemical, or other molecular biology-related approaches. Students apply and extend their knowledge and skills by performing a research and/or development project under the supervision of a site mentor. This practicum is performed at a site other than those utilized for CLS 751 (Practicum II) and CLS 752 (Practicum III). Prerequisite: Completion of CLS 710, CLS 711, CLS 720, and CLS 721, and consent of the instructor. PRA.

CLS 751. Practicum II. 5 Hours.
Advanced practical experience in a selected laboratory pursuing applied, basic, or diagnostic research projects utilizing genetic, biochemical, or other molecular biology-related approaches. Students apply and extend their knowledge and skills by performing a research and/or development project under the supervision of a site mentor. This practicum is performed at a site other than those utilized for CLS 750 (Practicum I) and CLS 752 (Practicum III). Prerequisites: Completion of CLS 710, CLS 711, CLS 720, and CLS 721, and consent of the instructor. PRA.

CLS 752. Practicum III. 5 Hours.
Advanced practical experience in a selected laboratory pursuing applied, basic, or diagnostic research projects utilizing genetic, biochemical, or other molecular biology-related approaches. Students apply and extend their knowledge and skills by performing a research and/or development project under the supervision of a site mentor. This practicum is performed at a site other than those utilized for CLS 750 (Practicum I) and CLS 751 (Practicum II). Prerequisites: Completion of CLS 710, CLS 711, CLS 720, and CLS 721, and consent of the instructor. PRA.

Bachelor of Science in Cytotechnology

Fees
Visit the Cytotechnology website for detailed tuition and fee information.

Career Opportunities
Graduates are eligible to sit for national certification examinations for cytotechnologists. Successful completion of the examination provides a nationally recognized credential as a cytotechnologist.

Employment opportunities are available in hospitals, reference laboratories, governmental agencies, and educational institutions.

Undergraduate Admission
This program requires 3 years of preparatory college course work and one year of cytotechnology course work. The program is also open to students who have bachelor’s degrees, if they have completed the science and math prerequisites. Applications for the 1-year cytotechnology program are available on the school's website (http://healthprofessions.kumc.edu). Applications for the fall semester should be submitted by February 1 of the year for which admission is requested. The application must be accompanied by a complete college transcript and 2 letters of recommendation. A personal applicant interview is required.

Admission Requirements
Applicants to this program must have completed the required college preparatory course work before entering the program in the fall. Minimum entry requirements are 3 years of college work (90 semester credit hours), an overall grade-point average of 2.5, and a grade-point average of 2.7 in prerequisite biology, chemistry, and mathematics before enrolling in the cytotechnology program. The student must have earned a minimum grade of C in each prerequisite course. Admission to the program is a competitive process.

International students, or those for whom English is a second language, may have additional requirements relative to language proficiency, residency, and citizenship status. International students should review current requirements (http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html).

Good physical and mental health is essential. Minor physical handicaps are not considered deterrents. Physical examinations and a color-blindness test are required before registration in the professional course work. Prospective students should review the program requirements, including prerequisite course work, and complete list of application requirements at the program’s website.

Prerequisites

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<tr>
<th>Course Code</th>
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<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
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<tr>
<td>MATH 101</td>
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Required courses:

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<tr>
<th>Course Code</th>
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</thead>
<tbody>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
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</table>
B.S. Degree Requirements

This program requires 3 years of undergraduate college course work including a minimum of 90 semester credit hours at KU Lawrence campus, or at another university or community college and 1 year of professional courses at KU Medical Center. Students are allowed no more than 64 hours of lower-division classes.

To graduate from KU and be eligible to sit for the CT (ASCP) registry examination, students must have completed a minimum of 129 credit hours, including 39 hours in the cytotechnology program. To obtain a bachelor's degree from KU, a student must earn the least 30 hours of credit for the degree by resident study. Transfer students should be aware that all transfer courses for which they have requested credit must be equivalent to courses required at KU, or additional course work will be required. All other degree requirements must be fulfilled. All required science prerequisites must be passed with a grade of C or better. Detailed curriculum information is found on the program’s website.

Students must earn grades of B or above to continue in the program. Program requirements and course offerings are subject to change. Prospective students should contact the program for the latest information.

Clinical Program in Cytotechnology

The cytotechnology professional program requires enrollment during the fall, spring, and summer terms of the senior year. The following courses are required:

- **CYTO 300** Introduction to Cytology 5
- **CYTO 321** Neoplasia in the Female Genital Tract I 5
- **CYTO 322** Neoplasia in the Female Genital Tract II 6
- **CYTO 523** Fundamental Analytical Techniques Laboratory 1
- **CYTO 355** Cytology Lab Management, Respiratory Cytology and Oral Cytology 4
- **CYTO 370** Effusions, C.S.F., and Miscellaneous Cytology 3
- **CYTO 380** Gastrointestinal, Breast, G.U. and F.N.A. Cytology 6
- **CYTO 415** Scientific Method and Literature in Cytology 1
- **CYTO 420** Advanced Practicum in Cytology 2
- **CYTO 450** Advanced Topics in Cytology 2
- **CLS 605** Introduction to Molecular Diagnostics I 1
- **CLS 607** Introduction to Molecular Diagnostics I Laboratory 1
- **CLS 622** Problems in Molecular Diagnostics 2

4-Year Graduation Plan

B.S. in Cytotechnology

Course Sequence

This suggested sequence of course work may be helpful in planning enrollment during the first 3 years.

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<th>Freshman</th>
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<td>MATH 101</td>
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<tr>
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<tr>
<td>BIOL 350</td>
<td>3 COMS 130 or 150</td>
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Western civilization (or equivalent) 3  Western civilization (or equivalent) 3  
Social sciences elective 3  Humanities elective 3  
Art history 3  Biology elective 3  
Other elective 3  Other elective 3  

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<tr>
<th>Junior</th>
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**Fourth Year**

During the fourth year, students follow the curriculum for the Clinical Program in Cytotechnology (p. 690).

**Diagnostic Cardiac Sonography**

This is a 21-month certificate program designed to produce competent diagnostic cardiac sonographers through educational and clinical experiences at the region’s premier academic health center. This program is provided in collaboration with Mid-America Cardiology at the University of Kansas Hospital in Kansas City, Kan. and includes clinical opportunities in hospitals in the Kansas City metro area. It is one of many programs in health care available from the KU School of Health Professions.

A certificate from the University of Kansas is awarded to the student upon successful completion of the program. Graduates are eligible to take the national registry examinations given by Cardiovascular International Credentialing (CIC) and the American Registry of Diagnostic Medical Sonographers (ARDMS) in adult cardiac sonography.

More about this profession can be found on the program’s website (http://cardiacsonography.kumc.edu).

**Certificate in Diagnostic Cardiac Sonography**

This is a 21-month certificate program designed to produce competent diagnostic cardiac sonographers through educational and clinical experiences at the region’s premier academic health center. This program is provided in collaboration with Mid-America Cardiology at the University of Kansas Hospital in Kansas City, Kan. and includes clinical opportunities in hospitals in the Kansas City metro area. It is one of many programs in health care available from the KU School of Health Professions.

A certificate from the University of Kansas is awarded to the student upon successful completion of the program. Graduates are eligible to take the national registry examinations given by Cardiovascular International Credentialing (CIC) and the American Registry of Diagnostic Medical Sonographers (ARDMS) in adult cardiac sonography.

More about this profession can be found on the program’s website (http://cardiacsonography.kumc.edu).

A bachelor’s degree with emphasis in science is preferred. If the student does not have a bachelor’s degree, he or she must be registered or licensed in one of the following fields: radiography, nuclear medicine, nursing, ultrasound (or other 2-year health professions certificate program).

Prerequisite course work and minimum grade-point average requirements also apply. All college course work must be from accredited institutions. Credentials or transcripts not from an accredited U.S. academic institution require evaluation by the KU International Student Services Office before they can be accepted for eligibility.

**Prerequisites**

The following courses must be completed from accredited institutions to be eligible for the cardiac sonography program.

- Algebra
- English (or oral communication)
- Human anatomy and physiology
- Medical terminology
- Physics

A background check is required. Prospective students should review the complete program eligibility requirements and application instructions on the program’s website (http://www.cardiacsonography.kumc.edu).

**Certificate Program Requirements**

This is a 21-month certificate program. During the program, students spend 30 to 40 hours a week at clinical affiliates dividing time between didactic course work and hands-on clinical applications. The curriculum includes ultrasound physics and instrumentation and cardiac anatomy and physiology. It incorporates detailed, structured, and comprehensive course work and teaches the student to use independent judgment in the acquisition of diagnostic information.

At the University of Kansas Hospital and other clinical sites, the cardiac ultrasound department conducts a variety of diagnostic ultrasound examinations. During training, students receive experience in patient care and performance of the following procedures: routine echocardiograms, stress testing, and use of contrast imaging and transesophageal echocardiography.

The student receives extensive interactive experience with registered cardiac sonographers or cardiologists in a laboratory accredited by the Intersocietal Commission for Accreditation of Echocardiography Laboratories (http://www.intersocietal.org).

**Curriculum**

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Diagnostic Ultrasound Technology (General and Vascular)

Overview

KU’s Diagnostic Ultrasound and Vascular Technology certificate is an 18-month accredited certificate program that prepares the student sonographer to use complex ultrasound equipment in a clinical setting. The sonographer, after advanced training, uses high-frequency sound waves for diagnostic purposes under the direction of a radiologist. A certificate from the University of Kansas is awarded to the student upon successful completion of the program at its KU Medical Center campus in Kansas City, Kan.

Graduates are candidates to take the national registry examinations given by the American Registry of Diagnostic Medical Sonographers in the areas of abdomen, OB/GYN, vascular technology, and sonography and instrumentation. Those who pass the exams become Registered Diagnostic Medical Sonographers and Registered Vascular Technologists.

More about this program and the profession can be found on the program’s website (http://www.kumc.edu/school-of-health-professions/ultrasound.html).

The University of Kansas Diagnostic Ultrasound Vascular Technology program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS). The Commission on Accreditation of Allied Health Education Programs, 1361 Park Street, Clearwater, FL 33756; 727-210-2350, www.caahep.org (http://www.caahep.org).

Certificate in Diagnostic Ultrasound Technology (General and Vascular)

KU’s diagnostic ultrasound and vascular technology certificate is an 18-month accredited certificate program that prepares the student sonographer to use complex ultrasound equipment in a clinical setting. The sonographer, after advanced training, uses high-frequency sound waves for diagnostic purposes, under the direction of a radiologist. A certificate from the University of Kansas is awarded to the student upon successful completion of the program at its KU Medical Center campus in Kansas City, Kan. Instruction is provided by skilled professionals employed by The University of Kansas Hospital and KU Medical Center.

Graduates are candidates to take the national registry examinations given by the American Registry of Diagnostic Medical Sonographers in the areas of abdomen, OB/GYN, vascular technology, and sonography principles and instrumentation. Those who pass the exams become Registered Diagnostic Medical Sonographers and Registered Vascular Technologists.

More about this program and the profession can be found on the program’s website (http://www.kumc.edu/school-of-health-professions/ultrasound.html).

Admission

The following are required for entry to this program:

1. Applicant must have completed, or be currently enrolled in, at the minimum a 24-month radiologic technology program (60 semester credit hours or 84 quarter credit hours).

   Please note: The required RT program is not available at the University of Kansas – please visit the program website (http://www.kumc.edu/school-of-health-professions/ultrasound/eligibility-and-requirements.html) for schools offering accredited AART programs.

2. Applicants must be a registered radiologic technologist (ARRT) or must be registry-certified before program start date in September.

3. Post-secondary credits, with a cumulative grade-point average of 2.5 on a 4.0 scale, are required in the following courses:
   • Communication skills (English, speech, or composition)
   • General college-level physics and/or radiographic physics
   • Human anatomy and physiology
   • Algebra, statistics (or higher) mathematics course

4. The student will be required to pass the ARRT registry exam before entrance into the ultrasound program.

5. Good physical and mental health are essential to the field of ultrasound. Physical or other disabilities are evaluated on a case by case basis by the program and by the Office of Institutional Opportunity and Access. Please review the program’s technical standards (http://www.kumc.edu/school-of-health-professions/ultrasound/technical-standards.html) for details.

6. Background check: the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) requires all incoming students to pay for a background check. Applicants will be asked to provide information and make the payment once officially accepted into the program. A drug screening may also be required. For more information, please see School of Health Professions background check and drug screening information. (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html)

7. International students: an applicant is considered an international student if he or she requires a visa, or currently resides in the U.S. with non-immigrant status, or currently resides in the U.S. while applying for permanent residency. Additional requirements and documentation, such as proof of English language proficiency, are required for international students to become eligible for KU programs. Please review the information for international students (http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html) before applying.

Certificate Program Requirements

The student spends 40 hours a week in the 18-month program, with time divided between classroom courses and clinical application. Didactic
studies include courses in medical law and ethics, introduction to sonography, sonography principles and instrumentation, abdomen, OB/GYN, small parts, neurosonology, and vascular technology.

**Curriculum**

<table>
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<th>Year 1</th>
<th>Hours Spring</th>
<th>Hours Summer</th>
<th>Hours</th>
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**Dietetics and Nutrition**

KU offers the following programs in the fields of dietetics and nutrition:

**Dietetic Internship Graduate Certificate**

This program prepares graduates for a career as a registered dietitian. A baccalaureate degree from an accredited university or college and completed coursework approved by the Accreditation Council for Education in Nutrition and Dietetics is required. Graduates are eligible for the registration examination to acquire the RD credential.

**Dietetics and Integrative Medicine Graduate Certificate**

An opportunity for working professionals or graduate students, students in this program acquire knowledge to function as a skilled advisor to the patient and a collaborative member of multidisciplinary health care teams. Students may enter with bachelor’s or master’s degrees in dietetics, nutrition, biological sciences or other healthcare professions.

**Master of Science in Dietetics and Nutrition**

Designed for professionals in nutrition and other careers with a science background, this degree offers many benefits, including expanded job opportunities and increased knowledge in the science of nutrition. An online master’s degree through the Great Plains Interactive Distance Education Alliance is available to registered dietitians.

**Ph.D. in Medical Nutrition Science**

Students with degrees in nutrition or biological sciences have the opportunity for clinical and translational research at a world-class academic health center renowned for its research facilities. This program emphasizes training in the core sciences of nutrition, biochemistry, biostatistics and the most advanced research methodology.

Courses in nutrition are also available to students who are not seeking a degree or working professionals interested in continuing education.

More about careers and areas of study in dietetics and nutrition can be found on the department’s website (http://dietetics.kumc.edu).

**Courses**

**DIET 660. Management of Human Resources in Dietetics. 6 Hours.**
Focus on human resource development and utilization as the student works with food service personnel. Learning encompasses recruiting, training, supervision, and evaluation of employees in a food service system. Open only to seniors majoring in dietetics. Prerequisite: Management concepts or personnel administration. LEC.

**DIET 661. Management of Food Processing and Service. 6 Hours.**
Application of theories and concepts pertaining to management functions and interdepartmental relationships in a variety of clinical food service settings. Consideration is given to the newer technological developments in the administration of food services. Open only to seniors majoring in dietetics. Prerequisite: Food service systems and management in dietetics. FLD.

**DIET 662. Special Problems in Food Service Management. 3 Hours.**
Advanced experience in the practice of dietetics in an assigned setting. Problems and procedures will vary with interest and needs of the students. Open only to seniors majoring in dietetics. Prerequisite: Food service systems. FLD.

**DIET 672. Nutrition Care of Patients. 6 Hours.**
Directed observation and supervised experience in nutritional care of patients. Nutrition principles studied in DIET 670, Applied Normal Nutrition, and DIET 671, Nutrition in Medical Science, are applied in clinical situations. Open only to seniors majoring in dietetics. Prerequisite: Principles of nutrition; and nutrition throughout the life cycle. LEC.

**DIET 675. Seminar in Dietetics and Nutrition. 1 Hour.**
Involves study and discussion of text and general materials pertaining to philosophy and methodology in the field of dietetics and nutrition. Guest lecturers will participate. May be repeated for credit providing no course duplication takes place. Open only to seniors majoring in dietetics. Prerequisite: Introduction to dietetics. FLD.

**DIET 800. Selected Topics in Dietetics. 1-3 Hours.**
An elective course to allow student credit hours in special issues or problems in dietetics offered by individual faculty. Course content can provide students with investigation of problems and/or issues relevant to theory, research investigation and/or practice related to the field of nutrition and dietetics. LEC.

**DIET 801. Current Issues or Trends. 3 Hours.**
Review of current issues in the economic, social, ethical, political, legal, technological, and ecological environments and the effects of these changes on dietetics practice. LEC.

**DIET 802. Foods Writing for Professionals. 3 Hours.**
A course focusing on the writing skills needed by the food professional in order to communicate effectively in writing about food and food-related topics. Student experiences include hands-on projects in research and writing for various audiences and types of publications. LEC.

**DIET 803. Accounting Concepts & Analysis. 3 Hours.**
An emphasis on financial statement analysis is the main objective of the course. A review of all major accounts in the income statement, balance sheet and statement of cash flow is made in determining a firm’s performance and financial condition in relation to what matters most to shareholders and investors. Prerequisites: General Calculus and Linear Algebra LEC.

**DIET 805. Entrepreneurship Theory and Practice. 3 Hours.**
Development and management of small businesses or private practice within the dietetics industry. Business plan development, marketing, cost considerations. Overview of consulting to health care and hospitality operations and examination of skills required for success. LEC.
DIET 819. Grant and Scientific Writing for the Professional. 3 Hours.
Grant writing, identifying external funding, managing grants, preparing manuscripts for peer-reviewed publication, and preparing papers and poster for presentation at professional meetings. Prerequisite: Enrolled GPIDEA. LEC.

DIET 822. Healthcare Administration. 3 Hours.
A comprehensive review of today's health care institutions and their response to the economic, social/ethical, political/legal, technological, and ecological environments. LEC.

DIET 824. Financial Management and Cost Controls in Dietetics. 3 Hours.
This course overviews the fundamental knowledge of financial management, managerial accounting, and operational cost controls for dietetics professionals. Topics include a review of managerial accounting concepts for not-for-profit organizations and for-profit organizations based on the Uniform System of Accounts, value and risk analyses, budgeting, asset management, franchising and management contracts, cost-volume-profit analyses, and operational applications for financial performance. LEC.

DIET 829. Nutrition and Aging. 3 Hours.
An overview of nutrition and the aging process. Physiological, psychological, and sociological aspects of aging, theories of aging, internal and external factors related to nutrient intake, and nutrient needs will be considered. Physical activity and practical application to community settings is addressed. LEC.

DIET 830. Nutrition: a Focus on Life Stages. 3 Hours.
The influence of normal physiological stresses on nutritional needs throughout the life span will be explored. Evaluating nutritional status at different stages of life and identifying appropriate needs and services will be included while, at the same time, consideration given for specific characteristics such as physiological condition and cultural heritage. LEC.

DIET 832. Functional Foods for Chronic Disease Prevention. 3 Hours.
Integrate and evaluate the regulatory principles, food science, nutrient science and nutritional metabolism for the development of functional foods, nutraceuticals, and dietary supplements for chronic disease prevention. Prerequisites: Biochemistry, Human Nutrition, Basic Food Science or consent of instructor. LEC.

DIET 833. Principles of Statistics. 3 Hours.
A basic course in statistics: Statistical methods applied to experimental and survey data from social or natural sciences; test of hypotheses concerning treatment means; linear regression; product-moment, rank, and bi-similar correlations; contingency tables and chi-square tests. LEC.

DIET 834. Methods of Research in Nutrition. 3 Hours.
A study of basic research terminology and designs commonly used in nutrition research. Topics include: research on animals, tissue culture and human subjects; qualitative, quantitative and outcomes research; ethical issues in research; dissemination of research findings; and appropriate use of research findings. Prerequisite: Consent of instructor. LEC.

DIET 836. Biochemical, Physiological, and Genetic Aspects of Human Nutrition. 3 Hours.
The topics covered will examine the integration of biochemistry, physiology, genetics, and nutrition. Emphasis will be placed on developing an understanding of how the combination cellular structure and function is related to the metabolic needs of the cell and its response to the environment. The integrated approach will form a basis for evaluating nutritional needs in humans. Prerequisite: courses in nutrition, physiology, and biochemistry, or consent of instructor. LEC.

DIET 838. Advanced Medical Nutrition Therapy. 3 Hours.
This course will discuss the role of diet in disease including diet as a factor related to prevention of diseases or illness, diet as an etiologic agent in illness and diet as a treatment for disease. Medical nutrition therapy is the use of specific nutrition services to treat an illness, injury or condition and involves two phases: 1) assessment and 2) treatment, which includes diet therapy, counseling and/or the use of specialized nutrition supplements. LEC.

DIET 839. Clinical Aspects of Nutrition Support. 3 Hours.
The course content provides in depth study of specialized visceral and somatic nutrition assessment of the critically ill patient. Content includes extensive review of methods for determining energy expenditure and substrate utilization during specific disease states. Discussion of the aspects of feeding the critically ill patient including timing, enteral and parenteral feeding methodology, specialized medical foods, equipment requirements, feeding complications and prevention, and pharmacological issues. Students will be expected to calculate formulas for both types feeding modalities and provide discussion of the evidence based guidelines for administration of these nutrition therapies. Prerequisite: minimum of 3 cr hours in Medical Nutrition Therapy. LEC.

DIET 841. International Nutrition and World Hunger. 3 Hours.
Advanced study of the magnitude, cause, and nature of hunger and undernutrition in low income countries; emphasis on programs, policies and planning directed toward alleviating hunger. LEC.

DIET 842. Nutrition and Wellness. 3 Hours.
Course will address wellness promotion through nutrition. Nutritional risk and protective factors will be examined as they relate to public health and individual nutrition. LEC.

DIET 843. Nutrition Education in the Community. 3 Hours.
Principles and practices of teaching individuals and groups to translate nutrition knowledge into action. Emphasis on research in and evaluation of nutrition education. LEC.

DIET 844. Behavior Management Theory. 3 Hours.
An in-depth analysis of the development of the behavioral basis of individual and group behavior in business, governmental, educational, and other organizations with emphasis on current research literature and applications. LEC.

DIET 845. Nutritional Aspects of Oncology. 3 Hours.
A course focusing on current research examining the role of nutrition in specific cancers. Topics include basic cancer biology, pathology and nutritional research methodology. Sources of information for cancer prevention programs and the application of translational research to clinical patient populations will be discussed. LEC.

DIET 850. Operations Management and Analysis. 3 Hours.
The study of the role of operations systems in the provision of value for the customer. Operations systems design; capacity determination, resource requirements planning and control, theory of constraints, supply chain management, quality management and control and project management are discussed and analyzed. Prerequisite: Basic graduate statistics course LEC.

DIET 854. Non-Thesis Research. 1-3 Hours.
Directed study of special problems in nutrition or nutrition care. This course provides for the individual or group study of special problems. Through directed readings, investigations and projects, the student acquires information with reference to questions in dietetics and nutrition not covered in organized courses. This course fulfills the research requirements for the Non-Thesis Option. RSC.
The goal is to emphasize the integrative and complex nature of human translational and applied research at the clinical and educational level. The course will examine topics ranging from basic science to clinical studies to nutritional science. The role of nutritional status and changes in the life stages which impact immune response impacting disease initiation and progression. Contributions of the GI system and changes in life stages impacting immunity and their relationship to immune response will be discussed. LEC.

DIET 880. Dietary and Herbal Supplements. 3 Hours.
Explore the safety and efficacy of botanical/herbal and dietary supplements in health applications including dietary supplementation in the prevention and treatment of chronic disease. Prerequisite: Human physiology is advisable. LEC.

DIET 881. Phytochemicals. 3 Hours.
The course is an overview on phytochemicals (non-nutritive biologically active compounds which may have health benefits) from fruits, vegetables, cereals and oilseeds. The course will include discussions of functional foods which are designer foods providing these compounds to the public. It will cover recent findings on chemistry, physiological functions, potential health implications of phytochemicals. LEC.

DIET 886. Advanced Nutrition: Nutrigenomics, Nutrigenetics and Advanced Lipid Metabolism in Human Nutrition. 3 Hours.
This course integrates topics related to current biochemical issues in nutritional science. The course will examine topics ranging from the cellular, molecular, and biochemical aspects of nutritional science to translational and applied research at the clinical and educational level. The goal is to emphasize the integrative and complex nature of human nutrition research ranging from basic science to clinical studies to translational and applied studies. LEC.

DIET 887. Nutrition and Immunology. 3 Hours.
This course examines the mechanisms underlying the modulation of immune responses by nutritional, naturally occurring and orally active food compounds. The role of nutritional status and changes in the life stages which impact immune response impacting disease initiation and progression. Contributions of the GI system and changes in life stages impacting immunity and their relationship to immune response will be discussed. LEC.

DIET 886. Micronutrients in Human Nutrition. 3 Hours.
Interrelationships of micronutrients in terms of biochemistry, physiology, genetics, and nutrition. Emphasis will be placed upon developing an understanding of how the coordination of structure and function is related to the metabolic needs of the cell and its response to the environment. This integrated approach will form the basis for evaluating the micronutrient needs of humans in both normal and altered metabolic states. LEC.

DIET 899. Thesis. 1-6 Hours.
Scholarly essay based research, written under the guidance of the student's adviser. Credit given upon meeting thesis requirements for the master's program. THE.

Courses

An overview of the nutritional therapies used for various disease disorders. The course emphasizes the nutritional care and treatment related to state of the art practice. LEC.

DN 670. Applied Normal Nutrition. 3 Hours.
Applied study of the relationship of normal food and nutrition principles to health promotion in select stages of the lifecycle. LEC.

DN 671. Nutrition in Medical Science. 6 Hours.
Study of the science of medical nutrition therapy and evidence based practice in the nutritional management of disease during specific stages of the life cycle. Prerequisite: Consent of Instructor LEC.

DN 796. Social and Cultural Aspects of Dietetics and Nutrition. 2-4 Hours.
A study of the aspects of society, culture and personality related diet, food habits, and nutrition. The role of the community and its agencies will be considered. Includes field work. Prerequisite: Consent of instructor. LEC.

DN 800. Selected Topics in Clinical Dietetics: ____. 1-6 Hours.
A learner-centered, self paced study of topics in applied clinical dietetics. Independent modules are offered to address the science and art of nutritional care relating to specific issues to clinical dietetics. Topics will be grouped in various combinations to provide flexibility of choice. Students may enroll in one or more topics for a total of six credit hours. Prerequisite: By permission of instructor only. LEC.

DN 810. Nutrition Assessment. 3 Hours.
Methods and tools used in screening and assessment of nutritional status of individuals and population groups are studied. Assessment methodology includes dietary surveys, computerized dietary intake analysis, anthropometric measures, biochemical measures and clinical evaluations. Laboratory experiences are provided to allow students practice time for learning and applying assessment techniques. Prerequisite: Permission of instructor. LEC.
DN 817. Seminar in Dietetics & Nutrition I. 1 Hour.
Seminar designed to promote effectiveness of professional written and oral communication, increase knowledge of research, and review content information in selected topics in dietetics. LEC.

DN 818. Seminar in Dietetics & Nutrition II. 1 Hour.
To promote effectiveness of professional written and oral communication, to increase knowledge of research, and to review content information in selected areas in dietetics. SEM.

DN 819. Scientific Writing for the Nutritional Sciences. 1 Hour.
Research proposal preparation and/or scientific manuscript writing experience. This course will provide the student with an overview of the steps used in proposal writing and/or the steps in preparation of a scientific manuscript for publication. LEC.

DN 820. Nutrition Education Skills for School Teachers. 3 Hours.
This graduate level course will expand understanding of nutrition and healthy eating for classroom teachers and other professionals who work with children. The course has a special emphasis on child and adolescent nutrition and how to translate nutrition facts into classroom applications and school-based interventions. Course topics will include healthy food choices, nutrition guidelines, nutrients, energy balance and weight, child and adolescent nutrition, and nutrition education in the classroom, school-based nutrition interventions, and measuring outcomes of nutrition interventions. Prerequisite: Student must be classroom teacher or consent of instructor. LEC.

DN 822. Management Dietetics & Nutrition I. 2 Hours.
Managerial skills in health care quality improvement and food service are practiced. Students are typically enrolled in DN 827 Practicum supervised practice experiences associated with the dietetic internship. Prerequisite: Food service systems or commensurate practical experience. LEC.

DN 823. Management Dietetics & Nutrition II. 2 Hours.
Managerial style is related to food policy, financial benchmarking and applied nutrition practice. Students are typically enrolled in DN 827 Practicum supervised practice experiences associated with the dietetic internship. Prerequisite: Food service systems or commensurate practical experience. LEC.

DN 825. Medical Nutrition Therapy I. 3 Hours.
Course content introduces the student into the concepts of an intermediate study of nutritional therapy of disease. Course content includes evidence-based practice in prevention and nutritional management of diseases. Patient assessment and medical chart documentation are covered. Elements of pathology and biochemistry of the nutrition-related problems are integrated into course topics. This course is designed for students enrolled in the dietetic internship, but students from other departments may enroll with consent of instructor. Prerequisite: Undergraduate coursework in nutrition, diet therapy, biochemistry and physiology or consent of instructor. LEC.

DN 826. Medical Nutrition Therapy II. 3 Hours.
Course content includes current nutrition theory and evidence-based practice in prevention and treatment of disease. Advanced therapies and patient management in nutrition support will be discussed. Course topics include pediatric nutrition, obesity, cardiovascular disease, diabetes, cancer, renal disease, and gastrointestinal diseases. Elements of pathology and biochemistry of the nutrition-related problems are integrated into course topics. This course is designed for students enrolled in the dietetic internship, but students from other departments may enroll with consent of instructor. Prerequisite: Undergraduate coursework in nutrition, diet therapy, biochemistry and physiology; DN 825; or consent of instructor. LEC.

DN 827. Practicum: Process in Clinical Dietetics. 1-7 Hours.
Supervised practice experience for graduate level students to fulfill the requirements for the Dietetic Internship. Experiences take place in hospitals, clinics, community health care agencies, and other practice settings in which dietetics and nutrition services are provided. Prerequisite: Admission to the graduate program, permission of dietetic internship director or course instructor. LEC.

DN 828. Clinical Education in Dietetics. 2-3 Hours.
A study of teaching methods appropriate for use in a clinical setting. Emphasis on development of instructional objectives, learning situations, and methods of evaluations to be used in clinical teaching in dietetics. Prerequisite: Consent of instructor. LEC.

DN 829. Nutrition and Aging. 3 Hours.
An overview of nutrition and the aging process. Physiological, psychological, and sociological aspects of aging, theories of aging, internal and external factors related to nutrient intake, and nutrient needs will be considered. LEC.

DN 830. Food Technology. 2-3 Hours.
Consideration of current food processing methods and the factors affecting the palatability and nutritive values of human foods. Course includes pertinent information regarding the protection of the food supply. LEC.

DN 834. Methods of Research in Nutrition. 3 Hours.
A study of basic research terminology and designs commonly used in nutrition research. Topics include: research on animals, tissue culture and human subjects; qualitative, quantitative and outcomes research; ethical issues in research; dissemination of research findings; and appropriate use of research findings. Prerequisite: Consent of instructor. Same as DIET 834. LEC.

DN 836. Biochemical, Physiological, and Genetic Aspects of Human Nutrition. 3 Hours.
The topics covered will examine the integration of biochemistry, physiology, genetics, and nutrition. Emphasis will be placed on developing an understanding of how the combination cellular structure and function is related to the metabolic needs of the cell and its response to the environment. The integrated approach will form a basis for evaluating nutritional needs in humans. Prerequisite: Courses in nutrition, physiology, and biochemistry, or consent of instructor. Same as DIET 836. LEC.

DN 838. Advanced Medical Nutrition Therapy. 3 Hours.
This course evaluates current issues in medical nutrition therapy. Course content includes evidence based analysis, the role of diet in disease management including factors related to disease pathophysiology, nutritional assessment and medical nutrition management of specific disease states. Prerequisite: Undergraduate medical nutrition therapy, biochemistry, physiology, or consent of the instructor. Same as DIET 838. LEC.

DN 839. Clinical Aspects of Nutrition Support. 3 Hours.
Specialized nutrition assessment and support. Review of energy expenditure and substrate utilization in specific disease states. Current methods for the initiation and management of enteral and parenteral nutrition therapy including access, metabolic and mechanical complications. Evaluation nutrition support methodology in selected disease states. LEC.

DN 840. Advanced Topics in Nutrition. 1-2 Hours.
Reading and preparation of a paper and/or oral presentation on a selected subject in nutrition. Prerequisite: Consent of instructor. LEC.
DN 841. International Nutrition. 1-3 Hours.
A study of global public health and nutrition concerns in various nations, assessment of nutritional status of diverse populations, international health and nutrition organizations, policies, and interventions. We explore the roles of dietitians, nutritionists, and others in creating and implementing international public health and nutrition policies and interventions. To enroll in the course, you must be a student in the Graduate Certificate Dietetic Internship Program, the Dietetics and Nutrition Master of Science Program, or the Great Plains IDEA, or have the consent of the instructor. Cross-listed with DIET 841. LEC.

DN 842. United States Public Health Nutrition. 1-3 Hours.
A study of US public health and nutrition concerns in diverse US populations, assessment of nutritional status in commonalities, health communication, nutrition policies and community based nutrition interventions. Exploration of the roles of dietitians, nutritionists, and others in developing and delivering nutrition policies and interventions in US communities. Prerequisite: Must be a student in the Graduate Certificate Dietetic Internship Program, the Dietetics and Nutrition Master of Science Program, or the Great Plains IDEA, or have the consent of the instructor. Cross-listed with DIET 841. LEC.

DN 854. Special Problems in Dietetics and Nutrition. 1-4 Hours.
Directed study of special problems in nutrition or nutrition care. This course provides for the individual or group study of special problems. Through directed readings, investigations, and projects, the student acquires information with reference to questions in dietetics and nutrition not covered in organized courses. LEC.

DN 857. Motivational Interviewing in Public Health Settings. 1 Hour.
The course is designed to introduce participants to Motivational Interviewing, its concepts, and to the subsequent skills required for helping people to change. This course will be cross-listed with PRVM 857. LEC.

DN 880. Dietary and Herbal Supplements. 2-3 Hours.
Explores the safety and efficacy of botanical/herbal and dietary supplements in health applications including dietary supplementation in the prevention and treatment of chronic disease. Prerequisite: Human physiology is advisable. LEC.

DN 881. Introduction to Dietetics and Integrative Medicine. 3 Hours.
Introduction to principles guiding integrative and functional Medical Nutrition Therapy; assessing, diagnosing, intervening, monitoring, and evaluating an individual client to restore function; focusing on the unique nutritional imbalances characteristic of chronic disease pathophysiology; supporting individuals with persistent symptoms; preventing chronic disease. Prerequisites: Introductory genetics, medical nutrition therapy, or consent of instructor. LEC.

DN 882. A Nutrition Approach to Inflammation and Immune Regulation. 3 Hours.
Inflammation and immune system dysregulation is common in chronic disease. The course presents the integrative nutrition approach to identify the underlying causes of inflammatory and immune-related conditions and associated nutritional influences; applies individualized nutritional interventions, as powerful modulators of the pathophysiology of inflammatory and immune responses. Prerequisites: Medical nutrition therapy, genetics or consent of instructor. LEC.

DN 884. Diet, Physical Activity & Cancer. 3 Hours.

DN 885. Nutritional Biochemistry. 3 Hours.
Course content facilitates the understanding of advanced biochemical principles applied to human nutrition. Topics include protein structure, bioenergetics, enzyme function, nutrient digestion, absorption and metabolism, metabolic regulation and intermediary metabolism, cellular signaling, and genomics encompassing nucleotide metabolism, gene expression and gene regulation. Prerequisite: Undergraduate biochemistry or consent of instructor LEC.

DN 870. Health Behavior Counseling. 3 Hours.
Theoretical and applied issues in health behavior counseling. Students will learn the theories of behavior change and how to apply these to health care issues. Specific health behaviors (i.e., dietary changes, smoking cessation, exercise adherence) will be discussed in the context of chronic disease for children, adults, and the elderly. Effective methods of counseling patients and promoting changes on an individual and small group basis will be presented. LEC.

DN 875. Pediatric Clinical Nutrition. 3 Hours.
Examines physiological, biochemical and nutritional aspects of disease processes relevant to infants and children up to 18 years of age. Medical nutrition therapy for a variety of medicine conditions found in this population will be discussed including inborn errors of metabolism, food hypersensitivity, obesity, and diseases of the major organ systems. Prerequisites: DN 826: Applied Clinical Nutrition or equivalent or consent of instructor. LEC.

DN 876. Intervention for the Prevention & Management of Obesity. 3 Hours.
This course emphasizes obesity in a population group ranging from childhood to the adult. Course materials will examine the impact of obese conditions on disease development throughout the life cycle. The course will critically analyze current evidence focused on interventions used in the behavioral and clinical management of overweight and obese individuals in community and clinical settings. Prerequisites: Consent of instructor. Same as DIET 876. LEC.

DN 885. Pediatric Clinical Nutrition. 3 Hours.
Examines physiological, biochemical and nutritional aspects of disease processes relevant to infants and children up to 18 years of age. Medical nutrition therapy for a variety of medicine conditions found in this population will be discussed including inborn errors of metabolism, food hypersensitivity, obesity, and diseases of the major organ systems. Prerequisites: DN 826: Applied Clinical Nutrition or equivalent or consent of instructor. LEC.

DN 886. Maternal and Child Nutrition. 3 Hours.
Critical examination of behavioral, physiological, and public health issues impacting dietary and nutritional factors that support normal growth and development. Course content focuses on the early stages of the life cycle: gestation, lactation, infancy, preschool, school age and adolescence. Topics include the fetal programming hypothesis, growth and nutritional requirements, breast and formula feeding of infants, infant weaning, and eating behaviors that lead to normal growth, growth faltering, and pediatric obesity. Prerequisite: Consent of the instructor. LEC.

DN 891. United States Public Health Nutrition. 3 Hours.
A study of US public health and nutrition concerns in diverse US populations, assessment of nutritional status in commonalities, health communication, nutrition policies and community based nutrition interventions. Exploration of the roles of dietitians, nutritionists, and others in developing and delivering nutrition policies and interventions in US communities. Prerequisite: Must be a student in the Graduate Certificate Dietetic Internship Program, the Dietetics and Nutrition Master of Science Program, or the Great Plains IDEA, or have the consent of the instructor. Cross-listed with DIET 841. LEC.
DN 890. Graduate Research. 1-4 Hours.
Individual investigation of special problems in dietetics and nutrition or hospital dietary administration approved by the student's advisor or advisory committee. Investigation involves original research. RSH.

DN 895. Advanced Macronutrients and Integrated Metabolism. 3 Hours.
Energy containing macronutrients and fiber presented from the perspective of their importance in human nutrition. Structural properties, digestion, absorption and metabolism are emphasized. Fuel utilization in response to food intake and exercise, cellular and whole-animal energetic and energy balance integrate metabolism. Students take an active role in presenting and discussing and exhibit advanced skills in analysis and presentation. Prerequisites: BCHM 702 or Equivalent. LEC.

DN 896. Advanced Micronutrients and Integrated Metabolism. 3 Hours.
Vitamins and minerals presented from the perspective of their requirements as nutrients for normal human physiological functions with emphasis on their underlying roles in structure, function and metabolism. Students take an active role in selecting, presenting and discussing recent published research and to exhibit advanced skills in analysis and presentation. Prerequisites BCHM 702 or equivalent. LEC.

DN 897. Micronutrient Research in Human Nutrition. 1 Hour.
This course requires students to design a research study on a vitamin or mineral. Students submit a written proposal and present it orally and defend the proposal in class. Students will be evaluated on the basis of plausibility, feasibility and originality of the proposed research. Corequisite DN 896. Prerequisite: Consent of Instructor. LEC.

DN 899. Thesis. 1-6 Hours.
Scholarly essay based on research, written under the guidance of the student's advisor. Credit given upon meeting thesis requirements for the master's degree. Prerequisite: Consent of advisor. THE.

DN 900. Techniques in Nutrition Research. 3 Hours.
A series of seven laboratory modules emphasizing quantitative methods and experimental analysis. The series of modules will be taught by departmental faculty. Each module requires data collection, data analysis, and written interpretation or report. instrumentation, dietary assessment software utilization and cellular microtechniques will be emphasized. Students will be responsible for learning one technique practiced in an outside laboratory setting. Student will rotate between the module sequence based on the number of students enrolled in the class. Prerequisite: DN 895 and DN 896 or permission of instructor of record. LEC.

DN 901. Graduate Seminar in Nutrition. 1 Hour.
Advanced course examining current research topics in nutrition. Extensive student and faculty interaction is emphasized utilizing lectures, class discussion of selected scientific readings and oral presentations. Prerequisite: Admission to PhD program in Dietetics and Nutrition or permission of instructor. LEC.

DN 908. Nutrigenomics and Nutrigenetics in Health and Disease. 3 Hours.
Nuclear receptors and their mechanisms of action, nutritional control of gene expression and functional genomic studies with relationships to nutrient intake and polymorphisms. Prerequisites: DN 836, DN 895, DN 896 or permission of instructor. LEC.

DN 990. Doctoral Research. 1-9 Hours.
Original and independent investigation approved by and conducted under the supervision of the student's advisor or advisory committee. This course is in partial fulfillment of the requirements for the Ph.D. degree. Prerequisite or corequisite: Restricted to Dietetics Nutrition Ph.D. candidates, or consent of DN advisor. Students must have completed the qualifying exam. LEC.

DN 999. Dissertation. 1-6 Hours.
Preparation of the written dissertation based upon original research and in partial fulfillment of the requirements for the Ph.D. degree. Prerequisite: DN 990 or consent of advisor. LEC.

Dietetic Internship Graduate Certificate

KU offers an exceptional dietetic internship program with a medical nutrition therapy emphasis. This program prepares graduates for a career as a registered dietitian.

The practice experiences include clinical and community nutrition, food and nutrition management and a culminating practice area of interest experience designed by the intern to meet personal professional and educational goals. Interns are able to choose from a variety of practice sites for each experience and are encouraged to submit ideas for new practice sites to the program director.

Students completing the dietetic internship program receive a graduate certificate from the University of Kansas. They are eligible to apply for approval by the Commission on Dietetic Registration to take the national Registration Examination for Dietitians.

An applicant to the dietetic internship must have a bachelor's degree and course work from a didactic program in dietetics approved by the Academy of Nutrition and Dietetics (http://www.eatrightacend.org/ACEND/content.aspx?id=6442485414). Please note that KU does not offer such an undergraduate program; all students entering the program must have completed course work from an accredited institution other than KU.

Applicants follow the national computer-matching procedure mandated by the Academy of Nutrition and Dietetics for application to internships.

To be considered for admission into KU's Dietetic Internship Graduate Certificate program, the following are required:

1. Degree
   A bachelor's degree from a didactic program in dietetics (DPD) accredited by the Accreditation Council for Education in Nutrition and Dietetics is required for admission. The degree must be from a regionally accredited U.S. university or college. Please note: the University of Kansas does not offer an accredited DPD. Click here to view accredited programs. (http://www.eatrightacend.org/ACEND/content.aspx?id=6442485414)
   Degrees earned outside the United States must be evaluated for equivalency. For guidelines, see the International Fact Sheet (http://www.eatrightacend.org/ACEND/content.aspx?id=6442485486) provided by ACEND.

2. Graduate Record Examination Score
   A valid score on the Graduate Record Examination (GRE) General Test is required for the verbal reasoning, quantitative reasoning and analytical writing portions of the exam. Applicants are awarded points based on percentile rank; there is not a minimum score recommended.

3. Grade Point Average
A cumulative undergraduate grade-point average of 3.0 on a 4.0 scale for college course work is required for admission.

4. Background Check
The Joint Commission requires all incoming students to pay for a background check (http://www.kumc.edu/school-of-health-professions/background-checks.html). This one-time fee must be paid directly to the company performing the background investigation. You will be asked to provide information and make the payment once you have been officially accepted into the program. For more information, please see the School of Health Professions Background Check Instructions. (http://www.kumc.edu/school-of-health-professions/background-checks.html)

International students or those for whom English is a second language must meet minimum English proficiency (p. 2395) requirements. International students may have additional requirements for visa, residency, and citizenship status. Students should contact the KUMC Office of International Programs (http://www.kumc.edu/international) for guidance regarding these issues during the application process.

Certificate Program Information:
No student may work toward a graduate certificate without being accepted as a graduate certificate student in a specific graduate certificate program. Graduate certificates are not granted retroactively. An individual who is not currently a degree-seeking graduate student at KU must apply and may be admitted directly to a graduate certificate program.

The graduate certificate program is not a means of entry into a graduate degree program. If students admitted to a graduate certificate program are later admitted to a graduate degree program as degree-seeking, applicable courses taken for the graduate certificate program may, upon recommendation of the department and within general guidelines, be approved by the Office of Graduate Studies to be counted toward the degree.

While the courses comprising a graduate certificate may be used as evidence in support of a student’s application for admission to a graduate degree program, the certificate itself is not considered to be a prerequisite and does not guarantee admission into any graduate degree program. The certificate program is not intended to serve as a default system for students in a degree program who find that they are not able to complete the degree for academic or other reasons. Should a student drop out of a degree program and seek admission to a certificate program, all certificate admission requirements must be followed for admission and conferral.

Graduate credit from another institution may not be transferred to a graduate certificate program.

The dietetic internship program prepares graduates for entry into careers as registered dietitians. Successful completion of the internship allows the student to take the registration examination to acquire the RD credential and enter the profession as a registered dietitian.

The program requires the completion of 24 graduate credit hours and 1,240 hours of supervised practice in a variety of practice settings.

The practice experiences include clinical and community nutrition, food and nutrition management and a culminating practice area of interest experience designed by the intern to meet personal professional and educational goals. Interns are able to choose from a variety of practice sites for each experience and are encouraged to submit ideas for new practice sites to the program director.

The following courses are taken during fall, spring, and summer terms.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DN 817</td>
<td>Seminar in Dietetics &amp; Nutrition I</td>
<td>1</td>
</tr>
<tr>
<td>DN 818</td>
<td>Seminar in Dietetics &amp; Nutrition II</td>
<td>1</td>
</tr>
<tr>
<td>DN 822</td>
<td>Management Dietetics &amp; Nutrition I</td>
<td>2</td>
</tr>
<tr>
<td>DN 823</td>
<td>Management Dietetics &amp; Nutrition II</td>
<td>2</td>
</tr>
<tr>
<td>DN 825</td>
<td>Medical Nutrition Therapy I</td>
<td>3</td>
</tr>
<tr>
<td>DN 826</td>
<td>Medical Nutrition Therapy II</td>
<td>3</td>
</tr>
<tr>
<td>DN 827</td>
<td>Practicum: Process in Clinical Dietetics</td>
<td>10</td>
</tr>
<tr>
<td>DN 841</td>
<td>International Nutrition</td>
<td>1</td>
</tr>
<tr>
<td>DN 842</td>
<td>United States Public Health Nutrition</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Hours 24

**Dietetics and Integrative Medicine Graduate Certificate**

An opportunity for working professionals or graduate students, students in this program acquire knowledge to function as a skilled advisor to the patient and a collaborative member of multidisciplinary health care teams. Students may enter with bachelor’s or master’s degrees in dietetics, nutrition, biological sciences or other healthcare professions.

Qualified applicants must currently be a registered dietitian (or other healthcare professional) and/or enrolled in a health professions major at the graduate level.

In addition, to be considered for admission, all students must meet the following requirements:

1. **Undergraduate Degree**
   A bachelor’s degree is required for admission. The degree may be in any field but must have included specific prerequisite courses in medical nutrition therapy and genetics. Degrees earned outside the United States must be evaluated for equivalency.

2. **Graduate Record Examination Score**
   An official score on the Graduate Record Examination General Test is required and official results must be sent directly to our office. For GRE information, visit www.gre.org (http://www.gre.org).

3. **Grade Point Average**
   A cumulative undergraduate grade-point average of 3.0 on a 4.0 scale for college course work is required for admission.

4. **Background Check**
   This one-time fee must be paid directly to the company performing the background investigation. You will be asked to provide information and make the payment once you have been officially accepted into the program. For more information, please see the School of Health Professions Background Check Instructions. (http://www.kumc.edu/school-of-health-professions/background-checks.html)

International students or those for whom English is a second language must meet minimum English proficiency (p. 2395) requirements. International students may have additional requirements for visa, residency, and citizenship status. Students should contact the KUMC Office of Graduate Studies for more information.
Office of International Programs (http://www.kumc.edu/international) for guidance regarding these issues during the application process.

Certificate Program Information:

No student may work toward a graduate certificate without being accepted as a graduate certificate student in a specific graduate certificate program. Graduate certificates are not granted retroactively. An individual who is not currently a degree-seeking graduate student at KU must apply and may be admitted directly to a graduate certificate program.

The graduate certificate program is not a means of entry into a graduate degree program. If students admitted to a graduate certificate program are later admitted to a graduate degree program as degree-seeking, applicable courses taken for the graduate certificate program may, upon recommendation of the department and within general guidelines, be approved by the Office of Graduate Studies to be counted toward the degree.

While the courses comprising a graduate certificate may be used as evidence in support of a student’s application for admission to a graduate degree program, the certificate itself is not considered to be a prerequisite and does not guarantee admission into any graduate degree program. The certificate program is not intended to serve as a default system for students in a degree program who find that they are not able to complete the degree for academic or other reasons. Should a student drop out of a degree program and seek admission to a certificate program, all certificate admission requirements must be followed for admission and conferral.

Graduate credit from another institution may not be transferred to a graduate certificate program.

This is an online program only, with no campus visits required. The 12 credit hours are delivered as web-based courses, affording great flexibility to students. The curriculum includes the following four courses, with one course offered per semester:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DN 880</td>
<td>Dietary and Herbal Supplements</td>
<td>3</td>
</tr>
<tr>
<td>DN 881</td>
<td>Introduction to Dietetics and Integrative Medicine</td>
<td>3</td>
</tr>
<tr>
<td>DN 882</td>
<td>A Nutrition Approach to Inflammation and Immune Regulation</td>
<td>3</td>
</tr>
<tr>
<td>DN 980</td>
<td>Nutrigenomics and Nutrigenetics in Health and Disease</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

The program is offered fall, spring and summer semesters. However, courses must be completed in a designated order, so please ask an adviser for details.

Master of Science in Dietetics and Nutrition

Designed for professionals in nutrition and other careers with a science background, this degree offers many benefits, including expanded job opportunities and increased knowledge in the science of nutrition. An online master's degree through the Great Plains Interactive Distance Education Alliance is also available to registered dietitians.

To be considered for admission, all students must meet the following requirements:

1. Undergraduate Degree. A bachelor’s degree is required for admission. The degree may be in any field but must have included prerequisite courses in biochemistry, physiology, and nutrition. Degrees earned outside the United States must be evaluated for equivalency. Students may be admitted on a provisional basis if some requirements have not yet been met at the time of application.
2. Graduate Record Examination Score. An official score on the GRE General Test is required. Applicants are evaluated according to percentile rank guidelines for program admission.
3. Grade-Point Average. A cumulative undergraduate grade-point average of 3.0 on a 4.0 scale for college course work is required for admission.
4. Letters of Recommendation. Three letters of recommendation are required for admission. These letters may be written by faculty, advisers, employers, or others who are familiar with your work and character.

A background check (http://www.kumc.edu/student-services/vice-chancellor-of-student-services/illegal-background-checks-for-students.html) is required during the admission process; it may affect the student's eligibility to enter the program.

International students or those for whom English is a second language must meet minimum English proficiency requirements (p. 2395), as indicated by TOEFL or equivalent exam scores. International students may have additional requirements for visa, residency, and citizenship status. Students should contact the KUMC Office of International Programs (http://www.kumc.edu/international) for guidance regarding these issues during the application process.

Great Plains Interactive Distance Education Alliance (IDEA)

This program provides an online 36-credit hour master's in dietetics and nutrition degree. Admission is limited to persons holding the registered dietitian (RD) or registry-eligible credential for the Commission on Dietetic Registration and the Academy of Nutrition and Dietetics and applicants must submit a copy of current CDR registration card as documentation. Without an RD credential, students must be registration-eligible, having completed both an accredited Didactic Program in Dietetics and an accredited dietetic internship or a Coordinated Program in Dietetics (which encompasses both the academic degree and the supervised practice).

The application procedures and required documentation are identical to the on-campus master's degree program (http://www.dietetics.kumc.edu/masters-apply.html), plus the additional documentation to verify RD credential or eligibility. International students are eligible only if they have completed a program recognized by the Academy of Nutrition and Dietetics.

The program offers flexibility; students may enroll full- or part-time, and some classes are delivered online. Approximately 12 to 15 credit hours of the program are elective courses that may be tailored to individual career goals, and students may choose a thesis or nonthesis option.

This program offers course work in the biochemical, clinical, and behavioral aspects of nutrition. The thesis option requires 30 credit hours, and the nonthesis option requires 33 credit hours for completion. For more information, please visit the program's website (http://www.kumc.edu/school-of-health-professions/dietetics-and-nutrition/master-of-science-in-dietetics-and-nutrition.html).
Great Plains Degree Plan

Required Courses (15)
- DIET 801 Current Issues or Trends 3
- DIET 834 Methods of Research in Nutrition 3
- DIET 833 Principles of Statistics 3
- DIET 886 Advanced Nutrition: Nutrigenomics, Nutrigenetics and Advanced Lipid Metabolism in Human Nutrition 3
- DIET 896 Micronutrients in Human Nutrition 3

Research requirement (6)
- DIET 819 Grant and Scientific Writing for the Professional 3
- DIET 899 Thesis 3
- or DIET 854 Non-Thesis Research

Electives (15)

Electives 15

Total Hours 36

Doctor of Philosophy in Medical Nutrition Science

Students with a degree in nutrition have the opportunity for clinical and translational research at a world-class academic health center renowned for its research facilities. This program emphasizes training in the core sciences of nutrition and biostatistics and the most advanced research methodology.

Courses in nutrition are also available to students who are not seeking a degree or working professionals interested in continuing education.

Applicants to this program must meet the following requirements:

1. College Course Work Requirements
   The course work required depends upon whether the student is accepted to the program from a bachelor's or master's degree program, as well as on the area of study of these degrees (nutrition, biological sciences or other areas of study). Hours for completion are the ultimate decision of the student's research advisor and research committee.

2. Prerequisite Courses. Students entering the program with bachelor's degrees should have completed 3 credit hours in biochemistry, 3 credit hours in physiology, and 3 credit hours in nutrition before admission. They must also take all courses required for the master's degree. Consult the academic advisor for specific requirements.

3. Grade Point Average
   The applicant must meet the general KU requirements for admission as a graduate student. The minimum GPA requirements for admission
include an undergraduate cumulative GPA of 3.0 or better and evidence of successful completion (equivalent grade of B or higher) of undergraduate or graduate course work in nutrition, biochemistry, genetics, or other biological science.

International Students:
An applicant is considered an international student if he or she requires a visa, or currently resides in the U.S. with non-immigrant status, or currently resides in the U.S. while applying for permanent residency. Additional requirements and documentation, such as proof of English language proficiency, are required for international students to become eligible for KU programs. Please review the information for international students (http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html) before applying.

The doctoral program in medical nutrition science typically requires approximately 45-60 total credit hours of graduate course work beyond the bachelor's degree. For those enrolling with a master's degree in nutrition, approximately 30 graduate hours (700 to 900 level) generally are required.

Prior course work and the student's research interests are considered in designing the plan of study. Students in the program must meet the research skills and responsible scholarship requirement (p. 2398) of the university, fulfill program course work requirements, and successfully complete a written comprehensive examination to achieve Ph.D. candidacy. The Ph.D. candidate must submit a written dissertation proposal describing an original research project in some aspect of nutrition research, and defend the proposal in a comprehensive oral exam before beginning the dissertation research. The written dissertation and successful oral defense of the dissertation are required to receive the degree.

For more information, please visit the program's website (http://www.kumc.edu/school-of-health-professions/dietetics-and-nutrition/phd-in-medical-nutrition-science/curriculum.html).

Degree Plan. Required courses for all Ph.D. students are listed below. Additional courses may be required as determined by the research committee.

Required courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DN 895</td>
<td>Advanced Macronutrients and Integrated</td>
</tr>
<tr>
<td></td>
<td>Metabolism</td>
</tr>
<tr>
<td>DN 896</td>
<td>Advanced Macronutrients and Integrated</td>
</tr>
<tr>
<td></td>
<td>Metabolism</td>
</tr>
<tr>
<td>DN 900</td>
<td>Techniques in Nutrition Research</td>
</tr>
<tr>
<td>DN 901</td>
<td>Graduate Seminar in Nutrition</td>
</tr>
<tr>
<td>DN 990</td>
<td>Doctoral Research</td>
</tr>
<tr>
<td>DN 999</td>
<td>Dissertation</td>
</tr>
<tr>
<td>GS 856</td>
<td>Introduction to Research Ethics (or equivalent research ethics course)</td>
</tr>
<tr>
<td>BIOS 720</td>
<td>Analysis of Variance</td>
</tr>
<tr>
<td>BIOS 730</td>
<td>Applied Linear Regression</td>
</tr>
</tbody>
</table>

Electives can vary according to needs.

Recommended courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 740</td>
<td>Applied Multivariate Methods</td>
</tr>
<tr>
<td>CLS 742</td>
<td>Scientific Writing</td>
</tr>
</tbody>
</table>

Elective courses required by the student's research committee are dependent upon the student's area of research concentration. The total elective hours can vary according to needs.

Health Information Management

In this two-year bachelor's degree program, students work with the latest technology at a top academic institution on the KU Medical Center campus in Kansas City, Kan. To be eligible for admission to this program, students must complete their first two years of undergraduate prerequisites from KU's Lawrence campus or another qualified accredited institution. To learn more about this program and the profession of health information management, please visit the program website.

KU also offers an online bachelor's degree-completion program for working professionals. This innovative program is designed specifically for individuals with the Registered Health Information Technician (RHIT) credential who want to advance to a bachelor's degree in health information administration. As an online program, it offers convenience and flexibility for students. For more information about the RHIT progression program, please refer to the program website.

Upon successful competition of these programs, the students are eligible to sit for the American Health Information Management Association's national registry exam. Graduates that pass this exam become credentialed and nationally recognized as a Registered Health Information Administrator with the RHIA credential.

The bachelor's degree in health information management is accredited by the Commission on Accreditation for Health Informatics and Information Management Education.

Students interested in entering this field should contact an advisor as early as possible in their collegiate careers to ensure prerequisite course work will be completed on schedule. For more information, view the frequently asked questions (http://www.kumc.edu/school-of-health-professions/health-information-management/frequently-asked-questions.html) for prospective students.

Courses

HEIM 210. Introduction to Healthcare. 1 Hour.
This course is an introductory overview of the healthcare system in the United States. The content includes information on the organizational structure of healthcare, the healthcare team, reimbursement, the importance of data quality, legal aspects of healthcare including privacy and security, and the electronic health record. This course is taught in a HYBRID format and requires access to a computer. Open to all students. LEC.

HEIM 230. Medical Terminology. 3 Hours.
A study of the language of medicine including word construction, definitions, medical abbreviations, and use of terms related to various areas of medical science and health professions. Course requires students to be able to break down medical terms and understand their meanings. This online course is designed for students interested in clinical and health professions. LEC.

HEIM 301. Health Information Management Orientation. 1-2 Hours.
This course is designed to prepare student for the HIM program, professional practice experiences and the HIM profession. Student will learn to apply communication, collaboration and project management
skills. This course has a special emphasis on professionalism, self-awareness and critical thinking. Student will also focus on interprofessional education and working effectively in teams.

**HEIM 325. Pharmacology. 2 Hours.**
This introduction to pharmacology course is intended to provide the student with the background information necessary to practice within the field of Health Information Management. The course covers the fundamentals of pharmacology, including pharmacokinetics and pharmacodynamics. The classification of drugs, the use of drug reference materials, and the mechanisms of therapeutic and adverse responses to drugs will be covered in the course. This course will also introduce the processes used for drug approval in the United States. Prerequisite: Permission of the instructor. LEC.

**HEIM 401. Introduction to Health Information Management (HIM). 3 Hours.**
This course introduces students to the foundational concepts of health record content, characteristics and requirements, along with the operational processes designed to support and safeguard the healthcare data and information contained therein. Joint Commission survey process is also included. Industry standard software applications are used for applied, hands-on learning in this course. LEC.

**HEIM 415. Healthcare Delivery Systems. 3 Hours.**
This course provides an introduction to the wide spectrum of healthcare delivery systems in which health information management and other healthcare professionals use their organizational and management skills. Special emphasis is placed on acute care, ambulatory care, home health, hospice care, long-term care, and managed care. The student will focus on how each delivery system is structured, their function, what data sets are collected, the reimbursement schemes used, health policy that shapes the system, outcomes (cost, quality, access) and how each system is integrated into the current delivery of healthcare in the United States. LEC.

**HEIM 420. Legal Aspects of Healthcare. 3 Hours.**
This course introduces the student to some of the basic legal principles found in healthcare and health information management (HIM). Fundamentals of law including statutory, regulatory, and judiciary practices are reviewed in the context of HIM including tort and liability. Emphasis is placed on HIPAA regulations. Patient legal rights and responsibilities as related to their healthcare are included, as well as fraud and abuse prevention and compliance. The basics of corporate liability and contracts are also covered. LEC.

**HEIM 435. Pathophysiology for Health Professionals. 3 Hours.**
An in-depth study of the fundamentals of medical science, medical essentials and the language of medicine, signs, symptoms, and test findings of disease processes and the current therapy employed in the treatment of diseases. Prerequisites: Courses in Anatomy lab, Physiology lab, and Medical Terminology or consent of the instructor. LEC.

**HEIM 450. Introduction to Professional Practices Experiences. 1 Hour.**
This course is designed to prepare students and develop the skills required for experiences outside of the classroom environment. The emphasis is on professional behavior for health information management professionals in the workplace. The course also introduces students to the application of electronic health record concepts. The content is intended to prepare students for site visits, professional practice experiences, the internship, as well as their future careers. LEC.

**HEIM 485. Independent Study in Health Information Management. 1-10 Hours.**
The content will vary depending on material appropriate to students. May be repeated for additional credit utilizing a variety of projects and special assignments. Prerequisite: Permission of the program director. FLD.

**HEIM 501. Information Resources for Health Professionals. 1 Hour.**
This course is designed to prepare students to effectively utilize information resources and technology on an academic medical center campus. Students will learn to apply computer skills, information technologies and literacy skills in an academic health care setting. The course also teaches students the foundations of information literacy - to recognize when information is needed, and to effectively locate, evaluate and use health information resources. Students will learn best practices to find the most relevant information using search strategies, databases (public and private), evaluative skills, and technology to apply and synthesize responses. Finally, this course will equip students with successful presentation skills and guidance on communicating with social technology. LEC.

**HEIM 510. Professional Practice Experience / Lab I. 1 Hour.**
Through supervised learning situations, students are given opportunities to visit different types of healthcare facilities in the area. These opportunities vary from year-to-year based upon availability. Opportunities might include (but not be limited to) developing competence while practicing a specific HIM function in an actual HIM department, exploring nontraditional HIM career roles, or visiting with and interviewing a long term care, behavioral health, rehabilitation, or managed care HIM department manager. Prerequisite: Successful completion of Junior-level HIM academic courses or permission from instructor. LEC.

**HEIM 525. Healthcare Database & Architecture. 3 Hours.**
This course is designed to help students understand databases and database management systems. Students will learn to model and understand database design, in conjunction with learning methods to structure data as records, tables, or objects. Students will also learn how query languages are used for searching, sorting, reporting, and other “decision support” activities to best utilize the available data. Along with acquiring knowledge fundamental to management of the electronic health record (EHR), students will develop general technical knowledge to become capable health information professionals. LEC.

**HEIM 540. Health Information Systems. 3 Hours.**
This course will provide students the knowledge and competence required to manage healthcare and clinical information systems. Students will receive hands-on application of the system development lifecycle using project management concepts. LEC.

**HEIM 565. Healthcare Coding Systems I. 4 Hours.**
This course introduces classification systems and terminologies used in healthcare and the relationship of these systems to patient care, research, and reimbursement systems. Course content provides study and application of coding guidelines, conventions, and rules of coding systems. Prerequisite: HEIM 435 or permission of the instructor. LEC.

**HEIM 567. Quality and Performance Improvement in Healthcare. 3 Hours.**
This course provides instruction on the principles of quality (QI) and performance improvement (PI) in the context of healthcare. PI drivers, models, techniques, and processes are covered including workflow reengineering. QI program organization, management and effectiveness are addressed. This course also includes content on patient safety, risk management, resource management and assessment of provider competence. LEC.
HEIM 570. Introduction to Healthcare Management. 1-3 Hours.
This course introduces theoretical and applicable concepts of management with an emphasis on managing in healthcare organizations. Students explore traditional management roles as well as leadership concepts. Course content depicts management in the context of a complex stakeholder environment evidenced in the healthcare system of the United States. LEC.

HEIM 571. Human Resource Management in Healthcare. 3 Hours.
Through the course students will have the opportunity to obtain working knowledge of human resource management. Technology and the continuing uncertainty of the economy have affected many aspects of human resource management; a number of tasks formerly performed by an HR office are now the purview of department managers. The course will familiarize students with the environment in which HR functions and the tasks involved in managing people. Topics include: social sustainability, culture, vision, staffing needs analysis, recruiting and selecting, training, developing, retaining, motivating, and legal rights of the people within the rapidly changing business environment. Prerequisite: HEIM 570 Healthcare Management. LEC.

HEIM 575. Applied Statistics and Research Methods in Healthcare. 3 Hours.
Emphasis is on the statistical analysis of healthcare data. Content includes hospital-based statistics, an introduction to epidemiological concepts, research design and methodology, research ethics and protocol, hypothesis testing, data management, analysis and presentation. Prerequisites: MATH 365 Elementary Statistics, or similar. LEC.

HEIM 585. Healthcare Reimbursements & Financing. 3 Hours.
This course examines complex financial systems within the United States healthcare system. Students explore content related to healthcare financing, reimbursement, and revenue cycle management, to include regulatory and/or policy initiatives and operational considerations for healthcare organizations. Prerequisite: Accounting or permission from instructor. LEC.

HEIM 604. Professional Practice Experience / Lab II. 2 Hours.
Provides a laboratory/professional practice experience setting for the application of coding, reimbursement and revenue cycle management-related practices with potential opportunity to participate in interprofessional activities. This is a two-credit hour lab. Prerequisite: HEIM 565, HEIM 585, and HEIM 635 or permission of the instructor. LAB FLD.

HEIM 635. Healthcare Coding Systems II. 3 Hours.
This course offers continued study of classification systems and terminologies used in healthcare and the relationship of these systems to patient care, research, and reimbursement systems. This course includes an introduction to the role of mapping between the various classification systems, nomenclatures and clinical terminologies used in healthcare. Prerequisite: HEIM 565 or permission of the instructor. LEC.

HEIM 661. Management Principles in Health Care. 3 Hours.
Introduction to basic principles of management and education and their application in the current healthcare environment. Course content includes: management, quality issues, budgeting, personnel issues, evaluation and application of management concepts, and educational methodologies. Cross listed with CLS 661 and RESP 661. Prerequisite: Admission to the Health Information Management Program or permission of the instructor. LEC.

HEIM 665. Topics in Health Information Management. 1-2 Hours.
This course will utilize case studies and guest presentations to address the latest developments in the management of health information.

Knowledge and skills will be applied to real-world problems. Students will examine key issues and trends within HIM through a series of seminar topics and presentations. LEC.

HEIM 670. Independent Study in Health Information Management. 1-10 Hours.
The content will vary depending on material appropriate to students. May be repeated for additional credit utilizing a variety of projects and special assignments. Prerequisite: Permission of the program director. LEC.

HEIM 671. Strategic Leadership in Healthcare. 3 Hours.
This course applies key concepts in personal, professional and organizational leadership for healthcare management. Special emphasis is on strategic leadership and planning for enterprise-wide health information strategies. Student will focus on leadership styles with an emphasis on self-discovery and professional development within an ever-changing environment. LEC.

HEIM 676. Healthcare Analytics. 3 Hours.
This course covers data-driven, computer-based tools and data analysis techniques that aid decision-making in healthcare. Effective use of data analysis increases the quality of strategic and operative planning and reduces the time used for decision-making processes. The course focuses on data-driven techniques and tools including such topics as medical coding systems, database fundamentals, business performance monitoring (managerial dashboards), and data mining applied to the healthcare industry. A number of data mining and predictive modeling approaches are discussed to address specific issues in healthcare. LEC.

HEIM 679. Information Governance in Healthcare. 3 Hours.
This course examines the role of health information managers as facilitators and champions of information governance in healthcare organizations. Course content includes an exploration of the topic of information governance, as well as introduces strategic considerations for enterprise processes, policies and procedures, standards, and metrics to support information governance efforts. Information is considered throughout the course as a strategic asset for organizational optimization. External users of information and related implications are also discussed. LEC.

HEIM 680. Management Internship. 3 Hours.
This internship experience provides the student with a management capstone experience in the activities and responsibilities of the health information administrator. Students are responsible for all costs to include: room, board, and transportation. Management sites are selected based on the experience and credentials of the student. Prerequisite: Successful completion of all HIM professional coursework and/or permission of the instructor. LEC.

HEIM 681. Management Practicum. 3 Hours.
This practicum experience provides the student with a management capstone experience in the activities and responsibilities of the health information administrator. The specific practicum topics are selected based on the experience and credentials of the student. Prerequisites: Successful completion of all HIM professional coursework and/or permission of the instructor. LEC.

Bachelor of Science in Health Information Management

In this two-year bachelor's degree program, students work with the latest health information technology at a top academic institution on the KU Medical Center campus in Kansas City, Kan. Students typically enter this
The bachelor's degree in health information management is accredited by the Commission on Accreditation for Health Informatics and Information Management Education.

Students interested in entering this field should contact an advisor as early as possible in their collegiate careers to ensure prerequisite course work will be completed on schedule. For more information, view the frequently asked questions (http://www.kumc.edu/school-of-health-professions/health-information-management/frequently-asked-questions.html) for prospective students.

Prior to entering the program, students must complete two (2) years of undergraduate college course work – either from the KU Lawrence campus or another regionally accredited university or community college – with a total of at least 60 semester credit hours.

No grade lower than a “C” is accepted in any prerequisite course. An overall grade point average of 2.5 (on a 4.0 scale) for college course work is required to be eligible to apply.

Changes in health care require frequent curriculum content changes and course revisions. All prospective students should obtain ongoing advising from the department (http://www.kumc.edu/school-of-health-professions/health-information-management.html) to ensure the candidate's transcript meets current prerequisites. Additional advising is available at the Undergraduate Advising Center (http://advising.ku.edu) in Lawrence.

**KU Students:** Students on the Lawrence campus should declare prehealth information management as their major. Please contact Robin Merritt, academic advisor for the School of Health Professions for advising.

**Transfer Students:** Students from other institutions need to verify that prerequisites are completed. Verify equivalent course work is transferable and will meet the program requirements using the CredTran system. Program sheets are available for community colleges in Kansas which provide a list of transferable courses. Please contact the HIM advisor at him@kumc.edu with questions or for assistance in transferring to KU.

International students, or those for whom English is a second language, may have additional requirements relative to language proficiency, residency, and citizenship status. Information for international students (http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html)

Good physical health and mental health is essential. Minor physical handicaps are not considered deterrents. The faculty reserves the option of restricting admission of candidates with handicaps that may affect ability to deliver safe and effective patient care. The admissions committee may request a personal interview with the applicant. All students must be current with required immunizations.

A background check is also required. Prospective students should review the program requirements and complete list of application requirements on the department’s website (http://www.kumc.edu/school-of-health-professions/health-information-management/how-to-apply/apply-online.html).

**Prerequisites**

**NOTE:** Students may still apply if currently enrolled or working towards prerequisite course work. However, all prerequisites must be completed before the start of the program.

### Biological Sciences (9-10)

- **Natural Sciences course to satisfy KU Core goal 3**
  - BIOL 240 Fundamentals of Human Anatomy 1
  - BIOL 246 Principles of Human Physiology 2

### Mathematics (6-7)

- MATH 365 Elementary Statistics
- ACCT 200 Fundamentals of Financial Accounting 3
  - or ACCT 205 Survey of Accounting

### English (6)

- ENGL 101 Composition
- ENGL 102 Critical Reading and Writing

### Oral Communication (3)

- COMS 130 Speaker-Audience Communication

### Humanities (3)

- PHIL 160 Introduction to Ethics

### Social Sciences (6)

- PSYC 104 General Psychology
- SOC 104 Elements of Sociology

### Other required courses (9)

- IST 202 Introduction to Information Systems
  - or IST 205 Survey of Information Systems
- HEIM 230 Medical Terminology
- BLAW 301 Legal Aspects of Business

### Total Hours 42-44

1. BIOL 241 or BIOL 242 are lab courses for BIOL 240 and are recommended but not required.
2. BIOL 247 is the lab course for BIOL 246 and is recommended but not required.
3. KU requires students to take MATH 101 before taking ACCT 200; transfer students may not need to complete a MATH 101 equivalent if it is not required by their college for the accounting course below.

International students, or those for whom English is a second language, may have additional requirements relative to language proficiency, residency, and citizenship status. Information for international students (http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html)

Good physical health and mental health is essential. Minor physical handicaps are not considered deterrents. The faculty reserves the option of restricting admission of candidates with handicaps that may affect ability to deliver safe and effective patient care. The admissions committee may request a personal interview with the applicant. All students must be current with required immunizations.

A background check is also required. Prospective students should review the program requirements and complete list of application requirements on the department’s website (http://www.kumc.edu/school-of-health-professions/health-information-management/how-to-apply/apply-online.html).

**Prerequisites**

**NOTE:** Students may still apply if currently enrolled or working towards prerequisite course work. However, all prerequisites must be completed before the start of the program.

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  - BIOL 240 Fundamentals of Human Anatomy 1
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3. KU requires students to take MATH 101 before taking ACCT 200; transfer students may not need to complete a MATH 101 equivalent if it is not required by their college for the accounting course below.
KU’s health information management program is committed to preparing students for a career in the dynamic profession of health information management. Students are provided the opportunity to learn theory and practice in managing, controlling, and ensuring integrity of health information. Students are well-prepared for many different types of health information careers.

The on-campus program begins each fall on the KU Medical Center campus in Kansas City, Kan. and culminates in a 4-week capstone professional experience at the end of the spring semester of the second year.

Program requirements and course offerings are subject to change. Prospective students should visit the program website (http://www.kumc.edu/school-of-health-professions/health-information-management.html) for the latest information.

Curriculum

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An online minor in healthcare management is available to any KU student having met the prerequisite requirements.

A minor in healthcare management provides students with an in-depth understanding of the U.S. health care delivery system, with special emphasis on legal, regulatory and reimbursement issues.

### Prerequisites

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<td>BLAW 301</td>
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**Total Hours:** 9

1. or similar information systems course
2. or other business law course

Acceptance to this minor is subject to review. To request a declaration for the minor in healthcare management please visit the program website him.kumc.edu (http://him.kumc.edu).

### Minor in Healthcare Management Requirements

Students will be trained in privacy, security and confidentiality practices, and related requirements for healthcare professionals. In the program, students will examine the uniquely complex financial and reimbursement systems and the roles of quality and performance improvement in health care. Students will also gain knowledge and experience in health information systems, and specifically, electronic health care records (EHRs) and data management.

The minor requires students to complete 18 hours (6 courses) with a “C” or higher in all of the courses.

**IMPORTANT NOTE:**
Courses are located at the University of Kansas Medical Center in Kansas City, Kan. and are also offered online. Students accepted into the program have the option to enroll in the on-campus or online sections of these courses.

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<td><strong>9</strong></td>
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1. Students must take HEIM 415 first. It can be taken with other courses during the same semester.
2. Students having completed an introductory management course at KU may be offered the opportunity to enroll in a reduced-hour version of HEIM 571.

Students are encouraged to take HEIM 210 Introduction to Healthcare (1 credit hour), which is offered on the Lawrence campus, to ensure that this minor best meets the student’s needs.

### Molecular Biotechnology

**Overview**

KU’s master’s degree in molecular biotechnology program prepares students for advanced careers in molecular biotechnology-oriented clinical, industrial and research laboratories. During the 2-year (40 credit hour) non-thesis program, students obtain training in the use and application of the latest methodologies and instrumentation as well as critical thinking, troubleshooting, and communication skills.

The application of these skills to research and development is emphasized. The innovative curriculum is structured to provide broad-based knowledge and hands-on experience through course work and practica performed in biotechnology settings. Together with state-of-the-art research facilities and excellent faculty, the University of Kansas Medical Center is a premier location to study molecular biotechnology.
Master of Science in Molecular Biotechnology

KU’s master’s degree in molecular biotechnology program prepares students for advanced careers in molecular biotechnology-oriented clinical, industrial and research laboratories. During the 2-year (40 credit hour) non-thesis program, students obtain training in the use and application of the latest methodologies and instrumentation as well as critical thinking, troubleshooting, and communication skills.

The application of these skills to research and development is emphasized. The innovative curriculum is structured to provide broad-based knowledge and hands-on experience through course work and practica performed in biotechnology settings. Together with state-of-the-art research facilities and excellent faculty, the University of Kansas Medical Center is a premier location to study molecular biotechnology.

Applications are considered in accordance with KU graduate studies admission requirements. Applicants must have earned a baccalaureate degree in a life science (e.g., Biochemistry, Biology, Cell Biology, Clinical Laboratory Sciences, Microbiology, Molecular Biosciences etc.) prior to enrollment in the program. An applicant with a baccalaureate degree in other than a life science can be considered for admission provided the prerequisite coursework has been successfully completed.

Prerequisites include the following courses:

- General chemistry (two semesters)
- Organic chemistry lecture and laboratory (at least one semester)
- Biochemistry (one semester)
- Genetics (one semester)
- Cell biology (one semester)
- Calculus (one semester)
- Physics (one semester)

Applicants can be working towards completion of a baccalaureate degree at the time of application, but must have completed their degree requirements before enrolling in the program.

Important Requirements

Grade Point Average: Applicants should have a minimum grade point average of 3.0 (on a 4.0 scale). Applicants with a GPA below 3.0 may be considered for admission on probationary or provisional status.

Graduate Record Examination (GRE): Arrange to take the GRE. Your application cannot be completely processed until we have received these scores. Use institution code 6895 to have an official copy of your scores mailed directly to KU Medical Center. The general exam must have been taken within the last two (2) years and include verbal, quantitative and analytical scores. We do not require a subject test.

English Language Proficiency (p. 2395): All applicants whose native language is not English must demonstrate English language proficiency through either the TOEFL or IELTS testing systems. The test must have been the testing service using ETS school code 6895. Photocopies of scores will not be accepted.

International Students: An applicant is considered an international student if he or she requires a visa, or currently resides in the U.S. with non-immigrant status, or currently resides in the U.S. while applying for permanent residency. Additional requirements and documentation, such as proof of English language proficiency, are required for international students to become eligible for KU programs.

Background Check: A background check (http://www.kumc.edu/school-of-health-professions/background-checks.html) is required during the admission process; it may affect the student’s eligibility to enter the program.

Prospective students should review the program requirements, including prerequisite course work, and complete list of application requirements on the program’s website (http://www.kumc.edu/school-of-health-professions/molecular-biotechnology.html).

The Master of Science in molecular biotechnology is a 2-year nonthesis program that provides broad-based knowledge and skills to prepare students for advanced careers in molecular biotechnology-oriented clinical, industrial, and research laboratories. Students receive training in the use and application of advanced methodologies and instrumentation as well as critical thinking, troubleshooting, and communication skills. The application of these skills to research and development is emphasized. A comprehensive examination, consisting of written and oral components, is required during the final semester of the program.

A minimum 40 credit hours in the program are designed to be completed in 2 years if pursued full-time. The curriculum provides broad-based training and experience through course work and practica in biotechnology settings. This program is not well suited to part-time study, particularly the practicum component. However, it is possible to extend the course of study over more than 2 years by delaying the recommended schedule of courses.

For details of the curriculum please visit the program’s website (http://mb.kumc.edu).

Year 1

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Year 2

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Total Hours: 40

Nuclear Medicine Technology

KU’s Nuclear Medicine Technology certificate is a 12-month accredited program which prepares technologists to inject radiopharmaceuticals and use highly technical cameras and computers in a clinical setting. The
program is a collaboration with the Department of Radiology and the The University of Kansas Hospital for clinical instruction while applications and student services are handled by the University of Kansas.

A certificate from the University of Kansas is awarded to the student upon successful completion of the program. Graduates are eligible to take the national registry examinations given by the American Registry of Radiologic Technologists and/or the Nuclear Medicine Technology Certification Board.

More about this profession can be found on the program's website (http://nuclearmedicine.kumc.edu).

Certificate in Nuclear Medicine Technology

KU's nuclear medicine technology certificate is a 12-month accredited program which prepares technologists to inject radiopharmaceuticals and use highly technical cameras and computers in a clinical setting. The program is a collaboration with the Department of Radiology and the The University of Kansas Hospital for clinical instruction while aspects of the academic program, including applications and student services, are handled by the University of Kansas.

A certificate from the University of Kansas is awarded to the student upon successful completion of the program. Graduates are eligible to take the national registry examinations given by the American Registry of Radiologic Technologists and/or the Nuclear Medicine Technology Certification Board.

More about this profession can be found on the program's website (http://www.nuclearmedicine.kumc.edu).

Applicants must currently be one of the following registered professionals. Credentials or transcripts not from an accredited U.S. academic institution require evaluation by the KU International Student Services Office before they can be accepted for eligibility.

- Registered Radiology Technologist (ARRT)¹
- Diagnostic Medical Sonographer (ARDMS)¹
- Diagnostic Cardiac Sonographer (ARDMS)¹
- Certified Medical Technologist
- Registered Nurse
- Associate's degree in a medical imaging profession with current registry or licensure
- Bachelor's degree in a health science field (i.e., biology or chemistry)

¹ The applicant may be a registry candidate but must pass the registry before entrance into the program.

Prerequisites

The following college courses must be completed to be eligible for the nuclear medicine program.

- College algebra
- College English
- Computer science
- Chemistry with lab
- General physics
- Medical terminology
- Humanities course
- Social sciences course
- Human anatomy and human physiology
- Human anatomy or human physiology lab
- Speech/Oral communication

Health and Physical Requirements

Good physical and mental health are essential to the field of nuclear medicine. Specifically, excellent visual acuity is necessary. The Nuclear Medicine Student must also have manual dexterity, sufficient hearing and speech, and good physical coordination in positioning patients and operating nuclear medicine equipment. Students must have full utility of both arms, hands and fingers in order to perform examinations and operate equipment. The ability to handle extremely heavy objects is required.

Physical or other disabilities are evaluated on a case by case basis by the program and by the Office of Institutional Access and Opportunity. Please review the program's technical standards (http://www.kumc.edu/school-of-health-professions/nuclear-medicine-technology/technical-standards.html) for details. The Educational Programs of the University of Kansas Medical Center reserve the right to make changes without prior notice to any of the polices stated in this document.

Background Check

The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) requires all incoming students to pay for a background check (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html). Applicants will be asked to provide information and make the payment once officially accepted into the program. A drug screening may also be required. For more information, please see the School of Health Professions background check information. (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html)

International Students

An applicant is considered an international student if he or she requires a visa, or currently resides in the U.S. with non-immigrant status, or currently resides in the U.S. while applying for permanent residency. Additional requirements and documentation, such as proof of English language proficiency, are required for international students to become eligible for KU programs. Please review the information for international students (http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html) before applying.

Grade-point average and other requirements also apply. Prospective students should review the complete program eligibility requirements and application instructions on the program's website (http://nuclearmedicine.kumc.edu).

A certificate from the University of Kansas is awarded to the student upon successful completion of the program. Graduates are eligible to

³ Background-checks-and-drug-screening-for-students.html
⁴ JCAHO requires all incoming students to pay for a background check (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html).
⁵ The applicant must have completed the following courses with a grade of "C" or better.

³ The applicant may be a registry candidate but must pass the registry before entrance into the program.

³ The program and by the Office of Institutional Access and Opportunity. Please review the program's technical standards (http://www.kumc.edu/school-of-health-professions/nuclear-medicine-technology/technical-standards.html)
take the national registry examinations given by the American Registry of Radiologic Technologists and/or the Nuclear Medicine Technology Certification Board.

Curriculum

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Nurse Anesthesia

The doctor of nursing practice in nurse anesthesia is a comprehensive 36-month graduate program in which registered nurses receive extensive education in both the academic and clinical components of nurse anesthesia. Students learn to administer anesthesia to all patient populations in a variety of clinical settings using all current anesthesia techniques, and graduates are prepared to take the national certification examination required to become Certified Registered Nurse Anesthetists.

The program is fully accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs, and the Kansas State Board of Nursing (http://www.kson.org). KU is accredited by the North Central Association (http://www.northcentralassociation.org) through its Higher Learning Commission.

The Department of Nurse Anesthesia Education (http://na.kumc.edu) is on the second floor of Delp Pavilion on the KU Medical Center campus in Kansas City, Kansas. It is part of the KU School of Health Professions.

Courses

NURA 800. Professional Aspects of Anesthesia. 3 Hours.
This course includes orientation to the profession of nurse anesthesia. The student will gain an understanding of the anesthesia department management and organization. The history of anesthesia will be discussed. Ethical, psychological, professional adjustments and legal responsibilities of the nurse anesthetist will be presented. LEC.

NURA 801. Introduction to Clinical Practicum. 1 Hour.
Students will engage in clinical practice that involves introduction to basic anesthesia skills. Emphasis is given to patient assessment, anesthetic planning and management of the patient population of low risk categories. The course includes introduction to clinical problem solving and "call" experiences that address the trauma patient and emergency surgical/anesthetic interventions for pathological states. Prerequisite: Permission of Instructor. CLN.

NURA 805. Clinical Anatomy. 4 Hours.
An intensive study of the major anatomical systems and regions of the body which have clinical significance for anesthetists and others. Particular attention devoted to the respiratory, cardiovascular, and nervous systems. Regional topics include the anatomy of the head, neck, vertebral column, thorax, axilla, and femoral triangle. Involves both lectures and cadaver dissection, plus appropriate models, x-ray films, and audiovisual materials. Prerequisite: Admission to the Nurse Anesthesia Program or permission of instructor. LEC.

NURA 806. Advanced Physiology. 4 Hours.
A course designed to lead to an advanced comprehension of the physiology of organ systems in the human in both cellular and organ processes. Physiology subject matter relevant to clinical health sciences include membrane transport, muscle, cardiovascular, respiratory, renal, water and electrolyte balance, gastrointestinal, and endocrine physiology as well as neurophysiology. Cellular mechanisms include the structure and function of ion channels and pumps, mechanisms of calcium regulation, excitation-coupling processes and mechanisms of oxidative cell damage and apoptosis. Prerequisite: Permission of instructor. LEC.

NURA 811. Advanced Theory in Anesthesia I. 2 Hours.
This is the first of five successive courses relative to the didactic study of the art and science of nurse anesthesiology. Students will acquire the knowledge base pertinent to the perioperative anesthetic management of ophthalmology and otolaryngology procedures and patients with alterations in the endocrine system. Students enhance their critical thinking, problem-solving skills and ability to synthesize didactic information to the clinical environment. In addition, students will be required to engage in analysis of currently published research to identify "best practices" based on research evidence. Prerequisite: Permission of Instructor. LEC.

NURA 812. Advanced Theory in Anesthesia II. 3 Hours.
This is the second of five successive courses relative to the didactic study of the art and science of nurse anesthesiology. Students will acquire the knowledge base pertinent to the perioperative anesthetic management of critical care and trauma patients, acid base and electrolytes, and hematologic needs of patients during surgical interventions. Students enhance their critical thinking, problem-solving skills and ability to synthesize didactic information to the clinical environment. In addition, students will be required to engage in analysis of currently published research to identify "best practices" based on research evidence. Prerequisite: Permission of Instructor. LEC.

NURA 813. Advanced Theory in Anesthesia III. 2 Hours.
This is the third of five successive courses relative to the didactic study of the art and science of nurse anesthesiology. Students will acquire the knowledge base pertinent to the perioperative anesthetic management of obstetrical, neonatal and pediatric patients. Students enhance their critical thinking, problem-solving skills and ability to synthesize didactic information to the clinical environment. In addition, students will be required to engage in analysis of currently published research to identify "best practices" based on research evidence. Prerequisite: Permission of Instructor. LEC.

NURA 814. Advanced Theory in Anesthesia IV. 3 Hours.
This is the fourth of five successive courses relative to the didactic study of the art and science of nurse anesthesiology. Students will acquire the knowledge base pertinent to the perioperative anesthetic management of neurosurgical, cardiovascular, thoracic, and transplantation patients. Students enhance their critical thinking, problem-solving skills and ability to synthesize didactic information to the clinical environment. In addition, students will be required to engage in analysis of currently published research to identify "best practices" based on research evidence. Prerequisite: Permission of Instructor. LEC.

NURA 815. Advanced Theory in Anesthesia V. 3 Hours.
This is the fifth of five successive courses relative to the didactic study of the art and science of nurse anesthesiology. Students will acquire the knowledge base pertinent to the perioperative anesthetic management of the orthopedic patient and disease processes of the myoneuroskeletal disease processes, the geriatric and urological patient
during surgical interventions. Students enhance their critical thinking, problem-solving skills and ability to synthesize didactic information to the clinical environment. In addition, students will be required to engage in analysis of currently published research to identify “best practices” based on research evidence. Prerequisite: Permission of instructor. LEC.

**NURA 820. Information Systems and Data Management in Anesthesia. 1 Hour.**
Information systems, data management concepts, and their applications will be explored. This will enable the doctoral prepared nurse anesthetist to utilize resources to facilitate quality improvement, increase patient safety through outcome measurements, and improve resource utilization in the perioperative period. Prerequisite: Permission of instructor. LEC.

**NURA 821. Advanced Practicum in Anesthesia I. 2 Hours.**
This is the first of six courses relative to the application of the art and science of nurse anesthesiology. Each section is designed to address specific surgical categories and the relevant patient care needs and risks. Completion of each course requires acquisition and refinement of clinical skills. Students will demonstrate progression in cognitive, psychomotor and affective skills appropriate to a professional nurse anesthetist. Prerequisite: Permission of Instructor. LEC.

**NURA 822. Advanced Practicum in Anesthesia II. 2 Hours.**
This is the second of six courses relative to the application of the art and science of nurse anesthesia. Each section is designed to address specific surgical categories and the relevant patient care needs and risks. Completion of each course requires acquisition and refinement of clinical skills. Students will demonstrate progression in cognitive, psychomotor and affective skills appropriate to a professional nurse anesthetist. Prerequisite: Permission of Instructor. LEC.

**NURA 823. Advanced Practicum in Anesthesia III. 2 Hours.**
This is the third of six courses relative to the application of the art and science of nurse anesthesia. Each section is designed to address specific surgical categories and the relevant patient care needs and risks. Completion of each course requires acquisition and refinement of clinical skills. Students will demonstrate progression in cognitive, psychomotor and affective skills appropriate to a professional nurse anesthetist. Prerequisite: Permission of Instructor. LEC.

**NURA 831. Advanced Chemistry and Physics. 2 Hours.**
Chemical and physical principles including states and properties of matter, laws governing the behavior of gases, flow and vaporization, oxidation and combustion; principles of electricity and electrical safety; and chemical properties and structure-activity relationships as a foundation for pharmacology. Course will also cover pertinent areas of organic chemistry. Prerequisite: Permission of instructor. LEC.

**NURA 832. Basic Principles of Anesthesia Practice. 3 Hours.**
This course introduces students to the introductory principles and theories regarding the art and science of anesthesia practice. Students will develop a conceptual basis for practice gained through a systems approach applied to development of anesthesia care based upon a strong foundation in physical assessment, physiological monitoring, applications of pharmacology, anesthesia systems, physical and chemical basic sciences. Prerequisite: Admission to the nurse anesthesia program or permission of instructor. LEC.

**NURA 835. Advanced Physical Assessment and Patient Care Technology for Anesthesia. 3 Hours.**
This course is designed to develop and refine the physical assessment skills of the practitioner as well as enhance their understanding, interpretation, and application of laboratory measurements and advanced diagnostic procedures in the perioperative setting. The course is arranged in a systems approach with emphasis placed on the cardiovascular, pulmonary, renal, neurological, and endocrine. Diagnostic procedures and laboratory values specific to each of these systems and their relevance to anesthesia principles and practice will be discussed. The selection of appropriate monitoring devices specific to each system related to individual patient needs will be discussed. Prerequisite: Permission of instructor. LEC.

**NURA 839. Regional Anesthesia/Pain Management. 3 Hours.**
Includes study of conductive anesthesia techniques, pharmacokinetics of local anesthetics, anatomical placement, and physiologic response. The course is inclusive of acute and chronic pain management techniques. LEC.

**NURA 880. Advanced Topics: _____ 1-4 Hours.**
Special study allowing a student to pursue a particular subject through readings, directed assignments, and conferences with a faculty member. Prerequisite: Consent of instructor. LEC.

**NURA 889. Introduction to Theory, Research Methods and Evidence-Based Practice. 3 Hours.**
Methods of theory development and analysis provide the foundation for the study of concepts and theories from nursing, anesthesiology and related scientific disciplines. Historical, scientific and philosophical frameworks relevant to the theoretical basis of nurse anesthesia are explored. The fundamentals of research methodology are examined including elements of design, measurement, statistical analysis and dissemination. The relationships between research, theory and practice are developed to create an awareness of how “best practice” resources support professional growth, competence and quality. Prerequisite: Permission of instructor. LEC.

**NURA 892. Applied Statistics and Analysis in Health Care. 3 Hours.**
Concepts include graduate-level statistical reasoning, statistical principles, and the role as the scientific basis for clinical and public health research and practice. Content includes hospital-based statistics, introduction to epidemiology, relationship of research design to statistical methods, research ethics/protocol, hypothesis testing, and data management. Prerequisite: Permission of instructor. LEC.

**NURA 901. Evaluation and Application of Evidence-Based Practice in Anesthesia I. 1 Hour.**
First of four courses in which the student will use analytic methods to critically appraise existing literature from nurse anesthesiology and other disciplines to determine and implement the best evidence for practice. An exploration of the design, implementation and evaluation of quality improvement methodologies will lead the student to an appreciation of the safe, effective, efficient and timely delivery of patient-centered anesthesia care. Previous student knowledge in the domain of research analysis will be applied to the design of evidence-based interventions in current anesthesia practice. Prerequisite: Permission of instructor. LEC.

**NURA 902. Evaluation and Application of Evidence-Based Practice in Anesthesia II. 1 Hour.**
Second of four courses in which the student will use analytic methods to critically appraise existing literature from nurse anesthesiology and other disciplines to determine and implement the best evidence for practice. An exploration of the design, implementation and evaluation of quality improvement methodologies will lead the student to an appreciation of the safe, effective, efficient and timely delivery of patient-centered anesthesia care. Previous student knowledge in the domain of research analysis will be applied to the design of evidence-based interventions in current anesthesia practice. Prerequisite: Permission of instructor. LEC.
NURA 903. Evaluation and Application of Evidence-Based Practice in Anesthesia III. 1 Hour.
Third of four courses in which the student will use analytic methods to critically appraise existing literature from nurse anesthesiology and other disciplines to determine and implement the best evidence for practice. An exploration of the design, implementation and evaluation of quality improvement methodologies will lead the student to an appreciation of the safe, effective, efficient and timely delivery of patient-centered anesthesia care. Previous student knowledge in the domain of research analysis will be applied to the design of evidence-based interventions in current anesthesia practice. Prerequisite: Permission of instructor. LEC.

NURA 904. Evaluation and Application of Evidence-Based Practice in Anesthesia IV. 1 Hour.
Fourth of four courses in which the student will use analytic methods to critically appraise existing literature from nurse anesthesiology and other disciplines to determine and implement the best evidence for practice. An exploration of the design, implementation and evaluation of quality improvement methodologies will lead the student to an appreciation of the safe, effective, efficient and timely delivery of patient-centered anesthesia care. Previous student knowledge in the domain of research analysis will be applied to the design of evidence-based interventions in current anesthesia practice. Prerequisite: Permission of instructor. LEC.

NURA 912. Leadership in Nurse Anesthesia I. 1 Hour.
First of two courses which focus the students on leadership projects which were designed in NURA 800, Professional Aspects of Anesthesia. Students will apply a variety of leadership theories as they conduct the projects with nurse anesthesia faculty supervision. At the conclusion of NURA 912, students will evaluate the projects and determine if goals were met, recognize which principles of leadership theory(ies) were utilized in the projects, and prepare an action plan for revisions. Presentations and self-analysis of the projects will be posted as VOPPTs on the ANGEL course site. Prerequisite: Permission of instructor. FLD.

NURA 913. Leadership in Nurse Anesthesia II. 1 Hour.
Second of two courses which focus the students on leadership projects which were designed in NURA 800, Professional Aspects of Anesthesia. Students will apply a variety of leadership theories as they conduct the projects with nurse anesthesia faculty supervision. At the conclusion of NURA 913, students will evaluate the projects and determine if goals were met, recognize which principles of leadership theory(ies) were utilized in the projects, and prepare an action plan for revisions. Presentations and self-analysis of the projects will be posted as VOPPTs on the ANGEL course site. Prerequisite: Permission of instructor. FLD.

NURA 924. Advanced Practicum IV. 2 Hours.
Fourth of six clinically-based courses related to the art and science of advanced nurse anesthesia practice and care of patients with specialized anesthesia care. The courses are divided into sequential clinical practicum related to diverse patient types in both normal and abnormal states and for those requiring anesthesia care in specialized areas (cardiothoracic, obstetrics, neurosurgical, etc.) Participation in case presentations may be required as warranted by clinical events. An opportunity is provided to apply advanced clinical decision making skills and evidence-based research to the assessment, management, and evaluation of complex health care problems of a diverse patient population in the perianesthesia care setting. Prerequisite: Permission of instructor. PRA.

NURA 925. Advanced Practicum V. 2 Hours.
Fifth of six clinically-based courses related to the art and science of advanced nurse anesthesia practice and care of patients with specialized anesthesia care. The courses are divided into sequential clinical practicum related to diverse patient types in both normal and abnormal states and for those requiring anesthesia care in specialized areas (cardiothoracic, obstetrics, neurosurgical, etc.) Participation in case presentations may be required as warranted by clinical events. An opportunity is provided to apply advanced clinical decision making skills and evidence-based research to the assessment, management, and evaluation of complex health care problems of a diverse patient population in the perianesthesia care setting. Prerequisite: Permission of instructor. PRA.

NURA 926. Advanced Practicum VI. 2 Hours.
Sixth of six clinically-based courses related to the art and science of advanced nurse anesthesia practice and care of patients with specialized anesthesia care. The courses are divided into sequential clinical practicum related to diverse patient types in both normal and abnormal states and for those requiring anesthesia care in specialized areas (cardiothoracic, obstetrics, neurosurgical, etc.) Participation in case presentations may be required as warranted by clinical events. An opportunity is provided to apply advanced clinical decision making skills and evidence-based research to the assessment, management, and evaluation of complex health care problems of a diverse patient population in the perianesthesia care setting. Prerequisite: Permission of instructor. PRA.

**Doctor of Nursing Practice**

The doctor of nursing practice in nurse anesthesia is a comprehensive 36-month program in which registered nurses receive extensive education in both the academic and clinical components of nurse anesthesia. Students learn to administer anesthesia to all patient populations in a variety of clinical settings using all current anesthesia techniques, and graduates are prepared to take the national certification examination required to become Certified Registered Nurse Anesthetists.

The program is fully accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs, and the Kansas State Board of Nursing (http://www.ksbn.org). KU is accredited by the North Central Association (http://www.northcentralassociation.org) through its Higher Learning Commission.

The Department of Nurse Anesthesia Education (http://na.kumc.edu) is on the second floor of Delp Pavilion on the KU Medical Center campus in Kansas City, KS. It is part of the KU School of Health Professions.

Prospective students must meet all program eligibility requirements. When ready to apply, please review the complete list of application requirements on the department's website (http://www.kumc.edu/school-of-health-professions/nurse-anesthesia-education/prospective-students/eligibility-and-requirements.html).

To be eligible to enter the program, an applicant must be a registered nurse with 2 years’ work experience as a licensed registered nurse, including a minimum 1 year of recent, full-time experience in an intensive care setting. Experience as an LPN does not count.

License, or eligibility for licensure, as a professional registered nurse in the state of Kansas is required. A current RN license must be obtained by the spring of the year in which the student enters the program.

A bachelor’s degree in any appropriate discipline, such as nursing, respiratory care, biological sciences, health care administration, pharmacology, psychology, sociology, is required. A bachelor’s degree in nursing is not required.
An overall grade-point average of 3.0 on a 4.0 scale is required for all prior course work.

This program does not accept transfer students.

The doctor of nursing practice with a specialization in nurse anesthesia is a 3-year degree program. With clinical experiences, class time, and study time, the program is very demanding. During the first 2 semesters, courses are mostly classroom-based during regular weekday hours. For the remainder of the program, students are assigned in the clinic with variable schedules, including 12-hour shifts outside of regular business hours. Students continue to take theory, research, and other courses during this time.

Much of the program’s course work after the first year is web-based. This design permits more learning methods to be incorporated into the program and allows students to continue to gain knowledge through academic course work while developing their skills in the clinic. Successful completion of a leadership project, a capstone project, an oral comprehensive exam, and supervised clinical practicum are also required for graduation. Please see the program website for detailed information on prerequisite courses (http://www.kumc.edu/school-of-health-professions/nurse-anesthesia-education/prospective-students/eligibility-and-requirements.html).

An overall cumulative grade-point average of 3.0 on a 4.0 scale is required for graduation. Please visit the department’s website (http://na.kumc.edu) for full curriculum details and degree requirements.

Please note that this is not a distance learning program.

Curriculum

Summer, Year 1 (6)

- NURA 805 Clinical Anatomy 4
- NURA 831 Advanced Chemistry and Physics 2

Fall, Year 1 (13)

- NURA 806 Advanced Physiology 4
- NURA 833 Basic Principles of Anesthesia Practice 3
- NURA 835 Advanced Physical Assessment and Patient Care Technology for Anesthesia 3
- PHCL 761 General Principles of Pharmacology 1
- PHCL 762 Pharmacology of the Autonomic Nervous System 1
- PHCL 763 Cardiovascular-Renal Pharmacology 1

Spring, Year 1 (13)

- NURA 801 Introduction to Clinical Practicum 1
- NURA 889 Introduction to Theory, Research Methods and Evidence-Based Practice 3
- NURA 892 Applied Statistics and Analysis in Health Care 3
- NRSG 812 Advanced Pathophysiology 3

Total Hours 81

Occupational Therapy

The Department of Occupational Therapy Education resides in the KU School of Health Professions (http://healthprofessions.kumc.edu) and is located on the KU Medical Center campus in Kansas City, Kan. The department offers the following degree programs:

Master of Occupational Therapy (MOT)

Students wanting to enter the profession of occupational therapy enter this 3-year graduate degree program after acquiring a bachelor's degree at KU or another institution. Graduates are eligible to take the national certification examination to obtain OT licensure. >> MOT program details
Doctor of Occupational Therapy (OTD)

This clinical-based doctorate program is designed for practicing occupational therapists who want to pursue the highest level of advanced practice. An OT degree and current license are required for admission. [OTD program details](http://www.kumc.edu/x12196.xml)

**OCTH 101. Introduction to Occupational Therapy. 1 Hour.**
Survey of the profession of occupational therapy. Includes information on academic and professional requirements, career opportunities, general description, and history of the profession. Open to all students. LEC.

**OCTH 601. Human Anatomy. 6 Hours.**
In OCTH 601, the study of gross anatomy and neuroanatomy in relation to human function and behavior will introduce students to how occupational therapists use anatomical knowledge to gather information about clients. Learning opportunities include lecture and laboratory. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

**OCTH 602. Orientation to the Occupational Therapy Profession. 3 Hours.**
In OCTH 602, we will examine occupation, explore the underlying philosophy and history of the occupational therapy profession, and implications for current practice and future directions. We will establish expectations for professionalism and practice application of ethical and professional behaviors within the context of occupational therapy practice. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

**OCTH 605. Theory and Practice in Occupational Therapy. 2 Hours.**
In OCTH 605, we will present established and emerging conceptual models of occupational therapy to guide students in exploration and discussion of assessment and intervention practices. Emerging professional reasoning skills and strategies will support individuals and small groups in synthesis and integration of theoretical concepts applied to diverse practice settings. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

**OCTH 622. Analysis and Adaptations of Occupations - I. 4 Hours.**
In OCTH 622, we will study the role of occupations and factors influencing occupational performance using the "top-down/bottom-up" analytic approach recommended by the WHO and reinforced by the OT Practice Framework. This course will use service learning as the context for synthesizing an understanding of occupation, the occupational therapy process, and person-centered practice. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

**OCTH 635. Lifespan Development from an Occupational Perspective. 4 Hours.**
In OCTH 635, we will examine in detail developmental theories and how they intersect with changes in occupations across the lifespan. We will promote an advanced understanding of participation in meaningful activities by practical experiences with real people in authentic settings. Students will gain an understanding and appreciation of the qualitative differences between typical and atypical occupational performance across the lifespan. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

**OCTH 645. Contexts of Occupation. 2 Hours.**
In OCTH 645, contextual supports and features of physical, social, and other environments will be explored as potential tools to facilitate maintaining or enhancing occupational performance irrespective of disability status. The interaction of person, context, and environment will be explored through guided discussion, reflection, and extra-mural exploratory assignments. A culminating activity inspires teams of students to assemble course elements to develop a cohesive summary project with practical application. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

**OCTH 655. Neuroscience Analysis of Occupational Performance. 3 Hours.**
In OCTH 655, we will build upon prior knowledge of neuroanatomy gained through OCTH 601. Principles of neuroscience will be interpreted in clinical application using a strength-based approach to advance understanding of nervous system function. The integration and function of neural systems will be considered in relation to specific challenges and capacity of the nervous system as a whole to support behavior. A practical application and problem-based perspective will be encouraged throughout the course, with students invited to consider consumer perspective and availability of potential supports. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

**OCTH 662. Physical Considerations in Facilitating Occupational Performance. 4 Hours.**
In OCTH 662, we will appraise the impact of select medical conditions on person factors and occupational performance in everyday life using scientific reasoning. Students will implement occupational therapy assessment and intervention strategies integrated with knowledge of injury and disease processes to facilitate an understanding of occupational performance outcomes. Particular consideration will be given to addressing complex comborbidities within the context occupational performance. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

**OCTH 670. Practicum - II. 2 Hours.**
In OCTH 670, we will employ the occupational therapy process, to participate in service provision to individuals through level I fieldwork experiences. We will build upon skills from OCTH 630 to advance leadership development and effective communication. This course will use both classroom and community-based practicum experiences. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

**OCTH 672. Psychiatric Considerations in Facilitating Occupational Performance. 3 Hours.**
In OCTH 672, we will examine in detail occupational performance as influenced by psychological conditions using evidence-based practices and principles of mental health. We will emphasize the importance of considering individuals, groups and organizations with the context of
occupational performance. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

OCTH 680. Independent Study. 1-6 Hours.
An elective course to allow students to pursue areas of special interest under direction of faculty of his or her choice. Investigation of special issues relevant to an aspect of occupational therapy practice will include study of pertinent practice factors. Student will complete special projects relevant to the practice areas, such as oral presentation, written paper or case analyses. May be repeated for credit. Prerequisite: Permission of department and instructor (offered Spring, Summer and Fall). IND.

OCTH 682. Analysis and Adaptation of Occupations - II. 2 Hours.
In OCTH 682, we will support students in service learning settings to expand OCTH 622 task analysis outcomes to include the occupational therapy practice framework to further analyze and apply the occupational therapy process using person-centered practice. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

OCTH 690. Evaluation and Assessment of Occupational Performance. 2 Hours.
In OCTH 690, we will examine in detail principles of the evaluation process to analyze occupational performance across the lifespan. We will differentiate, select, interpret, and document both formal and informal measures within a person-centered and contextually relevant approach. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department. LEC.

OCTH 704. Planning and Intervention in Occupational Therapy. 2 Hours.
This course will use professional reasoning to analyze cases across the lifespan. We will work in small groups using a problem-based format with faculty mentors as we develop an occupational profile, occupational analysis and evidence-based intervention plans for each case. LEC.

OCTH 710. Service Management: Delivery Systems. 1 Hour.
This course will explore how service delivery systems influence pragmatic reasoning and occupational therapy practice. We will examine American and global health care systems along with occupational therapy health care delivery settings with a focus on quality, cost, and access related to service delivery. Teaching and learning experiences occur through lecture, on-line materials, class discussion and small group activities.

OCTH 715. Supervision, Team Relations, and Management Communication. 1 Hour.
This course emphasizes entry level skills related to supervision, teamwork, and communication within practice environments. LEC.

OCTH 720. Occupational Therapy Practice Models. 7 Hours.
This course will use practice models to guide evaluation and intervention in occupational therapy practice. Students will gain an understanding of historical and contemporary models, learn the evidence underlying each model and conduct assessments with a consumer from each of the contemporary models. LEC.

OCTH 725. The Research Process. 1 Hour.
This course will transition from understanding and appraising research (OCTH 783) to generating research (OCTH 790). The purpose of this course is to guide students through planning research by introducing the components of research and describing ways in which research may be conducted. The course reviews research ethics, writing research questions and hypotheses, sampling, measurement and data collection, components of quantitative and qualitative research, and information about disseminating research. LEC.

OCTH 730. Practicum III. 2 Hours.
This course will build upon practicum and level I fieldwork experiences to continue developing necessary skills for level II fieldwork experiences. We will determine the relevant variables for intervention, work collaboratively with others within each setting, analyze, and reflect upon the experience. We will analyze principles of evidence-based practice and occupation-based intervention. LEC.

OCTH 738. Special Topics in Practice. 1-2 Hours.
Focused study of theory application, professional topics and skills, and emerging practice questions. Learning experiences may be in the form of guided readings and discussion, directed projects, seminars, or community/clinical experience with focus on advanced supplemental or exploratory learning. Specific topics and formats will vary as they are generated by student interest and faculty expertise. LEC.

OCTH 750. Case-Based Clinical Reasoning. 2 Hours.
This course will apply the professional reasoning process to understand individuals’ occupational performance and analyze services provided based on cases from level II fieldwork experiences. We will participate in small group discussion using a problem-based format to conduct case analysis and develop evidence-based intervention plans. LEC.

OCTH 755. Issues and Trends Seminar. 1 Hour.
This course will analyze key professional, political, and cultural issues and trends that impact service provision and the populations served by occupational therapists. This seminar format incorporates student-driven service experiences, discussion forums, and small group work to examine issues/trends and recognize opportunities to shape the future of the occupational therapy profession. LEC.

OCTH 760. Professional Development and Leadership in Service Management. 3 Hours.
This course will discuss professional responsibilities and career development opportunities as they relate to leadership, administration, and management of occupational therapy services. We will use reflective assessments to identify professional leadership strengths and career paths. Students working in small work groups will apply management principles to develop and propose community-based health promotion programs. LEC.

OCTH 765. Family and Community Service Systems. 2 Hours.
This course will use professional reasoning to examine occupational practice within various delivery systems. We will use lecture and small group seminars to analyze systems from level II fieldwork experiences and develop a program evaluation plan based on collaborations between students and fieldwork supervisors. LEC.

OCTH 770. Level II Fieldwork, Part 1. 6 Hours.
A required full-time, three-month supervised experience in a facility meeting specified criteria. Qualified occupational therapists supervise the experience. Students will be exposed to a variety of age ranges and disabilities within different service delivery systems. Prerequisite: Satisfactory completion of required academic coursework. LEC.

OCTH 775. Level II Fieldwork, Part 2. 6 Hours.
A required full-time, three-month supervised experience in a facility meeting specified criteria. Qualified occupational therapists will supervise this experience. Students will be exposed to a variety of age ranges and disabilities within different service delivery systems. Ages, disabilities, and service provision systems for this course will differ from the student’s prior fieldwork experience. Prerequisite: Satisfactory completion of required academic coursework. LEC.
OCTH 776. Population-Based Clinical Reasoning. 3 Hours.
This course will consider population-based concepts and theories to identify, prioritize and meet the health and life participation needs of populations. Within an interprofessional online learning context, students collaborate to develop community-based assessment and intervention emphasizing promotion, maintenance and restoration of health and wellness and disease prevention for specific populations. LEC.

OCTH 780. Elective Level II Fieldwork. 3-6 Hours.
An elective (optional) supervised experience in a facility meeting specific criteria. Qualified occupational therapist will supervise this experience. This fieldwork would allow students to pursue areas of special interest. Length and time commitment of experience will be commensurate with credit hours (e.g. each credit requires 80 hours of fieldwork contact at specified site). Prerequisite: Satisfactory completion of required academic coursework and OCTH 770. LEC.

OCTH 783. Evidence-Based Practice. 2 Hours.
This course will review, appraise, and integrate various levels of evidence to inform occupational therapy practice. Students will learn where and how to find relevant evidence as well as what factors should be considered in the assessment of evidence. We will review statistics and their use in interpreting outcome data. Students will also learn to synthesize and translate evidence into useful information for practice. LEC.

OCTH 790. Research Practicum and Professional Writing. 3 Hours.
This course will explore how the process of conducting a faculty-mentored research project becomes a platform for developing occupational therapy principles and for guiding practice, and how conveying meaning through professional writing is essential for communicating outcomes, interpretations, and instructions. Prerequisite: OCTH 727. Students from programs outside the MS in Occupational Therapy or PhD in Therapeutic Science need to contact the Occupational Therapy Department for permission to enroll. LEC.

OccupationalTherapy(Doctorate) Courses

OTD 750. Clinical Reasoning and Problem Based Learning. 3 Hours.
Students will apply a clinical reasoning process to individuals with occupational performance needs. Cases will be presented from students' clinical experiences. In a problem solving format, students will evaluate models of service delivery, evaluation and intervention delivery and dissemination of information received by the individual. Students will identify and discuss alternatives given a variety of situations and environments. PREREQUISITE: Permission of Department. LEC.

OTD 770. Knowledge For Specialty Practice Area. 3 Hours.
This course is designed to support and correspond with OTD 780. Students will be matched with a faculty mentor as they develop a literature review in an area of clinical interest. This experience is designed to supplement students' ongoing clinical practice as they develop a library of pertinent empirical readings. Students will be mentored as they develop skills in analytical reading and identification of information that informs best practice. PREREQUISITE: Admission to OTD Program or Permission of Instructor. LEC.

OTD 776. Population Based Health Care. 3 Hours.
This course will coordinate with OCTH 776. The purpose of this course is to introduce concepts and theories related to providing health care to complex systems and aggregates in the community, state and nation. Emphasis is placed on the promotion, maintenance and restoration of health and wellness and the prevention of disease. Internal and external environmental components which include historical, political, social, cultural and economic factors are presented. The role of the health care provider in identifying, prioritizing and meeting the health and life participation needs of aggregates is discussed. PREREQUISITE: Permission of department. LEC.

OTD 780. Practicum in Specialty Practice Area. 3 Hours.
This course is designed to support and correspond with OTD 770. Students will complete this course as they work in a clinical environment. They will meet with a faculty mentor to support the analysis and dissemination of their empirical information gathered during OTD 770. They will present their empirical literature findings to their professional colleagues via a clinical research forum. Students will be expected to create three forms of information dissemination and critically review the professional feedback they receive. PREREQUISITE: Permission of Department. LAB.

OTD 783. Evidence Based Practice. 3 Hours.
This course will coordinate with OTCH 783. Students will address the parameters and criteria for evidence-based practice. They will build a library of information that facilitates their evaluation of the status, beliefs, and practice of Occupational Therapy. They will develop skill in the synthesis of empirical evidence and explore dissemination options to service recipients. Students' work will culminate in the formulation of a decision-making paradigm for their future practice decisions. PREREQUISITE: Permission of Department. LEC.

OTD 799. Practice and Research. 3 Hours.
This is an elective course that allows students to pursue areas of special interest under the direction of a faculty member of his or her choice. This course is designed to support students' learning as they complete their pre-doctoral studies. Investigation of special issues relevant to an aspect of occupational therapy practice will include study of pertinent practice factors. Students will complete special projects relevant to the practice areas of interest, such as an oral presentation, written paper, or case analysis. May be repeated for credit. PREREQUISITE: Permission of Department. LEC.

OTD 825. Qualitative Research Methods. 3 Hours.
This course is an introduction to qualitative research techniques. Students will have several opportunities to gain hands-on experience using fundamental qualitative research techniques to sharpen their data collection, analysis and write-up skills. The goals of this course are to better understand the role qualitative techniques play in research, identify various ethical issues, sharpen interview and observation skills, and develop foundation skills for collecting, analyzing and interpreting qualitative data. Prerequisite: Permission of Department. Lecture course. LEC.

OTD 835. Quantitative Research for Applied Science. 3 Hours.
Research relevant to therapeutic intervention comes from a variety of disciplines involving varied research designs and analysis strategies. Students in this course will examine selected research studies and gain skill in analyzing methods and results as well as in applying research findings to practical problems. Students will conduct a systematic review on a specific area of occupational therapy practice. LEC.

OTD 850. Teaching Practicum. 1-3 Hours.
The purpose of this course is to provide practical learning whereby students receive individual mentorship for the development, implementation and evaluation of a teaching experience. Students will be responsible for developing the material, instructing students, grading assignments and evaluating the teaching experience. The teaching experience is expected to include at least 12 hours of face to face instruction (or the equivalent in on-line teaching or written materials). Teaching experiences can include MOT program lectures or labs, continuing education workshops, patient education programs, or staff in-services or another experience that meets the time and competency
requirements. Prerequisite: A graduate level teaching methods course such as NSG 873, NSG 874, C T 740, C T 840 PRA.

OTD 860. Theory and Practice in Occupational Therapy. 3 Hours.
This course will cover major theoretical frameworks and practice models in occupational therapy. The history of occupational therapy will be included to provide a basis for understanding the evolution of the profession as well as past and current issues and trends. Students will learn how to critically analyze theories, evaluate research evidence related to specific theories and practice models, and assess pragmatic issues in applying practice models to specific settings and populations. LEC.

OTD 865. Theory Based Practice. 3 Hours.
This course is designed to critically review Occupational Therapy theories, research, practice models and frameworks using the tenets of occupation based practice. Students will analyze seminal literature from occupational science and relate theory and evidence to practice. Students will review their specified area of practice to develop a proposed method of practice that incorporates empirical evidence and practice methods. Finally, students will select a mentor from their practice area to review their proposal. Critical feedback will be incorporated into a final presentation and paper. PREREQUISITE: Permission of Department. LEC.

OTD 875. Professional Development. 3 Hours.
This course will explore professional development from an advanced practice perspective. Students will examine aspects of advanced practice such as leadership (both work and professional), management, group and system communication and change agency. They will explore these topics within their current practice settings and select an area of advanced skills to explore in more depth. Students will develop an understanding of how they can impact systems and contribute to the development of the occupational therapy profession. LEC.

OTD 880. Program Evaluation. 3 Hours.
Leadership in areas of specialty practice will require our graduates to critically evaluate their practice programs. In this course, students will explore the traditional and innovative ways to evaluate professional services and systems, and they will develop skills to conduct program evaluations. Students will examine the purpose and process of program evaluations in a variety of clinical settings. Through lecture, discussion and a project they will develop and execute a program evaluation in their area of practice. PREREQUISITE: Permission of Department. LEC.

OTD 885. Advanced Practicum. 1-3 Hours.
This practicum is designed to span 400 hours. Students will identify an area of practice through which they want to develop clinical initiatives and leadership. Selected field experiences will provide opportunities for program development, leadership, and information dissemination. Upon completion, the students will provide his or her clinical team with a program, or research based initiative, along with specified program evaluation methods. PREREQUISITE: Permission of Department and continuous enrollment until completion of competencies. LAB.

OTD 890. Capstone Project. 1-3 Hours.
The capstone project will comprise a written report that involves both literature and field research activity. A capstone project report represents the application of knowledge as well as the search for it, and differs from a thesis such that student opinion and experience is involved. The student must negotiate capstone objectives, evaluation standards and any potential approvals prior to his or her practicum. PREREQUISITE: Permission of Department and continuous enrollment until competencies totaling 6 credit hours are completed. IND.

OTD 899. Special Projects. 3 Hours.
This is an elective course that allows students to pursue areas of special interest under the direction of a doctoral faculty member of his or her choice. This course is designed to support doctoral training. Academic options range from research based studies and/or activities to critical analysis of clinical practice methods. Students will complete special projects relevant to their designated practice area of interest. Students must negotiate learning objectives, academic projects and evaluation standards with their mentor. May be repeated for credit. PREREQUISITE: Permission of department. LEC RSH.

OTMS 699. Special Projects. 1-6 Hours.
(1-6) An elective course to allow student investigation of special issues or problems relevant to applied research and/or practice, under the direction of a faculty member chosen by the student. Systematic coverage of current issues may include a research investigation or study related to pertinent sociocultural trends, practice factors, or emerging issues in service provision. Students will complete special projects such as oral presentations, written papers, or case analyses as negotiated with the faculty mentor. May be repeated for credit. Prerequisite: Enrollment as a non-degree seeking student and permission of the instructor. IND.

OTMS 701. Professional Development. 3 Hours.
With an emphasis on leadership skills and professionalism, this course will include mentoring, supervising, managing, organizing presentations, and teaching, writing, and contributing through professional organizations (interdisciplinary and occupational therapy). Students professionalism on issues of concern to administrators, staff therapists, educators, or those in private practice. Prerequisite: Permission of Instructor. LEC.

OTMS 705. Multidisciplinary Theoretical Perspectives. 3 Hours.
Students will identify and explore the key theories in occupational therapy and those more specific to their emphasis area with an emphasis on those currently influencing clinical reasoning. Students will demonstrate an understanding of contemporary theories and be able to compare and contrast key theories. Students will develop rationales for theory guided interventions. Furthermore, they will develop an impact summary in their identified area of emphasis. Prerequisite: Permission of Instructor. LEC.

OTMS 735. Practice Models for Applied Science. 3 Hours.
Issues and trends relative to advanced application of theory, assessment and intervention with emphasis on pediatrics will be presented in lecture and discussion. Special projects will emphasize the student's special interests. Although faculty directed, student presentation will be emphasized. LEC.

OTMS 799. Special Topics in Occupational Therapy. 1-6 Hours.
An elective course to allow student investigation of special issues or problems relevant to applied research and/or practice, under the direction of a faculty member chosen by the student. Systematic coverage of current issues may include a research investigation or study related to pertinent sociocultural trends, practice factors, or emerging issues in service provision. Students will complete special projects such as oral presentations, written papers, or case analyses as negotiated with the faculty mentor. May be repeated for credit. Prerequisite: Permission of instructor. IND.

OTMS 800. Research Proseminar. 1 Hour.
A proseminar conducted by the core graduate faculty in Occupational Therapy and Therapeutic Science. Twice-monthly meeting will involve student and faculty presentations of their current research, as well as provide more opportunities to obtain feedback on research proposals. May be taken more than once for a total of four credits. (Same as TS 800.) RSH.
OTMS 801. Applied Neuroscience. 3 Hours.
The course will address the major functions of the systems within the central nervous system and how they interact to produce responses to environmental demands. Sensory input, central processing, and output mechanisms will be analyzed. The student will then appraise human behavior in relation to function and dysfunction of the nervous system, both in formulating potential behavioral signs when a specific neurological site is presented, and in hypothesizing about neurological involvement when analyzing a particular individuals problems. Prerequisite: Undergraduate neuroscience course or permission of instructor. LEC.

OTMS 835. Interpreting Research for Applied Science. 3 Hours.
This on-line course examines selected research studies, analysis methods and results employed, and applies research findings to practical problems. Students will design their own research project reflecting their area of interest. RSH.

OTMS 890. Graduate Research. 1-6 Hours.
Students investigate an empirical question relevant to occupational therapy and write a literature review and a research proposal under the guidance of a faculty advisor. Pending approval of the proposal, the student will carry out initial phases of the project, including materials preparation and data collection. RSH.

OTMS 899. Thesis. 1-6 Hours.
Course requires data analyses, interpretation, and scholarly writing based on individual original research carried out under the guidance of the student's adviser. These activities, along with a presentation of research, must meet with approval of the student's advisory committee to complete thesis requirements. Prerequisite: OTMS 890. THE.

Therapeutic Science Courses

TS 800. Research Proseminar. 1 Hour.
A proseminal conducted by the core graduate faculty in Occupational Therapy and Therapeutic Science. Twice-monthly meetings will involve student and faculty presentations of their current research, as well as provide more opportunities to obtain feedback on research proposals. May be taken more than once for a total of four credits. (Same as OTMS 800.) LEC.

TS 805. Multidisciplinary Theoretical Perspectives. 3 Hours.
Students will identify and explore key theories in behavioral and social science with an emphasis on those currently influencing clinical reasoning. Students will demonstrate an understanding of contemporary theories and be able to compare and contrast key theories, while also developing knowledge about theory guided research and interventions. LEC.

TS 850. From Beliefs to Evidence. 1 Hour.
Analysis of the role of beliefs about practice in professional culture and how beliefs are affected by the accumulation of research evidence. Topics include the nature of science and beliefs, the nature of evidence, and the debate over evidence-based practice. Students will use topics from their own professional interests for class presentations and written assignments. May be taken more than once for a total of two credits. LEC.

TS 880. Special Projects. 1-6 Hours.
An elective course to allow student investigation of special issues or problems relevant to applied research and/or practice, under the direction of a faculty member chosen by the student. Systematic coverage of current issues may include a research investigation or study related to pertinent sociocultural trends, practice factors, or emerging issues in service provision. Students will complete special projects such as oral presentations, written papers, or case analysis as negotiate with the faculty member. May be repeated for credit. Prerequisite: Permission of instructor. IND.

TS 900. Evolving Interdisciplinary Views of Disablement. 1 Hour.
Assessment of how our social and cultural context defines notions of disability and disablement in our society. Topics include historical constructs of disability, public policy related to disability, and social paradigms of disability. Students will evaluate views of disablement from the perspective of their own discipline. May be taken more than once for a total of two credits. LEC.

TS 950. Designing Effective Knowledge Transfer. 1 Hour.
Examination of the principles of knowledge transfer and diffusion of innovation as they relate to practices in therapeutic professions. Topics include the diffusion process, change agents, innovation adoption, and current diffusion methods. Students will evaluate diffusion processes that have occurred within their own professions. May be taken more than once for a total of two credits. LEC.

TS 980. Advanced Study in Therapeutic Science. 1-6 Hours.
Students engage in advanced study of a topic of their interest, guided by an appropriate mentor. Methods include directed readings, interpretation of evidence, discussions, and written syntheses of existing literature. Course culminates in a written proposal for original research and an oral defense of that proposal. Credit is given only after the dissertation proposal is accepted by the student's advisory committee. Prerequisite: Permission of instructor. SEM.

Research experience leading to dissertation for doctoral students in Therapeutic Science. THE.

Master of Occupational Therapy
(Bachelor of Science in Occupational Studies)

The Master of Occupational Therapy degree program at KU is a full-time, three-year course of study at the graduate level and includes academic, practicum, and fieldwork preparation. This program has been designed to provide students with skills necessary to work as an occupational therapist in a range of possible settings.

Upon completion of this course of study, students will be eligible for the national OT certification examination.

The occupational therapy program at the University of Kansas is accredited by the Accreditation Council for Occupational Therapy Education (http://www.acoteonline.org), 4720 Montgomery Lane, Suite 200, Bethesda, MD 20814-3449; (301) 652-6611. For more information, visit the ACOTE website at www.acoteonline.org. (http://www.acoteonline.org)

For more program details, please visit the program's website (http://www.kumc.edu/school-of-health-professions/occupational-therapy-education/master-of-occupational-therapy.html).

Undergraduate Degree
A bachelor's degree from a regionally accredited institution must be completed prior to start of program classes. The degree can be in any field, but course work must have included the specific MOT prerequisites: abnormal psychology, human development, statistics, ethics, anatomy with lab, and physiology.

Grade Point Average
Grade requirements include an overall 3.0 cumulative undergraduate grade point average, and a 3.0 admitting GPA, on a 4.0 scale. The admitting GPA is comprised of the grades earned in the specific MOT prerequisite courses listed above only. Information documented on student transcripts will be used to calculate all grade point averages. Consistent with University of Kansas policy, the admissions committee will replace grades of classes that have been repeated.

Passing Grades
A passing grade of "C" or higher is required in all prerequisite courses. A "D" is not considered a passing grade. All prerequisite science courses must be completed within the last 10 years.

Background Check
The Joint Commission requires all incoming students to pay for a background check (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html). This one-time fee must be paid directly to the company performing the background investigation. Students will be asked to provide information and make the payment once officially accepted into the program. A drug screening may also be required. More information: School of Health Professions background check and drug screening policy. (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html)

Technical Standards and Accommodations
Please read the program technical standards (http://www.kumc.edu/school-of-health-professions/occupational-therapy-education/doctor-of-occupational-therapy/technical-standards.html) carefully. Signed verification will be required of students after they have been accepted. Reasonable accommodations will be made for any accepted student who has a documented disability and can meet program expectations. Applicants with documented disabilities can request reasonable accommodations if needed during the admissions process.

CPR/First Aid
All accepted students must submit copies of current, valid CPR and First Aid certification prior to the program start date. CPR certification must cover the entire lifespan (infant, child, and adult). Accepted students are responsible for maintaining current, valid CPR status throughout the duration of the MOT degree program.

Admission requirements are subject to change. Students entering summer 2015 are governed by the 2014-2015 academic catalog. Students entering summer 2016 are governed by this academic catalog. Other years’ catalogs.

The program begins with the summer semester.

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<th>Total Hours: 83-89</th>
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1 This additional fieldwork study elective is not required to complete the MOT degree.

Additionally, the student will engage in a faculty-supported, community-based service learning project and complete a research project carried out with a group of students in collaboration with a faculty mentor.

If an interruption in the program occurs for any reason, all requirements must be completed within 4½ years of the start date.

Fieldwork Level II
Fieldwork Level II is a degree requirement and a vital part of an occupational therapy education. Courses are full-time practicum experiences carried out in service delivery settings. Students take FWII during the Spring 2a and Fall 3b semesters. An optional FWII experience may be scheduled during the Fall 3a semester. Students are responsible for transportation to and from fieldwork sites, living arrangements and expenses, tuition and fees for 12 to 18 credit hours, and any other expenses.

Degree requirements and course descriptions are subject to change. Students entering summer 2015 are governed by the 2014-2015 academic catalog. Students entering summer 2016 are governed by this academic catalog.
Doctor of Occupational Therapy

This program of study is directed at therapists already in practice who wish to upgrade their knowledge and skills to the doctoral level to meet the increasing demands of complex practice issues. This program focuses on specialization and professional leadership in practice. Offered entirely online, therapists can obtain this education while continuing to work in the profession.

An occupational therapy degree, a master’s degree, and current OT license are required for admission.

For complete details about the program, please visit the OT website (http://www.kumc.edu/school-of-health-professions/occupational-therapy-education/doctor-of-occupational-therapy.html).

To be considered for admission to this program, an applicant must have a degree from an accredited entry-level occupational therapy program. An applicant that has completed an entry-level occupational therapy program at the bachelors level must contact the department for information about prerequisite course work before applying to the program.

In addition, all applicants must provide documentation of current state license to practice occupational therapy or NBCOT registration as an occupational therapist.

A background check (http://www.kumc.edu/school-of-health-professions/background-checks.html) is required during the admission process; it may affect the student's eligibility to enter the program.

An applicant is considered an international student if he or she requires a visa, or currently resides in the U.S. with non-immigrant status, or currently resides in the U.S. while applying for permanent residency. Additional requirements and documentation, such as proof of English language proficiency (p. 2395), are required for international students to become eligible for KU programs. Please review the information for international students (http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html) before applying.

Prospective students should review the program requirements, including prerequisite course work, and complete list of application requirements on the department's website (http://www.kumc.edu/school-of-health-professions/occupational-therapy-education.html).

This program focuses on specialization and professional leadership in practice. Offered entirely online, therapists can obtain this education while continuing to work in the profession.

This innovative curriculum is designed to be responsive to professional demands and to meet the highest academic standards. Core work and specialization opportunities have been integrated across the curriculum to create a base of both advanced knowledge and specialty knowledge that will prepare graduates for leadership in their chosen areas of concentration.

The student must complete 36 credit hours of core and elective course work with an overall grade-point average of 3.0 or higher on a 4.0 scale. Students also complete a focused capstone project – an individually designed, mentored project that demonstrates a synthesis of the knowledge and skills developed in the program.

The curriculum is established from 4 key components:

• Evidence-based practice,
• Professional leadership,
• Specialty practice, and
• Teaching.

Curriculum

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<th>OTD Core Courses (15)</th>
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<td>OTD 860</td>
<td>Theory and Practice in Occupational Therapy</td>
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Total Hours 36

Elective Options. Each student selects graduate-level elective courses to complement his or her program. These selections must be approved by the student’s advisor.

Physical Therapy and Rehabilitation Science

The department offers the following programs:

1. The Doctor of Physical Therapy (DPT) (p. 724) program offers the required entry-level degree for students planning to become physical therapists.
2. The Doctor of Philosophy (p. 726) (Ph.D.) in rehabilitation science program prepares individuals for leadership positions in research and academia and serves to advance the science of medical rehabilitation.
3. A combined DPT/Ph.D. program is available to outstanding applicants with backgrounds in health-related sciences who wish to become physical therapists and engage in research related to rehabilitation science.
4. The post-professional DPT program, for physical therapists wishing to update their education and work toward the DPT degree, is not admitting students at this time.

The Department of Physical Therapy and Rehabilitation Science is on the third floor of Robinson Hall on the KU Medical Center campus in Kansas City, Kan., and is one of eight departments within the KU School of Health Professions.

Physical Therapy Rehab Sci Courses

PTRS 701. Professional Interactions. 1 Hour.

Introduces the student to the physical therapy profession and professional role expectations. The history of physical therapy as it relates to the professionalization process, including ethical and legal obligations, as
PTRS 702. Physical Therapy Documentation and Health Informatics. 1 Hour.
Emphasizes the development of effective documentation skills, including exposure to a variety of documentation formats across various practice setting and implications for proper reimbursement. Concepts of healthcare informatics are introduced including use of an electronic documentation systems and the capability of information systems to support quality care. Discharge classification models, behavioral objectives, and functional outcome concepts are applied to organize patient data and identify treatment goals. Prerequisite: Successful completion of semester 1 of the DPT curriculum or permission of instructor. LEC.

PTRS 703. Applied Anatomy. 1 Hour.
This course introduces the learner to how physical therapists use anatomical knowledge to gather basic examination information about the patient. Learning opportunities include lecture and laboratory. Prerequisite: Admission into the DPT program or permission of instructor. LEC.

PTRS 704. Physical Therapy Interventions I. 3 Hours.
Skills required by the physical therapist in the generalist acute care environment. A series of patient care related lectures, demonstrations, videotapes and laboratories are integrated to teach proper body mechanics, infection control and sterile technique, basic assessment, transfers, positioning, tubes, ostomies, clinic safety procedures, tilt table usage, prescribing a proper wheelchair, applying proper therapeutic range of motion exercises, and using appropriate assistive devices for gait and transfers. Prerequisite: Successful completion of semester 1 of the DPT curriculum or permission of instructor. LEC.

PTRS 705. Physical Therapy Interventions II. 4 Hours.
Students will apply the skills obtained in clinical coursework and begin clinical problem-solving using common physical therapy treatment interventions. Topics include integumentary management for wound healing interventions, therapeutic modalities with an emphasis on the healing process and electrical modalities. Learning opportunities include lecture and laboratory. Prerequisite: Successful completion of the first 2 semesters of the DPT curriculum or permission of the instructor. LEC.

PTRS 710. Advanced Topics in Human Anatomy. 6 Hours.
The student will obtain a basic understanding of human gross anatomy with specific knowledge of upper and lower extremities, head and neck, back and neural structures. At the end of this course the student will be able to apply this knowledge of anatomy to functional and clinical situations. Prerequisite: Admission into the DPT program or permission of instructor. LEC.

PTRS 711. Applied Kinesiology and Biomechanics. 4 Hours.
This course involves a study of joint structure and function, and biomechanical principles underlying human motion. Emphasis is placed on the application of kinesiological principles to clinical physical therapy situations. Learning opportunities include lecture and laboratory. Prerequisite: Successful completion of semester 1 of DPT curriculum or permission of instructor. LEC.

PTRS 712. Pathophysiology and the Physical Therapy Diagnosis. 4 Hours.
Review of integrative human physiology and pathophysiology with an emphasis upon homeostatic mechanisms and etiologies of disease. The interrelationships of function and dysfunction at the molecular, cellular and tissue level (pathology), organ and systemic level (impairment) and to the total human body (functional limitations) will be applied in each of the body systems. Discussions and applied materials will be tailored to the physical therapist with an emphasis on PT-specific diagnoses. Prerequisite: Admission into the post-professional DPT program, or consent of instructor. LEC.

PTRS 715. Applied Musculoskeletal Anatomy. 3 Hours.
The course involves a study of joint structure, joint function, and the biomechanical principles underlying human motion. All major peripheral joints and the spine will be studied. Application of functional anatomy to clinical physical therapy situations will be emphasized. Prerequisite: admission into post-professional DPT program, or consent of instructor. LEC.

PTRS 720. Integrated Clinical Experience I. 1 Hour.
This course consists of supervised experiences in a clinical setting and seminar sessions that provide preliminary opportunities for application of didactic course work. Emphasis will be placed on the development of communication and interpersonal skills in the clinical setting, as well as documentation and physical therapy skills and procedures that have been introduced in courses. Prerequisite: Successful completion of semester 1 of the DPT curriculum or permission of instructor. LEC.

PTRS 730. Integrated Clinical Experience II. 1 Hour.
This course consists of supervised experiences in a clinical setting and seminar sessions that provide preliminary opportunities for application of didactic course work. Emphasis will be placed on the development of communication and interpersonal skills in the clinical setting, as well as documentation and physical therapy skills and procedures that have been introduced in courses. Prerequisite: Successful completion of the first 2 semesters of the DPT curriculum or permission of instructor. CLN.

PTRS 740. Evidence-Based Orthopedic Rehab. 3 Hours.
Students will apply the concepts taught in PTRS 715 (Applied Musculoskeletal Anatomy) and skills obtained in their individual clinical practice. This course will include discussion related to current treatment approaches effecting peripheral and spinal joints. The course activities include review of the current evidence based scientific literature related to orthopedic conditions and interventions, web-based discussion related to individual patient case scenarios and lab activities associated with treatment techniques including mobilization/manipulation, self-mobilization and therapeutic exercises. Prerequisite: Entry into post-professional DPT program or permission of instructor. LEC.

PTRS 745. Orthopedic Physical Therapy I. 6 Hours.
Builds on the foundation from anatomy, kinesiology and biomechanics. Examination skills and treatment interventions that apply specifically to the musculoskeletal system are provided. Basic examination skills for all peripheral joints, gait analysis, and therapeutic exercise are discussed and reviewed for common orthopedic conditions. The course will integrate instruction with case-based clinical problem solving. Learning opportunities include lecture and laboratory. Prerequisite: Successful completion of the first 2 semesters of the DPT curriculum or permission of instructor. LEC.

PTRS 746. Musculoskeletal Conditions and Management. 3 Hours.
Mastery of physical therapy subjective and objective examination and treatment intervention for patients of all ages who present with a musculoskeletal problem with emphasis on amputation, prosthetics, upper and lower extremity orthoses, fracture management and connective
tissue disorders. Emphasis will be placed on the most common clinical problems and physical therapy diagnoses. Learning opportunities include lecture and laboratory. Prerequisite: Successful completion of the first 2 semesters of the DPT curriculum or permission of instructor. LEC.

PTRS 750. Research in Evidence-Based Physical Therapy Practice. 3 Hours.
An introduction to research in the evidence-based physical therapy practice including the Scientific Method, library and multimedia resources, research process, measurement theory (reliability and validity), research designs, experimental design principles, research ethics, critical review and analysis of research publications, statistical concepts, and writing of a research report and/or research proposal. Throughout, emphasis is placed on clinical research pertinent to physical therapy. Prerequisite: Successful completion of the first 2 semesters of the DPT curriculum or permission of instructor. LEC.

PTRS 810. Case Studies in PT Diagnosis. 2 Hours.
This course will provide students with the applied knowledge to medically screen patients for symptoms and signs that require the expertise of other health care professionals. Patient cases currently treated by the practicing physical therapist will be used to compare diagnostic tests and values. The course will focus on comorbidities and their implications in diagnosis and treatment. The course will be delivered via the web. Prerequisite: Admission into the post-professional DPT program, or approval by the instructor. LEC.

PTRS 815. Case Studies in Pathophysiology. 2 Hours.
Physical therapists need skills to relate human pathophysiology to its clinical presentation. The interrelationships of function and dysfunction at the molecular, cellular and tissue level (pathology), organ and systemic level (impairment) and to the total human body (functional limitations) will be applied in each of the body systems. Discussions and applied materials will be tailored to the patient population served by the therapist. Prerequisite: Admission into post-professional DPT program, or consent of instructor. LEC.

PTRS 817. Ethics in Health Care. 2 Hours.
Basic ethical concepts, principles, relevant theories and ethical decision making models applied to major contemporary health care issues and dilemmas facing health professionals. Development of skills for ethical clinical decision making is the focus. Prerequisite: Successful completion of the first 3 semesters of the DPT curriculum or permission of instructor. LEC.

PTRS 820. Integrated Clinical Experience III. 2 Hours.
This course consists of supervised experiences in a clinical setting and seminar sessions that provide intermediate opportunities for application of didactic course work. Emphasis will be placed on the development of communication and interpersonal skills in the clinical setting, as well as documentation and physical therapy skills and procedures that have been introduced in courses. Prerequisite: Successful completion of the first 3 semesters of the DPT curriculum or permission of instructor. LEC.

PTRS 825. Exercise Physiology. 3 Hours.
This course will provide entry-level DPT students with the knowledge of the physiological functions and adaptations of the human body with exercise. Emphasis will be placed on familiarizing students with sound medical rationale and the basis for treatment considering the immediate and long-term effects of exercise. Prerequisite: Successful completion of the first 3 semesters of the DPT curriculum, or consent of the instructor. LEC.

PTRS 826. Cardiopulmonary Physical Therapy. 4 Hours.
Anatomy, physiology and pathophysiology of the cardiovascular and pulmonary systems are studied and related to clinical signs and symptoms. Students are introduced to common evaluation and treatment techniques, as well as the rationale for including physical therapy in the management of cardiopulmonary conditions. These topics are discussed in conjunction with case studies and current research. Learning opportunities include lecture and laboratory. Prerequisite: Successful completion of the first 5 semesters of the DPT curriculum or permission of instructor. LEC.

PTRS 828. Medical Imaging. 1 Hour.
An introduction to medical imaging and an overview of its role in the health care delivery system. Topics include an introduction to basic imaging equipment with an emphasis on digital acquisition and processing. Factors affecting the quality of images and limitations to the techniques are reviewed. Imaging techniques covered include: X-rays, CT scans, Nuclear medicine, ultrasound, MRI and PET. This course will also include a component covering the microscopic anatomy of cells. Prerequisite: Admission to the DPT program or permission of instructor. LEC.

PTRS 830. Integrated Clinical Experience IV. 3 Hours.
This course consists of supervised experiences in a clinical setting and seminar sessions that provide intermediate opportunities for application of didactic course work. Emphasis will be placed on the development of communication and interpersonal skills in the clinical setting, as well as documentation and physical therapy skills and procedures that have been introduced in courses. Prerequisite: Successful completion of the first 4 semesters of the DPT curriculum or permission of instructor. LEC.

PTRS 832. Health Promotion Through the Lifespan. 2 Hours.
This course focuses on the role of the physical therapist in health promotion across the lifespan and in specific populations. Prerequisite: Successful completion of the first 5 semesters of the DPT curriculum, or permission of instructor. LEC.

PTRS 833. Pediatric Physical Therapy. 3 Hours.
This course introduces fundamental concepts necessary for the entry-level physical therapist to examine, evaluate, and treat the pediatric client. Lecture and lab experiences emphasize a problem oriented approach to physical therapy management of children with musculoskeletal, neurological, and/or cardiopulmonary impairments. Students will learn to recognize components of normal and abnormal development, particularly during the first year of life. Prerequisite: Successful completion of the first 5 semesters of the DPT curriculum or permission of instructor. LEC.

PTRS 835. Rehabilitation Administration I. 3 Hours.
The first course of two three-credit hour management classes designed to review the American health care system as a whole, and to examine the specific areas that rehabilitation health care managers must understand in order to succeed in an increasingly competitive and financially driven system. Some of these areas include the system of health care delivery, legal issues, human resource principles, accounting, reimbursement, payors, Medicare/Medicaid, regulations, outcomes information management, etc. This course will apply all of the above items to real world examples in numerous health care settings so the student understands the complexities of many settings which physical therapy personnel may work. Each unit will build on the last so that at the end of the second management course the student will be capable of proposing, building, opening, and successfully running rehabilitation services in a multitude of settings. Prerequisite: Admission into the post-professional DPT program, or consent of instructor. LEC.

PTRS 836. Rehabilitation Administration II. 3 Hours.
The second course of two three-credit hour management classes designed to review the American health care system as a whole and to examine the specific areas that rehabilitation health care managers must understand in order to succeed in an increasingly competitive and
Successful completion of the first 5 semesters of the DPT curriculum or permission of instructor. LEC.

PTRS 852. Neurologic Physical Therapy and Rehabilitation II. 6 Hours.
This course will focus on rehabilitation approaches for people with neurologic pathology. Students will examine factors that contribute to the control of voluntary movement and the learning of motor skills, and develop an understanding of the relationship between the brain and the purposeful movements that make us human. Students will acquire the skills to hypothesize about the relationship of health conditions and body function/structure to limitations in activities and participation in adults with neurologic pathology. A clinical decision making approach will combine contemporary rehabilitation approaches, consideration of psychosocial and cognitive factors, and research evidence in the discussion of complex patient cases. After completing this course, students will demonstrate novice-level knowledge and skills necessary to complete a physical therapy examination and develop a comprehensive treatment plan for adults with neurologic pathology. Learning opportunities include lecture and laboratory. Prerequisite: Successful completion of the first 5 semesters of the DPT curriculum or permission of instructor. LEC.

PTRS 855. Pharmacology for Physical Therapists. 1 Hour.
Pharmacological background for the clinical treatment of patients referred to physical therapy. Fundamentals of the actions of drugs including mechanisms of therapeutic and adverse effects. Prerequisite: Successful completion of semester 1 of the DPT curriculum or permission of instructor. LEC.

PTRS 858. Evidence-Based Rehabilitation of Patients Post-CVA. 3 Hours.
This course will provide students with the applied knowledge to medically screen patients for symptoms and signs that require the expertise of other health care professionals. Patient cases currently treated by the practicing physical therapist will be used to compare diagnostic tests and values. The course will focus on comorbidities and their implications in diagnosis and treatment. The course will be delivered through the web. Prerequisite:
Admission into the post-professional DPT program, or approval of the instructor. LEC.

PTRS 860. Evidence-Based Research Practicum I. 1 Hour.
Supervised and directed experiences in conducting evidence-based research activities. The research activities involved in this course are broadly defined with emphasis on the enhancement of evidence-based physical therapy practice. The student will be supervised by a member of the faculty. This is a two-semester course. Prerequisite: Successful completion of the first 5 semesters of the DPT curriculum or permission of instructor. RSH.

PTRS 861. Evidence-Based Research Practicum II. 1 Hour.
Supervised and directed experiences in conducting evidence-based research activities. The research activities involved in this course are broadly defined with emphasis on the presentation and communication of an evidence-based research project. The student will be supervised by a member of the faculty. Prerequisite: Successful completion of the first 6 semesters of the DPT curriculum, or consent of instructor, RSH.

PTRS 865. Independent Study. 1-3 Hours.
Individually negotiated learning experiences appropriate to the interests and background of the student. Prerequisite: Admission to the DPT program, post-professional DPT program, or permission of instructor. IND.

PTRS 877. Administration in Physical Therapy. 2 Hours.
Designed to familiarize the entry-level therapist with contemporary issues in health care which impact the practice of physical therapy in the health care system. Changes in the US health care system will be discussed, including managed care, plus essential elements and principles of management in health care organizations, and an overview of human resources and operational management. Financial management specifically reimbursement for patient services, risk management, information management, and compliance will be discussed. Discussion of professional development is intertwined throughout the course. Students will be exposed to business development and entrepreneurial skills needed to expand or start up a physical therapy practice. Prerequisite: Successful completion of the first 6 semesters of the DPT curriculum or permission of instructor. LEC.

PTRS 880. Differential Diagnosis of General Medical Conditions. 3 Hours.
Designed to provide students with the knowledge and clinical tools to medically screen patients for the presence of symptoms and signs that require the expertise of other health care professionals. It will focus on diagnoses that are not covered by common PT practice including diseases of the endocrine system, the immune system, GI system, and neoplasias. Prerequisite: Admission into the post-professional DPT program, or consent of instructor. LEC.

PTRS 882. Pathophysiology and Physical Therapist Screens. 6 Hours.
Review of integrative human pathophysiology with an emphasis upon homeostatic mechanisms and etiologies of disease. The interrelationships of function and dysfunction at the molecular, cellular and tissue level (pathology), organ and systemic level (impairment) and to the total human body (functional limitations) will be applied in each of the body systems. Discussions and applied materials will be tailored to the physical therapist with an emphasis on clinical tools to medically screen patients for the presence of symptoms and signs. Prerequisite: Successful completion of semester 1 of the DPT curriculum or permission of instructor. LEC.

PTRS 888. Interprofessional Physical Therapy Practice. 1 Hour.
This course is designed to develop collaborative practice competent physical therapy learners through interprofessional classroom and clinical experiences. Prerequisite: Successful completion of the first 4 semesters of the DPT curriculum or permission of instructor. LEC.

PTRS 890. Specialties in Physical Therapy Practice. 2 Hours.
Requires students to apply the five elements of patient/client management for addressing multi-system impairments across diverse and complex patient populations. Exposure to physical therapy advanced practice specialty areas included, but not limited to, sport medicine, women's health, neurology, pediatrics, geriatrics, and oncology. Seminar format instruction incorporating case-based instruction, group discussion, and speakers with advanced clinical credentials. Prerequisite: Successful completion of the first 6 semesters of the DPT curriculum or permission of instructor. LEC.

PTRS 920. Clinical Internship I. 6-8 Hours.
Nine to twelve weeks of clinical internship. During the clinical internship, the student will have the opportunity to develop the patient care skills needed for successful practice as a physical therapist. The student will work under the supervision of an experienced physical therapist in clinical settings affiliated with the program. Prerequisite: Successful completion of the first 7 semesters of the DPT curriculum or permission of instructor. CLN.

PTRS 921. Clinical Internship II. 6-8 Hours.
Nine to twelve weeks of clinical internship. During the clinical internship, the student will have the opportunity to develop the patient care skills needed for successful practice as a physical therapist. The student will work under the supervision of an experienced physical therapist in clinical settings affiliated with the program. Prerequisite: Successful completion of the first 7 semesters of the DPT curriculum or permission of instructor. CLN.

PTRS 922. Clinical Internship III. 6-8 Hours.
Nine to twelve weeks of clinical internship. During the clinical internship, the student will have the opportunity to develop the patient care skills needed for successful practice as a physical therapist. The student will work under the supervision of an experienced physical therapist in clinical settings affiliated with the program. Prerequisite: Successful completion of the first 7 semesters of the DPT curriculum or permission of instructor. CLN.

PTRS 923. Clinical Internship IV. 2-6 Hours.
Three to nine weeks of clinical internship. During the clinical internship the student will have the opportunity to develop the patient care skills needed for successful practice as a physical therapist. The student will work under the supervision of an experienced physical therapist in clinical settings affiliated with the program. Prerequisite: Successful completion of the first 7 semesters of the DPT curriculum or permission of instructor. CLN.

PTRS 924. Specialized Internship. 2-6 Hours.
Three to nine weeks of clinical internship. During the clinical internship the student will have the opportunity to have exposure to a different health care system such as an international clinical experience, or a specialized area of physical therapy practice. The student will be under the supervision of an experienced physical therapist in clinical settings affiliated with the program. Prerequisite: Successful completion of the first 7 semesters of the DPT curriculum or permission of instructor. CLN.

REHS 760. Introduction to Matlab Programming. 1 Hour.
Introduction: matlab windows, input-output, file types, general commands; interactive computation; matrices and vectors, matrix and array operations, scripts and functions applications, graphics. Prerequisite: None LEC.

REHS 805. Seminar in Rehabilitation Research. 0.5-3 Hours.
Students will be instructed in the planning and presentation of a 45 minute scientific seminar on topics outside their thesis area and on their thesis
work. Students will learn how to design and produce effective poster presentations. Prerequisite: Entry in the PhD program in Rehabilitation Science or consent of instructor. SEM.

REHS 850. Neuroscience. 4 Hours.
This course will introduce the principles of neuroscience and describe their application as relevant to rehabilitation scientists. The course will begin with the terminology of the nervous system, then cover the major functions of the peripheral, autonomic, and central nervous systems. The manner with which these systems interact to produce appropriate responses to external demands will be discussed. The behavioral consequences of damage to each system will be integrated throughout. Particular emphasis will be placed on the sensorimotor role in perception and the control of movement. Lecture and Lab. Prerequisite: Entry into the PhD in Rehabilitation Science Program. LEC.

REHS 857. Research Design and Methods II. 2 Hours.
An introduction to research design and methods including library and multimedia resources; research process; measurement theory (reliability and validity); experimental design principles; single subject design and other non-experimental design; critical thinking skill and procedure; critical review and analysis of a research article; basic scientific writing skills; and skills in writing a research report/manuscript. Prerequisite: Entry into the PhD in Rehabilitation Science program or permission of instructor. LEC.

REHS 862. Cellular and Molecular Basis of Rehabilitation. 2 Hours.
A study of the biology, at the cellular and molecular levels, of pathological processes that impair human function will highlight the mechanisms by which cells/tissues repair and/or adapt following disease/injury or aging. Emphasis will be placed on the body's edogenous ability for rehabilitation or adaptation to disease/injury. Prerequisite: Entry into the PhD in Rehabilitation Science program or permission of instructor. LEC.

REHS 863. Pathobiology of Human Function II. 4 Hours.
A study of biology and pathological processes that impair human function with emphasis on neuromuscular diseases, injury and diseases of the central and peripheral nervous systems, and neurological disorders associated with development and aging. Prerequisite: Entry in Rehabilitation Science program or consent of instructor. LEC.

REHS 865. Independent Study. 1-3 Hours.
Individually negotiated learning experiences appropriate to the interests and background of the student. Prerequisite: Entry in PhD in Rehabilitation Science program or permission of instructor. IND IND.

REHS 870. Teaching Practicum. 1-3 Hours.
Directed experiences in a planned instructional activity. Student will write course objectives, plan and deliver lectures, produce practical and written exams and assign grades. Prerequisite: Entry in PhD in Rehabilitation Science program or consent of instructor. LEC.

REHS 873. Research Practicum. 1-3 Hours.
This course is designed to provide supervised research experience in various laboratories in the department. Prerequisite: Entry in the PhD in Rehabilitation Science program, or consent of instructor. RSH.

REHS 875. Clinical Practicum. 1-3 Hours.
Specialized clinical training in a highly specific area of specialization. The primary purpose of this course is for the student to develop advanced clinical skills in his/her area of specialization. Prerequisite: Admission to the PhD in Rehabilitation Science program, and permission of instructor. CLN.

REHS 876. Advanced Studies in Rehabilitation Science. 3 Hours.
This course will explore the state of art of clinical and basic scientific research in rehabilitation. Students will learn how to critically analyze the research literature in the neuromotor, musculoskeletal, cardiopulmonary, and other rehabilitation fields. The course will cover the topics including but not limited to rehabilitation to improve balance and gait, rehabilitation in stroke survivors and patients with neurodegenerative diseases, rehabilitation in patients with injury/pathological conditions to ligament, tendon, and bone/cartilage, rehabilitation in patients with cardiopulmonary disease, rehabilitation in cancer patients/survivors, etc. Current literature in each topic area will be investigated to determine the features of the pathological condition and targetted subjects, factors that contribute to the outcomes of the rehabilitation, research tools and measurements, potential optimal rehabilitation techniques, and directions of future research. Prerequisite: Entry into the PhD in Rehabilitation Science program or permission of instructor. Basic knowledge in pathobiology and neuroscience is required. LEC.

REHS 877. Instrumented Analysis of Human Biomechanical Function. 3 Hours.
An in-depth study that provides critical analysis of equipment and other resources used in analyzing human motion, balance, strength, electrophysiological responses, and cardiorespiratory function. Students will be required to conduct a preliminary study, including design, methodology and data collection using one or more of these instruments. Prerequisite: Entry in PhD in Rehabilitation Science program, or consent of instructor. LEC.

REHS 880. Graduate Research. 1-10 Hours.
Original laboratory investigation conducted under the supervision of a senior staff member. Prerequisite: Entry in PhD in Rehabilitation Science program, or consent of instructor. RSH.

REHS 890. Dissertation in Rehabilitation Science. 1-10 Hours.
For students in advanced standing enrolled in the PhD in Rehabilitation Science program. THE.

Doctor of Physical Therapy

The KU doctorate in physical therapy is an accredited 3-year full-time graduate program designed to prepare a generalist physical therapy practitioner and to foster lifelong professional development. The program begins in early June and includes classroom, laboratory, research and clinical learning experiences. Students participate in 36 weeks of clinical work at clinical affiliate sites. As an academic health science center, the KU Medical Center provides ample opportunity for physical therapy students to interact with a large number of health care professionals, as well as students from other disciplines.

Admission to the program is a competitive process. The faculty values a well-rounded applicant, one having demonstrated his or her academic and cognitive abilities as well as her or his personal and professional potential. Class size is restricted; generally no more than 60 students are admitted in any single year.

Prospective students must first meet program eligibility requirements (http://www.kumc.edu/school-of-health-professions/physical-therapy-and-rehabilitation-science/doctor-of-physical-therapy/eligibility-and-
requirements.html). When ready to apply, please review the complete list of application requirements (http://www.kumc.edu/school-of-health-professions/physical-therapy-and-rehabilitation-science/doctor-of-physical-therapy/how-to-apply.html).

1. Undergraduate Degree. A bachelor's degree from a regionally accredited institution must be completed before the start of program classes. The degree can be in any field, but course work must have included the DPT prerequisite courses (http://www.kumc.edu/school-of-health-professions/physical-therapy-and-rehabilitation-science/doctor-of-physical-therapy/prerequisite-course-work.html). Students with degrees from universities outside the U.S. may be considered if they meet requirements (http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html) equivalent to a bachelor's degree from a program in the U.S.

2. Grade-Point Average. An overall 3.0 cumulative grade-point average on a 4.0-scale is required. In addition, student transcripts must document a minimum 3.0 GPA on a 4.0 scale in all prerequisite courses including math and science course work.

3. C Grades or Higher. A passing grade is required in all prerequisite courses. A grade of D is not considered a passing grade. All prerequisite science courses must be completed within the last 10 years.

4. Satisfactory Graduate Record Examination Score. A minimum score at the 50th percentile in the verbal, quantitative, and analytical sections on the Graduate Record Examination General Test is recommended. The GRE must have been taken within the past 5 years to be valid on an application.

5. International Students. International students or those for whom English is a second language must meet minimum English proficiency (http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html) requirements. International students may have additional requirements for visa, residency, and citizenship status. Students should contact the KU Medical Center Office of International Programs (http://www.kumc.edu/international) for guidance regarding these issues during the application process.

6. A background check (http://www.kumc.edu/student-services/vice-chancellor-of-student-services/criminal-background-checks-for-students.html) is required during the admission process; it may affect the student's eligibility to enter the program. A drug screening may also be required.

Prerequisites

BASIC SCIENCES

CHEMISTRY: 2 semesters (or equivalent) with laboratory.

PHYSICS: 2 semesters (or equivalent) with laboratory.

ANATOMY: 1 semester (or equivalent) with laboratory.

HUMAN PHYSIOLOGY: 1 semester (or equivalent) with laboratory.

BIOLOGY: 2 semesters (or equivalent) with laboratory.

MATHEMATICS

ALGEBRA/TRIGONOMETRY: 1 course in each, or a single course in algebra/trigonometry, or a single course in pre-calculus, or a single course in calculus, can be used to fulfill the requirement.

STATISTICS: 1 course.
Doctor of Philosophy in Rehabilitation Science

The doctorate in rehabilitation science program is designed to prepare suitably qualified individuals for leadership positions in research and academia. A major focus of the program is to advance the science of rehabilitation, and to elucidate the scientific basis for the procedures and processes used in clinical practice.

Areas of research emphasis include human and animal studies designed to (1) promote an understanding of the pathophysiology of injury, disease, functional impairment, and associated disabilities, and (2) espouse the rationale for therapies designed to alleviate impaired human function and related physical and mental disabilities.

The program is open to students with a bachelor’s degree. Applicants are not required to be physical therapists or to have degrees in physical therapy but are encouraged to have broad backgrounds in a health-related science (e.g., anatomy, physiology, biology, neuroscience, exercise science, biochemistry, genetics, molecular and cell biology) and statistics.

To be eligible for admission, the following are required:

1. **Degree.** A bachelor’s degree must be completed before the start of the program. Students with degrees from universities outside the U.S. may be considered if they meet requirements (http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html) equivalent to a bachelor’s degree from a program in the U.S.

2. **Graduate Record Examination Score.** Students must submit scores for Verbal Reasoning, Quantitative Reasoning and Analytical Writing sections of the GRE. **Note:** the GRE must have been taken within 5 years of the first semester of enrollment in this program.

3. **Grade-Point Average.** An overall minimum 3.0 GPA on a 4.0-scale is required.

A background check (http://www.kumc.edu/school-of-health-professions/background-checks.html) is required during the admission process; the result may affect the student’s eligibility for admission to the program.

International students or those for whom English is a second language must meet minimum English proficiency (p. 2395) requirements. International students may have additional requirements for visa, residency, and citizenship status. Students should contact the KU Medical Center Office of International Programs (http://www.kumc.edu/medical-center/international) for guidance regarding these issues during the application process.

Prospective students must first meet the program’s eligibility requirements (http://www.kumc.edu/school-of-health-professions/physical-therapy-and-rehabilitation-science/phd-in-rehabilitation-science/eligibility-and-requirements.html). When ready to apply, please review the complete list of application requirements (http://www.kumc.edu/school-of-health-professions/physical-therapy-and-rehabilitation-science/phd-in-rehabilitation-science/how-to-apply.html).

Students in this program must meet the general requirements of the university including the research skills and responsible scholarship requirement (https://documents.ku.edu/policies/Graduate_Studies/Research_Skills_and_Responsible_Scholarship.htm) and fulfill the basic program requirements to receive the Ph.D. degree. The student must be enrolled in REHS 990 Dissertation in Rehabilitation Science the semester they defend the dissertation.

The basic program requirements include the following:

- Successful completion of a minimum of 51 credit hours of course work, including 21 credit hours of core courses, 8 credit hours of research tools courses, 12 credit hours of doctoral dissertation research, and 6 credit hours of cognate elective courses.
- Demonstration of skills necessary for conducting original research investigation by passing the qualifying examination, which usually takes place after a majority of the core and research tools course work has been completed.
- Demonstration of competence in the core areas of study by successfully completing the comprehensive examination.
- Satisfactory completion of a dissertation based on an original research work.
- Successful oral defense of the dissertation.

Research includes human and animal studies that promote an understanding of the pathophysiology of injury, disease, functional impairment, and associated disabilities and espouse the rationale for therapies that alleviate impaired human function.

At least 4 years of full-time study is usually needed to fulfill these requirements.

Respiratory Care

KU offers a 4-year bachelor’s degree program in respiratory care. Students enter after 2 years of prerequisites taken from KU’s Lawrence campus or any regionally accredited 2- or 4-year college or university. The advanced curriculum and location at an academic medical center means students receive extensive experience in advanced respiratory therapy techniques.

For working professionals having graduated from a COARC-approved advanced practice level program, KU offers a flexible online baccalaureate degree-completion program in respiratory care. Students must already have the RRT credential and must take any missing prerequisite courses in addition to the online respiratory care courses to meet the credit-hour requirements for a 4-year degree.
www.kumc.edu) is located in the heart of the Kansas City metropolitan area at 39th and Rainbow Boulevard – about 40 minutes away from the main KU campus (http://www.ku.edu) in Lawrence, Kansas.

Advising and FAQ
For information about respiratory care at KU, please visit the department’s website (http://respiratorycare.kumc.edu). Students interested in entering this field should contact an advisor as early as possible in their collegiate careers to ensure prerequisite course work will be completed on schedule. Advising and campus visits are available Monday–Friday by appointment. Please email respiratory@kumc.edu for information. For advising on the KU Lawrence campus, please see the KU Undergraduate Advising Center (http://advising.ku.edu) website or visit Strong Hall, Room 132.

Courses

RESP 303. Introduction to Respiratory Care Procedures. 5 Hours.
An introductory course designed to acquaint the student with the fundamental theory, procedures, and equipment used in respiratory therapy. Emphasis is placed on understanding application of equipment and procedures to the patient, and the respiratory therapy treatment of patients requiring non-continuous ventilatory assistance. This course introduces such topics as cardiopulmonary resuscitation, bronchopulmonary hygiene, airway care, oxygen therapy, and cleaning and sterilization of equipment. Prerequisite: Concurrent enrollment in RESP 318 and RESP 325. LEC.

RESP 310. Clinical Pharmacology I. 1 Hour.
The student will learn about adrenergic and parasympatholytic bronchodilators, corticosteroids, mucus-controlling drugs, surfactant agents, antitussives, and the anti-infective drugs used for the treatment of respiratory disorder. LEC.

RESP 311. Clinical Pharmacology II. 1 Hour.
Content of this course includes neuromuscular blocking agents, cardiac agents, diuretics, anti-hypertensives, and central nervous system drugs. LEC.

RESP 318. Pulmonary Pathology. 3 Hours.
A course consisting of lecture and group discussion designed to introduce the student to pulmonary pathology. Special emphasis is placed on the etiology, pathophysiology, and treatment of pulmonary diseases. This course includes such topics as signs and symptoms of lung disease, chronic obstructive pulmonary diseases, pleural and mycotic diseases. Prerequisite/Corequisite: RESP 303, RESP 325, RESP 330, or permission of instructor. LEC.

RESP 325. Clinical Process. 2 Hours.
This course serves to introduce the beginning respiratory therapy student to the clinical environment. The student spends sixteen hours per week participating in either a clinically-oriented workshop or performing the fundamentals of respiratory therapy in the clinical setting. Typically meets Monday-Wednesday/Friday. FLD.

RESP 330. Cardiopulmonary Physiology. 4 Hours.
Designed to introduce the student to the basics of physiology of the cardiovascular and pulmonary systems. This course contains such topics as regulation of respiration and pH homeostasis, ventilation and perfusion relationships, and hemodynamics of the cardiovascular system. LEC.

RESP 340. Mechanical Ventilators. 5 Hours.
This course contains such topics as arterial puncture, classification of mechanical ventilators and adjunct devices, and their application to the patient. Four hours of lecture/discussion and a 3 hour weekly laboratory acquainting the student with the rationale for continuous mechanical ventilation and the basic operation of adult, pediatric and neonatal mechanical ventilators. Emphasis is placed on the selection of appropriate equipment and assessment of its effect on the patient. Prerequisite: RESP 303, RESP 318, RESP 325 and RESP 330. LEC.

RESP 345. Adult Critical Care. 3 Hours.
This course introduces the student to the different types of traumatic injuries in the critically ill adult patient. Topics such as the shock syndrome, multi-organ traumas including chest, head, spinal cord and thermal injuries will be discussed. Discussion of cardiac life support, fluid resuscitation, monitoring and ventilatory management are integrated into each topic. Prerequisite: Completion of RESP 303, RESP 318 and RESP 330 or their equivalent. LEC.

RESP 350. Clinical Application I. 1 Hour.
This course provides the intermediate respiratory therapy student with opportunities to practice basic respiratory therapy procedures. Emphasis is placed on performance of respiratory therapy procedures and application of equipment. This course emphasizes such topics as oxygen therapy, aerosol therapy, incentive spirometry, patient assessment, and IPPB therapy. The student will assume limited patient care responsibilities. Prerequisite: RESP 303, RESP 310, RESP 318, RESP 325, and RESP 330 or their equivalent. FLD.

RESP 355. Clinical Application II. 1 Hour.
This course provides the respiratory therapy student with an introduction to the critical care setting. The student will begin to apply the procedures and equipment most often utilized in the intensive care areas. Emphasis is placed on continuous mechanical ventilation, artificial airways, airway care, and bedside pulmonary function testing. The student will assume limited patient care responsibility in the critical care areas. Prerequisite: RESP 303, RESP 310, RESP 318, RESP 325 and RESP 330 or their equivalent. FLD.

RESP 375. Clinical Application III. 2 Hours.
This course provides the advanced respiratory therapy student with opportunities to refine procedural and evaluative skills in the critical care areas. The student will spend a minimum of twenty-four hours per week in the clinical setting. Emphasis is placed upon the students ability to evaluate the patients' clinical situation and recommend appropriate therapy modalities to the clinical supervisor. During this course the student will assume wider-ranging patient care responsibilities. Prerequisite: RESP 340, RESP 345, RESP 350, RESP 355, RESP 395 or their equivalent. FLD.

RESP 390. Pulmonary Function. 2 Hours.
Lecture and laboratory introducing the student to basic pulmonary function procedures. This course allows the student to practice pulmonary function tests and interpret the results. Lecture and laboratory topics include such topics as the measurement of lung volumes and capacities, body plethysmography, blood gas analysis, and flow volume loops. Prerequisite: RESP 318, RESP 325, and RESP 330. LEC.

RESP 395. Pediatric Critical Care. 1 Hour.
Study of common neonatal and pediatric disorders/diseases for the beginning respiratory care student. Lectures on basic fetal lung development, assessment of both the pediatric and neonatal patient and disorders/diseases such as respiratory distress syndrome, bronchopulmonary dysplasia, bronchiolitis, epiglottis and croup, and other commonly seen problems. Prerequisite: RESP 303, RESP 310, RESP 318 and RESP 330 or their equivalent. LEC.

RESP 399. Generalist Practice. 3 Hours.
This course is designed to allow students the opportunity to improve and perfect skills acquired in the junior year clinical courses. Emphasis will be given to refining the students’ abilities to assess patient status and administer appropriate therapy modalities. This course may also be used
to assess respiratory therapy knowledge and skills of students transferring from other programs. Prerequisite: Permission of instructor. FLD.

RESP 400. Advanced Critical Care. 4 Hours.
Concepts of the diseases and disorders that effect the critically ill adult are explored. Emphasis is placed on understanding common illnesses such as cardiac dysrhythmias, acute coronary syndrome, trauma of the chest and head, organ failure and toxin exposure as well as the other medical challenges of the critically ill patient. LEC.

RESP 401. Neonatal Respiratory Care. 4 Hours.
This course is designed to provide the student with an introductory knowledge of fetal and newborn cardiorespiratory anatomy, physiology, development, pathophysiology, and care. Prerequisite: Senior year standing or permission of instructor. LEC.

RESP 402. Chronic Respiratory Disease Management: The Evolving Role of the Respiratory Therapist. 3 Hours.
This course is an introduction to the evolving role of respiratory therapists in health care, especially in the area of chronic disease management. The students will explore various trends that are contributing to the role respiratory therapy may play in patient care. Topics covered in this course include COPD and asthma management, pulmonary rehabilitation, cardiopulmonary exercise testing, home care, elderly care, nutritional care of the pulmonary patient, and communication skills necessary for patient education. Students in this course will gain an understanding of how they can contribute to an inter-professional team in order to provide safe and effective patient care. Presentation of topics in this course may include lecture, group work/discussion, audiovisual, computer and other multimedia aids. LEC.

RESP 403. Physical Science for Health Professions. 3 Hours.
This course is an introduction to the fundamental concepts and principles of physics, chemistry, and the earth sciences. Topics include forces, energy, electricity, magnetism, modern physics, and chemical bonding. This course will provide respiratory therapists and students an applicable level of knowledge that aids in their understanding of therapies and equipment used in every day clinical practice. The course includes presentation of material using audiovisual, computer and other multimedia aids. LEC.

RESP 405. Health Care Management, Ethics and Law. 3 Hours.
This course provides an overview of fundamental concepts in healthcare management, law, and ethics. Students will learn the skills and knowledge necessary to be successful in management leadership, management design, and managing diversity. Ethical concerns relevant to the healthcare manager will be addressed. Current and historical controversies in healthcare will be discussed. Upon completion of this course, students will have the knowledge to understand laws, ethics, and management principles of the complex healthcare landscape. LEC.

RESP 425. Advanced Critical Care Procedures. 2 Hours.
This course is the capstone of the critical care experience and concentrates on advanced practice and assessment skills in the critical care setting. Emphasis is placed on quantitative assessment and monitoring procedures, advanced ventilator management and interpretation of data. This course requires access to the medical information of an intensive care patient. Prerequisite: RESP 375 or equivalent. LEC.

RESP 490. Special Studies or Projects. 1-9 Hours.
This course involves individual study, research or projects in the field of respiratory care under instructor guidance. Written reports and periodic conferences are required. Content and unit credit will be determined by student-instructor conferences and/or departmental conferences. This course may be repeated for a maximum of nine credits. Prerequisite: Admission to the respiratory care program and consent of instructor. LEC.

RESP 661. Management Principles in Health Care. 3 Hours.
An introduction to basic principles of management and their application in the current health care environment. Course content includes management theory, scope of management, quality issues, budgeting, personnel issues, evaluation and application of management concepts. Cross listed with HEIM 661 and CLS 661. Prerequisite: Senior year standing or permission of the instructor. LEC.

RESP 662. Education Principles in Health Care. 2 Hours.
An introduction to basic principles of education and their application in the current health care environment. Information on course content includes: Course design, inservice education and patient education. The focus is on educational needs, instructional media and course quality improvement. LEC.

RESP 663. Scientific Investigation Part I. 1 Hour.
This course is designed to provide the participant with an introduction to research skills culminating in a group Proposal of a bench study or chart review. The Proposal will consist of three sections: Introduction, Review of the Literature and Methods. The three sections will be developed through a series of progress reports with the aid of a faculty advisor. Students will work in groups to develop a research question about their daily practice that can only be answered by conducting research. This course will include discussions of the types of research data and the structure of a research manuscript. Students will have opportunities to read, interpret and analyze research reports and practice in writing critical evaluations of the literature as it applies to their research question. Prequisite: Statistics LEC.

RESP 664. Scientific Investigation Part II. 1 Hour.
This course is designed to teach the student how to read, interpret and analyze research reports. Prerequisite: Senior year standing and a course in statistics. LEC.

RESP 665. Scientific Investigation Part III. 1 Hour.
Each study group will write the Discussion and Conclusion sections of their paper and share their findings in a poster presentation. The final version of each group's study manuscript must be submitted to course instructor prior to graduation. The quality of the manuscript will be appropriate for submission to the journal of Respiratory Care. Prerequisites: RESP 663, 664. LEC.

RESP 666. Registry Review. 2 Hours.
This course involves individual student under instructor guidance. A series of practice exams are taken and discussed including a secured practice registry exam and clinical simulation exam. Prerequisite: Admission to the respiratory care program and consent of instructor. LEC.

RESP 667. Research in Health Care. 3 Hours.
Online version combines the on-campus series of courses: RESP 663, RESP 664 and RESP 665, for the individual student. The first half of the semester will produce a study proposal for a chart review that will require a faculty-assisted search of our database of de-identified patient information. The second half of semester will be analyzing results of search and with the aid of a faculty advisor, writing a quality manuscript suitable for submission to Respiratory Care that will be submitted to course instructor, at the very least. Prerequisites: statistics. LEC.

RESP 670. Clinical Specialty Practicum. 10 Hours.
Provides the student with a capstone experience in the activities and responsibilities related to clinical processes in one of the specific advanced practice specialties: critical care, neonatal, pediatrics, pulmonary rehabilitation, pulmonary function, sleep, hyperbaric oxygen,
management or education. Prerequisite: Permission of the instructor. FLD.

**RESP 671. Clinical Specialty Projects I. 6 Hours.**
Designed to give the student the opportunity to develop clinically-related projects in the areas of quality improvement, health care organizational structures and current processes in patient management. Prerequisite: Permission of the instructor. FLD.

**RESP 672. Clinical Specialty Projects II. 6 Hours.**
Designed to have the student demonstrate competency related to clinical processes in one of the specific advanced practice specialties: critical care, neonatal, pediatrics, pulmonary rehabilitation, pulmonary function, sleep, hyperbaric oxygen, management or education. Prerequisite: Permission of the instructor. FLD.

**Bachelor of Science in Respiratory Care**

**On-campus Bachelor's Degree Program**
KU offers a bachelor of science in respiratory care degree program with the option to specialize in pulmonary rehabilitation, neonatology, adult critical care, management, education, sleep disorders, cardiopulmonary diagnostics, and hyperbaric oxygen therapy. Most students enter this program after completion of their sophomore year of undergraduate study or after finishing two years of community college course work. With an advanced curriculum and located at an academic medical center, students receive extensive experience in advanced respiratory therapy techniques. The program includes a semester-long clinical assignment during the senior year in the student's area of specialization.

**RRT-to-Bachelor's Degree Bridge Program**
The University of Kansas respiratory care program offers a program for the respiratory therapist with RRT credential to obtain a bachelor's degree. This program is perfect for students unable to be physically present on campus or those with schedule constraints which make traditional college class schedules impossible. Courses (http://www.kumc.edu/school-of-health-professions/respiratory-care-education/degree-completion-bs-program-for-rrts/curriculum.html) are Web-based in this program and never require students to leave their home or office and offer added flexibility: if you're traveling or not feeling well, the courses (http://www.kumc.edu/school-of-health-professions/respiratory-care-education/degree-completion-bs-program-for-rrts/curriculum.html) are always available, anytime.

**On-campus Bachelor's Degree Program**
To be eligible for this program, 2 years of prerequisite course work are needed – either from the KU Lawrence campus or another regionally accredited university or community college. In order to complete prerequisites and recommended electives on-time and in the appropriate sequence, interested students should contact an academic advisor (respiratory@kumc.edu) for assistance in course selection.

Transfer students should be aware that all transfer courses for which they have requested credit must be equivalent to courses required at KU; otherwise, additional course work will be required. Graduates of an associate's degree respiratory care program are eligible to apply for advanced standing as seniors upon completion of all prerequisites.

International students should review current requirements. International students, or those for whom English is a second language, may have additional requirements relative to language proficiency, residency, and citizenship status. Information for international students (http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html)

Good physical health and mental health is essential. Minor physical handicaps are not considered deterrents. The faculty reserves the option of restricting admission of candidates with handicaps that may affect ability to deliver safe and effective patient care. The admissions committee may request a personal interview with the applicant. All students must be current with required immunizations.

A background check and documentation of shadow experience are required. Prospective students should review the program requirements, including prerequisite course work, and complete list of eligibility requirements (http://www.kumc.edu/school-of-health-professions/respiratory-care-education/how-to-apply.html).

**Prerequisites**

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English (6)</td>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics (6)</td>
<td>MATH 101</td>
<td>College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>Basic Sciences (23)</td>
<td>BIOL 240</td>
<td>Fundamentals of Human Anatomy</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BIOL 241</td>
<td>Human Anatomy Observation Laboratory</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>BIOL 246</td>
<td>Principles of Human Physiology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BIOL 247</td>
<td>Principles of Human Physiology Laboratory</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>BIOL 200</td>
<td>Basic Microbiology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BIOL 203</td>
<td>Introductory Microbiology Laboratory</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>PHSX 111</td>
<td>Introductory Physics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CHEM 110</td>
<td>Introductory Chemistry</td>
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<tr>
<td>Oral Communication (3)</td>
<td>COMS 130</td>
<td>Speaker-Audience Communication</td>
<td>3</td>
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<tr>
<td>Humanities (6)</td>
<td>PHIL 140</td>
<td>Introduction to Philosophy</td>
<td>3</td>
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<tr>
<td>Social Sciences (6)</td>
<td>PSYC 104</td>
<td>General Psychology</td>
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</tr>
</tbody>
</table>

**Total Hours** 50

**RRT-to-Bachelor's Degree Bridge Program**

An overall grade point average (GPA) of 2.5 (on a 4.0 scale) for college course work is required to enter the degree-completion program for RRTs. In addition, student transcripts must document an individual course grade of no less than "C" on each prerequisite course in math, chemistry, physics and biological sciences.

A minimum 120 hours of college credit are required to earn a bachelor's degree from KU. Students will earn at least 30 credit hours during the respiratory care program.

**Note:** To be transferable, all prerequisite and respiratory care course work must be from an educational institution that is regionally accredited.
is not the same as national accreditation. Not sure about your course work? Please read about the differences in accreditation. (http://www.k12.wa.us/certification/colleges/reg_accred.html)

Prerequisite Courses

- Human Anatomy (lab recommended)
- Human Physiology (lab recommended)
- Microbiology (lab recommended)
- Chemistry
- Physics
- Algebra
- English Composition I and II
- Oral Communication
- Humanities (2 courses)
- Psychology
- Sociology
- Statistics

Students having completed a single combined anatomy and physiology course will need to complete either a second, higher-level A&P course, or otherwise take a course in physiology only.

Requirements for On-campus Bachelor's Degree Program

Upon completion of the prerequisites for the program, students will have acquired 50 credit hours. This program requires 2 years of course work in respiratory care at KU Medical Center and will provide 62 hours plus an additional 5 hours of respiratory care electives. To earn a degree from KU, 120 total credit hours must be acquired, and the remaining hours can be fulfilled with any electives.

The program provides an organized learning experience in which each student acquires an in-depth understanding of and proficiency in advanced concepts of clinical respiratory care and the fundamentals of health professions education and management. During the senior year, the student specializes in one area of concentration: adult critical care, neonatal critical care, pulmonary rehabilitation, management, education, cardiopulmonary diagnostics, sleep medicine, or hyperbaric medicine.

Clinical experience is an integral part of the curriculum and students begin clinical rotations at one of the clinical affiliate sites (http://www.kumc.edu/school-of-health-professions/respiratory-care-education/about-the-program/clinical-affiliates.html) starting in their sixth week of the program. Clinical rotations give the student exposure to patient care and experience in performing respiratory care procedures.

### Fall, Year 1 (16)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>RESP 303</td>
<td>Introduction to Respiratory Care Procedures</td>
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<tr>
<td>RESP 310</td>
<td>Clinical Pharmacology I</td>
<td>1</td>
</tr>
<tr>
<td>RESP 318</td>
<td>Pulmonary Pathology</td>
<td>3</td>
</tr>
<tr>
<td>RESP 325</td>
<td>Clinical Process</td>
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</tr>
<tr>
<td>RESP 330</td>
<td>Cardiopulmonary Physiology</td>
<td>3</td>
</tr>
<tr>
<td>HEIM 230</td>
<td>Medical Terminology</td>
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### Spring, Year 1 (14)

<table>
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<th>Course</th>
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<tbody>
<tr>
<td>RESP 311</td>
<td>Clinical Pharmacology II</td>
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</tr>
<tr>
<td>RESP 340</td>
<td>Mechanical Ventilators</td>
<td>5</td>
</tr>
<tr>
<td>RESP 345</td>
<td>Adult Critical Care</td>
<td>3</td>
</tr>
<tr>
<td>RESP 350</td>
<td>Clinical Application I</td>
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### Summer, Year 1 (6)

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<tr>
<td>RESP 355</td>
<td>Clinical Application II</td>
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</tr>
<tr>
<td>RESP 390</td>
<td>Pulmonary Function</td>
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<tr>
<td>RESP 395</td>
<td>Pediatric Critical Care</td>
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</tr>
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</table>

### Fall, Year 2 (15)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>RESP 400</td>
<td>Advanced Critical Care</td>
<td>4</td>
</tr>
<tr>
<td>RESP 401</td>
<td>Neonatal Respiratory Care</td>
<td>4</td>
</tr>
<tr>
<td>RESP 425</td>
<td>Advanced Critical Care Procedures</td>
<td>2</td>
</tr>
<tr>
<td>RESP 662</td>
<td>Education Principles in Health Care</td>
<td>2</td>
</tr>
<tr>
<td>RESP 664</td>
<td>Scientific Investigation Part II</td>
<td>1</td>
</tr>
<tr>
<td>RESP 667</td>
<td>Registry Review</td>
<td>2</td>
</tr>
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</table>

### Spring, Year 2 (13)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>RESP 405</td>
<td>Health Care Management, Ethics and Law</td>
<td>2</td>
</tr>
<tr>
<td>RESP 665</td>
<td>Scientific Investigation Part III</td>
<td>1</td>
</tr>
<tr>
<td>RESP 670</td>
<td>Clinical Specialty Practicum</td>
<td>10</td>
</tr>
</tbody>
</table>

Total Hours: 64

Professional Credentialing

Upon graduation, students will be prepared to sit for the national certification examination. To be employed as a respiratory therapist, graduates must pass this exam and will be recognized with the Registered Respiratory Therapist (RRT) credential.

Program requirements and course offerings are subject to change. For details of the curriculum, including a year-by-year course sequence, please visit the program’s website (http://www.respiratorycare.kumc.edu/curriculum.html).

Requirements for RRT-to-Bachelor’s Degree Bridge Program

The curriculum for this program includes 17 hours of core courses.

Students then select from a specific set of program electives (listed below) to fulfill at least a total of 30 semester hours of course work in respiratory care. Upon acceptance, students work with an advisor to organizes a study plan based on a chosen clinical specialty area that serves as the final capstone project.

Clinical specialty areas: neonatal critical care, pediatric critical care, adult critical care, pulmonary rehabilitation, pulmonary function laboratory, polysomnography, hyperbaric therapy, respiratory care management or respiratory care education.

To qualify for graduation, all students must achieve a C or better on all course work in this program. A minimum 120 hours college credit are required to earn a bachelor's degree.

The course schedule follows a typical semester and is designed to be delivered at an organized and manageable pace. Tests are scheduled during selected weeks in the course and may be taken at the convenience of the student during that week.

**Core Courses (17)**

- RESP 405 Health Care Management, Ethics and Law 2
- RESP 668 Research in Health Care 3
Students take both of the following courses in his or her chosen specialty area. These are capstone courses that, when successfully completed, conclude the bachelor's degree program. They must be taken in the sequence below and students must have at least one year of RRT experience prior to enrolling.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESP 671</td>
<td>Clinical Specialty Projects I</td>
<td>6</td>
</tr>
<tr>
<td>RESP 672</td>
<td>Clinical Specialty Projects II</td>
<td>6</td>
</tr>
</tbody>
</table>

Program Electives (minimum of 13 hours required) (15)

Note: Some of the following courses are required for certain clinical specialty areas. Enrollment options vary by semester; these courses are not available every semester.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>RESP 400</td>
<td>Advanced Critical Care</td>
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<tr>
<td>RESP 401</td>
<td>Neonatal Respiratory Care</td>
<td>4</td>
</tr>
<tr>
<td>RESP 402</td>
<td>Chronic Respiratory Disease Management: The Evolving Role of the Respiratory Therapist</td>
<td>3</td>
</tr>
<tr>
<td>RESP 403</td>
<td>Physical Science for Health Professions</td>
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</tr>
<tr>
<td>RESP 425</td>
<td>Advanced Critical Care Procedures</td>
<td>2</td>
</tr>
<tr>
<td>RESP 662</td>
<td>Education Principles in Health Care</td>
<td>2</td>
</tr>
</tbody>
</table>

Therapeutic Science

Therapeutic science is an interdisciplinary program that involves faculty across a variety of departments and schools at KU. This program is part of a growing trend to provide interdisciplinary doctoral-level training to address issues related to disability. The KU therapeutic science doctoral degree program is administered through the Department of Occupational Therapy Education (http://ot.kumc.edu) in the KU School of Health Professions.

This program is designed for students whose interests in disability and quality of life require an integrated, interdisciplinary course of study that can not be provided by existing programs. Typically, applicants will already have obtained a graduate degree and have a professional credential or identity (e.g., occupational therapist, speech-language pathologist, licensed clinical social worker, clinical psychologist, special educator). Many are likely to be currently working in their chosen field related to issues of disability, but now seek to generate knowledge for understanding disability and improving quality of life for individuals with disabilities.

Courses

**TS 800. Research Proseminar. 1 Hour.**
A proseminar conducted by the core graduate faculty in Occupational Therapy and Therapeutic Science. Twice-monthly meetings will involve student and faculty presentations of their current research, as well as provide more opportunities to obtain feedback on research proposals. May be taken more than once for a total of four credits. (Same as OTMS 800.) LEC.

**TS 805. Multidisciplinary Theoretical Perspectives. 3 Hours.**
Students will identify and explore key theories in behavioral and social science with an emphasis on those currently influencing clinical reasoning. Students will demonstrate an understanding of contemporary theories and be able to compare and contrast key theories, while also developing knowledge about theory guided research and interventions. LEC.

**TS 850. From Beliefs to Evidence. 1 Hour.**
Analysis of the role of beliefs about practice in professional culture and how beliefs are affected by the accumulation of research evidence. Topics include the nature of science and beliefs, the nature of evidence, and the debate over evidence-based practice. Students will use topics from their own professional interests for class presentations and written assignments. May be taken more than once for a total of two credits. LEC.

**TS 880. Special Projects. 1-6 Hours.**
An elective course to allow student investigation of special issues or problems relevant to applied research and/or practice, under the direction of a faculty member chosen by the student. Systematic coverage of current issues may include a research investigation or study related to pertinent sociocultural trends, practice factors, or emerging issues in service provision. Students will complete special projects such as oral presentations, written papers, or case analysis as negotiate with the faculty member. May be repeated for credit. Prerequisite: Permission of instructor. IND.

**TS 900. Evolving Interdisciplinary Views of Disablement. 1 Hour.**
Assessment of how our social and cultural context defines notions of disability and disablement in our society. Topics include historical constructs of disability, public policy related to disability, and social paradigms of disability. Students will evaluate views of disablement from the perspective of their own discipline. May be taken more than once for a total of two credits. LEC.

**TS 950. Designing Effective Knowledge Transfer. 1 Hour.**
Examination of the principles of knowledge transfer and diffusion of innovation as they relate to practices in therapeutic professions. Topics include the diffusion process, change agents, innovation adoption, and current diffusion methods. Students will evaluate diffusion processes that have occurred within their own professions. May be taken more than once for a total of two credits. LEC.

**TS 980. Advanced Study in Therapeutic Science. 1-6 Hours.**
Students engage in advanced study of a topic of their interest, guided by an appropriate mentor. Methods include directed readings, interpretation of evidence, discussions, and written syntheses of existing literature. Course culminates in a written proposal for original research and an oral defense of that proposal. Credit is given only after the dissertation proposal is accepted by the student's advisory committee. Prerequisite: Permission of instructor. SEM.

**TS 990. Dissertation in Therapeutic Science. 1-9 Hours.**
Research experience leading to dissertation for doctoral students in Therapeutic Science. THE.

Doctor of Philosophy in Therapeutic Science

Therapeutic science is an interdisciplinary program that involves faculty across a variety of departments and schools at KU. This program is part of a growing trend to provide interdisciplinary doctoral-level training to address issues related to disability. The KU therapeutic science doctoral degree program is administered through the Department of Occupational Therapy Education (http://ot.kumc.edu) in the KU School of Health Professions.

This program is designed for students whose interests in disability and quality of life require an integrated, interdisciplinary course of study that can not be provided by existing programs. Typically, applicants will already have obtained a graduate degree and have a professional credential or identity (e.g., occupational therapist, speech-language pathologist, licensed clinical social worker, clinical psychologist, special educator). Many are likely to be currently working in their chosen field related to issues of disability, but now seek to generate knowledge for
understanding disability and improving quality of life for individuals with disabilities.

To be considered for admission, the following are required:

1. **Degree**
   A bachelor’s degree and a research-based master’s degree are required. Students with degrees from a university outside the U.S. may be considered provided they meet the requirements equivalent to those from a program in the U.S.

2. **Grade Point Average**
   An overall minimum 3.0 Grade Point Average (on a 4.0-scale) is required.

   Please note: Reflecting the interdisciplinary nature of the therapeutic science program, the Graduate Record Examination (GRE) is not required.

3. **International Students**
   An applicant is considered an international student if he or she requires a visa, or currently resides in the U.S. with non-immigrant status, or currently resides in the U.S. while applying for permanent residency. Additional requirements and documentation, such as proof of English language proficiency, are required for international students to become eligible for KU programs. Please review the information for international students (http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html) before applying.

   **Background Check**
   The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) requires all incoming students to pay for a background check (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html). This one-time fee must be paid directly to the company performing the background investigation. You will be asked to provide information and make the payment once you have been officially accepted into the program. For more information, please see the School of Health Professions Background Check Instructions. (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html)

   The program is composed of the following components:

   1. A core curriculum that includes foundation theory knowledge and a series of core courses
   2. Interdisciplinary content coursework and advanced study courses
   3. Design and methods and analysis coursework
   4. Competency attainment
   5. Dissertation work

   Please note that the course requirements listed below assume that the student already has at least 24 graduate credit hours in content courses and 6 hours in research methods and analysis courses that have been accumulated toward a master’s degree. The curriculum outlined below comprises a minimum of 60 credit hours in addition to any existing credits the student has earned prior to beginning the program. Note that most therapeutic science students accumulate more than the 60 credit minimum by the end of the program.

   Students in the program must meet the research skills and responsible scholarship requirement (https://documents.ku.edu/policies/Graduate_Studies/Research_Skills_and_Responsible_Scholarship.htm) of the university, fulfill program course work requirements, and successfully complete an oral comprehensive examination to achieve Ph.D. candidacy. The Ph.D. candidate must then write a dissertation based on original research, followed by a successful oral defense of the dissertation, to receive the Ph.D. degree. It is typical for students to require the equivalent of at least 3 years of full-time study to fulfill these requirements.

   **Core Courses Offered in the Therapeutic Science Ph.D. Program**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS 850</td>
<td>From Beliefs to Evidence</td>
<td>1</td>
</tr>
<tr>
<td>TS 900</td>
<td>Evolving Interdisciplinary Views of Disablement</td>
<td>1</td>
</tr>
<tr>
<td>TS 950</td>
<td>Designing Effective Knowledge Transfer</td>
<td>1</td>
</tr>
<tr>
<td>TS 980</td>
<td>Advanced Study in Therapeutic Science</td>
<td>1-6</td>
</tr>
<tr>
<td>TS 990</td>
<td>Dissertation in Therapeutic Science</td>
<td>1-9</td>
</tr>
</tbody>
</table>

   **Interdisciplinary Content Coursework:**
   Advanced Theory (Interdisciplinary) elective (at least 3 credits)
   Interdisciplinary content courses (at least 2, 3-credit courses)
   Advanced Study Coursework (at least 3 credits)

   1 Course is taken for 2 terms for total of 2 credit hours

   For full details of the curriculum, please visit the program’s website (http://www.kumc.edu/school-of-health-professions/therapeutic-science/curriculum.html).
Journalism & Mass Communications

Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your advisor (http://www.advising.ku.edu) for details). Other years’ catalogs (http://catalog.ku.edu/archives) »

Bachelor of Science in Journalism (p. 744)
Minor in Journalism (p. 747)
Master of Science in Journalism (p. 747)
Doctor of Philosophy in Journalism (p. 750)

The School of Journalism and Mass Communications

Values
The William Allen White School of Journalism and Mass Communications (http://www.journalism.ku.edu) is guided by a set of core values. We value

• A diverse, collaborative, and dynamic student-centered environment.
• Excellence in learning, teaching, and mentoring.
• Free expression and conscientious, ethical journalism as cornerstones of a democratic society.
• Critical and creative thinking.
• Meaningful research and creative activity.
• Imaginative outreach and collaboration on this campus, in Kansas, and in the profession of journalism.

Mission
The mission of the school is to teach students to think critically and creatively while preparing them for careers in journalism, mass communications, and related fields and for graduate study. Graduates will

• Appreciate the value of freedom of expression and its importance in society.
• Be able to analyze mass media critically.
• Have an ethical framework for the practice of journalism and mass communication.
• Demonstrate understanding of traditional and emerging media technologies on society.
• Demonstrate effective production and presentation skills for the media.
• Demonstrate an understanding of the importance of research for adding new knowledge and an ability to employ research techniques for analysis and interpretation.
• Demonstrate understanding of how communications organizations function and the important management issues they face.

The school is accredited by the Accrediting Council on Education in Journalism and Mass Communications.

School of Journalism Edwards Campus

Mission
To educate marketers for personal development and professional success.

Vision
To become the degree of choice for marketing communications professionals in the Kansas City area, growing marketers personally and professionally, growing the program enrollment and market awareness, and growing the marketing industry financially and creatively.

Values
• Academically sound … with a high-quality curriculum taught by expert faculty.
• Relationship-oriented … in our interactions with our constituents.
• Attentive … to the unique needs of working adult students.
• Servant-hearted … in our willingness to go “above and beyond” to assist students and prospects.

Our Promise
To bring KU’s and the William Allen White School of Journalism and Mass Communications’ reputations for academic excellence to greater Kansas City through high-level service and convenience for the working adult marketing professional seeking to further his/her career with an Integrated Marketing Communications Graduate degree.

Facilities

Stauffer-Flint Hall and Dole Human Development Center
The school’s classrooms, laboratories, student media, and faculty offices are in Stauffer-Flint Hall and Dole Human Development Center. The school’s main office, Advising and Records Office, The Agency, and Journalism Resource Center are in Stauffer-Flint, as are the offices of the Accrediting Council on Education in Journalism and Mass Communications and the Kansas Scholastic Press Association. The Dole Center houses multimedia labs, The University Daily Kansan, the television studio, and KUJH-TV.

Journalism Student Services Center
The Student Services Center, 117 Stauffer-Flint Hall, houses the Recruitment and Retention Coordinator as well as Undergraduate Advising and Records. For prospective student questions about admissions to KU from a high school or transfer institution, please contact (785) 864-4768. For current KU students seeking admission to the School of Journalism, contact (785) 864-4080. Students who need advising, enrollment and graduation planning and assistance should also call (785) 864-4080.

Journalism Resource Center
Professional publications, copies of major national and state newspapers, and reference and research materials are available in the Journalism Resource Center, 210 Stauffer-Flint Hall. Students may check out computers for use in the Resource Center.
Undergraduate Programs

The school offers the Bachelor of Science (p. 744) degree in journalism. The program prepares students for careers in advertising, corporate communications, integrated marketing communications, news, writing and editing, management, and sales in traditional media and emerging and converged media.

The school also offers a minor in journalism (p. 747).

Courses for Nonmajors

All KU students may take:

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<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
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<tr>
<td>JOUR 101</td>
<td>Media and Society</td>
<td>3</td>
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<td>JOUR 150</td>
<td>Stand and Deliver</td>
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<td>JOUR 177</td>
<td>First Year Seminar: _____</td>
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<td>JOUR 201</td>
<td>Current Issues in Journalism</td>
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<td>JOUR 300</td>
<td>Visual Storytelling</td>
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<td>JOUR 308</td>
<td>Ethics in a Wired World</td>
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<td>JOUR 320</td>
<td>Stratcom I: Introduction to Strategic Communication</td>
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<tr>
<td>JOUR 503</td>
<td>History of Journalism and Mass Communication</td>
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<td>JOUR 512</td>
<td>The Business of Media</td>
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<td>JOUR 534</td>
<td>Diversity in Media</td>
<td>3</td>
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<td>JOUR 540</td>
<td>Sports, Media and Society</td>
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<td>JOUR 590</td>
<td>International Journalism</td>
<td>3</td>
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<tr>
<td>JOUR 608</td>
<td>Ethics and Professional Practice</td>
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<td>JOUR 613</td>
<td>International Strategic Communications</td>
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<td>JOUR 618</td>
<td>First Amendment and Society</td>
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Junior standing is required for:

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<tr>
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<td>JOUR 618</td>
<td>First Amendment and Society</td>
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Students in professional schools who wish to take any other journalism course should consult their schools and the Journalism Advising and Records Office (http://www.journalism.ku.edu/advising), 117 Stauffer-Flint Hall.

Internships

Through the Career Center (http://www.journalism.ku.edu/career-center-students), the school enables students to gain professional experience working as interns. Internships vary in time of year, duration, location, compensation, and required course work or other experience. Many students complete internships during the summer, but they also are available during the school year. Staff members provide further guidance on opportunities and requirements.

Undergraduate Scholarships and Financial Aid

All students with financial need should apply to Financial Aid and Scholarships (http://affordability.ku.edu/steps/index.shtml). This office awards scholarships to incoming first-year students based on academic merit.

The School of Journalism and Mass Communications has a limited number of scholarships provided by donors who often specify the majors or the geographic areas from which recipients may be selected. Most scholarships from the school are reserved for students already enrolled in journalism courses. To receive a need-based scholarship from journalism, the student must have submitted the FAFSA form (http://
A Credit/No Credit option is available to all degree-seeking undergraduates. You may enroll in one course a semester under the option, if the course is not in your major or minor. For more information, visit the KU Policy Library (https://documents.ku.edu/policies/governance/USRR.htm#art2sect2).

Warning: Certain undesirable consequences may result from exercising the option. Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of No Credit to F when computing grade-point averages.

Journalism courses or courses in another school's major or minor may not be taken for Credit/No Credit.

Graduation with Distinction and Highest Distinction

Students who rank in the upper 10 percent of their graduating class and have a journalism grade-point average of at least 2.5 will graduate with distinction. The upper third of those awarded distinction will graduate with highest distinction. In addition to a student’s academic record, other factors may be considered.

Honor Roll

Students with grade-point averages of 3.75 who have completed at least 12 hours with letter grades are recognized on the honor roll or dean's list in fall and spring. Credit/No Credit grades are not accepted. S grades are accepted. An Honor Roll notation appears on the transcript.

Maximum and Minimum Semester Enrollment

The normal enrollment is 15 to 16 hours a semester. A 12-hour enrollment is considered a minimum full-time enrollment. Enrollment in more than 18 hours a semester, or more than 9 hours during the summer session, requires special permission from the assistant dean for student services.

Nonresidence Study Before the Last 30 Hours

Before the last 30 hours required for the degree, students may, under certain conditions, take courses at other institutions and transfer the credit to KU. Before enrolling in a nonresidence course, check on how your courses will transfer to KU (http://admissions.ku.edu/apply/credits) or complete KU's standard form, Request for Tentative Evaluation of Transfer Credit, in your dean's office or student services office or in College Student Academic Services for students in the College. After completing the course work, you must request that an official transcript be sent to the Office of Admissions (http://admissions.ku.edu/whyku/index.shtml), KU Visitor Center, 1502 Iowa St., Lawrence, KS 66044-7576, 785-864-3911. For transcripts to be official, they must be mailed from the college or university directly to KU. Faxed transcripts are not accepted for posting of transfer credit.

Nonresidence credit includes all credits from another college or university taken after initial enrollment at KU, military service courses, and other undergraduate course work not formally offered in the Schedule of Classes (p. 10).

Majors must submit the Request for Tentative Evaluation of Transfer Credit form before they enroll.

Prerequisites and Corequisites

Course prerequisites are strictly enforced. Students are administratively dropped from courses for which they do not meet prerequisites. Waiver is not granted if the prerequisite course was taken and failed or taken and not completed.

Probation

Students admitted to the school must do the following in order to remain in the school in good standing:

- Maintain a 2.5 cumulative KU grade-point average and a 2.5 journalism grade-point average.

Students failing to meet the condition above are placed on probation for 1 semester. If a student does not raise his or her cumulative KU and
Repetition of Courses
The School of Journalism and Mass Communications follows the university’s course repeat and grade replacement policy.

Required Work in Residence
No baccalaureate degree is granted to a student who has not completed at least 30 semester credit hours of residence courses at KU. No exceptions are granted.

To earn a bachelor’s degree from KU, you must complete the last 30 hours of credit for the degree by resident study. You may petition the dean for a waiver.

Students must have the permission of the assistant dean for student services. Up to 6 hours of work done at another institution may be accepted as part of the last 30 hours, if the hours are not in required courses in the major. If a student completes more than 6 of the last 30 hours at another college, he or she must complete additional KU course work to graduate. Transfer courses must be completed with a C or higher.

Time Limits
Students are encouraged to complete the undergraduate degree in 4 years or less. Students experiencing a break in enrollment may return within five years of the last class they attended as an enrolled undergraduate journalism student and complete their coursework under the requirements in place at the time they left. They must maintain continuous enrollment to finish their coursework after they re-enroll.

If it has been longer than five years, students may be readmitted under the current degree requirements in place when they return.

Transfer of Credit
CredTran (http://admissions.ku.edu/apply/credits) is a transfer course equivalency system that lists more than 2,200 colleges and universities from which KU has accepted transfer courses in the past. If your school or course is not listed, your evaluation will be completed when you are admitted to KU.

A maximum of 12 hours of journalism course work taken at other institutions may count toward a degree. Other journalism courses do appear on the transcript, but the hours are treated as excess, and an equal number of hours is added to the 120 required for graduation. Courses with grades of D are not accepted for transfer credit.

Graduate University Regulations
For information about university regulations, see Regulations (p. 12) or visit the University of Kansas Policy Library (http://www.policy.ku.edu).

Journalism Career Center
The Career Center (http://www.journalism.ku.edu/career-center-students), 120 Stauffer-Flint Hall, helps students find internships and jobs. Each year, leading media outlets, advertising agencies, and corporations in the state and the nation visit campus to interview students. The Career Center also maintains an online database of internships and jobs that is updated frequently.

Courses

JOUR 2. Grammar and Usage. 1 Hour.
A student who does not achieve the minimum required score on a 50-question grammar and usage test taken before enrolling in JOUR 302 must complete this one-credit basic skills course, which focuses on the mechanics of journalistic writing. It may be taken concurrently with JOUR 302. Passage of JOUR 002 and of JOUR 302, each with a grade of 2.0 or above, is a prerequisite to JOUR 415, JOUR 419 and JOUR 420. The one credit for JOUR 002 does not count toward the 120 total hours or the total journalism hours required for graduation. LEC.

JOUR 101. Media and Society. 3 Hours. GE3S.
Introductory course open to all KU students. The course emphasizes the use of critical and creative thinking as tools to better consider the reliability of information received through newspapers, magazines, radio and television, online media, trade publications, advertising, and business communications. The class also surveys media ethics, economics, technology, and the function and impact of media on a free society. The course is designed for pre-journalism students. Students considering journalism as a major, and students from other disciplines who take it as an elective. For students who enter college in Fall 2000 and thereafter, this is a prerequisite for all other journalism courses except JOUR 600. Not open to seniors. Must be completed with a grade of 2.0 or better. May be retaken once. LEC.

JOUR 150. Stand and Deliver. 3 Hours. GE22.
The ability to inform or persuade confidently through presentation is an incalculable skill no matter where students choose to direct their careers. This course introduces students to presentation approaches, effective oral communication fundamentals, audience analysis, support technologies and structural development. Students will assess their own communication styles and strengths, understand presentation purposes and types, research, edit and organize material, use graphics concepts and techniques to design formats for value-added content, and practice coherent, relevant and well-articulated stories. Students will apply what they learn in a variety of situations, from individual expository speeches to group business proposals. Open to all undergraduate students. LEC.

JOUR 177. First Year Seminar: ______. 3 Hours. SC GE11.
A limited-enrollment, seminar course for first-time freshman, organized around current issues in journalism or media. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

JOUR 201. Current Issues in Journalism. 3 Hours.
An in-depth investigation of a current event or issue confronting the various professions of journalism. The class will examine the implications of the event/issue for professional values, ethics, diversity and free expression. Prerequisite: JOUR 101 with a grade of 2.0 or better. LEC.

JOUR 210. Basic Video Production. 2 Hours.
This course instructs and prepares students to work with multiple media-studio and live production. This is a lab-intensive course designed with live newsroom and live in-the-field productions. Students will have the opportunity to learn behind the scenes skills; studio and live camera, floor directing, lighting, audio, basic PhotoShop and field producing skills in production of newscasts and other reports. May be taken twice. LAB.

JOUR 300. Visual Storytelling. 3 Hours.
This course is about understanding how an idea becomes something you can see and how the media use visuals in the most efficient and effective
ways possible. Students will develop a visual vocabulary and personal aesthetic as they expand their skills in the use of the digital toolbox— including presentation design, and the use of graphics, typography, color, photography (still and video) and audio. They will put their learning into practice through production of visual projects for diverse audiences served by print, online and broadcast media. Must be completed with a grade of 2.0 or better. Prerequisite: JOUR 101 with a grade of 2.0 or better. LEC.

JOUR 302. Infomania: Information Management. 3 Hours. GE11. This course will help students understand the crucial role that information plays in news and strategic communication. Students will learn not only how to gather information but how to evaluate, analyze and synthesize it. In doing so, they will experiment with a wide range of research tools, sources and techniques, and improve their writing and critical-thinking skills. Must obtain a grade of C (2.0) or higher to advance in the curriculum. Suggestions: JOUR 300 (or JOUR 310) should be taken prior to JOUR 302. Prerequisite: JOUR 101. Students must be admitted to the School of Journalism or Journalism minor or in an approved concentration in order to enroll in JOUR 302. Not open to seniors. LEC.

JOUR 304. Media Writing. 3 Hours. GE21. This course will emphasize journalistic writing and the role it plays in coherent and engaging stories. It will build on JOUR 300 and JOUR 302, helping students sharpen their writing and interviewing skills for the Web, for print and for broadcast; and sharpen their judgment in choosing information, sources and story forms. Passage of the School’s grammar and usage test or concurrent enrollment in JOUR 002 is required before enrolling in this course. Prerequisite: JOUR 101 with a grade of C (2.0) or higher and ENGL 101 and ENGL 102 or ENGL 105 and one course numbered ENGL 203 - ENGL 211 or equivalent for students who started at KU prior to Fall 2012. For students who started at KU in Fall 2012 or after, prerequisites are: JOUR 101, JOUR 300 and JOUR 302 each completed with a grade of C (2.0) or higher and ENGL 101 and ENGL 102 or ENGL 105 and one course numbered ENGL 203 - ENGL 211 or equivalent. A 2.5 English GPA when all are completed at KU; when any English courses are transferred, a 3.0 English GPA or 2.5 plus an English ACT score of 25. Not open to seniors. Must be completed with a grade of 2.0 or above to enroll in courses for which it is a prerequisite and may be retaken once. Students must be admitted to the School of Journalism or in an approved concentration in order to enroll in JOUR 304. LAB.

JOUR 305. Writing for Media, Honors. 3 Hours. GE21. This course will emphasize journalistic writing and the role it plays in coherent and engaging stories. It will build on JOUR 300 and JOUR 302, helping students sharpen their writing and interviewing skills for the Web, for print and for broadcast; and sharpen their judgment in choosing information, sources and story forms. Passage of the School’s grammar and usage test or concurrent enrollment in JOUR 002 is required before enrolling in this course. Prerequisite: JOUR 101 with a grade of C (2.0) or higher and ENGL 101 and ENGL 102 or ENGL 105 and one course numbered ENGL 203 - ENGL 211 or equivalent for students who started at KU prior to Fall 2012. For students who started at KU in Fall 2012 or after, prerequisites are: JOUR 101, JOUR 300 and JOUR 302 each completed with a grade of C (2.0) or higher and ENGL 101 and ENGL 102 or ENGL 105 and one course numbered ENGL 203 - ENGL 211 or equivalent. A 2.5 English GPA when all are completed at KU; when any English courses are transferred, a 3.0 English GPA or 2.5 plus an English ACT score of 25. Not open to seniors. Must be completed with a grade of 2.0 or above to enroll in courses for which it is a prerequisite and may be retaken once. Students must be admitted to the School of Journalism or in an approved concentration in order to enroll in JOUR 305. Open only to students in the KU Honors Program. LAB.

JOUR 308. Ethics in a Wired World. 3 Hours. AE51. This course surveys and applies theories, principles and critical-thinking strategies for making ethical decisions related to personal and professional use of media. Students will examine and strive to resolve specific ethics challenges posed by participation in media such as Facebook, Twitter, LinkedIn, Blackboard, news media websites, dating websites, and more. Course is not open to students, including minors, enrolled in the School of Journalism and Mass Communications. LEC.

JOUR 320. Stratcom I: Introduction to Strategic Communication. 3 Hours. Students develop an understanding of how organizations develop effective, research-based communication plans to accomplish their objectives. It examines the role of communications in strategic planning and explores career opportunities in professions such as advertising, public relations and sales. JOUR 320 provides insight into how communicators use critical and creative thinking to gather, organize, evaluate and deliver information in a culturally diverse environment. For students entering the Strategic Communication track of the School of Journalism Mass Communications, JOUR 320 provides the foundation for core courses in research methods, message development and strategic campaigns. Prerequisite: Junior standing or completion of JOUR 101 with a grade of C (2.0) or higher. Open to non-majors. LEC.

JOUR 409. Special Topics in: ____. 2-4 Hours. Prerequisite: Approval of instructor. IND.

JOUR 410. Photojournalism I. 3 Hours. Study of camera, film, printing, composition, light and lighting, flash, the principles of photojournalism, deadline shooting for sports, general news, spot news, and features. Building a portfolio and laboratory work are included. Prerequisite: JOUR 301 Research and Writing (or JOUR 302 Research and Writing, Honors) or JOUR 304 Media Writing (or JOUR 305 Media Writing, Honors) with a grade of 2.0 or above. LEC.

JOUR 415. Multimedia Reporting. 3 Hours. Hands-on instruction in the gathering, writing, and presentation of news and information for newspapers, magazines, television, radio, and online media. Student work may appear in campus media. A 75-question test on grammar, usage and AP style will be required as part of the course. Requirement: Must obtain a grade of C (2.0) or higher to advance in the curriculum. Prerequisite: JOUR 302 (Infomania), JOUR 304 (Writing for Media) (or JOUR 301 Research and Writing, JOUR 302 Research and Writing, Honors or JOUR 305 Research and Writing, Honors), and passage of the grammar test or JOUR 002 with a C (2.0) or higher and a satisfactory score on the grammar and usage test taken before JOUR 304 or completion of JOUR 002 with a grade of C (2.0) or above. LEC.

JOUR 419. Multimedia Editing. 3 Hours. This course emphasizes principles of editing for written and verbal expression, logic, visual presentation, organization, and news judgment for all forms of media: newspaper, magazine, broadcast, and online. Requirement: Must obtain a grade of C (2.0) or higher to advance in the curriculum. Prerequisite: JOUR 302 (Infomania), JOUR 304 (Writing for Media) (or JOUR 301 Research and Writing, JOUR 302 Research and Writing, Honors or JOUR 305 Research and Writing, Honors), and passage of the grammar test or JOUR 002 with a C (2.0) or above also required. LEC.

JOUR 420. Stratcom II: Principles of Advertising and Public Relations. 3 Hours. This course deepens students’ exposure to and understanding of two major disciplines within the broader area of strategic communication: advertising and public relations. Approximately half the course will be devoted to coverage of the principles of advertising; the other half will be devoted to coverage of the principles of public relations. Content
will include defining the two professions, exploring their status within the broader area of strategic communication and analyzing current and projected professional activities. Students will gain an understanding of the principles of these evolving, separate but related major professions within strategic communication. Prerequisite: Admission to the School of Journalism and JOUR 433 for students who started at KU prior to Fall 2012. For those who started Fall 2012 or after, prerequisites are: Admission to the School of Journalism and JOUR 320. LEC.

JOUR 460. Research Methods in Strategic Communication. 3 Hours. Students conduct, analyze and apply research to develop strategy and guide decisions related to communication campaigns. In addition to studying qualitative and quantitative research methods as well as basic statistics, students develop critical thinking skills by defining research problems and producing insightful solutions. Prerequisite: Admission to the School of Journalism and JOUR 433 for students who started at KU prior to Fall 2012. For students starting Fall 2012 and after, prerequisite is admission to the School of Journalism and JOUR 320. LEC.

JOUR 488. Laboratory in Media Production. 2 Hours. This course offers students an opportunity to work with multiple media-studio and live production. This is a lab-intensive course designed with live newsroom and/or live in-the-field productions. Students will serve as producers/anchors and directors for programing at KUJH, Media Crossroads and other media. No student may earn more than four hours total in JOUR 506, JOUR 507, and/or JOUR 508, and no student may earn more than eight hours combined for course work in JOUR 210, JOUR 488, JOUR 507, and JOUR 508. Excess hours of practicum will add hours to the total number of hours needed to meet graduation requirements. Limit of two hours enrollment in JOUR 488 in a student’s total course work. Prerequisite: Completion of JOUR 101 with a grade of 2.0 or above or instructor permission. LAB.

JOUR 499. Honors Research Essay. 3 Hours. Independent study ending in an essay developed from substantial original research and prepared under the direction of a School of Journalism faculty member who is a specialist in the area of the student's interest. Open only to those seniors already in the honors program and in their last semester in residence. Prerequisite: 3.7 minimum GPA in Journalism; 3.5 minimum overall GPA (all courses -in residence and other); and consent from supervising faculty member. RSH.

JOUR 500. Topics in Journalism: _____. 2-3 Hours. Prerequisite: Eight hours of journalism. If a section is designated Advanced Media, the prerequisite is JOUR 415 and JOUR 419, each with a grade of 2.0 or above. LEC.

JOUR 503. History of Journalism and Mass Communication. 3 Hours. A survey of the history of the American media emphasizing appreciation and understanding of the technological, social, and cultural trends affecting newspapers, magazines, radio, and television broadcasters, and online media. The class may focus on one segment of journalism history, which will be listed in that semester’s timetable. The course may be repeated when the focus varies. Prerequisite: Junior standing. LEC.

JOUR 504. Professional Presentation Skills. 1 Hour. This course helps students in News/Information and Strategic Communications articulate ideas to individuals and large groups. The curriculum will include preparing, organizing and delivering presentations in formal and informal settings. It also will cover presentation technology, as well as message organization and body language. Prerequisite: JOUR 415 or JOUR 435 (or JOUR 560) with a grade of 2.0 or better. LEC.

JOUR 505. Professional Development. 1 Hour. Preparation in skills needed in seeking internships and permanent employment, including resume and application letter writing, interviewing and professional presentations. Prerequisite: JOUR 415 or JOUR 435 (or JOUR 560) with a grade of 2.0 or higher. LEC.

JOUR 506. Directed Studies in Journalism. 1-3 Hours. Undergraduate research project. Students must submit a written proposal to be approved by the instructor before enrollment. Proposal form can be found on Journalism School website or at advising office and must be received by Journalism advising office by the 16th day of the semester. Limit of three hours enrollment in a student’s total course work. Prerequisite: 2.5 grade point average overall and in Journalism. IND.

JOUR 507. Practicum in Journalism (Professional). 1-3 Hours. Practical experience in a supervised professional setting for which the student does not receive pay. Students enrolled receive credit for professional experience in advertising, public relations, news-editorial, radio, television, photojournalism, and related fields. Supervision is provided by the employer offering the professional experience. Credit hours will be graded on a satisfactory/unsatisfactory basis. Enrollment requires consent of instructor. Students also must be registered with the Journalism Career Center. Limit of three hours enrollment in JOUR 507 in a student’s total course work. No student may have more than four hours total in JOUR 506, JOUR 507, and JOUR 508. A student may not turn a paid internship into a credit internship. Prerequisite: Having completed either JOUR 415 or JOUR 435 (or Jour 560) with a grade of 2.0 or above, having completed at least eleven hours of journalism, having a grade point average of 2.5 or above, both overall and in journalism, reporting to a journalism or communications professional, working at least forty hours for one credit, at least eighty hours for two hours of credit, receiving no pay for these hours, and completing a 4-5 page report accompanied by work samples. FLD.

JOUR 508. Practicum in Journalism (Academic). 1-2 Hours. Practical experience in journalism in a supervised academic setting for which the student does not receive pay. Students enrolled in the course receive credit for practical experience in advertising, public relations, magazine, news-editorial, radio, television, and photojournalism. Supervision is provided by the instructor offering the practicum. Letter grades are earned. Enrollment requires consent of instructor. Limit of two hours enrollment in JOUR 508 in a student’s total course work. No student may have more than four hours total in JOUR 506, JOUR 507, and JOUR 508. Prerequisite: 2.5 grade point average, both overall and in journalism. FLD.

JOUR 512. The Business of Media. 3 Hours. The course primarily covers how media organizations make and spend their money, the role and responsibility of the government in regulating media and an examination of the economic and social implications of the changing media environment. The course is strongly based on current events but also covers the historical perspective. Prerequisite: Junior standing. Open to anyone in the university with junior standing. LEC.

JOUR 534. Diversity in Media. 3 Hours. AE41. A study of mass media images and portrayals of race, class, and gender in society. The course examines media representations of African-Americans, Latinos, Native Americans, and Asian Americans, as well as media images of masculinity and femininity. The course also explores media images of groups traditionally under-represented in the media, including gays and lesbians, the elderly, the poor, and the disabled. Students study media portrayals in journalism, entertainment, public relations and advertising. The course encourages students to think critically about media images and analyze the role mass media play in reinforcing cultural stereotypes. Prerequisite: 8 hours of Journalism. LEC.

JOUR 540. Sports, Media and Society. 3 Hours. The role of mass media in shaping and influencing sports and popular culture. Students will think critically about currently accepted media and
sports practices, particularly at the Division I college level. Guest speakers represent media and athletics. Discussion, presentation, paper and essay exam. Prerequisite: Junior standing. LEC.

**JOUR 550. Digital Media. 4 Hours.**
This course will allow students to be immersed in a newsroom environment, build their portfolios and prepare for internships. Students will produce content for an online news magazine distributed through Kansans.com. Each student will select an area of emphasis: visuals, reporting, or editing and production. The Visuals lab will advance the student's understanding and use of visual communication skills and techniques across multiple platforms. Students in this course will be given the opportunity to emphasize a specific tool set (photography, graphics, presentation design) while expanding their knowledge and use of all forms of visuals. In the Editing/Production lab students will work for the University Daily Kansan website and for the newspaper, editing stories, writing headlines and cutlines, creating packages, working on search engine optimization, and creating graphics. The course will build on the skills of JOUR 419: Multimedia Editing, giving students hands-on experience with editing stories and creating packages for a live publication. In the Reporting lab the course will provide an immersive reporting opportunity for students in the News and Information track. It will allow students to report stories in print or video fashion, suited for the JOUR 550 website. Students will work in collaboration with the editing and production students, and the visual students also enrolled in JOUR 550. Reporting students will produce depth stories and cover breaking news as it happens. Requirement: Must obtain a grade of C (2.0) or higher to advance in the curriculum. Prerequisite: JOUR 415, and JOUR 419 each with a grade of C (2.0) or higher. LEC.

**JOUR 560. Message Development. 3 Hours.**
Students exercise both critical and creative thinking to develop the multi-media writing skills expected of strategic communicators. Students begin addressing clients' needs by applying research on product or service benefits, brand identity, competition and audience motivations. The research informs the writing of a strategic message planner or creative brief, which students employ to write and produce messages in many forms. Examples of messages created in JOUR 560 include print, video and radio advertising; social media messages; sales letters and other business writing; and such public relations writing as news releases. Combining strategy, design, and writing and production skills, students begin to build a professional portfolio throughout this class. JOUR 560 prepares students for internships and lays the groundwork for the campaigns class. Prerequisite: For students starting at KU prior to Fall 2012: JOUR 101 and JOUR 301, each with a grade of 2.0 or above, and a satisfactory score on the grammar and usage test taken before JOUR 301 or completion of JOUR 002 with a grade of 2.0 or above. For students starting at KU Fall 2012 and after: JOUR 300 (or JOUR 310) with a C (2.0) or higher, JOUR 302 (Infomania), JOUR 304 (Writing for Media) (or JOUR 301 Research and Writing, JOUR 302 Research and Writing, Honors or JOUR 305 Research and Writing, Honors), JOUR 320, JOUR 420, JOUR 460 and passage of the grammar test or JOUR 002 with a C (2.0) or higher. May be taken concurrent with JOUR 420 and JOUR 460. Only open to Journalism majors. LEC.

**JOUR 580. Environmental Journalism. 3 Hours.**
Environmental communications have expanded from discussions about land conservation to explorations of the ways in which the natural world encompasses and touches every aspect of our lives, from national security to economy prosperity, conservation to civil rights, public health to personal well-being. Using food and agriculture as the primary lenses of exploration, this class will explore the continuum of issues that relate to the environment and the types of media in which they manifest (ranging from press releases to audio podcasts). Prerequisite: Eight hours of journalism. LEC.

**JOUR 585. Multimedia Sports Journalism. 3 Hours.**
The course would be a hands-on, in-your-face, portfolio-building opportunity for students who want to venture into sports journalism. It would allow students to write sports stories, do live play-by-play, develop video stories and cover live events. It will also introduce them to sports journalism beyond the playing field. Must obtain a grade of C or higher to advance in the curriculum. It is suggested JOUR 550 is completed prior to JOUR 585 but a student can enroll in JOUR 585 with instructor permission. Prerequisite: JOUR 101, JOUR 300 (OR JOUR 310), JOUR 302 (Infomania), JOUR 304 (Writing for Media) (or JOUR 301 Research and Writing, JOUR 302 Research and Writing, Honors or JOUR 305 Research and Writing, Honors), JOUR 415, JOUR 419, all of which must be passed with a C (2.0) or higher. Students must be admitted to the School of Journalism in order to enroll in JOUR 585. LEC.

**JOUR 590. International Journalism. 3 Hours. NW AE42.**
This course explores print, broadcast and online media in industrialized and developing nations. It examines how government rules and restrictions affect press freedoms, examines the effects of technology on access to information, explores how the U.S. media cover news in foreign countries, explores how foreign media cover news events in the United States, and examines coverage of critical current events. The goal of the course is to make students aware of the effects of mass media in a global economy. Prerequisite: Eight hours of Journalism. LEC.

**JOUR 600. School Journalism and Publications. 3 Hours.**
(Open only to education majors and journalism teachers in elementary and secondary schools.) A study of the use of publications in the teaching of secondary school journalism, and an analysis of problems in supervising school newspapers, magazines, and yearbooks. The course covers staff organization, writing and editing, make-up, typography, advertising, and illustration. Students learn through lectures, projects, practice assignments, and directed study of newspapers, yearbooks, and current teaching materials. LEC.

**JOUR 608. Ethics and Professional Practice. 3 Hours. AE51.**
This course surveys techniques of moral analysis, argument, and decision-making for use by practitioners in both news and persuasive journalism. It employs classical ethical theory, moral reasoning models, and critical-thinking skills to resolve ethical choices through case studies involving reporters, editors, broadcasters, and practitioners in advertising, marketing, and public relations. Prerequisite: Eight hours of Journalism. LEC.

**JOUR 610. Photojournalism: Still and Video. 3 Hours.**
Students will produce publishable work on a daily basis, with expectations for frequent publication. Each student will learn to differentiate between appropriate uses of still versus video imaging and produce work accordingly. They will also gain deeper understanding of the practice of image editing through in-class production exercises and on-deadline work. Must obtain a grade of C (2.0). Prerequisite: For students who began at KU prior to Fall 2012, JOUR 410, JOUR 415, and JOUR 419 all with a grade of C (2.0) or higher. For students who began at KU Fall 2012 and after: JOUR 410 and JOUR 550 all with a grade of C (2.0) or higher. Students must be admitted to the School of Journalism, and be in good academic standing in order to enroll in JOUR 610. LEC.

**JOUR 611. Sales Strategies. 3 Hours.**
Students learn how to identify consumer, client, news source or employer needs and how to use their product, service or other skills to solve that need in today's evolving media world. This requires delivering the solution in a way the audience understands best, which is a fundamental to every strategic message or interaction with a news source. Even though
students work in a media sales context, the purpose of the course is not
to turn out professional media sales people, but to enhance strategic
communication abilities. Prerequisite: Junior standing. LEC.

**JOUR 612. Visual Design and Production. 3 Hours.**
This course approaches design as a visual problem-solving process.
Students create a digital portfolio that uses advanced storytelling
techniques and showcases digital media competency. The process
explores a number of possible solutions, encouraging students to expand
their perspectives and to explore innovative and creative approaches.
The resulting portfolio builds a bridge from student work to professional
practice. Prerequisite: For students starting prior to Fall 2012, students
must be admitted to the School of Journalism and have at least junior
standing to enroll in this course. For students starting Fall 2012 and after,
completion of JOUR 300 (or 310) with a grade of C (2.0) or higher. Must
be admitted to the School of Journalism to take Jour 612. LEC.

**JOUR 613. International Strategic Communications. 3 Hours.**
This course examines the process by which professional promotional
communicators operate in a global multicultural environment. It aims to
instill an appreciation for the challenges in crossing cultures, beginning
with research and continuing through examining or creating culturally
appropriate messages to be delivered in country-specific ways. The
course covers differences among cultures and their communication styles,
economic systems, demographics, politics, regulatory environment,
research practices and media systems. Through case studies and
projects, this course gives students a framework from which to sort
through the challenges of global marketing communications. Prerequisite:
Junior standing. LEC.

**JOUR 614. Case Studies in Strategic Communications. 3 Hours.**
This course examines how organizations have developed opportunities,
strengthened relationships and solved problems through the process of
research, planning, communication and evaluation. By studying cases,
students will learn how professionals past and present have responded to
changing needs. Cases will highlight both the diversity and the integration
of professions and professional practices within strategic communication.
Prerequisite: JOUR 420 (or JOUR 513 or JOUR 523.) Open to non majors
with permission of the instructor. LEC.

**JOUR 615. Social Media in Strategic Communication. 3 Hours.**
This course examines significant changes in strategic communication
approaches brought about by the networked information society. Students
will study effective ways for organizations to identify social technographics
of key audiences, create social media content, disseminate messages
and evaluate social media-based strategic communication initiatives.
This course combines theoretical and hands-on approaches to issues.
Students will work in groups to analyze, evaluate and develop social
media strategies for organizations chosen for their case study research.
Prerequisite: JOUR 460 (or JOUR 568) or consent of the instructor. Open to
non majors with permission of the instructor. LEC.

**JOUR 616. Financial Basics for Communicators. 3 Hours.**
An overview of how business and markets operate; balance sheets,
income statements and statements of cash flows; how to create and
interpret budgets, particularly for non-profit organizations; key documents
and regulations of business; how to use various tools of analysis, and
how to make personal finance decisions. Each student follows one public
company for the semester and explores various aspects of its operations.
Prerequisite: Junior standing and completion of JOUR 415 Multimedia
Reporting or JOUR 560 (or JOUR 435) with a grade of C (2.0) or better.
Open to non majors. LEC.

**JOUR 617. Multimedia Management and Leadership. 3 Hours.**
The course addresses challenges faced by managers and leaders in
traditional and non-traditional environments. The course explores a
range of management and leadership concepts, including organizational
culture, organizational change, functions of managers, leadership theory,
motivation and reinforcement. Also explores in some detail the new world
of work and what it means to be a "contingent employee" or "free agent."
Prerequisite: At least one course designated as Advanced Media or JOUR
460 (or JOUR 568). Open to non majors with permission of the instructor.
LEC.

**JOUR 618. First Amendment and Society. 3 Hours.**
An examination of the history and philosophy of freedom of speech and
press and the limitations imposed upon those rights by statute, common
law, and court decisions resolving conflicts with other constitutional rights.
Critical-thinking skills and case analysis focus on the roles, rights, and
responsibilities of the news and persuasive media in a free society. This
course is open to all students at the University of Kansas. It emphasizes
the importance of freedom of expression in a free society. Students study
key media law court decisions and explore free speech issues more
broadly to embrace the philosophical thinking that led to the development
of the First Amendment. Prerequisite: Junior standing. LEC.

**JOUR 619. Thriving Through Workplace Change. 1 Hour.**
This course gives students insights into the rapidly changing world of work
where freelance, contract, consulting and other forms of "contingent" or
"free agent" activities are becoming more common. The course provides
an overview of entrepreneurship, freelancing, networking, brand
building and other components of contingent work. It also provides
an overview of basics of personal finance such as taxes, insurance, budgets,
investing, etc. Prerequisite: Senior standing. Open to non-journalism
majors. LEC.

**JOUR 620. TV News-Advanced Media. 3 Hours.**
This course instructs and prepares students to work within multi-media
writing, reporting, web, graphics and live elements to tell stories on the
appropriate media platform. This is a lab-intensive course designed
with live newsroom and live on-the-field reporting. Students will also
have the opportunity to use producer and directing skills in production of
newscasts and other reports. Classroom discussions will concentrate on
refining and developing the skills you've learned in previous broadcast
news courses, and on discussion and critical evaluation of professional
standards and ethics. We will hold critique sessions of your lab work.
We try to maintain flexibility in the class discussion topics in order to
make them relevant to your lab work and to current issues in broadcast
journalism. Requirement: Must obtain a grade of C or higher to advance
in the curriculum. Prerequisite: JOUR 550 with a grade of C (2.0) or
higher. Students who started at KU prior to Fall 2012 only need to
complete JOUR 415 and JOUR 419 with a grade of C (2.0) or higher as a
prerequisite. Open to Journalism majors. Students must be in good
academic standing to take this course. LEC.

**JOUR 621. Data Reporting and Visualization-Advanced Media. 3
Hours.**
This class will advance the student's understanding and use of data
driven journalism and its effective presentation. It will expand their
knowledge of the skills necessary to be a data driven journalist and guide
them in the creation of a stories and complementary visuals based on
database analysis. Everyone in the class will learn the basic coding skills
that the field requires, use those skills to acquire data, and create multiple
data driven journalism stories, some of which will be used in media.
Requirement: Must obtain a grade of C or higher (2.0). Prerequisite:
JOUR 550 with a grade of C (2.0) or better. Students who started at KU prior
to Fall 2012 only need to complete JOUR 415 and JOUR 419 with a grade of
C (2.0) or higher as a prerequisite. Open to Journalism majors.
Students must be in good academic standing to take JOUR 621. LEC.
JOUR 630. Public Affairs Reporting-Advanced Media. 3 Hours.
This is an enterprise reporting class designed to give students hands-on experience covering important issues that impact individuals and communities in Kansas and perhaps beyond. Students will be assigned specific issues and/or beats involving government, business and non-profit agencies. Requirement: Must obtain a grade of C (2.0) or higher. Prerequisite: JOUR 550 with a grade of C (2.0) or higher. Students who started at KU prior to Fall 2012 only need to complete JOUR 415 and JOUR 419 with a grade of C (2.0) or higher as a prerequisite. Only open to Journalism majors. Students must be in good academic standing to take this course. LEC.

JOUR 635. Statehouse Reporting-Advanced Media. 3 Hours.
The purpose of this class is to provide students with an immersive public affairs reporting experience at the State Capital in Topeka while covering the important statewide issues of the day. Students will be assigned to cover the statehouse for specific media outlets and assist those media in fulfilling their public-service missions to their communities. Requirement: Must obtain a grade of C (2.0) or higher. Prerequisite: JOUR 550 with a grade of C (2.0) or higher. Students who started at KU prior to Fall 2012 only need to complete JOUR 415 and JOUR 419 with a grade of C (2.0) or higher as a prerequisite. Only open to Journalism majors. Students must be in good academic standing to take this course. LEC.

JOUR 636. Documentary-Advanced Media. 3 Hours.
The study of the field and functions of non-broadcast television: the use of video by business, educational, medical, governmental, and non-profit organizations. Students plan and produce typical video materials, such as training tapes, employee orientations, community relations, new product demonstrations and self-paced instructional programs, designed for both internal and external audiences. Must earn a C (2.0) or higher. Prerequisite: For students who began at KU prior to fall 2012: JOUR 415 or JOUR 560 (or JOUR 435) with a grade of C (2.0) or above. For students who begin at KU Fall 2012 and after: JOUR 550 with a grade of C (2.0) or above. Only open to Journalism majors. Students must be in good academic standing in order to enroll in JOUR 636. LEC.

JOUR 640. Strategic Campaigns. 3 Hours. AE61.
Students produce a campaign to solve a strategic communications problem for an established organization. Students work with an actual client to develop a campaign from the initial research to the final recommendation. By applying the knowledge, experience and skills gained in previous courses, students confirm their readiness to enter the profession. Prerequisite: Senior standing, good standing in the School of Journalism and JOUR 435, JOUR 513 or JOUR 523 and JOUR 568 for students who started at KU prior to Fall 2012. For those who started at KU Fall 2012 or after, prerequisites are senior standing, good standing in the School of Journalism and JOUR 560. LEC.

JOUR 645. Multimedia Writing and Production. 3 Hours.
This graduate-credit course will cover the information gathering, writing, graphic, audio and video production techniques needed to succeed in the upper-level skills classes. Students will produce both news and strategic messages in print, radio, TV and Web formats. LEC.

JOUR 650. Magazine Journalism-Advanced Media. 3 Hours.
Students in the course will produce different kinds of articles (departments and longer stories that fit key categories in magazines, including service articles, profiles and informational articles) for a real magazine. The magazine could be in print, online or take some other form. Students will gain an understanding of different parts of a magazine, the difference between departments and articles, and how to report and write short articles and longer substantive stories. Must obtain a grade of C (2.0) or higher. Students must be in good academic standing in order to enroll in JOUR 650. Only open to Journalism students. Prerequisite: JOUR 550 with a grade of C (2.0) or higher. Students who started at KU prior to Fall 2012 only need to complete JOUR 415 and JOUR 419 with a grade of C (2.0) or higher as a prerequisite. Only open to Journalism majors. Students must be in good academic standing to take this course. LEC.

JOUR 690. Media Innovation-Advanced Media. 3 Hours. AE61.
The primary goal of this course is to challenge students to identify the critical aspects of journalism that should be carried forward into a future media environment. By studying the concepts of innovation, entrepreneurial planning and the information needs of multiple audiences, students will be able to work together to develop strategies for new media enterprises suitable for implementation in the immediate future. The course will require students to integrate principles, theories and methods learned in other journalism courses through an immersive learning experience. The course will also introduce students to entrepreneurial practices and critical thinking in a collaborative and multi-format, small-group news laboratory. Requirement: Must obtain a grade of C (2.0) or higher. Suggestion: Senior standing required. Only open to Journalism majors. Prerequisite: JOUR 550 with a grade of C (2.0) or higher. Students who started at KU prior to Fall 2012 only need to complete JOUR 415 and JOUR 419 with a grade of C (2.0) or higher as a prerequisite. Only open to Journalism majors. Students must be in good academic standing to take this course. LEC.

JOUR 691. Community Journalism-Advanced Media. 3 Hours.
Students work at a community newspaper, television station or online operation; and either cover the news, produce or edit the news. Instruction includes newsroom coaching and evaluation by professional journalists. Classroom instruction covers such issues as analyzing media content, diversifying story sources, and practical ethical decisions faced by the students. Instructors also meet with students for individual conferences. Students must complete a written project and present it to the class and to the news professionals. Must obtain a grade of C (2.0) or higher. Prerequisite: JOUR 550 with a grade of C (2.0) or higher. Students who started at KU prior to Fall 2012 only need to complete JOUR 415 with a grade of C(2.0) or higher as a prerequisite. Only open to Journalism majors. Students must be in good academic standing to take this course. LEC.

JOUR 699. Reporting and Editing for Print and Online-Advanced Media. 3 Hours.
An intense eight-week reporting and editing experience on The University Daily Kansan and its web site kansan.com. A three-hour class session each week will focus on the proper concepts and techniques of reporting and editing. Students will be required to research and make presentations on various aspects of reporting and editing. Students also will meet one-on-one on an ongoing basis with the instructor to review work. Prerequisite: JOUR 415 and JOUR 419, each with a grade of 2.0 or above. LEC.

JOUR 700. Advanced Topics in Journalism: _____. 2-3 Hours.
Prerequisite: Graduate standing in Journalism or related field or permission of instructor. Other prerequisites may be listed with the specific course. LEC.

JOUR 720. Military and the Media. 3 Hours.
This uniquely structured class enrolls up to 16 advanced Kansas University students and 16 U.S. Army majors from Fort Leavenworth's Command and General Staff College (CGSC). Class goals are to increase the understanding by the military and the media of each other's functions and roles in a democracy. Kansas University and CGSC students work collaboratively on assignments leading to a multimedia project. The course is taught at Lawrence and at Fort Leavenworth and requires some extended class periods. Contact the instructor for more information.
JOUR 801. Research I: Theory. 3 Hours.
A comprehensive review of the theoretical and philosophical underpinnings of media research and practices. This seminar offers a range of perspectives and covers various interpretative, cultural, and critical approaches to understanding mass communication in various contexts. Each student drafts a literature review about a topic of the student's choice.LEC.

JOUR 802. Research II: Methods. 3 Hours.
An introduction to methodological approaches to the study of media. Qualitative and quantitative methodologies are reviewed. The class emphasis is on learning appropriate research tools to scientifically learn about messages, media, and audiences. Each student devises a research project during the course. Prerequisite: JOUR 801. LEC.

JOUR 803. Survey of Mass Media and Popular Culture. 3 Hours.
Covers the activities, functions, and operations of both traditional mass media and new media. The course provides a combination of historical context, current events, and a future perspective. Topics include the business and economics of the media, the role of the media, and rights and responsibilities. Prerequisite: JOUR 802. LEC.

JOUR 804. Mass Communication Methodology I-Qualitative. 3 Hours.
Advanced study of qualitative methodological approaches to the study of media. The class emphasis is using interpretative research tools and techniques from narrative analysis, to ethnography, historical analysis, to critical cultural approaches to learn about messages, media, and audiences. Each student devises a research project during the course. Prerequisite: JOUR 900, JOUR 801 and JOUR 802 or permission of instructor. LEC.

JOUR 805. Mass Communication Methodology II-Quantitative. 3 Hours.
Advanced study of quantitative methodological approaches to the study of media. The class emphasis is using social scientific research tools and techniques ranging from content analysis to conducting surveys to experimental designs to learn about messages, media, and audiences. Special focus will be on learning to use SPSS and statistical techniques. Each student devises a research project during the course. Prerequisite: JOUR 900, JOUR 801 and JOUR 802 or permission of instructor. LEC.

JOUR 815. Investigation and Conference. 1-3 Hours.
Specialized work by qualified students under direction of the graduate faculty. Investigation and research studies. Prerequisite: Ten hours of graduate work in journalism. RSH.

JOUR 818. Advanced Studies in First Amendment. 3 Hours.
Case studies and explorations in First Amendment theory and practice. Course will have one of two main foci: First Amendment practice such as censorship, libel, privacy, or Administrative Law such as FCC, FTC, FEC practice. Students will produce an original research paper. Course may be repeated once. LEC.

JOUR 819. Writing for Marketing Communications. 3 Hours.
A writing-intensive course focusing on articles and other works about marketing communication, management, general business and related subjects. Students read and discuss a core of designated work as well as works they select on their own. Students write reports, executive summaries and analytical briefings in which they synthesize these readings and apply marketing and management concepts to their own written work. LEC.

JOUR 820. Marketing Fundamentals for Communicators. 3 Hours.
The course is designed to provide a fundamental understanding of marketing theory and process and how these theories relate to Integrated Marketing Communications. Specific focus will be spent on the marketing environment, the marketing mix, market segmentation, planning, execution and measurement. As part of the class, students will learn the components of a marketing plan and how to develop a plan based on specific quantifiable corporate objectives. LEC.

JOUR 821. Integrated Marketing Communications and Sales Strategies. 3 Hours.
The concept of integrated selling strategies and how these strategies logically lead to execution in various forms of message delivery systems. Through case studies of specific business cases, students develop insights into potential buyer segments and develop rationales for the most effective way to reach buyers. Students not only offer solutions to cases but also explore ways to measure the impact of each technique and medium used. LEC.

JOUR 822. Database Development and Management. 3 Hours.
A course in creating, updating, and effectively using databases in marketing communications. Students learn the process of designing a database, what information to include and how to acquire information, and how to organize and execute marketing communications programs using a database. LEC.

JOUR 823. Branding in Marketing Communications. 3 Hours.
Cases and topics in the development and execution of branding in marketing communications plans. The course emphasizes how organizations define actual brand problems and attempt to solve them. LEC.

JOUR 824. Creative Process. 3 Hours.
An examination of the creative process and techniques of creative problem solving. The course gives students numerous opportunities to solve a variety of marketing communications problems. Students have an opportunity to visit with individuals who practice creativity in their professional lives and individuals who study creativity as scholars. LEC.

JOUR 825. Relationship Marketing. 3 Hours.
An exploration of the principles of relationship marketing and their application to marketing communications. Special emphasis is on the development of relationship messages, the use of databases for constituent management, and a review of appropriate marketing communications media. LEC.

JOUR 826. Innovation in Management of Communications. 3 Hours.
Students shall demonstrate their knowledge of Innovation Theory through papers, presentations and an essay exam. The class will emphasize Management Innovation but will also cover marketing, process and product innovation. The course is very current events oriented. LEC.

JOUR 827. Marketing Ethics. 3 Hours.
An examination of the ethical issues, philosophies, and decision-making systems that affect marketing communications. Through studies of specific business cases, students gain insight into the cultural, legal, and social decisions that affect an organization's future. LEC.

JOUR 828. Financial Fundamentals for Communicators. 3 Hours.
This course covers a wide range of financially-related concepts from the perspective of the communications function. Topics include: financial markets; finding and using key Securities and Exchange Commission filings; understanding the balance sheet, income statement and cash flows; financial analysis; investor relations; impact of Sarbanes-Oxley; corporate governance issues; building and using budgets; and impact of these concepts for not-for-profits. LEC.
JOUR 829. Marketing Communications Research. 3 Hours.
Students learn how marketing and media research help determine the success of an organization's marketing planning and strategic communications processes. Students study and conduct primary and secondary research - both qualitative and quantitative - including focus groups, ethnography and surveys. Prerequisite: JOUR 820 or permission of instructor. LEC.

JOUR 831. Technologies in Marketing Communications. 3 Hours.
Explores new and emerging technologies and their impact on the delivery of marketing messages. Students will work with the instructor on identifying areas of relevance to them, and on identifying ways to keep up with changes in technology, innovation and audiences. LEC.

JOUR 832. Leadership and Management in Marketing Communications. 3 Hours.
This course examines cases and topics of leadership as a process in a marketing communication organization. As a manager's duties evolve from performing tasks to managing relationships and strategic organizational outcomes, the capacity to lead becomes critical to personal and organizational success. Topics will focus on the role of leadership and vision, strategy, communication, ethics, social responsibility, group dynamics, and change. LEC.

JOUR 833. Social Media and Integrated Marketing Communications. 3 Hours.
Developments in information technology and online social networking have posed opportunities and challenges for those who practice and research marketing, advertising or public relations. This course combines theoretical and hands-on approaches to developing and implementing effective ways for organizations to analyze, create and share social media content, engage key audiences via relevant digital channels, and integrate social media initiatives into overall communication strategies. Students will use various platforms and tools to conduct social media analytics, evaluate social media campaigns, and develop social media planning for the organization chose for their case study. LEC.

JOUR 834. International and Multicultural Marketing Communications. 3 Hours.
The speed and scope of modern marketing communication have made the world a much smaller place. This course explores how international companies use advertising, public relations, promotion, personal selling and other methods to communicate in a global multicultural environment. Students gain a broader understanding of the characteristics of people in different countries and cultures, especially how they rely on media for information about products and services to meet their needs. LEC.

JOUR 840. Seminar in: ____. 3 Hours.
Research in the issues and development of media. Seminars focus on topics of current and historical interest. Students develop projects and presentations in special areas of interest and expertise. Course may be repeated under different topics. LEC.

JOUR 848. Advanced Mass Communication Ethics and Legal Issues. 3 Hours.
This course examines at the doctoral level the ethical and legal issues for mass communication research and practice. A special focus would be on human subjects protocols in research and the role of the scholar and the professional in maintaining ethical standards in the academy and in applied work in mass communications industries. Prerequisite: JOUR 900, JOUR 801 and JOUR 818 or permission of instructor. LEC.

JOUR 850. Capstone in Marketing Communications. 3 Hours.
In this capstone course, students use the skills they have developed in the marketing communications program to create a strategic integrated marketing communication plan for a client. The process involves the use of techniques such as research, branding, advertising, public relations, promotion, as well as other activities. Through the project, students demonstrate their knowledge of marketing communications and work with team members to meet an organization's strategic marketing communication needs. Prerequisite: JOUR 820, JOUR 828, JOUR 829 and 30 hours or permission of instructor. LEC.

JOUR 851. Professional Skills I. 3 Hours.
This course offers the opportunity for a student group of students to develop an individualized project to enhance professional communications skills. The student or group works in conjunction with a graduate faculty advisor to develop a suitable project, presenting a proposal for approval to the School's Graduate Director. The proposal must specify the nature of the project, the products to be delivered, a timeline for completion, and expected impact. Prerequisite: Admission to a KU graduate program. IND.

JOUR 852. Professional Skills II. 3 Hours.
This course offers the opportunity for a student or group of students to develop an individualized project to enhance professional communications skills. The student or group works in conjunction with a graduate faculty advisor to develop a suitable project, presenting a proposal for approval to the School's Graduate Director. The proposal must specify the nature of the project, the products to be delivered, a timeline for completion, and expected impact. Prerequisite: Admission to a KU graduate program; satisfactory completion of JOUR 851. IND.

JOUR 855. Financial Management and Media. 3 Hours.
This course covers a wide range of financially-related concepts from the managerial perspective. Topics include: risk and return, financial markets; understanding the balance sheet, income statement and cash flows; financial analysis; the Securities and Exchange Commission; investor relations; corporate governance; building and using budgets. Limited to graduate students or instructor permission. Lecture, discussion, case studies. LEC.

JOUR 860. Information Insight I. 3 Hours.
This course introduces students to the broad concepts and theories of information, media and audiences. The goal is to ground students in the broad concepts of the master's program and to push them to identify their direction and goals for a certificate or for a degree. During the summer after the in-person session, students will complete additional online coursework, including modules and readings that build a foundation for subsequent courses. LEC.

JOUR 861. Data Collection I. 3 Hours.
This course helps students understand secondary research methods, shows students how to delve into library resources with a deep search component, and gives students a framework for understanding research credibility. Prerequisite: Successful completion of JOUR 860. LEC.

JOUR 862. Data Collection II. 3 Hours.
This course explores primary research methods for creating and expanding databases. Students explore such areas as tools, processes and best practices for primary data collection. Prerequisite: Successful completion of JOUR 861. LEC.

JOUR 863. Data Analysis. 3 Hours.
This course gives students a framework for basic statistics to explore relationships, solve problems, and answer questions. They gain an understanding of how to apply descriptive and predictive statistics to interpret and communicate results of data meaningfully. Prerequisite: Successful completion of JOUR 862. LEC.

JOUR 864. Data Visualization and Presentation. 3 Hours.
This course helps students use digital resources to communicate results of data analysis effectively to appropriate audiences. Students learn to...
evaluate, interpret and present the results of data analysis using a variety of media. Prerequisite: Successful completion of JOUR 863. LEC.

JOUR 865. Analyzing Audiences. 3 Hours.
This course focuses on identifying appropriate audiences for media and information, as well as gathering information and analyzing audiences using primary and secondary sources. It includes creating, analyzing and interpreting analytics for websites, mobile technology and other forms of media. Prerequisite: Successful completion of JOUR 860. LEC.

JOUR 866. Social Media Strategy. 3 Hours.
This course provides a broad overview of the social media landscape, examining the development and use of various platforms, best practices in the use of social media, and the tools available for managing social media and social media analytics. It will take a strategic approach, focusing on social media as a conduit for larger content strategy, covering such areas as content marketing, content curation, behavioral targeting, and segmenting target markets on social networks. Students create a social media plan for themselves or their organization. Prerequisite: Successful completion of JOUR 860. LEC.

JOUR 867. Legal and Ethical Aspects of Information. 3 Hours.
This course helps students think critically and strategically about legal and ethical issues in social media and other forms of information and communication. Students gain a working understanding of the legal challenges of gathering and using information through the lens of intellectual property, defamation, libel, privacy, public records, intermediary liability, Internet freedom and governmental Internet regulations. Prerequisite: Successful completion of JOUR 860. LEC.

JOUR 868. Information in Context. 3 Hours.
This writing-intensive course explores the many ways that disciplinary focus influences the meaning and understanding of information. It helps students approach problem-solving in an interdisciplinary way, and allows them to understand how context can open new paths to understanding and meaning. Prerequisite: Successful completion of JOUR 860. LEC.

JOUR 869. Information Insight II. 3 Hours.
Students enroll in this course upon completion of their second certificate, working to complete a capstone project and then completing a one-week residency. It allows students to present the research from their projects, get feedback from faculty members and peers, and revise the projects for submission. Prerequisite: Successful completion of JOUR 860, JOUR 861, JOUR 862, JOUR 863, JOUR 864, JOUR 865, JOUR 866, JOUR 867, JOUR 868. LEC.

JOUR 898. Master's Professional Project. 3 Hours.
Suggested course description: The student completes an appropriate, Master's-level professionally based project. The student must present a proposal outlining the project and signed by both the student and advisor prior to enrolling. Prerequisite: PRE 710 or PRE 711, JOUR 801, JOUR 802, JOUR 803, JOUR 818 and JOUR 855. LEC.

JOUR 899. Master's Project/Thesis. 3 Hours.
The student, with the guidance of a master's project/thesis committee, completes execution of the project or thesis. In addition, the student completes the final, general examination and the presentation/defense of the project or thesis. Prerequisite: EPSY 710, EPSY 711, JOUR 801, JOUR 802, JOUR 803, JOUR 818 and JOUR 855. THE.

JOUR 900. Proseminar in Mass Communication. 1 Hour.
“Portal” course introducing doctoral students to the history of mass communication ideas and issues, the mission of the program and ethical guidelines for graduate studies. The course also introduces the School faculty and their interests. Students take Proseminar in the first semester of matriculation specifically to prepare for the coursework to come. Proseminar also will introduce students to the culture of tenure-track faculty to launch them on the path to becoming ethical and productive citizen-scholars. Limited to Journalism PhD students. LEC.

JOUR 901. Introduction to Doctoral Studies. 3 Hours.
This course is a portal to doctoral education. Students learn about the structure, function and culture of higher education and the role of doctoral studies in academe. The course examines issues such as tenure, promotion, finances, expectations of the professoriate and the role of professors in academe. The course presents human subjects protocols in research and the role of the scholar and the professional in maintaining ethical standards in the academy and in applied work in mass communications industries. Prerequisite: Admission to Journalism PhD program or permission of instructor. LEC.

JOUR 999. Dissertation. 1-9 Hours.
The student, with the guidance of a dissertation committee, completes execution of the dissertation. In addition, the student completes the final examination and the presentation/defense of the dissertation. THE.

Bachelor of Science in Journalism

Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your advisor (http://www.advising.ku.edu) for details).

Other years’ catalogs

Undergraduate Admission to the School of Journalism and Mass Communications

There are 2 paths for admission to the William Allen White School of Journalism and Mass Communications (the J-School):

Path 1: Direct admission from high school
Students will be considered for admission to the School of Journalism and Mass Communications directly out of high school if they

• Have composite ACT scores of 24 or higher (1090 SAT-I scores) and
• Graduate from high school with grade-point averages of 3.0 or higher

The conditions above are minimum requirements. Students must first meet admission requirements for the University of Kansas. Admission is competitive. If the school must set an admissions quota, students with the highest ACT (or SAT-I) scores and grade-point averages will be accepted.

Path 2: Change of school admission
Transfer students and current KU students who do not declare journalism as their major during the first semester of the first year may apply for admission if they

• Complete or are enrolled in 24 or more credit hours (either at KU or another institution) with grade-point averages of 2.5 or higher and
• Complete or are enrolled in JOUR 101 Media and Society the semester of application and
• Earn a C or higher in JOUR 101 (if applying while enrolled in JOUR 101, admission is rescinded if a C or higher is not earned) and
• Current KU students must apply to the J-School by the following deadlines:
  – For fall or summer admission: February 15
  – For spring admission: September 15
Students applying with more than 60 hours of college credit (at KU, another institution, or a combination of both) must meet with a journalism advisor to determine their admission eligibility.

Admission is competitive. The number of students admitted each semester depends on the number graduating in the preceding semester and the school’s overall capacity. Candidate selection is based on grade-point average. 90 percent of available spaces are filled by the candidates with the highest KU cumulative grade-point averages. The remaining 10 percent are selected from among those who petition before the deadline, provided that the student has a minimum cumulative grade-point average of 2.5. In reviewing petitions, the J-School considers elements such as ACT scores, socioeconomic factors, academic progress, and commitment to the profession. The school uses a student’s transfer cumulative grade-point average if he or she does not have a KU cumulative grade-point average. The school does not combine transfer and KU cumulative grade-point averages.

Requirements for Good Standing

Students admitted to the school must do the following in order to remain in the school and in good standing:

- Complete JOUR 101 Media and Society with a grade of 2.0 or higher.
- Maintain a 2.5 KU cumulative grade-point average and a journalism grade-point average. If either GPA drops below 2.5, students will be placed on probation for 1 semester. At the end of the probation semester, the advising office will re-evaluate the student's cumulative GPA. If the student has not raised his or her GPA to 2.5 or higher, the student’s admission will be rescinded. The student may reapply once his or her GPA is above 2.5. In extreme circumstances, the probation period may be extended to a second semester, if the student provides documentation of circumstances beyond the student’s control. This decision is made at the discretion of the associate dean, in consultation with the advising office.
- Students must also pass JOUR 300, JOUR 302, and JOUR 304 with a grade of C (2.0) or better. If the student does not pass JOUR 300, JOUR 302, or JOUR 304 the second time, admission will be rescinded.

Visit the Office of Admissions (http://admissions.ku.edu) for information about admission to KU. Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admission.

General Degree Requirements

Students may use up to 18 hours of journalism coursework to satisfy requirements for the KU Core.

Included or in addition to the KU Core requirements are the following general degree requirements:

- A course in oral communication or an exemption.
- An approved business and leadership course (approved courses are available in the Journalism Student Services Office or on the school’s website.)
- Completion of a foreign language through 4th level proficiency. Or, a student may complete 3rd level proficiency and complete one course in another foreign language to fulfill the requirement.
- An approved course in quantitative literacy (approved courses are available in the Journalism Student Services Office or on the school’s website.)
- An approved course in history (approved courses are available in the Journalism Student Services Office or on the school’s website.)
- A required grammar course within the School of Journalism. Students who earn a qualifying score on the School of Journalism's grammar test may be exempt.
- A course in arts or humanities.
- A course in the social sciences.
- A natural science with a lab.

The journalism diversity requirement may be satisfied by completing an approved journalism course (approved courses are available in the Journalism Student Services Office or on the school’s website.)

Admission requirements are subject to change. A student’s first semester of college is the first semester in which he or she enrolls after high school graduation.

Graduation Requirements

In addition to admission requirements, the following graduation requirements must be met:

1. The candidate must have earned at least 120 hours of college credit. Courses below the 100-level (like MATH 2), more than 48 hours of journalism, more than 4 hours of physical education activities, or more than 4 hours of military science are not included in the 120 hours required to graduate. Only 12 transfer hours in journalism may be counted toward the 120 hours needed for graduation. A maximum of 64 hours may be transferred from a community college.
2. The candidate must have completed a minimum of 40 hours in journalism and at least 72 hours outside journalism within the 120-hour total. Students admitted to KU before fall 2012 must complete a minimum of 33 hours in journalism courses.
3. The candidate must have at least a 2.5 KU grade-point average overall and in all journalism courses.
4. The candidate must have earned at least 45 hours in upper-division courses, numbered 300 and above.
5. The candidate must complete area distribution requirements in one of 2 ways:
   a. an 18-hour minor outside journalism or
   b. a second degree outside journalism.
6. The candidate must have met all requirements of the school. Transfer students must have met the equivalent of those requirements, as outlined above.
7. The candidate must apply to graduate early in his or her final semester.
8. The candidate must complete a minimum of 30 hours in residence after being admitted to the school.

The primary responsibility for meeting graduation requirements rests with the student. Some graduation requirements are subject to change.

Consult the Journalism Advising and Records Office for current information.

Two Undergraduate Degrees

A student who has earned a B.A. or B.S. degree and wishes to earn a second undergraduate degree in journalism is expected to meet the school’s requirements for area distribution, diversity, foreign language, and journalism and to complete a minimum of 72 hours outside
journalism. A candidate for a second undergraduate degree must have earned a minimum grade-point average of 2.5 in previous college work to be considered for admission to the school. A student must complete a minimum of 30 credit hours in residence after admission to the school. Admission is competitive.

Course Requirements for Journalism Majors

To earn the Bachelor of Science in Journalism degree, students must complete a minimum required total of 40 hours in journalism courses. 6 journalism courses form the core and are taken by all students. 4 of these courses are taken at the foundation level, and 2 are taken at the upper level.

Foundation Core (12)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 101</td>
<td>Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 300</td>
<td>Visual Storytelling</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 302</td>
<td>Infomania: Information Management</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 304</td>
<td>Media Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

Upper-Level Core (6)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 608</td>
<td>Ethics and Professional Practice</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 618</td>
<td>First Amendment and Society</td>
<td>3</td>
</tr>
</tbody>
</table>

1 Completion of JOUR 101 with a grade of 2.0 or higher is a prerequisite for JOUR 300, JOUR 302, and JOUR 304. Admission to the School of Journalism is a prerequisite for JOUR 302 and JOUR 304.

After completing the foundation core, the student selects a track, News and Information or Strategic Communication. Each includes courses to develop critical- and creative-thinking ability and skills required by specific fields in journalism and mass communications.

Tracks

News and Information

The News and Information track prepares students for careers in reporting, writing, and editing for the media, including newspapers, magazines, radio, television, and digital media. Students in News and Information gain skills and apply their learning by working on campus or professional media.

Required courses are

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 101</td>
<td>Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 300</td>
<td>Visual Storytelling</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 302</td>
<td>Infomania: Information Management</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 304</td>
<td>Media Writing</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 415</td>
<td>Multimedia Reporting</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 419</td>
<td>Multimedia Editing</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 550</td>
<td>Digital Media</td>
<td>4</td>
</tr>
<tr>
<td>JOUR 608</td>
<td>Ethics and Professional Practice</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 618</td>
<td>First Amendment and Society</td>
<td>3</td>
</tr>
</tbody>
</table>

1 To enroll in JOUR 640, a student must be in good academic standing and must have successfully completed JOUR 320, 420, 460 and 560.

Electives in the student’s interest area must be taken to meet the 40-hour minimum total of journalism hours. Three of these hours should fulfill the journalism diversity requirement.

B.S.J. Sample 4-Year Graduation Plan

Bachelor of Science in Journalism

120 hours are required to graduate.

Year 1

Fall  | Hours | Spring  | Hours
JOUR 101 | 3     | JOUR 300 | 3     
KU Core GE 1.2  | 3     | JOUR 302 | 3     
KU Core GE 2.1  | 3     | Business and leadership course | 3-4
Historical context course | 3 | KU Core GE3H | 3 |
Elective | 3 | KU Core GE22 | 3 |

15 | 15-16

Year 2

Fall  | Hours | Spring  | Hours
JOUR 304 | 3     | JOUR requirement | 3 |
Foreign language  | 5     | JOUR requirement | 3 |
Quantitative literacy course | 3 | Foreign language | 5 |
Minor course | 3 | KU Core GE3N with lab | 4-5 |

14 | 15-16
Year 3

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR requirement</td>
<td>3</td>
<td>JOUR 608</td>
<td>3</td>
</tr>
<tr>
<td>Foreign language</td>
<td>3</td>
<td>Foreign language</td>
<td>3</td>
</tr>
<tr>
<td>Minor course</td>
<td>3</td>
<td>KU Core AE42</td>
<td>3</td>
</tr>
<tr>
<td>KU Core AE41</td>
<td>3</td>
<td>JOUR requirement</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td>Minor course</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 15

Year 4

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 618</td>
<td>3</td>
<td>JOUR elective</td>
<td>3</td>
</tr>
<tr>
<td>JOUR requirement</td>
<td>3</td>
<td>Journalism diversity</td>
<td>3</td>
</tr>
<tr>
<td>Minor course</td>
<td>3</td>
<td>Minor course</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td>Minor course</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td>KU Core AE6</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 15

Total Hours: 119-121

Minor in Journalism

Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your advisor for details). Other years’ catalogs.

Minor in Journalism

The William Allen White School of Journalism and Mass Communications prides itself on providing quality education and job-building skills in a student-focused environment. This 18-credit hour program helps students learn to be effective communicators. Students can choose to focus in News and Information or Strategic Communications through the selection of their elective minor course.

Admission to the Minor

Admission Deadline

Regular admission deadlines are September 15 and February 15.

Students should complete the admission application online (http://journalism.ku.edu/undergraduate).

Admission Requirements

Admission is limited and competitive. Completion of 24 credit hours with a 2.5 cumulative grade-point average is required. Transfer students must earn a minimum KU cumulative GPA of 2.5 during their first semester.

Requirements for the Minor

Curriculum Requirements

A total of 18 hours is required for the minor. Students are allowed a choice of additional elective hours, not to exceed a total of 24 JOUR credit hours. The journalism minor requires a 2.5 GPA in journalism and a 2.5 cumulative GPA at KU.

- JOUR 101 Media and Society 3
- JOUR 300 Visual Storytelling 3
- JOUR 302 Infomania: Information Management 3
- JOUR 304 Media Writing 3
- JOUR 618 First Amendment and Society 3

Students choose one additional course from the following Journalism course offerings for which the prerequisites have been met:

**News & Information Focus**

- JOUR 410 Photojournalism I
- JOUR 415 Multimedia Reporting
- JOUR 419 Multimedia Editing
- JOUR 503 History of Journalism and Mass Communication
- JOUR 534 Diversity in Media
- JOUR 540 Sports, Media and Society
- JOUR 608 Ethics and Professional Practice

**Strategic Communication Focus**

- JOUR 320 Stratcom I: Introduction to Strategic Communication
- JOUR 460 Research Methods in Strategic Communication
- JOUR 534 Diversity in Media
- JOUR 608 Ethics and Professional Practice
- JOUR 611 Sales Strategies
- JOUR 613 International Strategic Communications
- JOUR 616 Financial Basics for Communicators

If you would like to know more about the journalism minor, please contact journalism advising at jadvising@ku.edu or 785-864-4080.

Master of Science in Journalism

Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your advisor for details). Other years’ catalogs (http://catalog.ku.edu/archives).

Graduate Admission

Admission is based primarily on the student’s undergraduate record, references, and results of the Graduate Record Examination. Applicants who have baccalaureate degrees in journalism, as well as those with no academic or professional background in journalism, are eligible to apply for the Mass Communication Program on the Lawrence Campus or the Integrated Marketing Communications (IMC) course of study on the KU Edwards Campus.

Applicants for the Integrated Marketing Communications (IMC) course of study are also evaluated on their professional experience and must have a minimum of 2 years of full-time professional employment in marketing communications or media-related fields.

Applications

Application Deadlines

Students may enter the Mass Communication and Integrated Marketing Communications programs in fall or spring semesters. The Mass Communication program is geared for a fall start, so IMC students entering in the spring semester will probably need 5 semesters to complete the degree. The School has a “rolling admission process.”

The priority application deadline for the fall, which begins in August, is the preceding February 1. (Applicants to the Integrated Marketing
Communications program may apply for fall admission by the deadline of June 1.) The priority application deadline for the spring, which begins in January, is the preceding November 1.

Application Materials
Applications can be considered only after these items have been submitted:

1. A completed online graduate application (http://www.graduate.ku.edu).
2. An official transcript of all college-level courses from each college or university attended.
3. Scores on the Graduate Record Examination (GRE). For more information, go to www.GRE.com (http://www.gre.com). Applicants for the Integrated Marketing Communications course of study may submit the Graduate Management Admission Test (GMAT). Tests must have been taken within the last 5 years. GRE Score targets are 158 on the Verbal section, 136 on the Quantitative section and 4.5 on the Analytical Writing section. The school code is 6871 and the major code is 4503.
4. Three letters of reference from persons familiar with the applicant's abilities. At least one academic reference is preferred and required for those who graduated within the past five years.
5. A written, 500-word statement of the applicant's academic and professional objectives.
6. A current résumé.
7. Applicants for the Integrated Marketing Communications course of study also must include three samples of professional work that reflects the applicant's years of experience.
8. Nonrefundable application fee payable online to the University of Kansas.
9. International students whose native language is not English also must submit Test of English as a Foreign Language examination scores. International English Language Testing System examination scores must be taken within the last 5 years. GRE Score targets are 158 on the Verbal section, 136 on the Quantitative section and 4.5 on the Analytical Writing section. The school code is 6871 and the major code is 4503.
10. International students must submit proof that they have the financial resources to cover annual expenses.

Submit your graduate application online (http://www.graduate.ku.edu). Applicants to Mass Communication and the M.S. in Journalism/J.D. program should send all test scores and official transcripts of all college and university course work to the school:

The University of Kansas School of Journalism and Mass Communications
Graduate Advisor
Stauffer-Flint Hall
1435 Jayhawk Blvd., Room 115
Lawrence, KS 66045-7515

Applications to the Integrated Marketing Communications course of study may send their test scores and official transcripts of all college and university course work to the KU Edwards Campus program:

The University of Kansas Edwards Campus
Integrated Marketing Communications graduate program
Attn: Kelly Crane, Education Program Manager
12600 Quivira Road
Overland Park, KS 66213-2402

M.S. in Journalism
The Journalism School offers three M.S. options: Mass Communications (Lawrence campus), Integrated Marketing Communications (p. 749) (KU Edwards Campus in Overland Park), and the Joint M.S.-J.D. degree.

Mass Communications
This track is focused on deeper, theoretical understanding of the professions of the media. Students with an interest in professional performance may take 2 courses in which they design 1 or more professional projects. To earn the degree, a student must complete 37 graduate credit hours with at least a B (3.0) average. Each student must complete and pass a general examination of the thesis. The thesis defense constitutes the final general examination.

Major Components of 37-Hour Requirement
The student entering the program takes

- 19 hours in core courses in First Amendment, Finance and Leadership, Mass Media, and Mass Communications and Methodology, including statistics.
- 6 hours in JOUR 840 seminars.
- 6 hours in a concentration (such as Sports Management, Health Communications, or Communication Studies) either inside or outside the school. The student may elect to design and produce 1 or 2 professional projects (such as a series of in-depth news stories or media business cases) as a concentration.
- 1 additional 3-hour elective.

The student also completes an acceptable project/thesis (JOUR 899) for 3 hours.

Core Course Requirements
The core graduate courses help students develop strong research and critical-thinking skills. 6 courses and 1 lab are required:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPSY 710</td>
<td>Introduction to Statistical Analysis</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 711</td>
<td>Lab for Introduction to Statistical Analysis</td>
<td>1</td>
</tr>
<tr>
<td>JOUR 801</td>
<td>Research I: Theory</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 802</td>
<td>Research II: Methods</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 803</td>
<td>Survey of Mass Media and Popular Culture</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 818</td>
<td>Advanced Studies in First Amendment</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 828</td>
<td>Financial Fundamentals for Communicators</td>
<td>3</td>
</tr>
</tbody>
</table>

Concentration/Professional Skills Requirements
The student develops an area of concentration of 6 hours either inside the Journalism School or in another school or department with the consent of the student's advisor and the Associate Dean for Graduate Studies (ADGS), for example, 2 courses in sports management, or communication studies and psychology.

Alternatively, the student may enroll in JOUR 851 and JOUR 852 (Professional Skills). The student develops and produces a master's-level professionally based project or projects with the approval of the advisor and ADGS. The projects help the student expand and advance professional skills.
For example, one of the following:

- HSES 828 & HSES 840: Sport Finance and Organizational Behavior in Sport
- JOUR 720 & JOUR 503: Military and the Media and History of Journalism and Mass Communication
- JOUR 851 & JOUR 852: Professional Skills I and Professional Skills II

**Advanced Course Requirements**

The student completes 2 JOUR 840 seminars, 1 graduate-level elective, and an acceptable project/thesis:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 840 Seminar in: _____</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 840 Seminar in: _____</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 899 Master's Project/Thesis</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**General Examination**

Each student must pass an oral examination of the thesis, which constitutes the final general examination. That examination must cover the totality of the student's master's experience. The examination will be given and evaluated by a committee of 3 graduate faculty members who serve on the student's thesis committee.

**Enrollment Requirements after Completing Course Requirements**

There is no requirement for continuous enrollment after courses are completed and prior to completing the thesis. Students must be enrolled in at least 1 hour of credit in the semester in which they graduate.

A student must complete the M.S.J. degree within 7 years of admission.

**Integrated Marketing Communications (IMC)**

The Integrated Marketing Communications (http://edwardscampus.ku.edu/prospective/graduate/marketing.shtml) course of study is offered on the KU Edwards Campus (http://edwardscampus.ku.edu), 12600 Quivira Rd., Overland Park, KS 66213, 913-897-8416.

**Course Requirements**

A student must complete 36 hours of credit with at least a B (3.0) average. A student takes 12 hours of core courses and 24 hours of professional courses. A student must complete the master’s degree program within 7 years of admission.

**Core Course Requirements (12)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 820</td>
<td>Marketing Fundamentals for Communicators</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 828</td>
<td>Financial Fundamentals for Communicators</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 829</td>
<td>Marketing Communications Research (prerequisite JOUR 820 or permission of instructor)</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 850</td>
<td>Capstone in Marketing Communications (Prerequisites: JOUR 820, JOUR 828, JOUR 829 and 30 hours toward the degree, or with permission of instructor)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Professional Course Requirements**

Those who hold the master's degree from KU are expected to be able to perform professional tasks. Students therefore must complete a minimum of 24 credit hours of professionally oriented courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
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</thead>
<tbody>
<tr>
<td>JOUR 819</td>
<td>Writing for Marketing Communications</td>
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<td>JOUR 821</td>
<td>Integrated Marketing Communications and Sales Strategies</td>
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<td>JOUR 822</td>
<td>Database Development and Management</td>
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<td>JOUR 823</td>
<td>Branding in Marketing Communications</td>
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<td>JOUR 824</td>
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<td>Relationship Marketing</td>
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<td>JOUR 826</td>
<td>Innovation in Management of Communications</td>
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<td>JOUR 827</td>
<td>Marketing Ethics</td>
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<td>JOUR 831</td>
<td>Technologies in Marketing Communications</td>
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<td>JOUR 832</td>
<td>Leadership and Management in Marketing Communications</td>
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<td>JOUR 833</td>
<td>Social Media and Integrated Marketing Communications</td>
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<td>JOUR 834</td>
<td>International and Multicultural Marketing Communications</td>
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<td>JOUR 840</td>
<td>Seminar in: _____</td>
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**Outside Courses**

A student may take up to 6 credit hours outside the school. Any student who wants to take an elective course outside the school must have permission from the instructor of the course, the school offering the course, and the graduate director of the journalism school prior to enrolling in the course. The student should be prepared to indicate how the course contributes to the master's program. Submission of a course description or syllabus from the course may be required for approval.

**Final General Examination**

Each student must pass a final general examination before graduating. This examination is part of the capstone course. The examination occurs during the oral presentation before the client and faculty.

**Joint M.S.J.-J.D.**

The joint M.S. in journalism and J.D. degree program combines into approximately 3½ years of full-time study the Master of Science in journalism and the Juris Doctor (p. 752) programs offered by the School of Journalism and Mass Communications and the KU School of Law. The joint degree program offers students academic grounding in both disciplines to prepare them for the professional practice of journalism, law, or media law.

For more information, please contact:

University of Kansas
Associate Dean of Graduate Studies and Faculty Development
William Allen White School of Journalism and Mass Communications (http://www.journalism.ku.edu)
Stauffer-Flint Hall
1435 Jayhawk Blvd.
Lawrence, KS 66045-7515
reinardy@ku.edu (twvolek@ku.edu)

You may also contact:
Doctor of Philosophy in Journalism

Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your advisor for details). Other years’ catalogs (http://catalog.ku.edu/archives)

Admission

KU Graduate Admission Standards. Regular admission requires a bachelor’s degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor’s degree requirements. The bachelor’s degree is not acceptable if it contains credit awarded for work experience that was not directly supervised by faculty members of an accredited university or not evaluated in units that identify the academic content.

Journalism School Requirements

• Master’s degree or equivalent with at least a 3.5 GPA on a 4.0 scale.
• Graduate application: Apply online at http://wwwgraduate.ku.edu/.
• Application fee (nonrefundable).
• Resume or CV.
• An official transcript from the undergraduate degree-granting institution AND all previous graduate credit, including the master’s degree, sent electronically to the Graduate Application Processing Center. A hard copy is acceptable if the institution cannot send electronic transcripts.
• Graduate Record Examination scores less than five years old. The journalism school looks for a verbal score at or above the 75th percentile, an analytical writing score at or above the 75th percentile, and a quantitative score at or above the 50th percentile.
• Examples of research and scholarship. Links to online articles are acceptable.
• Statement of research goals that coincide with the journalism school’s faculty scholarship.
• 3 references, including one from the master’s advisor.
• International students are required to submit TOEFL scores.
• International students are required to submit evidence of financial support.

In exceptional cases, students with a bachelor’s degree may be admitted for the full 55-hour program.

Contact Assoc. Dean Scott Reinardy (reinardy@ku.edu) and graduate advisor Jammie Johnson (jamjohn@ku.edu (twolek@ku.edu)) for more information or to express interest in the Ph.D. program.

Admission Deadline. For fall admission, the deadline for materials is Feb. 1.

The William Allen White School of Journalism and Mass Communications offers the Ph.D. degree, beginning fall 2012. The school has a solid reputation based in the profession and our faculty study issues and uses of real-world media communications. We seek junior colleagues who share those interests.

Our Ph.D. program is small and, therefore, selective. We admit 4 to 6 students per year to ensure close work with the faculty. We expect our students’ scholarly and research interests to intersect with those of our faculty.

The school’s Ph.D. is a rigorous scholarly research degree requiring mastery of theory and methodology. We expect our Ph.D. program graduates to possess advanced knowledge in the following areas necessary for all scholarship in the discipline:

• Scholarly inquiry and methods of discovery;
• Current theory and research methods of the discipline;
• Statistics appropriate to the discipline;
• Media use by society, historical and current;
• Media roles in society, including issues of diversity;
• The First Amendment, legal and ethical issues of the discipline.

Additionally, we expect our Ph.D. program graduates to possess advanced knowledge in one or more of the following areas as necessary for scholarship in their chosen area of expertise and with the advice and guidance of their respective faculty advisors:

• Advanced practice of theory, methods and concepts in the student’s area of journalism expertise;
• Advanced practice of theory, methods and concepts suitable to the student’s area of concentration;
• Advanced statistics;
• Specific uses and impacts of media, such as in healthcare delivery, in education, in politics, in the military, or in traditional mass media roles;
• The business of the media, historical and current;
• Innovation and entrepreneurship.

The Ph.D. program requires a total of 55 course credit hours (18 3-hour courses, plus a 1-hour statistics lab) plus dissertation hours, which are variable. 37 course hours are prescribed, 18 are elective. The student takes a 12-hour concentration in one academic unit outside of Journalism.

Students who hold a master’s in journalism may have this 55-hour requirement adjusted (a maximum of 18 credits) due to prior course work, leaving 37 hours for completion of the degree. The student completes study of appropriate research skills, designed in consultation with the faculty advisor. The student also must meet KU’s requirements for dissertation hours.
Languages, Literatures & Cultures (in CLAS)

Studying a foreign language at the University of Kansas is your first step towards a richer life. When you speak another language, it gives you access to new literature, new music, new art. It will multiply your job opportunities. It will allow you to move about more freely in today’s global society.

The University of Kansas offers over 40 foreign languages. Our faculty provides a wealth of knowledge about the cultures and languages of the world. We are home to twelve foreign language and culture focused departments, as well as five resource centers focused on foreign languages and area studies. You can choose from over 60 different degrees and concentrations, more than 140 study abroad programs, and you have access to a vast pool of undergraduate and graduate scholarships.

More information is available at: http://sllc.ku.edu/

Core Departments

- East Asian Languages & Cultures (https://ealc.ku.edu)
- French & Italian (http://www.frenchitalian.ku.edu)
- Germanic Languages & Literatures (https://germanic.ku.edu)
- Slavic Languages & Literatures (https://slavic.ku.edu)
- Spanish & Portuguese (http://spanport.ku.edu)

Affiliated Departments

- African and African-American Studies (http://afs.ku.edu)
- Anthropology (http://anthropology.ku.edu)
- Art History (http://arthistory.ku.edu)
- Classics (http://classics.ku.edu)
- Center for East Asian Studies (http://www.ceas.ku.edu)
- Center for Global & International Studies (http://global.ku.edu)
- Center for Latin American & Caribbean Studies (http://latamst.ku.edu)
- Center for Russian, East European and Eurasian Studies (http://www.crees.ku.edu)
- English (http://english.ku.edu)
- Humanities and Western Civilization (http://hwc.ku.edu)
- Kansas African Studies Center (http://www.kasc.ku.edu)
- Linguistics (http://www.linguistics.ku.edu)
- Religious Studies (http://religousstudies.ku.edu)
Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your advisor for details). Other years’ catalogs are available online or from the Office of the University Registrar.

Juris Doctor Program (p. 768)
Two-Year J.D. Program for Foreign-Trained Lawyers (p. 771)
Master of Laws in American Legal Studies (p. 772)
Doctor of Juridical Science Program (p. 772)

The School of Law

The School of Law is an excellent place to pursue professional legal education. The school’s primary mission is to prepare its students to be outstanding members of the legal profession, well educated in the law and committed to professional achievement and public service. The school educates students in both the general principles of law and the skills needed for practice in a changing legal environment. Students develop technical competence, pride in legal craftsmanship, a sound sense of ethics and professionalism, and an appreciation for the role of law and of the practice of law in society.

The law school has a venerable history and a commitment to educating for the future. Legal education at KU began in 1878, and the school was a charter member of the Association of American Law Schools. Since 1924, it has had a chapter of Order of the Coif, a national law school honor society with chapters at leading law schools throughout the country. The law school is fully accredited by the American Bar Association.

Outside the classroom, student organizations provide a focus for service as well as social activities and professional development. In a program that may be unique to KU, law students serve the university community and develop litigation skills by acting as prosecutors, defense counsel, and judges in the Traffic Court, which handles all appeals of campus parking tickets.

Two student-edited scholarly publications, the Kansas Law Review and the Kansas Journal of Law and Public Policy, allow students to delve deeply into areas of law that interest them, hone their writing, and expand their editing skills. KU Law students also participate in a rich array of moot court programs. Some are courses, and some are extracurricular activities. All provide hands-on writing and advocacy skills that are some of the hallmarks of a KU Law education.

Prelaw

View information about prelaw (p. 1943) study at KU.

Tuition and Fees

Current information about law school tuition (resident and nonresident) rates and required campus fees, which all law students pay each semester, is available online or from the Office of the University Registrar.

Tuition and fees (http://www.law.ku.edu/apply) entitle students to course instruction; dispensary care for ordinary illnesses and special medical care at nominal rates; the use of the Kansas and Burge Unions, libraries, buses, Legal Services for Students, and the Ambler Student Recreation Fitness Center; a copy of The University Daily Kansan and other local and national newspapers; and admission at reduced prices to most campus events, such as concerts, plays, films, lectures, and athletic events.

Residency Classification

Students are classified as resident or nonresident based on information provided on the application for admission. The determination of residency status is made by the Office of the University Registrar in accordance with Kansas regulations. This classification makes a difference in the cost of attending the School of Law. If you have questions about your residency status, contact the Office of the University Registrar.

Scholarships and Financial Aid

For information about scholarships and financial aid, visit the law school’s website.

Attendance

Regular class attendance is a fundamental part of legal education. Instructors may adopt individual policies to monitor attendance. No attendance policy may impose any sanction unless a student’s unexcused absences from class exceed the number of hours of credit given for the course plus one, and no sanction may be more stringent than imposition of a failing grade for the course.

Adding Classes

A student may add classes only in the first 2 weeks of the semester (fifth day in a summer session). Students contemplating adding a course after the course has begun should understand that they may be at a significant disadvantage.

Dropping Classes

A student may drop a course no later than the last day of classes in the semester or summer session. Enrollment in that class will be canceled and will not appear on the student’s record.

Special Drop Rule

Where the nature of the course requires a continuous commitment by the student, the instructor may establish special rules about dropping the course. Notice of these special rules will be provided before enrollment.

Maximum and Minimum Load

Students are expected to complete all required first-year courses during their first year of enrollment in law school. Summer starters must take all required first-year courses in the first year plus sufficient electives in both the fall and spring semesters to carry a course load of no fewer than 12 credit hours and no fewer than 4 courses in each semester. After the first year, the maximum course load is 18 credit hours per semester, and the minimum load is 12 hours. The associate dean for academic affairs may approve a schedule of fewer than 12 credit hours under exceptional circumstances.
Incomplete Classes
A student must finish an incomplete course by the end of the next semester (excluding summer sessions), whether or not the student is enrolled in the law school during the next semester. If a student does not make up an incomplete grade by the end of the next semester, the incomplete will be changed to a grade of F at the end of that semester. The last day of the final examination period is the end of the semester. Waivers of this rule or extensions of the time allowed for making up incomplete grades may be granted by the academic affairs committee only in cases of extreme hardship.

Withdrawal and Readmission Following Withdrawal
Students considering withdrawing are strongly encouraged to confer with the associate dean for academic affairs. Any student who has completed at least 29 credit hours and is in good standing may withdraw from all law school courses in which he or she is enrolled if the student completes all required administrative steps for withdrawal no later than the last day of classes for the semester. Students who wish to withdraw after the last day of classes for the semester must obtain permission from the academic affairs committee.

Any student who withdraws before completing 29 credit hours must reapply for admission. There are no exceptions to this rule. Any student who has completed at least 29 credit hours and who is not in good standing must have the permission of the associate dean for academic affairs to withdraw if the student wishes to return to school in a subsequent semester. A student who fails to secure permission to return must petition the academic affairs committee for reinstatement.

Students must complete all requirements for the degree within 5 years of initial enrollment. See J.D. Degree Requirements (p. 770).

Examinations
Thorough examinations are given under the honor system at the close of every term. Some faculty members also give midterm examinations. These examinations test students’ reasoning abilities and their knowledge of a particular subject area.

Special examinations are given only in cases of absence from the regular examination because of sickness of the student or in the student’s immediate family or similar exceptional circumstances. Students should contact the faculty member whose examination they must miss as soon as possible, certainly before the date the examination is to be given.

Grading System
The School of Law uses a 4.0 (A-F) grading scale:

- 4.0 (A)
- 3.7 (A-)
- 3.3 (B+)
- 3.0 (B)
- 2.7 (B-)
- 2.3 (C+)
- 2.0 (C)
- 1.7 (C-)
- 1.3 (D+)
- 1.0 (D)

- 0.7 (D-)
- 0 (F)

The average of grades in first-year courses must be 2.8-3.0; the average of grades in upper-level required courses must be 2.9-3.1; and the average of grades in all other courses must be 2.8-3.4. The recommended range in upper-level courses is 3.0-3.2.

Courses in which the faculty member finds it difficult or impossible to evaluate student performance with the precision necessary to assign letter grades may be graded Credit/No Credit when approved by the academic affairs committee before the beginning of the semester in which the course is taught.

Clinic and Externship Rules
No student may accumulate more than 16 credit hours from the Criminal Prosecution Clinic, the Project for Innocence and Post-Conviction Remedies, the Elder Law Externship, the Externship Clinic, the Kansas Supreme Court Research Clinic, the Judicial Clinic, the Legal Aid Clinic, the Legislative Clinic, the Media Law Clinic, the Medical-Legal Partnership Clinic, the Public Policy Clinic, or the Tribal Judicial Support Clinic as part of the 90 hours of law school credit required for graduation. Concurrent enrollment in more than 1 of these clinics and externships is permitted only with the consent of the directors of the programs in which enrollment is sought.

Students must be in good standing to enroll in a clinic or externship. This requirement may be waived by the associate dean for academic affairs in exceptional circumstances.

For some clinics and externships, the student must qualify as a supervised legal intern under Kansas Rule 719. To qualify, the student must have completed 60 credit hours. The credit-hour requirements are necessary to ensure that heavy course loads in the final 2 semesters will not interfere unduly with clinic work.

The Honor Code
Matters of law student honesty and integrity in academic performance are governed by an honor code (http://www.law.ku.edu/academics/honorcode.shtml) written and administered by law students. This system of peer review has been in effect for more than half a century and addresses issues such as plagiarism, cheating, and unauthorized collaboration in work assignments. Honor code violations, found to have occurred by the student committee after notice and hearing, are referred to the dean of the law school with recommended sanctions. Final disposition rests within the discretion of the dean. The honor code governs law students in the same way that the Code of Professional Responsibility governs members of the bar. The complete honor code may be found in the Academics (http://www.law.ku.edu/academics) section of the law school’s website. Copies also may be obtained from the Student Bar Association.

Exclusion and Probation
A student whose cumulative grade-point average is below 2.0 at the end of any regular semester, whether fall or spring, or at the end of the two 5-week summer sessions is on probation. A student who is on probation is not in good standing for purposes of the rules on withdrawal and readmission following withdrawal and any other rules that require good standing.
All students must achieve a minimum cumulative grade-point average of 2.0 during the semester in which they complete 90 hours, or they will not be permitted to graduate or continue in school. There is no appeal within the law school from this requirement.

A student whose cumulative grade-point average is below 1.8 after the completion of two semesters of full-time enrollment or two, five-week summer sessions and two semesters of full-time enrollment will be excluded from the school. A student whose cumulative grade-point average is below 2.0 after the completion of 59 credit hours or at the end of four semesters of full-time enrollment, regardless of the number of credit hours completed, will be excluded from the school. In either case, exclusion from the school is final. There is no appeal within the law school.

Students in the Two-Year J.D. Program are subject to the same grading system that applies to other J.D. candidates, and these policies of exclusion and probation apply equally to two-year students. Therefore, a two-year J.D. student whose cumulative grade-point average is below 1.8 after the completion of two semesters of full-time enrollment at the University of Kansas School of Law will be excluded from the school. A two-year J.D. student whose cumulative grade-point average is below 2.0 after the completion of four semesters of full-time enrollment at the law school will be excluded from the school. There is no appeal within the law school.

Career Services
A major component of the law school’s mission is helping students maximize employment opportunities at graduation. Working with students to design and implement a strategy begins during the first semester of law school and continues through graduation and beyond. The staff of the Office of Career Services (http://www.law.ku.edu/careerservices) meets with all first-year students to discuss their backgrounds, identify interests and discuss the numerous programs, clinics and opportunities available to them. First-year students may also participate in a mentoring program, matching them with practicing alumni in the area who offer advice on the practice of law and how students can best prepare themselves for success in school and after graduation.

The Office of Career Services is also committed to the same open-door policy as the school’s professors. Students are actively encouraged to meet with the members of the office on a walk-in basis or by appointment, as they prefer. Workshops and individual advising sessions help students explore career options and develop job-seeking skills. Excellent resource materials for career planning and placement are available, and staff members are knowledgeable about online resources.

KU law students are highly sought after by employers throughout the state, region, and nation. Law firms, government agencies, public interest groups, and other employers seeking summer and school-year interns and graduating students send representatives to interview at the law school or contact the school with information about openings.

The range of positions open to students and graduates is broad. Many join private law firms. Some firms specialize in corporate and transactional work, trial work, or criminal defense, but most are general practice firms. Many graduates enter government service, working at the federal, state, or local level. They become prosecutors or public defenders or work in agencies such as the Environmental Protection Agency, the Kansas Attorney General’s office, or the U.S. Securities and Exchange Commission. Still other graduates accept judicial clerkships, usually for a year or two after graduation, working for state or federal appellate or trial courts. The military branches also actively recruit at the school for their JAG programs.

Public interest work in legal services organizations or in organizations working for social change is attractive to many graduates. Law school graduates have joined organizations ranging from Kansas Legal Services to Public Citizen.

The law school also works closely with those students seeking a non-legal career after graduation. Our graduates have entered a wide array of industries, including energy, insurance and not-for-profit management. Our staff is actively working to grow these opportunities by building relationships with market leaders across the region and the country.

KU graduates have been successful in passing Kansas and Missouri bar examinations and have performed extremely well on examinations in other states, including Colorado and Texas. The Office of Career Services provides up-to-date information on bar requirements for all states. Law school applicants should secure information about character, fitness, and other qualifications for admission to the bar in states in which they intend to practice.

For more information, explore the Career Services (http://www.law.ku.edu/careerservices) section of the law school’s website.

Shook, Hardy & Bacon Center for Excellence in Advocacy
The Shook, Hardy & Bacon Center for Excellence in Advocacy capitalizes on its namesake’s distinguished history in litigation to cultivate a new generation of trial lawyers. The center has three broad goals: 1) offer unique skills-based training to KU law students; 2) present valuable programming for KU law alumni and the regional bar; and 3) open new scholarly opportunities for KU law faculty and nonfaculty studying related issues through a fellowship program.

For more information about the center, see the Centers (http://www.law.ku.edu/centers) section of the law school’s website.

Tribal Law and Government Center
The Tribal Law and Government Center prepares a new generation of advocates for careers representing the legal interests of indigenous nations and tribes. It provides a forum for research and scholarship on indigenous legal and governance issues.

The center operates 4 programs. The Tribal Lawyer Certificate Program ensures that law students who plan careers representing indigenous nations have the skills necessary to appreciate and strengthen the unique nature of their legal systems. The Tribal Law and Government Conference promotes research and scholarship regarding the unique legal and governance issues of indigenous nations. The Tribal Judicial Support Clinic gives second- and third-year students the opportunity to assist tribal court systems through a variety of projects. The joint degree program in law and indigenous studies aspires to facilitate the protection and strengthening of indigenous sovereignty, self-determination, and self-sufficiency in indigenous nations throughout the Americas.

For more information about the center, see the Centers (http://www.law.ku.edu/centers) section of the law school’s website.
Law Faculty

The law faculty is composed of honor graduates from law schools throughout the country. Virtually all have substantial experience in private or public interest practice. Many served as judicial clerks — 2 as clerks to Supreme Court justices.

Law faculty members are committed to excellence in the classroom and to mentoring law students. Students are encouraged to consult their professors regularly about their progress in the study of law as well as about career plans, job opportunities, and the professional responsibilities of lawyers. Law faculty offices are located throughout Green Hall, and doors are open to students.

Faculty members enrich their teaching by researching and writing about the areas of law they teach. They regularly participate in conferences and symposia, publish widely in legal journals, and enjoy national and international recognition for the quality of their work. Many have written important treatises and casebooks used at law schools around the country.

- Katie Cronin. Clinical Associate Professor of Law. B.S.W., Missouri, 2002; J.D., Vanderbilt, 2005. Medical-Legal Partnership Clinic.
- Melanie DeRousse. Clinical Associate Professor of Law. A.B., Chicago, 1999; J.D., Washington (St. Louis), 2007. Legal Aid Clinic.
- Meredith Schnug. Clinical Associate Professor of Law. B.A., Miami (Ohio), 2003; J.D., Washington (St. Louis), 2006. Legal Aid Clinic.
Course Prerequisites
A substantial number of second- and third-year courses have 1 or more upper-level courses as prerequisites.

Library Faculty Members

Emeritus Faculty Members

Course Prerequisites

For more information about law faculty members, go to the Faculty section of the law school's website (http://www.law.ku.edu/faculty).
First-Year Courses

LAW 804. Civil Procedure. 4 Hours.
This course will examine all phases of the litigation process in civil actions. Specific subjects covered may include: pleadings; discovery; disposition of cases without trial; the right to jury trial; post-trial motions; appeals; the bases for jurisdiction over persons and property; notice; venue; subject matter jurisdiction; choice of federal or state law in diversity cases; joinder of claims and parties; and preclusive effects of judgments. Required course.LEC.

LAW 809. Contracts. 4 Hours.
An introduction to contract law, including topics such as offer and acceptance, consideration, contracts enforceable without consideration, defenses to enforcement of contracts, terms of contracts and their interpretation, performance and breach of contracts, remedies for breach, third-party beneficiaries, and assignments. Required course. LEC.

LAW 814. Criminal Law. 2-4 Hours.
An introduction to substantive criminal law, including theories of punishment, basic stages of the criminal process, culpability, defenses, parties to crime, conspiracy, attempts, sentencing, homicide, and other selected offenses. Required course. LEC.

LAW 806. Introduction to Constitutional Law. 4 Hours.
An introduction to the law of the United States Constitution, including the historical context and evolution of constitutional principles, methods of constitutional interpretation and analysis, and basic doctrine concerning the structure of government and the protection of individual rights.

Lower-Level Courses

LAW 806. Introduction to Constitutional Law. 4 Hours.
An introduction to the law of the United States Constitution, including the historical context and evolution of constitutional principles, methods of constitutional interpretation and analysis, and basic doctrine concerning the structure of government and the protection of individual rights.

Upper-Level Courses

LAW 911. Accounting for Lawyers. 2 Hours.
An introduction to Accounting and Auditing for Lawyers. Coverage includes components of Generally accepted Accounting Principles related to assets, liabilities, equity, revenue and expenses; financial statements analysis; auditing standards; corporate governance; audit failure and forensic accounting. Not open to students who have completed 9 hours of accounting courses while an undergraduate or graduate student. LEC.

LAW 850. Administrative Law. 2.5-3 Hours.
The separation and delegation of powers. The development of administrative function. Administrative discretion, notice, hearing, jurisdiction, conclusiveness of determination, and judicial control. Examination of current problems in various administrative processes. LEC.

LAW 852. Advanced Criminal Procedure. 2.5-3 Hours.
Detailed analysis of the formal criminal process from initial appearance through appeal. Emphasis on pretrial and trial proceedings. LEC.

LAW 864. Advanced International Trade Law. 3 Hours.
Examines contemporary issues in international trade practice and policy. Among the practical topics covered in detail are: (1) antidumping and countervailing duties against dumping and unfair subsidies, respectively; (2) safeguard actions against fair foreign competition; (3) protection of intellectual property rights against infringement; (4) trade in agriculture (including sanitary and phytosanitary issues); and (5) trade in services. Among the policy topics emphasized, from both "our" and "their" perspective, are: (1) trade relations with Third World and Muslim
countries; (2) the critical link between trade and national security; (3) the complex interaction among trade, human rights, labor rights, and the environment; and (4) efforts to protect local culture in an era of globalization. The course is designed not only for students intending to work in international trade law, but also for students interested in careers anywhere in the world in other fields of, or relating to, international law who seek an appreciation of the increasingly sophisticated connections among these fields and trade. Prerequisite/Corequisite: A basic course in International Trade Regulation (e.g., suitable summer study program or work experience), concurrent registration in such a course, or permission of the instructor. LEC.

LAW 856. Advanced Legal Research. 2 Hours.
Spring semester. Evaluates important legal research tools and techniques not covered in the required first year Lawyering course. Provides an in-depth look at Kansas materials, legal reference books, form books, and computer-assisted research. Research aids in selected subject areas will also be examined. LEC.

LAW 857. Advanced Litigation. 2.5-3 Hours.
Advanced skills in the litigation process selected by the instructor, which may include negotiation, counseling, discovery techniques, advanced witness examination, expert witnesses, advanced jury selection techniques, alternative dispute resolution, arbitration, practice before administrative agencies, mediation, or other related topics. Course content will be promulgated by the instructor prior to the registration period for the semester in which the course is offered. This course may be taken more than once, provided the instructor determines there is no inappropriate duplication of other courses taken by the student. Prerequisite: Evidence, Trial Advocacy, and permission of instructor if an Advanced Litigation course has been taken. FLD.

LAW 858. Agriculture Law. 1-3 Hours.
Considers the role of government in agriculture as well as traditional transaction issues such as leasing, the marketing and storing of commodities, special secured financing rules relating to agriculture credit, the impact of the bankruptcy of a warehouse (elevator) containing producers' stored commodities, and problems confronting the livestock industry. Other unique issues to be considered include genetically modified crops (GMOs) and the use of antibiotics by producers of livestock and poultry. Prerequisite/co-requisite: Commercial Law: Secured Transactions. LEC.

LAW 860. Alternative Dispute Resolution. 2-3 Hours.
This course introduces the student to arbitration, mediation, negotiation, and other methods for resolving disputes. In addition to serving as alternatives to the court system, these processes also play an increasingly important role in litigation and settlement. This is a survey course, which may include exercises to develop skills such as interviewing, counseling, and negotiation. FLD.

LAW 862. American Legal History. 2-3 Hours.
An introductory survey of the history of American Law and American legal institutions. LEC.

LAW 863. Antitrust Law. 2.5-3 Hours.
Covers the Sherman Antitrust Act and related federal legislation designed to control the competitive practices and structure of American industries. Examines the law of monopolization, price fixing, group boycotts, vertical restraints such as tie-ins and distribution restrictions, and mergers. Some elementary principles of economic analysis are employed but economics is not a prerequisite. LEC.

LAW 853. Banking Law. 2-3 Hours.
This course will focus on the regulation of financial institutions, including depository institutions (banks, thrifts and credit unions), securities broker-dealers, insurance companies and investment companies. Emphasis will be on the laws governing banks and their corporate families, including issues pertaining to corporate structure, capitalization, liquidity and business activities. LEC.

LAW 889. Bankruptcy. 2.5-3 Hours.
This survey of bankruptcy and debtor-creditor law covers topics such as: Chapters 7, 11, and 13 of the Bankruptcy Code and enforcement of money judgments outside of bankruptcy. Prerequisite: Commercial Law: Secured Transactions. LEC.

LAW 883. Biodiversity Law. 2-3 Hours.
This class considers the role of law in regulating, managing, utilizing, and conserving the earth's rich biological diversity. Biodiversity law is explored from the perspectives of common law, statutes, agency regulations, and international law. Special consideration is made of the role science plays in informing biodiversity law and policy. Prerequisite: Environmental Law Survey. LEC.

LAW 870. Biolaw. 2-3 Hours.
This course examines the biology of the environment and the role of law. Topics covered will include law and evolution, law and genetics, law and neuroscience, law and ecology, climate change law, biodiversity law, law and biotechnology, reproductive law, behavioral law and economics, and law and deextinction. LEC.

LAW 885. Business Associations I. 2.5-3 Hours.
Fall semester. Legal aspects of typical American enterprise structures, including partnerships and corporations. The elements of agency relations are included. Emphasis is upon the control, management, financing, and regulation of closely held corporations. LEC.

LAW 886. Business Associations II. 2.5-3 Hours.
Spring semester. A continuation of Business Associations I involving further study of corporate problems. Primary emphasis is on the legal responsibilities of directors and dominant shareholders of both publicly and closely held corporations, and the remedies for enforcement thereof. Also included are brief introductions to corporate capital structure and the Securities Act of 1933. Prerequisite: Business Associations I. LEC.

LAW 892. Business Organizations. 4 Hours.
This introductory business law course is a one-semester equivalent of the two-semester Business Associations I and Business Associations II sequence. Students may only enroll in and receive credit for this course or the Business Associations I and II sequence, but not both. Topics to be covered include the law of agency, the formation, ownership, and management of partnerships, limited liability entities, and corporations, and the roles of federal law, state law, and contract in regulating the relationships among the various participants in a business venture, including fiduciary duties and enforcement mechanisms. Special attention will be paid to closely held business associations. This course will satisfy prerequisite requirements for any course requiring either Business Associations I or Business Associations II. LEC.

LAW 868. Business Planning Seminar. 2.5-3 Hours.
A problem approach to planning important business transactions, such as organization of a close corporation; organization of a public company; dividend and other corporate distributions; corporate liquidations; and corporate combinations such as merger and consolidation. Each problem is analyzed from the perspectives of tax, securities regulation, and corporate law. Prerequisite: Business Associations I and II or Business Organizations, Federal Income Taxation, and Taxation of Business Enterprises. LEC.

LAW 871. Capital Punishment. 3 Hours.
This three hour course will examine capital punishment as a system of law and will address many of the intertwining questions raised by
the existence of the death penalty in America: How, as a statutory and procedural matter, is the death penalty implemented in America? What procedures are unique to the imposition of death as a punishment? Why are those procedures used, and to what extent are they either adequate or inadequate? What are the arguments for and against the death penalty and how persuasive are they? Do we, as lawyers and as individuals, accept capital punishment as a working legal system. LEC.

**LAW 841. Chinese Law. 2-3 Hours.**
This course will explore the role of law in contemporary Chinese society from a historical and comparative perspective. This course complements (but is independent of) Law 879. The focus of the course is on China's administrative and legal institutions and legal reform efforts since 1978, with some coverage of China's traditional legal order and the historical influences on China's legal institutions and attitudes toward law from the early twentieth century to the present. Specific topics in modern Chinese law will vary but may include contract, property, criminal, business, intellectual property, environmental, and labor law, land human rights. Due to the volume of material we will cover in a limited time, the legal systems of Greater China (Hong Kong, Macau, Taiwan) will not be covered in this course. No Chinese language skill is necessary for this course and not prior familiarity with China or East Asia is assumed. LEC.

**LAW 886. Civil Rights Actions. 2-3 Hours.**
A survey of the law governing civil suits against government entities and officials to remedy violations of federal constitutional rights. The focus of the class is litigation under 42 U.S.C. section 1983, which creates a civil cause of action for damages and injunctive relief to remedy violations of federal constitutional rights. This area of law is sometimes referred to as "constitutional torts," because it involves civil litigation that is in many ways similar to traditional tort actions. The course covers the elements of a Section 1983 action, the constitutional immunity of states and state officers, defenses to Section 1983 liability, defendants' liability for attorneys fees under 42 U.S.C. section 1988, civil suits against federal defendants, and the relationship between Section 1983 and federal habeas corpus. LEC.

**LAW 898. Collective Bargaining and Dispute Resolution. 2.5-3 Hours.**
This course is designed to provide the student with: (1) a brief overview of US labor history in the private and public sectors, (2) a review of private sector labor law principles dealing with collective bargaining, (3) an examination of public sector labor law nationally and in Missouri, Kansas and selected other states, (4) an overview of the collective bargaining process, (5) a detailed and practical examination of issues arising during collective bargaining negotiations, (6) an overview of procedures used to resolve bargaining disputes, and (7) an exploration of the types of disputes arising under collective bargaining agreements and the use of grievance and arbitration procedures to resolve such disputes. LEC.

**LAW 872. Commercial Arbitration. 2.5-3 Hours.**
Addresses the law and practice of commercial arbitration, a rapidly growing form of alternative dispute resolution. Drafting arbitration agreements, the enforceability of arbitration agreements, selecting arbitrators, the arbitration hearing, and the enforceability of arbitration awards. Gives special emphasis to arbitration of international commercial disputes and the institutional rules under which such arbitrations proceed. LEC.

**LAW 874. Commercial Law: Payment Systems. 2-3 Hours.**
A study of the law governing modern payment systems, including checks and other negotiable instruments governed by Article 3 of the Uniform Commercial Code and bank transactions governed by 4 of the Uniform Commercial Code. Other payment systems that may be examined include credit cards, debit cards, automated clearinghouse payments, stored value cards, wire transfers, and letters of credit. LEC.

**LAW 873. Commercial Law: Secured Transactions. 2.5-3 Hours.**
Introduction to commercial transactions under the Uniform Commercial Code. Emphasis on secured transactions and the interplay between Article 9 of the Code and the trustee's powers under the Federal Bankruptcy Act. Analysis of basic problems in the area of consumer credit. Required course. LEC.

**LAW 879. Comparative Law. 2.5-3 Hours.**
A general introduction to and comparison of major legal systems of the world, with special emphasis given to how those systems reflect differing cultural values in addressing common legal questions. A major goal of the course is to deepen the students' understanding of law and practice in the United States and to broaden their perspective of law beyond the boundaries of the common law systems. (Same as ISP 876.) LEC.

**LAW 880. Complex Litigation. 2.5-3 Hours.**
Explores the many interesting facets of complex litigation in the context of mass torts. Bifurcated and special proceedings, class actions, consolidation, multidistrict litigation, and complex jointer issues, as well as substantive issues which arise in mass tort litigation. LEC.

**LAW 881. Conflict of Laws. 2-3 Hours.**
An analysis and consideration of problems respecting the law applicable in transactions or to relationships with elements in more than one state or country. The law to be applied in such situations, the theoretical bases of choice-of-law, and the issues which these matters can present under the Constitution of the United States are discussed. Far-reaching changes are occurring in basic assumptions and methods of approach in the field of choice-of-law, and special attention is given to these developments. Finally, the class considers the recognition and enforcement of foreign state judgments in terms of both standards and requirements that flow from relevant provisions of the Constitution. LEC.

**LAW 887. Constitutional Topics. 2.5-3 Hours.**
Examines the application of constitutional law and principles to selected social issues. Specific topics will be announced; topics may include such subjects as constitutional history, constitutional interpretation, the constitutional law of schools, gender and constitutional issues, or national security law. A writing project typically is required in place of a final examination. LEC.

**LAW 875. Construction Law and Litigation. 2-2.5 Hours.**
This is an upper-level course that will provide a detailed examination of the law associated with the construction industry. The course will be divided between contract formation issues and litigation issues. The contract formation portion will explore design and engineering services, professional responsibility, bidding, bidding government contracts, contract preparation, subcontracting, indemnity and insurance issues. The course will then focus on litigation issues, including liens, delay claims, construction defects, manufacturer's warranties, and design defects. There will be an in-depth examination of the AIA (American Institute of Architects) and AGC (Associated General Contractors) form documents and the use of ADR in the construction field. LEC.

**LAW 882. Consumer Law. 2.5-3 Hours.**
This course will examine federal and state law governing the formation, terms, and enforcement of consumer contracts. Topics covered will include deception and information in contract formation; regulation of consumer credit, goods, and services; creditors' collection tactics; and consumer remedies. LEC.

**LAW 869. Contract Drafting. 2.5-3 Hours.**
An intensive skills course designed to teach the principles of contemporary commercial drafting, including how to translate a business deal into contract concepts; draft each of a contract's parts; draft with clarity and without ambiguity; add value to a deal; work through the
drafting process; and review and comment on a contract. Weekly written homework is required. Prerequisite: Business Associations I or Business Organizations recommended but not required. LEC.

LAW 837. Contracts II/UCC Sales. 2-3 Hours.
The course will explore the domestic sale of goods as governed by Article 2 of the Uniform Commercial Code. The course will also address other significant statutory regimes governing the sale of goods such as the Magnuson-Moss Warranty Act and state consumer rights statutes. The course will also cover statutory regimes regulating e-commerce such as the ESIGN Act. The course may also address, although in less detail, the international sale of goods as governed by the United Nation Covenant on the International Sale of Goods. Students, in addition to exposure to substantive contract law doctrine, will develop significant statutory construction skills. Prerequisite: LAW 809 or an equivalent. LEC.

LAW 851. Contracts III. 2-3 Hours.
Considers in depth a number of topics not covered or only briefly covered in first year contracts, which may include contract interpretation, third party beneficiaries, assignment and delegation, the overlap of contract and tort, and the enforceability of particular provisions. Commercial Law: Secured Transactions or Commercial Law: Payment Systems will be an asset. Prerequisite: Contracts. LEC.

LAW 888. Copyright Law and Digital Works. 3 Hours.
Explores the major copyright issues posed by such categories of digital works as software, data bases containing factual and other public domain content, multi-media materials, computer generated or assisted works, and audio recordings containing digital sampling. LEC.

LAW 930. Corporate Finance. 2-3 Hours.
This advanced business law course examines the legal and financial aspects of corporate finance. Topics include the time value of money, valuation of stocks and bonds, the use of debt, equity, and derivative instruments in the firm's capital structure, dividends and distributions, and finance theories, including portfolio theory, the capital asset pricing model, and the efficient capital market hypothesis. Prerequisite or Corequisite: Business Associations II or Business Organizations. LEC.

LAW 893. Corporate Social Responsibility, Sustainability and the Law. 2.5-3 Hours.
Is sustainability the business of corporations? Can corporations help solve environmental crises and poverty? Should firms be "socially responsible" and what does law have to do with it anyway? In this seminar, we will consider these questions and other major debates surrounding the intersections of corporate social responsibility (CSR), sustainability, and the law. Topics to be covered include the relationship between law, ethics, and CSR, the "business case for CSR", alternatives to traditional profit-driven and shareholder-focused corporate models, and problems related to the accountability of multinational corporations for harms caused abroad. Each session will be framed by an area of law that intersects with CSR, such as labor and employment, the environment, human rights, finance, and sustainable development. This seminar satisfies the upper-level writing requirement, as a final paper based on independent research is required for this course. There are no prerequisites. Approved for Business and Environmental Law Certificate requirements. LEC.

LAW 838. Criminal Practice in Kansas. 2-3 Hours.
Designed for the student who plans to practice criminal law in Kansas. Examines the Kansas criminal code and case law, explores practical and ethical issues from the perspective of the prosecutor and defense counsel, and develops practical skills in pre- and post-trial proceedings. Includes filing of the complaint, bail, preliminary hearing, pretrial proceedings, motions practice, plea negotiations, client counseling, trial proceedings, jury instructions, post-trial motions, sentencing and appeals. LEC.

LAW 878. Criminal Procedure. 2.5-3 Hours.
An introduction to criminal procedure, including investigation and police practices, pre-trial proceedings, trials, sentencing, and review proceedings. Particular emphasis on the application of the exclusionary rule to arrest, search and seizure, interrogation procedures, and identification procedures. LEC.

LAW 890. Criminal Prosecution Clinic. 1-3 Hours.
Students are assigned to the office of the United States Attorney for Kansas or Kansas state district attorney offices as arranged by the instructor. Students assist prosecutors in virtually all phases of the criminal process, including criminal trials. A weekly seminar focusing on issues confronting criminal prosecutors accompanies the field work. Unless specifically authorized, students must be enrolled in both semesters of the academic year for three credit hours per semester. Prerequisite: Evidence and qualification under Kansas Rule 719. See Clinic and Externship Rules in the Academic Regulations section of this bulletin. Prerequisite or corequisite: Trial Advocacy. FLD.

LAW 859. Deposition Skills Workshop. 2 Hours.
This professional skills course will expose students to substantive and procedural law, as well as the ethical rules, pertaining to depositions. It provides students a realistic deposition setting in which they will learn to conduct and defend a series of depositions in a simulated environment under the direction of experienced attorneys who serve as the workshop faculty. Prerequisite: Evidence. LEC.

LAW 951. Digital Privacy Rights in an Open Society. 2-3 Hours.
This course focuses on the risks to personal privacy that arise from use of digital technologies to communicate and collect, store and share personal data. The course also focuses on laws that recognize and aim to protect digital privacy rights, as well as the tension between privacy protection and the value placed on freedom and openness in a democratic society. LEC.

LAW 900. Economic Development and Indigenous Nations. 2-3 Hours.
The course examines the laws governing the development and expansion of tribal economies including federal regulations governing the alienability of land, secured transactions, tribal commercial law and international trade. The course includes a detailed discussion of the taxation of activities occurring within Indigenous Nations. LEC.

LAW 901. Elder Law Externship. 2.5-3 Hours.
Involves students in representation of elderly individuals primarily in consumer, housing, and public benefits litigation. Students work under the supervision of attorneys from Kansas Legal Services and faculty from the School of Law. A one-hour classroom component accompanies the field work. Prerequisite: Elder Law LL.M. Thesis. LEC.

LAW 849. Elder Law LL.M. Thesis. 1-6 Hours.
Completion of a substantial research project on an elder law topic, under supervision as determined by the Director of the Elder Law LL.M. program. Enrollment may extend over more than one semester. RSH.

LAW 891. Elections and Campaign Finance. 3 Hours.
This course will consider the process of elections, campaign finance, and voting at both the state and federal levels. Topics addressed will include the role of political parties, voter and candidate eligibility, design of electoral districts, the mechanics of voting and vote counting, federal and state campaign regulation, and challenges to election results. LEC.
LAW 903. Employment Discrimination Law. 2.5-3 Hours.
A study of the major federal statutes prohibiting discrimination in employment and of constitutional objections to employment discrimination. LEC.

LAW 925. Employment Law. 2-3 Hours.
A study of state and federal regulation of the employer-employee relationship, as distinguished from the regulation of collective bargaining between management and unions. Coverage will include the Occupational Safety and Health Act, the Fair Labor Standards Act, the Employee Retirement Income Security Act, Unemployment compensation, and employment-at-will. LEC.

LAW 963. Energy Law and Policy. 2.5-3 Hours.
Energy law sits at the intersection between environmental law, natural resources law, and regulated industries. It governs the production and consumption of energy, namely electricity and fuel, but increasingly must also keep pace with technological and policy innovation driven by concerns over climate change, energy security, and sustainable development. This course provides an introduction to the energy sector in its legal and regulatory context, with an emphasis on key policy themes shaping this rapidly evolving area of law. LEC.

LAW 904. Environmental Law Seminar. 2-3 Hours.
An intensive study of one or more aspects of environmental law, such as wildlife law, energy policy, marine pollution controls, and so forth. May be repeated for credit, provided there is not duplication of subject matter. LEC.

LAW 905. Environmental Law Survey. 2.5-3 Hours.
A general survey of the legal mechanisms for protecting the environment. It considers the justifications for and economic implications of regulating activities with potential adverse effects on the environment and the various sources of legal constraints (common law, constitutional, and statutory) on those activities. The course provides an introduction to environmental litigation, to environmental assessment under the National Environmental Policy Act, to endangered species protection, and to the various forms of legislative and administrative controls on and inducements to avoid polluting activities reflected in statutes such as the Clean Air Act, the Clean Water Act, and the statutes designed to control contamination of land by hazardous substances. LEC.

LAW 907. Estate Planning: Practice. 2.5-3 Hours.
The course replicates the estate planning process, providing experience in gathering facts, analyzing alternatives, and implementing a plan through preparation of wills, trusts, and other documents. Extensive drafting of documents is required. Prerequisite: Estate Planning: Principles. LEC.

LAW 906. Estate Planning: Principles. 2-3 Hours.
A study of legal principles relating to transmission of property by gift or at death and the vehicles available for these purposes. Primary emphasis is on estate and gift taxation and income taxation of estates and trusts. Prerequisite: Federal Income Taxation and Trusts and Estates. LEC.

LAW 908. Evidence. 2.5-3 Hours.
Functions of the court and jury; burden of proof; presumptions; judicial notice; competency of witnesses; examination of witnesses; hearsay rule, with exceptions; opinion evidence; direct examination and circumstantial evidence; “best evidence” rule; standards of relevancy. Required course. LEC.

LAW 861. Executive Compensation. 2 Hours.
The course explores various types of nonqualified deferred compensation agreements used as supplements to, or substitutions for, retirement benefits available under qualified arrangements. Certain income tax, ERISA, accounting, corporate and securities laws issues will be addressed as they apply to bonus, employment, severance and stock-based compensation agreements. LEC.

The workshop will expose students to the substantive and procedural law as well as the ethical rules pertaining to expert witness testimony. Moreover, it will provide a realistic courtroom setting where students will learn to conduct and defend a series of expert witness examinations and cross-examinations in a simulated environment under the direction and guidance of experienced attorneys who will serve as the workshop faculty. Workshop faculty will evaluate each student and provide immediate critical and helpful feedback to the students after each testimonial performance. It is anticipated that each student will conduct and defend a total of at least five (5) mini expert witness examinations and/or cross-examinations during a one credit-hour workshop or ten (10) in a two credit-hour workshop. LEC.

LAW 894. Externship Clinic. 3-6 Hours.
Allows students to earn academic credit for performing legal work under the supervision of a practicing attorney at approved governmental agencies, non-profit legal services organizations, and non-profit international organizations. Students will work a specified number of hours per week, complete a goals memo, maintain weekly journals of their experience, and write a reflective paper. Students may enroll for more than one semester with permission of the Director, provided that no student may count more than 6 hours of Externship Clinic credit toward the credit required for graduation. No student may enroll in Externship Clinic in a field placement in which the student was formerly an employee, is currently an employee, or has an offer of employment. No student may enroll in Externship Clinic in a field placement for which there is an existing specialized Law School clinic or externship program without the prior permission of both the director of the affected specialized Law School clinic or externship program and the director of the Externship Clinic. Graded on a Credit/No Credit basis. LEC.

LAW 909. Family Law. 2-3 Hours.
Introduction to marriage and the family as the basic social unit in Western society. Topics include marriage, divorce, annulment, separate maintenance, alimony, child custody and support, antenuptial and post-nuptial agreements, adoption, legitimation, and minority. Practice points include financial planning, tax considerations, and the attorney’s responsibility. LEC.

LAW 910. Federal Courts and the Federal System. 2.5-3 Hours.
This course addresses the role of the federal courts in our constitutional federal system. Topics covered include justiciability, Congressional power over the jurisdiction of the courts, federal common law, abstention doctrines, Supreme Court review of state court decisions, and the role of the state courts in enforcing federal law. Prerequisite: Jurisdiction or permission of the instructor. LEC.

LAW 912. Federal Criminal Prosecution. 2.5-3 Hours.
A study of federal criminal prosecution, focusing on the crimes of fraud and political corruption, drug trafficking and money laundering, group/ organizational crimes such as conspiracies and RICO violations, false statements to federal officers, and obstruction of justice. Will also consider the federal/state prosecution relationships and overlap of their respective jurisdictions, as well as the federal forfeiture statutes. The working and application of the Federal Sentencing Guidelines will also be studied. LEC.

LAW 913. Federal Income Taxation. 2.5-3 Hours.
A survey of the federal income tax system, with special emphasis on the tax laws generally applicable to all taxpayers. Topics include income determination, deductions, credits, planning, and procedure. Historical
development and policy issues are addressed throughout the course. 
LEC.

LAW 914. Federal Indian Law. 2.5-3 Hours.
Addresses the law and policy of the United States regarding Indian nations and their members. Issues include the origins and contours of federal plenary power over Indian affairs, the scope of inherent tribal sovereignty, the limits of state power in Indian country, civil and criminal jurisdiction, and gaming. (Same as ISP 824.) LEC.

LAW 915. Federal Tax Procedure. 2-3 Hours.
A study of the chronology of tax disputes, from examination by the IRS to final disposition of the case by settlement or court decision. Includes the IRS’ procedure for return administration, the administrative appeals process, statutes of limitation on assessment, choice of forum, Tax Court jurisdiction, overpayment, and refund procedures. Prerequisite: Federal Income Taxation. Taxation of Business Enterprises is recommended, but not required. LEC.

LAW 917. Governmental Control of Land Development. 2-3 Hours.
A broad review of land use controls on urban development, including zoning, master planning, subdivision regulation, impact fees, regional controls, and other techniques. Also examines constitutional aspects of controls, as well as the public issues and policies that sustain them. LEC.

LAW 919. Healthcare Financing and Regulation. 2-3 Hours.
Addresses prominent legal and policy issues associated with the delivery of health care. Among these issues: access to care; credentialing of health care personnel; insurance coverage; antitrust strictures; cost containment; and proposals for systemic reform. Covers at least one of the following bioethical issues: organ transplantation; abortion; euthanasia; and rationing of care. LEC.

LAW 920. Health Law and Policy. 2-3 Hours.
A survey of significant legal and policy issues, both historical and current, associated with the delivery of health care. Among these issues are the patient-provider relationship, medical malpractice, the right to die, hospital licensing and physician credentialing, medical staff structure, insurance coverage disputes, and current ideas for health care reform. LEC.

LAW 922. Higher Education and the Law Seminar. 2.5-3 Hours.
A seminar focused on the unique legal issues facing colleges, universities, and graduate schools. The over 4400 institutions of higher education in the United States require legal services, especially as the Supreme Court rules on landmark affirmative action cases such as Fisher v. University of Texas and Schuette v. Coalition to Defend Affirmative Action, and law schools fight suits alleging they misrepresented job prospects to students. Topics will include tenure, freedom of speech and academic freedom, Due Process, student rights and discipline, affirmative action, Title IX and athletics, collective bargaining, tort liability, and antitrust. The course will explore issues that distinguish institutions of higher education from other corporate entities and distinctions between public and private institutions. LEC.

LAW 923. Immigration Law. 2-3 Hours.
Topics such as standards for the admission of immigrants; nonimmigrant visas for students, workers, and tourists; the regulation and exclusion of undocumented aliens; legal procedures for admission, exclusion, and deportation; refugee law; and citizenship law. LEC.

LAW 927. In-House Elder Law Clinic. 2.5-3 Hours.
Enrollment in this clinic is open only to candidates enrolled in the LL. M. Program in Elder Law. Involves representation of elderly individuals primarily in consumer, housing, domestic relations, and public benefits litigation. Unless specifically authorized, LL. M. candidates must enroll for two consecutive semesters. A weekly seminar focused on practical legal issues facing the elderly accompanies the fieldwork requirement. LEC.

LAW 924. Independent Research. 1-2.5 Hours.
Students may undertake a project which involves investigation, research, and scholarship in a particular area of the law. The research must be done under the supervision of a faculty member and must culminate in the writing of a research paper in publishable form. Students must complete and submit for faculty feedback at least two drafts or one draft and one outline in addition to the final research paper. The faculty supervisor must provide meaningful feedback to the student on the outline and draft(s). The final product of the independent research must be submitted at a date set by the faculty supervisor which is no later than the last day of classes of the semester. A student may not earn academic credit for independent research unless (1) in the case of a regular semester, that student is enrolled in at least 3 additional credit hours during the same semester, or (2) in the case of summer school, that student is enrolled in at least 2.5 additional credit hours in either five-week summer session. Students must successfully complete 10-15 double spaced, typed pages of work for every credit hour earned. No student may enroll for more than 2 hours of independent research in one semester, and no student may count more than 6 hours of independent research credit toward the credit required for graduation. However, a student may receive a maximum of 2.5 hours credit for independent research in either of the summer school sessions if that student is otherwise enrolled in 7.5 additional hours during the summer session. Prerequisite: Forty hours of law school credit and an overall average of at least 2.0 at the time of enrolling. RSH.

LAW 999. Indian Gaming. 2 Hours.
This course will examine the law, policy, politics, economics, and cultural effects of Indian gaming. It will focus primarily on the federal Indian Gaming Regulatory Act (IGRA), including its origins, structure, and real-world effects. In addition to mastering the pertinent legal issues, students will be asked to consider a series of questions about Indian gaming law, including (1) what are its real objectives? (2) does IGRA, as it is currently being applied, promote those objectives? and (3) given the expansion of non-Indian gaming in recent years, should IGRA be revised to better serve those objectives? Course materials will include IGRA and related case law, materials from the United States Department of Interior setting forth current federal policy, and various tribal-state compacts. LEC.

LAW 926. Insurance. 2.5-3 Hours.
The nature of insurance; regulation of insurance companies; insurable interest; interests of third persons in insurance policies and proceeds; the insured event; warranties; representations; concealment; the marketing of insurance. LEC.

LAW 968. Intellectual Property. 3-4 Hours.
An introduction to substantive patent law, copyright law, and trademark registration designed (1) to provide background knowledge for those interested primarily in the general law practice and (2) to provide a foundation for future specialization in patents, copyrights, and trademarks. LEC.

LAW 945. International Commerce and Investment. 3 Hours.
Examines the transactional aspects of the sale of goods and direct investment across national borders. The focus is on private international business transactions. Among the subjects covered regarding international commerce (sale of goods) are contract drafting, documentary sales, commercial terms, electronic commerce, agency and distributorship, and contract performance. Among the subjects covered regarding international investment are joint ventures, corporate codes of conduct, corrupt practices, transfer pricing, expropriation, and dispute resolution. This course complements (but is independent of) International Trade Regulation. LEC.
LAW 929. International Law Moot Court Competition. 2 Hours.
Spring semester. Open only to the team of students (usually five) selected by a competition held in the preceding fall semester. All students (including first-year students) are eligible to compete for a position on the team. Once selected, the team participates in the Jessup International Law Moot Court Competition, for which briefs are prepared over the winter recess and oral arguments are usually held in February. Graded Credit/No Credit. FLD.

LAW 944. International Trade Law. 3 Hours.
Examines the regulatory aspects of the sale of goods across national borders. Key topics include the history and institutions of the GATT-WTO system, accession to the WTO, dispute settlement under WTO rules, regulation of import duties, rules on customs classification and valuation, non-tariff barriers, statutory forms of relief from import competition, government regulation of export trade, regional trade regimes, and ideological and policy issues relating to trade liberalization and globalization. This course complements (but is independent of) International Commerce and Investment and is the basis for more advanced study on international trade law. LEC.

LAW 973. International Trafficking in Persons Seminar. 2-3 Hours.
This course examines issues related to trafficking in women and children from an international and comparative perspective. The primary focus of the course is commercial sexual exploitation and trafficking for the purpose of prostitution. Trafficking for other slave-like practices such as forced labor, the exploitation of immigrants for domestic service, the sale of children for irregular inter-country adoption, the involvement of children in sex tourism and armed conflict, and the sale of wives legalized by transnational marriages will also be covered. In covering these topics, students will be asked to understand the UN Protocol to Prevent, Suppress, and Punish Trafficking in Persons, Especially Women and Children; the Convention for the Suppression of the Traffic in Persons and of the Exploitation of the Prostitution of Others; the Convention on the Elimination of All Forms of Discrimination Against Women; the Convention on the Rights of the Child; the Hague Convention on the Protection of Children and Cooperation in Respect to Intercountry Adoption, and other legal provisions. LEC.

LAW 938. Introduction to Copyright in Literacy and Artistic Works. 1 Hour.
Provides students with a basic introduction to copyright issues related to literary and artistic works (excluding music). Among the subjects covered will be: subject matter of copyright, the meaning and significance of publication, formalities of copyright, the nature of rights under the common law and statutory copyright regimes, duration of copyright, transfers of copyright, infringement actions, remedies, and federal preemption. LEC.

LAW 931. Introduction to Elder Law. 2-2.5 Hours.
This course is an introduction to many of the legal issues that face a person who is elderly or has a disability, and focuses on the practical aspects of advising such a client. Topics covered are income (including Social Security and SSI), asset management (including Durable Powers of Attorney and living trusts), estate planning, special needs trusts, health care planning and decision making, Medicare, long-term care planning, long-term insurance, Medicaid, housing issues, guardianship, elder abuse, and end of life issues. LEC.

LAW 918. Islamic Law. 3 Hours.
Examines the history, doctrine, texts, and role of Islamic law (Shari’a) throughout the world. This course complements (but is independent of) LAW 879. The course focuses on the background and birth of the Arab-Islamic Empire, the life and times of the Prophet Muhammad (PBUH), the development of Islam, the Rashidun, Umayyad, and Abbasid Caliphates, Moghul and Ottoman Empires, the Koran and Sunnah and other sacred texts, the Sunni-Shi’a split, the principal schools of Islamic law, the status of women and religious minorities, and principles of the substantive areas of law, including criminal, family, inheritance, contract, property, business, banking, and international law. Also covered are issues of economic growth, marginalization, and terrorism LEC.

LAW 933. Judicial Clinic. 3 Hours.
Students serve as law clerks for state and federal judges performing legal research for the judges and observing proceedings in the courtroom and chambers. There is a classroom component to the clinic. Students also submit weekly journals to the clinic director and prepare either a paper based on their experiences or make a class presentation. Students must enroll for the academic year, for three credits per semester. FLD.

LAW 845. Jurisdiction. 2-3 Hours.
This course deals with issues relating to a court’s power to adjudicate claims. Topics covered may include jurisdiction over persons or property, subject matter jurisdiction, venue, determining the applicable law, joinder of parties, and recognition and enforcement of judgments. Prerequisite: Civil Procedure. Not open to students who have had the School’s two-semester, six-hour course or its equivalent. LEC.

LAW 934. Jurisprudence. 2-3 Hours.
Considers issues in legal and political theory or philosophy. The focus is on theories of adjudication, theories of law, and application of these theories to particular cases and problems. Other topics may be added, such as the philosophy of criminal punishment, the theory of legal interpretation, feminist jurisprudence, law and literature, or law and sociology. A writing project is required in place of a final examination. LEC.

LAW 935. Juvenile Law. 2 Hours.
A study of the juvenile justice system, juvenile courts, and the children and youth who come under juvenile court jurisdiction. Among the subjects covered will be: the history and philosophical basis of the juvenile court, child abuse and neglect, termination of parental rights, status offenders, children who commit criminal offenses, taking children and juveniles into custody, search and seizure, interrogation, intake, informal supervision, diversion, protective and temporary custody, pretrial detention, waiver of adult court, and adjudicatory and dispositional hearings. LEC.

The Kansas Journal of Law and Public Policy publishes articles by scholars, public officials, and others, including student staff members, on public policy topics. The staff of the Journal is chosen on the basis of a yearly writing competition. First year members of the Journal undertake editorial work and write comments for possible publication. Journal members may not enroll concurrently in the Kansas Law Review. FLD.

The Kansas Journal of Law and Public Policy publishes articles by scholars, public officials, and others, including student staff members, on public policy topics. The staff of the Journal is chosen on the basis of a yearly writing competition. Second year members of the Journal select articles for publication, edit the articles, and undertake the other responsibilities of publication. Journal members may not enroll concurrently in the Kansas Law Review. FLD.

LAW 840. Kansas Supreme Court Research Clinic. 3 Hours.
This clinic serves the dual goals of providing students with practical research experience and assisting the Kansas Supreme Court by providing needed research support. Students are assigned research projects from the Kansas Supreme Court and the Office of Judicial Administration as arranged by the instructors. Students employ a variety of methodologies to conduct thorough research and concisely
convey their findings to the Kansas Supreme Court, culminating with a presentation to the court at the end of the semester. FLD.

LAW 939. Labor Law. 2.5-5 Hours.
A study of the federal regulation of union-employer-employee relationships in the private sector. Subjects include employee organizational rights, union collective action, injunctions, federal preemption, the duty of bargain, antitrust limitations, the enforcement of the collective bargaining agreement, grievance procedures and arbitration, the union's duty of fair representation, and internal union affairs. LEC.

LAW 941. Land Transactions. 2-3 Hours.
This practice-oriented course treats basic transactions in land with primary emphasis on sales transactions involving residences and farms. A sales transaction is surveyed from the initial stage of marketing with real estate brokers through the making of the contract and the financing to final consummation and transfer of title. Topics are conveying, risks of title defects, and methods of title assurance, remedies on contract breach, American recording systems, condominiums, land descriptions, and financing methods. LEC.

LAW 942. Law and Bioethics. 2-3 Hours.
Explores a variety of topics at the intersection of bioethics and the law. Includes the definition of death, baby-selling, organ transplantation, surrogate parenting, human cloning, advance directives and end-of-life decision-making, physicians' authority to withhold "futile" care, the treatment of patients in persistent vegetative states, and rationing of healthcare. Students will have the option of fulfilling the writing requirement with one additional hour of independent research. LEC.

LAW 867. Law and the Arts. 2-3 Hours.
Provides students with an introduction to the laws of which they must understand to represent visual artists, collectors, and museums. Covers, among other subjects, intellectual property rights in art, licensing of artworks, sales and purchase of artworks, importation and export of art, etc. LEC.

LAW 953. Law Practice Management and Legal Entrepreneurship. 2.5-3 Hours.
Increasingly, law graduates are leaving law school and establishing their own law firms. This course is designed to introduce law students to the various issues that they will face as "legal entrepreneurs" and help them make the transition from law student to practicing lawyer in a solo or small law firm. Among the topics covered are law firm space, staffing, document production, marketing, etc. Students in the class will draft multiple documents such as a retainer letter, a client bill, and advertising copy. There is no examination in the course. LEC.

LAW 950. Law Review. 1-2 Hours.
The Kansas Law Review publishes scholarly commentary on the law by professors, practicing lawyers, judges, and law students. Students are selected for membership by competition, and are responsible for publishing five issues of the Review each year. Students select articles for publication, edit the articles, check citations, and write notes and comments for possible publication. Students must enroll for the academic year, for one-two credits per semester. Students enrolled in this course will not be permitted to enroll in the Kansas Journal of Law and Public Policy. Graded on a Credit/No Credit basis. FLD.

LAW 952. Legal Aid Clinic. 3-6 Hours.
Students provide legal assistance, including direct client representation, to indigent child and adult clients with active cases in Douglas County District Court and Lawrence Municipal Court. Recent areas of representation have included juvenile criminal defense, misdemeanor municipal defense, family law, protection from abuse, landlord-tenant, and other civil cases. A weekly seminar meeting accompanies the field work and allows students and instructors to study the methodologies underlying lawyering tasks in context, thereby merging theory with practice. Supervision meetings with faculty are designed to encourage creative case planning, practice management, and individual professional development through feedback and critique. Students are required to be qualified under Kansas Rule 719, which requires a minimum of 60 hours of course work. Students must apply to the clinic and be accepted before enrolling. Applications and deadlines are available in Room 105. Prerequisite: Trial Advocacy and Professional Responsibility; Qualification under Kansas Rule 719. See Clinic and Externship Rules in the Academic Regulations section of this bulletin. FLD.

LAW 955. Legislative Clinic. 2.5-3 Hours.
Students are assigned to state legislators or other offices that participate in the legislative process during the legislative session. A 2-hour seminar accompanies the fieldwork. A paper with two drafts is a required part of this seminar. FLD.

LAW 954. Legislation and Statutory Interpretation. 2-3 Hours.
This course examines the legislative process, the relationship between the common law and statutes, and statutory interpretation. It focuses primarily on the theoretical and practical aspects of statutory interpretation, including overall theories of interpretation, the canons of statutory interpretation, and the use of legislative history. Because statutory interpretation is a skill needed by all attorneys, the course is designed to be of interest to any student. LEC.

LAW 982. Lesbian, Gay, Bisexual, Transgender and Questioning (LGBTQ) Seminar. 2-3 Hours.
This course will explore the emergence of the LGBTQ civil rights movement and will cover numerous legal topics at the intersection of law and practice involving issues significant to LGBTQ clients. Among others, topics will include: marriage, divorce, employment discrimination, family creation, healthcare and tax consequences. Students will be asked to prepare legal documents and will complete a major drafting project. The course seeks to provide students with skills and knowledge to meet the needs of this unique client base. LEC.

LAW 956. Local Government Law. 2.5-3 Hours.
The structure, functions, and jurisdictions of local governmental units; intergovernmental arrangements and relationships, financing and staffing local government; tort liability of local governments. LEC.

LAW 958. Media and the First Amendment. 2.5-3 Hours.
The study of the First Amendment freedoms of speech and press. The focus is on both traditional media, such as newspapers and broadcast radio and television, and digital media, including blogs, that rely on the Internet to distribute news, opinion, entertainment, and advertising. LEC.

LAW 959. Media Law Clinic. 2.5-3 Hours.
Practical, in-depth studies of law, policy, regulation, and professional ethics that shape the relationship between the communications media and such institutions as the judiciary, legislature, agencies, business, education, and the professions. Individual students or teams of students, supervised by the clinic director, prepare research reports in response to requests from lawyers, policy-makers, publishers, and others who are concerned with the free flow of accurate, fair, and timely news and information in a democratic society. The clinic is designed to advance students' skills and knowledge in analyzing the rights and responsibilities of the communications media and the individuals and organizations that depend on those media to inform the citizenry. FLD.

LAW 885. Medical-Legal Partnership Clinic. 1-4 Hours.
Students provide legal assistance to clients referred from the Family Health Care Clinic in Kansas City, Kansas. Students will engage, under
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faculty supervision, in interviewing, counseling, negotiation and other aspects of the legal process. The cases may include health law, family law, immigration and other civil law problems. Students will work directly with one of the Family Health Care Center medical teams. Students must enroll for full year. Prerequisite or corequisite: Professional Responsibility. FLD.

LAW 947. Mergers and Acquisitions. 2-3 Hours.
An examination of the substantive law of corporate mergers and acquisitions. Coverage includes structure of the transaction; the buyer’s due diligence process; hostile takeover defenses and the responsibilities of the target’s board; state takeover legislation and issues of federal preemption; friendly acquisitions and the seller board’s duties; conflicts between majority and minority shareholders; and federal regulation of tender offers via the Williams Act. Prerequisite: Business Associations I and II (Business Associations II may be taken as a corequisite) or Business Organizations. LEC.

LAW 960. Moot Court Competition. 1 Hour.
Spring semester. A traditional moot court competition based upon an appeal to the United States Supreme Court with written briefs and oral argument rounds. The competition is conducted as a tournament, with elimination rounds and seeding of teams of pairings after the preliminary rounds. Students compete as two-person teams with two teams advancing to the final round. The competition is limited to second-year students and is usually completed by Mid-April. Graded on a Credit/No Credit basis. Prerequisite: Second-year status. FLD.

LAW 961. Moot Court Council. 1 Hour.
Spring semester. The Moot Court Council consists of the third-year students who represent KU in various national moot court competitions. All students are selected through the KU spring moot court competition (LAW 960) in their second year. The council administers the KU spring moot court competition under the supervision of the faculty member responsible for the course. The council also assists with tasks associated with participation in the various national competitions as assigned by the faculty member responsible for the course. Graded on a Credit/No Credit basis. FLD.

LAW 964. National/International Moot Court Competitions: _____. 1-2 Hours.
Students compete in various national and international moot court competitions (except the Jessup International Moot Court Competition, LAW 929). All students are selected through the KU spring moot court competition (LAW 960) in their second year. Teams will write a brief and participate in practice oral arguments as required by the faculty member responsible for three particular competition, including at least three arguments judged by law faculty, practicing lawyers, or judges. Students travel to regional, national, and international competitions as applicable. Competitions include: Bankruptcy Law Moot Court, Criminal Law Moot Court, Criminal Procedure Moot Court, European Law Students Association International Trade Moot Court, Environmental Law Moot Court, First Amendment Moot Court, National Moot Court, and Stetson International Environmental Moot Court and Health Law Moot Court. Students also must enroll in the Moot Court Council, LAW 961. Graded on a Credit/No Credit basis. FLD.

LAW 967. Native American Natural Resources. 2-3 Hours.
This course provides a detailed examination of natural resource law as it applies to Indian Country. Among the topics to be discussed are water law, environmental protection, and subsurface property rights. (Same as ISP 882.) LEC.

LAW 965. Nonprofit and Tax-Exempt Organizations. 1-2 Hours.
Focuses on the legal issues affecting nonprofit and tax-exempt organizations, with primary emphasis on state nonprofit corporation codes and the Internal Revenue Code. Issues covered include allocation of governance responsibility between members and directors, the role of states attorneys general, charitable trust law, obtaining and maintaining tax exemption, private inurement and private benefit, intermediate sanctions, reporting and disclosure requirements, and consequences of unrelated business income. Prerequisite: Business Associations I or Business Organizations and Federal Income Taxation. LEC.

LAW 966. Oil and Gas. 2.5-3 Hours.
The oil and gas lease; expressed and implied duties under a lease; the effect of various conditions of ownership on oil and gas transactions; oil and gas conveyances; unitization and pooling; conservation of oil and gas. LEC.

LAW 977. Patent Law. 2.5-4 Hours.
This class explores the doctrine, policy and practice of patent law in the United States. It examines the challenges posed to patent law by new technologies, such as biotechnology, pharmaceuticals, the Internet and nanotechnology. Patent law systems in other countries and the role of international patent treaties are also considered. Prerequisite: Intellectual Property Law. LEC.

LAW 979. Patent Practice. 2.5-3 Hours.
This course focuses on the practical application of patent law principles to the practice of patent law, including: assessing patentability, preparing and prosecuting patent applications, and analyzing infringement concepts. Students will examine patent statutes and United States Patent and Trademark rules and guidelines governing patent prosecution, as well as court decisions impacting and interpreting patents. The course will involve in-class and take-home assignments and workshops designed to expose students to situations encountered in actual patent practice, including the preparation o fan opinion of patentability, office action response, and drafting claims. Prerequisite: Intellectual Property and Patent Law. LEC.

LAW 987. Pension and Employee Benefits Law. 1-2.5 Hours.
 Covers the practical aspects of representing employers and employees in regard to pension plans, profit sharing plans, and other forms of tax- sheltered deferred compensation. Participation, contribution, vesting, distribution, plan qualification, and operational rules will be examined. Prerequisite: Federal Income Taxation. LEC.

LAW 969. Practice in Kansas. 2.5-3 Hours.
Designed for the student who intends to enter a private general practice in Kansas. Topics include substantive law of Kansas in domestic relations, landlord-tenant relations, debt collection, probate, and selected areas of criminal law and general civil practice. Students will develop practical skills in pleading and discovery techniques. LEC.

LAW 970. Pretrial Advocacy. 2.5-3 Hours.
This skills course is designed to teach the fundamentals of pretrial practice from the client’s first visit to the day before trial begins. Students will learn to interview and counsel clients, consider alternatives to litigation, draft pleadings, conduct and respond to discovery, and negotiate and draft settlement documents. FLD.

LAW 971. Product Liability. 2.5-3 Hours.
Intensive study of legal developments and problems relating to compensation for injuries resulting from defective products. LEC.

LAW 972. Professional Responsibility. 2-3 Hours.
Fall and spring semesters. Must be completed by the time the student finishes 60 hours of law school. Considers some of the history of the profession, training for the practice, the lawyer in the office, the lawyer and the public, the lawyer as lawmaker, limitations on personal conduct, the lawyer as judge, the canons of professional ethics, and many other incidents to the practice. Required course. LEC.
LAW 895. Project for Innocence and Post-Conviction Remedies. 2.5-3 Hours.
Provide assistance to the inmates incarcerated at the federal and state facilities in Kansas. Representation includes direct appeals, post-conviction and DNA litigation. Students interview clients, conduct fact investigation, determine the scope of representation and write court briefs. Students who satisfy Kansas Supreme Court Rule 719 may participate in court hearings. Students must enroll for the academic year, for 3 credits per semester. Concurrent enrollment in LAW 896 is required. Prerequisite or Corequisite: Criminal Procedure. FLD.

LAW 896. Project for Innocence and Post-Conviction Remedies Class. 1 Hour.
Designed to acquaint students with the issues surrounding the professional skills, substance, and ethics that are critical to student participation in LAW 895, Project for Innocence and Post-Conviction Remedies. A corequisite with LAW 895 and enrollment is limited to students concurrently enrolled in that course. LEC.

LAW 993. Public Health Law. 2-3 Hours.
A broad view of the problems of disease, treatment, and health care delivery from a population-based perspective. The focus is on collective responsibility for ensuring the conditions for a healthy society and the laws that relate to that objective. Topics may include international human rights and bioterrorism; infectious disease control, such as vaccination, quarantine, and surveillance; problems of urbanization, including sanitation, obesity, and public safety; constitutional rights, such as privacy, free speech, freedom of religion, and regulation of professions; formal and informal regulation through public health authorities and tort liability. LEC.

LAW 974. Public International Law. 2.5-3 Hours.
A general survey of the legal system governing the behavior of states and public international organizations. Includes the nature and sources of international law and the role of international law and procedures in the maintenance of world peace and security, the protection of human rights, the management of the environment, and the regulation of international economic relations. LEC.

LAW 975. Public Lands and Natural Resources. 2.5-3 Hours.
Devoted to the law and legal systems that govern the classification and use of one-third of America’s land mass. Includes a survey of the acquisition and disposition of the public domain; general federal statutes and doctrines that affect public land law; and different forms of federal lands classifications, including national parks, scenic rivers, and grazing lands. (Same as ISP 877.) LEC.

LAW 976. Public Policy Clinic. 3 Hours.
The Public Policy Clinic undertakes in-depth, balanced policy studies in response to requests from public officials. Individual students, or teams of students, supervised by the clinic director, prepare the research reports. Designed to give students practical experience in applying analytical policy methods to public policy issues. FLD.

LAW 984. Research Workshop: _____. 2-3 Hours.
Offers a limited number of students the opportunity to conduct related independent research projects under faculty supervision in some selected area of study. Each student will write an independent research paper for two credit hours as described under LAW 924 Independent Research; each student will also engage in one credit hour of related class discussion and assigned readings. Participation in any Research Workshop counts as, and is subject to the same rules as an independent research project. Participation in a Research Workshop constitutes 2 hours of independent research credit for the purpose of computing the maximum number of independent research hours. Each proposed workshop must be approved by the Student/Faculty Assembly. LEC.

LAW 986. Securities Regulation. 2.5-5 Hours.
An analysis of federal and state securities law and state "Blue Sky" laws. Prerequisite: Business Associations I and Business Associations II or Business Organizations. LEC.

Examines legal, governmental, political, social, cultural, and economic issues associated with American Indian tribal sovereignty and self-determination. Includes the source and scope of tribal sovereignty; the threats to tribal sovereignty; and the methods by which tribal sovereignty can be strengthened and revitalized. (Same as ISP 883.) LEC.

LAW 994. Special Topics: _____. 1-3 Hours.
The content of this course varies, and will be announced prior to pre-enrollment. May be repeated if there is no duplication of subject matter. LEC.

LAW 957. Sports Law. 2-3 Hours.
Legal issues pertaining to professional and amateur sports: terms and enforcement of professional contracts, including the role of arbitration; labor law and collective bargaining issues; the representation of professional athletes and the regulation of agents; antitrust aspects; intellectual property rights; the National Collegiate Athletics Association and the regulation of intercollegiate sports; and issues of racial and gender equity. LEC.

LAW 842. State Constitutional Law. 2-3 Hours.
All 50 states have their own constitutions and cases interpreting those charters. State constitutions sometimes mirror or duplicate federal constitutional provisions, but state constitutions also contain provisions not found in the U.S. constitution. In our federal system, both federal and state constitution law are important and vibrant. This course explores the similarities and the differences in federal and state constitutional law. Coverage includes structural aspects of state constitutional law (dual sovereignty, interpreting state constitutions independently of the federal constitution, the organization of state government., restrictions unique to the state constitutions, and the amendment process, as well as individual rights under state constitutions (equality, due process, criminal procedure, property, religion education, "right to a remedy"/"open courts", and privacy). Prerequisite: Introduction to Constitutional Law. LEC.
LAW 855. Taxation of Business Enterprises. 2-3 Hours.
A study of the effect of the federal income tax on corporations, partnerships, and limited liability companies, as well as their owners. Includes coverage of federal income tax provisions having especially important effects on business activities in general. Prerequisite: Federal Income Taxation and Business Associations I or Business Organizations. LEC.

This course will explore the development of legal ideas about the legal regulation of armed conflict, with special attention given to the role and treatment of civilians and other non-combatants. It will not cover American military justice under the Uniform Code of Military Justice nor will it cover internal discipline of military forces. Among the subjects covered will be the history of attempts to legally regulate armed conflict, the law of war at sea, in the air, and in space, treatment of civilians by combatants, treatment of property, particularly significant cultural property by combatants, and non-military combatants, including pirates and terrorists. LEC.

LAW 916. The State and Religion. 2-3 Hours.
An in-depth examination of court decisions and statutes concerning the first amendment religion clauses. Specific topics will include the definition of religion, school prayer, religious symbols, aid to sectarian institutions, and religious freedom. There will be some comparative material presented as well. The basic course is a 2 hour seminar but any student may also enroll for 3 hours on the condition that they submit a topical 10-12 page paper. LEC.

LAW 854. Topics in Advanced Legal Research: _____ 1 Hour.
Focuses on advanced legal research methodologies and sources related to a specific area of law. The area of law will be selected by the instructor and announced prior to enrollment, and could include environmental law, criminal law, tribal law, business law, intellectual property, or international law, among others. Depending on the area of law being covered, sources will include administrative materials, loose-leaf services, treatises, practice materials, association regulations, commercial databases, and the Internet. Students will prepare a research plan in a specific area of the law being covered. Each student will turn in research logs that document the steps taken to complete research problems. LEC.

LAW 962. Topics in Law and Philosophy, Mock Trial Council. 2, 1 Hours.
Explores various topics at the intersection of law and philosophy. Content varies but may include: What is freedom and what role should government play in a free society? What is equality and what is the best way to achieve it? What is the relationship between law and social justice? What is the source and value of human rights? Should social and economic rights be legally guaranteed? How should government redress historical injustices such as slavery, apartheid, and the Holocaust? Students must complete a substantial seminar paper in place of a final exam. (Same as PHIL 885.) The Mock Trial Council consists of third-year students who successfully completed Mock Trial Competition in their second year. These students help administer the selection process for the mock trial competition under the supervision of a faculty member responsible for the mock trial competitions and course. The council also assists in identifying competitions and with tasks associated with participation in regional and national mock trial competitions and with preparing our competition teams to compete. Graded on a Credit/No Credit basis. Prerequisite: LAW 949. LEC.

LAW 991. Torts II. 2-2.5 Hours.
Examines areas of tort law not considered in Torts I, such as misrepresentations, defamation, privacy, misuse of legal procedures, and interference with advantageous relationships. LEC.

LAW 948. Transactional LawMeet. 2 Hours.
Spring semester. A national competition, the goal of which is to provide participants with a meaningful and realistic simulation of transactional practice. The competition involves regional rounds followed by a national round of regional winners. Each round consists of three distinct phases. First, students work in teams of two or three to prepare a proposed draft agreement on behalf of one of the two parties to a business transaction. Second, each team prepares mark-ups to draft agreements prepared by the opposing teams they will encounter at the regional or national site. Finally, the teams meet to negotiate the final contours of the deal. Enrollment requires permission of the instructor and is competitive, based on an online simulation course in the fall semester and academic performance in Contract Drafting. Graded on a credit/no credit basis. Prerequisite: Contract Drafting. LEC.

LAW 992. Trial Advocacy. 2.5-3 Hours.
A skills course designed to teach the fundamentals of trial practice including opening and closing statements, direct and cross examination, use of demonstrative evidence, introducing exhibits, making evidentiary objections, and courtroom procedure and decorum. Combines skills workshops, lecture/demonstrations, and a mock trial. Prerequisite: Evidence. FLD.

LAW 998. Tribal Judicial Support Clinic. 3 Hours.
Students are assigned research projects from participating tribal courts as arranged by the instructor. Students provide research assistance to tribal court personnel in an array of projects that range from tribal code development, legal research and drafting of legal memoranda and judicial orders. Prerequisite: Federal Indian Law; Sovereignty, Self-Determination, and the Indigenous Nations; or Native American Natural Resources. LEC.

LAW 996. Trusts and Estates. 2.5-4 Hours.
Interstate succession; execution, construction, and revocation of wills; rights of the surviving spouse (including elective share); creation, construction, and termination of trusts; powers of appointment; future interests and the Rule Against Perpetuities; basic introduction to the federal taxation of estates and gifts; fiduciary administration of trusts and estates. LEC.

LAW 995. Water Law. 2-3 Hours.
A study of water rights including the riparian and prior appropriation doctrines for surface water, and the various doctrines for groundwater. Private and public water distribution organizations, and special water districts. Water pollution control. Interstate conflicts over water resources. Federal government involvement in water distribution including federal powers and programs. Indian and reserved rights. Kansas water law. (Same as ISP 879.) LEC.

LAW 997. Workers' Compensation. 2.5-3 Hours.
Primary emphasis will be placed on workers’ compensation (industrial insurance), where some of the basic problems of work-connected injuries and diseases will be considered. Current proposals for compensating the traffic victim without reference to fault will also be treated by way of comparison to the workers’ compensation system. As time permits, other areas of social legislation may be surveyed. LEC.
Juris Doctor Program

Law Programs

The First-Year Curriculum

First-year students take courses that ensure they are well grounded in the subject matter that lies at the heart of the Anglo-American legal tradition and that provide a foundation for upper-level classes and for the practice of law. Two aspects of the first-year curriculum — the lawyering course and the small-section program — contribute immeasurably to the process of learning the law at KU.

The lawyering course focuses on the skills and values of the profession. Taught by faculty members with extensive practice experience who meet weekly with students in both a traditional classroom setting and small groups, the course introduces students to the tools all lawyers use and helps bring students to an understanding of the legal system and legal institutions, case law and statutes, legal research and writing, and advocacy.

All first-year students take one of their other required courses in a small section of approximately 20-25 students. These classes provide an informal learning atmosphere and encourage in-depth discussions and critical analysis.

Upper-Level Courses

More than 100 courses are available to upper-level students, covering a broad range of practice areas from environmental law to the law of Indian gaming. Many are seminars, simulation courses, or clinics. For curriculum guides to Business and Commercial Law; Civil Litigation; Constitutional Law; Criminal Law; Elder Law; Environmental and Natural Resources Law; General Practice; Intellectual Property Law; International and Comparative Law; Litigation; Media, Law, and Technology; Public Law; Tax Law; and Tribal Law, see the Academics (http://www.law.ku.edu/areas) section of the law school’s website.

Within the context of their particular interests and career goals, the law school strongly encourages students to consider certain principles when selecting upper-class courses.

- First, students should develop core knowledge and essential skills during the second year by taking menu-required courses to lay the foundations for taking advanced courses in the third year.
- Second, given the importance of statutory law and regulatory systems to the modern legal system, students should take courses that focus on complex codes (including statutes, treaties or regulations) and familiarize them with administrative and regulatory systems, also preferably during the second year.
- Third, to provide perspective on the legal system and to be prepared to practice in the modern global environment, before graduation students should take at least one class that concerns a legal system other than the federal or state system in the United States.

To implement these principles, the law school encourages students to talk individually with their faculty advisors about particular courses.

Clinical Programs and Externships

The KU law school was a pioneer in experiential education and today offers many faculty-supervised clinical opportunities (http://www.law.ku.edu/clinics) and externships. All law students have a chance to participate in at least one of the school’s 12 clinics and externships.

These programs expose students to the tasks and challenges faced by lawyers in practice. Law students, acting under close faculty supervision, learn substantive law, develop legal skills, and learn professional values in actual practice settings.

- The Criminal Prosecution Clinic gives students an opportunity to work with prosecutors in Kansas state district attorneys’ offices as well as the office of the U.S. Attorney. They participate in nearly all phases of the criminal process, including trial work.
- In the Elder Law Externship, students work under the supervision of experienced attorneys representing clients in matters such as income maintenance, access to health care, housing, social security, Medicare/Medicaid, and consumer protection.
- The Externship Clinic provides students an opportunity to perform legal work under the supervision of a practicing attorney at pre-approved governmental agencies and public international organizations.
- Students in the Judicial Clerkship Clinic serve as law clerks for state and federal trial judges in Kansas City, Topeka, and Lawrence.
- The Kansas Supreme Court Research Clinic serves the dual goals of providing students with practical research experience and assisting the Kansas Supreme Court by providing needed research support. Students are assigned research projects from the Court and the Office of Judicial Administration.
- Students in the Legal Aid Clinic represent indigent citizens of Douglas County in areas including domestic relations, landlord-tenant disputes, and other civil actions. They also serve as public defenders in municipal and juvenile court.
- The focus of both the Legislative Clinic and the Public Policy Clinic is law-making. Students in the Legislative Clinic are assigned as interns to state legislators during the spring legislative session. In the Public Policy Clinic, students undertake policy studies in response to requests from public officials.
- Media Law Clinic students, under the supervision of the clinic director, respond to questions presented by lawyers, policymakers, publishers, and others concerned with the media.
- In the Medical-Legal Partnership Clinic, students provide legal assistance through the Department of Family Medicine at the University of Kansas Medical Center in Kansas City, Kan., and the Health Care Access Clinic in Lawrence, Kan. Cases may include health law, family law, housing law, public benefits law, disability law, and immigration law.
- In the Paul E. Wilson Project for Innocence and Post-Conviction Remedies, students counsel and represent state and federal prisoners in appellate and post-conviction litigation in state and federal courts.
- In the Tribal Judicial Support Clinic, students provide research assistance in an array of projects ranging from tribal code development to drafting memoranda and orders.

International Study

The law school sponsors several study abroad (http://www.law.ku.edu/study-abroad) programs for its students. They include

1. A 1-semester program in London, through the London Law Consortium, of which the KU law school is a founding member;
2. A summer program in Limerick and Dublin, Ireland, in collaboration with the University of Limerick; and
3. A summer program in Istanbul, Turkey, in collaboration with Bahcesehir University.
4. A summer program in Peking, China, in collaboration with the UMKC China Consortium and Peking University School of Law.

All have been approved by the American Bar Association. In addition, KU history and law faculty members collaborate to sponsor a summer program in Cambridge, England, focusing on Anglo-American legal history. This program is open to undergraduates and to entering law students before they begin their studies in the fall term of their first year. KU law students also may choose from among numerous other ABA-approved summer study abroad programs.

**Accelerated Program**

The School of Law offers a summer program (http://www.law.ku.edu/summerstart) that is fully integrated with the curriculum of the fall and spring semesters. First-year students may begin their studies in either the summer session or the fall semester. Students beginning law studies in the summer session may, but are not required to, complete their law degrees in 27 months by being enrolled continuously in 2 academic years and 3 contiguous summer sessions. About one-third of the students in each year’s entering class begin their studies in the summer.

The summer program consists of 2 consecutive 5-week sessions that begin in mid-May and conclude at the end of July. Each course offered during the summer meets approximately 80 minutes a day, 5 days a week. A first-year student takes 2 required first-year courses in each session. At the end of the second session, the student has accumulated 8 of the 90 hours required for graduation.

In addition to first-year courses, several upper-level courses usually are offered in the summer. There are opportunities to participate in Legal Aid Clinic, Project for Innocence and Post-Conviction Remedies, Externship Clinic, and Judicial Clinic during both summer sessions. Almost all summer session courses (including the clinics) carry 2 to 2.5 credit hours a session. Upper-level students may take 2 courses each session. Enrollment in more than 10 hours must be approved by the associate dean for academic affairs.

**Certificates**

**Certificate Programs**

The law school offers 8 certificate programs (http://www.law.ku.edu/certificates):

1. Advocacy
2. Business and Commercial Law
3. Elder Law
4. Environmental and Natural Resources Law
5. International Trade and Finance
6. Media, Law, and Technology
7. Tax Law
8. Tribal Lawyer

Each allows students to focus on an area of law and develop expertise in it. The requirements for each program are in the Academics (http://www.law.ku.edu/areas) section of the law school’s website. During their first year of law school, students should notify the associate dean for academic affairs of their intention to meet certificate requirements.

**Advocacy Certificate Program**

Effective advocacy requires a solid grounding in all aspects of litigation — planning the lawsuit, pretrial practices and procedures, trial advocacy, and post-trial matters — and in alternative forms of dispute resolution. This certificate program provides the means for students to develop basic knowledge and skills in effective advocacy.

**Business and Commercial Law Certificate Program**

The certificate program in business and commercial law is a response to the longstanding demand for attorneys with expertise in the field. Completion of the certificate requirements allows a student to develop the knowledge and skills needed to begin a successful career as a business lawyer. A student who obtains the certificate receives a solid grounding in the basic principles of business and commercial law and is familiar with many of the transactions that business and commercial lawyers commonly encounter in practice. Courses available to students include Business Associations, Commercial Law, Bankruptcy, Securities Regulation, Taxation of Business Enterprises, and Real Estate Finance.

**Elder Law Certificate Program**

The percentage of Americans over 60 has been growing steadily and significantly. The Elder Law Certificate program allows students to focus on the substantive law upon which an elder law practice is based, as well as on unique issues relevant to client counseling and professionalism when dealing with this expanding population. Participation in the Elder Law Externship is one of the requirements of the program.

**Environmental and Natural Resources Law Certificate Program**

Since the inception of modern environmental and natural resources law in the late 1960s and 1970s, the field has become increasingly important, both in its own right and as a result of the frequency with which environmental and natural resources law issues intrude into other, more traditional fields of practice such as real estate, insurance, and corporate law. The Environmental and Natural Resources Law Certificate introduces students to the basics of this constantly changing area of practice so that they become competent to address environmental and natural resources law issues in whatever contexts they arise.

**International Trade and Finance Certificate Program**

Legal practice is global in character. As part of its International and Comparative Law Program, the law school provides students an opportunity to undertake special preparation for such practice — and in particular to study the business nature of that practice — by earning a Certificate in International Trade and Finance.

**Media, Law, and Technology Certificate Program**

Private enterprise and governmental institutions increasingly depend on, and are affected by, communications media. As a result, legal representation in both the private and public sectors is enhanced by an understanding of media influence on the development and administration of law and public policy. The Media, Law, and Technology Certificate focuses on legislative challenges, judicial decision-making, and administrative policy in an era increasingly shaped by information technologies, global networks, and the media. The program’s
requirements include participation in 2 of these 3 clinics: Public Policy Clinic, Legislative Clinic, Media Law Clinic.

**Tax Law Certificate Program**
Demand for attorneys with expertise in the tax field continues to grow. Completion of the tax law certificate requirements allows students to develop the practical and technical skills needed to build successful careers. Certification also assures employers that the student not only has a mastery of basic principles of individual and entity taxation but also is familiar with many of the intricacies of tax law and practice. One of the program’s requirements is a minimum of 20 hours of participation in an Internal Revenue Service-sponsored Voluntary Income Tax Assistance program or a similar nonprofit tax assistance program.

**Tribal Lawyer Certificate Program**
Effectively representing Indian nations and tribes requires an understanding of the extremely complicated body of federal, state, and tribal law that affects every aspect of indigenous societies. The Tribal Lawyer Certificate program ensures that law students who plan careers representing indigenous nations have the skills necessary to appreciate and strengthen the unique nature of tribal legal systems and governments. Among the program’s requirements is an internship with a tribal legal department or a private or public interest law firm specializing in Indian law or participation in the Tribal Judicial Support Clinic.

**Joint Degree Programs**
The law school offers 12 joint degree (http://www.law.ku.edu/jointdegrees) programs:
1. Business
2. East Asian Languages and Cultures
3. Economics
4. Health Services Administration
5. Indigenous Studies
6. Journalism
7. Philosophy
8. Political Science
9. Public Administration
10. Russian, East European and Eurasian Studies
11. Social Welfare
12. Urban Planning

These programs permit a student to receive a master’s degree and a Juris Doctor degree in less time than it would take if the programs were pursued separately. In all cases, a student must be admitted separately to the law school and the other school or department. In the case of the joint law and business program, an applicant must take the Graduate Management Admission Test as well as the Law School Admission Test. The Juris Doctor is awarded concurrently after completion of the joint degree program requirements for each of the joint degree programs. For more information on the joint degree programs and the requirements for each program, see the Academics (http://www.law.ku.edu/areas) section of the law school’s website.

**J.D. Degree Requirements**
The degree Juris Doctor (J.D.) is conferred on candidates who have

- Completed a minimum of 90 credit hours;
- Achieved a minimum cumulative grade-point average of 2.0 (C);
- Taken and completed all required courses;
- Satisfied the “in residence” requirement;
- Satisfied the writing and experiential skills requirements; and
- Completed all requirements within 5 years of initial enrollment (see Withdrawal and Readmission Following Withdrawal (p. 752) in the Regulations section of the law school’s website).

**Credit-Hour Requirement**
Each student must complete a minimum of 90 credit hours. Course work in areas other than law is subject to the limitation described under Course Work Outside the School of Law, below.

**Grade-Point Average Requirement**
During the semester in which the student attains 90 credit hours, he or she must have achieved a minimum cumulative grade-point average of 2.0 (C) in all law school work. Grades for courses taken in areas other than law are not computed in the School of Law cumulative grade-point average.

**Required Courses**
To qualify for the J.D. degree, a student must have completed satisfactorily the following:

- All first-year courses listed below
- Evidence
- Professional Responsibility

Professional Responsibility must be completed by the time the student finishes 60 hours of law school credit.

Upper-level required courses should be taken in the second year of law school. Waiting to take these courses until the third year may cause class conflicts between these required courses and courses traditionally taken by third-year law students.

**First-Year Courses**

**Required First-Year Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 804</td>
<td>Civil Procedure</td>
<td>4</td>
</tr>
<tr>
<td>LAW 809</td>
<td>Contracts</td>
<td>4</td>
</tr>
<tr>
<td>LAW 814</td>
<td>Criminal Law</td>
<td>2-4</td>
</tr>
<tr>
<td>LAW 806</td>
<td>Introduction to Constitutional Law</td>
<td>4</td>
</tr>
<tr>
<td>LAW 820</td>
<td>Lawyering Skills I</td>
<td>2</td>
</tr>
<tr>
<td>LAW 821</td>
<td>Lawyering Skills II</td>
<td>3</td>
</tr>
<tr>
<td>LAW 826</td>
<td>Property</td>
<td>2-4</td>
</tr>
<tr>
<td>LAW 831</td>
<td>Torts I</td>
<td>2-4</td>
</tr>
</tbody>
</table>

**“In Residence” Requirement**
The 90 credit hours required for the J.D. degree must be earned during a course of study in residence at the School of Law extending over a period
of not less than 24 months. For more details, see Maximum and Minimum Load in the Regulations section.

Writing Requirements
Each student must satisfy the upper-level writing requirements by

• The successful completion of 3 writing courses, including 2 professional writing courses and 1 scholarly writing course.

All written work must be of at least C quality.

Experiential Skills Requirement
Each student must satisfy the experiential skills requirement by successfully completing 2 courses identified by the Academic Committee as experiential.

To satisfy the experiential skills requirement, the student must obtain
a grade of C or better in graded courses and a grade of CR in courses
graded Credit/No Credit.

Enrollment materials each semester contain a list of courses that satisfy
the experiential skills requirement. Although this list may vary, courses
that currently satisfy the requirement include the following:

• Advanced Litigation
• Alternative Dispute Resolution
• Business Planning Seminar
• Corporate Transactions: Process and Issues
• Deposition Skills Workshop
• Estate Planning: Practice
• Expert Witness Skills Workshop (if 2 credits)
• Federal Tax Procedure
• Introduction to Copyright in Literary and Artistic Works
• Law and the Arts
• Practice in Kansas
• Pretrial Advocacy
• Trial Advocacy

Course Work Outside the School of Law
A student who is not enrolled in a joint degree program may take up
to 6 hours of graduate-level courses outside the School of Law for
credit toward a law degree, provided the associate dean for academic
affairs approves the course work in advance as relevant to the student’s
education as a lawyer. A student seeking credit toward a law degree for
more than 6 hours of courses outside the School of Law must petition the
academic affairs committee for approval. In such instances, the entire
group of courses from outside the School of Law must be relevant to the
student’s education as a lawyer. A student must receive a grade of B or
better to receive J.D. credit for any such graduate-level nonlaw courses.
However, grades for such courses are not computed in the School of Law
cumulative grade-point average.

A student in good standing may, with the advance approval of the
associate dean for academic affairs, take law courses at another law
school accredited by the American Bar Association. If the student
successfully completes such courses, not more than 30 credit hours will
be transferred and counted toward the 90 credit hours required for the
J.D. Time spent at another institution will count as study in residence
for the purpose of the “in residence” requirement, but grades in courses
taken at the other institution will not be computed in the KU law school
cumulative grade-point average.

A student at another law school accredited by the American Bar
Association may apply for admission with advanced standing. If admitted,
such a student may transfer not more than 30 credit hours of law course
work completed successfully at the other law school toward the 90 credit
hours required for the J.D. degree. Grades for course work completed at
the other law school are not computed in the KU law school cumulative
grade-point average.

For purposes of the 2 preceding paragraphs, a grade of C (or equivalent)
or better is necessary in each course for which transfer credit is sought. In
no event may a student count more than 30 credit hours earned at other
law schools toward the 90 hours required for the J.D. degree.

Two-Year J.D. Program for
Foreign-Trained Lawyers
Students with foreign law degrees may pursue J.D. degrees through
the Two-Year J.D. Program (http://www.law.ku.edu/overview-2-year-
jd-foreign-trained-lawyers) for Foreign-Trained Lawyers. This program
can be an attractive option for such students and makes them more
marketable to employers who see the benefit of having some of their
attorneys bear full credentials in 2 or more jurisdictions. The foreign
students/lawyers also add a cosmopolitan flavor to classes and help
create an excellent professional network for other students and graduates.

Program Structure
Your route to completing the Two-Year J.D. for international attorneys
depends on whether or not certain other countries qualify.

Students who did not obtain a degree in a common law jurisdiction will
begin the program with the standard first-year curriculum. During the
second year of study, these students are eligible for any second- or third-
year course available to all other J.D. students.

Students in the Two-Year J.D. Program are subject to the same grading
system that applies to other J.D. candidates. All other law school and
university rules apply, as appropriate, to students in the Two-Year J.D.
Program. These include rules governing credits from outside the law
school and cross-listing of courses.

The Two-Year J.D. Program is not limited to foreign citizens. American
citizens who have foreign law degrees are also eligible, whether they were
born or raised overseas, or elected to complete their education abroad
after high school.

1 Australia, Bangladesh, Canada, England, India, New Zealand,
Malaysia, Pakistan, Singapore and Sri Lanka will typically qualify
as common law jurisdictions. Hong Kong and Macau also currently
qualify. The dean or a designated faculty member makes the decision
about whether or not certain other countries qualify.
Master of Laws in American Legal Studies

Requirements

The LL.M. in American Legal Studies (http://www.law.ku.edu/overview-llm-international) provides students who already hold a law degree with an introduction to the breadth of American law. Students who complete the one-year LL.M. program are ready for the further study of law in the United States, select bar examinations, and the practice of law internationally. Candidates must hold a basic law degree (LL.B. or equivalent) from an accredited foreign college or university, or a J.D. from an accredited American law school.

Curriculum

The KU Law LL.M. in American Legal Studies will prepare you to take the New York Bar Examination. The curriculum, tied to the requirements set by the New York Bar Examiners, consists of the following:

Course Requirements

Professional Responsibility (fall or spring semester) 2
Lawyering Skills I (fall semester) 2
Introduction to Constitutional Law 4
Select a minimum of 6 credits from the following: 6
  Business Organizations or Business Associations I and/or II
  Conflict of Laws
  Contracts
  Criminal Law
  Criminal Procedure
  Evidence
  Family Law
  Property
  Torts
  Trusts and Estates
  Commercial Law: Payment Systems
  Commercial Law: Secured Transactions

Electives: Students may take 10 credit hours in any course offered by KU Law, subject to relevant prerequisites.

Students seeking a more specialized curriculum may request approval from the Associate Dean for International and Comparative Law to waive one or more course requirements.

Grading System

An LL.M. student whose cumulative GPA falls below a 2.0 at the end of any regular semester is on probation. A student on probation is not in good standing for purposes of the rules of withdrawal or any other rules that require good standing.

All LL.M. students must achieve a cumulative GPA of 2.0 during the semester in which they complete 24 credit hours, or they will not be awarded the degree nor will they be permitted to continue in school. There is no appeal within this law school from this requirement.

LL.M. students are not subject to the mandatory grading guidelines applicable to students seeking a J.D. degree.

Students must complete all requirements for the degree within three years of initial enrollment.

Doctor of Juridical Science Program

S.J.D. Program

Future academic leaders, government leaders, judges, and others with a strong interest in the interplay of legal scholarship and practice may be interested in the Doctor of Juridical Science (http://law.ku.edu/overview-sjd) Program. Candidates for the S.J.D. conduct in-depth legal scholarship and must hold both a basic law degree (LL.B. or J.D.) and a master’s degree (LL.M.), possess a prestigious academic record, and show promise for reaching the highest ranks of legal service in their home countries.

Summary of S.J.D. Program Structure

<table>
<thead>
<tr>
<th>Year and Semester</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Year - Fall</td>
<td>Coursework related to dissertation research 8 total credits (7 coursework credits plus 1 credit hour for dissertation work); Begin research/writing dissertation</td>
</tr>
<tr>
<td>1st Year - Spring</td>
<td>Coursework related to dissertation research 8 total credits (7 coursework credits plus 1 hour credit hour for dissertation work); Continue research/writing dissertation</td>
</tr>
<tr>
<td>1st Summer</td>
<td>1 credit hour for research/writing dissertation</td>
</tr>
<tr>
<td>2nd Year - Fall</td>
<td>1 credit hour for research/writing dissertation</td>
</tr>
<tr>
<td>2nd Year - Spring</td>
<td>1 credit hour for research/writing dissertation</td>
</tr>
<tr>
<td>2nd Summer</td>
<td>1 credit hour for research/writing dissertation</td>
</tr>
<tr>
<td>3rd Year - Fall</td>
<td>1 credit hour for research/writing dissertation</td>
</tr>
<tr>
<td>3rd Year - Spring</td>
<td>1 credit hour for research/writing dissertation; Oral Examination at KU Law; Passage of Dissertation</td>
</tr>
</tbody>
</table>

1 1st Year must be in residence at the University of Kansas School of Law

Dissertation Passage Requirements

- Successful completion of all required courses with a grade of C or better.
- Production of a dissertation of no less than 200 single-spaced pages, including front material, footnotes, and bibliography. Paper type, font, margins, and other format and style matters must conform to KU’s Graduate School Instructions to Candidates for Doctoral Degrees in order for the dissertation to be deposited in the KU Libraries.
- Evidence that the candidate has identified a legal issue of relevance; constructed an original argument about that legal issue; defended that...
argument in a manner that is clear, organized, well-written and well-reasoned; and produced a work that would be publishable as a book, extended law review article, or linked series of law review articles.

- Successful, public defense of the dissertation to committee.
Liberal Arts & Sciences

Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your advisor (http://www.advising.ku.edu) for details). Other years' catalogs (http://catalog.ku.edu/archives) »

I'm looking for

| Anthropology (p. 1110) | Bachelor of Arts and Bachelor of General Studies in Anthropology (p. 1123) Minor in Anthropology (p. 1427) Master of Arts in Anthropology (p. 1427) Doctor of Philosophy in Anthropology (p. 1428) |

Astronomy (p. 1904) Bachelor of Arts in Astronomy (p. 1910) Bachelor of Science in Astronomy (p. 1913) Minor in Astrobiology (p. 1919) Minor in Astronomy (p. 1920)

Atmospheric Science (p. 1461) Bachelor of Science in Atmospheric Science (p. 1472) Minor in Atmospheric Science (p. 1475) Master of Science in Atmospheric Science (p. 1475)

Biology (p. 1476) Bachelor of Arts in Biochemistry (p. 1493) Bachelor of Arts in Biology (p. 1496) Bachelor of Arts in Human Biology (p. 1499) Bachelor of Arts in Microbiology (p. 1511) Bachelor of Science in Biochemistry (p. 1514) Bachelor of Science in Biology (p. 1517) Bachelor of Science in Microbiology (p. 1521) Bachelor of Science in Molecular Biosciences (p. 1524)

Biotechnology (p. 1526) Bachelor of Applied Science in Biotechnology (p. 1526)

Chemistry (p. 1527) Bachelor of Arts in Chemistry (p. 1532) Bachelor of Science in Chemistry (p. 1537) Minor in Chemistry (p. 1542) Master of Science in Chemistry (p. 1543) Doctor of Philosophy in Chemistry (p. 1544)

Child Language (p. 1544) Doctor of Philosophy in Child Language (p. 1545)

Classics (p. 1546) Bachelor of Arts and Bachelor of General Studies in Classical Antiquity (p. 1551) Bachelor of Arts and Bachelor of General Studies in Classical Languages (p. 1553) Minor in Classics (p. 1555) Master of Arts in Classics (p. 1555)

Clinical Child Psychology (p. 1556) Doctor of Philosophy in Clinical Child Psychology (p. 1557)
<table>
<thead>
<tr>
<th>Program</th>
<th>Degree Options</th>
</tr>
</thead>
</table>
| **Communication Studies**                    | Bachelor of Arts and Bachelor of General Studies in Communication Studies (p. 1567)  
Minor in Communication Studies (p. 1569)  
Minor in Leadership Studies (p. 1569)  
Master of Arts in Communication Studies (p. 1571)  
Doctor of Philosophy in Communication Studies (p. 1572) |
| **Computational Biology**                    | Doctor of Philosophy in Computational Biology (p. 1574) |
| **East Asian Languages and Cultures**        | Bachelor of Arts in East Asian Languages and Cultures (p. 1586)  
Minor in East Asian Languages and Cultures (p. 1591)  
Master of Arts in East Asian Languages and Cultures (p. 1592)  
Joint Degree Program in Law and East Asian Languages and Culture (p. 1594) |
| **East Asian Studies**                       | Master of Arts in Contemporary East Asian Studies (p. 1596) |
| **Ecology and Evolutionary Biology**         | Master of Arts in Ecology and Evolutionary Biology, Botany, or Entomology (p. 1613)  
Doctor of Philosophy in Ecology and Evolutionary Biology, Botany, or Entomology (p. 1615) |
| **Economics**                                | Bachelor of Arts and Bachelor of General Studies in Economics (p. 1625)  
Bachelor of Science in Economics (p. 1626)  
Minor in Economics (p. 1627)  
Master of Arts in Economics (p. 1628)  
M.A.-J.D. Degree Program (p. 1629)  
Doctor of Philosophy in Economics (p. 1629) |
| **English**                                  | Bachelor of Arts and Bachelor of General Studies in English (p. 1641)  
Bachelor of Arts and Bachelor of General Studies in Literature, Language, and Writing (p. 1648)  
Minor in English (p. 1650)  
Master of Arts in English (p. 1651)  
Master of Fine Arts in Creative Writing (p. 1653)  
Doctor of Philosophy in English (p. 1653) |
| **Environmental Studies**                    | Bachelor of Arts and Bachelor of General Studies in Environmental Studies (p. 1660)  
Bachelor of Science in Environmental Studies (p. 1661)  
Minor in Environmental Studies (p. 1662)  
Professional Science Masters in Environmental Assessment (p. 1663)  
Graduate Certificate in Environmental Assessment (http://catalog.ku.edu/liberal-arts-sciences/environmental-studies/environmental-assessment) |
| **European Studies**                         | Co-Major in European Studies (p. 1672)  
Minor in European Studies (p. 1675) |
| **French and Italian**                       | Bachelor of Arts in French (p. 1682)  
Minor in French (p. 1686)  
Minor in Italian (p. 1687)  
Master of Arts in French (p. 1687)  
Doctor of Philosophy in French (p. 1689) |
| **Genetics**                                 | Bachelor of Arts and Bachelor of General Studies in Geography (p. 1702)  
Bachelor of Science in Geography (p. 1704)  
Bachelor of Science in Atmospheric Science (p. 1706)  
Minor in Geography (p. 1709)  
Minor in Atmospheric Science (p. 1710)  
Master of Arts in Geography (p. 1710)  
Master of Science in Atmospheric Science (p. 1711)  
Master of Science in Geography (p. 1712)  
Doctor of Philosophy in Geography (p. 1713) |
| **Geography**                                | Bachelor of Arts in Geology (p. 1721)  
Bachelor of Science in Geology (p. 1723)  
Minor in Geology (p. 1730)  
Master of Science in Geology (p. 1730)  
Doctor of Philosophy in Geology (p. 1731) |
Germanic Languages and Literatures (p. 1732)
Bachelor of Arts in German Studies (p. 1742)
Minor in German Studies (p. 1744)
Master of Arts in Germanic Languages and Literatures (p. 1744)
Doctor of Philosophy in Germanic Languages and Literatures (p. 1745)

Gerontology (p. 1747)
Doctor of Philosophy in Gerontology (p. 1747)
Dual-title Ph.D. in Gerontology (p. 1749)

Global and International Studies (p. 1750)
Bachelor of Arts in Global and International Studies (p. 1759)
Co-Major in European Studies (p. 1762)
Minor in European Studies (p. 1765)
Global and International Studies Minor (p. 1765)
Minor in Jewish Studies (p. 1766)
Minor in Middle East Studies (p. 1768)
Master of Arts in Global and International Studies (p. 1769)
Global Master of Arts/Master of Business Administration (p. 1770)
Graduate Certificate in Global and International Studies (p. 1772)

History (p. 1772)
Bachelor of Arts and Bachelor of General Studies in History (p. 1794)
Minor in History (p. 1798)
Master of Arts in History (p. 1801)
Doctor of Philosophy in History (p. 1802)

History of Art (p. 1803)
Bachelor of Arts and Bachelor of General Studies in History of Art (p. 1813)
Minor in History of Art (p. 1814)
Master of Arts in History of Art (p. 1815)
Doctor of Philosophy in History of Art (p. 1815)

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Humanities and Western Civilization (p. 1818)
Bachelor of Arts in Humanities (p. 1823)
Minor in Humanities (p. 1825)
Minor in Peace and Conflict Studies (p. 1825)

Indigenous Studies (p. 1826)
Indigenous Studies Minor (p. 1830)
Master of Arts in Indigenous Studies (p. 1831)
Graduate Certificate in Indigenous Studies (p. 1832)

Information Processing Studies (p. 1833)
Interdisciplinary Studies (p. 1834)

Latin American & Caribbean Studies (p. 1834)
Bachelor of Arts and Bachelor of General Studies in Latin American Area and Caribbean Studies (p. 1837)
Minor in Latin American Area Studies (p. 1839)
Master of Arts in Latin American and Caribbean Studies (p. 1840)

Liberal Arts and Sciences (p. 1842)
Bachelor of General Studies in Liberal Arts and Sciences (p. 1843)

Linguistics (p. 1844)
Bachelor of Arts and Bachelor of General Studies in Linguistics (p. 1851)
Minor in Linguistics (p. 1853)
Master of Arts in Linguistics (p. 1853)
Doctor of Philosophy in Linguistics (p. 1854)

Mathematics (p. 1856)
Bachelor of Arts in Mathematics (p. 1863)
Bachelor of Science in Mathematics (p. 1865)
Minor in Mathematics (p. 1868)
Master of Arts in Mathematics (p. 1868)
Doctor of Philosophy in Mathematics (p. 1869)

Molecular Biosciences (p. 1871)
M.A. in Biochemistry & Biophysics; Microbiology; or Molecular, Cellular, & Developmental Biology (p. 1887)
Ph.D. in Biochemistry & Biophysics; Microbiology; or Molecular, Cellular, & Developmental Biology (p. 1888)

Museum Studies (p. 1890)
Master of Arts in Museum Studies (p. 1891)
Museum Studies Graduate Certificate (p. 1893)

Philosophy (p. 1894)
Bachelor of Arts and Bachelor of General Studies in Philosophy (p. 1899)
Minor in Philosophy (p. 1900)
Master of Arts in Philosophy (p. 1900)
Juris Doctor and Master of Arts in Philosophy (p. 1902)
Doctor of Philosophy in Philosophy (p. 1902)
Physics and Astronomy (p. 1904)
- Bachelor of Arts in Astronomy (p. 1910)
- Bachelor of Science in Astronomy (p. 1913)
- Bachelor of Arts in Physics (p. 1915)
- Bachelor of Science in Physics (p. 1917)
- Minor in Astrobiology (p. 1919)
- Minor in Astronomy (p. 1920)
- Minor in Physics (p. 1920)
- Master of Science in Physics (p. 1921)
- Doctor of Philosophy in Physics (p. 1923)

Political Science (p. 1927)
- Bachelor of Arts and Bachelor of General Studies in Political Science (p. 1938)
- Minor in Public Policy in the United States (p. 1940)
- Master of Arts in Political Science (p. 1941)
- Doctor of Philosophy in Political Science (p. 1942)

Psychology (p. 1946)
- Bachelor of Arts and Bachelor of General Studies in Psychology (p. 1961)
- Bachelor of Science in Behavioral Neuroscience (p. 1963)
- Minor in Psychology (p. 1965)
- Minor in Social and Behavioral Sciences Methodology (p. 1965)
- Master of Arts in Psychology (p. 1966)
- Doctor of Philosophy in Psychology (p. 1967)

Religious Studies (p. 1972)
- Bachelor of Arts and Bachelor of General Studies in Religious Studies (p. 1979)
- Minor in Religious Studies (p. 1980)
- Master of Arts in Religious Studies (p. 1981)

Russian, East European, and Eurasian Studies (p. 1983)
- Co-Major in Russian, East European, and Eurasian Studies (p. 1986)
- Minor in Russian, East European, and Eurasian Studies (p. 1988)
- Master of Arts in Russian, East European, and Eurasian Studies (p. 1989)
- Graduate Certificate in Russian, East European, and Eurasian Studies (p. 1990)

Slavic Languages and Literatures (p. 1991)
- Bachelor of Arts in Slavic Languages and Literatures (p. 2001)
- Minor in Slavic Languages and Literatures (p. 2005)
- Master of Arts in Slavic Languages and Literatures (p. 2008)
- Doctor of Philosophy in Slavic Languages and Literatures (p. 2009)

Sociology (p. 2011)
- Bachelor of Arts and Bachelor of General Studies in Sociology (p. 2019)
- Minor in Sociology (p. 2020)
- Doctor of Philosophy in Sociology (p. 2020)

Spanish and Portuguese (p. 2022)
- Bachelor of Arts in Spanish (p. 2030)
- Minor in Brazilian Studies (p. 2032)
- Minor in Spanish (p. 2033)
- Master of Arts in Spanish (p. 2034)
- Doctor of Philosophy in Spanish (p. 2034)

Speech-Language-Hearing: Sciences and Disorders (p. 2035)
- Bachelor of Arts and Bachelor of General Studies in Speech-Language-Hearing (p. 2039)
- Minor in Speech-Language-Hearing (p. 2041)
- Master of Arts in Speech-Language Pathology (p. 2042)
- Clinical Doctor of Speech-Language Pathology (p. 683)
- Doctor of Audiology (p. 684)
- Doctor of Philosophy in Speech-Language Pathology or Audiology (p. 2043)

Women, Gender and Sexuality Studies (p. 2045)
- Bachelor of Arts and Bachelor of General Studies in Human Sexuality (p. 2050)
- Bachelor of Arts and Bachelor of General Studies in Women's Studies (p. 2053)
- Minor in Women's Studies (p. 2057)
- Minor in Human Sexuality (p. 2058)
- Doctor of Philosophy in Women, Gender, and Sexuality Studies (p. 2060)
- Graduate Certificate in Women's Studies (p. 2060)

The University of Kansas

The College of Liberal Arts and Sciences

Aims
The College of Liberal Arts and Sciences (called the College or CLAS) is KU’s largest academic unit with more than 50 departments and programs. The liberal arts and sciences include disciplines in the humanities, social and behavioral sciences, and natural and mathematical sciences, as well as international and interdisciplinary studies options. The humanities are the study of the constructions or creations of humans over time (literature, religion, philosophy, history, culture, language, etc.). The social sciences are the study of how and why humans behave as they do individually,
in groups, or in society (psychology, sociology, anthropology, etc.). The
natural sciences involve explanations and predictions of the natural
world. Each department lends a unique perspective on the world. Look
at each department’s overview page to begin to understand their unique contribution to your education.

Liberal education at the undergraduate level is typically broad rather than specialized. Its aim is to develop a citizenry that is broadly informed and capable of critical appraisal and to provide fundamental knowledge in many fields. The mission of the College, as reflected in KU’s bachelor’s degree requirements, is to provide such an education. The College takes full advantage of KU’s role as a research institution to ensure that the knowledge imparted to students is current and that they learn the skills of inquiry and critical evaluation.

Undergraduate Programs

It is the students’ responsibility to become thoroughly acquainted with all requirements for the degree programs in which they plan to participate. These include all university requirements, as well as the requirements of the College outlined in this section of the catalog. Students are also responsible for understanding the requirements that are unique to individual programs.

In general, the student is subject to the requirements in place at the time of admission as a degree-seeking student.

CLAS Baccalaureate Degrees

The College of Liberal Arts and Sciences offers 4 degrees at the baccalaureate level:

• Bachelor of Arts (B.A.),
• Bachelor of General Studies (B.G.S.), and
• Bachelor of Science (B.S.),
• Bachelor of Applied Science (B.A.S.)

The majority of students in the College earn a B.A. degree. The B.A. degree may be earned with a major in all departments and programs in the College except atmospheric science. The B.A. is the traditional baccalaureate degree, structured to ensure both breadth and depth of knowledge through completion of the KU Core, degree specific requirements in writing, mathematics, foreign language, and laboratory science, as well as course work in the major.

The B.G.S. degree is an option allowing intentional breadth, consisting of the completion of the KU Core and one of two options for degree completion.

The B.S. degree is offered by all natural science areas except human biology, as well as economics and behavioral neuroscience. General education degree and major requirements are determined by each program offering the degree and may be different for each B.S. degree in the College. With fewer required non-science general education degree requirements, the B.S. permits more depth in the major. It requires additional work in supporting science areas.

View the list of College of Liberal Arts and Sciences Departments & Programs (p. 774).

Two Degrees

Double Degrees in the College of Liberal Arts and Sciences

The following combinations of degrees are allowable within the College as long as the student has completed at least 15 hours unique to each major:

• 2 (or more) B.S. degrees. These must be different B.S. degrees, not different concentrations within the same B.S. degree.
• B.A. and B.S. degrees as long as the degrees are in different majors. Students may not, for example, earn both a B.A. and a B.S. in mathematics.
• B.G.S. and B.S. degrees as long as the degrees are in different majors. Students may not, for example, earn both a B.G.S. and a B.S. in economics.
• Students may complete the requirements for more than one emphasis area or concentration in a major or degree program but should be aware that they are not completing a second degree or major. The following example illustrates this point: A student who completes all requirements for both the traditional English option and the creative-writing option is earning one degree, either the B.A. in English or the B.G.S. in English.
• Students may earn a B.A. or a B.G.S. with more than one major but not more than one B.A. or B.G.S. degree from the College.
• Students normally may not earn a B.A. degree and a B.G.S. degree. Exceptions to this must be approved by the Committee on Undergraduate Studies and Advising (CUSA). Requests for exceptions should be discussed with the director of College Student Academic Services.

Double Degrees in the College and a Professional School

Students who wish to work simultaneously for a degree from the College and a degree from one of the professional schools may do so, with the expectation that all general education requirements are met for both degrees.

The College of Liberal Arts & Sciences Online Degree Completion Programs

For students who are unable to take their coursework on the Lawrence or Edwards campuses, the College offers an online degree completion program leading to the Liberal Arts & Sciences, Bachelor of General Studies (BGS) degree. More information is available on The College of Liberal Arts & Sciences Online website (http://thecollegeonline.ku.edu), or students may contact us directly at thecollegeonline@ku.edu.

KU Edwards Campus Undergraduate Programs

Students who would like to complete a bachelor’s degree in the Kansas City area may choose from 4 CLAS undergraduate majors offered on the KU Edwards Campus (http://edwardscampus.ku.edu) in Overland Park.

Contact the CLAS undergraduate advisor, 864-8659 (from Lawrence) or 913-897-8659 (outside of Lawrence), about each of these degrees.

• Literature, Language, and Writing
  B.A. and B.G.S. degrees are offered. See requirements for the major under English (p. 1648).
• Molecular Biosciences
The B.S. degree is offered. See requirements for the major under Biology Undergraduate Program (p. 1524).

- **Public Administration**
  B.A. and B.G.S. degrees are offered. See requirements for the major under Public Administration (p. 2344).

- **Applied Science - Biotechnology**
  The B.A.S. or Bachelor of Applied Science is offered. See requirements for the major under Biotechnology.

**Special Opportunities in the College**

**KU Language Across the Curriculum**

KULAC is a pioneering program that seeks to equip students with real competency in a second language through a curriculum of courses and discussion sections taught in world languages in fields like business, history, politics, and the environment. KULAC classes allow you to study subjects that meet your interests (and graduation requirements) while sharpening your language skills, including the specialized vocabulary used in your career. Employers are looking for graduates who combine a disciplinary specialty with a second language proficiency and a knowledge of other cultures. KULAC makes it possible for you to develop these skills without slowing progress toward your degree. KULAC courses are open to any student who has completed at least two years of college-level classes in the relevant language. Courses are taught in Spanish, French, German, Italian, and Russian. There are new offerings each semester. For more information, consult the Center for Global and International Studies (http://global.ku.edu).

**UKanTeach**

UKanTeach (http://ukanteach.ku.edu) prepares future secondary (6th-through 12th-grade) math and science teachers by encouraging students to learn to teach while pursuing a 4-year bachelor’s degree. UKanTeach invites all KU students to take LA&S 290 (1 hour), the first course in the UKanTeach sequence. This career-exploration course allows students to design lessons and teach them in local schools. First-year students through seniors may enroll. Through course work and classroom experiences, students quickly learn whether they are suited to teaching.

Students pursuing any related undergraduate degree at KU can add the UKanTeach requirements to their major and earn a teaching license along with their degree.

The teaching licenses available in the UKanTeach program and some majors and interests commonly paired with each licensure area:

<table>
<thead>
<tr>
<th>Total hours</th>
<th>120</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours in CLAS and/or School of the Arts</td>
<td>100</td>
</tr>
<tr>
<td>Junior/senior hours (courses numbered 300 or above)</td>
<td>45</td>
</tr>
<tr>
<td>Hours in residence at KU (all must be taken at the junior/senior level)</td>
<td>30</td>
</tr>
<tr>
<td>KU cumulative grade-point average</td>
<td>2.0</td>
</tr>
<tr>
<td>Grade-point average in KU junior/senior hours in the major</td>
<td>2.0</td>
</tr>
<tr>
<td>Grade-point average in KU hours in the minor</td>
<td>2.0</td>
</tr>
</tbody>
</table>

If you know that you want to teach secondary mathematics or science (or if you want to explore the idea), the UKanTeach program can help you accomplish this while you continue to pursue your bachelor’s degree at KU.

UKanTeach advisors would be happy to meet with you to discuss the program in more detail and show you how UKanTeach can fit into your plan to graduate.

**Degree Requirements**

**Early and Continuous Enrollment in English and Math (All Undergraduate Degrees)**

Undergraduate students enrolled in the College of Liberal Arts and Sciences Students are expected to make timely progress towards completing their degree requirements. In an effort to have students remain compliant with the requirements of the KU Core and the College, students are required to complete the Written Communication and Quantitative Literacy requirements of both the KU Core and their degrees within the first year of undergraduate study.

**Written Communication**

Students are expected to enroll in two courses that meet Goal 2, Learning Outcome 1 of the KU Core in their first year of study. Students should pay close attention to their degree specific requirements (such as for the Bachelor of Arts) given that certain degrees require specific Goal 2, Learning Outcome 1 courses despite advanced standing in writing courses due to examination scores. To ensure compliance with this policy, students may be administratively registered for courses if the College determines that they are not on track to complete this requirement in the first year of study. If a student is found to be in non-compliance with this policy, the College retains the right to place a hold on their records to prevent future registrations.

**Quantitative Literacy**

Students are expected to meet the requirement of Goal 1, Learning Outcome 2 of the KU Core in their first year of study. Students should pay close attention to their degree specific requirements (such as for the Bachelor of Arts) given that certain degrees require specific Goal 1, Learning Outcome 2 courses to meet both KU Core and degree specific requirements. To ensure compliance with this policy, students may be administratively registered for courses if the College determines that they are not on track to complete this requirement in the first year of study. If a student is found to be in non-compliance with this policy, the College retains the right to place a hold on their records to prevent future registrations.

**Requirements for Graduation (All Undergraduate Degrees)**

**Grade-Point Average Required for Graduation**

To be eligible to graduate from the College of Liberal Arts and Sciences with any of the 3 degrees (B.A., B.G.S., or B.S.), a student must earn at least a 2.0 grade-point average in courses taken at KU (including grades earned in Independent Study courses through KU Continuing Education) and at least a 2.0 in KU junior/senior courses (courses numbered 300 and above) in the major. All junior/senior level major-eligible courses attempted at KU will be included in the GPA calculation.

**Hours Required for Graduation**

To be eligible to graduate from CLAS with any of the degrees, a student must successfully complete at least 120 credit hours, 45 of which must be junior/senior hours (courses numbered 300 and above), and 100 of
which must be completed in Liberal Arts and Sciences/School of the Arts course work. The required 120 hours are divided into 4 categories: the KU Core, College specific degree requirements, major, and elective requirements. The total hours are increased by enrollment in MATH 2 or any developmental course numbered below 100. The total also is increased by enrollment in excess of 64 hours of community college credit, 4 hours in physical education activity courses, 6 hours in music organization courses, and any repeated courses for which a student has already received credit.

Minimum and Maximum Hour and Grade-Point Average Requirements for All CLAS Degrees (B.A., B.G.S., B.S.)

Minimums

| Requirement                                      | Minimum
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total hours for graduation</td>
<td>120</td>
</tr>
<tr>
<td>Hours in CLAS and/or School of the Arts</td>
<td>100</td>
</tr>
<tr>
<td>Junior/senior hours (courses numbered 300 or above)</td>
<td>45</td>
</tr>
<tr>
<td>Hours in residence at KU (all must be taken at the junior/senior level)</td>
<td>30</td>
</tr>
<tr>
<td>KU cumulative grade-point average</td>
<td>2.0</td>
</tr>
<tr>
<td>Grade-point average in KU junior/senior hours in the major</td>
<td>2.0</td>
</tr>
<tr>
<td>Grade-point average in KU hours in the minor</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Maximums

| Requirement                                      | Maximum
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours from community colleges</td>
<td>64</td>
</tr>
<tr>
<td>Hours in physical education activity courses</td>
<td>4</td>
</tr>
<tr>
<td>Hours in music organization courses</td>
<td>6</td>
</tr>
</tbody>
</table>

Note: Courses numbered below 100 do not count toward a degree but are included in the grade-point average.

General Education Degree Requirements

All degrees require courses that reflect the breadth of the disciplines in the College.

All undergraduate degrees from the University of Kansas require completion of the KU Core Curriculum (http://kucore.ku.edu). In addition to the KU Core, students must satisfy the degree specific and major requirements of the degree they are pursuing. Below are the degree specific requirements of the various degrees of the College. Major requirements may be found on the specific departmental pages in this catalog.

Electives Required for Graduation

The Bachelor of Arts degree requires:

- **Quantitative Reasoning.** 3 credits. This course must have MATH 101 (College Algebra) or a higher mathematics course as a prerequisite. Additionally, this course must also be either approved for Goal 1, Learning Outcome 2 of the KU Core or another course approved by CUSA.

- **Laboratory or Field Experience.** Variable credits. This course must be an academic-credit bearing laboratory or field experience. This course may be taken in conjunction with a lecture but the course combination must contain a laboratory.

- **Writing.** 6 credits. Students must complete six credit hours (two courses) of collegiate writing-level instruction. Students must complete ENGL 101, Composition and ENGL 102/ENGL 105, Critical Reading and Writing/Freshman Honors English. Students who place in ENGL 102/ENGL 105 by examination, must complete ENGL 102/ENGL 105 and another course meeting Goal 2, Learning Outcome 1 of the KU Core.

- **Non-English Language Proficiency**

  Variable credits. Students must demonstrate fourth semester proficiency in a single non-English language, or third semester proficiency in a first non-English language and first semester proficiency in a second non-English language. This requirement may be met through coursework or examination by the appropriate language department.

The Bachelor of General Studies degree has two distinct options for completion and requires either:

- **Option A.** Completion of the requirements of a single BGS major AND a secondary field of academic study (a second major or minor)

- **Option B.** Completion of the B.G.S. in Liberal Arts and Sciences. This degree program requires:

  - Liberal Arts and Sciences Breadth Requirement.

  - World Language and Culture.

  2 courses (each with 3 credit hours or more) in a single world language, or proof of two-semester proficiency in a language other than English,

  OR

  the KU Core. Completion of 3 courses (each with 3 credit hours or more) in world, non-Western culture (W or NW designated courses), or language areas beyond the KU Core. This may include a variety of areas, languages, and cultures.

- **Additional Natural Sciences and Mathematics.** Satisfied by the completion of two additional courses from the natural sciences (requirement code N) and/or mathematics (MATH prefix courses) beyond the KU Core.

The Bachelor of Science degree:

- All Bachelor of Science degree requirements are listed on their respective academic department pages within this catalog.

Each degree allows a certain number of elective hours. In addition to general education degree and major requirements, students may choose elective courses to bring the total credit hours to 120. In choosing electives, students should be aware of limits in certain areas listed under Hours Required for Graduation.
Junior/Senior Hours Required for Graduation
KU requires all students pursuing bachelor’s degrees to complete a minimum of 45 credit hours at the junior/senior level (courses numbered 300 and above).

Majors and Minors
Major Requirements
Students must complete a major to graduate with a degree in the College. Students pursuing the B.G.S. in Liberal Arts and Sciences may not choose a secondary field of study.

A major requires the student to study at least one discipline in depth. The average number of required credit hours in the major for the B.A. degree is 30 hours. The Board of Regents requires a major to be at least 24 credit hours. See the individual major listings for specific minimum requirements. View a current list of all CLAS majors and minors (p. 774).

Degree requirements and course descriptions are subject to change. Check with department offices or College Student Academic Services (http://clas.ku.edu/undergrad) for current information.

Declaration of Major
The College expects that every student declare a major or be admitted to a professional school no later than the semester after completion of 60 credit hours. A student should meet with an academic advisor to discuss course selection and choice of major each term until the major is declared. For a major to be officially declared, CLAS Student Academic Services must receive a copy of the Major Declaration form signed by the student and the major department representative. If a student is pursuing a double major, he or she should complete a Major Declaration form in each major department.

Departments may reserve enrollment in courses in the department for declared majors.

Changing majors late in the academic career may delay graduation. Consult a graduation advisor in the College Student Academic Services office, 109 Strong Hall for further information regarding a change in major.

Students are encouraged to explore different disciplines before choosing their majors. Students who are not ready to declare a major can register interest in a major at CLAS Student Academic Services. Help with choosing a major can be obtained at the University Advising Center (http://advising.ku.edu) (126 Strong Hall), CLAS Student Academic Services (http://clas.ku.edu/undergrad) (109 Strong Hall), and the University Career Center (http://www.kucareerhawk.com/s/782/start.aspx) (110 Burge Union).

Admission to CLAS Majors
The requirements for admission to an academic department in the College of Liberal Arts and Sciences are based upon the term of admission to the Department. Departments may make exceptions to this policy at their discretion only with the consent of the student. Additionally, the Time Limit to Degree Policy, which allows a student a maximum of 10 years to complete his/her undergraduate degree, with a maximum of a two-year break from the University would supersede this policy.

Admission requirements to a particular major offer potential students the critical foundation of knowledge and skills necessary to become successful in that major. View current admission requirements for each CLAS department in the department’s section of the current catalog.

CLAS department admission requirements include the following:

Designated Admission Course Requirements and Minimum Admission Grade-Point Average
Departments may designate up to 4 courses and require an admission grade-point average from 2.2 to 3.0. If a student may choose from a set of course requirement options, and he or she has taken more than the minimum number of course options in the application term, grades received in any designated admission course requirement up to and including that term may be computed in the grade-point average for admission consideration. Only course grades from repeated lower-level courses, meeting the standards of KU’s course repeat policy (https://documents.ku.edu/policies/governance/USRR.htm#art2sect2), are removed from the grade-point average calculation.

The Credit/No Credit option is not available for any course that is an admission requirement. If a student has mistakenly requested the CR/NC option for a course required for admission, 1.7 grade points for any CR grade recorded and 0.0 points for any NC grade recorded are calculated into the grade-point average for admission purposes. A department may determine that any designated admission course taken with the CR/NC option must be repeated.

Application Term
Students must complete all requirements for admission to a major by the first semester of the junior year or before. Application to the major should occur in the term in which admission requirements will be completed. If a student does not meet established admission grade-point average criteria or neglects to apply for admission in this term, she or he must petition the department for permission for late application. The department, as part of an approved petition, determines late admission requirements (including grade-point average and course requirements) and the final admission deadline.

Hours in the Major: Maximums and Minimums
There is no limit on hours taken in the major for the B.A., B.G.S., or B.S. degree. Departments are not allowed to require more than 40 hours in the major for the B.A. or more than 50 hours in the major for the B.S. Some skills courses and supporting science courses are not included in this maximum limit. A minimum of 12 hours in the major must be in courses numbered 300 or above. At least 15 of these hours in the major must be taken in residence at KU.

Major Grade-Point Average Graduation Requirement
A student must earn a grade-point average of at least 2.0 in KU junior/senior courses (numbered 300 and above) completed in the major. All junior/senior level major-eligible courses attempted at KU will be included in the GPA calculation.

If a student has mistakenly requested the Credit/No Credit option for a course in the major, 1.7 grade points for any CR grade recorded and 0.0 points for any NC grade recorded are calculated into the major grade-point average for certification purposes. A department may determine that any major course taken with the CR/NC option must be repeated.

Double Major
A student may earn a double major if he or she satisfies the requirements of both majors and completes 15 hours unique to each major in consultation with advisors in each department.
Special Major

Students who feel that their best interests cannot be served by the majors listed may petition for a special major (B.A. or B.G.S.), if they follow the guidelines below. Such majors are supervised by special committees of three faculty members recruited by the student. Interested students should consult College Student Academic Services (http://clas.ku.edu/undergrad), preferably before the end of the sophomore year.

The following guidelines apply to special majors:

1. An official endorsement by one or more of the CLAS departments or degree programs involved must accompany a petition for a special major. The petition must be submitted to the committee on undergraduate studies and advising (CUSA).
2. At least 12 credit hours numbered 300 or above counted toward the special major must be taken after approval of the special major.
3. At least 2 committee members must be from the CLAS faculty.
4. At least 2/3 of the credit hours to be counted toward the special major must be CLAS courses.
5. Special majors must not overlap significantly with existing KU major programs and should not have the same titles as existing majors.
6. A student seeking a special major must fulfill the general education degree requirements necessary for the B.A. or B.G.S degree.

Note: Students considering classes to include in a special major should be guided by the fact that most CLAS majors require about 30 hours.

Minors

CLAS offers more than 40 approved minors. These are open to all students in the College regardless of the degree they are pursuing. The schools of Architecture, Design and Planning (http://www.sadp.ku.edu); Business (http://www.business.ku.edu); Education (http://www.soed.ku.edu); Engineering (http://www. engr.ku.edu); Journalism and Mass Communications (http://www.journalism.ku.edu); Music (http://music.ku.edu); Nursing (http://www2.kumc.edu/son); and Social Welfare (http://www.socwri.ku.edu) permit their students to earn CLAS minors.

Requirements for the minor vary, but all must be at least 18 hours including 12 hours at the junior/senior level (numbered 300 and above). 9 of the junior/senior-level courses must be taken in residence at KU. One course overlap may be used to fulfill requirements for both the major and the minor. Students may not earn a minor unless they have completed a major and have completed at least one course for the minor after the date the minor was approved by College Assembly. Successful completion of a minor requires a minimum KU grade-point average of 2.0 in all courses taken for the minor. For requirements for each minor, see the programs listed on the Departments & Programs (p. 774) page.

The Credit/No Credit option is not available for any course that may satisfy minor requirements. If a student has mistakenly requested the CR/NC option for a course in the minor, 1.7 grade points for any CR grade recorded and 0.0 points for any NC grade recorded are calculated into the major grade-point average for certification purposes. A department may determine that any minor course taken with the CR/NC option must be repeated.

View a current list of all CLAS majors and minors (p. 774).

KU Core

The KU Core curriculum, coupled with degree and major requirements in the College, ensure a balance of breadth and depth of knowledge critical in today's world.

See the General Education Degree Requirements section above for details regarding College-specific requirements.

Bachelor of Science Degree Requirements

All general education degree, major, and supporting requirements for each B.S. program are specified by department faculty, with approval of the College Assembly. They are listed under the department or program on the Departments & Programs (p. 774) page. B.S. candidates are held to a more prescribed program with fewer electives than B.A. candidates. Students pursuing the B.S. may complete an approved minor.

Overlap Between Requirements

A course may be used to fulfill a KU Core or College degree-specific requirement and a minor or major requirement.

A student may earn more than one major if he or she satisfies the requirements of all majors and completes 15 hours unique to each major in consultation with advisors in each department.

One course overlap is allowed between major requirements and minor requirements.

Graduate Programs

The College of Liberal Arts and Sciences (called the College or CLAS) is KU's largest academic unit with more than 50 departments and programs. Graduate programs in the liberal arts and sciences include disciplines in the arts, humanities, social and behavioral sciences, and natural and mathematical sciences, as well as many interdisciplinary degree programs where often highly diverse disciplines come together to offer students a unique graduate experience. Each graduate program's page contains program-specific information about admission, course curriculum, and faculty mentors.

The College's participation in graduate education reflects a long and distinguished commitment to higher learning and research across the liberal arts and sciences. The College takes full advantage of KU's role as an international research institution to ensure that the knowledge imparted to students is current and that they learn the skills of inquiry and critical evaluation. Graduate students are central to the research and teaching missions of the College. They are also the next generation of scholars who will make contributions to our communities and the production of knowledge for many years to come.

It is the students' responsibility to become thoroughly acquainted with all requirements for the degree programs in which they plan to participate. These include the university requirements for graduate studies at KU outlined in the College and Graduate Studies sections of the KU Policy Library (http://www.policy.ku.edu), the University Senate Rules and Regulations (p. 12), the Graduate Studies (p. 2369) sections of the online catalog, as well as the requirements of the College outlined in this catalog section. Additionally, students are responsible for understanding the requirements that are unique to individual graduate programs outlined in the graduate handbooks of individual academic units and the Departments & Programs (p. 774) sections of the online catalog.
In general, the student is subject to the regulations in force at the time of admission as a degree-seeking student. If degree requirements change, the student may opt to follow the new requirements or to continue under the regulations in force at the time of admission. Any student readmitted 10 years or more after his or her initial term as a degree-seeking student must fulfill the requirements in effect on the date of readmission to the graduate program.

**Graduate Degrees in the College**

The College offers graduate degrees in more than 90 areas of study. Master of Arts (M.A.) or Master of Science (M.S.) degrees can be earned in more than 40 disciplines and the Master of Fine Arts (M.F.A.) degree is offered in creative writing, visual art, and theatre design with a concentration in scenography. Other professional degrees are offered at the master’s level in the Master of Public Administration (M.P.A.) program and the Professional Science Masters (PSM) program.

The College offers Doctor of Philosophy (Ph.D.) degrees in 38 fields, including 2 fields within the School of the Arts.

For students whose academic and professional goals can best be achieved through investigations at the interface of 2 or more disciplines, the College offers master’s and doctoral degree programs in Interdisciplinary Studies. Please see the policy governing graduate degrees in Interdisciplinary Studies section of the online catalog.

The College currently offers Graduate Certificates in 17 fields, with more certificate programs in development.

View the the College’s Departments & Programs (p. 774) section of the online catalog for further information on specific fields of study.

**KU Edwards Campus Graduate Programs**

Students who would like to complete a graduate degree in the Kansas City area may choose from 4 College graduate degrees and 5 graduate certificates that are offered on the KU Edwards Campus (http://edwardscampus.ku.edu) in Overland Park. Information about program requirements, facilities, tuition, and fees is available on the Edwards Campus website (http://edwardscampus.ku.edu). Residents of Kansas City metro area counties admitted as degree-seeking students to one of these programs may qualify for the MetroKC tuition rate for Edwards Campus courses. For more information, contact the College’s Graduate Advisor at the Edwards Campus at (913) 897-8510.

The following graduate degrees are offered on the Edwards Campus:

- Master of Arts, Communication Studies (p. 1571), MA
- Master of Arts, Global and International Studies (p. 1769), MA
- Master of Public Administration (p. 2339), MPA
- Professional Science Masters in Environmental Assessment, PSM

The following graduate certificates are offered on the Edwards Campus:

- City and County Management
- Environmental Assessment
- Global and International Studies
- Performance Management

**Degree Requirements**

Requirements for the completion of master’s and doctoral degrees in the College are governed by department- or program-specific policy, College policies and procedures, Graduate Studies policies, and the University Senate Rules and Regulations.

Information on degree requirements presented in this section are limited to the most frequently consulted policies and key milestones in the graduate career. Students will find additional information under the KU Policy Library (http://policy.ku.edu), the Graduate Studies (p. 2369) and College’s graduate regulations sections of the online catalog, the academic unit’s handbook, and the University of Kansas Rules and Regulations (p. 12).

**Master’s Degree Requirements**

**Coursework**

Coursework requirements for the Master’s degree are established and tracked by the department or program, and their completion verified and approved by the College. Please consult with your advisor, the academic unit’s graduate handbook, and the relevant Departments & Programs section of the online catalog for further information on specific courses or course sequences required for the degree.

**Thesis**


**Final Examination**

A final general examination in the major subject is required for MA and MS degrees. The examination is held during the semester of the student’s final enrollment in course work and, in the case of thesis students, when the thesis has been substantially completed. In thesis programs, an oral thesis defense may be one of the degree requirements. Such a defense may be offered in addition to, or in conjunction with, the required general examination in the major field. Students earning a master’s thesis degree must have completed at least 1 hour of thesis enrollment before the master’s degree can be awarded. See also Master’s Degree Requirements (p. 2369), M.A. and M.S. Degrees, in the Graduate Studies section of the online catalog.

**Doctor of Philosophy Degree Requirements**

**Coursework**

Coursework requirements for the doctoral degree are established and tracked by the department or program, and their completion verified and approved by the College. Please consult with your advisor, the academic unit’s graduate handbook, and the relevant Departments & Programs section of the online catalog for further information on specific courses or course sequences required for the degree.

**Research Skills and Responsible Scholarship**

Graduate Studies requires that all doctoral students meet the Research Skills and Responsible Scholarship requirement before proceeding to the Comprehensive Exam. Specific requirements are determined by each department or program in consultation with Graduate Studies. Information on these requirements is contained in the department or program’s approved research skills requirement plan. Consult with your advisor and the Departments & Programs section of the online catalog for further information.
Residency
Two semesters, which may include one summer session, must be spent in resident study at KU. The College requires that residency be fulfilled before the comprehensive oral examination is scheduled. For more information on residency requirements, please see the Graduate Studies section (p. 2372) of the online catalog.

Comprehensive Oral Examination
The comprehensive oral examination covers the major field and any outside work for which the academic unit wishes to hold the student responsible. The examination is expected to be broader than a mere defense of the dissertation proposal.

The student must be enrolled the semester or summer session in which he or she completes the comprehensive oral examination. This enrollment may count toward the post-comprehensive enrollment requirements as described in Graduate Studies’ Candidacy for Doctoral Degree policy. If more than 5 years elapses between the completion of the comprehensive exam and degree completion, the student may be required to retake the oral comprehensive.

More information about comprehensive exam requirements may be found in the Graduate Studies section (p. 2372) of the online catalog.

Dissertation and Final Exam
Completion of the dissertation is the culminating phase of a doctoral program, marked by the final oral examination and defense of the dissertation. In all but the rarest cases, tentative approval of the dissertation is followed promptly by the final oral examination. Refer to the Graduate Studies section (p. 2369) of the online catalog for further information on the regulations governing the final oral examination, including committee composition and attendance regulations.


Ceremonies
At the end of each spring semester, the College holds a master’s hooding ceremony and Graduate Studies organizes the annual doctoral hooding ceremony. The School of the Arts hosts a separate ceremony for SOTA graduates. University Commencement information is available in the KU Commencement section of the KU website.

Attendance at these ceremonies is optional. Please consult the COGA website (http://coga.ku.edu) for more information.

Undergraduate Advising
Academic advising helps undergraduate students develop educational plans, clarify career and life goals, and appreciate the values of a liberal arts education. College Student Academic Services, in partnership with our faculty and staff across the University, is dedicated to helping undergraduate students achieve their educational and personal goals, and to maintaining the academic integrity of our degree programs. We welcome students, encourage them to be active participants in their educational experience, and celebrate their milestones.

CLAS encourages students to consult frequently with advisors, and to declare their majors as soon as possible in order to get connected with all resources in their chosen area of study. Academic advisors serve as guides, helping students explore options and make decisions. Undeclared CLAS students with fewer than 90 hours are assigned advisors in the University Advising Center (http://advising.ku.edu), 126 Strong Hall. UAC also provides prelaw, premedical and prehealth professions advising. When students declare majors, they are advised by faculty advisors and professional advisors in their major departments and in 109 Strong Hall.

College Student Academic Services (http://clas.ku.edu/undergrad), 109 Strong Hall, provides additional full-time advisors for students who entered KU before fall 1987 and students at all levels who have policy or petition questions or issues. In addition, SAS provides advising for prospective or new transfer seniors and refers them to faculty academic advisors in their majors as soon as possible. Finally, advisors in SAS work with graduating seniors to ensure timely completion of degree requirements through workshops, degree audits, and graduation advising appointments.

Degree Progress Report
The Degree Progress Report (DPR) is a computerized advising and degree-audit system, used to assist students and advisors in tracking progress toward completion of general education degree and major requirements for B.A., B.G.S., and B.S. degrees. Students should review their DPR each semester and be prepared to review and discuss information contained in the DPR at all advising appointments. The DPR can be accessed through the student's account in the KYou Portal under the Advising tab. Although the DPR provides a list of courses taken and grades earned, it is not an official transcript and can be used only for internal advising. Students must obtain all official transcripts from the Student Records Center (http://www.registrar.ku.edu), 121 Strong Hall.

4-Year Graduation Plans
With careful planning and commitment to a full-time course load, students can graduate in 4 years. Degree Plans for all BA degrees are available through the catalog “degree plan” tab. Degree Plans for BGS, BS, BAS, BAE, and BFA degrees are in progress.

Graduate Advising
Advising of graduate students is primarily conducted within the graduate programs by program staff members and the individual faculty members who act as mentors and advisors. Students are encouraged to work with the director of graduate studies in their program regarding course selections and individual program requirements to ensure that all program milestones are reached as expected by the program faculty and the College. The graduate studies director or coordinator is also responsible for the regular assessment of students in the program and can address questions regarding a student’s progress toward the degree.

Students seeking information on specific policy or procedures should review the relevant content in the KU Policy Library (http://policy.ku.edu) as well as the College and Graduate Studies (p. 2369) sections and the relevant Department or Program section of the online catalog. The College Office of Graduate Affairs (http://clas.ku.edu/coga), 102 Strong Hall, coga@ku.edu, is also available for assistance.

Students who have completed all degree requirements and are preparing to graduate are encouraged to schedule a Graduation Appointment with the College Office of Graduate Affairs.

Undergraduate University Regulations
For information about university regulations, see Regulations (p. 12) or visit the University of Kansas Policy Library (http://www.policy.ku.edu).
**Academic Integrity**

The College of Liberal Arts and Sciences strictly enforces KU and CLAS policies on academic misconduct. Academic integrity requires honest performance of academic responsibilities by students. These include preparation of assignments, reports and research papers, taking examinations, completing administrative requirements, and a sincere and conscientious effort by students to abide by the policies set forth by instructors. See Academic Integrity on the Regulations (p. 12) page.

**Change of School**

Students with a KU cumulative GPA of 2.00 or higher (or in their first semester) can fill out a Change of School Form requesting to be admitted to the College of Liberal Arts and Sciences and/or School of the Arts, from a KU professional school, through the last day of class for the current semester. Requests made after that will be for admission in the upcoming semester. This process is for active KU students. Students not admitted to KU follow the University’s admission policy.

Students with a KU cumulative GPA of less than a 2.00 will be evaluated according to the College’s academic standing policy and may not be admissible based on past academic performance at KU. Students that have been dismissed from another KU School will need to submit a change of school request one week or earlier prior to classes starting. Non-dismissed students may request to change schools through the 20th day of the current semester; after that date requests will be considered for the next semester.

- Change of school requests will not be reviewed until current semester grades are posted.
- Students admitted to the College on probation will need to meet the College’s academic probation requirements during the semester they are admitted or face an academic dismissal.
- The College reserves the right to deny admission to students who have had consecutive semesters of failing grades (or multiple semester withdrawals) regardless of their KU cumulative GPA in previous semesters.
- Students dismissed from another school at KU and are found to be inadmissible to the College can follow our readmission after dismissal policy to return to KU for a future semester.

To change from one school to another, you must submit a Change of School form in the dean’s office of the school you plan to enter or in College Student Academic Services (http://clas.ku.edu/undergrad) if you plan to enter the College. Follow the deadlines on the form. See the school’s requirements for admission.

Students applying for admission to the College from other schools in the university must meet the same minimum grade-point average requirements in KU attempted course work as continuing College students. Consult College Student Academic Services, Strong Hall, 1450 Jayhawk Blvd., Room 109, Lawrence, KS 66045-7518, 785-864-3500.

**Credit/No Credit**

A Credit/No Credit option is available to all degree-seeking undergraduates. You may enroll in 1 course a semester under the option, if the course is not in your major or minor. To exercise the option, you must fill out a card at the dean’s office of the school in which you are enrolled during the fifth and sixth weeks of the semester (or the third week of summer session and 8-week courses). See the Schedule of Classes (p. 10) for current dates for electing this option. After the close of the option period, the choice cannot be changed. Under the option, a grade of Credit is recorded for grades of A, B, or C; No Credit is recorded for grades of D or F. Courses graded Credit or No Credit do not count in computing the grade-point average. Courses graded Credit are included in the total hours counted toward graduation. Courses graded No Credit do not count toward graduation. For more information, visit the KU Policy Library (https://documents.ku.edu/policies/governance/USRR.htm#art2sec12).

**Warning:** Certain undesirable consequences may result from exercising the option. Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of No Credit to F when computing grade-point averages.

Students in the College must fill out a request in College Student Academic Services (http://clas.ku.edu/undergrad). The university-established timeline for exercising this option is strictly enforced.

**Enrollment**

See the Enrollment Guide (http://www.registrar.ku.edu/enrollment) for complete enrollment information.

**New and Readmitted Student Enrollment**

Immediately before the beginning of classes each term, an enrollment session is scheduled for new students. New students admitted for summer or fall term have an additional option of enrolling in fall courses during one of several summer orientation sessions. Invitations to orientation are sent automatically to newly admitted and readmitted students who applied for the spring, summer, or fall terms (except nondegree-seeking students). Readmitted students may attend a special abbreviated orientation session, may enroll during continuing enrollment, or may attend the enrollment sessions immediately before the start of the semester. Readmitted students whose readmission applications are completed by a designated date also may enroll during continuing enrollment, after meeting with an advisor. All students must preregister for orientation and enrollment sessions.

International students must complete the required check-in processes before enrollment and are encouraged to attend International Student Orientation, which includes advising and enrollment sessions.

**Continuing Enrollment**

This enrollment allows students who are currently enrolled during one term to enroll for the next term. Spring-enrolled students enroll in April for the following summer session or fall semester or both. Fall-enrolled students enroll in October or November for the following spring semester.

**Late Enrollment**

Each semester, the Schedule of Classes (p. 10) announces dates for late enrollment and the last day to submit a Petition to Late Enroll. Petitions are evaluated based on past academic performance. A student may enroll in a course or change class sections after the semester has been in session for 4 weeks only if the course has met fewer than 25 percent of the class sessions. For most classes, the faculty have established earlier dates for beginning class attendance and participation. A fee is assessed for late enrollment.

**Grading**

The letters A, B, C, D, S (satisfactory), and Credit indicate passing work. The letters F and U (unsatisfactory) and No Credit indicate that the quality of work was such that, to obtain credit, the student must repeat
regular course work. P represents satisfactory progress (an interim grade pending completion of a subsequent term’s course work). See the KU Policy Library (https://documents.ku.edu/policies/governance/USRR.htm#art2sect2) for more information.

**Graduation with Honors**

Undergraduates may earn honors upon graduation in 3 ways. The student may graduate with distinction or highest distinction, earn departmental honors in the major, or complete the University Honors Program (http://www.honors.ku.edu). It is possible to earn honors in 1 of these areas, any combination of them, or all 3. The award of honors is noted on the student’s transcript and in the Commencement program. Distinction and highest distinction are noted on the diploma.

**Graduation with Distinction or Highest Distinction**

The top 10 percent of each year’s graduating class is designated as graduating with distinction. Of these, the top one-third is designated as graduating with highest distinction. To be eligible, students must have completed at least 60 credit hours, graded A through F, in residence at KU. See Required Work in Residence below.

**Graduation with Departmental Honors**

Most departments and programs allow qualified majors to work toward graduation with departmental honors. Graduation with departmental honors is awarded in recognition of exceptional performance in the major, completion of a program of independent research or an alternative project, and a strong overall academic record.

In addition to the requirements of individual departments and programs (which must be approved by the College committee on undergraduate studies and advising), the College requires the following for graduation with departmental honors:

1. Candidates must declare the intention to work for departmental honors with the appropriate departmental honors coordinator(s) no later than the time of enrollment for the final undergraduate semester, but sooner if required by the department(s). Copies of the intent form should be returned to College Student Academic Services.

2. At the end of the final undergraduate semester, the candidate must have achieved an overall grade-point average of at least 3.25 and a grade-point average of at least 3.5 in the major. Both overall and major grade-point averages include work completed at other institutions, as well as at KU. No minimum grade-point average is required to declare candidacy for graduation with departmental honors unless specified by the department.

3. Each candidate’s departmental honors work must include independent research or an acceptable alternative project. The results of research are presented in a form appropriate to the requirements of the major department. Equivalents to the independent research component are established by approved departmental honors programs. In courses meeting the independent research requirement, the candidate must earn a grade of B or higher. Successful completion of all departmental honors requirements must be certified to the departmental honors coordinator(s) by a panel composed of at least three members of the College faculty who have read the report of the independent research and heard the oral presentation, where required.

**Petitions**

A department or program may petition to award graduation with departmental honors to deserving students who, for good reason, do not meet every College and departmental requirement. Send petitions to the committee on undergraduate studies and advising, College Student Academic Services (http://clas.ku.edu/undergrad).

**Late Completion of Honors Requirement**

Requirements for graduation with honors may be completed after the date on which certifications are requested from departments, and in some cases, requirements, if not needed for graduation, may be completed after a student has graduated. However, the Incomplete policy does apply and grades would lapse at the time of graduation. When a candidate finishes all requirements, departments must notify College Student Academic Services (http://collegesas.ku.edu) in writing.

**Honor Roll**

Undergraduates with grade-point averages of 3.5 who have completed at least 12 hours with letter grades are recognized on the honor roll or dean’s list in fall and spring. An Honor Roll notation appears on the transcript.

**Honors Program**

The University Honors Program (http://www.honors.ku.edu) provides opportunities for outstanding and creative undergraduates in all schools at KU to develop their full potential during their undergraduate years. See Honors (p. ) in this section of the online catalog for further information.

**Incompletes**

The letter I indicates incomplete work, such as may be completed without re-enrollment in the course. The letter I should not be used when a definite grade can be assigned for the work done. It is not given for the work of a student in any course except to indicate that some part of the work has, for reasons beyond the student’s control, not been done, while the rest has been satisfactorily completed. At the time an I is reported on the electronic roster, the character and amount of work needed, as well as the date required for completion and lapse grade if further work is not completed by this date, should be indicated.

A student who has an I posted for a course must make up the work by the date determined by the instructor, in consultation with the student, which may not exceed 1 calendar year, or the last day of the term of graduation, whichever comes first. An I not removed according to this rule automatically converts to a grade of F or U, or the lapse grade assigned by the course instructor, and appears on the student’s record.

Extensions to the time limit may be granted by the dean’s representative upon submission of a petition from the student containing the endorsement of the course instructor who assigned the I grade, or the department chairperson if the instructor is unavailable, prior to the expiration of the Incomplete. After the I grade is converted to a grade of F or U, the grade may only be changed in accordance with USRR Article II, Section 3 (https://documents.ku.edu/policies/governance/USRR.htm#art2sect3).
Maximum and Minimum Undergraduate Semester Enrollment

No undergraduate may enroll for more than 20 hours a semester except by permission of the director of Student Academic Services. Summer enrollment is limited to 10 hours. Permission is not considered unless the student has demonstrated high levels of academic ability in previous semesters.

Prerequisites and Corequisites

Students are advised to enroll according to prerequisites and corequisites noted in individual course descriptions. These prerequisites are enforced in a variety of ways including blocking enrollment, administrative drops without notice, etc.

Probation

The College reviews all students’ records at the end of fall and spring semesters and summer term to determine their academic standing. Students must maintain a 2.0 cumulative KU grade-point average to be in good academic standing. Students below that average are placed on probation.

- Freshmen and Sophomores on Probation (between 0 and 59 completed hours): Each student in this category must earn a 2.0 KU term grade-point average until his or her cumulative KU grade-point average reaches 2.0, returning the student to good academic standing. Students who fail to meet these requirements are dismissed.
- Juniors and Seniors on Probation (60 or more completed hours): Each student in this category must earn a 2.5 KU term grade-point average until his or her cumulative KU grade-point average reaches 2.0, returning the student to good academic standing. Students who fail to meet these requirements are dismissed.

To return to the College of Liberal Arts and Sciences, the student must follow CLAS readmission guidelines.

Readmission after Dismissal

Students dismissed for the first time from the College of Liberal Arts and Sciences must wait at least 1 full fall or spring semester before returning to KU. Summer session does not count as a full semester. In addition, a dismissed student must demonstrate academic success by completing a minimum of 6 hours of transferable academic course work at another higher education institution. To be readmitted, students must attain a grade-point average of 2.5 or higher in all hours taken after dismissal. All course work taken at every institution is calculated into the grade-point average since dismissal, even if the student opted for that institution’s retake policy. If students are lacking prerequisites and corequisites noted in individual course descriptions. These prerequisites are enforced in a variety of ways including blocking enrollment, administrative drops without notice, etc.

Probation

The College reviews all students’ records at the end of fall and spring semesters and summer term to determine their academic standing. Students must maintain a 2.0 cumulative KU grade-point average to be in good academic standing. Students below that average are placed on probation.

- Freshmen and Sophomores on Probation (between 0 and 59 completed hours): Each student in this category must earn a 2.0 KU term grade-point average until his or her cumulative KU grade-point average reaches 2.0, returning the student to good academic standing. Students who fail to meet these requirements are dismissed.
- Juniors and Seniors on Probation (60 or more completed hours): Each student in this category must earn a 2.5 KU term grade-point average until his or her cumulative KU grade-point average reaches 2.0, returning the student to good academic standing. Students who fail to meet these requirements are dismissed.

To return to the College of Liberal Arts and Sciences, the student must follow CLAS readmission guidelines.

Required Undergraduate Work in Residence

Junior/Senior Hours Required for Graduation

KU requires all students pursuing bachelor’s degrees to complete a minimum of 45 credit hours at the junior/senior level (courses numbered 300 and above). The College of Liberal Arts and Sciences requires that 30 of these 45 credit hours be completed in residence.

Hours in the Major: Maximums and Minimums

There is no limit on hours taken in the major for the B.A., B.G.S., or B.S. degree. Departments are not allowed to require more than 40 hours in the major for the B.A. or more than 50 hours in the major for the B.S. Some skills courses and supporting science courses are not included in this maximum limit. A minimum of 12 hours in the major must be in courses numbered 300 and above. At least 15 hours in each major(s) must be taken in residence at KU.

Time Limits

Undergraduates are strongly encouraged to complete the bachelor’s degree within 4 academic years. Students should complete a minimum of 30 credit hours each year. If a student is unable to complete 30 hours in the fall and spring terms, summer enrollment should be strongly considered.

Students have a maximum of ten years to complete their undergraduate work in the College of Liberal Arts and Sciences under degree requirements in effect at the initial term of matriculation. Students experiencing a break in enrollment during these ten years will follow their curricular requirements at the point of matriculation provided that the break in enrollment does not exceed two calendar years. Students readmitted after two years are held to the curricular requirements in place at the term of readmission. Students maintaining continuous enrollment would be allowed to continue in the College.
but who do not complete their degree requirements within ten years, may petition the College to complete their degree requirements under the curricular requirements in effect during the term of admission.

Transfer of Credit

CredTran (http://credittransfer.ku.edu) is a transfer course equivalency system that lists more than 2,200 colleges and universities from which KU has accepted transfer courses in the past. If your school or course is not listed, your evaluation will be completed when you are admitted to KU.

Only transfer grades of C or higher contribute to total hours earned for students entering KU in spring 1990 or after, and for courses taken in spring 1990 or after by all students. For questions about transfer work fulfilling College requirements, contact College Student Academic Services (http://clas.ku.edu/undergrad), 109 Strong Hall.

Graduate University Regulations

The pursuit of graduate study in the College of Liberal Arts and Sciences at KU is governed by department- or program-specific policy, College policies and procedures, Graduate Studies policies, and University Senate Rules and Regulations. Information on the most frequently consulted policies is contained in this section. Students should also consult the academic unit’s handbook, Graduate Studies and College sections of the KU Policy Library, and the Graduate Studies and University of Kansas Regulations sections of the online catalog.

Academic and Research Integrity

The College of Liberal Arts and Sciences strictly enforces KU and College policies on academic and scholarly misconduct. Academic integrity requires honest performance of academic and research responsibilities by students. These include, but are not limited to, ethical preparation of assignments, reports, and research papers; completion of examinations; ethical treatment of human and animal subjects; execution of administrative requirements; and a sincere and conscientious effort by students to abide by the policies set forth by instructors and research advisors.

Enrollment

Full-time, Half-Time and Part-Time Enrollment

Graduate Studies defines full-time enrollment as 9 credit hours in Fall or Spring semester and 6 hours in the summer session. Maximum enrollment for graduate students, except in rare instances, is 16 hours in Fall or Spring semester and 9 hours in the summer session. Please see the Full-time Enrollment for Graduate Students policy in the Graduate Studies (p. 2369) section of the online catalog and the KU Policy Library (http://policy.ku.edu) for more information on what constitutes full-time, half-time, and part-time enrollment, including variations on this policy for GTA/GRA/GA appointments and active duty military. At a minimum, all graduate students should be continuously enrolled in the Fall and Spring semesters while completing the credit hours required for the fulfillment of their degrees. Please consult the Graduate Studies (p. 2369) section of the online catalog and the KU Policy Library (http://policy.ku.edu) for other enrollment regulations.

Continuous Enrollment for Master’s Students

All master’s students in the College who have completed the required coursework for their degrees must be continuously enrolled in the Fall and Spring semesters until all remaining requirements for the degree, including thesis when applicable, are completed. No enrollment is required during the summer session unless it is the semester during which the student will graduate, in which case enrollment is required. Certain academic units have rules governing summer enrollment.

Post-Comprehensive Enrollment for Doctoral Students

After passing the Comprehensive Oral Exam, doctoral candidates must be continuously enrolled. During this time, until all requirements for the degree are completed (including the filing of the dissertation) or until 18 post-comprehensive hours have been completed (whichever comes first), the candidate must enroll for a minimum of 6 hours a semester and 3 hours a summer session. At least one of these hours must be in dissertation or approved dissertation equivalent coursework.

In addition, the College requires a period of at least 5 months to elapse between the comprehensive oral exam and the final exam. Students that have completed all degree requirements before completing 18 hours are still required to continue enrollment until this 5-month requirement has been met.

Upon completion of the 18-hour requirement, a student’s level of enrollment should reflect as accurately as possible the faculty time he or she utilizes. This may be as little as one hour per semester.

Special enrollment requirements apply to those with GTA/GRA/GA appointments. Please consult the Graduate Studies (p. 2369) section of the online catalog and the KU Policy Library (http://policy.ku.edu).

Lapses in Enrollment

Generally, no student is allowed to enroll after the first 4 weeks of a semester or the first 2 weeks of a summer session. If a student does not intend to enroll, he or she must determine the appropriate course of action in consultation with the department or program.

The student may elect to Voluntarily Discontinue from the program, and must inform the department or program in writing of this decision, which will in turn file the necessary forms with the College. This option requires the student to seek re-admission to the program if they choose to return at a future date. They remain eligible to seek admission to another department or program in the College.

The student may also petition for a Leave of Absence of up to one calendar year. If granted, the Leave of Absence maintains the student’s place in the program. Leave of Absence petitions must be filed by the department or program and provide evidence of the department or program’s endorsement of the student’s petition. Students interested in this option should begin by consulting with their advisor.

The time spent on Leave of Absence does not count toward the student’s time to degree, and therefore does not shorten the time available to complete their degree requirements. Similarly, if a student that has elected to Voluntarily Discontinue subsequently returns to the program, the time that has elapsed since his or her last enrollment does not count toward the time to degree.

Students who fail to enroll without completing the Voluntary Discontinuance process or without being granted a Leave of Absence are reviewed by the College Office of Graduate Affairs and the students’ academic units for possible dismissal. Any time that accrues during these lapses of enrollment in which the student does not occupy any approved enrollment category (e.g., Enrolled, Voluntarily Discontinued, On Leave) is counted toward the time to degree.
Students on an international student visa should consult with the International Programs office prior to any change in enrollment status.

Please see Graduate Studies policies governing Leave of Absence and Voluntary Discontinuance in the Graduate Studies (p. 2369) section of the online catalog and in the KU Policy Library (http://policy.ku.edu).

Dual Enrollments

Students enrolled in two schools or working on two degrees at the same time must complete the work for both degrees. Courses may not be counted toward both degrees, except in the joint degree programs that have been established (e.g., M.P.A./J.D., M.A. in Economics/J.D., M.B.A./M.A. in Area Studies, etc.). Please refer to the Combined Degrees information in the Graduate Studies (p. 2369) section of the online catalog for a complete list of approved joint degree programs.

University Regulations on Grading

Article II of the University Senate Rules and Regulations provides detailed information on regulations governing the grading of graduate coursework. Students should also consult the Graduate Studies (p. 2369) section of the online catalog and the KU Policy Library (http://policy.ku.edu) for more information on the Grading Policy.

The following are of particular relevance for graduate students in the College:

Passing Grades for Graduate Coursework

Only courses graded C or above are considered passing and may be counted for graduate credit. Courses graded C-, D or F may not be used to fulfill degree requirements.

Incomplete (I) and Waiting Grades (WG)

Incomplete (I) grades are used to note, temporarily, that students have been unable to complete a portion of the required coursework during that semester due to circumstances beyond their control. Incomplete work must be completed and assigned an A-F or S/U grade within the time period prescribed by the course instructor. After one calendar year from the original grade due date, an Incomplete (I) grade will automatically convert to a grade of F or U, or the lapsed grade assigned by the course instructor.

Waiting Grades (WG) are placeholders and should only be used in rare instances when, for reasons beyond his or her control, an instructor is not able to assign a course grade by the deadline.

Credit/No Credit (CR/NC)

Graduate students may select the Credit/No Credit option only for those courses that do not fulfill a degree requirement. This includes courses used to fulfill the Research Skills and Responsible Scholarship requirement. Students should consult with their advisor prior to electing the CR/NC option.

College-Specific Grading Policy

Plus/Minus (+/-) Grades

Plus-minus (+/-) grades may be used in the College. The plus or minus sign describes intermediate levels of performance between a maximum of A and a minimum of F. Intermediate grades are calculated as 0.3 units above or below the corresponding letter grade.

Participation (P) Grades

Use of the Participation (P) grade is restricted in the College. It is only approved for a limited number of courses for which special permission has been sought. When permission is granted, it is only used to indicate participation in thesis, dissertation, or research enrollments (related to thesis or dissertation), or in the first semester enrollment of a two-semester sequence course. In any semester, the instructor may elect to assign a letter grade of A, B, C, D, or F when evidence about performance is available. A letter grade (A, B, C, D, or F) must be assigned in the last semester of enrollment to characterize the quality of the final product.

A-F or S/U grades are used in all other courses, including those that are repeated across semesters. The latter include courses in which students are collecting, assembling, or analyzing data; reviewing a research or scholarly literature; creating portfolios; or writing theses or dissertations (e.g., research, thesis, and dissertation hours). Students in these courses are expected to develop plans of study with their instructors and to contact these instructors throughout the semester to discuss their progress or changes in their plans. Instructors assign grades each semester based on the quantity and quality of the work students complete that semester. The grades that students receive in the last semester of these courses (e.g., for completing data analyses and literature reviews, exhibiting portfolios, defending theses or dissertations) apply only to that semester.

If a department or program has a course for which the P grading system may be more appropriate than the A-F or S/U grading system, it must seek special approval from the College.

Incomplete (I) and Waiting Grades (WG)

The College does not allow graduate students to take oral comprehensive or final examinations or to go forward with a thesis or dissertation defense if a waiting grade (WG) or an incomplete (I) grade is listed on the student’s transcript.

Probation and Dismissal Guidelines

To be in good standing, a student must maintain a 3.0 cumulative grade-point average and be making satisfactory progress toward the degree, as determined by the department or program.

If the grade-point average falls below 3.0, the department or program notifies the student in writing that they are being recommended for probation and outlines the expectations of the graduate program and the College that the student must meet to return to good standing. This is followed by a letter from the College confirming their probationary status.

When the rationale for probation is based on grade-point average, a student is typically placed on probation for 1 academic semester. If the cumulative grade-point average has not risen to 3.0 at the end of that semester, the student can either be dismissed or be allowed to continue on probation, depending on the department or program’s assessment of the student’s progress.

Students may also be placed on probation for failing to make satisfactory progress toward the degree. This may include, but is not limited to, failed exams or failure to make adequate and timely progress on the dissertation or thesis.

A graduate student is dismissed upon recommendation of the student’s department or program. This typically occurs when a student fails to raise the grade point average to 3.0 after one or more semesters of probation, or otherwise fails to meet the terms of the probationary period. Academic dismissal should occur before a semester begins. If a student
is dismissed during the semester, the dismissal is effective only at the end of the semester in which the department or program gives notification of dismissal. The department or program will notify the student in writing of the reasons for their dismissal. This will be followed by a letter from the College confirming the dismissal from the program and from the College.

In cases when a student’s grade point average is so low that their ability to ever achieve the 3.0 grade-point average required for graduation is in serious doubt, the department or program should move to dismissal. If they wish to allow the student to continue, they must petition the College on the student’s behalf.

A student who has been dismissed from a graduate department or program in the College is not eligible for readmission to graduate study in any department or program in the College of Liberal Arts and Sciences.

**Time Limits**

The University and the College have established time limits governing various stages of the graduate student career.

**Maximum Time to Count Required Course Work**

Courses completed at the University of Kansas, or transfer credits from another university, are valid for a period of 10 years. Courses that were completed more than 10 years before the scheduling of the final defense may not be used to fulfill graduate degree requirements in the College of Liberal Arts and Sciences.

With the endorsement of their graduate programs, students may petition the College to accept out-of-date course work to fulfill the requirements for their graduate degrees, provided they are able to justify why this course work meets the current standards of scholarship in the discipline.

**Maximum Time to Submit Thesis or Dissertation**

Students must make all final revisions and file the final version of the thesis or dissertation manuscript to UMI/Proquest within six months of the date of final presentation and/or defense of the thesis or dissertation work. Until the final manuscript of a thesis or dissertation is filed, the student must be enrolled in accordance with enrollment policy. Graduate students in the College who do not file the final manuscript within the six-month time limit must enroll in 3 hours a semester until the thesis or dissertation is completed and filed.

**Maximum Time to Complete the Degree**

Graduate Studies has established time limits on master’s and doctoral degree completion. Please see Graduate Studies policies on Doctoral Program Time Constraints and Master’s Program Time Constraints in the Graduate Studies (p. 2369) sections of the online catalog and in the KU Policy Library (http://policy.ku.edu) for full details.

Master’s degree students have a total of seven calendar years, excluding any periods of absence due to an approved leave of absence or voluntary discontinuation from a program, in which to complete the work for a master’s degree.

Doctoral degree students have a total of eight calendar years, excluding any periods of absence due to an approved leave of absence or voluntary discontinuation from a program, to complete the Ph.D. This includes students who enter with a master’s degree from an institution other than KU and bachelor’s degree holders who bypass the master’s and are admitted directly to a Ph.D. program.

Students who complete the master’s degree at KU and subsequently begin doctoral studies have 10 years to complete both degrees.

A time limit extension may be granted by the College. All extension petitions require the department to prepare and file a Graduate Degree Completion Agreement, which must then be approved by a designated subcommittee of the Committee on Graduate Studies. Per Graduate Studies policy, extensions may be granted for up to one year. However, additional time may be requested in the Completion Agreement. If the Completion Agreement is approved, subsequent petitions will receive an expedited review.

Academic units may set their own, more rigorous time limits. Consult with your advisor and review your academic unit’s handbook and the relevant Departments and Programs section of the online catalog for program-specific information, requirements, and restrictions.

**Graduation**

All graduate students must be enrolled the semester they complete all degree requirements.

Graduate Studies establishes an early deadline for degree completion for each semester and summer session, usually occurring at the end of the first 2 weeks of a semester or the end of the first week of summer session. If the student meets all degree requirements including the submission of all required documentation by this date, they are not required to enroll for that semester.

The final Graduate Application for Graduation Deadline is set by the Registrar for each semester. Please consult the official Academic Calendar for specific dates. To be eligible for graduation, an application for degree must be submitted and all degree requirements met by this deadline. This includes the submission of all required documentation to the College Office of Graduate Affairs. See the Graduation section of the COGA (http://clas.ku.edu/coga/graduation) website for more information.

**Undergraduate Awards**

**Graduation with Honors**

Undergraduates may earn honors upon graduation in 3 ways, in addition to making the honor roll each semester. Students may graduate with distinction or highest distinction, earn departmental honors in the major, or complete the University Honors Program. It is possible to earn honors in 1 of these areas, any combination of them, or all 3. The award of honors is noted on the student’s transcript and in the Commencement program. Distinction and highest distinction are noted on the diploma.

**Graduation with Distinction or Highest Distinction**

The top 10 percent of each year’s graduating class is designated as graduating with distinction. Of these, the top one-third is designated as graduating with highest distinction. To be eligible, students must have completed at least 60 credit hours, graded A through F, in residence at KU. See Required Work in Residence below.

**Graduation with Departmental Honors**

Most departments and programs allow qualified majors to work toward graduation with departmental honors. Graduation with departmental
honors is awarded in recognition of exceptional performance in the major, completion of a program of independent research or an alternative project, and a strong overall academic record.

In addition to the requirements of individual departments and programs (which must be approved by the College committee on undergraduate studies and advising), the College requires the following for graduation with departmental honors:

1. Candidates must declare the intention to work for departmental honors with the appropriate departmental honors coordinator(s) no later than the time of enrollment for the final undergraduate semester, but sooner if required by the department(s). Copies of the intent form should be returned to College Student Academic Services.

2. At the end of the final undergraduate semester, the candidate must have achieved an overall grade-point average of at least 3.25 and a grade-point average of at least 3.5 in the major. Both overall and major grade-point averages include work completed at other institutions, as well as at KU. No minimum grade-point average is required to declare candidacy for graduation with departmental honors unless specified by the department.

3. Each candidate’s departmental honors work must include independent research or an acceptable alternative project. The results of research are presented in a form appropriate to the requirements of the major department. Equivalents to the independent research component are established by approved departmental honors programs. In courses meeting the independent research requirement, the candidate must earn a grade of B or higher. Successful completion of all departmental honors requirements must be certified to the departmental honors coordinator(s) by a panel composed of at least three members of the College faculty who have read the report of the independent research and heard the oral presentation, where required.

Late Completion of Honors Requirement
Requirements for graduation with honors may be completed after the date on which certifications are requested from departments, and in some cases, requirements, if not needed for graduation, may be completed after a student has graduated. However, the Incomplete policy does apply and grades would lapse at the time of graduation. When a candidate finishes all requirements, departments must notify College Student Academic Services in writing.

Honor Roll
Undergraduates with grade-point averages of 3.5 who have completed at least 12 hours with letter grades are recognized on the honor roll or dean’s list in fall and spring. An Honor Roll notation appears on the transcript.

Honors Program
The University Honors Program provides opportunities for outstanding and creative undergraduates in all schools at KU to develop their full potential during their undergraduate years. See Honors in this section of the online catalog for further information.

Graduate Awards
The College of Liberal Arts and Sciences offers several awards to recognize outstanding graduate students, faculty service, teaching excellence, and exemplary advising. Below, you will find a brief description of each award. More specific information about eligibility and the call for nominations each year can be found on the College’s website under Faculty Awards (http://clas.ku.edu/resources/faculty-staff/awards) and Graduate Student Awards (http://clas.ku.edu/resources/faculty-staff/awards).

Graduate Student Awards
Howard J. Baumgartel Peace and Justice Award
This is an annual award to support a graduate student in the College or the School of Business for thesis or dissertation research whose interests, achievements, and talents are in the peace and justice field.

Outstanding Thesis/Research Project Award
The Committee on Graduate Studies in the College has established 2 annual awards for students receiving a master’s degree. The awards carry a $500 stipend. Students are nominated for the award by their advisors. Each department may nominate one master’s student for each award.

Career Achievement Teaching Award
This annual award recognizes a retired faculty member in the College of Liberal Arts and Sciences who has made a significant contribution to the teaching of College students at either the undergraduate or graduate level and who has distinguished him/herself through excellence in teaching. The award amount is $1,000.

African African-American St Courses
AAAS 102. Arabic and Islamic Studies. 3 Hours. NW/SC AE42/GE3H/GE3S / U.
An introduction to the study of Islam and the Arabic language in relation to Islamic cultures in Africa, the Mediterranean region, and beyond. Topics covered include the historical origins of Islam in relation to the Arabic language and its cultures of origin. This course is interdisciplinary, including attention to the topic from the perspectives of historical unfolding of both the language and religion, geographic and cultural perspectives, political and economic concerns, and aesthetic perspectives, including literature and the arts. LEC.

AAAS 103. Introduction to Africa. 3 Hours. NW/SC GE3H/GE3S / S/W.
An introduction to the interdisciplinary study of African cultures and societies focusing on contemporary life on the continent. Topics to be covered include the geography, history, politics, and economics of the continent, as well as the religion, languages and literatures, music, and the arts. The interdisciplinary perspective will provide students with a sound basis for understanding contemporary African societies. LEC.

AAAS 104. Introduction to African-American Studies. 3 Hours. SC AE41 / U.
Interdisciplinary introduction to the basic concepts and literature in the disciplines covered in African American Studies. Includes the social sciences, and humanities (including history, religion, and literature) as well
as conceptual framework for investigation and analysis of Black history and culture and society. LEC.

AAAS 105. Introduction to African History. 3 Hours. NW GE11/GE3H / H/W.
An introduction to important historical developments in Africa, mainly south of the Sahara. Topics will include pre-history, empires, kingdoms and city-states, the slave trade, southern Africa, partition and colonialism, the independence era, military and civilian governments, and liberation movements. Approaches will include literature, the visual arts, politics, economics, and geography. (Same as HIST 104.) LEC.

AAAS 106. The Black Experience in the Americas. 3 Hours. HT AE41 / H/W.
An interdisciplinary study of the history of the African peoples of the New World, relating their cultures and institutions to the African background and to their peculiar New World experiences up to and including the nineteenth century. While the main emphasis is on the U.S.A., attention is also paid to the Caribbean and Latin America. Approaches include demography, economics, social and political developments, literature, and music. (Same as HIST 109.) LEC.

AAAS 115. Introduction to African History, Honors. 3 Hours. NW GE3H / H.
An intensive version of AAAS 105/HIST 104. An introduction to important historical developments in Africa, mainly south of the Sahara. Topics include early history, empires, kingdoms and city-states, the slave trade, southern Africa, partition and colonialism, the independence era, military and civilian governments, and liberation movements. Approaches include literature, the visual arts, politics, economics, and geography. Open only to students in the University Honors Program or by consent of instructor. (Same as HIST 111.) LEC.

AAAS 116. The Black Experience in the Americas, Honors. 3 Hours. HT AE41 / H.
An intensive version of AAAS 106. Open only to students on Dean's Honor Roll or enrolled in Honors Program, or consent of instructor. LEC.

AAAS 160. Introduction to West African History. 3 Hours. NW AE42/GE3H / H.
This course treats West African history through the first part of the twentieth century. The student is provided with a perspective on the major historical patterns that gave rise to West Africa's development as an integral part of world history. Special attention is paid to anthropological, geographical, and technological developments that influenced West African political and socioeconomic changes. (Same as HIST 160.) LEC.

AAAS 177. First Year Seminar: _____, 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in African African-American Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

AAAS 200. Directed Studies. 3 Hours. U.
This course is designed for the study of special topics related to Africana at the freshman/sophomore level. It prepares students for continued practice in cultural reading and writing and for the academic rigor that awaits them at the upper levels. Prerequisite: Consent of department. IND.

AAAS 210. Brazil and Africa: Atlantic Encounters. 3 Hours. H.
This is a survey course on the history of the relationships between Brazil and Western Africa from the sixteenth century onward. We examine the shape of the Atlantic world, the nature of the Portuguese empire in Brazil and Africa, the presence of Brazilian born agents in Western Africa, the cultural exchanges, the impact of colonial rule, and the responses of indigenous societies to these developments. Among the topics to receive attention are Brazil/Portuguese slave trade; slavery in Western Africa, urban and rural context of African slavery in Brazil; the family and religious life in both sides of the Atlantic; Brazilian communities in the coast of Africa; the abolition of slavery; and the long lasting relationships between Western Africa and Brazil. Students develop familiarity with major historical concepts, themes, and subjects. The course also aims to explore history as process to make sense of the past and the present. (Same as HIST 210.) LEC.

AAAS 300. African Traditional Religion and Thought. 3 Hours. NW / H/W.
A study of African traditional religious beliefs, systems and practices and how these have conditioned spiritual, moral and social values, attitudes, social relationships and institutions, art, literature and music. Topics covered include the African world-view, concepts of birth, life, marriage, death and reincarnation; the concurrent practice or monotheism, polytheism and the cult of the ancestors; and the extent of relevance to Black societies in the New World. Prerequisite: AAAS 103 or AAAS 105 or AAAS 106 or consent of instructor. LEC.

AAAS 301. Portrait of a Third-World Nation: Haiti. 3 Hours. NW / H/W.
Case study of Third-World problems and aspirations through the first Black nation to win independence from colonialism. Topics include: profile of the Third World; Caribbean diversity; the Columbian exchange; piracy; slavery and plantocracy; Revolution and the burden of freedom; U.S. occupation; Papa Doc, Baby Doc, and the Tontons Macoute; Liberation theology; peasant life; government and corruption; poverty and hunger; morality of foreign aid; Voodoo; folk medicine. No knowledge of Haitian or French required. Students may not receive credit for both HAIT 200 and AAAS 301. LEC.

AAAS 302. Contemporary Haiti. 3 Hours. NW.
Detailed analysis of recent Haitian history. The focus will include interactions between religion, social structure, politics, economics and international relations. (Same as HAIT 300.) Prerequisite: AAAS 301/HAIT 200, or consent of instructor. LEC.

AAAS 303. Peoples and Cultures of North Africa and the Middle East. 3 Hours. NW / S.
This course familiarizes students with the peoples and cultures of North Africa and the Middle East. It examines the cultural, demographic, and religious diversity of the region, as well as the development of the early Islamic community and the formation of Islamic institutions. Issues such as religion and politics, inter-religious relations, nation-building, Islamic response to colonialism, Palestinian-Israeli conflict, Islamic resurgence, secularism, democratization, and gender, are also explored. (Same as ANTH 303.) LEC.

AAAS 305. Modern African History. 3 Hours. NW AE42 / H/W.
A survey of social, political, and economic developments during the colonial era and independence struggles, followed by a closer examination of the contemporary experience in a selected country or region. (Same as HIST 300.) LEC.

AAAS 306. The Black Experience in the U.S. Since Emancipation. 3 Hours. H.
An interdisciplinary study of the history and culture of Black people in America from Reconstruction to the present. Topics covered include an analysis of Reconstruction, Black leaders, organizations and movements, the Harlem Renaissance, migration, and race relations. Demographic variables covered include socio-economic class, education, political persuasion, and influence by avant-garde cultural changes. (Same as HIST 359.) LEC.
AAAS 307. Modern African History, Honors. 3 Hours. NW AE42 / H.
An intensive version of AAAS 305. A survey of social, political and
economic developments during the colonial era and independence
struggles, followed by a closer examination of the contemporary
experience in a selected country or region. Open only to students
admitted to the University Honors Program, or by consent of the
instructor. (Same as HIST 307.) LEC.

AAAS 316. Ministers and Magicians: Black Religions from Slavery to the
Present. 3 Hours. H.
This course examines the history and diversity of African American
religious expression from slavery until the present, emphasizing both
mainstream and alternative faiths. It covers the religious world views
of enslaved Africans, and examines faiths inside and outside of Christianity.
Topics may include: independent black churches, magical practices, the
Holiness and Pentecostal movements, black Islam, religious freemasonry,
and esoteric faiths. The class emphasizes the influence of gender, class,
race, migration, and urbanization on black religion. (Same as AMS 316
and HIST 316.) LEC.

AAAS 317. African American Women: Colonial Era to the Present. 3
Hours. H.
This interdisciplinary course covers the history of African American
women, beginning in West and Central Africa, extending across
the Middle Passage into the Americas, and stretching through
enslavement and freedom into the 21st century. The readings cover their
experiences through secondary and tertiary source materials, as well as autobiographies and letters, plays and music, and poems, novels, and
speeches. (Same as AMS 317, HIST 317, and WGSS 317.) LEC.

AAAS 320. African Studies In: ______. 3 Hours. NW AE42 / H/W.
Lecture and discussion course in African area of current interest. May be
repeated for credit toward the major. Prerequisite: AAAS 103 or AAAS 105 or consent of instructor. LEC.

AAAS 321. African Studies In, Honors: ______. 3 Hours. H/W.
Lecture and discussion course in African area of current interest. May be
repeated for credit toward the major. Only open to students admitted to
the University Honors Program or with permission of the instructor.
Prerequisite: AAAS 103 or AAAS 105 or AAAS 115 or consent of
instructor. LEC.

AAAS 322. Legal Issues and the African American. 3 Hours. H.
This course examines civil issues in African-American communities
and populations, and their legal ramifications. Topics such as the penal
system, court sentencing, death penalty, cultural norms, law enforcement
and civil liberties are critically examined within social and humanistic
theories. LEC.

AAAS 323. African-American Studies In: ______. 3 Hours. H.
Lecture and discussion course in African-American area of current
interest. May be repeated for credit toward the major. Prerequisite: AAAS 106 or consent of instructor. LEC.

AAAS 324. African-American Studies In, Honors: ______. 3 Hours. H.
Lecture and discussion course in African-American area of current
interest. May be repeated for credit toward the major. Only open to
students admitted to the University Honors Program or with permission
of the instructor. Prerequisite: AAAS 106 or AAAS 116 or consent of
instructor LEC.

AAAS 325. Popular Black Music. 3 Hours. H.
This is a comparative study of popular music produced in Africa, and
the African Diaspora. The praxis, theories, histories, forms, artists and
audiences are discussed. LEC.

AAAS 327. African American Culture. 3 Hours.
This course defines African American culture and seeks to identify ways in
which it is distinct, both in terms of its roots and ongoing evolution. LEC.

AAAS 328. African American Urban Community and Class in the
Midwest. 3 Hours. H.
This course provides historical perspective on African Americans and
the politics of economic class within black urban spaces from the
end of Reconstruction to the post-World War II era. It focuses on the
development of an upwardly mobile urban black middle class, and
impoverished black urban "underclass," since the 1960s. Students are
couraged to successfully completed one of three courses: AAAS 104, AAAS 106, or AAAS 306. (Same as HIST 338.) LEC.

AAAS 330. Black Leadership. 3 Hours. H.
The course focuses on the concept of leadership and on Black leadership
in the United States. An in-depth analysis of selected case studies of
Black leaders both historical and contemporary. Some attention
will be given to the dispersion of Africans into the Americas and the
leadership that emerged, conditioned both by environmental factors and
the psychology engendered by the system of slavery. Selected successful
Black leaders will be invited to visit the class from time to time. (Same as
AMS 340.) LEC.

AAAS 332. Introduction to African Literature. 3 Hours. NW AE42 / H/W.
Reading, analysis, and discussion of contemporary fiction, poetry, and
drama from sub-Saharan Africa. Brief attention is paid to historical
development and to traditional literature. (Same as ENGL 326.)
Prerequisite: Prior completion of the KU Core Written Communication
requirement. Recommended: Prior completion of one 200-level English
course. LEC.

AAAS 333. Introduction to Caribbean Literature. 3 Hours. AE42 / H/W.
Reading, analysis, and discussion of fiction, poetry, and drama from the
Caribbean, including a small selection of Spanish, French, and
Dutch Antillean works in translation. (Same as ENGL 339.) Prerequisite:
Prior completion of the KU Core Written Communication requirement.
Recommended: Prior completion of one 200-level English course. LEC.

AAAS 334. Introduction to African Dance Theatre. 2 Hours. NW / U.
Introduction to the general techniques of non-verbal theatrical
conventions in African cultures. Practical training in movement vocabulary
supplemented by lectures on the "text" of performance. There will be an
end of semester "studio performance." (Same as DANC 230 and THR
226.) LEC.

AAAS 335. Introduction to Southern African Literature. 3 Hours. NW / H/W.
This course deals with the literatures of the southern Africa region,
including works by both women and men from South Africa, Botswana,
Lesotho, Zaire, Zimbabwe, and Mauritius. Course includes close attention
to the political and cultural bases of social conflict in the region. LEC.

AAAS 336. Introduction to African Literature, Honors. 3 Hours. NW / H/W.
Reading, analysis and discussion of contemporary fiction, poetry, and
drama from Africa. Brief attention is paid to historical development and
to traditional literature. Prerequisite: Open only to students admitted to
the University Honors Program or with consent of instructor. Not open to
students who have taken AAAS 332. LEC.

AAAS 340. Women in Contemporary African Literature. 3 Hours. NW
AE42/GE3H / H.
A critical study of issues and questions raised about women in
contemporary African literature and implications for the larger society
through the analysis of theme, language, characterization, roles and functions of women in selected works. (Same as WGSS 330.) LEC.

AAAS 345. Popular Culture in Africa: Spiritual Thrills, Romance and Sexualities. 3 Hours. H.
This course examines how the different constituents of popular culture mobilize, construct and structure gender, and spiritual and sexual identities in select contemporary African countries. Discussions also focus on how popular culture mediates the contesting spaces of indigenous local constructs and the push and pull of global forces to create geographic and contemporary specificities. (Same as WGSS 345.) LEC.

AAAS 349. Islam. 3 Hours. NW AE42/GE3S / H/W.
Islam’s Origins, the prophet Muhammed, the Holy Koran, religious symbols and moral mandates, and historical developments. (Same as REL 350.) LEC.

AAAS 350. Physical Geography of Africa. 3 Hours. N.
This course is a survey of the basic physical features of the African continent including structure and relief, rivers and lakes, soils and mineral resources. It includes characteristics and processes of African climates, and the ecology of Africa’s four major biomes: tropical rain forest, savanna, steppe, and desert. Climatic and environmental variations of the past, emergence of humankind, and development of pastoral and farming systems are discussed. Contemporary environmental concerns also include deforestation and desertification, the impacts of drought, methods for monitoring African environments, and Africa’s prospects in a 21st century suffering from global warming. (Same as GEOG 350.) LEC.

AAAS 351. Africa’s Human Geographies. 3 Hours. NW AE42/GE3S / S/W.
An introduction to historical, cultural, social, political, and economic issues in Africa from a geographic perspective. The course begins with the historical geography of humanity in Africa, from ancient times through to the present. Other topics include cultural dynamics, demography, health, rural development, urbanization, gender issues, and political geography. Case studies from Eastern and Southern Africa will be used to illustrate major themes. (Same as GEOG 351.) LEC.

AAAS 353. Modern and Contemporary African Art. 3 Hours. H.
In this course, we examine the development of artistic modernisms in Africa in historical context. We also study the content, production, patronage, and display of modern and contemporary African art. In doing so, we consider African artists’ engagement with modernity, globalization, and contemporary issues, as well as interrogate influential myths and assumptions regarding African artists and the work they produce. Course themes include the workshop as a critical site, independence movements and the creation of national art forms, art as global commodity, and art in resistance, remembrance, and revolution. (Same as HA 353.) LEC.

AAAS 355. African Theatre and Drama. 3 Hours. NW / H/W.
A study of the origin and development of continental African theatre and its affinity to the Levant. Traditional, colonial and contemporary dramatic theories and experiments will be examined in play selections. (Same as THR 326.) LEC.

AAAS 356. African-American Theatre and Drama. 3 Hours. H.
A historical study of Black theatre in the U.S.A. from its African genesis to its contemporary Americaness. Epochs in African-American dramaturgy will be critically examined. (Same as THR 327) LEC.

AAAS 370. Introduction to the Languages of Africa. 3 Hours. NW AE42/GE3S / H/W.
A survey of the indigenous languages of Africa from a linguistic perspective, covering the main language families and their geographic distribution, and focusing on the features and structure of the more widely spoken and representative languages in each family (e.g., Fula, Hausa, Maninka, Swahili, Yoruba). (Same as LING 370.) LEC.

AAAS 372. Religion, Power, and Sexuality in Arab Societies. 3 Hours. NW / S.
This course examines theories of religion, discourse, power, gender and sexuality in their application to Arab societies. The course introduces different aspects of Arab cultures. Through canonical works, we study political domination, tribal social organization, honor, tribe, shame, social loyalty, ritual initiations and discuss how these issues speak generally to anthropological inquiry. Regionally specific works are then framed by an additional set of readings drawn from anthropological, linguistics, and social theories. (Same as ANTH 372.) LEC.

AAAS 376. West African Art. 3 Hours. NW / H/W.
Introduction to the rich visual art traditions of West Africa. Emphasis is given to the major art-producing cultures of the Western Sudan and the Guinea Coast, including the pre-historic cultures of Nigeria, Mali, and Ghana. The diverse forms of figure sculptures and masquerade performance and meanings of these arts in historical and cultural contexts are examined. (Same as HA 376.) LEC.

AAAS 388. The Black Woman. 3 Hours. S/W.
An interdisciplinary study of the role of Black women in our society, from the African background through the plantation experience to the present. Prerequisite: One course in the social sciences and/or humanities or consent of instructor. LEC.

AAAS 400. Readings in: _____. 3 Hours. U.
Investigation of a subject selected by a student in consultation with a departmental adviser and conducted under supervision. Individual reports and conferences. Open only to students who have completed at least six credit hours in African and African-American studies. Cannot be repeated for credit. Prerequisite: Consent of instructor. IND.

AAAS 415. Women and Islam. 3 Hours. H/W.
Addresses the widely-held stereotype of Muslim women as pawns in a patriarchal socio-religious context. Investigating the Muslim cultures of certain regions, the course will examine the manner in which indigenous culture was influenced by the introduction of Islam and the historical impact of Islam on women’s social roles. Focusing principally on social change in the 20th century, the course will consider how socio-political change affects religious roles where religion is integrally involved in daily life. To what extent is individualism valued, and how are the pressures of late 20th century life mediated? The course will draw on texts from history, sociology, and literature. Prerequisite: REL 107 or AAAS 349/REL 350 or consent of instructor. LEC.

AAAS 420. Intercultural Communication: The Afro-American. 3 Hours. AE41 / H.
An examination of the barriers to effective communication between Black Americans and non-Black Americans. (Same as COMS 447.) Prerequisite: Skills in basic composition essential. LEC.

AAAS 429. Postcolonial Theatre and Drama. 3 Hours. NW AE42/GE3S / H.
The course develops an understanding of the postcolonial concept and its different manifestations in theatre and drama across nations and cultures. It approaches postcolonialism as a way of reading theatre, and as a genre within theatre by exploring how the “colonial project” has reconfigured the concept, content, and context of theatre in both colonized and colonizing cultures. In addition to the study of postcolonial playwrights and their works, the course is also an introduction to postcolonial theory and its critics. (Same as THR 429.) LEC.
AAAS 432. Francophone African Literature. 3 Hours. NW AE42 / GE3S / H/W.
This course is an introduction to 20th century African literature written in French, covering selected works by major authors from both sub-Saharan Africa and the Maghreb. Attention will be given primarily to the novel, although some poetry will also be read. Topics and themes include negritude, African identity in the wake of colonialism, Islam, and women's writing. Classes will be conducted in English. Students may read the texts in French or in translation. (Same as FREN 432.) Prerequisite: ENGL 102 and a 200-level English course. LEC.

AAAS 433. Islamic Literature. 3 Hours. NW AE51 / H/W.
This course focuses on literature that reflects Islamic culture from its inception to contemporary times. Beginning with attention to the importance of the spoken word in the establishment of Islam, course readings and lectures follow the place of literary works in confirming Islamic perspectives. Readings include selections from the Qur'an, classical works of poetry and narrative, and contemporary autobiography. Authors are from Africa and the region of the Golden Age of Islam, including the best known: al-Ghazali (d.1111 C.E.), Attar (d. circa 1193-1235), Ibn Arabi (d. 1240 C.E.), Rumi (d. 1273), Saadi (d.1291), Hafiz (d. 1389 C.E.), and Shah (contemporary), as well as readings by and about less well known Muslim women scholars and Sufis in all historical periods. Readings are all in English translations. LEC.

AAAS 434. African Women Writers. 3 Hours. NW / H/W.
This course focuses on four decades of African women's writing from all regions of the continent. Works included deal with a wide variety of issues relevant to African women, as well as universal issues of conceptions of gender roles, and the struggle to attain personal rights and freedom within traditional cultural frameworks. LEC.

AAAS 435. Muslim Women's Autobiography. 3 Hours. NW / H/W.
This course examines the realities of Muslim women's experiences as conveyed in their own voices. Works are drawn from all over the world, from Africa and the Middle East to Europe and the U.S. and cover the nineteenth and twentieth centuries. LEC.

AAAS 440. The Afro-American Family: A Psychological Approach. 3 Hours. S.
The examination of the structure, values, and behavior patterns of the contemporary African-American family as influenced by African cultures and kinship systems and the institution of slavery in association with other factors. Social and psychological forces that have enhanced or blocked family survival, stability, and advancement will be explored. The orientation of Black family life will emphasize its strengths, weaknesses, adaptations, strong kinship bonds, and egalitarian family roles. LEC.

AAAS 445. Arab Thought and Identity. 3 Hours. NW / N/W.
The intention of this course is to present a comprehensive portrait and a deeper understanding of the Arab society and its cultural background. We will focus on the debate that is still raging about traditionalism versus modernity, and authenticity (assala) and specificity (Khususiyya) versus westernization. Moreover, we will discuss the question of Arab identity which manifests itself through a sense of belonging and diversity of affiliations, and relies as well on shared culture and its variations, and shared place in history and common experiences. It is designed for any student interested in this ethnic group. LEC.

AAAS 450. Popular Culture in the Muslim World. 3 Hours. NW / H.
A study of pop songs, television, comics, and other idioms of popular culture from different parts of the Muslim world, with attention to Muslims' sense of humor, tragedy, aesthetics, and pertinent issues of the day. (Same as REL 450.) LEC.

AAAS 460. Topics and Problems in African and African-American Studies. 1-3 Hours. H/W.
Individual investigation of special topics in African and African-American studies. May not be repeated for credit toward the major. Prerequisite: Six hours in African and African-American studies or consent of instructor. IND.

AAAS 470. Language and Society in Africa. 3 Hours. NW AE42 / GE3S / H/W.
Examines issues and problems associated with language use in sub-Saharan Africa from a sociological perspective. Topics covered include an overview of the types of languages spoken on the continent; indigenous languages, colonial languages, pidgins and creoles, and Arabic as a religious language; problems associated with the politics of literacy and language planning, writing and standardization of indigenous languages; and the cultural and ideological dilemmas of language choice. (Same as LING 470.) Prerequisite: AAAS 103, AAAS 305, or LING 106; or consent of instructor. LEC.

AAAS 496. Field Experience. 3 Hours. AE61 / H/W.
A supervised placement in practical situations where students actively participate in organized work within the community, to be completed with an acceptable paper. The course may be taken in the United States, Caribbean, or Africa to meet the B.A. degree requirement in African and African-American Studies. Open only to junior and senior majors or by consent of the department. FLD.

AAAS 501. Regional History: _____ . 3 Hours. H/W.
A survey of the major political, social, economic and intellectual trends in a region of Africa or the Americas. Prerequisite: Five hours of distribution courses in history. LEC.

AAAS 502. Directed Language Study: _____. 5 Hours. U.
Study of an African language at Elementary I and Elementary II levels under individual supervision and with the aid of self-instructional material. Open to juniors and seniors in good standing and graduate students only and with permission of the department. May be repeated for up to 10 credit hours. Cannot be used to fulfill BA foreign language requirement. IND.

AAAS 503. Directed Language Study: _____. 3 Hours. U.
Study of an African language at Intermediate I and Intermediate II levels under individual supervision and with the aid of self-instructional material. Open to juniors and seniors in good standing and graduate students only and with permission of the department. May be repeated for up to 6 credit hours. Cannot be used to fulfill BA foreign language requirement. IND.

AAAS 504. Directed Language Study I: _____. 3 Hours. U.
Study of an African language at Advanced I and Advanced II levels under individual supervision and with the aid of self-instructional material. Open only to juniors and seniors in good standing, graduate students and with permission of the department. May be repeated for up to 6 credit hours. Cannot be used to fulfill BA foreign language requirement. IND.

AAAS 505. Directed Language Study II: _____. 3 Hours. U.
Designed for native and near native speakers, this course involves reading of materials published in an African language intended for conversation, oral presentation, and writing by native speakers. May be repeated for up to 6 credit hours. Prerequisite: Native or near native speaker proficiency or consent of instructor. IND.

AAAS 510. Global Ethnic and Racial Relations. 3 Hours. NW AE42 / S.
An examination of constructions of race and ethnicity around the world. Emphasis is on the social, political, historical, cultural and economic factors that lead to the creation of ethnic and racial identities, ethnic conflict and accommodation, ethnic movements, and ethnic political
organization. Racial and ethnic relations in the U.S. are compared with other countries. Major focus is placed on ethnicity in Africa, Asia, Latin America, the Caribbean, and/or the Middle East. (Same as AMS 534 and SOC 534.) LEC.

AAAS 511. The Civil Rights Movement. 3 Hours. H.
An examination of the Civil Rights Movement in American History. Emphasis is placed on the activities of major Civil Rights organizations, Civil Rights legislation and its impact on American life, and conflicts between integrationist and separatist forces in politics, economics, education, culture and race relations in the United States. LEC.

AAAS 512. African and Western Cosmologies. 3 Hours. H/W.
Ancient and modern Western world views will be compared to African world views, with special attention paid to the way these are supported in the underpinnings of sociocultural institutions. Prerequisite: A course in African Studies and a course in the philosophy of science or consent of instructor. LEC.

AAAS 517. Roots of Human Trafficking: Modern Slavery and Africa. 3 Hours. H.
This reading- intensive seminar explores human trafficking in the modern world. It examines labor exploitation and commercialization in a historical perspective. The course aims to explore how Imperialism led to the expansion of human trafficking and how women, men and children experienced labor exploitation in different ways. We examine why forced labor was/is behind the car and bicycle industries, sugar, coffee, and chocolate consumption. Today more than 27 million people are held, sold, and trafficked as slaves around the world. This course discusses similarities and differences between contemporary and historical slavery and analyzes why and how it persists nowadays. Readings include accounts of people held in bondage, case studies, and reports. Students develop familiarity with major historical concepts, themes, and subjects. Students also engage, investigate, and understand history as a process to explain how we make sense of the past and the present. Students carry on a research project throughout the semester about the historical roots of a modern case of slavery and/or human trafficking, producing original scholarship. (Same as HIST 517.) Prerequisite: Successful completion of a history course numbered below 500, or permission of instructor. LEC.

AAAS 520. African Studies in: ____. 3 Hours. NW AE42 / H/W.
Upper level lecture and discussion courses in African area of current interest and/or taking advantage of faculty resources in topics relevant to the major. May be repeated for credit toward the major. Prerequisite: Junior/Senior in good standing. LEC.

AAAS 521. African Studies In, Honors: ____. 3 Hours. H/W.
Upper level lecture and discussion courses in African area of current interest and/or taking advantage of faculty resources in topics relevant to the major. May be repeated for credit toward the major. Only open to students admitted to the University Honors Program or with permission of the instructor. Prerequisite: Junior/senior in good standing. LEC.

Historical development, systematic ideas and rites of selected periods, cultural settings, and movements. Prerequisite: Five hours of distribution courses in the humanities or AAAS 512 and consent of instructor. LEC.

Upper level lecture and discussion courses in African-American area of current interest and/or taking advantage of faculty resources in topics relevant to the major. May be repeated for credit toward the major. Prerequisite: Junior/Senior in good standing. LEC.

AAAS 524. African-American Studies In, Honors: ____. 3 Hours. H.
Upper level lecture and discussion courses in African-American area of current interest and/or taking advantage of faculty resources in topics relevant to the major. May be repeated for credit toward the major. Only open to students admitted to the University Honors Program or with permission of the instructor. Prerequisite: Junior/senior in good standing. LEC.

AAAS 525. Social History of Black Aging in America. 3 Hours. H.
The purpose of this course is to provide a comprehensive historical examination of American society’s changing attitudes and responses to aging and older adults, with emphasis on the Black aged. Beginning with the African background where older adults were highly valued, the course explores the impact of slavery, the industrial Revolution, urbanization and the development of the youth-oriented culture prevalent in the United States today. Subsequently, the course focuses on the emergence of twentieth century social gerontological problems and the role of the modern Black movements, public agencies, and private organizations in addressing the issues. Film, essays, drama, and/or fiction are utilized to illustrate the cultural attitudes of each historical period. Prerequisite: AAAS 103 or AAAS 105 or AAAS 106 or a course in American history, or consent of instructor. LEC.

AAAS 527. Popular Culture in Africa. 3 Hours. S/W.
This course examines multiple expressions of popular culture in contemporary Africa, focusing on the aesthetics of forms such as music, theater, dress, street art, and popular literary genres, as well as the social themes they deal with and the societies that produce them. The approach will be based on a critical reconsideration of notions such as traditional versus modern culture, elite versus folk art, westernization, and cultural hybridity, in order to find better ways of discussing the cultural vibrancy of everyday life in contemporary Africa. LEC.

AAAS 530. Islam and African Studies. 3 Hours. H.
A study of Islamic thought, practice, and institutions of Islam with an emphasis on the examination of primary documents. (Same as REL 532.) LEC.

AAAS 532. Social History of Black Aging in America. 3 Hours. H.
A study of the social history of Black Americans, from their earliest protest efforts to the contemporary scene, with the focus on the methods and themes employed to alter their status in American society. (Same as COMS 551.) Prerequisite: COMS 130. Skills in basic composition essential. LEC.

AAAS 536. Islamic Art and Architecture in Africa. 3 Hours. N.
Study of Islamic art and architecture in various cultural and geographical settings, from the first mosques of North African and the Swahili coast to contemporary Islamized masquerades in West Africa. We consider art objects and architectural sites in terms of religious practice, trade and commerce, ritual and political power, and contemporary expression. (Same as HA 536.) Prerequisite: AAAS 102, AAAS 103, HA 100, or HA 150; or permission of instructor. LEC.

AAAS 542. The History of Islam in Africa. 3 Hours. NW / H/W.
A study of the history and institutions of Islam in Africa. Emphasis will be placed on the impact of Islam on African traditional religions and African civilizations in general; the historiographical traditions of Islam in Africa. (Same as REL 535.) Prerequisite: Five hours of distribution courses in the humanities. LEC.

AAAS 543. Language and Culture in Arabic-Speaking Communities. 3 Hours. NW AE42/GE3S / H.
The course examines the links between language structure, patterns of use, language choice, and language attitudes in the diglossic and bilingual Arabic-speaking communities. It also explores language as a
AAAS 545. Unveiling the Veil. 3 Hours. NW / H.
This course seeks to unveil a complex cultural practice that has been misconstrued by many scholars. It explores the versatility of the meaning of the veil. It examines the ways in which the veil has become a symbol of privacy, cultural identity, religious assertion, resistance and liberation, besides being a symbol of constraint, oppression, backwardness, and sexual mystery. LEC.

AAAS 550. Senior Seminar in: ______. 3 Hours. AE61 / H/W.
Small discussion groups, each designed to consider a specific, clearly defined topic, using an interdisciplinary approach and requiring the demonstration of a comprehensive knowledge of the fundamentals in the field as appropriate to the topic. Class discussion based on student presentations. Prerequisite: Senior majors; special departmental permission for other seniors. LEC.

AAAS 551. Environmental Issues in Africa. 3 Hours. S.
Acquaints students with the complexities of debates on environmental problems in Sub-Saharan Africa. Topics addressed may include deforestation, desert expansion, wildlife conservation, soil erosion, climate change, coral reef destruction, water resources development, mangrove preservation, and the environmental effects of war, industrialization, and urbanization. Class presentations and projects synthesize the perspectives of both human and physical geography. (Same as GEOG 550.) Prerequisite: GEOG 104 or permission of instructor. LEC.

AAAS 552. Classical Islamic Literature. 3 Hours. NW / H.
An examination of major developments in classical Islamic literature in the Middle East and beyond, with attention to the poetic and prose works (in translation) that emerged from them. (Same as REL 552.) LEC.

AAAS 553. Geography of African Development. 3 Hours. NW AE42/GE35 / S.
Acquaints students with the values and social parameters of African agricultural and pastoral practice. Topics include customary land rights, African perspectives on the natural world, gender issues in African agriculture, and the urbanization of African cultures. The course also contrasts African views with those of Western development practitioners and donor agencies. Case studies from different countries are used to highlight the continent's regional differences. (Same as GEOG 553.) LEC.

AAAS 554. Contemporary Health Issues in Africa. 3 Hours. S.
The course examines health and nutrition in African communities, using the methods of biological and medical anthropology. Fundamental to the approach taken in the course is the understanding that the health of human groups depends on interactions between biological and cultural phenomena in a particular ecological context. One topic will be selected per semester to examine in detail the full array of epidemiological factors contributing to patterns of specific diseases. AIDS, childhood diseases, and reproductive health of African women are among possible topics. Course material will be selected from scholarly and medical publications, as well as coverage in the popular media. The use of a variety of sources will enhance understanding of the biological and cultural issues involved, and will help students identify possible bias and misinformation in popular coverage of events such as famine or epidemic in African settings. (Same as ANTH 545.) Prerequisite: An introductory course in either Anthropology or African Studies. LEC.

AAAS 555. African Film. 3 Hours. NW / H.
A critical study of Africa and its peoples as depicted in films. The aesthetic, cultural, economic, political, historical, and ideological aspects of African films are examined. (Same as FMS 544.) LEC.

AAAS 557. Cities and Development. 3 Hours. S.
An intermediate level course in urban geography, with an emphasis on cities in the developing world. Example cities in Latin America and the Caribbean, Sub-Saharan Africa, the Middle East, South Asia, and/or Southeast Asia may be examined. The main focus is on the intersection between urbanization and economic development, but social, political, and cultural aspects of development in cities are considered. Other topics include the geographic impacts of European colonialism, urbanization and industrialization, rural-to-urban migration, urban structure and spatial dynamics, urban planning, and environmental sustainability. (Same as GEOG 557.) LEC.

AAAS 560. Race, Gender, and Post-Colonial Discourses. 3 Hours. H.
An examination of the ways in which the concept of race, gender, and post-colonialism frame African literatures from the Caribbean, North America, and the continent itself. The course will focus on these discourses grounding them in critical frameworks within which they can be contextually analyzed and evaluated, at the same time examining their impact in literacy praxis and theory. (Same as WGSS 560.) LEC.

AAAS 561. Liberation in Southern Africa. 3 Hours. NW AE42 / U.
This course examines struggles for freedom in southern Africa and the consequences of political, economic, and social changes in the region. The end of colonial rule, the demise of white-settler domination, and the fall of the apartheid regime is discussed. As a major political event of the twentieth century, the liberation of southern Africa had both local and global consequences. The course analyzes transnational issues of liberation and resistance to consider broader regional and international perspectives. Course themes pay particular attention to gender and ethnicity and include a focus on democratization and contemporary meanings of liberation. Prior coursework in African Studies is strongly recommended, but not required. (Same as HIST 561 and POLS 561.) LEC.

AAAS 565. Gender, Culture, and Migration. 3 Hours. H.
This course brings a human face to the 21st century manifestation of globalization by focusing on the issues of culture, gender and migration. How do these three aspects create the "global village" amongst both the host and donor peoples? When people move from one place to another, what do they leave behind, what do they take with them? What is gained, or lost by the host community? What is the impact of migration on a specific group's and individual's sense of identity? How has migration affected the people's construction, understanding, and practice of gender? Given their primary roles in the home and within the culture, these questions and more are posed with particular attention to women. Migration theories, interviews and personal testimonies as well as literary and dramatic works are critical to our analyses of the issues raised and enable us to hold conversations with, and listen to the stories of the ordinary people who make globalization happen and sustain it. (Same as AMS 565 and WGSS 565.) LEC.

AAAS 566. Kongo Trans-Atlantic. 3 Hours. S.
This seminar explores Kongo culture and history through a cross-section of the African-Atlantic World: Western Equatorial Africa and related New World societies in Jamaica, Brazil, Haiti, Cuba, and the Georgia and Carolina coasts, and New Orleans (thus in former British, Portuguese, French, Spanish, and U.S. colonial territories). The seminar will assess recent scholarship on patterns of slavery and resistance, cultural and linguistic change, creolization and hybridization. (Same as ANTH 568.) LEC.
AAAS 574. Slavery in the New World. 3 Hours. H/W.
Slavery, slave culture, and the slave trade in the U.S., Latin America, and the Caribbean will be examined comparatively. Attention will also be given to African cultures, the effects of the slave trade on Africa, and the effects of African cultures on institutions in the New World. (Same as HIST 574.) LEC.

AAAS 578. Central African Art. 3 Hours. NW / H/W.
Introduction to the arts and cultures of Central Africa. Emphasis is given to the major art-producing cultures of the Equatorial forest and the Southern Savanna regions of Cameroon, Gabon, Congo, Zaire, and Angola. The historical and cultural contexts for the visual arts associated with centralized leadership and non-centralized societies are explored. (Same as HA 578.) LEC.

AAAS 584. Black American Literature. 3 Hours. H.
A study of the literature written by Black Americans from the pre-Civil War period to the present. Emphasis upon specific historical periods in the development of Black literature as well as on a critical analysis of major autobiographical, poetical, and fictional works. LEC.

AAAS 585. Race and the American Theatre. 3 Hours. U.
The representation(s) of race in significant texts and performance styles in American theatre analyzed according to political ideologies, dramatic movements and the impact of these factors on the representation of the "other" in the theatre. (Same as AMS 529 and THR 529.) LEC.

AAAS 590. The Rise and Fall of Apartheid. 3 Hours. H.
This course will deal with the last fifty years of South African history during which apartheid came to be formulated, supported, and perpetuated, and the forces that were responsible for its disintegration by 1990. Reference will also be made to the transformation process since April 1994. (Same as HIST 599.) LEC.

AAAS 598. Sexuality and Gender in African History. 3 Hours. NW AE42 / S.
An examination of the history of sexuality and gender in Africa with a focus on the 19th and 20th centuries. Major issues and methods in the historical scholarship on gender and sexuality will be covered. Topics of historical analysis include life histories, rites of passage, courtship, marriage, reproduction, education, masculinities, homosexuality, colonial control, and changing gender relations. Prior course work in African history is suggested. Graduate students will complete an additional project in consultation with the instructor. (Same as HIST 598.) LEC.

AAAS 600. Politics in Africa. 3 Hours. NW AE42 / S.
A survey of politics in Africa, focused on the countries of sub-Saharan or Black Africa. The course includes a historical discussion of precolonial Africa, colonization and the creation of contemporary states, and the politics of independence, before examining contemporary political systems and the forces influencing patterns of politics on the continent. (Same as POLS 665.) Prerequisite: POLS 150 or AAAS 105 or AAAS 305 or consent of instructor. LEC.

AAAS 611. History of the Black Power Movement. 3 Hours. H.
Examines the Black Power Movement in its many manifestations, beginning with a discussion of its political and cultural background: the transition from Civil Rights to Black Power in the African American Freedom Movement of the 1960s; the impact on African Americans of African decolonization and the spread of anti-colonial and anti-imperialist movements throughout other parts of the globe. The course also examines the Black Arts Movement and its influence on the Black Power Movement and vise versa. Therefore, some attention will also be paid to the music, literature, theater, and the graphic arts of the period, and the aesthetic and political critiques of these artistic forms. Prerequisite: AAAS 511 not required but recommended. LEC.

AAAS 630. The Life and Intellectual Thought of W.E.B. Du Bois. 3 Hours. H.
A critical examination of W. E. B. Du Bois, paramount black scholar and activist whose massive body of scholarly work spans the period from late 19th through the mid-20th centuries. Course covers the major works of Du Bois. Topics include Du Bois as sociologist, historian, propagandist, and creative writer. Moreover, the course deals with Du Bois as an intellectual in conversation with other black thinkers, including individuals such as, Booker T. Washington, Alexander Crummell, Anna Julia Cooper, Ida B. Wells-Barnett, Marcus Garvey, E. Franklin Frazier, Walter White and Thurgood Marshall. LEC.

AAAS 650. Sufism. 3 Hours. NW / H.
A survey of developments in Sufi (Islamic Mystical) thought, poetry, and ritual throughout Muslim history and across the Muslim world. (Same as REL 650.) Prerequisite: AAAS 349/REL 350 or permission of instructor. LEC.

AAAS 657. Gender in Islam and Society. 3 Hours. NW / H.
An investigation of the relationship between Islam, and gender roles and status in religious texts (Quran and Hadith) and in societies across the Muslim world, past and present. (Same as REL 657.) Prerequisite: AAAS 349/REL 350 or permission of instructor. LEC.

AAAS 662. Gender and Politics in Africa. 3 Hours. S.
This course is designed to explore the field of gender and African politics. We begin by paying particular attention to African women's political roles during the pre-colonial and colonial society. Next, we examine the impetus, methods, and path of liberation struggles and how gender roles were shaped, shifted, and changed during these struggles. The majority of the class focuses on current issues in African politics, including gender and development, HIV/AIDS and women's health, gender and militarism. We also explore women's roles in political institutions, civil society organizations, trade and labor unions, and transnational movements. We also examine contemporary constructions of masculinity and femininity in African states and explore how these constructions affect social policy and national political agendas. (Same as WGSS 662.) LEC.

AAAS 663. The Anthropology of Islam. 3 Hours. NW / H.
This course uses critical readings of major anthropological works on Islam to: 1) analyze various interpretations of "Islamic cultures" through a discussion of regionally-grounded works, and 2) examine how the anthropological study of Islam also is informed by theoretical and philosophical approaches to major anthropological questions, such as religion, myth, kinship, social organization, and power. The course offers both a history of various interpretations of Islam as well as a history of theories of these interpretations. (Same as ANTH 663.) LEC.

AAAS 676. West African Art. 3 Hours. NW / H/W.
Introduction to the rich visual art traditions of West Africa. Emphasis is given to the major art-producing cultures of the Western Sudan and the Guinea Coast, including the archaeological cultures of Nigeria, Mali, and Ghana. The diverse forms of figure sculptures and masquerade performance and meanings of these arts in historical and cultural contexts are examined. This course requires more intensive work than AAAS 376 and is open to upper division and graduate students only. Not open to students who have taken AAAS 376/HA 376. (Same as HA 676.) LEC.

AAAS 677. African Design. 3 Hours. NW / H/W.
A survey of sub-Saharan African media, emphasizing textiles, ceramics, metal and bead work, the artist's techniques, working methods and apprenticeship, and historical and contemporary cultural contexts, including the influence of tourism and the international art market on artistic production and style. Open to juniors, seniors, and graduate students only. (Same as HA 677.) Prerequisite: AAAS 376 or HA 376.
or AAAS 578 or HA 578, or an introductory course in art history at the college level, or consent of instructor. LEC.

AAAS 679. African Expressive Culture: ______. 3 Hours. NW / H/W.
An in-depth examination of an artistic tradition shared by a number of African cultures. Discussion includes historical development related to style, use and meaning and other relevant issues. Open to juniors, seniors, and graduate students only. (Same as HA 679.) Prerequisite: AAAS 376 or HA 376, or AAAS 578 or HA 578, or an introductory course in art history at the college level, or consent of instructor. LEC.

AAAS 680. Introduction to Modern Africa. 3 Hours. H/W.
An interdisciplinary approach to cross-cultural understanding of Africa's place in the modern world. Specific emphasis will be given to the role of Africa in world history, African cultures, modern African history, and problems of development and nation building in Africa. Prerequisite: Consent of instructor. LEC.

AAAS 690. Investigation and Conference. 1-3 Hours. AE61 / H/W.
Individual and supervised readings in selected areas of African and African-American studies which will be an investigation of a subject selected by the student with the advice and direction of an instructor. Individual reports and conferences. Prerequisite: Seniors and consent of department. IND.

AAAS 695. Honors Project in: ______. 3 Hours. AE61 / H.
An individual research project in African-American or African studies under the direction of a specialist in the area of the student's interest, the results of the project to be presented in written form and to be defended before a committee of three faculty members as provided for under the requirements for Honors. Majors only and permission of instructor. IND.

AAAS 700. Africa in World Politics. 3 Hours.
A 20th-century and 21st-century study of the combined internal and external forces that precipitated the rise of Africa, the major African issues in international relations, and Africa's impact on the modern world. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 701. Politics in Africa. 3 Hours.
A survey of politics in Africa, focused on the countries of sub-Saharan or Black Africa. The course includes a historical discussion of precolonial Africa, colonization and the creation of contemporary states, and the politics of independence, before examining contemporary political systems and the forces influencing patterns of politics on the continent. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 715. Seminar in African Art. 3 Hours.
A concentrated study of a special topic relating to African Art studies. Different topics are offered in different semesters. (Same as HA 715.) Prerequisite: Nine hours of Art History and/or consent of instructor. SEM.

AAAS 716. Women in Islam. 3 Hours.
Addresses the widely-held stereotype of Muslim women as pawns in a patriarchal socio-religious context. Investigating the Muslim cultures of certain regions, the course will examine the manner in which indigenous culture was influenced by the introduction of Islam and the historical impact of Islam on women's social roles. Focusing principally on contemporary social change, the course will consider how socio-political change affects religious roles where religion is integrally involved in daily life. To what extent is individualism valued, and how are the pressures of the late 20th-century and early 21st-century life mediated? The course will draw on texts from history, sociology, and literature. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 720. Intercultural Communication: The Afro-American. 3 Hours.
An examination of the barriers to effective communication between Black Americans and non-Black Americans. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 723. Special Topics in Africana Studies: ______. 3 Hours.
Seminar in an area of current interest in African and African-American Studies. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 727. African-American Culture. 3 Hours.
This course defines African American culture and identifies ways in which it is distinct. The course identifies the roots of African American culture, as well as the transformations occurring over time. The course covers identity issues and considers the possibility of complex, multi-identity structures. The course addresses the issues of whether there is a common narrative or a common root metaphor for African American culture, how this is known epistemologically, internally and externally, and how epistemological "knowledge" is appropriated. Course pedagogy includes text readings, case studies, performance events, and media events. LEC.

AAAS 730. Black Leadership. 3 Hours.
The course focuses on the concept of leadership and on Black leadership in the United States. An in-depth analysis of selected case studies of Black leaders both historical and contemporary. Some attention will be given to the dispersion of Africans into the Americas and the leadership that emerged, conditioned both by environmental factors and the psychology engendered by the system of slavery. Selected successful Black leaders will be invited to visit the class from time to time. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 731. African Literature. 3 Hours.
Introduction to African Literature. Reading, analysis, and discussion of contemporary fiction, poetry, and drama from sub-Sahara Africa. Brief attention will be paid to historical development and to traditional literature. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 732. Francophone African Literature. 3 Hours.
This course is an introduction to 20th-century and modern Francophone African literature covering selected works by major authors from both sub-Saharan Africa and the Maghreb. Attention will be given primarily to the novel, although some poetry will also be read. Topics and themes include negritude, African identity in the wake of colonialism, Islam, and women's writing. Classes will be conducted in English. Students may read the texts in French or in translation. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 733. Islamic Literature. 3 Hours.
Contemporary literature that is set in the context of Muslim cultures provides for an examination of Muslim identity on its own terms. This course focuses on the literary examination of works by Muslim authors from Egypt, Sudan, Senegal, Guinea, Mali, Morocco, Nigeria, and Niger. From the perspective of both male and female authors, the issue of what it means to be a Muslim is considered through fictional accounts set in contemporary contexts. Some works will be read in translation from Arabic.
or French; others are written originally in English. Cultures considered in this course vary widely in their origins and customs, which allows for a focus on the one pervasive element they share in common: Islam as it shapes people's lives. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 734. African Women Writers. 3 Hours.
This course focuses on African women’s writing from all regions of the continent. Works included deal with a wide variety of issues relevant to African women, as well as universal issues of conceptions of gender roles, and the struggle to attain personal rights and freedom within traditional cultural frameworks. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 735. Muslim Women’s Autobiography. 3 Hours.
This course examines the realities of Muslim women’s experiences as conveyed in their own voices. Works are drawn from all over the world, from Africa and the Middle East to Europe and the U.S. and cover from the 19th-century to the present. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 740. The Afro-American Family: A Psychological Approach. 3 Hours.
The examination of the structure, values, and behavior patterns of the contemporary African-American family as influenced by African cultures and kinship systems and the institution of slavery in association with other factors. Social and psychological forces that have enhanced or blocked family survival, stability, and advancement will be explored. The orientation of Black family life will emphasize its strengths, weaknesses, adaptations, strong kinship bonds, and equilitarian family roles. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 745. Arab Thought and Identity. 3 Hours.
The intention of this course is to present a comprehensive portrait and a deeper understanding of the Arab society and its cultural background. We will focus on the debate that is still raging about traditionalism versus modernity, and authenticity (assala) and specificity (Khususiyya) versus westernization. Moreover, we will discuss the question of Arab identity which manifests itself through a sense of belonging and diversity of affiliations, and relies as well on shared culture and its variations, and shared place in history and common experiences. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 749. Islam. 3 Hours.
Islam's origins, the prophet Muhammed, the Holy Koran, religious symbols and moral mandates, and historical developments. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 750. Popular Culture in the Muslim World. 3 Hours.
A study of pop songs, television, comics, and other idioms of popular culture from different parts of the Muslim world, with attention to Muslims' sense of humor, tragedy, aesthetics, and pertinent issues of the day. LEC.

AAAS 760. Topics and Problems in African and African-American Studies. 3 Hours.
Individual investigation of special topics in African and African-American studies. May not be repeated for credit. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 770. Language and Society in Africa. 3 Hours.
Examines issues and problems associated with language use in sub-Saharan Africa from a sociological perspective. Topics covered include an overview of the types of languages spoken on the continent: indigenous languages, colonial languages, pidgins and creoles, and Arabic as a religious language; problems associated with the politics of literacy and language planning, writing and standardization of indigenous languages; and the cultural and ideological dilemmas of language choice. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 774. Topics in Literatures of Africa and the African Diaspora: 3 Hours.
An intensive study of the literatures of Africa and African diaspora (people of African descent dispersed around the world). This study will focus on the major characteristics of a particular period, genre, mode, and/or theme in literatures such as African, Caribbean, Afro-Brazilian, African American, African Canadian, Black British. Critical theories pertinent to writers and their work will be covered. Topics may include studies in drama, poetry, or the novel; migration narratives; literature of a particular era, such as the Harlem Renaissance, Negritude, or the Black Arts Movement; representations of gender, etc. As topics vary by semester, the course may be repeated for credit. (Same as ENGL 774.) LEC.

AAAS 778. The Black Woman. 3 Hours.
An interdisciplinary study of the role of Black women in our society, from the African background through the plantation experience to the present. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 801. Introduction to Africana Studies: African-American. 3 Hours.
An introduction to, and overview of, the historical, intellectual, and professional foundations of African-American Studies; a multidisciplinary examination of the key texts and issues in the field. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 802. Introduction to Africana Studies: African. 3 Hours.
An introduction to, and overview of, the historical, intellectual, and professional foundations of African Studies; a multidisciplinary examination of the key texts and issues in the field. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 803. Research Methods in Africana Studies. 3 Hours.
A multidisciplinary introduction to the range of research methods employed to examine African and African-American history, cultures, and societies. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 804. Seminar in Africana Studies. 3 Hours.
An interdisciplinary, comparative exploration of the histories, cultures, and societies of Africans and peoples of African descent. Students will be required to utilize the skills gained in AAAS 801 and AAAS 802 to design and implement a project that will be critically assessed in the seminar. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. Prerequisite: AAAS 801 and AAAS 802 or consent of instructor. LEC.

AAAS 810. Comparative Racial and Ethnic Relations. 3 Hours.
An examination of constructions of race and ethnicity around the world. Emphasis is on the social, political, historical, cultural and economic
AAAS 811. The Civil Rights Movement. 3 Hours.
An examination of the Civil Rights Movement in American History. Emphasis is placed on the activities of major Civil Rights organizations, Civil Rights legislation and its impact on American life, and conflicts between integrationist and separatist forces in politics, economics, education, culture and race relations in the United States. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 812. The Black Power Movement. 3 Hours.
This course will examine the Black Power Movement in its many manifestations, beginning with a discussion of its political and cultural background: the transition from Civil Rights to Black Power in the Afro-American freedom movement of 1960's; the impact on African Americans of African decolonization and the spread of anti-colonial and anti-imperialist movements throughout other parts of the globe. There will also be some examination of the Black Arts Movement and its influence on the Black Power Movement and vice versa. Therefore, some attention will also be paid to the music, literature, theater, and the graphic arts of the period, and the aesthetic and political critiques of these artistic forms. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 822. African and African-American Religion. 3 Hours.
Historical development, systematic ideas and rites of selected periods, cultural settings, and movements. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 825. Social History of Black Aging in America. 3 Hours.
The purpose of this course is to provide a comprehensive historical examination of American society's changing attitudes and responses to aging and older adults, with emphasis on the Black aged. Beginning with the African background where older adults were highly valued, the course explores the impact of slavery, the industrial Revolution, urbanization and the development of the youth-oriented culture prevalent in the United States today. Subsequently, the course focuses on the emergence of twentieth-century social gerontological problems and the role of the modern Black movements, public agencies, and private organizations in addressing the issues. Film, essays, drama, and/or fiction are utilized to illustrate the cultural attitudes of each historical period. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 827. Popular Culture in Africa. 3 Hours.
This course examines multiple expressions of popular culture in contemporary Africa, focusing on the aesthetics of forms such as music, theatre, dress, street art, and popular literary genres, as well as the social themes they deal with and the societies that produce them. The approach will be based on a critical reconsideration of notions such as traditional versus modern culture, elite versus folk art, westernization, and cultural hybridity, in order to find better ways of discussing the cultural vibrancy of everyday life in contemporary Africa. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 830. The Life and Times of W.E.B. Du Bois. 3 Hours.
A critical examination of the life and thought of W. E. B. Du Bois, paramount black scholar and activist whose massive body of scholarly work spans the period from late 19th through the mid-20th centuries. Course covers the major works of Du Bois. Topics include Du Bois as sociologist, historian, propagandist, and creative writer, taking into account his often shifting views on art and culture, politics, leadership, civil rights and the color line, trade unionism, Pan-Africanism, socialism, internationalism, and, of course, double consciousness, among other issues. Moreover, the course will deal with Du Bois as an intellectual in conversation with other black thinkers, including individuals such as Booker T. Washington, Alexander Crummell, Anna Julia Cooper, Ida B. Wells-Barnett, Marcus Garvey, E. Franklin Frazier, Walter White and Thurgood Marshall. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 832. Comparative Black Literature. 3 Hours.
Reading, analysis, and discussion of contemporary fiction, poetry, and drama from Africa, the Caribbean, and the United States. Brief attention will be paid to historical development and to traditional literature. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 834. The Rhetoric of Black Americans. 3 Hours.
A study of the rhetoric of Black Americans, from their earliest protest efforts to the contemporary scene, with the focus on the methods and themes employed to alter their status in American society. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 843. Language and Culture in Arabic-Speaking Communities. 3 Hours.
The course examines the links between language structure, patterns of use, language choice, and language attitudes in the diglossic and bilingual Arabic-speaking communities. It also explores language as a reflector and creator of Arab culture (e.g. linguistic encoding of politeness, the Quranic text as the spoken and written word, the role of tropes in Arabic rhetoric). The topics for discussion range from the micro-level language choice to the macro-level issues of national language policies and planning within the domain of government and education across the Arab world. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 845. Unveiling the Veil. 3 Hours.
This course seeks to unveil a complex cultural practice that has been misconstrued by many scholars. It explores the versatility of the meaning of the veil. It examines the ways in which the veil has become a symbol of privacy, cultural identity, religious assertion, resistance and liberation, besides being a symbol of constraint, oppression, backwardness, and sexual mystery. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 851. Environmental Issues in Africa. 3 Hours.
Acquaints students with the complexities of debates on environmental problems in Sub-Saharan Africa. Topics addressed may include deforestation, desert expansion, wildlife conservation, soil erosion, climate change, coral reef destruction, water resources development, mangrove preservation, and the environmental effects of war, industrialization, and urbanization. Class presentations and projects synthesize the perspectives of both human and physical geography. Additional
advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 852. Classical Islamic Literature. 3 Hours.
An examination of major developments in classical Islamic literature in the Middle East and beyond, with attention to the poetic and prose works (in translation) that emerged from them. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 853. Geography of African Development. 3 Hours.
Acquaints students with the values and social parameters of African agricultural and pastoral practice. Topics include customary land rights, African perspectives on the natural world, gender issues in African agriculture, and the urbanization of African cultures. The course also contrasts African views with those of Western development practitioners and donor agencies. Case studies from different countries are used to highlight the continent’s regional differences. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 855. African Film and Video. 3 Hours.
A critical study of Africa and its peoples as depicted in films and videos. The aesthetic, cultural, economic, political, historical, and ideological aspects of African films and videos will be examined. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 857. Cities and Development. 3 Hours.
An intermediate-level course in urban geography, with an emphasis on cities in the developing world. Example cities in Latin America and the Caribbean, Sub-Saharan Africa, the Middle East, South Asia, and/or Southeast Asia may be examined. The main focus is on the intersection between urbanization and economic development, but social, political, and cultural aspects of development in cities are considered. Other topics include the geographic impacts of European colonialism, urbanization and industrialization, rural-to-urban migration, urban structure and spatial dynamics, urban planning, and environmental sustainability. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 860. Race, Gender, and Post-Colonial Discourses. 3 Hours.
An examination of the ways in which the concept of race, gender, and post-colonialism frame African literatures from the Caribbean, North America, and the continent itself. The course will focus on these discourses grounding them in critical frameworks within which they can be contextually analyzed and evaluated, at the same time examining their impact in literacy praxis and theory. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 874. Slavery in the New World. 3 Hours.
Slavery, slave culture, and the slave trade in the U.S., Latin America, and the Caribbean will be examined comparatively. Attention will also be given to African cultures, the effects of the slave trade on Africa, and the effects of African cultures on institutions in the New World. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 880. Introduction to Modern Africa. 3 Hours.
An interdisciplinary approach to cross-cultural understanding of Africa’s place in the modern world. Specific emphasis will be given to the role of Africa in world history, African cultures, modern African history, and problems of development and nation building in Africa. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 884. Black American Literature. 3 Hours.
A study of the literature written by Black Americans from the pre-Civil War period to the present. Emphasis upon specific historical periods in the development of Black literature as well as on a critical analysis of major autobiographical, poetic, and fictional works. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 885. Race and the American Theatre. 3 Hours.
The representation(s) of race in significant texts and performance styles in American theatre analyzed according to political ideologies, dramatic movements and the impact of these factors on the representation of the "other" in the theatre. LEC.

AAAS 890. The Rise and Fall of Apartheid. 3 Hours.
This course will deal with the fifty years of South African history during which apartheid came to be formulated, supported, and perpetuated, and the forces that were responsible for its disintegration by 1990. Reference will also be made to the transformation process since April 1994. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 898. Sexuality and Gender in African History. 3 Hours.
An examination of the history of sexuality and gender in Africa focused on the 19th-century to the present. Major issues and methods in the historical scholarship on gender and sexuality will be covered. Topics of historical analysis include life histories, rites of passage, courtship, marriage, reproduction, education, masculinities, homosexuality, colonial control, and changing gender relations. Prior course work in African history is suggested. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 899. Thesis. 1-6 Hours.
Investigation and research of a topic for a master’s thesis. A maximum of 6 thesis hours may be counted toward the 33 hours required for the degree. THE.

AMHR 110. Elementary Amharic I. 5 Hours. U.
Basic level of oral fluency and aural comprehension. Vocabulary acquisition, pronunciation, grammar, and writing. Reading of simple texts. Not open to native speakers of Amharic. LEC.

AMHR 120. Elementary Amharic II. 5 Hours. U.
A continuation of AMHR 110. Readings in cultural texts. Prerequisite: AMHR 110. LEC.

AMHR 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Amharic. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

AMHR 210. Intermediate Amharic I. 3 Hours. U.
Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern Amharic texts and discussion in Amharic. Prerequisite: AMHR 120. LEC.

AMHR 220. Intermediate Amharic II. 3 Hours. U.
Continuation of AMHR 210. Discussion in Amharic of texts. Prerequisite: AMHR 210. LEC.

ARAB 110. Elementary Arabic I. 5 Hours. U.
Five hours of class per week. Basic level of oral fluency and aural comprehension. Vocabulary acquisition, pronunciation, grammar, and
writing. Reading of simple texts. Not open to native speakers of Arabic.
LEC.

**ARAB 120. Elementary Arabic II. 5 Hours. U.**
Five hours of class per week. A continuation of ARAB 110. Readings in cultural texts. Prerequisite: ARAB 110. LEC.

**ARAB 177. First Year Seminar: _____ . 3 Hours. GE11 / U.**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Arabic. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

**ARAB 210. Intermediate Arabic I. 3 Hours. U.**
Three hours of class conducted in Arabic. Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern Arabic texts and discussion in Arabic. Prerequisite: ARAB 120. LEC.

**ARAB 220. Intermediate Arabic II. 3 Hours. U.**
Three hours of class conducted in Arabic. Continuation of ARAB 210. Discussion in Arabic of texts studied. Prerequisite: ARAB 210. LEC.

**ARAB 310. Advanced Arabic I. 3 Hours. U.**
A practical Arabic language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Arabic. Designed for students who have had two or more years of Arabic study. Open to native speakers. Prerequisite: ARAB 220 or consent of instructor. LEC.

**ARAB 320. Advanced Arabic II. 3 Hours.**
A continuation of ARAB 310. Prerequisite: Satisfactory completion of ARAB 310 or consent of instructor. LEC.

**ARAB 401. Readings in Arabic I. 3 Hours. U.**
Designed for native and near-native speakers, this course involves reading newspapers and other publications in the language intended for native speakers, conversation, oral presentations, and advanced grammar. Prerequisite: Native or near-native speaker proficiency or consent of instructor. LEC.

**ARAB 402. Readings in Arabic II. 3 Hours. U.**
Continuation of ARAB 401. LEC.

**HAIT 110. Elementary Haitian I. 3 Hours. U.**
Beginning course in the vernacular language of Haiti, Martinique, Guadeloupe and other areas of the Caribbean and the Indian Ocean. Conversational approach, with essentials of grammar. Reading of basic texts. Special attention to folk culture as expressed by language. No previous knowledge of another foreign language is required. LEC.

**HAIT 120. Elementary Haitian II. 3 Hours. U.**
Continuation of HAIT 110, with further readings in Haitian literature. Prerequisite: HAIT 110 or consent of instructor. LEC.

**HAIT 177. First Year Seminar: _____ . 3 Hours. GE11 / U.**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Haitian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

**HAIT 230. Intermediate Haitian I. 3 Hours. U.**
Continued practice in conversation and composition; intensive and extensive readings from contemporary press, short story, poetry, and folk tales. Prerequisite: HAIT 120 or consent of instructor. LEC.

**HAIT 240. Intermediate Haitian II. 3 Hours. U.**
Continuation of HAIT 230, with additional readings from theatre, novel, and historical texts. Prerequisite: HAIT 230 or consent of instructor. LEC.

**HAIT 300. Contemporary Haiti. 3 Hours. NW / H.**
Detailed analysis of recent Haitian history. The focus will include interactions between religion, social structure, politics, economics and international relations. (Same as AAAS 302.) Prerequisite: AAAS 301/HAIT 200, or consent of instructor. LEC.

**HAIT 350. Advanced Haitian I. 3 Hours. U.**
Course objective is a sophisticated command of understanding, speaking, reading, and writing Haitian. Texts include newspapers and other Haitian publications as well as spoken material produced essentially for native speakers. Conversation and oral presentations. Keeping of personal journal in Haitian. LEC.

**HAIT 360. Advanced Haitian II. 3 Hours. U.**
Continuation of HAIT 350, plus advanced readings from Haitian authors such as Carrie Paultre, Frank Etienne, Lyonel Desmarattes, and Michel-Rolph Trouillot. LEC.

**HAIT 497. Directed Studies in Haitian. 1-15 Hours. U.**
May be taken more than once, total credit not to exceed fifteen hours. Material not covered by course work, and/or in field of student's special interest. Conferences. Course taken for one hour of credit may not be used to fulfill College's humanities distribution requirement. Prerequisite: Six hours of Haitian Creole and consent of instructor. IND.

**HAIT 500. Directed Studies in Haitian Language and Literature. 1-15 Hours. U.**
Advanced work in either language or literature or both. May be taken more than once, total credit not to exceed fifteen hours. Conferences. As a three-credit-hour course, it may count toward a major in African and African-American studies. Prerequisite: Four semesters of Haitian Creole or equivalent and consent of instructor. IND.

Advanced work in Haitian culture. May be taken more than once, total credit not to exceed fifteen hours. Conferences. As a three-credit-hour course, it may count toward a major in African and African-American studies. No knowledge of Haitian or French is required. Prerequisite: AAAS 301 or HAIT 200, or consent of instructor. IND.

**HAIT 700. Investigation and Conference. 1-6 Hours.**
Supervised individual readings in selected areas of Haitian language, literature, and culture. Individual reports and conferences. Prerequisite: Consent of instructor. RSH.

**HAUS 110. Elementary Hausa I. 5 Hours. U.**
Five hours of class per week. Basic level of oral fluency and aural comprehension. Vocabulary acquisition, pronunciation, grammar, and writing. Reading of simple texts. Not open to native speakers of Hausa. LEC.

**HAUS 120. Elementary Hausa II. 5 Hours. U.**
Five hours of class per week. A continuation of HAUS 110. Readings in cultural texts. Prerequisite: HAUS 110. LEC.

**HAUS 177. First Year Seminar: _____ . 3 Hours. GE11 / U.**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Hausa. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

**HAUS 210. Intermediate Hausa I. 3 Hours. U.**
Three hours of class conducted in Hausa. Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing
skills beyond the basic level. Introduction to modern Hausa texts and discussion in Hausa. Prerequisite: HAUS 120. LEC.

**HAUS 220. Intermediate Hausa II. 3 Hours. U.**
Three hours of class conducted in Hausa. Continuation of HAUS 210. Discussion in Hausa of texts studied. Prerequisite: HAUS 210. LEC.

**HAUS 310. Advanced Hausa I. 3 Hours. U.**
A practical Hausa language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Hausa. Designed for students who have had two or more years of Hausa study. Open to native speakers. Prerequisite: HAUS 220 or consent of instructor. LEC.

**HAUS 320. Advanced Hausa II. 3 Hours. U.**
A continuation of HAUS 310. Prerequisite: Satisfactory completion of HAUS 310 or consent of instructor. LEC.

**HAUS 401. Readings in Hausa I. 3 Hours. U.**
Designed for native and near-native speakers, this course involves reading newspapers and other publications in the language intended for native speakers, conversation, oral presentation, and advanced grammar. Prerequisite: Native or near-native speaker proficiency or consent of instructor. LEC.

**HAUS 402. Readings in Hausa II. 3 Hours. U.**
Continuation of HAUS 401. LEC.

**KISW 110. Elementary KiSwahili I. 5 Hours. U.**
Five hours of class per week. Basic level of oral fluency and aural comprehension. Vocabulary acquisition, pronunciation, grammar, and writing. Reading of simple texts. Not open to native speakers of KiSwahili. LEC.

**KISW 120. Elementary KiSwahili II. 5 Hours. U.**
Five hours of class per week. A continuation of KISW 110. Readings in cultural texts. Prerequisite: KISW 110. LEC.

**KISW 177. First Year Seminar: _____. 3 Hours. GE11 / U.**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in KiSwahili. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

**KISW 210. Intermediate KiSwahili I. 3 Hours. U.**
Three hours of class conducted in KiSwahili. Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern KiSwahili texts and discussion in KiSwahili. Prerequisite: KISW 120. LEC.

**KISW 220. Intermediate KiSwahili II. 3 Hours. U.**
Three hours of class conducted in KiSwahili. Continuation of KISW 210. Discussion in KiSwahili of texts studied. Prerequisite: KISW 210. LEC.

**KISW 310. Advanced KiSwahili I. 3 Hours. U.**
A practical KiSwahili language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in KiSwahili. Designed for students who have had two or more years of KiSwahili study. Open to native speakers. Prerequisite: KISW 220 or consent of instructor. LEC.

**KISW 320. Advanced KiSwahili II. 3 Hours. U.**
A continuation of KISW 310. Prerequisite: Satisfactory completion of KISW 310 or consent of instructor. LEC.

**KISW 401. Readings in KiSwahili I. 3 Hours. U.**
Designed for native and near-native speakers, this course involves reading newspapers and other publications in the language intended for native speakers, conversation, oral presentations, and advanced grammar. Prerequisite: Native or near-native speaker proficiency or consent of instructor. LEC.

**KISW 402. Readings in KiSwahili II. 3 Hours. U.**
Continuation of KISW 401. LEC.

**KISW 410. Advanced KiSwahili. 3 Hours. U.**
The course objective is a sophisticated command of speaking, listening, reading, and writing in KiSwahili. Texts used include newspapers and other KiSwahili publications not expressly for language learners, and spoken material intended for native speakers is introduced. Conversation and oral presentations. Advanced grammar. Available for elective credit in the major. Prerequisite: Native, near-native or second language competence or satisfactory completion of fourth level language proficiency. LEC.

**SOMI 110. Elementary Somali I. 5 Hours. U.**
Five hours of class per week. Basic level of oral fluency and aural comprehension. Vocabulary acquisition, pronunciation, grammar, and writing. Reading of simple texts. Not open to native speakers of Somali. LEC.

**SOMI 120. Elementary Somali II. 5 Hours. U.**
Five hours of class per week. A continuation of SOMI 110. Readings in cultural texts. Prerequisite: SOMI 110. LEC.

**SOMI 210. Intermediate Somali I. 3 Hours. U.**
Three hours of class conducted in Somali. Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern Somali texts and discussion in Somali. Prerequisite: SOMI 120. LEC.

**SOMI 220. Intermediate Somali II. 3 Hours. U.**
Three hours of class conducted in Somali. Continuation of SOMI 210. Discussion in Somali of texts studied. Prerequisite: SOMI 210. LEC.

**WOLO 110. Elementary Wolof I. 5 Hours. H.**
Five hours of class per week. Basic level of oral fluency and aural comprehension. Vocabulary acquisition, pronunciation, grammar, and writing. Reading of simple texts. Not open to native speakers of Wolof. LEC.

**WOLO 120. Elementary Wolof II. 5 Hours. U.**
Five hours of class per week. A continuation of WOLO 110. Readings in cultural texts. Prerequisite: WOLO 110. LEC.

**WOLO 177. First Year Seminar: _____. 3 Hours. GE11 / U.**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Wolof. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

**WOLO 210. Intermediate Wolof I. 3 Hours. U.**
Three hours of class conducted in Wolof. Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern Wolof texts and discussion in Wolof. Prerequisite: WOLO 210. LEC.

**WOLO 220. Intermediate Wolof II. 3 Hours. U.**
Three hours of class conducted in Wolof. Continuation of WOLO 210. Discussion in Wolof of texts studied. Prerequisite: WOLO 210. LEC.

**WOLO 310. Advanced Wolof I. 3 Hours. U.**
A practical Wolof language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Wolof. Designed for students who have had two or more years of Wolof study. Open to native speakers. Prerequisite: WOLO 220 or consent of instructor. LEC.
WOLO 320. Advanced Wolof II. 3 Hours. U.
A continuation of WOLO 310. Prerequisite: Satisfactory completion of WOLO 310 or consent of instructor. LEC.

WOLO 401. Readings in Wolof I. 3 Hours. U.
Designed for native and near-native speakers, this course involves reading newspapers and other publications in the language intended for native speakers, conversation, oral presentations, and advanced grammar. Prerequisite: Native or near-native speaker proficiency or consent of instructor. LEC.

WOLO 402. Readings in Wolof II. 3 Hours. U.
Continuation of WOLO 401. LEC.

WOLO 420. Advanced Wolof II. 3 Hours. U.
Aspects of Wolof literature are examined at an advanced level, including differences between oral and written narrative, oral and poetic modes, varieties of registers as determined by gender and socio-economic level, and the effect of medium on literary style. Prerequisite: Native, near-native or second language competence, or satisfactory completion of fourth level language proficiency. LEC.

American Studies Courses

AMS HR. Philosophy and Religion. 3 Hours. HR GE3H / H.
LEC.

AMS 100. Introduction to American Studies. 3 Hours. HT AE41/GE3H / H.
An introduction to the history and key concepts of American Studies. Students explore major changes in American culture through the critical reading and analysis of primary and secondary source material. Not open to students who have taken AMS 101. LEC.

AMS 101. Introduction to American Studies, Honors. 3 Hours. HT AE41/GE3H / H.
An introduction to the history and key concepts of American Studies. Students explore major changes in American culture through the critical reading and analysis of primary and secondary source material. Not open to students who have taken AMS 100. Prerequisite: Membership in the University Honors Program or approval by the American Studies Program. LEC.

AMS 110. American Identities. 3 Hours. SC AE41/GE3S / S.
An interdisciplinary introduction to individual and group identities over time. Students explore theories and methods relating to identity from various perspectives, such as race, class, gender, sexuality, age, religion, and region. Not open to students who have taken AMS 112 or SOC 112. (Same as SOC 110.) LEC.

AMS 112. American Identities, Honors. 3 Hours. SC AE41/GE3S / S.
An interdisciplinary introduction to individual and group identities over time. Students explore theories and methods relating to identity from various perspectives, such as race, class, gender, sexuality, age, religion, and region. Not open to students who have taken AMS 110 or SOC 110. (Same as SOC 112.) Prerequisite: Membership in the University Honors Program or approval by the American Studies Program. LEC.

AMS 177. First Year Seminar: _____ . 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in America Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-year freshman status. LEC.

AMS 260. America's Latinos/Latinas. 3 Hours. AE41 / U.
An introduction to the Latino/a population (Mexican-Americans, Puerto Ricans, Cuban-Americans, Dominican-Americans, and Central and South Americans) in the US. Students discuss how US and Latin American societies have shaped Latino incorporation into the United States. We also discuss contemporary political, cultural and social issues that pertain to Latinos/as in the US. (Same as SOC 260) LEC.

AMS 290. Religion in American Society. 3 Hours. HR AE41/GE3S / H.
A broad introduction to religion in American culture. This class emphasizes the well-established religions with large followings (viz. Judaism, Catholicism, Eastern Orthodoxy, and Protestantism). Some attention is also given to other religions active in America. Other topics covered include the relationship of church and state, religion in ethnic and racial minority groups, and women and religion. Not open to students who have taken REL 172. (Same as REL 171.) LEC.

AMS 310. American Culture, 1600-1876. 3 Hours. H.
An examination of the major historical shifts, trends, and conflicts that have shaped the multicultural nature of life in the United States from the initial European settlements to 1876. In addition to tracing developments in literature, architecture, drama, music, and the visual arts, this course will investigate patterns and changes in the popular, domestic, and material culture of everyday life in America. (Same as HIST 310.) Prerequisite: AMS 100 or AMS 110 or H IST 128. LEC.

AMS 312. American Culture, 1877 to the Present. 3 Hours. H.
An examination of the major historical shifts, trends, and conflicts that have shaped the multicultural nature of life in the United States from 1877 to the present. In addition to tracing developments in literature, architecture, drama, music, and the visual arts, this course will investigate patterns and changes in the popular, domestic, and material culture of everyday life in America. (Same as HIST 312.) LEC.

AMS 316. Ministers and Magicians: Black Religions from Slavery to the Present. 3 Hours. AE41 / H.
This course examines the history and diversity of African American religious expression from slavery until the present, emphasizing both mainstream and alternative faiths. It covers the religious world views of enslaved Africans, and examines faiths inside and outside of Christianity. Topics may include: independent black churches, magical practices, the Holiness and Pentecostal movements, black Islam, religious freemasonry, and esoteric faiths. The class emphasizes the influence of gender, class, race, migration, and urbanization on black religion. (Same as AAAS 316 and HIST 316.) LEC.

AMS 317. African American Women: Colonial Era to the Present. 3 Hours. H.
This interdisciplinary course covers the history of African American women, beginning in West and Central Africa, extending across the Middle Passage into the Americas, and stretching through enslavement and freedom into the 21st century. The readings cover their experiences through secondary and tertiary source materials, as well as autobiographies and letters, plays and music, and poems, novels, and speeches. (Same as AAAS 317, HIST 317, and WGSS 317.) LEC.

AMS 320. Border Patrolled States. 3 Hours. H.
Examines the politics of immigrant, citizenship and space through official, intellectual and popular responses to the growth of Latino/a populations in the U.S. and to international migration to and from Mexico and Central America. Topics include consideration of how responses to immigration articulate racialized and culturally specific (including linguistic and religious) concepts of the nation, and how questions of citizenship and residency dovetail with issues of community "voice", public space, and diverse notions of "security". LEC.

AMS 322. Modernism. 3 Hours. H.
Examines modernism as a transnational cultural movement primarily from the 1890s to the 1940s, but also considers the impact of modernism on
The social structure and organization of American society with special reference to recent social changes. (Same as SOC 330.) Prerequisite: An introductory course in sociology or American studies. LEC.

AMS 332. The United States in Global Context. 3 Hours. AE42 / S. Examines the influence abroad of US culture, policies and practices and the impact of other countries on US culture, society, and politics. Among the topics that may be examined are race, ethnicity, colonialism, imperialism, migration, technology, communications and media, popular culture, language, health, domestic and transnational organizations, as well as economic, political, religious, military and educational institutions. (Same as SOC 332.) LEC.

AMS 340. Black Leadership. 3 Hours. H/W. The course focuses on the concept of leadership and on black leadership in the United States; an in-depth analysis of selected case studies on black leaders, both historical and contemporary. Some attention will be given to the dispersion of Africans into the Americas and the leadership that emerged, conditioned both by environmental factors and the psychology engendered by the system of slavery. Selected successful black leaders will be invited to visit the class from time to time. (Same as AAAS 330.) LEC.

AMS 344. Case Study in American Studies: ____. 3 Hours. H. This course examines in depth a specific American studies or theme. LEC.

AMS 345. Cultural Studies. 3 Hours. H. Students gain awareness of major scholars and "schools" that have pursued critical, interdisciplinary research or cultural processes and products in the field of American Studies. Topics may include cultural materialism, semiotics, nationalism, ethnic/racial identity, gender and sexuality, cultural politics, mass media, public spheres, social space and place, commodity consumption, music, and popular culture. LEC.

AMS 350. Visual Culture and the Harlem Renaissance. 3 Hours. H. Examines the African American cultural movement through art; the artistic gaze in novels; representations of African Americans in film; as well as the influence of musical and dramatic performance on the African American image. Considers the impact of American, European, and other cultural influences on black artists of the time. LEC.

AMS 360. Theory and Method. 3 Hours. H. An introduction through a topical theme to theories and methods currently used in American Studies. Prerequisite: AMS 100, AMS 110 and AMS 332 or their equivalent, or consent of instructor. LEC.

AMS 390. Geography of the United States and Canada. 3 Hours. S. A study of the different physical, economic, and cultural settings in the United States and Canada which form the basis for the various forms of livelihood. Emphasis on the United States. (Same as GEOG 390.) Prerequisite: An introductory geography course, or background in United States or Canadian history, social science, or culture, or consent of instructor. LEC.

AMS 494. Topics in: ____. 1-4 Hours. H. Interdisciplinary study of selected aspects of American society or culture or of the American experience. LEC.

AMS 510. History of American Women--Colonial Times to 1870. 3 Hours. H. A survey of women's roles as housewives, mothers, consumers, workers, and citizens in pre-industrial, commercial, and early industrial America. (Same as HIST 530 and WGSS 510.) LEC.

AMS 511. History of American Women--1870 to Present. 3 Hours. AE41 / H. A survey of women's history in the United States that will include radical and reform movements, the impact of war and depression, professionalism, immigration, women's work and the biographies of leading figures in women's history. (Same as HIST 531 and WGSS 511.) LEC.

AMS 520. Topics in Latino Studies: ____. 3 Hours. U. The study of special topics in Latino Studies. Students may repeat this course when different topics are offered. LEC.

AMS 522. American Racial and Ethnic Relations. 3 Hours. S. Analysis of the basic sociological concepts that apply to majority-minority relations; with special emphasis on racial and ethnic interaction in the United States. (Same as SOC 522.) Prerequisite: A distribution course in sociology or American studies. LEC.

AMS 529. Race and the American Theatre. 3 Hours. U. The representation(s) of race in significant texts and performance styles in American theatre analyzed according to political ideologies, dramatic movements and the impact of these factors on the representation of the "other" in the theatre. (Same as AAAS 585 and THR 529.) LEC.

AMS 534. Global Ethnic and Racial Relations. 3 Hours. NW / S. An examination of constructions of race and ethnicity around the world. Emphasis is on the social, political, historical, cultural and economic factors that lead to the creation of ethnic and racial identities, ethnic conflict and accommodation, ethnic movements, and ethnic political organization. Racial and ethnic relations in the U.S. are compared with other countries. Major focus is placed on ethnicity in Africa, Asia, Latin America, the Caribbean, and/or the Middle East. (Same as AAAS 510 and SOC 534.) LEC.

AMS 536. Ethnicity in the United States: ____. 3 Hours. S. An examination of the history, sociology, and culture of U.S. ethnic categories (e.g., American Indians, Latinos, Asian Americans, Jewish Americans, Irish Americans). The specific group studied varies from semester to semester. Course may be repeated for credit. (Same as SOC 536.) Prerequisite: A principal course in American Studies, Sociology, or Anthropology, or permission of instructor. LEC.
AMS 540. Culture, Space and Power in Urban America. 3 Hours. H.
Surveys scholarship on urban expressive culture as it illuminates the
politics to identity and public space by African American and Latino/a
urban communities. Explores how race, class and gender positionality
affect and reflect access to public space and recognition in the public
sphere through aesthetic practices such as hip-hop, graffiti writing and
custom car cruising. LEC.

AMS 550. Research Seminar in: _____. 3 Hours. AE61 / H.
A seminar exploring a specific American studies theme. A research paper
or equivalent project is required. Prerequisite: AMS 360 (a grade of C
or better is recommended) or consent of instructor. Cannot be taken
concurrently with AMS 551, AMS 552 or AMS 553. LEC.

AMS 551. Research Project in American Studies. 3 Hours. AE61 / H.
Independent research on a selected topic under the direction of a faculty
member. Students write an original research paper or complete an
equivalent project in another medium, grounded in primary as well as
secondary sources. Prerequisite: AMS 550 or consent of instructor. RSH.

AMS 552. Public Service in American Studies. 3 Hours. AE61 / H.
Independent public service in a selected area undertaken in consultation
with and under the direction of a faculty member. Students produce a
final written project on the experience that integrates the public service
experience and academic materials, or complete an equivalent project in
another medium. Prerequisite: AMS 550 or consent of instructor. RSH.

AMS 553. Honors in American Studies. 3 Hours. AE61 / H.
Honors equivalent of AMS 551. May be taken twice for credit. Three hours
of AMS 553 may be substituted for a course in an appropriate category
in the American Studies major. Prerequisite: AMS 550, eligibility for
departmental honors, or consent of instructor. RSH.

AMS 554. Advanced Topics in American Literature to 1865: _____. 3
Hours. H.
Study of American literary works before 1865. Topics may focus on
a particular genre, theme, historical period, author, or group of
authors. May be repeated for credit as the topic changes. (Same as ENGL
576.) Prerequisite: Prior completion of at least one 300- or 400-level
English course. LEC.

AMS 555. Advanced Topics in American Literature Since 1865: _____. 3
Hours. H.
Study of American literary works after 1865. Topics may focus on
a particular genre, theme, topic, historical period, author, or group of
authors. May be repeated for credit as the topic changes. (Same as ENGL
577.) Prerequisite: Prior completion of at least one 300- or 400-level
English course. LEC.

AMS 565. Gender, Culture, and Migration. 3 Hours. H.
This course brings a human face to the 21st century manifestation of
globalization by focusing on the issues of culture, gender and migration.

How do these three aspects create the “global village” amongst both
the host and donor peoples? When people move from one place to
another, what do they leave behind, what do they take with them?
What is gained, or lost by the host community? What is the impact of
migration on a specific group’s and individual’s sense of identity? How
has migration affected the people’s construction, understanding, and
practice of gender? Given their primary roles in the home and within the
culture, these questions and more are posed with particular attention to
women. Migration theories, interviews and personal testimonies as well as
literary and dramatic works are critical to our analyses of the issues raised
and enable us to hold conversations with, and listen to the stories of the
ordinary people who make globalization happen and sustain it. (Same as
AAAS 565 and WGSS 565.) LEC.

AMS 576. Cultural Geography of the United States. 3 Hours. S.
Distributions of major culture elements including folk architecture, religion,
dialect, foodways, and political behavior are systematically studied from a
predominantly historical perspective. These discussions are followed by
a survey of the major culture regions in America. Although not absolutely
necessary, familiarity with concepts treated in any of the following courses
would be helpful: AMS 100, AMS 110, ANTH 108, ANTH 308, GEOG 102,
or GEOG 390. (Same as GEOG 576.) LEC.

AMS 579. Geography of American Foodways. 3 Hours.
An interdisciplinary approach to food that explores the diversity of
eating habits across the United States and the role of food as an
indicator of cultural identity and change. Current regional and ethnic food
consumption patterns are stressed. Topics include multiculturalism and
regional identity, the symbiotic relationship between restaurant food and
home cooking, the recent interest in farmers’ markets and organic foods,
and the importance of the food industry and the popular press in setting
trends. (Same as GEOG 579.) LEC.

AMS 580. American Art. 3 Hours. H.
A survey of American painting, sculpture, and architecture from colonial
to recent times. (Same as HA 570.) Prerequisite: AMS 100, AMS 151, or the
equivalent, or consent of instructor. LEC.

AMS 590. Transnational Asian Film. 3 Hours. H.
Examines the ways that contemporary East Asian films and the American
film industry appropriate cinematic techniques, styles and themes from
one another. Uses cultural studies theories to examine the construction of
cultural and historical narratives of transnational interaction among
East Asian countries. Explores the impact of economic globalization on
transnational film production. LEC.

AMS 629. Sociology of Sport. 3 Hours. S.
Examination of organized sport as a social institution and its relation
to other social institutions (e.g., political, economic, educational, and
religious), with special emphasis on American society. Analysis of the
social correlates of sports participation and a consideration of the role
of sport in social change. (Same as SOC 629.) Prerequisite: A principal
course in American studies or sociology, or consent of instructor. LEC.

AMS 650. Jazz and American Culture. 3 Hours. H.
This course considers cultural and social histories of jazz, from the 1920s
through the present day, as sites for exploring ideological struggles over
such fields as race, class, gender, sexuality, democracy, capitalism,
freedom, community, Americanness, and globalization in the U.S. The
course will explore such questions as the following: What music was
called jazz at what times and places? What did it mean to whom? Who
played it? Who wrote about it? Who listened to it? Who danced to it?
Who policed it? Who produced it? Who used it to rebel? Who used it
to survive? What did all of these practices mean to participants? The
course will examine struggles over social meanings in the U.S. through a
study of jazz performance, labor, representation, marketing, consumption,
censorship, and historiography. Prerequisite: A course in American
studies, American history, or consent of instructor. (Same as WGSS 652.)
LEC.

AMS 652. Jazz I, Roots to 1955. 3 Hours. H.
Survey of jazz music, from ragtime and blues to jazz of the 1940s
and 50s. Covers various styles of jazz, including New Orleans, swing,
bebop and cool. Students are expected to have a basic understanding of
melody, harmony and rhythm, although ability to read scores is
not necessary. Graduate students will complete additional work to be
determined in consultation with the instructor. LEC.
AMS 653. Jazz II, 1955-Present. 3 Hours. H.
Survey of jazz music, from 1950s to the present. Covers various styles of jazz, including free jazz, postmodern jazz and fusion. Students are expected to have a basic understanding of melody, harmony and rhythm, although ability to read scores is not necessary. Graduate students will complete additional work to be determined in consultation with the instructor. LEC.

AMS 680. Jazz Autobiography. 3 Hours. H.
Examines the literary and musical significance of jazz autobiographies since the 1940s. Authors include Louis Armstrong, Jelly Roll Morton, Billie Holiday, Charles Mingus, Nina Simone and others. Graduate students will complete additional work to be determined in consultation with the instructor. LEC.

AMS 682. Jazz Narratives in Novels and Films. 3 Hours. H.
Examines jazz and musicians' life stories in prose fiction and fictional or biographical films. Novels may include works by John Clellon Holmes and Nathaniel Mackey. Films may include Lady Sings the Blues and Space is the Place. Graduate students will complete additional work to be determined in consultation with the instructor. LEC.

AMS 690. Black Cultural Studies. 3 Hours. H.
Examines critical approaches to the study of African American cultural production. Uses literature, films, music, art and performance to explore the development of interpretations of black culture. Covers major developments in black aesthetics in the twentieth century, various theoretical schools of thought, and significant writers such as bell hooks, Stuart Hall, and Gina Dent. Graduate students will complete additional course work to be determined in consultation with the instructor. LEC.

AMS 694. Directed Readings. 1-4 Hours. H.
Consent of instructor is required. IND.

AMS 696. Studies in: . 3 Hours. H.
Interdisciplinary study of different aspects of the American experience in different semesters. LEC.

AMS 700. Introduction to Museum Exhibits. 3 Hours.
This course will consider the role of exhibits as an integrated part of museum collection management, research, and public service. Lecture and discussion will focus on issues involved in planning and producing museum exhibits. Laboratory exercises will provide first hand experience with basic preparation techniques. Emphasis will be placed on the management of an exhibit program in both large and small museums in the major disciplines. (Same as BIOL 787, GEOL 781, HIST 723, and MUSE 703.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

AMS 714. Conservation Principles and Practices. 3 Hours.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects will also be considered. (Same as BIOL 700, GEOL 780, HIST 722 and MUSE 706.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

AMS 720. The Nature of Museums. 3 Hours.
The purpose of this course is to provide an overview of the kinds of museums, their various missions, and their characteristics and potentials as research, education, and public service institutions responsible for collections of natural and cultural objects. (Same as BIOL 788, GEOL 782, HIST 720, and MUSE 702.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

AMS 725. Museum Studies Workshop: . 1-3 Hours.
Short term, intensive workshops presented to provide specialized background in a variety of skills required in historical archives or museums. FLD.

AMS 730. Principles and Practices of Museum Collection Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museum collections, their associated data, and their use in scholarly research; cataloging, storage, fumigation, automated information management and related topics will be presented for museums of art, history, natural history and anthropology. (Same as BIOL 798, GEOL 785, HIST 725, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

AMS 731. Museum Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as BIOL 785, GEOL 783, HIST 728, and MUSE 701.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

AMS 737. Music in America. 3 Hours.
A survey of historical developments from the Pilgrims to the present. (Same as MUSC 759.) Prerequisite: One course in the field of music history and literature or consent of instructor. LEC.

AMS 767. Gerontology Proseminar. 3 Hours.
A proseminar coordinated by the Gerontology Center. The proseminar explores essential areas of gerontology for researchers and practitioners, providing a multidisciplinary (psychology, biology, sociology, and communication) perspective on aging. The proseminar surveys contemporary basic and applied research, service programs, and policy and management issues in gerontology. (Same as ABSC 787, COMS 787, PSYC 787, and SOC 767.) (Formerly HDFS 787.) LEC.

AMS 778. Field Work. 1-12 Hours.
Supervised field research in aspects of American civilization. Prerequisite: Consent of instructor. FLD.

AMS 799. American Studies Museum Apprenticeship. 1-6 Hours.
Provides directed, practical experience in research, collection care and management, public education, and exhibits with emphasis to suit the particular requirements of each student. (Same as ANTH 799, BIOL 799, GEOL 723, HIST 799, and MUSE 799.) FLD.

AMS 801. Introduction to American Studies. 3 Hours.
An introduction to the field of American Studies through an examination of some of the classic and innovative works, issues, debates, and controversies in the history and the literature of American Studies. LEC.

AMS 802. Theorizing America. 3 Hours.
Drawing from a broad range of perspectives (e.g., cultural theory, social theory, literary theory, etc.), this course will introduce students to current theoretical debates in American studies and the concepts that inform them. LEC.
AMS 803. Research Methods in American Studies. 3 Hours.
An introduction to the range of interdisciplinary research methods in American studies. Emphasis will be placed on an examination of the assumptions, logics, and procedures involved in various approaches to understanding American society and culture. LEC.

AMS 804. Research Seminar. 3 Hours.
An intensive application of theoretical and methodological issues to the development of specific substantive research problems. Students will be expected to design and implement a study that will be critically assessed in the seminar. LEC.

AMS 805. American Pluralism: Race, Ethnicity, and Religion in American Life. 3 Hours.
Analysis of the dynamics of intercultural and intergroup relations in America with special emphasis on the examination of major conceptual perspectives that have characterized the study of race, ethnicity, and religion in American life. LEC.

AMS 808. Studies in: ______. 3 Hours.
Interdisciplinary study of different aspects of the American experiences in different semesters. LEC.

AMS 809. Advanced Research Seminar. 3 Hours.
An intensive application of theoretical and methodological issues to the development of specific substantive research problems. Students will be expected to design and implement a study that will be critically assessed in the seminar. Prerequisite: AMS 804. Permission of the instructor required. LEC.

AMS 835. Colloquium in the History of Gender. 3 Hours.
This colloquium will cover theoretical and topical readings on the history of manhood, womanhood, and gender systems. (Same as HIST 895 and WGSS 835.) LEC.

AMS 836. Colloquium in United States Women's History. 3 Hours.
This colloquium will cover theoretical and topical readings on the history of women in the United States from the pre-contact period to the present. It is designed to familiarize students with the most important and current historiography in the field. (Same as HIST 896 and WGSS 836.) LEC.

AMS 837. Comparative Colloquium in Women's History. 3 Hours.
This colloquium will approach the history of women from a comparative perspective through theoretical and topical readings on women in at least two different cultures. (Same as HIST 897 and WGSS 837.) LEC.

AMS 896. Examination Preparation. 1-6 Hours.
Directed and independent study in preparation for the M.A. examination. May be repeated. RSH.

AMS 899. Thesis. 1-6 Hours.
Investigation of a topic for master's thesis. Total enrollment in this course may not exceed six hours of credit. THE.

AMS 900. Teaching Seminar. 1-6 Hours.
This seminar is designed to assist students in the preparation, presentation, and evaluation of teaching in American Studies. Graded on a satisfactory/unsatisfactory basis. LEC.

AMS 973. Seminar in United States Women's History. 3 Hours.
This research seminar will focus on the history of women in the United States from the pre-contact period to the present. Students will research and write a paper using primary sources, and present those papers to the seminar for evaluation. (Same as HIST 973 and WGSS 873.) LEC.

AMS 996. Examination Preparation. 1-9 Hours.
Directed and independent study in preparation for the doctoral comprehensive examinations. May be repeated. RSH.

AMS 997. Directed Readings. 1-4 Hours.
Directed reading in an area of American culture in which there is no appropriate course in the offerings of the American Studies program or of the cooperating departments, but in which there is a member of the graduate faculty competent and willing to direct a program of study. RSH.

AMS 998. Seminar in: _______. 3 Hours.
Topics vary from semester to semester. Graduate students are consulted in selecting topics. LEC.

AMS 999. Dissertation. 1-12 Hours.
THE.

Anthropology Courses

ANTH 100. General Anthropology. 3-4 Hours. SC AE42/GE3S / S.
Lecture and discussion sections covering the four primary fields of Anthropology: Biological Anthropology, Linguistics, Social Anthropology, and Archaeology. Concepts and approaches to each field, using past and present examples from around the world, will be examined with an emphasis on the unity of the anthropological approach. Future directions of human experience are explored. Discussion sections will be used to examine material covered in lecture and in readings in specific cultural and evolutionary contexts. Discussion and application of fundamental concepts to contemporary events, examination of fossil collections, and viewing and discussion of relevant visual materials are among topics to be covered in sections. LEC.

ANTH 102. Succeeding in Anthropology. 1 Hour. S.
This course is designed to enhance students' chances for success in anthropology major and life after college. Students will learn how to maximize their possibilities for gaining academic assistance, grants, and career building, as well as design strategies for winning jobs, entry into graduate programs, and paid internships at home and abroad. Graded on a satisfactory/unsatisfactory basis. LEC.

ANTH 104. Fundamentals of Physical Anthropology. 3-4 Hours. NB GE3N / N.
Lecture and discussion sections covering the mechanisms and principles of Darwinian evolution with special emphasis on human and primate data. Lecture topics include genetics, variation, primate ethology, and the fossil evidence for human evolution. Discussion sessions include topics in Mendelian and population genetics, blood group systems, quantitative morphological variation, and fossil human and primate skeletal material. LEC.

ANTH 105. Fundamentals of Physical Anthropology, Honors. 3-4 Hours. NB GE3N / N.
An honors section of ANTH 104 for students with superior academic records. LEC.

ANTH 106. Introductory Linguistics. 3 Hours. SC AE42/GE11/GE3S / S.
Introduction to the fundamentals of linguistics, with emphasis on the description of the sound system, grammatical structure and semantic structure of languages. The course will include a survey of language in culture and society, language change, computational linguistics and psycholinguistics, and will introduce students to techniques of linguistic analysis in a variety of languages including English. (Same as LING 106.) LEC.

ANTH 107. Introductory Linguistics, Honors. 3 Hours. SC AE42/GE11/GE3S / S.
Introduction to the fundamentals of linguistics, with emphasis on the description of the sound system, grammatical structure and semantic structure of languages. The course includes a survey of language in culture and society, language change, computational linguistics and
psycholinguistics, and introduces students to techniques of linguistic analysis in a variety of languages including English. Open only to students admitted to the University Honors Program or by consent of instructor. (Same as LING 107.) LEC.

ANTH 108. Introduction to Cultural Anthropology. 3-4 Hours. SC AE42/GE3S / S.
An introduction to the nature of culture, language, society, and personality. Included in this survey are some of the major principles, concerns, and themes of cultural anthropology. The variety of ways in which people structure their social, economic, political, and personal lives. Emphasized are the implications of overpopulation, procreative strategies, progress and growth of cultural complexity, developments in the Third World, and cultural dynamics in Western as well as in non-Western societies. LEC.

ANTH 109. Introduction to Cultural Anthropology, Honors. 3-4 Hours. SC / S.
An honors section of ANTH 108 for students with superior academic records. LEC.

ANTH 110. Introduction to Archaeology. 3-4 Hours. HT GE3H / H.
A general introduction to the study of archaeology. Evolution of prehistoric cultures in adaptive response to changing natural and social environments, from the early Paleolithic to the emergence of urban civilizations. LEC.

ANTH 111. Introduction to Archaeology, Honors. 3-4 Hours. HT GE3H / H.
An honors section of ANTH 110 for students with superior academic records. LEC.

ANTH 160. The Varieties of Human Experience. 3 Hours. NW AE42/GE3H/GE3S / S/W.
An introduction to basic concepts and themes in cultural anthropology by means of the comparative study of selected cultures from around the world, for the purpose of appreciating cultural diversity. Emphasis is on systems of belief and meaning. Not open to students who have taken ANTH 360. LEC.

ANTH 161. The Third World: Anthropological Approaches. 3-4 Hours. NW / S/W.
Violent change, revolution, planned change, and peaceful transition in non-Western cultures. A study of development, modernization, nation-building, rapid acculturation, and war. LEC.

ANTH 162. The Varieties of Human Experience, Honors. 3 Hours. NW AE42/GE3H/GE3S / S/W.
An honors section of ANTH 160 for students with superior academic records. Not open to students who have had ANTH 160 or ANTH 360. LEC.

ANTH 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Anthropology. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

ANTH 293. Myth, Legend, and Folk Beliefs in East Asia. 3 Hours. NW AE42 / H/W.
A survey of the commonly held ideas about the beginning of the world, the role of gods and spirits in daily life, and the celebrations and rituals proper to each season of the year. The purpose of the course is to present the traditional world view of the peoples of East Asia. (Same as EALC 130, REL 130.) LEC.

ANTH 300. General Anthropology. 3 Hours. AE42/GE3H/GE3S / S.
A more intensive treatment of the content of ANTH 100. Not open to students who have had ANTH 100. LEC.

ANTH 301. Anthropology Through Films. 3 Hours. AE42 / S.
An exploration of the human ways through films. Cross-cultural interpretations by filmed records of varieties of interpersonal relations seen through such aspects of culture as hunting, war, marriage, religion, sex, kinship, and death. Patterns of interactions are analyzed by examples from cultures around the world, primarily the non-Western world. LEC.

ANTH 303. Peoples and Cultures of North Africa and the Middle East. 3 Hours. NW / S.
This course familiarizes students with the peoples and cultures of North Africa and the Middle East. It examines the cultural, demographic, and religious diversity of the region, as well as the development of the early Islamic community and the formation of Islamic institutions. Issues such as religion and politics, inter-religious relations, nation-building, Islamic response to colonialism, Palestinian-Israeli conflict, Islamic resurgence, secularism, democratization, and gender, are also explored. (Same as AAAS 303.) LEC.

ANTH 304. Fundamentals of Physical Anthropology. 3-4 Hours. NB GE3N / N.
A more intensive treatment of the content of ANTH 104. Not open to students who have had ANTH 104 or ANTH 105. LEC.

ANTH 308. Introduction to Cultural Anthropology. 3-4 Hours. SC AE42/GE3S / S.
An introduction to the nature of culture, language, society, and personality. Included in this survey are some of the major principles, concerns, themes of cultural anthropology, and the variety of ways in which people structure their social, economic, political, and personal lives. Emphasized are the implications of overpopulation, procreative strategies, progress and growth of cultural complexity, developments in the Third World, and cultural dynamics in Western as well as in non-Western societies. Not open to students who have taken ANTH 108 or ANTH 109. LEC.

ANTH 310. Introduction to Archaeology. 3-4 Hours. HT GE3H / H.
A more intensive treatment of the content of ANTH 110. Not open to students who have taken ANTH 110 or ANTH 111. LEC.

ANTH 313. New Discoveries in Archaeology. 3 Hours. S.
Recent discoveries in anthropological archaeology in various areas of the world and their impact on existing bodies of fact and theory, and on established methods of archaeological discovery. LEC.

ANTH 315. The Prehistory of Art. 3 Hours. S.
A survey of prehistoric art focusing on the material record and interpretations of rock art (paintings, engravings on rock surfaces in rock-shelters, caves and in open air sites) and portable art created by prehistoric people. The emphasis is on the small-scale societies (hunter-gatherer and early food producers) around the world before the appearance of written records in respective geographic areas. Environmental, social and cultural contexts in which these art forms were created are discussed along with a review of past scholarship and current interpretive approaches to this old and enduring expression of human creativity. Course may be offered in lecture or online format. (Same as HA 315.) LEC.

ANTH 317. Prehistory of Europe. 3 Hours. S.
A survey of one million years of prehistory from the peopling of the European continent to the Roman Empire. The course will focus on the growth of culture, considering economy and technology, art and architecture. Topics will include the Neanderthals, the big game hunters of
the Ice Age, the megalith builders, the Celts. Prerequisite: An introductory course in anthropology, history, or cultural geography. LEC.

ANTH 318. Prehistory of Kansas. 3 Hours. S.
A survey of the changing lifeways of Native Americans in Kansas from the time of the earliest inhabitants of at least 12,000 years ago to the period of Euro-American contact. Extensive use will be made of Museum of Anthropology collections. LEC.

ANTH 320. Language in Culture and Society. 3 Hours. SC AE41/AE61 / S.
Language is an integral part of culture and an essential means by which people carry out their social interactions with the members of their society. The course explores the role of language in everyday life of peoples in various parts of the world and the nature of the relationship between language and culture. Topics include world-view as reflected in language, formal vs. informal language, word taboo, and ethnography of speaking. (Same as LING 320.) LEC.

ANTH 321. Language in Culture and Society, Honors. 3 Hours. SC AE41/AE61 / S.
An honors section of ANTH 320 for students with superior academic records. Not open to students who have had ANTH 320 or LING 320. (Same as LING 321.) Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

ANTH 340. Human Variation and Evolution. 3 Hours. AE41 / N.
An examination of biochemical and physical variability in contemporary human populations. Topics include: genetic basis of human diversity, evolutionary theory, population genetics, blood groups, biochemical variations, body size and shape, pigmentation, and other morphological characteristics. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 341. Human Evolution. 3 Hours. N.
The evolutionary processes and events leading to the development of humans and the humanlike forms from primate ancestors; fossil hominids and the origin of modern Homo Sapiens. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 343. Food, Nutrition and Culture. 3 Hours. U.
The course is a cross-cultural survey of human dietary practices (foodways). Students are introduced to the concepts of nutrition, diet and cuisine. Evolutionary and adaptive aspects of human diets and cuisines are considered. Nutritional, environmental/technological, social and ideological aspects of regional and ethnic foodways are examined. Invited lecturers from different cultural traditions offer indigenous perspectives on their foodways. LEC.

ANTH 350. Human Adaptation. 3 Hours. S.
A survey and examination of present-day human populations focusing upon adaptations in different environments and the interaction of culture and biology. General evolutionary theory is treated with an emphasis on the mechanisms of evolutionary change. Genetic, physiological, and cultural adaptations to environmental stress are discussed from the standpoint of their past evolutionary significance and their influence on contemporary human variation. Prerequisite: ANTH 104 or ANTH 304. LEC.

ANTH 352. Controversies on the Living and the Dead. 3 Hours. N.
The pros and cons of conflicting theories on the past and present evolution are examined. Race and intelligence, evolution of skin color, and genetic future of humans are among the considered topics. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 359. Anthropology of Sex. 3 Hours. N.
An evolutionary perspective on the behavior and biology of males and females in human society. Topics will include the evolution of sexual dimorphism, social and biological issues in human reproduction, primate social patterns, human sexual behavior and taboos, sex and social structure, and the sociobiology of sex. LEC.

ANTH 360. The Varieties of Human Experience. 3 Hours. NW AE42/GESH/GE36 / S/W.
A more intensive treatment of ANTH 160. An introduction to basic concepts and themes in cultural anthropology by means of the comparative study of selected cultures from around the world. For the purpose of appreciating cultural diversity. Emphasis is on systems of belief and meaning. Not open to students who have taken ANTH 160. LEC.

ANTH 361. The Third World: Anthropological Approaches. 3-4 Hours. NW / S/W.
A more intensive treatment of the content of ANTH 161. Not open to students who have had ANTH 161. LEC.

ANTH 362. Peoples of Southeast Asia. 3 Hours. NW / S/W.
An analysis of the cultural diversity and unity of the peoples of Burma, Thailand, Laos, Cambodia, Vietnam, Malaysia, Indonesia, and the Philippines. Emphasis on cultural-historical relationships and theories of cultural development and change. LEC.

ANTH 363. Gendered Modernity in East Asia. 3 Hours. S.
This course explores rapidly changing gender relationships and the sense of being "modern" in East Asia by examining marriage and family systems, work, education, consumer culture, and geopolitics. The class seeks to understand how uneven state control over men and women shapes desires, practices, and norms and how men and women act upon such forces. Avoiding biological or social determinism, this course treats gender as an analytical category and examines how modern nation-states and global geopolitics are constituted and operated. (Same as EALC 363 and WGSS 363.) LEC.

ANTH 364. Peoples of Japan and Korea. 3 Hours. NW / S/W.
An analysis of the cultural diversity and unity of the peoples of Japan and Korea. Emphasis on historical and ethnological relationships, social structure, and ethics. (Same as EALC 364.) LEC.

ANTH 365. Japanese People through Film. 3 Hours. NW / S/W.
Japanese people's culture and society through an extensive examination of both documentary and feature films. Readings from social science fields and literature will be used--the former to supply a theoretical framework for the study of Japanese people and the latter to further the inquiry into the individual sentiment motivating actions. (Same as EALC 365.) LEC.

ANTH 366. The Life Cycle in Japanese Culture and Literature. 3 Hours. NW / H/W.
A study of the Japanese people from birth to death: what it means to be born in a Japanese family, to grow up Japanese, and to die Japanese. Anthropological works and selections from Japanese literature and film will be used to examine ways in which Japanese people live through the critical periods in their life cycle. (Same as EALC 366.) LEC.

ANTH 367. Introduction to Economic Anthropology. 3 Hours. S.
This course uses ethnographic case materials to explore the ways humans provision themselves under different social and environmental conditions. It introduces the basic theories, concepts, and debates of economic anthropology and provides a foundation for more advanced courses in this subdiscipline. Prerequisite: ANTH 108 or ANTH 308, or ANTH 160 or ANTH 360, or permission of instructor. LEC.
ANTH 368. The Peoples of China. 3 Hours. NW / S/W.
An analysis of the cultural origin, diversity, and unity of the peoples of China. Emphasis on historical development, social structure, cultural continuity and change, and ethics. (Same as EALC 368.) LEC.

ANTH 370. Peoples and Cultures of the Pacific. 3 Hours. NW / S/W.
A survey of the native cultures of Australia, Melanesia, Micronesia, and Polynesia. Investigation of the origins and dispersal of Pacific peoples, their cultural adaptations to differing habitats, their forms of social, political, and religious organization. Consideration of the problems and cultural changes resulting from colonization and modernization. Prerequisite: ANTH 100, ANTH 108, ANTH 160, ANTH 308, ANTH 360, or consent of instructor. LEC.

ANTH 372. Religion, Power, and Sexuality in Arab Societies. 3 Hours. NW / S.
This course examines theories of religion, discourse, power, gender and sexuality in their application to Arab societies. The course introduces different aspects of Arab cultures. Through canonical works, we study political domination, tribal social organization, honor, tribe, shame, social loyalty, ritual initiations and discuss how these issues speak generally to anthropological inquiry. Regionally specific works are then framed by an additional set of readings drawn from anthropological, linguistics, and social theories. (Same as AAAS 372.) LEC.

ANTH 376. North American Indians. 3 Hours. NW AE41 / S/W.
A survey of American Indian cultures north of Mexico at the time of the first contact with Western civilization; detailed studies of selected Indian cultures. LEC.

ANTH 379. Indigenous Traditions of Latin America. 3 Hours. NW / S/W.
A survey of the major indigenous traditions of Mesoamerica, the Andes, and lowland tropical Latin America. Coverage emphasizes how indigenous cultural traditions and societies have both continued and changed since the European Invasion and addresses such current issues as language rights, territorial rights, sovereignty, and state violence. Students enrolled in the 600-level section will be required to complete additional research and class leadership tasks. Not open to students who have taken LAA 634. (Same as LAA 334.) LEC.

ANTH 380. Peoples of South America. 3 Hours. NW / S/W.
A survey of native peoples and cultures of South America from the time of initial Western contacts to the present day. LEC.

ANTH 382. People and the Rain Forest. 3 Hours. S.
An analysis of the cultural origin, diversity, and unity of the peoples of the neotropics. Emphasizing the peoples of Amazonia, the course introduces students to topics associated with the economic, political, and cultural dimensions of social life in rain forest communities. LEC.

ANTH 387. Field Research on Gender. 3 Hours. S.
This course examines gender roles and gender culture in Costa Rica, especially in the southern part of the country. Students will be introduced, both theoretically and practically, to feminist anthropology as well as gender ethnography. It covers academic literature about the topic, and literature written by women. The class will also discuss different types of machismo culture and the structures and functioning of families in southern Costa Rica. Class taught in Golfito, Costa Rica. Course taught in Spanish. Contact the Department of Anthropology, or the Office of Study Abroad. LEC.

ANTH 389. The Anthropology of Gender: Female, Male, and Beyond. 3 Hours. NW GE21.
This course will introduce students to cultural constructions and performances of masculinity, femininity, and alternative genders across time and space. Topics and cases will be drawn from primarily non-Western cultures, ranging from Javanese markets to Pacific Rim gardens, and from Haitian voudou to Maya royal politics. This course uses research by archeologists, linguists, anthropologists, and sociocultural anthropologists. (Same as WGSS 389.) LEC.

ANTH 397. Museum Anthropology. 3 Hours. S.
An introduction to the historical background, practice, and ethical issues involved in the creation, presentation, and dissemination of anthropological information in a museum setting. Students participate in the study of a collection of material culture (artifacts) from the Museum of Anthropology, culminating in development of a script for an exhibit. FLD.

ANTH 400. Topics in Anthropology, Honors: ______. 3 Hours. H.
Selected issues and theories in contemporary anthropology (cultural, linguistic, biological, archaeological) for honors students. Topic for semester to be announced. May be repeated for credit if content varies. Prerequisite: Admission to the University Honors Program or consent of instructor. LEC.

ANTH 401. Integrating Anthropology. 3 Hours. S.
Capstone course that integrates the primary fields of anthropology. Students apply concepts and approaches from each field to a particular topic in preparation for and presentation of a cross-disciplinary and integrative final project. Prerequisite: Completion of all required introductory anthropology courses and two anthropology courses LEC.

ANTH 406. Laboratory Techniques in Archaeology. 3 Hours. S.
A survey of basic laboratory procedures associated with specimen preparation, analysis, classification, and measurement of archaeological materials, with emphasis on lithic and ceramic technology. Formal lectures and laboratory sections. LEC.

ANTH 410. Archaeological Myths and Realities. 3 Hours. S.
A more intensive treatment of the content of ANTH 210. Not open to students who have had ANTH 210. LEC.

ANTH 415. The Rise of Civilization. 3 Hours. S.
A study of evolutionary processes leading to the birth of the early great urban civilizations of the Old World and the New World. Patterns of growth and similarities and differences in the rise of urban complexes and states in Mesopotamia, Egypt, the Indus Valley, and in Mexico/Guatemala and Peru. LEC.

ANTH 418. Summer Archaeological Field Work. 1-8 Hours. AE61 / S.
Under the direction of a professional archaeologist, undergraduate and graduate students are taught proper procedures for the excavation and laboratory analysis of data from a prehistoric or historic archaeological site. Data gathered may be used for additional graduate research. Enrollment by application; limited to twenty students. A fee for subsistence costs will be charged. FLD.

ANTH 419. Training in Archaeological Field Work. 1-6 Hours. S.
Undergraduate and graduate students are taught techniques of archaeological field work, including survey and excavation, as well as laboratory procedures, including artifact classification and curation. FLD.

ANTH 430. Linguistics in Anthropology. 3 Hours. S.
A survey of the interrelatedness of linguistic systems, of nonlinguistic communicative systems, and of other cultural systems. (Same as LING 430.) LEC.

ANTH 440. Introduction to Primates. 3 Hours. N.
A survey of the evolution and behavior of nonhuman primates. The survey includes the stages of primate evolution, morphology of living primates, and descriptions and analyses of primate behavioral patterns. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.
ANTH 442. Anthropological Genetics. 3 Hours. N.
Principles of human genetics involved in biological anthropology. The genetics of non-Western populations considered within an evolutionary framework. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 445. Topics in Biological Anthropology: ____. 3 Hours. N.
Seminar concentrating on selected problems and issues in contemporary biological anthropology. Topic for semester to be announced. Course may be repeated for a maximum of nine hours of credit. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 447. Human Behavioral Genetics. 3 Hours. S.
A survey of human behavioral genetics for upper division undergraduates. Emphasis is on how the methods and theories of quantitative, population, medical, and molecular genetics can be applied to individual and group differences in humans. Both normal and abnormal behaviors are covered, including intelligence, mental retardation, language and language disorders, communication, learning, personality, and psychopathology. (Same as BIOL 432, PSYC 432, SPLH 432.) Prerequisite: Introductory courses in biology/genetics or biological anthropology and psychology are recommended. LEC.

ANTH 449. Laboratory/Field Work in Human Biology. 1-3 Hours. AE61 / N.
Faculty supervised laboratory or field research for Human Biology majors. Students design and complete a research project in collaboration with a Human Biology faculty member. (Same as BIOL 449, SPLH 449, and PSYC 449.) Prerequisite: Consent of instructor and Human Biology major. FLD.

ANTH 459. Anthropology of Sex, Honors. 3 Hours. H.
The course is an introduction to the evolutionary study of human sexual behavior. Using an explicitly Darwinian framework, it examines the biological basis for human mate selection, male and female mating strategies, child-birth and child-care practices, parental care, marriage, and family structure. The power of Darwinian theory to predict human sexual behavior is tested in anthropological field studies, designed and carried out by students in the class. Class time is allocated for discussion of students' research as it progresses through each stage, and results are presented in the last weeks of the semester. Prerequisite: Introductory class in biology or biological anthropology. Open only to students in the University Honors Program, or by consent of instructor. LEC.

ANTH 460. Theory in Anthropology. 3 Hours. GE3H / S.
A critical examination of the main theories and concepts in cultural anthropology. Consideration of the philosophical presuppositions underlying past and current theoretical issues and trends. LEC.

ANTH 461. Introduction to Medical Anthropology. 3 Hours. S.
An introduction to the social and cultural practices that contribute to health and disease, including a survey of therapy systems in both Western and non-Western societies (e.g., Native American, African, Western allopathic medicine, etc.). This course should be of special interest to premedical students and majors in the allied health professions. LEC.

ANTH 462. Field Methods in Cultural Anthropology. 3 Hours. H.
This course introduces students to ethical considerations, methods used in ethnographic fieldwork, field notes, coding data, analysis, and write-up. Students design and carry out research projects. Prerequisite: ANTH 108 or ANTH 308, or ANTH 160 or ANTH 360 or ANTH162, or instructor's approval. LEC.

ANTH 465. Genocide and Ethnocide. 3 Hours. S.
Study of the killing of peoples and cultures. Case studies, focusing primarily on tribal South America. Examination of the implications of these studies as regards our definition of culture and our evaluation of aid programs, missionary efforts, and international business expansion. LEC.

ANTH 474. Applied Cultural Anthropology. 3 Hours. S.
Applications of anthropological theory, methods, and findings in programs of community and national development, public health, international aid, and military assistance. Examination of the role of the anthropologist, of ethics and values in intervention schemes, and of the organization of planned change in applied programs. Intensive analysis of selected case studies. FLD.

ANTH 480. Technology and Society in the Contemporary World. 3 Hours. AE61 / S.
The impact of scientific and technological advances on social and personal life in contemporary society. A wide range of topics will be dealt with during the semester; examples include the internet and new modes of communication, developments in genetics and medicine, and testing for intelligence, drugs, lie detection, and other purposes. LEC.

ANTH 482. Psychological Anthropology. 3 Hours. S.
Introduction to the interrelationship of individual and society: processes of socialization, perception and cognition, personality and culture, with emphasis on the psychological interpretation of human behavior and the sociocultural contexts of psychological processes. Both ethnographic and cross-culturally comparative perspectives are introduced. LEC.

ANTH 484. Magic, Science, and Religion. 3 Hours. NW / S/W.
A comparative study of religion and systems of value and belief in non-Western cultures. LEC.

ANTH 496. Reading and Research. 1-6 Hours. S.
Individual investigation of special problems in anthropology. Maximum of three credit hours in any one semester. Prerequisite: Consent of instructor. IND.

ANTH 498. Seminar in Technology: _____. 3 Hours. S.
Topic for semester to be announced. LEC.

ANTH 499. Senior Honors Research. 1-6 Hours. S.
Individual research under the direction of one or more instructors in the department. Maximum of four credit hours in any one semester. Prerequisite: A grade-point average of 3.5 in anthropology and 3.0 in all courses, and consent of instructor. IND.

ANTH 500. Topics in Archaeology: _____. 3 Hours. S.
Seminar concentrating on selected problems and issues in contemporary archaeology. Topic for semester to be announced. Course may be repeated for a maximum of nine hours of credit. Prerequisite: Successful completion of a course in archaeology at any level, or by permission of instructor. LEC.

ANTH 501. Topics in Sociocultural Anthropology: _____. 3 Hours. S.
Course concentrating on selected problems, theories, and issues in contemporary sociocultural anthropology. Topic for semester to be announced. LEC.

ANTH 502. Topics in Anthropological Linguistics: _____. 3 Hours. S.
Course concentrating on selected problems, theories, and issues in contemporary anthropological linguistics. Topic for semester to be announced. LEC.

ANTH 503. Topics in Biological Anthropology: _____. 3 Hours. S.
Course concentrating on selected problems, theories, and issues in contemporary biological anthropology. Topic for semester to be announced. LEC.

ANTH 504. North American Archaeology. 3 Hours. S.
A general survey of the archaeology of North America. Detailed coverage of selected problems. LEC.
ANTH 505. Prehistory of Eastern North America. 3 Hours. S.
A survey of the archaeological record of eastern North America from the late Pleistocene to the time of European contact. The diverse environments of eastern North America are considered in conjunction with the dynamic climatic and ecological changes which have occurred during the past 20,000 years to provide a background for study of the prehistoric groups who occupied the region. Topics will include the change in economies, technologies, and organization from the earliest hunter-gatherers through the development of pre-Colombian complex societies. Prerequisite: ANTH 110 or ANTH 310. LEC.

ANTH 506. Ancient American Civilizations: Mesoamerica. 3 Hours. NW / S/W.
An archaeological survey of the Precolombian heritage of Mexico and Central America. The sites and cultures of the Olmecs, Teotihuacan, the Maya, the Zapotecs, the Toltecs, and the Aztecs will be considered in detail. Investigations of ancient art and architecture, crafts and technologies, trade and exchange, religious beliefs and practices, and writing and calendrical systems will be directed toward understanding the growth and the decline of these Native American civilizations. LEC.

ANTH 507. The Ancient Maya. 3 Hours. S/W.
An intensive examination of current scholarship on the ancient Maya civilization of Mexico and Central America. The course will consider Maya culture from its roots in early villages of the Preclassic period to the warring city-states of the Postclassic period. Topics will include settlement and subsistence systems, sociopolitical evolution, art and architecture, myth and symbolism, and Maya hieroglyphic writing. An important theme of the course will be the relevance of the Precolombian Maya for understanding complex societies and contemporary Latin American Culture. Prerequisite: Successful completion of one of the following: ANTH 110, ANTH 310, ANTH 415, ANTH 506, or ANTH 508. LEC.

ANTH 508. Ancient American Civilizations: The Central Andes. 3 Hours. NW / S/W.
An archaeological survey of the ancient peoples of Peru and neighboring countries in South America. The origins of complex societies on the coast and in the Andean highlands will be reviewed with special consideration of the role of "vertical" environments in the development of Andean social and economic systems. Cultures such as Chavin, Moche, Nazca, Huari, Tiahuanaco, Chimú, and the rise of the imperial Inca state will be examined through artifacts, architectural remains, and ethnohistoric documents. LEC.

ANTH 510. An Introduction to Southwestern Archaeology. 3 Hours. NW / S.
Consideration of the history and processes of cultural development from the evidence of humans' first presence to the historic period in the Southwestern United States and Northern Mexico. Special attention will be devoted to the origins, changes within, and connections to modern Southwestern native peoples of three long-lived traditions known as Hohokam, Mogollon, and Anasazi. Prerequisite: ANTH 110 or ANTH 310. LEC.

ANTH 512. Ethnohistory: ______. 3 Hours. S.
A critical evaluation of the records (local traditions, written documents, maps, photographs, etc.) relevant to a reconstruction of the history of cultures. Topic for the semester to be announced. LEC.

ANTH 514. The Near East in Prehistory. 3 Hours. S.
A broad examination of the prehistory of the Near East, emphasizing selected regional and research themes. Discussion will include a consideration of cultural adaptation and environmental diversity, early history of archaeological work, and current research trends. While all cultural periods will be examined, a major emphasis will be on the origins of food production and Neolithic economies. LEC.

ANTH 515. Topics in Old World Prehistory: ______. 3 Hours. S.
Topic for the semester to be announced. An introductory course in archaeology recommended. LEC.

ANTH 516. Hunters and Gatherers. 3 Hours. S.
The diversity of hunter-gatherer cultures documented in the ethnographic and archaeological records is considered on a global scale, with particular attention given to the relationships between environment, technology, and organization. The evolution of hunter-gatherers from the earliest hominids until their interaction with more complex societies is considered, with emphasis given to the variation and nature of change in these societies. Prerequisite: ANTH 108 or ANTH 110, or ANTH 308 or ANTH 310. LEC.

ANTH 517. Geoarchaeology. 3 Hours. N.
Application of the concepts and methods of the geosciences to interpretation of the archeological record. The course will focus primarily on the field aspects of geoarchaeology (e.g., stratigraphy, site formation processes, and landscape reconstruction), and to a lesser extent on the array of laboratory approaches available. (Same as GEOG 532.) Prerequisite: GEOG 104, ANTH 110, or ANTH 310. LEC.

ANTH 518. Environment and Archaeology. 3 Hours. S.
An investigation of the relationships between the biophysical world and the development of human cultures. Examination of archaeological methods employed in the study of these relationships. LEC.

ANTH 519. Lithic Technology. 3 Hours. S.
An introduction to the analysis and interpretation of prehistoric stone industries. Topics discussed include origins and development of lithic technology, principles of description and typology, use and function of stone tools; interpretation of flint knapping. Prerequisite: An introductory course in archaeology. LEC.

ANTH 520. Archaeological Ceramics. 3 Hours. S.
Practicum in the method and theory of pottery analysis in archaeology. Topics include manufacturing techniques, classification, and compositional analysis of pottery artifacts, as well as strategies for interpreting the role of ceramic vessels in food production, storage, and consumption; social and ritual activities; trade and exchange; and the communication of ideas. Prerequisite: ANTH 110 or ANTH 310. LEC.

ANTH 521. Zooarchaeology. 3 Hours. S.
This course is intended to complement faunal identification with practical involvement in analyses and interpretation of archaeological faunal assemblages using a variety of modern methods. Students will participate in the study of specific archaeological faunal remains, development of comparative zooarchaeological collections, and in middle-range research to document the variety of agents that affect faunal remains. Prerequisite: ANTH 110 or ANTH 310. LEC.

ANTH 522. Paleoethnobotany. 3 Hours. S.
This course discusses the relationship between past human groups and their plant environment, including the use of plants for food, fuel, shelter, and household articles. Topics include a review of the development of paleoethnobotanical research, methods and techniques of data recovery, basics in plant identification, methods of data quantification and interpretation, and current research topics. In addition to selected readings, students will participate with the development of comparative botanical collections and the interpretation of botanical remains recovered from archaeological contexts. Prerequisite: ANTH 110 or ANTH 310. LEC.

ANTH 523. Great Plains Archaeology. 3 Hours. S.
A survey is provided of the archaeological record and its interpretations for the Great Plains area of North America. The records from earliest
human occupation, variation in hunter and gatherer societies, to horticultural and farming societies, and the historic period are reviewed. The history of archaeological research in the region, explanatory frameworks and models, and discussion of changes in economy, technology, mobility, social organization, and population movements are among the topics of concern. LEC.

ANTH 540. Demographic Anthropology. 3 Hours. S.
This course will survey demographic topics that are relevant to anthropological research and theory. Topics will include family and household structure, fertility, nuptiality, mortality, migration, and paleodemography. Emphasis will be placed on methods in use in these areas and applications from the literature. Prerequisite: Three courses in anthropology (at least one in physical and one in cultural) or graduate standing. LEC.

ANTH 542. Biology of Human Nutrition. 4 Hours. N.
Lecture and discussion. A comprehensive introduction to human nutrition, focusing on the anatomical, biochemical, and physiological aspects of nutrition. The essential nutrients and their role in human metabolism are covered in detail, and the course’s systemic approach places a strong emphasis on integration of metabolism. Students also are introduced to human dietary evolution, the concept of nutritional adaptation, and cross-cultural differences in diet and nutritional physiology. Discussion sections focus on applied aspects of human nutrition, including dietary assessment. The course is a prerequisite for ANTH 543, which is recommended as the second course in a sequence on human nutrition. Prerequisite: ANTH 104 or ANTH 304, and BIOL 152. Students who have not had BIOL 152 should have taken a comparable introductory course in organi

ANTH 543. Nutrition Through the Life Cycle. 3 Hours. N.
The first half of the course focuses on nutrition through the life cycle, with an emphasis on biological, cultural, and environmental factors that influence human dietary intake and nutrition across the life span. Particular attention is given to the role of nutrition in cross-cultural variation in human growth, development, and aging. The second half of the course examines evolutionary aspects of human nutrition, including the origins and adaptive significance of regional and cultural basis. The development of taste and food preferences, at the level of the individual and population, as well as symbolic aspects of dietary behavior also will be considered. Prerequisite: ANTH 542 or permission of instructor. LEC.

ANTH 544. Origins of Native Americans. 3 Hours. N.
A survey of the genetic, linguistic, historic, archaeological, and morphological evidence for the origins of indigenous populations of the Americas. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 545. Contemporary Health Issues in Africa. 3 Hours. S.
The course examines health and nutrition in African communities, using the methods of biological and medical anthropology. Fundamental to the approach taken in the course is the understanding that the health of human groups depends on interactions between biological and cultural phenomena in a particular ecological context. One topic will be selected per semester, to examine in detail the full array of epidemiological factors contributing to patterns of specific diseases. AIDS, childhood diseases, and reproductive health of African women are among possible topics. Course material will be selected from scholarly and medical publications, as well as coverage in the popular media. The use of a variety of sources will enhance understanding of the biological and cultural issues involved and will help students identify possible bias and misinformation in popular coverage of events such as famine or epidemic in African settings. (Same as AAAS 554.) Prerequisite: An introductory course in either anthropology or African studies. LEC.

ANTH 549. Human Paleontology: Fossil Apes to Australopithecus. 3 Hours. N.
This course is an intensive survey of the fossil evidence for hominoid evolution up to the emergence of the first hominids—Australopithecus. Topics include the origin and evolution of the great apes, gibbons, and extinct forms such as Ramapithecus and Gigantopithecus, as well as the appearance of Australopithecines. Functional morphology is stressed. This course may be taken either before or after ANTH 550. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 550. Human Paleontology: Homo Erectus to Homo Sapiens. 3 Hours. N.
The rise of genus Homo is the theme of this course. Fossils representing erectus, Neanderthal, Upper Paleolithic, and post-Pleistocene forms are discussed in detail with particular emphasis on the relationship between cultural and morphological change. The course is a continuation of ANTH 549, but may be taken out of sequence. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 555. Evolution of Human Diseases. 3 Hours. N.
This course traces the evolution of human diseases over the past 3 million years. Topics include paleopathology, epidemics/pandemics, genetic adaptations to diseases, and emerging/reemerging diseases. In addition, interrelationships between humans and diseases, coupled with interactions with other animals, vectors, and natural and cultural environments are discussed. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 561. Indigenous Development in Latin America. 3 Hours. AE42 / S.
Surveys the history of the development enterprise since WWII, examines the marginalization and impoverishment of Latin America’s indigenous peoples, and provides training to carry out projects for and with them to enhance their quality of life. Development is understood as not merely technological or economic, but also social, emotional, and educational. Students work in teams to design their own mock development project. A 3-credit non-obligatory companion course, Applied Anthropological Field School among the Ch’ortí Maya, will follow in the intersession after each version of this course. (Same as LAA 561.) Prerequisite: ANTH 100, ANTH 108, ANTH 160 or LAA 100; or consent of instructor. LEC.

ANTH 562. Mexamerica. 3 Hours. AE41 / S.
This class surveys the relations between Mexico and the U.S. as nation-states, and among Mexicans, Mexican Americans, and Anglo Americans (to a lesser extent other U.S. citizens) in historical perspective. Issues of sovereignty, national and ethnic identity, immigration, migration, labor relations, popular culture, media, and transnational economics are covered. Prerequisite: ANTH 108/308 or ANTH 160/360 or LAA 100. LEC.

ANTH 563. Cultural Diversity in the United States. 3 Hours. SC / S.
Anthropological approaches to racial, ethnic, religious, and localized communities in contemporary U.S. Surveys major theories from social science, considers case studies of immigrant indigenous peoples from historical and contemporary, local, national, and international perspectives, and addresses questions concerning the sources, conditioners, and consequences of in-group and out-group identities. Prerequisite: Introductory cultural anthropology and one cultural course numbered 300 or above, or permission of instructor. LEC.

ANTH 564. The Peoples of Africa. 3 Hours. NW / S.W.
"Peoples of Africa” examines the anthropology of Sub-Saharan Africa through selected case studies of particular societies and issues that have wider comparative relevance. Normally two to four societies are selected for the semester and studied through ethnographic, historical, and literary monographs. These case studies are examined in their pre-
colonial, colonial, and postcolonial histories. Lectures, readings, and exercises emphasize three kinds of reasoning -- geographical, historical, and cultural context -- required to grasp events and issues in unfamiliar societies. The course also features major anthropological ideas that emerged in the study of African society, and tracks how anthropology has been adapted by African scholars, policy makers, and activists. LEC.

ANTH 565. Popular Images in Japanese Culture, Literatures, and Films. 3 Hours. NW / S/W.
The course examines recurring themes and images in Japanese culture through films, literary works, and anthropological and other social science literature. These themes and images are studied in the contexts of both modern and traditional cultures. Although the popular deviates from the orthodox, nevertheless, the energy and pervasiveness of these bastard offspring enforce and sustain “proper” cultural values. As a result of exploration of both highways and backroads of cultural expression, a holistic picture of Japanese ethos will emerge. (Same as EALC 565.) LEC.

ANTH 567. Japanese Ghosts and Demons. 3 Hours. NW / S/W.
An investigation of deeply rooted Japanese beliefs about intimate relationships among humans, animals, and nature - beliefs which help to explain the mysterious and to lend order to the world. Anthropological works, selections from Japanese literature, historical documents, artworks, and films will be used to examine supernatural themes. (Same as EALC 567.) LEC.

ANTH 568. Kongo Trans-Atlantic. 3 Hours. S.
This seminar explores Kongo culture and history through a cross-section of the African-Atlantic World: Western Equatorial Africa and related New World societies in Jamaica, Brazil, Haiti, Cuba, and the Georgia and Carolina Coasts, and New Orleans (thus in former British, Portuguese, French, Spanish, and U.S. colonial territories). The seminar will assess recent scholarship on patterns of slavery and resistance, and cultural and linguistic change, creolization and hybridization. (Same as AAAS 568.) LEC.

ANTH 569. Contemporary Central America and Mexico. 3 Hours. S.
Mexico and Central America have formed a cultural interaction zone for thousands of years, and today share common challenges, particularly political, economic, and social ones related to the Spanish colonial legacy, U.S. involvement, and their place in the global economy. Some of the issues addressed include racism, civil war, migration, youth gangs, narco-trafficking, resource extraction, homeless children, the transition from local subsistence economies to low-income work, and struggles for indigenous rights. Prerequisite: ANTH 160 or ANTH 162, ANTH 360, ANTH 108 or ANTH 308, or LAA 100. LEC.

ANTH 570. Anthropology of Violence. 3 Hours. S.
Introduces students to the comparative and cross-cultural study of violence. The course begins by surveying different anthropological approaches to the study of violence, with special attention paid to classical social theorists as well as ethnographic works. Topics may include (post) coloniality and identity politics, nationalism, race, religion, and political culture; geographic areas to be covered may include Africa, Europe, Latin America, the Middle East, and South Asia. LEC.

ANTH 571. Violence, Aggression, and Terrorism in the Modern World. 3-4 Hours. S.
A cultural and psychological analysis of the sources, dynamics, effects, and practices of modern patterns of violence. Variations in psycho/social reactions to violence will be examined with reference to personal, social, and cross-cultural characteristics. Particular attention will be given to the cultural and individual characteristics of people who successfully survive violence and terrorism targeted at them. Emphasis will be upon the psychological and cultural origins of terrorism and violence in modern societies. Prerequisite: Introductory course in anthropology or psychology. LEC.

ANTH 580. Feminism and Anthropology. 3 Hours. S.
This seminar will introduce students to feminism in anthropology, including feminist theories, methodologies, ethnographic styles, and the history of women in the discipline since the late 1800s. Emphasis is on the social contexts for feminist theory-building since the 1960s and changing ideas about gender and power. (Same as WGSS 580.) Prerequisite: One of the following: ANTH 389, ANTH 460, WGSS 201; or permission of instructor. LEC.

ANTH 582. Ethnobotany. 3 Hours. S.
Course will involve lectures and discussion of ethnobotany - the mutual relationship between plants and traditional people. Research from both the field of anthropology and botany will be incorporated in this course to study the cultural significance of plant materials. The course has 7 main areas of focus: 1) Methods in Ethnobotanical Study; 2) Traditional Botanical Knowledge - knowledge systems, ethnolinguistics; 3) Edible and Medicinal Plants of North America (focus on North American Indians); 4) Traditional Phytochemistry - how traditional people made use of chemical substances; 5) Understanding Traditional Plant Use and Management; 6) Applied Ethnobotany; commercialization and conversation (focus on traditional harvest of plant materials); 7) Ethnobotany in Sustainable Development (focus on medicinal plant exploration by pharmaceutical companies in Latin America). (Same as EVRN 542.) Prerequisite: ANTH 104, ANTH 108, EVRN 148, or consent of instructor. LEC.

ANTH 583. Love, Sex, and Globalization. 3 Hours. S.
Escalating transnational flows of information, commodities, and people have created innumerable kinds of “intimate” contacts on a global scale, such as mail order brides, child adoption, sex tourism, commodified romance, and emotional labor. Exploring the ways that cultural artifacts of intimacy are rendered, fetishes and riefied in a free market economy, this course examines how discourses on love and sex encounter, confront, and negotiate the logics of the capitalist market, the discrepant narratives of (colonial) modernity, and the ethic of pleasure. In so doing, this course navigates the treacherous interplay among emotions-specifically love, sex, and money, seeking the potential and limits of cultural politics of emotions. (Same as WGSS 583.) LEC.

ANTH 586. Visual Anthropology. 3 Hours. U.
This course takes a hands-on approach to the study of theory, ethics, and methods in visual ethnographic representation. Students also read and consider historical dimensions in this subdiscipline and complete individual and team projects in photographic and videographic media. Prerequisite: An introductory course in cultural anthropology or permission of the instructor. LEC.

ANTH 587. Multidisciplinary Field School in Partnership with the Chorti Maya. 3 Hours. S.
Teams of interdisciplinary students partner with the Chorti Maya of Guatemala and Honduras to share information and experiences. One third of the course consists of readings and 4-5 orientation sessions on campus, and two thirds entails two weeks in Central America. Examples of activities might include historical research, water testing and improvement, photography, art, music, tourism consultation, marketing of crafts, human rights advocacy, web design, computer training, and museum work, among others. There are no prerequisites, but students with a working knowledge of Spanish will receive preference for admission. (Same as LAA 587.) LEC.

ANTH 595. The Colonial Experience. 3 Hours. NW / S/W.
An anthropological and historical examination of the processes and dynamics of the colonial experience. Cross-cultural psychosocial phenomena that have profoundly affected the values and social
organizations of both colonizers and colonized will be emphasized. Specific examples will be chosen from the former American, Japanese, and European colonial empires with emphasis on Asia. LEC.

ANTH 603. Shamanism Past and Present. 3 Hours. S.
This course explores shamanism, broadly defined as the practice of gaining insight through the use of ecstatic techniques (dance, drumming, trance, vision quests, and the use of psychotropic substances) for the purpose of interpreting existence and healing illnesses, through a consideration of theories and evidence for its practice from Upper Paleolithic times to the present day. Examples from the ancient cultures of Asia, Europe, Africa, Australia, and the Americas are used to explore current theoretical approaches in order to identify shamanism and shamanism in the past. Issues of identifying shamans and shamanism in art and archaeological contexts are discussed. The course also explores the role that shamanism plays in a wide variety of cultures. The principal goal of the course is to provide a reasoned, critical interpretation of shamanism in the context of contemporary debates about its definition and active practice. Prerequisite: ANTH 108/308 or ANTH 110/310 or ANTH 160/360. LEC.

ANTH 605. Mortuary Practices in the Archaeological Record. 3 Hours. S.
Students study theories and methods of burial practices in the archaeological record. They learn about past communities; attitudes toward death and burial and how social organization, complexity, ideology, power, gender and age roles contribute to mortuary practices. The course examines a variety of Old and New World examples from different chronological periods through class presentations, debates and written assignments. The course focuses on comparisons and evaluation of traditional and current methods and approaches. Prerequisite: ANTH 100/300 or ANTH 110/310 or instructor's consent. LEC.

ANTH 619. Field Concepts and Methods in Geoarchaeology. 3 Hours. S.
A field course taught during the three week summer session. Involves all-day excursions to different regions in order to introduce students to a variety of archaeological landscapes and environments. Focuses on the application of geoscientific concepts and methods in archaeological field investigations, emphasizing natural processes such as erosion, deposition, weathering, and biological and human activity that create and modify the archaeological record, and on soil-stratigraphic and geophysical approaches to landscape and site investigations. LEC.

ANTH 648. Human Osteology. 4 Hours. N.
Techniques in bone identification, sex, race, age determination, stature reconstruction, paleopathology, and bone biology are reviewed. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LAB.

ANTH 650. Human Reproduction: Biology and Behavior. 3 Hours. N.
This is a comprehensive course in the biology of human reproduction (anatomy, physiology, and endocrinology). The implications of human reproductive biology for the evolution of human behavior are considered as well. Students also examine in detail the methods and theories underlying two interconnected approaches utilized by biological anthropologists in the study of human reproduction: human reproductive ecology, which focuses on the biological determinants of human reproductive function and reproductive success, and human behavioral ecology, which focuses on evolutionary relationships between human reproductive strategies and human social behavior. The course is the first part of a two-semester sequence (ANTH 650 and ANTH 660) that examines in detail biological and cultural determinants of human reproductive strategies. Prerequisite: ANTH 359 or BIOL 152 or permission of instructor. LEC.

ANTH 652. Population Dynamics. 3 Hours. N.
Examination of possible interrelationships between the demographic structure of a population and the forces of evolution. Students are exposed to field methods and techniques of population studies. Prerequisite: An introductory course in anthropology, biology, or permission of instructor. LEC.

ANTH 660. Human Reproduction: Culture, Power, and Politics. 3 Hours. S.
This seminar analyzes and critiques the socially constructed nature of reproductive practices and their articulation with relations of power. Topics range from conception to menopause, infertility to population. Cases are drawn from a wide variety of cultural contexts. This course is the second part of a two-semester sequence (beginning with ANTH 650) that examines in detail biological and cultural determinants of human reproduction. (Same as WGSS 660.) Prerequisite: ANTH 650, or 6 hours in women's studies, or permission of instructor. LEC.

ANTH 661. Cultural Dynamics. 3 Hours. S.
A survey of representative studies of the processes of cultural stability and change, and of theories of innovation, diffusion, acculturation, growth, and planned intervention in cultural processes. LEC.

ANTH 663. The Anthropology of Islam. 3 Hours. NW / H.
This course uses critical readings of major anthropological works on Islam to: 1) analyze various interpretations of “Islamic cultures” through a discussion of regionally-grounded works, and 2) examine how the anthropological study of Islam also is informed by theoretical and philosophical approaches to major anthropological questions, such as religion, myth, kinship, social organization, and power. The course offers both a history of various interpretations of Islam as well as a history of theories of these interpretations. (Same as AAAS 663.) LEC.

ANTH 664. Women, Health, and Healing in Africa. 3 Hours. H.
The course explores the values, practices, cultural systems and social-economic conditions that influence the sickness and health of women in Africa. The focus is on theoretical and applied debates and issues including: contraception, infertility, and reproduction; HIV/AIDS and other sexually transmitted infections; spiritual suffering and mental illness; trauma and violence; chronic illness, disability, and aging; pharmaceuticals, biotechnologies, and clinical research. Prerequisite: 6 hours of coursework in Anthropology and/or Women's Studies and/or African American Studies. LEC.

ANTH 665. Women, Health, and Healing in Latin America. 3 Hours. S.
This seminar uses a life-cycle approach to examine women's health (physical, mental, and spiritual) and their roles as healers. Special consideration is given to the effects of development programs on well-being, access to health care, and changing roles for women as healers. Cases will be drawn from a variety of Latin American contexts. (Same as WGSS 665 and LAA 665.) Prerequisite: 6 hours of coursework in anthropology and/or women's studies and/or Latin American studies. LEC.

ANTH 666. Anthropology of Religion. 3 Hours. S.
An examination of the various approaches (individual, ritual, and cognitive) anthropologists have adopted in the study of religion, with emphasis on millenarian and prophetic movements as examples of radical change. LEC.

ANTH 667. Primitive Mythology. 3 Hours. S/W.
Methods of studying the mythology of nonliterate peoples; historical survey of theories of myth; consideration of worldwide myths and primitive mythologies from specific cultures. LEC.

ANTH 670. Contemporary American Culture. 3 Hours. S.
An anthropological investigation, in seminar format, of the social consequences of transformations in today's society. Specific topics
may include: the information explosion; developments in science and technology; genetics and assisted reproduction; ethnic and cultural diversity; and changing views of the normal and abnormal, sexual and other forms of relationships, and of the self. Prerequisite: An introductory course in cultural anthropology, sociology, or American studies. LEC.

ANTH 671. The Culture of Consumption: (E.G. United States and Japan). 3 Hours. S.
Examines the ideologies of capitalism and consumerism as they influence social institutions and daily life. Topics for consideration grow out of instructors' interests and may include areas such as class, religion, advertising, politics, gender, medicine, environment, childhood, and education. Prerequisite: ANTH 560 or permission of instructor. LEC.

ANTH 672. Meat and Drink in America. 3 Hours. S.
This seminar explores food and beverage production and consumption in the United States. Organized metaphorically as a meal, the course explores where food and beverages come from, how they are produced and by whom, and what they mean to us as eaters and drinkers. Although the course surveys food and beverage production and consumption in general, special attention is given to meat and poultry, alcohol, coffee, carbonated drinks, regional foods, opposition to consumption of meat and alcohol, and tobacco. LEC.

ANTH 673. Neoliberalism and Globalization. 3 Hours. S.
Transnational processes profoundly shape the 21st century human experience. This course links theories of economic globalization with ethnographic case materials. It explores the spread of the dominant ideology driving these processes and the effects of neoliberal policies on the urgent and vital matters facing humanity today: war and peace, social justice, democracy, cultural pluralism, and ecologically sustainable development. The course thereby links macro-economic policies to the experiences of families, workers, communities, women, indigenous peoples, and other social groups. Prerequisite: ANTH 560 or permission of instructor. LEC.

ANTH 674. Political Anthropology. 3 Hours. S.
Analysis of political systems of tribal societies and of pre-industrial states. LEC.

ANTH 675. Anthropology of Law. 3 Hours. S.
Comparative analysis of the legal and political strategies used to achieve social control in both Western and non-Western cultures. Emphasis on the differential use of customary and legal sanctions, formalized procedures of negotiation or adjudication, and the role of legal specialists in society. LEC.

ANTH 676. Culture Wars. 3 Hours. S.
A seminar exploring the political, religious, cultural and ideological antagonisms that divide contemporary society. Topics of discussion to be treated may include Christianity vs. Islam, evolutionism vs. intelligent design, attitudes pertaining to sexual orientation, and the proper relation between church and state. LEC.

ANTH 680. Culture and Human Biology. 3 Hours. S.
A lecture course concerned with the relationship between culture and biological systems; the prohibition of incest; socialization and aggression in ethnological studies; disease and therapy; and other alterations of mind and body states. LEC.

ANTH 684. Anthropology and the Health Sciences. 3 Hours. S.
Ecology of human health; cultural and social factors in the etiology of human diseases; social and cultural variables involved in health practices, programs, the organization of healing systems and the diagnostic process; the consequences of health innovations and medicotechnical apparatus. LEC.

ANTH 690. The Social Construction of the Self. 3 Hours. AE42/GE3H / S.
A seminar exploring concepts of the self as the product of variable social and cultural conditions. Consideration of dominant anthropological and interdisciplinary theories of the self and how the self is construed in various societies from Asia, the Pacific, and elsewhere. LEC.

ANTH 695. Cultural Ecology. 3 Hours. S.
Investigation of the interrelations between sociocultural systems and the natural environment, including a survey of major theories and descriptive studies. (Same as GEOG 670.) LEC.

ANTH 696. Language, Culture and Ethnicity in Prehistoric Eastern Europe. 3 Hours. S.
The course is for students who wish to understand the prehistory of Eastern Europe with special attention to the Slavs. The interdisciplinary course examines East European prehistory from the perspectives of archaeology and linguistics, considering also how ideologies have influenced the interpretation of results. No language prerequisite. (Same as SLAV 635) LEC.

ANTH 699. Anthropology in Museums. 3 Hours. S.
The course reviews the history of archeological, ethnographic, physical anthropological and other types of collections. It also considers current issues facing anthropologists, such as: contested rights to collections and the stories that accompany them; representation and interpretation of cultures; art and artifact; conceptualization, design and building of exhibitions; and anthropological research and education in the museum. LEC.

ANTH 701. History of Anthropology. 3 Hours.
Development of the field of anthropology and its relations with intellectual history. Emphasis on method and theory in historical context. Required of all M.A.-level students in anthropology. Prerequisite: Consent of instructor or graduate standing. LEC.

ANTH 702. Current Archaeology. 3 Hours.
An introduction to fundamental theoretical orientations and methodological approaches in world archaeology. Case studies illustrate data acquisition, dating methods, culture history, paleoenvironmental models, and culture processes. Required of all M.A.-level students in anthropology. Prerequisite: Consent of instructor or graduate standing. LEC.

ANTH 703. Current Biological Anthropology. 3 Hours.
The fundamental issues, methods, and theories in contemporary biological anthropology. Required of all M.A.-level students in anthropology. Prerequisite: Consent of instructor or graduate standing. LEC.

ANTH 704. Current Cultural Anthropology. 3 Hours.
The fundamental issues, methods, and theories in contemporary cultural anthropology and anthropological linguistics. Required of all M.A.-level students in anthropology. Prerequisite: Consent of instructor or graduate standing. LEC.

ANTH 705. Technological Change: _____. 3 Hours.
Studies in technological change through invention, evolution, and diffusion. Topic for semester to be announced. LEC.

ANTH 706. Current Linguistic Anthropology. 3 Hours.
This course will cover fundamental issues, methods, and theories in contemporary linguistic anthropology. (Same as LING 706.) Prerequisite: Graduate standing or consent of the instructor. LEC.

ANTH 707. Responsible Research and Scholarship in Anthropology. 3 Hours.
This course examines a range of issues critical to responsible research, scholarship, and practice in anthropology. Required for all doctoral
students in Anthropology. Prerequisite: Graduate standing in anthropology or consent of instructor. SEM.

ANTH 710. History of American Archaeology. 3 Hours.
A survey of the development of method and theory in American archaeology, with emphasis on North America. Prerequisite: Graduate standing or consent of instructor. LEC.

ANTH 715. Seminar in North American Archaeology. 2-4 Hours.
In-depth examination of specific problems and issues in the study of archaeology in North America including the Arctic. Prerequisite: Graduate standing in Archaeology or instructor's consent. SEM.

ANTH 718. Seminar in Latin American Archaeology: _____ 3 Hours.
In-depth examination of specific problems and issues in the study of Precolombian societies of Mesoamerica, Central America, and South America. Topic for semester to be announced. Prerequisite: ANTH 506, ANTH 508, and/or consent of instructor. LEC.

ANTH 720. Seminar in Old World Prehistory: _____ 2-4 Hours.
Studies of prehistoric cultures and their natural environments. Topic for semester to be announced. Prerequisite: Graduate standing in anthropology or consent of instructor. LEC.

ANTH 725. Introduction to Linguistic Science. 3 Hours.
An introduction to the theory and techniques of linguistic science for majors and others intending to do advanced work in linguistics and linguistic anthropology. Emphasis on the sound system, grammatical structure, and semantic structure of languages. Lectures and laboratory sessions. (Same as LING 700.) Not open to students who have taken ANTH/LING 106 or ANTH/LING 107. Prerequisite: Graduate standing. LEC.

ANTH 730. Linguistics in Anthropology. 3 Hours.
The study of language as it concerns anthropology. Language systems in relation to culture, language taxonomy, semantics, and linguistic analysis as an ethnographic tool. (Same as LING 730.) Prerequisite: Graduate standing. LEC.

ANTH 732. Discourse Analysis. 3 Hours.
This course focuses on linguistic frameworks for the analysis of discourse. Discourse is a linguistic system larger than the sentence (utterance), which connects and contextualizes speech and written text. This course focuses on current issues and theoretical frameworks in the analysis of discourse. Using oral and written data, students will examine how contexts influence and shape linguistic form. Topics covered include transcription systems, the structure and organization of different genres of language, and the performance of social actions, including stance-taking, framing, and the construction of identity. Students will also have an opportunity to perform discourse analytic research on the data of their choice. (Same as LING 732.) Prerequisite: ANTH 706 or permission of the instructor. LEC.

ANTH 733. Language, Gender and Sexuality. 3 Hours.
This course focuses on the complex relationship between language use and the social construction of gender and sexuality (i.e. how language is used in the construction of gender and sexuality, and how gender and sexuality are performed and enacted through language). Examines theoretical notions of language, gender, and sexuality from linguistics, linguistic anthropology, and sociology. Among the topics covered are cross-cultural definitions of masculinity and femininity, construction of gendered and sexual identities through language use, language and power, ideologies, style, and performativity. The course will consider research on language, gender, and sexuality from a variety of cultures within the last 50 years. (Same as LING 733.) Prerequisite: ANTH 706 or permission of the instructor. LEC.

ANTH 734. Language Evolution. 3 Hours.
Human language demonstrates a level of complexity not found in the communicative systems of other species. This course focuses on the development of human language, so as to obtain a better understanding of the origin and development of human language. Questions addressed include: what features of language are distinct from other communicative system, when did human language originate, in what stages did human language evolve, and how does language relate to properties of the human brain and mind? Data from a variety of disciplines will be considered, including primatology, human development, cognition, evolutionary biology, archaeology, and linguistics. (Same as LING 734.) Prerequisite: ANTH 106 or ANTH 107 or LING 106 or LING 107 or ANTH 736 or LING 708 or ANTH 725. LEC.

ANTH 736. Linguistic Analysis. 3 Hours.
Practice in applying the techniques of phonological, grammatical, and syntactic analysis learned in introductory linguistics to data taken from a variety of languages of different structural types. (Same as LING 708.) Prerequisite: An introductory course in linguistics. Not open to students who have taken LING 308. LEC.

ANTH 740. Linguistic Data Processing. 3 Hours.
The tools and techniques necessary to analyze linguistic fieldwork data, including research design, recording and elicitation techniques, computational data processing and analysis, and field ethics. Techniques of research, field recording, and data analysis technology. Methods of phonetic transcription, grammatical annotation, and analysis of language context. Practice of techniques via short studies of at least one language. (Same as LING 740.) Prerequisite: LING 700 or permission of instructor. LEC.

ANTH 741. Field Methods in Linguistic Description. 3 Hours.
The elicitation and analysis of phonological, grammatical, and discourse data from a language consultant. In-depth research on one language. Techniques of research design, methods of phonetic transcription, grammatical annotation, and analysis of language context. (Same as LING 741.) Prerequisite: LING 705 or permission of instructor. LEC.

ANTH 743. Nutritional Anthropology: Methods and Theory. 3 Hours.
This is an intensive course aimed explicitly at graduate students whose research involves some aspect of human dietary behavior (foodways) and human nutrition. It examines the application of both biological and cultural theory to the study of human nutrition and cross-population variation in nutritional strategies and dietary practices. Topics include, among others, the evolution of human nutrition, environment and nutrition, nutritional epigenetics, effects of food scarcity, the cultural meanings of food, food as metaphor, and food and language. A second emphasis of the course is on field methods in nutritional anthropology, including dietary interviews, observation of dietary behaviors, nutritional and anthropometric assessment, nutrient analysis and ever-expanding field methods in nutritional ecology (nutritional endocrinology, physiology and genetics). Ethical issues in nutritional anthropology also are considered. Prerequisite: Graduate student status or permission from instructor. LEC.

ANTH 747. North American Indian Languages. 3 Hours.
Introduction to the nature and distribution of North American Indian languages. Prerequisite: ANTH 306 or ANTH 430 or ANTH 730. LEC.

ANTH 748. Language Contact. 3 Hours.
Theories and case studies of languages in contact. Areal and genetic linguistics, genesis of pidgins and creoles, multilingualism. Social, political, economic, and geographic factors in language change. (Same as LING 748.) Prerequisite: A course in linguistics. LEC.
ANTH 749. Linguistics and Ethnolinguistics of China and Central Asia: ______. 3 Hours.  
Selected topics in linguistics and linguistic anthropology, focusing on dominant and/or minority languages of China, Central Asia, or a particular region of Central and Eastern Eurasia. Topics may include any subfield of linguistics, including language contact, typology, dialectology, and sociolinguistics. Topic for semester to be announced. (Same as LING 749.) Prerequisite: A course in linguistics. LEC.

ANTH 754. Biological Bases of Human Behavior. 3 Hours.  
The role of behavioral genetics in normal behavior is examined in this seminar. There is special emphasis on the genetics of complex human behavior such as sensory perception, aggression, intelligence, proxemics, kinesics, and learning. Several abnormal conditions, such as schizophrenia, chromosomal aberrations, alcoholism, and brain dysfunction are discussed in terms of the genetic and environmental interactions. LEC.

ANTH 756. Genetics of Isolates. 3 Hours.  
The evolutionary effects of finite population size and reproductive isolation are discussed in this seminar. Stochastic processes, genetic distances, approaches to population structure, and measures of inbreeding are considered. Prerequisite: ANTH 652 or consent of instructor. LEC.

ANTH 759. Dental Anthropology. 3 Hours.  
An intensive study of human teeth. Principles of eruption, growth, genetics, anatomy, pathology, measurements, casting, and cultural changes in teeth will be presented. Prerequisite: Consent of instructor. LEC.

ANTH 761. Introduction to Medical Anthropology. 3 Hours. SC.  
An introduction to the social and cultural practices that contribute to health and disease, including a survey of therapy systems in both Western and non-Western societies (e.g., Native American, African, Western allopathic medicine, etc.). This course should be of special interest to premedical students and majors in the allied health professions. Graduate version of ANTH 461 with more advanced requirements. Prerequisite: Consent of instructor. LEC.

ANTH 762. Human Growth and Development. 3 Hours.  
Consideration of comparative physical growth patterns throughout the human life cycle. Sex and population differences in skeletal, dental, and sexual maturation. Effect of genetic and environmental factors upon growth and maturation. Prerequisite: An introductory course in biological anthropology or consent of instructor. LEC.

ANTH 764. Selected Topics in Human Paleontology: ______. 3 Hours.  
Intensive, high-level survey and critique of the application of modern biological theory of evolution and taxonomy to the problems of primate and human evolution. Prerequisite: Consent of instructor. LEC.

ANTH 766. Topics in Biological Anthropology: ______. 3 Hours.  
Topic for semester to be announced. Students may repeat the course for different topics. Prerequisite: Consent of instructor. LEC.

ANTH 769. Seminar in Primate Studies. 3 Hours.  
Survey of field and laboratory investigations of the comparative anatomy and behavior of nonhuman primates. LEC.

ANTH 770. Research Methods in Physical Anthropology. 3 Hours.  
A practical course in the use of special laboratory techniques of biological anthropological research and methods of data presentation. Prerequisite: Consent of instructor. LAB.

ANTH 775. Seminar in Cultural Anthropology: ______. 3-9 Hours.  
Intensive consideration of special problems in cultural anthropology. Topic for semester to be announced. LEC.

ANTH 777. Seminar in Applied Cultural Anthropology. 3 Hours. S.  
Selected problems in applying anthropological theory, methods, and findings in programs of directed change. FLD.

ANTH 780. Social Organization. 3 Hours.  
Comparative analysis of the structure, development, and function of human social groups. Emphasis on kinship, legal, economic, and political institutions. Prerequisite: Graduate standing or consent of instructor. LEC.

ANTH 781. Symbolic Anthropology. 3 Hours.  
An examination of anthropological approaches to religion, world view, and other symbol systems in simple and complex societies. Prerequisite: Graduate standing or consent of instructor. LEC.

ANTH 783. Doing Ethnography. 3 Hours.  
Ethnography is both process and product. The product, a representation of a culture (or selected aspects of a culture), is based on fieldwork, the common term for the ethnographic process. This course explores how ethnographers prepare for the field, do their fieldwork, then report it. LEC.

ANTH 785. Topics in Ethnology: ______. 3 Hours.  
Topic for semester to be announced. Usually the course will focus on selected problems in the social and cultural life of a people in a particular geographic region of the world. Coverage will include both the classical ethnological literature as well as special issues of current concern. Students may repeat the course for different topics. Prerequisite: Graduate standing or consent of instructor. LEC.

ANTH 786. Ethnographic Documentary Production. 3 Hours.  
This course combines classroom and fieldwork in applications of theories, ethics, and methods of visual representation. Students carry out team-based ethnographic fieldwork projects through which they learn about pre-production, video production, and nonlinear post-production of ethnographic video documentaries. Prerequisite: Successful completion of ANTH 564 or permission of instructor. LEC.

ANTH 788. Symbol Systems: ______. 3 Hours.  
Anthropological approaches to the study of worldview, religion, folklore, mythology, art, and other expressive behavior. Topic for the semester to be announced. Prerequisite: Graduate standing or consent of instructor. LEC.

ANTH 789. Anthropology of Gender: Advanced Seminar in the Four Fields. 3 Hours.  
This seminar is intended primarily for graduate students in anthropology or other disciplines that share an interest in any of the subdisciplines of anthropology (archaeology, linguistic anthropology, biological anthropology, and sociocultural anthropology) and/or anthropological theories and methods. Undergraduates pursuing Honors or other major research projects are also encouraged to participate. Students will receive training in the contemporary theories, research, and pedagogies informing the anthropology of gender. Class participants will explore how these materials intersect with their current thesis or research projects and develop syllabi specific to their subdiscipline. (Same as WGSS 789.) Prerequisite: Permission of instructor. LEC.

ANTH 794. Material Culture. 3 Hours.  
The historical and cross-cultural study of artifacts as embodiments of technological, social, organizational, and ideological aspects of culture. LEC.

ANTH 799. Anthropology Museum Apprenticeship. 1-6 Hours.  
Provides directed, practical experience in research, collection care and management, public education, and exhibits, with emphasis to suit the particular requirements of each student. Limit of six hours of credit for the M.A. degree. (Same as AMS 799, BIOL 799, GEOL 723, HIST 799, and MUSE 799.) FLD.
ANTH 810. Seminar in Ethnolinguistics: ______. 2-3 Hours.
An advanced study of the relations between language and culture.
Subject will vary each semester; students may repeat the course more than once. (Same as LING 810.) LEC.

ANTH 811. Quantitative Archaeology. 3 Hours.
Instruction in statistical methods for analyzing quantitative data in archaeological research. Topics will include techniques for handling nominal, ordinal, and radio-scale variables, the collection and presentation of quantitative information, and the use of computers. Prerequisite: Graduate standing and college-level algebra and/or consent of instructor. LEC.

ANTH 849. Seminar in Archaeology: ______. 2-4 Hours.
Subject matter of seminar to be announced for semester. LEC.

ANTH 851. Data Analysis in Archaeology: ______. 1-6 Hours.
A two-semester course designed to provide graduate students with basic principles in the analysis of archaeological data. Course content will include an introduction to archaeological systematics, analytical procedures, application of multivariate statistics, and computer applications. Topic for semester to be announced. FLD.

ANTH 853. Theory and Current Problems in Archaeology. 3 Hours.
Consideration of scientific methodology, basic assumptions of anthropological archaeology, relationship of archaeology and anthropology, and current theoretical and methodological trends in archaeology. LEC.

ANTH 856. Advanced Medical Anthropology: ______. 3-6 Hours.
This course provides advanced training in selected aspects of medical anthropology; the topic for a particular semester will reflect the current interests of the instructor. It is expected that the course content will alternate between theoretical and applied emphases. May be repeated for a total of six hours credit. Prerequisite: ANTH 461 or consent of instructor. LEC.

ANTH 880. Advanced Feminist Anthropology: ______. 3-6 Hours.
Intensive consideration of special problems in feminist anthropology. Topic for the semester to be announced. May be repeated for a total of six hours credit. (Same as WGSS 880.) Prerequisite: Permission of instructor. LEC.

ANTH 889. Internship Analysis. 1-6 Hours.
Experiential learning in the application of anthropology through placement in business, government, community, research, or social service organization or agency. This course is a sequel to ANTH 897. Students finish up any remaining research and deliver their findings to the client. They also prepare a written report and a verbal presentation for the Department of Anthropology. Prerequisite: ANTH 897 and Graduate standing in Anthropology. RSH.

ANTH 899. Master's Thesis. 1-12 Hours.
Limit of six hours credit for the M.A. degree. Graded on a satisfactory/unsatisfactory basis. THE.

ANTH 996. Graduate Research. 1-9 Hours.
Individual investigation of special problems in anthropology. RSH.

ANTH 999. Doctoral Dissertation. 1-12 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

Applied Behavioral Science Courses

ABSC 100. Introduction to Applied Behavioral Science. 3 Hours. SI GE11/GE3S / S.
An introduction to the principles of behavioral science and their application to problems facing contemporary societies (e.g., autism, public health, education, juvenile delinquency, substance abuse). Students will learn how behavioral scientists analyze human behavior and how these analyses are used to inform interventions. Students will also learn about careers in the behavioral sciences and how to pursue them. Course may be offered in lecture or online format. LEC.

ABSC 101. Introduction to Applied Behavioral Science, Honors. 3 Hours. SI / S.
This course introduces students to the principles of scientific inquiry in applied behavioral science: objectivity, definitions, observation, reliability, validity, correlation and its limitations, causation, experimental design and analysis, and the interpretation of data. These principles are presented in the context of solving individual and societal problems across the lifespan, for example, in early childhood education, public health, developmental disabilities (e.g., autism), delinquency, independent living for people with disabilities, educational systems, and gerontology. Open only to students in the University Honors Program. LEC.

ABSC 150. Community Leadership. 3 Hours. SF AE51 / S.
An introduction to analysis, intervention, evaluation, and leadership in contemporary problems facing local communities. Readings, lectures, and service-learning activities enable students to understand community problems and how citizens and professionals can address them. (Formerly HDFL 150.) LEC.

ABSC 151. Community Leadership, Honors. 3 Hours. SF AE51 / S.
An introduction to analysis, intervention, evaluation, and leadership in contemporary problems facing local communities. Readings, lectures, and service-learning activities enable students to understand community problems and how citizens and professionals can address them. Open only to students in the University Honors Program. (Formerly HDFL 151.) LEC.

ABSC 160. Introduction to Child Behavior and Development. 3 Hours. SI GE3S / S.
An introduction to child behavior and development with an emphasis on the normal developmental range of growth, intelligence, cognition, emotion, language, and social skills from birth to adolescence. (Formerly HDFL 160.) LEC.
ABSC 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Applied Behavioral Science. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

ABSC 268. Introduction to Marriage and Family Relations. 3 Hours. S.
This course focuses on the family unit and the factors that affect its development. Topics include dating and cohabitation; family and lifestyle diversity; parental roles and child development; divorce and stepfamilies. The course emphasizes research related to these issues. (Formerly HDFL 288.) LEC.

ABSC 279. Study Abroad Topics in: ____. 1-5 Hours. S.
A course designed to enhance international experience in topic areas related to applied behavioral science at the freshman/sophomore level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission. LEC.

ABSC 304. The Principles and Procedures of Behavior Modification and Therapy. 3 Hours. GE3S / S.
An advanced examination of the principles of applied behavior analysis as used to address problems in developmental disabilities, childhood autism, language development, early childhood education, with adolescent and family life, and in normal everyday adult behavior. Issues in measurement, design, and evaluation of the effects of applied behavior analysis procedures and ethical implications of the use of these procedures are examined. Procedures used to teach and maintain appropriate behaviors, eliminate inappropriate behaviors, and develop comprehensive behavioral intervention programs are described. Prerequisite: ABSC 100 or ABSC 101. LEC.

ABSC 308. Research Methods and Application. 4 Hours. GE11 / S.
Examines research methods used to identify, describe, understand, and intervene on socially important problems occurring across the life span (e.g., early childhood, adolescence, elders) and in varied settings (homes, classrooms, group-care facilities, and communities). Discusses research methods and concepts (e.g., prediction, experimental control, reliability, validity) within scientific, psychological, and behavior-analytic frameworks. Presents strategies and tactics regarding descriptive and experimental methods, direct and indirect measurement, graphical and statistical analysis, and single-subject and group experimental designs. Examines ethics and social responsibility in research. Provides opportunities to read primary and secondary sources, develop research questions, write and present research proposals, and assist in the conduct of research projects. Prerequisite: ABSC 304. LEC.

ABSC 310. Building Healthy Communities. 3 Hours. SF AE51 / S.
This course teaches knowledge and skills for addressing issues in community health and development (e.g., substance abuse, adolescent pregnancy, child and youth development, prevention of violence). Students learn core competencies such as analyzing community problems and goals, strategic planning, intervention, and evaluation. In a service-learning component, students apply these skills to issues that matter to them and to the communities they serve. (Formerly HDFL 310.) Prerequisite: Open only to students in the University Honors Program. LEC.

ABSC 342. Adult Development and Aging. 3 Hours. S.
An overview of environmental, cultural, and biological influences of adult development and aging. Course material is organized in terms of topics, rather than presenting a chronological account. (Formerly HDFL 342.) Prerequisite: ABSC 100 or ABSC 101, ABSC 150 or ABSC 151, or ABSC 160. LEC.

ABSC 350. The Behavioral Treatment of Children with Autism. 3 Hours. S.
Students learn about methods of teaching children with autism and about evaluating those methods. Topics include: basic methods of teaching as applied to imitation, productive and receptive language, self-help skills, and engagement in community activities, as well as observation and measurement of behavior in community settings and evaluating consumer satisfaction. The course consists of classroom lectures, discussions, demonstrations, examinations, and completion of laboratory and observation assignments. Enrollment priority is given to majors who intend to do practicum work with children with autism. (Formerly HDFL 350.) Prerequisite: ABSC/HDFL 304 or instructor permission. LEC.

ABSC 356. Foundations of Early Childhood Education. 3 Hours. S.
This course introduces students to the field of early childhood education. Contemporary perspectives and professional practices are examined through an analysis of historical and philosophical ideologies. (Formerly HDFL 356.) Prerequisite: ABSC/HDFL 160 or instructor permission. LEC.

ABSC 360. Drugs, Addiction, and Behavior. 3 Hours. S.
This course offers an overview of the basic and applied research in behavioral pharmacology and addictions, as well as interventions. Among the topics it covers are a history of drugs, addiction, and behavior; basic principles of drug action (e.g., pharmacodynamics); behavioral pharmacology testing paradigms (e.g., self-administration); drug action and effects (e.g., alcohol, nicotine, designer drugs, anti-depressants); behavioral deficits associated with addictions (e.g., memory); addiction treatment and recovery (e.g., maturing out, contingency management); and drugs and society. Prerequisite: ABSC 100. PSYC 104 is also recommended. LEC.

ABSC 405. Children and Media. 3 Hours. H.
The applied study of child development theories and research methods on the influences and effects of television and related visual media on childhood in the contexts of families, schools, and society. (Same as PSYC 405 and THR 405) (Formerly HDFL 405.) LEC.

ABSC 410. Behavioral Approaches in Working with Adolescents. 3 Hours. S.
Addresses some of the basic behavioral techniques used with juveniles who have problems in school, at home, or in the community: readings and role-playing sessions covering assessment of problems, relationship development, observing and defining behavior, teaching and contracting techniques, and counseling. Prerequisite: ABSC 304 highly recommended. LEC.

ABSC 425. Teaching Apprenticeship in Applied Behavioral Science. 3 Hours. S.
Students read new materials, become more fluent with ABSC 100 content, and acquire tutoring skills. Course may not be repeated. Prerequisite: ABSC 100 and consent of the instructor and department chair. LEC.
ABSC 433. Analysis of Cultural, Ethnic, and Gender Roles in Childhood and Adolescence. 3 Hours. S.
This course examines aspects of different cultures and ethnic groups, and the definitions of gender role behavior found in them. The research literature in these areas is reviewed and the implications for early childhood education settings are studied. The course examines this literature in order to provide an increased understanding of effective approaches to educational practices directly related to the structure of society in the United States. (Formerly HDFL 433.) Prerequisite: ABSC/HDFL 160 or instructor permission. LEC.

ABSC 437. Independent Living and People with Disabilities. 3 Hours. S.
A multi-disciplinary seminar exploring theory, method, research, and practice in independent living. The course reviews personal and environmental factors as they relate to everyday problems affecting people with varying disabilities. It also contains service-learning activities in which students apply skills and knowledge gained in the classroom. (Formerly HDFL 437.) Prerequisite: An introductory course in social sciences or consent of the instructor. LEC.

ABSC 441. Ethical, Legal and Professional Issues in Applied Behavioral Science. 3 Hours. S.
The course covers ethical and legal issues in the responsible conduct of basic, applied, intervention and prevention research (e.g., informed consent and assent with typical and atypical populations); inclusion of underrepresented groups, participatory action research; bias, fraud, and plagiarism, conflict of interest; reporting misconduct; authorship conflict. It also covers professional issues in behavioral consultation and training, review of the Behavior Analysis Certification Board task list on basic behavior-analytic skills, client-centered responsibilities, and foundational knowledge. This course satisfies the Behavior Analysis Certification Board requirement for 15 classroom contact hours of coursework related to Ethical Considerations in Behavior Analysis needed to take the BACB examination. This course is taught at the 400 and 800 levels, with additional assignments at the 800-level. Prerequisite ABSC 308. LEC.

ABSC 444. Curriculum Development for Young Children. 3 Hours. S.
A survey of educational materials and activities appropriate for young children. Students explore several components of effective curriculum development (e.g., objectives, methods of activity presentation, teaching strategies) and learn to integrate them to construct curricula for a range of content and skill areas. By focusing on functional components of a curriculum, students learn to construct, critically evaluate, and modify curricula for typically and atypically developing children. Prerequisite: ABSC 304 or instructor permission. LEC.

ABSC 455. Health, Safety, and Nutrition in Early Childhood Development. 3 Hours. S.
This course addresses children's health, safety, and nutritional needs and contemporary approaches to achieving wellness. Students develop analytical skills through reading, discussion, and application of theoretical and empirical concepts. Current research results are emphasized and applied to course problem sets and projects. (Formerly HDFL 455.) Prerequisite: ABSC/HDFL 160 or equivalent knowledge. LEC.

ABSC 469. Special Topics in: ______. 1-3 Hours. S.
A course designed for the study of special topics in applied behavioral science. Course content addresses major topics and specialized issues in the field. May be repeated for credit if the content differs. Prerequisite: Instructor permission. LEC.

ABSC 470. Organizational Behavior Management. 3 Hours. S.
This course offers detailed discussion of the organizational behavior management (OBM) literature including performance management, behavioral systems analysis, and behavior-based safety. This course also addresses empirically supported staff training procedures and research in implementation science. Students assist with OBM-relevant research and develop skills in both translational and applied OBM research. Prerequisite: ABSC 100. LEC.

ABSC 479. Study Abroad Topics in: ______. 1-5 Hours. S.
A course designed to enhance international experience in topic areas related to topics in applied behavioral science at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission. LEC.

ABSC 486. Issues in Parenting. 3 Hours. S.
Theoretical approaches to the study of parenting and parent-child relationships, techniques for analyzing common parenting problems, designing appropriate interventions, fostering effective communication skills, understanding issues of diversity, and promoting parent education programs. Professional collaboration and support of families and children are emphasized throughout. Students develop analytical skills through reading, discussion, and application of theoretical and empirical concepts. (Formerly HDFL 486.) Prerequisite: ABSC/HDFL 160 or equivalent knowledge of child development or child psychology. LEC.

ABSC 489. Directed Readings in: ______. 1-3 Hours. S.
A course designed for directed readings in applied behavioral science. Readings address major topics and specialized issues in the field. May be repeated for credit if the content differs. (Formerly HDFL 484.) Prerequisite: Instructor permission. IND.

ABSC 499. Directed Research in: ______. 1-3 Hours. AE61 / S.
Basic and applied research experience. The course provides training in research methods, measures, and designs, and the conduct of research, in the behavioral sciences. May be repeated for credit if the content differs. Prerequisite: Instructor permission. RSH.

ABSC 509. Contemporary Behavioral Science: Historical, Conceptual, and Comparative Foundations. 3 Hours. AE61 / S.
This course provides a survey of modern behavioral science and its applications. It reviews the discipline's history; integrates its sub-disciplines; situates it within the natural sciences, social sciences, and humanities; and compares and contrasts it with other perspectives. It covers recent advances in research, their implications for understanding human behavior, and their application to solving societal problems. And, it addresses the ethical implications of applied behavioral science. Prerequisite: ABSC 100 or ABSC 101 and ABSC 304, or instructor permission. LEC.

ABSC 535. Developmental Psychopathology. 3 Hours. S.
A review of contemporary psychological and developmental disorders of children and youth. Course presents current models of psychopathology, classification systems, assessment methods, and treatment approaches designed for the individual, the family, and the community. Specific attention is given to age, gender, and cultural differences and similarities. Topics include: anxiety disorders, oppositional behavior disorders, physical/sexual abuse, learning disabilities, depression, chronic physical illness, and autism. (Same as PSYC 535.) (Formerly HDFL 535.) Prerequisite: ABSC/HDFL 160 or PSYC 333, or instructor permission. LEC.

ABSC 542. Applied Gerontology. 3 Hours. S.
This course will provide an overview of social and behavioral problems faced by older adults, people who provide for elders, and human service programs for elders. It also surveys empirically-derived intervention strategies designed to maintain abilities and reduce or eliminate problem behaviors experienced by elders or their caregivers. (Formerly HDFL
ABSC 555. Issues in Administering Early Childhood Services. 2 Hours. S.
This course provides an overview of professional, social, legal, and economic issues associated with the administration of early childhood services and programs. Emphasis is placed on theoretical principles, empirical research, and professional responsibilities inherent in the provision of quality service, including needs assessment, organizational skills, delivery systems, human resource management, communication skills, grant writing, legal and ethical considerations, and advocacy. (Formerly HDFL 555.) Prerequisite: Senior standing in the early childhood specialty area or instructor permission. LEC.

ABSC 560. The Juvenile Justice System: A Behavioral and Legal Perspective. 3 Hours. S.
An overview of the juvenile justice system, including the history, development, and current controversy over children’s rights in the legal system examined in light of relevant principles of behavioral science and behavioral systems of rehabilitation. Topics include delinquency, miscreancy, status offenses, dependent-neglected children, child abuse, and juvenile court procedures and personnel (e.g., probation officers), and rehabilitative programs. (Formerly HDFL 560.) Prerequisite: ABSC 100. LEC.

ABSC 562. Behavioral Community Psychology. 3 Hours. S.
A seminar that provides an overview of the history and origin of behavioral community psychology. The course examines the development and future of behavioral community psychology as an integration of two sub-disciplines, applied behavior analysis and community psychology. Provides an integrated review of empirically-based behavioral interventions applied in community-based settings. Prerequisite: ABSC 100, or ABSC 150, or ABSC 310, or instructor permission. Course is offered at the 500 and 800 levels with additional assignments at the 800-level. LEC.

ABSC 565. Applied Developmental Psychology. 3 Hours. S.
An advanced study of the application of theories and concepts of developmental and behavioral psychology to a range of specific issues and problems of childhood and adolescence. This course relies heavily on the empirical research literature. Topics include contemporary social issues and child development, research in applied settings, assessment, intervention, and prevention, as well as program evaluation. (Same as PSYC 565.) (Formerly HDFL 565.) Prerequisite: ABSC/HDFL 160 or PSYC 333, and ABSC/HDFL/PSYC 535. LEC.

ABSC 599. Honors and Thesis in Applied Behavioral Science. 1-5 Hours. AE61 / S.
A two-semester course combining small group discussions of selected, advanced topics in applied behavioral science with honors thesis supervision on a project of the student’s own design. Students normally enroll for one or two hours in fall semester and three to five hours in spring semester. (Formerly HDFL 496.) Prerequisite: ABSC 304, ABSC/HDFL 308, and instructor permission. IND.

ABSC 606. Special Projects in the Community. 1-10 Hours. S.
Structured opportunities to develop and apply knowledge and skills (e.g., analyzing problems, strategic planning, intervention, evaluation) in a project that addresses a community problem or goal. (Formerly HDFL 606.) Prerequisite: Instructor permission. IND.

ABSC 620. Drug Abuse: From Basic Research to Public Policy. 3 Hours. S.
This course reviews basic and applied research in the social, behavioral, and neural sciences on how environmental variables, brain mechanisms, individual history, and cultural constraints interact and maintain drug abuse. Topics include the mechanisms of drug action; the safety, toxicity, stimulus properties, and functional impairments related to commonly abused drugs; common models of treatment and prevention; and historical and current legislative and judicial approach to drug abuse. (Formerly HDFL 620.) Prerequisite: A course in biology and a course in either applied behavioral science or psychology. LEC.

ABSC 626. Psychology of Adolescence. 3 Hours. S.
Impact of factors of social environment and physical growth upon psychological development from puberty to young adulthood. (Same as PSYC 626.) Prerequisite: PSYC 104, PSYC 333, or HDFL/ABSC 160. LEC.

ABSC 632. Advanced Child Behavior and Development. 3 Hours. S.
An advanced course in child development that includes a survey of the field’s principles and theoretical approaches, and current issues in research and practice. Topics will include: prenatal development, cognition and language, social-emotional development, socialization influences in childhood, developmental psychopathology, and social policies. (Formerly HDFL 632.) (Same as PSYC 632.) Prerequisite: ABSC/HDFL 160, PSYC 333, or instructor permission, and senior or graduate status. LEC.

ABSC 671. Applied Behavior Analysis. 3 Hours. S.
This advanced course extends knowledge and skills in analyzing behavioral problems, designing interventions, and planning applied research projects. Topics include the selection of problems and target populations, analysis of problems/goals, designing measurement systems, developing interventions, and disseminating products from applied behavioral research. (Formerly HDFL 671) Prerequisite: ABSC/HDFL 304 or instructor permission. LEC.

ABSC 672. Applied Behavior Analysis, Honors. 3 Hours. S.
This advanced course extends knowledge and skills in analyzing behavioral problems, designing interventions, and planning applied research projects. Topics include the selection of problems and target populations, analysis of problems/goals, designing measurement systems, developing interventions, and disseminating products from applied behavioral research. Students design an intervention research project. Prerequisite: Open only to students in the University Honors Program; ABSC/HDFL 304 or instructor permission. LEC.

ABSC 675. Practicum in Infant-Toddler Care and Early Intervention I. 3-5 Hours. AE61 / S.
Experience in a classroom-based early intervention and child-care program serving children younger than 3 years. Students gain practical experience with care-giving and teaching practices appropriate for typically and atypically developing children. Students learn to develop and implement individualized curricula based on assessments of children’s skills. (Formerly HDFL 558.) Prerequisite: ABSC/HDFL 444 (or concurrent enrollment) and instructor permission. FLD.

ABSC 676. Practicum in Infant-Toddler Care and Early Intervention II. 3-5 Hours. AE61 / S.
An advanced practicum providing experience in classroom-based early intervention and child-care program serving children younger than 3 years. Students gain practical experience with care-giving and teaching practices appropriate for typically and atypically developing children. Students learn to develop and implement individualized curricula based on assessments of children’s skills. (Formerly HDFL 559.) Prerequisite: ABSC/HDFL 444, HDFL 558 or ABSC 675, and instructor permission. FLD.
ABSC 677. Practicum in Preschool Education and Intervention I. 3-5 Hours. AE61 / S.
A one-semester practicum providing opportunities for students to assume responsibility for the education and guidance of young children in an early childhood program. Regularly scheduled individual and staff conferences enable students to evaluate personal growth and progress as teachers of young children. (Formerly HDFL 492.) Prerequisite: ABSC/HDFL 444 (or concurrent enrollment) and instructor permission. Must also meet special state requirements for child care employees and volunteers. FLD.

ABSC 678. Practicum in Preschool Education and Intervention II. 3-5 Hours. AE61 / S.
A one-semester advanced practicum providing opportunities for students to assume responsibility for the education and guidance of young children in an early childhood program. Regularly scheduled individual and staff conferences enable students to evaluate personal growth and progress as teachers of young children. (Formerly HDFL 493.) Prerequisite: ABSC/HDFL 444, HDFL 492 or ABSC 677, and instructor permission. Must also meet special state requirements for child care employees and volunteers. FLD.

ABSC 679. Practicum in Behavior Analysis Research in Early Childhood Education. 1-6 Hours. AE61 / S.
A two-semester practicum providing opportunities for supervised training in one of several ongoing research projects in the field of behavior analysis, either basic or applied. Students assist in conducting research and participate in individual and group meetings to discuss and evaluate research and related methodological issues. (Formerly HDFL 688.) Prerequisite: ABSC/HDFL 308 and instructor permission. FLD.

ABSC 680. Practicum in Advanced Laboratory in the Development of Behavioral Treatments for Children with Autism. 1-6 Hours. AE61 / S.
Students participate in an intensive behavioral treatment program teaching language, social skills, self-help skills, and academic skills to young children with autism. Students learn: to develop and implement treatment programs; design and use of a system of data collection and analysis; and apply the principles and philosophy of community and school mainstreaming. (Formerly HDFL 550.) Prerequisite: ABSC/HDFL 350 and instructor permission. LAB.

ABSC 682. Organizational Behavior Management Practicum. 1-5 Hours. AE61 / S.
This practicum course is designed to provide training and support practice in addressing socially significant problems and goals of community-based organizations using behavior analysis to guide assessment and intervention. Additionally, this course promotes community-university partnerships to support change and improvement in organizations through service learning. All practicum students are required to have previously completed ABSC 100 and selected applied behavioral science as a major or minor. FLD.

ABSC 685. Practicum in Community-based Residential or Day Treatment Programs for Disabled Adults. 3-6 Hours. AE61 / S.
A one or two-semester practicum in which students are provided with the opportunity to work directly with developmentally disabled adults in either community-based residential or day treatment programs. Students are required to read relevant literature, carry out treatment programs, and participate in weekly meetings to discuss treatment goals and progress. (Formerly HDFL 696.) Prerequisite: ABSC/HDFL 304, ABSC/HDFL 410, and instructor permission. FLD.

ABSC 687. Practicum in Behavioral Gerontology. 1-6 Hours. AE61 / S.
A one or two-semester practicum providing opportunities for supervised training in behavioral gerontology. Students: (a) read literature in the area of their specific practicum setting such as adult day care, senior centers, nursing homes; (b) assist in collecting information relevant to evaluating the program effectiveness of their efforts on behalf of the elderly; and (c) participate in discussions and planning meetings relevant to maintenance and improvement of operation of the practicum. (Formerly HDFL 644.) Prerequisite: ABSC/HDFL 342 or ABSC/HDFL 542 and instructor permission. FLD.

ABSC 690. Practicum in Community Health and Development. 1-6 Hours. AE61 / U.
A two-semester practicum in which students engage in structured opportunities to practice core competencies related to the work of promoting community health and development (e.g., strategic planning, intervention, evaluation). In weekly group meetings, students prepare for their individual working field settings (e.g., health and human service agencies, research and advocacy organizations, community organizations). (Formerly HDFL 690.) Prerequisite: ABSC/HDFL 150, ABSC/HDFL 310, and instructor permission. FLD.

ABSC 691. Practicum in Community Health and Development, Honors. 1-6 Hours. AE61 / U.
A two-semester practicum in which students engage in structured opportunities to practice core competencies related to the work of promoting community health and development (e.g., strategic planning, intervention, evaluation). In weekly group meetings, students prepare for their individual working field settings (e.g., health and human service agencies, research and advocacy organizations, community organizations). (Formerly HDFL 692.) Prerequisite: Open only to students in the University Honors Program; ABSC/HDFL 151, ABSC/HDFL 311 and instructor permission. FLD.

ABSC 692. Practicum in Basic Research. 3 Hours. AE61 / S.
Practical supervised training in the laboratory study of human and/or animal behavior. Students assist in conducting basic research, read and discuss research articles, attend lab meetings, and acquire data analysis and presentation skills. Prerequisite: ABSC 308 (or concurrent enrollment) and permission of the instructor. RSH.

ABSC 693. Practicum in Historical and Conceptual Foundations. 3-6 Hours. AE61 / S.
Practical supervised training in the historical and conceptual foundations of applied behavioral science (e.g., behavior analysis). Students research and read primary source literatures and write papers that advances our understanding of the field's foundations (e.g., empirical, theoretical). Prerequisite: ABSC 100/101, ABSC 304, ABSC 308, and ABSC 509 (or concurrent enrollment), and permission of instructor. IND.

ABSC 694. Practicum in Juvenile Problems. 3-6 Hours. AE61 / S.
A one-semester practicum providing opportunities for students to aid professionals in the development and implementation of behavioral treatment plans with adolescents. Regularly scheduled individual and group meetings enable the evaluation of the practicum students' progress while working in the rehabilitative process for juveniles who have problems that can bring them into contact with the juvenile justice system. (Formerly HDFL 694.) Prerequisite: ABSC/HDFL 410, ABSC/HDFL 560, and instructor permission. FLD.

ABSC 695. Special Practicum in:_____. 3-6 Hours. S.
A one or two-semester practicum providing opportunities for supervised, hands-on training outside the existing specialty areas or their options. This practicum must be arranged with the prior approval of a faculty advisor and the department's Undergraduate Curriculum Committee. Students should see an advisor about this practicum early in their junior year. Prerequisite: Instructor permission. FLD.
ABSC 696. Special Practicum in, Honors: _____. 3-6 Hours. S.
A one or two-semester practicum providing opportunities for supervised, hands-on training outside the existing specialty areas or their options. This practicum must be arranged with the prior approval of a faculty advisor and the department’s Undergraduate Curriculum Committee. Students should see an advisor about this practicum early in their junior year. Prerequisite: Open only to students in the University Honors Program and instructor permission. FLD.

ABSC 698. Special Research Practicum in: _____. 3-6 Hours. S.
A one or two-semester research practicum providing opportunities for supervised, hands-on research training outside the existing specialty areas or their options. This practicum must be arranged with the prior approval of a faculty advisor and the department’s Undergraduate Curriculum Committee. Students should see an advisor early in their junior year about the practicum and its prerequisites and requirements. Prerequisite: Open only to students in the University Honors Program and instructor permission. FLD.

ABSC 699. Special Research Practicum in, Honors: _____. 3-6 Hours. S.
A one or two-semester research practicum providing opportunities for supervised, hands-on research training outside the existing specialty areas or their options. This practicum must be arranged with the prior approval of a faculty advisor and the department’s Undergraduate Curriculum Committee. Students should see an advisor early in their junior year about the practicum and its prerequisites and requirements. Prerequisite: Open only to students in the University Honors Program and instructor permission. FLD.

ABSC 701. Parenting in Modern Society. 3 Hours.
The theoretical study of parenting and parent-child relationships, techniques for analyzing common parenting problems, designing appropriate interventions, fostering effective communication skills, understanding issues of diversity, and promoting parent education programs are some of the issues addressed in this course. Professional collaboration and support of families and children are emphasized throughout. Students develop analytical skills through reading, discussion, and application of theoretical and empirical research. (Formerly HDFL 701.) Prerequisite: ABSC/HDFL 160 or equivalent knowledge of child development or child psychology. LEC.

ABSC 702. Curriculum Development for Young Children. 3 Hours.
A survey of educational materials and activities that are appropriate for young children (birth to age 8). Students explore several components of effective curriculum (e.g., objectives, effective methods of activity presentation, teaching strategies) and learn to combine them to construct curriculums for a range of content and skill areas. By focusing on the functional components of curriculums, students learn to construct, critically evaluate, and modify them for both typically developing children and children with special needs. A BACB® pre-approved course. (Formerly HDFL 702.) LEC.

ABSC 703. Leadership in Early Education Programs: Theory and Research. 3 Hours.
Effective leadership skills and professional roles associated with the administration of early childhood services and programs are examined in this course. Theoretical principles, empirical research, and professional responsibilities inherent in the provision of quality service, including needs assessment, organizational skills, delivery systems, human resource management, communication skills, grant writing, legal and ethical considerations, conflict resolution, and advocacy are explored through readings, discussion, and assigned projects. Not open to students who have completed ABSC 555. (Formerly HDFL 677.) Prerequisite: ABSC/HDFL 160 or equivalent knowledge of child development or child psychology. LEC.

ABSC 704. Research Practicum in Clinical Child Psychology. 3 Hours.
This course provides students in the Clinical Child Psychology Program with the opportunity to enhance and consolidate their research activities by fulfilling one of the elective cluster course requirements. This practicum involves a contract with a research advisor and the program director. The contract includes definable products and dates for completion to prepare for submission for publication, develop a grant proposal, or conduct additional research project independent of other requirements in the program. The course is not to be taken as an overload, but is to be part of a full-time course schedule. May be repeated. (Same as PSYC 704.) (Formerly HDFL 704.) Prerequisites: Graduate standing in clinical child psychology and instructor permission. LEC.

ABSC 705. Pediatric Psychology. 3 Hours.
Discussion of behavior problems commonly encountered in the pediatric population, including reviews of data-based methodologies for remediation. Topics include general child rearing skills, bedtime problems, enuresis, encopresis, toilet training, self-injurious behavior, temper tantrums, behavior in community settings, child abuse, psychotropic drugs for children, adolescent behavior problems and selection of children’s play materials. (Formerly HDFL 705.) Prerequisite: ABSC/HDFL 160, ABSC/HDFL 632, or PSYC 602. LEC.

ABSC 706. Special Topics in Clinical Child Psychology: _____. 3 Hours.
A course offering detailed discussion of the literature and research methods of a special topic within clinical child and pediatric psychology. Topic and instructor may change by semester and will be announced in the Schedule of Classes. May be repeated. (Same as PSYC 706.) (Formerly HDFL 706.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. LEC.

ABSC 709. Biology and Behavior. 3 Hours.
A course on the role of physiology and anatomy in behavior, with an emphasis on their participation in the basic behavioral processes and in typical and atypical behavioral development. The course also addresses issues in measurement and current research. (Formerly HDFL 709). Prerequisite: ABSC/HDFL 796; ABSC/HDFL 798 recommended. LEC.

ABSC 710. Community Health and Development. 3 Hours.
This course extends knowledge and skills for addressing issues in community health and development (e.g., substance abuse, adolescent pregnancy, child and youth development, prevention of violence). Students learn core competencies such as analyzing community problems and goals, strategic planning, intervention, and evaluation, and then apply these skills to issues that matter to them and to the communities they serve. (Formerly HDFL 710.) (Same as ISP 871.) LEC.

ABSC 716. Experimental Problems in Community Settings. 1-5 Hours.
Research in the experimental design and analysis of community settings. No more than 10 hours total. (Formerly HDFL 716.) Prerequisite: Instructor permission. RSH.

ABSC 719. Experimental Field Work in Community Settings. 1-5 Hours.
Instruction in the methods and techniques of the experimental design and analysis of community settings through supervised participation in established research programs. Emphasizes the techniques of gathering original experimental data. No more than 10 hours total. (Formerly HDFL 719.) Prerequisite: Instructor permission. RSH.

ABSC 721. Biological Bases of Mental Retardation. 4 Hours.
This course deals with the biological substrates of mental retardation. Retardation is classified as a medical syndrome, rather than by behavioral
patterns, but behavioral peculiarities are addressed where relevant. Attention is directed to both genetic causes such as the chromosomal anomalies (e.g., Mongolism) and molecular and metabolic errors (e.g., phenylketonuria), as well as to the environmentally produced retardation by nutritional deficiency, prenatal rubella, and brain trauma. (Formerly HDFL 721.) Prerequisite: One course in biology or equivalent. LEC.

**ABSC 723. Adolescent Adjustment. 3 Hours.**
An overview of adolescence with primary emphasis on various adjustment difficulties and respective therapeutic approaches. Content to provide perspectives on relevant practice, research, theory, and contemporary social forces. (Formerly HDFL 723.) Prerequisite: Instructor permission. LEC.

**ABSC 725. Research Methods and Application. 3 Hours.**
Surveys research methods used to identify, describe, understand, and intervene on socially important problems occurring across the life span (e.g., early childhood, adolescence, elders) and in varied settings (homes, classrooms, group-care facilities, and communities). Discusses research methods and concepts (e.g., prediction, control, reliability, validity) within scientific, psychological, and behavior-analytic frameworks. Presents strategies and tactics regarding descriptive and experimental methods, direct and indirect measurement, graphic and statistical analysis, and single-subject and group experimental designs. Examines ethics and social responsibility in research. Provides opportunities to read secondary and primary sources, develop research questions, write and present research proposals. (Formerly HDFL 725.) Prerequisite: Instructor permission. RSH.

**ABSC 730. Developmental Neurobiology. 3 Hours.**
This course consists of lectures and discussion sessions on topics that describe the structural and functional maturation of the nervous system. The areas covered deal with the morphological, physiological, and biochemical changes in the developing central nervous system of vertebrates (including human infants), and with the interaction of the external environment with some of these maturational processes. Prerequisite: Introductory human development, psychology, or biology course. LEC.

**ABSC 735. Within Subjects Research Methodology and Direct Observation. 3 Hours.**
A graduate level introduction to the logic of experimentation, direct observation strategies, and research conducted using individual (e.g., single subject) and time series experimental designs. An ABA-accredited and BACB® pre-approved course. (Formerly HDFL 735.) Prerequisite: Graduate standing in applied behavioral science or instructor permission. LEC.

**ABSC 741. Readings in Gerontology. 3-5 Hours.**
Supervised readings in topical areas of gerontology. A program of study, conferences, and reports are developed by the instructor and student. (Formerly HDFL 741.) Prerequisite: Instructor permission. RSH.

**ABSC 742. Research in Gerontology. 1-10 Hours.**
Original investigations of some unsolved problems relating to adult development and aging. (Formerly HDFL 742.) Prerequisite: Graduate standing or instructor permission. RSH.

**ABSC 756. Philosophical Bases of Early Childhood Education. 3 Hours.**
Historical influences and current theoretical models of early childhood education are addressed through a survey and analysis of the literature. Not open to students who have completed ABSC 356. (Formerly HDFL 756.) Prerequisite: ABSC/HDFL 160 or equivalent knowledge of child development or child psychology. LEC.

**ABSC 765. Evaluating and Disseminating Scientific Material I. 1-3 Hours.**
Intensive training in the evaluation and production of scientific critiques and reviews of current issues in the analysis of behavior, as disseminated through the media. May be repeated. (Formerly HDFL 765.) Prerequisite: Instructor permission. LEC.

**ABSC 787. Gerontology Proseminar. 3 Hours.**
A proseminar coordinated by the Gerontology Center. The proseminar explores essential areas of gerontology for researchers and practitioners, providing a multidisciplinary (e.g., psychology, biology, sociology, communication) perspective on aging. The proseminar surveys contemporary basic and applied research, service programs, and policy and management issues in gerontology. (Same as AMS 767, COMS 787, PSYC 787, and SOC 767.) (Formerly HDFL 787.) LEC.

**ABSC 788. Designing Early Education Environments. 3 Hours.**
This course reviews empirically-supported strategies for designing effective and socially valid care and education environments for young children with and without disabilities. Topics will include: early educational theory, individualized curricula and goal selection strategies, various instructional typologies (e.g., direct instruction, embedded teaching), specific teaching tactics (e.g., prompting, time delay, differential reinforcement), preventive and assessment-based behavioral management strategies, current best practice recommendations for design of the social and physical environment, and methods for assessing children's, caregivers', and teachers' programmatic preferences. Prerequisite: ABSC 796. LEC.

**ABSC 796. Laboratory in Behavioral Development and Modification: The Analysis of Behavior I. 3 Hours.**
An introductory graduate laboratory course on the basic principles of behavior, and related procedures for producing behavioral change, with nonhuman subjects. The principles and procedures have special relevance to analogous processes in child development, both normal and deviant. An ABA-accredited and BACB® pre-approved course. (Formerly HDFL 796.) Prerequisite: Instructor permission. LAB.

**ABSC 797. Proseminar in Child Language. 2 Hours.**
A review and discussion of current issues in children's language acquisition. May be repeated for credit. Students are graded S/F. (Same as LING 799, PSYC 799 and SPLH 799.) (Formerly HDFL 797.) LEC.

**ABSC 799. Experimental Analysis of Behavior. 3 Hours.**
This course provides an in-depth description of the basic principles of operant and respondent conditioning in the context of basic non-human and human subjects research. Students will learn various theoretical approaches to understanding effects of reinforcement and punishment. Special attention will be provided to the role of verbal processes in the learning of verbally competent individuals. Students will gain substantive experience with identifying laboratory derived principles present in the literature that are relevant to application through assigned projects. Prerequisite: ABSC 796 or equivalent. SEM.

**ABSC 800. Conceptual Foundations of Applied Behavioral Science. 3 Hours.**
A master's-level graduate seminar on the field's conceptual foundations, with special emphasis on behavior analysis and its application - applied behavior analysis. The course addresses the field's history, philosophy of science, and disciplinary purview; its advanced behavioral principles and processes; its analyses of various content domains in the behavioral, social, and cognitive sciences (e.g., emotion, language, cognition, culture); and its relation to other disciplines (e.g., biology, psychology, anthropology). It also considers professional issues in, for example, the ethical conduct of research and practice. An ABA-accredited and BACB pre-approved course. Prerequisite: ABSC 799. SEM.
ABSC 801. Design and Analysis of Community Development Methods. 1-6 Hours.
An examination of principles and practices of community development and evaluation of methods used to promote community improvement. May be repeated if the content differs. (Formerly HDFL 801.) Prerequisite: Instructor permission. RSH.

ABSC 802. Behavior Analysis in Developmental Disabilities. 3 Hours.
A graduate seminar that includes an overview of the behavioral characteristics of various developmental disabilities and examination of empirically-supported behavioral approaches to the study and treatment of developmental disabilities. Topics will include classification and etiology, motivation, methods for developing appropriate skills, assessment and treatment of behavior disorders, staff training, and legal and ethical issues related to treatment. Prerequisite: ABSC 796 and instructor permission. LEC.

ABSC 803. Fundamentals of Psychological Assessment and Intervention with Children. 3 Hours.
Lecture and supervised experience covering the theoretical and empirical literature on assessment and intervention methods for children, adolescents, and families. Students will learn and demonstrate evidence-based clinical interviewing skills, behavioral observation techniques, risk assessment techniques, therapeutic communication approaches, strategies for providing assessment feedback to families, and ethical principles related to the provision of assessment and psychotherapy (including client file and resource management.) The course requires interaction with clinical populations and communication with referral sources. (Same as PSYC 803.) Prerequisite: Graduate student in clinical child psychology program. LEC.

ABSC 804. Research in Community Health Promotion. 1-6 Hours.
Supervised, original investigations of problems relevant to community health, such as the prevention of substance abuse or promotion of child outcomes. As appropriate, the course is focused on any combination of: literature research, research planning, and preparation conducting research, analyzing data, writing research reports, or preparing oral reports of completed research. (Formerly HDFL 804.) Prerequisite: Instructor permission. RSH.

ABSC 805. Functional Behavioral Assessment. 3 Hours.
The strategies, tactics, and ethics of functional assessment are presented in the larger context of behavioral assessment (e.g., nomothetic and idiographic approaches). Research articles relevant to indirect, descriptive, and experimental functional assessment approaches and assessment-based interventions are carefully reviewed to determine the appropriate conditions for each type of assessment and intervention. (Formerly HDFL 805.) Prerequisite: ABSC 796 and instructor permission. LEC.

ABSC 806. Functional Behavioral Assessment Practicum. 1-6 Hours.
This course provides supervised experience in the use of functional behavioral assessment in home, clinic, or educational environments with young children presenting problem behaviors. (Formerly HDFL 806.) Prerequisite: ABSC 805 and instructor permission. FLD.

ABSC 807. Design and Evaluation of Community Health Promotion Methods. 1-6 Hours.
An examination of the methods used to develop and evaluate community health promotion programs. The course addresses topics of interest to participants, such as substance abuse, adolescent pregnancy, or child outcomes. May be repeated for credit if the content differs. (Formerly HDFL 807.) Prerequisite: Instructor permission. RSH.

ABSC 808. Professional Issues: Clinical Child Psychology. 1 Hour.
Consideration of special problems confronting the child and family oriented scientist-practitioner, and in the development of a professional identity. Topics include critical issues, including ethical, legal, cultural, empirical, and clinical aspects of research and practice. May be repeated. (Formerly HDFL 809.) (Same as PSYC 809.) Prerequisite: Graduate standing in clinical child psychology. LEC.

ABSC 810. Introduction to Developmental Assessment. 3 Hours.
A course covering the general principles of developmental assessment from birth through adulthood, with special emphasis on the history and nature of assessment instruments and the criteria for acceptance, reliability, and stability of results. Selected assessment techniques for infants, preschool children, elementary school children, adolescents, and adults are reviewed and evaluated for their utility, limitations, and applications. A critical analysis of assessment in general and particular assessment tools is made. (Formerly HDFL 810.) LEC.

ABSC 811. Achievement and Intellectual Assessment in Clinical Child Psychology. 3 Hours.
Course covers the basic theory, research, administration, and reporting of psychological assessment of development, intelligence, and achievement for children, adolescents, and adults within cultural and developmental contexts. The range of psychological instruments examined includes, for example, WIAT, K-ABC, W-J, S-B, WISC, WAIS, and WPPSI. (Same as PSYC 811.) Prerequisite: Graduate student in clinical child psychology. LEC.

ABSC 812. Behavioral and Personality Assessment of Children. 3 Hours.
Lecture, laboratory, field work, and supervision. Theory and applications in the psychological evaluation of children with standardized assessment techniques. The administration, scoring, interpretation, and reporting of behavioral and personality functioning in children. (Formerly HDFL 812.) (Same as PSYC 812.) Prerequisite: Graduate standing in clinical child psychology. LEC.

ABSC 813. Behavioral Science Research Proseminar. 1-3 Hours.
A master's level professional seminar in which faculty and students present research proposals; offer formal presentations of completed empirical research, reviews of the literature, and other areas of scholarship; and engage discussion about contemporary empirical, conceptual, and professional issues in applied behavioral science. May be repeated a total of six credits. (Formerly HDFL 813.) Prerequisite: Graduate standing in applied behavioral science or instructor permission. LEC.

ABSC 814. Advanced Child and Family Assessment. 3 Hours.
Lecture, laboratory, field work, and supervision. Supervised experience in specialized psychological assessment approaches for children and families. Emphasis on interviewing, observation, psychometric scales, consultation, rationale, administration, analysis, and reporting of mental health functioning of children and families. Experience with clinical populations, and communication with referral sources. (Formerly HDFL 814.) (Same as PSYC 814.) Prerequisite: Graduate student in clinical child psychology. LEC.

ABSC 820. Advanced Child Development. 3 Hours.
A survey of the basic empirical research in the field of child development, covering intelligence, cognition, perception, attention, personality, social behavior, and socialization processes. These literatures are integrated and their implications for social application are addressed. (Formerly HDFL 820.) (Same as PSYC 820.) Prerequisite: A course in child development or equivalent. LEC.
ABSC 821. Behavior Analysis of Child Development. 3 Hours.
An advanced graduate seminar on the behavior-analytic approach to child development. Students examine the behavior-analytic view of child development and compare and contrast this approach with other systems for understanding development. Students also review and critically evaluate current and seminal literature related to several different developmental domains (e.g., motor, emotional, social, cognitive development) and explore implications for the application of current knowledge. An ABA-accredited and BACB® pre-approved course. (Formerly HDFL 821.) Prerequisite: ABSC 798 and consent of instructor. LEC.

ABSC 822. Children and Public Policy. 3 Hours.
This course examines how public policies affect the development of children. Includes examination of child and family policy in the United States and other countries, policy-related research on children, major policy issues affecting children, and child advocacy. (Formerly HDFL 822.) Prerequisite: Instructor permission. LEC.

ABSC 824. Treatment of Severe Learning Problems. 3 Hours.
The course reviews new approaches to working with persons with retardation and autism; theoretical orientations and how they affect implementation of procedures; and current research outcomes in various developmental areas of persons with retardation. It covers approaches used with persons through the life span, from childhood through adulthood, that are based on ecological and stimulus control variables. Ethical and practical implications are the focus of class lectures and discussions. (Formerly HDFL 824.) LEC.

ABSC 825. Social Development. 3 Hours.
A lecture and discussion course in social development. It includes such topics as theoretical approaches to the study of social development, as well as the literature on family processes, peer relations, aggression and prosocial behavior, child abuse and neglect, family violence, child care, and the media. (Same as PSYC 825.) (Formerly HDFL 880.) Prerequisite: A course in child psychology or development. LEC.

ABSC 828. Research in Early Intervention with Children. 3 Hours.
A seminar on current issues in assessment and intervention for young children who are at risk for or who have special needs. Provides foundation for evaluating and understanding research in early intervention. Includes historical, conceptual and legislative underpinnings of early intervention, risk factors affecting development, methodological issues in early intervention research, best practice standards, and applications to social, language, and pre-academic domains. (Formerly HDFL 828.) LEC.

ABSC 831. Science of Human Behavior. 3 Hours.
A graduate seminar on the analysis of human behavior, grounded in basic behavioral principles. The focus is on the process and products of human development, among them motivation/emotion, social behavior, personality, sensation/perception, language, cognition, creativity, attitudes/beliefs, consciousness/unconsciousness, purpose/will, and values. The course is pre-approved by the Behavior Analysis Certification Board® for its BCBA® certification requirements. Prerequisite: ABSC 800 and Master's degree in Applied Behavioral Science or instructor permission. SEM.

ABSC 834. Directed Readings in Community Health Promotion. 1-5 Hours.
Supervised readings in topical areas of community health promotion, such as the prevention of substance abuse and promotion of child outcomes. A program of study, conferences, and reports is developed by the instructor and student. (Formerly HDFL 834.) RSH.

ABSC 837. Advanced Study of People with Disabilities. 3 Hours.
This course reviews major approaches in identifying disability pathogenesis and explores the biological bases of selected congenital physical disabilities, and etiologies of selected acquired physical disabilities. Rehabilitation approaches and the role of scientist-practitioners in working with people with disabilities are also discussed. This course primarily covers adults with physical disabilities. (Formerly HDFL 837.) Prerequisite: Graduate standing or instructor permission. LEC.

ABSC 840. Theoretical Concepts of Human Development and Child Care Practice. 3 Hours.
Basic introduction to treatment concepts and procedures related to child development and child-care programs. The major goal is to provide a theoretical framework that is effective in dealing with various types of child deviancy. (Formerly HDFL 840.) Prerequisite: Graduate standing or instructor permission. LEC.

ABSC 841. Ethical, Legal, and Professional Issues in Applied Behavioral Science. 3 Hours.
The course covers ethical and legal issues in (a) the responsible conduct of basic, applied, and intervention research (e.g., informed consent and assent with typical and atypical populations; inclusion of underrepresented groups; bias, fraud, and plagiarism in data collection and reporting; conflict of interest; reporting misconduct; authorship) and (b) professional issues in teaching, research, and service (e.g., written and presented scientific communication; grant preparation; the journal review process; cultural competence; teaching; vita preparation). The course will also include instruction in the preparation of editorial reviews for manuscripts submitted for publication to in peer-reviewed journals, in partial fulfillment of the department's doctoral requirement for preparing editorial reviews. A BACB pre-approved course. Prerequisite: Graduate standing in applied behavioral science. LEC.

ABSC 846. Practicum in Clinical Child Psychology I. 1-3 Hours.
Introductory practicum experience for the Clinical Child Psychology Program. Orientation to psychological evaluation and treatment of children, adolescents, and their families and initial development of professional self-assessment skills. Students acquire specific clinical competencies through shadowing cases, assisting with interpretation of test of intelligence and academic achievement, conducting behavioral observations in field settings, and performing co-therapy of cases presenting to the KU Child and Family Services Clinic. May be taken in more than one semester. (Same as PSYC 846.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

ABSC 847. Practicum in Clinical Child Psychology II. 1-3 Hours.
Intermediate practicum experience for the Clinical Child Psychology Program. Development of specific competencies in assessment and intervention with children, adolescents, and their families through didactics, field experience, and supervision. Students acquire specific clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic. Students develop ability to identify specific treatment goals and select therapeutic interventions that are conceptually congruent with clients' presenting problems and are based on sound empirical evidence. Students also develop the ability to integrate and synthesize test results, interview material, and behavioral observations into coherent case conceptualizations. May be taken in more than one semester. (Same as PSYC 847.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

ABSC 848. Applied Gerontology: Practice and Intervention. 3 Hours.
A survey of intervention research in gerontology. Program evaluations designed to determine the effectiveness of community-based
interventions, current social service delivery practice, and contemporary social policies are examined. An ABA-accredited and BACB® pre-approved course. (Formerly HDFL 848.) LEC.

**ABSC 856. An Interdisciplinary Approach to Intervention with the Handicapped. 3 Hours.**
This course surveys knowledge from various disciplines that address developmental disabilities across the life span. Its focus is on designing strategies for individual intervention and treatment programs by an interdisciplinary team. Designed for students in social work, speech pathology, psychology, nutrition, audiology, special education, physical therapy, nursing, child development, behavior analysis, and related fields. (Formerly HDFL 707.) Prerequisite: A basic course in child development or instructor permission. FLD.

**ABSC 861. Applied Behavior Analysis. 3 Hours.**
This advanced course extends knowledge and skill in analyzing behavioral problems, designing interventions, and planning applied research projects. Topics include the selection of problems and target populations, analysis of problems and goals, designing measurement systems, developing interventions, and disseminating products from applied behavioral research. Students use examples from their own applied research. An ABA-accredited and BACB® pre-approved course. (Formerly HDFL 871.) LEC.

**ABSC 862. Behavioral Community Psychology. 3 Hours.**
A seminar that provides an overview of the history and origin of behavioral community psychology. The course will examine the development and future of behavioral community psychology as an integration of two sub-disciplines, applied behavior analysis and community psychology. The course will provide an integrated review of empirically-based behavioral interventions applied in community-based settings. The course is offered at the 500 and 800 levels with additional assignments required at the 800-level. Prerequisite: ABSC 796, or ABSC 710, or instructor permission. SEM.

**ABSC 865. Applied Behavior Analysis in Complex Organizations. 3 Hours.**
An examination of the theory, principles, and methods of behavior analysis and their applications to problems of human behavior in complex organizations such as businesses, industries, human service organizations, and governments. (Formerly HDFL 888.) Prerequisite: Graduate standing or instructor permission. LEC.

**ABSC 866. Service System and Consumer Issues in Developmental Disabilities. 3 Hours.**
This course provides a service-system perspective on developmental disabilities. Students learn (a) how service systems have developed for people with developmental disabilities; (b) about service systems from the perspective of agency administrators, program evaluation, and public and private payment systems (e.g., health insurance, Medicaid, Medicare, CHIPS, Title V); and (c) from consumers, themselves, about the barriers they face in obtaining needed services. Finally, students learn about advocating for service-system change at a consumer, program, and policy level. Prerequisite: Graduate standing or instructor permission. LEC.

**ABSC 870. Practicum I in Behavioral Psychology. 1-6 Hours.**
Instruction and supervised laboratory or field work for master’s students. Practica are offered by different instructors on different topics; may be repeated for credit if the content differs. Topics and instructors are announced in the Schedule of Classes. (Formerly HDFL 873.) Prerequisite: Graduate standing in applied behavioral science or instructor permission. FLD.

**ABSC 871. Practicum I in Behavior Analysis: ____. 1-6 Hours.**
Instruction and supervised laboratory or field work for master’s students. Practica are offered by different faculty members on different topics; may be repeated for credit if the content differs. Topics and instructors are announced in the Schedule of Classes. (Formerly HDFL 873.) Prerequisite: Graduate standing in applied behavioral science or instructor permission. FLD.

**ABSC 872. Practicum I in: ____. 1-6 Hours.**
Instruction and supervised laboratory or field work for master's students. Practica are offered by different faculty members on different topics; may be repeated for credit if the content is different. Topics and instructors are announced in the Schedule of Classes. Prerequisite: Graduate standing in applied behavioral science or instructor permission. FLD.

**ABSC 873. Practicum in Educational Psychological/Rehabilitative Services: ____. 3-6 Hours.**
This course is for students who wish to complete practicum experiences in services related to persons with retardation, autism, or physical disabilities in programs in various settings, such as the Ann Sullivan Center in Lima, Peru and the Algeria School in Paraguay. The course is designed to give interested students opportunities to work with professionals in these programs on a semester or summer basis. The course consists of participation in professional activities associated with the practicum program and a report of these activities to the instructor. (Formerly HDFL 789.) Prerequisite: Instructor permission. FLD.

**ABSC 874. Practicum in Consumer Evaluation of Behavior Programs. 3-6 Hours.**
A practicum course designed to provide students with the knowledge, background, and practical experience in the conduct of consumer evaluations for behavioral treatment programs. (Formerly HDFL 855.) Prerequisite: Instructor permission. FLD.

**ABSC 875. Practicum in Community Health Promotion. 1-6 Hours.**
A practicum course designed to provide students with knowledge, background, and practical experience in the implementation of community health promotion projects and their evaluation. May be repeated for credit if the content differs. (Formerly HDFL 808.) Prerequisite: Instructor permission. FLD.

**ABSC 876. Practicum in Community Development. 1-6 Hours.**
A practicum course designed to provide students with knowledge, background, and practical experience in the implementation of community improvement projects and their evaluation. May be repeated for credit if the content differs. (Formerly HDFL 802.) Prerequisite: Instructor permission. FLD.

**ABSC 877. Advanced Practicum in Gerontology. 1-6 Hours.**
Supervised practical experience in working with elders in home, community, or institutional settings. Regular individual conferences with faculty are used to evaluate student progress. (Formerly HDFL 849.) Prerequisite: Graduate standing or instructor permission. FLD.

**ABSC 880. Early Childhood Practicum for Allied Professionals. 1-6 Hours.**
Professionals in fields such as journalism, social welfare, and psychology may have career interests that include work with or on behalf of young children. This practicum provides students with individualized opportunities to work with young children in a group setting in order to extend their professional skills. (Formerly HDFL 790.) Prerequisite: Instructor permission. FLD.

**ABSC 881. Early Childhood Care and Intervention Practicum I. 1-6 Hours.**
A course covering the specification of learning goals and the implementation and evaluation of curriculum design management of groups of young children. May be repeated for no more than a total of six credit hours. (Formerly HDFL 791.) Prerequisite: Instructor permission. FLD.
ABSC 882. Early Childhood Care and Intervention Practicum II. 1-6 Hours.
A course to assess and teach skills in diagnosis and evaluation of particular problems in the developmental process of young children (1-5 years of age), and to design and implement interventions. May be repeated for no more than a total of six credit hours. (Formerly HDFL 792.) Prerequisite: ABSC 791 and instructor permission. FLD.

ABSC 883. Early Childhood Administration Practicum. 1-6 Hours.
Experiences in understanding and developing parent satisfaction with care arrangements for their child(ren), providing services to personnel responsible for care and development of young children, and/or maximizing use of available services for young children on their behalf. May be repeated for no more than a total of six credit hours. (Formerly HDFL 793.) Prerequisite: ABSC 791 and instructor permission. FLD.

ABSC 884. Early Childhood Early Intervention Practicum. 1-6 Hours.
Laboratory teaching in an early childhood classroom that includes children who are developmentally delayed, demonstrate behavioral or learning difficulties, or have other developmental disabilities. Experience includes individualized programming for children with special needs, as well as group management and group curriculum planning. May be repeated for no more than a total of six credit hours. (Formerly HDFL 794.) Prerequisite: ABSC 791 and instructor permission. FLD.

ABSC 885. Early Childhood Teacher Training Practicum. 1-6 Hours.
Experience in supervising staff who work in programs for young children. Supervision includes orienting, monitoring, and evaluating staff performance; opportunities for interaction with other professionals; experience in facilitating staff communication; and consulting on research projects. (Formerly HDFL 795.) Prerequisite: ABSC 791 and instructor permission. FLD.

ABSC 886. Developmental Assessment Practicum: ______, 1-6 Hours.
This course provides direct experience in the developmental assessment of a selected age group, such as infants, preschool and elementary children, adolescents, or adults. It may be repeated providing the age group specification is not repeated. (Formerly HDFL 811.) Prerequisite: HDFL 810 or an equivalent course. FLD.

ABSC 887. Clinical Practicum in Pediatric Psychology. 1-6 Hours.
Supervised experience with pediatric patients referred for behavior problems, including, for example, temper tantrums, enuresis, encopresis, and hyperactivity. Also includes evaluation and treatment of children with commonly encountered behavior problems. In addition, students observe pediatric staff performing appropriate physical exams and observe the interaction between the medical staff and the pediatric psychologist. (Formerly HDFL 823.) Prerequisite: ABSC 705 and instructor permission. FLD.

ABSC 888. Diversity Issues in Clinical Psychology. 3 Hours.
Review of individual differences pertaining to culture, ethnicity, race, gender, sexual orientation, age, etc., as these have an impact upon theory, research, assessment, and treatment issues in clinical psychology. (Same as PSYC 888.) Prerequisite: Graduate status in clinical psychology, or consent of instructor. LEC.

ABSC 890. Seminar in: ______. 3 Hours.
A seminar for master's level students. It examines basic and applied research literatures in specialized fields of applied behavioral science. May be repeated for credit if the content differs. (Formerly HDFL 701.) Prerequisite: Graduate standing in applied behavioral science or instructor permission. LEC.

ABSC 891. Research in: ______. 1-6 Hours.
Supervised research investigations in basic or applied behavioral science for master's students. The course introduces observational measurement, research methods and designs, and the conduct of research in the behavioral sciences. May be repeated for credit if the content is different. (Formerly HDFL 800.) Prerequisite: Graduate standing or instructor permission. RSH.

ABSC 892. Readings in: ______. 1-3 Hours.
An individual, supervised study of recent research and scholarship for master's students. The course emphasizes current scholarship in selected areas of basic and applied behavioral science and its conceptual foundations. Designed for students whose needs cannot be met in other courses. May be repeated for credit if the content differs. (Formerly HDFL 833.) Prerequisite: Graduate standing or instructor permission. RSH.

ABSC 893. Special Topics in: ______. 1-3 Hours.
A research and readings course for master's students. It allows them to concentrate their studies on selected basic and applied problems in behavioral science and carry out independent research. May be repeated for credit if the content differs. (Formerly HDFL 722, HDFL 724, HDFL 725, HDFL 799.) Prerequisite: Graduate standing or instructor permission. LEC.

ABSC 894. Study Abroad Topics in: ______. 1-3 Hours.
A course designed to enhance international experience in topic areas related to behavioral science for master's students. May be repeated for credit if the content differs. Prerequisite: Graduate standing or instructor permission. LEC.

ABSC 897. Master's Thesis in Clinical Child Psychology. 1-10 Hours.
Supervised research experience for completing the thesis leading to master's degree. Graded on a satisfactory/unsatisfactory basis. (Formerly HDFL 897.) (Same as PSYC 897.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. RSH.

Supervised research experience for the thesis leading to a master's degree in applied behavioral science. May be repeated. Graded on a satisfactory/unsatisfactory basis. (Formerly HDFL 898.) Prerequisite: Graduate standing in applied behavioral science or instructor permission. RSH.

ABSC 899. Self-Control, Impulsivity, and Human Addictive Disorders. 3 Hours.
This course examines basic research designed to explore variables affecting animal and human decision making; particularly decisions classified as demonstrating impulsivity and self-control. The evidence for genetic and learning contributions to patterns of impulsive decision making will be explored, as will the relation between impulsivity and a range of addictive disorders. LEC.

ABSC 905. Psychopathology in Children. 3 Hours.
Diagnosis and treatment of psychological problems in childhood and adolescence. Preference given to graduate students in child clinical psychology, school psychology, and counseling psychology. (Same as PSYC 905.) Prerequisite: Fifteen hours of graduate credit in psychology or consent of instructor. LEC.

ABSC 906. Psychotropic Drugs: Effects Through the Life Span. 3 Hours.
This course covers basic pharmacological concepts, neuropharmacological principles, and the therapeutics of drug effects on behavior. Special attention is given to age and history as influences in psychopharmacological outcomes. (Formerly HDFL 906.) LEC.
ABSC 913. Behavioral Science Research Proseminar. 1-3 Hours.
A doctoral level professional seminar in which faculty and students present research proposals; offer formal presentations of completed empirical research, reviews of the literature, and other areas of scholarship; and engage discussion about contemporary empirical, conceptual, and professional issues in applied behavioral science. May be repeated for a total of eight credits. (Formerly HDFL 913.) Prerequisite: Graduate standing in behavioral psychology or instructor permission. LEC.

ABSC 920. Seminar in Language Development. 3 Hours.
The course pertains to relevant research regarding infant speech development, vocabulary development, linguistic development, articulation development, and language retardation. (Same as SPLH 966.) (Formerly HDFL 920.) LEC.

ABSC 921. The History and Systems of Psychology. 3 Hours.
An advanced graduate seminar on the history of psychology and its systems, and their relations to contemporary psychology. Pertinent issues in the history and philosophy of science are addressed (e.g., scientific revolutions), as are concerns in the historiography of psychology (e.g., presentism). (Formerly HDFL 981.) Prerequisite: Master's degree or instructor permission. LEC.

ABSC 931. Verbal Behavior. 3 Hours.
An advanced graduate seminar on the analysis of the verbal behavior of the proficient speaker and the biological, environmental, and motivational factors affecting it. Structural and developmental issues, as well as implications for language training and remediation are integrated throughout. Critiques and rebuttals are examined, along with current empirical and conceptual advances in research and theory. An ABA-accredited and BACB® pre-approved course. (Formerly HDFL 831.) Prerequisite: ABSC 800, advanced coursework in psycholinguistics or linguistics, or instructor permission. SEM.

ABSC 934. Directed Readings in Clinical Child Psychology. 3-5 Hours.
Designed to meet the needs of advanced students whose study in clinical child psychology cannot be met with present courses or for whom advanced work is desired in a specialized area of study. (Formerly HDFL 934.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. RSH.

ABSC 935. Experimental Foundations of Applied Behavior Analysis. 3 Hours.
A graduate level introduction to basic behavioral research. This course surveys seminal and current research in the experimental analysis of behavior and relates this work to research and practice in applied behavior analysis. Topics include respondent conditioning, complex schedule performance, avoidance, stimulus control, and choice. Prerequisite: ABSC 798 and consent of instructor. LEC.

ABSC 936. Quantitative Analysis of Behavior. 3 Hours.
Advanced experimental course (doctoral-level) that demonstrates the operations of principles of behavior, and the quantitative models that describe them, in the context of basic research. Specific review of the methods to obtain the data necessary to permit a quantitative analysis of behavior, along with the quantitative analyses themselves, will be discussed. Students will learn the advantages and disadvantages of quantitative analyses in the behavioral sciences, along with a behavioral perspective on quantitative models of behavior. Students will obtain hands-on experience selecting data for a quantitative analysis, reviewing whether the data and proposed model meet the requisite assumptions of EAB research on quantitative models, and analyzing behavioral data using quantitative models. Prerequisite: ABSC 799. SEM.

ABSC 940. Measurement and Experimental Design for Applied Research. 3 Hours.
This is an advanced course on research methods helpful in the development, evaluation, and dissemination of effective and sustainable behavior-analytic programs. The practices examined involve (a) selecting non-reactive measures of staff implementation behaviors; (b) selecting effective and sustainable components of a staff management program; and (c) experimentally analyzing the effectiveness and sustainability of the staff management program. Particular emphasis is placed on the analysis of the principles of behavior that determine the maintenance of staff interventions and, therefore, the survival of behavioral programs in their post-research phase. Students read and discuss the literature on factors that promote or impede program survival. Students design an intervention program using the practices examined in the course, simulate an experimental analysis of the program, and write a JABA-style manuscript describing the program and their simulated data. An ABA-accredited and BACB® pre-approved course. (Formerly HDFL 940.) Prerequisite: ABSC/HDFL 735 or HDFL 803, ABSC/HDFL 796, and ABSC/HDFL 871 or instructor permission. LEC.

ABSC 941. Teaching and Conference. 3-6 Hours.
This course is used by graduate students fulfilling the doctoral program teaching requirement. Students assist in class preparation and organization, teaching, grading, and office hours or serve as discussion section leaders or laboratory course supervisors. They meet regularly with the faculty members they are assisting. Students enroll for 3 hours for the equivalent of a 25% assistantship and 6 hours for a 50% equivalent. (Formerly HDFL 941.) Prerequisite: Instructor permission. FLD.

ABSC 942. Techniques of Data Analysis for Applied Research. 3 Hours.
This course examines data analysis procedures commonly used with both large group and single subject experimental designs. In addition to presenting specific data analysis techniques, the strengths and weaknesses inherent in the various techniques are carefully reviewed and evaluated. (Formerly HDFL 942.) Prerequisite: ABSC/HDFL 735 or HDFL 803 and an intermediate statistics course. LEC.

ABSC 943. Advanced Practicum in Clinical Child Psychology III. 1-3 Hours.
Development of advanced competencies in assessment and intervention with children, adolescents, and their families through didactics, field experience, and supervision. Students acquire advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum (i.e., formal case presentation), and modeling of clinical competencies for junior students. Students will demonstrate the ability to implement empirically derived therapeutic interventions in consideration of individual differences, cultural values, and individual preferences. Students in external practicum sites will demonstrate an understanding of evidence-based models of consultation and provision of consultation to care providers in professional contexts. May be taken in more than one semester. (Same as PSYC 943.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

ABSC 944. Advanced Practicum in Clinical Child Psychology IV. 1-3 Hours.
Demonstration of advanced competencies in assessment, intervention, and consultation with children, adolescents, and their families through didactics, field experience, and supervision in the semester(s) prior to required clinical internship. Students demonstrate advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family...
ABSC 947. Advanced Practicum in Clinical Child Psychology V. 1-5 Hours.
Specialized practicum experience for the Clinical Child Psychology Program. Demonstration of advanced competencies related to supervision and consultation in clinical psychology. With faculty supervision, students will develop and demonstrate the ability to provide effective supervision to less advanced students in the program in selected cases appropriate to the service setting. Further development of advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum, and modeling of clinical competencies for junior students. May be taken in more than one semester. (Same as PSYC 947.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

ABSC 951. The Analysis of Cognition. 3 Hours.
A graduate seminar on the behavior analysis of cognition. Topics include consciousness, attention, perception, memory, language, rule-governed behavior, problem-solving, decision-making, generativity, creativity, and beliefs and attitudes. Comparisons and contrasts are drawn among different theoretical orientations (information-processing, parallel-processing, nonmediational theories). Prerequisite: ABSC 800, advanced coursework in cognitive psychology, or instructor permission. SEM.

ABSC 961. Advanced Seminar in Applied Behavior Analysis: _____. 3 Hours.
An advanced seminar examining the literature and research methods in specialized areas of applied behavior analysis (e.g., developmental disabilities, community health, organizational development). May be repeated for credit if the content differs. An ABA-accredited and BACB® pre-approved course. (Formerly HDFL 971.) LEC.

ABSC 963. Clinical Child Psychology Internship. 1 Hour.
Three consecutive enrollments, covering a minimum of eleven months of experience in an approved clinical psychology field setting; supervision by qualified clinical child psychology faculty and field staff clinicians. Required of all clinical child psychology program students. An intensive guided experience in application of clinical child psychology theory, methods, and practices. Integrates scientific and clinical aspects of field. (Formerly HDFL 963.) (Same as PSYC 963.) Prerequisite: Completion of Ph.D. comprehensive examinations, graduate standing in clinical child psychology, and permission of clinical child psychology faculty. FLD.

ABSC 965. Evaluating and Disseminating Scientific Material II. 1-3 Hours.
Intensive training in the evaluation and production of scientific critiques and reviews on current issues in the analysis of behavior, as disseminated through the media. May be repeated. (Formerly HDFL 965.) Prerequisite: Instructor permission. LEC.

ABSC 970. Practicum II in Behavioral Psychology. 1-6 Hours.
Advanced instruction and supervised laboratory or field work for doctoral students beyond ABSC 870. May be repeated for credit if the content differs. Prerequisite: Graduate standing in behavioral psychology or instructor permission. FLD.

ABSC 971. Practicum II in Behavior Analysis: _____. 1-6 Hours.
Advanced instruction and supervised laboratory or field work for doctoral students beyond ABSC 871. May be repeated for credit if the content differs. Prerequisite: Graduate standing in behavioral psychology or instructor permission. FLD.

ABSC 972. Practicum II in: _____. 1-6 Hours.
Advanced instruction and supervised laboratory or field work for doctoral students beyond ABSC 872. May be repeated for credit if the content differs. Topic and instructor are announced in the Schedule of Classes. Prerequisite: Graduate standing in applied behavioral science or instructor permission. FLD.

ABSC 976. Therapeutic Interventions with Children. 3-5 Hours.
Clinical approaches to the therapeutic treatment of children with special emphasis on research findings and laboratory (practicum) experience. A survey of relationship therapies, operant strategies, system approaches, parent education and play therapy by the right therapist for a specific child with a particular problem. (Same as PSYC 976.) Prerequisite: Instructor permission. FLD.

ABSC 981. History of Behavior Analysis. 3 Hours.
An advanced graduate seminar on the long past, short history, recent origins, and modern history of applied behavioral science. This includes the field's history, internally: its conceptual system, sciences and discipline, profession, and institutions. It also includes the field's history, externally, for instance, the history of Western philosophy, science, American culture, and the behavioral and social sciences. Historiographic issues are addressed throughout. Prerequisite: ABSC 800 and Master's degree in ABSC or Instructor permission. SEM.

ABSC 989. Methods of Obtaining External Research Funding. 1-3 Hours.
The objective of this course is to demystify this process and prepare participants to submit their first independent research grant application. Participants learn about the characteristics of different funding mechanisms and agencies, the characteristics of successful and unsuccessful application strategies, how to turn an initial research idea into a competitive application, ethical issues that influence each stage of the development and submission process, and the nuts and bolts of grant development and management. Specific activities include critiquing an actual NIH grant application, participating in a mock review panel, and developing an actual grant application. LEC.

ABSC 990. Advanced Seminar in: _____. 3 Hours.
An advanced seminar for doctoral students. It examines basic and applied research literatures in specialized fields of applied behavioral science. May be repeated for credit if the content differs. (Formerly HDFL 930.) Prerequisite: Graduate standing in behavioral psychology or instructor permission. LEC.

ABSC 991. Advanced Research in: _____. 1-9 Hours.
Advanced, supervised research in basic or applied behavioral science for doctoral students. The course may focus on any combination of a literature review, research planning and preparation, conducting research, analyzing data, writing research reports, and preparing oral reports of completed research. May be repeated for credit if the content differs. (Formerly HDFL 900.) Prerequisite: Graduate standing in behavioral psychology or instructor permission. LEC.

ABSC 992. Advanced Readings in: _____. 1-6 Hours.
An advanced individual, supervised study of recent research and scholarship for doctoral students. The course emphasizes current scholarship in selected areas of basic and applied behavioral science and its conceptual foundations. Designed for students whose needs cannot be met in other courses. May be repeated for credit if the content differs.
(Formerly HDFL 933.) Prerequisite: Graduate standing in behavioral psychology or instructor permission. RSH.

**ABSC 993. Advanced Special Topics in: _____ 1-3 Hours.**
An advanced research and readings course for doctoral students. It allows them to concentrate their studies on selected basic and applied problems in behavioral science and carry out independent research. May be repeated for credit if the content differs. (Formerly HDFL 931.) Prerequisite: Graduate standing in behavioral psychology or instructor permission. RSH.

**ABSC 994. Advanced Study Abroad Topics in: _____ 1-6 Hours.**
An advanced course designed to enhance international experience in topic areas related to behavioral science for doctoral level students. May be repeated for credit if the content differs. Prerequisite: Graduate standing in behavioral psychology or instructor permission. LEC.

**ABSC 998. Doctoral Dissertation in Clinical Child Psychology. 1-10 Hours.**
Research experience making an original contribution to literature in clinical child psychology. Graded on a satisfactory/unsatisfactory basis. (Same as PSYC 998.) (Formerly HDFL 998.) RSH.

**ABSC 999. Doctoral Dissertation in Behavioral Psychology. 1-9 Hours.**
Advanced supervised research that makes an original, empirical contribution to the literature in applied behavioral science leading to a doctoral degree in behavioral psychology. May be repeated. Graded on a satisfactory/unsatisfactory basis. (Formerly HDFL 999.) Prerequisite: Graduate standing in behavioral psychology or instructor permission. THE.

### Biology Courses

**BIOL 100. Principles of Biology. 3 Hours. NB GE3N / N.**
Intended for non-science majors. The basic concepts of biology at the cellular, organismal, and population levels of organization and their applications to humans and modern society. An honors section, BIOL 101, is offered for students with superior academic records. BIOL 100 and BIOL 102 (or BIOL 101 and BIOL 103, honors) satisfy the College natural science with laboratory requirement. Concurrent enrollment in BIOL 102 is recommended. LEC.

**BIOL 101. Principles of Biology, Honors. 3 Hours. NB GE3N / N.**
Intended for non-science majors with superior academic records. The basic concepts of biology at the cellular, organismal, and population levels of organization and their applications to humans and modern society. Concurrent enrollment in BIOL 102 or BIOL 103 is recommended. BIOL 101 and either BIOL 102 or BIOL 103 satisfy the College natural science with laboratory requirement. Prerequisite: Membership in the College Honors Program or consent of instructor. LEC.

**BIOL 102. Principles of Biology Laboratory. 1 Hour. U.**
Intended for non-science majors. Exercises are designed to give the student hands-on experience with selected topics from the associated lecture course (BIOL 100). An honors laboratory (BIOL 103) is offered for students with superior academic records. Prerequisite: Concurrent enrollment in BIOL 100 is recommended. LAB.

**BIOL 103. Principles of Biology Laboratory, Honors. 1 Hour. U.**
Intended for non-science majors with superior academic records. Exercises are designed to give the students hands-on experience with selected topics from the associated lecture course (BIOL 101). Prerequisite: Membership in the College Honors Program or consent of instructor. Concurrent enrollment in BIOL 101 is recommended. LAB.

**BIOL 105. Biology Orientation Seminar. 1 Hour. N.**
Introduces interested students to information about majoring in the biological sciences at the University of Kansas. Students learn about degree requirements, academic advising, research opportunities, and career options, as well as how to align academic and professional goals. Graded on a satisfactory/unsatisfactory basis. LEC.

**BIOL 110. Microorganisms in Your World. 3 Hours. NB / N.**
A course for students who are not science majors. Designed to acquaint students with some microbial activities which affect their lives. Includes the historical development of microbiology, the basic principles of microbial growth, disinfection, antibiotics, infection, and immunity; and some commercial, agricultural, and industrial uses of microorganisms. Emphasis is on infectious diseases. Not open to students with any credit in microbiology. May not be counted as a prerequisite for any other microbiology course. LEC.

**BIOL 116. Introduction to Evolutionary Biology. 3 Hours. N.**
An account of evolutionary thinking from classical to contemporary time. The emphasis is on mainstream developments (Darwinism, Mendelism, the Modern Synthesis, Cultural Ecology), but certain social issues will be examined (social Darwinism, creationism). LEC.

**BIOL 120. Insects in Your World. 3 Hours. NB GE3N / N.**
Students will learn about the global impact of insects on human concerns, both positive (pollination and decomposition) and negative (competition with humans for food, fiber, and shelter, and disease transmission) while developing an appreciation for the ways in which scientists work with real problems involving insects. The course will cover the overwhelming abundance and diversity of insects, and their life history, ecology, behavior, and physiology. This course is intended for both nonbiology and biology majors. Format: two lectures and one discussion section per week. LEC.

**BIOL 150. Principles of Molecular and Cellular Biology. 4 Hours. NB GE3N / N.**
An integrated lecture and laboratory course for biology majors and students planning to take additional courses in biology. This course covers basic biochemistry, cell structure and function, molecular biology, genetics, physiology, and development of plants and animals. Three hours of lecture and three hours of laboratory per week. An honors section (BIOL 151) is offered for students with superior academic records. Prerequisite: Concurrent or prior enrollment in CHEM 130, CHEM 190, CHEM 150, or CHEM 170, or consent of instructor. LEC.

**BIOL 151. Principles of Molecular and Cellular Biology, Honors. 4 Hours. NB GE3N / N.**
An integrated lecture and laboratory course for students with superior academic records who are biology majors or who plan to take additional courses in biology. This course covers basic biochemistry, cell structure and function, molecular biology, genetics, physiology, and development of plants and animals. Three hours of lecture and three hours of laboratory per week. Prerequisite: Membership in the University Honors Program and concurrent or prior enrollment in CHEM 130, CHEM 190, CHEM 150, or CHEM 170, or consent of instructor. LEC.

**BIOL 152. Principles of Organismal Biology. 4 Hours. NB GE3N / N.**
An integrated lecture and laboratory course for biology majors and students who plan to take additional courses in biology. This course covers basic elements of plant and animal morphology and physiology, principles of evolution, organismal diversity and phylogeny, population biology, population genetics, ecology, and behavior. Three hours of lecture and three hours of laboratory per week. An honors section (BIOL 153) is offered for students with superior academic records. Prerequisite: BIOL 150 or BIOL 151. LEC.
BIOL 153. Principles of Organismal Biology, Honors. 4 Hours. NB GE3N / N.
An integrated lecture and laboratory course for students with superior academic records who are biology majors or planning to take additional courses in biology. This course covers basic elements of plant and animal morphology and physiology, principles of evolution, organismal diversity and phylogeny, population biology, population genetics, ecology, and behavior. Three hours of lecture and three hours of laboratory per week. Prerequisite: BIOL 150 or BIOL 151 and membership in the University Honors Program or consent of instructor. LEC.

BIOL 155. Principle Lab in: ______. 1-3 Hours. U.
This introductory laboratory exposes the students to basic principles in biology and modern experimental techniques through an open-ended authentic research experience directed by a faculty member. Prerequisite: Consent of instructor. LEC.

BIOL 177. First Year Seminar: ______. 3 Hours. NB GE11.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in biology. Does not contribute to major requirements in biology. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

BIOL 200. Basic Microbiology. 3 Hours. NB GE3N / N.
Introduction to bacteria and viruses. Topics include historical development of microbiology, bacterial structure and growth, enzymes and energy production, disinfection, antibacterial drugs, gene transfer, viral replication, infection and immunity, with emphasis on infectious diseases. Can be substituted for BIOL 201 as a prerequisite for other microbiology courses by consent of department. Not open to those with credit in BIOL 110, BIOL 201, BIOL 400, or BIOL 401. Prerequisite: A course in high school biology and a course in high school chemistry. This course is not recommended for first semester freshmen. LEC.

BIOL 203. Introductory Microbiology Laboratory. 2 Hours. U.
Laboratory exercises to complement BIOL 200. Prerequisite: BIOL 200. May be taken concurrently. LAB.

BIOL 210. Introduction to Clinical Laboratory Sciences. 1 Hour. U.
An introductory overview of medical technology as a profession including types of analyses performed, specialties, interrelationships in the health care system and a visit to a clinical laboratory. This course will enable those considering a major in medical technology to have a clear definition of the profession. This course does not meet any degree requirements in biology. No prerequisite. (Same as CLS 210.) LEC.

BIOL 215. Plants Through Time. 3 Hours. NB / N.
Examines the evolution of plants and their environments from the origin of life to the present, including the historical development of the biosphere, mass extinctions (past and present), and social implications of future climate changes and deforestation. Not recommended for students with credit in GEOL 121. LEC.

BIOL 225. Evolution and the History of Life. 3 Hours. GE3N / N.
This introductory course for non-majors focuses on the significance of the history of life and the fossil record for our understanding of evolution. Key events in the history of life are considered, including the origins of life, the eukaryotic cell, and humans, and also various mass extinctions. The focus is on general scientific and evolutionary principles and mechanisms that can be extracted from the study of the fossil record. It also uses the lessons of the fossil record to consider the prospects for our own species. LEC.

BIOL 240. Fundamentals of Human Anatomy. 3 Hours. N.
Introduction to the gross anatomy of the human body. Covers the spatial arrangement and appearance of structures throughout the body, including visual identification of these structures. Musculoskeletal relationships, and the anatomy of major organ systems, are emphasized. Not intended for biology majors. Prerequisite: BIOL 100, or equivalent. LEC.

BIOL 241. Human Anatomy Observation Laboratory. 2 Hours. U.
One of the two laboratories in gross anatomy designed to complement BIOL 240. Provides an opportunity to develop a comprehensive three-dimensional understanding of anatomical structures and spatial relationships while gaining substantial dissecting experience. Student perform supervised dissection of human cadavers. Limited to students enrolled in, or seeking admission to, programs that require a human anatomy observation laboratory. Prerequisite: Concurrent or prior enrollment in BIOL 240 is required. LAB.

BIOL 242. Human Anatomy Dissection Laboratory. 3 Hours. U.
One of the two laboratories in gross anatomy designed to complement BIOL 240. Provides an opportunity to develop a comprehensive three-dimensional understanding of anatomical structures and spatial relationships while gaining substantial dissecting experience. Student perform supervised dissection of human cadavers. Limited to students enrolled in, or seeking admission to, programs that require a human anatomy laboratory. Concurrent or prior enrollment in BIOL 240 is required. LAB.

BIOL 246. Principles of Human Physiology. 3 Hours. N.
An introduction to the physiological and biochemical processes and general physiological principles necessary to sustain life. Organ and organ system processes are emphasized. Intended for students majoring in allied health or sports related curricula who require a course in human physiology. Not intended for biology majors. Prerequisite: BIOL 100 or equivalent. LEC.

BIOL 247. Principles of Human Physiology Laboratory. 2 Hours. U.
Designed to complement BIOL 246. Uses experiments and simulations to demonstrate laboratory techniques and representative processes in areas of human physiology. Concurrent or prior enrollment in BIOL 246 required. LAB.

BIOL 350. Principles of Genetics. 4 Hours. N.
Why are related individuals more similar than unrelated individuals and what is the basis for heritable traits? From Mendel’s discoveries of the patterns of genetic inheritance, to the study of transmissible hereditary factors, genetics is central to understanding the biological sciences. Topics include molecular genetics and genetic engineering; Mendelian genetics and mapping; control of gene expression; cytotgenetics; epigenetics and non-Mendelian genetics; and population and quantitative genetics. Examples are taken from a wide variety of organisms, including viruses, bacteria, plants, fungi, insects, and humans. Prerequisite: Two semesters of college-level chemistry and BIOL 150 or BIOL 152; or consent of the instructor. LEC.

BIOL 360. Principles of Genetics, Honors. 4 Hours. N.
The science of genetics aims to explain why individuals differ from one another and how these differences are inherited. Honors Genetics covers all core topics in fundamental genetics: Mendelian inheritance, meiosis and recombination, mutation, molecular genetics, population genetics, quantitative genetics and genomics. Special attention given to the practice of genetics and the complex relationship between genotype, phenotype and environment. A broader goal of Honors Genetics is to provide students a framework for understanding recent advances in medical genetics and the modern era of personal genomics. Prerequisite: Two semesters of college-level chemistry and BIOL 150 or BIOL 152, membership in the University Honors Program; or consent of the instructor. LEC.
BIOL 400. Fundamentals of Microbiology. 3 Hours. NB GE3N / N.
Fundamental principles of microbiology with emphasis on physical and chemical properties of the bacterial cell; microbial metabolism, cultivation, growth and death of bacteria; microbial genetics, pathogenesis and immunity, industrially important microorganisms. Prerequisite: BIOL 150 or BIOL 151 and two semesters of college chemistry, or consent of the instructor. LEC.

BIOL 401. Fundamentals of Microbiology, Honors. 3 Hours. N.
Honors section of BIOL 400 and BIOL 612, by application and invitation. Prerequisite: BIOL 151, two semesters of college chemistry, and membership in the University Honors Program, or consent of the instructor. LEC.

BIOL 402. Fundamentals of Microbiology Laboratory. 2 Hours. U.
Laboratory exercises designed to complement BIOL 400 or BIOL 700. Prerequisite: BIOL 400 or BIOL 612, or BIOL 400 or BIOL 612 concurrently. LAB.

BIOL 405. Laboratory in Genetics. 2 Hours. U.
A laboratory program which includes written reports on fruit fly crosses, exercises on meiosis, probability and statistics, human genetics and computer simulations of genetics problems. Prerequisite: Concurrent or prior (preferred) enrollment in BIOL 350 or its equivalent. LAB.

BIOL 408. Physiology of Organisms. 3 Hours. N.
A comprehensive and integrative approach to the study of organisms with an emphasis on physiological, ecological, structural, and behavioral adaptations to differing environments. Prerequisite: BIOL 152 or BIOL 153 and CHEM 130 or CHEM 190 or CHEM 170; or consent of the instructor. LEC.

BIOL 409. Physiology of Organisms, Laboratory. 2 Hours. U.
The laboratory exposes the students to the structure and function of the major groups of animals and plants. Students use basic techniques of biological observation, such as microscopy and dissection, and experimental techniques to analyze plant and animal function. Prerequisite: Concurrent or prior enrollment in BIOL 408, or consent of the instructor. LAB.

BIOL 410. Human Biogeography, Honors. 3 Hours. N.
Principles of evolution and earth change are used to examine distributions of human populations, wealth, and resources. Readings from the current literature will be included. Lecture and discussion. (Same as GEOG 410.) Prerequisite: BIOL 152 or BIOL 153 or GEOG 107 and membership in the University Honors Program or consent of instructor. LEC.

BIOL 412. Evolutionary Biology. 4 Hours. N.
Introduction to the patterns and processes of organic evolution. Considered are the history of evolutionary thought, molecular evolution, genetics and microevolution, selection and adaptation, and speciation and macroevolution. Emphasis will be placed on how scientists study and document change over time in natural populations, methods for testing hypotheses about events in evolutionary history, and how discovering evolutionary mechanisms at one level of organization can help to explicate general processes in the natural world. Prerequisite: BIOL 152 and BIOL 350, or consent of the instructor. LEC.

BIOL 413. History and Diversity of Organisms. 3 Hours. N.
An integrated lecture and laboratory course presenting an overview of the variety and ancestry of life on earth. Using representatives from prokaryotes, protists, plants, fungi, and animals, principles of phylogenetic reconstruction are illustrated and evolutionary trends in the life history features, functional morphology, and structural complexity of extant and extinct organisms are presented. Two hours of lecture and three hours of laboratory per week. Prerequisite: BIOL 152 or BIOL 153, or consent of the instructor. LEC.

BIOL 414. Principles of Ecology. 3 Hours. N.
Study of the principles underlying species population density changes, community structure and dynamics, biogeochemical cycles, and energy flow and nutrient cycling in ecosystems. Prerequisite: BIOL 152 or BIOL 153, or consent of the instructor. LEC.

BIOL 415. Field and Laboratory Methods in Ecology. 2 Hours. N.
This course complements BIOL 414 with field trips and laboratory exercises that illustrate the basic concepts of ecology. Topics covered include methodologies for quantitative sampling of terrestrial and aquatic systems, design of field studies, computer simulation and digital data analysis techniques, and scientific writing. Prerequisite: Concurrent or prior enrollment in BIOL 414. A statistics course is recommended. FLD.

BIOL 416. Cell Structure and Function. 3 Hours. N.
A lecture survey of molecular cell biology with emphasis on experimental approaches to understanding cell function; topics include biological membranes and transmembrane transport, vesicular trafficking (endocytosis), cell signaling, cell motility and the cytoskeleton, and the regulation of the cell division cycle. Prerequisite: BIOL 150 or BIOL 151; BIOL 350 or BIOL 360; CHEM 130 or CHEM 190 or CHEM 170; and CHEM 135 or CHEM 195 or CHEM 175, or consent of the instructor. LEC.

BIOL 417. Biology of Development. 3 Hours. N.
A general course designed to introduce students to the developmental biology of animals. Emphasis is placed on understanding how a single-celled fertilized egg develops into a complex multicellular organism by the processes of cell division, differentiation, growth, and morphogenesis. Lectures stress experimental approaches to investigating development, including classic embryology and modern molecular genetics. Prerequisite: BIOL 350 or consent of the instructor. LEC.

BIOL 418. Laboratory in: _____, 1-3 Hours. U.
A varied program of laboratory and fieldwork designed to introduce students to investigative approaches in the study of the basic concepts of biological science. Students may enroll in more than one section. Prerequisite: BIOL 100, BIOL 101, BIOL 150, BIOL 151, or exemption. Each section may have additional prerequisites to be determined by instructor. LAB.

BIOL 419. Topics in: _____, 1-3 Hours. N.
Courses on special topics in biology, given as need arises. May be lectures, discussions, readings, laboratory, or fieldwork. Students may select sections according to their special needs. IND.

BIOL 420. Seminar: _____, 1-3 Hours. N.
The preparation and presentation of oral reports on selected topics from the recent research literature. Students may choose one interest group each semester, but may enroll in a given interest group only once. Enrollment in each interest group limited to twenty students. Prerequisite: Course work varying with the topic of the seminar, or consent of instructor. LEC.

BIOL 421. Topics in Molecular Biosciences: _____, 3 Hours. N.
Lecture instruction and the preparation and presentation of oral and written reports on selected topics from the recent research literature in molecular biosciences. Students may enroll in a given topic only once. Prerequisite: Course work varying with the topic of the seminar, or consent of instructor. LEC.

BIOL 423. Non-laboratory Independent Study. 1-9 Hours. AE61 / N.
Original study in discussion or preparation of review papers on selected topics of current interest. May be undertaken only with the consent of the major advisor and of the faculty member who will guide the research. Prerequisite: Consent of instructor. IND.
BIOL 424. Independent Study. 1-9 Hours. AE61 / N.
Original study in laboratory or field in selected topics of current research interest. May be undertaken only with the consent of the major advisor and of the faculty member who will guide the research. Prerequisite: Consent of instructor. IND.

BIOL 425. Teaching Apprenticeship in Biology. 1-9 Hours. N.
Involvement as teaching assistant for a course in Biology. Credit hours shall not exceed the credits offered for the course being taught. May be undertaken only with the consent of the Director of Undergraduate Biology and of the faculty member who will teach the course. Prerequisite: Consent of instructor and Director of Undergraduate Biology. FLD.

BIOL 426. Laboratory in Cell Biology. 3 Hours. U.
Laboratory exercises will examine the function, organization, and composition of eukaryotic cells. Prerequisite: BIOL 150 or BIOL 151, CHEM 130 or CHEM 190 or CHEM 170; concurrent or prior enrollment in BIOL 416 or BIOL 536; or consent of the instructor. BIOL 350 or BIOL 360 is highly recommended. LAB.

BIOL 428. Introduction to Systematics. 3 Hours. N.
Basic elements of systematic theory and practice; phylogenetic reconstruction using morphological and molecular data; interpretation of phylogenetic hypotheses; principles of nomenclature and classification; evolutionary processes and patterns of species diversity; discussion of the aims and needs of taxonomy; species and speciation; construction of keys; significance of biological collections. Prerequisite: BIOL 152 or BIOL 153. Not intended for students with advanced systematics background. LEC.

BIOL 430. Laboratory in Molecular Biology. 3 Hours. U.
Practical experience in recombinant DNA technology and molecular cloning. Prerequisite: BIOL 416 or a course in biochemistry or microbiology. LAB.

BIOL 432. Human Behavioral Genetics. 3 Hours. S.
A survey of human behavioral genetics for upper division undergraduates. Emphasis is on how the methods and theories of quantitative, population, medical, and molecular genetics can be applied to individual and group differences in humans. Both normal and abnormal behaviors are covered, including intelligence, mental retardation, language and language disorders, communication, learning, personality, and psychopathology. (Same as ANTH 447, PSYC 432, SPLH 432.) Prerequisite: Introductory courses in biology/genetics or biological anthropology and psychology are recommended. LEC.

BIOL 435. Introduction to Neurobiology. 3 Hours. N.
Basic principles of neurobiology. The focus will be on the nature of communication among nerve cells and their targets. Topics will include the development, structure and function of nerve cells, chemistry of neurotransmission, processing and integration including the cellular and molecular basis of higher functions and neurological disorders. Prerequisite: BIOL 150 or BIOL 151. LEC.

BIOL 440. Advanced Human Anatomy. 6 Hours. N.
Integrated lecture and laboratory course designed to provide students with a detailed understanding of the structure of the human body. Cadaver dissection will reinforce three-dimensional relationships discussed in lecture and each of the main organ systems will be considered using a regional approach to the body. Prerequisite: BIOL 152 or equivalent; BIOL 240, BIOL 241, or BIOL 242; and instructor consent. LEC.

BIOL 448. Kansas Plants. 3 Hours. N.
A study of common and important non-cultivated Kansas plants, with special emphasis on the ecology of the state; paleoclimatic and paleobotanical background of the central prairies and plains; present climate, physiography and vegetation; poisonous, edible, and medicinal plants; identification by means of simplified keys. Prerequisite: BIOL 100, BIOL 101, BIOL 150, or BIOL 151 and BIOL 152 or BIOL 153. LEC.

BIOL 449. Laboratory/Field Work in Human Biology. 1-3 Hours. AE61 / N.
Faculty supervised laboratory or field research for Human Biology majors. Students design and complete a research project in collaboration with a Human Biology faculty member. (Same as ANTH 449, PSYC 449, and SPLH 449.) Prerequisite: Consent of instructor and Human Biology major. FLD.

BIOL 454. Brain Diseases and Neurological Disorders. 3 Hours. N.
Major brain diseases and neurological disorders such as stroke, Alzheimer’s Disease, Parkinson’s Disease, Huntington’s Disease, Multiple Sclerosis, Epilepsy, Schizophrenia, etc., will be discussed in terms of the etiology, molecular, and cellular basis of potential therapeutic interventions. Graduate students are required to present original research paper assigned by the instructor to the class in addition to other assignments for all the students enrolled. Prerequisite: BIOL 150, or consent of instructor. LEC.

BIOL 461. Biodiversity of the Rainforest. 3 Hours. N.
An introduction to birds, bats, and plants of the rainforest, with emphasis on general characteristics of each of the taxa and their relationship to the tropical ecosystem, as well as their particular anatomy, ecology, behavior, and diversity. Field work focuses on identification of birds and bats (at species level), plants (at family level), and on capturing and preservation techniques. Taught in Golfito, Costa Rica. Contact Undergraduate Biology, or the Office of Study Abroad. Prerequisite: BIOL 150 or BIOL 151 and BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses are taught in Spanish; therefore, four semesters of Spanish are required. Summer courses are taught in English. LEC.

BIOL 463. Introduction to Ornithology of the Tropics. 4 Hours. N.
A theory and practice course on birds. Course covers morphology, reproduction, evolution, ecology, and behavior, as well as systematics of Costa Rican birds. Course includes field work on bird identification. Taught in Golfito, Costa Rica. Contact Undergraduate Biology, or the Office of Study Abroad. Prerequisite: BIOL 150 or BIOL 151 and BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses are taught in Spanish; therefore, four semesters of Spanish are required. Summer courses are taught in English. LEC.

BIOL 465. Marine Biology. 4 Hours. N.
A theory and practice course on biont relationships, the role of organisms and marine biodiversity. It covers basic marine principles and physico-chemical processes (temperature, salinity, dissolved oxygen, nutrients, and pH in the water) and their effect on the abundance, and horizontal and vertical distribution of marine organisms. Course includes field work on data collection. Taught in Golfito, Costa Rica. Contact Undergraduate Biology, or the Office of Study Abroad. Prerequisite: BIOL 150 or BIOL 151 and BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses are taught in Spanish; therefore, four semesters of Spanish are required. Summer courses are taught in English. LEC.

BIOL 467. Marine Resources Management. 3 Hours. N.
A theory and practice course which focuses on the techniques used for monitoring the growth of fish, shrimp, and mollusks, with the purpose of understanding the variables that could produce the best yields. The course covers ecology (population growth, competition, predators, ecosystem dynamics), and fishery biology (growth, fish yield, capture efficiency) applicable in the field experiments. Taught in Golfito, Costa Rica. Contact Undergraduate Biology, or the Office of Study Abroad. Prerequisite: BIOL 150 or BIOL 151 and BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses are taught in Spanish;
therefore, four semesters of Spanish are required. Summer courses are
taught in English. LEC.

**BIOL 468. Fresh Water Ecology. 4 Hours. N.**
A theory and practice class on the study of rivers and lagoons. It includes
systematics of rivers, lagoons, and reservoirs. Course includes theory and
field work to monitor physical (stream topography, flow, edge vegetation),
chemical (nutrients, temperature, pH levels, dissolved oxygen), and
biological (collecting and identification of aquatic insects) conditions in
rivers. Taught in Golfito, Costa Rica. Contact Undergraduate Biology,
or the Office of Study Abroad. Prerequisite: BIOL 150 or BIOL 151 and
BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses
are taught in Spanish; therefore, four semesters of Spanish are required.
Summer courses are taught in English. LEC.

**BIOL 477. Ecology and Global Change. 3 Hours. N.**
Humans influence both natural and managed ecosystems. This course
studies the effects of climate change, land-use change, and reductions
in biodiversity on ecosystems. Emphasis is placed on how biological
and physical processes may be perturbed by human influences. Topics
include the greenhouse effect, species extinctions, human disease
expansion, and the effects of global change on agricultural productivity.
A combination of lectures and discussion address issues from a scientific
basis and link these ecological issues to our everyday lives and society as
a whole. Prerequisite: BIOL 152, BIOL 153, or equivalent, or permission
of instructor. LEC.

**BIOL 480. Biology and Diversity of Parasites. 3 Hours. N.**
Introductory lecture course to the field of Parasitology. Provides basic
knowledge about the morphology and biology of parasitic animals.
Coverage includes a diversity of protozoan and metazoan groups
parasitizing animals, including humans (e.g., malaria, amoebas,
hookworms, tapeworms). Some emphasis is given to groups of parasites
of particular medical and/or economic importance. Selected principles
of parasitism are introduced. Prerequisite: BIOL 152 or BIOL 153, or
permission of instructor. LEC.

**BIOL 481. Parasitology Laboratory. 1 Hour. U.**
Laboratory course in the study of protozoan and metazoan parasites
of animal, including humans, emphasizing their diversity, classification,
morphology, and identification. One three-hour laboratory each week.
Prerequisite: Concurrent or prior enrollment in BIOL 480. LAB.

**BIOL 494. Introduction to Mammalogy. 3 Hours.**
A study of mammals, with emphasis on evolution, biogeography,
ystematics, and natural history. Lectures, laboratory, and field study.
Prerequisite: BIOL 152 or 153 or permission of instructor. LEC.

**BIOL 499. Introduction to Honors Research. 2 Hours. N.**
Intended for sophomores planning to enroll in the Biology Honors Program. Students interested in pursuing Biology Honors discuss with Biology faculty members the rationale, methods, and interpretations of research being carried out in individual faculty labs to learn how scientific research is conducted. Prerequisite: At least 17 credit hours of college level natural sciences coursework or consent of instructor. LEC.

**BIOL 500. Biology of Insects. 3 Hours. N.**
Lectures and demonstrations providing an introduction to the study of
insects, including general classification, structure, phylogeny,
identification, development, physiology, behavior, ecology, and relations
to human affairs. Prerequisite: BIOL 152, 153, or equivalent, or
permission of instructor. LEC.

**BIOL 502. Laboratory in Insect Biology and Diversity. 2 Hours. U.**
Laboratory and field studies of insects, emphasizing their diversity,
classification, ecological relationships, morphology, and behavior.
Course provides practical application of principles covered in BIOL 500.
Prerequisite: Concurrent or prior enrollment in BIOL 500 or the equivalent.

**BIOL 503. Immunology. 3 Hours. N.**
Lectures on the nature and mechanisms of natural and acquired
resistance including humoral and cellular immunity. Characteristics of
antigens and antibodies and of their interaction; ontogeny and cellular
basis of immune responsiveness, hypersensitivity; specific immunologic
tolerance. Not open to those with credit in BIOL 524. Prerequisite: BIOL
400 or BIOL 401, or consent of instructor. LEC.

**BIOL 504. Immunology Laboratory. 2 Hours. U.**
Laboratory designed to complement BIOL 503. Prerequisite: BIOL 503, or
BIOL 503 concurrently. LAB.

**BIOL 505. Social Insects. 3 Hours. N.**
Lectures and laboratory demonstrations on presocial and social insects,
specifically termites, ants, wasps, and bees. Emphasis will be placed on
evolution of social behavior and the place of social insects in sociobiology.
Prerequisite: BIOL 152, BIOL 153, or equivalent. LEC.

**BIOL 506. Pathogenic Microbiology. 3 Hours. N.**
Lectures. Characteristics and mechanisms of pathogenic microorganisms
and disease processes. Elements of host-parasite interactions. Not
open to freshmen or sophomores. Prerequisite: BIOL 503, or consent
of instructor. LEC.

**BIOL 507. Pathogenic Microbiology Laboratory. 2 Hours. U.**
Laboratory to complement BIOL 506. Cultivation of pathogenic
microorganisms, diagnostic procedures, and experiments to demonstrate
various aspects of microbial pathogenicity and host responses.
Prerequisite: BIOL 402 and BIOL 506 (or concurrent enrollment) or
consent of instructor. LAB.

**BIOL 509. Biology of Spiders. 3 Hours. N.**
An introduction to the evolution, anatomy, physiology, behavior, and
ecology of spiders and other arachnids. Special topics include the
action of spider venoms; the composition and uses of silk; courtship
and mating; predation; social behavior; and the role of spiders in
natural and agricultural ecosystems. Concurrent enrollment in BIOL
511 is encouraged. Prerequisite: BIOL 152, BIOL 153 or permission
of instructor. LEC.

**BIOL 510. Comparative Anatomy. 5 Hours. N.**
Structure, function, and evolution of the vertebrates. Lectures and
laboratory study. A course designed for zoologists. Prerequisite: BIOL
100, BIOL 101, BIOL 150, or BIOL 151 and BIOL 152 or BIOL 153. LEC.

**BIOL 511. Biology of Spiders Laboratory. 1 Hour. U.**
Topics will include comparative biology of arachnid orders (spiders,
scorpions, harvestmen, mites, and others), external and internal anatomy
of spiders, identification of common spider families and genera, and
spider behavior. Students will be required to make a small collection
(collect, preserve, and identify specimens). Prerequisite: BIOL 509;
concurrent enrollment is preferred. LAB.

**BIOL 512. General Virology. 3 Hours. N.**
Lectures and discussions covering the basic nature and characteristics
of viruses from a general biological point of view: viruses of bacteria, animals
and plants, physical-chemical properties; host cell-viral interactions; mode
of replication of DNA and RNA viruses, tumor viruses. Prerequisite: BIOL
400, BIOL 401 or consent of instructor. LEC.

**BIOL 513. Virology Laboratory. 2 Hours. U.**
Experiments involving cultivation, quantitation, and identification of animal
viruses, continuous cell culture and primary chicken embryo culture
techniques. Molecular biology techniques are used to demonstrate the
steps in virus replication. The value of viruses as tools to understand
normal cellular processes is emphasized in experiments which demonstrate the relative simplicity of viruses and the relative complexity of eukaryotic cells. Demonstrations include transformation of cells by tumor viruses and electron microscopy of virus particles. Prerequisite: BIOL 402 and BIOL 512, or consent of instructor. LEC.

BIOL 514. Principles of Ecology, Honors. 3 Hours. N.
Honors section of BIOL 414 for students with superior academic records. Course covers core concepts on the ecology of individuals, populations, communities, and ecosystems. Relative to BIOL 414, topics are presented in greater depth with increased student participation and stronger emphasis on the primary scientific literature. Prerequisite: BIOL 100, BIOL 101, BIOL 150, or BIOL 151 and BIOL 152 or BIOL 153. Open only to students admitted to the University Honors Program or by consent of instructor. LEC.

BIOL 516. Microbial Physiology. 3 Hours. N.
Elements of microbial physiology. Carbohydrate metabolism; enzymes and coenzymes; microbial nutrition; quantitative problems in microbial physiology; a survey of microbial metabolic types. Prerequisite: BIOL 400 or BIOL 612 and BIOL 402, and five hours of organic chemistry. LEC.

BIOL 517. Microbial Physiology Laboratory. 2 Hours. U.
Laboratory designed to complement BIOL 516. Prerequisite: BIOL 516, or BIOL 516 concurrently. LAB.

BIOL 518. Microbial Genetics. 3 Hours. N.
Bacteria and viruses as models of genetic systems. Mutagenesis and repair. Transformation, transductions, and recombination. Molecular biology of gene expression. Prerequisite: An introductory microbiology course. LEC.

BIOL 519. Microbial Genetics Laboratory. 2 Hours. U.
Laboratory designed to complement BIOL 518. Prerequisite: BIOL 402, BIOL 518, or BIOL 518 concurrently. LAB.

BIOL 520. Marine Biology. 3 Hours. N.
This introductory course covers biological, physical, and chemical ocean sciences, with an emphasis on ecological aspects. In addition to this Lawrence campus course, students may enroll for a supplementary 1 credit field trip class to a Caribbean coral reef island offered in December or January. Prerequisite: BIOL 414 or permission of the instructor. LEC.

BIOL 521. Insect Systematics. 4 Hours. N.
A study of the diversity of insects, including the classification of all living and fossil orders and the more common families primarily on the basis of external morphology. The biology, ecology, phylogeny, and geological history of each order is covered. Includes both lectures and laboratory exercises. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 500, BIOL 502 or equivalent, or permission of instructor. LEC.

BIOL 525. Aquatic Entomology. 4 Hours. N.
Designed to enable students to develop skill in the area of identification of aquatic insects and to gain a detailed comprehension of their community structure and dynamics. The external morphology of all aquatic orders is covered, followed by consideration of specific physiological and behavioral adaptations that facilitate an aquatic existence. Includes both lectures and laboratory exercises. Requirements include making a collection of aquatic insects. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 414 or BIOL 500. LEC.

BIOL 526. Insect Physiology and Internal Morphology. 3 Hours. N.
Mechanisms and integration of the internal life-supporting systems of insects, emphasizing the interdependence of structure and function. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 408 and BIOL 500, or permission of instructor. LEC.

BIOL 528. External Morphology of Insects. 4 Hours. N.
A study of external structure common to all insect orders, with detailed comparative laboratory studies of representative species. Includes both lectures and laboratory exercises. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 500, BIOL 502 or equivalent, or permission of instructor. LEC.

BIOL 529. Immature Insects. 3 Hours. N.
The classification, structure, and ecological distribution of immature insects, especially larvae of Holometabola. Includes both lectures and laboratory exercises. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 502 or permission of instructor. LEC.

BIOL 533. Biology of Fungi. 4 Hours. N.
A study of the major groups of fungi from slime molds to mushrooms. Emphasis on their activities in natural substrates, isolation techniques, parasitic and mutualistic relationships with other organisms, uses in research, industrial applications, production of mycotoxins and poisons, and physiological, genetic and reproductive behavior. Lectures, laboratory, and field trips. Prerequisite: BIOL 100, BIOL 101, BIOL 150, or BIOL 151 and BIOL 152 or BIOL 153. LEC.

BIOL 536. Cell Structure and Function (Honors). 3 Hours. N.
BIOL 536 is the honors version of BIOL 416. Completion of this class will satisfy the BIOL 416 requirement. Open to students in the Honors program or by permission of instructor. Prerequisite: BIOL 350 or consent of instructor. LEC.

BIOL 540. General Invertebrate Zoology. 4 Hours. N.
Phylogeny, physiology, and embryology; evolutionary processes; characteristics of major ecological groupings. Laboratory will consider major taxonomic categories with emphasis on functional morphology and its evolutionary modifications. Prerequisite: BIOL 152 or BIOL 153. LEC.

BIOL 545. Evolution of Development. 5 Hours. N.
An advanced course designed to expose students to evolutionary change in the developmental patterning of plant and animal form. This course includes a lecture component and a laboratory component to integrate multiple biological disciplines including comparative morphology, molecular evolution, developmental genetics and experimental development, to explore biodiversity at a mechanistic level. Lectures are designed to give students background on topics ranging from homology assessment to empirical examples of how changes in gene expression or function may have shaped morphological diversity. The laboratory complements these topics through observations of normal development in a diversity of plant and animal model organisms, and through conducting independent research experiments. Prerequisite: BIOL 350 or equivalent. LEC.

BIOL 555. General Plant Physiology. 3 Hours. N.
The principal physiological processes of higher plants including photosynthesis, respiration, water relations, mineral nutrition, and factors associated with morphogenesis. Prerequisite: BIOL 408 or consent of instructor. LEC.

BIOL 560. Histology. 3 Hours. N.
Study of detailed microscopic anatomy of cells, tissues, and organs of mammals. Examples are drawn from normal and abnormal tissue, histochemistry, and electron microscopy. Lecture and demonstrations. A course in anatomy and physiology is highly recommended. Prerequisite: BIOL 152 or BIOL 153. LEC.
BIOL 570. Introduction to Biostatistics. 3 Hours. N.
Statistical concepts related to biological problems. Topics include the scientific method, data representation, descriptive statistics, elementary probability distributions, estimation and hypothesis testing, emphasizing the analysis of variation. Prerequisite: College algebra and ten hours of natural science. LEC.

BIOL 571. Introduction to Biostatistics Laboratory. 2 Hours. U.
Introductory statistical analyses on microcomputers. Data entry and export; simple graphs and exploratory data analysis; descriptive statistics; sampling; point and interval estimation; one and two sample t-tests; Chi-square; regression and correlation; analysis of variance; and nonparametric methods. Prerequisite: BIOL 570 or equivalent (may be taken concurrently). LAB.

BIOL 582. Principles of Biogeography. 3 Hours. N.
An introduction to the study of the distribution of life on earth. Covers geographical patterns of species diversity and the processes that give rise to those patterns: speciation, extinction, dispersal, vicariance, continental drift, ecological interactions, and phylogeny. Topics are presented within the framework of evolutionary history and include discussion of the biology of species on islands, terrestrial biomes, altitudinal zonation of species, latitudinal species gradients, historical factors governing species distributions, macroevolutionary trends in the fossil record, and application of modern molecular techniques for testing biogeographical hypotheses. Prerequisite: BIOL 152 or 153 and past or concurrent enrollment in BIOL 412, 413, 414, or 550; or permission of instructor. LEC.

BIOL 583. Herpetology. 3 Hours. N.
A study of amphibians and reptiles. This lecture course will explore the taxonomic diversity of amphibians and reptiles, and current areas of active research in herpetology. Topics will be considered within a phylogenetic framework, and include discussion on systematics, biogeography, tetrapod origins, skeletal systems, growth, circulatory system, locomotion, thermal and water regulation, hibernation, ecology, sexual behavior, parental care, and mimicry. LEC.

BIOL 592. Ichthyology. 4 Hours. N.
A study of fishes. Lecture topics include the structure and adaptations of fishes to the aquatic environment and a survey of major fish groups with emphasis on their evolution and biogeography. Laboratory topics include a survey of fish diversity using specimens and the use of keys to identify fishes, with emphasis on the Kansas fish fauna. This course meets with BIOL 792. Students taking this course at the 700 level will have additional work required of them. Prerequisite: BIOL 152 and/or BIOL 413. LEC.

BIOL 593. Ornithology. 3 Hours. N.
A lecture and laboratory course on the biology, evolution, and diversity of birds. Prerequisite: BIOL 412 (or BIOL 413), or permission of instructor. LEC.

BIOL 594. Forest Ecosystems. 3 Hours.
Students learn basic concepts of forest productivity, forest water relations, forest hydrology, nutrient cycling, through soils and vegetation, nutrient uptake, carbon cycling, decomposition, linkages to aquatic ecosystems, and agents of disturbance to these cycles. The class spends a significant part of the semester exploring forest soil profiles and the challenges they present to different forest ecosystems. We discuss the function of forested ecosystems in a global context and identify and understand smaller-scale processes that drive forest function. Prerequisite: CHEM 135 or CHEM 195 or CHEM 175, and BIOL 414. LEC.

BIOL 595. Human Genetics. 3 Hours. N.
A lecture course providing balanced coverage of Mendelian and molecular genetics of humans; includes discussions and presentations on current issues in human and medical genetics. Prerequisite: BIOL 350. LEC.

BIOL 598. Research Methods. 3 Hours. N.
An introduction for pre-service teachers to the tools used by scientists to solve scientific problems. Topics include design of experiments and interpretation of their results, use of statistics, mathematical modeling, laboratory safety, ethical treatment of human subjects, writing scientific papers, giving oral presentations, and obtaining data from the scientific literature. Open only to students in the UKanTeach program. LEC.

BIOL 599. Senior Seminar: _______. 1 Hour. AE61 / N.
A synthesis and discussion of current trends in a discipline or disciplines related to one of the degrees offered in the biological sciences. Emphasis is placed on providing seniors with an appreciation of the discipline's state-of-the-art and on developing skills for success in the next stage of a career in the biological sciences. Topics depend on the associated degree program. Prerequisite: Must be taken in the final year of a degree and students must have completed most of the course work required for one of the degrees in the biological sciences. LEC.

BIOL 600. Introductory Biochemistry, Lectures. 3 Hours. N.
Designed to offer the essentials of the chemistry of the constituents of living organisms and the changes these constituents undergo (during life processes) in the human body and other living forms. Prerequisite: BIOL 150 or BIOL 151 and one semester of organic chemistry. LEC.

BIOL 601. Principles of Biochemistry Laboratory. 2 Hours.
Theory and methods in the development of protein separation and purification, enzyme structure/function, and enzyme kinetics derived from primary literature searches and readings. Prerequisite or Co-requisite: BIOL 600; or consent of instructor. LAB.

BIOL 602. Plant Ecology. 3 Hours. N.
Introduction to basic concepts, focused at community and species level. Architectural ecophysiometry of plants and their physiological responses to physical factors: solar radiation, climate, and soils. Plant succession as an interaction among species differing in ecophysiometry and life style. Classification and ordination of plant communities: practice and theory. Other topics include: species diversity and lognormal distribution as to abundance classes; species/area relations and theory of island biogeography; allelochemical defenses; genecology; paleoecology. Prerequisite: BIOL 414 or consent of instructor. Concurrent enrollment in parallel laboratory, BIOL 607, recommended. LEC.

BIOL 603. Systematic Botany. 3 Hours. N.
A lecture/laboratory course providing hands-on experience with plant identification, a history of plant classification, the principles of nomenclature and character analysis, the basics of systematics theory, and a phylogenetically-oriented introduction to vascular plant diversity. Prerequisite: BIOL 413 or equivalent. LEC.

BIOL 606. Ecological Plant Physiology. 3 Hours. N.
Physiological responses of higher plants to environmental factors are discussed. Major topics are: water relations, heat transfer, resistance to water and temperature stress, dormancy, photoperiodism, photosynthesis and respiration under natural conditions, and effects of environmental pollution. Prerequisite: BIOL 408 or consent of instructor. LEC.

BIOL 607. Field and Laboratory Exercises in Plant Ecology. 2 Hours. U.
Introduction to quantitative analysis of plant communities and correlated environmental parameters; field and/or laboratory measurements of ecophysiological traits and comparative ecophysiometry of principal species. Prerequisite: BIOL 414. Concurrent enrollment in parallel lecture, BIOL 602, recommended, but not required. LAB.

BIOL 609. Current Progress in Microbiology. 1 Hour. U.
A seminar course which will focus on current research in microbiology. A term paper will be required of each student. May be repeated for credit.
BIOL 611. Molecular Systematics and Evolution. 4 Hours. N.
An introduction to the use of molecular data in systematics and population biology. Topics include: evolution of genes and proteins; properties of mitochondrial DNA, chloroplast DNA, ribosomal RNA genes, protein-coding genes, and repetitive DNAs; laboratory methods for data collection; and data analysis. Prerequisite: BIOL 350. BIOL 550 or equivalent is recommended. LEC.

BIOL 612. Fundamentals of Microbiology. 3 Hours. NB / N.
Lectures. Fundamental principles of microbiology with emphasis in physical and chemical properties of the bacterial cell; microbial metabolism, cultivation, growth and death of bacteria; microbial genetics; pathogenesis and immunity, industrially important microorganisms. Meets with BIOL 400, but students will be given additional and more advanced assignments, and will carry higher expectations. Prerequisite: BIOL 150 or BIOL 151 and two semesters of college chemistry, or consent of instructor. LEC.

BIOL 613. Biology of Honeybees. 3 Hours. N.
Social organization, evolution, behavior, morphology, communication, pollination biology, and ecology of honeybees. Experience will be gained with colony dynamics and behavior while working with bees in the field. Prerequisite: BIOL 152, BIOL 153, or consent of instructor. LEC.

BIOL 616. Medical Entomology. 3 Hours. N.
A study of the major human diseases transmitted by arthropods with emphasis on the biology and ecology of vectors, vector feeding mechanisms as related to disease transmission, epidemiology of arthropod-borne diseases, and the impact of arthropod-borne diseases on humans. Laboratory work on recognition of vector species, information sources, and use of taxonomic keys. Prerequisite: BIOL 152 or BIOL 153 and a course in microbiology or consent of instructor. LEC.

BIOL 622. Paleontology. 3 Hours. N.
A study of the structure and evolution of ancient life; the nature and diversity of life through time; the interactions of ancient organisms with their environments and the information that the study of fossils provides about ancient environments; the use of fossils to determine the ages of rocks and the timing of past events in earth history; and the patterns of extinction through time. (Same as GEOL 521.) Prerequisite: BIOL 100, BIOL 101, BIOL 152, BIOL 153, GEOL 105, or GEOL 304. LEC.

BIOL 623. Paleontology Laboratory. 1 Hour. U.
Laboratory course in the study of fossils with emphasis on the practice of paleontology and the morphology of ancient organisms. (Same as GEOL 523.) LAB.

BIOL 625. Behavioral Ecology and Sociobiology. 3 Hours. N.
The role of natural selection in animal behavior, and the influence of behavior on population biology and social dynamics of animal species. Topics include: game theory and optimization as applied to animal behavior; altruism, cooperation and competition; kin recognition and interactions; group formation and dynamics, dominance, aggression, and territoriality; feeding strategies; reproductive behavior including mate choice, parental care, and mating systems. Prerequisite: BIOL 152; either BIOL 350, BIOL 412 or BIOL 414 recommended; or consent of instructor. LEC.

BIOL 630. Conservation and Wildlife Biology. 3 Hours. N.
Examination of the concepts and processes involved in conservation of plant and animal populations and communities. Topics to be covered include conservation of endangered species, problems with invasions of exotic species and habitat fragmentation, wildlife management, and design of nature reserves. Prerequisite: BIOL 414, BIOL 412 strongly recommended. LEC.

BIOL 636. Biochemistry I. 3 Hours. N.
First semester of a two-semester lecture course in introductory biochemistry. Emphasis upon the physical structure of macromolecules and membranes, enzyme structure/function, and enzyme kinetics. Prerequisite: CHEM 335 or consent of instructor. LEC.

BIOL 637. Introductory Biochemistry Laboratory. 2 Hours. U.
The laboratory portion of BIOL 600 or 636. Experiments have been selected to introduce the student to cell constituents and biochemical reactions. One four-hour laboratory and one-hour lecture each week. Prerequisite: BIOL 600 or BIOL 636, or concurrent enrollment. LAB.

BIOL 638. Biochemistry II. 3 Hours. N.
Second semester of a two-semester lecture course in introductory biochemistry. Emphasis upon the metabolism of carbohydrates, lipids, amino acids, proteins, and nucleic acids. Prerequisite: BIOL 636. LEC.

BIOL 639. Advanced Biochemistry Laboratory. 2 Hours. U.
The laboratory portion of BIOL 638. One four-hour laboratory and a one-hour lecture each week. Experiments have been selected to familiarize students with experimental biochemical techniques using state-of-the-art methodology. Prerequisite: BIOL 637 and 638 (BIOL 638 may be taken concurrently). LAB.

BIOL 640. The Biology and Evolution of Fossil Plants. 3 Hours. N.
A lecture course in which fossil plants, prozists and fungi are examined throughout geologic time. Emphasis will be directed at paleoecology, biogeography and the stratigraphic distribution and composition of ancient floras. (Same as GEOL 528.) Prerequisite: BIOL 413 or permission of instructor. LEC.

BIOL 641. Laboratory in Paleobotany. 1 Hour. U.
An examination of selected fossil plants throughout geological time and the techniques used to study them; laboratory will include identification and the use of plant fossils in biostratigraphy. (Same as GEOL 529.) Prerequisite: BIOL 413 or permission of instructor. Must be taken concurrently with BIOL 640. LAB.

BIOL 644. Comparative Animal Physiology. 3 Hours. N.
Lecture and discussion of the basic mechanism of organic maintenance and integration; a comparative treatment of the uniformities and diversity of animal function; emphasis on environmental adaptations and evolutionary relationships. Prerequisite: BIOL 152 or BIOL 153, and a course in organic chemistry, or consent of instructor. A college physics course is recommended but not required. LEC.

BIOL 646. Mammalian Physiology. 4 Hours. N.
Lectures and demonstrations. An intermediate course in the functions, mechanisms and interactions of mammalian organ systems. Discussions span topics from molecular to whole animal functions. Required for pharmacy students and strongly recommended for students planning advanced work in any area of physiology. The student is assumed to have the knowledge and ability to utilize their math and science background. Prerequisite: Five hours of organic chemistry, a course of college physics. LEC.

BIOL 647. Mammalian Physiology Laboratory. 2 Hours. U.
Laboratory experiments in representative areas of mammalian physiology designed to complement BIOL 646. Not open to students with credit in BIOL 247. Prerequisite or Co-requisite: BIOL 646. LAB.

BIOL 648. Systematics and Macroevolution. 3 Hours. N.
An introduction to the theory of macroevolution and the fundamental principles of systematics. Intended for students planning to pursue advanced studies in organismal biology, evolution, and/or systematics.
Topics in macroevolution will include hierarchy theory, species concepts, speciation and species selection. Methods of phylogenetic estimation will be discussed and include parsimony, Maximum likelihood and Bayesian inference. Evolutionary studies utilizing phylogenies including tests of homology, studies of character evolution, and biogeography will be discussed. An overview of classification and nomenclature will also be provided. Prerequisite: BIOL 412 or equivalent. LEC.

BIOL 650. Advanced Neurobiology. 3 Hours. N.
The course builds an in depth knowledge about basic mechanisms of synaptic communication among nerve cells and their targets, and the structure and function of nervous systems. Topics include nervous system development and synapse formation, structure and function of neurons, physiological and molecular basis of synaptic communication between neurons, mechanisms of synaptic plasticity involved in learning and memory, sensory systems (vision, auditory, vestibular, motor reflexes and pain), processing of neural information at cellular and system levels, synapse regeneration and diseases of the nervous system. Prerequisite: BIOL 435 (Introduction to Neurobiology), or consent of instructor. LEC.

BIOL 652. Comparative Animal Behavior. 3 Hours. N.
A comparative analysis of behavior as an adaptive mechanism; emphasis on ontogenetic and evolutionary aspects of behavior. Prerequisite: BIOL 152 or BIOL 153; and BIOL 412. Alternatively, BIOL 412 may be taken as a corequisite. LEC.

BIOL 654. Comparative Animal Behavior, Laboratory. 1 Hour. U.
Laboratory and field phase of BIOL 652. Students may elect sections according to their special interests. Prerequisite: Prior or concurrent enrollment in BIOL 652. LAB.

BIOL 655. Behavioral Genetics. 3 Hours. N.
A survey of behavioral genetics in animals and humans. Emphasis is on how the methods and theories of quantitative, population and molecular genetics can be applied to individual and group differences in animals. Behaviors covered may include circadian rhythms, foraging, courtship, learning and memory, anxiety, social structures and human behaviors. Prerequisite: BIOL 350 or consent of instructor. LEC.

BIOL 656. Ecosystem Ecology. 3 Hours. N.
An introduction to the patterns and processes that affect terrestrial ecosystems. Emphasis is placed on understanding nutrient cycles (e.g., carbon nitrogen phosphorous), hydrologic cycles, and patterns of net primary productivity. The role of both natural and anthropogenic disturbances in structuring terrestrial ecosystems is examined in the context of global land-use patterns. Discussion of current research literature will be expected. (Same as EVRN 656.) Prerequisite: BIOL 414 and CHEM 130. LEC.

BIOL 661. Ecology of Rivers and Lakes. 3 Hours. N.
Study of the ecology and structure of creeks, rivers, ponds, lakes, and wetlands as well as some of the major human impacts. Prerequisite: One year of biology or permission of the instructor. BIOL 414 recommended. LEC.

BIOL 662. Aquatic Ecology Laboratory. 2 Hours. U.
A field and laboratory course introducing biological, physical, and chemical characteristics of lentic (ponds and lakes) and lotic (creeks and rivers) habitats. Students learn sampling and monitoring techniques and how to classify aquatic biota at higher taxonomic levels. Co- or prerequisite: CHEM 130 or CHEM 190 or CHEM 170, and BIOL 661. LAB.

BIOL 664. Vertebrate Biology. 3 Hours. N.
A laboratory course emphasizing principles of systematics and identification and the behavioral ecology of local vertebrate animals. Prerequisite: BIOL 152, BIOL 153 or consent of instructor. LAB.

BIOL 667. Chemical Communication in Sex, Feeding, and Fighting. 3 Hours. N.
The course focuses on the role of chemical information molecules in the interrelationships among organisms, with particular attention to interactions (a) within and between animal species, (b) within and between plant species, (c) between animals and plants, (d) between predators and prey, and (e) between parasites and hosts. Prerequisite: BIOL 100 or BIOL 101 or BIOL 152 or BIOL 153 or consent of instructor. LEC.

BIOL 668. Evolutionary Ecology. 3 Hours. N.
Emphasis will be on the themes that interface ecology and evolutionary studies. Topics will include selection theory; reproductive, foraging, and sex allocation problems; coevolution; patterns or morphological and behavioral adaptations; competition, predation, and population regulation. Special attention will be given to the philosophy and practice of resolving unanswered questions in evolutionary ecology. Prerequisite: BIOL 412 or permission of instructor. LEC.

BIOL 669. Biology of Freshwater Invertebrates. 3 Hours. N.
A lecture, field, and laboratory course examining the classification, biological characteristics, and ecology of invertebrates in lotic and lentic habitats. Major groups of benthic and planktonic invertebrates will be studied, including aquatic insects, crustaceans, molluscs, and others. Prerequisite: BIOL 540, BIOL 660, BIOL 661, or BIOL 663, or permission of instructor. LEC.

BIOL 672. Gene Expression. 3 Hours. N.
A study of the structure and expression of genes in prokaryotes and eukaryotes. Emphasis on the mechanisms of DNA, RNA, and protein biosynthesis. Prerequisite: A course in biochemistry or consent of instructor. LEC.

BIOL 673. Cellular and Molecular Neurobiology. 3 Hours.
Mechanisms of neural function and development will be considered at the cellular and molecular levels. Synaptic mechanisms of learning and memory, modulation of transmitter release, and the molecular basis of neurodegenerative disorders will also be discussed. Prerequisite: BIOL 435, BIOL 646, or permission of instructor. LEC.

BIOL 676. Mammalian Neuroanatomy. 3 Hours. N.
Lectures, video tape demonstrations, and laboratory dissection of mammalian nervous system with some attention to human material. Major emphasis on nervous system structure as it relates to function. For neurobiology and pre-health science majors. Prerequisite or Corequisite: A course in neurobiology (BIOL 435, BIOL 650), or permission of the instructor. LAB.

BIOL 688. The Molecular Biology of Cancer. 3 Hours. N.
The basic concepts of molecular biology are examined and used to probe the process by which a normal cell becomes a cancer cell. The course investigates DNA damage and repair, chemical carcinogenesis, gene cloning and manipulation, the control of gene expression in eukaryotes, tumor viruses, the roles of oncogenes and tumor suppressor genes in carcinogenesis, and cancer therapy. Prerequisite: BIOL 350 and BIOL 416; or BIOL 536; or consent of instructor. LEC.

BIOL 694. The Art of Becoming a Professional Scientist. 3 Hours. N.
Discusses aspects of graduate education that are directed at students entering graduate school and that focus on how to be successful in the post PhD phases of a career, but that must be initiated early in the graduate student program of study. One three hour discussion per week. Senior standing and planning on entering graduate school. LEC.

BIOL 695. Animal Communication and Sensory Ecology. 3 Hours. N.
Lectures and discussion sessions. A study of the propagation and perception of olfactory, acoustic, and visual signals produced by animals
in the context of communication. Both physiological and evolutionary perspectives will be treated. Prerequisite: A course in behavior or consent of instructor. LEC.

BIOL 699. Biology Honors Research Colloquium. 1 Hour. AE61 / U. Students pursuing Honors in Biology will meet weekly to discuss, both formally and informally, their honors research. Background information and experimental approaches of the research will be examined and critiqued. Prerequisite: Enrollment in Biology Honors program and consent of instructor. LEC.

BIOL 700. Conservation Principles and Practices. 3 Hours.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects will also be considered. (Same as AMS 714, GEOL 780, HIST 722 and MUSE 706.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 701. Topics in: _____. 1-3 Hours.
Advanced courses on special topics in biology, given as need arises. Lectures, discussions, readings, laboratory, or field work. Students may select sections according to their special interests. LEC.

BIOL 702. Laboratory Practice: Radiation Safety Procedures. 0.75 Hours.
An introduction to the basic properties of radioisotopes, and the fundamental safety practices needed for the safe use of low levels of radioactive materials. Risks associated with radiation exposures and applicable state and federal regulations are discussed. (Normally the content of the first ten hours of BIOL 703.) Prerequisite: Senior standing in one of the sciences. LAB.

BIOL 703. Radioisotopes and Radiation Safety in Research. 1.25 Hour.
An introduction to the properties of radioactive materials, radiations, and their interaction with matter, methods of radiation detection and measurement, protective measures, applicable state and federal regulations, design and implementation of safety management systems in the research laboratory, design of tracer experiments, and the risks associated with radiation exposure. Prerequisite: BIOL 702 or concurrent enrollment in BIOL 702, algebra and two semesters of either physics or chemistry. LEC.

BIOL 704. Research Animal Methods. 3 Hours.
Lectures, discussions, and laboratory sessions. Selection of proper animal models for specific research studies. Various external influences that alter research data. Routine techniques including restraint, sample collection, injection, anesthesia and euthanasia. Prevention and handling of common research animal problems or diseases. Proper and humane animal care as defined by the Federal Animal Welfare Act. Prerequisite: Senior or graduate standing in one of the biological sciences or permission of instructor. LEC.

BIOL 706. Current Trends in Curation and Collection Management. 2 Hours.
Seminar course to provide students with a working knowledge of the primary issues and current trends in building, administration, and care of scientific collections. Topics include permits, collecting, accessioning, cataloging, preservation, preventive conservation, and access to collections and data. The course format consists of readings, lectures, guest speakers, discussions, and visits to scientific collections on campus. (Same as MUSE 710.) LEC.

BIOL 708. External Morphology of Insects. 4 Hours.
A study of external structure common to all insect orders, with detailed comparative laboratory studies of representative species. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 500, BIOL 502 or equivalent, or permission of instructor. LEC.

BIOL 709. Immature Insects. 3 Hours.
The classification, structure, and ecological distribution of immature insects, especially larvae of Holometabola. Includes both lectures and laboratories. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 502 or consent of instructor. LEC.

BIOL 710. Insect Development. 3 Hours.
A study of the embryonic and postembryonic development of insects. Emphasis is placed on developmental physiology of the early embryonic stages, the morphogenesis of organ systems, and the action of hormones in postembryonic development. Laboratory includes demonstrations and histological and experimental work. Prerequisite: Consent of instructor or BIOL 500. LEC.

BIOL 711. Insect Systematics. 4 Hours. N.
A study of the diversity of insects, including the classification of all living and fossil orders and the more common families primarily on the basis of external morphology. The biology, ecology, phylogeny, and geological history of each order will be covered. Includes both lectures and laboratory exercises. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 500 and BIOL 502 or equivalent, or permission of instructor. LEC.

BIOL 712. Evolutionary Biology - Graduate. 3 Hours.
A thorough survey of evolutionary biology. Topics include: the history of evolutionary thought, genetics and the nature of variation, adaptation, speciation, coevolution, macroevolution, the comparative method, and the history of life. Prerequisite: BIOL 350 or equivalent or consent of instructor. LEC.

BIOL 714. Community and Ecosystem Ecology. 3 Hours.
Study of factors determining distribution of organisms, community structures, energy flow in ecosystems, and functional analysis of ecosystems. Discussion periods will include reading from current scientific literature. Prerequisite: Intended for graduate students in biology who did not have an undergraduate course in community ecology. Consent of instructor. LEC.

BIOL 716. Insect Physiology and Internal Morphology. 3 Hours.
Mechanisms and integration of the internal life-supporting systems of insects, emphasizing the interdependence of structure and function. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 408 and BIOL 500, or permission of instructor. LEC.

BIOL 717. Insect Ecology and Behavior. 3 Hours.
Lectures and laboratory demonstrations. A study of insect population dynamics, life history strategies, co-evolutionary interactions, foraging, and reproductive and social behaviors. Approaches from basic population biology and behavioral ecology are emphasized. Prerequisite: A course in ecology or behavior, or consent of instructor. LEC.

BIOL 718. Laboratory in Molecular Biology. 3 Hours.
Practical experience in recombinant DNA technology and molecular cloning. Given concurrent with BIOL 418. Prerequisite: BIOL 416 or course in biochemistry or microbiology. Training in radiation safety preferred. LAB.
BIOL 719. Light and Electron Microscopy. 3 Hours.
A lecture and laboratory class emphasizing the theoretical and practical use of light microscopes and scanning and transmission electron microscopes. A variety of approaches using light microscopy will be employed, including brightfield, phase, fluorescence, DIC, polarization, and darkfield optics. A variety of techniques will be used to prepare specimens and view them using scanning and transmission electron microscopy. Video and computer-aided analysis of images as well as conventional photographic techniques will be included. Prerequisite: Permission of instructor. LEC.

BIOL 720. Scientific Illustration. 3 Hours.
Lectures, demonstrations, and studio participation. Instruction in the preparation of illustrations for scientific publications, theses, and oral and poster presentations. Emphasis on basic drafting and layout skills, and pen and ink and tone renderings intended for publication. Attention given to preparation of photographs for publication and oral presentations. Instruction provided in use of specialized optical equipment for drawing. Prerequisite: Upper division or graduate standing and permission of instructor. LEC.

BIOL 721. Microbial Genetics. 3 Hours.
Bacteria and viruses as models of genetic systems. Mutagenesis and repair. Transformation, transductions, and recombination. Molecular biology of gene expression. This course is the graduate-level section of BIOL 518 and MCRB 510. Graduate students will be assigned additional and more advanced studies. Prerequisite: An introductory microbiology course or permission of instructor. LEC.

BIOL 725. Aquatic Entomology. 4 Hours.
Identification of aquatic insects and detailed study of their community structure and dynamics. The external morphology of all aquatic orders will be covered, followed by consideration of specific physiological and behavioral adaptations that facilitate an aquatic existence. Includes both lectures and laboratory exercises. Requirements include making a collection of aquatic insects. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 414 or BIOL 500 or permission of instructor. LEC.

BIOL 742. Plant Population Biology. 3 Hours.
A survey of the major areas of plant population ecology and genetics including competition, demography, pollination ecology, gene flow, natural selection and mating systems. Each topic is introduced by a lecture and is further explored by discussion of the current literature. Prerequisite: BIOL 412 or equivalent. LEC.

BIOL 743. Population Genetics. 3 Hours.
Description and discussion of genetic variation in natural populations. The effects and interaction of selection, migration, mutation, mating systems, and finite population size on the maintenance of genetic variation. Discussion of the interface with evolution and population ecology. Prerequisite: BIOL 350 and BIOL 412 or equivalent. LEC.

BIOL 745. Laboratory in Experimental Ecology. 3 Hours.
A series of seven laboratory modules emphasizing quantitative methods and experimental analysis. Each module requires data collection analysis, and written interpretation. Modern instrumentation, including use of microcomputers, is emphasized. Topics include ecological modeling, ecological genetics, physiological ecology, community structure, mating and reproduction and precipitation and soil chemistry. Prerequisite: BIOL 412 or BIOL 414. LAB.

BIOL 746. Principles of Systematics. 4 Hours.
Lectures: historical and philosophical foundations of modern systematics; theory and practice of classifications; character analysis; phylogeny reconstruction; formulation and testing of systematic hypotheses; species concepts and speciation; the interface between systematics and evolutionary theory, particularly the origins of asymmetric diversity patterns, macroevolution, adaptation, coevolution, and the evolution of higher taxa; roles of paleontological, ontogenetic, biochemical, and molecular data in systematics; and biogeography. Laboratory work: practical applications of nomenclature, development of keys, descriptions and systematic revisions, character analysis, phylogeny reconstruction, hypothesis testing, interpretation of biogeographic patterns. (Three hours lecture and two hours laboratory per week.) Prerequisite: BIOL 628 or equivalent. Intended for graduate students planning to specialize in systematics. LEC.

BIOL 747. Quantitative Genetics. 3 Hours.
A discussion of genetic traits for which individual gene differences do not separate a population into qualitatively distinct groups. Includes the estimation of heritability, genetic determination, and number of loci, and a study of selection theory. Prerequisite: BIOL 404 or BIOL 412 or equivalent and a course in statistics. LEC.

BIOL 749. Topics in Stable Isotopes in the Natural Sciences:. 2-3 Hours.
Isotopic compositions of substances provide powerful insights into many topics in the natural sciences. Applications of isotopic analyses of carbon, hydrogen, oxygen, and nitrogen to selected research topics such as plant resource use, food web analysis, paleoecology, paleodiet reconstruction, hydrology, and soils genesis will be examined. Knowledge of isotope chemistry is not required. (Concepts necessary to understand pertinent articles will be taught during the first class meetings.) May be repeated. (Same as GEOG 749.) LEC.

BIOL 750. Advanced Biochemistry. 3 Hours.
The structures and dynamics of proteins and nucleic acids will be developed in terms of well-understood examples which will also be used to discuss the function of major classes of proteins. The application of structural and dynamical principles to biological membranes and their function will also be discussed. Prerequisite: BIOL 807 and BIOL 808, a general biochemistry course, or permission of instructor. LEC.

BIOL 751. Plant Communities of North America. 3 Hours.
Physiognomic and floristic analysis of the vegetation, with emphasis on the Southwest; distribution of communities in relation to climate, substratum, and disturbance; recognition of dominant elements of vegetation through study of specimens and illustrative material. Prerequisite: BIOL 602. LEC.

BIOL 752. Cell Biology. 3 Hours.
A lecture course emphasizing biochemical, developmental, and molecular aspects of cell structure and function. Prerequisite: BIOL 807 and BIOL 808, or BIOL 416 or BIOL 536, or permission of instructor. LEC.

BIOL 753. Advanced Genetics. 3 Hours.
An advanced course in modern genetic analysis of eukaryotes. Course material will consist mainly of primary literature in the field of genetics. Topics covered include: genomic structure and genome projects; nature of mutations; mutant analysis; genetic recombination and mapping; analysis of gene function; genetic buffering; RNAi and epigenetics; and the genetics of model organisms. This course is meant for graduate students in the Molecular Biosciences and Genetics programs. Prerequisite: BIOL 807 and BIOL 808, or a course in genetics and a course in biochemistry, or permission of the instructor. LEC.

BIOL 754. Brain Diseases and Neurological Disorders. 3 Hours.
Major brain diseases and neurological disorders such as stroke, Alzheimer's Disease, Parkinson's Disease, Huntington's Disease, Multiple Sclerosis, Epilepsy, Schizophrenia, etc., will be discussed in terms of the etiology, molecular, and cellular basis of potential therapeutic
Interventions. Graduate students are required to present original research paper assigned by the instructor to the class in addition to the other assignments for all the students enrolled. Prerequisite: BIOL 150, or consent of instructor. LEC.

**BIOL 755. Mechanisms of Development. 3 Hours.**
Molecular aspects of differential gene function, signal transduction, and cell polarity in the regulation of morphogenesis. Prerequisite: BIOL 807 and BIOL 808 for graduate students; BIOL 417 or equivalent for undergraduate students; or permission of instructor. LEC.

**BIOL 756. Cell and Tissue Culture Laboratory. 3 Hours.**
An introduction to current laboratory methods of cell and tissue culture, intended to provide an understanding of and substantial experience in several aspects of animal cell growth, cell synchrony, cell nutrition, the production and selection of mutant cell lines, the production and use of heterokaryons and interspecific hybrids, cell transformation in vitro, the cultivation and characterization of differentiated cells in culture, enzyme induction, and cell karyotyping. LAB.

**BIOL 757. Carcinogenesis and Cancer Biology. 3 Hours.**
This course surveys the field of cancer research. The major goal is to introduce the breadth of cancer research while, at the same time, providing sufficient depth to allow the student to recognize problems in cancer and to design experiments which study cancer biology. Toward that end, the student should (at the conclusion of the course) be able to: define cancer, identify and discuss its causes; identify and discuss the genetic basis for cancer development and progression; discuss the theoretical basis for cancer therapy design and efficacy testing; discuss the biochemical, molecular and cellular events involved in the natural history of major human neoplasms. Prerequisite: Permission of instructor. LEC.

**BIOL 767. The Vegetation of the Earth. 3 Hours.**
A discussion of the world's vegetation in its natural condition and as affected by man. Included are aspects of its economic and cultural usefulness and the problem of its preservation. Prerequisite: BIOL 634. LEC.

**BIOL 768. Plant Molecular Biology. 3 Hours.**
Gene expression in chloroplasts, mitochondria, and plant nuclei, and regulatory interactions among these genomes. Special topics include the molecular biology of the photosynthetic apparatus, nitrogen fixation, stress and development, viruses and viroids, transposable genetic elements and gene evolution, and gene transfer and plant genetic engineering. Prerequisite: A course in biochemistry, cell or molecular biology, or permission of instructor. LEC.

**BIOL 770. Plant Biochemistry. 3 Hours.**
A detailed study of plant biochemistry with emphasis on metabolic and regulatory processes particularly characteristic or unique in plants. Prerequisite: BIOL 600 or equivalent. LEC.

**BIOL 772. Gene Expression. 3 Hours.**
A study of the structure and expression of genes in prokaryotes and eukaryotes. Emphasis on the mechanisms of DNA, RNA, and protein biosynthesis. This course meets concurrently with BIOL 672 and is open to graduate students seeking a more rigorous treatment of techniques in molecular biology that students receive in BIOL 672. Prerequisite: A course in biochemistry or consent of instructor. LEC.

**BIOL 775. Chemistry of the Nervous System. 3 Hours.**
A detailed study of the molecular aspects of nerve transmission will be covered with special emphasis on the uptake, storage, release, biosynthesis and metabolism of specific neurotransmitters. Drugs affecting these processes and current research on receptor isolation and receptor mechanisms will be discussed from a chemical viewpoint.

(同上CHEM 775, MDCM 775, NURO 775, PTX 775, and PHCH 775.) Prerequisite: BIOL 600 or equivalent or consent of instructor. LEC.

**BIOL 777. Integrative and Developmental Neurobiology. 3 Hours.**
Cellular processing of neural information both at the local level and in long distance integration. Local computing functions, and integration of these functions among the various areas to produce coherent movement and perceptions will be discussed. A description of forces guiding the development of the nervous system to form a coherent working system in both invertebrate and vertebrate animals will be presented, as will determinants of brain sexual dimorphism. Prerequisite: An upper level course in physiology or BIOL 520. LEC.

**BIOL 780. Fisheries. 2 Hours.**
Philosophy and practice of conservation as it applies to major world fisheries. Species principally utilized, factors affecting production, methods for appraisal and management of stocks. Historical and prospective roles of the fisheries in relation to human food supplies and recreational needs. Prerequisite: BIOL 412. LEC.

**BIOL 781. Fisheries, Laboratory. 2 Hours.**
Training in field and laboratory techniques for fishery research and management. Prerequisite: Concurrent or prior enrollment in BIOL 780. LAB.

**BIOL 782. Principles of Biogeography. 3 Hours.**
A synthesis of historical and ecological biogeography of plants and animals, treating vicariance, dispersal, and community patterns; lectures, readings, discussions. A course in systematics and a course in ecology are recommended. LEC.

**BIOL 783. Herpetology. 3 Hours. N.**
A study of amphibians and reptiles. This lecture course will explore the taxonomic diversity of amphibians and reptiles, and current areas of active research in herpetology. Topics will be considered within a phylogenetic framework, and include discussion on systematics, biogeography, tetrapod origins, skeletal systems, growth, circulatory system, locomotion, thermal and water regulation, hibernation, ecology, sexual behavior, parental care, and mimicry. Students taking the course at the 700 level will have additional work required of them. Prerequisite: BIOL 152 Principles of Organismal Biology, and/or BIOL 413 History and Diversity of Organisms. LEC.

**BIOL 784. Introduction to Museum Public Education. 3 Hours.**
Consideration of the goals of an institution's public education services, developing programs, identifying potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as AMS 797, GEOL 784, HIST 721, and MUSE 705.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

**BIOL 785. Museum Management. 3 Hours.**
Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as AMS 731, GEOL 783, HIST 728, and MUSE 701.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

**BIOL 786. Fundamentals of Tropical Biology. 1-8 Hours.**
The tropical environment and biota; ecologic relations, communities and evolution in the tropics. Primarily a field course, taught in Costa Rica; two sessions per year, February-March, July-August. FLD.
BIOL 787. Introduction to Museum Exhibits. 3 Hours.
This course will consider the role of exhibits as an integrated part of museum collection management, research, and public service. Lecture and discussion will focus on issues involved in planning and producing museum exhibits. Laboratory exercises will provide first hand experience with basic preparation techniques. Emphasis will be placed on the management of an exhibit program in both large and small museums in the major disciplines. (Same as AMS 730, GEOL 781, HIST 723, and MUSE 702.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 788. The Nature of Museums. 3 Hours.
The purpose of this course is to provide an overview of the kinds of museums, their various missions, and their characteristics and potentials as research, education, and public service institutions responsible for collections of natural and cultural objects. (Same as AMS 720, GEOL 782, HIST 720, and MUSE 702.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 789. Field Course in Entomology. 1-6 Hours.
Field experiences in various habitats, with an emphasis in ecology, systematics, behavior, and collection techniques. FLD.

BIOL 790. Paleontology of Lower Vertebrates. 3 Hours.
General account of the osteology, geological distribution, and evolution of the principal groups of fishes, amphibians, reptiles, and birds. Lectures and laboratory. (Same as GEOL 725.) LEC.

BIOL 791. Paleontology of Higher Vertebrates. 3 Hours.
Evolution of mammals, and anatomical modifications involved in the process as ascertained from the fossil record. Lectures and laboratory. (Same as GEOL 726.) LEC.

BIOL 792. Ichthyology. 4 Hours.
A study of fishes. Lecture topics include the structure and function of fishes; the adaptations of fishes to the aquatic environment; and a survey of major fish groups with emphasis on evolutionary relationships and biogeography. Laboratory topics include a survey of fishes using specimens, and the use of keys to identify fishes with emphasis on the Kansas fish fauna. A research paper using primary scientific literature is required. Prerequisite: Graduate standing or permission of the instructor. LEC.

BIOL 794. Mammalogy. 3 Hours.
A study of mammals, with emphasis on systematics, biogeography, and natural history. Lectures, laboratory, and field study. Prerequisite: BIOL 100 or BIOL 413. LEC.

BIOL 795. Biology of Amphibians. 3 Hours.
Evolutionary biology of amphibians with emphasis on systematics, morphology, development, reproductive strategies, and distribution; lectures and laboratory. Prerequisite: BIOL 664 or permission of instructor. LEC.

BIOL 796. Biology of Reptiles. 3 Hours.
Evolutionary biology of reptiles with emphasis on systematics, morphology, reproductive strategies, and distribution; lectures and laboratory. Prerequisite: BIOL 664 or permission of instructor. LEC.

BIOL 797. Field Course in Vertebrate Paleontology. 3-6 Hours.
Training in the techniques of collecting vertebrate fossils, description and interpretation of the stratigraphy of fossiliferous sediments, and interpretation of the adequacy and bias of samples. FLD.

BIOL 798. Principles and Practices of Museum Collection Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museum collections, their associated data, and their use in scholarly research; cataloging, storage, fumigation, automated information management and related topics will be presented for museums of art, history, natural history and anthropology. (Same as AMS 730, GEOL 785, HIST 725, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 799. Natural History Museum Apprenticeship. 1-6 Hours.
Provides directed, practical experience in collection care and management, public education, exhibits and administration with emphases to suit the particular requirements of each student. Full time for one semester or half time for two semesters. (Same as AMS 799, ANTH 799, GEOL 723, HIST 799, and MUSE 799.) FLD.

BIOL 801. Topics in: ____. 1-3 Hours.
Advanced courses on special topics in biology, given as need arises. Lectures, discussing readings, laboratory or field work. Students may select sections according to their special interests. LEC.

BIOL 802. The Art of Becoming a Professional Scientist. 3 Hours.
Discusses aspects of graduate education that are directed at the post PhD phases of a career, but that must be initiated early in the graduate student program of study. One 3-hour discussion per week. LEC.

BIOL 804. Scientific Integrity: Molecular Biosciences. 1 Hour.
This course introduces aspects and issues associated with being an ethical, responsible, and professional research scientist. Included topics are professional practices, regulations, and rules that define the responsible and ethical conduct of research. Graduate students will become familiar with and prepare to navigate through challenges that occur during a career in research science. The format of individual classes is expected to incorporate both instruction and discussion. Prerequisite: Admission to the graduate program in Molecular Biosciences, or consent of instructor. LEC.

BIOL 806. Major Patterns in Insect Evolution. 3 Hours.
Extensive reading and discussion of the primary literature on topics relating to major patterns in the evolutionary history of insects, including the fossil history of insects, the monophyly of arthropods, the origin of wings, the changing role of insects in ecological communities, the origins of social behavior, modes and mechanisms of speciation, and patterns of species diversity. Assigned readings require a solid background in evolutionary theory and insect biology, especially morphology, development, and classification. Prerequisite: Permission of instructor. LEC.

BIOL 807. Graduate Molecular Biosciences. 6 Hours.
An introduction to the advanced study of biochemistry, microbiology, genetics, cell and developmental biology, and neurobiology for all Molecular Biosciences graduate students. Topics can include macromolecular structure, metabolism, kinetics and thermodynamics, bioinformatics, prokaryotic and eukaryotic genetic mechanisms, cell structure and function, signal transduction, basic and pathogenic bacteriology, immunology, virology, membrane potentials, synaptic transmission, and sensory neurophysiology. Prerequisite: Admission to the graduate program in Molecular Biosciences, or consent of instructor. LEC.

BIOL 809. Graduate Molecular Biosciences for Medicinal Chemists. 4 Hours.
An introduction to the advanced study of biochemistry, microbiology, and neurobiology for graduate students in Medicinal Chemistry. Prerequisite: Admission to the graduate program in Medicinal Chemistry and consent of instructor. LEC.

BIOL 810. Seminar in Biochemistry. 1 Hour.
Presentation and discussion of specific areas of recent research in biochemistry. This course may be taken more than once. LEC.
BIOL 811. Advanced Molecular and Cellular Immunology. 2 Hours.
Covers recent advances in immunochemistry and immunobiology.
Topics include structure and function of antibodies, hybridoma systems,
idiotypes, induction and regulation of the immune response through cell
interactions and cytokine action, and the role of immune activity in disease
states such as hypersensitivity, autoreactivity, and cancer. Prerequisite:
BIOL 807 and BIOL 808, or an introductory course in immunology, or
consent of instructor. LEC.

BIOL 812. Mechanisms of Host-Parasite Relationships. 2 Hours.
Emphasis is on virulence factors of microorganisms and the host
response to infection. Topics will include pathogenesis of intracellular
and extracellular parasites, bacterial adhesins, and toxins, and the role
of innate and acquired immunity in host resistance and the response
to infection. Prerequisite: BIOL 807 and BIOL 808, or a course in
biochemistry, or consent of instructor. LEC.

BIOL 813. Advanced Bacterial Physiology. 2 Hours.
The intermediary reactions catalyzed by the bacterial cell during energy-
requiring processes. Thermodynamic considerations of these processes
are discussed. Knowledge of calculus is recommended. Prerequisite:
BIOL 807 and BIOL 808, or a course in microbiology and a course in
biochemistry, or consent of instructor. LEC.

BIOL 814. Advanced Molecular Virology. 2 Hours.
The course concentrates on evaluation of current literature concerning
all aspects of molecular biology, biochemical characterization, and
pathogenic mechanisms involved in host-virus interactions. Students
will be expected to present articles and participate in discussions.
Prerequisite: BIOL 807 and BIOL 808, or a course in microbial genetics
and a course in virology, or consent of instructor. LEC.

BIOL 815. Advanced Molecular Genetics. 2 Hours.
A literature-based course that covers recent advances in microbial
molecular genetics. Topics include transcription, translation, mutagenesis
and repair, genetic exchange mechanisms, and regulation of gene
expression. Prerequisite: BIOL 807 and BIOL 808, or a course in microbial
genetics, or consent of instructor. LEC.

BIOL 816. Careers in Chemical Biology. 1 Hour.
Advanced course examining current research topics in chemical biology.
An emphasis will be placed on career options open to PhD scientists
in Chemical Biology, and preparation for the different career paths.
Extensive student/faculty interaction is emphasized utilizing lectures,
class discussion of assigned readings of research reports, and oral
presentations. This course will be graded satisfactory/unsatisfactory.
(Also as CHEM 816, MDCM 816 and PHCH 816.) Prerequisite:
Permission of instructor. SEM.

BIOL 818. Techniques in Molecular Biosciences. 2 Hours.
This course provides an introduction to common techniques used for
research strategies in molecular biosciences. The course will cover
common techniques in cell biology, biochemistry, microbiology, and
neurobiology. Information will be presented in lectures and through
practical demonstrations. This course is primarily intended for first
year graduate students in the Department of Molecular Biosciences.
Prerequisite: Enrollment in the Molecular Biosciences Graduate Program
or consent of instructor. LAB.

BIOL 840. Scientific Communication. 2 Hours. N.
Principles of English communication skills for the professional scientist.
The course explores the form, function, and practice (including ethics) of
scientific communication, emphasizing elements of writing and speech
that are important to clarity and precision. The course covers written and
verbal communication of primary research results as well as composing
correspondence, a curriculum vitae, reviews, etc. Prerequisite: Graduate
standing. LEC.

BIOL 841. Biometry I. 5 Hours.
The application of statistical methods to data from various fields of
biological research. Special emphasis is placed on practical computational
procedures. Prerequisite: College algebra. LEC.

BIOL 842. Biometry II. 3 Hours.
This course is primarily devoted to special advanced topics in analysis
of variance, analysis of covariance and regression analysis. Polynomial
regression and multiple linear regression will be presented as will the
general linear model. Elementary matrix algebra will be developed as
needed. Prerequisite: BIOL 841. LEC.

BIOL 847. Phylogenetics. 3 Hours.
An introduction to the theory and practice of phylogenetic systematics.
Includes principles of character analysis including determination of
homology and determination of character polarity, testing alternate
phylogenetic trees, and reconstructing trees using computer techniques.
Also includes principles of constructing phylogenetic classifications
and the nature of taxa in the phylogenetic system. Other topics, such
as the nature of species and principles of biogeography are included.
Prerequisite: Twenty hours natural history. LEC.

BIOL 848. Phylogenetic Methods. 4 Hours.
A survey of methods for inferring phylogenetic trees from character data
and using phylogenies to address evolutionary questions. Lectures will
present the relevant theory and algorithmic description of methods.
Computer lab will familiarize students with software that implements the
analyses discussed in lecture. Intended for graduate students specializing
in systematics. Prerequisite: BIOL 845 and BIOL 841 or consent of
instructor. LEC.

BIOL 860. Principles and Practice of Chemical Biology. 3 Hours.
A survey of topics investigated by chemical biology methods including:
transcription and translation, cell signaling, genetic and genomics,
biochemical pathways, macromolecular structure, and the biosynthesis of
peptides, carbohydrates, natural products, and nucleic acids. Concepts
of thermodynamics and kinetics, bioconjugations and bioorthogonal
chemistry will also be presented. (Same as CHEM 860, MDCM 860 and
PHCH 860.) Prerequisite: Permission of instructor. LEC.

BIOL 872. Gene Expression II. 3 Hours.
Second semester of a two-semester lecture course on gene expression.
Emphasis on control of gene expression at the transcriptional and post-
transcriptional levels. Prerequisite: BIOL 772 or consent of instructor.
LEC.

BIOL 888. Topics in Evolutionary Morphology: ____. 2 Hours.
Presentation and discussion by graduate students and faculty of selected
topics centering on observed changes in structure and function of
organisms from a phylogenetic point of view. Presentation will include
results of original research when possible and appropriate, and otherwise,
will be based on syntheses of recent literature. RSH.

BIOL 890. Advanced Study in Microbiology. 1-10 Hours.
Original investigation by students at the master's degree level. Graded
on a satisfactory/unsatisfactory basis. Prerequisite: Ten or more hours of
microbiology and consent of department. RSH.

BIOL 895. Human Genetics. 3 Hours.
A lecture course providing balanced coverage of Mendelian and molecular
genetics of humans; includes discussions and presentations on current
issues in human and medical genetics. Prerequisite: A course in genetics.
LEC.
BIOL 899. Master's Thesis. 1-10 Hours.
Research which is to be incorporated into an M.A. thesis. Not more than ten hours may be earned. Graded on a satisfactory/unsatisfactory basis. THE.

BIOL 901. Graduate Seminar in Biochemistry and Biophysics. 1 Hour.
Advanced course examining current research topics in biochemistry and biophysics. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Prerequisite: Enrollment in graduate school, and departmental admission. LEC.

BIOL 902. Graduate Seminar in Molecular, Cellular, and Developmental Biology. 1 Hour.
Advanced course examining current research topics in molecular, cellular, and developmental biology. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Prerequisite: Enrollment in graduate school, and departmental permission. LEC.

BIOL 903. Graduate Seminar in Neurobiology. 1 Hour.
Advanced course examining current research topics in neurobiology. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Prerequisite: Enrollment in graduate school, and departmental permission. SEM.

BIOL 904. Graduate Seminar in Microbiology. 1 Hour.
Advanced course examining current research topics in microbiology. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Enrollment in graduate school, and departmental permission. LEC.

BIOL 905. Advanced Molecular Genetics. 1-3 Hours.
A review of current literature in molecular genetics. RSH.

BIOL 906. Advanced Genetics. 1-3 Hours.
May be repeated for credit up to six hours. Review of current literature and genetic theory of selected topics such as population, molecular, quantitative, and physiological genetics. RSH.

BIOL 911. Research Topics in Plant Physiology and Biochemistry. 1-6 Hours.
Directed research on selected topics. Prerequisite: BIOL 770 or equivalent. RSH.

BIOL 918. Modern Biochemical and Biophysical Methods. 4 Hours.
This course emphasizes the use of techniques for solving problems of structure and function of biological macromolecules. Students will complete several modules that consist of lectures relating to theory and practical aspects of each methodological approach, and apply these techniques to solving a specific problem. Students will submit a paper describing the resulting data and conclusions. Prerequisite: BIOL 807, BIOL 808, and BIOL 818, or permission of instructor. LEC.

BIOL 925. Research Grant Proposal Preparation. 3 Hours.
This course introduces the basics of preparing a successful scientific grant application. Topics to be covered include how to develop a novel, fundable project, scientific writing and grantsmanship, and what criteria reviewers consider in evaluating grants. The course will be a mix of instruction and class discussion. Prerequisite: Admission to the graduate program in Molecular Biosciences, or consent of instructor. LEC.

BIOL 930. Ultrastructure and Cellular Mechanisms. 3 Hours.
Two lectures and one seminar-recitation. A detailed consideration of electron microscopic analyses of cell structure as related to cell function. Prerequisite: BIOL 416. LEC.

BIOL 943. Multivariate Data Analysis. 3 Hours.
Matrix formulation of multivariate models and data. Specific methods covered include Principal Components Analysis, Factor Analysis, Multiple Group Discriminant Analysis and Canonical Analysis, and Canonical Correlation Analysis. Prerequisite: BIOL 842 or knowledge of elementary matrix algebra. LEC.

BIOL 944. Topics in Quantitative Ecology: _____ 1-3 Hours.
Presentation and discussion by instructor and students of mathematical and statistical concepts in ecology. Topics are selected from texts or sets of readings. LEC.

BIOL 950. Evolutionary Mechanisms. 3 Hours.
Reading and discussions of evolutionary mechanisms from the genetic, ecologic, and systematic viewpoints. Prerequisite: BIOL 412. LEC.

BIOL 952. Introduction to Molecular Modeling. 3 Hours.
Introduction to theory and practice of contemporary molecular modeling, including molecular mechanics, molecular dynamics, computer graphics, data analysis, use of structure and sequence databases, docking, and homology modeling. Weekly computer laboratory section aimed at allowing participants to pursue independent research projects that incorporate modeling aspects. Lectures, laboratory manuals, program descriptions, and technical notes are presented on course web page. (Same as MDCM 952.) Prerequisite: Graduate standing or consent of instructor. LEC.

BIOL 968. Seminar in Vegetation Geography. 2-3 Hours.
(Same as GEOG 937.) LEC.

BIOL 985. Advanced Study. 1-10 Hours.
Individual investigations; laboratory, field or museum; or reading assignments in specialized topics not ordinarily treated in other courses. Graded on a satisfactory/unsatisfactory basis. RSH.

BIOL 999. Doctoral Dissertation. 1-12 Hours.
Original research that is to be incorporated into a Ph.D. dissertation. Graded on a satisfactory/unsatisfactory basis. RSH.

BTEC 300. Introduction to Biotechnology. 3 Hours. N.
Review of techniques used in food, agricultural, pharmaceutical, industrial, and environmental biotechnology. Role of regulatory agencies during the discovery, development, and manufacture of new medical devices, biotechnology, biomedical, and pharmaceutical products. Guest presentations in biotechnology. Prerequisite: BTEC 416. LEC.

BTEC 330. Biotechnology Regulation and Documentation Processes. 3 Hours. N.
Current good manufacturing practices (GMP) as they apply in the biotechnology workplace. History, rationale, purpose, and GMP requirements applicable to the manufacturing, packaging, labeling, testing, and control of pharmaceutical products, and consequences of inaction. Prerequisite: BTEC 300. LEC.

BTEC 340. Biotechnology Research Methods and Applications. 3 Hours. N.
Introduction to fermentation and protein chemistry. Theory behind laboratory techniques and overview of industrial scale expression systems. Bacterial cell culture techniques, principles of fermenter operation and purification, documentation procedures, important tasks for clean room operations, including sanitation, sterilization, cleaning procedures, calibration, and environmental monitoring. Prerequisite: BTEC 300; BIOL 600. LEC.
BTEC 301. Principles of Bioprocessing Laboratory I. 1 Hour. N.
Laboratory sessions involve use of microbial expression vectors, fermentation systems, and large-scale purification of recombinant protein. Includes bacterial cell culture techniques, principles of bioreactor/fermentation operations and purification techniques, and calibration. Primary goal of this course is to provide students with an advanced background in bacterial upstream and downstream biotechnology. Prerequisite: BTEC 300; BTEC 340 or concurrent enrollment in BTEC 340. LEC.

BTEC 340. Principles of Bioprocessing Laboratory I. 1 Hour. N.
Mammalian cell culture techniques, principles of bioreactor operations and purification techniques, and calibration. The primary goal of this course is to provide students with an advanced background in mammalian upstream and downstream biotechnology. Prerequisite: BTEC 341; BTEC 440 or concurrent enrollment in BTEC 440. LEC.

BTEC 405. Microbial Genetics Laboratory. 4 Hours. N.
Research projects center on using molecular genetics to examine the biology of the bacterium Pseudomonas aeruginosa, an opportunistic pathogen often found in the lungs of cystic fibrosis patients. Students engage in independent projects to probe various aspects of P. aeruginosa physiology such as antibiotic resistance, phase variation, toxin production, secondary metabolite production, twitching motility, swarming behaviors, and more. Projects aim to discover the molecular basis for these processes using both classical and new, cutting-edge techniques. These include plasmid manipulation, genetic complementation, mutagenesis, PCR, DNA sequencing, enzyme assays, and gene expression studies. Prerequisite: BIOL 350; BIOL 402. LAB.

BTEC 424. Independent Study in Biotechnology. 1-3 Hours. N.
Independent project at a related bioscience industry partner or faculty in selected topics of current translational research interest. May be undertaken only with the consent of the major advisor who will guide the research after determining objectives with the interested industry partner or faculty. Prerequisite: Consent of instructor. IND.

BTEC 440. Biotechnology Research Methods and Applications II. 3 Hours. N.
Theory and practice behind laboratory techniques and overview of industrial scale expression systems of insect or mammalian protein chemistry. Cell culture techniques, principles of bioreactor operation and purification, documentation procedures, important tasks for clean room operations, including sanitation, sterilization, cleaning procedures, calibration, and environmental monitoring are evaluated. Prerequisite: BTEC 340; BTEC 341. LEC.

BTEC 441. Principles of Bioprocessing Laboratory II. 1 Hour. N.
Mammalian cell culture techniques, principles of bioreactor operations and purification techniques, and calibration. The primary goal of this course is to provide students with an advanced background in mammalian upstream and downstream biotechnology. Prerequisite: BTEC 341; BTEC 440 or concurrent enrollment in BTEC 440. LEC.

BTEC 450. Applied Bioinformatics. 3 Hours. N.
Overview of the fields of bioinformatics and genomics. Topics, tools, issues and current trends in these and related fields are discussed. Principles and practical application of bioinformatics tools in molecular biology and genetics are evaluated. The haploid human genome occupies a total of just over 3 billion DNA base pairs. This information is not contained in books, but stored in electronic databases. Computational biology utilizes infer function by comparative analysis. This course is designed for life scientists from all fields to introduce them to the power of bioinformatics and enable them to access and utilize biological information in databases for their own research. Prerequisite: BTEC 300; BIOL 570 or MATH 365 or PSYC 210. LEC.

BTEC 460. Introduction to Quality Control/Quality Assurance in Biotechnology. 3 Hours. N.
Quality control techniques, assurance issues, and management methods. Quality in design and planning, in the constructed project, and in production of goods and services. Prerequisite: BTEC 330. LEC.

BTEC 475. Bioseparations Laboratory. 2 Hours. N.
Develop novel and effective strategies for extraction and purification of recombinant and native biomolecules by understanding constraints posed by the biological system and the products. Research projects are geared toward developing cost-effective processes for recovery of industrial and biopharmaceutical products derived from a variety of native and/or transgenic sources. Prerequisite: BTEC 405; BTEC 441. LAB.

BTEC 494. Selected Topics in Biotechnology. 1 Hour. N.
Course work varies with the topic of the seminar. The preparation and presentation of oral reports on selected topics from recent translational research literature. Students may choose one interest group each semester, but may enroll in a given interest group only once. May be repeated for credit when topics vary. Prerequisite: BTEC 300 and approval of instructor. LEC.

BTEC 501. Ethical Issues in Biotechnology. 1 Hour. N.
Student investigations and discussions of current controversial issues in biotechnology. This course emphasizes thinking about new technologies in a rational and thoughtful way. Prerequisite: BTEC 300. LEC.

BTEC 541. Gene Expression Analysis: Microarrays. 2 Hours. N.
This course reviews current theory, techniques, instrumentation, troubleshooting, analysis tools, and advanced protocols for microarray analysis. Students have the opportunity to utilize skills learned during lecture in a laboratory environment. At the conclusion of this course, students understand microarray experimental design, its tools, and analysis of generated data. Prerequisites: BTEC 300. LAB.

BTEC 542. Protein Expression in Insect Cells. 2 Hours. N.
Introduction to the insect cells expression system, and its advantages and disadvantages. Introduction to expression of recombinant proteins with baculovirus. Outline of antibody and antibody fragments as well as other complex proteins. Basic techniques used for growth and maintenance of insect cell cultures. The lab portion of the course provides students with practical experience in protein expression techniques in the insect cells expression system. Prerequisite: BTEC 300. LAB.

BTEC 543. Genomics and Proteomics. 2 Hours. N.
Overview and history of RNA interference technology. Principles, mechanism, and applications of RNA interference in model organisms. Laboratory sessions include RNA interference-mediated silencing of genes in plants, C. elegans, and mammalian cell culture. Prerequisite: BTEC 300. LAB.

BTEC 545. RNA Interference and Model Organisms. 2 Hours. N.
Introduction and history of RNA interference technology. Principles, mechanism, and applications of RNA interference in model organisms. Laboratory sessions include RNA interference-mediated silencing of genes in plants, C. elegans, and mammalian cell culture. Prerequisite: BTEC 300. LAB.

BTEC 547. Bioanalytical Lab. 2 Hours. N.
Analytical methods used for testing biotherapeutics are examined. Emphasis is placed on assessing protein concentration, purity, identity and activity. The importance of sample processing, throughput and level of validation are explored as samples from upstream processing, downstream processing and final bulk are interrogated. Students also learn key concepts used to validate the performance of analytical methods. Prerequisite: BTEC 300. LAB.

BTEC 548. Protein Expression in Insect Cells. 2 Hours. N.
Introduction to the insect cells expression system, and its advantages and disadvantages. Introduction to expression of recombinant proteins with baculovirus. Outline of antibody and antibody fragments as well as other complex proteins. Basic techniques used for growth and maintenance of insect cell cultures. The lab portion of the course provides students with practical experience in protein expression techniques in the insect cells expression system. Prerequisite: BTEC 300. LAB.

BTEC 549. Biotechnology Capstone Experience. 3 Hours. N.
Supervised internship at a biotech company; or an independent thesis; or honors thesis with Honors Program. Prerequisite: BTEC 441 and approval of instructor. FLD.

Center for East Asian Studies Courses
CEAS 200. Topics in East Asian Studies: ______. 1-3 Hours. U.
An introductory interdisciplinary topics course addressing contemporary issues related to one or more East Asian countries. Format and content will vary. Does not count toward the EALC major or minor requirements unless otherwise indicated by EALC in the Schedule of Classes. LEC.
CEAS 500. Seminar in East Asian Studies: ___. 1-3 Hours. U.
An interdisciplinary seminar addressing contemporary issues related to one or more East Asian countries. Prerequisites to be determined by instructor(s) on the basis of course content. Does not count toward the EALC major or minor requirements unless otherwise indicated by EALC in the Schedule of Classes. LEC.

CEAS 610. Minorities in Japan. 3 Hours. S.
This course offers a sociological and historical exploration of Japan’s minorities: the Ainu, Okinawans, Burakumin, and Zainichi Koreans who are often excluded from narratives of Japanese history. Exclusion of the minority issue not only overlooks the existence of minority populations in Japan but also contributes to misconceptions of Japan as a homogeneous country. The course objective is to challenge the conventional master narrative of racial and cultural homogeneity. We shed light on Japan’s minorities, their historical experiences, current struggles, and future challenges. Prerequisite: An introductory East Asian Studies course or consent of instructor. LEC.

CEAS 700. Contemporary East Asia. 3 Hours.
This graduate seminar explores rapidly changing societies in contemporary East Asia, particularly China, Japan, and Korea. The course provides a critical overview of East Asia and its diversity and complexity using cross-cultural perspectives and interdisciplinary social science approaches, and situates East Asian societies in the context of globalization. LEC.

CEAS 802. Research Seminar. 3 Hours.
Students will work with the instructor and, when appropriate, an additional faculty advisor to design, research and write up a research paper on an East Asian topic of their choosing. Students enrolling in this course are expected to have taken a social science research methods class prior to taking this course and to apply those methods to the research process. A core course for the MA in Contemporary East Asian Studies. Prerequisite: Permission of the instructor. SEM.

Chemistry Courses

CHEM 100. Chemistry in Context: ___. 3 Hours. NP GE3N / N.
An introduction to chemistry that focuses on basic chemical principles, designed for students with no previous background in chemistry. This course promotes the development of chemical literacy within a context that encourages an appreciation for the role and significance of chemistry in the modern world. Not intended for students who need to fulfill a specific chemistry requirement as part of their degree program. LEC.

CHEM 110. Introductory Chemistry. 5 Hours. NP GE3N / N.
This integrated lecture and laboratory course provides an introduction to basic concepts related to general, organic, and biological chemistry. Suitable for students seeking an introductory course and for students who are majoring in health and allied health fields. Students whose majors require more than one semester of chemistry should enroll in CHEM 130, CHEM 170, or CHEM 190. CHEM 110 and CHEM 150 cannot both be taken for credit. LEC.

CHEM 130. General Chemistry I. 5 Hours. NP GE12/GE3N / N.
This course seeks to develop a working knowledge of the conceptual foundation and the quantitative chemical relationships on which subsequent chemistry courses are built. Atomic structure, chemical bonding, reaction stoichiometry, thermochemistry, and periodic trends are emphasized in this integrated lecture and laboratory course. Students pursuing or considering a major in one of the chemical sciences should strongly consider taking CHEM 170 or CHEM 190. Students with credit in CHEM 110 will have two hours added on to their total number of hours required for graduation. Prerequisite: Must be eligible for MATH 115. LEC.

CHEM 135. General Chemistry II. 5 Hours. GE12/GE3N / N.
This course, which is a continuation of CHEM 130, focuses on chemical kinetics, chemical equilibrium, acid-base chemistry, and thermodynamics. Additional topics, such as environmental chemistry, electrochemistry, coordination chemistry, nuclear chemistry, organic chemistry, and/or polymers, may also be included in this integrated lecture and laboratory course. Students pursuing or considering a major in one of the chemical sciences should strongly consider taking CHEM 175 or CHEM 195. Prerequisite: CHEM 130, CHEM 170 or CHEM 190. LEC.

CHEM 150. Chemistry for Engineers. 5 Hours. GE12/GE3N / N.
This one semester course is designed for students in the School of Engineering who are not required to take additional chemistry courses at the college level. Topics covered in this integrated lecture and laboratory course include quantum theory, atomic structure, chemical bonding, solids, liquids, gases, thermodynamics, equilibrium, acids and bases, kinetics, polymer chemistry, and materials science. The application of these concepts to engineering problems and practices is emphasized. Prerequisite: Must have completed a course in high school chemistry and be eligible for MATH 121 or MATH 125 (or have Departmental consent). Students not admitted to the School of Engineering must receive permission from instructor. CHEM 110 and CHEM 150 cannot both be taken for credit. LEC.

CHEM 170. Chemistry for the Chemical Sciences I. 5 Hours. NP GE12/GE3N / N.
The first course in a two-course sequence focused on the principles and applications of modern chemistry. This integrated lecture and laboratory course is designed for students pursuing or considering a major in one of the chemical sciences (such as chemistry, biochemistry, chemical engineering or petroleum engineering). The CHEM 170/CHEM 175 course sequence covers the same general topics as CHEM 130/CHEM 135, but with an increased emphasis on modern applications of chemistry. Students with credit in CHEM 110 will have two hours added on to their total number of hours required for graduation. Prerequisite: Eligibility for MATH 115. LEC.

CHEM 175. Chemistry for the Chemical Sciences II. 5 Hours. N.
An integrated lecture and laboratory course which is a continuation of CHEM 170. Prerequisite: CHEM 130, CHEM 170 or CHEM 190. LEC.

CHEM 177. First Year Seminar: ___. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Chemistry. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

CHEM 180. Seminar I. 0.5 Hours. U.
Special topics for chemistry majors such as using the chemical literature, educational and professional perspectives, scientific ethics, and undergraduate research opportunities. It is recommended that students take this half-semester course in their freshman or sophomore year. Prerequisite: A declared major in chemistry or consent of instructor. LEC.

CHEM 190. Foundations of Chemistry I, Honors. 5 Hours. NP GE12/GE3N / N.
This integrated lecture and laboratory course, which is designed for qualified and motivated students having a strong interest in chemistry, provides a more thorough treatment of the concepts and topics covered in CHEM 130 and CHEM 170. It is anticipated that students in CHEM 190 plan to take more than one year of chemistry at the college level. Students with credit in CHEM 110 will have two hours added on to their total number of hours required for graduation. Prerequisite: high-school chemistry and calculus; at least one of the following: (a) acceptance into the KU Honors Program, (b) an AP exam score in chemistry of 3 or
CHEM 195. Foundations of Chemistry II, Honors. 5 Hours. GE12/GE3N / N.
A course designed for qualified and motivated students with strong interest in chemistry to provide a more thorough treatment of the concepts and topics of advanced general chemistry. It is anticipated that the students in CHEM 195 have completed CHEM 190 or excelled in CHEM 130 or CHEM 170. Prerequisite: Membership in the University Honors Program, CHEM 130, CHEM 170 or CHEM 190, or consent of the department. LEC.

CHEM 201. Laboratory Safety in the Chemical Sciences. 1 Hour. U.
A course for undergraduate students focusing on chemical safety in modern laboratories. The course will feature practical instruction in lab safety, an introduction to safety resources, and group discussions centered around case studies. Required for all B.S. majors, and for all B.A. majors participating in undergraduate research. Students with credit in CHEM 201 may not take CHEM 701 for credit. Prerequisite: CHEM 135, CHEM 175, or CHEM 195. LEC.

CHEM 309. History of Chemistry. 3 Hours. H.
Birth of modern chemical science from roots in Greek natural philosophy, alchemy, Renaissance medicine and technology. The Chemical Revolution of Lavoisier and Dalton. Maturity of chemistry in the 19th and 20th centuries, along with an examination of growth of chemical institutions and the rise of chemical industry. Emphasis on developments from the 18th century to the present. (Same as HIST 309.) LEC.

CHEM 310. Fundamentals of Organic Chemistry. 3 Hours. GE3N / N.
A study of the structures and reactions of important classes of organic compounds. Along with the organic laboratory, CHEM 331, this course will fulfill the needs of students requiring a single semester of organic chemistry. Students requiring more than one semester of organic chemistry should enroll in CHEM 330. Prerequisite: CHEM 135, CHEM 175 or CHEM 195. LEC.

CHEM 330. Organic Chemistry I. 3 Hours. GE3N / N.
A study of the structure and reactivity of selected classes of organic compounds. CHEM 330 is the first course of a two-semester sequence. Students who require only one semester of organic chemistry should enroll in CHEM 310. Students with credit in CHEM 310 will have two hours added on to their total number of hours required for graduation. Prerequisite: CHEM 135, CHEM 175 or CHEM 195. LEC.

CHEM 331. Organic Chemistry I Laboratory. 2 Hours. U.
Emphasis on basic techniques for the preparation, separation, and purification of organic compounds. Required for a major in chemistry and by those departments and programs specifying a complete undergraduate organic chemistry course. Prerequisite or corequisite: CHEM 310 or CHEM 330 or CHEM 380. LAB.

CHEM 335. Organic Chemistry II. 3 Hours. N.
A continuation of CHEM 330, intended for students who want further training in organic chemistry. Prerequisite: CHEM 330 or CHEM 380. LEC.

CHEM 336. Organic Chemistry II Laboratory. 2 Hours. U.
More advanced organic laboratory techniques with emphasis on modern spectroscopic methods for determining the structure and purity of organic compounds. Prerequisite: CHEM 331. Prerequisite or corequisite: CHEM 335 or CHEM 385. LAB.

CHEM 380. Organic Chemistry I, Honors. 3 Hours. GE3N / N.
This is the first half of a two-semester sequence in organic chemistry for students with strong records in previous chemistry courses and who are planning or considering a major in a chemistry-related field. The content is similar to that of CHEM 330 but with coverage in greater depth and more emphasis on developing problem-solving skills. Students requiring only one semester of organic chemistry should not enroll in this course but take CHEM 310. Students with credit in CHEM 310 who take and complete CHEM 380 will have two hours added to their total number of credit hours required for graduation. Prerequisite: CHEM 135, CHEM 175 or CHEM 195 and membership in the University Honors Program or consent of instructor. LEC.

CHEM 385. Organic Chemistry II, Honors. 3 Hours. N.
This is the second course in a two-semester sequence in organic chemistry for students with strong records in previous chemistry courses and who are planning or considering a major in chemistry or in a chemistry-related field. The content is similar to that of CHEM 335 but with coverage in greater depth and more emphasis on developing problem-solving skills. Prerequisite: CHEM 330 or CHEM 380 and membership in the University Honors Program, or consent of instructor. LEC.

CHEM 390. Topics in Chemistry, Honors: ______. 1-5 Hours. N.
A course on special topics in chemistry, given as the need arises. Course content applies and expands upon general chemistry concepts, such as chemical thermodynamics, kinetics, and bonding. In this course, students gain knowledge in a topic of contemporary interest in chemistry, are challenged to examine the experimental and theoretical basis of this knowledge, and consider the broader impacts of this knowledge outside the discipline. Course may be repeated for different topics. Prerequisite: CHEM 135, CHEM 175 or CHEM 195 and membership in the University Honors Program; or permission of instructor. Each section may have additional prerequisites to be determined by the instructor. LEC.

CHEM 450. Directed Readings/Laboratory in Chemistry. 1-3 Hours. N.
Individual and supervised study or laboratory work on special topics or problems in chemistry. Prerequisite: Ten hours of chemistry and a minimum overall grade-point average of 2.0 or consent of department. IND.

CHEM 510. Biological Physical Chemistry. 3 Hours. N.
A one semester course, designed particularly for biology, biochemistry, and premedical students, which surveys the fundamentals of physical chemistry. The basic principles of thermodynamics, chemical kinetics, quantum chemistry, and spectroscopy will be introduced, and their application to aqueous solutions and biochemical systems will be emphasized. Prerequisite: One semester of organic chemistry, two semesters of calculus, and two semesters of physics. LEC.

CHEM 511. Biological Physical Chemistry Laboratory. 2 Hours. AE61 / U.
A course particularly for biology, biochemistry, and premedical students. Experiments in physical chemistry illustrating the fundamental principles of quantum mechanics, spectroscopy, thermodynamics, and kinetics as applied to chemical systems. Prerequisite: CHEM 510. LAB.

CHEM 530. Physical Chemistry I. 3 Hours. N.
An introduction to the basic principles of quantum mechanics, atomic and molecular structure, molecular rotations and vibrations, group theory, spectroscopy, and statistical mechanics. Prerequisite: CHEM 135, CHEM 175 or CHEM 195; PHSX 212; MATH 127 and MATH 220 or MATH 320; and completion of, or concurrent enrollment in MATH 290 or consent of instructor. LEC.

CHEM 531. Physical Chemistry I Laboratory. 2 Hours. U.
Experiments in physical chemistry, with emphasis on the fundamental principles of quantum mechanics and spectroscopy as applied to chemical systems. Prerequisite: CHEM 530. LAB.
CHEM 535. Physical Chemistry II. 4 Hours. N.
Emphasizes the thermodynamics of molecular systems with application to the structure and properties of gases, liquids, solids, materials, statistical thermodynamics, chemical kinetics, and reaction dynamics. Prerequisite: CHEM 530 and MATH 290 or consent of instructor. LEC.

CHEM 536. Physical Chemistry II Laboratory. 2 Hours. U.
Experiments in physical chemistry, with emphasis on the fundamental principles of chemical thermodynamics and kinetics. Prerequisite: CHEM 535 or consent of instructor. LEC.

CHEM 598. Research Methods. 3 Hours. N.
An introduction for pre-service teachers to the tools used by scientists to solve scientific problems. Topics include design of experiments and interpretation of their results, use of statistics, mathematical modeling, laboratory safety, ethical treatment of human subjects, writing scientific papers, giving oral presentations, and obtaining data from the scientific literature. Open only to students in the UKanTeach program. LEC.

CHEM 620. Analytical Chemistry. 3 Hours. N.
Principles of analytical chemistry with emphasis on the fundamental reactions used for chemical analysis. Topics include chemical equilibria in acid/base, complexation, separations, and redox systems, data analysis, potentiometry and spectrophotometry. Prerequisite: One semester of organic chemistry and organic chemistry laboratory, CHEM 535 or CHEM 510 (or concurrent enrollment in CHEM 510), or permission of instructor. Corequisite: CHEM 621. LEC.

CHEM 621. Analytical Chemistry Laboratory. 2 Hours. U.
Experiments illustrate fundamental principles of chemical analysis methods. The course serves as an introduction to advanced instrumental methods of analysis. Prerequisite: One semester of organic chemistry and organic chemistry laboratory, CHEM 535 or CHEM 510 (or concurrent enrollment in CHEM 510), or permission of instructor. Corequisite: CHEM 620. LAB.

CHEM 635. Instrumental Methods of Analysis. 2 Hours. U.
Theory and application of instrumental methods to modern analytical problems. Topics covered include atomic and molecular spectroscopy, electrochemistry, mass spectrometry, and separations. Prerequisite: CHEM 620 and CHEM 621 and one semester of physical chemistry laboratory, or permission of instructor. Corequisite: CHEM 636. LEC.

CHEM 636. Instrumental Methods of Analysis Laboratory. 2 Hours. AE61 / U.
Theory and application of instrumental methods to modern analysis problems. Experiments covered in this capstone laboratory course include atomic and molecular spectroscopy, electrochemistry, and separation methods. Prerequisite: CHEM 620 and CHEM 621, and one semester of physical chemistry laboratory, or permission of instructor. Corequisite: CHEM 635. LAB.

CHEM 660. Systematic Inorganic Chemistry. 3 Hours. N.
A systematic study of the elements and their compounds, emphasizing the relationship between properties of substances and their atomic and molecular structures and the positions of the elements in the periodic systems. Prerequisite: CHEM 510 or CHEM 530. LEC.

CHEM 661. Advanced Inorganic Laboratory. 2 Hours. U.
Experiments concerning the synthesis and characterization of inorganic compounds. Prerequisite: CHEM 660 or concurrent enrollment in CHEM 660. LAB.

CHEM 680. Topics in Chemistry. 1-5 Hours. N.
Courses on special topics in chemistry, given as the need arises. Course may be repeated for different topics. Prerequisite: 20 hours of Chemistry. Each section may have additional prerequisites to be determined by the instructor. LEC.

CHEM 695. Seminar II. 0.5 Hours. U.
Special topics and presentations by students and faculty in areas of current interest such as recent advancements in chemistry, professional development, societal issues facing chemists, and reports of ongoing research. This half-semester course is recommended for seniors. Prerequisite: CHEM 180. LEC.

CHEM 698. Undergraduate Research Problems. 1-6 Hours. AE61 / N.
May be repeated to accumulate a maximum of 10 credit hours. An undergraduate research course, in any of the fields of chemistry, consisting of experimental or theoretical work, or the preparation of an extensive paper based on laboratory investigation of a selected topic. A final report must be submitted to the instructor at the end of the semester. Prerequisite: CHEM 201, or CHEM 201 concurrently, or documentation of appropriate laboratory safety training. IND.

CHEM 699. Undergraduate Honors Research. 2-6 Hours. AE61 / N.
To be taken two semesters for a total of no more than 8 hours. An undergraduate research course, in any of the fields of chemistry. At the completion of the research, a written thesis, and an oral presentation will be required. Open to students in the Chemistry Honors Program. Prerequisite: CHEM 201, or CHEM 201 concurrently, or documentation of appropriate laboratory safety training. IND.

CHEM 700. Responsible Scholarship in the Chemical Sciences. 1 Hour.
A course for beginning graduate students with particular emphasis on scholarship issues relevant to the chemical sciences. Topics will include scientific ethics, codes of conduct, record keeping, authorship, and the responsibilities of a scientist. Group discussions, particularly centered around case studies, will be a significant component of the course. LEC.

CHEM 701. Laboratory Safety in the Chemical Sciences. 1 Hour.
A course for beginning graduate students focusing on chemical safety in modern laboratories. The course will feature practical instruction in lab safety, an introduction to safety resources, and group discussions centered around case studies. LEC.

CHEM 718. Mathematical Methods in Physical Sciences. 3 Hours.
Review of all complex variable theory; introduction to the partial differential equations of physics; Fourier analysis; and special functions of mathematical physics. (Same as PHSX 718.) Prerequisite: Two semesters of junior-senior mathematics. LEC.

CHEM 720. Fundamentals and Methods of Analytical Chemistry. 3 Hours.
An introductory graduate level course in analytical chemistry, in which the principles of electrochemistry, spectroscopy, and separation science are utilized to solve analytical problems in inorganic, organic and biochemical. Prerequisite: An undergraduate course in analytical chemistry, a year of organic chemistry, and a year of physical chemistry. LEC.

CHEM 730. Coordination and Organometallic Chemistry. 3 Hours.
An examination of the basic foundations of coordination chemistry and organometallic chemistry including symmetry methods, bonding, magnetism, and reaction mechanisms. Prerequisite: Two semesters of organic chemistry and one semester of physical chemistry in which quantum chemistry is introduced. The latter course may be taken concurrently with CHEM 730. LEC.

CHEM 740. Principles of Organic Reactions. 3 Hours.
A consideration of the structural features and driving forces that control the course of chemical reactions. Topics will include acid and base
properties of functional groups; qualitative aspects of strain, steric, inductive, resonance, and solvent effects on reactivity; stereo-chemistry and conformations; an introduction to orbital symmetry control; basic thermodynamic and kinetic concepts; and an overview of some important classes of mechanisms. Prerequisite: Two semesters of undergraduate organic and one semester of physical chemistry or concurrent enrollment. LEC.

CHEM 742. Spectroscopic Identification of Organic Compounds. 3 Hours.
The use of techniques such as infrared, nuclear magnetic resonance, and ultraviolet spectroscopy, and mass spectrometry for elucidating the structure of organic molecules. A lecture and workshop course. Prerequisite: CHEM 626 and CHEM 627. LEC.

CHEM 750. Introduction to Quantum Mechanics. 3 Hours.
An introduction to the basic principles of quantum theory relevant to atomic and molecular systems. Topics include operators and operator algebra, matrix theory, eigenvalue problems, postulates of quantum mechanics, the Schrodinger equation, angular momentum, electronic structure, molecular vibrations, approximation methods, group theory, and the foundations of spectroscopy. Prerequisite: Two semesters of physical chemistry. LEC.

CHEM 760. Introduction to Chemistry in Biology. 3 Hours.
A comprehensive introduction to the application of chemistry to address problems in biology at the molecular level. The fundamentals of biomolecules (nucleic acids, proteins, lipids and carbohydrates) and techniques of chemical biology research will be discussed. LEC.

CHEM 775. Chemistry of the Nervous System. 3 Hours.
A study of the overall concept of central nervous system functioning. A brief introduction to neuroanatomy and neurophysiological techniques as well as a relatively detailed discussion of the chemistry of neurotransmitters is included. (Same as BIOL 775, MDCM 775, NURO 775, PTX 775, and PHCH 775.) Prerequisite: One year of undergraduate organic chemistry. LEC.

CHEM 800. Research. 1-10 Hours.
Original investigation on the graduate level. RSH.

CHEM 810. Colloquium: ____. 1 Hour.
Colloquia on various topics of current interest are presented by students, faculty, and visiting scientists. LEC.

CHEM 812. Chemical Seminar. 1-3 Hours.
Individual studies of certain advanced phases of chemistry not covered in the regular graduate courses. IND.

CHEM 816. Careers in Chemical Biology. 1 Hour.
Advanced course examining current research topics in chemical biology. An emphasis will be placed on career options open to PhD scientists in Chemical Biology, and preparation for the different career paths. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. This course will be graded satisfactory/unsatisfactory. (Same as BIOL 816, MDCM 816 and PHCH 816.) Prerequisite: Permission of instructor. SEM.

CHEM 820. Analytical Separations. 3 Hours.
An advanced treatment of analytical separations techniques. The theory of separation science will be augmented with discussion of practical aspects of instrumentation and experiment design. Prerequisite: CHEM 720. LEC.

CHEM 822. Electrochemical Analysis. 3 Hours.
An advanced treatment of selected electroanalytical techniques and methodology. Prerequisite: CHEM 720. LEC.

CHEM 824. Spectrochemical Methods of Analysis. 3 Hours.
General concepts of encoding chemical information as electromagnetic radiation; major instrumental systems for decoding, interpretation, and presentation of the radiation signals; atomic emission, absorption, and fluorescence; ultraviolet, visible, infrared, and microwave absorption; molecular luminescence; scattering methods; mass spectrometry; magnetic resonance; automated spectrometric systems. Prerequisite: CHEM 720. LEC.

CHEM 826. Mass Spectrometry. 3 Hours.
An introduction to mass spectrometry. The various ionization techniques and mass analyzers will be discussed, and many examples of different mass spectrometric applications will be introduced. Prerequisite: CHEM 720. LEC.

CHEM 828. Bioanalysis. 3 Hours.
A course covering important aspects in modern chemical measurement with particular emphasis placed on bioanalysis. This course will survey the modern analytical challenges associated with the ongoing efforts in genomics and proteomics and discuss future trends in methods in instrumentation. Prerequisite: CHEM 720. LEC.

CHEM 830. Structure, Bonding and Spectroscopic Methods in Inorganic Chemistry. 3 Hours.
An introduction of quantum and group theories in relation to bonding and physicochemical properties of inorganic substances. Topics include vibrational and electronic spectroscopies, magnetism, and inorganic photochemistry. Prerequisite: CHEM 730. LEC.

CHEM 832. Inorganic Reaction Mechanisms and Catalysis. 3 Hours.
Mechanistic aspects of transition metal chemistry including substitution reactions, electron transfer reactions, rearrangement reactions, ligand reactions and inorganic photochemistry. Principles and applications of heterogeneous and homogeneous catalytic processes emphasizing catalysis at transition metal centers. Prerequisite: CHEM 730. LEC.

CHEM 840. Physical Organic Chemistry. 3 Hours.
An examination of the methods used to probe the mechanisms of organic reactions and of the chemistry of some important reactive intermediates. Topics will include isotope effects, kinetics, linear free energy relationships, solvent effects, a continuing discussion of orbital symmetry, rearrangements, carbocations, carbanions, carbenes, radicals, excited states, and strained molecules. Prerequisite: CHEM 740. LEC.

CHEM 842. Organic Synthesis I. 3 Hours.
A discussion of fundamental reactions for the formation of carbon-carbon bonds, oxidation, reduction, and functional group interchange. Prerequisite: CHEM 740. LEC.

CHEM 844. Problem Solving in Organic Chemistry. 1 Hour.
A course designed to develop a student's ability to apply fundamental concepts of mechanistic organic and organometallic chemistry, physical organic chemistry, bioorganic chemistry, synthetic organic reactions and techniques for structure elucidation. Students will propose solutions to practice problems mimicking challenges that arise in contemporary research in organic chemistry. The format includes interactive problem-solving discussions led by faculty and peers and monthly written examinations. May be repeated up to three times until the student has passed at least four of the written exams. Graded on a Satisfactory/Unsatisfactory basis. Prerequisite: CHEM 740 or permission of instructor. SEM.

CHEM 850. Advanced Quantum Mechanics. 3 Hours.
The advanced mathematical and physical principles of quantum mechanics relevant to atomic and molecular systems. Topics may include abstract vector spaces and representations, time-dependent quantum dynamics, electronic structure theory, density matrices, second-
quantization, advanced group theory, path integrals, and scattering theory. Prerequisite: CHEM 750 or its equivalent. LEC.

CHEM 852. Statistical Thermodynamics. 3 Hours.
Thermodynamics and introduction to equilibrium statistical mechanics with emphasis on problems of chemical interest. The course consists of two roughly equal parts: 1) An advanced overview of the laws and concepts of thermodynamics with application to specific problems in phase and chemical equilibria and 2) An introduction to equilibrium statistical mechanics for both classical and quantum systems. Prerequisite: CHEM 750 or its equivalent. LEC.

CHEM 854. Chemical Kinetics and Dynamics. 3 Hours.
A study of the rates, mechanisms, and dynamics of chemical reactions in gases and liquids. Topics include an advanced overview of classical kinetics, reaction rate theories (classical collision theory, transition-state theory and introductory scattering theory), potential energy surfaces, molecular beam reactions, photochemistry, Marcus electron transfer theory and other areas of current interest. Prerequisite: CHEM 750 or its equivalent. LEC.

CHEM 856. Molecular Spectroscopy. 3 Hours.
Quantitative molecular spectroscopy and its chemical applications. The basic principles of the molecular energy levels, selection rules and spectral transition intensities will be discussed and applied to rotational, vibrational, electronic, and nuclear magnetic spectroscopy. Linear and nonlinear spectroscopies will be addressed. Prerequisite: CHEM 750 or its equivalent. LEC.

CHEM 860. Principles and Practice of Chemical Biology. 3 Hours.
A survey of topics investigated by chemical biology methods including: transcription and translation, cell signaling, genetic and genomics, biochemical pathways, macromolecular structure, and the biosynthesis of peptides, carbohydrates, natural products, and nucleic acids. Concepts of thermodynamics and kinetics, bioconjugations and bioorthogonal chemistry will also be presented. (Same as BIOL 860, MDCM 860 and PHCH 860.) Prerequisite: Permission of instructor. LEC.

CHEM 899. Master's Thesis. 1-10 Hours.
Research work (either experimental or theoretical) in chemistry for students working toward the M.S. degree. Graded on a satisfactory/unsatisfactory basis. THE.

CHEM 900. Advanced Research. 1-10 Hours.
Original investigation in chemistry at the graduate level. Graded on satisfactory/unsatisfactory basis. Prerequisite: Advancement to doctoral candidacy. RSH.

CHEM 914. Computational Methods in Physical Sciences. 3 Hours.
Advanced computer applications in physical science. General discussion and illustration of computer organization and solution by numerical and other methods with examples from physics, astronomy, and other physical sciences. Students will design, write, validate, and document a computer program to solve a physical problem. (Same as ASTR 815 and PHSX 815.) Prerequisite: Six hours of computer science courses numbered 300 or above, and six hours of physics and/or astronomy courses numbered 300 or above. LEC.

CHEM 930. Bioinorganic Chemistry. 3 Hours.
A survey of metalloproteins and metalloenzymes, their structures and functions, including recent advances in biomimetic modeling, small molecule activation in biological systems, and related physical methods. Prerequisite: CHEM 832. LEC.

CHEM 942. Organic Synthesis II. 3 Hours.
A survey of important techniques in organic chemistry with respect to scope, limitations, mechanism, and stereochemistry. Emphasis will be placed on new synthetic methods and application of such methods to the synthesis of structurally interesting compounds, particularly natural products. Prerequisite: CHEM 842. LEC.

CHEM 950. Advanced Statistical Mechanics. 3 Hours.
Advanced equilibrium statistical mechanics and introduction to nonequilibrium statistical mechanics. Topics include: the theory of liquids, critical phenomena linear response theory and time correlation functions, Langevin dynamics, and molecular hydrodynamics. (Same as PHSX 971.) Prerequisite: CHEM 909 or equivalent. LEC.

CHEM 970. College Teaching Experience in Chemistry. 3 Hours.
A student will engage in a semester-long, planned instructional activity that shall include college classroom teaching under the supervision of a chemistry department faculty member. Prerequisite: Two semesters as a graduate teaching assistant. LEC.

CHEM 980. Advanced Topics in Chemistry: _____ 2-3 Hours.
A course covering special advanced topics in chemistry not included in other graduate courses. One or more topics will be covered in a given semester and an announcement of the course content and prerequisites will be made at the end of the previous semester. This course may be taken more than once when the topic varies. LEC.

CHEM 999. Doctoral Dissertation. 1-10 Hours.
Research work (either experimental or theoretical) in chemistry for students working toward the Ph.D. degree. Graded on a satisfactory/unsatisfactory basis. THE.

Classics Courses

CLSX 148. Greek and Roman Mythology. 3 Hours. HL GE3H / H/W.
A systematic examination of the traditional cycles of Greek myth and their survival and metamorphosis in Latin literature. Some attention is given to the problems of comparative mythology and the related areas of archaeology and history. Slides and other illustrated materials. No knowledge of Latin or Greek is required. LEC.

CLSX 149. Greek and Roman Mythology Honors. 3 Hours. HL GE3H / H/W.
The study of Greek and Roman mythology through extensive readings in primary classical texts and secondary authors. Prerequisite: Admission to the Honors Program or consent of instructor. LEC.

CLSX 151. Introduction to Classical Archaeology. 3 Hours. HT GE11/ GE15 / H/W.
An introduction to the history, methods, and excavation techniques of archaeology, with special emphasis on ancient Greece and Rome. Topics include stratigraphy, chronology, artifact analysis, the role of archaeology in our understanding of Greek and Roman society, and the treatment of archaeology in popular culture. Illustrated throughout with presentations of important archaeological sites of the ancient Mediterranean such as Athens and Pompeii, from the earliest times through late antiquity. LEC.

CLSX 177. First Year Seminar: _____ 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Classics. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

CLSX 178. Writing About Greek and Roman Culture. 3 Hours. GE21 / H.
This course uses focused content from Greek and Roman mythology as a vehicle for learning, applying, and practicing essential skills of writing. The content varies from term to term but is always circumscribed, such as Helen of Sparta, nature myths, the wandering hero, or children in Greek
tragedy. Students complete a variety of writing exercises that build upon each other and include revision. The course will be taught in English. LEC.

**CLSX 210. Greek Rhetoric in Theory and Practice. 3 Hours. H.**
This course explores the theory and practice of ancient Greek rhetoric, with the aim of developing student¿s own rhetorical skills and habits. All readings are in translation; no knowledge of ancient Greek is required. Students study rhetoric in such authors as Homer, Demosthenes, Plato, and Lysias and discuss such topics as the role of public speaking in maintaining Greek democracy, the difference between rhetorical skill as a means and an end, the relationship between rhetorical style and civic identity, and the adaptability of rhetoric to various circumstances and audiences. Students practice delivery with ancient speeches; write and deliver speeches tailored to a variety of situations; and listen to and critique the speeches of their peers and others. LEC.

**CLSX 220. Roman Oratory in Theory and Practice. 3 Hours. H.**
This course explores the theory and practice of ancient Roman rhetoric, with the aim of developing student¿s own rhetorical skills and habits. All readings are in translation; no knowledge of Latin is required. Students will study rhetoric in such authors as Cicero, Quintilian, Caesar, and Seneca and discuss such topics as the role of rhetorical theory in Roman education; oratory as a hallmark of public service during the Republic, and its transition to a pastime in the Imperial age; the ways the Romans connected oratorical style with humor, the body, and gender identity; and the leeway given to speakers in constructing an argument. Students practice delivery with ancient speeches; write and deliver speeches tailored to a variety of situations; and listen to and critique the speeches of their peers and others. LEC.

**CLSX 230. Greek Literature and Civilization. 3 Hours. HL GE3H / H.**
An introduction to ancient Greek literature and civilization. Studied against the historical and cultural background of their times will be writers of poetry and prose such as Homer, Sappho, the tragedians, Aristophanes, Plato, and topics arising from the texts such as religion, athletics, oral performance, sexuality, and the development of literary genres. No knowledge of Greek required and no prerequisite. LEC.

**CLSX 232. Word Power: Greek and Latin Elements in English. 3 Hours. H/W.**
A study of English words drawn from Greek and Latin for all those interested in the sources of the English vocabulary. Enough Greek and Latin for essential purposes is also studied. No knowledge of Greek or Latin is required. A student may not receive credit for both CLSX 232 and CLSX 332. LEC.

**CLSX 240. Roman Literature and Civilization. 3 Hours. HL GE3H / H.**
An introduction to ancient Roman literature and civilization. No knowledge of Latin required. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

**CLSX 240. Honors. 3 Hours. HL GE3H / H.**
Honors version of CLSX 240. An introduction to ancient Roman literature and civilization through extensive readings in primary Roman texts. No knowledge of Greek or Latin is required. A student may not receive credit for both CLSX 232 and CLSX 332. LEC.

**CLSX 300. Greek Literature and Civilization, Honors. 3 Hours. HL GE3H / H.**
Honors version of CLSX 300. An introduction to ancient Greek literature and civilization through extensive readings in primary Greek texts. No knowledge of Greek required. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

**CLSX 332. Scientific Word Power: Greek and Latin Elements in the Vocabulary of Science. 3 Hours. H.**
A study of the terminology of science with reference to its debt to the Greek and Latin languages. While all the natural sciences will be treated, there will be some emphasis on the biological sciences. No knowledge of Greek or Latin is required. A student may not receive credit for both CLSX 232 and CLSX 332. LEC.

**CLSX 340. Roman Literature and Civilization, Honors. 3 Hours. HL GE3H / H.**
Honors version of CLSX 340. An introduction to Roman Literature and civilization through extensive readings in primary Roman texts. No knowledge of Latin required. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

**CLSX 350. Modern Themes, Ancient Models: _____ 3 Hours. H.**
The study of the evolution of a cultural or literary tradition from the Graeco-Roman world into modern times. The theme of the course will normally vary from semester to semester; topics such as these may be examined: the analysis of a literary genre (e.g. drama, satire, lyric), the transformation of the ancient mythical heritage, the reception of ancient astronomy. Students should consult the Schedule of Classes for the theme of the course in a given semester. With departmental permission, may be repeated for credit as topic varies. (Same as HWC 380.) LEC.

**CLSX 351. Introduction to Classical Archaeology, Honors. 3 Hours. HT GE11/GE3H / H/W.**
Honors version of CLSX 151, with the focus towards critical approaches and research. Special attention is paid to recent methodological, theoretical, and ethical debates within the profession of Classical archaeology. Assignments and activities may include position papers on contentious issues of the day, research assignments, and/or field trips to museums and related institutions. Prerequisite: Admission to the Honors Program or consent of instructor. LEC.

**CLSX 355. Ancient Greece and Rome in Film. 3 Hours. H.**
This course explores the reception of the cultures of ancient Greece and Rome in film. Students in this course learn about the cultures of ancient Greece and Rome through primary sources, and analyze several films from the 20th and 21st centuries for which these sources are relevant. The course considers the relationship between historical accuracy and artistic license in the films selected for the course, how each film reflects the concerns of the modern cultural context in which it was made, the common visual and thematic elements that link films set in ancient Greece or Rome, and the reuse of elements from Greek and Roman mythology and history in films set in the modern world. No knowledge of Latin or Greek required. LEC.

**CLSX 374. Gender and Sexuality, Ancient and Modern. 3 Hours. AE42 / H.**
Classical Greek and Roman attitudes to gender and sexuality compared and contrasted with modern notions and behaviors. Attention is paid to literature (dramatic, philosophical, medical, and legal texts) and archaeological evidence (vase painting, sculpture, and domestic architecture). The course may include the following topics: age divisions and rites of passage from childhood to maturity; marriage; conception, birth, and infanticide; the family; love; homoeroticism; property and economics; and sexuality and the law, politics, and religion. No knowledge of Greek or Latin is required: (Same as HWC 374.) LEC.
CLSX 375. Studies in: ____. 1-3 Hours. H/W.
Selected readings in Greek and Roman antiquity and the classical tradition for students who desire special work on a flexible basis. No knowledge of Greek or Latin is required. May be repeated for credit, the maximum being twelve hours. Prerequisite: Consent of instructor. LEC.

CLSX 384. The Rise of Greek Tragedy. 3 Hours. H.
Plays by Aeschylus, Sophocles, and Euripides will be read in translation. The criticism of the plays, and the role they play in Athenian (and Greek) culture of the 5th century. This course includes the Oresteia, Oedipus Tyrannus, Antigone, and Medea. No knowledge of Greek is required. LEC.

CLSX 388. Poetry and Politics in Fifth-Century Athens. 3 Hours. H.
The later plays of Euripides and Sophocles, selected plays by the comic dramatist Aristophanes, and passages from the historian Thucydides. Criticism of the plays, and discussion of themes common to literature and history in this period. The dissolution of a high culture. CLSX 384 is NOT a prerequisite. No knowledge of Greek required. LEC.

CLSX 490. Comprehensive Examination of Classical Antiquity. 1 Hour. U.
An examination covering the six areas of course work and reading for the Classical Antiquity major, to be taken by the student pursuing the major in the last semester of the senior year. Prerequisite: A declared major in Classical Antiquity and status as a graduating senior. IND.

CLSX 492. Independent Study for Classical Antiquity Majors. 3 Hours. U.
Under the supervision of an advisor in Classics, the student will do extensive reading in the area of Classics generously defined, to result in two or more papers as agreed upon between faculty and student. IND.

CLSX 496. Honors Essay in Classical Antiquity. 3 Hours. AE61 / H/W.
Individual directed research and preparation of an essay on a topic in Classical literature, culture, or language. Prerequisite: Eligibility for departmental honors and consent of essay advisor. IND.

CLSX 501. The History of the Latin Language. 3 Hours. H.
The place of Latin among the Indo-European languages and the languages of Italy, its development as a literary medium, and how it changed in pronunciation, vocabulary, and grammar from its beginnings through the Medieval period. LEC.

CLSX 502. Development of Ancient Greece, ca. 1000-300 B.C.E.: 3 Hours. H/W.
Emphasis on the ancient sources and texts, developments in political institutions and society, the changing definitions of personal, cultural, and national identities, and the cultural tensions between Greece and the cultures to the west and east, especially Italy and Persia. No knowledge of the ancient languages is required. (Same as HIST 502). LEC.

CLSX 515. Gender and Sexuality in Greek Culture. 3 Hours. H.
This course explores various approaches to the study of gender and sexuality in Greek antiquity. Contents will vary, and the course may focus on methodology and case studies, or on particular themes, historical periods, or artistic or literary genres. No knowledge of Greek or Latin is required. (Same as WGSS 515.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, or Women, Gender and Sexuality Studies; or permission of instructor. LEC.

CLSX 516. Gender and Sexuality in Roman Culture. 3 Hours. H.
This course explores various approaches to the study of gender and sexuality in Roman antiquity. Contents vary, and the course may focus on methodology and case studies, or on particular themes, historical periods, or artistic or literary genres. No knowledge of Greek or Latin is required. (Same as WGSS 516.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, or Women, Gender and Sexuality Studies; or permission of instructor. LEC.

CLSX 525. Aegean Archaeology and Art. 3 Hours. H/W.
An interdisciplinary survey of the major cultures of the prehistoric Aegean (Greek) world from the Neolithic period to the fall of the Mycenaean civilization. Includes discussions of the Minoan and Mycenaean civilizations, the rise of the Greek city-states, and the diffusion of Greek culture to the west and east, especially Italy and Persia. Prerequisite: Consent of instructor. LEC.

CLSX 527. Roman Archaeology and Art. 3 Hours. H/W.
An interdisciplinary survey of the material culture of ancient Rome from its origins to the fall of the Roman Empire. Includes lectures with slides and discussion; use of the Wilcox Museum of Classical Antiquities. No knowledge of Greek or Latin is required. For advanced undergraduates with backgrounds in the humanities and for graduate students (especially in Classics and History of Art). No knowledge of Greek or Latin is required. (Same as HIST 526.) LEC.

CLSX 529. Archaeology and Art of the Ancient Near East. 3 Hours. H.
A cross-cultural survey of the material remains of the major civilizations of the ancient Near East, including Mesopotamia, Egypt, and Persia. Includes lectures with slides and discussion; use of the Wilcox Museum of Classical Antiquities. No knowledge of Greek or Latin is required. For advanced undergraduates with backgrounds in the humanities and for graduate students (especially in Classics and History of Art). No knowledge of Greek or Latin is required. (Same as HIST 537.) LEC.

CLSX 538. Pompeii and Herculaneum. 3 Hours. H.
An interdisciplinary survey of the art and archaeology of the ancient Roman cities of Pompeii and Herculaneum. Emphasis on the structures and decorations of major public spaces and houses and on aspects of cultural, social, political, commercial, and religious life from the period of the Hellenistic period (ca. 300 B.C.E. - 30 B.C.E.). Emphasis on major sites, monumental architecture, and changing forms of social and artistic expression (e.g., architecture, sculpture, vase painting). Includes lectures with slides and discussion; use of the Wilcox Museum of Classical Antiquities. No knowledge of Greek or Latin is required. For advanced undergraduates with backgrounds in the humanities and for graduate students (especially in Classics and History of Art). No knowledge of Greek or Latin is required. (Same as HIST 538.) LEC.

CLSX 550. Capstone in Classics. 1-3 Hours. AE61 / H.
This capstone seminar synthesizes various aspects of the discipline of Classics by focusing on recent award-winning scholarship or creative work in the field. Specific assignments and additional readings vary from one semester to another and will be stated on the instructor's syllabus. Introductory knowledge of Greek or Latin is required. Prerequisite: 15 hours in CLSX/LAT/GRK at the 200 level or above, or status as a senior major in the department, or permission of the instructor. LEC.
CLSX 570. Study Abroad Topics in Greek and Roman Culture: ____. 1-3 Hours. H.
This course is designed for the study of special topics in Classics at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

CLSX 575. Readings in: ____. 1-3 Hours.
Selected readings in Greek and Roman antiquity and the classical tradition for students who desire special work on a flexible basis. No knowledge of Greek or Latin is required. May be repeated for credit if topic varies. Only six hours may count toward the major. Prerequisite: Consent of instructor. LEC.

CLSX 576. Topics in Greek and Roman Literature: ____. 3 Hours. H.
Lecture and discussion course focusing on a theme, genre, or period of literature from the ancient classical world. No knowledge of Greek or Latin is required. May be repeated for credit if topic varies. Only 6 hours may count toward the major. LEC.

CLSX 577. Topics in the Archaeology and Art of the Ancient Mediterranean: ____. 3 Hours. AE61/H.
Lecture and discussion course focusing on a theme, medium, region, or period in the archaeology and art of the ancient Near Eastern and classical world. May be repeated for credit if topic varies. Only 6 hours may count toward the major. LEC.

CLSX 675. Studies in: ____. 1-3 Hours. H/W.
Selected readings in Greek and Roman antiquity and the classical tradition for students who desire special work on a flexible basis. No knowledge of Greek or Latin is required. May be repeated for credit, the maximum being twelve hours. Prerequisite: Consent of instructor. IND.

CLSX 717. Investigations in Greek Drama I. 3 Hours.
Attendance at CLSX 384 required, plus one seminar per week, discussing the scholarly background of the major lecture, as well as the problems and aims of teaching Greek drama in English to undergraduates. No knowledge of Greek is required. RSH.

CLSX 718. Investigations in Greek Drama II. 3 Hours.
A continuation of CLSX 717. Attendance at CLSX 388 plus one seminar per week. No knowledge of Greek is required. RSH.

CLSX 790. Practicum in the Teaching of Classics. 0.5 Hours.
Required of all assistant instructors and teaching assistants in the teaching of Classics courses. May be repeated up to three semester hours credit in total. FLD.

CLSX 899. Thesis. 1-6 Hours.
Thesis hours. THE.

GRK 104. Elementary Ancient Greek. 5 Hours. U.
The essentials of ancient Greek grammar, with readings. LEC.

GRK 105. Elementary Ancient Greek, Honors. 5 Hours. U.
The essentials of ancient Greek grammar, with readings. Prerequisite: Membership in the University Honors Program or permission of instructor. LEC.

GRK 108. Ancient Greek Readings and Grammar. 5 Hours. U.
A continuation of Greek 104, with extensive readings from one or more classical authors. Prerequisite: GRK 104 or GRK 105. LEC.

GRK 109. Ancient Greek Readings and Grammar, Honors. 5 Hours. U.
A continuation of GRK 105, with extensive readings from one or more classical authors. Prerequisite: GRK 104 or 105; and membership in the University Honors Program or permission of instructor. LEC.

GRK 112. Intermediate Ancient Greek. 3 Hours. U.
Systematic grammar review and selected texts from Plato and Euripides. Prerequisite: GRK 108 or GRK 109 or consent of instructor. LEC.

GRK 177. First Year Seminar: ____. 3 Hours. GE11/U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Greek. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

GRK 301. Philosophy and Oratory. 3 Hours. H/W.
Systematic grammar review in conjunction with readings selected from Plato, Aristotle and the Attic orators, with attention to issues of interpretation and social and cultural history. Prerequisite: GRK 108 or GRK 109. LEC.

GRK 302. Drama and Lyric Poetry. 3 Hours. H/W.
Systematic grammar review in conjunction with readings selected from Aeschylus, Sophocles, Euripides, and the lyric poets, with attention to issues of literary interpretation and cultural history. Prerequisite: GRK 108 or GRK 109. LEC.

GRK 303. Greek Narrative Prose. 3 Hours. H/W.
Systematic grammar review in conjunction with readings selected from the historians Herodotus, Thucydides, and Xenophon, as well as from the Greek novels and the New Testament. Attention will be given to issues of interpretation and cultural history. Prerequisite: GRK 108 or GRK 109. LEC.

GRK 310. Homer's Odyssey. 3 Hours. H/W.
Selections from Homer's Odyssey, with attention to issues of literary translation and interpretation, performance, and social and cultural history. Prerequisite: GRK 301, or GRK 302, or GRK 303. LEC.

GRK 312. Homer's Iliad. 3 Hours. H/W.
Selections from Homer's Iliad, with attention to issues of literary translation and interpretation, performance, and social and cultural history. Prerequisite: GRK 301, or GRK 302, or GRK 303. LEC.

GRK 375. Readings in: ____. 1-3 Hours. H/W.
Readings in classical Greek texts. May be repeated for up to twelve hours. Prerequisite: GRK 108 or the equivalent. IND.

GRK 496. Honors Essay in Greek. 3 Hours. AE61/H/W.
Individual directed research and preparation of an essay on a topic in Greek literature or language. Prerequisite: Eligibility for departmental honors and consent of essay advisor. IND.

GRK 508. Early Greek Philosophy. 3 Hours. H/W.
A study of the doctrines of Greek philosophy before Plato. Emphasis on the Pre-Socratic philosophers with some attention paid to the Sophists and the Hippocratic Corpus. (Same as PHIL 508.) Prerequisite: PHIL 384, or GRK 301, or GRK 302, or GRK 303, or GRK 310, or GRK 312, or permission of instructor. LEC.

GRK 701. Archaic Poetry. 3 Hours.
Close reading of texts from Homer, Hesiod, Pindar, the lyric poets. LEC.

GRK 702. Drama. 3 Hours.
Close reading of texts from Aeschylus, Sophocles, Euripides, Aristophanes. LEC.

GRK 703. History and Oratory. 3 Hours.
Close reading of texts from Herodotus, Thucydides, Xenophon, Attic orators. LEC.

GRK 704. Philosophy. 3 Hours.
Close reading of texts from Plato, Aristotle, the Pre-Socratics. LEC.
LAT 200. Vergil's Aeneid. 3 Hours. H/W.
Selections from Vergil's Aeneid, with attention to literary interpretation and historical context. Prerequisite: LAT 112 or LAT 113 or permission of department. LEC.

LAT 201. Vergil's Aeneid, Honors. 3 Hours. H/W.
Selections from Vergil's Aeneid with attention to literary history. Exercises in literary analysis and/or prose composition. Prerequisite: LAT 109 or permission of department. LEC.

LAT 202. Roman Historians. 3 Hours. H/W.
Selected readings from such authors as Caesar, Livy, and Tacitus, with attention to issues in Roman history and historiography. Prerequisite: LAT 200 or LAT 201, or permission of department. LEC.

LAT 203. Lyric and Elegiac Poetry. 3 Hours. H/W.
Selected readings from such authors as Catullus, Horace, Tibullus, Propertius, Sulpicia, Ovid, and Martial, with attention to literary interpretation and historical context. Prerequisite: LAT 200 or LAT 201, or permission of department. LEC.

LAT 204. Dramatic Literature. 3 Hours. H/W.
Close reading of texts from authors such as Plautus, Terence, and Seneca, with attention to literary interpretation, theater history, and performance. Prerequisite: LAT 200 or LAT 201, or permission of department. LEC.

LAT 205. Latin Grammar. 3 Hours. H/W.
Systematic grammar review in conjunction with selected readings, such as Cicero or Caesar, with additional readings in Roman poetry. Attention to literary history and historical context. Prerequisite: LAT 108 or LAT 109, or permission of department. LEC.

LAT 206. Intermediate Latin Composition. 3 Hours. H/W.
Composition in Latin prose, stressing the basic principles of Latin syntax and style. Recommended for majors and minors. Prerequisite: LAT 200 or LAT 201. LEC.

LAT 207. Reading and Critical Analysis. 3 Hours. H/W.
Selected readings for qualified students who desire special work on a flexible basis. May be repeated for credit, the maximum being twelve hours. Prerequisite: Undergraduate proficiency in Greek or equivalent. RSH.

LAT 208. Readings in Latin Literature. Honors. 3 Hours. U.
Systematic grammar review in conjunction with selected prose authors, such as Cicero or Caesar, with additional readings in Roman poetry. Attention to literary history and historical context. Prerequisite: LAT 108 or LAT 109, or permission of department. LEC.

LAT 209. Readings in Latin Literature, Honors. 3 Hours. U.
Systematic grammar review in conjunction with selected prose authors, such as Cicero or Caesar, with additional readings in Roman poetry. Attention to literary history and historical context. Prerequisite: LAT 108 or LAT 109, or permission of department. LEC.

LAT 210. Latin Literature. 3 Hours. H/W.
Selected readings from such authors as Cicero, Seneca, Petronius, Pliny, and Apuleius, with attention to literary interpretation and historical context. Prerequisite: LAT 200 or LAT 201, or permission of department. LEC.

LAT 211. Latin Prose Composition. 3 Hours. H/W.
An introduction to teaching required of all assistant instructors and teaching assistants in the teaching of Latin. May be repeated up to three semester hours credit in total. FLD.

LAT 212. Seminar in the Teaching of Latin. 3 Hours.
An introduction to teaching required of all assistant instructors and teaching assistants in the teaching of Latin. May be repeated up to three semester hours credit in total. FLD.

LAT 213. Philological Latin. 3 Hours. H/W.
Selected readings from such authors as Cicero, Seneca, Petronius, Pliny, and Apuleius, with attention to literary interpretation and historical context. Prerequisite: LAT 200 or LAT 201, or permission of department. LEC.

LAT 214. Introduction to Latin. 3 Hours. H/W.
Extensive reading in a variety of Latin authors. LEC.

LAT 215. Latin Grammar. 3 Hours. H/W.
Systematic grammar review in conjunction with selected readings, such as Cicero or Caesar, with additional readings in Roman poetry. Attention to literary history and historical context. Prerequisite: LAT 108 or LAT 109, or permission of department. LEC.

LAT 216. Latin Literature. 3 Hours. H/W.
Selected readings from such authors as Cicero, Seneca, Petronius, Pliny, and Apuleius, with attention to literary interpretation and historical context. Prerequisite: LAT 200 or LAT 201, or permission of department. LEC.

LAT 217. Readings in Classical Latin. 3 Hours.
Selections from Vergil's Aeneid, with attention to literary interpretation and literary history. Prerequisite: LAT 112 or LAT 113 or permission of department. LEC.

LAT 218. Readings in Classical Latin, Honors. 3 Hours.
Selections from Vergil's Aeneid with attention to literary history. Exercises in literary interpretation and verse composition. Prerequisite: LAT 113 or permission of department. LEC.

LAT 219. Intermediate Latin Composition. 3 Hours. H/W.
Composition in Latin prose, stressing the basic principles of Latin syntax and style. Recommended for majors and minors. Prerequisite: LAT 200 or LAT 201. LEC.

LAT 220. Prose Fiction and Epistolography. 3 Hours. H/W.
Selected readings from such authors as Cicero, Seneca, Petronius, Pliny, and Apuleius, with attention to literary interpretation and historical context. Prerequisite: LAT 200 or LAT 201, or permission of department. LEC.
LAT 899. Thesis. 1-6 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

Communication Studies Courses

COMS 104. Introduction to Communication Studies. 3 Hours. H.
Survey of the major areas of the Communication Studies field. Provides
an overview of communication theory and research methods, and
introduces key topics, approaches, and applications in core areas such
as rhetoric, organizational communication, interpersonal communication,
intercultural communication, and communication technology. LEC.

COMS 130. Speaker-Audience Communication. 3 Hours. GE22 / U.
Study of rhetorical theory and its application to the preparation,
presentation, and criticism of oral discourse in audience situations.
Special consideration of listening behavior and of the ethical conduct
of speech in a free society. This course fulfills the College argument and
reason requirement. LEC.

COMS 131. Speaker-Audience Communication, Honors. 3 Hours.
GE22 / U.
The study of rhetorical theory and its application to the preparation,
presentation, and criticism of oral discourse in audience situations.
Special consideration of listening behavior and of the ethical conduct
of speech in a free society. This course fulfills the College argument and
reason requirement. This is an honors section of COMS 130 open only to
students in the Honors Program. LEC.

COMS 132. Speaker-Audience Communication for the Professional
Schools. 3 Hours. GE22 / H.
This course focuses on the study of oral communication: the application,
presentation, and criticism of oral discourse in audience situations.
Special consideration of listening behavior and of the ethical conduct
of speech in a free society. This course fulfills the College argument and
reason requirement. This is an only section of COMS 130 open only to
students in the professional schools. LEC.

COMS 133. Speaker-Audience Communication, Honors. 3 Hours.
GE22 / H.
This course focuses on the study of oral communication: the application,
presentation, and criticism of oral discourse in audience situations.
Special consideration of listening behavior and of the ethical conduct
of speech in a free society. This course fulfills the College argument and
reason requirement. This is an honors section of COMS 130 open only to
students in the professional schools who are members of the University
Honors Program. LEC.

COMS 150. Personal Communication. 3 Hours. U.
This course is an introduction to communication theory, process, and
skill. The course seeks to increase the student's understanding of
communication theory, both interpersonal and public, and of his or her
own communicative behavior. Class projects and participation urge
students to apply this theoretical knowledge to a variety of settings,
including interpersonal and addressing groups and audiences. This
course does not fulfill the College argument and reason requirement.
Not open to those who have credit in COMS 130. LEC.

COMS 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment seminar course for first-time freshmen, addressing
current issues in Communication Studies. Course is designed to
meet the critical thinking learning outcome of the KU Core. First-Year
Seminar topics are coordinated and approved by the Office of First-Year
Experience. Prerequisite: First-time freshman status. LEC.

COMS 201. Introduction to Leadership. 2 Hours. H.
This course introduces students to the study of the leadership process.
The course covers theories and research on core themes of leadership,
focusing on how course materials relate to students' own leadership
experiences. This course is taught online. Concurrent enrollment in
COMS 202 is recommended. Students considering the Leadership
Studies Minor must complete COMS 202. Not open to seniors. LEC.

COMS 202. Introduction to Leadership Applications. 1 Hour. AE51 / H.
This course focuses on the application of information learned in COMS
201. Activities and discussions emphasize application, analysis, and
engagement with the process of leadership. Concurrent enrollment in
COMS 201 is recommended. Students considering the Leadership
Studies Minor must complete COMS 201 and COMS 202. Not open to
seniors. Prerequisite/co-requisite: COMS 201. LEC.

COMS 210. Communication in Organizational and Professional
Contexts. 3 Hours. S.
Introduces foundational concepts in organizational communication,
focusing on topics such as superior-subordinate relationships,
information- and feedback-seeking, relationships with stakeholders,
and dealing with organizational change. The course emphasizes
individual communication practices and responsibilities that contribute to
organizational outcomes and personal success in organizations. LEC.

COMS 230. Fundamentals of Debate. 3 Hours. GE11 / U.
Introduction to the principles of debating. Emphasis on debating
techniques, analysis of the question, methods of using evidence,
refutation, and brief making. This course fulfills the College argument and
reason requirement. LEC.

COMS 231. Practicum in Forensics. 1 Hour. U.
For students selected by faculty supervisor for work on university debate
squad. Students to enroll at time of their selection. Recurring enrollments
permitted. FLD.

COMS 232. The Rhetorical Tradition. 3 Hours. HR / H.
Historical survey of theories of communication and persuasion, the people
who produced them, and the philosophical assumptions upon which they
rest. Beginning with the Greeks, especially Plato and Aristotle, and ending
with selections from Kenneth Burke and other contemporary figures, the
course focuses on changing concepts of rhetoric throughout a time span
of some 2000 years. Prerequisite: COMS 130, COMS 150, or COMS 230.
LEC.

COMS 235. Introduction to Rhetoric and Social Influence. 3 Hours.
HL GE11 / H.
This course examines in detail the texts of speeches and essays on
controversial issues in order to illustrate the varied forms of rhetorical
action and the diverse modes of analysis and evaluation that can be
applied to them. Examples are drawn from the rhetorical literature of
contemporary U.S. speakers and prose writers. Prerequisite: COMS 130,
COMS 150, or COMS 230. LEC.

COMS 238. Cases in Persuasion. 3 Hours. H.
An exploration of basic principles that explain the effect and effectiveness
of the arts of persuasion currently practiced in American society. Class
discussions of incidents leading to the discovery of principles and theories
that explain them. Continuing emphasis on issues concerning the ethical
character of persuasion in contemporary life. Prerequisite: COMS 130,
COMS 150, or COMS 230. LEC.

COMS 244. Introduction to Interpersonal Communication Theory. 3
Hours. SI GE35 / S.
Examines basic theoretical perspectives and research on verbal and
nonverbal communication elements affecting communication between
individuals in a variety of contexts. Topics include communication competence, developmental aspects of interpersonal communication, and interpersonal influence. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 246. Introduction to Intercultural Communication. 3 Hours. S.
This course attempts to provide an understanding of communication as it affects culture and as it is affected by culture. Special emphasis will be placed on the principle of similarity and differences as it relates to the roles of verbal and non-verbal symbols, codes, and cues, stereotypes, prejudices and value and thought patterning systems between and among cultures. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 307. Introduction to Political Communication. 3 Hours. S.
The primary goal of this course is to encourage critical engagement in politics and political campaigns. This course addresses various elements of political communication, with primary focus on the political campaign. By the end of the semester students are able to understand the relevant theories of political communication, evaluate and use critical thinking skills in consuming political messages, and grasp the complex structural and situational factors that influence political discourse. Prerequisite: COMS 130. LEC.

COMS 310. Introduction to Organizational Communication. 3 Hours. SC GE35 / S.
This course provides a foundation for the study of communication in organizational contexts. It introduces students to various organization theories including classical, human relations, systems, and cultural approaches and examines the role of communication in each. Information flow, communication climate, communication networks, work relationships and managerial communication are discussed as well as organizational symbolism, conflict resolution, rituals and ethics. The course is designed to heighten students’ awareness of the role of communication in the organizing process and to develop their abilities to diagnose and prevent communication-related problems. Prerequisite: COMS 130 or COMS 150. LEC.

COMS 320. Communication on the Internet. 3 Hours. S.
This course introduces social and communication issues in the context of online interaction. Surveys a range of social internet technologies (e.g., newsgroups, chat, MUDs, etc.). Focus is on the interpersonal topics, including the establishment and maintenance of individual and cultural identities, personal relationships, the emergence of online communities, power and conflict in online groups, language use in online contexts, and how online groups are used to enhance or alter civic and global cultures. LEC.

COMS 330. Effective Business Communication. 3 Hours. S.
The purpose of this course is to develop effective written, spoken, and electronically mediated communication skills necessary for business. Students will write short technical reports, plan meetings and conferences, prepare and present briefings and persuasive proposals with visual aids, and examine the use of new communication technologies. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 331. Persuasive Speaking. 3 Hours. H.
Guided experiences in the preparation and presentation of discourse intended to influence outcomes of human interactions in various speaker-audience situations, including television. Special emphasis on speech styles in influencing thought, attitudes, and behavior. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 335. Rhetoric, Politics and the Mass Media. 3 Hours. H.
This course investigates the ways in which rhetorical strategies (persuasive and linguistic usage) permeate the relationship between politics and politicians and the mass media. We will analyze media coverage of political debates, the presidential use of radio, television and press conferences, and the network evening news coverage of political events to see how political decisions are influenced by and influence the media. (Same as POLS 521.) Prerequisite: COMS 130 or COMS 150. LEC.

COMS 342. Problem-Solving in Teams and Groups. 3 Hours. S.
This course introduces basic concepts important to leading and/or participating in problem-solving work teams. Problem identification and analysis and leadership are emphasized and practiced. Teamwork variables are discussed and promoted. Lecture, demonstrations, exercises in class are structure for students to analyze groups outside of class. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 344. Relational Communication. 3 Hours. S.
This course studies communication issues, theories, research and skills applicable to sustaining and enriching long-term relationships, such as families, friendships and close workplace collaborations. Emphasis is given to applying course concepts to students’ own relationships and interaction in class. Prerequisite: COMS 244. LEC.

COMS 356. Introduction to Behavioral Research Methods in Communication. 3 Hours. GE12 / S.
An introduction to the nature of theory and theory building in the study of human communication. Research methods include experimentation, survey, content analysis, and field description. An introduction to statistics and statistical tests is included as well. Prerequisite: MATH 101 and admission to the Communication Studies major or consent of instructor. LEC.

COMS 410. Micro-Level Organizational Communication. 3 Hours. S.
An examination of dyadic level communication in organizations, with emphasis on contexts of superior-subordinate and peer communication. The course also addresses contexts of organizational entry and exit, perception and judgment, information seeking, feedback, and organizational attachment. Prerequisite: COMS 310. LEC.

COMS 411. Macro Level Organizational Communication. 3 Hours. S.
An exploration of the communication patterns and challenges between organizational groups and organizations as a whole. Key elements include networks, boundary spanning, inter-organizational collaboration, and the role of technology in linking large organizational components. Prerequisite: COMS 310 or instructor permission. LEC.

COMS 412. Communication in Distributed Organizations. 3 Hours. S.
Examination of the communication challenges faced by distributed organizations, especially those with a global presence. Topics include telework, virtual terms, and new processes required to support interaction among people located in several different places. Prerequisite: COMS 310 or permission of instructor. LEC.

COMS 420. Communication, Technology and Globalization. 3 Hours. H.
Examines the social, cultural, and economic challenges and opportunities advanced communication technologies and globalization pose to processes such as democratic deliberation, urban governance, and environmental sustainability. Prerequisite: COMS 130. LEC.

COMS 425. Communication and the American Presidency. 3 Hours. H.
Examination of the ways in which American presidents communicate with the American people and how such communication influences the public. Emphasis is on a number of approaches to better understanding presidential communication, including rhetorical, historical, and content analysis. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.
COMS 431. Communication and Leadership. 3 Hours. H.
This course provides an overview of the role of communication in leadership in a variety of contexts, including: interpersonal, small group, intercultural, organizational, and public sphere. It will include theoretical and experiential approaches to effective leadership communication. Prerequisite: Admission to Leadership Minor or consent of instructor. LEC.

COMS 435. Forms and Styles of American Public Discourse. 3 Hours. H.
Changing styles of public discourse are examined from the beginning of the nation to contemporary times, and the generic forms of address that have emerged from our national dialogue, such as jeremiads, inaugurals and apologies, are studied from a formistic perspective. Prerequisite: COMS 235. LEC.

COMS 440. Communication and Gender. 3 Hours. AE41 / S.
Focuses attention on the relationship between communication and gender, including both physical and psychological dimensions. Topics include: sex role orientations and stereotypes; perceived and actual differences in verbal and nonverbal communication behaviors; the influence of gender on communication in a variety of contexts. (Same as WGSS 440.) Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 441. Health Communication. 3 Hours. H.
This course is a survey of the many disciplines found in the field of health communication, including persuasion that targets health-related behavior, negotiation of treatment with health care providers, emotional support of patients, news media coverage of medical research, and health campaign principles. Prerequisite: COMS 130. LEC.

COMS 447. Intercultural Communication: The Afro-American. 3 Hours. AE41 / H/W.
An examination of the barriers to effective communication between black Americans and non-black Americans. (Same as AAAS 420.) Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 450. Ethical Issues in Political Communication. 3 Hours. H.
Application of ethical standards to the evaluation of political communication. Examination of value questions related to advocacy in modern society (propaganda, demagoguery, credibility). Analysis of First Amendment rights and other issues pertaining to censorship and freedom of speech (defamation, dissent, incitement, public morals, privacy). Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 453. Communication in Political Campaigns. 3 Hours. H.
This course examines political communication as it evolves throughout a political campaign and includes such topics as theories and strategies, stages in political campaigns, influence of the mass media, television advertising, candidate debates, polling, and the use of new technologies in delivering campaign communication. Selected examples from recent campaigns illustrate the strategies and effects of political communication as we examine how politicians persuade us to vote for them. Prerequisite: A course in communication studies. LEC.

COMS 459. Undergraduate Seminar in: ____. 1-3 Hours. H.
Course organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. (Distribution credit given for two or three hours only.) LEC.

COMS 460. Undergraduate Seminar in: ____. 1-3 Hours. S.
Course organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. (Distribution credit given for two or three hour enrollments only.) LEC.

COMS 485. Communication and Organizational Change. 3 Hours. S.
Examines communication processes that support or hinder implementation of organizational change. Topics include stakeholder analysis, individual responses to change, communicating about change, generating support for change, and managing resistance to change. LEC.

COMS 496. Capstone in: ____. 3 Hours. S.
In the capstone course students synthesize and apply knowledge and skills gained through the major. Capstone coursework requires students to integrate practices and theories learned in their areas of concentration. Topics within each concentration change as needs and resources develop. Prerequisite: Senior standing, COMS 130, and completion of COMS 235 and COMS 356 or concurrent enrollment. LEC.

COMS 497. Honors Seminar. 3 Hours. AE61 / H.
This course is intended for honor students who want to learn more about the history of communication studies, major areas of research, or more in-depth knowledge about special communication-related topics. Areas to be covered may change as needs and resources change. LEC.

COMS 498. Honors Thesis. 2-6 Hours. AE61 / H.
(Six hours maximum credit, which may be distributed through two semesters.) Study should include readings directed toward original research, i.e., an intensive investigation of a specific problem in this field. Prerequisite: Consent of the Department Honors Committee. IND.

COMS 499. Directed Study in Communication Studies. 1-3 Hours. H.
(A maximum of six hours of credit may be counted, with not more than four in a single area of study.) Investigation of a special topic or project selected by the student with advice, approval, and supervision of an instructor. Such study may take the form of directed reading, or special research, individual reports and conferences. (Distribution credit given for two-three hours only.) Prerequisite: At least seven hours of credit in the department and consent of instructor. IND.

COMS 503. Post-Soviet Communication. 3 Hours. H.
This course is designed to acquaint students with the shifting manner of public discourse in Post-Soviet Russia and help them to explore in some depth cross-cultural communication between America and Russia. In addition to contemporary and historical background on Russian communicative practices, students examine discourse in business development, mass media, marketing, and advertising. All readings in English. (Same as SLAV 503). LEC.

COMS 530. Internship in Communication Studies. 1-3 Hours. AE61 / S.
Students do communication-centered fieldwork in an organization related to their career goals. Criteria for the organizations and work assignments suitable for internship credit are in an information brochure available at the COMS Department office and website. The internship plan is developed with field supervisor and internship faculty adviser. Reports and meetings are required. Prerequisite: Permission of instructor, admission to COMS major. FLD.

COMS 531. Seminar in Leadership Strategies and Applications. 3 Hours. H.
This seminar serves as the capstone course for the Leadership Studies minor. It includes advanced readings on leadership theory and practice, as well as major written and applied projects in which students integrate and demonstrate what they have learned in the program. Prerequisite: COMS 201, COMS 431, and admission to the Leadership Studies minor. LEC.

COMS 532. Leadership Studies Practicum. 1-3 Hours. AE61 / U.
Students engage in a variety of training programs and field experiences in which they learn about leadership, observe leaders in action, and
involve themselves in leadership activities. Written assignments and group discussions are used to analyze their learning. Should be taken for a total of three credit hours, across more than one semester. Prerequisite: COMS 201 and admission to the Leadership Studies minor. FLD.

COMS 535. American Public Address, Puritans to 1900. 3 Hours. H.
A history of American public address from the Puritans to about 1900. Using the tools of rhetorical criticism, students describe, analyze, and evaluate select rhetoric from the period. Graduate students are assigned extra reading and a research paper. Prerequisite: COMS 235. LEC.

COMS 536. American Public Address, 1900-Present. 3 Hours. H.
A history of American public address from 1900 to the present. Using the tools of rhetorical criticism, students describe, analyze, and evaluate select rhetoric from the period. Graduate students are assigned extra reading and a research paper. Prerequisite: COMS 235. LEC.

COMS 537. Communication in Conflict Resolution. 3 Hours. S.
An examination of conflict situations and the manner in which communication can serve as a vehicle for their intensification or resolution. The focus is on the theory of games as it applies to conflict within interpersonal situations; implications will be drawn for larger social systems. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 538. Persuasion Theory and Research. 3 Hours. S.
This course focuses on the social scientific study of persuasion. Traditional theories of attitude change and persuasion research are studied along with techniques of measuring attitudes. Attention is also given to the attitude-behavior relationship and the production of compliance-gaining messages. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 539. Argumentation. 3 Hours. S.
Analysis of the theory and techniques of argumentation in historical and contemporary writings, with special emphasis on the works of Aristotle, John Stuart Mill, Richard Whately, and Stephen Toulmin. Application of argumentation theory to political and legal discourse. Opportunity for student performances in the preparation and criticism of argument. Prerequisite: Four hours in the department. LEC.

COMS 543. Group Leadership Practicum. 1-3 Hours. S.
Theory and practice in leadership of small group interaction. Includes responsibility for conducting a semester-long series of group meetings in an educational context under the supervision of faculty, study and training in leadership skills, a weekly practicum seminar, and individual conferences with supervising instructor. May be taken more than once, but not for more than four hours total credit. (Distribution credit given for two-three hours only.) Prerequisite: COMS 344, COMS 455, and permission of instructor. FL D.

COMS 544. Advanced Interpersonal Communication: Theories and Research. 3 Hours. S.
Intensive exploration of contemporary theories and research in the field of interpersonal communication; emphasis on an array of theoretical models and research exemplars; comparative analysis of major theoretical and research paradigms. Prerequisite: COMS 244 or instructor consent. LEC.

COMS 546. Communication Across the Life-span. 3 Hours. S.
Examination of the ways in which communication changes across the life-span, and influences human development. Course will include topics such as barriers to communication among elderly populations; communication and mis-communication across generations; the role of language in constructing life-span development (e.g., the mid-life crisis); development of language and social interaction during childhood; peer relationships and communication in adolescence; uses and effects of mass communication across the life-span. Prerequisite: COMS 244 and COMS 356. LEC.

COMS 547. Communication and Culture. 3 Hours. S.
A study of the systematic relationship between communication and culture. Emphasis is on culture as a variable in communicative situations: cultural aspects of attitude and cognition, language interchange, cultural differences in extra-verbal behavior, interaction between oral traditions and mass media. Prerequisite: COMS 130, COMS 150, COMS 230, or an introduction course in anthropology. LEC.

COMS 548. Theories of the Interview. 3 Hours. S.
Comprehensive study of communication processes in dyadic, face-to-face situations commonly encountered in organizations and professional environments. Intensive analysis of simulated and real-life interviews. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 549. Communication in Service and Sales. 3 Hours. S.
This course will deal with communication between organizational personnel and their customers or clients. Case studies and research concerning communication behaviors of service providers and salespeople will be covered. Prerequisite: COMS 310. LEC.

COMS 551. The Rhetoric of Black Americans. 3 Hours. H/W.
A study of the rhetoric of black Americans, from their earliest protest efforts to the contemporary scene, with focus on the methods and themes employed to alter their status in American society. (Same as AAAS 534.) Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 552. The Rhetoric of Women's Rights. 3 Hours. AE41 / H.
An analysis of the themes and rhetorical strategies of the women's rights movement in America. The course will view the struggle for women's rights from a historical perspective and will conclude with contemporary issues concerning the role of women in society. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 554. Rhetoric of Popular Culture. 3 Hours. H.
A study of the social and cultural importance of popular culture. Emphasis is on the use of rhetoric and a number of important theoretical approaches to help examine popular culture's often unnoticed influence. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 555. Family Communication. 3 Hours. S.
An examination of trends and theory related to the scientific study of the family, with a focus on issues related to family interaction, functioning, relationships, and communication. Research and theories from communication, sociological, and psychological perspectives are employed to examine topics such as family violence, mental health problems, marital satisfaction, divorce, courtship, and the impact of the family on its children (and vice versa). Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 557. East Asian Communication. 3 Hours. S.
Explores the major communication theories and research in the East Asian cultural contexts by focusing on the Chinese, Japanese, and Korean cultures. Examines, from a broader perspective, certain cultural values (e.g., harmony, hierarchy, conservatism, and modernism) upheld in East Asian cultures and their influences on people's communicative behaviors in an age of globalization. Students explore issues of history, identity, verbal and non-verbal symbols, stereotypes, prejudice, values and thought patterning systems in the East Asian cultural context from a communicative perspective. This course is designed as a bridge course and meets with a graduate level section of the same title. Prerequisite: COMS 246. LEC.

COMS 559. Seminar in: …. 1-3 Hours. H.
Course organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion,
readings, and individual projects. (Distribution credit given for two-three hours only.) LEC.

COMS 560. Seminar in: ____. 3 Hours. S.
Course organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. (May be repeated for credit if content varies). LEC.

COMS 590. Nonverbal Communication. 3 Hours. S.
Examination of non-linguistic behavior in human communication, including proxemics (spacings), kinesics (movement and expression), and paralinguistics (voice quality). Includes phylogenetic and developmental perspectives, methods of analysis, applications to interpersonal problems. (Same as PSYC 590.) Prerequisite: COMS 356 or PSYC 210 or PSYC 211. LEC.

COMS 603. Topics in Presidential Rhetoric: ____. 3 Hours. H.
This course involves an examination of presidential rhetoric, including a focus on the strategies present in presidential discourse, the function that this rhetoric serves, and the historical context in which it was presented. One or more important presidential rhetors will be covered each semester. This course can be repeated for credit if taken under a different topic. LEC.

COMS 605. Speech Writing. 3 Hours. H.
Emphasis is on actual practice in preparing speech manuscripts for oneself and others. Model speeches are examined to better understand language, evidence, and stylistic choices available to speech writers. The ethical dimensions of writing for others in corporate and political positions are stressed. Students are required to prepare a variety of speeches and analyses of others’ speeches. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 607. Political Communication. 3 Hours. H.
This course will focus on contemporary political communication theory and illustrate how such theories are exemplified in modern political contexts: political arguments and developing consensus, constitutional issues and hearings, the rhetorical presidency, the dissemination of political information, and political uses of definition. (Same as POLS 520.) Prerequisite: COMS 130 or COMS 150. LEC.

COMS 608. Communication, Media and Terrorism. 3 Hours. S.
The course considers the topics of media and terrorism from a macro public opinion and politics perspective. This course addresses the nature of terrorism, who terrorists are, and what are their grievances with the larger society in which they are embedded. Terrorism has unique links to communication and these will be explored in various ways: consideration of acts of terror, recruiting new terrorists, and issues in choosing effective and ineffective means of fighting terrorism. Additional topics include media portrayals of terrorism in news discourse and mediated communication such as motion pictures and televised dramatic portrayals. Prerequisite: COMS 130. LEC.

COMS 620. Communication and New Technology. 3 Hours. S.
This course explores the impact of new communication technology on individuals and groups in various contexts. Topics include: The development of computer-mediated communication, social and psychological impacts of new communication technology, the evolution of telework and advances in interactive telecommunications. LEC.

COMS 639. Legal Communication. 3 Hours. S.
An analysis of how communication principles and theories operate within the context of the legal system. Topics covered will include the lawyer/client interview, depositions and pre-trial discovery, settlement negotiation, jury selection, opening and closing statements, and witness testimony. Prerequisite: COMS 130 or COMS 150. LEC.

COMS 647. Issues in Intercultural Communication. 3 Hours. S.
Examination of the processes and factors affecting communication in an intercultural context, and of methods of training for intercultural communication roles. Prerequisite: COMS 547 and an introductory course in anthropology, or consent of instructor. LEC.

COMS 656. Mass Media: Social Science Applications. 3 Hours. S.
This course introduces students to the major theories of and prominent research in mass communication. The aim is to stimulate critical thinking about the content and effects of mass communication, develop critical consumption skills, and enhance awareness of public policy issues relating to the media. Students are required to read a variety of chapters and articles on mass communication, promoting independent investigation into specific areas of interest. This course is a bridge course and meets with a graduate level section of the same title. Prerequisite: COMS 356. LEC.

COMS 667. Interpersonal Communication in Multinational Organizations. 3 Hours.
A study of interpersonal communication in management and professional development in intercultural situations. Focus on preparation of the global manager or professional in the organizational environment. Special attention to the problems and challenges of intercultural interactions in the context of multinational organizations. LEC.

COMS 669. Human Conflict and Peace. 3 Hours. H.
Study of religious, cultural, and social traditions toward understanding the nature and purposes of human conflict. Analysis of various meanings of peace, with emphasis on study of nonviolent approaches to management of conflict. Class discussion, readings, and individual research projects. (Same as REL 669.) Prerequisite: Junior standing or above. LEC.

COMS 710. Survey of Theory and Research in Organizational Communication. 3 Hours.
This course examines the theoretical and philosophical underpinnings of organizational communication research. Course topics cover variable analytic traditions and systems theory, as well as cultural, critical, and various interpretive approaches to understanding communication in organizational contexts. Prerequisite: COMS 310 and permission of the instructor. LEC.

COMS 730. Writing and Speaking for Decision Makers. 3 Hours.
Theory and application of communication strategies for corporate communication. This course presents rhetorical analysis of organizational situations and audiences, focusing on corporate decision-makers. Included are informative and persuasive communications such as board presentations, requests for proposal and responses to RFPs, grant proposals, and persuasive presentations for adoption, implementation, or evaluation of organizational programs. Course is limited to Regents Center students only. LEC.

COMS 741. Special Topics in Communication Studies: ____. 2-3 Hours.
Examination of special topics in Communication Studies. Prerequisite: Instructor consent. LEC.

COMS 784. Proseminar in Communication and Aging. 1 Hour.
A weekly forum for students and faculty to discuss professional issues and interdisciplinary research in communication and aging. May be repeated for credit. (Same as PSYC 784.) (Same as SPLH 784.) Prerequisite: Consent of instructor. LEC.
COMS 787. Gerontology Proseminar. 3 Hours.
A proseminar coordinated by the Gerontology Center. The proseminar explores essential areas of gerontology for researchers and practitioners, providing a multidisciplinary (psychology, biology, sociology, and communication) perspective on aging. The proseminar surveys contemporary basic and applied research, service programs, and policy and management issues in gerontology. (Same as ABSC 787, AMS 767, PSYC 787, and SOC 767.) (Formerly HDFL 787.) LEC.

COMS 807. Rhetoric, Politics and the Mass Media. 3 Hours.
This course investigates the ways in which rhetorical strategies (persuasive and linguistic usage) permeate the relationship between politics and politicians and the mass media. We will analyze media coverage of political debates, the presidential use of radio, television and press conferences, the network evening news coverage of political events, the influence of political advertising to see how political decisions are influenced by and influence the media. LEC.

COMS 810. Organizational Communication: Theory and Research. 3 Hours.
This course examines the theoretical and philosophical underpinnings of organizational communication research. Course topics cover variable analytic traditions and systems theory, as well as cultural, critical, and various interpretive approaches to understanding communication in organizational contexts. Prerequisite: COMS 310 and permission of instructor. LEC.

COMS 811. Applied Organization Communication. 3 Hours.
This survey course addresses key communication processes in organizations, including developing and sustaining workplace relationships, providing and receiving feedback, processes of effective teams and in leadership situations. Students will apply these concepts to appreciate the dynamics of organizational culture, power, and ethics at work and will identify strategies to enhance workplace success. SEM.

COMS 835. Impression Formation and Interpersonal Behavior. 3 Hours.
Intensive investigation of the processes involved in impression formation and of the effects of established impressions upon interpersonal communication. (Same as PSYC 845.) Prerequisite: COMS 535 or PSYC 670. LEC.

COMS 844. Seminar in Interpersonal Communication. 3 Hours.
This class will address current theory and research in interpersonal communication. Issues addressed may include verbal or nonverbal communication in families, close relationships, initial interactions, and the like. LEC.

COMS 846. Communication and Aging. 3 Hours.
Examination of the interrelationship between communication and the aging process. The course will include current research and theory on such topics as intergenerational communication, language and age identity, age-stereotyping and communication, mass media and aging, age and health communication, and others of current interest in the field. LEC.

COMS 848. Communication Audits in Organizations. 3 Hours.
The principal thrust of this course is a hands-on analysis of the communication in 1-2 organizations. Students work as a consulting group to analyze dimensions of communication, communication channels, job satisfaction, organizational commitment, and communication strategies. Experience is gained in organizational research methods, instrument development, organizational analysis, feedback, and organizational development. LEC.

COMS 850. Introduction to Research Methods. 3 Hours.
An introduction to methodological approaches to the study of communication. Approaches considered will include (a) humanistic message analysis and evaluation; (b) ethnographic and observational techniques; (c) survey construction and execution; and (d) experimental design and procedures. Special focus on issues of validity, reliability, and ethics. LEC.

COMS 851. Communication Research: Historical and Descriptive. 3 Hours.
An introduction to types of historical and descriptive research in human communication. Library resources and methods of research will be covered. Emphasis will be placed upon preparing a research prospectus and upon writing the research report. LEC.

COMS 852. Communication Research: Experimentation and Quantitative Analysis. 3 Hours.
An introduction to the process of research in communication studies, including consideration of basic principles in research design, methods of observation and measurement, and the application of appropriate statistical techniques. LEC.

COMS 855. Qualitative Research Methods in Communication Studies. 3 Hours.
Study of strategies for describing communication behavior in particular contexts, emphasizing ethnography and specific observational and interview data gathering and analysis methods. Prerequisite: COMS 755 or equivalent. LEC.

COMS 856. Communication Research: Quantitative Analysis. 3 Hours.
An intermediate overview of statistical techniques commonly used in communication research. Content will include a review of univariate statistical tests such as t-test, correlation, chi-square, and other nonparametric techniques of data analysis. Additionally, factorial analysis of variance, multiple regression, and factor analysis will be covered, along with the application of appropriate statistical techniques. Prerequisite: COMS 850 and an introductory course in statistics. LEC.

COMS 859. Proseminar in Communication Studies. 3 Hours.
An overview and integration of communication studies based upon an examination of selected basic writings in the discipline. LEC.

COMS 860. New Communication Technology and the Work Place. 3 Hours.
An examination of changes in the workplace and for workers associated with new communication technologies such as e-mail, voice mail, teleconferencing, distributed computer processing, and computer-supported decision making. Emphasis is on changes in organizational communication patterns, participant responses to the technologies, and evaluation of the outcomes of implementing work place communication technologies. To be taken by Regents Center students. LEC.

COMS 898. Investigation and Conference (For Master’s Candidates). 1-8 Hours.
(Limited to eight hours credit toward the M.A. degree.) Directed research and experimentation for M.A. students in some phase of speech science or the teaching of speech and drama. RSH.

COMS 899. Master’s Thesis. 1-6 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

COMS 907. Seminar in Political Communication. 3 Hours.
This course will focus on contemporary political communication theory and illustrate how such theories are exemplified in modern political contexts: political arguments and developing consensus, communication strategies in Congressional and bureaucratic decision-making, the
rhetorical presidency, the dissemination of political information, political narrative, and political campaigns. LEC.

COMS 920. Introduction to Teaching Oral Communication. 3 Hours. This seminar prepares new graduate teaching assistants for their first teaching experience. Students will develop course materials including lectures, discussion prompts, assignments, exams based on pedagogical best practices. Students will apply theoretical concepts related to teaching, learning and assessment, and apply those theories to their own classrooms. LEC.

COMS 930. Seminar in Speech: ______. 1-4 Hours. Special problems in speech. Prerequisite: Twelve hours of credit in the department. LEC.

COMS 932. Theories of Rhetoric: Classical. 3 Hours. An intensive study of the rhetorical theories of classical writers from 466 B.C. to the decline of Roman oratory. Principal emphasis will be on Isocrates, Plato, Aristotle, Quintilian, Cicero, and Longinus. LEC.

COMS 933. Theories of Rhetoric: Neo-Classical. 2-3 Hours. A study of the development of rhetorical theory from 325 A.D. to the twentieth century. Notable departures from the classical tradition will be examined. Special concentration on the writings of Augustine and the tradition of medieval preaching. Alcuin, Ramus, Bacon, Campbell, Whately, Blair, John Quincy Adams, and the elocutionary movement. LEC.

COMS 936. Seminar in Language and Discourse. 3 Hours. This seminar uses interdisciplinary readings to examine central theoretical questions regarding language and communication. The course moves from considering major theoretical positions to current research in communication on discourse. Methodological issues in the study of language and discourse are also addressed. LEC.

COMS 938. Seminar in Persuasion. 2-3 Hours. Examination of selected topics in persuasion, with emphasis on the application of recent theories and experimental research to the analysis of persuasive discourse. Prerequisite: COMS 538 or equivalent. LEC.

COMS 939. Seminar in Argumentation. 2-3 Hours. Examination of special problems in argumentation, with emphasis on the relationship of systems of argumentation to their philosophic presuppositions. Discussion of the writings of Toulmin, Natanson, Johnstone, Perelman, Dewey. Prerequisite: COMS 539 or equivalent. LEC.

COMS 941. Seminar in Health Communications. 3 Hours. This course is a survey of the many disciplines of study found in the field of health communication. Emphases include decision making regarding health-related behaviors, the influence of interpersonal messages, negotiating treatment with health care providers, coping with medical difficulties, the critical examination of medical research, news, and health campaigns, and the impacts of new technologies. SEM.

COMS 945. Seminar in Social Support. 3 Hours. This course is a survey of the many disciplines of the fundamental form of communication known as social or emotional support or comforting. Emphases include message-, receiver-, and interactionally-oriented approaches, as well as support contexts, dilemmas, structures, features, and positive effects on physical and mental health. SEM.

COMS 946. Seminar in Communication and Intergroup Relations. 3 Hours. Conceptual and theoretical frameworks for exploring and understanding relations between individuals from different societal groups (e.g., cultural/ethnic, gender, age). Focus on issues of identity, power relations as manifested in interpersonal, mass media, and organizational contexts.

The course will include methodological and applied implications for studying different groups, both within the USA and around the world. LEC.

COMS 947. Communication in Cultural Innovation and National Development. 3 Hours. An examination of the role of speech and other types of communication in the introduction of change within cultures and the diffusion of innovation between cultures. Specific communication problems concerning agriculture, education, international aid, military assistance, and public health will be discussed. LEC.

COMS 948. Seminar in Organizational Communication. 2-3 Hours. Analysis of speech communication functions in the organizational structures of business, industry, labor, military, education, government, and professional agencies. Development of conceptual schemes for conducting research and training programs on speech systems which characterize the operation of organized groups. LEC.

COMS 950. Seminar in Public Address: ______. 3 Hours. The study of public address by historical periods or by topics. LEC.

COMS 951. Seminar in Movement Theory and Genre Criticism. 3 Hours. This course examines the theoretical and methodological underpinnings of approaches to rhetorical analysis focusing on social movements and rhetorical genres. It will review existing theory on these topics, develop a methodological approach to both forms of critical analysis, and test each methodological approach via case studies. Prerequisite: COMS 755 or consent of instructor. LEC.

COMS 952. Seminar in Mythic and Narrative Approaches to Rhetorical Criticism. 3 Hours. This course examines the theoretical and methodological underpinnings of approaches to rhetorical analysis focusing on narrative rhetoric, with a special emphasis on myth as a type of narrative. It will review existing theory on these topics, consider a number of alternative methodological approaches, and test each methodological approach via case studies. Prerequisite: COMS 755 or consent of instructor. LEC.

COMS 953. Seminar in Organizational Rhetoric. 3 Hours. This course focuses on theoretical and methodological materials related to the use of rhetoric in an organizational setting. It will review existing theory and methodological development on this topic, paying special attention to the distinction between rhetoric used within an organization and rhetoric focused on audiences external to the organization. Multiple case-studies will be considered to illuminate the functioning of both internal and external organizational rhetoric. Prerequisite: COMS 755 or consent of instructor. LEC.

COMS 955. Seminar in Rhetorical Criticism. 3 Hours. A study of contemporary and historical writings on rhetorical criticism. Emphasis is placed upon the development of critical methodology for future research and writing. Prerequisite: COMS 755. LEC.

COMS 958. Comparative Theories of Speech Communication. 3 Hours. A descriptive and comparative analysis of theories of communication applicable to speech behavior. Prerequisite: COMS 859 or equivalent. LEC.

COMS 959. Theories of Rhetoric: Contemporary. 3 Hours. A study of the writings on rhetorical theory in the twentieth century. Principal emphasis will be on the psychological treatment of rhetoric. I.A. Richards and Kenneth Burke, and the relationship in the twentieth century between rhetoric and dialectic, rhetoric and poetic. Prerequisite: COMS 859 or equivalent. LEC.
COMS 997. Research in: _____ 1-6 Hours.
Supervised research under the direction of a faculty member on a topic of mutual interest to the faculty and graduate student. RSH.

COMS 998. Investigation and Conference (For Doctoral Candidates). 1-8 Hours.
(Limited to eight hours credit towards the Ph.D. degree.) Directed research and experimentation for Ph.D. students in some phase of speech science or the teaching of speech and drama. RSH.

COMS 999. Doctoral Dissertation. 1-12 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

Computational Biology Courses

BINF 701. Bioinformatics I. 5 Hours.
First semester of a two-semester course in bioinformatics and computational biology. Topics include basic concepts of bioinformatics and molecular modeling, bioinformatics databases, computational tools and modeling methods, protein sequence and structure alignment, conformational analysis, secondary structure determination, tertiary structure modeling (homology, threading, ab initio, molecular dynamics and Monte Carlo simulations, protein folding and dynamics), as well as students presentations of material from current papers in the field of study and their own on-going research for discussion and critique. Prerequisite: College introductory biochemistry (no requirement for specific courses), math, and computer courses or concurrent enrollment in such courses and consent of instructor. LEC.

BINF 702. Bioinformatics II. 5 Hours.
Second semester of a two-semester course in bioinformatics and computational biology. Topics include protein quaternary structure modeling (protein-protein/DNA/small ligand docking, binding, computer-aided drug design), protein structure-function relationships, biological membranes (structure and function of integral membrane proteins, protein-membrane and protein-protein interactions in membranes), phylogenetic trees, modeling of genome-wide protein interaction networks based on structure, sequence, experiment and data-mining, as well as students presentations of material from current papers in the field of study and their own on-going research for discussion and critique. Prerequisite: BINF 701. LEC.

BINF 703. Advanced Computational Biology I. 5 Hours.
This is the first semester of an intensive two-semester course in Computational Biology, aimed at second-year graduate students. Topics include graph theory, systems biology, mathematical and computational modeling of complex systems, synthetic biology and protein design. Students will gain a mastery of cutting-edge topics in Computational Biology through lectures, careful reading of current literature, and advanced individual research projects. Prerequisite: BINF 701 and BINF 702, or consent of instructor. LEC.

BINF 704. Advanced Computational Biology II. 5 Hours.
This is the second semester of an intensive two-semester course in Computational Biology, aimed at second-year graduate students. Topics include graph theory, systems biology, mathematical and computational modeling of complex systems, synthetic biology and protein design. Students will gain a mastery of cutting-edge topics in Computational Biology through lectures, careful reading of current literature, and advanced individual research projects. Prerequisite: BINF 703. LEC.

BINF 709. Topics in: _____. 1-3 Hours.
Advanced courses on special topics in Bioinformatics, given as need arises, including lectures, discussions, readings, or laboratory. Students may select sections according to their special interests. LEC.

BINF 999. Doctoral Dissertation. 1-12 Hours.
Original research that is to be incorporated into a PhD dissertation. THE.

East Asian LanguagesCultures Courses

CHIN 100. Elementary Conversational Chinese I. 3 Hours. U.
Three hours of class per week plus outside use of recorded text materials. Basic spoken language instruction intended primarily for beginners planning travel or work in China and Taiwan. Introduction to basic written characters. Does not fulfill College of Liberal Arts and Sciences foreign language distribution requirements or department major and minor requirements. LEC.

CHIN 101. Elementary Conversational Chinese II. 3 Hours. U.
Continuation of CHIN 100. Prerequisite: CHIN 100 or equivalent. LEC.

CHIN 102. Beginning Chinese I. 4 Hours. U.
Taught mainly in the summer, this course covers about 75% of the material in CHIN 104, upon which this course is modeled. LEC.

CHIN 104. Elementary Chinese I. 5 Hours. U.
Three hours of lecture and three hours of spoken drill each week. An introduction to spoken and written modern standard Chinese (Mandarin). Not open to students with native ability in Mandarin or Chinese dialect. Students who have any previous knowledge of Chinese must take a placement exam before enrolling in Chinese classes at K.U. Consult Department of East Asian Languages and Cultures for details. LEC.

CHIN 105. Elementary Chinese for Advanced Beginners. 3 Hours. U.
This course is designed for students who have already acquired some elementary Chinese language abilities (in high school or from family), but cannot be placed in CHIN 108, Elementary Chinese II. The course focuses on perfecting listening, speaking, reading and writing skills, and prepares students for CHIN 108. For admission to the class, students must take the EALC Chinese placement exam, be interviewed by designated instructors, and approved. LEC.

CHIN 108. Elementary Chinese II. 5 Hours. U.
Continuation of CHIN 104. Prerequisite: CHIN 101, CHIN 104, or equivalent. LEC.

CHIN 148. Intensive Elementary Chinese. 10-12 Hours. U.
An accelerated one semester course in elementary Chinese, covering the material of CHIN 104 and CHIN 108. Classes meet for two hours of lecture and one hour of drill daily. Emphasis on spoken language with grammar and readings in selected texts. No prerequisite. LEC.

CHIN 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Chinese. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

CHIN 204. Intermediate Chinese I. 5 Hours. U.
Continuation of CHIN 108. Three hours of lecture and three hours of spoken drill. Prerequisite: CHIN 108 or equivalent. LEC.

CHIN 206. Intermediate Chinese Conversation. 2 Hours. U.
Practice in speaking, presentation of prepared talks, and guided discussions. This course is primarily used to award transfer credit and does not fulfill any portion of the College of Liberal Arts and Sciences foreign language requirement. Prerequisite: CHIN 204 or equivalent. FLD.

CHIN 208. Intermediate Chinese II. 5 Hours. U.
Continuation of CHIN 204. Prerequisite: CHIN 204. LEC.
CHIN 251. Reading and Writing Chinese I. 1-3 Hours. H.
Designed for those who speak modern standard (Mandarin) Chinese but lack reading and writing skills. Focuses on acquiring knowledge of the Chinese writing system and preparing students for possible entry into advanced courses in Chinese, e.g. CHIN 504 (Advanced Modern Chinese I), or, after appropriate testing, for possible exemption from the College of Liberal Arts and Sciences foreign language requirement. Students should take the online Chinese placement exam and consult with the Chinese Language Program Coordinator. Enrollment by permission of the Chinese Language Program Coordinator only. LEC.

CHIN 252. Reading and Writing Chinese II. 1-3 Hours. H.
Continuation of CHIN 251. Prerequisite: CHIN 251 or permission of the instructor. LEC.

CHIN 290. Accelerated Chinese. 3 Hours. U.
Instruction in reading and writing Chinese for students who already possess a degree of oral/aural proficiency. This course will prepare students for enrollment in CHIN 504, Advanced Modern Chinese I. No prerequisites. Consent of instructor required. LEC.

CHIN 342. Introduction to Classical Chinese. 3 Hours. H.
An introduction to Classical Chinese through detailed analysis of short original passages from a variety of early Chinese texts. Students gain a foundation in the grammar and vocabulary of Classical Chinese, preparing them for CHIN 544. The course is offered at the 300 and 500 levels, with additional requirements for students taking the 500 level. Prerequisite: A basic knowledge of Chinese characters (e.g. from CHIN 108 or JPN 108) and consent of the instructor, or CHIN 208 or JPN 208. Not open to students who have completed CHIN 542. LEC.

CHIN 386. Advanced Chinese Conversation. 2 Hours. U.
Guided discussions designed to increase fluency and further improve pronunciation. Prerequisite: CHIN 504 or equivalent. LEC.

CHIN 498. Directed Readings in Chinese. 1-4 Hours. H/W.
Readings in Chinese on a subject selected by a student with the advice and direction of the instructor. Individual meetings and reports. Prerequisite: Consent of instructor. IND.

CHIN 504. Advanced Modern Chinese I. 5 Hours. H/W.
Five hours of class and two of drill. Readings in selected modern Chinese literary texts and discussion in Chinese of recordings of stories and dramas. Prerequisite: CHIN 208 or equivalent. LEC.

CHIN 508. Advanced Modern Chinese II. 5 Hours. H/W.
Continuation of CHIN 504. Prerequisite: CHIN 504 or equivalent. LEC.

CHIN 512. Advanced Chinese I. 2 Hours. H/W.
Readings in modern Chinese texts on a variety of subjects and discussion in Chinese. Prerequisite: CHIN 218 or equivalent. LEC.

CHIN 513. Advanced Chinese II. 2 Hours. H/W.
Continuation of CHIN 512. Prerequisite: CHIN 512 or equivalent. LEC.

CHIN 542. Introduction to Classical Chinese. 3 Hours. H/W.
An introduction to Classical Chinese through detailed analysis of short original passages from a variety of early Chinese texts. Students gain a foundation in the grammar and vocabulary of Classical Chinese, preparing them for CHIN 544. The course is offered at the 300 and 500 levels, with additional requirements for students taking CHIN 542. Prerequisite: A basic knowledge of Chinese characters (e.g. from CHIN 108 or JPN 108) and consent of instructor, or CHIN 208 or JPN 208. Not open to students who have completed CHIN 342. LEC.

CHIN 544. Readings in Classical Chinese: ______. 3 Hours. AE42/AE61 / H/W.
Classical Chinese is the language of the most famous works of Chinese philosophy and most Chinese literature before the twentieth century. The course introduces readings from a specific philosophical school or literary genre, for example: Confucian Philosophical Texts, Daoist Philosophical Texts, Poetry, Ming/Qing fiction, etc. Prerequisite: CHIN 342 or CHIN 542 or consent of the instructor. May be repeated for credit if content varies. LEC.

CHIN 562. Modern Chinese Texts I. 3 Hours. NW AE61 / H/W.
Readings and interpretation of varied modern Chinese texts. Continued study of the language in the form of oral discussion and written reports. Prerequisite: CHIN 504 or equivalent. LEC.

CHIN 564. Modern Chinese Texts II. 3 Hours. H/W.
A continuation of CHIN 562 with materials of increasing difficulty. Prerequisite: CHIN 562. LEC.

CHIN 580. Introduction to Chinese Research Materials. 1 Hour. U.
An introduction to basic reference works in Chinese and Western languages, including dictionaries, encyclopedias, concordances, and bibliographies. Library organization and research methods will also be discussed. (Five week course.) Prerequisite: CHIN 208 or equivalent. LEC.

CHIN 598. Readings in: ______. 1-3 Hours. H/W.
Students will read selections from materials on a given topic or topics. May be repeated for credit. Prerequisite: CHIN 564 or permission of instructor. IND.

CHIN 690. Seminar in Chinese Texts. 1-3 Hours. H/W.
Varying topics with varying prerequisites. LEC.

CHIN 801. Directed Readings and Research in Chinese. 1-4 Hours.
Advanced language training for the study of Chinese sources in the humanities or social science field of the student. Prerequisite: Consent of instructor. RSH.

CHIN 880. Advanced Chinese Research Materials. 2 Hours.
A detailed examination of various Chinese language reference works and research materials. Emphasis will be placed on the use of different types of reference works to carry out research strategies. Prerequisite: CHIN 504 or equivalent and CHIN 580. LEC.

EALC 105. Living Religions of the East. 3 Hours. HR/NW AE42/GESH / H/W.
A basic introduction to religion in India, China, and Japan with emphasis upon religions that affect the modern period. Not open to students who have taken REL 108/EALC 108. (Same as REL 106.) LEC.

EALC 108. Living Religions of the East, Honors. 3 Hours. HR/NW AE42/GESH / H.
A basic introduction to religion in India, China, and Japan with emphasis upon religions that affect the modern period. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken REL 106/EALC 105. (Same as REL 108.) LEC.

EALC 121. Introduction to Contemporary China. 3 Hours. NW AE42 / H.
An overview of contemporary Chinese culture and society since the economic reforms and opening up launched in 1978, through the study of changes in politics, the economy, society, culture and everyday life in China. The course is taught in English. No prior knowledge of Chinese language is required. LEC.

EALC 130. Myth, Legend, and Folk Beliefs in East Asia. 3 Hours. NW AE42 / H/W.
A survey of the commonly held ideas about the beginning of the world, the role of gods and spirits in daily life, and the celebrations and rituals proper to each season of the year. The purpose of the course is to present the traditional world view of the peoples of East Asia. (Same as ANTH 293, REL 130.) LEC.
EALC 131. Myth, Legend, and Folk Beliefs in East Asia, Honors. 3 Hours. NW / H/W.
A survey of the commonly held ideas about the beginning of the world, the role of gods and spirits in daily life, and the celebrations and rituals proper to each season of the year. The purpose of the course is to present the world view of the ordinary peoples of East Asia in contrast to their more sophisticated systems of philosophy that are better known to the Western world. Open only to students in the University Honors Program or by permission of instructor. LEC.

EALC 136. The Japanese Tradition. 3 Hours. NW / H/W.
An examination of the cultural heritage of Japan from earliest times to Meiji Restoration. Emphasis will be placed upon Japan's literary tradition. Not open to students with credit in EALC 512. LEC.

EALC 177. First Year Seminar: _______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in East Asian Languages and Cultures. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

EALC 198. Studies in: _______. 1-5 Hours. H.
Topics are various aspects of Chinese and Japanese cultures. LEC.

EALC 231. Introduction to: _______. 1-3 Hours. NW / H/W.
Topics are various aspects of Chinese and Japanese cultures. LEC.

EALC 298. Studies in: _______. 1-5 Hours. H.
Special purpose subject in East Asia and contiguous regions. LEC.

EALC 301. Cultural Traditions of China, Inner Asia, and Tibet. 3 Hours. NW / H.
This course acquaints the student with the broad outlines of the traditional cultures and literatures of China and the contiguous regions of Inner Asia and Tibet. Course materials include translations and discussions of oral tales, epics, poetry, novels, and biography, which explore the interaction between these regions and cultures as well as their continuities and disparities. The course is most appropriate for students with no background in Asian culture. LEC.

EALC 302. Cultural Traditions of Japan and Korea. 3 Hours. NW / H/W.
A wide-ranging examination of the similarities and difference between Japanese and Korean culture through folklore, literature, film, and other texts. Format: Lecture and discussion. Designed for students with no background in Asian culture. LEC.

EALC 310. The Chinese Novel. 3 Hours. H/W.
Reading and analysis of the form and types of Chinese novel, its beginnings and development to the present day. LEC.

EALC 312. Traditional Japanese Literature in Translation. 3 Hours. H/W.
A survey of the major works of Japan's long literary heritage. Readings from such classics as the Tale of Genji, the world's first novel, No drama, and poetry will acquaint the student with one of the world's great literary traditions. (Not open to students with credit in EALC 712.) LEC.

EALC 314. Traditional Chinese Literature in Translation. 3 Hours. H/W.
A general survey of representative literary works of major genres in traditional China. Lectures, assigned readings, and discussions in English. A knowledge of Chinese is not required. (Not open to students with credit in EALC 714.) LEC.

EALC 315. Survey of Japanese Film. 3 Hours. NW AE42 / H.
This course surveys the major developments in and critical approaches to twentieth-century Japanese film. Focusing mostly on narrative films, the course introduces students to basic methodological issues in Japanese film history, especially questions of narrative, genre, stardom, and authorship. We examine Japanese cinema as an institution located within specific contexts focusing on the ways in which this institution shapes gender, race, class, ethnic and national identities. This course examines how patterns of distribution, exhibition, and reception have influenced film aesthetics and film style over the last century. Through secondary readings, lectures, and discussions students critically examine how Japanese cinema as an institution both responds to and intervenes in the social, cultural, and political history of twentieth century Japan. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. (Same as FMS 315.) LEC.

EALC 316. Modern Japanese Literature in Translation: 1868-1945. 3 Hours. AE42 / H/W.
A survey of major literary works of Japan's modern era through the Pacific War. Topics include the social and spiritual challenges of modernization, urbanization, and the issues of race and national identity. Works by Soseki, Ogai, Akutagawa, Tanizaki, Kawabata, and others will be covered. This course is offered at the 300 and the 700 levels, with additional assignments at the 700 level. Not open to students who have completed EALC 716. LEC.

EALC 317. Contemporary Japanese Literature in Translation: 1945-Present. 3 Hours. AE42 / H/W.
A survey of major literary works of Japan's post-war and contemporary eras. Topics include life during and after the war, the experience of the atomic bomb, and the postmodern landscape. Works by Dazai, Mishima, Oe, Abe, Murakami, and others will be covered. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. Not open to students who have completed EALC 717. LEC.

EALC 318. Modern Chinese Fiction and Film. 2-3 Hours. AE42 / H/W.
A general survey of important Chinese fiction and film of the 20th century. Lectures, readings, and discussions in English. Knowledge of Chinese is not required. Not open to students with credit in EALC 518. This course is taught at the 300 and 500 levels with additional assignments at the 500 level. LEC.

EALC 319. Contemporary Chinese Fiction and Film. 3 Hours. AE42 / H.
A general survey of important Chinese fiction and film from the late 20th century to the present. Lectures, readings, and discussions in English. A knowledge of Chinese is not required. (Not open to students with credit in EALC 519.) LEC.

EALC 320. Modern East Asia: Multiple Perspectives. 3 Hours. NW / H.
A survey of the major political changes in China, Japan, Korea and Tibet in the 20th century. Students will learn about the changes that swept through East Asia as it rapidly modernized via documentary films and lectures and will study the impact of these changes on individuals by reading autobiographies. LEC.

EALC 328. The Body in Japan. 3 Hours. H.
The course examines historical and cultural concepts of the body in Japan and then focuses upon the pivotal events of the last half-century as experienced through the body. Students are introduced to a wide range of extreme bodily experiences: the regimented body of wartime, the body irradiated by the atomic bomb, the body of malnutrition and national humiliation, possessed bodies, licentious bodies, creating life through the body, the aged body, self-immolation of the body, nurturing the body, beautifying the body, and others. The primary sources of investigation and
Asian and global context. The course uses a multi-disciplinary approach, from the time of its liberation from Japan in 1945 to the present in its East Asian and global context.

EALC 330. Chinese Literature and Culture: Premodern Times. 3 Hours. NW / H/W.
An examination of Chinese literature and culture from earliest times to the modern period. Not open to students who have taken EALC 530. This course is taught at the 300 and 500 levels with additional assignments at the 500-level. LEC.

EALC 331. Studies In: ________. 1-3 Hours. H/W.
Topics in the Chinese and Japanese cultures. LEC.

EALC 332. Asian Literature in Translation: _______, 3 Hours. NW / H/W.
Introduction to Asian culture and society through close reading and analysis of important works of Asian literature. Themes and issues to be focused upon will vary (e.g., traditional or modern literature of China, Japan, or Korea, and special topics of interest). Lecture and discussion format. Knowledge of Asian languages is not required. LEC.

EALC 333. Asian Literature in Translation, Honors: _______, 3 Hours. NW / H/W.
Introduction to Asian culture and society through close reading and analysis of important works of Asian literature. Themes and issues to be focused upon will vary (e.g., traditional or modern literature of China, Japan, or Korea, and special topics of interest). Lecture and discussion format. Knowledge of Asian languages is not required. Open only to students in the University Honors Program or by permission of instructor. LEC.

EALC 340. Structure of Chinese. 3 Hours. H.
A detailed study of the phonological and grammatical structure of Chinese and the interactions between language and culture. Depending on student interest, a unit on the pedagogy of teaching Chinese as a foreign language may also be included. Primarily for students who want a linguistic knowledge of the language rather than a practical command of it. Students taking the course at the 500 level will have more work required of them. LEC.

EALC 345. Chinese Cinema. 3 Hours. H.
This course surveys representative Chinese films since the 1980s and their global reception. The most recent formalistic, industrial, and institutional developments of Chinese cinema are examined. Students view films, do secondary readings, and learn theories and methodologies of film studies. Lectures and class discussions also cover the socio-historical context of contemporary Chinese filmmaking. This course is taught at the 300 and 500-levels with additional assignments required at the 500-level. Prerequisite: Junior status, or permission of the instructor. Not open to students with credit in EALC 545. LEC.

EALC 350. Contemporary Japan. 3 Hours. NW / U.
An exploration of the Japanese way of life, self-concepts, and world view through lecture, discussion, reading, and field trips to businesses, community organizations, and cultural sites. Offered only during the Summer Institute in Hiratsuka, Japan. LEC.

EALC 361. Colonial Korea. 3 Hours. H.
This course examines the history, society, and culture of Korea from the end of Choson dynasty through the Colonial period (1910-1945) in its East Asian and global context. The course uses a multi-disciplinary approach, including history, anthropology, literature, and film. Not open to students with credit in EALC 561. LEC.

EALC 362. Post-Colonial Korea. 3 Hours. H.
This course examines the history, society, and culture of South Korea from the time of its liberation from Japan in 1945 to the present in its East Asian and global context. The course uses a multi-disciplinary approach, including history, anthropology, literature, and film. Prerequisite: EALC 361 or EALC 561, or permission of the instructor. Not open to student with credit in EALC 562. LEC.

EALC 363. Gendered Modernity in East Asia. 3 Hours. H.
This course explores rapidly changing gender relationships and the sense of being "modern" in East Asia by examining marriage and family systems, work, education, consumer culture, and geopolitics. The class seeks to understand how uneven state control over men and women shapes desires, practices, and norms and how men and women act upon such forces. Avoiding biological or social determinism, this course treats gender as an analytical category and examines how modern nation-states and global geopolitics are constituted and operated. (Same as ANTH 363 and WGSS 363.) LEC.

EALC 364. Peoples of Japan and Korea. 3 Hours. NW / S/W.
An analysis of the cultural diversity and unity of the peoples of Japan and Korea. Emphasis on historical and ethnological relationships, social structure, and ethics. (Same as ANTH 364.) LEC.

EALC 365. Japanese People through Films. 3 Hours. NW / S/W.
Japanese people's culture and society through an extensive examination of both documentary and feature films. Readings from social science fields and literature will be used--the former to supply a theoretical framework for the study of Japanese people and the latter to further the inquiry into the individual sentiment motivating actions. (Same as ANTH 365.) LEC.

EALC 366. The Life Cycle in Japanese Culture and Literature. 3 Hours. NW / H/W.
A study of the Japanese people from birth to death: what it means to be born in a Japanese family, to grow up Japanese, and to die Japanese. Anthropological works and selections from Japanese literature and film will be used to examine ways in which Japanese people live through the critical periods in their life cycle. (Same as ANTH 366.) LEC.

EALC 368. The Peoples of China. 3 Hours. NW / S/W.
An analysis of the cultural origin, diversity, and unity of the peoples of China. Emphasis on historical development, social structure, cultural continuity and change, and ethics. (Same as ANTH 368.) LEC.

EALC 370. Chinese Folk Belief. 3 Hours. H/W.
A survey of the beliefs of the ordinary Chinese people throughout the centuries with regard to myths, the other world, festivals, and the gods. Prerequisite: A course dealing with China. LEC.

EALC 380. Popular Cultures of East Asia. 3 Hours. NW / H.
This course examines the contemporary popular cultures of Korea, Japan, China, and Taiwan, with particular emphasis on relations between East Asia and North America. Students study the issue of globalization and how the transnational flow of commodities and culture affects local societies and individual identities. They learn to identify, describe, and analyze the cross-cultural content of popular cultural artifacts and modes of expression relating to East Asia. To this end, they explore in detail such subjects as: fashion, foodways, cinema, manga, soap operas, and punk rock. Not open to students who have taken EALC 580. LEC.

EALC 410. The Culture of Play in Japan. 3 Hours. NW AE42 / N/W.
This course examines the phenomenon and manifestations of play in Japanese culture. Topics include but are not confined to: the philosophy of play, the semiotics of play, the places of play, the role of laughter, play in Japanese religion, simulation and performance, and play and competition. LEC.
EALC 411. The Culture of Play in Japan, Honors. 3 Hours. NW AE42 / N/W.
This course examines the phenomenon and manifestations of play in Japanese culture. Topics include but are not confined to: the philosophy of play, the semiotics of play, the places of play, the role of laughter, play in Japanese religion, simulation and performance, and play and competition. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

EALC 412. Visual and Literary Culture in Modern Japan. 3 Hours. H.
This course examines the interconnections between the evolution of modern Japanese literature and vision technologies such as painting, panoramas, magic lanterns, stereoscopes, photography, motion pictures, television, and computers. The course provides an overview of modern Japanese literature from the perspectives of the visual culture in which that literature was conceived. The course considers such authors as Higuchi, Soseki, Ogai, Shimazaki, Akutagawa, Tanizaki, Yokomitsu, Kawabata, and Abe. Not open to students who have completed EALC 612. LEC.

EALC 413. Asian Media Studies. 3 Hours. H.
This course examines new and emerging media in East Asia and how the media industries of East Asia function. Using recent scholarship and industry data on contemporary cybertechnologies, music studies, and television industries of East Asia we examine how such factors as globalization, post-colonialism, censorship, emerging technology, and national media legislation affect regional and transnational media industries in Japan, South Korea, and Mainland China/Taiwan/Hong Kong. (Same as FMS 413.) LEC.

EALC 415. Ancient China. 3 Hours. NW / H.
A survey of ancient Chinese culture to the Qin period. Major archaeological discoveries and the literary tradition are taken as the primary evidence through which a number of topics are introduced (for example: environment, food, writing, art, thought, ritual). A knowledge of Chinese is not required. The course is offered at the 400 and 600 levels, with additional assignments at the 600 level. Not open to students who have completed EALC 615. LEC.

EALC 418. Sexual Politics in Chinese Literature and Culture: Premodern Times. 3 Hours. NW / H.
This course uses myth, literature, history, biography, and other documents to discuss sexual politics in China from ca 1500 B.C.E. to the end of the last dynasty in 1911. Topics include: emperors, empresses, and consorts, polygamy, prostitution, love, yin and yang cosmology, the art of the bedchamber, women's literature, and erotic literature. Recommended: A course in East Asian studies. Not open to students who have taken EALC 618. This course is taught at the 400 and 600 levels with additional assignments at the 600-level. LEC.

EALC 420. Daily Life in China From the Opium War to the Present. 3 Hours. NW / H/W.
Daily life and issues of social and cultural interaction between China and Western nations from the Opium War to the present. Fiction, travel diary, historical sources, film, and personal accounts will make up course materials. LEC.

EALC 431. Studies in the Chinese and Japanese traditions. LEC.

EALC 488. Senior Seminar in East Asian Languages and Cultures. 3 Hours. AE61 / H/W.
Open to seniors majoring in East Asian Languages and Cultures or by consent of instructor. LEC.

EALC 498. Directed Readings in East Asian Languages and Cultures. 1-4 Hours. AE61 / H/W.
Readings in English on an East Asian subject, selected by a student with the advice and direction of the instructor. Individual meetings and reports. Prerequisite: ECIV 104 or ECIV 304 and consent of instructor. IND.

EALC 499. Honors Thesis. 3 Hours. AE61 / H/W.
Required of all students working for a degree with honors. May be repeated for a total of nine semester hours. IND.

EALC 508. Religion in China. 3 Hours. NW AE42/GE3H / H/W.
Survey of religious thought and practice in China from the Shang to the People's Republic. (Same as REL 508.) LEC.

EALC 509. Religion in Japan. 3 Hours. NW AE42/GE3H / H/W.
Survey of religious thought and practice in Japan from the Jomon period to the present. (Same as REL 509.) LEC.

EALC 510. Education in Japan. 3 Hours. NW / N/W.
An investigation of the relationship between education and Japanese national and cultural identity as expressed in conceptions of childhood: philosophical and political positions underlying curricular and administrative policies, teachers' training, and pedagogical styles; the interface between education, "work," and the economy in general; and the theme of "internationalization," (kokusaika). The course is taught in English. LEC.

EALC 518. Modern Chinese Fiction & Film. 3 Hours. AE42 / H.
A general survey of important Chinese fiction and film of the 20th century. Lectures, readings, and discussions in English. Knowledge of Chinese is not required. Not open to students with credit in EALC 318. This course is taught at the 300 and 500 levels with additional assignments at the 500-level. Prerequisite: An introductory East Asian studies course such as ECIV 104 or ECIV 304 or EALC 105; or consent of instructor. LEC.

EALC 519. Contemporary Chinese Fiction and Film. 3 Hours. H.
A general survey of important Chinese fiction and film from the late 20th century to the present. Lectures, readings, and discussions in English. A knowledge of Chinese is not required. This course is taught at the 300 and 500 levels with additional assignments at the 500-level. Prerequisite: An introductory East Asian studies course such as ECIV 104 or ECIV 304 or EALC 105; or consent of instructor. Not open to students with credit in EALC 319. LEC.

EALC 520. Entrepreneurship in East Asia. 3 Hours. NW / H.
An intensive examination of the history and current status of entrepreneurship in China, Japan, and other nations in East Asia. This course investigates the role of entrepreneurs in Asian economic development from the nineteenth century to the present, as well as the relationship between entrepreneurship and Asian cultural traditions. The opportunities and challenges of entrepreneurship in East Asia today are also considered. (Same as HIST 640.) LEC.

EALC 527. Asian Theatre and Performance. 3 Hours. NW / H/W.
A survey of traditional and modern theatre and performance in Asia, with greatest attention given to India, China, and Japan. A study of plays, dramatic genres, history, conventions of play production, and acting styles and other performance forms. (Same as THR 527.) LEC.

EALC 530. Chinese Literature and Culture: Premodern Times. 3 Hours. NW / H/W.
An examination of Chinese literature and culture from earliest times to the modern period. This course is taught at the 300 and 500 levels with additional assignments at the 500-level. Prerequisite: An introductory East Asian studies course, such as ECIV 104 or ECIV 304 or EALC 105; or consent of the instructor. Not open to students with credit in EALC 330. LEC.
EALC 536. Cultural Traditions of Japan. 3 Hours. NW / H/W.
An examination of the major intellectual and aesthetic trends in Japanese history. The course is designed to give teachers and professionals, as well as students with a general interest in Japan, an overview of its unique cultural tradition. Not open to students with credit in EALC 136. LEC.

EALC 541. Asian Film. 3 Hours. NW AE42 / H.
Seminar on various national film cultures of East and Southeast Asia. Representative films are studied from formal, stylistic, and socio-historic perspectives. Addresses the 12 impact of key cultural, economic, and political issues on each film industry. Class discussion, reports, and individual research papers. The course is offered at the 500 and 800 levels, with additional assignments at the 800 level. (Same as FMS 541.) Prerequisite: Junior status. LEC.

EALC 543. Contemporary Japanese Film. 3 Hours. NW AE42 / H.
Seminar on the major developments in the contemporary (1980-present) Japanese film industry examining how filmmaking practices and film criticism have been influenced by such issues as transnationalism, postcolonialism, critical race theory, postmodernism, and new media. We survey recent industrial and stylistic trends as well as key critical debates. Class discussion, reports, and individual research papers. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. (Same as FMS 543.) Prerequisite: Junior status. LEC.

EALC 545. Chinese Cinema. 3 Hours. H.
This course surveys representative Chinese films since the 1980s and their global reception. The most recent formalistic, industrial, and institutional developments of Chinese cinema are examined. Students view films, do secondary readings, and learn theories and methodologies of film studies. Lectures and class discussions also cover the socio-historical context of contemporary Chinese filmmaking. This course is taught at the 300 and 500-levels with additional assignments required at the 500-level. Prerequisite: Junior status, or permission of the instructor. Not open to students with credit in EALC 345. LEC.

EALC 555. Buddhists and Buddhism in China. 3 Hours. NW AE42 / H.
A reading and media-rich survey of institutional, ritual, literary, educational, and exegetical practices that have shaped the lives of Buddhists in China, past and present. Alterities within the Buddhist tradition, and interactions with other religious options, are considered. (Same as REL 555.) LEC.

EALC 561. Colonial Korea. 3 Hours. H.
This course examines the history, society, and culture of Korea from the end of the Choson dynasty through the colonial period (1920-1945) in its East Asian and global context. The course uses a multi-disciplinary approach, including history, anthropology, literature and film. Prerequisite: An introductory East Asian studies course, such as ECIV 104 or ECIV 304, or EALC 105; or consent of instructor. There are additional readings and more extensive writing assignments than in EALC 361. Not open to students with credit in EALC 361. LEC.

EALC 562. Post-Colonial Korea. 3 Hours. H.
This course examines the history, society, and culture of South Korea from the time of its liberation from Japan in 1945 to the present in its East Asian and global context. The course uses a multi-disciplinary approach, including history, anthropology, literature, and film. Prerequisite: EALC 361 or EALC 561, or permission of the instructor. There are additional readings and more extensive writing assignments than in EALC 361. Not open to students with credit in EALC 362. LEC.

EALC 563. Cultural History of Korea. 3 Hours. H.
This course examines the cultural history of Korea in periods prior to the 19th Century. Special attention is given to varying constructions of cultural value, heritage, and identity, together with the historically specific factors that engendered them. (Same as HIST 590.) LEC.

EALC 564. Modern Korean Culture and Society. 3 Hours. H.
This course examines the history, society, values, and political economy of Korea in its East Asian and global context. The course uses multi-disciplinary approaches, including those of history, anthropology, literature and film. Prerequisite: An introductory course in East Asian studies, or permission of instructor. LEC.

EALC 565. Popular Images in Japanese Culture, Literatures, and Films. 3 Hours. NW / S/W.
The course examines recurring themes and images in Japanese culture through films, literary works, and anthropological and other social science literature. These themes and images are studied in the contexts of both modern and traditional cultures. Although the popular deviates from the orthodox, nevertheless, the energy and pervasiveness of these offspring enforce and sustain “proper” cultural values. As a result of exploration of both highways and backroads of cultural expression, a holistic picture of Japanese ethos will emerge. (Same as ANTH 565.) LEC.

EALC 567. Japanese Ghosts and Demons. 3 Hours. NW / S/W.
An investigation of deeply rooted Japanese beliefs about intimate relationships among humans, animals, and nature - beliefs which help to explain the mysterious and to lend order to the world. Anthropological works, selections from Japanese literature, historical documents, artworks, and films will be used to examine supernatural themes. (Same as ANTH 567.) LEC.

EALC 570. The Structure of Japanese. 3 Hours. H.
A detailed study of the phonological and grammatical structure of Japanese and the use of the language in social/cultural contexts. Primarily for students who want a linguistic knowledge of the language rather than a practical command of it. (Same as LING 570.) LEC.

EALC 572. The Structure of Chinese. 3 Hours. AE42 / H.
A detailed study of the phonological and grammatical structure of Chinese and the interactions between language and culture. Depending on student interests, a unit on the pedagogy of teaching Chinese as a foreign language may also be included. Primarily for students who want a linguistic knowledge of the language rather than a practical command of it. (Same as LING 572.) LEC.

EALC 575. Love, Sexuality and Gender in Japanese Literature. 3 Hours. H.
An examination of Japanese attitudes toward love, sexuality, and gender differences as revealed in literature from the tenth century to the present. Discussion format. LEC.

EALC 578. Gender and Society in Modern China. 3 Hours. H.
This course examines gender politics and social institutions in modern China by examining important literary works and films from the Republican era (1911-1949), the Maoist era (1949-1976), and the post-Mao era (1976-present). Secondary readings are also supplied. All the readings are in English. No knowledge of Chinese is required. Prerequisite: An introductory East Asian studies course such as ECIV 104, ECIV 304, or EALC 105; or consent of the instructor. LEC.

EALC 580. Popular Cultures of East Asia. 3 Hours. NW / H.
This course examines the contemporary popular cultures of Korea, Japan, China, and Taiwan, with particular emphasis on relations between East Asia and North America. Students study the issue of globalization and how the transnational flow of commodities and culture affects local societies and individual identities. They learn to identify, describe, and analyze the cross-cultural content of popular cultural artifacts and modes of expression relating to East Asia. To this end, they explore in detail such subjects as: fashion, foodways, cinema, manga, soap operas, and punk
rock. More extensive writing requirements than 380. Not open to students who have taken EALC 380. LEC.

EALC 583. Imperial China. 3 Hours. NW / H/W.
An intensive survey of China's traditional civilization and its history, with emphasis on the last centuries of imperial rule under the Sung, Yuan, Ming, and Ch'ing dynasties (to 1850). (Same as HIST 583.) LEC.

EALC 584. Modern China. 3 Hours. NW AE42 / H/W.
An intensive survey of China's history from the early 19th century to the present. Key topics include the decline of the traditional system, the rise of communism, the Maoist era, and the tensions of change and control in the 1980s and 1990s. (Same as HIST 584.) LEC.

EALC 585. Reform in Contemporary China. 3 Hours. NW AE42 / H/W.
Examines the epochal changes that have occurred in China from Deng Xiaoping's rise to power in 1978 to the present. Includes a focus on the historical background of the revolutionary period before examining the political and economic changes that spawned the 1989 "pro-democracy" movement at Tiananmen. The course includes an analysis of the events of the 1990s focusing on U.S.-China political and economic relations and the destabilizing effects of inflation, infrastructural reform, political and economic decentralization, and leadership succession. A previous course on China is helpful, but not mandatory. (Same as POLS 668.) LEC.

EALC 587. Early Modern Japan. 3 Hours. NW AE42 / H/W.
Early modern Japan (16th to 19th century) examines the history, culture, and patterns of life during an era of rigid social control but artistic brilliance. After an historical overview of the period, students will explore topics including the social structure, travel, religion, thought, and the formation of traditional cultural forms such as Kabuki theater. (Same as HIST 587.) LEC.

EALC 588. Japan, 1853-1945. 3 Hours. NW / H/W.
This course provides an intensive survey of Japanese history from the arrival of Commodore Perry through the Pacific War. Social, economic, and political themes will be emphasized. Among the topics covered will be the Meiji Restoration, industrialization, Japanese imperialism, Taisho democracy, and wartime mobilization. (Same as HIST 588.) LEC.

EALC 589. Japan Since 1945. 3 Hours. NW / H/W.
This course provides an overview of Japanese history from the end of World War II to the present day. Among the topics covered will be the Allied Occupation, postwar politics and social change, the economic "miracle," popular culture, women and the family, crime and punishment, the educational system, and Japan's place in the world. (Same as HIST 589.) LEC.

EALC 590. Topics in East Asian Languages and Cultures: ____. 1-9 Hours. H/W.
Specific topical courses will be offered every year covering a number of disciplines. Credit, description, and prerequisites will vary. Note: May be repeated for credit up to the stated limit. LEC.

EALC 591. Topics in East Asian Languages and Cultures: ____. 1-9 Hours. S/W.
Specific topical courses will be offered every year covering a number of disciplines. Credit, descriptions, and prerequisites will vary. Note: May be repeated for credit up to the stated limit. LEC.

EALC 593. Modern Korea. 3 Hours. NW / H/W.
This course will examine selected topics in Modern Korean history in the 19th and 20th centuries, with special emphasis on Korea's connections to China and Japan. (Same as HIST 593.) Prerequisite: A college-level course in East Asian history or culture, or consent of instructor. LEC.

EALC 594. Law and Society in Traditional China. 3 Hours. H/W.
The course begins with a series of lectures on the main principles underlying Chinese social structure. The course then examines the application of those principles in legal cases. Students read legal cases in translation and argue them in class. (Same as HIST 594.) Prerequisite: A course in Chinese history. LEC.

EALC 596. Defining Japan: Marginalized Groups and the Construction of National Identity. 3 Hours. NW / H/W.
This course investigates the construction of national identity in modern Japan by examining the historical experiences of groups marginalized by mainstream society. We will explore the pressures of conformity, the pervasiveness of social ostracism and the surprising diversity in Japanese society. Among the groups discussed will be indigenous peoples (the Ainu, Okinawans), the Korean minority, the outcast class (burakumin), the sick and disabled, the Yakuza, and political activists. (Same as HIST 596.) LEC.

EALC 597. Japanese Theater History. 3 Hours. NW / H/W.
This course examines the interconnections between the evolution of Japanese theater, with special attention to traditional theater and the genres of noh, kyogen, and kabuki in particular, tracing their origins in the pre-modern era and their continued performance today. To gain an understanding of the historical and artistic setting of these arts, lectures and readings will consider broader issues such as performance and ritual in religion and daily life, gender and representation, and folk theater. A portion of this class will include practical studies of theatrical forms including noh dance and kabuki music (shamisen). (Same as HIST 597.) LEC.

EALC 598. History and Structure of the Japanese Language. 3 Hours. H/W.
The historical development of Japanese. Study of Japanese phonology, morphology and syntax, using the techniques of descriptive linguistics and generative grammar. Prerequisite: An introductory course in linguistics or one year of Japanese. LEC.

EALC 600. Biography of a City: ____. 3 Hours. H/W.
This interdisciplinary, team-taught course surveys the artistic, intellectual, and historical development of some of the great cities of the world, such as Kyoto or Tokyo. LEC.

EALC 612. Visual and Literary Culture in Modern Japan. 3 Hours. H.
This course examines the interconnections between the evolution of modern Japanese literature and vision technologies such as painting, panoramas, magic lanterns, stereoscopes, photography, motion pictures, television, and computers. The course provides an overview of modern Japanese literature from the perspectives of the visual culture in which that literature was conceived. The course considers such authors as Higuchi, Soseki, Ogai, Shimazaki, Akutagawa, Tanizaki, Yokomitsu, Kawabata, and Abe. There will be additional assignments for students in 612. Not open to students who have completed EALC 412. LEC.

EALC 615. Ancient China. 3 Hours. NW / H/W.
A survey of ancient Chinese culture to the Qin period. Major archaeological discoveries and the literary tradition will be taken as the primary evidence through which a number of topics are introduced (for example: environment, food, writing, art, thought, ritual). A knowledge of Chinese is not required. The course is offered at the 400 and 600 levels, with additional assignments at the 600 level. Not open to students who have completed EALC 415. LEC.

EALC 618. Sexual Politics in Chinese Literature and Culture: Premodern Times. 3 Hours. NW / H.
This course uses myth, literature, history, biography, and other documents to discuss sexual politics in China from ca 1500 B.C.E. to the end of
the last dynasty in 1911. Topics include: emperors, empresses, and consorts, polygamy, prostitution, love, yin and yang cosmology, the art of the bedchamber, women's literature, and erotic literature. Prerequisite: A course in East Asian studies. Not open to students who have taken EALC 418. This course is taught at the 400 and 600 levels with additional assignments at the 600-level. LEC.

EALC 620. Daily Life in China from the Opium War to the Present. 3 Hours. NW / H/W.
Daily life and issues of social and cultural interaction between China and Western nations from the Opium War to the present. Fiction, travel diary, historical sources, film, and personal accounts will make up course materials. LEC.

EALC 636. Women in Japanese Literature. 3 Hours. H/W.
An examination of women as subjects, readers, and writers of Japanese literature. Topics may include images and stereotypes of women in Japanese literature; feminist readings of this literature; female culture; and the psychodynamics of female creativity. LEC.

EALC 642. Chinese Thought. 3 Hours. NW AE42/GE3H / H/W.
A survey of the principal modes of Chinese thought from their origins through the imperial period. Not open to students with credit in EALC 132. (Same as HWC 524 and PHIL 506.) Prerequisite: Eastern civilizations course or a course in Asian history or a distribution course in philosophy. LEC.

EALC 646. Chinese Law. 3 Hours. H/W.
The history and development of civil and criminal law in China from its beginnings until the present. The course will be taught both by lectures and by discussion of cases. A section of the course will concern modern Chinese law. Prerequisite: A course on China, or general background in law or business. LEC.

EALC 649. Doing Business With China: Law and Policy. 3 Hours. NW / H/W.
A study of the issues involved in doing business with China. The current Chinese political and economic context will be examined, followed by a study of the Chinese legal system and Chinese economic law and regulation. Relevant U.S. law will also be considered. Prerequisite: A course on China, or general background in law or business. LEC.

EALC 656. Government and Politics of East Asia. 3 Hours. NW AE42 / S/W.
A comparative examination of the contemporary political institutions, processes and ideas of China, Japan, and Korea. (Same as POLS 656.) Prerequisite: A distribution course in political science or a course in East Asian studies. LEC.

EALC 666. Political Economy of East Asia. 3 Hours. S.
This course provides basic understanding of fiscal, monetarist, and trade policies; how governments in East Asia use them to pursue growth; the extent to which these governments follow or controvert economics to pursue growth; and how the performances of economies in East Asia relate to the US and global economies. (Same as POLS 666.) Prerequisite: POLS 150. LEC.

EALC 676. International Relations of Asia. 3 Hours. S/W.
An intensive study of the problems of ideological conflict, diplomatic relations, strategic arrangements, economic cooperation, and cultural exchange in East and Southeast Asia with special emphasis upon the roles of major world powers. (Same as POLS 676.) Prerequisite: POLS 170 or a course in East Asian studies. LEC.

EALC 678. Chinese Foreign Policy. 3 Hours. S/W.
In-depth examination of China's changing policies toward other countries with special emphasis on policy-making process, negotiating behavior, military strategy, economic relations, and cultural diplomacy. (Same as POLS 678.) LEC.

EALC 700. Introduction to East Asian Studies. 1 Hour.
Required of all M.A. students in the Department regardless of concentration. Introduction to resources in East Asian languages and literature. LEC.

EALC 701. Practicum in Teaching Chinese. 1 Hour.
This course is required every semester for graduate teaching assistants in the Chinese language program in EALC. The course will cover applicable second language acquisition theories and principles of foreign language pedagogy and focus on teaching methodologies, instructional techniques, and development of pedagogical materials specific to the Chinese classroom. This class will be conducted in a seminar format. Prerequisite: Teaching appointment in the East Asian Languages and Cultures department. SEM.

EALC 702. Practicum in Teaching Japanese. 1 Hour.
This course is required every semester for graduate teaching assistants in the Japanese language program in East Asian Languages and Cultures. The course will cover applicable second language acquisition theories and principles of foreign language pedagogy and focus on teaching methodologies, instructional techniques, and development of pedagogical materials specific to the Japanese language classroom. This class will be conducted in a seminar format. Prerequisite: Teaching appointment in the East Asian Languages and Cultures department. SEM.

EALC 703. Practicum in Teaching Korean. 1 Hour.
This course is required every semester for graduate teaching assistants in the Korean language program in East Asian Languages and Cultures. The course will cover applicable second language acquisition theories and principles of foreign language pedagogy and focus on teaching methodologies, instructional techniques, and development of pedagogical materials specific to the Korean language classroom. This class will be conducted in a seminar format. Prerequisite: Teaching appointment in the East Asian Languages and Cultures department. SEM.

EALC 712. Readings in Traditional Japanese Literature. 3 Hours.
A survey of Japanese literature from earliest times to 1868. Students will study the major writers in each genre, with special emphasis on an individual research topic. A knowledge of Japanese is not required. (Not open to students with credit in EALC 312.) LEC.

EALC 714. Readings in Traditional Chinese Literature. 3 Hours.
A general survey of representative literary works of major genres in traditional China. Lectures, assigned readings, and discussions in English. A knowledge of Chinese is not required. (Not open to students with credit in EALC 314.) LEC.

EALC 715. Survey of Japanese Film. 3 Hours.
This course surveys the major developments in patterns of distribution, exhibition, and reception and their influence on film aesthetics in twentieth century Japanese film. Through secondary readings, lectures, and discussions students will examine how Japanese cinema as an institution responds to and intervenes in the social, cultural, and political history of twentieth century Japan. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. (Same as FMS 715.) LEC.

A survey of major literary works of Japan's modern era through the Pacific War. Topics include the social and spiritual challenges of modernization, urbanization, and the issues of race and national identity. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. An individual research project in an area of the student's special
interest will be required. Not open to students who have completed EALC 316. LEC.

EALC 717. Contemporary Japanese Literature in Translation: 1945-Present. 3 Hours.
A survey of major literary works of Japan's post-war and contemporary eras. Topics include life during and after the war, the experience of the atomic bomb, and the postmodern landscape. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. An individual research project in an area of the student's special interest will be required. Not open to students who have completed EALC 317. LEC.

EALC 718. Readings in Modern Chinese Literature. 2-3 Hours.
A general survey of the important writers of the 20th century and their works. Lectures, readings, and discussions in English. A knowledge of Chinese is not required. (Not open to students with credit in EALC 318.) LEC.

EALC 732. Seminar in Eastern Religious Thought: _____. 3 Hours.
Analysis of the religious thought of selected thinkers of India, China, and/or Japan, traditional and modern. May be taken more than once if subject matter varies sufficiently. (Same as REL 762.) Prerequisite: REL 507, REL 508, REL 509, or permission of the instructor. LEC.

EALC 733. Seminar in Eastern Religious Texts: _____. 3 Hours.
Analysis of a selected religious text or texts from India, China, or Japan, in translation. May be taken more than once if subject matter varies sufficiently. (Same as REL 733.) Prerequisite: REL 507, REL 508, REL 509, or permission of the instructor. LEC.

EALC 743. Contemporary Japanese Film. 3 Hours.
Seminar on the major developments in the contemporary (1980-present) Japanese film industry examining how filmmaking practices and film criticism have been influenced by such issues as transnationalism, postcolonialism, critical race theory, postmodernism, and new media. We will survey recent industrial and stylistic trends as well as key critical debates. Class includes discussion, reports, and individual research papers. This course is offered at the 500 and 700 levels, with additional assignments at the 700 level. (Same as FMS 743.) SEM.

EALC 747. East Asian History and Culture for Teachers. 2 Hours.
An advanced survey of the history, culture, and contemporary affairs of China, Japan and Korea, specifically designed for K-12 educators who wish to incorporate East Asian topics into their classroom teaching. Pedagogical methods and resources for the study of East Asia will be emphasized. Topics covered will address relevant benchmarks in the state curricular standards in social studies, themes from the Advanced Placement world history examination, and the national standards in world history. (Same as HIST 747.) Prerequisite: Approval of the instructor. LEC.

EALC 762. Readings in Japanese Religion. 3 Hours.
A high-level introduction to the traditional religions of Japan, with special emphasis on Japanese Buddhism. Texts to be used will include translations of original documents as well as secondary studies. Those students who have competence in Japanese will be required to do some readings in that language, but a knowledge of the language is not a prerequisite. LEC.

EALC 764. Modern Korean Culture and Society. 3 Hours.
An examination of the history, society, values, and political economy of Korea in its East Asian and global context. The course will use a multi-disciplinary approach, including history, ethnography, fiction and film. LEC.

EALC 766. Japanese People: Their Culture and Literature. 3 Hours.
A study of Japanese people's life cycle through a combination of theoretical social scientific observations of Japanese as a cultural group and personal literary descriptions of them. An individual research paper is required. (Not open to students with credit in EALC 366.) LEC.

EALC 776. Seminar in Religion and Society in Asia: _____. 3 Hours.
Analysis of selected Asian religions and their relationships to selected Asian societies. May be taken more than once if subject matter varies sufficiently. (Same as REL 776.) Prerequisite: REL 507, REL 508, REL 509, or permission of the instructor. LEC.

EALC 790. Topics in East Asian Languages and Cultures: _____. 1-3 Hours.
Special topical courses covering a number of disciplines. Credit descriptions and prerequisites will vary. NOTE: May be repeated for up to 12 total credits. RSH.

EALC 801. Directed Readings. 1-5 Hours.
Designed to meet the needs of advanced students whose study in East Asian studies cannot be met with regular courses. Prerequisite: Consent of instructor. RSH.

EALC 841. Asian Film. 3 Hours.
Seminar on various national film cultures of East and Southeast Asia. Representative films are studied from formal, stylistic, and socio-historic perspectives. Addresses the impact of key cultural, economic and political issues on each film industry. Class includes discussion, reports, and individual research papers. This course is offered at the 500 and 800 levels, with additional assignments at the 800 level. (Same as FMS 841.) SEM.

EALC 888. Contemporary China Studies. 3 Hours.
This course will review and analyze the current literature on China's social and political development, including a wide range of topics within political science. There is a rich body of literature within each topic such as civil society in China, legal reform, political culture, nationalism, gender issues, ethnicity, political behavior, elections, economic development, and inequality. This course will introduce key literature within each topic focusing on the debates among China scholars as well as how these debates fit in the general field of political science. (Same as GIST 888 and POLS 888.) Prerequisite: POLS 668 or permission of the instructor. LEC.

EALC 899. Thesis. 1-6 Hours.
An inquiry into the source material upon a specific subject. THE.

ECIV 104. Eastern Civilizations. 3 Hours. HL/NW AE42 / H/W.
This course acquaints the student with the broad outlines of the traditional cultures and literatures of East Asia, and explores the interaction between these regions and cultures as well as their continuities and disparities. Course materials include translations and discussions of original sources. The course is most appropriate for students with no background in Asian culture. Does not complete major requirement. Not open to students with credit in ECIV 304. LEC.

ECIV 105. Eastern Civilizations Honors. 3 Hours. HL/NW AE42 / H/W.
An introductory course designed to acquaint the student with the broad outlines of the traditional cultures and literatures of East Asia. By reading translations of original source materials, the student is able to see the interaction among the various cultures as well as their essential continuity. The course is most appropriate for students without any background in Asian culture. Offered for students with superior academic records. Open only to students in the University Honors Program or by permission of instructor. LEC.
ECIV 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Eastern Civilization. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

ECIV 304. Eastern Civilizations. 3 Hours. HL/NW AE42 / H/W.
This course acquaints the student with the broad outlines of the traditional cultures and literatures of East Asia, and explores the interaction between these regions and cultures as well as their continuities and disparities. Course materials include translations and discussions of original sources. The course is most appropriate for students with no background in Asian culture. Not open to students with credit in ECIV 104. If majoring in EALC and have completed ECIV 104, see major advisor about completing the ECIV 304 major requirement. LEC.

ECIV 305. Eastern Civilizations Honors. 3 Hours. HL/NW AE42 / H/W.
An introductory course designed to acquaint the student with the broad outlines of the traditional cultures and literatures of East Asia. By reading translations of original source materials, the student is able to see the interaction among the various cultures as well as their essential continuity. The course is most appropriate for students without any background in Asian culture. Similar to ECIV 304, but reading and writing assignments reflect the fact that this is an honors course. Open only to students in the University Honors Program or by permission of instructor. LEC.

JPN 100. Beginning Japanese I. 3 Hours. U.
An introduction to Japanese. Familiarity with the basic structural patterns of the language through conversation is stressed. The hiragana and katakana syllabaries are introduced and a few characters are learned. Usually offered as part of a Summer Study Abroad Program. LEC.

JPN 101. Beginning Japanese II. 3 Hours. U.
Continuation of JPN 100. Available to students who took JPN 100 as part of the Summer Study Abroad Program. Not available for credit for students who have previously completed JPN 104. Prerequisite: JPN 100 or equivalent. LEC.

JPN 104. Elementary Japanese I. 5 Hours. U.
Three hours of lecture, three hours of drill per week. Acquisition of basic language skills (listening, speaking, reading, writing). Not available for credit for students who have previously completed JPN 101. LEC.

JPN 108. Elementary Japanese II. 5 Hours. U.
Continuation of JPN 104. Prerequisite: JPN 101, JPN 104, or equivalent. LEC.

JPN 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Japanese. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

JPN 204. Intermediate Japanese I. 5 Hours. U.
Three hours of lecture, three hours of drill. Prerequisite: JPN 108 or equivalent. LEC.

JPN 206. Intermediate Japanese Conversation. 2-4 Hours. U.
Enhancement of conversational ability at the intermediate level. Used primarily to accommodate transfer credits. Prerequisite: JPN 204 or equivalent. LEC.

JPN 208. Intermediate Japanese II. 5 Hours. U.
Continuation of JPN 204. Prerequisite: JPN 204. LEC.

JPN 226. Japanese in Context - Intermediate. 3 Hours. U.
Supervised and individualized study and practice of language skills through direct experience in interviews and guided practical applications in various public settings in Japan. Some conventional classroom instruction in grammar included. Offered only during the Summer Institute in Hiratsuka, Japan. Prerequisite: Two semesters or the equivalent of Japanese language study. LEC.

JPN 233. Special Skills in Japanese: _____. 1-4 Hours. U.
Instruction in special skills in Japanese, such as pronunciation, recognition of Chinese characters, comprehension of broadcast media, etc. at the freshman/sophomore level. Course work must be arranged through the office of KU Study Abroad and approved by the Department of East Asian Languages and Cultures. May be repeated for credit if content varies. LEC.

JPN 306. Advanced Japanese Conversation I. 2 Hours. H/W.
Intensive practice of communicative skills at the advanced level. Prerequisite: JPN 208 or equivalent. LEC.

JPN 310. Advanced Japanese Conversation II. 2 Hours. H/W.
Continuation of JPN 306. LEC.

JPN 326. Japanese in Context - Advanced. 3 Hours. U.
Supervised and individualized study and practice of language skills through direct experience in interviews and guided practical applications in various public settings in Japan. Some conventional classroom instruction in grammar and usage. Offered only during the Summer Institute in Hiratsuka, Japan. Prerequisite: Four semesters or the equivalent of Japanese language study. LEC.

JPN 333. Special Skills in Japanese: _____. 1-4 Hours. U.
Instruction in special skills in Japanese, such as pronunciation, recognition of Chinese characters, comprehension of broadcast media, etc. at the junior/senior level. Course work must be arranged through the office of KU Study Abroad and approved by the Department of East Asian Languages and Cultures. May be repeated for credit if content varies. LEC.

JPN 386. Advanced Japanese Conversation III. 1-3 Hours. U.
Instruction in discussion in formal contexts and speech making. Prerequisite: JPN 504 or equivalent. LEC.

Readings in Japanese on a subject selected by a student with the advice and direction of the instructor. Individual meetings and reports. Prerequisite: Consent of instructor. IND.

JPN 504. Advanced Modern Japanese I. 3 Hours. H/W.
Readings in selected modern Japanese texts on various topics: history, education, language, society, business, and literature. Meets three hours per week. Prerequisite: JPN 208 or equivalent. LEC.

JPN 508. Advanced Modern Japanese II. 3 Hours. H/W.
Continuation of JPN 504. Prerequisite: JPN 504 or equivalent. LEC.

JPN 509. Business Japanese. 3 Hours. U.
Study of Japanese language especially appropriate to business situations. Although the course emphasizes developing conversational ability, the primary focus is on strengthening reading and writing in the specialized area. The course includes discussion of non-verbal aspects of Japanese business practices as well. Prerequisite: The first semester of third-year Japanese or the equivalent. LEC.

JPN 542. Introduction to Classical Japanese I. 3 Hours. H/W.
Introductory grammar and readings in classical Japanese texts. Prerequisite: JPN 508. LEC.
JPN 544. Introduction to Classical Japanese II. 3 Hours. H.
Continued readings of classical Japanese texts, on the intermediate and advanced level. Introduction to the elements of kambun (Sino-Japanese) and sorobun (epistolary) styles. Prerequisite: JPN 509 or equivalent. LEC.

JPN 562. Modern Japanese Texts I. 3 Hours. AE61 / H/W.
Readings and interpretation of modern Japanese texts from various fields. Continued study of the language in the form of oral discussion and written reports. Prerequisite: JPN 508. LEC.

JPN 564. Modern Japanese Texts II. 3 Hours. H/W.
A continuation of JPN 562. Prerequisite: JPN 562 or equivalent. LEC.

JPN 569. Advanced Business Japanese. 3 Hours. U.
This course strengthens reading and writing skills and continues developing conversational ability. It assumes a higher level of competency in Japanese than JPN 509 and includes both verbal and non-verbal aspects of Japanese business practices. Prerequisite: Completion of third-year Japanese or equivalent. LEC.

JPN 598. Readings in: ______. 1-3 Hours. H/W.
Students will read selections from materials on a given topic or topics. May be repeated for credit. Prerequisite: JPN 564 or permission of instructor. IND.

JPN 690. Seminar in: ______. 1-3 Hours. H/W.
Varying topics with varying prerequisites. LEC.

JPN 801. Directed Readings and Research in Japanese. 1-4 Hours.
Advanced language training for the study of Japanese sources in the humanities or social science field of the student. Prerequisite: JPN 564 or consent of instructor. RSH.

JPN 880. Advanced Japanese Research Materials. 2 Hours.
A detailed examination of various Japanese language reference works and research materials. Emphasis will be placed on the use of different types of reference works to carry out research strategies. Prerequisite: JPN 508 or equivalent and JPN 580. LEC.

KOR 104. Elementary Korean I. 5 Hours. U.
Five hours of class and two hours of drill in the spoken language each week. Grammar and readings in selected texts. LEC.

KOR 108. Elementary Korean II. 5 Hours. U.
Continuation of KOR 104. Prerequisite: KOR 104. LEC.

KOR 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Korean. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

KOR 201. Intermediate Korean I. 5 Hours. U.
Five hours of class and two hours of spoken drill. Readings in selected texts in modern Korean. Prerequisite: KOR 108 or equivalent. LEC.

KOR 202. Intermediate Korean II. 5 Hours. U.
Continuation of KOR 201. Prerequisite: KOR 204. LEC.

KOR 498. Directed Readings in Korean. 1-4 Hours. H/W.
Readings in Korean on a subject selected by a student with the advice and direction of the instructor. Individual meetings and reports. Prerequisite: Consent of instructor. IND.

KOR 504. Advanced Modern Korean I. 4 Hours. H/W.
Readings in and discussion of selected modern Korean texts on various topics: history, literature, society, and language. Prerequisite: KOR 208 or equivalent. LEC.

KOR 508. Advanced Modern Korean II. 4 Hours. H/W.
Readings and analysis of modern or contemporary texts from various fields. Includes oral discussion and written essays. Prerequisite: KOR 504 or equivalent. LEC.

KOR 562. Modern Korean Texts I. 1-5 Hours. H.
Readings and analysis of modern or contemporary texts from various fields. Includes oral discussion and written essays. Prerequisite: KOR 508 or equivalent. LEC.

KOR 564. Modern Korean Texts II. 1-5 Hours. H.
Continuation of KOR 562. Reading and analysis of modern or contemporary texts from various fields. Includes oral discussion and written essays. Prerequisite: KOR 508 or equivalent. LEC.

MONG 101. Elementary Mongolian I. 3 Hours. U.
The first semester of Elementary Mongolian is designed to give the student basic communicative competency, including pronunciation and intonation, structure, and syntax. Effective oral and written communication is stressed. LEC.

MONG 102. Elementary Mongolian II. 3 Hours. U.
A continuation of Elementary Mongolian I. Prerequisite: Elementary Mongolian I or the equivalent. LEC.

MONG 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Mongolian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

TIB 101. Elementary Tibetan I. 3 Hours. U.
An introduction to the Tibetan language in both its literary and colloquial forms according to the Central Tibetan dialects. Four semesters of 3-credit Tibetan language courses fulfill the College of Liberal Arts and Sciences foreign language requirement. LEC.

TIB 102. Elementary Tibetan II. 3 Hours. U.
A continuation of TIB 101. Prerequisite: TIB 101 or equivalent. Four semesters of 3 credit Tibetan language courses fulfill the College of Liberal Arts and Sciences foreign language requirement. LEC.

TIB 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Tibetan. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

TIB 201. Intermediate Tibetan I. 3 Hours. U.
Continuation of TIB 102. Prerequisite: TIB 102 or equivalent. Four semesters of 3-credit Tibetan language courses fulfill the College of Liberal Arts and Sciences foreign language requirement. LEC.

TIB 202. Intermediate Tibetan II. 3 Hours. U.
Continuation of TIB 201. Prerequisite: TIB 201 or equivalent. Four semesters of 3-credit Tibetan language courses fulfill the College of Liberal Arts and Sciences foreign language requirement. LEC.

UYGR 101. Elementary Uyghur I. 3 Hours. U.
Uyghur is an important Central Asian Turkic language spoken by nine million people in China. The first semester is designed to give the student basic communicative competency, including pronunciation and intonation, structure, and syntax. Effective oral and written communication is stressed. LEC.
ECON 104. Introductory Economics. 4 Hours. SF GE3S / S.
An introduction to modern economics designed primarily for students who do not plan to major in economics. Topics include economic history, the operation of economic institutions, and the formation and execution of economics policies to meet the current problems of the domestic and international economy. Course may be offered in lecture or online format. Prerequisite: MATH 101 or MATH 104, or eligibility for MATH 115 or MATH 121. LEC.

ECON 105. Introductory Economics, Honors. 4 Hours. SF GE3S / S.
An introduction to modern economics designed primarily for students who do not plan to major in economics. Topics include economic history, the operation of economic institutions, and the formation and execution of economics policies to meet the current problems of the domestic and international economy. Prerequisite: Consent of the Economics Department and MATH 101 or MATH 104, or eligibility for MATH 115 or MATH 121. LEC.

ECON 110. The Economics of Globalization. 3 Hours. SF AE42 / S.
The course emphasizes the application of economic methods of analysis to the public policy issues that globalization creates. Topics covered may include the following: winners and losers from trade; links between trade and labor markets; links between trade and foreign investment; the international financial system and exchange rates; outsourcing and multinational corporations; international institutions and regional trade agreements. LEC.

ECON 142. Principles of Microeconomics. 3 Hours. SF GE3S / S.
An analytical introduction to microeconomics. Topics include theory of markets, public policy, international trade, economic efficiency, and equity. Prerequisite: MATH 101 or MATH 104, or eligibility for MATH 115 or MATH 121. LEC.

ECON 143. Principles of Microeconomics, Honors. 3 Hours. SF GE3S / S.
An honors section of ECON 142. An analytical introduction to microeconomics. Topics include theory of markets, public policy, international trade, economic efficiency, and equity. Prerequisite: Consent of the Economics Department and MATH 101 or MATH 104, or eligibility for MATH 115 or MATH 121. LEC.

ECON 144. Principles of Macroeconomics. 3 Hours. SF GE3S / S.
An analytical introduction to macroeconomics. Topics include determination of aggregate income, employment, inflation, exchange rates, and the role of fiscal and monetary policy in dealing with unemployment, inflation, and economic growth. Prerequisite: MATH 101, MATH 104, or eligibility for MATH 115 or MATH 121. LEC.

ECON 145. Principles of Macroeconomics, Honors. 3 Hours. SF GE3S / S.
An honors section of ECON 144. An analytical introduction to macroeconomics. Topics include determination of aggregate income, employment, inflation, exchange rates, and the role of fiscal and monetary policy in dealing with unemployment, inflation, and economic growth. Prerequisite: Consent of the Economics Department and MATH 101, MATH 104, or eligibility for MATH 115 or MATH 121. LEC.
ECON 510. Energy Economics. 3 Hours. S.
The application of basic economic concepts and methods to the analysis of energy markets, regulation, and policies. Topics covered include energy trends and projections, economic growth and resource exhaustion, the organization and regulation of fossil fuel industries, nuclear power and non-conventional energy technologies, the world oil market, energy conservation, environmental pollution, and national energy policies in the U.S. and other developed as well as developing countries. Prerequisite: ECON 142 and ECON 144 or permission of instructor. LEC.

ECON 515. Income Distribution and Inequality. 3 Hours. AE41 / S.
An analysis of the distribution of income and wealth in the United States and a few other developed countries. The concepts of economic inequality, economic justice, statistical measures of inequality and their applications will be discussed. Various theories of income distribution (e.g., Ricardian, Marxian, neoclassical, and neo-Keynesian) will be covered. Prerequisite: ECON 142 and ECON 144. LEC.

ECON 516. Income Distribution and Inequality, Honors. 3 Hours. AE41 / H.
This course examines the definition and impact of social and economic inequality. Beginning with a review of economic and philosophical perspectives of inequality, the course considers the measurement of inequality, current trends in U.S. and international inequality, and policies designed to eliminate inequality. The course requires both writing and quantitative analysis and includes a term paper. Students should be comfortable with methods of quantitative social science. The Honors section is taught as a seminar where philosophical perspectives on inequality are debated and discussed. Prerequisite: ECON 142 and ECON 144. Open only to students who have been admitted to the University Honors Program, or by consent of instructor. LEC.

ECON 520. Microeconomics. 3 Hours. S.
The theory of consumption, production, pricing, and resource allocation. Not open for credit to students with credit in ECON 524. Prerequisite: ECON 142, ECON 144, and Math 116 or Math 122 (or equivalent). LEC.

ECON 521. Microeconomics Honors. 3 Hours. S.
The theory of consumption, production, pricing, and resource allocation. Prerequisite: ECON 142 and ECON 144 and consent of department. LEC.

ECON 522. Macroeconomics. 3 Hours. S.
The theory of national income and employment, the analysis of aggregate demand, the general degree of utilization of productive resources, the general level of prices, and related questions of policy. Prerequisite: ECON 142 and ECON 144. LEC.

ECON 523. Macroeconomics Honors. 3 Hours. S.
The theory of national income and unemployment, the analysis of aggregate demand, the general degree of utilization of productive resources, the general level of prices, and related questions of policy. Prerequisite: ECON 142 and ECON 144 and consent of department. LEC.

ECON 526. Introduction to Econometrics. 3 Hours. S.
An introduction to the statistical analysis of economic data and its application to economic inquiry. Includes extensive use of statistical software. Prerequisite: ECON 142, ECON 144, and MATH 526 or equivalent. LEC.

ECON 530. American Economic Development. 3 Hours. H.
An introductory study of the development of the American economy from colonial times to the present. Investigates long-term trends in output, population, and output per capita, as well as short-term fluctuations, and the variables and institutions that determined these fluctuations and trends. (Same as HIST 628.) Prerequisite: ECON 104 or ECON 142 and ECON 144. LEC.

ECON 535. Economic History of Europe. 3 Hours. S.
An introductory study of European economic history from the Middle Ages to the 1980s. Investigates the sources of economic growth, and the interaction between economic forces and social institutions. Topics covered will include the rise of commerce, the agricultural and industrial revolutions, imperialism, the Great Depression, and European recovery after World War II. (Same as HIST 528.) Prerequisite: ECON 104 or ECON 142 and ECON 144. LEC.

ECON 536. Economic Issues of the European Union. 3 Hours. S.
A survey of the economies of the European Union, with a focus on the economic development of the member states since World War II, and an examination of the various economic issues confronting them today. (Same as EURS 536.) Prerequisite: ECON 104 or ECON 144. LEC.

ECON 540. Recent American Economic History. 3 Hours. S.
An empirically oriented examination of the American economy designed to apply economic concepts to a wide variety of topics such as monetary and fiscal policy, income distribution, the Great Depression, poverty, population growth, the defense sector, education, research and development, technological change, and industrial organization. Prerequisite: ECON 104 or ECON 142 and ECON 144; ECON 520 and/or ECON 522 recommended. LEC.

ECON 550. Environmental Economics. 3 Hours. U.
This course provides an overview of the theory and empirical practice of economic analysis as it applies to environmental issues. Topics include externalities (a type of market failure), the valuation of nonmarket goods, the practice of benefit-cost analysis, and the efficiency and cost effectiveness of pollution control policies. Most importantly, the course permits students to perform economic field research, using state-of-the-art techniques in a manner accessible to undergraduate students. (Same as EVRN 550.) Prerequisite: ECON 104 or ECON 142. LEC.

ECON 560. Economic Systems. 3 Hours. S.
Critical analysis of economic theories underlying such economic systems as capitalism, different types of socialism, communism, and fascism. Comparative study of economic planning, production, distribution, price formation, economic institutions, and forms of government in countries under different economic systems. Prerequisite: ECON 104 or ECON 142 and ECON 144. LEC.

ECON 562. The Russian Economy. 3 Hours. S/W.
An analytical survey of Russian economic development, with emphasis on the structure and operation of the Russian economy and transition issues. Prerequisite: ECON 104 or ECON 142 and ECON 144 and consent of instructor. LEC.

ECON 563. Current Economic Issues of East Europe. 3 Hours. S.
An institutional and theoretical analysis of the issues arising from the transition from a command economy to a free market-oriented economy. With emphasis on the former Soviet Union, topics will include: assessment of the central planning experience; changes in property rights and their effect on resource allocation; market mechanisms and how they work when market institutions are at the formative stage; and public interest under privatization. Prerequisite: ECON 142 and ECON 144. LEC.

ECON 564. Topics in Applied Economics: ______. 3 Hours. S.
This course will focus on an area of applied economics of current interest. This course can be used to fulfill the elective course requirement for the Economics major. Prerequisite: ECON 142 and ECON 144. LEC.

ECON 570. Economics for Management Decisions. 3 Hours. S.
Economic analysis of the firm with emphasis on managerial decisions in a business environment. Topics include supply and demand with applications, consumer behavior, quantitative demand analysis, production and cost, transactions costs and the organization of the
firm, strategic decisions in alternative market environments, risk and uncertainty, imperfect information, and project evaluation. Prerequisite: ECON 142. LEC.

ECON 582. Economic Development. 3 Hours. S.
An introduction to economic growth and development in high and low income countries, problems of development, and development policy. Prerequisite: ECON 104 or ECON 142. LEC.

ECON 583. Economic Issues of East Asia. 3 Hours. S.
This course will study the economics of the East Asian countries, especially China, Japan, Korea, and Taiwan. Topics to be covered include economic growth, development and change, international trade, inflation, unemployment, income distribution, and urbanization. Emphasis will be on the post World War II period. Prerequisite: ECON 104 or ECON 142 and ECON 144. ECON 522 recommended. LEC.

ECON 584. Economic Development of Latin America. 3 Hours. S.
This course explores development strategies followed in the countries of Latin America and the Caribbean, and analyzes current debates over development strategy. Topics covered include: debt, structural adjustment, and multilateral lending agencies; trade policy, and regional or hemispheric integration; state intervention in the economy; the role of elites; environmental degradation and sustainable development; land reform and agricultural policy; transnational enterprises and foreign investment; women in work and the household; migration (rural-urban, and international); and grassroots development projects. Prerequisite: ECON 104 or ECON 144. LEC.

ECON 586. Economic Issues in China. 3 Hours. S.
This course studies the Chinese economy, especially during the post-1979 reform period, and its relationship to the development of the Greater China Circle (China, Hong Kong, and Taiwan). Topics to be covered include economic development during the pre-1979 reform period, economic reform, and its impacts on China, Hong Kong, Taiwan, and lessons from the Chinese economic reforms. Prerequisite: ECON 142 and ECON 144. LEC.

ECON 587. Economic Development of Africa. 3 Hours. S.
This course studies current economic issues facing African countries. It studies the general characteristics of several African economies and examines the impact of economic development policies, including those of international organizations, on the economies of Africa. Topics include poverty, income inequality, debt, foreign investment policies, trade policies, and government regimes. Prerequisite: ECON 104 or ECON 142 and ECON 144. LEC.

ECON 590. Game Theory. 3 Hours. S.
Analysis of strategic choice problems. Firms, voters, bargainers, animals, sports competitors, and persons in everyday life choose alternative options with the outcomes depending on the choices of one or more other similar decision makers. Strategies of rational choices will be derived and analyzed in economic and other environments. Prerequisite: ECON 142. LEC.

ECON 600. Money and Banking. 3 Hours. S.
The basic principles of money, credit, and banking and their relation to prices and business fluctuations; a study of commercial and central banking and the problems of credit control. Prerequisite: ECON 522. LEC.

ECON 604. International Trade. 3 Hours. S.
An introduction to the nonmonetary theory of international trade, the cause and pattern of trade, the gains from trade, and the contemporary issues in international economic policy. Prerequisite: ECON 520 or ECON 524. LEC.

ECON 605. International Finance. 3 Hours. S.
This course surveys theories of exchange rate and balance of payments determination. Included are the elasticity approach, Keynesian models, and the monetary approach. The mechanics of foreign exchange trading, balance of payments accounting, and the working of the international monetary system are also discussed. Prerequisite: ECON 522. LEC.

ECON 609. Sports Economics. 3 Hours. S.
The course covers the microeconomics of the sports industry. Topics include analysis of teams, leagues, players, incomes, strategies, history, and government policy. Prerequisite: ECON 520 or permission of instructor. LEC.

ECON 610. Resource Economics and Environmental Policy. 3 Hours.
Survey of the economics of natural resources, designed to introduce the student to the economic models and analytical methods commonly used in natural resource problems and policy issues. Topics covered include environmental pollution and regulation, environmental case studies and applications of cost-benefit analysis, theoretical models, policy issues in the utilization of renewable and nonrenewable resources, sustainable development, and global environmental problems. Prerequisite: ECON 520 or ECON 524 or permission of instructor. LEC.

ECON 620. Elements of Mathematical Economics. 3 Hours. S.
Selected aspects of economic theory with emphasis on those parts where the spirit of mathematical analysis, rather than dexterity, is utilized. The simplification of the subject matter is accomplished by stressing complete treatment of special cases such as a two commodity-two individual world. Prerequisite: ECON 520 or ECON 524 and MATH 116 or MATH 121. LEC.

ECON 622. Public Finance. 3 Hours. S.
A general introduction to the science of public finance. Topics covered include public expenditures, public revenues and public credit, and the shifting and incidence of taxation. Prerequisite: ECON 520 or ECON 524. LEC.

ECON 630. Industrial Organization and Antitrust Policy. 3 Hours. S.
An examination of the structure, conduct and performance of American industry applying the concepts and techniques of economic analysis. Topics covered include the theories of monopoly, competition and oligopoly, concentration, barriers to entry, price-fixing and other restrictive practices, mergers, technological change, and public regulation. The course will also focus on the historical development of American antitrust law. Prerequisite: ECON 520 or ECON 524. LEC.

ECON 631. Economics of Regulation. 3 Hours. S.
This course studies topics in the economic effects of industry regulation by administrative agencies as a substitute for market competition. Topics include various theories of regulatory behavior, the theory of natural monopoly, the economic effects of rate of return regulation on the performance of electric utilities, and the effects of recent social and environmental regulation. Prerequisite: ECON 520 or ECON 524. LEC.

ECON 635. Science and Technology in Economic Growth. 3 Hours. S.
An analytical and historical exploration of the roles that science and technology have played in the economic growth of industrial societies. This course will examine the forces that have shaped the rate and direction of technological change, and the impact of technological change on Western living standards. Topics covered will include factors influencing the pace of innovation, the diffusion of new technologies, international technology transfers, growth accounting, and models of aggregate economic growth. Prerequisite: ECON 520 or ECON 524. LEC.
ECON 640. Labor Economics. 3 Hours. S.
Analysis of labor markets and differences in wage rates and incomes. Topics include returns to education and training, labor unions, unemployment, anti-poverty programs, and other government policies influencing the labor market. Prerequisite: ECON 520 or ECON 524. LEC.

ECON 669. The Economics of Financial Markets. 3 Hours. S.
This course provides an introduction to the theory of finance and its use in the understanding of the economic role of financial markets. There are two central themes: the allocation of resources over time and the allocation of resources under uncertainty. Topics may include: household saving and investment, investment projects, valuation of financial assets, choice under uncertainty, portfolio choice, and capital asset pricing. Prerequisite: ECON 520 and ECON 526. LEC.

ECON 675. Introduction to Welfare Economics. 3 Hours. S.
This course provides a nontechnical introduction to optimal resource allocation from the societal point of view as well as alternative individual mechanisms for achieving such an optimum. Prerequisite: ECON 520 or ECON 524. LEC.

ECON 680. Economic Growth. 3 Hours. S.
This course studies growth with an emphasis on national evidence and macroeconomic policy issues. Classic and modern growth theories are developed and evaluated on the basis of how well they fit empirical evidence. Theories are developed in which productivity growth results from endogenous changes in technology or in the efficiency with which factors are utilized. The fundamental factors that affect productivity are examined, and they may include government policies, income inequality, geography, climate, resources and other factors. Prerequisite: ECON 522. LEC.

ECON 700. Survey of Microeconomics. 3 Hours.
A comprehensive survey of microeconomics, including the theories of consumption, production, distribution, pricing, and resource allocation. Prerequisite: ECON 520 and MATH 116 or MATH 121; and completion of ECON 142 and ECON 144, ECON 520, and ECON 522 with a grade-point average of at least 3.0 or graduate standing. LEC.

ECON 701. Survey of Macroeconomics. 3 Hours.
A comprehensive survey of the modern theory of national income determination with particular emphasis on the foundation of macroeconomic models and their empirical implementation. Prerequisite: ECON 522 and MATH 116 or MATH 121. LEC.

ECON 705. Development of Economic Thought. 3 Hours.
The development of economic thought from the time of the physiocrats through the modern period. Consideration is given to the works of the English Classical school, the school of Vienna, the historical school, the Lausanne school, and Cambridge school. In addition, the development of economic thought in the United States during the period is treated. Prerequisite: ECON 520 and ECON 522. LEC.

ECON 715. Elementary Econometrics. 3 Hours.
An elementary analysis of problems of estimation, prediction, and hypothesis testing in the context of general linear, stochastic difference equation and simultaneous equations models. Applications of econometric theory to practical economic problems will be emphasized. Prerequisite: DSCI 301 or its equivalent; MATH 116 or MATH 121; and completion of ECON 142 and ECON 144, ECON 520, and ECON 522 with a grade-point average of at least 3.00 (B) or graduate standing. LEC.

ECON 716. Econometric Forecasting. 3 Hours.
An analysis of econometric forecasting techniques, including time-series models, single-equation regression models, and multiple-equation regression models. The course will examine forecasts of (a) macroeconomic variables, such as interest rates, investment, GNP, and the rate of inflation; and (b) market variables, such as price and quantity. Prerequisite: ECON 715 or ECON 817. LEC.

ECON 730. Topics in Industrial Organization. 3 Hours.
Advanced study of recent research in applied microeconomics and business behavior. Topics include vertical integration, collusion, multi-plant and multi-product operations, regulated industries, tying arrangements, and the empirical links between monopoly power and profitability. Prerequisite: ECON 630 or equivalent. LEC.

ECON 735. Science and Technology in Economic Growth. 3 Hours.
An analytical and historical exploration of the roles that science and technology have played in the economic growth of industrial societies. Topics covered include factors influencing the pace and character of technological innovation, national systems of innovation, the diffusion of new technologies, measurement of the benefits of new technologies, and the role of technology in various growth theories. Prerequisite: ECON 520, or ECON 524, or consent of instructor. LEC.

ECON 740. Theory of Economic Growth and Development. 3 Hours.
Advanced study of the theory of economic growth and development. Recent growth models, theory of underdevelopment, programming, policies and plans for development. Prerequisite: ECON 520 and ECON 522. LEC.

ECON 741. Economic Planning. 3 Hours.
A study of the techniques employed in the preparation of a national economic plan and of the policies required for its implementation. Special attention is given to the purposes of a plan, development strategies, investment requirements, and project appraisal. The development plans of several countries are examined to illustrate problems of planning economic development. Prerequisite: ECON 520 and ECON 522. LEC.

ECON 750. The Theory of International Finance. 2-3 Hours.
This course examines the modern, financial-asset market approach to exchange rate determination as well as dynamic exchange rate models. Possible topics may include exchange rate overshooting, exchange rate crises, and international policy coordination. Prerequisite: ECON 605 and MATH 116. LEC.

ECON 760. The Theory of Public Finance. 3 Hours.
An analysis of governmental fiscal activity and its economic effects with emphasis on the determination and incidence of budget policy. Prerequisite: ECON 520 and ECON 522; ECON 622 recommended. LEC.

ECON 761. Public Sector: Urban and Regional Finance. 3 Hours.
An analysis of the American state and local finance scene with special emphasis on urban and regional tax and expenditure problems and issues. Prerequisite: ECON 520 and ECON 522; ECON 622 recommended. LEC.

ECON 765. Advanced American Economic Development. 3 Hours.
A study of the process of economic growth as it has occurred in the American economy, with emphasis on 19th century developments. The structural changes that accompanied growth and the impact of technological change are among the major topics considered. Prerequisite: ECON 520, ECON 522 and ECON 530, or consent of instructor. LEC.

ECON 766. Economic History. 3 Hours.
The development of market economies and economic institutions. The course will focus on Europe, but will include comparisons with other developed nations. Topics include: long-run economic growth, the rise of capitalist agriculture and industry, the causes and consequences of technological change; changes in income distribution and economic organization; and the social and cultural effects of economic change.
Prerequisite: ECON 520, ECON 522, and ECON 535 or ECON 530, or consent of instructor. LEC.

ECON 768. The Industrial Revolution. 3 Hours.
An examination of the development of the industrialization of England and its impact on the North Atlantic economy. Consideration will be given to the effects of demographic and technical changes upon economic structure and the changing economic relationships between nations. Prerequisite: ECON 520 and ECON 522 or consent of instructor. LEC.

ECON 769. Financial Economics. 3 Hours.
An introduction to the economic analysis of choice under uncertainty and asset pricing theory. Topics include the general equilibrium Arrow-Debreu model of complete markets; capital asset pricing model; stochastic dominance; portfolio frontiers; mutual fund separation theorems; arbitrage pricing theory; valuation of derivative securities. Both single-period models and multi-period models will be discussed. Students should have some background in elementary linear algebra, calculus, and probability theory. Prerequisite: DSCI 301 and ECON 700 or equivalent. LEC.

ECON 770. Economics of the Labor Market. 3 Hours.
A theoretical and empirical analysis of labor supply and demand, human capital, information and labor mobility, unemployment, discrimination, and union behavior and influence. Prerequisite: ECON 520, and MATH 121 or MATH 115 and MATH 116. LEC.

ECON 770A. Game Theory and Applications. 3 Hours.
This course covers basic game theory and applications. Topics covered include strategic games with complete information, Bayesian games (with incomplete information), extensive games with perfect information, and extensive games with imperfect information. Equilibrium concepts covered include Nash equilibrium, mixed-strategy Nash equilibrium, rationalizability, Bayesian Nash equilibrium, sub-game perfect Nash equilibrium, and sequential equilibrium. Depending on availability of time, additional topics may include strictly competitive games and repeated games. The course may include diverse applications such as in business strategy, auctions, voting, international trade, military conflicts, contracts, regulation, and industrial organization. Prerequisite: MATH 122 and MATH 526. LEC.

ECON 771. Game Theory and Applications II. 3 Hours.
This course is a continuation of game theory and applications (ECON 790). Topics may include rationality and common knowledge, multi-stage games and repeated games, coalitional games and the core, and sequential rationality, including possible applications such as signaling, reputation, and information transmission. Additional topics may include, among others, strictly competitive games, auctions, and evolutionary game theory. The course may include diverse applications within and outside economics. Prerequisite: ECON 790 or consent of instructor LEC.

ECON 800. Optimization Techniques I. 3 Hours.
Economic models involving the maximization of a scalar (vector) function subject to equality and inequality constraint where the variables are in a finite dimensional Euclidean space. Characterization of optimal points by way of first and second order derivatives and by way of saddle points. Duality theorems of mathematical programming. Prerequisite: Consent of instructor. LEC.

ECON 801. Microeconomics I. 3 Hours.
An advanced course in price and distribution theory. Prerequisite: ECON 800 or consent of instructor. LEC.

ECON 802. Microeconomics II. 3 Hours.
The study of the operation of the economic system taking into account the diversity of goods and services. Primary attention is centered upon the competitive economy. A study is made of the existence, uniqueness, stability, and comparative statics of equilibrium positions. In addition, a study is made of ways of evaluating alternative states of the economy in terms of systems of value judgments. This includes a discussion of the Arrow Impossibility Theorem; the notion of a Pareto-satisfactory process is introduced and the relationship between Pareto-optimal states and competitive equilibrium positions is studied. Prerequisite: ECON 801. LEC.

ECON 803. Growth Theory. 3 Hours.
The study of Harrod-Domar growth models; the Solow model; Uzawa's two sector model; n-sector growth models; the Ranis-Fei development models; and other application of growth theory to public policy. Prerequisite: ECON 700 and ECON 701. LEC.

ECON 805. Teaching Methods in Economics. 3 Hours.
The goal of the course is to enhance undergraduate student learning by refining and expanding the teaching techniques in the teaching assistant's arsenal. The course starts by discussing and illustrating the importance of setting the tone on the first day of class. Then the course turns to ways of creating intellectually exciting lectures and discussion sections. Active learning comes next as the course presents techniques to involve actively the students in their learning experience. Then the course examines ways for recognizing and broadening our teaching styles to include different learning styles. The course also discusses the evaluation of students by emphasizing the importance of matching the assessment of students with course objectives. This course will not assume any prior teaching experience. Prerequisite: Consent of instructor. LEC.

ECON 809. Optimization Techniques II. 3 Hours.
Economic models involving the maximization of an integral (a vector of integrals) subject to differential equality (inequality), integral equality (inequality), and finite equality (inequality) constraints. Characterization of optimal paths by way of first and second derivatives. Existence of optimal paths. Prerequisite: Consent of instructor. LEC.

ECON 810. Macroeconomics I. 3 Hours.
A survey of basic macroeconomic models, including Classical and Keynesian as well as more recent ones. Topics also cover monetary and fiscal stabilization policies, the role of rational expectations, and basic behavioral equations. Tradeoffs of inflation and unemployment are examined both theoretically and empirically. Prerequisite: ECON 809 or consent of instructor. LEC.

ECON 811. Macroeconomics II. 3 Hours.
Structure of dynamic models and intertemporal optimization. Monetary and real business cycle theories and long-run economic growth. Microeconomic foundations of macroeconomics, theories of explicit and implicit contracts, and implications of overlapping generations models. Prerequisite: ECON 810. LEC.

ECON 817. Econometrics I. 3 Hours.
An intensive study of the general linear model and distribution theory associated with the multivariate normal; stochastic difference equation; autocorrelation, errors in variables. Prerequisite: MATH 628. LEC.

ECON 818. Econometrics II. 3 Hours.
The study of estimation and hypothesis testing within the context of the stochastic simultaneous equations model. Prerequisite: ECON 817. LEC.

ECON 820. Applied General Equilibrium. 3 Hours.
A study of numerical applications of Walrasian general equilibrium theory to problems in public finance, international trade, and macroeconomics. The Arrow-Debreu model will be reviewed with emphasis on the use of Kakutani's fixed point theorem to prove existence of equilibrium. Fixed point algorithms used to solve the general equilibrium model will be studied. The Shoven-Whalley method for introducing taxes into the general equilibrium model will be discussed and extended to open economy models with tariffs and quotas. Finally, dynamic macroeconomic
models will be studied and financial assets will be introduced in perfect foresight models. Prerequisite: ECON 801. LEC.

ECON 825. Tutorial. 0 Hours.
This course is designed to provide extra assistance for graduate students in economics. RSH.

ECON 830. Game Theory and Industrial Organization. 3 Hours.
A comprehensive introduction to game theory and the theory of industrial organization. Basic game theoretic equilibrium concepts will be discussed in the context of static games, games of incomplete information, and dynamic games. These concepts will be applied to the theory of industrial organization. Topics may include mechanism design, market failure, monopoly, imperfect competition and oligopoly, limit pricing, predatory pricing, innovation and technical change, advertising and signaling theory, collusion and coordination, regulation under incomplete information, agency and auditing problems, incentives in hierarchies, job market signaling, insurance markets, nonlinear pricing and monopoly, and bargaining and long term relations. Prerequisite: ECON 801 and 802. RSH.

ECON 831. Economics of Regulation. 3 Hours.
This course provides an analytical introduction to the study of the economic rationale for and effects of government regulation of industry. Special emphasis will be placed on public utility regulation. Prerequisite: ECON 700. LEC.

ECON 835. Comparative Economic Systems. 3 Hours.
Comparative studies of the organization, operation, and performance of economic systems. Theoretical issues involving the comparison of different economic systems will be covered. Theoretical characterizations of different economic systems such as capitalistic economies, socialistic economies, and centrally planned economies, will be developed. Case studies of economic institutions and economic performance in various countries will be examined. Prerequisite: ECON 700 and ECON 701. LEC.

ECON 840. Microeconomic Issues in Development Economics. 3 Hours.
This course will examine the process and policies of economic development from a microeconomic perspective. Selected topics may include: the use of input-output matrices in development planning; price controls and corrections for their allocative distortions; international trade policies; transformations from planned to market economies; labor markets and labor mobility; and capital markets and capital mobility. LEC.

ECON 842. Theory of Economic Planning. 3 Hours.
Formal construction of the foundations of economic planning with emphasis on concise discussion of the logic behind the techniques utilized in economic planning. Topics that will be studied include: social welfare, short-term planning, price guided planning procedures, non-price guided planning procedures, long-term planning objectives, and characteristics of optimal plans. Prerequisite: ECON 802 or consent of instructor. LEC.

ECON 844. Macroeconomic Issues in Development Economics. 3 Hours.
This course will examine the process and policies of economic development from a macroeconomic perspective. Topics will include the theory of growth in the dual economy, the role of foreign trade in economic development, inflation and stabilization in developing economies, the problem of foreign debt, the relationship between financial and real development, and various development policies. Prerequisite: ECON 810 or consent of instructor. LEC.

ECON 850. The Advanced Theory of International Finance. 3 Hours.
This is an advanced course in international finance. Possible topics include optimizing, equilibrium models of exchange rate determination, empirical tests of international asset-pricing models, international policy coordination, and properties of different international monetary arrangements. Prerequisite: ECON 811. LEC.

ECON 851. The Theory of International Trade. 3 Hours.
The study of the pure theory of international trade; factor-price equalization, trade and welfare, general equilibrium in the international economy, comparative statics, and stability conditions. Prerequisite: ECON 700 and ECON 701. LEC.

ECON 855. Natural Resources. 3 Hours.
Advanced analysis of the economic relationships between natural resources, population, and environment. Emphasis is on the analytical techniques useful for solving the economic problems of natural resource allocation over time. Prerequisite: ECON 700. LEC.

ECON 860. Advanced Public Finance. 3 Hours.
A rigorous treatment of the economics of the public sector. Emphasis will be placed on government expenditure and taxation. Possible topics include tax incidence, optimal taxation, dynamic analysis of fiscal policy, public goods, and cost benefit analysis. Prerequisite: ECON 801 or permission of instructor. LEC.

ECON 866. Selected Problems in American Economic History. 3 Hours.
A critical study of selected aspects of American economic history with particular emphasis upon the testing of hypotheses that have been advanced to explain the growth and development of the American economy. Prerequisite: ECON 766. LEC.

ECON 869. Advanced Financial Economics. 3 Hours.
This course presents an analysis of financial markets and instruments, together with the quantitative tools essential for research in the field. The material will be presented in a discrete time setting and will stress the link between financial economics and equilibrium theory. Topics will include securities pricing in the absence of arbitrage, the theory of risk and utility in the basic portfolio problem, mean variance analysis and the CAPM, the Martingale properties of security prices, restricted participation, asymmetric information, and recent research results. Prerequisite: ECON 802 or consent of instructor. LEC.

ECON 870. Applied Microeconomics. 3 Hours.
This course introduces students to the data and empirical methods used in the fields of applied economics such as labor economics, public finance, and industrial organization. The course will focus on how to adjust for self-selection and identify causal relationships in applied microeconomic fields. Topics covered include economic data and statistical programming, instrumental variables, difference-in-differences, regression discontinuity, count data, sample selection, treatment effects, and duration models. Attention will be given to the suitability of the methods to the research question under consideration. Each topic will emphasize the proper application of the methods using the standard textbook treatment as well as assigned papers that examine the basic economic issues, the econometric techniques, and the applications to data. Prerequisite: ECON 817 and ECON 818, or consent of instructor. ECON 915 is recommended. LEC.

ECON 880. Selected Topics in Economic Theory: _____ 1-3 Hours.
An advanced course in economic theory that will study selected topics in economic theory such as consumer theory, linear economics, decision theory, stability of economic equilibrium, comparative statics, etc. Prerequisite: Consent of instructor. LEC.

ECON 899. Master's Thesis. 1-10 Hours.
The.
ECON 901. Advanced Economic Theory I. 3 Hours.
Advanced study of current general equilibrium analysis, the mathematical tools involved in such analysis, and some applications to other branches of economic theory. Prerequisite: ECON 802 and ECON 810. LEC.

ECON 902. Advanced Economic Theory II. 3 Hours.
A continuation of the advanced study of general equilibrium analysis. Prerequisite: ECON 901. LEC.

ECON 910. Economic Theory Seminar-Workshop. 1-3 Hours.
This seminar-workshop is designed to study advanced research topics in the areas of microeconomic and macroeconomic theory, and also provide assistance in the preparation and development of the dissertations of Ph.D. candidates in these areas of specialization. LEC.

ECON 911. Applied Macroeconomics. 3 Hours.
An advanced exploration of the microeconomic foundations of macroeconomics, neoclassical macroeconomics with and without money, Keynesian and neo-Keynesian macroeconomics, and economic stabilization, inflation, and unemployment. Prerequisite: ECON 802 and ECON 810. LEC.

ECON 912. Advanced Macroeconomics. 3 Hours.
An analysis of economic policy in dynamic economic models. The effects of various policies on the equilibrium, stability, and adjustment paths of the models will be considered. Both open and closed economies will be analyzed. Prerequisite: ECON 810. MATH 320 is recommended. LEC.

ECON 913. Monetary Economics. 3 Hours.
This course examines how money, monetary policy, and monetary institutions influence the macroeconomy. Modern theories of money demand are presented and critiqued. The function of commercial banks, non-bank financial intermediaries, and central banks in the money supply process is addressed. Interrelationships between the tools, the instruments, the operating procedures, the intermediate targets, and the goals of policy are examined. Additional topics may include the monetary transmission mechanism, the effect of uncertainty on optimal policy decisions, the rules versus discretion debate, the monetary implications of fiscal policy, the term structure of interest rates, the causes and consequences of bank runs and financial panics, and the optimal method of constructing weighted monetary aggregates. Prerequisite: ECON 811 or consent of instructor. LEC.

ECON 915. Advanced Econometrics I. 3 Hours.
The study of selected topics in applied cross-section econometrics for uses mainly in applied microeconomics, public finance, and labor economics. Topics include traditional econometrics of production and demand, latent variable models, panel data studies, probabilistic choice models, censored and truncated models, sample selection, disequilibrium models, duration studies, and semi- and non-parametric models. Prerequisite: ECON 818, or consent of instructor. LEC.

ECON 916. Advanced Econometrics II. 3 Hours.
A study of selected topics in applied time-series econometrics for use mainly in applied macroeconomics, international finance, and development economics. Topics include empirical applications of ARCH models, VAR models (study of impulse response function and variance decomposition), unit-root cointegration and long memory models. Bayesian unit root analysis, estimation and inference of dynamic general equilibrium models, model calibration and simulation are also possible topics of this course. Prerequisite: ECON 818, or consent of instructor. LEC.

ECON 917. Advanced Econometrics III. 3 Hours.
A study of structural and nonlinear time series approaches to econometric modeling and inference. The course emphasizes techniques needed to use economic theory in system-wide econometrics. Emphasis is placed on selection of functional form for approximation to theoretical functions and the use of duality theorems for derivation of the resulting econometric systems of equation. Inference with those models will be by nonlinear parametric, semi-parametric, and nonparametric methods. Prerequisite: ECON 818. LEC.

ECON 918. Financial Econometrics. 3 Hours.
This course is designed to provide a variety of new econometric tools useful to investigate financial data. It discusses how to measure and forecast financial volatility using models such as Stochastic Volatility, multivariate GARCH, and Dynamic Conditional Correlation models. It also covers Dynamic Factor models and State Space models, which can be used in many financial data analyses. The course will be particularly helpful for the students preparing dissertations in the field of finance, macro-finance, monetary economics, international finance, and development economics. It will also benefit the students interested in more practical use of tools in the field such as financial risk management, insurance, and commercial banking. Prerequisite: ECON 818. ECON 916 is recommended. LEC.

ECON 920. Econometrics Seminar-Workshop. 1-3 Hours.
This seminar-workshop is designed to study advanced research topics in the area of econometric theory and application, and also provide assistance in the preparation and development of the dissertations of Ph.D. candidates in this area of specialization. LEC.

ECON 925. Economic Dynamics. 3 Hours.
A study of the concepts of equilibrium and stability in various economic frameworks; static economies, changing economies, and disaggregated and aggregated economies. Prerequisite: ECON 802. LEC.

ECON 930. Economic History Seminar-Workshop. 1-3 Hours.
This seminar-workshop is designed to study advanced research topics in the area of economic history, and also provide assistance in the preparation and development of the dissertations of Ph.D. candidates in this area of specialization. LEC.

ECON 940. Economic Seminar-Workshop in: ____. 1-3 Hours.
This seminar-workshop is designed to study advanced research topics in the specified area of applied economics (public finance, monetary analysis, environment-energy, economic growth and development, urban economics, health care economics, natural resources, labor-manpower, international trade and finance, comparative economic systems, Soviet economics), and also provide assistance in the preparation and development of the dissertations of Ph.D. candidates with dissertations in a specific area of applied economics. LEC.

ECON 950. Special Problems in Economics. 1-3 Hours.
LEC.

ECON 955. Advanced Topics in Natural Resources. 3 Hours.
Rigorous analysis of an Arrow-Debreu economy with natural resources and extensions (including optimal growth, planning procedures, and uncertainty). Investigation of current research topics in theoretical and applied resource economics. Required course for Ph.D. candidates writing dissertations in natural resources. Prerequisite: Consent of instructor. ECON 927 recommended. RSH.

ECON 970. Advanced Labor Economics. 3 Hours.
A survey of recent labor economics research. Topics include labor supply and demand, human capital investment, and unemployment. Prerequisite: ECON 770. LEC.

ECON 999. Doctoral Dissertation. 1-10 Hours.
THE.
English Courses

ENGL 50. Basic Writing Skills. 3 Hours. U.
A review of the basic skills of written English, with emphasis on sentence-level grammar. Recommended for all students who score 16 or below on the ACT English test. May be repeated for credit. LEC.

ENGL 100. Introduction to Literature. 3 Hours. H.
An introduction to critical thinking skills through the study of works of literature drawn from a variety of genres and methods of critical inquiry. This course does not fulfill any KU writing requirement. LEC.

ENGL 101. Composition. 3 Hours. GE21 / U.
Instruction and practice in writing in a variety of rhetorical contexts, including academic ones. LEC.

ENGL 102. Critical Reading and Writing. 3 Hours. GE21 / U.
Builds upon the instruction in writing of ENGL 101, emphasizing critical thinking through careful, thoughtful reading and writing. Also instructs in the evaluation and use of secondary sources. Prerequisite: Completion of ENGL 101 or its equivalent, or an ACT score of 27-31, or an SAT score of 600-649, or an AP exam score of 3 on either the Literature and Composition exam or the Language and Composition exam, or an IB score of 5. LEC.

ENGL 105. Freshman Honors English. 3 Hours. GE21 / U.
Study of significant works of world literature. The primary aims are to develop reading and writing skills and to introduce the students to works of literature drawn from a variety of genres and historical periods. Prerequisite: An ACT score of 31-36, or an SAT score of 650 or higher, or an AP exam score of 3 on either the Literature and Composition exam or the Language and Composition exam, or membership in the University Honors Program. LEC.

ENGL 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in English. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

ENGL 199. Orientation to English Studies. 1 Hour. H.
Provides an overview of English Studies at the University of Kansas. Students learn about degree requirements and specializations; research, extracurricular, and study abroad opportunities; and career and internship options. Graded on a satisfactory/unsatisfactory basis. LEC.

ENGL 200. Study Abroad Topics in: ______. 1-6 Hours. H.
This course is designed for the study of special topics in English. Coursework is completed through a KU study abroad program. Available only to KU study abroad participants. May be repeated for credit if content varies. Does NOT fulfill any part of the Freshman-Sophomore honors requirement. LEC.

ENGL 203. Topics in Reading and Writing: ______. 3 Hours. GE11/GE21/GE3H / H.
In-depth reading and writing on a significant topic, theme, or genre. Includes a variety of textual types or a range of historical periods. Continued practice in critical reading and writing. May include but will not be limited to writing in literary genres. Prerequisite: Completion of ENGL 101 and ENGL 102, or their equivalent. LEC.

ENGL 205. Freshman-Sophomore Honors Proseminar: ______. 3 Hours. GE11/GE21/GE3H / H.
Study of a major movement, topic, or theme in literature and culture. The primary aims are to further develop reading and writing skills and to consider significant cultural and artistic issues. Prerequisite: ENGL 105 or an AP exam score of 4 on either the Literature and Composition exam or the Language and Composition exam. LEC.

ENGL 209. Introduction to Fiction. 3 Hours. GE11/GE21/GE3H / H.
In-depth reading of and writing about prose fiction with emphasis on critical analysis of a variety of narrative types from different historical periods. Prerequisite: Completion of ENGL 101 and ENGL 102, or their equivalent. LEC.

ENGL 210. Introduction to Poetry. 3 Hours. GE11/GE21/GE3H / H.
In-depth reading of and writing about poetry with emphasis on critical analysis of a variety of forms and techniques used in poems from different historical periods. Prerequisite: Completion of ENGL 101 and ENGL 102, or their equivalent. LEC.

ENGL 211. Introduction to the Drama. 3 Hours. GE11/GE21/GE3H / H.
Study of plays selected to familiarize the student with dramatic masterpieces and with the drama as a literary type. Prerequisite: Completion of ENGL 101 and ENGL 102, or their equivalent. LEC.

ENGL 300. The Bible, the Classics, and Modern Literature. 3 Hours. H.
An introduction to the nature and function of literature, emphasizing Biblical, Classical, and other major cultural traditions and their influence on British and American literature. Some ancient and modern works will be studied in conjunction. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 301. Topics in British Literature to 1800: ______. 3 Hours. H.
Study of British literary works before 1800. Topics may focus on a particular genre, theme, topic, historical period, author, or group of authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 302. Topics in British Literature Since 1800: ______. 3 Hours. H.
Study of British literary works since 1800. Topics may focus on a particular genre, theme, topic, historical period, author, or group of authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 305. World Indigenous Literatures. 3 Hours. NW AE42 / H.
A survey of contemporary world indigenous literatures that includes those from North America, Australia, New Zealand, the South Pacific, the Arctic, and Latin America. Texts are in English (original or translation). Genres studied include the novel, poetry, and drama, supplemented by works from the oral tradition, the visual arts, and film. (Same as ISP 305.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 306. Global Environmental Literature. 3 Hours. H.
An examination of a variety of literary and other representations of human and non-human environments and environmentalism. Particular attention will be paid to how race, gender, class, sexuality, and geography produce and are produced by those representations. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 308. Introduction to Literary Criticism and Theory. 3 Hours. GE3H / H.
Study of significant problems in literary interpretation and methodology, in which basic critical principles and approaches are systematically examined and applied. These approaches might include, but are not limited to, feminism, Marxism, deconstruction, psychoanalysis, and
cultural studies. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 309. The British Novel. 3 Hours. HL / H.
Study of five or more significant novels representative of developments in the British novel of the eighteenth, nineteenth, and twentieth centuries. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 310. Literary History I. 3 Hours. H.
A study of literature in English, including major forms and movements, from the medieval period to Romanticism. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 312. Major British Writers to 1800. 3 Hours. H.
Outstanding works of British literature, from the earliest times to the close of the eighteenth century, studied in chronological sequence and with some attention to the characteristics of the various periods of English literary history embraced. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 314. Major British Writers after 1800. 3 Hours. H.
Outstanding works of British literature, from 1800 to the present, studied in chronological sequence and with some attention to the characteristics of the various periods of English literary history embraced. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 315. Studies in British Literature. 3 Hours. HL AE42 / H.
For students enrolled in the annual summer Study Abroad program, an interdisciplinary program conducted with other humanities departments. British literature is studied in the context of visits to relevant sites such as London, the Lake District, and Edinburgh. Prerequisite: Prior completion of the KU Core Written Communication requirement. Approval for enrollment in the summer Institute through the Study Abroad office is required. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 316. Introduction to Major American Writers. 3 Hours. H.
Outstanding works of American literature, studied in chronological sequence and with some attention paid to the characteristics of the various periods of American literary history embraced. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 317. Topics in American Literature to 1865: _____ 3 Hours. H.
Study of American literary works before 1865. Topics may focus on a particular genre, theme, historical period, author, or group of authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 318. Topics in American Literature Since 1865: _____ 3 Hours. H.
Study of American literary works since 1865. Topics may focus on a particular genre, theme, historical period, author, or group of authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 320. American Literature I. 3 Hours. H.
From the beginnings to 1865, with emphasis on the major writers and movements. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 322. American Literature II. 3 Hours. H.
From 1865 to the present, with emphasis on the major writers and movements. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 323. Twentieth Century Literature and Culture. 3 Hours. H.
The study of British and American literature, emphasizing important figures and movements since World War I. On occasion, the study of literature will be enriched with an investigation of other arts, such as music, film, and painting. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 324. Contemporary Authors: _____. 3 Hours. H.
Study of one or more recent British and/or American authors. (Different authors in different semesters.) May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 325. Recent Popular Literature. 3 Hours. HL / H.
Study of recent best sellers or other works of popular interest. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 326. Introduction to African Literature. 3 Hours. NW AE42 / H / W.
Reading, analysis, and discussion of contemporary fiction, poetry, and drama from sub-Saharan Africa. Brief attention is paid to historical development and to traditional literature. (Same as AAAS 332.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 327. Studies in Twentieth-Century Drama: _____. 3 Hours. H.
A survey of major twentieth-century playwrights and theatre groups, to be selected by the instructor. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 328. Literature and Film: _____. 3 Hours. H.
The comparative study of the literary and film treatments of a particular topic or theme, with special attention to the generic qualities of literature and film. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 330. Literary History II. 3 Hours. H.
A study of literature in English, including major forms and movements, from the Romantics to the present. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 331. Chaucer. 3 Hours. H.
Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 332. Shakespeare. 3 Hours. H.
A study of ten to fourteen of Shakespeare's plays. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.
ENGL 334. Major Authors: _____ 3 Hours. H.
Study of one or two major British and/or American authors. Different authors in different semesters. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 336. Jewish American Literature and Culture. 3 Hours. AE41 / H.
An examination of Jewish American literature and culture from the 17th century to the present. Materials may include a broad range of literary genres as well as folklore, music, film, and visual art. (Same as JWSH 336.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 337. Introduction to U.S. Latino/a Literature. 3 Hours. AE41 / H.
An historical survey of literature by U.S. Latina/o writers from Mexican, Puerto Rican, Cuban, Dominican, and Central/South American descent. Various genres, including oral forms such as corridos as well as novels, poetry, essays, and autobiographical writing, will be considered. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 338. Introduction to African-American Literature. 3 Hours. AE41 / H.
An introduction to prominent works of African-American literature from the 18th century to the present as well as to the basic approaches to study and principles of this body of work, including its connection with African sources. Literature will include a wide variety of genres, and course materials may be supplemented by folklore, music, film, and visual arts. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 339. Introduction to Caribbean Literature. 3 Hours. AE42 / H.
Reading, analysis, and discussion of fiction, poetry, and drama from the Caribbean, including a small selection of Spanish, French, and Dutch Antillean works in translation. (Same as AAAS 333.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 340. Topics in U.S. Ethnic Literature: _____ 3 Hours. AE41 / H.
A study of literature by authors from one or more ethnic groups within the U.S., including but not limited to Asian American, African American, American Indian, Jewish American, Italian American, U.S. Latina/o. Different topics in different semesters. May be repeated for credit as topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 341. American Literature of Social Justice. 3 Hours. AE41 / H.
An examination of U.S. literature that addresses situations of political and economic oppression or repression with the potential function of enlisting readers' sympathies in a project of social justice. The course focuses on U.S. literary texts dealing with social injustice and the curtailment of human and civil rights and addresses debates surrounding cultural authority and authenticity, identity politics, attempts to represent the voice of the "oppressed," revision of strategies used in slave narrative or in testimonio, and ethical and rhetorical appeals to an assumed readership. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 351. Fiction Writing I. 3 Hours. H.
A study of narrative techniques and practice in the writing of fiction. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 352. Poetry Writing I. 3 Hours. H.
A study of prosody and practice in the writing of verse. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 353. Screenwriting I. 3 Hours. H.
An introduction to the practice of writing and evaluating scripts for film. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 354. Playwriting I. 3 Hours. H.
An introduction to the practice of writing and evaluating scripts for stage. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 355. Nonfiction Writing I. 3 Hours. H.
An introduction to the literary techniques of nonfiction and practice in the writing of one or more of the genre's subtypes, such as the personal essay, the familiar essay, the lyric essay, the memoir, nature writing, or travel writing. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 356. Advanced Composition: _____ 3 Hours. H.
The principles of effective composition, as applied to a specific topic such as critical writing, expository writing, pre-legal English, book reviewing, etc. May be repeated for credit as topic varies. Prerequisite: Prior completion of the KU Core Written Communication requirement. LEC.

ENGL 357. American Literature of Social Justice. 3 Hours. AE41 / H.
A study of literature that addresses situations of political and economic oppression or repression with the potential function of enlisting readers' sympathies in a project of social justice. The course focuses on U.S. literary texts dealing with social injustice and the curtailment of human and civil rights and addresses debates surrounding cultural authority and authenticity, identity politics, attempts to represent the voice of the "oppressed," revision of strategies used in slave narrative or in testimonio, and ethical and rhetorical appeals to an assumed readership. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 358. Introduction to Rhetoric and Composition. 3 Hours. GE3H / H.
Introduces students to rhetoric and composition, a field that investigates questions about the nature, processes, teaching and historical, social and cultural contexts of writing. Students survey the themes, debates, and trends that inform the work of scholars in this field. Students also become
acquainted with the historical traditions of discourse instruction, and the relevance of those traditions to our current understandings of writing. Prerequisite: Prior completion of the KU Core Written Communication requirement. LEC.

ENGL 385. The Development of Modern English. 3 Hours. H.
An introduction to the history of the English language, with special attention to general structural changes throughout its history, especially changes in vocabulary and meaning, and past influences of other languages upon present usage. Prerequisite: Prior completion of the KU Core Written Communication requirement. LEC.

ENGL 387. Introduction to the English Language. 3 Hours. HL GE3H / H.
A survey of the English language, its historical development, and its grammatical structure. Prerequisite: Prior completion of the KU Core Written Communication requirement. LEC.

ENGL 390. Studies in: ______. 3 Hours. H.
A study of a specialized theme or topic in English studies. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 400. Teaching and Tutoring Writing. 3 Hours. U.
Students explore theories and strategies of teaching and tutoring writing across academic disciplines. They learn more about themselves as writers as they build a repertoire of writing techniques useful in their studies, in the workplace, and in their personal lives. By observing and consulting in the writing center, they understand how reflection leads to responsible/responsive and engaged practice. (Same as LAS 400.) LEC.

ENGL 466. Literature for Children. 3 Hours. H.
Wide reading in the great literature of the past and present suitable for children: folktales and epics, mythology, modern fantasy, fiction, poetry. Emphasis on extending the student's background and developing critical judgment. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 479. The Literature of: ______. 3 Hours. H.
A study of the literary treatment of a particular aspect of British and/or American society. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 492. The London Review. 3 Hours. AE42 / H.
This class meets one day a week throughout the semester and includes a nine-day visit to London over the spring break period. Students spend the early part of the semester selecting special interests, researching places to visit and study, and exchanging information. After the trip, students compile and publish a journal entitled "The London Review", which is comprised of essays, photos, art work, and other reflections about their experience in London. Prerequisite: Admission to University Honors Program or permission of instructor. LEC.

ENGL 494. Research Internship. 1-3 Hours. H.
Practical research experience in English studies gained by assisting a faculty member on a faculty research, editorial, pedagogical, or outreach project. Credit hours are graded by faculty on a satisfactory/unsatisfactory basis. May be used as a component of the Research Experience Program (REP). Prerequisite: At least one 300-level English course, declaration of English major, and permission of instructor. FLD.

ENGL 495. Directed Study: ______. 1-3 Hours. H.
Work for advanced majors in fields or on topics not covered in course work. May be repeated for a total of up to six hours. Does not satisfy specific course requirements for the English major. May be counted as part of the total junior-senior credit hours required. Prerequisite: Completion of three junior-senior courses in English and consent of instructor. IND.

ENGL 496. Internship. 1-3 Hours. H.
Practical experience in the use of English skills in supervised academic or professional settings. Credit hours are graded on a satisfactory/unsatisfactory basis, according to the written evaluation provided by the supervisor to the director. Prerequisite: At least one 300-level English course, declaration of English major, and permission of Undergraduate Director. FLD.

ENGL 497. Service Learning Internship. 1-3 Hours. H.
Practical experience in the use of English skills in a non-profit or advocacy context. Credit hours are graded by faculty on a satisfactory/unsatisfactory basis, according to the written evaluation student provided by the on-site supervisor and on the student's written reflective component assigned and evaluated by the supervising faculty member. May be used as a component of the Service Learning certification program. Prerequisite: At least one 300-level English course, declaration of English major, and permission of instructor. FLD.

ENGL 506. Science Fiction. 3 Hours. AE61 / H.
The development of science fiction as a literary genre, and as a literature of ideas for a future-oriented society. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 507. Science, Technology, and Society: Examining the Future through a Science-Fiction Lens. 3 Hours. AE61 / H.
Science and technology offer many benefits to individuals and to societies, yet they also present many challenges. This course explores the past, present, and possible future effects of science and technology on society through readings and discussions of nonfiction articles in conjunction with science-fiction stories and novels. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 508. Contemporary Literary Theory. 3 Hours. AE61 / H.
Study of selected works of literary theory and of current issues in literary studies. The course is designed for advanced undergraduates who intend to continue their study of literature in graduate school and for new graduate students who require a grounding in literary theory. According to each instructor's interest, the course may survey contemporary literary theory or may focus on a particular topic (e.g., authorship, canon formation, creativity, metaphor, narrative, rhetoric) or on a theoretical position (e.g., cultural studies, deconstruction, feminism, historicism, Marxism, psychoanalysis). A student may repeat the course with the permission of the appropriate director. Prerequisite: Completion of three junior-senior courses in English (or their equivalent) or graduate standing. LEC.

ENGL 520. History of the Book. 3 Hours. AE61 / H.
Brief history of writing materials and handwritten books; history of printed books from the fifteenth century as part of cultural history; technical progress and aesthetic change. (Same as HIST 500.) LEC.

ENGL 521. Advanced Topics in British Literature 1800: ______. 3 Hours. AE61 / H.
A Study of texts written before 1800. May be organized around a particular genre, historical period, a group of writers, or a theme. May be repeated for credit as topic varies. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.
ENGL 522. Advanced Topics in British Literature After 1800: ______. 3 Hours. H.
A study of texts written after 1800. May be organized around a particular genre, historical period, group of writers, or a theme. May be repeated for credit as topic varies. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 525. Shakespeare: ______. 3 Hours. AE61 / H.
Intensive study of selected works. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 530. Irish Literature and Culture: ______. 3 Hours. AE61 / H.
Study of topics in Irish literature and culture. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. (Same as EURS 512.) Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 531. James Joyce. 3 Hours. AE61 / H.
A study of the major works of James Joyce, with the majority of the semester dedicated to Ulysses. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 532. Whitman and Dickinson. 3 Hours. AE61 / H.
A study of selected works of Walt Whitman and Emily Dickinson. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 533. William Faulkner. 3 Hours. AE61 / H.
A study of selected works of William Faulkner. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 534. Major Authors (Capstone): ______. 3 Hours. AE61 / H.
Study of one or two major authors. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 536. Readings in the Holocaust. 3 Hours. AE61 / H.
An examination of Holocaust literature, which may include fiction, nonfiction, poetry, drama, and film. Theoretical concerns may include such issues as memory, trauma, representation, imagination, exile, alienation, silence, the body and emotions, and intergenerational transmission. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 551. Fiction Writing II. 3 Hours. AE61 / H.
Continuation of ENGL 351. May be repeated for undergraduate credit up to a total of six hours. Prerequisite: ENGL 351 or equivalent. LEC.

ENGL 552. Poetry Writing II. 3 Hours. AE61 / H.
Continuation of ENGL 352. May be repeated for undergraduate credit up to a total of six hours. Prerequisite: ENGL 352 or its equivalent. LEC.

ENGL 553. Screenwriting II. 3 Hours. AE61 / H.
A continuation of ENGL 353. May be repeated for undergraduate credit up to a total of six hours. Prerequisite: ENGL 353 or its equivalent. LEC.

ENGL 554. Playwriting II. 3 Hours. AE61 / H.
A continuation of ENGL 354. May be repeated for undergraduate credit up to a total of six hours. Prerequisite: ENGL 354 or its equivalent. LEC.

ENGL 555. Nonfiction Writing II. 3 Hours. AE61 / H.
Continuation of ENGL 355. May be repeated for undergraduate credit up to a total of six hours. Prerequisite: ENGL 355 or its equivalent. LEC.

ENGL 560. British Literature of the 20th Century: ______. 3 Hours. AE61 / H.
Study of twentieth-century literary works. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 562. Advanced Technical Writing I. 3 Hours. AE61 / H.
Stresses research methods in technical communication and simulates on-the-job training through live interviews and other forms of research. Students master the relevant software tools and begin to develop a technical-writing portfolio. Prerequisite: ENGL 362. LEC.

ENGL 563. Advanced Technical Writing and Editing. 3 Hours. AE61 / H.
Students apply the principles of communicating business, scientific, and technical information to targeted readers. Concentration on the varying writing styles for online documents, proposals, reports, specifications, journal articles, and larger documents, as appropriate to their audience. Simulates an internship and helps students further develop a technical-writing or -editing portfolio. Students provide weekly status reports and a final report detailing their learning experience and present it to an appropriate technical communication class to help other students better understand the field. Prerequisite: Instructor permission. LEC.

ENGL 564. Advanced Technical Editing I. 3 Hours. AE61 / H.
Students learn to use specialized vocabulary and editing tools such as proofreaders’ marks, style guides, and standard editorial reference material; and they practice how to identify and correct common problems. Students usually work with writers in other technical writing courses, learning to work productively with other peoples’ print and online documents. Students practice taking editing tests and develop a technical-editing portfolio. Prerequisite: ENGL 362. LEC.

ENGL 565. The Gothic Tradition. 3 Hours. H.
This course explores and defines the Gothic tradition in British and American literature from its beginnings in the late eighteenth century to more recent twentieth-century texts in literature and film. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 567. Modern Drama: ______. 3 Hours. AE61 / H.
A study of American, British, or comparative drama from the late nineteenth century to the present. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 568. American Literary Environmentalism. 3 Hours. AE61 / H.
An examination of representations of nature and human/nature relations and their political, social and environmental consequences, with a special focus on the 19th and 20th centuries, including the writings of transcendentalists and conservationists, slave narratives, scientific writing on toxicity and other topics, and environmental justice literature. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 569. The Modern Tradition. 3 Hours. AE61 / H.
An intensive study of the formative backgrounds of the "modern" spirit as it is expressed in imaginative literature. Readings from such influential spokesmen as W. James, Zola, Marx, Darwin, Henry Adams, Kierkegaard, Dostoevsky, Nietzsche, I.A. Richards, T.S. Eliot, Joyce, Auden, Rilke, Croce, Yeats, Malraux, Freud, Jung, D.H. Lawrence, Sartre, Camus, and Gide. Prerequisite: Prior completion of the freshman-sophomore English requirement or its equivalent. LEC.
ENGL 570. Topics in American Literature: _____ 3 Hours. AE61 / H.
Different topics in different semesters. May be repeated for credit as the
topic changes. Capstone course. Prerequisite: Prior completion of at least
one 300- or 400-level English course. LEC.

ENGL 571. American Indian Literature: _____ 3 Hours. NW AE41/
AE61 / H/W.
The study of a wide range of American Indian literature, from various
tribes and in a variety of genres. Satisfies the non-western culture course
requirement. May be repeated for credit as the topic changes. Capstone
course. Prerequisite: Prior completion of at least one 300- or 400-level
English course. LEC.

ENGL 572. Women and Literature: _____ 3 Hours. AE61 / H.
Different topics in different semesters. May be repeated for credit as the
topic changes. Capstone course. Prerequisite: Prior completion of at least
one 300- or 400-level English course. LEC.

ENGL 573. U.S. Latina/o Literature: _____ 3 Hours. AE41/AE61 / H.
A study of the literature written by U.S. Latina/o writers of Mexican, Puerto
Rican, Cuban, Dominican, and other Central/South American descent,
in a variety of genres. Attention is given to the cultural and historical
contexts of the literature and to the specificity of particular U.S. Latina/
o groups. May be repeated for credit as the topic changes. Capstone
course. Prerequisite: Prior completion of at least one 300- or 400-level
English course. LEC.

ENGL 574. African American Literature: _____ 3 Hours. AE41/AE61 / H.
A study of the literature written by African Americans from the pre-Civil
War period to the present. Emphasis upon specific historical periods in
the development of African American literature as well as on a critical
analysis of major autobiographical, poetic, and fictional works. May be
repeated for credit as the topic changes. Capstone course. Prerequisite:
Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 575. Literature of the American South. 3 Hours. AE61 / H.
A survey of fiction, non-fiction, poetry, and drama written by selected
writers of the American South from the pre-Civil War period to the present.
The course will emphasize the critical analysis of individual texts as well
as the cultural and historical context of the works. Capstone course.
Prerequisite: Prior completion of at least one 300- or 400-level English
course. LEC.

ENGL 576. Advanced Topics in American Literature to 1865: _____ 3
Hours. AE61 / H.
Study of American literary works before 1865. Topics may focus on a
particular genre, theme, historical period, author, or group of
authors. May be repeated for credit as the topic changes. (Same as AMS
554.) Prerequisite: Prior completion of at least one 300- or 400-level
English course. LEC.

ENGL 577. Advanced Topics in American Literature Since 1865: _____ 3
Hours. AE61 / H.
Study of American literary works after 1865. Topics may focus on a
particular genre, theme, historical period, author, or group of
authors. May be repeated for credit as the topic changes. (Same as AMS
555.) Prerequisite: Prior completion of at least one 300- or 400-level
English course. LEC.

ENGL 578. Poetry, 1900-1945. 3 Hours. AE61 / H.
A Study of English-language poetry of the early twentieth century.
Capstone course. Prerequisite: Prior completion of at least one 300- or
400-level English course. LEC.

ENGL 579. Poetry since 1945. 3 Hours. AE61 / H.
A study of English-language poetry from the mid-twentieth century to the
present. Capstone course. Prerequisite: Prior completion of at least one
300- or 400-level English course. LEC.

ENGL 580. Rhetoric and Writing: _____ 3 Hours. AE61 / H.
A study of selected broad topics in rhetoric and writing, including such
topics as the rhetoric of law, the rhetoric of education, persuasion in
literature, literacy, and rhetorical genres. May be repeated for credit as the
topic changes. Capstone course. Prerequisite: Prior completion of at least
one 300- or 400-level English course. LEC.

ENGL 581. English Language Studies: _____ 3 Hours. AE61 / H.
A study of selected topics in English language studies (e.g. World
Englishes, Language and Literary Style, and The Secret Life of English
Words). May be repeated for credit as the topic changes. Capstone
course. Prerequisite: Prior completion of at least one 300- or 400-level
English course. LEC.

ENGL 582. American English. 3 Hours. AE61 / H.
A study of the structure, history, and varieties of the English language in
the United States from the period of colonization to the present. Capstone
course. Prerequisite: Prior completion of at least one 300- or 400-level
English course. LEC.

ENGL 590. Studies in: _____ 1-3 Hours. AE61 / H.
A study of a specialized theme or topic in English studies. May be
repeated for credit as the topic changes. Capstone course. Prerequisite:
Prior completion of the first-and second-year English requirement or its
equivalent, and at least one 300- or 400-level ENGL course; or permission
of instructor. LEC.

ENGL 592. Survey of: _____ 3 Hours. AE61 / H.
A broad view of major works and authors in a particular period, genre, or
mode. May be repeated for credit as the topic varies. Capstone course.
Prerequisite: Prior completion of at least one 300- or 400-level English
course. LEC.

ENGL 596. Technical Communication Internship. 1-3 Hours. AE61 / H.
Practical experience in the use of technical-writing or editing skills in
supervised professional settings for which the student normally does not
receive pay. A 1-3 hour internship requires 40-120 hours of documented
on-site work in one semester (40 hours per credit). Credit hours are
graded on a satisfactory/unsatisfactory basis, according to a written
recommendation from the student's workplace manager, student work
logs and self-evaluation, and an oral report. Prerequisite: Advanced
Technical Writing I (English 562) and permission of instructor. LEC.

ENGL 598. Honors Proseminar: _____ 3 Hours. AE61 / H.
Directed reading and participation in small discussion groups, each
formed to consider a specific and limited subject during the semester.
Written work will be required, and will be judged on both content and
form. The course is part of a departmental program leading to Honors in
English. Prerequisite: Admission must be approved by the departmental
director of undergraduate studies. LEC.

ENGL 599. Honors Essay. 3 Hours. AE61 / H.
Independent study, culminating in a substantial essay prepared under the
direction of a member of the Department of English who is a specialist
in the area of the student's interest. Prerequisite: Admission must be
approved by the departmental director of undergraduate studies. LEC.

ENGL 610. The Literature of England to 1500. 3 Hours. AE61 / H.
A survey of the literature of medieval England (in translation). Capstone
course. Prerequisite: Prior completion of at least one 300- or 400-level
English course. LEC.
ENGL 620. Renaissance English Literature: ____. 3 Hours. AE61 / H.
A broad view of literary works written between 1485 and 1660. Surveys may be offered with focus on a particular genre (poetry, drama, or prose), historical period (16th- or 17th-century literature), or group of authors (women writers). May be repeated for credit as topic varies. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 633. Milton. 3 Hours. AE61 / H.
A close reading of Paradise Lost, Paradise Regained, Samson Agonistes, and the minor poems, with illustrative selections of prose. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 640. British Literature, 1600-1800: ____. 3 Hours. AE61 / H.
Study of literary works from the Restoration and eighteenth century. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 650. Romantic Literature: ____. 3 Hours. AE61 / H.
Study of literary works from the British Romantic period. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 655. Victorian Literature: ____. 3 Hours. AE61 / H.
Study of literary works from the Victorian period. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 660. Ecocriticism. 3 Hours. AE61 / H.
A study of the relationship between various modes of representation and environmentalism. Particular attention paid to the intersection between eco-criticism and other forms of contemporary literary theory, including, for example, critical race studies, poststructuralism, postcolonial theory, gender and sexuality studies, class-based criticism, and animal theory. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 674. African Literature: ____. 3 Hours. NW AE42/AE61 / H.
An advanced study of a topic, genre, or area of written and/or oral African literature. Emphasis is placed on the critical analysis of major works, as well as their cultural and historical contexts. The course also addresses central critical and theoretical debates in the field. May be repeated for credit as the topic changes. Prerequisite: At least one 300- or 400-level English course, or permission of instructor. LEC.

ENGL 690. Studies in: ____. 3 Hours. AE61 / H.
A study of a major topic of concern to English literature. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 707. Literary Criticism to 1800. 3 Hours.
An introduction to the major writings of literary criticism, in their historical context, from Plato and Aristotle to Samuel Johnson. LEC.

ENGL 708. Literary Criticism after 1800. 3 Hours.
An introduction to modern criticism, in its historical context, from Wordsworth and Coleridge to the present. The emphasis will be on major critics and predominant schools. LEC.

ENGL 709. Critical Theory: Problems and Principles: ____. 3 Hours.
Study of a topic (such as mimesis, influence, deconstruction) that is important in critical theory. May be repeated for credit as topic varies. LEC.

ENGL 710. Introduction to Old English. 3 Hours.
A study of the grammatical features of the earliest form of written English, with readings in Old English prose and poetry. LEC.

ENGL 712. Beowulf. 3 Hours.
Prerequisite: An introductory course in Old English. LEC.

ENGL 714. Middle English Literature. 3 Hours.
Reading of selected works in Middle English (exclusive of the works of Chaucer). LEC.

ENGL 720. Chaucer: ____. 3 Hours.
Intensive study of either the Canterbury Tales or Troilus and Criseyde and the earlier poems. May be repeated for credit up to a maximum of six hours. LEC.

ENGL 725. Shakespeare: ____. 3 Hours.
Intensive study of selected plays. May be repeated for credit as the topic changes. LEC.

ENGL 730. Topics in Early Modern Literature: ____. 3 Hours.
Intensive study of texts written between 1485 and 1800. The course may be organized around a particular genre (poetry, prose, drama), historical period (e.g. Elizabethan literature), a major author (e.g. Milton), group of authors (e.g. women writers), or theme (e.g. literature and politics 1660-1800). Students will be expected to read and apply relevant criticism and theory as well as study primary texts. May be repeated for credit as topic varies. LEC.

ENGL 750. British Literature of the 19th Century: ____. 3 Hours.
Intensive study of British literary works of the 1800s. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. LEC.

ENGL 751. Fiction Writing III. 1-3 Hours.
Practice in the writing of fiction under the direction of a member of the department working in conjunction with one or more writers in residence. Membership is limited to students who submit, well in advance enrollment, manuscripts showing unusual ability. May be repeated for credit. LEC.

ENGL 752. Poetry Writing III. 1-3 Hours.
Practice in the writing of poetry under the direction of a member of the department working in conjunction with one or more writers in residence. Membership is limited to students who submit, well in advance of enrollment, manuscripts showing unusual ability. May be repeated for credit. LEC.

ENGL 753. Writers Workshop. 1-3 Hours.
An intensive course in writing prose fiction and/or verse. Criticism (NEW) of manuscripts through group meetings and individual conferences with the instructor. Membership limited to students who submit manuscripts showing special ability in at least one of the creative writing forms. May be repeated for credit. LEC.

ENGL 756. Forms: ____. 3 Hours.
A study of literary works belonging to a particular genre or to multiple genres (fiction, nonfiction, poetry, drama etc), either in a particular form (short story, essay, sonnet, etc.), concerned with a particular topic, or illustrative of a particular element of craft (voice, point of view, character development, etc.). Intended primarily for creative-writing students with an interest in developing their skills at reading as writers. May be repeated for credit as the topic varies. LEC.

ENGL 757. Speculative Fiction Writing Workshop. 3 Hours.
An intensive, 2-week course in writing speculative fiction, including genres such as slipstream, magical realism, fantasy, horror, and science fiction. The course is part of the Center for the Study of Science Fiction Summer Institute. Application period: January 1 - April 15. Application includes note
to instructor expressing interest and one story. May be repeated for credit with instructor's permission. LEC.

**ENGL 760. British Literature of the 20th Century:** _____. 3 Hours.
Intensive study of British literary works written during the 20th century. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. LEC.

**ENGL 764. Modern Irish Literature:** _____. 3 Hours.
Intensive study of topics in modern Irish literature. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. LEC.

**ENGL 767. Studies in Modern Drama:** _____. 3 Hours.
Reading of selected works in modern and contemporary drama. May be repeated for credit as the topic changes. LEC.

**ENGL 770. Studies in Life Writing:** _____. 3 Hours.
This course focuses on or surveys individual writers in the tradition of life writing; or intensively examines topics such as "Autobiography," "Memoir and Diary," "Biography," "Slave Narrative," "Letters," "Personal Essays," or "Autobiographical Fictions." Special emphasis within a topic, such as period, gender, or ethnicity, are possible. May be repeated for credit up to a maximum of six hours. LEC.

**ENGL 774. Topics in Literatures of Africa and the African Diaspora:** _____. 3 Hours.
An intensive study of the literatures of Africa and/or African diaspora (people of African descent dispersed around the world). This study will focus on the major characteristics of a particular period, genre, mode, and/or theme in literatures such as African, Caribbean, Afro-Brazilian, African American, African Canadian, Black British. Critical theories pertinent to writers and their work will be covered. Topics may include studies in drama, poetry, or the novel; migration narratives; literature of a particular era, such as the Harlem Renaissance, Negritude, or the Black Arts Movement; representations of gender, etc. As topics vary by semester, the course may be repeated for credit. (Same as AAAS 774.) LEC.

**ENGL 776. American Literature to 1900:** _____. 3 Hours.
Intensive study of North American literary works before 1900. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. LEC.

**ENGL 777. American Literature after 1900:** _____. 3 Hours.
Intensive study of North American literary works after 1900. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. LEC.

**ENGL 779. U.S. Poetries Since 1900:** 3 Hours.
A colloquium for graduate students, sampling the range of poetries and poetics produced in the United States in the twentieth and twenty-first centuries. LEC.

**ENGL 780. Composition Studies:** 3 Hours.
This course surveys the field of composition studies, examining major issues and theories in the study of writing. The course may include theories from classical to contemporary rhetoric, composition theory from the twentieth century, and the most current debates in the study of writing. LEC.

**ENGL 781. Criticism and the Teaching of Literature:** 3 Hours.
A survey of selected critical theories and of the applicability of those theories to the teaching of literature. LEC.

**ENGL 785. History of the English Language:** 3 Hours.
Historical study of the phonology, morphology, syntax, vocabulary, and semantics of English; the relation between linguistic and cultural change. LEC.

**ENGL 787. Modern English Grammar:** 3 Hours.
A study of contemporary English: phonology, morphology, syntax, and usage. The emphasis is structural, but "traditional" grammar is referred to for contrast, example, and clarification. LEC.

**ENGL 790. Studies in:** _____. 3 Hours.
Examination of a significant topic in literature or the English language. May be repeated for credit as the topic varies. LEC.

**ENGL 800. Methods, Theory, and Professionalism:** 3 Hours.
Acquaintance with resources and practice in techniques that are essential to other graduate courses. Major concerns include the writing and documentation of scholarly papers; basic reference and bibliographical aids; critical approaches to literature and literary historiography; and the place of language and rhetoric in English studies today. LEC.

**ENGL 801. Study and Teaching of Writing:** 3 Hours.
A survey of major concepts and issues in the study of writing, especially as applied to teaching composition. Practices in writing pedagogy are also discussed, and students' teaching of composition is observed and explored. Required of and enrollment limited to new teachers of English 101. May not be repeated for credit toward graduate degree. FLD.

**ENGL 802. Practicum in the Teaching of College English:** 1 Hour.
A course concerned primarily with the pedagogy and practice of teaching English 102. Includes weekly group meetings, individual conferences, and class visitations. Required of and enrollment limited to new teachers of English 102. May not be repeated for credit toward graduate degree. Course graded on a satisfactory/unsatisfactory basis. FLD.

**ENGL 803. Practicum in the Teaching of Creative Writing:** 1 Hour.
A course for graduate teaching assistants pursuing the M.F.A. or Ph.D. with emphasis in Creative Writing. Normally taken in the third year. Concerns primarily the pedagogy of creative writing: workshop techniques, approaches to conferencing, revision strategies, and the like. Includes weekly group meetings as well as class visitations and individual conferences. May not be repeated for credit towards graduate degree. Graded on a satisfactory/unsatisfactory basis. Prerequisite: ENGL 801 and 802. FLD.

**ENGL 808. Topics in Composition Studies and Rhetoric:** _____. 3 Hours.
Examination of selected topics in composition and rhetoric, such as literary studies, genre theory, dialogism, or writing across the curriculum. May be repeated for credit as the topic changes. Prerequisite: ENGL 780 or equivalent. LEC.

**ENGL 885. Writing Center Theory and Administration:** 3 Hours.
This course explores theories motivating writing center administration and practice. Students will investigate the multiple functions of writing centers, from writing labs associated with college composition instruction, to decentralized resources for writing faculty teaching writing across the disciplines, to elementary, secondary, and community support centers for writers, to online administrative perspective, design a research study and propose actions such as creating policy, developing curricula, designing materials, or conducting assessments. (Same as LAS 700.) Prerequisite: LAS 400, ENGL 400, or consent of instructor. LEC.

**ENGL 896. Internship:** 1-3 Hours.
Practical experience under professional supervision in editing, theatrical production, and other activities relevant to the completion of an advanced degree in English. FLD.

**ENGL 897. Preparation for the M.A. Examination:** 1-3 Hours.
An independent reading course for students preparing to take the M.A. examination. The grade in the course will be an S or U, as determined by
ENGL 999. Doctoral Dissertation. 1-12 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

ENGL 998. Investigation and Conference: ______. 1-6 Hours.
Individual work in (a) language, (b) literature, (c) composition, or (d) the
teaching of English, by properly qualified graduate students under the
direction of appropriate members of the Graduate Faculty as assigned
by the Graduate Director. Limited to 6 hours of credit toward the M.A. or
Ph.D. degree; only on three-hour enrollment may substitute for a formal
course in satisfying a field distribution requirement. Normally offered for
only up to three credit hours in any one enrollment. Permission of the
supervising faculty member and of the Graduate Director required for
enrollment. RSH.

Environmental Studies Courses

EVRN 103. Environment and History. 3 Hours. H.
Nature is our oldest home and newest challenge. This course surveys
the environmental history of the earth from the extinction of the dinosaurs
to the present with a focus on the changing ecological role of humans. It
analyzes cases of ecological stability, compares cultural attitudes toward
nature, and asks why this ancient relationship seems so troubled. (Same
as HIST 103.) LEC.

EVRN 140. Global Environment I: The Discovery of Environmental
Change. 5 Hours. GE3N / U.
This interdisciplinary course and laboratory sections survey the
foundations of environmental understanding and the process of
scientific discovery from perspectives that combine the principles and
methodologies of the humanities, physical, life and social sciences.
Key topics include the history of environmental systems and life on
earth, the discovery of biotic evolution, ecological change, and climate
change. Laboratory sections apply the principles and methodologies of
the humanities, physical, life and social sciences to earth systems and the
development of environmental understanding using historical and present-
day examples. (Same as GEOG 140 and HIST 140.) LEC.

EVRN 142. Global Environment II: The Ecology of Human
Civilization. 5 Hours. GE3S / U.
This interdisciplinary course and its laboratory sections survey the
history of humanity's relationship with the natural world over the long
term from perspectives that combine the principles and methodologies
of the humanities, physical, life and social sciences. Key topics include
the evolution of Homo sapiens and cultural systems; the development of
hunter, gatherer, fisher, agricultural, and pastoral lifeways; the
ecology of colonialism and industrial civilization, and the emergence of
ideological and ethical perspectives on the relationship between nature
and culture. Laboratory sections apply the principles and methodologies
of the humanities, physical, life and social sciences to the humanity's
engagement with the global environment using historical and present-day
examples. (Same as GEOG 142 and HIST 142.) LEC.

EVRN 144. Global Environment I: Discovery of Environmental
Change, Honors. 5 Hours. GE3N / U.
This interdisciplinary course surveys the foundations of environmental
understanding and the process of scientific discovery from perspectives
that combine the principles and methodologies of the humanities,
physical, life and social sciences. Key topics include the history of
environmental systems and life on earth, the discovery of biotic evolution,
ecological change, and climate change. Laboratory sections apply
the principles and methodologies of the humanities, physical, life and
social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as GEOG 144 and HIST 144.) Open only to students admitted to the University Honors Program or by permission of instructor. LEC.

EVRN 145. Global Environment II: The Ecology of Human Civilization, Honors. 5 Hours. GE3S / U.
This interdisciplinary course and its laboratory sections survey the history of humanity's relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics will include the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the ecology of colonialism and industrial civilization, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to the humanity's engagement with the global environment using historical and present-day examples. (Same as GEOG 145 and HIST 145.) Open only to students admitted to the University Honors Program or by permission of instructor. LEC.

EVRN 148. Scientific Principles of Environmental Studies. 3 Hours. NB GE3N / N.
This course presents an overview of our understanding of environmental processes and issues. Topics include scientific principles, resource issues, pollution and global change, among others. This course gives students a rigorous understanding of interactions between humans and their environment and provides students with a scientific basis for making informed environmental decisions. (Same as GEOG 148.) LEC.

EVRN 149. Scientific Principles of Environmental Studies, Honors. 3 Hours. NB GE3N / N.
This course presents an overview of our understanding of environmental processes and issues. Topics include scientific principles, resource issues, pollution and global change, among others. This course gives students a rigorous understanding of interactions between humans and their environment and provides students with a scientific basis for making informed environmental decisions. An honors section of EVRN 148, designed for superior students. (Same as GEOG 149.) Prerequisite: Membership in the University Honors Program or approval of instructor required. LEC.

EVRN 150. Environment, Culture and Society. 3 Hours. SC GE3S / S.
An introduction to geographic approaches to the study of the environment, emphasizing societal and cultural factors that influence human interaction with the biosphere, hydrosphere, lithosphere and atmosphere. The course involves analysis of a broad range of contemporary environmental issues from the local to global scales. (Same as GEOG 150.) LEC.

EVRN 170. Introduction to Kansas Landscapes. 1 Hour. N.
A course focused on the land and environment of Kansas. Field trips provide students with direct experience of the diverse landscapes in our area. Coursework also emphasizes the dynamic nature of the current landscape and the natural and cultural processes that have shaped it. LEC.

EVRN 171. Understanding Kansas Landscapes. 1 Hour. N.
An introduction to the research methods used by scholars in diverse fields, applied to environmental issues introduced in EVRN 170. Prerequisite: EVRN 170. LEC.

EVRN 172. Kansas Landscape Projects. 1 Hour. N.
Students participate in the design and execution of a simple research project focused on a local environmental topic. Prerequisite: EVRN 170, and EVRN 171. LEC.

EVRN 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Environmental Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

EVRN 200. Study Abroad Topics In: _____. 1-6 Hours. S.
This course is designed for the study of special topics in Environmental Studies. Coursework must be arranged through the Office of Study Abroad. May be repeated for credit if content varies. LEC.

EVRN 304. Environmental Conservation. 3 Hours. NE GE3N / N.
A survey of current methods of describing and modeling the function, structure, and productivity of natural and anthropogenically modified earth resource systems, along with a discussion of contemporary views of what constitutes a natural landscape. Fundamental natural science principles about the interplay among lithospheric, atmospheric, hydrospheric, and biospheric components of earth systems are emphasized. Uses of natural resources, including fossil fuels, minerals, and water, are described with attention to the earth's total energy budget. Human activities that affect preservation, conservation, and multiple uses of earth regions receive attention. Systems under stress through population and other contemporary forces serve as examples. (Same as GEOG 304.) LEC.

EVRN 320. Environmental Policy Analysis. 3 Hours. N.
An historical and analytical study of the formulation, implementation, and consequences of environmental policy in the United States. Attention will be directed at relevant interest groups, issues specific to both rural and urban populations, relationships between national policies and international organizations concerned with environmental problems. Prerequisite: EVRN 148/GEOG 148; and EVRN 103/HIST 103, EVRN 347/HIST 347 or EVRN 150/GEOG 150. LEC.

EVRN 332. Environmental Law. 3 Hours. U.
An introduction to how the American legal process improves, transforms, and damages the natural environment. Emphasizes and compares shifting responsibilities of legal forces and institutions: judges and litigants, legislators and statutes, agencies and administrations, and citizens and regulated entities. Prerequisite: EVRN 148 and EVRN 103/HIST 103, EVRN 347/HIST 347 or EVRN 150/GEOG 150. LEC.

EVRN 335. Introduction to Soil Geography. 4 Hours. N.
The course focuses on the properties and processes of soils as they occur in their environment. The student is introduced to the nature of soil as it functions as a body: genesis of soils; properties of soil solids, especially colloids; soil chemical composition, properties, and reactions; interaction between solid, liquid, and gaseous components in soils; plant-soil-water relationships; biological interactions with soil; classification of soils; and the distribution of soils on the landscape. Not open to students who have taken GEOG 535 or EVRN 535. (Same as GEOG 335.) Prerequisite: GEOG 104 or GEOL 101 or consent of instructor; BIOL 100 and CHEM 130 or CHEM 190 recommended. LEC.

EVRN 336. Ethics, Ideas and Nature. 3 Hours. AE51 / H.
This course examines the ethical frameworks developed for thinking about, using, and protecting the natural world. Examples of topics include indigenous approaches to nature, the history of ecological ideas, environmental movements, the role of the state in managing resources, utilitarianism and progressivism, environmental lawmaking, wilderness advocacy, nature and theology, the rights of nature, and environmental justice. Students are introduced to the theories of duty ethics, justice ethics, utilitarianism, and rights ethics, and required to apply ethical decision making to contemporary and historical environmental issues. Multiple perspectives on the history of human interactions with nature demonstrate the importance of reflecting upon the value systems
inherent in human-centered environmental ethics and nature-centered environmental ethics. (Same as HIST 336.) LEC.

EVRN 338. Permaculture Design. 6 Hours. N.
Students learn how a local, sustainable design system known as permaculture design creates an ecologically sound and economically viable way of living. The course consists of lecture, field, and practicum sessions. Lecture topics include food security, permaculture ethics, ecological principles, system design, sustainable soils, food production, food forests, earth works, and construction of human habitats. LEC.

EVRN 347. Environmental History of North America. 3 Hours. H.
A survey of changes in the landscape and in people's perceptions of the natural world from 1500 to present. Topics include agroecology, water and energy, the impact of capitalism, industrialism, urbanization, and such technologies as the automobile and the origins of conservation. (Same as HIST 347.) LEC.

EVRN 371. Environmental Geopolitics. 3 Hours. S.
This course examines how human relationships with the biophysical world are politicized. Examines key contributions to debates surrounding environmental security, resource conflicts, and related issues, as well as geopolitical assumptions on which these debates build. (Same as GEOG 371.) LEC.

EVRN 385. Environmental Sociology. 3 Hours. S.
This course invites students to study society and its impact on the environment. Environmental problems are social problems. This course will address such issues as social paradigms, theories, inequalities, movements, and research. (Same as SOC 385.) LEC.

EVRN 410. Geospatial Analysis. 3 Hours. N.
Focuses on applications of geospatial technologies to environmental issues using case study examples and data, and provide students with a foundational skill-set in geographic information systems, remote sensing, and GPS techniques. Prerequisite: EVRN/GEOG 148/149; EVRN/HIST 103, EVRN/GEOG 150 or EVRN/HIST 347. LEC.

EVRN 420. Topics in Environmental Studies: . 1-6 Hours. N.
Courses on special topics in Environmental Science and/or Policy. These courses may be lecture, discussions, or readings. Students may enroll in more than one interest group but may enroll in a given interest group only once. LEC.

EVRN 425. Global Water Scarcity. 3 Hours. S.
Though natural factors are introduced, this course focuses primarily on the human factors that contribute to global water scarcity. This course also discusses the consequences of water scarcity and its effects on society. Prerequisite: EVRN 148 or permission of instructor. LEC.

EVRN 433. Biogeography Field and Laboratory Techniques. 3 Hours. N.
This course provides undergraduate students with practical experience in field data collection techniques and laboratory data analysis methods. During the first half of the semester, students work in the field using a variety of methods to measure such vegetation characteristics as: cover, density, biomass, leaf area, and canopy architecture. Students gain experience in the use of field instruments including a spectroradiometer, and techniques for quantifying biophysical attributes of vegetation. During the later part of the course, students learn to summarize their field data and examine relationships between the vegetation attributes and measurements made using remote sensing instruments. Recommended: GEOG 316 or an introductory statistics equivalent. (Same as GEOG 433.) FLD.

EVRN 460. Field Ecology. 3 Hours. N.
An introduction to research methods for environmental science. The course includes fieldwork in diverse ecosystems (lakes, streams, forests, prairies). It emphasizes the development of skills in data analysis and interpretation that are essential to a full understanding of environmental issues. Enrollment limited to environmental studies majors, or by instructor permission. Prerequisite: Junior or Senior standing, completion of the natural sciences requirement of the KU Core (GE3N), and either EVRN 320 or EVRN 332. FLD.

EVRN 490. Internship in Environmental Studies. 1-8 Hours. AE61 / N.
Supervised practical experience in a specific environmental area of interest. The advisor will schedule regular meetings to evaluate progress and provide assistance. A written summary of the internship experience and evaluation will be prepared independently by the student, a representative of the cooperating agency, and the advisor. Total credit may not exceed 8 hours. Prerequisite: Junior standing and consent of program director. Restricted to declared Environmental Studies majors. Restricted to students with a 2.5 overall GPA or above. FLD.

EVRN 510. Advanced Environmental Applications in Geospatial Techniques. 3 Hours. H/N.
This course focuses on applying advanced geospatial mapping and analysis techniques to "real-world" environmental issues. Course content may include lecture/lab time on advanced geospatial topics; a major class project, small-group projects, or individual projects; or half-semester internships with state agencies or campus entities that will culminate in an individual project. The specific nature of projects will be driven largely by student interest and ability, as well as agency/center needs. Prerequisite: EVRN 410 or equivalent course; or permission of the instructor. LEC.

EVRN 519. Sociology of Global Food. 5 Hours. U.
The Sociology of Global Food offers a critical examination of the global food system since the Industrial Revolution. Topics include the industrialization of agriculture, sustainable agriculture, and the role of food and agriculture in organizing society. This course discusses the emergence of current debates around food and agriculture including food activism, technological developments, human/environment relationships, and labor issues. There is a lab component to this course. (Same as SOC 519.) Prerequisite: Junior standing. LEC.

EVRN 526. Remote Sensing of the Environment I. 4 Hours. N.
Introduction to study of the environment through air photos and satellite imagery, including principles of remote sensing, interactions of electromagnetic energy with the atmosphere and earth’s surface, aerial photography, satellite systems, and sensors (electro-optical, thermal, and radar). Emphasis in the latter part of the course is on such applications as global monitoring, land cover mapping, forestry, agriculture, and oceanography. Laboratory emphasizes visual interpretation of aerial photography and satellite imagery and an introduction to digital image processing in the department’s NASA Earth Science Remote Sensing Laboratory. (Same as GEOG 526.) Prerequisite: MATH 101 or equivalent. GEOG 358 recommended. LEC.

EVRN 528. Environmental Justice and Public Policy. 3 Hours. S.
This course provides an overview of environmental justice, both as a social movement and as a public policy initiative. Environmental justice examines the distribution of environmental externalities across different socio-economic and racial groups. We will discuss several different public policy areas that have been impacted by the environmental justice movement: hazardous waste facility siting, urban redevelopment and Brownfields, transportation policy, and Native American sovereignty. We will also touch upon international environmental policy in an environmental justice context. Throughout the course we will evaluate empirical issues in
studying environmental justice. (Same as POLS 528.) Prerequisite: POLS 306, or a statistics class, or consent of instructor. LEC.

EVRN 535. Soil Geography. 5 Hours. N.
A broad study of the principles and properties of soils and their distribution on the landscape. Topics covered include: pedology, clay mineralogy, soil physics, soil chemistry, management of soils, soil biology, taxonomy, and soil geomorphology. Laboratory section and a field project are required. Not open to students who have taken GEOG 335 or EVRN 335. (Same as GEOG 535.) Prerequisite: GEOG 104 or GEOL 101 or consent of the instructor; BIOL 100 and CHEM 130 or CHEM 190 recommended. LEC.

EVRN 538. Soil Chemistry. 3 Hours. N.
This course examines the chemical properties and processes of soils and methods of evaluation. Topics include solid and solution speciation, mineral solubility, soil colloidal behavior, ion exchange, surface complexation, soil salinity and sodicity, soil acidity, oxidation-reduction reactions, and kinetics of soil chemical processes. (Same as GEOG 538.) Prerequisite: GEOG 335 or GEOG 535 or EVRN 335 or EVRN 535, CHEM 135 or CHEM 195, MATH 121, PHSX 114, or consent of the instructor. LEC.

EVRN 542. Ethnobotany. 3 Hours. S.
Course will involve lectures and discussion of Ethnobotany - the mutual relationship between plants and traditional people. Research from both the field of anthropology and botany will be incorporated in this course to study the cultural significance of plant materials. The course has 7 main areas of focus: 1) Methods in Ethnobotanical Study; 2) Traditional Botanical Knowledge - knowledge systems, ethnolinguistics; 3) Edible and Medicinal Plants of North America (focus on North American Indians); 4) Traditional Phytochemistry - how traditional people made use of chemical substances; 5) Understanding Traditional Plant Use and Management; 6) Applied Ethnobotany; 7) Ethnobotany in Sustainable Development (focus on medicinal plant exploration by pharmaceutical companies in Latin America). (Same as ANTH 582.) Prerequisite: ANTH 104, ANTH 108, EVRN 148, or consent of instructor. LEC.

EVRN 550. Environmental Economics. 3 Hours. U.
This course provides an overview of the theory and empirical practice of economic analysis as it applies to environmental issues. Topics include externalities (a type of market failure), the valuation of nonmarket goods, the practice of benefit-cost analysis, and the efficiency and cost effectiveness of pollution control policies. Most importantly, the course permits students to perform economic field research, using state-of-the-art techniques in a manner accessible to undergraduate students. (Same as ECON 550.) Prerequisite: ECON 104, ECON 140, or ECON 142. LEC.

EVRN 553. Comparative Environmental Politics. 3 Hours. S.
This course compares environmental politics and policies across a number of countries, including those in North America, Western Europe, East Asia, and Latin America. (Same as POLS 553.) LEC.

EVRN 562. United States Environmental History in the 20th Century. 3 Hours. H.
Americans dramatically changed the natural world between 1900 and 2000. This course asks how transformed environments shaped the American experience during a century of technological innovation, democratic renewal, economic expansion, global conflict, and cultural pluralism. Topics include food and markets, energy and transportation, law and politics, protest and resistance, urbanization, and environmentalism's fate in a global information era. (Same as HIST 562.) LEC.

EVRN 563. U.S. Environmental Thought in the 20th Century. 3 Hours. H.
Explores both leading and dissident ideas that Americans have had about the natural world since 1900. Broad chronological periods are explored in some depth, including the Progressive Era, New Deal, Cold War, the Sixties, and the Reagan Eighties. The course uses articles and books, as well as visual and aural forms of communication. Commercial speech, as well as scholarly and literary works, are considered. (Same as HIST 563.) Prerequisite: EVRN 148 or HIST 129, or by permission of instructor. LEC.

EVRN 611. Water Quality, Land Use, and Watershed Ecosystems. 3 Hours. N.
Water quality issues are integrated with land use planning and the development of watershed management strategies. Interrelationships among the hydrologic cycle, atmospheric deposition, nutrient transformations and pesticide use are examined in regards to stream, lake, and groundwater quality. Prerequisite: CHEM 110 or CHEM 130 and BIOI 414, or consent of instructor. LEC.

EVRN 615. Capstone Project. 3 Hours. AE61 / N.
The capstone project provides students with a broad-based, interdisciplinary educational experience and allows them to integrate and synthesize the knowledge they have gained in their environmental studies major. It rejoins the cohort that has separately pursued the BA/BGS and BS tracks and places them in situations in which they address real world environmental issues with a team approach and produce professionally meaningful analytical reports. Prerequisite: Junior standing; EVRN 320, EVRN 332, and EVRN 460. Restricted to declared Environmental Studies majors. LEC.

EVRN 616. Environmental Impact Assessment. 3 Hours. N.
This course provides an overview of environmental laws and regulations. Additional focus is given to the process described in the National Environmental Policy Act (NEPA). Students will learn when NEPA is triggered, the difference between Environmental Impact Statements (EIS) and Environmental Assessments (EIA), and how to write an EIS/EIA. Prerequisite: An introductory course in environmental law, or consent of instructor. LEC.

EVRN 620. Environmental Politics and Policy. 3 Hours. S.
Analysis of environmental politics and the formulation and implementation of environmental policy. Examines the history and development of environmental politics as well as current trends. Themes include interest groups, business interests, political institutions, and specific environmental policy issues. (Same as POLS 624.) LEC.

EVRN 624. Independent Study. 1-9 Hours. AE61 / N.
A research course, in any of the fields of environmental studies, consisting of either experimental research, original policy analysis, or the preparation of an extensive paper based on library investigation. Project topic to be agreed upon in advance with supervising faculty member. Prerequisite: Consent of instructor. IND.

EVRN 625. Honors Research in Environmental Studies. 3 Hours. AE61 / N.
A course giving eligible majors the opportunity to earn Departmental Honors by engaging in an intensive program of study leading to an original piece of research. Prerequisite: Senior standing, approval of the Environmental Studies Program, the Honors Project Director, and an overall 3.25 cumulative grade point average during the semester of enrollment. Restricted to declared Environmental Studies majors. IND.

EVRN 628. The Politics of Public Health. 3 Hours. S.
This course examines the social, institutional and political context of public health policy in the United States. We will examine factors that shape the nation's public health, explore the role of government in reducing risk
and promoting well being, and analyze the major institutions responsible for monitoring, protecting and promoting general public health. Themes include the social determinants of health, health disparities, emerging infectious diseases, food safety, transportation, and environmental health. (Same as POLS 628.) Prerequisite: POLS 110 and POLS 306 are recommended. LEC.

EVRN 635. Soil Physics. 3 Hours. N.
Provides theoretical and practical foundations for understanding physical properties and processes of variably-saturated porous media. Focus is on the transport, retention, and transformation of water, heat, gas, and solutes through the soil. We examine modern vadose zone measurement methods, analytical tools, and numerical models for data collection and interpretation. (Same as GEOG 635.) Prerequisite: GEOG 335 or EVRN 335; or GEOG 535 or EVRN 535, and MATH 121, PHSX 114; or consent of instructor. LEC.

EVRN 656. Ecosystem Ecology. 3 Hours. N.
An introduction to the patterns and processes that affect terrestrial ecosystems. Emphasis is placed on understanding nutrient cycles (e.g., carbon nitrogen phosphorus), hydrologic cycles, and patterns of net primary productivity. The role of both natural and anthropogenic disturbances in structuring terrestrial ecosystems is examined in the context of global land-use patterns. Discussion of current research literature will be expected. (Same as BIOL 656.) Prerequisite: BIOL 414 and CHEM 130. LEC.

EVRN 700. Colloquium. 1 Hour.
Topics of current interest in environmental studies. May be repeated for credit for different topics. LEC.

EVRN 701. Climate Change, Ecological Change and Social Change. 3 Hours.
This interdisciplinary graduate seminar examines the history of climate change from natural and physical science, social science, and humanities perspectives. The class explores the ways that different disciplines approach understanding climate change and its impact on natural and human systems and how these understandings have changed over time. The course is team-taught by faculty from the natural and physical sciences, social sciences, humanities, and professional schools, and will include faculty guest speakers from KU and off-campus. Students will write a research paper on a climate change topic of their choice that reflects the historical and interdisciplinary approaches of the seminar. A goal of the seminar is to assemble student papers for presentation and possible publication. Prerequisite: Consent of instructor. LEC.

EVRN 702. Energy, Ecology and Community in Kansas. 3 Hours.
This interdisciplinary graduate seminar examines the role of climate in shaping energy, ecology, and community in Kansas from natural and physical science, social science, and/or humanities perspectives. The class will combine lectures, group projects, and field research to understand the ways that climate change and energy production are reshaping the human and natural systems in Kansas and the Great Plains. The course is team-taught by faculty from the natural and physical science, social science, humanities and professional schools, and will include faculty guest speakers from KU and off-campus. LEC.

EVRN 720. Topics in Environmental Studies: ______. 1-6 Hours.
Courses on special topics in Environmental Studies. These courses may be lecture, seminars, or readings. Students may enroll in more than one interest group but may enroll in a given interest group only once. LEC.

EVRN 721. Environmental Regulation and Policy. 3 Hours.
This course provides a survey of the environmental regulations, environmental problems, and environmental solutions that must be dealt with by environmental scientists in agencies and industry. Considers both theoretical and practical/applied aspects of environmental practices. LEC.

EVRN 730. Environmental Toxicology. 3 Hours.
Examines the effects of toxic chemicals on individuals, populations, communities and ecosystems. Topics include major classes of pollutants, movement, distribution and fate of pollutants in the environment, mechanisms of action, toxicity testing, and environmental assessment. LEC.

EVRN 740. Soil Science for Environmental Assessment. 3 Hours.
Provides students with a solid understanding of soils in the environment, particularly as it relates to environmental assessment. Topics include soil geomorphology, soil physics/chemistry/biology, management of soils, and soil contaminants. Prerequisite: CHEM 130 or CHEM 190 recommended or consent of the instructor. LEC.

EVRN 745. Environmental Data Analysis and Statistics. 3 Hours.
Survey of common statistical methods for analyzing environmental data. Includes techniques for environmental monitoring, impact assessment, and site reclamation, as well as methods for handling censored data, time series, and spatial analysis. Sampling design, data interpretation, and presentation of statistical results will be emphasized. Prior coursework or practical experience in statistics is expected. Prerequisite: Permission of instructor. LEC.

EVRN 750. Environmental Air Quality Assessment. 3 Hours.
Addresses scientific, regulatory, and technical aspects of air quality monitoring, including pollutant formation and dispersion, pollution control, national emissions standards, and methods for monitoring pollutants and air quality. Prerequisite: CHEM 130 or CHEM 190 recommended or consent of the instructor. LEC.

EVRN 815. Professional Science Masters Capstone. 3 Hours.
A culminating experience to develop a workforce project, producing a written report and presented orally to a committee that includes an industry member. Students will develop an applied workforce project in the student's place of employment for full time employees or an internship for full time students. The students will document their project in a written report and present their project to the Environmental Studies faculty (2), and the student's employer or representative if practical. LEC.

EVRN 915. Capstone. 3 Hours.
The goal of this research seminar is to discuss individual students' research, culminating in the completion of a paper in Environmental Studies for presentation at a professional meeting and/or publication in a professional journal. SEM.

French Italian Courses

FREN 100. French for Reading Knowledge. 3 Hours. U.
Special course for candidates for advanced degrees in other departments. Fundamentals of grammar and reading of material of medium difficulty. Intended primarily for graduate students, but open also to seniors planning graduate study. Does not satisfy any part of the undergraduate language requirement. Presupposes no previous study of French. Conducted in English. LEC.

FREN 104. Elementary French, Overseas. 1-5 Hours. U.
Basic language instruction in French for beginners participating in study abroad programs in France or a French-speaking country. Graded satisfactory/unsatisfactory. LEC.

FREN 107. Elementary French I for the Professional Schools. 3 Hours.
Essentials of French grammar; practice in speaking, reading, and writing French. Introduction to French business culture. Three hours of class
FREN 108. Elementary French II for the Professional Schools. 3 Hours. U.
Essentials of French grammar; practice in speaking, reading, and writing French. Introduction to French business culture. Three hours of class per week. This course does not satisfy the College of Liberal Arts and Sciences foreign language requirement. Prerequisite: FREN 107 or equivalent. LEC.

FREN 109. Elementary French III for the Professional Schools. 3 Hours. U.
Essentials of French grammar; practice in speaking, reading, and writing French. Introduction to French business culture. Three hours of class per week. This course does not satisfy the College of Liberal Arts and Sciences foreign language requirement. Prerequisite: FREN 108 or equivalent. LEC.

FREN 110. Elementary French I. 5 Hours. U.
Five hours of class per week. A balanced approach stressing understanding, speaking, reading, and writing. LEC.

FREN 111. Introduction to French I. 3 Hours. U.
Introduction to French for special purposes; no previous French required. Provides basic familiarity with the French language, focusing on speaking, listening, reading and the essentials of French grammar. Introduction to the culture of the French-speaking world. Three class hours per week; may be delivered by videoconference or face-to-face. Does not satisfy any KU language requirement. Prerequisite: Instructor permission required. LEC.

FREN 112. Introduction to French II. 3 Hours. U.
Continuation of FREN 111. Further development of basic familiarity with the French language, focusing on speaking, listening, reading and the essentials of French grammar. Continued exploration of the culture of the French-speaking world. Three class hours per week; may be delivered by videoconference or face-to-face. Does not satisfy any KU language requirement. Prerequisite: FREN 111 or permission of instructor. LEC.

FREN 113. Introduction to French III. 1.5 Hour. U.
Continuation of FREN 112. Further development of basic familiarity with the French language, focusing on speaking, listening, reading and the essentials of French grammar. Continued exploration of the culture of the French-speaking world. Three class hours per week; may be delivered by videoconference or face-to-face. Does not satisfy any KU language requirement. Prerequisite: FREN 112 or permission of instructor. LEC.

FREN 120. Elementary French II. 5 Hours. U.
Five hours of class per week. A balanced approach stressing understanding, speaking, reading, and writing. Prerequisite: FREN 110 or by departmental permission. LEC.

FREN 152. France and the French. 3 Hours. HL AE42/GE3H / H.
A comprehensive, interdisciplinary survey of French culture that may include topics ranging from the earliest times to the present, with particular attention to literature, the arts, thought, politics, society, food, and customs. Taught in English. Does not fulfill any requirement in the French major or minor. LEC.

FREN 177. First Year Seminar: _______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in French. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

FREN 230. Intermediate French I. 3 Hours. U.
Third-semester course stressing oral and written work in French; systematic review of grammar and introduction to reading in cultural texts. (See also FREN 231, FREN 234.) Prerequisite: FREN 120 or by departmental permission. LEC.

FREN 231. Intermediate French I, Honors. 3 Hours. U.
Similar in approach and content to FREN 230; smaller class size; open to students who have done very good to excellent work in previous French classes. Prerequisite: Grade of B or A in FREN 120 or departmental permission. LEC.

FREN 234. Intermediate French I and II. 6 Hours. U.
One-semester course meeting five times a week for six hours credit. Material same as in FREN 230 and FREN 240. (FREN 234, FREN 240, FREN 241–each completes foreign language requirement.) Prerequisite: FREN 120 or by departmental permission. LEC.

FREN 240. Intermediate French II. 3 Hours. U.
Continuation of FREN 230. (FREN 234, FREN 240, FREN 241–each completes foreign language requirement.) (See also FREN 241.) Prerequisite: FREN 230, FREN 231, or by departmental permission. LEC.

FREN 241. Intermediate French II, Honors. 3 Hours. U.
Similar in approach and content to FREN 240; smaller class size; open to students who have done very good to excellent work in previous French classes. Prerequisite: A grade of A in FREN 230 or FREN 231, or departmental permission. LEC.

FREN 300. Intensive Review of French Grammar. 3 Hours. H/W.
Designed to provide essential skills for advanced courses. Prerequisite: FREN 234, FREN 240, or FREN 241, or by departmental permission. LEC.

FREN 310. French Phonetics. 3 Hours. GE3S / H/W.
A course in practical phonetics with exercises stressing rhythm, intonation, and individual sounds. Prerequisite: FREN 240, FREN 241, or by departmental permission. LEC.

FREN 315. Le Francais Pratique. 1-6 Hours. H/W.
Supplementary non-major language course that can be a sequel to the first four semesters of French. Primarily for students studying abroad. Covers vocabulary study, oral exercises, discussion of texts, writing, and free conversation. Prerequisite: FREN 230/231 or FREN 234, FREN 240/241. LEC.

FREN 326. Introduction to French Literature. 3 Hours. HL AE42/GE3H / H.
Analysis of selected texts from various genres; special emphasis on explication de texte. Prerequisite: FREN 300 (or with FREN 300), or by departmental permission. LEC.

FREN 330. French Language and Civilization I. 3 Hours. H.
A study of French grammar, conversation, and composition, with selected aspects of French civilization. Available to participants in the Summer Language Institutes, and selected Study Abroad programs. LEC.

FREN 340. French Language and Civilization II. 3 Hours. H.
A study of French grammar, conversation, and composition, with selected aspects of French civilization. Available to participants in the Summer Language Institutes, and selected Study Abroad Programs. LEC.

FREN 350. Applied French Grammar and Composition I. 3 Hours. H/W.
Systematic grammar review with extensive practice in writing French. Prerequisite: FREN 300 or FREN 326. LEC.

FREN 352. French for Journalism and Business. 3 Hours. H/W.
Practical acquisition of skills necessary to understand the language of journalism and business. Prerequisite: FREN 300. LEC.
FREN 375. Intermediate French Conversation. 3 Hours. H/W.
Three meetings per week. Guided discussions designed to increase fluency, improve pronunciation, and acquire vocabulary. Sections limited to twelve students. May be designated a KULAC class at the discretion of the instructor. Prerequisite: FREN 300 or concurrent enrollment in FREN 300. LEC.

FREN 376. Advanced French Conversation. 3 Hours. H/W.
Three meetings per week. Guided discussions designed to increase fluency, improve pronunciation, and knowledge of French culture and language. Classes have centered around topics such as the French Revolution, the Arts, Renaissance Festivals, and French cinema. Sections limited to twelve students. May be designated a KULAC class at the discretion of the instructor. Prerequisite: FREN 375. LEC.

FREN 401. Paris, City of Lights and Legends. 3 Hours. HL AE42/GE3H / H.
An exploration of the French capital from its origins to present as emblem and icon of the social, literary, cultural, and political development of the French nation and of French ideals. Topics include great persons, events, works, symbols, and myths since the founding of the city to the present. Taught in English. Does not fulfill any requirement in the French major or minor. LEC.

FREN 405. French Literature in Translation. 3 Hours. HL AE42/GE3H / H.
Readings and discussions of representative great masterpieces of French literature from the medieval Arthurian romances and chansons de geste to the present, with particular emphasis on the question of the interrelations of form and content. Includes such authors as Rabelais, Montaigne, Racine, Moliere, Voltaire, Balzac, Flaubert, Baudelaire, Proust, Gide, Camus, and Beckett. Conducted in English. A reading knowledge of French is extremely useful but not a requirement. LEC.

FREN 406. Introduction to French Culture Through Film. 3 Hours. AE42/GE3H / H/W.
Discussion of great masterpieces of French film from the silent era to the present, with a particular emphasis on how film portrays and conveys important aspects of French culture past and present. The works of a variety of film-makers may be covered, and may include among others Georges Melies, Jean Vigo, Jean Renoir, Abel Gance, Rene Clair, Marcel Carne, Jean Cocteau, Alain Resnais, Jean-Luc Godard, Francois Truffaut, Agnes Varda, Louis Malle, Eric Rohmer, and Claude Berri. Films will be shown in French with subtitles in English. Knowledge of French is useful, but not required. LEC.

FREN 410. Survey of French Culture I. 3 Hours. AE42/GE3H / H/W.
A survey of the historical, philosophical, literary, and artistic development of France, from the beginning through the 17th century. Prerequisite: FREN 300 and FREN 326. May be designated a KULAC class at the discretion of the instructor. LEC.

FREN 420. Survey of French Culture II. 3 Hours. AE42/GE3H / H/W.
Continuation of FREN 410, from the 18th century to the present. Prerequisite: FREN 300 and FREN 326. May be designated a KULAC class at the discretion of the instructor. LEC.

FREN 430. La France d’Aujourd’Hui. 3 Hours. AE42/GE3H / H/W.
Social, political, and economic trends from 1939 to present, with emphasis on period since 1968. Prerequisite: FREN 300 and FREN 326. May be designated a KULAC class at the discretion of the instructor. LEC.

FREN 431. French-Speaking World (Outside France). 3 Hours. AE42/GE3H / H/W.
Cultures of the some 235 million persons in the five world areas whose everyday and/or official language is French: Canada; Caribbean (e.g., Haiti, Guadeloupe, Martinique); Europe (e.g., Belgium, Switzerland); Africa and Indian Ocean (23 former French or Belgian colonies); Pacific (e.g., Tahiti, New Caledonia). Also French-speaking settlers in the United States (Louisiana, South Carolina, New England, Kansas). French presence in Indo-China and the Near East. Prerequisite: FREN 300 and FREN 326. (May be taken concurrently with FREN 300 and/or FREN 326.) May be designated a KULAC class at the discretion of the instructor. LEC.

FREN 432. Francophone African Literature. 3 Hours. NW AE42/GE3H / H/W.
This course is an introduction of 20th Century African literature written in French, covering selected works by major authors from both sub-Saharan Africa and the Maghreb. Attention will be given primarily to the novel, although some poetry will also be read. Topics and themes include negritude, African identity in the wake of colonialism, Islam, and women’s writing. Classes will be conducted in English. Students may read the texts in French or in translation. (Same as AAAS 432.) Prerequisite: ENGL 102 and a 200-level English course. LEC.

FREN 440. Studies in French Culture: ___. 3 Hours. H/W.
Representative topics are: History of Paris, Role of Women in French Literature and Culture, Interrelationships of the Arts, French-speaking African Culture, Culture of French Canada. May be repeated for credit with departmental permission; may also be repeated as part of major in French language and culture. Prerequisite: FREN 300 and FREN 326. May be designated a KULAC class at the discretion of the instructor. LEC.

FREN 450. French Literature of the Middle Ages. 3 Hours. AE42/GE3S / H/W.
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 300 and FREN 326. LEC.

FREN 455. French Literature of the Renaissance. 3 Hours. AE42/GE3S / H/W.
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 300 and FREN 326. LEC.

FREN 460. French Literature of the Seventeenth Century. 3 Hours. AE42/GE3S / H/W.
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 300 and 326. LEC.

FREN 462. French Literature of the Eighteenth Century. 3 Hours. AE42/GE3S / H/W.
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 300 and 326. LEC.

FREN 465. French Literature of the Nineteenth Century. 3 Hours. AE42/GE3S / H/W.
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 300 and 326. LEC.

FREN 466. French Literature of the Twentieth Century. 3 Hours. AE42/GE3S / H/W.
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 300 and 326. LEC.

FREN 470. French Literature of the Twentieth Century. 3 Hours. AE42/GE3S / H/W.
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 300 and 326. LEC.

FREN 480. Studies in French Literature: ___. 3 Hours. H/W.
A study of a period, theme, group of authors, or movement. Subject matter will vary; may be taken more than once if subject differs. Prerequisite: FREN 300 and FREN 326. LEC.

FREN 495. Directed Readings in French. 1-15 Hours. AE61 / U.
A matter will vary; may be repeated as part of major in French language and culture. Prerequisite: FREN 300 and FREN 326. May be designated a KULAC class at the discretion of the instructor. LEC.
FREN 499. Honors in French. 3 Hours. AE61 / H/W.
Various topics in French or Francophone literature or culture. May be taken more than once, total credit not to exceed nine hours. Minimum of six hours of FREN 499 required for B.A. with Honors in French. Student must discuss Honors eligibility and their topic with a faculty member before enrolling. IND.

FREN 500. Advanced French Phonetics. 3 Hours. GE3S / H/W.
Advanced theory and practice of French pronunciation. Not open to students who have taken FREN 310, except by departmental permission. Prerequisite: FREN 300 or FREN 326 or graduate standing. LEC.

FREN 530. Studies in Film: _______. 3 Hours. AE42/AE61 / H/W.
Studies in an aspect of film, a director or group of directors. Emphasis on French film. Given in French or English. LEC.

FREN 592. French Culture Through Film I, Beginnings to 1950. 3 Hours. AE42/AE61 / H/W.
A survey of the major public images of French culture as surveyed in French silent and sound film from the early 1900s through World War II and its immediate aftermath. Students will view and discuss a selection of films that address crucial aspects of French culture such as (but not limited to) gender, war and peace, daily life, art and artists, tradition and revolution, city life versus country life, social classes, moral choice, and individual freedoms. The course will include discussion of the cultural and artistic significance of major French film movements like Poetic Realism. In addition to viewing and discussing films, students will read and analyze the writings of a number of French intellectuals, writers, and artists who have had a major influence on French culture as it appears in films from 1900-1950. May be taught in French or English. For students who already have some knowledge of French culture. LEC.

FREN 593. French Culture Through Film II, 1950-Present. 3 Hours. AE42/AE61 / H/W.
A survey of the major public images of French culture as surveyed in French silent and sound film from 1950 to present. Students will view and discuss a selection of films that address crucial aspects of French culture such as (but not limited to) gender, war and peace, daily life, art and artists, tradition and revolution, city life versus country life, colonialism and post-colonialism, social classes, moral choice, and individual freedoms. The course will include discussion of the cultural and artistic significance of major French film movements like the New Wave. In addition to viewing and discussing films, students will read and analyze the writings of a number of French intellectuals, writers, and artists who have had a major influence on French culture as it appears in films from 1950-present. May be taught in French or English. For students who already have some knowledge of French culture. LEC.

FREN 600. Studies in: _______. 3 Hours. H/W.
Topics vary by semester. May be repeated for credit. Prerequisite: Departmental permission. LEC.

FREN 610. Theme et Version. 3 Hours. H/W.
Exercises in English-French and French-English translation, designed to enable the student to write with greater clarity and precision in both languages. LEC.

FREN 620. Expository French Writing. 3 Hours. H/W.
Intensive practice in writing French, designed to clarify fine points of grammar and usage and to aid the student in developing an accurate and graceful prose style. LEC.

FREN 680. Language Teaching and Advanced Conversation. 2-3 Hours. U.
A summer course designed principally for secondary school language teachers. Discussion of current theory in language acquisition integrated into an intensive oral review of French. Meets three hours daily for two weeks; includes lab. (Not applicable toward a major or graduate degree in French.) LEC.

FREN 681. Language Teaching for Oral Proficiency. 1 Hour. U.
A summer course designed principally for secondary school language teachers. Provides an orientation to proficiency-based models in foreign language instruction, national standards in the rating of foreign language proficiency, and curriculum development sessions which address issues of articulation in foreign language curricula. (Not applicable toward a major or graduate degree in French.) (Same as GERM 681 and SPAN 681.) LEC.

FREN 700. Old French. 3 Hours.
Introduction to grammar and structure through the reading of representative works. LEC.

FREN 701. History of the French Language. 3 Hours.
Major aspects of development and growth. Conducted in English. LEC.

FREN 702. Provençal. 3 Hours.
Introduction to grammar and structure of the language through a reading of representative works from the Troubadour period. LEC.

FREN 703. Structure of Modern French. 3 Hours.
Linguistic analysis of the phonological, morphological, and syntactic structure of modern French. Description in terms of current theories and models. Application of linguistic analyses to the teaching of French. LEC.

FREN 704. Methods in French Language Instruction. 3 Hours.
This course provides an overview of current and historical approaches to foreign language teaching, with reference to the instruction of French. Past and current trends and methodologies of language instruction are examined in order to acquaint students with various classroom approaches. Research findings in second language acquisition are explored and their implications discussed so as to show how these findings lead to more effective classroom practices. LEC.

FREN 720. Introduction to Graduate Studies in French. 3 Hours.
This course is an introduction to the skills required of students doing graduate degrees in French; areas covered include 1) introduction to literary theory and criticism, 2) bibliography and research methods, including database management software, 3) preparation and presentations of a research/conference paper, 4) technology training, including web design, on-line portfolio, and digital humanities, and 5) professional ethics and awareness of the academic market and alternative careers. LEC.

FREN 730. Introduction to French Poetry. 3 Hours.
A detailed introduction to versification, rhetoric, image and symbol as they apply to the study of poetry. Texts will be chosen from one or more periods of French literature and will include poems in verse and prose. Considerations and readings on the history of French poetry, on the composition of recueils, on poetic theory, and on the relation of poetry to other genres and media may be incorporated. LEC.

FREN 732. Francophone Studies. 3 Hours.
Selected movements, themes, genres, topics in the cultures and/or literatures of the French-speaking world outside France. May be repeated for credit. LEC.

FREN 740. Medieval French Literature. 3 Hours.
Literary history of the period, with discussion of representative works read for the most part in the original old French. LEC.

FREN 750. French Literature of the Sixteenth Century. 3 Hours.
A survey of the major writers, covering Rabelais, Sceve, Louise Labé, Marguerite de Navarre, Ronsard, Du Bellay, Montaigne, and d'Aubigné. LEC.
FREN 763. French Drama of the Seventeenth Century. 3 Hours.
Development of baroque and classical French drama, with emphasis on
Corneille, Moliere, and Racine. LEC.

FREN 765. Nondramatic French Literature of the Seventeenth
Century. 3 Hours.
Esthetics of baroque and classicism. Emphasis on Descartes, Pascal,
La Rochefoucauld, Mme de Lafayette, although other authors may be
studied. LEC.

FREN 770. French Literature of the Eighteenth Century. 3 Hours.
Special attention paid to Montesquieu, Voltaire, Diderot, and Rousseau;
also development of novel and drama. LEC.

FREN 782. French Novel of the 19th Century. 3 Hours.
Emphasis on major novelists of the century: Balzac, Stendhal, Flaubert,
and Zola. LEC.

FREN 785. French Romantic Movement. 3 Hours.
Major Romantic writers viewed in context of intellectual, esthetic, and
social milieu of period 1800-1850. LEC.

FREN 787. French Post-Romanticism. 3 Hours.
Literary movements developing out of reaction to Romanticism: Realism,
Naturalism, Parnassianism. LEC.

FREN 790. Contemporary French Writers. 3 Hours.
Major 20th century authors, stressing Proust, Gide, Giraudoux, Claudel,
Sartre, and Camus. LEC.

FREN 792. Proust. 3 Hours.
Principal movements, structures, and tensions of A la recherche du temps
perdu. LEC.

FREN 795. Investigation and Conference. 1-3 Hours.
Readings and research projects in French language, literature, and
culture for students at the MA level. Directed work to fulfill needs not met
by available courses. One-three hours credit in any semester. Maximum
credit for M.A.: Three hours. By special departmental permission only.
RSH.

FREN 799. Masters Seminar. 1 Hour.
To meet Masters degree requirement for continual enrollment. This
course will be graded satisfactory/unsatisfactory. FLD.

FREN 800. Studies in: _______. 3 Hours.
Study of topics not limited to one century. May be repeated for credit.
LEC.

FREN 810. Criticism and Critical Methods. 3 Hours.
Literary criticism from historical, theoretical, and practical point of view.
LEC.

Selected topics to be specified. Study of form, movements, or themes in
the French Novel, not limited to one century. May be repeated for credit.
LEC.

FREN 814. Studies in the French Short Story: _______. 3 Hours.
Selected topics to be specified. Study of form and theory of the French
short story, not limited to one century. LEC.

FREN 842. Arthurian Literature in France. 3 Hours.
Origins and development of Arthurian legend; analysis of major texts.
Prerequisite: FREN 700. LEC.

FREN 848. Studies in Medieval French Literature: _______. 3 Hours.
Various movements, themes, or genres. May be repeated for credit.
Prerequisite: FREN 700. LEC.

FREN 850. Early Renaissance Literature. 3 Hours.
Emphasis on Rabelais, Marguerite de Navarre, Marot, Maurice Sceve and
Louise Labe. LEC.

FREN 858. Studies in Sixteenth Century French Literature: _______. 3
Hours.
Various movements, themes, or genres. May be repeated for credit. LEC.

Hours.
Various movements, themes, or genres. May be repeated for credit. LEC.

FREN 871. Literature of the Enlightenment in France. 3 Hours.
Philosophical thought in 18th century as reflected in literature. Emphasis
on philosophies, with discussion of external influences. LEC.

FREN 872. Novel of the Eighteenth Century in France. 3 Hours.
Origins and development to Revolution; thematic analysis with attention to
critical attitudes and their influence upon evolution of novel as genre. LEC.

FREN 878. Studies in Eighteenth Century French Literature: _______. 3
Hours.
Various movements, themes, or genres. May be repeated for credit. LEC.

FREN 887. Symbolist Movement in France. 3 Hours.
Works of major symbolist poets, including Baudelaire, Verlaine, Rimbaud,
Mallarme, and Valery. LEC.

FREN 888. Studies in Nineteenth Century French Literature: _______. 3
Hours.
Various movements, themes, or genres. May be repeated for credit. LEC.

FREN 897. New Directions in the French Novel. 3 Hours.
Samuel Beckett to the nouveau roman. LEC.

FREN 898. Studies in Twentieth Century French Literature: _______. 3
Hours.
Various movements, themes, or genres. May be repeated for credit. LEC.

FREN 899. M.A. Thesis. 1-6 Hours.

FREN 900. Seminar in French: _______. 3 Hours.
Topics in literary, linguistic, and cultural research. May be repeated for
credit. LEC.

FREN 995. Investigation and Conference. 1-3 Hours.
Readings and research projects in French language, literature, and
culture for PhD students. Directed work to fulfill needs not met by
available courses. One-three hours credit in any semester. Prerequisite:
By Special Departmental Permission only. RSH.

FREN 999. Ph.D. Dissertation. 1-12 Hours.
THE.

ITAL 100. Italian for Reading Knowledge. 3 Hours. U.
Special course for candidates for advanced degrees. Fundamentals of
grammar and reading of material of medium difficulty. Open to graduate
students and to seniors planning graduate study. Does not satisfy any
part of the undergraduate language requirement. Presupposes no
previous study of Italian. Conducted in English. LEC.

ITAL 103. Elementary Italian Language and Civilization. 3 Hours. H.
A systematic review of the fundamentals of Italian grammar through
practice in conversation and writing, with an introduction to Italian culture.
Available only to participants in study abroad programs. This course does
not satisfy the College of Liberal Arts and Sciences foreign language
requirement. No prerequisite. LEC.

ITAL 107. Elementary Italian Conversation I. 3 Hours. U.
First part of a two-course sequence (108) for students with no
previous study of a foreign language and minimal linguistic background
as well as for students in professional schools who plan to participate in study abroad programs in Italy. Offers knowledge of essential grammar and basic oral communication skills through practice in grammar, listening comprehension, and conversation. Active participation required. Completion of both ITAL 107 and ITAL 108 is equivalent to ITAL 110 and allows students to enroll in ITAL 120. LEC.

ITAL 108. Elementary Italian Conversation II. 3 Hours. U.
A continuation of ITAL 107, second part of a two-course sequence for students with no previous study of a foreign language and minimal linguistic background as well as for students in professional schools who plan to participate in study abroad programs in Italy. Offers knowledge of essential grammar and basic oral communication skills through practice in grammar, listening comprehension, and conversation. Active participation required. Completion of both ITAL 107 and ITAL 108 is equivalent to ITAL 110 and allows students to enroll in ITAL 120. Prerequisite: ITAL 107 or Italian Coordinator’s approval. LEC.

ITAL 110. Elementary Italian I. 5 Hours. U.
Introduction to Italian language and culture. Essentials of grammar and practice in speaking, understanding, reading, and writing. Active participation required. Five hours of class per week. LEC.

ITAL 120. Elementary Italian II. 5 Hours. U.
Five hours of class. Reading of simple texts; dictation; speaking; elementary composition. Prerequisite: ITAL 110. LEC.

ITAL 152. Studies in Italian Heritage. 3 Hours. AE41/GE11 / H.
A comprehensive, interdisciplinary survey of the ways in which the historical culture of Italy can be found in Lawrence, KS. Emphasis is on politics, sciences, philosophy, media, and immigration. Uses materials from various KU collections. Taught in English. Does not fulfill any requirement in the Italian major or minor. LEC.

ITAL 155. Intensive Basic Italian I. 3 Hours. U.
First part of a two-course sequence (with ITAL 156) for students with previous language study or strong linguistic background. Same content as ITAL 110 but accomplished in three hours of class per week. Active participation required. Prerequisite: Previous study of another language or permission of instructor. LEC.

ITAL 156. Intensive Basic Italian II. 3 Hours. U.
A continuation of ITAL 155, second part of a two-course sequence for students with previous language study or strong linguistic background. Same content as ITAL 120 but accomplished in three hours of class per week. Active participation required. Prerequisite: ITAL 155 or permission of instructor. LEC.

ITAL 177. First Year Seminar: _____ 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Italian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

ITAL 203. Intermediate Italian Language and Civilization. 3 Hours. H.
A systematic review of Italian grammar through practice in conversation and composition, with an introduction to Italian culture. Available only to participants in study abroad programs. This course does not satisfy the College of Liberal Arts and Sciences foreign language requirement. Prerequisite: ITAL 120. LEC.

ITAL 230. Intermediate Italian I. 3 Hours. U.
Review and expansion of grammatical structures introduced in Elementary Italian I and II, with continued practice in speaking, understanding, reading, and writing, coordinated with the study of cultural texts. Active participation required. Prerequisite: ITAL 120 or ITAL 156. LEC.

ITAL 240. Intermediate Italian II. 3 Hours. U.
Continuation of ITAL 230. (ITAL 240 completes foreign language requirement.) Review and expansion of grammatical structures introduced in Elementary Italian I and II, with continued practice in speaking, understanding, reading, and writing, coordinated with the study of cultural texts. Active participation required. Prerequisite: ITAL 230. LEC.

ITAL 300. Composition and Conversation. 3 Hours. H/W.
Study of advanced grammatical structures with extensive practice in writing and conversation. Guided discussions on a variety of contemporary Italian literary, journalistic, and cinematic works. Active participation required. Prerequisite: ITAL 240 or permission of instructor. LEC.

ITAL 301. Introduction to Italian Literature I. 3 Hours. AE42/GE3S / H/W.
Representative works and trends from origins to Renaissance. Prerequisite: ITAL 240 or reading knowledge of Italian. LEC.

ITAL 302. Introduction to Italian Literature II. 3 Hours. AE42/GE3S / H/W.
Representative works and trends from 17th century to present. Prerequisite: ITAL 240 or reading knowledge of Italian. LEC.

ITAL 303. Italian Language and Civilization I. 3 Hours. U.
An advanced study of Italian grammar, conversation, composition, with selected aspects of Italian civilization. Available only to participants in the KU summer language institute or semester abroad program in Florence or Rome. Prerequisite: ITAL 240. LEC.

ITAL 304. Italian Language and Civilization II. 3 Hours. U.
An advanced study of Italian grammar, conversation, composition, with selected aspects of Italian civilization. Available only to participants in the KU summer language institute or semester abroad program in Florence or Rome. Prerequisite: ITAL 303. LEC.

ITAL 315. Advanced Composition and Conversation. 3 Hours. H/W.
Continuation of ITAL 300. Study of advanced grammatical structures with extensive practice in writing and conversation. Guided discussions on a variety of contemporary Italian literary, journalistic, and cinematic works. Active participation required. Prerequisite: ITAL 300 or permission of instructor. LEC.

ITAL 335. Italy and the Italians I. 3 Hours. HL AE42/GE3H / H.
Survey of Italian culture with study of geography, history, government, education, Roman archaeology, and music. Lecture, discussion, and supportive readings. Not open to native speakers of Italian. LEC.

ITAL 336. Italy and the Italians II. 3 Hours. GE11/GE3H/GE3S / H.
Survey of Italian culture with study of art and architecture, literary masterpieces in translation, science, culinary arts, and cinema. Lecture, discussion, and supportive readings. Not open to native speakers of Italian. LEC.

ITAL 340. Studies in Italian Culture: _____ 3 Hours. AE42 / H.
A study of particular aspects of and/or periods in Italian culture. May be repeated for credit with departmental permission. Prerequisite: ITAL 240 or permission of instructor. LEC.

ITAL 405. Italian Literature in Translation: _____ 3 Hours. AE42/GE3S / H/W.
Major works representing various movements, themes, or genres. May be repeated with departmental permission. All work done in English. LEC.
ITAL 410. 19th and 20th Century Short Stories. 3 Hours. AE42 / H/W.
A survey of representative short stories of the 19th and 20th Centuries, including Verga, Panzini, Pirandello, Guarechesi, Moravia, Calvino, Landolfi, and Bigiaretti. Prerequisite: ITAL 240 or reading knowledge of Italian or permission of instructor. LEC.

ITAL 420. 19th and 20th Century Poetry. 3 Hours. AE42 / H/W.
A survey of 19th and 20th century poets and their works, including Leopardi, Pascoli, d’Annunzio, Govoni, Palazzeschi, Gozzano, Marinetti, Boccioni, Ungaretti, Montale, Quasimodo, and Pasolini. Prerequisite: ITAL 240 or reading knowledge of Italian or permission of instructor. LEC.

ITAL 430. Dante’s Masterpiece. 3 Hours. AE61 / H/W.
Detailed study of Dante’s epic poem with a close reading of the Inferno. Prerequisite: ITAL 300 or demonstrated knowledge of Italian. LEC.

ITAL 440. Italian Renaissance and Early Modern Literature. 3 Hours. H/W.
Detailed study of selected masterpieces of the Italian Renaissance from the 13th to the 18th centuries. Prerequisite: ITAL 300 or demonstrated knowledge of Italian. LEC.

ITAL 465. 19th and 20th Century Novels I. 3 Hours. AE42/GE3S / H/W.
With Italian 466, a survey of representative 19th and 20th century novels including those of Manzoni, Pirandello, Svevo, Deledda, Vittorini, Moravia, Pavese, Pratolini, Buzzati, Ginzburg, and Calvino. Prerequisite: ITAL 240 or reading knowledge of Italian or permission of instructor. LEC.

ITAL 466. 19th and 20th Century Novels II. 3 Hours. AE42/GE3S / H/W.
See ITAL 465. Prerequisite: ITAL 240 or reading knowledge of Italian or permission of instructor. LEC.

ITAL 480. Studies in Italian Literature: _______. 3 Hours.
A study of a period, theme, group of authors, or cultural movement. Subject matter will vary; may be taken more than once if subject differs. Prerequisite: ITAL 300 or demonstrated knowledge of Italian. LEC.

ITAL 495. Directed Readings in Italian. 1-3 Hours. AE61 / U.
May be taken more than once, total credit not to exceed nine hours. Various fields of Italian literature. Prerequisite: Consent of instructor, given only to those having demonstrated ease in reading Italian. IND.

ITAL 499. Honors in Italian. 3 Hours. AE61 / H.
Various topics in Italian literature or culture. Minimum of three hours of Italian 499 required for a B.A. with Honors in the Italian option of the French degree. Students must discuss Honors eligibility and their topic with a faculty member before enrolling. Honors paper must be written in Italian. LEC.

ITAL 502. Dante’s Divine Comedy I. 3 Hours. AE61 / H/W.
Detailed study of Dante’s masterpiece. Attention will also be given to such matters as the development of the Italian language at Dante’s period and the relation of the Comedy to Dante’s other works. Prerequisite: Reading knowledge of Italian. LEC.

ITAL 503. Dante’s Divine Comedy II. 3 Hours. AE61 / H/W.
Continuation of ITAL 502. Prerequisite: Completion of ITAL 502. LEC.

ITAL 695. Graduate Directed Readings in Italian. 1-3 Hours. U.
May be taken more than once, total credit not to exceed nine hours. Directed readings, conferences with instructor. Prerequisite: ITAL 495 or consent of instructor. IND.

Geography Courses

ATMO 105. Introductory Meteorology. 5 Hours. NE GE3N / N.
A lecture and laboratory course introducing students to the atmosphere, weather and climate phenomena, and their controlling physical processes. Topics covered include: the structure of the atmosphere, energy and energy budgets, climate and climate change, air pollution, clouds and precipitation, pressure and wind systems, severe weather, and weather forecasting. LEC.

ATMO 106. Introductory Meteorology, Honors. 5 Hours. NE GE3N / N.
Offers version of ATMO 105. A lecture and laboratory course introducing students to the atmosphere, weather and climate phenomena, and their controlling physical processes. Topics covered include: the structure of the atmosphere, energy and energy budgets, climate and climate change, air pollution, clouds and precipitation, pressure and wind systems, severe weather, and weather forecasting. Prerequisite: Membership in University Honors Program or by permission of instructor. LEC.

ATMO 177. First Year Seminar: _______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Atmospheric Science. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

ATMO 220. Unusual Weather. 3 Hours. NE GE11/GE3N / N.
An introductory lecture course which surveys the general principles and techniques of atmospheric science and illustrates their application through discussions of natural but unusual weather phenomena such as blizzards, hurricanes, tornados, and chinooks, of the effects of air pollution on weather, and of intentional human alteration of the atmosphere. LEC.

ATMO 310. Aviation Meteorology. 3 Hours. N.
This course introduces students to meteorological events that affect aircraft operations. Aviation applications of meteorological observations including satellite and radar observations are discussed. Students learn about graphical displays of meteorological information. Numerical forecasting models and how their output is applied for aviation is also considered. Forecasting of weather events of particular interest to aviation such as ceiling, visibility, icing and turbulence is emphasized. Prerequisite: ATMO 105 or AE 245 or equivalent. LEC.

ATMO 321. Climate and Climate Change. 3 Hours. N.
This course is designed to introduce students to the nature of the Earth’s physical climate. It introduces the basic scientific concepts underlying our understanding of our climate system. Particular emphasis is placed on energy and water balances and their roles in evaluating climate change. The course also evaluates the impact of climate on living organisms and the human environment. Finally, past climates are discussed and potential future climate change and its impact on humans is evaluated. (Same as GEOG 321.) Prerequisite: ATMO 105 or GEOG 104. LEC.

ATMO 499. Honors Course in Atmospheric Science. 2-3 Hours. AE61 / N.
Open to students with nine hours of upper level credit in Atmospheric Science, an average of at least 3.5 in all Atmospheric Science courses, and an overall average of at least 3.25. Includes the preparation of an honors paper and its defense before a committee of a least two regular faculty members. LEC.

ATMO 505. Weather Forecasting. 3 Hours. N.
A first course in synoptic meteorology designed to introduce students to weather analysis and forecasting through the application of hydrodynamic and thermodynamic principles to operational analysis and forecasting. Topics include analysis and interpretation of surface and upper-air observations and data from satellites, radars, and wind profilers; chart and sounding analysis; and three-dimensional, conceptual models of weather systems. The course includes student-led weather briefings and analysis exercises. Prerequisite: ATMO 105 and MATH 121 or MATH 115. LEC.
ATMO 505. Forecasting Models and Methods. 3 Hours. N.
Introduction to basic numerical weather prediction methods. Computer programs are used to apply numerical methods to weather data and to evaluate dynamical processes on numerical grids. Meteorological graphics packages are used to analyze current weather data and numerical model output. Current operational numerical models and output products are discussed. Prerequisite: ATMO 505, MATH 122, and EECS 138 or EECS 168. LEC.

ATMO 515. Energy and Water Balance. 3 Hours. N.
A study of the distribution and circulation of water in the air-earth system as influenced by atmospheric processes and surface conditions. The solar and terrestrial radiation budget and the water balance at the earth's surface will be applied to agricultural and urban energy and water problems. Prerequisite: ATMO 105 or EECS 138. LEC.

ATMO 521. Microclimatology. 3 Hours. N.
A study of climatic environment near the earth-atmosphere interface. Consideration of rural climates in relation to agriculture and urban climates as influenced by air pollution and other factors. Emphasis is on physical processes in the lower atmosphere, distribution of atmospheric variables, the surface energy budget and water balance. (Same as GEOG 521.) Prerequisite: ATMO 105 and MATH 121. LEC.

ATMO 525. Air Pollution Meteorology. 3 Hours. N.
A study of background levels and concentrated sources of atmospheric pollution together with considerations of pollution buildup in urban areas as related to particular weather conditions. Inadvertent weather modifications and effects of atmospheric pollution on particular weather events and general climate will be discussed. Prerequisite: ATMO 105, MATH 121, and EECS 138. LEC.

ATMO 531. Topics in Atmospheric Science: ______. 1-3 Hours. N.
An investigation of special topics in atmospheric science. May include topics in dynamic, physical or synoptic meteorology or climatology as well as related topics in earth and physical sciences. May be repeated if topic differs. LEC.

ATMO 605. Operational Forecasting. 2 Hours. N.
Students enhance their forecasting expertise by preparing forecasts for presentation to the public through a variety of media. Classroom activities include weekly map discussions and analysis of current weather situations. Forecasting topics such as forecast verification, aviation forecast products, severe weather, flash floods and watches and warnings are examined. Credit for ATMO 605, ATMO 606, and ATMO 607 is limited to a total of eight hours, six of which may be counted toward a degree in atmospheric science. Prerequisite: ATMO 505. FLD.

ATMO 606. Forecasting Practicum - Private Industry. 2 Hours. AE61 / N.
Practical experience in private industry working with current and/or archived meteorological data. Possibilities include the preparation of forecasts for TV stations and meteorological consulting firms, and working with environmental consulting firms to assess air pollution hazards. May be repeated two times for credit. Credit for ATMO 605, ATMO 606, and ATMO 607 is limited to a total of eight hours, six of which may be counted toward a degree in atmospheric science. Prerequisite: ATMO 605. FLD.

ATMO 607. Forecasting Intern - National Weather Service. 2 Hours. AE52/AE61 / N.
Practical experience working in a National Weather Service forecasting center in analyzing weather data and preparing weather forecasts. May be repeated two times for credit. Credit for ATMO 605, ATMO 606, and ATMO 607 is limited to a total of eight hours, six of which may be counted toward a degree in atmospheric science. Prerequisite: ATMO 605. FLD.

ATMO 630. Synoptic Meteorology. 3 Hours. N.
Interpretation, development, and analysis of synoptic charts. Prerequisite: ATMO 505 and ATMO 640. LEC.

ATMO 634. Physical Climatology. 3 Hours. N.
Atmospheric processes are described and discussed in relation to the climate of the earth's surface. Such topics as the greenhouse effect, ozone depletion, and the effect of solar irradiance on climatic change will be included. The physical processes and relationships between various climatic features will be studied. Prerequisite: ATMO 505 and DSCI 301 or MATH 526. LEC.

ATMO 640. Dynamic Meteorology. 3 Hours. N.
This course introduces the student to the fundamentals of fluid dynamics necessary for understanding large scale atmospheric motions. Fundamental physical laws of conservation of mass, momentum and energy are examined and applied to atmospheric flows. Rotation in the atmosphere is examined quantitatively in terms of both circulation and vorticity. Prerequisite: MATH 223 and PHSX 214 or PHSX 212 and PHSX 236. LEC.

ATMO 642. Remote Sensing. 3 Hours.
This course is designed to prepare students to effectively use remotely sensed data in operational or research settings for further work in this field. Topics include radiation and radiation transfer applied to active and remote sensing; radiative properties of space, sun, earth and atmosphere; instrument design considerations and operational characteristics; inversion methods for temperature or concentration profiling; surface temperature measurement; cloud top height determination; rain rate and wind velocity measurement; severe weather detection; satellite photograph interpretation. Prerequisite: ATMO 680, MATH 581. LEC.

ATMO 650. Advanced Synoptic Meteorology. 3 Hours. N.
Analysis and interpretation of synoptic weather charts including treatment of numerical weather forecasting. Prerequisite: ATMO 630 and ATMO 660. LEC.

ATMO 660. Advanced Dynamic Meteorology. 3 Hours. N.
Advanced study of the atmosphere including treatment of the vorticity equation. Prerequisite: ATMO 640 and MATH 220 or MATH 320. LEC.

ATMO 680. Physical Meteorology. 3 Hours. N.
This course is designed to enhance the student’s understanding of atmospheric processes through the study of these processes at molecular through micro scales. Topics include the properties and behavior of gases; transfer processes; phase change; solar and earth radiation; cloud drop, ice crystal and precipitation formation; atmospheric electricity; stratospheric chemistry. Prerequisite: MATH 223; PHSX 214, or PHSX 212 and PHSX 236. LEC.

ATMO 690. Special Problems in Meteorology. 1-3 Hours. N.
Prerequisite: Nine hours in meteorology. IND.

ATMO 697. Seminar for Seniors. 1 Hour. AE61 / N.
Current research in atmospheric science will be discussed. May be repeated for a total of two credit hours. Prerequisite: Senior level in atmospheric science. LEC.

ATMO 699. Undergraduate Research. 2 Hours. AE61 / U.
Work on a research project under the supervision of a faculty member. Prerequisite: Nine credit hours in atmospheric science. May be taken up to three times for credit. IND.

ATMO 710. Atmospheric Dynamics. 3 Hours.
Presentation of contemporary approaches to the study of atmospheric dynamics. May include methodologies that provide insight into global, synoptic, mesoscale or microscale motions. Prerequisite: ATMO 660 or equivalent. LEC.
ATMO 720. Atmospheric Modeling. 3 Hours.
Illustration and application of contemporary approaches to mathematical and statistical description of atmospheric phenomena. Prerequisite: MATH 122, ATMO 640, ATMO 680, and a course in statistics, or consent of instructor. LEC.

ATMO 727. Atmospheric Storms. 3 Hours.
The physical processes and operating principles involved in the development and life cycles of extreme or unusual weather events including tornadoes, blizzards, lightning displays, and tropical storms. Prerequisite: EECS 138, MATH 121, and ATMO 320. LEC.

ATMO 731. Advanced Topics in Atmospheric Science: _____. 1-3 Hours.
Advanced investigation of special topics in atmospheric science. May include topics in dynamic, physical or synoptic meteorology or climatology as well as related topics in earth and physical sciences. May be repeated if topic differs. LEC.

ATMO 750. Numerical Weather Prediction. 3 Hours.
An exploration of the mathematical methods used to describe the current state of the atmosphere and to predict future states. Current operational numerical weather prediction techniques will be included. Prerequisite: ATMO 660. LEC.

ATMO 825. Seminar in Climatology. 2-3 Hours.
LEC.

ATMO 827. Seminar in Atmospheric Science. 1-3 Hours.
LEC.

ATMO 899. Master’s Thesis. 1-10 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

GEOG 100. World Regional Geography. 3 Hours. SC AE42 / S.
An introductory survey of the environmental setting, historically formative periods, and present-day issues that distinguish the major culture areas of the world. LEC.

GEOG 101. World Regional Geography, Honors. 3 Hours. SC AE42 / S.
An introductory survey of the environmental setting, historically formative periods, and present-day issues that distinguish the major culture areas of the world. Open only to students in the College Honors Program, or by consent of instructor. LEC.

GEOG 102. Principles of Human Geography. 3 Hours. SC AE42/GE3S / S.
An examination of the relationships between humans and their environments. The course introduces students to basic concepts in human geography relating to economic activities, landscapes, languages, migrations, nations, regions, and religions. Serves as the basis for further course work in cultural, economic, political, population, and urban geography. LEC.

GEOG 103. Principles of Human Geography, Honors. 3 Hours. SC AE42/GE3S / S.
An introduction to how human societies organize space and modify the world about them. Resultant patterns on the landscape are interpreted through principles of space perception, cultural ecology, diffusion, land use, and location theory. Comparisons are made between urban and rural areas and between subsistence and commercial societies. Open to students who have been accepted into the College Honors Program. LEC.

GEOG 104. Principles of Physical Geography. 3 Hours. NE GE3N / N.
The components of the physical environment are discussed in order to familiarize the student with their distributions and dynamic nature. Major topics include the atmosphere, landforms, soils, and vegetation together with their interrelationships and their relevance to human activity. This course and GEOG 105 together satisfy the laboratory science requirement. Both courses are required for geography majors. LEC.

GEOG 105. Introductory Laboratory in Physical Geography. 2 Hours. U.
A laboratory course designed to complement GEOG 104 in satisfying the laboratory science requirement. It is required for geography majors. Laboratory exercises include a wide variety of analyses using data on the atmosphere, hydrosphere, biosphere, and lithosphere. Prerequisite: GEOG 104, which may be taken concurrently. LAB.

GEOG 107. Principles of Physical Geography, Honors. 3 Hours. NE GE3N / N.
Interactive processes among the systems of the earth are studied and discussed. Major topics include vegetation, soils, landforms, water, the atmosphere, and cycles of matter between these portions of the earth. The course includes lectures and critical discussions to address study problems in physical geography. Open only to students in the University Honors Program or by consent of the instructor. LEC.

GEOG 110. Geopolitics in the News. 3 Hours. S.
This course examines leading contemporary geopolitical events and processes through the lens of geography. It focuses on major political conflicts and struggles as they play out unevenly over space, contextualizing them within broader themes of neocolonialism, globalization, and the international system of nation-states. Emphasis is put on making issues commonly found in the media understandable to students by providing a relevant historical background and drawing comparisons among events. LEC.

GEOG 111. Maps and Mapping. 4 Hours. H.
How do people find their way from here to there or just around? Simple--they use maps. Maybe not maps on pieces of paper but maps in their heads: mental maps. Different people have different maps, even of the same place. Mapping is an ancient form of communication and maps have created ideas and opinions, promoted understanding and confusion. A non-technical approach to the transformation of space onto maps, to their content and structure, and their role and impact in human activity, past and present. Neither background in geography nor artistic skills are required. LEC.

GEOG 140. Global Environment I: The Discovery of Environmental Change. 5 Hours. GE3S / U.
This interdisciplinary course and laboratory sections survey the foundations of environmental understanding and the process of scientific discovery from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the history of environmental systems and life on earth, the discovery of biotic evolution, ecological change, and climate change. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as EVRN 140 and HIST 140.) LEC.

GEOG 142. Global Environment II: The Ecology of Human Civilization. 5 Hours. GE3S / U.
This interdisciplinary course and its laboratory sections survey the history of humanity's relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the ecology of colonialism and industrial civilization, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to the humanity's
engagement with the global environment using historical and present-day examples. (Same as EVRN 142 and HIST 142.) LEC.

GEOG 144. Global Environment I: The Discovery of Environmental Change, Honors. 5 Hours. U.
This interdisciplinary course surveys the foundations of environmental understanding and the process of scientific discovery from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the history of environmental systems and life on earth, the discovery of biotic evolution, ecological change, and climate change. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as EVRN 144 and HIST 144.) Open only to students admitted to the University Honors Program or by permission of instructor. LEC.

GEOG 145. Global Environment II: The Ecology of Human Civilization, Honors. 5 Hours. U.
This interdisciplinary course and its laboratory sections survey the history of humanity’s relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the ecology of colonialism and industrial civilization, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to the humanity’s engagement with the global environment using historical and present-day examples. (Same as EVRN 145 and HIST 145.) Open only to students admitted to the University Honors Program or by permission of instructor. LEC.

GEOG 148. Scientific Principles of Environmental Studies. 3 Hours. NB / N.
This course presents an overview of our understanding of environmental processes and issues. Topics include scientific principles, resource issues, pollution and global change, among others. This course gives students a rigorous understanding of interactions between humans and their environment and provides students with a scientific basis for making informed environmental decisions. (Same as EVRN 148.) LEC.

GEOG 149. Scientific Principles of Environmental Studies, Honors. 3 Hours. NB / N.
This course presents an overview of our understanding of environmental processes and issues. Topics include scientific principles, resource issues, pollution and global change, among others. This course gives students a rigorous understanding of interactions between humans and their environment and provides students with a scientific basis for making informed environmental decisions. An honors section of GEOG 148 designed for superior students. (Same as EVRN 149.) Prerequisite: Membership in the University Honors Program or approval of instructor required. LEC.

GEOG 150. Environment, Culture and Society. 3 Hours. SC / S.
An introduction to geographic approaches to the study of the environment, emphasizing societal and cultural factors that influence human interaction with the biosphere, hydrosphere, lithosphere, and atmosphere. The course involves analysis of a broad range of contemporary environmental issues from the local to global scales. (Same as EVRN 150.) LEC.

GEOG 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Geography. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

GEOG 210. Computers, Maps, and Geographical Analysis. 3 Hours. N.
This course will introduce students to a number of different methods for the visualization, representation, and analysis of geographical phenomena. Both field and computer-based techniques will be employed to demonstrate the concept of experimental design and the collection, processing, and analysis of geographical data. Topics include: 1) the unique nature of geographic data; 2) mapping techniques and technologies; 3) geographical information systems; 4) remote sensing (aerial photography and satellite imagery); and 5) methods of geographical analysis (e.g., statistic and spatial modeling). LEC.

GEOG 304. Environmental Conservation. 3 Hours. NE GE3N / N.
A survey of current methods of describing and modeling the function, structure, and productivity of natural and anthropogenically modified earth resource systems, along with a discussion of contemporary views of what constitutes a natural landscape. Fundamental natural science principles about the interplay among lithospheric, atmospheric, hydrospheric, and biospheric components of earth systems are emphasized. Uses of natural resources, including fossil fuels, minerals, and water are described with attention to the earth’s total energy budget. Human activities that affect preservation, conservation, and multiple uses of earth regions receive attention. Systems under stress through population and other contemporary forces serve as examples. (Same as EVRN 304.) LEC.

GEOG 311. Map Conception and Development. 4 Hours. N.
An examination of the map process with emphasis on two areas: 1) the mental map formed during interaction with the environment and 2) the map as a physical object which emerges from mapping activity. A local area will serve as the laboratory/environment for the mapping activity including production and use. LEC.

GEOG 316. Methods of Analyzing Geographical Data. 4 Hours. N.
Introduces the benefits and limitations of using quantitative methods to analyze geographical problems. Covers traditional descriptive (e.g., measures of central tendency) and inferential statistics (e.g., hypothesis testing) but also inherently geographical approaches such as shape and point pattern analysis, and spatial autocorrelation. Laboratory emphasizes using the computer to explore and analyze geographical problems. LEC.

GEOG 319. Topics in Techniques: ____. 1-3 Hours. N.
An investigation of special topics in Techniques. May include coursework in cartography, GIS, or remote sensing. May be repeated if topic differs. LEC.

GEOG 321. Climate and Climate Change. 3 Hours. N.
This course is designed to introduce students to the nature of the Earth's physical climate. It introduces the basic scientific concepts underlying our understanding of our climate system. Particular emphasis is placed on energy and water balances and their roles in evaluating climate change. The course also evaluates the impact of climate on living organisms and the human environment. Finally, past climates are discussed and potential future climate change and its impact on humans is evaluated. (Same as ATMO 321.) Prerequisite: ATMO 105 or GEOG 104. LEC.

GEOG 331. Regional Geomorphology of the United States. 3 Hours. N.
This course examines forces and processes affecting the earth’s surface, and furthermore identifies and describes the physiographic regions that are the result of these processes. Special efforts are made to explore various photographic resources, satellite imagery, and internet sources or geomorphic data from a regional perspective since there is no wholly satisfactory text available for the course. A research paper is required.
Prerequisite: An introductory earth science course or consent of instructor. LEC.

GEOG 332. Glaciers and Landscape. 3 Hours. N.
Elements from glaciology, geology, and climatology are merged to examine the interactions between glaciers and their natural environments, including the processes involved in glacier formation, the relationship between glaciers and climate, the mechanisms of glacier flow, and interpretation of the Earth’s glacial record. Emphasis is placed on an interdisciplinary approach to study environmental change and paleoclimate reconstruction. Prerequisite: GEOG 104 or GEOL 101, or consent of instructor. LEC.

GEOG 335. Introduction to Soil Geography. 4 Hours. N.
This course focuses on the properties and processes of soils as they occur in their environment. The student is introduced to the nature of soil as it functions as a body; genesis of soils; properties of soil solids, especially colloids; soil chemical composition, properties, and reactions; interaction between solid, liquid, and gaseous components in soils; plant-soil-water relationships; biological interactions with soil; classification of soils; and the distribution of soils on the landscape. Not open to students who have taken EVRN 535 or GEOG 535. (Same as EVRN 335.) Prerequisite: GEOG 104 or GEOL 101 or consent of instructor; BIOL 100 and CHEM 130 or CHEM 190 recommended. LEC.

GEOG 338. Introduction to River Systems. 3 Hours. N.
A course of fluvial geomorphology. Topics include the drainage basin, fluvial processes, river channel adjustment and forms, human disturbance and geomorphic response, and research methods in fluvial geomorphology. Field trip. Prerequisite: GEOG 104, LEC.

GEOG 339. Topics in Physical Geography: ____. 1-3 Hours. N.
An investigation of special topics in Physical Geography. May include coursework under headings of soils, vegetation, climate, or geomorphology. May be repeated if topic differs. LEC.

GEOG 350. Physical Geography of Africa. 3 Hours. N.
This course is a survey of the basic physical features of the African continent including structure and relief, rivers and lakes, soils and mineral resources. It includes characteristics and processes of African climates, and the ecology of Africa’s four major biomes: tropical rain forest, savanna, steppe, and desert. Climatic and environmental variations of the past, emergence of humankind, and development of pastoral and farming systems are discussed. Contemporary environmental concerns also include deforestation and desertification, the impacts of drought, methods for monitoring African environments, and Africa’s prospects in a 21st century suffering from global warming. (Same as AAAS 350.) LEC.

GEOG 351. Africa’s Human Geographies. 3 Hours. NW AE42/GE3H/GE3S / S/W.
An introduction to historical, cultural, social, political, and economic issues in Africa from a geographic perspective. The course begins with the historical geography of humanity in Africa, from ancient times through to the present. Other topics include cultural dynamics, demography, health, rural development, urbanization, gender issues, and political geography. Case studies from Eastern and Southern Africa will be used to illustrate major themes. (Same as AAAS 351.) LEC.

GEOG 352. Economic Geography. 3 Hours. S.
This course offers an overview of contemporary economic geography with an underlying theme of uneven regional development. Topics examined include: the historical context in which capitalism emerged; the major theoretical approaches used to understand the temporal and spatial dynamics of capitalist society; a series of case studies of different economic sectors; and the global economy, including its development with respect to colonialism, neocolonialism, international trade, third world development, and population growth. LEC.

GEOG 354. Globalization. 3 Hours. S.
This course is designed to provide a broad overview of some major facets of the historical, economic, political, cultural, and geographical dimensions of contemporary globalization, the process by which individual regions and nations have become progressively linked to, and structured by, the world-system of states and markets, and the cultural contradictions associated with this process. LEC.

GEOG 357. History and Philosophy of Geographic Information Science. 3 Hours. N.
An examination of the development of geographic information science (GISci) from its roots in traditional geography, cartography, and remote sensing to modern geographic information systems (GIS). GIS is explored as a new scientific instrument, a “macroscope” for representing and analyzing complex earth processes, both physical and cultural. The societal benefits and risks of GIS are demonstrated and discussed. LEC.

GEOG 358. Principles of Geographic Information Systems. 4 Hours. N.
An introduction to computer-based analysis of spatial data. Covers basic principles of collecting, storing, analyzing, and displaying spatial data. Emphasis is on problem-solving activities using common spatial analytical techniques (e.g., map overlay). The student will gain extensive hands-on experience with state-of-the-art GIS software. LEC.

GEOG 370. Introduction to Cultural Geography. 3 Hours. GE3S / H.
Charts some of the major lines of research in cultural geography, including critical theory, political economy, poststructuralist thought, feminism, and global consumption. Through fieldwork, diverse research methods are applied to issues such as community development, cultural patterns on the landscape and global impacts on local economies. Prerequisite: GEOG 100, GEOG 101, GEOG 102 or GEOG 103; or consent of instructor. LEC.

GEOG 371. Environmental Geopolitics. 3 Hours. S.
This course examines how human relationships with the biophysical world are politicized. Examines key contributions to debates surrounding environmental security, resource conflicts, and related issues, as well as geopolitical assumptions on which these debates build. (Same as EVRN 371.) LEC.

GEOG 372. Environmental Policy. 3 Hours. N.
An historical and analytical study of the formulation, implementation, and consequences of environmental policy in the United States. Attention is directed at relevant interest groups, issues specific to both rural and urban populations, relationships between national policies and international organizations concerned with environmental problems. Prerequisite: GEOG 148 or EVRN 148; and either EVRN 103 or HIST 103, EVRN 347 or HIST 347, or GEOG150 or EVRN 150. LEC.

GEOG 373. Political Geography. 3 Hours. S.
Political Geography is concerned with spatial dynamics of power. It concerns issues such as territory, boundaries, and identity as well as feminist, post-colonial, geopolitical, and environmental perspectives. This class will consider the development of this subfield, the role it has played in imperial expansion, and ways in which more recent critiques have shaped political geography to be a means of understanding different forms of power and its relationship to people and places. Prerequisite: GEOG 100 or GEOG 102 or equivalent or consent of instructor. LEC.

GEOG 375. Intermediate Human Geography. 3 Hours. S.
An examination of processes of cultural-economic interaction and patterns of human activity on a global scale. The topics cover the whole spectrum of human geography, with focus on urban-economic development,
innovation and diffusion, and trade. Each week the third hour will be devoted to discussion of topics dealt with in lectures presented during the first two hours. Prerequisite: Introductory course in Geography or consent of the instructor. LEC.

GEOG 377. Urban Geography. 3 Hours. S.
This course explores the city from the multiple perspectives of its inhabitants. The cultural viewpoints of place, gender, age, and ethnicity are stressed. Traditional topics such as urban hierarchy, functions of the city, suburbanization, and ongoing changes in core and peripheral areas also receive attention. The distinctive landscapes of individual North American cities are emphasized, but examples also are drawn from throughout the world. LEC.

GEOG 379. Topics in Cultural Geography: ______. 1-3 Hours. S.
An investigation of special topics in Cultural Geography. May include coursework under headings of culture theory, material culture, language, foodways, or religion. May be repeated if topic differs. LEC.

GEOG 390. Geography of the United States and Canada. 3 Hours. S.
A study of the different physical, economic, and cultural settings in the United States and Canada which form the basis for the various forms of livelihood. Emphasis on the United States. (Same as AMS 390.) Prerequisite: An introductory geography course or background in the United States or Canadian history, social science, or culture or consent of instructor. LEC.

GEOG 395. Environmental Issues of: ______. 3 Hours. S.
This regional geography course examines contemporary environmental issues of a particular region of the world based on the expertise of the professor. Course emphasis is on the interaction of natural, socio-economic, and cultural factors of development that give rise to environmental problems. Students learn how local, national, and international government and non-governmental stakeholders address environmental problems. Course may be repeated with different professors. LEC.

GEOG 396. East Asia. 3 Hours. NW AE42/GE3H/GE3S / S/W.
This course is an introduction to the contemporary politics, economy, and culture of Korea, China, and Japan in the context of globalization. In addition to the discussion of individual countries, the course examines the cross-cutting themes such as international relations, cultural exchange, and economic development in the region of East Asia. LEC.

GEOG 397. Geography of Kansas and the Plains. 3 Hours. S.
A study of the different physical, economic, and cultural settings in Kansas and the Plains that form the basis for various kinds of livelihood. LEC.

GEOG 399. Topics in Regional Studies: ______. 1-3 Hours. S.
An investigation of special topics in Regional Studies. May include coursework related to a specific country or region. May be repeated if topic differs. LEC.

GEOG 410. Human Biogeography, Honors. 3 Hours. N.
Principles of evolution and earth change are used to examine distributions of human populations, wealth, and resources. Readings from the current literature will be included. Lecture and discussion. (Same as BIOL 410.) Prerequisite: BIOL 152 or 153 or GEOG 107 and membership in the University Honors Program or consent of instructor. LEC.

GEOG 418. Workshop in Production Cartography. 1-3 Hours. AE61 / N.
Theory and practice of map production and other related graphics using the latest graphic and GIS software. Projects vary but include the processes of design and production, editing and quality control, and a final printed or operational product. Involves a weekly consultation session and laboratory time in KU Cartographic GIS Services. Prerequisite: Completion of GEOG 311 and consent of instructor. IND.

GEOG 433. Biogeography Field and Laboratory Techniques. 3 Hours. N.
This course provides undergraduate students with practical experience in field data collection techniques and laboratory data analysis methods. During the first half of the semester, students work in the field using a variety of methods to measure such vegetation characteristics as: cover, density, biomass, leaf area, and canopy architecture. Students gain experience in the use of field instruments including a spectroradiometer, and techniques for quantifying biophysical attributes of vegetation. During the later part of the course, students learn to summarize their field data and examine relationships between the vegetation attributes and measurements made using remote sensing instruments. Recommended: GEOG 316 or an introductory statistics equivalent. (Same as EVRN 433.) FLD.

GEOG 458. Geographical Information Systems: ______. 1-6 Hours. N.
An introduction to the organization and components of geographic information systems and their software. Fundamental concepts and their implementation with applications to physical and human systems. LEC.

GEOG 490. Geographic Internship. 1-6 Hours. AE61 / N.
Supervised practical experience. The student submits a proposal describing the internship prior to enrollment. Upon acceptance, regularly scheduled meetings with the advisor provide assistance, guidance and evaluation of progress in the professional experience. A written summary of the experience or outcomes of the research project are prepared independently by the student, a representative of the host agency, and the advisor. Total credit not to exceed six hours. Prerequisite: Fifteen hours of geography and permission of instructor. FLD.

GEOG 498. Special Topics in Geography: ______. 1-5 Hours. U.
Prerequisite: Fifteen hours of geography. IND.

GEOG 499. Honors Course in Geography. 2-3 Hours. AE61 / U.
Open to students with nine hours of upper level credit in geography, an average of at least 3.5 in all geography courses, and an overall average of at least 3.25. Includes the preparation of an honors paper and its defense before a committee of at least two regular faculty members. IND.

GEOG 500. Senior Capstone in Geography. 3 Hours. AE61 / N.
The capstone project provides students with a broad-based, interdisciplinary educational experience and allows them to integrate and synthesize the knowledge they have gained in their studies. The course is designed to achieve several objectives: provide an overview of geography as a unified, coherent discipline with multiple perspectives, emphasize writing and analytical skills, introduce students to a major research project that integrates elements of physical and human geography, and cultivate knowledge of future professional development. Graduate students may take this course by permission only. Prerequisite: Nine hours in Geography and status as a senior major in the department; or permission of instructor. LEC.

GEOG 510. Human Factors, 4 Hours. N.
An introduction to the concepts and theories underlying the study of human-technological systems. Human-machine interfaces and system properties and the environment are considered. Lecture-discussion sessions are supplemented by computer-supported laboratory and research activities. LEC.

GEOG 511. Intermediate Cartography: ______. 1-6 Hours. N.
An investigation of special topics in cartography. Can be repeated for different topics. Prerequisite: A course in cartography and consent of instructor. LEC.
GEOG 513. Cartographic Design. 3 Hours. S.
A study of graphic elements and their role in the physical and perceptual structure of the map image. Concepts and principles of design are stressed with particular emphasis on the figure-ground relationships, color and lettering. Prerequisite: GEOG 311. LEC.

GEOG 514. Visualizing Spatial Data. 4 Hours. N.
Students use Visual Basic or other currently prominent programming language to visualize spatial data. Early projects cover basic principles such as color manipulation and spatial transformations. Later projects involve developing more sophisticated software for data presentation, data exploration, and map animation. Prerequisite: Some experience with Visual Basic or other programming language. LAB.

GEOG 516. Applied Multivariate Analysis in Geography. 3 Hours. N.
An introduction to the application of multivariate statistical analysis in geography. Techniques covered include univariate and multivariate analysis of variance, multiple regression, logistic regression, principle components analysis, and spatial regression. Practical applications of the techniques in a geographical research context are emphasized. Students will learn how to use statistical packages such as SPSS. Prerequisite: GEOG 316 or equivalent. LEC.

GEOG 517. Data Handling and Map Symbolization. 3 Hours. N.
An analysis of methods for manipulating and symbolizing spatial data. Techniques studied include dot, choropleth, proportional symbols, and isarithmic (contour) mapping. Topics covered include data classification, the use of color, and automated methods of interpolation (triangulation, inverse distance, and kriging). Emphasis is on developing maps that can be presented to the general public, although some consideration is given to visualization software that can be utilized by individuals to explore spatial data. Prerequisite: GEOG 111 or GEOG 210 or GEOG 311. LEC.

GEOG 519. History of Cartography. 3 Hours. H.
A history of mapmaking worldwide from its origins to the present day. Emphasis on maps as historical records of evolving civilizations and cultural landscapes and methods of studying early maps. (Same as HIST 546.) LEC.

GEOG 521. Microclimatology. 3 Hours. N.
A study of climatic environments near the earth-atmosphere interface. Consideration of rural climates in relation to agriculture and urban climates as influenced by air pollution and other factors. Emphasis is on physical processes in the lower atmosphere, distribution of atmospheric variables, the surface energy budget, and water balance. (Same as ATM 521.) Prerequisite: ATM 105 and MATH 121. LEC.

GEOG 526. Remote Sensing of Environment I. 4 Hours. N.
Introduction to study of the environment through air photos and satellite imagery, including principles of remote sensing, interactions of electromagnetic energy with the atmosphere and earth’s surface, aerial photography, satellite systems, and sensors (electro-optical, thermal, and radar). Emphasis in the latter part of the course is on such applications as global monitoring, land cover mapping, forestry, agriculture, and oceanography. Laboratory emphasizes visual interpretation of aerial photography and satellite imagery and an introduction to digital image processing in the department’s NASA Earth Science Remote Sensing Laboratory. (Same as EVRN 526.) Prerequisite: MATH 101 or equivalent. GEOG 358 recommended. LEC.

GEOG 531. Topics in Physical Geography: ______. 1-3 Hours. N.
An investigation of special topics in physical geography. May include specific course work under the headings of geomorphology, climatology, soils, vegetation, quaternary, paleoenvironments, hydrology, etc. May be repeated, if topic differs. LEC.

GEOG 532. Geoarchaeology. 3 Hours. N.
Application of the concepts and methods of the geosciences to interpretation of the archeological record. The course will focus primarily on the field aspects of geoarchaeology (e.g., stratigraphy, site formational processes, and landscape reconstruction), and to a lesser extent on the array of laboratory approaches available. (Same as ANTH 517.) Prerequisite: GEOG 104, ANTH 110, or ANTH 310. LEC.

GEOG 535. Soil Geography. 4 Hours. N.
A broad study of the principles and properties of soils and their distribution on the landscape. Topics covered include: pedology, clay mineralogy, soil physics, soil chemistry, management of soils, soil biology, taxonomy, and soil geomorphology. Laboratory section and a field project are required. Not open to students who have taken GEOG 335 or EVRN 335. (Same as EVRN 535.) Prerequisite: GEOG 104 or GEOL 101 or consent of the instructor; BIOL 104 and CHEM 130 or 190 recommended. LEC.

GEOG 537. Elements of Plant Geography. 3 Hours. N.
An introduction to spatial and temporal variation in natural plant populations and communities. Included is an introduction to methods of analysis, and an overview of structure and process in the earth’s major biomes. Prerequisite: GEOG 331; or an introductory biology/botany course and GEOG 104; or consent of instructor. LEC.

GEOG 538. Soil Chemistry. 3 Hours. N.
This course examines the chemical properties and processes of soils and methods of evaluation. Topics include soil and solution speciation, mineral solubility, soil colloidal behavior, ion exchange, surface complexation, soil salinity and sodicity, soil acidity, oxidation-reduction reactions, and kinetics of soil chemical processes. (Same as EVRN 538.) Prerequisite: GEOG 335 or GEOG 535 or EVRN 335 or EVRN 355, CHEM 135 or CHEM 195, MATH 121, PHYS 114, or consent of the instructor. LEC.

GEOG 541. Geomorphology. 4 Hours. N.
A critical study of land forms in relation to tectonics, climatic environment, and geologic processes. The use of geomorphic methods in the interpretation of Cenozoic history is emphasized. Laboratory exercises in analysis of field observations, maps, and photographs. Required field trip and fee. (Same as GEOL 541.) Prerequisite: GEOL 101 and GEOL 103, GEOG 104 and GEOG 105, or GEOL 103 and GEOL 304. LEC.

GEOG 550. Environmental Issues in Africa. 3 Hours. S.
Acquaints students with the complexities of debates on environmental problems in Sub-Saharan Africa. Topics addressed may include deforestation, desert expansion, wildlife conservation, soil erosion, climate change, coral reef destruction, water resources development, mangrove preservation, the environmental effects of war, industrialization, and urbanization. Class presentations and projects synthesize the perspectives of both human and physical geography. (Same as AAAS 551.) Prerequisite: GEOG 104 or permission of instructor. LEC.

GEOG 552. Topics in Urban/Economic Geography: ____. 1-3 Hours. S.
An investigation of special topics in urban/economic geography. May include specific course work under the headings of energy, economic development, international trade, environmental perception, housing, transportation, and migration. May be repeated. LEC.

GEOG 553. Geography of African Development. 3 Hours. NW AE42/GE33/GE33S/S.
Acquaints students with the values of social parameters of African agricultural and pastoral practice. Topics include customary land rights, African perspectives on the natural world, gender issues in African agriculture, and the urbanization of African cultures. The course also contrasts African views with those of Western development practitioners.
and donor agencies. Case studies from different countries are used to highlight the continent's regional differences. (Same as AAAS 553.) LEC.

GEOG 556. Geography of the Energy Crisis. 3 Hours. S.
A discussion and analysis of the basic facts and causes of energy problems on a national and world scale. Examines current production, consumption, efficiency, reserves, conservation, and other energy policy options, including adjustments that will affect consumer use, national politics, and strategic issues. Prerequisite: GEOG 102 or GEOG 375. LEC.

GEOG 557. Cities and Development. 3 Hours. S.
An intermediate level course in urban geography, with an emphasis on cities in the developing world. Example cities in Latin America and the Caribbean, Sub-Saharan Africa, the Middle East, South Asia, and/or Southeast Asia may be examined. The main focus is on the intersection between urbanization and economic development, but social, political, and cultural aspects of development in cities are considered. Other topics include the geographic impacts of European colonialism, urbanization and industrialization, rural-to-urban migration, urban structure and spatial dynamics, urban planning, and environmental sustainability. (Same as AAAS 557.) LEC.

GEOG 558. Intermediate Geographical Information Systems. 4 Hours. N.
An intermediate level course in geographic information science designed for advanced undergraduate and graduate level students who already have an introductory understanding of GIS. Emphasis will be placed on the application of spatial analytical techniques to geographical problem-solving. Topics include spatial data structures, interpolation techniques, terrain analysis, cost surfaces, and database management technique. Students will apply knowledge gained in lecture and reading to natural resource, urban, and scientific applications using state-of-the-art GIS software. Prerequisite: GEOG 358 or consent of instructor. LEC.

GEOG 560. GIS Application Programming. 3 Hours. N.
This course teaches programming within Geographic Information Systems. Students learn how to customize GIS applications to automate data processing and spatial analysis through programming languages. GIS programming concepts and methods are introduced from the aspects of spatial data management and analysis covering both the vector and raster data models. Prerequisite: GEOG 558 and a course in programming languages. LEC.

GEOG 570. Geography of American Indians. 3 Hours. NW AE42/GEO3S / S.
A survey of the culture and history of selected indigenous peoples of the Americas. Emphasis is placed on the environmental setting, the settlement and subsistence patterns, and the impact of European colonization. Discussion includes present-day ethnic and resource issues. LEC.

GEOG 571. Topics in Cultural Geography: ______. 1-3 Hours. S.
An investigation of special topics in cultural geography. May include specific course work under the headings of cultural theory and methodology, material culture, foodways, religion, and similar topics. May be repeated, if topic differs. LEC.

GEOG 574. Exploring Oceania. 3 Hours. S.
Acquaints students with the culture and history of Oceania including its settlement and the impacts of European and American colonialism on Australasia, Melanesia, Micronesia and Polynesia. Emphasis is placed on applying broad geographical concepts to this vast Oceanic region through the lenses of development, media and migration studies. Prerequisite: GEOG 102 or GEOG 103; or consent of instructor. LEC.

GEOG 576. Cultural Geography of the United States. 3 Hours. S.
Distributions of major culture elements including folk architecture, religion, dialect, foodways, and political behavior are systematically studied from a predominately historical perspective. These discussions are followed by a survey of the major culture regions in America. Although not absolutely necessary, familiarity with concepts treated in any of the following courses would be helpful: AMS 100, AMS 110, ANTH 108, ANTH 308, GEOG 102, or GEOG 390. (Same as AMS 576.) LEC.

GEOG 579. Geography of American Foodways. 3 Hours.
An interdisciplinary approach to food that explores the diversity of eating habits across the United States and the role of food as in indicator of cultural identity and change. Current regional and ethnic food consumption patterns are stressed. Topics include multiculturalism and regional identity, the symbiotic relationship between restaurant food and home cooking, the recent interest in farmers' markets and organic foods, and the importance of the food industry and the popular press in setting trends. (Same as AMS 579.) LEC.

GEOG 590. Understanding Central Asia. 3 Hours. NW / S/W.
An intensive, multidisciplinary survey of Central Asia, focusing on the former Soviet republics-Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan-with additional coverage of neighboring regions (the Caucasus and the Caspian basin, Afghanistan, and western China). The course addresses the history of the region (from the Silk Road to Soviet rule), geography, religion, and the building of post-Soviet states and societies. (Same as REES 510.) LEC.

GEOG 591. Geography of Latin America. 3 Hours. SC AE42/GEO3S / S/W.
A study of the different physical, economic, and cultural settings in Latin America which form the basis for the various forms of livelihood. LEC.

GEOG 592. Middle American Geography. 3 Hours. S.
This regional study of the natural environments and cultural-historical backgrounds of Mexico, Central America, and the Caribbean details the physical and historical processes that have shaped the cultural landscape. LEC.

GEOG 593. Central American Peoples and Lands. 3 Hours. S.
This is a study of the natural and cultural history of the region's lands and peoples that focuses on the cultural geography of the surviving indigenous populations, including their culture area, culture history, cultural landscape, and cultural ecology. LEC.

GEOG 594. Geography of the Former Soviet Union. 3 Hours. S/W.
An analysis of the spatial organization of the successor states to the USSR. A study of the diverse human and natural resources, demographic, cultural, and economic conditions. Prerequisite: An introductory geography course or background in Russian-East European history, social science, or culture, or consent of instructor. LEC.

GEOG 595. Geography of Eastern Europe. 3 Hours. S/W.
A study of nations and regions of Eastern Europe, excluding Russia. Prerequisite: An introductory geography course or background in Slavic-East European history, social science, or culture or consent of instructor. LEC.

GEOG 597. Geography of Brazil. 3 Hours. S.
Study of geographic factors, physical and cultural, that are basic to understanding the historical development of Portuguese South America and the contemporary and cultural geography of Brazil. Course also includes a survey of Brazil's South American neighbors. LEC.

GEOG 601. Indigenous Peoples of the World. 3 Hours. S.
A survey of the varied responses of global Indigenous peoples as a result of the imposition of external economic and political systems. An overview
of diverse, thematic issues such as land rights, economic development, resources and cultural patrimony, languages, knowledge systems, and women's rights from the perspectives of Indigenous societies around the world. Detailed studies of Indigenous peoples seeking recognition and protection under international law are used. (Same as ISP 601.) Prerequisite: Permission of instructor. LEC.

**GEOG 635. Soil Physics. 3 Hours. N.**

Provides theoretical and practical foundations for understanding physical properties and processes of variably-saturated porous media. Focus is on the transport, retention, and transformation of water, heat, gas, and solutes through the soil. We examine modern vadose zone measurement methods, analytical tools, and numerical models for data collection and interpretation. (Same as EVRN 635.) Prerequisite: GEOG 335 or EVRN 335, or GEOG 535 or EVRN 535, and MATH 121, PHSX 114; or consent of instructor. LEC.

**GEOG 658. Topics in Geographic Information Science: _____. 1-6 Hours.**

An investigation of special topics in geographic information science. May include specific coursework under the headings of methodology, basic research, thematic or regional applications, geographic information systems (GIS), Global Positioning System (GPS), and geostatistics. May be repeated if topic differs. LEC.

**GEOG 670. Cultural Ecology. 3 Hours. S.**

Investigation of the interrelations between socio-cultural systems and the natural environment, including a survey of major theories and descriptive studies. (Same as ANTH 695.) Prerequisite: An introductory course in geography or anthropology. LEC.

**GEOG 710. Information Design. 3 Hours.**

Concepts and principles for the organization of verbal, numerical, and graphic/spatial data and their application to the production of information displays and instruments. Examination of the evolution of the information design process from the traditional (communication system) perspective to interactive user-centered design approaches. The nature of human information processing in handling information for both visualization and analysis, with particular emphasis on decision-making and usability. Prerequisite: GEOG 510, INDO 510, PSYC 318, PSYC 685, or equivalent, or consent of instructor. LEC.

**GEOG 711. Advanced Cartography: _____. 3 Hours.**

An investigation of special topics in cartography. Can be repeated for different topics. Prerequisite: Consent of instructor. LEC.

**GEOG 713. Practicum in Cartography. 1-6 Hours.**

Experience in the organization and presentation of cartographic material in lecture, discussion, and laboratory formats. May be repeated to a total of six credits. Prerequisite: Consent of instructor, FLD.

**GEOG 714. Field Experience. 3 Hours. AE61.**

Working in a new environment presents problems unlike those encountered in a classroom situation. Data collection techniques and exercises discussed in this off-campus course are intended to provide experience in dealing with an unfamiliar situation. Course location is dictated by the interests and composition of the student group; offered in the first three weeks of August. Geography majors are encouraged to attend. This course is required for graduate students. Fee required. Prerequisite: Junior-senior standing and fifteen hours of geography or consent of instructor. FLD.

**GEOG 716. Advanced Geostatistics. 3 Hours.**

An introduction to the practical application of advanced geospatial statistical techniques. Potential topics include: spatial regression, interpolation, clustering, and advanced nonparametric statistics. Knowledge of a statistical package and GIS is assumed. Prerequisite: GEOG 516 or equivalent and GEOG 358 or equivalent. LEC.

**GEOG 719. Development of Geographic Thought. 2-3 Hours.**

Critical analysis of the growth of geographic thought from antiquity to the present: emphasis on structure of modern geography. Prerequisite: Twenty hours of geography or consent of instructor. LEC.

**GEOG 726. Remote Sensing of Environment II. 4 Hours.**

An overview of techniques for computer analysis of digital data from earth orbiting satellites for environmental applications. Topics covered include: data formats, image enhancements and analysis, classification, thematic mapping, and environmental change detection. The laboratory exercises provide hands-on experience in computer digital image processing in the department's NASA Earth Science Remote Sensing Laboratory. Prerequisite: Introductory statistics and GEOG 526 or equivalent. LEC.

**GEOG 731. Topics in Physical Geography: _____. 1-3 Hours.**

An investigation of special topics in physical geography. May include specific course work under the headings of geomorphology, climatology, soils, vegetation, quaternary, paleoenvironments, hydrology, etc. May be repeated. RSH.

**GEOG 733. Advanced Biogeography Field and Laboratory Techniques. 3 Hours.**

This course provides graduate students with practical experience in field data collection techniques and laboratory data analysis methods. During the first half of the semester, students will work in the field using a variety of methods to measure such vegetation characteristics as: cover, density, biomass, leaf area, and canopy architecture. Students will gain experience in the use of field instruments including a spectroradiometer, and techniques for quantifying vegetation biophysical attributes. The laboratory analyses component will include: data summary, data entry, correlation, regression, MANOVA, cluster analysis, and data display, and reporting. Recommended: GEOG 516 or multivariate statistics equivalent. LEC.

**GEOG 735. Soil Geomorphology. 3 Hours.**

Examines the interaction of pedogenic and geomorphic processes during the Quaternary with an emphasis on strategies and methodologies employed in soil-geomorphic studies. Group research projects incorporating field data collection and analyses are required. Prerequisite: GEOG 335 or GEOG 535 or consent of the instructor. LEC.

**GEOG 741. Advanced Geomorphology. 1-3 Hours.**

Detailed discussions of processes and landforms characteristic of specific environments. Considered during separate semesters will be general methodology, and fluvial, arid regions, glacial, and shoreline geomorphology. Course may be taken more than once. (Same as GEOL 741.) Prerequisite: GEOG 541. LEC.

**GEOG 749. Topics in Stable Isotopes in the Natural Sciences:. 2-3 Hours.**

Isotopic compositions of substances provide powerful insights into many topics in the natural sciences. Applications of isotopic analyses of carbon, hydrogen, oxygen, and nitrogen to selected research topics such as plant resource use, food web analysis, paleoecology, paleoecolod reconstruction, hydrology, and soils genesis will be examined. Knowledge of isotope chemistry is not required. (Concepts necessary to understand pertinent articles will be taught during the first class meetings.) May be repeated. (Same as BIOL 749.) LEC.

**GEOG 751. Analysis of Regional Development. 3 Hours.**

An analytical approach to spatial organization of economic activities and aspects of growth and development. Location theory and the geography of trade and migration. A research paper is required. Prerequisite: GEOG 551, or a course in economics, or consent of instructor. LEC.
GEOG 752. Topics in Urban/Economic Geography: ____. 1-3 Hours.
An investigation of special topics in urban/economic geography. May include specific coursework under the headings of energy, economic development, international trade, environmental perception, housing, transportation, and migration. May be repeated. LEC.

GEOG 756. Energy Problems and the Economic-Physical Environment. 2-3 Hours.
This course investigates the economic, social, political, and environmental conditions of energy production, transport, and use: total energy consumption and mix, relations to the level and structure of the economy, substitutability of fuel and energy sources, resource endowment in an international setting. Prerequisite: GEOG 551 or a course in economics or consent of instructor. LEC.

GEOG 758. Geographic Information Science. 4 Hours.
This course integrates topics in geographical information science (GISci) with spatial analytical techniques to solve spatial problems. Focuses on the most current research in GISci and its relevance to the environmental sciences, natural resource management, and spatial decision-making. Students are expected to apply the concepts and techniques learned in this class to their own research projects. Prerequisite: GEOG 316 and GEOG 558, or consent of instructor. LEC.

GEOG 771. Topics in Cultural Geography: ____. 1-3 Hours.
An investigation of special topics in cultural geography. May include specific course methodology, material culture, foodways, religion, and similar topics. May be repeated. LEC.

GEOG 772. Problems in Political Geography. 3 Hours.
Case studies of regional and national power settings with particular emphasis upon the geographical analysis of political developments in unstable areas of the world. Prerequisite: GEOG 102 or GEOG 375. LEC.

GEOG 773. Humanistic Geography. 3 Hours.
A discussion and project-oriented course focused on ways of studying the character and meaning of places. Concepts examined include place image and image makers, landscapes as text, sense of place, vernacular regions, and alternate representations of space. Prerequisite: Graduate standing or fifteen hours of geography or consent of instructor. LEC.

GEOG 775. Proseminar in Population Geography. 3 Hours.
Evaluation of problem formulation data gathering, research methods, and substantive knowledge in the geography of human populations. Concurrent auditing of GEOG 575 plus an additional meeting each week is required. Prerequisite: GEOG 575 and GEOG 516, and SOC 514. LEC.

A detailed description and analysis of selected regions of North America. Prerequisite: An introductory geography course or background in United States or Canadian history, social science, or culture or consent of instructor. LEC.

GEOG 791. Latin American Regions: ____. 3 Hours.
A description and analysis of the principal sources of geographic information pertaining to portions or all of Latin America. Prerequisite: GEOG 591 or concurrent auditing of GEOG 591, or consent of instructor. LEC.

GEOG 794. Regions of the Former USSR. 3 Hours.
A description and analysis of geographic data pertaining to the successor states to the USSR. Prerequisite: Fifteen hours of Geography courses or background in Russian, East European or Middle East studies, or consent of instructor. LEC.

GEOG 795. European Regions: ____. 3 Hours.
Prerequisite: Fifteen hours of geography, background in specified area, or consent of instructor. LEC.

GEOG 796. Asian Regions: ____. 2-3 Hours.
Prerequisite: Fifteen hours in geography courses or background in Asia, or consent of instructor. LEC.

GEOG 801. Indigenous Peoples of the World. 3 Hours.
A survey of the varied responses of global Indigenous peoples as a result of the imposition of externally-dominated economic and political systems. An overview of diverse, thematic issues such as land rights, economic development, resources and cultural patrimony, languages, knowledge systems, and women’s rights from the perspectives of Indigenous societies around the world. Detailed studies of Indigenous peoples seeking recognition and protection under international law will be used. The course is offered at the 600 and 800 levels, with additional assignments at the 800 level. (Same as ISP 801.) LEC.

GEOG 802. Urban Geographic Information Systems. 3 Hours.
An advanced survey of urban GIS/LIS focusing on: (1) history; (2) the wide range of applications from Automated Mapping/Facilities Management (AM/FM) to topologically related GIS; (3) generic analytical functions in both raster and vector modalities; and (4) software employed, hardware platforms, and institutional settings. A limited experience in the use of GIS is provided from exercises employing ARC/Info software. Prerequisite: Some experience with DOS based computing. LEC.

GEOG 805. History of Geographic Thought. 2 Hours.
A course to familiarize students with the history and philosophy of geography as a science and humanity. The course summarizes, reviews, and explores the ongoing relevance of 2,500 years of theoretical and methodological advancements in human and physical geography. LEC.

GEOG 806. Basic Seminar. 2 Hours.
The second of two courses required of M.A. students designed to provide experience in the development of research proposals and exposure to methodologies in geography. This course deals with approaches to geographic problems, and involves individual examination of special topics which require preparation, presentation, and critical evaluation of research proposals. LEC.

GEOG 818. Problems in Production Cartography. 1-3 Hours.
Advanced instruction in the theory and practice of producing maps and other related graphics for classroom instruction and research projects. Emphasis will be on current photo-mechanical and automated techniques. Prerequisite: By appointment. Consent of instructor. LEC.

GEOG 835. Practicum in Soil Mapping and Soil Erosion. 3 Hours.
This course is designed to give graduate students field experience in soil mapping and in the evaluation of soils for loss through processes of erosion. Prerequisite: GEOG 535 or equivalent or consent of instructor. FLD.

GEOG 858. Environmental Geographic Information Systems. 4 Hours.
An introduction to the use of GIS for environmental inventory, monitoring, and modeling. This course integrates the principles of landscape ecology with the analytical tools of GIS, remote sensing, and spatial analysis. Students will be taught GIS methodologies used to address real world problems and the use of GIS spatial analysis techniques to characterize landscapes and monitor their change. Prerequisite: GEOG 316 and GEOG 558 or equivalents, multivariate analysis recommended. LEC.

GEOG 890. Geographic Internship. 1-6 Hours.
Supervised professional experience. The student submits to the program committee a proposal describing the internship prior to enrollment. Upon acceptance, regularly scheduled meetings with the advisor provide assistance, guidance and evaluation of progress in the professional experience. A written summary of the experience or outcomes of
the research project are prepared independently by the student, a representative of the host agency, and the advisor. Total credit not to exceed six hours. Prerequisite: Twelve hours of graduate level geography courses and consent of program committee. FLD.

GEOG 898. Readings in Geography. 1-4 Hours.

GEOG 899. Master's Thesis. 1-10 Hours.

Graded on a satisfactory/unsatisfactory basis. THE.

GEOG 911. Seminar in Cartography: _______. 1-4 Hours.

Study of selected topics in cartography. Can be repeated for different topics. Prerequisite: GEOG 726 or consent of instructor. LEC.

GEOG 912. Seminar in Quantitative Methods. 2-3 Hours.

LEC.

GEOG 926. Seminar in Remote Sensing. 2-4 Hours.

Study of selected topics in remote sensing theory and application. May include independent or group research and/or development work. Topic will be specified in advance. Prerequisite: GEOG 726 or consent of instructor. LEC.

GEOG 935. Seminar in Soil Geography. 2-3 Hours.

Subject matter varies but focuses on modern concepts and trends in soil geography. Sample topics include classification, paleopedology, and soil genesis. Field trip and fee may be required. Prerequisite: GEOG 735 or consent of instructor. LEC.

GEOG 937. Seminar in Soil Geography. 2-3 Hours.

LEC.

GEOG 947. Seminar in Vegetation Geography. 1-3 Hours.

(Same as BIOL 968.) LEC.

GEOG 939. Seminar in Fluvial Systems. 2-3 Hours.

Study of selected topics in theory and method of fluvial systems. Samples include hydraulic geometry, the nature of alluvial sediments, and basin case studies. Topic will be specified in advance. LEC.

GEOG 957. Seminar in Urban and Economic Geography. 2-3 Hours.

LEC.

GEOG 958. Seminar in Geographic Information Systems. 2-4 Hours.

Study of selected topics in analysis of digital geographic data. May include research and/or developmental work. Prerequisite: GEOG 758 or equivalent, or consent of instructor. LEC.

GEOG 970. Seminar in Cultural Geography: _______. 2-3 Hours.

Study of selected topics in the theory and method of cultural geography. Samples include religious patterns, folk architecture, and place-defining novels. Topic will be specified in advance. LEC.

GEOG 972. Seminar in Political Geography. 2-3 Hours.

Study of selected topics in the theory and method of political geography. Samples include insurgent states, electoral patterns, and political ecology. Topic will be specified in advance. Prerequisite: GEOG 772 or consent of instructor. LEC.

GEOG 975. Seminar in Population Geography. 2-3 Hours.

Study of selected geographic topics and problems dealing with the distribution of human populations. Prerequisite: GEOG 775 or consent of instructor. LEC.

GEOG 980. Seminar in Geography: _______. 1-3 Hours.

LEC.

GEOG 990. Seminar in Regional Geography: _______. 1-3 Hours.

(Selected areas to be specified.) LEC.

GEOG 998. Research in Geography. 1-5 Hours.

RSH.

GEOG 999. Doctoral Dissertation. 1-10 Hours.

Graded on a satisfactory/unsatisfactory basis. THE.

Geology Courses

GEOL 101. The Way The Earth Works. 3 Hours. NE GE3N / N.

Introduction to the principles of earth science. Study of the formation, occurrence, and structure of minerals and rocks; action of streams, oceans, glaciers, and other agents in the formation and modification of the landscape; volcanism, earthquakes, and plate tectonics. Discussion of earth processes in the context of sustainable energy, environmental concerns, climate and other topical issues. This course with GEOL 103 satisfies the College laboratory science requirement. Concurrent enrollment in GEOL 103 is recommended for students taking both. Course may be offered in lecture or online format. LEC.

GEOL 102. The Way The Earth Works, Honors. 3 Hours. NE GE3N / N.

Honors section of GEOL 101. An introduction to the principles of earth science. Study of the formation, occurrence, and structure of minerals and rocks; action of streams, oceans, glaciers, and other agents in the formation and modification of the landscape; mountain building, volcanism, earthquakes, and plate tectonics. Discussion of earth processes in the context of sustainable energy, environmental concerns, climate and other topical issues. Not open to students who have taken GEOL 101. This course with GEOL 103 satisfies the College laboratory science requirement. Concurrent enrollment in GEOL 103 is recommended for students taking both. Course may be offered in lecture or online format. LEC.

GEOL 103. Geology Fundamentals Laboratory. 2 Hours. U.

A course in geologic laboratory studies. This course plus GEOL 101, GEOL 102, GEOL 105, GEOL 106, or GEOL 121 satisfies the College laboratory science requirement. Gives students practical, hands-on experience with identifying earth materials (rocks, minerals, fossils), understanding their relationships to earth processes, understanding topographic and geologic maps, interpreting results of surficial processes, and learning about deep-earth processes such as earthquakes. Includes short field trips to see geologic structures and results of local geologic processes. This lab course may be offered in on-campus lab or online format. Prerequisite: Previous or concurrent enrollment in GEOL 101, GEOL 102, GEOL 105, GEOL 106 or GEOL 121. LAB.

GEOL 105. History of the Earth. 3 Hours. NE GE3N / N.

An introduction to the physical and biological history of the earth, the methods used to decipher earth history, and the development of the geological sciences. This course with GEOL 103 satisfies the College laboratory science requirement. Concurrent enrollment in GEOL 103 is recommended for students taking both. Not open to students who have taken GEOL 106 or GEOL 304. LEC.

GEOL 106. History of the Earth Honors. 3 Hours. NE GE3N / N.

Honors section of GEOL 105. An introduction to the physical and biological history of the earth, the methods used to decipher earth history, and the development of the geological sciences. This course with GEOL 103 satisfies the College laboratory science requirement. Concurrent enrollment in GEOL 103 is recommended for students taking both. Not open to students who have taken GEOL 105 or GEOL 304. LEC.

GEOL 121. Life Through Times: DNA to Dinosaurs. 3 Hours. NB GE1/GE3N / N.

This course lead students on a journey through time to explore the interconnection between life and the geology of Earth, including our own complex relationship with the world around us. This course with GEOL 103 satisfies the College laboratory science requirement. Concurrent enrollment in GEOL 103 is recommended, but not required, for students taking both. LEC.
GEOL 171. Earthquakes and Natural Disasters. 3 Hours. GE3N / N.
Addresses the subject of natural disasters with concentration on
earthquake effects and their mitigation. Briefly treats volcanic eruptions,
tidal waves, floods, global warming, severe weather, and catastrophic
meteorite impacts from the perspective of geological and human
significance. Provides a basic background into earth-science processes.
LEC.

GEOL 177. First Year Seminar: ______. 3 Hours. GE11.
A limited-enrollment, seminar course for first-time freshmen, organized
around current issues in geology. May not contribute to major
requirements in geology. First year seminar topics are coordinated and
approved through the Office of First Year Experiences. Prerequisite: First-
time freshman status. LEC.

GEOL 302. Oceanography. 3 Hours. GE3N / N.
Basic description of oceanography: description and discussion of the
ocean as a dynamic system. Relationships between and dependence
upon the interactions of submarine topography, water chemistry, wave
action, and biota in understanding the ocean system. Review of part
that humanity plays in perturbing the natural oceanic environment.
Discussions of estuarine problems as related to the sea, cultural activities,
and rivers. Course may be offered in lecture or online format. Prerequisite:
An introductory science course. LEC.

GEOL 304. Historical Geology. 3 Hours. N.
An introduction to the physical and biological history of the Earth, the
methods used to decipher earth history, and the development of the
geological sciences. Concepts of lithostratigraphy, chronostratigraphy and
biostratigraphy, and methods of analysis of stratigraphic data focus on
the interpretation of Earth history. Prerequisite: GEOL 101 and GEOL 103.
LEC.

GEOL 311. Mineralogy and Structure of the Earth. 3 Hours. GE3N / N.
Basic identification and properties of rocks and minerals in the context of
whole-earth structure and evolution. Includes basic chemical equilibria for
rock and mineral systems and their bearing on processes involved with
formation and evolution of Earth’s crust, mantle, and core. Two lectures
and one lab per week. Prerequisite: GEOL 101, CHEM 130, and eligibility
for MATH 121 or MATH 115. LEC.

GEOL 312. Mineral Structures and Equilibria Laboratory. 1 Hour. U.
A laboratory to accompany GEOL 311. Presents more rigorous analysis of
the structures, compositions, and chemical equilibria governing
the formation and stability of common rock-forming mineral systems.
Prerequisite: GEOL 311 (may be taken concurrently), CHEM 130, and
eligibility for MATH 121 or MATH 115. LAB.

GEOL 315. Gemstones. 3 Hours. N.
The properties, occurrence, description, determination, and mineral
affinities of gems, ornamental stones, and gem materials. LEC.

GEOL 316. Geochemistry. 3 Hours. N.
The course is intended to be an introduction to all types of geochemistry.
It focuses on the chemistry of the natural world and the chemical
evolution of the Earth over geological time. The course is composed of
three modules: (a) geochemical fundamentals; (b) natural and
anthropogenically perturbed aspects of the Earth's hydrosphere and
its interaction with surficial rocks, sediments, soils, the biosphere and the
atmosphere and (c) the origin and evolution of Earth (crust-mantle-core)
and the solar system through nuclear and high temperature chemical
processes. Prerequisite: GEOL 101, CHEM 130 or 190; and eligibility for
MATH 115. LEC.

GEOL 317. First Year Seminar: ______. 3 Hours. GE11.
A limited-enrollment, seminar course for first-time freshmen, organized
around current issues in geology. May not contribute to major
requirements in geology. First year seminar topics are coordinated and
approved through the Office of First Year Experiences. Prerequisite: First-
time freshman status. LEC.

GEOL 331. Sedimentology and Stratigraphy. 4 Hours. GE3N / N.
Basic principles used in the study of sedimentology and stratigraphy.
Physical, chemical, and biological processes in sedimentary environments
applied to the recognition of the depositional environment, preservation,
and alteration of sedimentary rocks. Field and laboratory study of
sedimentary rocks with emphasis on interpretation of original depositional
environments and preservation in the stratigraphic record. Prerequisite:
GEOL 101 and GEOL 103; and GEOL 304 or taken concurrently. LEC.

GEOL 351. Environmental Geology. 3 Hours. GE3N / N.
An introductory course dealing with the implications of geologic
processes and materials for civilization. Topics to be considered
include: geologic hazards such as floods, landslides, earthquakes, and
volcanism; the availability of water, mineral, and energy resources; and
the environmental impact of resource utilization. The importance of
recognizing geologic constraints in land use planning and engineering
projects is emphasized and illustrated by examples. LEC.

GEOL 360. Field Investigation. 2 Hours. N.
Summer session. A field-geology course that provides beginning geology
students with an initial understanding of the nature of geological evidence
in the field, the breadth of geological phenomena, and the importance of
the interplay of information from many geological disciplines in
solving problems. Given at various geologically diverse locations. Fee.
Prerequisite: GEOL 101. LEC.

GEOL 391. Special Studies in Geology. 1-6 Hours. N.
Special reports upon subjects in which students have a particular interest.
Prerequisite: Fifteen hours of geology. IND.

GEOL 399. Senior Honors Research. 2-5 Hours. AE61 / N.
Normally two to five hours in any one semester with a maximum of eight
hours. An undergraduate research course, in any of the fields of geology,
open by permission of the department to seniors in the College who
have an average grade of B or higher in geology courses. Prerequisite:
Thirty hours of geology, five of which may be taken concurrently with this
course. IND.

GEOL 501. Error Analysis. 1 Hour. N.
This course covers basic error analysis as it applies to geology. The
course will emphasize the description and propagation of errors in
data collection and reduction. Subjects include: how to report data and
associated errors, error propagation in simple and complex equations,
the Normal, Gaussian, and Poisson distributions, linear and higher order
regression, and X-squared test. Prerequisite: MATH 121. LEC.

GEOL 512. Igneous and Metamorphic Petrology. 3 Hours. N.
The study of minerals, rocks and fluids within the earth's crust and mantle
to elucidate their mechanisms of formation and the pressure-temperature-
composition conditions within the earth. The course emphasizes
equilibrium thermodynamics, phase equilibria, fractionation mechanisms,
tectonic control of petrogenesis, and quantitative analysis of mineral
parageneses. Prerequisite: GEOL 311 and first semester calculus, or
permission of instructor. LEC.

GEOL 513. Petrology Laboratory. 1 Hour. U.
A laboratory course to accompany GEOL 512. Material covered will
include the use of the polarizing microscope in study of rocks in thin
sections; identification of rock-forming minerals in thin section; study of
textures as guides to the crystallization process; calculations of chemical
changes during fractional crystallization and partial melting. Students
will also make extensive study of igneous and metamorphic rocks in
hand specimens, accompanied by thin section study, with emphasis on
composition, texture, and structure. Students must co-enroll in GEOL 512.
Prerequisite: GEOL 312. Concurrent enrollment in GEOL 512 required.
LAB.
GEOL 521. Paleontology. 3 Hours. N.
A study of the structure and evolution of ancient life; the nature and diversity of life through time; the interactions of ancient organisms with their environments and the information that the study of fossils provides about ancient environments; the use of fossils to determine the ages of rocks and the timing of past events in earth history; and the patterns of extinction through time. (Same as BIOL 623.) Prerequisite: BIOL 101 or BIOL 152 or GEOL 105 or GEOL 304. LEC.

GEOL 523. Paleontology Laboratory. 1 Hour. U.
Laboratory course in the study of fossils with emphasis on the practice of paleontology and the morphology of ancient organisms. (Same as BIOL 623.) LEC.

GEOL 528. The Biology and Evolution of Fossil Plants. 3 Hours. N.
A lecture course in which fossil plants, protists and fungi are examined throughout geologic time. Emphasis will be directed at paleoecology, biogeography and the stratigraphic distribution and composition of ancient floras. (Same as BIOL 640.) Prerequisite: BIOL 413, or permission of instructor. LEC.

GEOL 529. Laboratory in Paleobotany. 1 Hour. U.
An examination of selected fossil plants throughout geological time and the techniques used to study them; laboratory will include identification and the use of plant fossils in biostratigraphy. (Same as BIOL 641.) Prerequisite: BIOL 413 or permission of instructor. Must be taken concurrently with GEOL 528. LAB.

GEOL 532. Stratigraphy. 4 Hours. AE61 / N.
A study of the principles of lithostratigraphy, biostratigraphy, and sequence stratigraphy. Methods of analysis of stratigraphic data focus on the interpretation of earth history. The stratigraphic record of North America is presented for evaluation of its geologic history. Three lectures and one laboratory per week. Required field trip. Prerequisite: GEOL 101, GEOL 521, and GEOL 331. LEC.

GEOL 534. Volcanology. 3 Hours. N.
Physical and geochemical volcanology. Considers relationship of tectonics and volcanism; types of magmas; rheology of lavas, pyroclastic density currents, and mass movements in volcanic environments; and interpretation of processes and conditions of formation of volcanic rocks from their field character. Field trips to ancient volcanic complexes. Prerequisite: GEOL 331 and GEOL 512, or permission of instructor. LEC.

GEOL 535. Petroleum and Subsurface Geology. 4 Hours. N.
A general study of the occurrence, properties, origin, and migration of petroleum. Studies of various oil fields and oil-bearing basins. Laboratory studies include well logs, subsurface mapping, and cross-sections. Prerequisite: GEOL 331, GEOL 562, and GEOL 572; or CPE 527, or permission of instructor. LEC.

GEOL 536. Geological Log Analysis. 1 Hour. U.
Application of well logging measurements to interpretation subsurface. LEC.

GEOL 537. Petroleum Reservoir Characterization. 3 Hours. N.
Geological, geophysical, and engineering characterization of a petroleum reservoir. Includes mapping; petrophysical, production, and pressure analysis; and numerical modeling. Considers economic analysis of steps to improve oil recovery. Students who have completed GEOL 837 may not take GEOL 537 for credit. Prerequisite: GEOL 535 and permission of instructor. LEC.

GEOL 541. Geomorphology. 4 Hours. N.
A critical study of landforms in relation to tectonics, climatic environment, and geologic processes. The use of geomorphic methods in the interpretation of Cenozoic history is emphasized. Laboratory exercises in analysis of field observations, maps, and photographs. Required field trip and fee. (Same as GEOG 541.) Prerequisite: GEOL 101 and GEOL 103, GEOG 104 and GEOG 105, or GEOL 304 and GEOL 103. LEC.

GEOL 551. Engineering Geology. 3 Hours. N.
Consideration of geologic factors affecting engineering projects. Topics include: techniques of site exploration, engineering properties of soil and rock, geologic conditions important in the design of major structures, and geologic information useful in land-use planning. Prerequisite: An introductory course in geology or consent of instructor. LEC.

GEOL 552. Introduction to Hydrogeology. 3 Hours. N.
Physical description of hydrogeologic media. Elementary groundwater hydraulics: analytical and graphical solutions for steady-state application. Well hydraulics and pumping tests. Basic groundwater geology. Effects of topography and geology on regional flow systems. Field and numerical delineation and analysis of groundwater flow systems and applications. Chemical characteristics of groundwaters and their relationship to aquifer geology and hydrology. Investigations of groundwater quality and contamination. Prerequisite: Two semesters each of calculus, physics, and chemistry. LEC.

GEOL 556. Introductory Field Geology. 3 Hours. AE61 / N.
Summer session. The study of the principles of field geology and the application of field methods to solve geological problems. Includes use of topographic maps and aerial photographs for geological mapping, the study of stratigraphic methods by measuring sections, and working field trips to areas of regional geological interest. Given at the University of Kansas Geology Field Camp near Canon City, Colorado. Fee. Prerequisite: GEOL 331, GEOL 360, and GEOL 562, or consent of instructor. FLD.

GEOL 561. Field Geology. 3 Hours. N.
Summer session. The application of the principles of field geology to solve complex geological problems in the field. Given at the University of Kansas Geology Field Camp near Canon City, Colorado, or at other sites as appropriate. Fee. Prerequisite: GEOL 560. FLD.

GEOL 562. Structural Geology. 4 Hours. N.
A study of primary and secondary rock-structures and their genesis. Includes techniques of structural analysis and introduces mechanics of rock deformations. Lectures, laboratory, and required field trip. Prerequisite: GEOL 311; PHSX 111, PHSX 114, or PHSX 211 and PHSX 216, and MATH 115 or MATH 121. LEC.

GEOL 572. Geophysics. 3 Hours. N.
Introductory study of gravitational, magnetic, seismic, electrical, and thermal properties of the earth. Measurements, interpretation, and applications to exploration, earth structure, and global tectonics. Prerequisite: An introductory course in geology; MATH 116 or MATH 122, and PHSX 115 or PHSX 212 and PHSX 236. PHSX 115 or PHSX 212 may be taken concurrently. LEC.

GEOL 573. Geodynamics and Plate Tectonics. 3 Hours. N.
Study of physical processes in the solid Earth and of geophysical approaches to studying Earth systems at regional and global scales. Topics include global potential fields, thermal regime, rheology and Earth deformation, earthquakes and seismic structure, plate motions and global tectonics. (Same as PHSX 528.) Prerequisite: An introductory course in geology; MATH 116 or MATH 122, and PHSX 115, PHSX 214, or PHSX 212 and PHSX 236. LEC.

GEOL 575. Seismic Exploration. 3 Hours. N.
Application of seismic reflection and refraction techniques to the description of near-surface geology and the exploration for energy and mineral resources. Theory of seismic information, data collection, data processing using computers, and geologic interpretation. Prerequisite: A
course in computer programming, either FORTRAN or C, which may be taken concurrently. An introductory geophysics course, such as GEOL 572. LEC.

GEOL 576. Potential Fields Exploration. 3 Hours. N. Use of gravity, magnetic, and electrical signals in the exploration for energy and mineral resources. Elementary potential field theory, data collection methods, data analysis, and interpretation using computers. Prerequisite: A course in computer programming, either FORTRAN or C, which may be taken concurrently. An introductory geophysics course, such as GEOL 572. LEC.

GEOL 577. Environmental Geophysics. 3 Hours. Application of the methods of geophysical exploration to evaluate, mitigate, and prevent environmental problems below the surface of the earth. Development of fundamental principles and discussion of environmental case histories using seismic, gravity, magnetic, electromagnetic, electrical, and radar methods. Prerequisite: An introductory course in geology; MATH 116 or MATH 122; and PHSX 115, or PHSX 212 and PHSX 236. LEC.

GEOL 578. Seismic Data Analysis and Interpretation. 3 Hours. N. Interpretation methods applied to seismic exploration and reservoir characterization. Topics include: rock physics, the convolutional model, synthetic seismograms, seismic response of hydrocarbon reservoirs, resolution, seismic velocity, depth conversion, seismic attributes, AVO, inversion, seismic anisotropy, 3-D 4-D interpretation, S-wave and converted wave interpretation, laboratory use of commercial seismic interpretation software. Prerequisite: GEOL 575 or consent of the instructor. LEC.

GEOL 591. Topics in Geology: ______. 1-5 Hours. N. May include lectures, discussions, readings, laboratory, and field work in geology. Will be given as needed. May be taken more than once. LEC.

GEOL 711. X-Ray Analysis. 1-2 Hours. Introduction to the theory and practice of X-ray diffraction and X-ray fluorescence analysis as applied to geological materials. Includes safety training necessary for the operation of X-ray analytical equipment in the department. Prerequisite: GEOL 311 and PHSX 115 or PHSX 212. LEC.

GEOL 712. Microstructures and Petrofabrics. 3 Hours. This course is geared towards developing a qualitative and quantitative understanding of the fundamentals of rock and mineral deformation necessary to interpret comprehensively microstructural data. Microstructures and petrofabrics contain a wealth of information on kinematics, rheology, and boundary conditions of deforming rocks, important information that often goes unnoticed and unused. This course builds on knowledge acquired in undergraduate structural geology and petrology courses and will give students the tools for a more rigorous and sophisticated evaluation of thin sections and quantitative microstructural and textural data. Required field trip. Prerequisite: GEOL 512 and GEOL 562; or consent of the instructor. LEC.

GEOL 713. Advanced Petrology. 1 Hour. Advanced topics in igneous and metamorphic petrology with emphasis on chemical and isotopic modeling. Course may be repeated, as topics covered vary. LEC.

GEOL 714. Thermochronology. 3 Hours. This advanced course is intended to provide students with an in-depth understanding of the fundamentals and an appreciation of the complexities of thermochronology. The primary focus of this course is on modern thermochronological dating methods, a quantitative understanding of noble gas diffusion, data acquisition and interpretation, numerical modeling of complex thermochronological data, and hands-on laboratory experience in the KU thermochronology facilities. Prerequisite: MATH 122 and GEOL 717; or consent of the instructor. LEC.

GEOL 715. Geochemistry. 3 Hours. Application of chemical equilibria and kinetics to geological environments and processes, with emphasis on processes involving solution equilibria. Includes introduction to thermodynamic aspects of equilibria. Prerequisite: CHEM 188 and MATH 122. LEC.

GEOL 716. Geologic Thermodynamics. 2 Hours. Classical thermodynamics with an emphasis on phase equilibria, solid-solution chemistry, and modeling of natural systems. Prerequisite: Second semester calculus, or permission of instructor. LEC.

GEOL 717. Geochronology. 2-4 Hours. Principles and applications of natural radioactive systems for geochronology and cosmochronology, including use of radiogenic isotopes as geochronological tracers. Prerequisite: GEOL 512 or consent of instructor. LEC.

GEOL 718. Stable Isotope Geochemistry. 1-3 Hours. Principles and applications of equilibria among stable isotopes in the geological environment, with emphasis on the isotopic systems of hydrogen, carbon, and oxygen. Prerequisite: GEOL 715 or consent of instructor. LEC.

GEOL 721. Micropaleontology. 3 Hours. Systematics, paleontology, evolution, and biostratigraphy of microfossils, particularly foraminifera, ostracodes, and conodonts. Preparation of material for study. Applications of micropaleontology to geologic problems. Prerequisite: GEOL 521 or BIOL 100 or 152. LEC.

GEOL 722. Paleontology. 3 Hours. Principles of ecology as applied to the interpretation of past environments. Prerequisite: GEOL 521. LEC.

GEOL 723. Paleontology Museum Apprenticeship. 1-6 Hours. N. Provides directed, practical experience in collection, management, and laboratory. (Same as BIOL 799.) LEC.

GEOL 724. Paleobiogeography. 3 Hours. The study of the coevolution of the Earth and its biota. The class will focus on using phylogenetic approaches with fossil taxa to study how tectonic change has influenced the evolution of life and also to determine what evolutionary patterns can tell us about the nature and sequence of geological events. Prerequisite: GEOL 521, or consent of the instructor. LEC.

GEOL 725. Paleontology of Lower Vertebrates. 3 Hours. General account of the osteology, geologic distribution, and evolution of the principal groups of fishes, amphibians, reptiles, and birds. Lectures and laboratory. (Same as BIOL 799.) Prerequisite: GEOL 105 or GEOL 304, or GEOL 521. LEC.

GEOL 726. Paleontology of Higher Vertebrates. 3 Hours. Evolution of mammals and anatomical modifications involved in the process as ascertained from the fossil record. Lectures and laboratory. (Same as BIOL 791.) Prerequisite: GEOL 105 or GEOL 304 or GEOL 521. LEC.

GEOL 727. Macroevolution. 3 Hours. This course will present a broad survey of topics in macroevolution including the differences between micro- and macroevolutionary patterns and processes and the manners of formulating and analyzing macroevolutionary questions. Discussions will focus on the relevance
of hierarchy theory and levels of selection; an overview of species concepts, both ontological and epistemological; and an analysis of the neo-Darwinian synthesis as related to innovations in evolutionary theory. In addition, the relevance of contingency and extinction to evolutionary theory will be emphasized. LEC.

GEOL 728. Paleopedology. 3 Hours.
Paleopedology is the study of ancient soils preserved in the geologic record. The course covers concepts of paleopedology and its applications to the interpretation of paleoenvironmental, paleoecologic, and paleohydrogeologic settings and its use in sequence stratigraphy and paleoeclimatology. Prerequisite: GEOG 535, GEOL 331, or GEOL 532; or consent of the instructor. LEC.

GEOL 729. Ichnology. 3 Hours.
Ichnology is the study of organism-substrate interactions. The class will cover concepts and applications of ichnology in the marine and continental realms, including the behavior of such organisms as microbes, plants, invertebrates, and vertebrates preserved in the geologic record as trace fossils. Ichnology is applied in geology and in the petroleum industry to interpret ancient environments, hydrogeology, ecology, and climate. Prerequisite: GEOL 331, GEOL 521, or GEOL 532; or consent of the instructor. LEC.

GEOL 731. Terrigenous Depositional Systems. 4 Hours.
Processes that operate in recent sedimentary environments, responses of sediment to those processes, and criteria for determining depositional environments of ancient sedimentary rocks. Lectures, practical exercises, and field trips. Prerequisite: GEOL 331 or GEOL 532. LEC.

GEOL 732. Carbonate Depositional Systems. 3 Hours.
Patterns and processes of contemporaneous carbonate deposition and diagenesis, depositional models; applications to interpretation of carbonate rocks. Lecture, discussion, laboratory and field trips. Prerequisite: GEOL 532 (may be taken concurrently). LEC.

GEOL 741. Advanced Geomorphology. 1-3 Hours.
Detailed discussions of processes and landforms characteristic of specific environments. Considered during separate semesters will be general methodology, and fluvial, arid regions, glacial, and shoreline geomorphology. Course may be taken more than once. (Same as GEOG 741.) Prerequisite: GEOL 541. LEC.

GEOL 751. Physical Hydrogeology. 3 Hours.
Study of fluid flow in subsurface hydrologic systems. Investigation of the ground water environment including porosity, and hydraulic conductivity and their relationship to typical geologic materials. Examination of Darcy’s law and the continuity equation leading to the general flow equations. Discussion of typical hydraulic testing methods to estimate aquifer parameters in various situations and apply these to water resource problems. Study of the basic mechanisms that determine the behavior of typical regional flow systems. (Same as CE 752.) LEC.

GEOL 753. Chemical and Microbial Hydrogeology. 4 Hours.
Lecture and discussion of chemical and microbiological controls on groundwater chemistry. Topics include thermodynamic and microbiological controls on water-rock reactions; kinetics; and microbiological, chemical and isotopic tools for interpreting water chemistry with respect to chemical weathering and shallow diagenesis. Origins of water chemistry, changes along groundwater flow paths, and an introduction to contaminant biogeochemistry will be discussed through the processes of speciation, solubility, sorption, ion exchange, oxidation-reduction, elemental and isotopic partitioning, microbial metabolic processes and microbial ecology. An overview of the basics of environmental microbiology, including cell structure and function, microbial metabolism and respiration, microbial genetics and kinetics of microbial growth will be covered. (Same as CE 753.) Prerequisite: One year of chemistry, one year of calculus, one year of biology, an introductory course in hydrogeology, or consent of the instructors. LEC.

GEOL 754. Contaminant Transport. 3 Hours.
A study of the transport of conservative and non-conservative pollutants in subsurface waters. Case studies are used to illustrate and develop a conceptual understanding of such processes as diffusion, advection, dispersion, retardation, chemical reactions, and biodegradation. Computer models are developed and used to quantify these processes. (Same as CE 754.) Prerequisite: Introductory Hydrogeology or consent of instructor. LEC.

GEOL 761. Regional Field Geology. 1-5 Hours.
A detailed field study of a carefully selected area that includes features of several phases of geology. Field trip fee. Prerequisite: GEOL 561 or equivalent and departmental approval. FLD.

GEOL 763. Tectonics and Regional Geology. 3 Hours.
Topics vary with demand and include fundamental features of plate tectonics, interpretation and distribution of regional geology of mountain belts with emphasis on tectonic setting and processes, regional geology, and tectonics of selected mountain belts. Prerequisite: GEOL 562, GEOL 512, or GEOL 331, and GEOL 572. LEC.

GEOL 771. Advanced Geophysics: ____. 1-3 Hours.
Topics to vary with demand and include heat flow, wave propagation, synthetic seismograms, groundwater exploration, geothermal exploration, electrical methods in exploration, rock mechanics-TECTONOPHYSICS, rock magnetism, geomagnetism, paleomagnetism, geophysical inverse theory, and others upon sufficient demand. May be repeated for different topics. (Same as PHSX 727.) Prerequisite: GEOL 572 or GEOL 573/PHSX 528 or consent of instructor. LEC.

GEOL 772. Geophysical Data Analysis. 3 Hours.
Fourier analysis, sampling theory, prediction and interpolation of geophysical data, filtering theory, correlation techniques, deconvolution. Examples will be chosen from various fields of geophysics. (Same as PHSX 727.) Prerequisite: MATH 250, GEOL 572, or consent of instructor. LEC.

GEOL 773. Seismology. 3 Hours.
General theory of seismic waves, wave field extrapolation (migration) by finite difference methods, construction of travel-time curves, reflection and attenuation of coefficients, earthquake source mechanism, distribution and forecasting of earthquakes. (Same as PHSX 723.) Prerequisite: MATH 250/CE 250/AE 250/CE 250/CPE 250/EECS 250/EPHX 250/ME 250 and either GEOL 572 or GEOL 573 or PHSX 528. LEC.

GEOL 775. Near-Surface Seismology. 3 Hours.
Theoretical and applied study of all aspects of near-surface reflection, refraction, and surface-wave seismology from design and acquisition to interpretation. Prerequisite: MATH 250, GEOL 572, or consent of the instructor. LEC.

GEOL 776. Ground Penetrating Radar. 3 Hours.
Theoretical and applied study of radar methods used for imaging the subsurface. Topics include EM theory relating to wave propagation through earth environments, GPR data acquisition, processing and interpretation. Prerequisite: Consent of the instructor. LAB.

GEOL 780. Conservation Principles and Practices. 3 Hours.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and
identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects will also be considered. (Same as AMS 714, BIOL 700, HIST 722 and MUSE 706.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

GEOL 781. Introduction to Museum Exhibits. 3 Hours. This course will consider the role of exhibits as an integrated part of museum collection management, research, and public service. Lecture and discussion will focus on issues involved in planning and producing museum exhibits. Laboratory exercises will provide first-hand experience with basic preparation techniques. Emphasis will be placed on the management of an exhibit program in both large and small museums in the major disciplines. (Same as AMS 700, BIOL 787, HIST 723, and MUSE 703.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

GEOL 782. The Nature of Museums. 3 Hours. The purpose of this course is to provide an overview of the kinds of museums, their various missions, and their characteristics and potentials as research, education, and public service institutions responsible for collections of natural and cultural objects. (Same as AMS 720, BIOL 788, HIST 720, and MUSE 702.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

GEOL 783. Museum Management. 3 Hours. Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as AMS 731, BIOL 785, HIST 728, and MUSE 701.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

GEOL 784. Introduction to Museum Public Education. 3 Hours. Consideration of the goals of an institution's public education services, developing programs, identifying potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as AMS 797, BIOL 784, HIST 721, and MUSE 705.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

GEOL 785. Principles and Practices of Museum Collection Management. 3 Hours. Lecture, discussion, and laboratory exercises on the nature of museum collections, their associated data, and their use in scholarly research; cataloging, storage, fogging, automated information management and related topics will be presented for museums of art, history, natural history and anthropology. (Same as AMS 730, BIOL 798, HIST 725, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

GEOL 791. Advanced Topics in Geology: _____ . 1-5 Hours. Selected offerings in geology. Intended primarily for graduate students and qualified seniors. May include lectures, discussions, reading, laboratory and field work. May be taken more than once. LEC.

GEOL 837. Geoscience and Petroleum Engineering. 3 Hours. Advanced geological, geophysical, and engineering characterization of a petroleum reservoir. Includes mapping; petrophysical, production, and pressure analysis; and numerical modeling. Considers economic analysis of steps to improve recovery. Students who have completed GEOL 537 may not take GEOL 837 for credit. LEC.

GEOL 851. Field and Laboratory Methods: Physical Hydrogeology. 1 Hour. Introduction to field and laboratory methods commonly used in physical hydrogeology. Practical experience with common water level measurement techniques, various well pumping techniques, well installation and geologic core sampling, and hydraulic testing. Prerequisite: Introductory course in hydrogeology and familiarity with computer use for data processing, or consent of instructor. LEC.

GEOL 852. Field and Laboratory Methods: Contaminant Transport. 1 Hour. Introduction to laboratory methods for evaluating reactive transport parameters, followed by development and implementation of computer models. Students will gain experience building models starting from basic transport equations using a spreadsheet platform and, where appropriate, commercial software packages. Prerequisite: GEOL 751 (may be taken concurrently) or equivalent, or consent of the instructor. LEC.

GEOL 853. Field and Laboratory Methods: Chemical Hydrogeology. 1 Hour. Practical experience in measuring unstable chemical parameters in groundwater, including pH, Eh, dissolved oxygen, temperature, alkalinity, specific conductance, and turbidity. Practical experience in collecting water samples for chemical analysis, choosing appropriate sample containers and preservation methods, and special techniques for collecting samples for determination of parameters sensitive to environmental changes such as oxygen level or temperature. Prerequisite: GEOL 753 (may be taken concurrently) or equivalent, or consent of the instructor. LEC.

GEOL 854. Field and Laboratory Methods: Geobiology. 1 Hour. Practical experience in cultivating, enumerating and visualizing groundwater microorganisms. Geochemical and molecular techniques for studying microbial community diversity, biomineralization and mineral dissolution, and biodegradation of organic contaminants will be covered. Practical experience in collecting water samples for preservation of microorganisms sensitive to environmental changes such as oxygen level or temperature. Prerequisite: GEOL 753 (may be taken concurrently) or equivalent, or consent of the instructor. LEC.

GEOL 891. Special Studies in Geology. 1-5 Hours. May be repeated. LEC.

GEOL 899. Master's Thesis. 1-12 Hours. THE.

GEOL 921. Advanced Invertebrate Paleontology: _____ . 1-3 Hours. Detailed study of systematics, morphology, stratigraphic distribution and paleoecology of major groups of organisms in the fossil record. Specific group or groups covered will vary according to student and faculty needs and interests. May be repeated. Prerequisite: An introductory course in invertebrate paleontology. LEC.

GEOL 932. Carbonate Petrology. 3 Hours. Study of the physical and chemical factors important in the genesis and diagenesis of carbonate rocks. Includes the application of principles learned from research on modern marine environments to the interpretation of ancient carbonates. Various analytical techniques are covered with emphasis on thin section petrography. Prerequisite: GEOL 331 and GEOL 732. LEC.

GEOL 933. Sandstone Petrology. 3 Hours. Description, classification, and interpretation of sedimentary rocks, emphasizing petrographic methods applied to terrigenous rocks and interpretation of provenance of sedimentary sequences. Prerequisite: GEOL 511 and GEOL 531 or GEOL 532. LEC.
GEOL 991. Seminar in: ______. 1-5 Hours.
A review of the principles of the geological sciences. Fields considered are: geomorphology, igneous petrology, metamorphic petrology, invertebrate paleontology, groundwater, geochemistry, stratigraphy, sedimentation, micropaleontology, mineralogy, structural geology, and geophysics. Several may be taken concurrently. May be taken more than one semester. LEC.

GEOL 999. Doctoral Dissertation. 1-12 Hours.
THE.

Germanic LanguagesLiteratures Courses

DANE 100. Danish Reading Course. 3 Hours. U.
Special course designed to enable graduate students to develop a reading knowledge of Danish as a research skill. Enrollment for undergraduate credit is required. Does not satisfy any part of the undergraduate language requirement. Not open to native speakers of Danish. LEC.

DANE 101. Danish Reading Course II. 3 Hours. U.
Continuation of DANE 100 and introduction to reading Norwegian and Swedish. Not open to native speakers of Danish. Prerequisite: DANE 100 or equivalent. LEC.

DANE 104. Elementary Danish I. 5 Hours. U.
Essentials of grammar, practice in speaking, reading, and writing Danish. Five hours of recitation per week. Not open to native speakers of Danish. LEC.

DANE 105. Elementary Danish I, Honors. 5 Hours. H.
Course content similar to DANE 104, with additional work to expand the student's cultural context and understanding. Not open to native speakers of Danish or students who have completed DANE 104. Prerequisite: Open only to students admitted to the University Honors Program or by permission of instructor. LEC.

DANE 108. Elementary Danish II. 5 Hours. U.
Continuation of DANE 104, with additional work to expand the student's cultural context and understanding. Not open to native speakers of Danish or students who have completed DANE 104. Prerequisite: Open only to students who received a grade of A in DANE 104 or an A or B in DANE 105. LEC.

DANE 109. Elementary Danish II, Honors. 5 Hours. H.
Course content similar to DANE 108, with additional cultural study. Not open to native speakers of Danish or students who have completed DANE 108. Prerequisite: Open to students who received a grade of A in DANE 104 or an A or B in DANE 105. LEC.

DANE 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Danish. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

DANE 212. Intermediate Danish I. 3 Hours. U.
A continuation of DANE 108. Structured grammar review, composition, conversation with readings of literary and cultural texts. Not open to native speakers of Danish. Prerequisite: DANE 108 or permission of instructor. LEC.

DANE 213. Intermediate Danish I, Honors. 3 Hours. H.
Course content similar to DANE 212, with additional cultural study. Not open to native speakers of Danish or students who have completed DANE 212. Prerequisite: Completion of DANE 108 with a grade of A, or DANE 109 with a grade of A or B. LEC.

DANE 216. Intermediate Danish II. 3 Hours. U.
A continuation of DANE 212. Structured grammar review, composition, conversation with readings of literary and cultural texts. Not open to native speakers of Danish. Prerequisite: DANE 212 or permission of instructor. LEC.

DANE 217. Intermediate Danish II, Honors. 3 Hours. H.
Course content similar to DANE 216, with additional cultural study. Not open to native speakers of Danish or students who have completed DANE 216. Prerequisite: Completion of DANE 212 with a grade of A, or DANE 213 with a grade of A or B. LEC.

DANE 220. Intensive Danish. 16 Hours. U.
This course is designed to teach speaking, reading, writing, and comprehension skills of first and second year Danish in one semester. Classes are held for four hours a day Monday through Friday (8:30 a.m. - 12:20 p.m.). There are intensive drills in grammar, integrated language lab work, and homework assignments. Not open to native speakers of Danish. Prerequisite: Admission to Danish Institute at the University of Kansas. LEC.

DTCH 100. Dutch Reading Course. 3 Hours. U.
Special course designed to enable graduate students to develop a reading knowledge of Dutch as a research skill. Enrollment for undergraduate credit is required. Does not satisfy any part of the undergraduate language requirement. Not open to native speakers of Dutch. LEC.

DTCH 101. Dutch Reading Course II. 3 Hours. U.
Continuation of DTCH 100. Not open to native speakers of Dutch. Prerequisite: DTCH 100 or equivalent. LEC.

DTCH 104. Elementary Dutch I. 5 Hours. U.
Essentials of grammar, practice in speaking, reading, and writing Dutch. Five hours of recitation per week. Not open to native speakers of Dutch. LEC.

DTCH 105. Elementary Dutch I, Honors. 5 Hours. H.
Course content similar to DTCH 104, with additional work to expand the student's cultural context and understanding. Not open to native speakers of Dutch or students who have completed DTCH 104. Prerequisite: Open only to students admitted to the University Honors Program or by permission of instructor. LEC.

DTCH 108. Elementary Dutch II. 5 Hours. U.
Continuation of DTCH 104, with additional work to expand the student's cultural context and understanding. Not open to native speakers of Dutch or students who have completed DTCH 104. Prerequisite: Open only to students who received a grade of A in DTCH 104 or an A or B in DTCH 105. LEC.

DTCH 109. Elementary Dutch II, Honors. 5 Hours. H.
Course content similar to DTCH 108, with additional cultural study. Not open to native speakers of Dutch or students who have completed DTCH 108. Prerequisite: Open to students who received a grade of A in DTCH 104 or an A or B in DTCH 105. LEC.

DTCH 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Dutch. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

DTCH 212. Intermediate Dutch I. 3 Hours. U.
A continuation of DTCH 108. Structured grammar review, composition, conversation, with readings of literary and cultural texts. Three class meetings per week. Not open to native speakers of Dutch. Prerequisite: DTCH 108 or equivalent. LEC.
DTCH 213. Intermediate Dutch I, Honors. 3 Hours. U.
Course content similar to DTCH 212, with additional cultural study. Three class meetings per week. Not open to native speakers of Dutch. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

DTCH 216. Intermediate Dutch II. 3 Hours. U.
A continuation of DTCH 212. Structured grammar review, composition, conversation, with readings of literary and cultural texts. Three class meetings per week. Not open to native speakers of Dutch. Prerequisite: DTCH 212 or equivalent. LEC.

DTCH 217. Intermediate Dutch II, Honors. 3 Hours. U.
Course content similar to DTCH 216, with additional cultural study. Three class meetings per week. Not open to native speakers of Dutch. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

DTCH 453. Investigation and Conference: ______. 1-3 Hours. H/W.
Independent study and directed reading on special topics. Permission of the instructor who will supervise the student's work is required. Not open to native speakers of Dutch. IND.

GERM 100. German Reading Course I. 3 Hours. U.
Primarily for graduate students in other departments but also open to seniors planning to pursue graduate study. Fundamentals of grammar and reading texts of medium difficulty. Does not count toward undergraduate language requirement. Previous study of German not necessary. Not open to native speakers of German. LEC.

GERM 101. German Reading Course II. 3 Hours. U.
Continuation of GERM 100. Advanced grammar and reading advanced texts in the students' respective fields. Does not count toward undergraduate language requirement. Not open to native speakers of German. Prerequisite: GERM 100 or permission of instructor. LEC.

GERM 104. Elementary German I. 5 Hours. AE42 / U.
Introductory German; no previous German required. Development of students' balanced knowledge of the German language and culture, including the ability to understand and produce short spoken, written, and multimedia texts on everyday topics and to interpret, compare, and contrast German and American cultural phenomena. Emphasis on interaction. Not open to native speakers of German. Students who complete this course successfully should take GERM 108. LEC.

GERM 108. Elementary German II. 5 Hours. AE42 / U.
Continuation of GERM 104. Further development of students' balanced knowledge of the German language and culture, including the ability to understand and produce short spoken, written, and multimedia texts on everyday topics and to interpret, compare, and contrast German and American cultural phenomena. Emphasis on interaction. Not open to native speakers of German. Students who complete this course successfully should take GERM 201. Prerequisite: GERM 104 or placement by examination. LEC.

GERM 111. Introduction to German I. 3 Hours. U.
Introduction to German for special purposes; no previous German required. Provides basic familiarity with the German language, focusing on speaking and reading skills and the essentials of German grammar. Introduction to the culture of the German-speaking world. Three class hours per week; may be delivered by video conference or face-to-face. Does not satisfy any KU language requirement. Prerequisite: GERM 111 or permission of instructor. LEC.

GERM 112. Introduction to German II. 3 Hours. U.
Continuation of GERM 111. Further development of basic familiarity with the German language, focusing on speaking and reading skills and the essentials of German grammar. Continued exploration of the culture of the German-speaking world. Three class hours per week; may be delivered by video conference or face-to-face. Does not satisfy any KU language requirement. Prerequisite: GERM 111 or permission of instructor. LEC.

GERM 113. Introduction to German III. 1.5 Hour. U.
Continuation of GERM 112. Further development of basic familiarity with the German language, focusing on speaking and reading skills and the essentials of German grammar. Continued exploration of the culture of the German-speaking world. Three class hours per week; may be delivered by video conference or face-to-face. Does not satisfy any KU language requirement. Prerequisite: GERM 112 or permission of instructor. LEC.

GERM 124. German Cinema in Context. 3 Hours. HL AE42 / H.
Taught in English. Screening and analysis of German films from the early 20th century to the present. Readings, lectures, and discussions on the films' sources, ideologies, techniques, and artistic achievements. Does not count toward the German major or minor. LEC.

GERM 125. German Cinema in Context (Honors). 3 Hours. HL AE42.
Course content similar to GERM 124. Taught in English. Screening and analysis of German films from the early 20th century to the present. Readings, lectures, and discussions on the films' sources, ideologies, techniques, and artistic achievements. Does not count toward German major or minor. LEC.

GERM 128. Introduction to the Arts in German-Speaking Europe. 3 Hours. H.
Taught in English. Exploration of the arts in German-speaking Europe: major cultural periods, movements, art forms, and people (artists, architects, composers, writers, filmmakers) from the Middle Ages to the present. Consideration of the arts within the larger European historical and cultural context from which they emerged. Does not count toward the German major or minor. This course is offered at the 100 and 300 levels with additional assignments at the 300-level. Not open to students who have completed GERM 328. LEC.

GERM 130. German-Speaking Europe and German-Speaking Europeans. 3 Hours. H.
A survey of contemporary German-speaking Europe that covers topics such as geography, the environment, technology, the arts, music, film, literature, politics, immigration, language, religion, customs. Focus on Germany, Austria, Switzerland, Belgium, Luxembourg, Liechtenstein. Taught in English. Does not count toward the German Studies major or minor. LEC.

GERM 132. The City of Berlin in German Culture. 3 Hours. H.
Taught in English. Introduction to Berlin within the context of major German and European historical, social, intellectual, and artistic developments since 1800. Exploration of complex epochs such as the Bismarck, Nazi, Cold War, and post-unification eras through journalism, literature, sociological writings, and film. Does not count toward German major or minor. This course is offered at the 100 and 300 levels with additional assignments at the 300-level. Not open to students who have completed GERM 332. LEC.

GERM 136. The German Transatlantic Experience. 3 Hours. HT AE41 / U.
Taught in English. Introduction to the migration of German-speaking Europeans to North America, 17th century-present. Consideration of European and North American factors motivating migration, the journey to the New World, the experiences of immigrants and their descendants, and the ways in which German-speaking Europeans shaped the multicultural history of America. LEC.
GERM 148. Germanic Mythology, Religion, and Folklore. 3 Hours. H/W.
Taught in English. Introduction to the pagan myths and beliefs of Teutonic antiquity and their survival in the popular traditions of Germanic countries, within the framework of comparative mythology, archaeology, and anthropology. Does not count toward the German major or minor. LEC.

GERM 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in German. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

GERM 201. Intermediate German I. 3 Hours. AE42 / U.
Continuation of GERM 108. Further development of students' balanced knowledge of the German language and culture, including the ability to understand and produce short spoken, written, and multimedia texts in different genres and to interpret, compare, and contrast German and American cultural phenomena. Emphasis on interaction. Not open to native speakers of German. Students who successfully complete this course should take GERM 202. Prerequisite: GERM 108 or placement by examination. LEC.

GERM 202. Intermediate German II. 3 Hours. AE42 / U.
Continuation of GERM 201. Further development of students' balanced knowledge of the German language and culture, including the ability to understand and produce short spoken, written, and multimedia texts in different genres and to interpret, compare, and contrast German and American cultural phenomena. Emphasis on interaction. Not open to native speakers of German. Students who successfully complete this course should take GERM 301. Prerequisite: GERM 201 or placement by examination. LEC.

GERM 203. Introduction to Business German: Deutsch im Berufsalltag. 3 Hours. AE42 / H.
Continuation of GERM 201; completes language proficiency sequence. Further development of students' balanced knowledge of the German language and culture, including the ability to understand and produce short spoken, written, and multimedia texts on the topics related to professional communication and to interpret, compare, and contrast German and American business cultural phenomena. Emphasis on interaction. Recommended for students planning to take GERM 352 and GERM 462. Not open to native speakers of German. Prerequisite: GERM 201 or placement by examination. LEC.

GERM 220. Special Studies in Germanic Languages. 1-5 Hours. U.
Credits awarded for elementary instruction in a Germanic language while studying abroad. Transfer credits must be arranged through the KU Office of Study Abroad, with permission from the departmental undergraduate advisor. May be repeated for credit if content varies. LEC.

GERM 222. Special Studies in German: _____. 1-3 Hours. H/W.
Credits awarded for the study of special topics in German while studying abroad. Transfer credits must be arranged through the KU Office of Study Abroad, with permission from the departmental undergraduate advisor. May be repeated for credit if content varies. LEC.

GERM 301. High Intermediate German I. 3 Hours. AE42 / H/W.
Continuation of GERM 202. Further development of students' use of German through reading and discussion of literary and non-literary texts (spoken, written, multimedia, combined with intensive grammar review. Introduction to expressive functions of German with emphasis on spoken and written communication. Not open to native speakers of German. Students who complete this course successfully should take GERM 302. Prerequisite: GERM 202 or placement by examination. LEC.

GERM 302. High Intermediate German II. 3 Hours. AE42 / H/W.
Continuation of GERM 301. Refinement and expansion of students' use of German. Reading and discussion in German of literary and non-literary texts (spoken, written, multimedia), combined with continued intensive grammar review. Emphasis on better understanding German grammatical structures and acquisition of vocabulary. Not open to native speakers of German. Students who complete this course successfully should take GERM 401. Prerequisite: GERM 301 or placement by examination. LEC.

GERM 315. German Literature and the Modern Era. 3 Hours. H.
Introduction in English to German writers 1750-present. Discussion of themes such as technology, modern and postmodern developments, gender, war, politics, and culture in German-speaking Europe. Readings include works in translation by influential German writers. Open to first-year students and non-majors; qualifies for major or minor credit when taken with GERM 316, a one-hour discussion section. GERM 315 and GERM 316 are required for admission to all courses beyond GERM 402 (except GERM 444 and GERM 462). LEC.

GERM 316. Discussion Section for German Literature and the Modern Era. 1 Hour. H.
Discussion section to be taken with GERM 315: German Literature and the Modern Era. Introduction to critical German vocabulary for discussing German-language literature in its historical and cultural context. Prerequisite: GERM 202 or placement by examination. GERM 315 qualifies for major or minor credit when taken with GERM 316. LEC.

GERM 320. Border Crossings in German Culture. 3 Hours. HT AE42.
Taught in English. Exploration of writers, filmmakers, and artists who have emigrated from, or migrated to German-speaking Europe. Emphasis on both their transnational impact and their representations of border crossings. Topics may include exile communities before, during, and after World War II and multiculturalism in contemporary Germany, Austria, and Switzerland. Does not count toward German major or minor. LEC.

GERM 324. Magic, Monsters and the Occult in German Literature. 3 Hours. HL AE42.
Taught in English. Reading and discussion of fictional and non-fictional works by German writers that address topics such as magic, monsters, the occult sciences, the Faust legend and pact with the devil, and the vampire. Consideration of the works' influence on other nations' literatures. Does not count toward the German major or minor. LEC.

GERM 325. Magic, Monsters, and the Occult in German Literature, Honors. 3 Hours. HL / H.
Taught in English. For centuries German scientists, philosophers and poets have produced groundbreaking literature that has featured magic, monsters and the occult sciences. German poets introduced popular themes, such as the Faust legend and the pact with the devil, and they introduced one of the most popular monsters into literature - the vampire. In this course we read and discuss fictional and nonfictional works by German authors that address these themes, and we discuss the influence that these works have had on other nations’ literatures. Does not fulfill any requirement in the German major or minor. Prerequisite: Membership in the University Honors Program or permission of instructor. LEC.

GERM 328. The Arts in German-Speaking Europe. 3 Hours. HL AE42.
Taught in English. Exploration of the arts in German-speaking Europe: major cultural periods, movements, art forms, and people (artists, architects, composers, writers, filmmakers) from the Middle Ages to the present. Consideration of the arts within the larger European historical and cultural context from which they emerged. Does not count toward the German major or minor. This course is offered at the 100 and 300 levels with additional assignments at the 300-level. Not open to students who have completed GERM 128. LEC.
GERM 330. Topics in: _____ 3 Hours. H.
Taught in English. Interdisciplinary study of selected aspects of the society or culture of German-speaking Europe or of the European experience. Does not count toward the German major or minor. LEC.

GERM 332. Berlin in German Culture. 3 Hours. HL AE42.
Taught in English. Introduction to Berlin within the context of major German and European historical, social, intellectual, and artistic developments since 1800. Exploration of complex epochs such as the Bismarck, Nazi, Cold War, and post-unification eras through journalism, literature, sociological writings, and film. Does not count toward German major or minor. This course is offered at the 100 and 300 levels with additional assignments at the 300-level. Not open to students who have completed GERM 132. LEC.

GERM 333. German Conversation and Idioms. 3 Hours. H.
Intensive practice in conversational German with instruction in proper pronunciation as well as an introduction to idiomatic usage. Only for students in the KU Summer Language Institute in Holzkirchen, Germany. Prerequisite: GERM 202 or equivalent fourth -semester German course. LEC.

GERM 335. Love and the German Middle Ages. 3 Hours. H.
Taught in English. Introduction to German conceptions of love, marriage, and adultery in medieval and early modern German-speaking Europe. Exploration of the German contribution to discourse of love through theoretical, literary, and legal texts, as well as through visual and material culture. Examination of German discourse within the broader European context, and of similarities, differences, and continuities between medieval and modern constructs. Does not count toward German major or minor. LEC.

GERM 352. Business German: Deutsch Fur Den Beruf. 3 Hours. H/W.
Extensive practice in business communication: terminology, texts and correspondence, oral practice in business situations. Not open to native speakers of German. Prerequisite: GERM 202 or placement by examination. LEC.

GERM 353. German Conversation. 3 Hours. H/W.
Further development of practical conversational skills for students with intermediate proficiency in German. Discussion of topics from everyday German life and current affairs, based on German newspapers and magazines. May be repeated but counts only once toward the major or minor. Not open to native speakers of German. Prerequisite: GERM 202. LEC.

GERM 375. Topics in Film of German-Speaking Europe: _____ 3 Hours. H.
Examination of topics such as Expressionism, Turkish-German culture in contemporary German film, popular filmmaking, post-unification film, German literature as film, German film and national identity. Topics and periods vary. Prerequisite: GERM 302. LEC.

GERM 400. Introduction to German Literary Masterpieces. 3 Hours. H/W.
For students enrolled in the KU Summer Language Institute in Germany. Selected works of major German Language writers of the 19th and 20th centuries. Not open to native speakers of German. Prerequisite: GERM 302. LEC.

GERM 401. Advanced German I. 3 Hours. H.
Continuation of GERM 302. Expansion and refinement of proficiency in German (speaking, listening, reading, writing), increased understanding of German grammatical structures, development of a more sophisticated vocabulary, and introduction to stylistics through discussion and analysis of literary and nonliterary texts. Students successfully completing GERM 401 may take all other GERM courses at the 400 and 500 levels. Prerequisite: GERM 302. LEC.

GERM 402. Advanced German II. 3 Hours. H.
Continuation of GERM 401. Development of advanced proficiency in German through analysis and discussion of literary and nonliterary texts and practice in advanced composition. Emphasis in both discussions and papers on style and rhetoric and on developing skill in textual analysis. Focus on advanced German grammar and on style and idiomatic expression in spoken and written German. Prerequisite: GERM 401. LEC.

GERM 411. German Culture 1150-1750. 3 Hours. AE61 / H.
Exploration of major cultural periods and movements within the framework of historical and political change, with investigation of themes such as nation and national identity, founding myths, geography, and language. Study of forms of culture in German-speaking Europe, including visual art, music, literature, architecture, and the press. Prerequisite: GERM 316 and GERM 401. LEC.

GERM 412. German Culture 1750-Present. 3 Hours. AE61 / H.
Exploration of major cultural periods and movements 1750-present within the framework of historical and political change, with investigation of themes such as nation and national identity, founding myths, geography, and language. Study of forms of culture in German-speaking Europe, including visual art, music, literature, architecture, and the press. Prerequisite: GERM 316 and GERM 401. LEC.

GERM 453. Investigation and Conference: _____ 1-3 Hours. H/W.
Independent study and directed reading on special topics. Permission of the instructor who will supervise the student's work is required. Not open to native speakers of German. IND.

GERM 462. The German Business Environment. 3 Hours. H/W.
Introduction to German business practices, including basic information about German economic and corporate life. Especially designed for students intending to participate in an internship with a German company and those who wish to enhance their knowledge of basic business German. Taught in German. Not open to native speakers of German. Prerequisite: One 300-level German course. LEC.

GERM 475. Topics in German Studies: _____ 3 Hours. H.
Exploration of cultural forms such as literature, film, philosophy, social institutions, linguistics, the arts, and the press. Examination of how cultural meaning is produced and interpreted. Topics vary, and course may address topics across a narrow or broad time frame. May be repeated if content varies. Prerequisite: GERM 316 and GERM 401. LEC.

GERM 480. Literature and Culture of German-Speaking Europe 1150-1750. 3 Hours. AE61 / H.
Exploration of medieval and early modern literature within the framework of major cultural movements and political, and economic change. Prerequisite: GERM 316 and GERM 401. LEC.

GERM 481. Literature and Culture of German-Speaking Europe 1750-1830. 3 Hours. AE61 / H.
Exploration of literature within the framework of major cultural movements and historical, political, and economic change. Prerequisite: GERM 316 and GERM 401. LEC.

GERM 482. Literature and Culture of German-Speaking Europe 1830-1918. 3 Hours. AE61 / H.
Exploration of literature within the framework of major cultural movements and historical, political, and economic change. Prerequisite: GERM 316 and GERM 401. LEC.
GERM 483. Literature and Culture of German-Speaking Europe 1918-Present. 3 Hours. AE61 / H.
Exploration of literature within the framework of major cultural movements and historical, political, and economic change. Prerequisite: GERM 316 and GERM 401. LEC.

GERM 501. Advanced German III. 3 Hours. H.
Focus on usage-based grammar of contemporary German. Extensive reading and analysis of grammatical structures in context and integration of form, meaning, and use. Exploration of grammatical structures using contemporary electronic textual analysis tools. Prerequisite: GERM 402. LEC.

GERM 550. German Language Seminar: History of the German Language. 3 Hours. H.
Introduction to basic concepts of German philology and historical linguistics and exploration of the development of a national German language. Prerequisite: GERM 316 and GERM 401. LEC.

GERM 560. German Language Seminar: Structure of the German Language. 3 Hours. H.
This course provides an overview of the structure of modern standard German. Students will explore different levels of the linguistic system of German (including phonology, morphology, and syntax) and complete practical exercises. Prerequisite: GERM 316 and GERM 401. LEC.

GERM 575. Topics in Genre: ____. 3 Hours. H.
Study of the definition, style, form, and content of a specific literary genre in German-language literature and the social, cultural, political, and economic factors that led to its emergence. Consideration of the genre's suitability for particular writers or periods. Topic and period vary. May be repeated if content varies. Prerequisite: GERM 316 and GERM 401. LEC.

GERM 579. Investigation and Conference: ____. 1-3 Hours. AE61 / H/W.
Independent study and directed reading on special topics. Permission of the instructor who will supervise the student's work required. Prerequisite: GERM 316 and GERM 401. LEC.

GERM 580. Senior Capstone Course: German-Speaking Europe Today. 3 Hours. AE61 / H.
Focus on synthesizing students' knowledge of the history, culture, and politics of German-speaking Europe 1945-present. Consideration of scholarly articles, journalism, essays, literary texts, film, and the arts on topics including cultural identity in post-unified Germany; European integration; current debates and controversies; political parties and leading political figures; role of literature, film, music, visual arts, media, and popular culture; role of universities. Required of all German majors in senior year. Prerequisite: GERM 316, GERM 401, and senior standing. LEC.

GERM 598. Research for Departmental Honors. 3 Hours. H.
Research for a departmental honors project, on a topic chosen in conjunction with the faculty advisor. Emphasis on independent study and writing. Open to students with previous coursework in German at the 400 level, an overall 3.0 GPA, and at least a B+ average in advanced work in German. Prerequisite: GERM 316, GERM 401, senior standing, and permission of Undergraduate Advisor. LEC.

GERM 599. Departmental Honors Project. 3 Hours. H.
Continuation of GERM 598. Course consists of completion of Departmental Honors project. Quality of project determines whether student receives credit only or Honors in German. Prerequisite: GERM 598. LEC.

GERM 614. Course in Representative Authors: ____. 3 Hours. AE61 / H.
Readings and discussions in German of selected literary works by a major author (e.g., Goethe, Heine, Fontane, Brecht, Kafka, Grass, etc.). May be repeated. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416 and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent. LEC.

GERM 616. Topics in German Literature: ____. 3 Hours. AE61 / H/W.
Readings and discussions in German of selected literary works on a particular topic or theme (e.g., nature, women, art and literature, etc.). May be repeated. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416, and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent. LEC.

GERM 618. Topics in German Language and Linguistics: ____. 3 Hours. AE61 / H/W.
Readings and discussions in German in an area of specialized language or linguistic study (e.g., lexical fields, modern German dialects, etc.). May be repeated. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416, and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent. LEC.

GERM 620. Topics in German Culture and Folklore: ____. 3 Hours. AE61 / H/W.
Readings and discussions in German on some aspect of German culture or folklore, including Landeskunde (study of contemporary Germany). May be repeated. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416, and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent. LEC.

GERM 625. Idiomatic Usage in Modern Colloquial and Literary German. 3 Hours. AE61 / H/W.
Practical exercises in the systematic study of idioms and synonyms, designed to foster a more discriminating and effective usage of German. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416 and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent. LEC.

GERM 628. Translation into German (Advanced). 3 Hours. AE61 / H/W.
Exercises in the translation of expository and stylistically sophisticated texts from various fields. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416 and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent. LEC.

GERM 630. Advanced German Grammar. 3 Hours. AE61 / H/W.
Recommended for students intending to teach German. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416 and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent. LEC.

GERM 632. Deutscher Stil (Advanced German Composition). 3 Hours. AE61 / H/W.
Training in writing reports and seminar papers in German. Recommended for students intending to do graduate work in German. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416 and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent. LEC.

GERM 681. Language Teaching for Oral Proficiency. 1 Hour. AE61 / U.
A summer course designed principally for secondary school language teachers. Provides an orientation to proficiency-based models in foreign language instruction, national standards in the rating of foreign language proficiency, and curriculum development sessions which address issues of articulation in foreign language curricula. (Not applicable toward a
major or graduate degree in German.) (Same as FREN 681 and SPAN 681.) LEC.

**GERM 700. Introduction to Graduate Studies in German. 3 Hours.**
An introduction to the skills required of students enrolled in graduate degree programs in German Studies; areas covered include 1) introduction to literary theory and criticism, 2) bibliography and research methods, including database management software, 3) preparation and presentations of a research/conference paper, 4) technology training, including web design, on-line portfolio, and digital humanities, and 5) professional ethics and awareness of the academic market and alternative careers. We will also be working on practical, professionally useful goals, such as how to (better) make use of technology, how to create a CV and modify it for different positions, how to write an abstract, and how to produce a conference paper. Course requirements will include a variety of smaller assignments and two larger projects, a web-based professional portfolio and an 8 to 10-page conference paper. LEC.

**GERM 701. Introduction to the Study of Literature. 3 Hours.**
Introduction to methods of literary research and presentation of seminar papers. Exercises in the use of basic guides to the study of German language and literature, in the documentation of scholarly research, and in the writing of interpretive essays, based on reading and discussion of selected works from different periods of the departmental "Basic Reading List. LEC.

**GERM 703. Methods of Literary Criticism. 3 Hours.**
Differentiation of critical methods. Exercises in textual criticism. LEC.

**GERM 704. German Stylistics. 3 Hours.**
Stylistic analysis of literary texts; writing in German. LEC.

**GERM 705. German Phonetics. 3 Hours.**
A systematic study of German phonetics. Prerequisite: Graduate standing or consent of instructor. LEC.

**GERM 710. Workshop for M.A. Students. 1 Hour.**
Discussion of policies in the M.A. program, examinations, thesis proposals, writing of theses, grant proposals, conference presentations, publications of scholarship, and entrance into the academic job market. Required of all M.A. students in the first year in the program. Does not count toward completion of 30 hours of course work for the M.A. RSH.

**GERM 711. History of the German Language. 3 Hours.**
A comprehensive introduction to the basic concepts of German philology and various aspects of historical linguistics, including the nature of language and linguistic change, discoveries of the pioneer philologists of the 19th century regarding the prehistory of German, and the beginnings of a national German language. LEC.

**GERM 712. The Structure of Modern Standard German. 3 Hours.**
A comprehensive introduction to the structure and usage of contemporary German, including phonetics, phonology, morphology, syntax, text linguistics, semantics, pragmatics, and language variation. Students will listen to lectures, read texts on German linguistics, participate in discussions, and work extensively on linguistic problems involving German. LEC.

**GERM 716. Topics in German Literature: ______. 3 Hours.**
Intensive study of a selected topic in German literature. May be repeated. Offered only in conjunction with GERM 616 when taught by a Max Kade Distinguished Visiting Professor. Graduate students will be assigned additional work. LEC.

**GERM 718. Topics in German Language and Linguistics: ______. 3 Hours.**
Intensive study of a selected topic in German language and linguistics. May be repeated for credit. LEC.

**GERM 721. Introduction to Middle High German Literature. 3 Hours.**
The elements of Middle High German as required for reading medieval texts in the original. Intensive reading and literary study of at least one text in full. LEC.

**GERM 732. Early Modern Period. 3 Hours.**
Reading and discussion of major literary works of the period; combined with lectures and background readings on literary, cultural, and political history. LEC.

**GERM 734. Age of Goethe. 3 Hours.**
Reading and discussion of major literary works in the period; combined with lectures and background readings on literary, cultural, and political history. LEC.

**GERM 736. Post-Romantic Nineteenth Century. 3 Hours.**
Reading and discussion of major literary works in the period; combined with lectures and background readings on literary, cultural, and political history. LEC.

**GERM 738. Twentieth Century. 3 Hours.**
Reading and discussion of major literary works in the period; combined with lectures and background readings on literary, cultural, and political history. LEC.

**GERM 740. Introduction to the Culture of German-Speaking Central Europe. 3 Hours.**
An introduction to major cultural traditions, currents, and specific aspects that shaped and continue to characterize modern Germany, Austria and Switzerland. LEC.

**GERM 751. Topics in German Studies: ______. 3 Hours.**
Course covers key topics in German Studies and represents the expertise of faculty in the department as well as department-affiliated faculty. Topics will vary from semester to semester and instructor to instructor to allow flexibility for in-depth analysis of particular topics. May be repeated as topics vary. LEC.

**GERM 753. Investigation and Conference: ______. 1-6 Hours.**
To be taken only in exceptional cases. Permission of the instructor who will supervise the student’s work is required. RSH.

**GERM 754. Studies in Humanism, Renaissance, and Reformation Literature: ______. 3 Hours.**
LEC.

**GERM 755. Studies in Baroque Literature: ______. 3 Hours.**
LEC.

**GERM 756. Studies in Enlightenment Literature: ______. 3 Hours.**
LEC.

**GERM 760. Studies on Writers of the Age of Goethe: ______. 3 Hours.**
LEC.

**GERM 762. Studies in Romanticism: ______. 3 Hours.**
LEC.

**GERM 764. Studies in the Literature of the 19th Century: ______. 3 Hours.**
LEC.

**GERM 766. Studies in Literature since 1890: ______. 3 Hours.**
LEC.

**GERM 800. Seminar: Teaching German as a Second Language. 3 Hours.**
Introduction to selected aspects of second-language acquisition, foreign-language pedagogy, and contrastive grammar, with the major concentration on practical guidance in teaching elementary German, in test preparation and grading, and in the use of equipment. LEC.
GERM 801. Practicum in GTAs. 1 Hour.
Discussion of matters relating to the teaching of German in specific courses. Required of all GTAs in each semester of teaching, unless enrolled in GERM 800. Does not count toward completion of 30 hours of course work for the M.A. or 27 hours of course work for the Ph.D. IND.

GERM 822. Survey of Medieval German Literature. 3 Hours.
Text-oriented study of the literature of 750-1500 with selected readings in the original and in translation. Prerequisite: GERM 721. LEC.

GERM 823. Readings in Middle High German Epics: _____. 3 Hours.
Reading and literary analysis of one of the following: Nibelungenlied, Erec and Iwein, Tristan, Parzival. Prerequisite: GERM 721. LEC.

GERM 824. Readings in Middle High German Lyrics. 3 Hours.
Reading and literary analysis of one of the following: Minnesangs Fruehling, Walther von der Vogelweide. Prerequisite: GERM 721. LEC.

GERM 851. Studies in Germanic Philology: _____. 3 Hours.
Topics to be announced. Emphasis on studies in etymology, semantics, vocabulary, medieval dialects, linguistic theories. Prerequisite: GERM 711. LEC.

GERM 852. Special Topics in Literature: ____. 3 Hours.
Prerequisite: GERM 701. LEC.

GERM 854. Studies in the Works of: ____. 3 Hours.
In-depth study of the work of a major author in German literature. Prerequisite: GERM 701. LEC.

GERM 855. Introduction to German Applied Linguistics. 3 Hours.
Introduction to theories and topics in German applied linguistics. SEM.

GERM 860. Introduction to Modern German Dialects. 3 Hours.
Introduction to modern German dialects, methods of dialect research and aspects of linguistic assimilation and loss as well as a survey of German-American dialects. Prerequisite: Permission of instructor required. SEM.

GERM 898. Master’s Project. 3 Hours.
Faculty directed project that satisfies the requirements for the degree of Master of Arts in German Studies. Prerequisite: Restricted to German Studies MA students. Prerequisite: Restricted to German Studies MA students. RSH.

GERM 899. Master's Thesis. 3 Hours.
May not be repeated. THE.

GERM 900. Workshop for Ph.D. Students. 1 Hour.
Discussion of policies in the Ph.D. program, research specializations, examinations, dissertation proposals, writing of dissertations, grant proposals, conference presentations, publication of scholarship, and entrance into the academic job market. Required of all Ph.D. students in the first year in the program. Does not count toward completion of 27 hours of course work for the Ph.D. LEC.

GERM 901. Gothic. 3 Hours.
Reading of selected Gothic texts. Historical and descriptive study of Gothic phonology and grammar, with an introduction to comparative Germanic grammar. Prerequisite: GERM 711. LEC.

GERM 902. Old Saxon. 3 Hours.
Introduction to the elements of its grammar and discussion of its role in the Germanic family of languages. Selected readings from the Heliand and discussion of the entire work. Prerequisite: GERM 711. LEC.

GERM 903. Old High German. 3 Hours.
Reading and discussion of selected prose texts and poetic documents; phonological and grammatical features of the Old High German dialects. Prerequisite: GERM 711. LEC.

GERM 904. Gothic and Its Closest Relatives. 3 Hours.
A survey of the earliest Germanic languages with an emphasis on the comparative phonology and grammar of Gothic, Old High German, and Old Saxon as well as the reading of selections of major texts in those three language. LEC.

GERM 951. Seminar in Germanic Philology: ____. 3 Hours.
LEC.

GERM 952. Seminar in Medieval German Literature: ____. 3 Hours.
LEC.

GERM 953. Investigation and Conference: ____. 1-6 Hours.
To be taken only in exceptional cases. Permission of the instructor who will supervise the student's work is required. RSH.

GERM 954. Seminar in Humanism, Renaissance, and Reformation Literature: ____. 3 Hours.
LEC.

GERM 955. Seminar in Baroque Literature: ____. 3 Hours.
LEC.

GERM 956. Seminar in Enlightenment Literature: ____. 3 Hours.
LEC.

GERM 960. Seminar on Writers of the Age of Goethe: ____. 3 Hours.
LEC.

GERM 962. Seminar in Romanticism: ____. 3 Hours.
LEC.

GERM 964. Seminar in the Literature of the 19th Century: ____. 3 Hours.
LEC.

GERM 966. Seminar in Problems in Literature since 1890: ____. 3 Hours.
LEC.

GERM 967. Seminar in Special Topics: ____. 3 Hours.
LEC.

GERM 999. Doctoral Dissertation. 1-10 Hours.
LEC.

HNGR 103. Survival Hungarian. 3 Hours. U.
Practical training for people intending to live, study, travel, or work in Hungary. Focus on conversational skills. Intensive practice in speaking and listening, with vocabulary about Hungarian geography, culture, and business. Introduction to basic grammar. Not for native speakers LEC.

HNGR 104. Elementary Hungarian I. 5 Hours. U.
Essentials of grammar, practice in speaking, reading, and writing Hungarian. Five class meetings per week. Not open to native speakers of Hungarian. LEC.

HNGR 108. Elementary Hungarian II. 5 Hours. U.
Continuation of grammar; practice in conversation, composition, and reading. Five class meetings per week. Not open to native speakers of Hungarian. Prerequisite: HNGR 104 or equivalent. LEC.

HNGR 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Hungarian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

HNGR 212. Intermediate Hungarian I. 3 Hours. U.
A continuation of HNGR 108. Structured grammar review, composition, conversation, with readings of literary and cultural texts. Three class
from the Viking age to the present. Slides and other illustrated materials.

This course is designed to impart a general knowledge of life in Denmark, Finland, Iceland, Norway, and Sweden, with emphasis on social and cultural conditions, against a geographical and historical background, from the Viking age to the present. Slides and other illustrated materials. (Same as EURS 510.) LEC.

SCAN 570. Scandinavian Life and Civilization. 3 Hours. H/W.

This course is designed to impart a general knowledge of life in Denmark, Finland, Iceland, Norway, and Sweden, with emphasis on social and cultural conditions, against a geographical and historical background, from the Viking age to the present. Slides and other illustrated materials. (Same as EURS 510.) LEC.

SCAN 566. Representative Authors in English. 3 Hours. H/W.

Intensive study of one or more major authors from the literatures of Scandinavia. May be repeated. LEC.

SCAN 561. Topics in Scandinavian Languages and Linguistics: ______. 3 Hours.

Intensive study of a selected topic in Scandinavian languages and linguistics. The course deals with the linguistic analysis of language rather than the acquisition of a particular language. May be repeated. Prerequisite: A course in linguistics. LEC.

SCAN 753. Investigation and Conference: ______. 1-3 Hours.

Independent study and directed reading on special topics. Permission of the instructor is required. RSH.

SCAN 907. Readings in Old Norse Literature. 3 Hours.

Introduction to the grammar and reading of the prose literature of the "saga-age" (1100-1350). Varied selections from the literature provide the context in which the language is discussed. LEC.

SWED 105. Elementary Swedish I, Honors. 5 Hours. U.

Similar to SWED 104 with additional work to expand the student's cultural context and understanding. Not open to native speakers of Swedish or students who have completed SWED 104. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

SWED 108. Elementary Swedish II. 5 Hours. U.

Continuation of grammar; practice in conversation, composition, and reading. Five hours of recitation per week. Not open to native speakers of Swedish. LEC.

SWED 109. Elementary Swedish II, Honors. 5 Hours. U.

Similar to SWED 104 with additional work to expand the student's cultural context and understanding. Not open to native speakers of Swedish or students who have completed SWED 104. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

SWED 177. First Year Seminar: ______. 3 Hours. GE11 / U.

A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Swedish. Course content similar to SWED 108, with additional cultural study. Meets 5 days a week. Not open to native speakers of Swedish. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

SWED 212. Intermediate Swedish I. 3 Hours. U.

A continuation of grammar; practice in conversation, composition, and reading. Five hours of recitation per week. Not open to native speakers of Swedish. Prerequisite: SWED 104 or permission of instructor. LEC.

SWED 213. Intermediate Swedish I, Honors. 3 Hours. U.

Course content similar to SWED 212, with additional cultural study. Three class meetings per week. Not open to native speakers of Swedish. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.
SWED 216. Intermediate Swedish II. 3 Hours. U.
A continuation of SWED 212. Structured grammar review, composition, conversation with readings of literary and cultural texts. Not open to native speakers of Swedish. Prerequisite: SWED 212 or permission of instructor. LEC.

SWED 217. Intermediate Swedish II, Honors. 3 Hours. U.
Course content similar to SWED 216, with additional cultural study. Three class meetings per week. Not open to native speakers of Swedish. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

SWED 330. Intermediate Swedish Composition and Conversation. 3 Hours. H.
Extensive practice in writing and speaking Swedish with grammar and review and selected readings. Not open to native speakers of Swedish. Prerequisite: SWED 216 or equivalent. LEC.

Global International Studies Courses

EARS 150. Study Abroad Topics in European Studies: _____ 1-5 Hours. U.
This course is designed for the study of special topics in European Studies at the 100-level (Freshman/Sophomore level). Coursework must be arranged through the KU Office of Study Abroad and approved by a faculty advisor in European Studies. May be repeated for credit if content varies. LEC.

EARS 177. First Year Seminar: _____ 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in European Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

EARS 302. European Culture and Society 1945 to Present. 3 Hours. HT AE42 / H.
The course provides historical, cultural, and political overviews of Europe since 1945 with particular emphasis on the contribution of French and Italian culture and society. The course emphasizes Europe's contribution to Western intellectual thought, social movements, arts and literature, and global society. (Same as HWC 302.) LEC.

EARS 329. History of War and Peace. 3 Hours. HL / H.
A study of the changing nature of warfare and the struggle to bring about peace. Topics include pacifism, the "military revolution" that created the first professional armies; the development of diplomatic immunity, truces, and international law; the peace settlements of Westphalia, Utrecht, Vienna, Versailles, San Francisco; the creation of peace movements and peace prizes; the evolution of total war, civil war; and guerrilla warfare involving civilians in the twentieth century; the history of the League of Nations and United Nations; and the rise of intergovernmental and non-governmental organizations. (Same as HIST 329 and PCS 329.) LEC.

EARS 350. Study Abroad Topics in: _____ 1-5 Hours. H.
This course is designed for the study of special topics in European Studies at the Junior/Senior level. Coursework must be arranged through the KU Office of Study Abroad and approved by a faculty advisor in European Studies. May be repeated for credit if content varies. LEC.

EARS 430. European Civilization in World Context: _____ 3 Hours. HL AE42/GE3H / H.
An introduction to the literature of encounter between European and non-European civilizations, drawing on both Western and non-Western sources. The course may include European interactions with areas such as the Mediterranean Basin, Sub-saharan Africa, South and East Asia, and the Americas. World areas and historical periods chosen for study will vary from semester to semester according to the interest and field of the instructor. Not open to freshmen. (Same as HWC 430.) Prerequisite: HWC 114 or HWC 204 and HWC 115 or HWC 205. LEC.

EARS 435. Islam in Europe. 3 Hours. AE42 / H.
Investigation of Muslim migration into Europe and day-to-day interactions of Muslims with other European populations. This is an integrated study of historical, political, religious and economic influences that determine Muslim experience in contemporary European culture. (Same as HWC 435.) LEC.

EARS 500. Seminar in European Studies. 3 Hours. AE42/AE61 / H.
Provides an interdisciplinary approach to the study of modern European civilization. By discussing both classic and contemporary, controversial readings each week and writing several papers during the semester, students acquire an understanding of the development of modern European culture and society and Europe's contemporary problems. Topics for discussions and papers are drawn from the following subjects: the economic and political integration of European states; modernism and anti-modernism in European culture; imperialism, migration, and ethnic and racial division in European society; democracy versus dictatorship; American-European relations; mass culture, urban development, and the welfare state; and contrasts and comparisons between European Cultures--East and West, North and South. Seminar discussions are led by invited European Studies faculty as well as the instructor or instructors. Required of all European Studies majors. Prerequisite: Junior standing or consent of instructor. LEC.

EARS 501. Senior Thesis in European Studies. 3 Hours. AE61 / H.
European Studies majors will do research and write a substantial paper on a topic in the culture, economy, history, or politics of Europe. Topics will be approved by the European Studies Committee. Students will work with an advisor chosen from among the European Studies faculty and with the European Studies Coordinator. The majority of the students' work will be done independently with their advisors, but students will meet with the European Studies Coordinator several times as a class to report on their progress and present their final drafts. Required of all European Studies majors. Prerequisite: Completion of EARS 500 and 15 hours toward the Co-Major. IND.

EARS 502. Senior Honors Thesis in European Studies. 3 Hours. AE61 / H.
Open to European Studies majors doing their senior thesis for Honors. Prerequisite: Completion of EARS 500, 15 hours toward the Co-Major, and approval of Honors thesis by European Studies Committee. Completion of or concurrent enrollment in EARS 501. IND.

EARS 503. Europe Today. 3 Hours. S.
This intensive, interdisciplinary seminar focuses on current social, political, and economic changes in Europe. Topics include European integration and the European Union, the conflict between nationalism and European consciousness, NATO and U.S.-European relations, and international business in Europe. The seminar will include guest lectures from an international array of scholars, political officials, and business representatives, as well as site visits to their institutions and companies. The seminar takes place in Brussels, Belgium, and enrollment is restricted to students accepted in the KU Summer Institute for European Studies study abroad program. LEC.

EARS 505. Studies in Exile Literature. 3 Hours. H.
A multidisciplinary study of selected literary, scholarly, and creative works produced by those Europeans forced into exile, emphasizing their impact on culture and society both in Europe and in those countries in which the exiles resided. Examples: exile during the Nazi dictatorship in Germany (1933-1945), during Cold War crises (Berlin 1960, Prague 1968). LEC.
EURS 506. Culture and Politics of the Cold War in Western Europe. 3 Hours. H.
An interdisciplinary overview of the Cold War period (1945-1985) focusing on Western European dimensions of the problem, based on the view that the Cold War structured political institutions, cultures, and societies in enduring ways that continue to be relevant today. LEC.

EURS 507. Research in European Collections. 1-3 Hours. H.
This course allows students in the European Studies Co-Major and related disciplines to receive credit for research related to European Collections in one or more of the following institutions: Watson and Spencer Research Libraries, the Dole Institute, the Eisenhower and Truman Presidential Libraries, the U.S. Army Combined Arms Research and Foreign Military Studies Office at Fort Leavenworth, the Linda Hall Library in Kansas City, and the Winston Churchill Collection at the Westminster College Library in Fulton, Missouri. May be taken in place of EURS 501 by European Studies Honors Students if taken for three credit hours. Permission of instructor necessary. IND.

EURS 508. Politics and Economics of Cultural Production in Western Europe. 3 Hours. H.
Artists and intellectuals in their relation to state and society. This course is designed to introduce students (1) to the role European artists and intellectuals have often played in the arena of politics and (2) to the privileged place cultural production (arts, literature, media) occupies in the formation of various European identities and economies. LEC.

EURS 509. Introduction to the Study of Southern European Societies. 3 Hours. H.
Social, historical, and economic study of Southern European societies with emphasis on modern period. Relevant to the study of European integration and EU enlargement. Consideration of the distinctive southern Mediterranean societies from the perspective of their collective identity as a regional economic and geopolitical bloc. LEC.

EURS 510. Scandinavian Life and Civilization. 3 Hours. H.
This course is designed to impart a general knowledge of life in Denmark, Finland, Iceland, Norway, and Sweden with emphasis on social and cultural conditions, against a geographical and historical background, from the Viking Age to the present. Slides and other illustrated materials. (Same as SCAN 570.) LEC.

EURS 511. Topics in European Studies: ____. 3 Hours. H.
A study of significant themes, movements, or problems in European history, literature, politics, sociology, or culture. May also relate European issues to issues in other world areas (Africa, North America, Asia, etc.) May be repeated for credit when topic varies. LEC.

EURS 512. Irish Literature and Culture: ____. 3 Hours. H.
Study of topics in Irish literature and culture. Topics may focus on a particular genre, theme, historical period, or group of authors. May be repeated for credit as the topic changes. (Same as ENGL 510.) Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

EURS 536. Economic Issues of the European Union. 3 Hours. S.
A survey of the economies of the European Union, with a focus on the economic development of the member states since World War II, and an examination of the various economic issues confronting them today. (Same as ECON 536) Prerequisite: ECON 104 or ECON 144. LEC.

EURS 550. Classics of Peace Literature. 3 Hours. HL AE51/AE61 / H.
A study of influential proposals for world peace from Erasmus' The Complaint of Peace (1516) to the 1995 Hague Appeal for World Peace. Selected writings by such authors as Erasmus, Hugo Grotius, Jean-Jacques Rousseau, Immanuel Kant, Henry Thoreau, Henri Dunant, Berthe von Suttner, Woodrow Wilson, Mahatma Gandhi, and Martin Luther King, Jr., are considered. (Same as PCS 550.) Prerequisite: HWC 204 or HWC 205. LEC.

EURS 555. The Literature of Human Rights. 3 Hours. H.
Examines in literature, art, and film from about 1800 to the present, both sides of the ongoing debate surrounding the idea that all human persons possess inalienable rights because all persons possess intrinsic value as persons, value independent of race, gender, caste or class, wealth, age, sexual preference, etc. Anti- and pro-rights proponents are paired and studied with equal care. (Same as PCS 555.) LEC.

EURS 580. Directed Study. 1-3 Hours. AE61 / H.
Independent study and directed reading on special topics. Permission of the instructor who will supervise the student's work is required. LEC.

EURS 581. Discussion Section in French. 1 Hour. U.
The 1 credit hour course represents a foreign language discussion section to be attached to a major 3-credit hour EURS course (example: EURS 500). Foreign language discussion sections are an integral part of the KULAC program envisaged to reinforce foreign language proficiency. LEC.

EURS 582. Discussion Section in German. 1 Hour. U.
The 1 credit hour course represents a foreign language discussion section to be attached to a major 3-credit hour EURS course (example: EURS 500). Foreign language discussion sections are an integral part of the KULAC program envisaged to reinforce foreign language proficiency. LEC.

EURS 583. Discussion Section in Italian. 1 Hour. U.
The 1 credit hour course represents a foreign language discussion section to be attached to a major 3-credit hour EURS course (example: EURS 500). Foreign language discussion sections are an integral part of the KULAC program envisaged to reinforce foreign language proficiency. LEC.

EURS 584. Discussion Section in Spanish. 1 Hour. U.
The 1 credit hour course represents a foreign language discussion section to be attached to a major 3-credit hour EURS course (example: EURS 500). Foreign language discussion sections are an integral part of the KULAC program envisaged to reinforce foreign language proficiency. LEC.

EURS 604. The European Union. 3 Hours. H.
The European Union, the union of 27 European countries, is a culmination of a long history of European unity. The European Union now encompasses population and economic strength rivaling that of the United States. This course examines selected topics in the history of European integration and the political, legal, economic, and social implications of the present European Union as well as its relations with the United States and other regions of the world. LEC.

FARS 110. Elementary Farsi I. 5 Hours. U.
Vocabulary acquisition, pronunciation, grammar, and writing. Course includes reading of simple texts. Five hours of class per week. LEC.

FARS 120. Elementary Farsi II. 5 Hours.
Continuation of FARS 110. Vocabulary acquisition, pronunciation, grammar, and writing. Course includes reading of simple texts. Five hours of class per week. Prerequisite: FARS 110 or departmental permission. LEC.

FARS 210. Intermediate Farsi I. 3 Hours. U.
A continuation of FARS 120. Course emphasizes oral and written work in Farsi. Systematic review of grammar and introduction to reading in cultural texts. Prerequisite: FARS 120 or departmental permission. LEC.
FARS 220. Intermediate Farsi II. 3 Hours. U.
A continuation of FARS 210. Course emphasizes oral and written work in Farsi. Systematic review of grammar and introduction to reading in cultural texts. Prerequisite: FARS 210 or departmental permission. LEC.

FARS 310. Advanced Farsi I. 3 Hours. U.
Enhancement of speaking, comprehension, and writing abilities in Farsi. Readings from Farsi literature introduced. Prerequisite: FARS 220 or placement exam that establishes a level of proficiency in Farsi suited to Advanced Farsi I. LEC.

FARS 320. Advanced Farsi II. 3 Hours. U.
Enhancement of speaking, comprehension, and writing abilities in Farsi. Readings from Farsi literature introduced. Prerequisite: FARS 310 or placement exam that establishes a level of proficiency in Farsi suited to Advanced Farsi II. LEC.

FARS 593. Directed Study in Persian Culture and Literature: ____. 1-3 Hours. U.
This course is designed for students seeking proficiency in Farsi beyond FARS 320. The instructor directs the student through readings and materials in Farsi that add to the student's substantive knowledge of Iran and culture in the Farsi language. May be taken multiple semesters for credit with varying content. Prerequisite: FARS 320 and consent of instructor. LEC.

GIST 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Global International Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

GIST 201. Topics in: ____. 1-3 Hours. U.
An interdisciplinary study of international topics. Designed especially for freshmen and sophomores. May be repeated for credit if content varies. LEC.

GIST 202. Topics in South Asian Studies: ____. 1-3 Hours. U.
An interdisciplinary study of topics related to South Asia. Designed especially for freshmen and sophomores. May be repeated for credit if content varies. LEC.

GIST 203. Topics in Middle Eastern Studies: ____. 1-3 Hours. U.
An interdisciplinary study of topics related to the Middle East. Designed especially for freshmen and sophomores. May be repeated for credit if content varies. LEC.

GIST 250. Introduction to Globalization. 3 Hours. S.
Along with an overview of the origins and historical development of globalization, the course addresses various aspects of the growth of transnational economic, cultural, institutional, and political interconnections, including the implications of rapidly-developing information technology and social media, international security in a transnational world, and the issues related to the movement of goods, people (immigration), images, ideas, and institutional forms across national borders. LEC.

GIST 301. Introduction to Global and International Studies. 3 Hours. GE11 / S.
This course provides an overview to the major ways and themes involved in the study of world cultures, politics, and societies as applied by disciplines in the social sciences. Topics such as the construction and maintenance of cultures, comparative political systems, global and regional economies, popular culture, gender and the environment will be covered through their manifestations in particular regional and global contexts. LEC.

GIST 320. Love, Sex and Marriage in India. 3 Hours. H.
This course addresses diverse aspects of the philosophies and expressions of intimacy and pleasure as found in India. Using old and new literature, including from the Kamasutra, as well as media, we examine the following: how and why in ancient times sensual pleasure was another path for ultimate bliss; how perspectives and traditions of intimacy have changed over time; diverse types of marriages; the culture and practice of arranged marriages; same-sex intimacy; and universal concepts of love. LEC.

GIST 325. Peoples and Cultures of South Asia. 3 Hours. S.
This course provides an introduction to the diversity of peoples in South Asia, including India, Pakistan, Nepal, Bangladesh and Bhutan. The particular cultures and language of the indigenous peoples in the region are highlighted through academic sources and the direct study of reproductions of these cultures in literature and film. LEC.

GIST 350. Study Abroad Topics in: ____. 1-5 Hours. U.
This course is designed for the study of special topics in global and international studies at the junior/senior level. Course work must be arranged through the KU Office of Study Abroad and approved by a faculty adviser in Global and International Studies. May be repeated for credit if content varies. LEC.

GIST 424. Nationalism(s) in Turkey. 3 Hours. S.
This course analyzes the major variations in nationalist paradigms existing in contemporary Turkey, including conservative nationalism, secular nationalism, religious (Islamic) nationalism, and Kurdish nationalism. Through the lens of seminal theories on the origins, development, and types of nationalism and the relevant historical background of the Turkish Republic, we explore how these competing visions of "the nation" and "homeland" have changed, fragmented, and manifested themselves in everyday Turkish politics and society. LEC.

GIST 493. Directed Readings. 3 Hours. U.
Individual and supervised readings in a selected area of international studies. Course is repeatable with permission of the program director. LEC.

GIST 495. Global Internship. 3 Hours. U.
Semester-long internship with a business or organization located abroad or that provides a global or international working context for the interning student. A term paper is required. Prerequisite: Consent of instructor. FLD.

GIST 501. Topics in: ____. 1-3 Hours. U.
An interdisciplinary study of international topics. Designed especially for juniors and seniors. May be repeated for credit if content varies. LEC.

GIST 502. Advanced Topics in South Asian Studies: ____. 1-3 Hours. U.
An interdisciplinary study of topics related to South Asia. May be repeated for credit if content varies. Prerequisite depends on specific topic offered. LEC.

GIST 503. Advanced Topics in Middle East Studies: ____. 3 Hours. U.
An interdisciplinary study of topics related to the Middle East. May be repeated for credit if content depends on specific topic offered. LEC.

GIST 530. Politics and Society in the Contemporary Persianate World. 3 Hours. S.
This course examines the major currents of political developments and their linkages with religion, culture and civil society in Turkey, Iran, Afghanistan, Pakistan and India since the late nineteenth century. During the "pre-modern" period, all these countries formed part of "the Persianate world," a region that extended from the Iranian plateau to
the Balkans, Central Asia and the Indian subcontinent, mostly under the Turkic administrations, and tied together by trade, Islam, and Persian as the lingua franca. The dissemination of modern Western political thought and nationalism during the colonial period led to nation-states and the end of the linguistic domination of Persian in the region. Though each of these nation-states ultimately took a different trajectory, they each were faced with similar challenges that offer the basis for interesting comparisons between them. This course explores the trajectories of these countries in regard to the relations between the state, religion, and politics, various strands of nationalism, pluralism, religious and ethnic minorities, social equality, and democratization. Prerequisite: GIST 301 or POLS 150. LEC.

GIST 535. Literature and Society in the Contemporary Middle East. 3 Hours. S.
This course offers a general introduction to the modern Middle Eastern literatures in English translation. Through analyses of selected short stories and novels from Arabic, Turkish and Persian literature, the students develop an understanding of the issues that shape everyday life in the Contemporary Middle East. The course investigates issues of nation and national identity, war, ethnicity, class, religion, and gender and sexuality. We use a variety of paradigms, namely nationalist, Marxist, feminist, and Islamist, to provide a theoretical framework for discussion of the selected works. No prior knowledge of Arabic, Turkish or Persian language is needed. Prerequisite: GIST 301. LEC.

GIST 610. Interdisciplinary Methods for Global Contexts. 3 Hours. S.
An introduction to a variety of widely-employed quantitative and qualitative research methods in the social sciences and humanities, including methods such as statistical analysis, ethnography, and content analysis. LEC.

GIST 624. Social Movements in the Middle East. 3 Hours. S.
Using the major theories and approaches comparatively applied to social movements around the world, this course critically analyzes historical and existing cases of social movements and "nonmovements" in the Middle East. We cover examples of Islamist (and post-Islamist), women's, nationalist, democratic, youth and labor movements and their impact on the region. Contextual factors like technology and social networking, regime type, institutions, and socioeconomic structures are also considered for their role in supporting or inhibiting collective action. Prerequisite: GIST 301 or POLS 150. LEC.

GIST 684. International Law: The State and the Individual. 3 Hours. S.
International law has assumed an increasingly significant role in international life. This course examines major issues in international law including (but not limited to): the changing status and role of the state; rights of minorities and self-determination; the environment; and human rights. The course examines the central questions and the relevant international legal principles associated with each issue. Prerequisite: POLS 170. LEC.

GIST 685. International Law: Laws of Armed Conflict. 3 Hours. S.
This course examines the principles, roles, and functions of international law in the conduct of war. As the course reviews the development and application of the basic rules of armed conflict, several current issues and conflicts are addressed including: the legitimate use of force; the proper definitions of combatants and civilians; actions that constitute war crimes, the legality of new weapons technology, and, if the laws of armed conflict apply to the current "war on terrorism." Prerequisite: POLS 170. LEC.

GIST 697. Diplomacy Lab. 1-3 Hours. S.
This course is designed to partner with an innovative program implemented by the US Department of State. Students enrolling in this course team up with a group of four or more students to address a real world problem posed by a State Department officer. The team, with the assistance of the instructor, engages in extensive and systematic research to address the problem and presents their finding in a formal report presented to the State Department in the desired format. Throughout the semester, the students teleconference with the State Department officer posing the question and utilize their accumulated cultural, linguistic and research knowledge to tackle a real-life, global issue. Prerequisite: GIST 301. LEC.

GIST 698. Capstone Seminar. 3 Hours. AE61 / H.
A seminar designed to introduce students to the theory and practice of global and international studies. A research paper will be required. May not be repeated for credit. Prerequisite: 12 hours of junior/senior level and above courses that satisfy requirements for the major. LEC.

GIST 699. Capstone Seminar, Honors. 3 Hours. AE61 / H.
A seminar designed to introduce honors students to the theory and practice of global and international studies. A research paper will be required. May not be repeated for credit. Prerequisite: 12 hours of junior/senior level and above courses that satisfy requirements for the major. LEC.

GIST 701. Approaches to International Studies. 3 Hours.
This course examines various approaches to the study of cultures, politics, and societies in their global and international contexts through the exploration of a series of exemplary works of global/international research from a variety of disciplines (eg. anthropology, sociology, political science, economics, geography, history, etc.). The course will cover the major contributions of these disciplines in their approaches to global questions and themes and will provide a multi-disciplinary framework within which students can begin exploring their own global and international research questions. The course also provides an introduction to the major regions and many of the themes that students will be able to specialize in during the course of the MA program. LEC.

GIST 702. Globalization. 3 Hours.
A central issue in international studies is globalization, the increasing interconnectedness of societies and economies. This course examines globalization from an historical and contemporary perspective. Major topics include (but are not necessarily limited to) the historical expansion of the West since 1500, the growth of international economic institutions, conflict among global cultures, the future of state sovereignty, and the challenges of economic integration. LEC.

GIST 703. The World Economy. 3 Hours.
An introduction to international trade and finance, theories of economic development, and international economic structures. Not appropriate for economics majors. LEC.

GIST 704. Global Cultures and Societies. 3 Hours.
Examination of the components of culture, economic and political anthropology, major global cultural areas, and the impact of cultural differences as expressed through language, literature, religion, thought, and motivation in cross-cultural communications. LEC.

GIST 705. Globalization in History. 3 Hours.
A study of the increasing interaction among world societies since 1500 and an investigation of the long-term developments behind current world problems. Major topics include Western expansion since 1500, the spread of state sovereignty, the formation of a world economy, and the spread of international institutions. Current issues will vary, but may include environmental crises, human rights, migration, free trade and the spread of consumer culture, ethnicity and nationalism, and international intervention within states. (Same as HIST 705.) LEC.

GIST 706. Comparative Governments. 3 Hours.
Survey of different governmental structures in the contemporary world and the ways these countries have confronted issues such as modernization
and development, economic security, ethnic pluralism and conflict, and globalization. LEC.

GIST 710. Interdisciplinary Research Methods for Global Contexts. 3 Hours.
This course addresses the challenges for students engaged in research in an interdisciplinary and international context. The course will take issues for research and place them within the structure of a research design process, including formulation of a general question, the appropriation of theory, the grounding of a literature review, and the positing of a testable research question and/or hypothesis. Students will also be exposed to research methodologies and how these manifest themselves through the logic of the disciplines—such as anthropology, sociology, geography, political science, history and literature. With a final thesis project design in mind, students will be expected to be expected to be able to utilize the research tools of accessing secondary analytical data, archival research, SPSS, ArcView and methods such as survey construction, implementation, and analysis, interviews, content analysis, discourse analysis, case study, and GIS. Prerequisite: GIST 701 or consent of instructor. LEC.

GIST 750. Topics in International Studies: ____. 3 Hours.
A study of one or more selected topics in international studies. Course may be taken more than once. LEC.

GIST 793. Directed Readings. 1-5 Hours.
Individual and supervised readings in a selected area of international studies. Course is repeatable with permission of the program director. LEC.

GIST 888. Contemporary China Studies. 3 Hours.
This course will review and analyze the current literature on China's social and political development, including a wide range of topics within political science. There is a rich body of literature within each topic such as civil society in China, legal reform, political culture, nationalism, gender issues, ethnic identity, political behavior, elections, economic development, and inequality. This course will introduce key literature within each topic focusing on the debates among China scholars as well as how these debates fit in the general field of political science. (Same as EALC 888 and POLS 888.) Prerequisite: POLS 668 or permission of the instructor. LEC.

GIST 897. Examination Preparation. 1 Hour.
Independent study in preparation for the Comprehensive M.A. examination. Graded on satisfactory/unsatisfactory basis. May be repeated. LEC.

GIST 898. Thesis Writing. 3 Hours.
This course guides MA students through the crafting of their academic or professional thesis. The students begin the course with a literature review and data/research completed, and they will be directed through in-class workshops and deadlines with the intention to produce a full draft of their thesis. Students may choose to draft a thesis that fits either academic conventions for a similar body of research, or they may develop a body of research whose target would be a business or professional audience. Course is designed to assist students in the development of theses with varying methodologies, methods, and audiences on global and international topics. Prerequisite: GIST 710. THE.

GIST 899. Thesis. 1-6 Hours.
Enrollment for writing thesis for master's degree. THE.

HEBR 110. Elementary Israeli Hebrew I. 5 Hours. U.
A beginning course in modern Israeli Hebrew. Essentials of grammar, syntax and conversational practice; elementary reading and writing. Note: Students with other previous experience in Hebrew must take a placement exam. LEC.

HEBR 120. Elementary Israeli Hebrew II. 5 Hours. U.
A continuation of HEBR 110. Note: Students with other previous experience in Hebrew must take a placement exam. Prerequisite: HEBR 110. LEC.

HEBR 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Hebrew. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

HEBR 210. Intermediate Israeli Hebrew I. 3 Hours. U.
Further development of language skills: listening comprehension, oral efficiency, intermediate grammar and syntax, reading and writing. Note: Students with other previous experience in Hebrew must take a placement exam. Prerequisite: HEBR 120. LEC.

HEBR 220. Intermediate Israeli Hebrew II. 3 Hours. U.
A continuation of HEBR 210. Note: Students with other previous experience in Hebrew must take a placement exam. Prerequisite: HEBR 210. LEC.

HEBR 230. Biblical Hebrew. 3 Hours. U.
This course introduces students to the grammatical structure and vocabulary of biblical Hebrew. It includes basic biblical passages for students to translate into English and analyze. LEC.

HEBR 240. Biblical Hebrew II. 3 Hours. U.
This is a continuation of HEBR 230. It continues the study of the grammatical structure and vocabulary of biblical Hebrew, and includes biblical texts for students to translate and analyze. Prerequisite: HEBR 230 or permission of the instructor. LEC.

HEBR 340. Advanced Israeli Hebrew I. 3 Hours. U.
Advanced study of Modern Hebrew. This course is designed to strengthen linguistic skills, enrich vocabulary, and further the study of grammar and syntax. Not open to native speakers of Hebrew. Prerequisite: HEBR 220 or permission of the instructor. LEC.

HEBR 350. Advanced Israeli Hebrew II. 3 Hours. U.
Continued advanced study of modern Hebrew. Not open to native speakers of Hebrew. Prerequisite: HEBR 340 or permission of the instructor. LEC.

HEBR 395. Study Abroad Topics in Hebrew: ____. 3-6 Hours. H.
This course is designed for the study abroad of special topics in Hebrew at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

HEBR 410. Studies in Modern Hebrew Literature. 3 Hours. H.
An introduction to Hebrew literature from the nineteenth century to the present day. The course emphasizes the development of basic interpretive skills and the understanding of basic literary movements, genres, and concepts. Not open to native speakers of Hebrew. Prerequisite: HEBR 220 or equivalent. LEC.

HEBR 420. Studies in Modern Hebrew. 3 Hours. U.
This course is designed to help students achieve fluency in speaking, listening, and writing Modern Hebrew. Not open to native speakers of Hebrew. Prerequisite: HEBR 220 or equivalent. LEC.

HEBR 490. Independent Study. 1-3 Hours. U.
Intensive reading or research under faculty supervision. Not open to native speakers of Hebrew. Prerequisite: HEBR 220 or equivalent. IND.

HNDI 110. Beginning Hindi I. 5 Hours. U.
An introduction to modern standard Hindi that emphasizes acquisition of basic language skills (speaking, comprehension, reading and writing)
through a combination of lecture, drill, and work with the Devanagari script. LEC.

HNDI 120. Beginning Hindi II. 5 Hours. U.
A continuation of Beginning Hindi I that builds on basic skills of speaking and comprehension, and the writing and reading of the Devanagari script developed in Beginning Hindi I. Prerequisite: HNDI 110 or placement exam that establishes a level of proficiency in Hindi suited to Beginning Hindi II. LEC.

HNDI 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Hungarian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

HNDI 210. Intermediate Hindi I. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in modern standard Hindi, with emphasis on grammar. Readings will be introduced from representative genres of Hindi literature. Prerequisite: HNDI 120 or placement exam that establishes a level of proficiency in Hindi suited to Intermediate Hindi I. LEC.

HNDI 220. Intermediate Hindi II. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in modern standard Hindi, with emphasis on grammar. Readings will be introduced from representative genres of Hindi literature. Prerequisite: HNDI 210 or placement exam that establishes a level of proficiency in Hindi suited to Intermediate Hindi II. LEC.

HNDI 301. Topics in Hindi Culture, Language and Literature: _____. 3 Hours. U.
Investigation of special topics on Hindi culture, language and literature at the undergraduate level. May be repeated for credit when topic varies. LEC.

HNDI 310. Advanced Hindi I. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in Hindi. Readings are introduced from representative genres of Hindi literature. Prerequisite: HNDI 220 or placement exam that establishes a level of proficiency in Hindi suited to Advanced Hindi I. LEC.

HNDI 320. Advanced Hindi II. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in Hindi. Readings are introduced from representative genres of Hindi literature. Prerequisite: HNDI 310 or placement exam that establishes a level of proficiency in Hindi suited to Advanced Hindi II. LEC.

HNDI 593. Directed Study in Hindi Culture and Literature: _____. 1-3 Hours. H.
This course is designed for students seeking proficiency in Hindi beyond HNDI 320. Instructor will direct the student through readings and materials in Hindi that will add to the students substantive knowledge of India and culture in the Hindi language. May be taken multiple semesters for credit with varying content. Prerequisite: HNDI 320, and consent of instructor. LAB.

JWSH 107. Living Religions of the West. 3 Hours. HR / H.
A basic introduction to the major religious traditions of the Near East, Europe, and the Americas, with an emphasis on their development through the modern period and their expressions in contemporary life. Not open to students who have taken REL 109. (Same as REL 107.) LEC.

JWSH 124. Understanding the Bible. 3 Hours. HR / H.
An introduction to the literature of the Bible, exploring the relationships among the various types of literature present and the function of each type in the history and religious life of the people who produced and used them. Cannot be taken concurrently with REL 311 or JWSH 321 or REL 315. Not open to students who have taken REL 125 or JWSH 125. (Same as REL 124.) LEC.

JWSH 125. Understanding the Bible, Honors. 3 Hours. HR / H.
An introduction to the literature of the Bible, exploring the relationships among the various types of literature present and the function of each type in history and religious life of the people who produced and used them. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken REL 124 or JWSH 124. (Same as REL 125.) LEC.

JWSH 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Jewish Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

JWSH 300. Topics in Jewish Studies: _____. 3 Hours. H.
Examination of special topics in Jewish Studies. May be repeated if topic varies. LEC.

JWSH 311. Narratives of Jewish Life. 3 Hours. HL AE42 / H.
The course focuses on the narratives through which Jews made sense of their lives under the impact of the forces of modernity, beginning in the “old world,” and moving through the 19th century and into the 20th. The goal is to analyze how the imagination of Jewish writers was captured by the changes in social structures such as new educational, residential and occupational opportunities, leading to increased interactions with the gentile society. Students read and discuss literary works based in the shtetl in revolutionary Russia, and in America. We will also look at memoirs and letters written by ordinary Jews. All assigned texts will be in English. LEC.

JWSH 315. The Spanish Inquisition. 3 Hours. H.
A broad historical study of the Spanish Inquisition from 1478 to its afterlife in modern culture, including its use in political debates and its depiction in popular culture. Topics include anti-Semitism, the nature of the inquisitorial investigation, the use of torture, censorship and the relationship between the Inquisition, the Spanish monarchy and other religious and lay authorities. Taught in English. Will not count toward the Spanish major. (Same as HIST 325 and SPAN 302.) LEC.

JWSH 318. Jews and Slavs in Eastern Europe. 3 Hours. H.
Jews and Slavs have shared territory from the Middle Ages to the present day. The contact between these culturally and linguistically distinct groups have shaped many centuries of Eastern European history - from the extreme violence of the pogroms to long periods of peaceful coexistence and cooperation. “Jews and Slavs” examines the history and cultural geography of Slavic-Jewish contact from the perspectives of both groups. Through literature, film, journalism, and folklore, students learn about the profound influence Jews and Slavs have had on each other, the uneasy feelings that accompanied their interactions, and the creative and fascinating impact their interaction had on both cultures. (Same as SLAV 318.) LEC.

JWSH 321. Religion of Ancient Israel. 3 Hours. H.
A study of the development of the Hebrew Bible from its earliest stages of oral tradition to its canonization with an emphasis on the relationship of the historical, intellectual, and cultural contexts shaping that development. (Same as REL 311.) Prerequisite: REL 124 or JWSH 124 or permission of instructor. LEC.
JWSH 325. Introduction to Judaism. 3 Hours. H.
Analyzes a selection of the core texts, teachings, and practices of Jewish religious traditions in terms of classical and contemporary understanding. (Same as REL 325.) LEC.

This course demystifies the Talmud, arguably the most central yet also the most mysterious text of rabbinic Judaism. Students are introduced to the scope, substance, styles, and major figures of the Talmud, and also learn how the text came into being over the course of several centuries. (Same as REL 326.) Prerequisite: REL 104, REL 107, or REL 124 or REL 125, or permission of the instructor. LEC.

JWSH 327. Jewish Secular Culture. 3 Hours. HL AE42 / H.
By examining the modern concept of Yiddishkeit (Jewishness), this course explores Jewish secularism as a set of modern intellectual, literary, and cultural practices that redefined the relationship between the secular and religious in literature, music, theatre, art, humor, and foodways. This interdisciplinary course draws on theoretical approaches from history, cultural studies, religious studies, folklore, and linguistics to examine the different secularizing cultural practices of the Jews in Central and Eastern Europe, as well as in North America. LEC.

JWSH 335. History of Jewish Women. 3 Hours. H.
This course explores the history of Jewish women from antiquity to the twentieth century. It examines the historical constructions of women's gender roles and identities in Jewish law and custom as well as the social and cultural impact of those constructions in the context of the realities of women's lives in both Jewish and non-Jewish society. (Same as HIST 335, WGSS 335.) LEC.

JWSH 336. Jewish American Literature and Culture. 3 Hours. AE41 / H.
An examination of Jewish American literature and culture from the 17th century to the present. Materials may include a broad range of literary genres as well as folklore, music, film, and visual art. (Same as ENGL 336.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

JWSH 338. Languages of the Jews. 3 Hours. H.
From the beginning, Jewish history and culture is closely tied to language, from Hebrew and Aramaic to the languages of diaspora such as Yiddish and Ladino. Focusing on issues of language in society, this course will survey the languages spoken by the Jews throughout their long history in diverse communities around the world. We will learn about Hebrew as a spoken and a sacred language, examine how Jewish languages are born and die, and discuss the resurrection of Modern Hebrew in the state of Israel. All readings are in English. No prior knowledge of languages or linguistics is required. (Same as LING 338.) LEC.

JWSH 339. Languages of the Jews, Honors. 3 Hours. H.
Honors version of JWSH 338 or LING 338, Languages of the Jews. Prerequisite: Membership in the University Honors Program or consent of instructor. (Same as LING 339.) LEC.

JWSH 340. Topics in Modern Jewish Literature: ____. 3 Hours.
This course treats Jewish literature in English or English translation in the 20th and 21st centuries either as a broad survey or according to specific themes. May be repeated for credit. LEC.

JWSH 341. Hitler and Nazi Germany. 3 Hours. H/W.
An examination of the rise of Hitler and Nazism, beginning with the breakdown of 19th century culture in the First World War and continuing through the failure of democracy under the Weimar Republic. The course will also discuss the impact of Nazism on Germany and how Nazism led to the Second World War and the Holocaust. (Same as HIST 341.) LEC.

JWSH 343. The Holocaust in History. 3 Hours. H.
The systematic murder of the Jews of Europe by the Nazis during World War II is one of the most important events of modern history. This course studies the Holocaust by asking about its place in history. It compares other attempted genocides with the Holocaust and examines why most historians argue that it is unique. Other topics covered include the reasons the Holocaust occurred in Europe when it did, the changing role of anti-Semitism, and the effects of the Holocaust on civilization. The course also discusses why some people have sought to deny the Holocaust. The course concludes by discussing the questions people have raised about the Holocaust and such issues as support for democracy, the belief in progress, the role of science, and the search for human values which are common to all societies. (Same as HIST 343.) LEC.

JWSH 344. Modern Jewish History. 3 Hours. H.
This course explores the complex of interactions between Jews, Judaism, and modernity by examining the challenges to Jewish life and thought, community and culture, self-understanding and survival, from the early modern period to the present day. Through the lenses of religious, cultural, intellectual, and political expression, the course examines the social, economic, and demographic changes in Jewish communities in Western, Central and Eastern Europe, the United States, and Israel along with the impact of antisemitism and the Holocaust. (Same as HIST 344.) LEC.

JWSH 350. Contemporary Jewish Identities. 3 Hours. SC / H.
This course explores the variety of ways in which American Jews create Jewish identities as individuals and groups. It traces the emergence of the various current divisions within Judaism: Reform Judaism (which by definition, implies Orthodoxy), then Conservative Judaism, and then the later development of Reconstructionist Judaism. The course also explores other contemporary options for being Jewish: cultural Jews, secular Jews, unaffiliated Jews, religious Jews, and gay or lesbian or transgendered Jews. LEC.

JWSH 361. Jewish Film. 3 Hours. HL / H.
An examination of the cultural history of the Jews through films that explore Jewish themes, including but not limited to: issues of tradition and modernity, religion and secularism, immigration, gender, Zionism, anti-Semitism, and the Holocaust. Films studied may be in English and in foreign languages (with English subtitles) like Yiddish, Hebrew, and Russian. LEC.

JWSH 395. Study Abroad Topics in Jewish Studies: ____. 3-6 Hours. H.
This course is designed for the study of special topics in Jewish Studies at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

JWSH 490. Directed Study in Jewish Studies. 3 Hours. AE61 / H.
Intensive reading or research under faculty supervision. Prerequisite: Consent of instructor. IND.

JWSH 491. Directed Study in Jewish Studies, Honors. 3 Hours. AE61 / H.
Honors version of JWSH 490. Intensive reading or research under faculty supervision. Prerequisite: Membership in the University Honors Program or consent of instructor. IND.

JWSH 523. The Dead Sea Scrolls. 3 Hours. H.
A study of the archeological evidence and texts from the Dead Sea area that provide primary evidence for Jewish religious belief and practice in the Greek and Roman periods (ca. 250 B.C.E. - 135 C.E.). (Same as REL 523.) Prerequisite: REL 124 or JWSH 124 or consent of instructor. LEC.
JWSH 525. Jews and Christians. 3 Hours. H.
This course examines the ways Jews and Christians have interacted with and characterized one another at various points in their histories. Special emphasis is placed on the gradual separation of the two religious traditions in the 1st-4th centuries. (Same as REL 525.) Prerequisite: A previous course in Religious Studies or Jewish Studies; or consent of instructor. LEC.

JWSH 526. Jewish History and Literature in the Greek and Roman Periods. 3 Hours. H.
The history and literature of the Jewish people from the hellenistic period (late fourth century B.C.E. to the codification of the Mishnah 210 C.E.). Select texts from the Hebrew Bible, the so-called apocrypha and pseudepigrapha, the Qumran scrolls, Philo, Josephus, related early Christian texts, and Rabbinc texts will be studied. (Same as REL 526.) Prerequisite: REL 124 or JWSH 124 or permission of instructor. LEC.

JWSH 560. Classical and Contemporary Jewish Thought. 3 Hours. H.
An introduction to individual Jewish thinkers and collective projects from Philo to the present, including The Talmud and Midrash, Middle Age and Early Modern Jewish philosophical and Talmudic rationalism and mysticism. Considers such thinkers as Spinoza, Cohen, Soloveitchik, Rosenzweig, and Levinas. (Same as REL 560.) Prerequisite: A previous course in Religious Studies or Jewish Studies; or consent of instructor. LEC.

JWSH 570. Studies in Judaism. 3 Hours. H.
A study of the major intellectual sources of the Jewish tradition from the Mishna, Talmud, Midrash, prayerbook, philosophers, the Zohar, and the Shulchan Aruch. (Same as REL 570.) Prerequisite: A course in Religious Studies or Jewish Studies numbered 300 or above. LEC.

JWSH 572. Jewish Folklore. 3 Hours. H.
Jewish folklore is extraordinarily rich and varied. From folktales to riddles, from legends about the exalted rabbis to irreverent jokes, folklore is central to the Jewish way of life. This course traces the extent to which oral elements appear in traditional Jewish literary texts such as the Bible; read and discuss folktales, and examine minor genres such as proverbs, riddles and jokes. Topics include the supernatural beings of Jewish folklore dybbuks, seductive female demons, and golems. Students acquire theoretical tools with which to analyze folklore (Jewish or otherwise), read stories, watch movies, and collect samples of folklore from informants. LEC.

JWSH 573. Jewish Folklore, Honors. 3 Hours. H.
Honors version of JWSH 572. Jewish folklore is extraordinarily rich and varied. From folktales to riddles, from legends about the exalted rabbis to irreverent jokes, folklore is central to the Jewish way of life. This course traces the extent to which oral elements appear in traditional Jewish literary texts such as the Bible; read and discuss folktales, and examine minor genres such as proverbs, riddles and jokes. Topics include the supernatural beings of Jewish folklore dybbuks, seductive female demons, and golems. Students acquire theoretical tools with which to analyze folklore (Jewish or otherwise), read stories, watch movies, and collect samples of folklore from informants. Open only to students in the University Honors Program or by permission of instructor. LEC.

JWSH 600. Advanced Topics in Jewish Studies: ______. 3 Hours. H.
Examination of advanced topics in Jewish Studies. May be repeated if topic varies. Prerequisite: Consent of instructor. LEC.

JWSH 650. Service Learning in Jewish Studies. 3 Hours. S.
This course, to be taken in the junior or senior year, is designed to give students the opportunity to apply the knowledge, concepts, and ideas gained in courses in Jewish studies to real-life situations in appropriate agencies and organizations. Open to students in the Jewish Studies program. Prerequisite: Permission of instructor. FLD.

TAJ 110. Elementary Tajik I. 5 Hours. U.
Vocabulary acquisition, pronunciation, grammar, and writing. Course includes reading of simple texts. Five hours of class per week. LEC.

TAJ 120. Elementary Tajik II. 5 Hours. U.
Continuation of TAJ 110. Vocabulary acquisition, pronunciation, grammar, and writing. Course includes reading of simple texts. Five hours of class per week. Prerequisite: TAJ 110 or departmental permission. LEC.

TAJ 210. Intermediate Tajik I. 3 Hours. U.
A continuation of TAJ 120. Course emphasizes oral and written work in Tajik. Systematic review of grammar and introduction to reading in cultural texts. Prerequisite: TAJ 210 or departmental permission. LEC.

TAJ 220. Intermediate Tajik II. 3 Hours. U.
A continuation of TAJ 210. Course emphasizes oral and written work in Tajik. Systematic review of grammar and introduction to reading in cultural texts. Prerequisite: TAJ 210 or departmental permission. LEC.

TAJ 310. Advanced Tajik I. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in Tajik. Readings from Tajik literature introduced. Prerequisite: TAJ 220 or placement exam that establishes a level of proficiency in Tajik suited to Advanced Tajik I. LEC.

TAJ 320. Advanced Tajik II. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in Tajik. Readings from Tajik literature introduced. Prerequisite: TAJ 220 or placement exam that establishes a level of proficiency in Tajik suited to Advanced Tajik II. LEC.

TAJ 510. Tajik for Geographers. 1 Hour. H.
The course is designed to facilitate the use of primary sources in Tajik for carrying out research in human geography of Tajikistan. TAJ 510 compliments REES 510. Prerequisite: TAJ 220, or consent of instructor. LEC.

TAJ 532. Tajik For Sociologists. 1 Hour. H.
The course is designed to facilitate the use of primary sources in Tajik for carrying out research in sociology of Tajikistan. TAJ 532 compliments SOC 532. Prerequisite: TAJ 220, or consent of instructor. LEC.

History of Art Courses

HA 100. Introduction to Western Art History. 3 Hours. HT AE42/GE3H / H.
A chronological survey of Western art and architecture, including the ancient Near East, Europe from antiquity to the present, and North America from the colonial period to the present. The course emphasizes major historical and cultural developments, analyzes key art works and monuments, and introduces basic art historical principles and analytical methods. The course is offered at the 100 and 300 levels, with additional reading and writing assigned at the 300 level. Intended for non-majors. Does not count toward the 30 required hours in the major. Not open to students with credit in HA 103, HA 150, HA 151, HA 160, HA 161, or HA 300. LEC.

HA 103. Introduction to Western Art History, Honors. 3 Hours. HT AE42/GE3H / H.
A chronological survey of Western art and architecture, including the ancient Near East, Europe from antiquity to the present, and North America from the colonial period to the present. The course emphasizes major historical and cultural developments, analyzes key art works and monuments, and introduces basic art historical principles and analytical methods. The course is offered at the 100 and 300 levels, with additional
reading and writing assigned at the 300 level. Intended for non-majors. Does not fulfill the 30 required hours in the major. Not open to students with credit in HA 100, HA 150, HA 151, HA 160, HA 161, HA 300, or HA 303. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

HA 105. Special Study: ____. 1-6 Hours. H.
This course is designed for the study of special topics in art history at the introductory level, including courses taken in the study abroad program. May deal with individual artists, special themes, or other topics not generally covered in courses offered by the department. May be repeated for credit if content varies. LEC.

HA 150. History of Western Art: Ancient Through Medieval. 3 Hours. HT AE42/GE3H / H.
A survey of the art of earlier periods in the West, from prehistoric times through the middle ages in Europe, with special emphasis on the relationship between artistic developments and cultural changes. Not open to students with credit in HA 160. LEC.

HA 151. History of Western Art: Renaissance to Contemporary. 3 Hours. GE3H / H.
A survey of art in the West from the Renaissance to the contemporary period in Europe and America, with special emphasis on the achievements of individual artists in relation to the cultural movements of their times. Not open to students with credit in HA 160. LEC.

HA 160. History of Western Art: Ancient Through Medieval, Honors. 3 Hours. HT AE42/GE3H / H.
A survey of the art of earlier periods in the West, from prehistoric times through the middle ages in Europe, with special emphasis on the relationship between artistic developments and cultural changes. Not open to students with credit in HA 150. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

HA 161. History of Western Art: Renaissance to Contemporary, Honors. 3 Hours. GE3H / H.
A survey of the art in West from the Renaissance to the contemporary period in Europe and America, with special emphasis on the achievements of individual artists in relation to the cultural movements of their times. Not open to students with credit in HA 160. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

HA 165. Introduction to Asian Art. 3 Hours. HT/NW AE42/GE3H / H/W.
An introduction to the visual arts of India, China, Korea, and Japan. Emphasis is placed on cultural context, including religion, social class and gender, and on cultural interactions between these countries. LEC.

HA 166. The Visual Arts of East Asia. 3 Hours. HT/NW AE42/GE3H / H.
An introduction to the visual arts of India, China, Korea, and Japan. Emphasis is placed on cultural context, including religion, social class and gender, and on cultural interactions between these countries. LEC.

HA 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in History of Art. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

HA 261. Introduction to Modern Art. 3 Hours. HT GE3H / H.
A general survey of painting, sculpture, architecture, and graphic art of the 19th and 20th centuries. Emphasis is placed on major movements and their artists, including Neo-Classicism, Romanticism, Realism, Impressionism, Post-Impressionism, Fauvism, Expressionism, Cubism, Surrealism, Abstract Art, Pop Art, and the developments of the contemporary period. LEC.

HA 300. Introduction to Western Art History. 3 Hours. HT AE42/GE3H / H.
A chronological survey of Western art and architecture, including the ancient Near East, Europe from antiquity to the present, and North America from the colonial period to the present. The course emphasizes major historical and cultural developments, analyzes key art works and monuments, and introduces basic art historical principles and analytical methods. The course is offered at the 100 and 300 levels, with additional reading and writing assigned at the 300 level. Intended for non-majors. Does not count toward the 30 required hours in the major. Not open to students with credit in HA 100, HA 103, HA 150, HA 151, HA 160, HA 161, or HA 303. LEC.

HA 303. Introduction to Western Art History, Honors. 3 Hours. HT / H.
A chronological survey of Western art and architecture, including the ancient Near East, Europe from antiquity to the present, and North America from the colonial period to the present. The course emphasizes major historical and cultural developments, analyzes key art works and monuments, and introduces basic art historical principles and analytical methods. The course is offered at the 100 and 300 levels, with additional reading and writing assigned at the 300 level. Intended for non-majors. Does not count toward the 30 required hours in the major. Not open to students with credit in HA 100, HA 103, HA 150, HA 151, HA 160, HA 161, or HA 300. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

HA 305. Special Study: _____. 1-6 Hours. H.
This course is designed for the study of special topics in art history, including courses taken in the study abroad program. May deal with individual artists, special themes, or other topics not generally covered in courses offered by the department. May be repeated for credit if content varies. LEC.

HA 307. Directed Readings. 1-6 Hours. U.
Supervised study and research into special fields of art of particular interest to the student. Weekly consultation and reports. LEC.

HA 310. The Art and Architecture of Florence and Paris. 3 Hours. H.
Taught in the Humanities and Western Civilization Program Abroad, this course examines the major movements that defined and shaped the art and architecture of Florence and Paris, with special attention to the Renaissance in Florence and the Gothic and modern periods in Paris. Through classroom lectures, readings, and visits to museums, churches, and other historic sites, selected works of art and architecture are analyzed in terms of their formal qualities, iconography, and cultural context. Prerequisite: Approval for enrollment in the Humanities and Western Civilization Study Abroad program through the KU Office of Study Abroad. LEC.

HA 311. The Art and Architecture of the British Isles. 3 Hours. H.
Taught in the British Summer Institute in the Humanities Study Abroad program, this course offers an introductory survey of British art and architecture. Through classroom lectures, readings, and visits to museums, churches, and other historic sites, selected works of art and architecture are analyzed in terms of their formal qualities, iconography, and cultural context. Prerequisite: Approval for enrollment in the British Summer Institute in the Humanities Study Abroad program through the KU Office of Study Abroad. LEC.

HA 315. The Prehistory of Art. 3 Hours. S.
A survey of prehistoric art focusing on the material record and interpretations of rock art (paintings, engravings on rock surfaces in rock-shelters, caves and in open air sites) and portable art created...
by prehistoric people. The emphasis is on the small-scale societies (hunter-gatherer and early food producers) around the world before the appearance of written records in respective geographic areas. Environmental, social and cultural contexts in which these art forms were created are discussed along with a review of past scholarship and current interpretive approaches to this old and enduring expression of human creativity. Course may be offered in lecture or online format. (Same as ANTH 315.) LEC.

HA 317. Greek and Roman Art. 3 Hours. H/W.
A survey of the art of ancient Greece and Rome (ca. 1000 B.C.E. - 500 C.E.). Emphasis on major sites, architecture, sculpture, and painting. Illustrated lectures and discussion; use of the Wilcox Classical Museum. No knowledge of Greek or Latin is required. Not open to students who have taken both CLSX 526/HA 526 and CLSX 527/HA 537, except with permission of the instructor. (Same as CLSX 317, HWC 317.) LEC.

HA 329. Politics and Conflict in Israel and Palestine. 3 Hours. H.
This course focuses on various aspects of the Israeli-Palestinian conflict including its history from the Ottoman period to the present day, the social and political effects on Israeli and Palestinian life and citizenship, official and unofficial narratives, and international responses. LEC.

HA 330. Italian Renaissance Art. 3 Hours. GE3H / H/W.
A survey of the art and architecture of Italy from c. 1300 to 1550. Special emphasis is placed on regional styles and the private, political, and devotional contexts in which works of art and architecture functioned. Some of the artists whose works are considered are Giotto, Duccio, Donatello, Botticelli, Leonardo, and Michelangelo. LEC.

HA 340. Special Study in Asian Art Before 1900: ______. 1-6 Hours. H.
This course is designed for the study of special topics in Asian art before 1900, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels.

HA 341. Special Study in Islamic Art, 14th-17th Century: ______. 1-6 Hours. H.
This course is designed for the study of special topics in Islamic art of the 14th-17th centuries. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels.

HA 342. Special Study in 18th/19th-Century European or American Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in European or American art of the 18th and/or 19th centuries, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels.

HA 343. Special Study in 20th/21st-Century Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in art of the 20th and/or 21st centuries, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels.

HA 353. Modern and Contemporary African Art. 3 Hours. H.
In this course, we examine the development of artistic modernisms in Africa in historical context. We also study the content, production, patronage, and display of modern and contemporary African art. In doing so, we consider African artists’ engagement with modernity, globalization, and contemporary issues, as well as interrogate influential myths and assumptions regarding African artists and the work they produce. Course themes include the workshop as a critical site, independence movements and the creation of national art forms, art as global commodity, and art in resistance, remembrance, and revolution. (Same as AAAS 353.) LEC.

HA 354. Japanese Prints. 3 Hours. NW / H/W.
This course explores the history of Japanese prints with special emphasis on ukiyo-e (pictures of the floating world) woodblock prints made during the Edo Period (early 17th to 19th century). The course is organized thematically as well as chronologically and examines woodblock prints by focusing on both design and socio-political history. The course is taught at the 300 and 500-levels with additional work required at the 500-level.

HA 361. Buddhist Art of Korea. 3 Hours. H.
Introduction to the history of Buddhist temple buildings, paintings, sculptures and illuminated hand-scrolls in Korea from the 4th through the 19th centuries, with special emphasis on their stylistic, geographical, social, devotional and literary contexts. Current theories and controversies pertinent to the history and study of Korean Buddhist art are also addressed. Not open to students who have taken HA 561 or REL 511. Work requirements will be greater for students enrolled at the 500 level than at the 300 level. Prerequisite: A college level introduction to Asian art history, or consent of instructor. LEC.

HA 362. Ceramics of Korea. 3 Hours. H.
A survey covering the history of Korean ceramics from prehistoric times through the early modern period, with special emphasis on their stylistic, geographical, social and political context. Topics include celadon-glazed, stamped and slip-decorated stoneware, Korean ceramics related to the Japanese tea ceremony and Mingei pottery. Not open to students who have taken HA 562. Work requirements will be greater for students enrolled at the 500 level than at the 300 level. Prerequisite: A college level introduction to Asian art history, or consent of instructor. LEC.

HA 363. Modern Korean Art and Culture. 3 Hours. H.
This course is a thematic introduction to Korean art and culture with an emphasis on modern and contemporary Korea. Pre-modern works are contextualized with respect to contemporary issues. Students learn how to conduct a comprehensive analysis of an artwork by considering the political, historical and social conditions of its time within a broader East Asian cultural framework. Prerequisite: An introductory course in art history at the college level, or consent of instructor. LEC.

HA 367. Art and Culture of Japan. 3 Hours. NW AE42/GE3H / H/W.
An introduction to the arts of Japan in historical and cultural context. Visual arts are stressed. LEC.

HA 368. Art and Culture of China. 3 Hours. NW AE42/GE3H / H/W.
An introduction to the arts of China in historical and cultural context. Visual arts are stressed. LEC.

HA 369. Art and Culture of Korea. 3 Hours. NW AE42/GE3H / H/W.
An introduction to the arts of Korea in historical and cultural context. Visual arts are stressed. LEC.

HA 370. American Art. 3 Hours. H.
A survey of American painting, sculpture, and architecture from colonial to recent times. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 376. West African Art. 3 Hours. H/W.
Introduction to the rich visual art traditions of West Africa. Emphasis is given to the major art-producing cultures of the Western Sudan and the Guinea Coast, including the pre-historic cultures of Nigeria, Mali, and Ghana. The diverse forms of figure sculptures and masquerade
HA 380. History of Photography. 3 Hours. H.
An introduction to the history of photography as a means of artistic expression and visual communication. Special attention is placed on the relation between developments in photography and the artistic and cultural context of the time. LEC.

HA 388. Modern and Contemporary Visual Arts of Japan. 3 Hours. H.
This course covers Japanese visual arts from the Meiji era (1868-1912) through the present day. The course is designed thematically as well as chronologically, and examines painting, sculpture and architecture focusing on both socio-political contexts and artistic concerns that emerged at certain times in recent Japanese history. The aim of this course is to provide first-hand knowledge of Japanese modern and contemporary visual arts as well as an in-depth consideration of some of the key issues attached to Japan's modernization and modernity. The course is taught at the 300 and 500-levels with additional work required at the 500-level. LEC.

HA 390. Special Study in African Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in African art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 391. Special Study in Asian Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in Asian art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 392. Special Study in Ancient Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in ancient art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 393. Special Study in Medieval Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in medieval art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 394. Special Study in Renaissance Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in Renaissance art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 395. Special Study in Baroque Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in Baroque art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 396. Special Study in American Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in American art. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 397. Special Study in Modern Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in modern art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 467. Art and Culture of Japan, Honors. 3 Hours. NW / H/W.
An introduction to the arts of Japan using fundamental principles and analytical methods of art history. Emphasis is placed on cultural contexts of art production, including history and religion. Honors version of HA 367, with more classroom discussion and opportunities for original research. Prerequisite: Membership in the University Honors Program or permission of the instructor. Not open to freshmen or students with credit in HA 267 or HA 367. LEC.

HA 468. Art and Culture of China, Honors. 3 Hours. NW / H/W.
An introduction to the arts of China using fundamental principles and analytical methods of art history. Emphasis is placed on cultural contexts of art production, including history and religion. Honors version of HA 368, with more classroom discussion and opportunities for original research. Prerequisite: Membership in the University Honors Program or permission of the instructor. Not open to freshmen or students with credit in HA 268 or HA 368. LEC.

HA 469. Art and Culture of Korea, Honors. 3 Hours. NW / H/W.
A survey of the development of painting in Korea, beginning with the earliest forms of figurative and landscape depiction. Emphasis will be placed on the major painting traditions of the Song, Yuan, Ming, and Qing Dynasties. Prerequisite: An introductory course in art history or Eastern Civilizations and membership in the University Honors Program or consent of instructor. LEC.

HA 488. Honors Essay in Art History. 3 Hours. AE61 / H.
Required for departmental honors. A course of directed research and the preparation of a paper on an art history topic, supervised by a professor. Prerequisite: A grade-point average of 3.5 in art history and 3.25 in all courses, and consent of a major advisor and supervising professor. IND.

HA 500. Prints and Printmakers. 3 Hours. H.
The major historical achievements in the field of printmaking, the artists who produced prints, and the impact of their work on the visual arts. Lectures supplemented by work with original material. Prerequisite: An introductory course in Western art history at the college level and three further hours of history of art or consent of instructor. LEC.

HA 505. Special Study: ______. 1-6 Hours. H.
This course is designed for the study of special topics in art history on a trial basis, open to both undergraduate and graduate students. Prerequisite: An introductory-level course in art history, appropriate to the specific special study topic; or consent of instructor. LEC.

HA 506. Early Medieval and Romanesque Art. 3 Hours. H.
This course examines the art of Europe from the Early Christian era through the Romanesque period, up to 1200. Architecture, sculpture, manuscript illumination, metalwork and painting are explored in relation to their political, religious and social contexts. Graduate students can expect to complete additional reading and writing assignments. Prerequisite: HA 100 or HA 150, or permission of the instructor. LEC.

HA 507. Gothic Art. 3 Hours. H.
This course examines the art of Europe during the Gothic period, from 1140-1500. Architecture, sculpture, manuscript illumination, metalwork, painting and furniture are explored in relation to their political, religious and social contexts. Graduate students can expect to complete additional production and meanings of these arts in historical and cultural contexts are examined. (Same as AAAS 376.) LEC.
reading and writing assignments. Prerequisite: HA 100 or HA 150, or permission of instructor. LEC.

HA 508. The Italian Renaissance Home. 3 Hours. H.
This course explores the history of domestic art and architecture in Italy, with a special emphasis on Florence, from c. 1350 to 1600. Palace architecture, religious works made for private devotions, the increasing use of mythological themes in painting and sculpture, birth trays, painted cassoni, majolica, and various types of portraiture are examined within the contexts of contemporary theories of virtue and magnificence, the rituals of marriage and childbirth, the public and private promotion of political and personal agendas, and changing tastes. In addition to acquiring an in-depth knowledge of the artistic and architectural milieu of Italian Renaissance homes and expanding their cultural understanding, students enrolled in this course engage in a series of assignments designed to build and hone their reading, critical thinking, visual analysis, research, and writing skills. The same assignments allow students to integrate their knowledge of and to think creatively about the period, objects, and buildings in question. A high expectation of class participation and the opportunity to present their research provide students with the opportunity to build and strengthen their oral communications skills. Prerequisite: HA 100, HA 150, HA 151, or the equivalent, or consent of instructor. LEC.

HA 510. Medieval Manuscripts and Early Printed Books. 3 Hours. H.
Students study the history of the book from 300 to 1500 A.D., concentrating on the role of visual imagery in books and the place of books in medieval and renaissance culture. In addition to discussing the relation between text and image, and studying the stylistic contexts for ancient, medieval, and Renaissance illumination and early woodcut illustration, participants in this course consider such additional topics as methods of book production, the development of cycles of illustration for religious and secular books, and the relationship between manuscripts and early printed books. Lectures and discussion are supplemented by visits to the fine collection of manuscripts, printed books, and facsimiles in the Kenneth Spencer Research Library. Prerequisite: An introductory course in Western art history at the college level, or consent of the instructor. LEC.

HA 525. Aegean Archaeology and Art. 3 Hours. H/W.
An interdisciplinary survey of the major cultures of the prehistoric Aegean (Greek) world from the Neolithic period to the end of the Bronze Age (ca. 3000-1100 B.C.E.), with special emphasis on the cultural and artistic achievements of the Mycenaean, Minoan, and Cycladic islanders, including their contacts with the neighboring cultures of Anatolia (Hittites and Troy), the Levant, Egypt, and South Italy. Includes lecture with slides and discussion. For advanced undergraduates with backgrounds in the humanities and for graduate students (especially in Classics and History of Art). No knowledge of Greek or Latin is required. (Same as CLSX 525.) LEC.

HA 526. Greek Archaeology and Art. 3 Hours. H.
An interdisciplinary survey of the material culture of the ancient Greek world from the Protogeometric period to the end of the Hellenistic age (ca. 1100 - 30 B.C.E.), with an emphasis on the major sites, monuments, and changing forms of social and artistic expression (architecture, sculpture, vase painting, and other arts). Includes lectures with slides and discussion; use of the Wilcox Museum of Classical Antiquities. No knowledge of Greek or Latin is required. For advanced undergraduates and graduate students with backgrounds in the humanities; and for graduate students (especially those in History of Art and Classics). (Same as CLSX 526.) LEC.

HA 527. Late Medieval Art in Italy. 3 Hours. H.
This course examines the history of paintings, sculptures and buildings produced in Italy from c. 1250 to 1400. Important individual works, artists, and decorative complexes, such as Giotto’s Scrovegni (Arena) Chapel, are analyzed in terms of their stylistic, geographical, social, historical, devotional, and literary contexts. Current theories and controversies pertinent to the history and study of 13th- and 14th-century Italian art are also addressed. Prerequisite: HA 100, HA 150, or the equivalent, or consent of instructor. LEC.

HA 529. Archaeology and Art of the Ancient Near East. 3 Hours. H.
A cross-cultural survey of the material remains of the major civilizations of the ancient Near East, including Anatolia, Mesopotamia, the Levant, and Egypt from Neolithic period to the rise of the Roman empire (ca. 6000 B.C.E. - 30 B.C.E.). Includes lectures with slides and discussion. For advanced undergraduates with backgrounds in the humanities and for graduate students (especially in Classics and History of Art). No knowledge of Greek or Latin is required. (Same as CLSX 529.) LEC.

HA 530. Renaissance Art in Italy: The 15th Century. 3 Hours. H/W.
The focus of this course is the history of Italian painting, sculpture, and architecture from 1400 to 1500. Special emphasis is placed on the diverse artistic styles and functions of works of art, as well as on the artists and patrons that produced them. Domestic art and the art and architecture of the 15th-century Italian courts are also discussed. Prerequisite: HA 100, HA 150, or the equivalent, or consent of instructor. LEC.

HA 531. Renaissance Art in Italy: The 16th Century. 3 Hours. H.
This course explores the history of Italian painting, sculpture, and architecture from c. 1500 to 1600. It focuses on the artistic centers of Florence, Rome, Parma, and Venice. Some of the artists whose works is considered are Leonardo, Michelangelo, Raphael, Pontormo, Titian, Cellini, and Giambologna. The history of 16th-century women patrons and artists is also addressed. Prerequisite: HA 100, HA 150, HA 151, or the equivalent, or consent of instructor. LEC.

HA 532. Michelangelo. 3 Hours. H.
During the sixteenth century, the writer Ludovico Ariosto described the Florentine artist Michelangelo Buonarroti (1475-1564) as “divine.” Since that time more has been written about Michelangelo than any other artist of the Italian Renaissance. His ability to work in diverse media, namely painting, sculpture, and architecture, as well as the power of his works, earned him this prominent position in the history of art and made him one of the most influential artists of the early modern period. This course will trace various aspects of Michelangelo’s long, sometimes troubled, and vibrant career, focusing on issues such as his techniques, patrons, and the innovative style of his works. Special emphasis will be placed on interpreting primary sources to understand better his life and works and place them within their artistic, historical, social, and religious contexts. Prerequisite: HA 100, HA 150, HA 151, or the equivalent, or consent of instructor. LEC.

HA 533. European Art 1789-1848: Gender and Revolution. 3 Hours. H.
This course will analyze painting in Europe from the late 18th century to the mid-19th century. Particular attention will be paid to the ways in which images represent and/or repress such themes as politics, history, gender, ethnicity, race, and class. Assigned readings present a variety of methodological perspectives—social-historical, feminist, formalist, and psychoanalytic. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 534. Art in France 1848-1900: Modernisms. 3 Hours. H.
This course will examine painting in France from 1848 to 1900 with particular emphasis given to the visual articulation and/or repression of such constructs as gender, race, history, and ethnicity. Assigned
readings present a variety of methodological perspectives—social-historical, feminist, formalist, and psychoanalytic. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 536. Islamic Art and Architecture in Africa. 3 Hours. H.
Study of Islamic art and architecture in various cultural and geographical settings, from the first mosques of North African and the Swahili coast to contemporary Islamized masquerades in West Africa. We consider art objects and architectural sites in terms of religious practice, trade and commerce, ritual and political power, and contemporary expression. (AAAS 536.) Prerequisite: AAAS 102, AAAS 103, HA 100, or HA 150; or permission of instructor. LEC.

HA 537. Roman Archaeology and Art. 3 Hours. H/W.
An interdisciplinary survey of the material culture of ancient Rome from its origins to the late empire (8th c.B.C.E. - 4th c.C.E.). Emphasis on major sites, monuments, and changing forms of social and artistic expression, as well as on Etruscan and Greek influence on Rome and Rome’s influences on its provinces. Includes lectures with slides and discussion; use of the Wilcox Museum of Classical Antiquities. No knowledge of Greek or Latin is required. For advanced undergraduates and graduate students with backgrounds in the humanities; and for graduate students (especially those in History of Art and Classics). (Same as CLSX 527.) LEC.

HA 538. Pompeii and Herculaneum. 3 Hours. H.
An interdisciplinary treatment of the art and archaeology of the ancient Roman cities of Pompeii and Herculaneum in Italy. Emphasis on the structures and decorations of major public spaces and houses and on aspects of cultural, social, political, commercial, and religious life from the period of the second century B.C.E. to 79 C.E., when Pompeii and Herculaneum were buried by the eruption of Mt. Vesuvius. Slide lectures and discussion. (Same as CLSX 538, HWC 538.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, History of Art, or permission of the instructor. LEC.

HA 539. History of Japanese Buddhist Art. 3 Hours. H.
A survey of the Buddhist art of Japan that begins with the introduction of Buddhism in the sixth century and ends with contemporary Buddhist art. Students will also consider how Buddhist images function as part of the living religious tradition in Japan. Prerequisite: A survey of either Asian art, Japanese art, Asian religions, Japanese culture, or consent of instructor. LEC.

HA 540. Special Study in Asian Art Before 1900: ______. 1-6 Hours. H.
This course is designed for the study of special topics in Asian art before 1900, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor. LEC.

HA 541. Special Study in Islamic Art, 14th-17th Century: ______. 1-6 Hours. H.
This course is designed for the study of special topics in Islamic art of the 14th-17th centuries. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor. LEC.

HA 542. Special Study in 18th-19th Century European or American Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in European or American art of the 18th and/or 19th centuries, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor. LEC.

HA 543. Special Study in 20th/21st-Century Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in art of the 20th and/or 21st centuries, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor. LEC.

HA 545. Early Chinese Art. 3 Hours. NW / H.
A survey of Chinese art from Neolithic times through the Han Dynasty (ca. 200 C.E.). Emphasis will be placed on recent archaeological excavations and also on the development of bronze vessels of the Shang and Zhou Dynasties. Prerequisite: A college level introduction to Asian art history, or consent of instructor. LEC.

HA 546. Chinese Sculpture. 3 Hours. H.
A survey of Chinese sculpture from the Shang dynasty through the Song dynasty (1600 BCE-1279 CE), focused on sculptural programs in native funerary art and Buddhist temples and cave-shrines. LEC.

HA 548. Buddhist Scriptures in Chinese Painting. 3 Hours. H.
Examination of Chinese paintings based on the major Buddhist scriptures (sutras) popular in China from the 8th century through the early modern period. Readings include selections from the sutras (in translation). Emphasis is placed on the cultural and religious reasons why certain scriptural themes were selected for representation and on the distinctively Chinese interpretation of these themes in pictorial art. Prerequisite: An introductory course in Asian art history, Eastern Civilizations, or Eastern religions or consent of instructor. LEC.

HA 549. Chinese Painting. 3 Hours. H.
An introductory survey of painting in China from the 7th through the 19th centuries. Prerequisite: One course in art history, or in East Asian languages cultures; or consent of instructor. LEC.

HA 550. Capstone in Art History: ______. 3 Hours. AE61 / H.
An advanced course dedicated to the in-depth study of special topics in art history. Students conduct research on a question within the parameters of the course topic and produce a research product that integrates knowledge from within the discipline of art history or in combination with other disciplines to generate new ideas. May be repeated for credit if content varies. Prerequisite: Junior or senior standing and twelve hours of art history, or consent of the instructor. LEC.

HA 554. Japanese Prints. 3 Hours. NW / H/W.
This course explores the history of Japanese prints with special emphasis on ukiyo-e (pictures of the floating world) woodblock prints made during the Edo Period (early 17th to 19th century). The course is organized thematically as well as chronologically and examines woodblock prints by focusing on both design and socio-political history. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Prerequisite: An introductory course in art history or consent of instructor. LEC.
HA 561. Buddhist Art of Korea. 3 Hours. H.
Introduction to the history of Buddhist temple buildings, paintings, sculptures and illuminated hand-scrolls in Korea from the 4th through the 19th centuries, with special emphasis on their stylistic, geographical, social, devotional and literary contexts. Current theories and controversies pertinent to the history and study of Korean Buddhist art are also addressed. Not open to students who have taken HA 361. Work requirements will be greater for students enrolled at the 500 level than at the 300 level. (Same as REL 511.) Prerequisite: A college level introduction to Asian art history, or consent of instructor. LEC.

HA 562. Ceramics of Korea. 3 Hours. H.
A survey covering the history of Korean ceramics from prehistoric times through the early modern period, with special emphasis on their stylistic, geographical, social and political context. Topics include celadon-glazed, stamped and slip-decorated stoneware, Korean ceramics related to the Japanese tea ceremony and Mingei pottery. Not open to students who have taken HA 362. Work requirements will be greater for students enrolled at the 500 level than at the 300 level. Prerequisite: A college level introduction to Asian art history, or consent of instructor. LEC.

HA 564. European Art, 1900-1945. 3 Hours. H.
A detailed survey of modern European art from the turn of the century through World War II. Movements to be considered may include post-impressionism, cubism, constructivism, dada, and surrealism. Graduate students may be expected to do additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 565. Art Since 1945. 3 Hours. H.
An international survey of modern and postmodern art since 1945. Topics to be covered may include abstract expressionism, pop, minimalism, happenings, and performance art, earth works, conceptual art, feminist art, photo-realism, crafts, and new media. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 566. American Art to 1860: Inventing a Nation. 3 Hours. H.
A survey of major artists and movements in painting, sculpture, and allied arts, from the period of initial European settlement to the mid-19th century. Consideration will be given to developments in portraiture, history painting, landscape, still-life, statuary, and decorative arts. Attention will be paid both to formal developments and to cultural context. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 567. Italian Baroque Art. 3 Hours. H.
Seventeenth-century art in the northern and southern Netherlands with emphasis on painting of Rubens and Rembrandt. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 581. American Art 1860-1890: Gilded Age. 3 Hours. H.
A survey of major artists and movements in painting, sculpture, and allied arts, from the period of initial European settlement to the mid-19th century. Consideration will be given to developments in portraiture, history painting, landscape, still-life, statuary, and decorative arts. Attention will be paid both to formal developments and to cultural context. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 582. American Art 1860-1900: Gilded Age. 3 Hours.
A survey of major artists and movements in painting, sculpture, and allied arts, from the early urban realists to the emergent avant-garde at mid century. Consideration will be given to the assimilation of European modernism. Attention will be paid both to formal developments and to cultural context. Graduate students may be expected to complete additional reading and writing assignments.

HA 583. American Art 1900-1945: Rise of Modernism. 3 Hours. H.
A survey of major artists and movements in painting, sculpture, and allied arts, from the early urban realists to the emergent avant-garde at mid century. Consideration will be given to the assimilation of European modernism. Attention will be paid both to formal developments and to cultural context. Graduate students may be expected to complete additional reading and writing assignments.
Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 584. Kansas Art, History, and Popular Culture. 3 Hours. H.
An overview of the art and cultural history of Kansas (and Kansas City) from territorial days to the present. Emphasis is placed on key issues, figures and events. A general familiarity with American history is recommended. (Same as FMS 414). LEC.

HA 585. The Art of Buddhism. 3 Hours. NW / H/W.
A survey of the Buddhist arts (architecture, sculpture, and painting) of India, China, and Japan. LEC.

HA 586. Japanese Painting. 3 Hours. NW / H/W.
A survey covering the development of Japanese painting from the Kofun period to the early twentieth century. Topics include Buddhist and other religious paintings, narrative handscrolls, ink painting, decorative screens, ukiyo-e, and western-style paintings of the Meiji and Taisho periods. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: An introductory course in Asian art or consent of instructor. LEC.

HA 587. Japanese Sculpture. 3 Hours. NW / H.
A survey of Japanese sculpture from the Kofun period (300-700 C.E.) to the present day. Emphasis is placed on works of Buddhist sculpture from the 7th through the 13th centuries. Prerequisite: An introductory course in Asian art history or consent of instructor. LEC.

HA 588. Modern and Contemporary Visual Arts of Japan. 3 Hours. H.
This course covers Japanese visual arts from the Meiji era (1868-1912) through the present day. The course is designed thematically as well as chronologically, and examines painting, sculpture and architecture focusing on both socio-political contexts and artistic concerns that emerged at certain times in recent Japanese history. The aim of this course is to provide first-hand knowledge of Japanese modern and contemporary visual arts as well as an in-depth consideration of some of the key issues attached to Japan's modernization and modernity. Prerequisite: an introductory course in art history or consent of instructor. The course is taught at the 300 and 500-levels with additional work required at the 500-level. LEC.

HA 589. Japanese Artistic Encounters with Europe and the United States. 3 Hours. NW / H.
Consideration of Japanese artistic responses to visual culture from Europe and the United States. The course focuses upon Japanese art from the 16th century to the present. Prerequisite: A college-level introduction to Asian art history or consent of instructor. LEC.

HA 590. Special Study in African Art: ______, 1-6 Hours. H.
This course is designed for the study of special topics in African art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history or African Studies, or consent of the instructor. LEC.

HA 591. Special Study in Asian Art: ______, 1-6 Hours. H.
This course is designed for the study of special topics in Asian art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history or Asian Studies, or consent of the instructor. LEC.

HA 592. Special Study in Ancient Art: ______, 1-6 Hours. H.
This course is designed for the study of special topics in ancient art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in Art History or Classics, or consent of the instructor. LEC.

HA 593. Special Study in Medieval Art: ______, 1-6 Hours. H.
This course is designed for the study of special topics in medieval art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor. LEC.

HA 594. Special Study in Renaissance Art: ______, 1-6 Hours. H.
This course is designed for the study of special topics in Renaissance art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor. LEC.

HA 595. Special Study in Baroque Art: ______, 1-6 Hours. H.
This course is designed for the study of special topics in Baroque art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor. LEC.

HA 596. Special Study in American Art: ______, 1-6 Hours. H.
This course is designed for the study of special topics in American art. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor. LEC.

HA 597. Special Study in Modern Art: ______, 1-6 Hours. H.
This course is designed for the study of special topics in modern art, including courses taken through study abroad. May be repeated for credit if content varies. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor. LEC.

HA 600. Biography of a City: ______, 3 Hours. H/W.
An interdisciplinary study of a city, covering its history, literature, and arts during the periods when the city's culture reached its height. LEC.

HA 676. West African Art. 3 Hours. NW / H/W.
Introduction to the rich visual art traditions of West Africa. Emphasis is given to the major art-producing cultures of the Western Sudan and the Guinea Coast, including the archaeological cultures of Nigeria, Mali, and Ghana. The diverse forms of figure sculptures and masquerade performance and the meanings of these arts in historical and cultural contexts are examined. Upper division and graduate students can enroll for this course with appropriate course requirements. Not open to students who have taken AAAS 376/HA 376. (Same as AAAS 676.) LEC.

HA 677. African Design. 3 Hours. NW / H/W.
A survey of sub-Saharan African media, emphasizing textiles, ceramics, metal and bead work, the artist's techniques, working methods and apprenticeship, and historical and contemporary cultural contexts, including the influence of tourism and the international art market on artistic production and style. Open to juniors, seniors, and graduate students only. (Same as AAAS 677.) Prerequisite: AAAS 376 or HA 376, or AAAS 578 or HA 578, or an introductory course in art history at the college level, or consent of instructor. LEC.

HA 678. African Expressive Culture: ______, 3 Hours. NW / H/W.
An in-depth examination of an artistic tradition shared by a number of African cultures. Discussion includes historical development related to style, use and meaning and other relevant issues critical to the topic. Open to juniors, seniors, and graduate students only. (Same as AAAS 679.) Prerequisite: AAAS 376 or HA 376, or AAAS 578 or HA 578, or
HA 704. Seminar on Christian Iconography. 3 Hours.
A study of subject matter in the visual arts and of modes of representing certain themes and categories of ideas and meanings in the history of art. Prerequisite: Nine hours of history of art and knowledge of a foreign language. SEM.

HA 705. Major Artist: ______. 1-3 Hours.
The study in detail of a single artist or of an artist and his school or shop. Prerequisite: An introductory course in Western art history at the college level and the 400-level course in the period in which the artist's work falls. SEM.

HA 706. Seminar on Special Problems in Art History: ______. 1-6 Hours.
Seminar dealing with particular art historical problems of a special and specific nature. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 707. Directed Readings. 1-6 Hours.
Supervised study and research into special fields of art of particular interest to the student. Weekly consultations and reports. RSH.

HA 710. Museum Techniques and Functions. 3 Hours.
Primarily for graduate students interested in pursuing a career in art museum work. The development of the museum idea, the activities of the art museum, as well as practical experience in the various fields of art museum curatorship and public activity are among the areas studied. SEM.

HA 712. Directed Museum Study. 1-6 Hours.
Supervised study and research projects related to art works in the permanent collections or special exhibitions of local museums of art. Planned in consultation with a faculty member and the director of the museum. RSH.

HA 715. Seminar in African Art. 3 Hours.
A concentrated study of a special topic relating to African Art studies. Different topics are offered in different semesters. (Same as AAAS 715.) Prerequisite: Nine hours of Art History and/or consent of instructor. SEM.

HA 716. Art of the Early Middle Ages in the West. 3 Hours.
A pro-seminar in the art of the West from the Migration Period through the art of the Carolingian Empire. SEM.

HA 719. Art Histories: Theory and Methodology. 3 Hours.
This course examines the major methodologies and theories that have shaped and continue to shape the field of art history. Through critical reading of primary, secondary, and interpretive texts, the course will analyze closely the history and current state of the discipline. Prerequisite: Nine hours of History of Art or consent of instructor. SEM.

HA 720. Asian Art: Theory and Method. 3 Hours.
This course examines important methodologies and theories of the past and present employed in the field of Asian art history. Through critical reading of primary documents and secondary scholarship, students will gain historical perspective on and practical tools for research in the history of Asian art and visual culture. Prerequisite: Nine hours of History of Art or consent of instructor. SEM.

HA 723. Romanesque Art. 3 Hours.
A study of Western European sculpture, painting, and architecture from the period of the Migrations, through the so-called "Dark Ages" to the creation of the Gothic style. Prerequisite: A survey of Medieval art. SEM.

HA 725. The Gothic Cathedral. 3 Hours.
The development and spread of Gothic architecture and sculpture in France, England, Spain, and Germany. Prerequisite: A college level introduction to Medieval art history. SEM.

HA 745. Dutch and Flemish Painting of the 17th Century. 3 Hours.
A detailed study of the art of Hals, Rembrandt and Vermeer, on the one hand, and of Rubens and Van Dyck on the other. Prerequisite: A survey of Northern Baroque art or consent of instructor. SEM.

HA 760. Proseminar in Korean Art. 3 Hours.
An intensive study of a selected topic in the visual arts of Korea; topics may focus on a particular genre, theme, historical period or group of artists, for example Buddhist painting and sculpture, Choson period landscape and genre painting, ceramics and lacquerware or modern and contemporary art in North and South Korea. May be repeated for credit up to a maximum of 12 hours. Prerequisite: Consent of instructor. SEM.

HA 782. Japanese Painting. 3 Hours.
A survey covering the development of Japanese painting from the Kofun period down to the early twentieth century. Topics will include Buddhist and other religious paintings, narrative handscrolls, suibokuga, decorative screens, genre paintings and ukiyo-e prints, and Western-style paintings of the Meiji and Taisho periods. Work requirements will be greater for students enrolled at the 700 level. Prerequisite: HA 265, or HA 267, or consent of instructor. LEC.

HA 788. Proseminar in Japanese Art. 3 Hours.
Critical analysis of readings on selected topics in Japanese art. May be repeated for credit up to a maximum of 12 hours. Prerequisite: Consent of instructor. SEM.

HA 789. Proseminar in Chinese Art. 3 Hours.
Critical analysis of readings on selected topics in Chinese art. May be repeated for credit up to a maximum of 12 credit hours. Prerequisite: Consent of instructor. SEM.

HA 805. Seminar in Graphic Arts: ______. 3 Hours.
A concentrated study of one or more artists, techniques, or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. Prerequisite: A course in graphic art, or in a discipline related to the field of the seminar. SEM.

HA 806. Problems in Connoisseurship West: ______. 3-6 Hours.
The analysis of the work of a specific artist, medium or period, and developing a knowledge of the methods and means of establishing standards of quality and authorship. Includes study in Spencer and/or Nelson Museums. Prerequisite: Nine hours of art history and a reading knowledge of a pertinent foreign language. SEM.

HA 822. Seminar in Buddhist Art: ______. 3 Hours.
A concentrated study of selected problems dealing with Buddhist art in Asia. Different topics are offered in different seminars. May be repeated for credit up to a maximum of twelve hours. Prerequisite: Reading knowledge of Chinese or Japanese and consent of instructor. SEM.

HA 824. Seminar in Edo Period Painting: ______. 3 Hours.
Special study of one or more schools of painting of the Edo period (1615-1868) in Japan. Individual works will be analyzed in depth. Prerequisite: A course in Japanese painting. SEM.

HA 870. Seminar in Photographic History: ______. 3 Hours.
Advanced study of photographic images as made and used in the nineteenth and twentieth centuries. Requires primary research. Prerequisites include study of nineteenth century history of art. Specific topics vary. SEM.
HA 898. Franklin Murphy Seminar in Art History: _____. 3 Hours.  
This seminar is given each spring by the Murphy Lecturer of the year and includes two weeks of intensive study with a nationally known expert in a special field of art history. The other weeks of seminar meetings for the semester are conducted by the faculty member most closely specialized in this field. Prerequisite: Consent of supervising faculty member. SEM.

HA 899. Thesis. 1-6 Hours.  
THE.

HA 906. Seminar on Special Problems in Art History: _____. 1-6 Hours.  
Seminar dealing with particular art historical problems of a special and specific nature. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 907. Directed Readings in Art. 1-12 Hours.  
Supervised study and research into special fields of art of particular interest to the student. Weekly consultation and reports. Prerequisite: Nine hours of art history and a reading knowledge of a pertinent foreign language. RSH.

HA 910. Curatorial Problems:. 3-8 Hours.  
Primarily for the graduate student interested in art museum work. The student will engage in specialized research related to museum activities resulting in either a research paper, an exhibition, or a catalogue of some portion of the museum's holdings. Prerequisite: Nine hours of history of art and a reading knowledge of a pertinent foreign language. SEM.

HA 920. Seminar in Early Medieval Art: _____. 3 Hours.  
A study of selected problems dealing with the art of the early Middle Ages. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 925. Seminar in Late Medieval Art: _____. 3 Hours.  
A study of selected problems dealing with the art of the later Middle Ages. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 930. Seminar in Italian Renaissance Art: _____. 3 Hours.  
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 935. Seminar in Northern Renaissance Art: _____. 3 Hours.  
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 940. Seminar in 17th Century Art: _____. 3 Hours.  
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 950. Seminar in 18th Century Art: _____. 3 Hours.  
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 955. Seminar in 19th Century Art: _____. 3 Hours.  
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 960. Seminar in 20th Century Art: _____. 3 Hours.  
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 965. Seminar in American Art: _____. 3 Hours.  
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. Prerequisite: Consent of instructor. SEM.

HA 970. Seminar in Photography and Fine Art: _____. 3 Hours.  
Advanced study of the relationships between photographic images, prints, painting, mass media, illustration, and other forms of visual expression. Specific periods and areas of emphasis will vary. Prerequisite: Advanced study of nineteenth century history of art. SEM.

HA 980. Seminar in Chinese Art: _____. 3 Hours.  
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 982. Seminar in Later Chinese Art: _____. 3 Hours.  
A concentrated study of artists, monuments or movements in Later Chinese art. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 16 credit hours. SEM.

HA 990. Seminar in Japanese Art: _____. 3 Hours.  
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 995. Seminar in Korean Art: _____. 3 Hours.  
Concentrated study of one particular genre, theme, historical period or group of artists. Readings will include primary and secondary language material in Korean, Japanese and/or Chinese including texts in classical forms of these languages. May be repeated for credit up to maximum of twelve hours. Prerequisite: Reading knowledge of Korean, Japanese or Chinese and consent of instructor. SEM.

HA 999. Doctoral Dissertation. 1-12 Hours.  
THE.

History Courses

HIST 101. Introduction to History: _____. 3 Hours. HT GE11 / H.  
An introduction to the study of history. The course will expose the student to the major issues and methods of historical study. This will be done through the study of a specific historical period or topical area. In the study of this period or topic, students will be introduced to schemes of interpretation, critical readings and analysis, primary sources, and evaluation of evidence. LEC.

HIST 102. Introduction to History, Honors: _____. 3 Hours. HT / H.  
An introduction to the study of history. The course will expose the student to the major issues and methods of historical study. This will be done through the study of a specific historical period or topical area. In the study of this period or topic, students will be introduced to schemes of interpretation, critical readings and analysis, primary sources, and evaluation of evidence. Prerequisite: Membership in the College Honors Program or consent of department. LEC.

HIST 103. Environment and History. 3 Hours. H.  
Nature is our oldest home and newest challenge. This course surveys the environmental history of the earth from the extinction of the dinosaurs to the present with a focus on the changing ecological role of humans. It analyzes cases of ecological stability, compares cultural attitudes toward nature, and asks why this ancient relationship seems so troubled. (Same as EVRN 103.) LEC.
HIST 104. Introduction to African History. 3 Hours. NW GE11/GE3H / H/W.
An introduction to important historical developments in Africa mainly south of the Sahara. Topics will include early history, empires, kingdoms, and city-states, the slave trade, southern Africa, partition and colonialism, the independence era, military and civilian governments, and liberation movements. Approaches will include literature, the visual arts, politics, economics, and geography. (Same as AAAS 105.) LEC.

HIST 105. Introduction to Ancient Near Eastern and Greek History. 3 Hours. NW GE3H / H/W.
A general survey of the political, social, and economic developments of Mesopotamia, Egypt, Asia Minor, and Greece from Paleolithic times to 323 B.C. LEC.

HIST 106. Introduction to Roman History. 3 Hours. H/W.
A general survey of the political, social, and economic developments of ancient Rome from 753 B.C. to 475 A.D. LEC.

HIST 107. Introduction to the Ancient World. 3 Hours. H.
This course covers the history of the ancient Near East, Greece and Rome with emphasis on the origins of agriculture, writing, cities, empires, and democracy. Students will be introduced to schemes of interpretation, critical readings, and analysis, primary sources, and evaluation of evidence. LEC.

HIST 108. Medieval History. 3 Hours. HT GE11 / H/W.
The history of Europe from the Barbarian Invasions to the beginning of the 16th century. LEC.

HIST 109. The Black Experience in the Americas. 3 Hours. HT AE41 / H/W.
An interdisciplinary study of the history of the African peoples of the New World, relating their cultures and institutions to the African background and to their peculiar New World experiences up to and including the nineteenth century. While the main emphasis is on the U.S.A., attention is also paid to the Caribbean and Latin America. Approaches include demography, economics, social and political developments, literature, and music. (Same as AAAS 106.) LEC.

HIST 111. Introduction to African History, Honors. 3 Hours. NW / H/W.
An intensive version of AAAS 105/HIST 104. An introduction to important historical developments in Africa, mainly south of the Sahara. Topics include early history, empires, kingdoms and city-states, the slave trade, southern Africa, partition and colonialism, the independence era, military and civilian governments, and liberation movements. Approaches include literature, the visual arts, politics, economics, and geography. Open only to students in the University Honors Program or by consent of instructor. (Same as AAAS 115.) LEC.

HIST 112. Introduction to British History. 3 Hours. H.
This course will introduce students to the concepts, issues, and methods of historical study, at the same time as it explores the main processes and events which shaped the history of Britain and its imperial dependencies. Students will be introduced to the nature and validity of different historical interpretations, and to the purpose and merit of historical writings. LEC.

HIST 113. Europe 1500-1789, Honors. 3 Hours. HT / H.
An introduction to early modern European history, with emphasis on the cultural, political, economic, and social processes and events which helped to shape the modern world: The renaissance, the rise of the nation states, the Reformation, absolutism, and constitutionalism, the Enlightenment, and the coming of the French Revolution. Not open to students who have taken HIST 114. This Honors course is a Humanities Historical Studies Principal Course. Prerequisite: Membership in the College Honors Program or consent of department. LEC.

HIST 114. Renaissance to Revolution: Europe 1500-1789. 3 Hours. HT GE11 / H/W.
An introduction to early modern European history, with emphasis on the cultural, political, economic, and cultural forces which have helped to shape the modern world. The renaissance, the rise of nation states, the Reformation, absolutism and constitutionalism, the Enlightenment, and the coming of the French Revolution. LEC.

HIST 115. French Revolution to the Present: Europe 1789-Present. 3 Hours. HT GE11/GE3H / H/W.
An introduction to recent European history, with emphasis on the social, political, economic, and cultural forces which have helped to create the Europe of today: the French Revolution, the romantic movement, the revolutions of 1848, nationalism, imperialism, Communism, and two World Wars, the cold war, and its aftermath. LEC.

HIST 116. French Revolution to the Present: Europe 1789 to Present, Honors. 3 Hours. HT GE11/GE3H / H.
An introduction to recent European history, with emphasis on the social, political, economic, and cultural forces which have helped to create the Europe of today: The French Revolution, the romantic movement, the revolutions of 1848, nationalism, imperialism, Communism, and two World Wars, the cold war and its aftermath. Not open to students who have taken HIST 115. This Honors course is a Humanities Historical Studies Principal Course. Prerequisite: Membership in the College Honors Program or consent of department. LEC.

HIST 117. Russia, an Introductory History. 3 Hours. HT / H/W.
A survey of the evolution of Russia from its origins to the present. The focus will be on the interaction of government and society and on internal and external pressures affecting modernization and reform, revolution, and territorial expansion. LEC.

HIST 118. History of East Asia. 3 Hours. NW AE42 / H/W.
A survey of the history of China, Japan, Korea, and other cultures in East Asia from premodern to modern times. Students are introduced to the major currents of East Asian history and historical methods used to study them. Not open to students with credit in upper division East Asian history. LEC.

HIST 119. History of East Asia, Honors. 3 Hours. NW AE42 / H/W.
A survey of the history of China, Japan, Korea, and other cultures in East Asia from premodern to modern times. Students are introduced to the major currents of East Asian history and historical methods used to study them. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

HIST 120. Colonial Latin America. 3 Hours. NW AE42/GE3H / H/W.
The principal focus is on the evolution and analysis of societies, economies, and religions of native American peoples, the impact of Spanish and Portuguese conquests and settlement, government, trade and culture upon native civilizations, the influence of African population and culture, and the creole nature of the resulting society in the colonial period. Changes in the society and economy which presaged the movements for independence are also discussed. LEC.

HIST 121. Modern Latin America. 3 Hours. HT GE3H / W.
Students are introduced to historical analysis within the context of the emergence of national identities and the process of modernization in the region. It also discusses key processes such as urbanization and industrialization and examines social movements for reform or revolution in the 20th Century. The course compares social, cultural, economic, and political changes across a variety of countries since 1810, giving particular attention to the legacies of colonialism. In this way the course deals with interpretations of the processes and movements and major issues of Latin American historiography. LEC.
HIST 122. Colonial Latin America, Honors. 3 Hours. NW AE42/GE3H / H/W.
The principal focus is on the evolution and analysis of societies, economies, and religions of native American peoples, the impact of Spanish and Portuguese conquests and settlement, government, trade and culture upon native civilizations, the influence of African population and culture, and the creole nature of the resulting society in the colonial period. Changes in the society and economy which presaged the movements for independence are also discussed. Prerequisite: Membership in the College Honors Program or permission of instructor. LEC.

HIST 123. Modern Latin America, Honors. 3 Hours. HT GE3H / W.
Similar in content to HIST 121. Students are introduced to historical analysis within the context of the emergence of national identities and the process of modernization in the region. The course compares social, cultural, economic, and political changes across a variety of countries since 1810, giving particular attention to the legacies of colonialism. It also discusses key processes such as urbanization and industrialization and examines social movements for reform and revolution in the 20th century. In this way the course deals with interpretations of these processes and movements and major issues of Latin American historiography. Prerequisite: Membership in the University Honors Program or permission of instructor. LEC.

HIST 124. Latin American Culture and Society. 3 Hours. SC AE42 / S.
An introduction to the interdisciplinary study of Latin America, as manifest in the arts and literature, history, and in environmental, political, economic, and social realities. Explores and critiques the principal themes and methodologies of Latin American Studies, with an aim towards synthesizing contributions from several different disciplines. Emphasizes the unique insights and perspectives made possible by interdisciplinary collaboration and provides students with the basic knowledge base for understanding Latin America today. (Same as LAA 100.) LEC.

HIST 128. History of the United States Through the Civil War. 3 Hours. HT GE3H / H.
A historical survey of the United States from the peopling of the continent through the Civil War. This survey is designed to reflect the diversity of the American experience, to offer the student a chronological perspective on the history of the United States, and to explore the main themes, issues, ideas, and events which shaped that history. LEC.

HIST 129. History of the United States After the Civil War. 3 Hours. HT GE3H / H.
A historical survey of the American people from Reconstruction to the present. This survey is designed to reflect the diversity of the American experience, to offer the student a chronological perspective on the history of the United States, and to explore the main themes, issues, ideas, and events which shaped that history. Not open to students who have taken HIST 128. Prerequisite: Membership in the College Honors Program or consent of department. LEC.

HIST 130. History of the United States Through the Civil War, Honors. 3 Hours. HT GE3H / H.
A historical survey of the United States from the peopling of the continent through the Civil War. This survey is designed to reflect the diversity of the American experience, to offer the student a chronological perspective on the history of the United States, and to explore the main themes, issues, ideas, and events which shaped that history. Not open to students who have taken HIST 128. Prerequisite: Membership in the College Honors Program or consent of department. LEC.

HIST 131. History of the United States After the Civil War, Honors. 3 Hours. HT GE3H / H.
A historical survey of the American people from Reconstruction to the present. This survey is designed to reflect the diversity of the American experience, to offer the student a chronological perspective on the history of the United States, and to explore the main themes, issues, ideas, and events which shaped that history. Not open to students who have taken HIST 128. Prerequisite: Membership in the College Honors Program or consent of department. LEC.

HIST 136. Early Science to 1700. 3 Hours. H.
Surveys the Western scientific tradition from roots in ancient Egypt, Mesopotamia, and Greece to the Scientific Revolution in seventeenth-century Europe. Focuses on the theoretical, methodological, and institutional development of the physical and bio-medical sciences. Addresses interactions of science with the technological, religious, philosophical, and social dimensions of Western culture. LEC.

HIST 137. History of Modern Science. 3 Hours. H.
Surveys the history of science from the seventeenth century to the present with study of the changing theoretical, institutional, and social character of the scientific enterprise. Addresses physical, biological, and social sciences with attention to the chemical revolution at the turn of the nineteenth century, evolutionary biology, the new physics of the early twentieth century, and the professionalization of social science. Relates scientific changes to historical developments in technology, religion, national traditions in Europe and the USA, and non-Western cultures. LEC.

HIST 140. Global Environment I: The Discovery of Environmental Change. 5 Hours. GE3H / U.
This interdisciplinary course and laboratory sections survey the foundations of environmental understanding and the process of scientific discovery from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the history of environmental systems and life on earth, the discovery of biotic evolution, ecological change, and climate change. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as EVRN 140 and GEOG 140.) LEC.

HIST 142. Global Environment II: The Ecology of Human Civilization. 5 Hours. GE3H / U.
This interdisciplinary course and its laboratory sections survey the history of humanity's relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the ecology of colonialism and industrial civilization, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as EVRN 142 and GEOG 142) LEC.
GEOG 144 and EVRN 144.) Open only to students admitted to the University Honors Program or by permission of instructor. LEC.

HIST 145. Global Environment II: The Ecology of Human Civilization, Honors. 5 Hours. U.
This interdisciplinary course and its laboratory sections survey the history of humanity's relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics will include the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the ecology of colonialism and industrial civilization, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to the humanity's engagement with the global environment using historical and present-day examples. (Same as EVRN 145 and GEOG 145.) Open only to students in the University Honors Program or by permission of instructor. LEC.

HIST 160. Introduction to West African History. 3 Hours. NW AE42/GE3H / H.
This course treats West African history through the first part of the 20th century. The student is provided with a perspective on the major historical patterns that gave rise to West Africa's development as an integral part of world history. Special attention is paid to anthropological geographical, and technological developments that influenced West African political and socioeconomic changes. (Same as AAAS 160.) LEC.

HIST 177. First Year Seminar: _____ . 3 Hours. HT GE11.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in history. May not contribute to major requirements in history. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

HIST 206. Disasters in Mediterranean Antiquity. 3 Hours. H.
This course examines a variety of natural and man-made disasters in the ancient Mediterranean world including floods, volcanic eruptions, earthquakes, famines, plagues, and tsunamis. Emphasis throughout is on exploring the range of impacts, responses, and attempts at recovery documented by ancient sources and proposed by modern scholars. The focus lies on primary evidence, ranging from the Bible to Greece and Rome via Egypt and Mesopotamia. The course aims to familiarize students with several types of catastrophic events that occurred in antiquity in order to gain an understanding of their effects on the environment and on decision making process. In addition to investigating what these disasters entailed, we seek to appreciate how they affected societies in various ways including economically, psychologically, and demographically, and how individuals and governments reacted and responded to these crises. LEC.

HIST 210. Brazil and Africa: Atlantic Encounters. 3 Hours. H.
This is a survey course on the history of the relationships between Brazil and Western Africa from the sixteenth century onward. We examine the shape of the Atlantic world, the nature of the Portuguese empire in Brazil and Africa, the presence of Brazilian born agents in Western Africa, the cultural exchanges, the impact of colonial rule, and the responses of indigenous societies to these developments. Among the topics to receive attention are Brazil/Portuguese slave trade; slavery in Western Africa, urban and rural context of African slavery in Brazil; the family and religious life in both sides of the Atlantic; Brazilian communities in the coast of Africa; the abolition of slavery; and the long lasting relationships between Western Africa and Brazil. Students develop familiarity with major historical concepts, themes, and subjects. The course also aims to explore history as process to make sense of the past and the present. (Same as AAAS 210.) LEC.

HIST 220. A Global History of Human Health. 3 Hours. H.
This course surveys how human populations have experienced diseases including those induced by infectious microbes, environmental agents, and dietary causes from prehistoric hunter-gatherer societies to today's global population. Particular emphasis is on major transitions and historical events that have led to major epidemics. These transitions and events include but are not limited to the transition to agriculture, urbanization, imperial expansion, colonialism, industrialization, world wars, factory farming, and the transportation revolution. The development of medicine, public policies, and global health organizations is a central theme as is the development of global health disparities. Students are challenged to think historically and apply a long-term perspective to understand today's global health problems. LEC.

HIST 250. Study Abroad Topics in: ____. 1-5 Hours. H.
This course is designed for the study of special topics in History at the freshman/sophomore level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

HIST 300. Modern African History. 3 Hours. NW AE42 / H/W.
A survey of social, political, and economic developments during the colonial era and independence struggles, followed by a closer examination of the contemporary experience in a selected country or region. (Same as AAAS 305.) LEC.

HIST 301. The Historian's Craft, Honors. 3 Hours. H.
This course introduces students to the practice and methods of the study of history and serves as the gateway to the major. Students learn (1) to think historically; (2) to understand how historians construct and write about the past through narratives, theory and analytical discussion; (3) to critically evaluate historical arguments and the material used to substantiate those arguments, including an introduction to the process of peer review; (4) to develop writing and research skills including the interpretation of primary sources; and (5) to master professional standards of presenting their findings. This course is required of all history majors and is a prerequisite for HIST 696 Seminar in: ______. Prerequisite: Open only to declared History majors or by consent of instructor. LEC.

HIST 302. The Historian's Craft, Honors. 3 Hours. H.
This course introduces students to the practice and methods of the study of history and serves as the gateway to the major. Students learn (1) to think historically; (2) to understand how historians construct and write about the past through narratives, theory and analytical discussion; (3) to critically evaluate historical arguments and the material used to substantiate those arguments, including an introduction to the process of peer review; (4) to develop writing and research skills including the interpretation of primary sources; and (5) to master professional standards of presenting their findings. This course, or HIST 301 - its non-honors equivalent, is required of all history majors and is a prerequisite for HIST 696 Seminar in: ______. Prerequisite: Open only to students admitted to the University Honors Program who are declared History majors, or by consent of instructor. LEC.

HIST 303. Sin Cities. 3 Hours. H.
This course offers a comparative global introduction to the history of the modern city by looking at the ways in which certain metropolises developed an attractive underbelly of decadence at the same time as they sought to be centers of refined and orderly cosmopolitan life. The course examines topics such as popular culture, gambling, prostitution, crime, violence, nightlife, tourism, and corruption in the context of the increased social mobility that characterized the beginning of the industrial age and that has extended into the 21st century. Students investigate the changing relation
between work and leisure, spectacle and consumerism, and urban space and the struggle for order. LEC.

HIST 304. 1642, 1688, 1776: Three British Revolutions. 3 Hours. H.
Explains and analyzes the three revolutions in the English-speaking world which, more than any others, are held to have laid the foundations of modernity. Themes discussed include social, intellectual, and political developments, structures, and conflicts. 1642 and 1688 are treated in the setting of England's relations with Scotland and Ireland, and against the background of European wars of religion. 1776 is analyzed in a transatlantic context as a civil war within the wider British polity. LEC.

HIST 305. The Scientific Revolution. 3 Hours. H.
Describes and analyzes the factors producing a Scientific Revolution in early-modern Europe. Focuses on fundamental changes in astronomy-cosmology, physics, and biology from Copernicus to Newton. Examines the emergence of experimental method as an essential part of Western science. Portrays the development of new forms of scientific organization and the cultural frameworks that bore and shaped them. Surveys the various interpretations of this period expressed by current historians of science. LEC.

HIST 306. Science and Western Culture. 3 Hours. H.
Analyzes the institutional, social, technological, and political circumstances of science in the Western tradition. Examines the place of science in pre-modern European settings. Emphasizes the shifting centers of national scientific prominence since the seventeenth century from Italy to Britain to France to Germany to the USA. LEC.

HIST 307. Modern African History, Honors. 3 Hours. NW AE42 / H.
An intensive version of HIST 300. A survey of social, political, and economic developments during the colonial era and independence struggles, followed by a closer examination of the contemporary experience in a selected country or region. Open only to students admitted to the University Honors Program, or by consent of the instructor. (Same as AAAS 307.) LEC.

HIST 308. Key Themes in Modern Global History. 3 Hours. H.
A comparative historical analysis of major global developments from the late 15th century to the present. Some of the themes likely to be explored are empire-building, contact between cultures and colonial social relations; the attraction of cities, their role in a global economy and the shift to an urban world; and the impact of capitalism and industrialization on social organization including conflict between classes and changes in the nature of work. Students learn ways of interpreting primary historical documents and comparing historical investigations across time and space. Not open to students who have completed HIST 100. LEC.

HIST 309. History of Chemistry. 3 Hours. H.
Birth of modern chemical science from roots in Greek natural philosophy, alchemy, Renaissance medicine, and technology. The Chemical Revolution of Lavoisier and Dalton. Maturity of chemistry in the 19th and 20th centuries, along with an examination of the growth of chemical institutions and the rise of chemical industry. Emphasis on developments from the 18th century to the present. (Same as CHEM 309.) LEC.

HIST 310. American Culture, 1600-1876. 3 Hours. H.
An examination of the major historical shifts, trends, and conflicts that have shaped the multicultural nature of life in the United States from the initial European settlements to 1876. In addition to tracing developments in literature, architecture, drama, music, and the visual arts, this course will investigate patterns and changes in the popular, domestic, and material culture of everyday life in America. (Same as AMS 310.) Prerequisite: AMS 100 or AMS 110 or HIST 128. LEC.

HIST 311. Great Lives in Science. 3 Hours. H.
This course examines the lives of selected great scientists. Lectures and biographical readings deal with scientists who lived in the period between the seventeenth century and the present. Through comparative biography, the course assesses the theoretical, methodological, institutional, and social development of modern science. LEC.

HIST 312. American Culture, 1877 to the Present. 3 Hours. H.
An examination of the major historical shifts, trends, and conflicts that have shaped the multicultural nature of life in the United States from 1877 to the present. In addition to tracing developments in literature, architecture, drama, music and the visual arts, this course investigates patterns and changes in the popular, domestic, and material culture of everyday life in America. (Same as AMS 312.) LEC.

HIST 313. Conspiracies and Paranoia in American History. 3 Hours. H.
The theme of conspiracy is a recurring motif in American history. This course uses a case-study method to revisit episodes such as the Salem witch trials, the movement against freemasonry, the Slave Power conspiracy, and more recent obsessions such as UFOs and the assassination of John F. Kennedy to explain why so many Americans have embraced conspiracy theories to explain mysterious events and dramatic social change. The course will rely on primary accounts, fiction, and film, as well as secondary historical literature, to examine both “real” and “imaginary” conspiracies and their effects on the politics, culture, and society of the United States. LEC.

HIST 314. Globalization: History and Theory. 3 Hours. H.
Explores the rise of global capitalism in the 19th and 20th centuries, contemporary debates about 21st century globalization, and the role of globalization in our everyday lives. Questions considered include: Is globalization an incremental process that has been going on for centuries, or is it a dramatic new force reshaping the post-Cold War world? Is it a cultural and social process or an economic and political one? Or is it all of these things? Not open to students who have completed HIST 315. LEC.

HIST 315. Globalization: History and Theory Honors. 3 Hours. H.
Explores the rise of global capitalism in the 19th and 20th centuries, contemporary debates about 21st century globalization, and the role of globalization in our everyday lives. Questions considered include: Is globalization an incremental process that has been going on for centuries, or is it a dramatic new force reshaping the post-Cold War world? Is it a cultural and social process or an economic and political one? Or is it all of these things? Not open to students who have completed HIST 314. Open only to students in the College Honors Program or consent of instructor. LEC.

HIST 316. Ministers and Magicians: Black Religions from Slavery to the Present. 3 Hours. H.
This course examines the history and diversity of African American religious expression from slavery until the present, emphasizing both mainstream and alternative faiths. It covers the religious world views of enslaved Africans, and examines faiths inside and outside of Christianity. Topics may include: independent black churches, magical practices, the Holiness and Pentecostal movements, black Islam, religious freemasonry, and esoteric faiths. The class emphasizes the influence of gender, class, race, migration, and urbanization on black religion. (Same as AAAS 316 and AMS 316.) LEC.

HIST 317. African American Women: Colonial Era to the Present. 3 Hours. AE41 / H.
This interdisciplinary course covers the history of African American women, beginning in West and Central Africa, extending across the Middle Passage into the Americas, and stretching through enslavement and freedom into the 21st century. The readings cover their
experiences through secondary and tertiary source materials, as well as autobiographies and letters, plays and music, and poems, novels, and speeches. (Same as AAAS 317, AMS 317, and WGSS 317.) LEC.

HIST 318. Indian Territory. 3 Hours. H.
This course examines the cultural, social, economic, environmental, and political history of Indian Territory in what is now the state of Oklahoma. It surveys the diverse geographical regions, tribal cultures, the impact of Indian Removal Act, assimilation, acculturation, westward expansion, the Civil War, boarding schools, the Dawes Act, the Curtis Act, and land runs on Indian Territory residents. The course also treats post-Civil War violence, outlaws, and the role of tribal courts along with controversies over removals, Land Run celebrations, allotment scandals, and Osage oil murders. (Same as HWC 345 and ISP 345.) LEC.

HIST 319. History, Women, and Diversity in the U.S. 3 Hours. AE41 / H.
This survey course explores the history of being female in America through a focus on the ways differences in race, sexuality, ethnicity, class, and life cycle have shaped various aspects of women's lives. Themes to be explored could include, but are not limited to: social and political activism; intellectual developments; family; women's communities; work; sexuality; and culture. LEC.

HIST 320. From Goddesses to Witches: Women in Premodern Europe. 3 Hours. HT GE11/GE3H / H.
This course examines the social, cultural, and political contexts of women's spirituality and their relations to gender relations in Europe from about 30,000 B.C.E. to the 16th century Protestant Reformation. Lectures move both chronologically and topically, covering such subjects as goddess-worshipping cultures, women's roles in Christian and Jewish societies, symbols of women, and male attitudes toward women. Students will be able to participate in weekly discussions of primary and secondary source readings about women. (Same as WGSS 320.) LEC.

HIST 321. From Mystics to Feminists: Women's History in Europe 1600 to the Present. 3 Hours. HT AE42/GE11/GE3H / H.
This survey of women's history in Europe looks at changing patterns of women's economic roles and family structures in preindustrial and industrial society, the importance of women in religious life, cultural assumptions underlying gender roles, and the relationship of women to political movements, including the rise of feminism. (Same as WGSS 321.) LEC.

HIST 324. History of Women and the Body. 3 Hours. H.
This course examines different notions about women and their bodies from a historical perspective. It discusses the arguments and circumstances that have shaped women's lives in relation to their bodies, and women's responses to those arguments and circumstances. This course covers a wide geographical and chronological spectrum, from Ancient societies to the present, from Latin America and the Middle East, to North America and Western Europe. (Same as WGSS 324.) LEC.

HIST 325. The Spanish Inquisition. 3 Hours. H.
A broad historical study of the Spanish Inquisition from 1478 to its afterlife in modern culture, including its use in political debates and its depiction in popular culture. Topics include anti-Semitism, the nature of the inquisitorial investigation, the use of torture, censorship and the relationship between the Inquisition, the Spanish monarchy and other religious and lay authorities. Taught in English. Will not count toward the Spanish major. (Same as JWSH 315 and SPAN 302.) LEC.

HIST 326. Native American Civilizations and their European Conquerors. 3 Hours. NW AE42/GE11/GE3H / H/W.
The societies, economies, and cultures of Native American peoples in Brazil, Peru, Mexico, and the Southwestern United States will provide the main focus of this course to understand the culture and values of those who preceded the Europeans in the Americas. European culture is also examined, including the motivations for exploration and conquest. The details of the particular conquests and how they affected the resulting composite society will also be discussed, using contemporary eye-witness accounts, films recreating the action, and modern accounts. LEC.

HIST 327. The Premodern Middle East. 3 Hours. NW AE42 / H.
A survey of the history of the Middle East from the origins of Islam in the seventh century to the rise and consolidation of the Ottoman Empire in the eighteenth century. Lectures and discussions focus on diversity within the Middle East at the height of the Islamic empires. Topics include the life of Muhammad and early Islamic communities, expansion of Islam into Asia, Africa and Europe, intellectual strength in the medieval period, and the everyday lives of women, Christians, Jews and other minority groups. LEC.

HIST 328. The Modern Middle East. 3 Hours. NW AE42 / H.
A survey of the history of the Middle East from 1800 to the present. Lectures and discussions focus on diversity within the Middle East over two centuries of major political and cultural change. Topics include causes for the decline of the Ottoman Empire, debates over modernization, European imperialism and the formation of nation-states, twentieth century cultural revolutions and women's activism, the Arab-Israeli conflict, and the revival of Islamic social movements. LEC.

HIST 329. History of War and Peace. 3 Hours. HL / H.
A study of the changing nature of warfare and the struggle to bring about peace. Topics include pacifism, the "military revolution" that created the first professional armies; the development of diplomatic immunity, truces, and international law; the peace settlements of Westphalia, Utrecht, Vienna, Versailles, and San Francisco; the creation of peace movements and peace prizes; the evolution of total war, civil war, and guerrilla warfare involving civilians in the twentieth century; the history of the League of Nations and United Nations; and the rise of intergovernmental and non-governmental organizations. (Same as EURS 329 and PCS 329.) LEC.

HIST 330. Revolt and Revolution in Early Modern Europe. 3 Hours. H.
A study of forces giving rise to riots, rebellions, and revolution in Western Europe from 1600-1790. The course will examine social and ideological aspects of famine, religious persecution, taxation, war, landlord-peasant relations, and the increasing power of kings. LEC.

HIST 331. Atlantic Societies, 1450-1800: A Comparative History of European Colonization. 3 Hours. H.
This course offers a comparative history of the European (Portuguese, Spanish, French, English, and Dutch) colonization of the Americas. It examines the interaction among peoples and cultures across the Atlantic, from the age of European exploration to the start of the independence movements in the Americas. Themes that will receive special attention include: comparing patterns of colonization, the forging of American societies of European, Native American, and African cultures, the slave trade, and the history of sugar production. LEC.

HIST 333. Eurometro: Visions of the European Metropolis, 1849-1939. 3 Hours. H.
This course investigates the interrelated symbols of the European metropolis during the "Age of Great Cities", from the filth of the sewers to the "filthiness" of prostitution. Students investigate gender and class in the metropolis by exploring a few stereotypes: the juvenile delinquent, the woman on the street, and the flaneur. The course format stresses discussion of common texts, including short readings of literature from the period and historical scholarship. Students also analyze contemporary photographs, art, architecture, and advertising. LEC.
HIST 334. The Great War: The History of World War I. 3 Hours. H.
A historical survey of the causes, course, and consequences of the conflict, 1878-1919, stressing its socio-economic dimensions as well as its political ramifications and military aspects. Considerable use will be made of visual aids. No prerequisites. LEC.

HIST 335. History of Jewish Women. 3 Hours. H.
This course explores the history of Jewish women from antiquity to the twentieth century. It examines the historical constructions of women's gender roles and identities in Jewish law and custom as well as the social and cultural impact of those constructions in the context of the realities of women's lives in both Jewish and non-Jewish society. (Same as JWSH 335, WGSS 335.) LEC.

HIST 336. Ethics, Ideas, and Nature. 3 Hours. AE51 / H.
This course examines the ethical frameworks developed for thinking about, using, and protecting the natural world. Examples of topics include indigenous approaches to nature, the history of ecological ideas, environmental movements, the role of the state of managing resources, utilitarianism and progressivism, environmental lawmaking, wilderness advocacy, nature and theology, the rights of nature, and environmental justice. Students are introduced to the theories of duty ethics, justice ethics, utilitarianism, and right ethics, and required to apply ethical decision making to contemporary and historical environmental issues. Multiple perspectives on the history of human interactions with nature demonstrate the importance of reflecting upon the value systems inherent in human-centered environmental ethics and nature-centered environmental ethics. (Same as EVRN 336.) LEC.

HIST 337. History, Ethics, Modernity. 3 Hours. H.
This course will examine the question "How has human dignity been preserved or violated in the modern age?" Cast in a global framework, some of the probable themes are the history of human rights; the moral universe of genocide; the (in)dignity of industrial work; the shifting status of the poor and the colonized and their treatment by the state and society; the impact of changing technology on ethics in war, peace and the environment; and the violation of dignity as a factor in collective resistance. LEC.

HIST 338. African American Urban Community and Class in the Midwest. 3 Hours. H.
This course provides historical perspective on African Americans and the politics of economic class within black urban spaces from the end of Reconstruction to the post-World War II era. It focuses on the development of an upwardly mobile urban black middle class, and impoverished black urban "underclass," since the 1960s. Students are encouraged to have taken one of three courses: AAAS 104, AAAS 106, or AAAS 306. (Same as AAAS 328.) LEC.

HIST 340. The History of the Second World War. 3 Hours. H.
A survey of the origins, course, and consequences of the war, 1930-1945. Political, economic, military, and social aspects will be dealt with in the context of their global effects. Extensive use will be made of motion pictures and other media. LEC.

HIST 341. Hitler and Nazi Germany. 3 Hours. H/W.
An examination of the rise of Hitler and Nazism, beginning with the breakdown of 19th century culture in the First World War and continuing through the failure of democracy under the Weimar Republic. The course will also discuss the impact of Nazism on Germany and how Nazism led to the Second World War and the Holocaust. (Same as JWSH 341.) LEC.

HIST 343. The Holocaust in History. 3 Hours. H.
The systematic murder of the Jews of Europe by the Nazis during World War II is one of the most important events of modern history. This course studies the Holocaust by asking about its place in history. It compares other attempted genocides with the Holocaust and examines why most historians argue that it is unique. Other topics covered include the reasons the Holocaust occurred in Europe when it did, the changing role of anti-Semitism, and the effects of the Holocaust on civilization. The course also discusses why some people have sought to deny the Holocaust. The course concludes by discussing the questions people have raised about the Holocaust and such issues as support for democracy, the belief in progress, the role of science, and the search for human values which are common to all societies. (Same as JWSH 343.) LEC.

HIST 344. Modern Jewish History. 3 Hours. H.
This course explores the complex interactions between Jews, Judaism, and modernity by examining the challenges to Jewish life and thought, community and culture, self-understanding and survival, from the early modern period to the present day. Through the lenses of religious, cultural, intellectual, and political expression, the course examines the social, economic, and demographic changes in Jewish communities in Western, Central and Eastern Europe, the United States, and Israel along with the impact of antisemitism and the Holocaust. (Same as JWSH 344.) LEC.

HIST 345. Hard Times: The Depression Years in America, 1929-1941. 3 Hours. H.
An analysis of the experiences of the American people during the Great Depression. Attention will also be given to the global dimensions of the crisis, socioeconomic dislocation, cultural and institutional change, and the impact of the Asian and European wars. LEC.

HIST 346. Law and Society in America. 3 Hours. H.
Law and lawyers have powerfully shaped American values and institutions. This course explores law's impact on American society from the age of European colonization through present. Topics include liberty, public order, race and ethnicity, the family, property, speech, environment, and self-government. The course also examines the changing images of lawyers and the law over time. Course materials include not just statutes and court decisions, but literature, imagery, and popular culture materials. LEC.

HIST 347. Environmental History of North America. 3 Hours. H.
A survey of changes in the landscape and in people's perceptions of the natural world from 1500 to present. Topics include agroecology, water and energy, the impact of capitalism, industrialism, urbanization, and such technologies as the automobile, and the origins of conservation. (Same as EVRN 347.) LEC.

HIST 348. History of the Peoples of Kansas. 3 Hours. H.
A survey of culture and society in Kansas from prehistory to the present. Topics include Native American life, Euro-American resettlement, Bleeding Kansas and the Civil War, agricultural settlement, urbanization and industrialization, depression and recovery, and modern Kansas in transition. Emphasis in the course will be on social and economic conditions, the experience of ethnic and racial groups, inter-racial relations, and the role of women. LEC.

HIST 350. The Korean War, 1950-1953. 3 Hours. H.
An examination of the origins, pattern of development, and legacy of this still unsettled conflict, which in many ways set the tone for the entire post-1945 era of the Cold War. Points of emphasis will include the motives and policies of the major participants (Koreans, Americans, Chinese, and Soviets), as well as the effects of the war on their domestic politics and foreign policy positions. LEC.

HIST 351. American Indian and White Relations to 1865. 3 Hours. H.
This course provides an intensive survey of the Indians of North America from Prehistory to 1865, and focuses on ancient indigenous cultures, early European-Indian relations and the impact of European culture upon the
indigenous peoples of North America. (Same as HWC 348, ISP 348.) LEC.

HIST 352. American Indians Since 1865. 3 Hours. H.
This course examines American Indian/White relations from reconstruction to the present. It surveys the impact of westward expansion and cultural changes brought about by the Civil War, forced education, intermarriage, the Dawes Act, the New Deal, the World Wars, termination, relocation and stereotypical literature and movies. The class also addresses the Red Power and AIM movements, as well as indigenous efforts to decolonize and to recover and retain indigenous knowledge. After learning about the past from both Native and non-Native source materials, students will multiple perspectives about historical events and gain understandings of diverse world views, values, and responses to adversity. (Same as HWC 350 and ISP 350.) LEC.

HIST 353. Indigenous Peoples of North America. 3 Hours. NW AE41 / H/W.
This course surveys the history of the first peoples to inhabit North America from prehistory to present. Commonly and collectively referred to as American Indians, indigenous peoples include a diverse array of nations, chiefdoms, confederacies, tribes, and bands, each of which has its own unique cultures, economies, and experiences in dealing with colonial and neocolonial powers. This class seeks to demonstrate this diversity while at the same time providing an understanding of the common struggle for political and cultural sovereignty that all indigenous nations face. Indigenous nations that have developed a relationship with the United States will receive primary focus, but comparative reference will be made to First Nations of Canada. LEC.

HIST 354. Spanish Borderlands in North America. 3 Hours. AE51 / H.
The Northern frontier provinces of the Viceroyalty of New Spain from their exploration and occupation by Spain until their absorption by the United States. LEC.

HIST 355. U.S. Borderlands Since 1848. 3 Hours. H.
This course discusses issues associated with the Mexican borderlands region after conquest and acquisition by the United States. Themes include race relations, immigration, labor, economics, politics, culture, and the environment. We discuss how the region was incorporated into the United States, and how this relationship is evolving. We also examine the notion of a borderlands region and whether or not this is a valid characterization for Kansas. LEC.

HIST 358. The Vietnam War. 3 Hours. H.
This course is a survey of the Vietnam War. It covers the early days of Cold War, 1945-54, and all phases of the Vietnam War: the advisory phase (1955-64); the Americanization phase (1965-68); the Vietnamization Phase (1969-73); and the final phase, the Vietnam Civil War, 1972-75. This course covers the causes, course, conduct, and consequences of the war and in so doing provides a political, military, and social history of the war. LEC.

HIST 359. The Black Experience in the U.S. Since Emancipation. 3 Hours. H.
An interdisciplinary study of the history and culture of Black people in American from Reconstruction to the present. Topics covered include an analysis of Reconstruction, Black leaders, organizations and movements, the Harlem Renaissance, migration, and race relations. Demographic variables covered include socio-economic class, education, political persuasion, and influence by avant-garde culture changes. (Same as AAAS 306.) LEC.

HIST 360. Science and Religion. 3 Hours. H.
The interaction and significant confrontations between science and religion will be considered together with the religious responses to science and technology. LEC.

HIST 362. The American Way of War Since World War II. 3 Hours. H.
This course is a survey of American Military History from World War II to current military operations. It covers the Cold War, the Korean War, the Vietnam War, both Persian Gulf wars, the global war on terrorism, and the war in Afghanistan. The course examines the causes, course, conduct, and consequences of the wars and covers advances in technology and doctrine, civil-military relations, foreign policy, and inter-service rivalry, providing a political, military, and cultural history of the wars. LEC.

HIST 365. Invention of the Tropics. 3 Hours. H.
This course surveys the history of the tropical environment and its peoples from Europe's first encounter to today's ecotourism boom. It focuses on portrayals of the tropics in historical travel accounts and films. Through these sources, we seek to understand how science, technology, and tourism have been used, in turn, as instruments of progress and destruction, tools of empire and national liberation. Case studies are drawn from Latin America, Africa, Oceania, and Asia. LEC.

HIST 366. Old Regime and Revolution in France, 1648-1799. 3 Hours. H.
This course explores the political, social and cultural system of early modern France. It culminates with study of the collapse of monarchy and establishment of republican government during the French Revolution. LEC.

HIST 367. Magic and Superstition in European History. 3 Hours. H.
This course traces the changing role and understanding of magic in European culture, religion, politics and science from the late Middle Ages through the early 20th century. Topics may include alchemy, miracles, magical healing, witchcraft, monsters and demonic possession. LEC.

HIST 368. A History of Afro-Latin America. 3 Hours. H.
This course examines the history of Africans and their descendants in Latin America. In this region, Africans could be found serving as militia commanders, laboring as skilled tradesmen, running their own businesses, working as household servants, and toiling on plantations. Students will study the varied experiences of these men and women across colonial and national boundaries. Topics include: acculturation/Creolization, manumission, family formation, social networks, economic roles, political mobilization, and interaction with indigenous peoples. LEC.

HIST 369. Colonialism and Revolution in the Third World, Honors. 3 Hours. NW AE42 / H.
This course will study the structure and dynamics of colonialism and neocolonialism in the third world beginning in the 19th Century and continuing to the 1980s. It will also examine responses to these systems, from small-scale resistance to nationalist revolutions. Attention will be given to the relationship between ideology and collective behavior. Case studies will be drawn from Africa, Asia, and Latin America. Prerequisite: Membership in the University Honors Program or permission of instructor. LEC.

HIST 370. Violence and Conflict in Latin American History. 3 Hours. H.
This course treats the history of Latin America since the European conquest through the prism of violence and social conflict. It traces the roots of the region's social collapse during the twentieth century to political and cultural factors in the colonial and early national periods. Using films and literature in addition to historical texts, the course discusses the sources of nationalism, civil wars, banditry, urbanization, violent dissent, military dictatorships, human rights abuses and guerrilla insurgencies as well as the political uses of violence made by different social groups. LEC.
HIST 371. The Cultural History of Modern Latin America. 3 Hours. H.
This course explores themes such as the evolution of national identities, the conflict between the city and the countryside, exile, the surrealism and cultural resistance against foreign influences through an examination of the literature, film, art, music, religions and popular and material culture of 19th and 20th century Latin America. LEC.

HIST 372. Violence and Conflict in Latin American History, Honors. 3 Hours. H/W.
This course treats the history of Latin America since the European conquest through the prism of violence and social conflict. It traces the roots of the region's social collapse during the 20th century to political and cultural factors in the colonial and early national periods. Using films and literature in addition to historical texts, the course discusses the sources of nationalism, civil wars, banditry, urbanization, violent dissent, military dictatorships, human rights abuses, and guerrilla insurgencies as well as the political uses of violence made by different social groups. Not open to students who have taken HIST 370. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

HIST 373. The Supreme Court and Religious Issues in the United States. 3 Hours. H.
Historical study of the interpretation of the religion clauses of the First Amendment with special reference to the questions of establishment, the free exercise of religion, freedom of religious belief, worship, and action, and religion and the public schools. Not open to freshmen. (Same as REL 373.) LEC.

HIST 375. The Supreme Court and Religious Issues in the United States, Honors. 3 Hours. H.
Historical study of the interpretation of the religion clauses of the First Amendment with special reference to the questions of establishment, the free exercise of religion, freedom of religious belief, worship, and action, and religion and the public schools. Open only to students in the University Honors Program or by permission of the instructor. (Same as REL 375.) LEC.

HIST 377. Everyday Communism in Eastern Europe. 3 Hours. H.
This course investigates through film, literature, memoirs, photography, architecture, and scholarship the experience of ordinary citizens under Soviet-style communism in Eastern Europe. We study the ways people supported, resisted, opposed, and merely got by under state socialism from the late 1940s to the collapse of Communism in 1989. LEC.

HIST 378. Beyond the Iron Curtain: Soviet Perspectives on the Cold War. 3 Hours. AE42 / H.
This course reimagines the Cold War through Soviet eyes, challenging assumptions and offering less familiar perspectives on a global conflict. Analyzing Soviet and American mass media, popular culture, declassified documents, and personal stories, students investigate the following: Who started the Cold War, and who won it? Was it a time of relative peace or paranoia? How did the two sides view each other and did espionage help them know each other better? How did people and culture sometimes cross the iron curtain? What were the Soviets doing in places like Latin America and the Middle East? And why were both sides so concerned with Olympic athletes, ballet defectors, and cosmonauts? LEC.

HIST 380. Revolutionary Europe: The People in Arms. 3 Hours. H/W.
A survey of the political, social, economic and cultural transformation of Europe in a century of turmoil, from the Old Regime through the liberal and national revolts of 1848, the Paris Commune and the Russian Revolution. LEC.

HIST 385. Themes in British History. 3 Hours. H.
For students enrolled in the annual summer Study Abroad program. This course examines some of the main events and trends in British history, from the earliest times to recent British history. The specific historical themes investigated will depend upon the instructor. The course can be taken only via enrollment in the KU British Summer Institute in the Humanities. Prerequisite: Approval for enrollment in the Summer Institute through the Study Abroad office. LEC.

HIST 390. Topics in: ____. 3 Hours. H.
A study of a specialized theme or topic in History. May be repeated for credit when topic varies. LEC.

HIST 391. Topics in (Honors): ____. 3 Hours. H.
A study of a specialized theme or topic in History. May be repeated for credit when topic varies. Open only to students admitted to the University Honors Program. Prerequisite: Permission of instructor. LEC.

HIST 392. Huns, Turks, and Mongols: The Nomad Factor in Asian History. 3 Hours. NW / H/W.
This course introduces the history of major nomadic powers in Eurasian Steppes and their impact in the world from the first Millennium BCE to around 1500 AD. The main topics include the culture of the Scythians, the Hun and Xiongnu confederacy, the Mongol conquest, and the Turkish empires in Central and West Asia. It investigates the natural and human forces that shape the identities of the nomads and their changing images in history. LEC.

HIST 393. The Silk Road. 3 Hours. H.
A comprehensive introduction to the cultural influence and material exchange among major civilizations along the Silk Road. It covers the period of more than one thousand years between the 2nd and the 15th centuries CE, during which time forces wielded by the Persians, the Chinese, the Indians, the Tibetans and the Mongols shaped the geopolitical landscape of the vast region that spreads from the Caspian Sea to the Gobi Desert. Students explore the role of the Silk Road in the formation of the religious and ethnic identities of these civilizations, as well as their perceptions towards one another. Along with textual materials, the course uses extensive visual and musical materials to present interesting phenomena, such as Sogdian burial practice, Arab accounts of Tang China, Nestorian Christianity at the Mongol court, and Marco Polo's journey to the East. The course begins and concludes with discussion of the contemporary significance of the Silk Road as a historical category. LEC.

HIST 394. Made in China: Chinese Business History. 3 Hours. H.
This course examines the development of business in China since 1900. Topics include the rise of industrialism, the role of foreign investment, China's role in the global market place, the relationship between business and the state, state-run factories, party life, entrepreneurship, building a domestic market for industrial goods, advertising, consumerism, and economic nationalism LEC.

HIST 395. History of Sushi. 3 Hours. H.
Sushi, now served at Midwestern supermarkets and university cafeterias, reveals the transformation of an ancient Japanese dish into a global phenomenon. This course takes familiar Japanese dishes like sushi and ramen and as starting points to ask how food accrues to sheds national characteristics in an age of globalization. To learn the origin of sushi and ramen, the class traces the evolution of the diet in the context of the development of Japanese civilization. Using the methodology of food history, course assignments include short research papers on Japanese foods; analyses of primary sources from statistics to comic books to movies; and short essays drawing from participant observation of Japanese foods now available locally. LEC.
HIST 397. From Mao to Now: China's Red Revolution. 3 Hours. NW AE42/GE11 / H.
This course on China's Communist revolution considers the evolution of Maoism, or Chinese Communism, from its ideological origins through its implementation during and after the Chinese Communist revolution. It examines major Maoist movements such as Land Reform, the Great Leap Forward, the Cultural Revolution, and the cult of Mao. It further considers the globalization of Maoism by examining examples of other Maoist revolutions and revolutionaries in places like Cambodia, Peru, and Nepal. LEC.

HIST 398. Introduction to History of Japan: Anime to Zen. 3 Hours. NW / H/W.
This course provides a foundation for study of Japanese history. It combines lectures on the scope of Japanese history over the past 2,000 years with discussions of topics key to the development of Japanese civilization such as religion and literature. We analyze how different media, such as film, Japanese animation (anime), and art can be used as historical sources, and how these shape our understanding of Japan. Students hone their ability to analyze both thematic and historical questions through writing assignments and discussions. LEC.

HIST 399. The Samurai. 3 Hours. NW AE42/GE11 / H/W.
Japan's warrior class, the samurai, dominated politics and society for more than half of Japan's recorded history. This course traces the history of the samurai from their origins to the dissolution of their class in 1877, examining their military role, philosophy, and cultural contributions. It also considers continued references to the "spirit of the samurai" in the twentieth century. LEC.

HIST 401. Case Studies in: ____. 2-3 Hours. H.
Examination of a limited aspect of a general subject; other aspects of the same subject may be offered other semesters. LEC.

HIST 402. Roman Military History. 3 Hours. H.
The Defense of the Roman Frontiers. This course emphasizes the development of the Roman empire from Caesar to the late second century. It includes the origins of the Germans and their society, the Celtic background, and the relationship between the emperor and the army. LEC.

HIST 404. Technology: Its Past and Its Future. 3 Hours. H.
An examination of the role of technology and its influence on society. The historical development of technology will be traced up to modern times with an emphasis on its relations to the humanities. Attention will be given to the future of different branches of technology and alternative programs for their implementation. (Same as ENGR 304.) LEC.

HIST 407. History of Science in the United States. 3 Hours. H.
Traces the evolution of a scientific tradition in American culture. Examines the growth of scientific ideas and institutions under European and indigenous influences. Studies the interactions of science with technological, theological, political, and socio-economic developments. LEC.

HIST 410. The American Revolution. 3 Hours. H.
This course will focus on the meaning the American Revolution had for different groups of Americans. Particular emphasis will be on the relationship between ideology and experience, and the impact of the Revolution on such groups as women, slaves, Indians, African-Americans, the poor, merchants, and loyalists. LEC.

HIST 411. The New Republic: U.S. History 1787-1848. 3 Hours. H.
This course traces the history of the United States from the debates over the ratification of the Constitution until 1848. Major topics include the republican experiment, the Market Revolution, the Age of Jackson, religious revivals and reform, slavery and the cotton kingdom, the Manifest Destiny. Historians view the period as vital to understanding the development of the society, economy, culture, and politics of the modern United States. LEC.

HIST 412. The Civil War in America, 1828-1877. 3 Hours. H.
The United States from the rise of sectional conflict through the disintegration and reunification of the Union. LEC.

HIST 413. The Rise of Industrial America, 1877-1920. 3 Hours. H.
The political, economic, social, and intellectual development of the United States from 1877 to 1920. LEC.

HIST 414. Gone with the Wind. 3 Hours. H.
For four years, another country occupied part of what we now think of as the United States. The Confederate States of America was a short-lived experiment founded on the cornerstone of slavery that advocated small government, states' rights, agriculture, and patriarchy. Even before the Confederacy collapsed, though, none of those ideals was working out well in real life. Why, then, do so many Americans have such a hallowed view of the Confederate experience? This class discusses some military matters but focuses primarily on the homefront. LEC.

HIST 420. Dante's Comedy. 3 Hours. H.
The complete Divine Comedy will be read in English translation, with equal stress on each of its three parts: the Inferno, the Purgatory, and the Paradise. No prerequisite. (Same as HWC 410.) LEC.

HIST 421. Economic and Social History of Later Medieval Europe, 1000-1500. 3 Hours. H.
An introductory study of European economic and social history from the Tenth Century Crisis to the 1490s. This course investigates the causes of economic development and the interactions among market, nonmarket, and social institutions such as the family. Topics covered include trade, labor, technologies, consumerism, social unrest and the rise of social and economic thought. LEC.

HIST 424. Venice and Florence in the Renaissance. 3 Hours. H.
Comparative urban study of Florence and Venice from the thirteenth through the sixteenth centuries. Principal subjects are the distinctive economies of the city-states, political developments, Renaissance humanism, patronage of the arts, family life, and foreign policy. LEC.

HIST 425. History of the Mediterranean World, 1099-1571. 3 Hours. H.
This course examines Mediterranean civilizations from the First Crusade to the Battle of Lepanto. Topics include the commercial revolution, medieval colonization, the Byzantine and Ottoman states, shipping and navigation, and the Atlantic. Equal coverage of the eastern and western Mediterranean. LEC.

HIST 440. War and United States Society. 3 Hours. H.
A survey of the American experience in military conflict, both foreign and domestic, from the colonial period to the present. In addition to the strategic and tactical aspects of war, the course will treat the political, economic, and social effects in their national and global contexts. Extensive use will be made of audio-visual materials. LEC.

HIST 444. Frozen in Time: Politics and Culture in the Cold War, 1945-75. 3 Hours. H.
This course deals with the interactions between Cold War culture and domestic and international politics chiefly from the American and to some degree comparative perspective. It focuses on the period 1945-1975, and makes use of films, television, music, works of science fiction and related genres, and other cultural manifestations to examine such themes as programs of domestic and international repression, consensus politics, cultural imperialism, gender roles, and class, status, and racial dynamics in the context of what was perceived as bipolar rivalry. LEC.
HIST 450. Study Abroad Topics in: ______. 1-5 Hours. H.
This course is designed for the study of special topics in History at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

HIST 451. Suburbia. 1.5 Hour. H.
A history of the growth of suburban enclaves, from their emergence during the electric streetcar era to their dominance in the late 20th century. This short course features the analysis of class dynamics, racial exclusions, commuting, social conformity and the alienation of the young within a U.S. context, but some attention is given to comparisons with other parts of the world. LEC.

HIST 452. Chicago. 1.5 Hour. H.
A history of the Midwestern metropolis from its origins as a swamp to an industrial port city. Topics covered in this short course may include the meat-packing industry, political corruption and reform, immigration and migration, the rise and demise of neighborhoods, transportation systems, working-class social movements, modern architecture and urban popular culture. LEC.

HIST 453. Anarchism: A Global History. 1.5 Hour. H.
This short course examines the key theorists and organizers of the anarchist movement, beginning with its emergence in the 19th century and extending into its reappearance in the 21st century. It traces developments in Europe, South America, Asia and the United States. Topics may include the Paris Commune, credit unions, propaganda by the deed, wage slavery, resistance to authority, and the general strike. LEC.

HIST 454. Work. 1.5 Hour. H.
This short course traces the evolution of work from pre-industrial times to the computerized workplace. Issues such as the meaning of work, dignity and respect, time efficiency and exploitation, unionization and strikes, workplace democracy, collectives and worker-owned businesses, laziness as a form of resistance to authority, leisure, the culture of commuting, and hierarchy and status are explored. The evolution of work in non-U.S. societies is analyzed comparatively. LEC.

HIST 455. Havana. 1.5 Hour. H.
This short course examines the history of the Cuban port city from the era of Spanish colonialism to the "special period" of shortages and deprivations during the 1990s. Topics covered may include popular culture, Caribbean pirates, cigar factories and labor, urban slavery, Chinatown, social revolution, restructuring of urban public space, suburban expansion, modernist architecture, tourism, gambling and vice, historical preservation and the changing conditions of streetlife. LEC.

HIST 460. Topics in: ______. 1.5 Hour. H.
An eight-week course devoted to a specific historical topic. May be repeated for credit as topics change. LEC.

HIST 461. The Asia-Pacific War, 1937-1945. 3 Hours. H.
This course introduces students to the Asia-Pacific War, which began with the outbreak of fighting between Japan and China in July 1937 and ended with the unconditional surrender of the Japanese Empire to Allied forces in August 1945. The course revolves around three themes, which are explored through lecture, discussion, and extensive use of film and visual materials: the geopolitical and colonial origins of the conflict; the concept of total war and the political and social transformations it unleashed on all belligerent nations; and the ideologies on the home front justifying the mass slaughter of soldiers and civilians. There is also discussion about how people in Japan, the United States, China, Korea, and other countries remember the war in the postwar period. LEC.

HIST 470. Popular Culture in Latin America and Africa. 3 Hours. NW/H.
This course offers a comparative assessment of the origins and practice of various forms of popular culture in the 20th Century in these two regions. Theories that explain the links between modernism and popular culture are discussed. Topics investigated may include the impact of spectacle on the urban environment, the legacies of colonialism in the sphere of culture, and the intersection of public space and popular culture. Forms such as music, cinema, street theater, and sports are explored. LEC.

HIST 471. Social History of South America. 3 Hours. H/W.
The various republics of South America have experienced radical social change since the late 19th century. Compressed industrialization has propelled the accelerated growth of global megacities, mass immigration from Europe and Asia, and the rise of populist and socialist politics that address the needs of the working class. This course follows a thematic approach by examining collective violence, endemic poverty, shifting gender relations, labor conflict, public health, revolutionary movements, and dictatorships. LEC.

HIST 470. Popular Culture in Latin America and Africa. 3 Hours. NW/H.
This course offers a comparative assessment of the origins and practice of various forms of popular culture in the 20th Century in these two regions. Theories that explain the links between modernism and popular culture are discussed. Topics investigated may include the impact of spectacle on the urban environment, the legacies of colonialism in the sphere of culture, and the intersection of public space and popular culture. Forms such as music, cinema, street theater, and sports are explored. LEC.

HIST 471. Social History of South America. 3 Hours. H/W.
The various republics of South America have experienced radical social change since the late 19th century. Compressed industrialization has propelled the accelerated growth of global megacities, mass immigration from Europe and Asia, and the rise of populist and socialist politics that address the needs of the working class. This course follows a thematic approach by examining collective violence, endemic poverty, shifting gender relations, labor conflict, public health, revolutionary movements, and dictatorships. LEC.

HIST 470. Popular Culture in Latin America and Africa. 3 Hours. NW/H.
This course offers a comparative assessment of the origins and practice of various forms of popular culture in the 20th Century in these two regions. Theories that explain the links between modernism and popular culture are discussed. Topics investigated may include the impact of spectacle on the urban environment, the legacies of colonialism in the sphere of culture, and the intersection of public space and popular culture. Forms such as music, cinema, street theater, and sports are explored. LEC.
HIST 494. Service Learning in History. 1-3 Hours. AE61 / H.
This course is designed to give students the opportunity to apply historical knowledge and ideas gained through course work to real-life situations in volunteer service agencies and community centers. Open to History majors and others with significant History backgrounds. Permission of instructor is required. LEC.

HIST 498. Undergraduate History Honors Seminar. 3 Hours. AE61 / H.
Required for students in the History major honors program, normally in the second semester of their honors projects. Prerequisite: Approval of the Coordinator of the Honors Program of the Department of History. Another seminar experience may be substituted, with the approval of the Honors Coordinator. LEC.

HIST 500. History of the Book. 3 Hours. H.
Brief history of writing materials and handwritten books; history of printed books from the 15th century as part of cultural history; technical progress and aesthetic change. Offered every second year. (Same as ENGL 520.) LEC.

HIST 502. Development of Ancient Greece, ca. 1000-300 B.C.E. 3 Hours. H/W.
Emphasis on the ancient sources and texts, developments in political institutions and society, the changing definitions of personal, cultural, and national identities, and the cultural tensions between Greece and the cultures to the west and east, especially Italy and Persia. No knowledge of the ancient languages is required. (Same as CLSX 502.) LEC.

HIST 503. The Ancient History of the Near East. 3 Hours. H.
History of the rise of civilizations in the ancient Near East from the earliest time to the Muslim conquest of the early seventh century, including the areas of Mesopotamia, Egypt, Syria, Palestine and Asia Minor. An archaeological approach is used in focusing attention on the cultural phenomena and achievements of the peoples of these areas, including the Babylonians, Assyrians, Persians, ancient Israelites, Greeks and Romans. LEC.

HIST 506. Roman Republic. 3 Hours. H.
An investigation of the history of Rome from its origins to the end of the Republic in 31 B.C.E., emphasizing political, social and economic aspects of the development of Rome from a minor city to a world power. LEC.

HIST 507. Early Roman Empire. 3 Hours. H.
A political, social, and economic investigation of the early Roman Empire from Augustus to Diocletian emphasizing how Rome held together a world-empire until economic and military problems forced a complete reorganization of the imperial system. LEC.

HIST 508. Late Roman Empire (284-527). 3 Hours. H.
An investigation and analysis of the later Roman Empire from Diocletian to Justinian, emphasizing the Christianization of the empire, its division into Western and Eastern/Byzantine Empires, and the barbarian invasions. LEC.

HIST 509. Multinational Corporations: The Role of Money and Power. 3 Hours. H.
This course explores the origins, historical evolution, and global expansion of multinational corporations since the 1880s. Particular attention is devoted to U.S.-directed multinational businesses with both market-oriented and supply-oriented direct investments abroad and the competitive advantages gained by American capital, management, and marketing expertise vis-a-vis foreign firms operating in Canada, Europe, Asia, Latin America, and Africa. An objective of the course is to assist the student of international business in understanding, analyzing, and addressing various complex, interrelated and interdependent trends and issues in the world community that have had a critical impact on business performance in the international marketplace. LEC.

HIST 510. Topics in: _____. 2-3 Hours. H.
A study of a specialized theme or topic in History. May be repeated for credit when topic varies. LEC.

HIST 511. Foodways: Native North America. 3 Hours. H.
This course surveys the traditional foodways of the indigenous peoples of North America. We survey hunting, gathering and fishing methods, meal preparation, medicinal plants and the cultivation of crops according to tribal seasons. Because modern indigenous peoples are suffering from unprecedented health problems, such as diabetes, obesity, high blood pressure and related maladies, the course traces through history the reasons why tribal peoples have become unhealthy and why some have lost the traditional knowledge necessary to plant, cultivate, and save seeds. The course also addresses the destruction of flora and fauna from environmental degradation. (Same as HWC 551 and ISP 551.) Prerequisite: Upper division course on indigenous / American Indian history, or permission of the instructor. LEC.

HIST 512. Foodways: Latin American. 3 Hours. H.
This course explores the traditional foods, ways of eating, and cultural significance of food among peoples of Latin America. The course surveys the vast array of flora in Central and South America and the Caribbean, and focuses on issues of environmental protection, bioethics, food security, and the growth of farming and ranching. The class studies the impact that foods such as maize, potatoes and cacao have had globally, and includes African, Asian, and European influences on Latin cuisine, as well as health problems associated with dietary changes. (Same as HWC 552 , ISP 552, and LA 552.) Prerequisite: Upper division course on Latin America, or permission of the instructor. LEC.

HIST 513. Early Medieval Culture. 3 Hours. H/W.
The formation of a new civilization in Western Europe between the decline of the Roman Empire and the First Crusade is the central stress in this topical study of the institutions and ideas characteristic of the Latin West, 300-1100. LEC.

HIST 515. The Crusades in Cross-Cultural Perspective. 3 Hours. H.
This course examines the development and evolution of the crusade as well as the history of the crusading movement from the 11th to the 15th centuries. Through an analysis of documents from Christian, Jewish, and Muslim perspectives, this course aims to consider "the Crusades" in the broadest possible context. One of the key questions to be addressed in this course is: how did these expeditions to the Holy Land both reflect and influence cross-cultural relations in the medieval Mediterranean World? LEC.

HIST 516. Later Medieval Culture. 3 Hours. H.
The civilization of Medieval Europe at its height (1100-1350); its subsequent disintegration and transformation. LEC.

HIST 517. Roots of Human Trafficking: Modern Slavery and Africa. 3 Hours. H.
This reading-intensive seminar explores human trafficking in the modern world. It examines labor exploitation and commercialization in a historical perspective. The course aims to explore how imperialism led to the expansion of human trafficking and how women, men and children experienced labor exploitation in different ways. We examine how forced labor was/is behind the car and bicycle industries, sugar, coffee, and chocolate consumption. Today more than 27 million people are held, sold, and trafficked as slaves around the world. This course discusses similarities and differences between contemporary and historical slavery and analyzes why and how it persists nowadays. Readings include accounts of people held in bondage, case studies, and reports. Students develop familiarity with major historical concepts, themes, and subjects. Students also engage, investigate, and understand history as a process.
to explain how we make sense of the past and the present. Students carry on a research project throughout the semester about the historical roots of a modern case of slavery and/or human trafficking, producing original scholarship. (Same as AAAS 517.) Prerequisite: Successful completion of a history course numbered below 500, or permission of instructor. LEC.

HIST 519. European Intellectual History of the Seventeenth Century. 3 Hours. H/W.
This course will trace the development of the European intellectual tradition in the crucial period of the seventeenth century. Such topics as the changing views on religion, the decline of Humanism, and the rise of natural science form the center of the course and will be studied against the background of social and political change. Class sessions will consist of discussions of both primary and secondary sources. LEC.

HIST 520. The Age of the Renaissance. 3 Hours. H/W.
A survey of economic, political, social, and cultural developments in Italy in the 14th and 15th centuries, with special attention to those elements in the life of the age which look forward to the modern world. LEC.

HIST 521. The Age of the Reformation. 3 Hours. H/W.
The Protestant revolt of the 16th century. LEC.

HIST 522. The Age of Religious Wars, 1540-1648. 3 Hours. H/W.
The Catholic or Counter-Reformation and the wars of religion, including the Thirty Years War. LEC.

HIST 523. Europe between Absolutism and Revolution. 3 Hours. H/W.
An investigation of why the major states of Europe underwent a crisis at the end of the 1700s that culminated in a wave of democratic revolutions, reforms, and the wars of Napoleon. LEC.

HIST 524. The French Revolution. 3 Hours. H/W.
A study of the origins, development, and impact of the French Revolution, beginning with a description of France in the 18th century and ending with a look at France under Napoleon. LEC.

HIST 525. Modern France: From Napoleon to de Gaulle. 3 Hours. H/W.
A survey of economic, political, social, and cultural developments in France, beginning with a description of France in the 18th century and ending with a look at France under Napoleon. LEC.

HIST 529. Intellectual History of 19th Century Europe. 3 Hours. H/W.
A survey of significant currents of thought during this period. Attention to the problem of the relationship between ideas and the historical situation. LEC.

HIST 530. History of American Women--Colonial Times to 1870. 3 Hours. AE41 / H.
A survey of women's history in the United States that will consider women's roles as housewives, mothers, consumers, workers, and citizens in preindustrial, commercial, and early industrial America. (Same as AMS 510 and WGSS 510.) LEC.

HIST 531. History of American Women--1870 to Present. 3 Hours. AE41 / H.
A survey of women's history in the United States that will include radical and reform movements, the impact of war and depression, professionalization, immigration, women's work, and the biographies of leading figures in women's history. (Same as AMS 511 and WGSS 511.) LEC.

HIST 532. History of Women and Work in Comparative Perspective. 3 Hours. H.
This course explores the connection between historical changes in the labor process and the occupational choices available to women in different countries. Through discussion and analysis of texts, students will evaluate the construction of a gendered division of work as shaped over time by economic, cultural, and political forces. The chronological and geographical focus may vary depending on the instructor. (Same as AMS 512 and WGSS 512.) LEC.

HIST 533. The History of Women and the Family in Europe, from 1500 to the Present. 3 Hours. H/W.
A survey of how women's roles and the family have changed in Europe from the early modern period to the present. It will consider the relation of the family to such cultural, social, and political changes as the Reformation, the French Revolution, middle class culture, industrialization, and the mass movements of the 19th and 20th centuries. LEC.

HIST 534. Captivity in America, 1492-1800. 3 Hours. H.
Captivity, threatened and actual, shaped the lives of the people of North America. It profoundly influenced the ways in which individuals and communities thought about themselves and the people around them. Colonists feared captivity among Native Americans; centuries later, Americans in the early republic rallied to the cause of their countrymen captured by Barbary pirates. This course examines the impacts, cultural, social, religious, and otherwise, of a variety of forms of captivity in colonial British, Spanish, and French North America. Topics in this course may include the captivity of European explorers and settlers by Native American groups; the enslavement of peoples from Africa to European and Native American masters; prisoners of war; naval impressment; and the displacement and captivity of Native American individuals and communities. Prerequisite: Successful completion of prior history course numbered below 500. LEC.

HIST 537. France from the Renaissance to the French Revolution. 3 Hours. H.
A study of the major political developments of early modern France, including absolutism, corporate institutions, and popular revolts, as well as an examination of the everyday life and beliefs of ordinary people. LEC.
HIST 538. European Intellectual History of the Eighteenth Century. 3 Hours. H.
An examination of the writing, ideas, and language of the major thinkers of the Enlightenment, including Diderot, Hume, Kant, Lessing, Rousseau, and Voltaire. LEC.

HIST 541. British History, 1500-1660. 3 Hours. H.
An introduction to the impact on the British Isles of the Reformation and Renaissance; the development of the Tudor state; Parliament; the Stuart monarchy; the Anglican counter-reformation; civil war; the Cromwellian experiment. LEC.

HIST 543. Modern Iran. 3 Hours. NW / H.
A history of Iran from the sixteenth century to the present with an emphasis on religious, political, and cultural history. Topics will include the establishment of Shi’ism as the state religion in the sixteenth century, the evolution of religio-political thought among the Shi’ite clerical establishment, great power politics in the nineteenth century, European cultural and intellectual influence, nation-building and nationalism in the twentieth century, the Islamic revolution of 1979, and Iranian politics since the revolution. Prerequisite: HIST 327 and HIST 328. LEC.

HIST 544. Britain and Ireland from 1200 to 1500. 3 Hours. H.
Survey of social, cultural, political, and economic developments with particular emphasis on interaction between Anglo-Norman/English and Celtic societies. LEC.

HIST 545. British History, 1660-1832. 3 Hours. H.
A study of Britain’s recovery from civil war; state formation and national identity; ideological conflict; the Revolution of 1688; religion and secularization; social stability and commercial expansion; reform; threats to the state, and the American revolution; Britain’s survival of the French Revolution; the breakdown of the ancient regime in 1828-32. LEC.

HIST 546. History of Cartography. 3 Hours. H.
A history of mapmaking worldwide from its origins to the present day. Emphasis on maps as historical records of evolving civilizations and cultural landscapes and methods of study early maps. (Same as GEOG 519.) LEC.

HIST 547. The Intellectual History of Europe in the Twentieth Century. 3 Hours. H.
This course will examine in depth the leading developments in European thought from the 1920’s to the present. Topics will include: existentialism, philosophic hermeneutics, and postmodernism. LEC.

HIST 548. British History, 1832 to the Present. 3 Hours. H.
A study of the rise of modern Britain from the 1832 Reform Act, a major step on the path from aristocratic government to mass democratic politics. It covers the politics and society of the Victorian era, the extension of British influence overseas, the origins and social impact of two world wars, the creation of the Welfare State, the loss of Empire, and Britain’s entry into Europe. LEC.

HIST 551. Spain and its Empire, 1450-1700. 3 Hours. H.
This course will examine the society and culture of Spain in the period known as “the Golden Age.” Subjects that will receive attention include: rural and urban society, economic and political organization of the Spanish and American peoples in the early years of the conquest, the place of women in society, the social basis for “Golden Age” culture, and the debate over the “decline of Spain. LEC.

HIST 555. Aspects of British Political Thought. 3 Hours. H.
This course will offer an introduction to a number of classic works in British political thought, placed against their historical background. Close reading of selected texts will be combined with contextual analysis. LEC.

HIST 556. Aspects of British Political Thought, Honors. 3 Hours. H.
Similar in content to HIST 543. This course will offer an introduction to a number of classic works in British political thought, placed against their historical background. Close reading of selected texts will be combined with contextual analysis. Open only to students in the University Honors Program or by permission of the instructor. LEC.

HIST 557. Nationalism and Communism in East Central Europe from 1772 to the Present. 3 Hours. H/W.
The peoples of East Central Europe under Hapsburg, Romanov, and German rule; the dissolution of the empires, independence and the role of the new states in the European balance of power; World War II, Soviet domination, and the recent role of East Central Europe in the Communist World. LEC.

HIST 558. Religion in Britain Since the Reformation: A Survey. 3 Hours. H.
This course will deal analytically and synoptically with religion in Britain from the Reformation to the present with special reference to the Church of England, and focuses on the theses of ecclesiology, ecclesiastical polity, and political theology. It is essentially an examination of religious history from a perspective of the history of ideas. (Same as REL 558.) LEC.

HIST 559. Religion in Britain Since the Reformation: A Survey, Honors. 3 Hours. H.
This course deals analytically and synoptically with religion in Britain from the Reformation to the present with special reference to the Church of England, and focuses on the themes of ecclesiology, ecclesiastical polity, and political theology. It is essentially an examination of religious history from the perspective of the history of ideas. Open only to students in the University Honors Program or by permission of instructor. (Same as REL 559.) LEC.

HIST 560. The Value of Freedom. 4 Hours. H.
This course explores multiple definitions of freedom: its value, limitations, and evolving meaning. The course specifically focuses on four major contexts in which human beings have faced existential questions about freedom’s value: politics, religion, work, and gender relations. The goals are to explore the ways in which other societies and epochs have valued freedom and balanced it against competing social goods and thus to attune students to the particularities of today’s definitions and celebrations of freedom. LEC.

HIST 561. Liberation in Southern Africa. 3 Hours. NW AE42 / H.
This course examines struggles for freedom in southern Africa and the consequences of political, economic, and social changes in the region. The end of colonial rule, the demise of white-settler domination, and the fall of the apartheid regime is discussed. As a major political event of the twentieth century, the liberation of southern Africa had both local and global consequences. The course analyzes transnational issues of liberation and resistance to consider broader regional and international perspectives. Course themes pay particular attention to gender and ethnicity and include a focus on democratization and contemporary meanings of liberation. Prior coursework in African Studies is strongly recommended, but not required. (Same as AAAS 561 and POLS 561.) LEC.

HIST 562. United States Environmental History in the 20th Century. 3 Hours. H.
Americans dramatically changed the natural world between 1900 and 2000. This course asks how transformed environments shaped the American experience during a century of technological innovation, democratic renewal, economic expansion, global conflict, and cultural pluralism. Topics include food and markets, energy and transportation, law and politics, protest and resistance, suburbanization, and
environmentalism's fate in a global information era. (Same as EVRN 562.) LEC.

HIST 563. U.S. Environmental Thought in the 20th Century. 3 Hours. H.
Explores both leading and dissident ideas that Americans have had about
the natural world since 1900. Broad chronological periods are explored in
some depth, including the Progressive Era, New Deal, Cold War, the
Sixties, and the Reagan Eighties. The course uses articles and books,
as well as visual and aural forms of communication. Commercial speech,
as well as scholarly and literary works, are considered. (Same as EVRN 563.) Prerequisite: EVRN 148 or HIST 129, or permission of instructor. LEC.

HIST 564. Medieval Russia. 3 Hours. H.
Political, economic, social, cultural, and religious developments of Russia
from the beginnings of the Russian state in the 9th Century through the
17th Century. LEC.

HIST 565. Imperial Russia. 3 Hours. H/W.
The history of Imperial Russia from Peter the Great's reinvention of the
empire in the eighteenth century to its demise in the revolutions of 1917.
Placing Russia in a global context, the course examines change and
continuity in politics, society, economy, and culture and looks at Russia as
a diverse empire between Europe and Asia. Readings include historical
scholarship and some of the classics of Russian literature. LEC.

HIST 568. Rise and Fall of the Soviet Union. 3 Hours. H/W.
An exploration of the Soviet Union's creation, evolution, collapse, and
legacy in contemporary Russia and Eurasia. Drawing on historical
scholarship, literature, music, and film, the course examines the major
trends and developments in Soviet politics, ideology, society, economy,
and culture. Special attention is paid to how the multiethnic Soviet state's
rise and fall reflected broader changes in the world during the "Soviet
century. LEC.

HIST 570. The Middle East After World War II. 3 Hours. NW AE42 / H/
W.
An intensive study of developments and changes in the Middle East since
World War II. Topics and themes will vary, but may include the long-
lasting effects of European imperialism, Big Oil and the energy crisis,
the Arab-Israeli conflict and peace process, American intervention in
the Middle East, minority communities, and the revival of Islamic and popular
protest movements. LEC.

HIST 573. Latin America in the 19th Century. 3 Hours. H/W.
The course will analyze the social, political, and economic problems of the Latin American nations from their independence to the Mexican
Revolution (1910). Emphasis will be on the emergence and shaping of the
new countries; their transition to modern industrializing societies; and the
impact of this transition on Latin American society. LEC.

HIST 574. Slavery in the New World. 3 Hours. H/W.
Slavery, slave culture, and the slave trade in the U.S., Latin America, and
the Caribbean will be examined comparatively. Attention will also be given
to African cultures, the effects of the slave trade on Africa, and the effects
of African cultures on institutions in the New World. (Same as AAAS 574.) LEC.

HIST 575. History of Mexico. 3 Hours. H/W.
Mexican history from preconquest days to the contemporary period. LEC.

HIST 576. History of the Caribbean and Central America. 3 Hours. H/
W.
A comparative examination of Central America and the Caribbean.
Emphasis is on understanding the complex social, cultural, and political
development of this broad region from the pre-Columbian period until
the modern era. Topics include: conquest, colonization, racial and ethnic
diversity, economic development, political conflict, and globalization.
Prerequisite: HIST 120, HIST 121, or HIST 370. LEC.

HIST 579. The History of Brazil. 3 Hours. H/W.
The history of Brazil from European discovery to the present with
emphasis on social and economic change. Topics discussed will include
the Indian, African, and European backgrounds, slave society, the frontier
in Brazilian development, cycles of economic growth and regionalism, the
role of foreign capital, industrial development, labor, urban problems, the
military in government, and human rights. LEC.

HIST 580. Economic History of Latin America. 3 Hours. H/W.
A study of the changing economic conditions in Latin America from
Colonial times through the Twentieth Century and the effect of these
conditions on Latin American society. Emphasis will be on the major
theoretical issues of development economics, patterns of growth, and
suggested strategies for economic development. Analysis will center
on changes in agriculture, industry, labor, finance, transportation and
technology, urbanization, immigration, role of women, export and
commerce, and foreign involvement. LEC.

HIST 581. The Japanese Empire. 3 Hours. H.
Although the history of modern Japan was for a long time conventionally
understood within the parameters of the nation-state, in fact modern
Japanese identity coalesced around empire. This reading-intensive course
explores the Japanese empire from its origins in the late
nineteenth century to its collapse at the end of World War II in 1945, as
well as the empires post-1945 legacies in Asia. Particular attention is paid
to different forms of Japanese colonial domination practiced in Hokkaido,
Okinawa, Taiwan, Korea, the South Seas Islands, Manchuria, occupied
China, and Southeast Asia. We also study the ways in which the empire
and colonial subjects, in turn, transformed Japanese state and society.
Furthermore, we examine transnational themes the Japanese empire
shared with other modern empires in areas such as colonial violence,
gender, migration, settlements, war mobilization, and historical memories
of the colonial experience. Prerequisite: Successful completion of an East
Asian history or culture course numbered below 500; or a history course
numbered below 500; or permission of the instructor. LEC.

HIST 582. Ancient Japan. 3 Hours. NW / H.
Course covers the history of Japan from the prehistoric era through the
ancient period (approximately 10,000 BC to 1200 AD). Topics examined
include the rise of Japanese Civilization, state formation, early capitals,
belief systems, courtly culture in the Heian period (794-1185), and daily
life. Writing assignments provide students with opportunities to gain
familiarity with historical methods for analysis and to strengthen their
written expressions. Not open to students who have taken HIST/EALC
586. LEC.

HIST 583. Imperial China. 3 Hours. NW / H/W.
An intensive survey of China's traditional civilization and its history, with
emphasis on the last centuries of imperial rule under the Sung, Yuan,
Ming, and Ch'ing dynasties (to 1850). (Same as EALC 583.) LEC.

HIST 584. Modern China. 3 Hours. NW AE42 / H/W.
An intensive survey of China's history from the early 19th century to the
present. Key topics include the decline of the traditional system, the rise
of communism, the Maoist era, and the tensions of change and control in
the 1980s and 1990s. (Same as EALC 584.) LEC.

HIST 585. Beer, Sake, Tea-Beverages in Japan History. 3 Hours. H.
Sake and tea are synonymous with Japan today, but the history of
beverages from water to whiskey illuminates key developments in
Japanese civilization. This course makes a thematic survey of Japanese
beverages introducing the place of drinks in global history before
examining their distinct context in Japan. Topics include the ritual consumption of beverages as in the tea ceremony; the place of alcohol in Japanese culture; locales for consuming beverages such as bars, teahouses and coffee shops; and the Westernization of taste preferences as characterized by the introduction of beer and wine. By taking this course, students gain insight into ways that beverages contribute to Japanese culture and help shape personal and national identity. Prerequisite: Successful completion of an East Asian history or culture course number below 500 or permission of the instructor. LEC.

HIST 587. Early Modern Japan. 3 Hours. NW AE42 / H/W.
Early modern Japan (16th to 19th century) examines the history, culture, and patterns of life during an era of rigid social control but artistic brilliance. After an historical overview of the period, students will explore topics including the social structure, travel, religion, thought, and the formation of traditional cultural forms such as Kabuki theater. (Same as EALC 587.) LEC.

HIST 588. Japan, 1853-1945. 3 Hours. NW / H/W.
This course provides an intensive survey of Japanese history from the arrival of Commodore Perry through the Pacific War. Social, economic, and political themes will be emphasized. Among the topics covered will be the Meiji Restoration, industrialization, Japanese imperialism, Taisho democracy, and wartime mobilization. (Same as EALC 588.) LEC.

HIST 589. Japan Since 1945. 3 Hours. NW / H/W.
This course provides an overview of Japanese history from the end of World War II to the present day. Among the topics covered will be the Allied Occupation, postwar politics and social change, the economic "miracle," popular culture, women and the family, crime and punishment, the educational system, and Japan’s place in the world. (Same as EALC 589.) LEC.

HIST 590. Cultural History of Korea. 3 Hours. H.
This course examines the cultural history of Korea in periods prior to the 19th Century. Special attention is given to varying constructions of cultural value, heritage, and identity, together with the historically specific factors that engendered them. (Same as EALC 563.) LEC.

HIST 591. Food in History: West and East. 3 Hours. H/W.
A survey of scholarship on food in the West and in East Asia, choosing works primarily by historians, but also by sociologists, geographers, and anthropologists. We consider how scholars have approached issues concerning food productions and consumption, what habits of eating reveal about daily life, and how and when food is embedded with historiography related to these topics, keeping in mind the famous maxim of the noted French gastronome Brillat-Savarin (d. 1826): "Tell me what you eat: I will tell you what you are. LEC.

HIST 592. Modern Korea. 3 Hours. NW / H/W.
This course will examine selected topics in Modern Korean history in the 19th and 20th centuries, with special emphasis on Korea’s connections to China and Japan. (Same as EALC 592.) Prerequisite: A college-level course in East Asian history or culture, or consent of instructor. LEC.

HIST 594. Law and Society in Traditional China. 3 Hours. S/W.
The course begins with a series of lectures on the main principles underlying Chinese social structure. The course then examines the application of those principles in legal cases. Students read legal cases in translation and argue them in class. (Same as EALC 594.) Prerequisite: A course in Chinese history. LEC.

HIST 596. Defining Japan: Marginalized Groups and the Construction of National Identity. 3 Hours. NW / H/W.
This course investigates the construction of national identity in modern Japan by examining the historical experiences of groups marginalized by mainstream society. We will explore the pressures of conformity, the perversiveness of social ostracism and the surprising diversity in Japanese society. Among the groups discussed will be indigenous peoples (the Ainu, Okinawans), the Korean minority, the outcast class (burakumin), the sick and disabled, the yakuza, and political activists. (Same as EALC 596.) LEC.

HIST 597. Japanese Theater History. 3 Hours. NW / H/W.
This course examines the historical development and characteristics of Japanese theater, with special attention to traditional theater and the genres of noh, kyogen, and kabuki in particular, tracing their origins in the pre-modern era and their continued performance today. To gain an understanding of the historical and artistic setting of these arts, lectures and readings will consider broader issues such as performance and ritual in religion and daily life, gender and representation, and folk theater. A portion of this class will include practical studies of theatrical forms including noh dance and kabuki music (shamisen). (Same as EALC 597.) LEC.

HIST 598. Sexuality and Gender in African History. 3 Hours. NW AE42 / H.
An examination of the history of sexuality and gender in Africa with a focus on the 19th and 20th centuries. Major issues and methods in the historical scholarship on gender and sexuality will be covered. Topics of historical analysis include life histories, rites of passage, courtship, marriage, reproduction, education, masculinities, homosexuality, colonial control, and changing gender relations. Prior course work in African history is suggested. Graduate students will complete an additional project in consultation with the instructor. (Same as AAAS 598.) LEC.

HIST 599. The Rise and Fall of Apartheid. 3 Hours. H.
This course will deal with the last fifty years of South African history during which apartheid came to be formulated, supported, and perpetuated, and the forces that were responsible for its disintegration by 1990. Reference will also be made to the transformation process since April 1994. (Same as AAAS 590.) LEC.

HIST 600. West African History. 3 Hours. NW / H/W.
A study of the political, social, and economic development of West Africa until the colonial era. Major focus will be on the role of state formation, trade, ecology, and urbanization in the formation of centralized politics from the 11th to the 16th centuries and the impact of the process of Islamization and Muslim revolution on political and socioeconomic change in selected West African societies in the 19th century. LEC.

HIST 601. Oral History. 3 Hours. H.
This course explores the emergence of oral history as a methodology and focuses on the guidelines and ways to effectively use oral history in historical, journalistic, and social science research. The skills of collecting and sorting information gathered through eyewitness accounts, oral traditions, genealogies, investigative reporting procedures, and questionnaires are developed. The nature of the interview in relation to personal and public documents, ordinary conversation, and other related data sources will be considered in this course. LEC.

HIST 602. Religion in Britain 1785-1925. 3 Hours. H.
This course offers an examination of religious thought and practice during the transition from a pre-industrial, unitary order to a modern urban, industrial, and secular society. It will stress the close study of a range of selected texts, including works by such authors and works as Paley, Horsley, Wilberforce, Thomas Arnold, Newman Maurice, essays and reviews, Jowett, Lux Mundi, Gore, and Temple. It will attend to continental European influences on British thought and set theological debate in the wider context of the intellectual history of the period. LEC.
HIST 603. History of Tibet. 3 Hours. NW AE42 / H.
This course surveys the cultural and political history of Tibet from the eighth to the twentieth century. Through readings, lectures, and discussions, students gain familiarity with the dominant features of Tibetan civilization. Topics include the relationship between Tibet and the civilizations of India and China, Tibetan Buddhism, and the tensions between the struggle for Tibetan independence versus claims of Chinese sovereignty. The course also considers the Tibetan diaspora and the reception of knowledge about Tibetan civilization in the West. LEC.

HIST 604. Contemporary Greater China. 3 Hours. NW AE42 / H.
This course considers contemporary China, Taiwan, and Hong Kong in comparative perspective. It begins in the early twentieth century so as to set up a comparison between Nationalist, Communist and Colonial China. It focuses on the evolution from the 1940s to the present studying the political, economic and social systems of the three regions that constitute what we now call 'Greater China' and considers, in particular, important points of difference and similarity between them. LEC.

HIST 605. Medieval Japan. 3 Hours. NW AE42 / H.
Course examines the history of Japan from the end of the ancient period (c. 1200 AD) through the medieval era (approximately 1573). Issues covered include the formation and destruction of the Kamakura and Muromachi warrior governments, medieval religious life and culture. Writing assignments provide students with opportunities to gain familiarity with historical methods for analysis and to strengthen their written expression. Not open to students who have taken HIST/EALC 586. LEC.

HIST 608. History of Sexuality. 3 Hours. H.
This survey course traces the changing conceptions of human sexuality from early civilizations to the present. It will include, but not be limited to, such topics as attitudes and beliefs, laws, sciences and medicine, cultural differences, and the impact of economic change on sexual definition and experience. LEC.

HIST 609. History of Women and Reform in the United States. 3 Hours. AE41 / H.
This survey course will outline the history of women's involvement in reform movements in the United States from 1600 to the present. It will include, but not be limited to, such topics as labor movements, utopian communities, religious revivals, moral reform, women's rights, civil rights. LEC.

HIST 610. American Colonial History. 3 Hours. H.
Examines colonial American history from the age of Columbus to the mid-1760s. The course seeks to place colonial American history into the larger historical context, particularly the expansion of the British Empire in the early modern period. Emphasis in the course will be on migration, social and economic conditions, and inter-racial relations. LEC.

HIST 611. Early American Indian History. 3 Hours. H.
This course will focus on the history of American Indians, especially those of the eastern woodlands, from precontact times to the 1830's. Particular emphasis will be on the response of Indians to demographic catastrophe, the development of trade between Indians and colonists, and Indian responses to European colonization in British America and New France. The role of Indians in the American Revolution and the changes caused by Removal will also be treated. LEC.

HIST 612. History of Federal Indian Law and Policy. 3 Hours. H.
This course offers a comprehensive examination of federal legislation and court decisions in the United States that have affected American Indians. The history of law and policy will be traced from the colonial period, but the major emphasis will be on the struggle of American Indians to preserve sovereignty in the 19th and 20th centuries. LEC.

HIST 613. Slavery and Freedom in the Age of Jackson. 3 Hours. H.
This course focuses on the growing importance of the issues of slavery and freedom in the United States between 1815-1848. Recently, scholars have demonstrated that the period was one of disorienting, dramatic, and unprecedented change as politics, economics, racial and gender roles, and key institutions were permanently transformed. The course will examine these changes and how they, in turn, remade the values and identities of all Americans. LEC.

HIST 615. Rise of Modern America: Politics, Culture, and Society, 1900-1950. 3 Hours. H.
The history of the United States in the First Half of the Twentieth Century. LEC.

HIST 616. Contemporary America, 1941-Present. 3 Hours. H.
A history of the United States from its entry into World War II to the present. A study of such selected topics as women's history and feminism, race relations and the Afro-American civil rights movement, power, poverty, the military-industrial complex, McCarthyism, and presidential administrations. LEC.

HIST 617. America in the 1960's. 3 Hours. H.
The people of the United States experienced significant social, political, and cultural change during the 1960's. This course studies the history of these changes, focusing on the American people, the institutions that shaped their lives, and the social and political movements, for and against change, that surfaced during this decade. Specific topics include: the struggle for racial equality, the Kennedy, Johnson, and Nixon administrations; the Vietnam War, the antiwar movement, New Left, and counterculture; feminism's rebirth; the white backlash; and the resurgence of political and cultural conservatism. Course requirements include readings, discussion, and original historical research and writing. LEC.

HIST 618. History of the American West to 1900. 3 Hours. H.
A survey of Western history with emphasis on such topics as Native Americans and Indian-white relations, environment and resource use, exploration and discovery, expansionism and Manifest Destiny, economic development, urban, rural, and alternative communities, ethnic and racial experience, women and violence. Consideration will also be given to topics such as fur trade, mining, the cattle business, and agriculture. LEC.

HIST 619. History of the American Indian. 3 Hours. NW / H/W.
A study of Indians in the United States from colonial times to the present. Consideration will be given to the political, social, and cultural history of selected Indian tribes and to Indian-white relations with particular attention to the Indian point of view. Other topics will include a comparative study of Indian policy of nations colonizing in America, cultural intermingling and cultural conflict, and current Indian problems. Slides, films, and guest speakers (including American Indians) will be used in the course. LEC.

HIST 620. History of Kansas. 3 Hours. H.
A survey of the history of culture and society from prehistory to the present. Topics include Native American life, Euro-American resettlement, Bleeding Kansas and the Civil War, agricultural settlement, urbanization and industrialization, depression and recovery, and modern Kansas in transition. LEC.

HIST 621. The American West in the 20th Century. 3 Hours.
A study of the post-frontier era and the struggle to create a regional identity, drawn from legends of the heroic past, varieties of racial and ethnic experience, political culture, and the possibilities of the land. LEC.

HIST 622. History of the Plains Indians. 3 Hours. NW / H/W.
A history of the Plains Indians from the sixteenth century to the present. Consideration will be given to tribal culture and society, to the impact
of the fur trade and international rivalries on tribes, and to Indian-white relations. LEC.

HIST 625. Body, Self and Society. 3 Hours. H.
An intensive examination of the role of the human body in the creation of personal and social identities in the Western world. Students become acquainted with contemporary theories of embodiment and senses as they are applied to a variety of historical themes, and develop research projects on a topic negotiated with the instructor. (Same as HWC 575, WGSS 575.) Prerequisite: An upper-division course in History, Humanities and Western Civilization, or Women Gender and Sexuality Studies; or permission of instructor. LEC.

HIST 626. Men and Masculinities. 3 Hours. H.
An intensive examination of the history and theory of masculinities in the Western world. Students become acquainted with some of the key theories of men and masculinities, and develop research projects on a topic negotiated with the instructor. (Same as HWC 570, WGSS 570.) Prerequisite: An upper-division course in History, Humanities and Western Civilization, or Women Gender and Sexuality Studies; or permission of instructor. LEC.

HIST 628. American Economic Development. 3 Hours. H.
An introductory study of the development of the American economy from colonial times to the present. Investigates long-term trends in output, population, and output per capita, as well as short period fluctuations, and the variables and institutions that determined these fluctuations and trends. (Same as ECON 530.) Prerequisite: ECON 104 or ECON 142 and ECON 144. LEC.

HIST 629. The United States and the World to 1890. 3 Hours. H.
The origins of American diplomacy from the wars of the 18th century and the Revolution to 1901. The foreign relations of the American government and the reactions of the American people to international problems. LEC.

HIST 630. The United States and the World, 1890-2003. 3 Hours. H.
An examination of the history of United States foreign relations over the course of the twentieth century. Treats America's emergence as a world power before World War I, imperialism and interventionism, involvement in World War I and World War II, internationalism, the Cold War and America's anti-communist crusade, third world nationalism, responses to a global economy, and the obligations of a military superpower in a chaotic world. LEC.

HIST 631. The Contemporary Afro-American Experience. 3 Hours. H.
A history of Afro-America from the end of the Civil War to the present. Consideration will be given to such topics as America's capitulation to racism, blacks in agriculture, blacks and the labor movement, Booker T. Washington and W.E.B. DuBois, civil rights protest, migration and urbanization, Marcus Garvey and black nationalism, the Harlem Renaissance, blacks during the New Deal, blacks in recent politics, the modern civil rights movement, ghetto uprisings, and the changing relationships among race, caste, and class. LEC.

HIST 636. Agriculture in World History. 3 Hours. H.
A survey of the development of agriculture from prehistory through the present. The major themes of the course will be how various methods of farming have spread around the world, how new techniques have transformed agriculture, and how peasants and farmers have interacted with cities and governments. LEC.

HIST 640. Entrepreneurship in East Asia. 3 Hours. NW / H.
An intensive examination of the history and current status of entrepreneurship in China, Japan, and other nations in East Asia. This course investigates the role of entrepreneurs in Asian economic development from the nineteenth century to the present, as well as the relation between entrepreneurship and Asian cultural traditions. The opportunities and challenges of entrepreneurship in East Asia today are also considered. (Same as EALC 520.) LEC.

HIST 646. Witches in European History and Historiography. 3 Hours. H.
This course examines witches, witchcraft, and magic in Europe in the late medieval and early modern period (approximately 1200-1700 C.E.). Particular emphasis will be on the variety of historical and anthropological approaches that have been used to study the subject and their meaning in the context of gender politics and gender theory. (Same as WGSS 646.) LEC.

HIST 649. History of Feminist Theory. 3 Hours. H.
This discussion course will cover the development of feminist theories from the late Middle Ages to the present. Reading will include Pisan, Wollstonecraft, Mill, Freud, Woolf, Beauvoir, Friedan, Daly, Kristeva, and others. (Same as WGSS 549.) LEC.

HIST 653. American Constitutional History to 1887. 3 Hours. H.
A historical study of the colonial origins, revolutionary development, creation of, struggle over and preservation of the American constitutional system from 1763 to 1887. LEC.

HIST 654. American Constitutional History Since 1887. 3 Hours. H.
A historical study of the evolution of thought and practice of the constitutional system from the conflict over government regulation of business, through the expansion of executive and legislative power, to the evolution of protections of Bill of Rights guarantees by the Supreme Court and the reaction against that evolution. LEC.

HIST 660. Biography of a City: _____. 3 Hours. AE42 / H.
These interdisciplinary, team-taught courses survey the artistic, intellectual, and historical development of the great cities of the world. London, Paris, and Rome have been offered in recent semesters, and other cities will be studied in the future. LEC.

HIST 661. Palestine and Antiquity. 3 Hours. H.
A survey of the history of Palestine from biblical origins to the Muslim conquest, with emphasis on such topics as social and religious institutions, cultural and communal diversity, and relations between foreign powers and local authorities. The course further explores the roots of the present conflictual situation in this part of the Middle East. LEC.

HIST 666. Contemporary America, 1941-Present, Honors. 3 Hours. H.
A survey of the economic, social, political, and cultural history of the United States from its entry into World War II to the present. Students with credit in HIST 614 or HIST 616 should not enroll in HIST 666. LEC.

HIST 670. Comparative Diasporas. 3 Hours. H.
This course examines history from the point of view of diasporas, groups who move across established borders but maintain an identity linked to an original homeland. This course examines commonalities and differences in the diaspora experience by looking comparatively at a range of prominent cases, including the Jewish, African, Armenian, Greek, Turkish, German, Irish, Italian, South Asian, and Chinese diasporas, the “Gypsies,” and the internal diasporas of multiethnic states like Russia. The course also gives students the opportunity to pursue research on a diaspora of their own choosing. LEC.

HIST 699. Philosophy of History. 3 Hours. H.
Topics will include: The nature of historical knowledge; the problems of historical inquiry; a critique of philosophies of history; and a study
of history and related disciplines. (Same as PHIL 696.) Prerequisite: A distribution course in philosophy. LEC.

HIST 705. Globalization in History. 3 Hours.
A study of the increasing interaction among world societies since 1500 and an investigation of the long-term developments behind current world problems. Major topics include western expansion since 1500, the spread of state sovereignty, the formation of a world economy, and spread of international institutions. The current world problems investigated will vary, but may include issues such as environmental crises, human rights, migration, free trade and the spread of consumer culture, ethnicity and nationalism, and international intervention within states. (Same as AMS 730, BIOL 785, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

HIST 727. Practical Archival Principles. 3 Hours.
Study of the principles and practices applicable to the preservation, care, and administration of archives and manuscripts. Practical experience will be an integral part of this course. (Same as MUSE 707.) LEC.

HIST 728. Museum Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as AMS 731, BIOL 785, GEOL 783, and MUSE 701.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

HIST 747. East Asian History and Culture for Teachers. 2 Hours.
An advanced survey of the history, culture, and contemporary affairs of Japan, China, and Korea, specifically designed for K-12 educators who wish to incorporate East Asian topics into their classroom teaching. Pedagogical methods and resources for the study of East Asia will be emphasized. Topics covered will address relevant benchmarks in the state curricular standards in social studies, themes from the Advanced Placement world history examination, and the national standards in world history. (Same as EALC 747.) Prerequisite: Approval of the instructor. LEC.

HIST 748. East Asian Historical Materials: ______. 3 Hours.
The aim of the course is to provide students with the linguistic tools needed for archival research in East Asian history by assisting them in gaining experience reading primary and secondary language materials in Japanese and/or Chinese including texts in classical forms of these languages. After studying the rules of classical grammar and the particulars of historical materials as needed, students will read primary documents in conjunction with secondary readings in Japanese and/or Chinese. Fundamental aspects of paleography may also be introduced in this course depending on student need. Prerequisite: Capability of reading Japanese or Chinese and permission of the instructor. LEC.

HIST 799. Museum Studies Apprenticeship. 1-6 Hours.
Provides directed, practical experience in the collection, care, use, and/or management of historical materials. (Same as AMS 799, ANTH 799, BIOL 799, GEOL 723, and MUSE 799.) Prerequisite: Consent of instructor. FLD.

HIST 800. Readings in: ______. 1-8 Hours.
Prerequisite: Consent of instructor. RSH.

HIST 801. Colloquium in: ______. 1-6 Hours.
Reading and discussion of selected topics. LEC.

HIST 802. Seminar in: ______. 3 Hours.
Research Seminar on selected topics. SEM.

HIST 805. The Nature of History. 3 Hours.
Analysis of what historians do and how the profession of history has developed in terms of training, concepts, and practices in both research and teaching. Consideration also of the major controversies that have developed over historical method and historical interpretation, giving greatest emphasis to American and European historiography by providing a relationship to the leading concepts of world history. LEC.
HIST 806. Studies in: _____. 3 Hours.
The core course for each thematic major field in the graduate program in History. The course, offered in a colloquium style format, will serve as an introduction to the principal standard literature in the field, and will consider the full range of methodologies or approaches appropriate to the field. LEC.

HIST 807. Professional Development Colloquium in Pedagogy. 3 Hours.
This course will help train future professional historians to teach. It will focus on a variety of pedagogical topics for future college history faculty, including: developing students’ critical and analytical thinking; teaching research skills; promoting student involvement/participation; determining course goals; use of multi-media technology. In addition to attending class meetings of History 807, students will attend as observers throughout the semester one 500/600-level course in an area relevant to their future teaching and complete the readings assigned to the class. They will produce a course portfolio for an undergraduate course, including: a syllabus designed by the student; a set of assignments that will be part of that course, such as examinations and papers; sample lesson plans; an annotated bibliography of materials relevant to the subject-matter of the course. LEC.

HIST 808. Colloquium in Comparative History: _____. 3 Hours.
A readings-oriented course which explores themes in two or more geographic and/or chronological fields of history. The benefits and disadvantages of comparative methodologies will be analyzed. Topics will vary each term but may include the examination of such subjects as the history of urbanization, labor, colonialism, immigration, the family, political thought, or industrialization. Prerequisite: Varies with area of subtopic. LEC.

HIST 820. Colloquium on Popular Culture in Latin America. 3 Hours.
This course examines the history and theory of popular culture in 19th and 20th century Latin America from a cross-disciplinary perspective. Some of the topics covered could include: the historical development of urban popular culture from broadsides and newspapers to radio and telenovelas; the politics of music from the tango to the new song movement; folk art vs. High art in the definition of national identity; cultural imperialism; sports and public rituals as spectacles for the working class; relationship between mass culture and the novel; gender roles and social order as revealed in forms of popular culture; and the politics of the New Latin American Cinema. Discussions will be in English. No prerequisites. LEC.

HIST 822. Colloquium in the Urban History of Latin America. 3 Hours.
Explores the growth of the city and urban culture from the Spanish conquest to the present. Focus on such topics as crime, public health, leisure activities, artisans, unionization, residential patterns and transportation. LEC.

HIST 823. Colloquium on Colonial Latin America. 3 Hours.
Explores the historiography and major themes and problems of the history of colonial Latin America. Ordinarily this will involve reading and discussion of historiographical articles, major works in the field and works involving new approaches and perspectives. A long historiographical paper will be required. LEC.

HIST 824. Seminar on Labor in Latin America. 3 Hours.
Major problems in class conflict resulting from industrialization of peripheral economies. Focus on such topics as labor movements, worker-inspired revolutions, women in the workforce, the ideology of work, labor migration, occupational culture and worker’s relationship to the state. LEC.

HIST 825. Seminar in Latin American Foreign Relations. 3 Hours.
This seminar examines the history of Latin American attitudes and policies toward other parts of the world as well as among the Latin American nations themselves. Examples of topics of interest are anti-imperialism, Pan-Americanism, foreign cultural influences, non-intervention, international cooperation and conflict, dependency, transnational corporations, regional integration, international law and doctrine and national security. LEC.

HIST 826. Seminar in Twentieth Century South America. 3 Hours.
Research seminar which examines major topics in the recent history of the Andean and Southern Cone countries. Topics such as the history of poverty, the dirty wars and the rise of military regimes, the social collapse of Colombia, Argentina and Peru, and the persistence of traditional cultures in the face of capitalist transformations will be thoroughly explored. LEC.

HIST 827. Colloquium in the Social History of Latin America. 3 Hours.
Explores the historiography, methods and themes of Latin American social history from the conquest to the present. Sessions will focus on specific groups including the history of indigenous groups, peasants, slaves, women, families, workers, and the poor. A long historiographical paper will be required. LEC.

HIST 830. Colloquium in Eighteenth and Nineteenth-Century Britain. 3 Hours.
This course examines the varied elite and popular responses to the creation of a capitalist economy (agrarian and industrial) in Britain between 1750 and 1890. LEC.

HIST 831. Colloquium in Eighteenth and Nineteenth-Century Britain. 3 Hours.
This course examines the main developments in the political, social, and cultural history of Britain since 1890. The aim is to trace the relationship between political movements and socio-cultural attitudes and institutions. LEC.

HIST 832. Colloquium in the History of British History. 1500-1660. 3 Hours.
This course will engage with recent scholarship on the Renaissance and Reformation, the Civil War and the English Republic. LEC.

HIST 833. Colloquium in the History of the British Empire. 3 Hours.
The course will deal selectively with themes in the political and cultural interaction of the peoples of the British Isles with peoples overseas, the expansion and contraction of empire, and the rationales for these processes. LEC.

HIST 834. Colloquium in British Political Thought. 3 Hours.
This course provides an introduction to the rich tradition of British writings on politics through a close reading of a number of classic texts, interpreted in their historical settings. LEC.

HIST 835. Colloquium in British Religious History. 3 Hours.
This course will deal analytically and synoptically with religion in Britain from the reformation to the present with special reference to the Church of England, and will focus on the themes of ecclesiology, ecclesiastical polity, and political theology. LEC.

HIST 844. Colloquium on East Central Europe, 1772-1914. 3 Hours.
The colloquium covers the period beginning with the decline and partitions with Poland and ends with the outbreak of World War I. The major areas of study are the development of modern national consciousness among Poles, Czechs, Slovaks, Magyars, and Ukrainians, and the status of the Jews in these areas; economic, social, and educational development; and the rise of modern political parties. Prerequisite: HIST 557. LEC.

HIST 845. Eastern Europe, 19th and 20th Centuries. 3 Hours.
The course considers the challenges of modernity in Eastern Europe, with a focus on the lands of the former Habsburg Empire. The course
is designed to introduce students to major issues in modern Eastern European history and historiography, with an emphasis on recent scholarship. Topics include: nationalism, identity formation, anti-Semitism, modernization and urbanization, World War I, interwar nation-states, World War II, Communist takeovers, everyday life under Communism, dissidence, Solidarity, the collapse of Communism, and post-socialist transitions. LEC.

HIST 847. Colloquium in Russian History. 3 Hours.
A group readings course that begins with Russia in the medieval period and continues through the end of the twentieth century. Topics may vary each term, but may include such subjects as political, social, religious, gender, or intellectual history. The course will focus around significant interpretive issues and the historiography that address them. Basic familiarity with the chronology and the main problems of Russian history is assumed. LEC.

HIST 848. Colloquium in 20th Century Russia. 3 Hours.
The focus will be on reading and discussion of historical literature on the end of Imperial Russia, the Russian revolutions, and the Soviet Union and its aftermath. LEC.

This graduate seminar will focus on interactions between the so-called Old and New Worlds in the three centuries following Columbus' voyages. The course will pay particular attention to the changes in the lives of Europeans, Africans, and the peoples of the Americas as a result of the emergence of transatlantic economies, empires, and cultural systems. LEC.

HIST 856. Colloquium in Modern European History I - Renaissance to the French Revolution. 3 Hours.
This course will concentrate upon a number of selected topics in the history of Europe between the Renaissance and the French Revolution. Emphasis will be placed upon certain problems within this period and the recent historiography that deals with them. The first in a sequence of colloquia in Modern European History. Required for European history graduate students and students majoring in other fields whose secondary fields correspond to this time frame. LEC.

HIST 857. Colloquium in Modern European History II - Major Themes in Early Modern History. 3 Hours.
This course will concentrate upon a number of selected topics in early modern European history. Emphasis will be placed upon certain problems within this period and the recent historiography that deals with them. The second in a sequence of colloquia in Modern European History. Required for European history graduate students and students majoring in other fields whose secondary fields correspond to this time frame. LEC.

HIST 858. Colloquium in Modern European History III - French Revolution to the Present. 3 Hours.
From the French Revolution into the contemporary era. The third in a sequence of colloquia in Modern European History. Required for European history graduate students and students majoring in other fields whose secondary fields correspond to this time frame. LEC.

HIST 859. Colloquium in Modern European History IV - Major Themes in Modern History. 3 Hours.
This course will concentrate upon a number of selected topics in modern European history. Emphasis will be placed upon certain problems within this period and the recent historiography that deals with them. The fourth in a sequence of colloquia in Modern European History. Required for European history graduate students and students majoring in other fields whose secondary fields correspond to this time frame. LEC.

HIST 879. Colloquium on North American Environmental History. 3 Hours.
Intensive survey of significant works in the field from colonial times to the present, with attention to bibliography, research methods and needs, and leading issues in interpretation. LEC.

HIST 880. Colloquium in Iberian World History. 3 Hours.
A graduate colloquium focused on a historical topic that examines from a transregional perspective the historical foundations, development, and colonial heritage of regions and societies touched by Iberian expansionism. LEC.

HIST 881. Slavery in the Atlantic World. 3 Hours.
A graduate colloquium examining the historical roots, processes, experiences, and legacies of human slavery from local, regional, comparative, and global perspectives. LEC.

HIST 882. Gender, Sexuality, and Family in Iberia. 3 Hours.
A graduate colloquium that develops theoretical approaches and examines historical case studies focused on the social and cultural construction of gender roles, sexual identities, family structures, and living strategies for peoples and places touched by Iberian expansionism. LEC.

HIST 883. Ethnohistory of the Americas. 3 Hours.
A graduate colloquium that develops methodologies and examines historical case studies for the study of ethnicity, interethnic relations, and cultural hybridity from a hemispheric perspective, not only for indigenous peoples, but also for African-, Asian-, European-, or Pacific-derived groups, as well as new ethnic groupings and identities that emerged from their interaction. LEC.

HIST 890. Colloquium in American History 1492-1800. 3 Hours.
Study of the leading interpretations of major issues in the history of Colonial and Revolutionary America, including appropriate attention to new approaches and techniques in research. The first course in the sequence of colloquia in United States history. Required of all U.S. history graduate students. LEC.

HIST 891. Colloquium in 19th Century U.S. History. 3 Hours.
Study of the leading interpretations of major issues in the history of the United States in the 19th century. The third course in the sequence of colloquia in United States history. LEC.

HIST 892. Colloquium in 20th Century U.S. History. 3 Hours.
Study of the leading interpretations of major issues in the history of the United States in the 20th century. The third course in the sequence of colloquia in United States history. LEC.

HIST 895. Colloquium in the History of Gender. 3 Hours.
This colloquium will cover theoretical and topical readings on the history of manhood, womanhood, and gender systems. (Same as AMS 835 and WGSS 835.) LEC.

HIST 896. Colloquium in United States Women's History. 3 Hours.
This colloquium will cover theoretical and topical readings on the history of women in the United States from the pre-contact period to the present. It is designed to familiarize students with the most important and current historiography in the field. (Same as AMS 836 and WGSS 836.) LEC.

HIST 897. Comparative Colloquium in Women's History. 3 Hours.
This colloquium will approach the history of women from a comparative perspective through theoretical and topical readings on women in at least two different cultures. (Same as AMS 837 and WGSS 837.) LEC.

HIST 898. Colloquium in Material Culture and History. 3 Hours.
This course provides an overview of theories and methods used in material culture studies and their application to historical research, writing, and presentation. Topics may vary from semester to semester, but could include vernacular architecture, museum studies, anthropology, cultural
geography, historical archeology, and perceptual theory. The course will consist of intensive reading, discussion, and written work. While it is not limited to a particular geographical or chronological area, or discipline, given the state of the field most topics will be drawn from U.S. history.

LEC.

HIST 900. Independent Research Seminar: _____. 3 Hours.
Design and completion of an independent project, culminating in the production of a professional-quality paper based on original, primary source research. Prerequisite: Consent of the instructor. LEC.

HIST 901. Research Seminar in Global History. 3 Hours.
A research seminar oriented around cross-regional, comparative, and transnational aspects of history, culminating in production of a professional-quality paper based on original, primary source research. SEM.

HIST 910. Seminar in Roman History: _____. 3 Hours.
A research seminar in specialized aspects of Roman history. May be repeated for credit. LEC.

HIST 913. Numismatics as a Basis for Study of Roman Noble Families of the Late Republic. 3 Hours.
A seminar involving the study of the importance and influence of the noble families of Rome on Roman history (200-27 B.C.) with special emphasis on the literary and numismatic evidence. Reading knowledge of Latin will be essential for this course. LEC.

HIST 914. The Major Roman Historians. 3 Hours.
An analysis and criticism of the works of the most significant Roman historians from Sallust to Ammianus Marcellinus, including a comparison and contrast between the Latin and Greek historians who wrote during the Graeco-Roman period (150 B.C.-378 A.D.). LEC.

HIST 918. Elements of Latin Paleography. 3 Hours.
Introduction to the techniques of reading, dating, and localizing medieval Latin manuscripts. LEC.

HIST 919. Seminar in Medieval Europe. 2-6 Hours.
LEC.

HIST 929. Seminar in Modern European History: _____. 2-5 Hours.
A study of sources in some restricted fields and the presentation of research results. A reading knowledge of French or German or some other modern language is desirable. LEC.

HIST 930. Seminar in British History. 3 Hours.
A research seminar focusing on new, actively-investigated and controversial themes in British history, chiefly c. 1660-1832. LEC.

HIST 932. Order and Disorder in Britain and America, c. 1750-1920. 3 Hours.
The study of the history of crime and protest in their relationship with the wider social and political theory of Britain and America. Specific topics may include the impact of industrialization, the notion of the "moral economy," the legal and ideological nature of the death penalty, the crowd in history, and the administrative and intellectual developments in policing, prisons, and asylums. LEC.

HIST 934. Seminar in Modern European History. 1-12 Hours.
A research and thesis seminar offered by several members of the Standing Field Committee in Modern European History. Students seeking advanced degrees in European history from the Renaissance to the present will enroll each semester for work on their theses and dissertations. May be repeated. LEC.

HIST 946. Seminar in the Middle East. 3 Hours.
A research seminar in Middle East history, with emphasis on the 19th and 20th centuries. The European impact on and relationships with the Middle East are stressed. LEC.

HIST 949. Seminar in Modern Russian History. 3 Hours.
A focus on major problems of historical interpretation and research investigation from Peter the Great to the present. LEC.

HIST 950. Seminar in Latin American History. 3 Hours.
A research seminar focused on a major theme or problem in Latin American history. LEC.

HIST 951. Seminar in Latin American Revolutions. 3 Hours.
This seminar focuses on sweeping socio-political upheavals such as occurred in Mexico in 1910, Guatemala in 1944, Bolivia in 1952, Cuba in 1959, and Nicaragua in 1979. After considering various sociological and political theories of revolution the seminar searches for an understanding of the basic reasons for revolutions in the countries mentioned (and failure of revolutionary efforts elsewhere) and possible common characteristics of the Latin American revolutionary process. LEC.

HIST 952. Seminar in Ideology, Violence and Social Change in Latin America. 3 Hours.
Research seminar focusing on the role of ideas and ideologies, values and cultural norms in the history of Latin America. Political action, including rebellions, movements and strikes by the masses and efforts toward social control by elites will also be a major theme. Finally the course will examine the meaning of "social change" for Latin America and when it can be said that "social change" actually occurs. LEC.

HIST 955. Seminar in East Asian History. 3 Hours.
A research seminar in East Asian history. Prerequisite: Open only to graduate students having a reading knowledge of at least one East Asian language. LEC.

HIST 962. Seminar in American History. 1-12 Hours.
A research and thesis seminar offered by several members of the Standing Field Committee in United States History. Students seeking advanced degrees in United States history will enroll in the seminar for theses and dissertation credit. May be repeated. LEC.

HIST 964. Seminar in American Colonial History. 3 Hours.
An intensive, research-oriented study of American history from the 1580s to the 1760s. The course will cover both British America and New France. May be repeated. LEC.

HIST 965. The American Revolutionary Experience. 3 Hours.
An intensive, research-oriented study of American history from 1760 to 1800. May be repeated. LEC.

HIST 971. Recent American History, 1920 to the Present. 3 Hours.
LEC.

HIST 973. Seminar in United States Women's History. 3 Hours.
This research seminar will focus on the history of women in the United States from the pre-contact period to the present. Students will research and write a paper using primary sources, and present those papers to the seminar for evaluation. (Same as AMS 973 and WGSS 873.) LEC.

HIST 974. Seminar in American History: _____. 3 Hours.
A research course focusing on selected topics in history. LEC.

HIST 975. Seminar in the History of United States Foreign Relations. 3 Hours.
An intensive study of United States foreign policy during a selected period. LEC.

HIST 980. Seminar in the Trans-Mississippi West. 1-5 Hours.
LEC.
HIST 981. Seminar in Environment and History. 3 Hours.
An inquiry into major issues and methods in environmental history, viewed from both an American and modern world perspective. LEC.

HIST 982. Colloquium in the History of the American West. 3 Hours.
Study of issues and interpretations in the history of the American West from prehistory to the present, including attention to new approaches and techniques in research. LEC.

HIST 986. Seminar in Historiography of Science. 3 Hours.
Examines the various patterns of interpretation influencing current historiography of science: the substance and impact of "internalist" history, which deals with the evolution of scientific ideas; the diversity of "externalist" history, which stresses interaction between the scientist's activity and social environment. Readings and discussions will assess intellectual, chronological, socio-economic, theological, philosophical, national, institutional and literary aesthetic influences on the history of science. LEC.

HIST 998. Portfolio Preparation. 1-6 Hours.
Writing and editing of materials in the student's professional portfolio. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Permission of the instructor. RSH.

HIST 999. Doctoral Dissertation. 1-12 Hours.
An inquiry into the source material upon a specific subject. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Consent of instructor. THE.

Honors Program Courses

HNRS 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Honors. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

HNRS 190. Freshman Honors Seminar. 1 Hour. U.
This seminar serves as an introduction to the Honors Program, to the research opportunities and other academic resources available at the University of Kansas and to specific disciplinary perspectives on an overarching theme. While closely examining a topic germane to the instructor, students develop skills in research, reading, writing and in-depth discussion. The instructor of the student's seminar also serves as the academic honors advisor for the enrolled students. Required of all freshman Honors students; open only to freshmen in the University Honors Program. LEC.

HNRS 195. Transfer Honors Seminar. 1 Hour. U.
This seminar serves as an introduction to the Honors Program, and to the research opportunities and other academic resources available at the University of Kansas. This seminar fosters the transfer students' oral and written communication and the critical assessment of their academic and pre-professional goals. The instructor of the student's seminar also serves as the academic honors advisor for the enrolled students. Open only to transfer students in the University Honors Program. LEC.

HNRS 250. Citizen Philanthropy: An Introduction to the Nonprofit World. 3 Hours. U.
This interdisciplinary course explores the historical and economic roots of citizen generosity and the role of the nonprofit/philanthropic sector. This service learning course combines volunteer experiences and public service internships with research and exploration of the missions and ethical orientations of nonprofit organizations. The course is designed to explore the social and the ethical contexts of the nonprofit sector with opportunities to demonstrate social and civic responsibility. LEC.

HNRS 300. Honors Commons Course. 3 Hours. H.
An opportunity to investigate a broad topic across various subjects and disciplines. In alliance with the University Commons at Spooner Hall, this course examines a problem or topic from perspectives of several disciplines across the arts, sciences, social sciences and humanities. The course is complemented by a dedicated annual university lecture series germane to the course's topic. Prerequisite: Membership in the University Honors Program. LEC.

HNRS 310. University Scholars Seminar. 3 Hours. U.
An interdisciplinary survey to acquaint students with some of the main ideas, methods, and outstanding problems in various areas of scholarship. The organization of human knowledge inside and outside the university, as well as the implications of this organization for scholarship and society, are emphasized. Ideas and methods in various disciplines are contrasted and compared. Required of and open only to newly admitted students in the University Scholars Program. LEC.

HNRS 320. Global Scholars Seminar. 3 Hours. H.
The Global Scholars Seminar is designed to foster academically talented and motivated undergraduate students' interest in global studies. Through interdisciplinary coursework, mentorship and research experience in global studies, the seminar provides cohorts of students with opportunities to develop their intellectual capabilities and interests to the fullest and better prepares them for careers, further study, and leadership roles in today's complex international arena. Required of and open only to newly admitted students in the Global Scholars Program. LEC.

HNRS 370. Personal Writing Seminar. 1 Hour. U.
This seminar helps students develop their personal writing abilities. Students analyze language and rhetorical choices in the genre of the personal essay. Students demonstrate rhetorical flexibility within the genre, considering audience, purpose, and application of the material. Prerequisite: Permission of the University Honors Program. LEC.

HNRS 380. Critical Thinking and Advocacy Seminar. 1 Hour. U.
The focus of this class is on honing the two basic skills of critical thinking and advocacy. In this seminar, students develop a basic system for critical analysis that can be applied generally: test that critical analysis system in a series of practicums to develop the skills necessary to apply it; and develop a basic system for designing effective and ethical persuasive messages. Prerequisite: Permission of the University Honors Program. LEC.

HNRS 430. Honors Interdisciplinary Seminar. 3 Hours. U.
An opportunity to synthesize topic across various subjects and disciplines. This course examines a problem or topic from the perspectives of several disciplines. Open to qualified sophomores, juniors, and seniors in the University Honors Program. LEC.

HNRS 492. Topics and Problems on: _____. 1-6 Hours. U.
An interdisciplinary study of different topics. Designed especially for juniors and seniors. LEC.

HNRS 495. Honors Directed Study. 1-3 Hours. U.
Individual and supervised study of an interdisciplinary topic or topics. May be repeated for a total of up to 6 hours. Up to one 3-hour enrollment will count as one course toward completion of the University Honors Program. Prerequisite: Membership in the University Honors Program and consent of the instructor. IND.

HNRS 496. Honors Internship. 1-3 Hours. U.
Students participate in an internship in an organization related to their professional/career goals. An internship plan is developed by the student in conjunction with the student's academic adviser and an authorized agent of the internship site. Prerequisite: Instructor permission required. LEC.
HNRS 497. Honors Freshman Seminar Assistantship. 0 Hours.
Open to all Honors students selected to be Honors Freshman Seminar Assistants, regardless of major field. These students assist Seminar instructors in the teaching of an Honors seminar in various ways, including but not limited to: leading group discussion; engaging students in the learning process; developing classroom material; encouraging and guiding students to solve problems themselves and helping students prepare for their advising assignments. Offered fall semester only. May be repeated. LEC.

HNRS 520. University Scholars Junior/Senior Seminar. 2-3 Hours. U.
An interdisciplinary seminar course designed for advanced-level students in the University Scholars Program. Faculty mentors are invited to attend. Will count toward completion of the University Honors Program. Prerequisite: HNRS 310 or concurrently. LEC.

Humanities Western Civ Courses

HWC 110. Introduction to Humanities. 3 Hours. HL GE21/GE3H / H.
An introduction to the humanities as a division of learning and to interdisciplinary study in the humanities. Topics include the history and role of the humanities in a liberal education, perspectives and methods in the humanities, the humanities and human diversity, and interdisciplinary approaches to understanding and interpreting texts. LEC.

HWC 111. Introduction to Humanities, Honors. 3 Hours. HL GE21/GE3H / H.
An introduction to the humanities as a division of learning and to interdisciplinary study in the humanities. Topics include the history and role of the humanities in a liberal education; perspectives and methods in the humanities; the humanities and human diversity; and interdisciplinary approaches to understanding and interpreting texts. Prerequisite: Membership in the University Honors Program. LEC.

HWC 114. Western Civilization I Honors. 3 Hours. AE42/GE11/GE21 / H.
A program of study using readings and writing to explore and understand the record of Western Civilization from the ancient world through the early modern period. This is a writing intensive and writing instructive course designed to expand critical thinking and global awareness through the medium of composition practice. Prerequisite: Membership in the University Honors Program or permission of the department. LEC.

HWC 115. Western Civilization II Honors. 3 Hours. AE42/GE11 / H.
A program of study emphasizing the reading and discussion of some of the influential writings and ideas that have shaped the intellectual and cultural heritage of the Western world. Western Civilization II includes readings from the modern period. Prerequisite: Membership in the University Honors Program or permission of department. LEC.

HWC 175. Kansas Environment and Culture. 3 Hours. H.
An introduction to the inhabitants of Kansas and their experiences of the unique landscapes found within the state. Through the use of sources such as letters, autobiographies, novels, art, architecture and film, this course explores how Kansas environments have shaped and been shaped by the humans that occupy them, and why Kansas has had a powerful hold on the American imagination. LEC.

HWC 177. First Year Seminar: _____ 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Humanities and Western Civilization. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

HWC 204. Western Civilization I. 3 Hours. AE42/GE11/GE21 / H.
A program of study using readings and writing to explore and understand the record of Western Civilization from the ancient world through the early modern period. This is a writing intensive and writing instructive course designed to expand critical thinking and global awareness through the medium of composition practice. LEC.

HWC 205. Western Civilization II. 3 Hours. AE42/GE11 / H.
A program of study emphasizing the reading and discussion of some of the influential writings and ideas that have shaped the intellectual and cultural heritage of the Western world. Western Civilization II includes readings from the modern period. LEC.

HWC 206. Contemporary Western Civilization. 3 Hours. HL GE11/GE3H / H.
A sequel to the two Western Civilization courses which offers the opportunity to examine influential works of literature, philosophy, history, and political thought written since the end of World War II. In keeping with the decline of colonialism and the growth of global and multicultural civilization since 1945, the readings of the course are selected from both Western and non-Western writers. LEC.

HWC 240. Introduction to World Literature. 3 Hours. H.
This course provides an introduction to the field of world literature as an approach to critical reading and writing about literary works in a global context. Topics may include: what constitutes literature; challenges to reading works across time or within different cultural traditions; reading works in translation; history of writing technologies and canon formation; literature and market forces; and the literature of global encounters and exchanges. This is a writing intensive and writing instructive course designed to expand critical thinking and global awareness through the medium of composition practice. LEC.

HWC 250. Civilizations and the Individual. 3 Hours. HL GE3H / H.
Introduction to perennial themes that define human experience through reading and discussion of primary texts. Topics may include the nature of humanity; nature and the supernatural; the individual and the state. LEC.

HWC 251. Civilizations and Individual, Honors. 3 Hours. HL GE3H / H.
Honors version of HWC 250. Introduction to perennial themes that define human experience through reading and discussion of primary texts. Topics may include the nature of humanity; nature and the supernatural; the individual and the state. Prerequisite: Membership in the University Honors Program, or permission of instructor. LEC.

HWC 300. Studies In: ______. 3 Hours. H.
An interdisciplinary course, focusing on different topics and drawing on diverse media, cultures, and historical periods. Humanities-based, this course, depending on its topic, may include the arts, the social sciences, and the natural sciences. May be repeated for credit with different topics. LEC.

HWC 302. European Culture and Society 1945 to Present. 3 Hours.
HT AE42 / H.
The course provides historical, cultural, and political overviews of Europe since 1945 with particular emphasis on the contribution of French and Italian culture and society. The course emphasizes Europe's contribution to Western intellectual thought, social movements, arts and literature, and global society. (Same as EURS 302.) LEC.

HWC 304. World Literature I. 3 Hours. HL GE3H / H.
The study of great books in English translation from antiquity through the fifteenth century from two or more national literatures. LEC.
HWC 308. World Literature II. 3 Hours. HL GE3H / H.
The study of great books in English translation from the sixteenth, seventeenth, eighteenth, and early nineteenth centuries from two or more national literatures. LEC.

HWC 312. World Literature III. 3 Hours. HL GE3H / H.
The study of great books in English translation in the modern period (late nineteenth and twentieth centuries) from two or more national literatures. LEC.

HWC 317. Greek and Roman Art. 3 Hours. H/W.
A survey of the art of ancient Greece and Rome (ca. 1000 B.C.E. - 500 C.E.). Emphasis on major sites, architecture, sculpture, and painting. Illustrated lectures and discussion; use of the Wilcox Classical Museum. No knowledge of Greek or Latin is required. Not open to students who have taken both CLSX 526/HA526 and CLSX 527/HA 537, except with permission of the instructor. (Same as CLSX 317, HA 317.) LEC.

HWC 320. Being Human in the Workplace. 3 Hours. H.
A study of what it means to be human and humane in the workplace. Topics include the concepts of work, the worker, and the workplace; workers' rights; issues of discrimination; business ethics; privacy and confidentiality; bullying; whistle blowing; workplace environment. LEC.

HWC 324. Undergraduate Writing & Research Methods. 1 Hour. H.
Preparation for senior thesis project required of HWC majors. Introduction to writing strategies, library investigation, and time management skills. Open to HWC majors and others engaged in research and writing at the undergraduate level. Class will proceed by discussion of skills, methods, and examples, and will culminate in a written proposal from each student. LEC.

HWC 325. Theory and Method in Interdisciplinary Studies in the Humanities. 3 Hours. H.
An introduction to recent cultural theory and interdisciplinary methods used across the humanities and qualitative social sciences. Includes examination of traditional views of the humanities and its implicit cultures along with discussion of new methodologies of cultural analysis. LEC.

HWC 328. Law and the Legal Profession. 3 Hours. H.
An overview of Western Legal education, both in historical and modern contexts. Legal subjects such as constitutional law, contracts, property, the courts and ethics are also studied. Students gain perspective on law as a profession, and the legal environments in which we live. Note: this course does not guarantee admission to law school or constitute entry into the legal profession as a career. It is intended to provide information and help students identify interests in the field of legal study. LEC.

HWC 335. Introduction to Indigenous Studies. 3 Hours. NW / H.
This course is an introduction to the study of modern and historic indigenous peoples. It surveys the concepts, methods and content relevant to Indigenous Studies, using case studies drawn from the diverse indigenous cultures. Special attention is paid to the various ways in which standard academic disciplines --history, anthropology, literature, law, political science, among others--contribute to the study of Indigenous cultures and current issues. The course illustrates that the social, political, religious, and economic aspects of indigenous life are interconnected and tribal histories and cultures cannot be understood without an awareness of these fields. (Same as ISP 335.) LEC.

HWC 345. Indian Territory. 3 Hours. H.
This course examines the cultural, social, economic, environmental, and political background of Indian territory in what is now the state of Oklahoma. It surveys the diverse geographical regions, tribal cultures, the impact of the Indian Removal Act, assimilation, acculturation, westward expansion, the Civil War, boarding schools, the Dawes Act, the Curtis Act, and land runs on Territory residents. The course also treats post-Civil War violence, outlaws, and the role of tribal courts along with controversies over removals, Land Run celebrations, allotment scandals, and Osage oil murders. (Same as HIST 318 and ISP 345.) LEC.

HWC 348. American Indian and White Relations to 1865. 3 Hours. H.
This course provides an intensive survey of the Indians of North America from Prehistory to 1865, and focuses on ancient indigenous cultures, early European-Indian relations and the impact of European culture upon the indigenous peoples of North America. (Same as HIST 351, ISP 348.) LEC.

HWC 350. American Indians Since 1865. 3 Hours. H.
This course examines American Indian/White relations from reconstruction to the present. It surveys the impact of westward expansion and cultural changes brought about by the Civil War, forced education, intermarriage, the Dawes Act, the New Deal, the World Wars, termination, relocation and stereotypical literature and movies. The class also addresses the Red Power and AIM movements, as well as indigenous efforts to decolonize and to recover and retain indigenous knowledge. After learning about the past from both Native and non-Native source materials, students will multiple perspectives about historical events and gain understandings of diverse world views, values, and responses to adversity. (Same as HIST 352 and ISP 350.) LEC.

HWC 370. The Twentieth Century. 3 Hours. H.
An integrated study of several disciplines such as history, philosophy, art, music, and literature as they relate to the twentieth century in one country, or one historical or aesthetic movement occurring during this time. LEC.

HWC 374. Gender and Sexuality, Ancient and Modern. 3 Hours. H.
Classical Greek and Roman attitudes to gender and sexuality compared and contrasted with modern nations and behaviors. Attention is paid to literature (dramatic, philosophical, medical, and legal texts) and archaeological evidence (vase painting, sculpture, and domestic architecture). The course may include the following topics: age divisions and rites of passage from childhood to maturity; marriage; conception, birth, and infanticide; the family; love; homoeroticism; property and economics; and sexuality and the law, politics, and religion. No knowledge of Greek or Latin is required. (Same as CLSX 374.) LEC.

HWC 380. Modern Themes, Ancient Models: _____ 3 Hours. H.
The study of the evolution of a cultural or literary tradition from the Graeco-Roman world into modern times. The theme of the course will normally vary from semester to semester; topics such as these may be examined: the analysis of a literary genre (e.g. drama, satire, lyric), the transformation of the ancient mythical heritage, the reception of ancient astronomy. Students should consult the Schedule of Classes for the theme of the course in a given semester. With departmental permission, may be repeated for credit as topic varies. (Same as CLSX 350.) LEC.

HWC 390. Comparative Literary Theory. 3 Hours. H.
A study of selected works in literary theory and of selected problems in literary interpretation and comparative literary methodology, designed to examine and apply systematically basic critical principles and approaches. Study of approaches such as feminism, Marxism, deconstruction, psychoanalysis, and cultural studies are carried out through discussion and writing. Prerequisite: Completion of the freshman-sophomore English requirement or its equivalent. LEC.

HWC 410. Dante's Comedy. 3 Hours. H.
The complete Divine Comedy will be read in English translation, with equal stress on each of its three parts—the Inferno, the Purgatory, and the Paradise. The poem will be explained for the general reader by specialists having a variety of perspectives. (Same as HIST 420.) LEC.
HWC 420. The Interrelations of the Humanities and the Arts. 3 Hours.
H.
An interdisciplinary seminar on the relations of several of the humanities and the arts. Topics will vary, but the interrelation of the humanities and arts will be the central focus. Not open to freshmen and sophomores; recommended in the junior year. Required of students majoring in humanities. LEC.

HWC 424. Senior Seminar in Humanities. 3 Hours. AE61 / H.
A seminar to result in the student's integration of knowledge within the Humanities major. Students undertake a project that reflects and utilizes the interdisciplinary perspectives of the humanities. Options for the final project include a portfolio, web page, or significant writing project. Not open to freshmen and sophomores; recommended in the senior year. Prerequisite: Completion of at least 9 hours of upper division courses in the major. IND.

HWC 430. European Civilization in World Context: _____. 3 Hours.
HL AE42/GE3H / H.
An introduction to the literature of encounters between European and non-European civilizations, drawing on both Western and non-Western sources. The course may include European interactions with areas such as the Mediterranean Basin, Sub-saharan Africa, South and East Asia, and the Americas. World areas and historical periods chosen for study will vary from semester to semester according to the interest and field of the instructor. Not open to freshmen. (Same as EURS 430.) Prerequisite: HWC 114 or HWC 204 and HWC 115 or HWC 205. LEC.

HWC 435. Islam in Europe. 3 Hours. AE42 / H.
Investigation of Muslim migration into Europe and day-to-day interactions of Muslims with other European populations. This is an integrated study of historical, political, religious and economic influences that determine Muslim experience in contemporary European culture. (Same as EURS 435.) LEC.

HWC 436. Islam in Europe, Honors. 3 Hours. H.
Investigation of Muslim migration into Europe and day-to-day interactions of Muslims with other European populations. This is an integrated study of historical, political, religious and economic influences that determine Muslim experience in contemporary European culture. Prerequisite: Membership in the University Honors Program or permission of department. Not open to students who have completed EURS/HWC 435 LEC.

HWC 460. Animals in Art and Literature. 3 Hours. H.
A study of the role of animals (especially mammals), both wild and domesticated, in defining the nature of human beings and human culture through the disciplines of religious studies, philosophy, history, art and literature. Both western and non-western courses are examined. LEC.

HWC 464. Visions in Art and Literature. 3 Hours. H.
A study of the phenomenon of visions, their expression in various media, and theories of visionary experience from the humanities and social sciences, with a particular emphasis on critically evaluating the relationship between the visionary experience and its expression. (Same as REL 464). LEC.

HWC 468. Illness in Art and Literature. 3 Hours. H.
An examination of how illness and health have been conceptualized, expressed, and explored in Western literature and art, as well as a consideration of issues and health from the perspectives of philosophy and religious studies. (Same as REL 468). LEC.

HWC 470. American Health Care: From Origins to Modern Models. 3 Hours. H.
An interdisciplinary analysis of the historical origins and present currents within American medicine. This is an integrated study of basic historical, political, economic and professional influences that underlie the character and practice of health care in our century. LEC.

HWC 477. Gender and Religion. 3 Hours. H.
Examination of the symbols, images, scriptures, rites and teachings that define gender in various religious traditions. (Same as REL 477.) LEC.

HWC 490. Roots of Federal Indian Policy. 3 Hours. H.
This course introduces students to the basic concepts and ideologies of US Federal Indian policy. It surveys European intellectual trends that were influential in creating policies applied to colonized native peoples. The course explores the origins of such policies, including removals, “civilization programs,” the reservation period, the Dawes (Allotment) Act, the New deal, termination, relocation, NAGPRA and tribal rights, in addition to issues surrounding American Indian identity, tribal membership and demographics. This course serves as a foundation for more in-depth study of Federal Indian Law pertinent to the Indigenous peoples of the United States. (Same as ISP 490.) LEC.

HWC 494. Humanities Directed Study: _____. 1-3 Hours. AE61 / H.
Investigation of a subject in fields or on topics not covered in regularly scheduled courses. May be repeated for a total of 6 hours. Does not replace or satisfy specific course requirements for the HWC major. May be counted as part of the total junior-senior credit hours required. LEC.

HWC 500. Studies in: _____. 3 Hours. H.
A study of significant themes, topics, or problems in the humanities. May also relate an issue in the humanities to the social sciences or natural sciences. May be repeated for credit when the topic varies. LEC.

HWC 505. Europe Today. 3 Hours. AE42 / H.
An exploration of major social, political and economic developments post World War II including the rise of the European Union, the integration of Eastern and Western Europe, the growing role of Islam, attitudes towards the United States, and Europe's role in the world economy. Topics may vary based on current events. LEC.

HWC 508. Special Topics in World Literature: _____. 3 Hours. H.
An examination of selected theoretical texts and literary works relevant to the emerging field of "world literature studies" that seeks to account for the ways that global relationships structure literary production, circulation, and reception. Topics and texts vary. May be taken more than once if content differs sufficiently. LEC.

HWC 510. Science, Technology, and Society. 2-3 Hours. H.
The objective of this course is to provide members of the university community with information that enables them to judge the humanistic, moral, and ethical implications of scientific and technological developments. Formal presentations by guest lecturers, followed by question-and-answer periods, will alternate with panel discussions, symposia, etc., prepared by faculty members drawn from the various departments, schools, and organizational units of K.U. LEC.

HWC 514. Totalitarianism and Literature in Central Europe. 3 Hours. H.
This course asks how fiction written in Central Europe engaged and grappled with the totalitarian experience imposed by Nazi and Soviet forms of government. The course focuses on the works by 20th-century Polish, Czech, and Hungarian writers that deal with totalitarianism. (Same as SLAV 514.) LEC.

HWC 520. Literature in Translation: _____. 3 Hours. H.
Studies in one or more national literatures. Discussion and frequent critical papers. Prerequisite: Completion of one junior-senior level course in a language and literature department. LEC.
HWC 524. Chinese Thought. 3 Hours. NW / H/W.
A survey of the principal modes of Chinese thought from their origins through the imperial period. Not open to students with credit in EALC 132. (Same as EALC 642 and PHIL 506.) Prerequisite: Eastern civilization course or a course in Asian history or a distribution course in philosophy. LEC.

HWC 530. Study of a Culture: ___. 3 Hours. H/W.
An interdisciplinary study of elements that have contributed to the development of a particular civilization, such as Irish, Scottish, or Scandinavian. LEC.

HWC 538. Pompeii and Herculaneum. 3 Hours. H.
An interdisciplinary treatment of the art and archaeology of the ancient Roman cities of Pompeii and Herculaneum in Italy. Emphasis on the structures and decorations of major public spaces and houses and on aspects of cultural, social, political, commercial and religious life from the period of the second century B.C.E. to 79 C.E., when Pompeii and Herculaneum were buried by the eruption of Mt. Vesuvius. Slide lectures and discussion. (Same as CLSX 538, HA 538) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, History of Art, or permission of the instructor. LEC.

HWC 540. Translation. 3 Hours. H.
Students will undertake substantial work in the translation of non-technical writing, e.g., poems, short stories, novels, essays, from any foreign language to English, and examine the practical and theoretical problems encountered in or raised by translation. Prerequisite: Satisfactory completion of at least third-year foreign language work. LEC.

HWC 551. Foodways: Native North America. 3 Hours. H.
This course surveys the traditional foodways of the indigenous peoples of North America. We survey hunting, gathering and fishing methods, meal preparation, medicinal plants and the cultivation of crops according to tribal seasons. Because modern indigenous peoples are suffering from unprecedented health problems, such as diabetes, obesity, high blood pressure and related maladies, the course traces through history the reasons why tribal peoples have become unhealthy and why some have lost the traditional knowledge necessary to plant, cultivate and save seeds. The course also addresses the destruction of flora and fauna from environmental degradation. (Same as HIST 511 and ISP 551.) Prerequisite: Upper division course on indigenous/ American Indian history, or permission of the instructor. LEC.

HWC 552. Foodways: Latin America. 3 Hours. H.
This course explores the traditional foods, ways of eating, and cultural significance of food among peoples of Latin America. The course surveys the vast array of flora in Central and South America and the Caribbean, and focuses on issues of environmental protection, bioethics, food security, and the growth of farming and ranching. The class studies the impact that foods such as maize, potatoes and cacao have had globally, and includes African, Asian, and European influences on Latin cuisine, as well as health problems associated with dietary changes. (Same as HIST 512, ISP 552, and LAA 552.) Prerequisite: Upper division course on Latin America, or permission of the instructor. LEC.

HWC 566. The Devil in Russian Literature. 3 Hours. H.
This course traces the various manifestations of the Devil through Russian and European folklore, myth, theology, culture, and literature. Although the focus is on Russian literature, classic European works are discussed, as they had a powerful impact on the modern Russian conception of the Evil One. Readings in English. (Same as SLAV 566.) LEC.

HWC 570. Men and Masculinities. 3 Hours. H.
An intensive examination of the history and theory of masculinities in the Western world. Students become acquainted with some of the key theories of men and masculinities, and develop research projects on a topic negotiated with the instructor. (Same as HIST 626, WGSS 570.) Prerequisite: An upper-division course in History, Humanities and Western Civilization, or Women Gender and Sexuality Studies; or permission of instructor. LEC.

HWC 575. The Body, Self and Society. 3 Hours. H.
An intensive examination of the role of the human body in the creation of personal and social identities in the Western world. Students become acquainted with contemporary theories of embodiment and senses as they are applied to a variety of historical themes, and develop research projects on a topic negotiated with the instructor. (Same as HIST 625, WGSS 575.) Prerequisite: An upper-division course in History, Humanities and Western Civilization, or Women Gender and Sexuality Studies; or permission of instructor. LEC.

HWC 600. Biography of a City: ___. 3 Hours. AE42 / H/W.
Examination in depth of the historical, social, and artistic growth and development of one major urban center. LEC.

HWC 620. Study of a Culture: ___. 3 Hours. H/W.
An interdisciplinary study of elements that have contributed to the development of a particular civilization, such as Irish, Scottish, or Scandinavian. LEC.

HWC 770. Research in Men and Masculinities. 3 Hours.
An intensive examination of the history and theory of masculinities in the Western World since the sixteenth century. Students will become acquainted with some of the key theories of men and masculinities, examine in depth the interplay between manhood and modernity, and develop research projects on a topic negotiated with the instructor. May be repeated if content varies sufficiently. LEC.

HWC 775. Advanced Study in the Body and Senses. 3 Hours.
An intensive examination of the role of the human body in the creation of personal and social identities in the West since the sixteenth century. Emphasis is on understanding how contemporary theories of embodiment and senses are applied to concrete historical or contemporary problems. May be repeated if course content varies sufficiently. LEC.

PCS 150. Study Abroad in Topics in Peace and Conflict Studies: ___. 1-5 Hours. H.
This course is designed for the study of special topics in Peace Conflict Studies at the 100-200 level (Freshman/Sophomore level). Coursework must be arranged through the KU Office of Study Abroad and approved by a faculty advisor in Peace Conflict Studies. May be repeated for credit if content varies. LEC.

PCS 220. Introduction to Peace and Conflict Studies. 3 Hours. HT GE11/GE3H / H.
An introduction to the content and methods of peace studies. Peace studies is a multidisciplinary and interdisciplinary approach to the study of war and peace. Building on and integrating the work of various fields of study, the course examines the causes of...
structural and direct violence within and among societies and the diverse ways in which humans have sought peace, from conquest and balance of power to international organizations and nonviolent strategies. Open only to students admitted to the University Honors Program or by permission of instructor. Not open to students who have completed PCS 220. LEC.

PCS 329. History of War and Peace. 3 Hours. HL / H.
A study of the changing nature of warfare and the struggle to bring about peace. Topics include pacifism, the "military revolution" that created the first professional armies; the development of diplomatic immunity, truces, and international law; the peace settlements of Westphalia, Utrecht, Vienna, Versailles, San Francisco; the creation of peace movements and peace prizes; the evolution of total war, civil war; and guerrilla warfare involving civilians in the twentieth century; the history of the League of Nations and United Nations; and the rise of intergovernmental and non-governmental organizations. (Same as HIST 329 and EURS 329.) LEC.

PCS 350. Study Abroad in Topics in Peace and Conflict Studies: ______. 1-5 Hours. H.
This course is designed for the study of special topics in Peace Conflict Studies at the Junior/Senior level. Coursework must be arranged through the KU Office of Study Abroad and approved by a faculty advisor in Peace Conflict Studies. May be repeated for credit if content varies. LEC.

PCS 550. Classics of Peace Literature. 3 Hours. HL AE51/AE61 / H.
A study of influential proposals for world peace from Erasmus' The Complaint of Peace (1515) to the 1995 Hague Appeal for World Peace. Selected writings by such authors as Erasmus, Hugo Grotius, Jean-Jacques Rousseau, Immanuel Kant, Henry Thoreau, Henri Dunant, Berthe von Suttner, Woodrow Wilson, Mahatma Gandhi, and Martin Luther King, Jr., are considered. (Same as EURS 550.) Prerequisite: HWC 204 or HWG 205. LEC.

PCS 555. Topics in Peace and Conflict Studies: ______. 3 Hours. H.
This course offers specialized or interdisciplinary perspectives on historical, political, social, and religious movements, institutions, societies, agencies, or texts dealing with conflict resolution. May be repeated for credit with different topics. LEC.

PCS 556. Education for Peace and Non-Violence. 3 Hours. H.
This course reviews the history, aims and methodology of peace education. Topics include examination of the roots and causes of social violence; educational initiatives that seek to reduce structural and direct violence; and teaching methodologies in the field of multicultural education and pedagogy. LEC.

PCS 560. Directed Study in Peace and Conflict Studies. 1-3 Hours. AE61 / H.
Practicum or research under the supervision of a faculty member and with the approval of the Peace and Conflict Studies Minor. Individual conferences, reports, and papers, and, in the case of practicum, supervised experience with an approved organization or agency. Prerequisite: Completion of three core courses in the minor. IND.

PCS 565. The Literature of Human Rights. 3 Hours. H.
Examines in literature, art, and film from about 1800 to the present, both sides of the ongoing debate surrounding the idea that all human persons possess inalienable rights because all persons possess intrinsic value as persons, value independent of race, gender, caste or class, wealth, age, sexual preference, etc. Anti- and pro-rights proponents are paired and studied with equal care. (Same as EURS 565.) LEC.

PCS 650. Senior Seminar in Peace and Conflict Studies. 3 Hours. AE61 / H.
This capstone seminar provides a sustained and in-depth study of a particular topic in Peace and Conflict Studies, to be chosen by the instructor. Each student is required to carry out a substantive research project to produce a term paper or comparable work. Required for completion of minor. Prerequisite: Students must have completed at least nine hours in the minor before enrolling. LEC.

PCS 760. Investigation and Conference in Peace and Conflict Studies. 3 Hours.
Research under the supervision of a faculty member and approved for the Peace and Conflict Studies program. Individual conferences, reports, and papers; may be combined with classwork. Open only to graduate students. LEC.

PCS 801. Peace and Conflict Studies: Texts and Methods. 3 Hours.
An interdisciplinary study of the historic literature on human conflict and peacemaking and the methods used to analyze and interpret the literature. Peace literature encompasses a range of genres that include religious teachings, philosophical essays, political proposals, treaties and conventions, fiction, poetry, and drama. Approaches to solutions to human conflict cover a spectrum including political revolution, diplomacy and treaties, international law and organizations, and world government. Students produce a substantial graduate-level research project. PCS 801 is required for the Graduate Certificate in Peace Conflict Studies, and to be taken as early as possible in the students program of study. Open only to graduate students. LEC.

PCS 850. Peace and Conflict Studies Research Seminar. 3 Hours.
The capstone of the Graduate Certificate program, providing a sustained and in-depth study of a particular topic in Peace Conflict Studies, to be chosen by the instructor. The members of the seminar have the option of doing a research project or supervised practicum resulting in a substantial paper that integrates their work in the program. Required for the Graduate Certificate and open only to graduate students. Prerequisite: At least six hours of course work toward the Graduate Certificate including PCS 801. SEM.

Indigenous Studies Courses

ISP 101. Introduction to Indigenous Nations Studies. 3 Hours. NW / S.
An introduction to the study of Indigenous peoples. It surveys the concepts, methods, and content relevant to Applied Indigenous Studies, using case studies drawn from diverse cultures. The course illustrates that the social, political, religious, and economic aspects of American Indian life are interconnected and that tribal histories cannot be understood without an awareness of these fields. Students are introduced to controversies over how to research, write, and interpret American Indians, and will address the foundations of Indigenous Studies, and that is Indigenous concepts of decolonization, empowerment and Nation-building. The course explores how the lives of Indigenous people have been affected by colonization, while exploring the varying definitions of “colonialism”, “colonizer” and the “colonized. LEC.

ISP 305. World Indigenous Literatures. 3 Hours. NW AE42 / H.
A survey of contemporary world indigenous literatures that includes those from North America, Australia, New Zealand, the South Pacific, the Arctic, and Latin America. Texts are in English (original or translation). Genres studied include the novel, poetry, and drama, supplemented by works from the oral tradition, the visual arts, and film. (Same as ENGL 305.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ISP 330. Native American Religions. 3 Hours. NW AE41 / H.
A survey of religious traditions among selected Native American peoples. Topics include religious freedom, ritual activity, cultural narrative (“myth”), kinship, healing practices, ecology, government relations, impact of colonization, impact of missionization, contact between cultures, and
secularization. Not open to students who have completed GINS 331. (Same as REL 330.) LEC.

ISP 331. Native American Religions, Honors. 3 Hours. NW AE41 / H.
A survey of religious traditions among selected Native American peoples. Topics include religious freedom, ritual activity, cultural narrative ("myth"), kinship, healing practices, ecology, government relations, impact of colonization, impact of missionization, contact between cultures, and secularization. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have completed ISP 330. (Same as REL 331.) LEC.

ISP 335. Introduction to Indigenous Studies. 3 Hours. NW / H.
This course is an introduction to the study of modern and historic indigenous peoples. It surveys the concepts, methods, and content relevant to Indigenous Studies, using case studies drawn from the diverse indigenous cultures. Special attention is paid to the various ways in which standard academic disciplines—history, anthropology, literature, law, political science, among others—contribute to the study of Indigenous cultures and current issues. The course illustrates that the social, political, religious, and economic aspects of indigenous life are interconnected and cultures cannot be understood without an awareness of these fields. (Same as HWC 335.) LEC.

ISP 345. Indian Territory. 3 Hours. H.
This course examines the cultural, social, economic, environmental, and political background of Indian Territory in what is now the state of Oklahoma. It surveys the diverse geographical regions, tribal cultures, the impact of the Indian Removal Act, assimilation, acculturation, westward expansion, the Civil War, boarding schools, the Dawes Act, the Curtis Act, and land runs on Territory residents. The course also addresses post-Civil War violence, outlaws, and the role of tribal courts along with controversies over removals, Land Run celebrations, allotment scandals, and Osage oil murders. (Same as HIST 318 and HWC 345.) LEC.

ISP 348. American Indian and White Relations to 1865. 3 Hours. H.
This course provides an intensive survey of the Indians of North America from Prehistory to 1865, and focuses on ancient indigenous cultures, early European-Indians relations and the impact of European culture upon the indigenous peoples of North America. (Same as HIST 351, HWC 348.) LEC.

ISP 350. American Indians Since 1865. 3 Hours. H.
This course examines American Indian/White relations from reconstruction to the present. It surveys the impact of westward expansion and cultural changes brought about by the Civil War, forced education, internmarriage, the Dawes Act, the New Deal, the World Wars, termination, relocation and stereotypical literature and movies. The class also addresses the Red Power and AIM movements, as well as indigenous efforts to decolonize and to recover and retain indigenous knowledge. After learning about the past from both Native and non-Native source materials, students will multiple perspectives about historical events and gain understandings of diverse world views, values, and responses to adversity. (Same as HIST 352 and HWC 350.) LEC.

ISP 490. Roots of Federal Indian Policy. 3 Hours. H.
This course introduces students to the basic concepts and ideologies surrounding modern United States Federal Indian policy. It will survey the European intellectual trends that were influential in creating policies that were (and still are) applied to the colonized Native peoples. The course will explore the roots of US Indian policy, including removals, "civilization programs," the reservation period, the Dawes (Allotment) Act, the New Deal, termination, relocation, NAGPRA and tribal rights, in addition to the issues surrounding American Indian identity, tribal membership and demographics. This course serves as the foundation for more in-depth study into the complicated and ever-changing field of Federal Indian Law as it pertains to the Indigenous peoples of the United States. (Same as HWC 490.) LEC.

ISP 504. Topics in Indigenous Nations Studies: ______. 3 Hours. NW / S.
This course concentrates on selected problems in the interdisciplinary field of Indigenous Nations Studies. Courses in this field utilize methods developed in various disciplines in order to examine issues related to the survival, self-sufficiency, mutual support, empowerment, and decolonization of Indigenous Peoples throughout the world. May be repeated for credit when the topic differs. Recommended for juniors or seniors, or for students who have completed ISP 101/GINS 101/INS 101. LEC.

ISP 510. Indigenous Women and Activism. 3 Hours. NW / S.
Examines the roles of activist Indigenous women in politics, social work, academia, business, environmental and health issues. Compares and contrasts the ideology of the predominantly white feminist movement with the goals and concerns of the "Red Power" movement and emphasizes Indigenous socio-cultural values and concerns. Profiles prominent Indigenous female activists, tribal leaders and writers, in addition to topics of serious concern to Indigenous women: violence, racism, loss of culture and language, education, health care and other manifestations of continued colonization. LEC.

ISP 530. Indigenous Food and Health. 3 Hours. NW / U.
This course investigates the historic diets of Indigenous peoples, including cultivation of crops, hunting and fishing methods, food preparation and seed preservation. The class traces through history the colonial policies and ideologies that caused the cultures to alter their ways of eating, resulting in unprecedented modern health problems and offers traditional cultural strategies for health recovery. LEC.

ISP 551. Foodways: Native North America. 3 Hours. H.
This course surveys the traditional foodways of the indigenous peoples of North America. We survey hunting, gathering and fishing methods, meal preparation, medicinal plants and the cultivation of crops according to tribal seasons. Because modern indigenous peoples are suffering from unprecedented health problems, such as diabetes, obesity, high blood pressure and related maladies, the course traces through history the reasons why tribal peoples have become unhealthy and why some have lost the traditional knowledge necessary to plant, cultivate, and save seeds. The course also addresses the destruction of flora and fauna from environmental degradation. (Same as HIST 511 and HWC 551.) Prerequisite: Upper division course to the survival, self-sufficiency, mutual support, empowerment, and decolonization of Indigenous Peoples throughout the world. May be repeated for credit when the topic differs. Recommended for juniors or seniors, or for students who have completed ISP 101/GINS 101/INS 101. LEC.

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ISP 552. Foodways: Latin America. 3 Hours. H.
This course explores the traditional foods, ways of eating, and cultural significance of food among peoples of Latin America. The course surveys the vast array of flora in Central and South America and the Caribbean, and focuses on issues of environmental protection, bioethics, food security, and the growth of farming and ranching. The class studies the impact that foods such as maize, potatoes and cacao have had globally, and includes African, Asian, and European influences on Latin cuisine, as well as health problems associated with dietary changes. (Same as HIST 512, HWC 552 and LAU 552.) Prerequisite: Upper division course to the survival, self-sufficiency, mutual support, empowerment, and decolonization of Indigenous Peoples throughout the world. May be repeated for credit when the topic differs. Recommended for juniors or seniors, or for students who have completed ISP 101/GINS 101/INS 101. LEC.

ISP 600. Research Methods and Indigenous Peoples. 1-3 Hours. NW / U.
An introduction to the social science methods of investigation and analysis that are used in Indigenous Nations Studies as a discipline. The nature of Indigenous Nations Studies data sources and methods of data collection, the logic of social scientific inquiry, and key methods of data analysis are
emphasized. In addition, the social and educational implications of the results are examined. Prerequisite: Permission of instructor. LEC.

ISP 601. Indigenous Peoples of the World. 3 Hours. NW / U.
A survey of the varied responses of global Indigenous peoples as a result of the imposition of external economic and political systems. An overview of diverse, thematic issues such as land rights, economic development, resources and cultural patrimony, languages, knowledge systems, and women's rights from the perspectives of Indigenous societies around the world. Detailed studies of Indigenous peoples seeking recognition and protection under international law are used. (Same as GEOG 601.) Prerequisite: Permission of instructor. LEC.

ISP 602. Indigenous Decolonization and Empowerment. 3 Hours. NW / U.
An Indigenous focus of the foundation and impact of colonization, decolonization, empowerment and nation-building. Prerequisite: Permission of instructor. LEC.

ISP 603. Introduction to Indigenous Nations Graduate Studies. 3 Hours. NW / U.
The goal of this course is two-fold: to introduce students to the academic discipline of Indigenous Nations Studies, its debates and contours, history, methods, and resources; and to develop the skills necessary to proceed successfully through the program. Key words and terms, critical thinking/reading/and writing skills, and research skills are emphasized. Guest lectures from ISP faculty members, librarian, and members of the Writing Center serve to complement and broaden assignments and discussions. Prerequisite: Permission of instructor. LEC.

ISP 611. Applied Indigenous Leadership. 3 Hours. NW / U.
Trains students in the skills of grant writing, leadership, conflict resolution, public presentation, organization and program development as applicable to Indigenous peoples. Prerequisite: Permission of instructor. LEC.

ISP 612. Native American Oppression, Resistance, and Liberation. 3 Hours. NW / U.
An interdisciplinary examination of the effects of historical and contemporary forms of colonialism and postcolonial strategies of resistance practiced by Indigenous peoples within and beyond the borders of the United States. Prerequisite: Permission of instructor. LEC.

ISP 613. Issues Facing Indigenous Peoples. 3 Hours. NW / U.
Explores the theories and methods of selected cultural, environmental, legal, political, and socio-economic issues confronting Indigenous societies throughout the world. Prerequisite: Permission of instructor. LEC.

ISP 614. Decolonizing Narratives. 3 Hours. NW / U.
With the decolonizing potential of Indigenous literary and cultural productions, this course seeks to both answer and explore such questions as: How can literary and cultural texts such as novels, poetry, music, and film from world Indigenous communities function as decolonizing tools? Can decolonizing methodologies be applied to such texts? How do such texts contribute to and strengthen Indigenous political, intellectual, cultural, visual and rhetorical sovereignty? Includes an overview of Indigenous literature, films and documentaries from North America, the Pacific, Australia, and New Zealand. Prerequisite: Permission of instructor. LEC.

ISP 670. Indigenous Peoples' Health Status, Beliefs, and Behaviors. 3 Hours. NW / U.
Explores the health status, beliefs, and behaviors of particular Indigenous cultures. Examines the role of internal and external influences on health, various mainstream and Indigenous models of health behavior, perceptions of illness and curing, health status, and healing practices. Focuses on the groups of the Maori of New Zealand, First Nations in Canada, Palestinian peoples in the Middle East, American Indians, and Indigenous Australians. Prerequisite: Permission of instructor. LEC.

ISP 673. Environmental Justice. 3 Hours. NW / U.
An examination of the impact of environmental justice and security in Indigenous communities throughout the world with a focus on tactics and strategies that incorporate Indigenous perspectives in responses and mitigation schemes. A survey of mining, dumping, and storage of toxic and radioactive waste activities as related to Indigenous peoples. Case study analyses of economic, military and mining interests contrasted with perspectives emerging from cultural traditions and beliefs of Indigenous peoples and communities. Prerequisite: Permission of instructor. LEC.

ISP 800. Indigenous Issues in the United States. 3 Hours.
This course will focus on contemporary issues relating to Indigenous peoples and nations within the United States, with particular emphasis on such issues as sovereignty, indigeneity, colonialism and decolonization. The course will address varied disciplinary approaches to this range of issues and will consider how this discourse bears upon scholarly conversations regarding broader themes in other selected fields of study. LEC.

ISP 801. Indigenous Peoples of the World. 3 Hours.
A survey of the varied responses of global Indigenous peoples as a result of the imposition of externally-dominated economic and political systems. An overview of diverse, thematic issues such as land rights, economic development, resources and cultural patrimony, languages, knowledge systems, and women's rights from the perspectives of Indigenous societies around the world. Detailed studies of Indigenous peoples seeking recognition and protection under international law will be used. The course is offered at the 600 and 800 levels, with additional assignments at the 800 level. (Same as GEOG 801.) LEC.

ISP 802. Indigenous Decolonization and Empowerment. 3 Hours.
An Indigenous focus of the foundation and impact of colonization, decolonization, empowerment and nation-building. LEC.

ISP 803. Introduction to Indigenous Nations Graduate Studies. 3 Hours.
The goal of this course is two-fold: to introduce students to the academic discipline of Indigenous Nations Studies, its debates and contours, history, methods, and resources; and to develop the skills necessary to proceed successfully through the program. Unpacking key words and terms, critical thinking/reading/and writing skills, and research skills will be emphasized. Guest lectures will serve to complement and broaden assignments and discussions LEC.

ISP 804. Special Topics: ______. 1-3 Hours.
Designed to fulfill program needs of the Indigenous Nations Studies master's program, this course may meet with appropriate professional or graduate courses. Can be repeated for credit when topic differs. LEC.

ISP 805. American Indian Leadership. 3 Hours.
Students will analyze the qualities of American Indian leadership and will examine circumstances and backgrounds of Indian leaders as heroes and role models paying particular attention to how they responded as individuals, leaders, and as community members of their tribes. Besides surveying noted Indian leaders in treaty negotiations, allotment, removal, war, etc., the course will examine leaders in medicine, education, and recent American Indian history including attention to women leaders. Students will learn about the leaders’ tribes and cultures in addition to understanding the ethnohistory of Indian-white relations. LEC.

ISP 806. Directed Readings. 1-3 Hours.
An individual readings course with a qualified instructor on a topic in Indigenous Nations Studies. LEC.
ISP 807. Internship in Indigenous Nations Studies. 1-6 Hours.
Internships provide students the opportunity to obtain training and perform professional duties for academic credit at pre-approved indigenous-related agencies, organizations, and communities. Students are required to demonstrate a minimum of 60 contact hours for each one credit hour. To enroll, students must obtain the consent of a ISP faculty member and the Program's Curriculum Committee. May be repeated for credit. Prerequisite: permission from instructor. LEC.

ISP 809. Indigenous Women: Gender and Sexuality. 3 Hours.
This course examines gender and sexuality among indigenous communities in the world. Ethnographies about indigenous women are used to explore a variety of gender and sexual identities. Gendered and sexualized identities are analyzed within broader societal contexts such as the division of labor, kinship, marriage household, and the control of resources. Power relationships are examined between sub-altern women and the larger society, nation and globalizing world in which they play a part. LEC.

ISP 810. Indigenous Women and Activism. 3 Hours.
An examination of the roles and ideologies of prominent Indigenous female activists, tribal leaders and writers. LEC.

ISP 811. Applied Indigenous Leadership. 3 Hours.
A preparation to train students in the skills of grant writing, leadership, conflict resolution, public presentation, organization and program development as applicable to Indigenous peoples. LEC.

ISP 812. Native American Oppression, Resistance, and Liberation. 3 Hours.
An interdisciplinary examination of the effects of historical and contemporary forms of colonialism and postcolonial strategies of resistance practiced by Indigenous peoples within and beyond the borders of the United States. LEC.

ISP 813. Issues Facing Indigenous Peoples. 3 Hours.
This course explores the theories and methods of selected cultural, environmental, legal, political, and socio-economical issues confronting Indigenous societies throughout the world. LEC.

ISP 814. Decolonizing Narratives. 3 Hours.
With the decolonizing potential of Indigenous literary and cultural productions, this course seeks to both answer and explore such questions as: How can literary and cultural texts such as novels, poetry, music, and film from world Indigenous communities function as decolonizing tools? Can decolonizing methodologies be applied to such texts? How do such texts contribute to and strengthen Indigenous political, intellectual, cultural, visual and rhetorical sovereignty? An overview will be presented from Indigenous literature, films and documentaries from North America, the Pacific, Australia, and New Zealand. LEC.

ISP 824. Federal Indian Law. 2.5-3 Hours.
Addresses the law and policy of the United States regarding Indian nations and their members. Issues include the origins and contours of federal plenary power over Indian affairs, the scope of inherent tribal sovereignty, the limits of state power in Indian country, civil and criminal jurisdiction, and gaming. (Same as LAW 914) Prerequisite: Permission from instructor. LEC.

ISP 830. Indigenous Food and Health. 3 Hours.
Investigates the historic diets of Indigenous peoples, including cultivation of crops, hunting and fishing methods, food preparation and seed preservation. Traces through history the colonial policies and ideologies that caused the cultures to alter their ways of eating, resulting in unprecedented modern health problems. Will offer traditional cultural strategies for health recovery. LEC.

ISP 862. Indigenous Archives. 3 Hours.
A discussion of what constitutes an archive, including the theory and methodology of archival collections, and an introduction to archiving as a profession. Includes a discussion of records management, with an emphasis on tribal archives collections and tribal records. Includes instruction on arrangement and description of tribal archival collections, funding, environmentally controlled storage, and disaster recovery planning. The class will specifically address the needs of tribal archives: tribal records, oral history interviews, photographs, litigation records, grant writing, and culturally sensitive materials. Students will learn about primary and secondary sources, different formats of writing professional research papers, and will produce a research paper at the end of the semester. LEC.

ISP 863. Oral History. 3 Hours.
A discussion of the importance of the oral tradition in Indigenous nations and the difference between oral tradition and oral histories and myth. The class will concentrate on the methodologies of tribal oral history projects, from organizational aspects to personnel issues, equipment needed, sources of grant funding, interview methodology, as well as documentation and preservation of the interviews. The course will discuss how to share and make available these interviews and when access to them needs to be restricted. The students will conduct videotaped oral histories as part of the class exercises and get hands-on experience with the preservation, organization, and transcription of oral history projects. LEC.

ISP 864. Exhibiting Culture. 3 Hours.
A discussion of how museums and exhibits can be a vehicle for Indigenous community empowerment and the importance of Indigenous cultures to interpret their stories themselves. The class will also look at how different nations view the display and handling of their belongings and what kinds of belongings can or should be handled and displayed. LEC.

ISP 865. Grant Writing and Fundraising. 3 Hours.
A discussion of how to develop a grant writing and fundraising plan for a tribal project. Includes how to develop an idea or project and how to prepare a funding campaign. The students will produce a fundraising event and work on the various parts of an actual grant as the final class activity that will be designed to bring in funding to support KU Global Indigenous Nations Studies Program. LEC.

ISP 866. Indigenous Museum Management. 3 Hours.
A discussion of the community models of museum management, including museum administration, professional positions within a museum, museum exhibits, public education programs, security, and disaster planning. The course will compare and contrast museum management in European/American museums and tribal museums and how these management styles affect collection policies, exhibit policies, traditional care of collections, sacred and ceremonial item handling and display, NAGPRA and repatriation, and oral histories. LEC.

ISP 867. Indigenous Records Management. 3 Hours.
A discussion of what constitutes a record and how to manage records at the business or government level. Train students in hands-on records management techniques, policies, developing a records retention schedule, and how to plan and design a records management program for records pertaining to Indigenous nations. LEC.

ISP 868. Indigenous Records Management II. 3 Hours.
A discussion of what constitutes a record and how to manage records at the business or government level. This is a second level of records management leading to preparation for taking the certification examination. LEC.
ISP 869. Traditional Care of Collections. 3 Hours.
A discussion of on traditional care issues of handling and preserving of Indigenous belongings. The class will compare the methods of traditional care at tribal museums vs. conservation of Native items in mainstream museums. LEC.

ISP 870. Indigenous Peoples' Health Status, Beliefs, and Behaviors. 3 Hours.
This course is designed to explore the health status, beliefs, and behaviors of particular Indigenous cultures. The course examines the role of internal and external influences on health, various mainstream and Indigenous models of health behavior, perceptions of illness and curing, health status, and healing practices. The course will focus on the groups of the Maori of New Zealand, First Nations in Canada, Palestinian peoples in the Middle East, American Indians, and Indigenous Australians. LEC.

ISP 871. Community Health and Development. 3 Hours.
This course extends knowledge and skills for addressing issues in community health and development (e.g., substance abuse, adolescent pregnancy, child and youth development, prevention of violence). Students learn core competencies such as analyzing community problems and goals, strategic planning, intervention, and evaluation, and then apply these skills to issues that matter to them and to the communities they serve. (Same as ABSC 710.) LEC.

ISP 873. Environmental Justice. 3 Hours.
An examination of the impact of environmental justice and security in Indigenous communities throughout the world with a focus on tactics and strategies that incorporate Indigenous perspectives in responses and mitigation schemes. A survey of mining, dumping and storage of toxic and radioactive waste activities as related to Indigenous peoples. Case study analyses of economic, military and mining interests contrasted with perspectives emerging from cultural traditions and beliefs of Indigenous peoples and communities. LEC.

ISP 874. Natural Resource Management: Indigenous Perspectives. 3 Hours.
An examination of resource management issues in Indigenous communities throughout the world with a focus on tactics and strategies that incorporate Indigenous perspectives in the management schemes. Case study analyses of management techniques derived from European-based science with Indigenous traditions and beliefs. LEC.

ISP 875. Native and Western Views of Nature. 3 Hours.
A comparison of the attitudes and perspectives towards the natural world developed by different cultural traditions. A review of western attitudes and also the traditional ecological knowledge of Indigenous peoples toward management of natural resources, non-human animals, and the natural world. LEC.

ISP 876. Comparative Law. 2.5-3 Hours.
A general introduction to and comparison of major legal systems of the world, with special emphasis given to how those systems reflect differing cultural values in addressing common legal questions. A major goal of the course is to deepen the students' understanding of law and practice in the United States and to broaden their perspective of law beyond the boundaries of the common law systems. (Same as LAW 879.) Prerequisite: Permission from instructor. LEC.

ISP 877. Public Lands and Natural Resources. 2.5-3 Hours.
Devoted to the law and legal systems that govern the classification and use of one-third of America's land mass. Includes a survey of the acquisition and disposition of the public domain; general federal statutes and doctrines that affect public land law; and different forms of federal land classifications, including national parks, scenic rivers, and grazing lands. (Same as LAW 975.) Prerequisite: Permission from instructor. LEC.

ISP 879. Water Law. 2.5-3 Hours.
A study of water rights including the riparian and prior appropriation doctrines for surface water, and the various doctrines for groundwater. Private and public water distribution organizations, and special water districts. Water pollution control. Interstate conflicts over water resources. Federal government involvement in water distribution including federal powers and programs. Indian and reserved rights. Kansas water law. (Same as LAW 995.) Prerequisite: Permission from instructor. LEC.

ISP 882. Native American Natural Resources. 2-3 Hours.
This course provides a detailed examination of natural resource law as it applies to Indian Country. Among the topics to be discussed are water law, environmental protection, and subsurface property rights. (Same as LAW 967.) LEC.

ISP 883. Sovereignty, Self-Determination and Indigenous Nations. 2-3 Hours.
Examines legal, governmental, political, social, cultural, and economic issues associated with American Indian tribal sovereignty and self-determination. Includes the source and scope of tribal sovereignty; the threats to tribal sovereignty; and the methods by which tribal sovereignty can be strengthened and revitalized. (Same as LAW 987.) Prerequisite: Permission from instructor. LEC.

ISP 888. Master's Non-Thesis. 1-6 Hours.
Course for Indigenous Studies students completing a portfolio Master's exam. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Permission from instructor. LEC.

ISP 889. Master's Thesis. 1-6 Hours.
Course for Global Indigenous Nations Studies students completing Master's thesis projects. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Permission from instructor. THE.

Information Processing Studies Courses

IPS 101. Elements of the Theory of Computation. 3 Hours. NM / N.
An introduction to the theoretical areas of computer science and their applications. Emphasis will be placed on the methods and standards by which computer science makes judgments and on what computers can and cannot accomplish. Among major topics covered are: how to read and to implement algorithms; what is memory and how much of it is required for various tasks; why computers cannot multiply; how finite-state machines compute; applications of finite-state machines to programming; recognizing languages; formal grammars. "Can machines think?" and other contemporary topics in the philosophy of computer science will be covered as time permits. Prerequisite: MATH 101 or MATH 104. LEC.

IPS 302. Journey Through Genius, Honors. 3 Hours. N.
The course explores some of the most significant and enduring ideas in mathematics: the great theorems, discoveries of beauty and insight that stand today as monuments to the human intellect. Emphasis will be placed on the methods and standards by which mathematics makes judgments. Among the major topics covered are: Euclid and the infinitude of primes, Archimedes determination of circular area, Cardano and the solution of the cubic, the Bernoullis and the harmonic series, a sample of Euler's number theory, Cantor and the transfinite realm. Along with the essential mathematics, the humanity of these great mathematicians is captured. Prerequisite: Membership in the University Honors Program, high school algebra and geometry, and permission of the instructor. LEC.

IPS 400. Topics in the Theory of Computing. 1-3 Hours.
This course is designed to allow students to do further readings in the theory of computing beyond the material presented in IPS 101. Topics, scope, and meeting times to be arranged for the individual student. Prerequisite: IPS 101 and consent of instructor. LEC.
Latin American Caribbean Std Courses

KICH 110. Elementary Quichua I. 3 Hours. U.
An orientation to Ecuadorian Quichua language and culture for beginning students. Includes elements of grammar, conversation, and composition. Quichua (a.k.a. Kichwa, Quechua, Keche, Kitchwa, Kichwa, Khetchua, or Runa Ximi) in its various forms is an indigenous language spoken by over six million people in Ecuador, Peru and Bolivia combined. LEC.

KICH 114. Elementary Quichua II. 3 Hours. U.
Continuation of KICH 110. Prerequisite: KICH 110 or equivalent LEC.

KICH 230. Intermediate Quichua I. 3 Hours. U.
Continuation of KICH 114. Prerequisite: KICH 114 or equivalent. LEC.

KICH 234. Intermediate Quichua II. 3 Hours. U.
Continuation of KICH 230. Prerequisite: KICH 230 or equivalent. LEC.

KQKL 110. Elementary Kaqchikel Maya I. 3 Hours. U.
An orientation to Kaqchikel Maya language and culture for beginning students. Includes elements of grammar, conversation, and composition. Kaqchikel is the first language of approximately 500,000 people of highland Guatemala and one of roughly 30 Mayan languages. LEC.

KQKL 114. Elementary Kaqchikel Maya II. 3 Hours. U.
Continuation of KQKL 110. Prerequisite: Completion of KQKL 110 or equivalent. LEC.

KQKL 230. Intermediate Kaqchikel Maya I. 3 Hours. U.
Continuation of KQKL 114. Prerequisite: Completion of KQKL 114 or equivalent. LEC.

KQKL 234. Intermediate Kaqchikel Maya II. 3 Hours. U.
Continuation of KQKL 230. Prerequisite: Completion of KQKL 230 or equivalent LEC.

LAA 100. Latin American Culture and Society. 3 Hours. SC AE42 / S.
An introduction to the interdisciplinary study of Latin America, as manifest in the arts and literature, history, and in environmental, political, economic, and social realities. Explores and critiques the principal themes and methodologies of Latin American Studies, with an aim towards synthesizing contributions from several different disciplines. Emphasizes the unique insights and perspectives made possible by interdisciplinary collaboration and provides students with a basic knowledge base for understanding Latin America today. (Same as HIST 124.) LEC.

LAA 102. Orientation Seminar in Latin American and Caribbean Studies. 1 Hour. U.
LAA 102 is an online orientation seminar designed to introduce students to the Latin American and Caribbean Studies major at KU and help students place the major in the context of their overall undergraduate experience and career plans. The course provides students with introductory information about Latin America and the Caribbean and the nature of interdisciplinary inquiry, and an interdisciplinary major, and about resources available at KU and beyond for research and study related to the region. During the course, students also learn about typical careers pursued by Latin American and Caribbean Studies majors, reflect on their own educational and career goals, and determine whether the major matches those goals. Finally, the course provides students with information about requirements for the major, along with information about when required courses are offered and when they should be taken. LEC.

LAA 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Latin Area and Caribbean Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

LAA 300. Interdisciplinary Themes in Latin American Studies. 3 Hours. AE51 / U.
This course offers an in-depth examination of several key themes in Latin American Studies. Emphasis is placed on exploring the utility of interdisciplinary methods and on becoming familiar with the theoretical framework that underpins the field. Prior completion of LAA 100 recommended. LEC.

LAA 302. Topics in Latin American Area Studies: ______. 3 Hours. U.
Investigation of special topics on Latin America at the undergraduate level. LEC.

LAA 332. Language and Society in Latin America. 3 Hours. NW AE42 / S.
This course will examine the cultural and social significance of Amerindian languages in Latin America. Spanish and Portuguese will be related in language situations to Amerindian languages, such as Quechua, Aymara, the Mayan languages, Nahuatl, and Guarani. Some African-substratum Creole languages will be used to illustrate the multifaceted relations between language and ethnic group, sex, nation, geography, social class, context, and social interaction. LEC.

LAA 333. Language and Society in Latin America, Honors. 3 Hours. NW AE42 / S.
This course will examine the cultural and social significance of Amerindian languages in Latin America. Spanish and Portuguese will be related in language situations to Amerindian languages, such as Quechua, Aymara, the Mayan languages, Nahuatl, and Guarani. Some African-substratum Creole languages will be used to illustrate the multifaceted relations between language and ethnic group, sex, nation, geography, social class, context, and social interaction. Prerequisite: Membership in the University Honors Program. LEC.

LAA 334. Indigenous Traditions of Latin America. 3 Hours. NW AE42 / S/W.
A survey of the major indigenous traditions of Mesoamerica, the Andes, and lowland tropical Latin America. Coverage emphasizes how indigenous cultural traditions and societies have both continued and changed since the European Invasion and addresses such current issues as language rights, territorial rights, sovereignty, and state violence. Students enrolled in the 600-level section will be required to complete additional research and class leadership tasks. Not open to students who have taken LAA 634. (Same as ANTH 379.) LEC.

LAA 335. The Politics of Language in Latin America. 3 Hours. NW / S.
Although approximately 600 indigenous languages are spoken by 30 million people in Latin America, public life is conducted in Spanish. The class provides a comprehensive survey of language issues in Latin America by analyzing the situation of minority language groups, language rights, language policies, and language planning, as well as by considering the questions that arise regarding bilingual education, literacy, and the role of minority languages in educational systems. LEC.

LAA 402. Topics in Latin American Area Studies. 3 Hours. U.
Investigation of special topics on Latin America at the undergraduate level. LEC.

LAA 450. Capstone Course in Latin American Studies. 3 Hours. AE61 / U.
The interdisciplinary focus of this class allows students to connect what they have learned about major issues in the field of Latin American Studies with a thematic focus of the professor's choosing. By the end of the class and culminating their study of the field at KU, they will be able to discuss these issues from a variety of theoretical, methodological, and disciplinary perspectives as demonstrated in the portfolio of written work maintained throughout the semester. Prerequisite: Completion of
3 courses at the 300 level and above with Latin American content in the Humanities and 3 at the 300 level and above in the Social Sciences (that is, at least 18 credits toward the major); or permission of instructor. LEC.

LAA 499. Honors Course in Latin American Studies. 3 Hours. AE61/H.
Intensive study and research under faculty direction. Open to students wishing to graduate with honors in Latin American Studies and having a grade point average of at least 3.5 in Latin American Studies and at least 3.25 overall. Requires an interdisciplinary project concerning a specific topic involving at least two disciplines. Must be directed by a faculty member in Latin American Studies, approved by the Center Associate Director, and defended before a committee of at least three faculty members. To earn departmental honors, a student must take the course for two semesters (with a minimum grade of B the first semester, and an A the second). LEC.

LAA 500. Directed Study in Latin American Area Studies. 1-3 Hours. AE61/U.
Independent study and directed reading on special topics. IND.

LAA 501. Multilingualism and Multiculturalism in Latin America. 3 Hours. H.
Examines the sociolinguistic issues of multilingual countries in Latin America from an interdisciplinary perspective. Topics include but are not limited to linguistic inequality, the language of politics, language and education, urban and rural linguistic interaction, and indigenous and creole languages. Prerequisite: A liberal arts course with Latin American content. LEC.

LAA 503. Race, Gender, Ethnicity, and Nationalism in Latin America. 3 Hours. NW AE42/H.
The development of cultural identity in Latin America is traced through the study of major narrative trends including Amerindian languages and the analysis of "indigenista" literature. The African substratum of Latin American culture and its relation to concepts such as "marvelous realism" is explored. The importance of "race," "gender," and "ethnicity" are investigated as tools to define national identity in Latin America. The influence of modernization, industrialization, and nationalistic and populist thought on their emergence of distinctive writing and themes is also assessed. LEC.

LAA 504. Politics of Culture in Modern Latin America. 3 Hours. H.
This course explores the relationship between political development and cultural phenomena of Latin America from 1800 to the present, with special emphasis on gender, popular culture, and ideology. The influences of 20th-century ideologies and technology on cultural development in Latin America will also be examined. LEC.

LAA 505. U.S. Latino and Latin American Film and Literature. 3 Hours. H.
This course follows the development of U.S. Latino and Latin American cinema from its origins to the present and its relationship with literary discourse. U.S. Latino/Latin American cinema can be seen as a specific practice that cannot be reduced in all its manifestations to the institutional mode of production of the dominant Hollywood model. The course examines the creation of a national cinema that seems to be more dependent on a literary canon. Knowledge of Spanish is not required. LEC.

LAA 506. Race, Gender, Ethnicity, and Nationalism in Latin America, Honors. 3 Hours. NW AE42/H.
The development of cultural identity in Latin America is traced through the study of major literary works of the nineteenth and twentieth centuries. The importance of "race," "gender," and "ethnicity" are explored as tools to define national identity in Latin America. The impact of modernization, industrialization, and nationalistic and populist thought on the emergence of distinctive writing and themes is also assessed. Prerequisite: Membership in the University Honors Program. LEC.

LAA 552. Foodways: Latin America. 3 Hours. H.
This course explores traditional foods, ways of eating, and cultural significance of food among peoples of Latin America. The course surveys the vast array of flora in Central and South America and the Caribbean, and focuses on issues of environmental protection, bioethics, food security, and the growth of farming and ranching. The class studies the impact that foods such as maize, potatoes and cacao have had globally, and includes African, Asian, and European influences on Latin cuisine, as well as health problems associated with dietary changes. (Same as HIST 512, HWC 552, and ISP 552.) Prerequisite: Upper division course on Latin America or permission of the instructor. LEC.

LAA 561. Indigenous Development in Latin America. 3 Hours. AE42/S.
Surveys the history of the development enterprise since WWII, examines the marginalization and impoverishment of Latin America's indigenous peoples, and provides training to carry out projects for and with them to enhance their quality of life. Development is understood as not merely technological or economic, but also social, emotional, and educational. Students work in teams to design their own mock development project. A 3-credit non-obligatory companion course, Applied Anthropological Field School among the Ch'orti' Maya, will follow in the intersession after each version of this course. (Same as ANTH 561.) Prerequisite: ANTH 100, ANTH 108, ANTH 160 and LAA 100; or consent of instructor. LEC.

LAA 587. Multidisciplinary Field School in Partnership with the Chorti Maya. 3 Hours. S.
Teams of interdisciplinary students partner with the Chorti Maya of Guatemala and Honduras to share information and experiences. One third of the course consists of readings and 4-5 orientation sessions on campus, and two thirds entails two weeks in Central America. Examples of activities might include historical research, water testing and improvement, photography, art, music, tourism consultation, marketing of crafts, human rights advocacy, web design, computer training, and museum work, among others. There are no prerequisites, but students with a working knowledge of Spanish will receive preference for admission. (Same as ANTH 587.) LEC.

LAA 602. Topics in Latin American Studies: _____, 3 Hours. U.
Investigation of special topics on Latin America. LEC.

LAA 634. Indigenous Traditions of Latin America. 3 Hours. NW AE42/S/W.
A survey of the major indigenous traditions of Mesoamerica, the Andes, and lowland tropical Latin America. Coverage emphasizes how indigenous cultural traditions and societies have both continued and changed since the European Invasion and addresses such current issues as language rights, territorial rights, sovereignty, and state violence. Students enrolled in the 600-level section will be required to complete additional research and class leadership tasks. Not open to students who have taken ANTH 379 or LAA 334. LEC.

LAA 665. Women, Health, and Healing in Latin America. 3 Hours. S.
This seminar uses a life-cycle approach to examine women's health (physical, mental, and spiritual) and their roles as healers. Special consideration is given to the effects of development programs on well-being, access to health care, and changing roles for women as healers. Cases will be drawn from a variety of Latin American contexts. (Same as ANTH 665 and WGSS 665.) Prerequisite: 6 hours coursework in Anthropology and/or Women's Studies and/or Latin American Studies. LEC.
LAA 700. Introduction to Latin American Library Resources. 3 Hours.
A survey of bibliographic and reference sources for research on Latin America in the humanities and social sciences. Designed to prepare students for library research at the seminar, thesis, or dissertation level. Prerequisite: Junior standing, reading knowledge of Spanish or Portuguese. LEC.

LAA 701. Interdisciplinary Seminar in Latin American Culture and Problems. 3 Hours.
An interdisciplinary seminar incorporating significant and pertinent materials from the fields of anthropology, economics, geography, history, political science, sociology, and Spanish and Portuguese literature. Required of all graduate students enrolled in the Master of Arts program in Latin American Area Studies. Prerequisite: LAA 700 (may be taken simultaneously with LAA 701 if both courses offered during same semester). LEC.

LAA 703. Research Colloquium on Brazil. 3 Hours.
An interdisciplinary research seminar on historical and contemporary issues in Brazil, incorporating information and analysis from such fields as anthropology, economics, geography, history, political science, sociology, and Spanish and Portuguese literature and culture. Required for the Brazilian Graduate Certificate. Prerequisite: Recommended reading proficiency in Portuguese. LEC.

LAA 704. Research Colloquium on Central America and Mexico. 3 Hours.
An interdisciplinary research seminar on historical and contemporary issues in Central America and Mexico, incorporating information and analysis from such fields as anthropology, economics, geography, history, political science, sociology, and Spanish and Portuguese literature and culture. Required for the Central American Graduate Certificate. Prerequisite: Recommended reading proficiency in Spanish. LEC.

LAA 700. Introduction to Latin American Library Resources. 3 Hours.
A survey of bibliographic and reference sources for research on Latin America in the humanities and social sciences. Designed to prepare students for library research at the seminar, thesis, or dissertation level. Prerequisite: Junior standing, reading knowledge of Spanish or Portuguese. LEC.

LAA 701. Interdisciplinary Seminar in Latin American Culture and Problems. 3 Hours.
An interdisciplinary seminar incorporating significant and pertinent materials from the fields of anthropology, economics, geography, history, political science, sociology, and Spanish and Portuguese literature. Required of all graduate students enrolled in the Master of Arts program in Latin American Area Studies. Prerequisite: LAA 700 (may be taken simultaneously with LAA 701 if both courses offered during same semester). LEC.

LAA 703. Research Colloquium on Brazil. 3 Hours.
An interdisciplinary research seminar on historical and contemporary issues in Brazil, incorporating information and analysis from such fields as anthropology, economics, geography, history, political science, sociology, and Spanish and Portuguese literature and culture. Required for the Brazilian Graduate Certificate. Prerequisite: Recommended reading proficiency in Portuguese. LEC.

LAA 704. Research Colloquium on Central America and Mexico. 3 Hours.
An interdisciplinary research seminar on historical and contemporary issues in Central America and Mexico, incorporating information and analysis from such fields as anthropology, economics, geography, history, political science, sociology, and Spanish and Portuguese literature and culture. Required for the Central America Mexico Graduate Certificate. Prerequisite: Recommended reading proficiency in Spanish. LEC.

LAA 800. Investigation and Conference. 1-2 Hours.
Investigation and research of interdisciplinary topics in Latin American Studies. RSH.

LAA 899. Thesis/Non-Thesis. 1-6 Hours.
Prerequisite: Consent of instructor. THE.

Liberal Arts Sciences Courses

LA&S 101. Learning Communities Seminar in: ______. 1-2 Hours. U.
This course is designed to expand student's knowledge of the University community by exploring an academic theme and the connections between courses. Through the study of different topics students explore the inherent relationships among fields of study. Designed especially for freshmen and sophomores. Enrollment is limited to students participating in designated learning community. Concurrent enrollment in specified learning community courses is required. May be repeated for credit up to 4 hours if topic varies. SEM.

LA&S 110. Cherokee Language I. 5 Hours. U.
Emphasizes the vocabulary of and fundamentals of reading and writing the Cherokee language. Students will have an opportunity to learn the language, beliefs, and religious practices of the Cherokee. Taught at Haskell Indian Nations University. LEC.

LA&S 120. Cherokee Language II. 5 Hours. U.
Continuation of Cherokee Language I. Includes an intermediate level of vocabulary skill with increased emphasis on reading and writing. Taught at Haskell Indian Nations University. Prerequisite: LAS 110. LEC.

LA&S 150. Academic Success Seminar. 1 Hour. U.
This course provides students with the skills and resources necessary to improve their approach to their academic career. It is designed to help enhance students’ time management and study skills as well as facilitate a connection with student success resources. Students and instructors work together in an interactive learning environment to create an academic foundation for success. Additional topics covered include: test preparation and anxiety; reading comprehension; procrastination; and memory and concentration. Recommended for students with less than a 2.5 GPA. LEC.

LA&S 160. Dean's Scholars Program Seminar. 0.5-3 Hours. U.
An enhancement of communication, time management, and leadership skills. The students will explore resources and determine goals pertinent to their objectives regarding graduate school. Restricted to students in the Dean's Scholars Program. LEC.

LA&S 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in liberal arts and sciences. First-year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

LA&S 200. Topics at HINU: ______. 1-6 Hours. U.
Special topics at the undergraduate level. Taught at Haskell Indian Nations University. Special permission from the Provost's Office required. LEC.

LA&S 202. History of North American Indian Tribes. 3 Hours. NW / H.
Introductory survey of the origin, evolution, and distribution of Indians throughout North America, location of tribes in historic times, their relationships to one another, and their responses to white penetration of the continent. Emphasis on American Indian leadership and major contributions of American Indian people to American society. Taught at Haskell Indian Nations University. LEC.

LA&S 204. Contemporary Issues of the American Indian. 3 Hours. H.
An overview of current and historical issues which have resulted in policies and regulations affecting American Indians and Alaska Natives. The issues include: education, treaties, sovereignty and self-determination, religions, natural resources, legislation, jurisdiction, reservation and/or urban status, federal trust relationship, tribal economics and enterprises, American Indian policy, federal recognition, and current issues both regional and local. Taught at Haskell Indian Nations University. LEC.

LA&S 206. Indian Law and Legislation. 3 Hours. S.
An introduction and general overview of federal Indian law and processes and its relationship to tribal governments. Focus will be on sovereignty and its relationship to the internal and domestic laws of the United States government, tribal governments, and the international community. Taught at Haskell Indian Nations University. LEC.

LA&S 208. Tribal/Federal Government Relations. 3 Hours. S.
An introductory study of the special relationship that exists between the federal government and tribal governments. Included will be a general overview of specific programs, laws, and court decisions that address the unique relationship that exists between two sovereign nations; the United States Government and tribal governments. Taught at Haskell Indian Nations University. LEC.

LA&S 210. Tribal Resources and Economic Development. 3 Hours. S.
Inventory and identify the resources currently available to tribal governments to include natural and human resources and those financial resources available to tribal governments from federal, state, and private resources. Included will be an economic analysis on how to best optimize available resources while recognizing the economic concept of constrained maximization. Taught at Haskell Indian Nations University. LEC.
LA&S 212. Chemical Dependency and the Native American. 3 Hours. S.
Examines the continuum of chemical abuse and dependency and the
emotional, physical, intellectual, and spiritual effects of addictions on
individuals, families, and communities. In addition, treatment approaches
and relapse prevention efforts are discussed. Special emphasis is
placed on integrating Native American understandings and responses to
chemical addictions. Taught at Haskell Indian Nations University. LEC.

LA&S 230. Cherokee Language III. 5 Hours. U.
Continuation of Cherokee language II. Taught at Haskell Indian Nations
University. Prerequisite: LAS 120. LEC.

LA&S 240. Cherokee Language IV. 5 Hours. U.
This course is a continuation of LAS 230, Cherokee Language III, and
includes the study of grammar, with particular attention to speaking
fluency and continued practice in reading and writing. Taught at Haskell
Indian Nations University. Prerequisite: LAS 230. LEC.

LA&S 250. Western Civilization I. 3 Hours. H.
The beliefs and values of Western civilization from the eighth century BC
to the close of the eighteenth century are compared with the ideas central
to American Indian cultural traditions. Fulfills the Western Civilization I
requirement for CLAS. Taught at Haskell Indian Nations University. LEC.

LA&S 252. Western Civilization II. 3 Hours. H.
The beliefs and values of Western Civilization since the close of
the eighteenth century are compared with the ideas central to American
Indian cultural traditions. Fulfills the Western Civilization II requirement
for CLAS. Taught at Haskell Indian Nations University. LEC.

LA&S 290. Approaches to Teaching Science and Mathematics I. 1
Hour. U.
Science and Mathematics students explore teaching as a career by
teaching lessons in elementary classrooms in order to obtain first hand
experience planning and implementing inquiry-based curriculum. This
course is open to any student who has completed or is concurrently
enrolled in a science or mathematics course at KU. LEC.

LA&S 291. Approaches to Teaching Science and Mathematics II. 1
Hour. U.
Science and Mathematics students continue to explore secondary
teaching as a possible career choice by teaching several lessons in a
middle school classroom. The students build upon and practice lesson
design skills that were developed in LAS 290, in which they taught
in elementary classrooms. Prerequisite: LAS 290. LEC.

LA&S 292. Topics and Problems on: ____. 1-6 Hours. U.
An interdisciplinary study of different topics. Designed especially for
freshmen and sophomores. LEC.

LA&S 301. Learning Communities Seminar in: ____. 1-2 Hours. U.
This course is designed to expand student's knowledge of the University
community by exploring an academic theme and the connections between
courses. Through the study of different topics students will explore the
inherent interdisciplinarity of fields of study. Designed especially for
juniors and seniors. Enrollment is limited to students participating in
designated learning community. Concurrent enrollment in specified
learning community courses is required. May be repeated for credit up to
4 hours. LEC.

LA&S 340. Computers for the Classroom. 1-3 Hours. U.
"The Art and Science of Computer Presentation." An inter-disciplinary
course designed to explore current technology in "Computer
Presentations" (various equipment and programs), research the field of
information processing, and develop applications for interactive multi-
media communications. Not open to students who have received credit for
LAS 740. Prerequisite: Consent of instructor. LEC.

LA&S 400. Teaching and Tutoring Writing. 3 Hours. U.
Students explore theories and strategies of teaching and tutoring writing
across academic disciplines. They learn more about themselves as
writers as they build a repertoire of writing techniques useful in their
studies, in the workplace, and in their personal lives. By observing and
consulting in the writing center, they understand how reflection leads to
responsible/responsive and engaged practice. (Same as ENGL 400.)
LEC.

LA&S 414. Ethnobiology. 5 Hours. N.
Integrates Native American traditional knowledge of ecology and biology
with modern, western science. One purpose of the course is to preserve
the unique knowledge and varied cultural traditions relating to the life
sciences that are possessed by indigenous people. Taught at Haskell
Indian Nations University. Prerequisite: BIOL 100 or BIOL 150. LEC.

LA&S 450. Topics at Haskell Indian Nations University: _____. 1-6
Hours.
Special topics at the junior/senior undergraduate level. Taught at Haskell
Indian Nations University. Special permission from the Provost's office
required. LEC.

LA&S 470. Job Search Skills for Liberal Arts and Sciences Majors. 1
Hour. U.
This course is designed to introduce students to the fundamentals of
planning and organizing job search strategies. Emphasis is placed on
practical application of employment search tools for post-graduation
employment or graduate school admission, stressing the value of the arts
and sciences degree in the labor market. LEC.

LA&S 475. Professional Career Management. 3 Hours. U.
When envisioning the future, many students consider immediate post-
graduation needs but may fail to consider future professional career
management, life and career transitions, and career progression. This
advanced career development course studies the theories of career
development, organizational and industrial psychology, and human
resources. Students learn theories from these areas and understand how
to apply them to their own professional career, future career transitions,
and lifelong career progression. LEC.

LA&S 480. Preparing for International Careers. 2 Hours. U.
This course, delivered through an 8-week seminar and week-long
study abroad experience, teaches the fundamentals of executing an
international job search. The course is open only to participants admitted
to the Preparing for International Careers study abroad program. Students
must complete a study abroad application and be approved before enrolling
in the course. LEC.

LA&S 485. Global Career Management. 3 Hours. U.
This global career development course studies the theories of cross-
cultural communication and analyzes the global economy to help
students apply these concepts to their own lifelong career management.
Furthermore, the course builds upon the international experiences
students are having at KU and also allows any student to gain lifelong
knowledge and skills to be successful in a global job search or career
transition, by assisting them to articulate their skills and value through a
cross-cultural perspective to potential employers. LEC.

LA&S 490. Internship Exploration. 1-5 Hours. AE61 / U.
This course provides credit for supervised practical experiences in an
occupational area of interest. In addition to the work-related activity,
students complete reading and writing assignments, participate in an on-
line discussion and create a final portfolio of internship accomplishments.
Hours of credit recorded (1-5) are based on number of hours at internship
site and agreement of instructor. Credit hours will be assigned a letter grade. Repeatable for up to 5 credit hours, provided the internship experiences are different. Prerequisite: Consent of Instructor. LEC.

LING 492. Topics and Problems on: ______. 1-6 Hours. U.
An interdisciplinary study of different topics. Topics include Sanskrit. Designed especially for Juniors and Seniors. LEC.

LING 494. Senior Seminar in Liberal Arts and Sciences. 3 Hours. H.
This course is a seminar to result in the student's integration of knowledge within the liberal arts and sciences. Through lecture and discussion, students explore a series of issues or themes that integrate several disciplines in the humanities, arts, social sciences, and mathematics and natural sciences. A final project (options include a portfolio, web page, paper, presentation) demonstrates the students' knowledge of the concepts, theories, and methods of several disciplines, and their ability to integrate that knowledge across disciplines. Not open to freshmen and sophomores; recommended in the senior year. Prerequisite: Completion of at least 30 junior/senior hours. LEC.

LING 700. Writing Center Theory and Administration. 3 Hours.
This course explores theories motivating writing center administration and practice. Students will investigate the multiple functions of writing centers, from writing labs associated with college composition instruction, to decentralized resources for writing faculty teaching writing across the disciplines, to elementary, secondary, and community support centers for writers, to online consultation services. Students will choose a special interest or problem, and, from an administrative perspective, design a research study and propose actions such as creating policy, developing curricula, designing materials, or conducting assessments. (Same as ENGL 885.) Prerequisite: LAS 400, ENGL 400, or consent of instructor. LEC.

LING 710. Computer Assisted Language Learning. 1 Hour.
An introduction to the use of computer-based technologies in language learning and teaching. A project-based approach will combine discussions of current research with hands-on technical training. Prerequisite: Consent of instructor LEC.

LING 740. Computers for the Classroom. 1-3 Hours.
"The Art and Science of Computer Presentation." An inter-disciplinary course designed to explore current technology in "Computer Presentations" (various equipment and programs), research the field of information processing, and develop applications for interactive multimedia communications. Not open to students who have received credit for LAS 340. Prerequisite: Consent of instructor LEC.

LING 792. Topics in: ______. 1-3 Hours.
An interdisciplinary study of a variety of topics from the Liberal Arts and Sciences. Usually intended for graduate students, but may also be taken by qualified upper level undergraduates. May be repeated for credit when topic differs. LEC.

Linguistics Courses

LING 106. Introductory Linguistics. 3 Hours. SC AE42/GE11/GE3S / S.
Introduction to the fundamentals of linguistics, with emphasis on the description of the sound system, grammatical structure, and semantic structure of languages. The course will include a survey of language in culture and society, language change, computational linguistics and psycholinguistics, and will introduce students to techniques of linguistic analysis in a variety of languages including English. (Same as ANTH 106). LEC.

LING 107. Introductory Linguistics, Honors. 3 Hours. SC AE42/GE11/GE3S / S.
Introduction to the fundamentals of linguistics, with emphasis on the description of the sound system, grammatical structure, and semantic structure of languages. The course includes a survey of language in culture and society, language change, computational linguistics and psycholinguistics, and introduces students to techniques of linguistic analysis in a variety of languages including English. Open only to students admitted to the University Honors Program or by consent of instructor. (Same as ANTH 107.) LEC.

LING 110. Language and Mind. 3 Hours. SI AE41/GE11/GE3S / S.
A study of the relation between language and the human mind, focusing on language as a fundamental aspect of human cognition. Topics include what is innate and what is learned during first and second language acquisition, how we process language, and whether there are areas of the brain specialized for language. LEC.

LING 111. Language and Mind, Honors. 3 Hours. SI AE41/GE11/GE3S / S.
A study of the relation between language and the human mind, focusing on language as a fundamental aspect of human cognition. Topics include what is innate and what is learned during first and second language acquisition, how we process language, and whether there are areas of the brain specialized for language. Open only to students admitted to the University Honors Program, or by consent of instructor. LEC.

LING 120. The Physics of Speech. 4 Hours. N.
An introduction to the acoustic structure of speech intended for non-science majors. Emphasis will be placed on the methods and standards by which scientists measure and evaluate the physical characteristics of speech. Topics will include: simple harmonic motion, the propagation of sound waves, aerodynamic aspects of vocal fold vibration, resonance, digital speech processing, frequency analysis, and speech synthesis. Three class hours and one laboratory per week. (Same as SPLH 120.) Prerequisite: MATH 101 or 104 or equivalent. LEC.

LING 177. First Year Seminar: ______. 3 Hours. SC GE11.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in linguistics. May not contribute to major requirements in linguistics. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

LING 180. Study Abroad Topics in Linguistics: ______. 1-3 Hours. U.
This course is designed for the study of special topics in Linguistics. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

LING 300. Empirical Approaches to Languages. 3 Hours. S.
This course provides students with a current overview of experimental data and up-to-date theories addressing empirical approaches to the study of language. A hands-on approach is used to facilitate understanding variation in language comprehension and production, the biological bases of language, and the acquisition of first and second languages. LEC.

LING 305. Phonetics I. 3 Hours. S.
This course provides a basic introduction to the study of human speech sounds. Topics to be covered include anatomy and physiology of the speech production apparatus, transcription and production of the world's sounds, basic acoustics, computerized methods for speech analysis, acoustic characteristics of speech sounds, stress, and intonation. A hands on laboratory project is part of the course. Prerequisite: An introductory course in Linguistics. LEC.
LING 307. Phonetics II. 3 Hours. AE61 / S.
This course is a continuation of Phonetics I (LING 305/705) and provides a more detailed survey of acoustic and auditory phonetics. Topics to be covered include vocal tract acoustics, quantal theory, speaker normalization, theories of speech perception, prosody, the phonetics of second language acquisition, and the production and perception of cues to gender, talker, region, and socio-economic status. In addition, a number of laboratory projects are required. Prerequisite: LING 305. LEC.

LING 308. Linguistic Analysis. 3 Hours. GE11 / H.
Practice in applying the techniques of phonological, grammatical, and syntactic analysis learned in introductory linguistics to data taken from a variety of languages of different structural types. Prerequisite: LING 106. LEC.

LING 312. Introduction to Phonology. 3 Hours. S.
This is an introductory course in phonology. It focuses on crucial phonological concepts such as the underlying and surface representations, phoneme and allophone, contrast, alternation, neutralization, distinctive features, and the syllable. It provides the basic skill set for phonological analysis, including how to discover phonological patterns, select underlying representations, and write phonological rules to capture the patterns. Common phonological universals in the world's languages will also be discussed. Prerequisite: LING 305. LEC.

LING 314. Phonological Theory I. 3 Hours. AE61 / S.
This is a survey course on modern phonological theory. It starts with the discussion of the conspiracy and duplication problems in rule-based phonology and works its way to Optimality Theory (OT). Topics in OT include its conceptual and empirical advantages over rule-based phonology, its potential problems and their possible remedies, the relevance of phonetics in OT constraints, correspondence theory, and how OT can be applied to prosodic phenomena such as stress and tone. It also focuses on theory-building in phonology, with discussions on the external motivations for phonological grammar, how to lay out the predictions of a theoretical proposal, and how phonological predictions can be empirically tested. Prerequisite: LING 312 or instructor consent. LEC.

LING 320. Language in Culture and Society. 3 Hours. SC AE41/AE61 / S.
Language is an integral part of culture and an essential means by which people carry out their social interactions with the members of their society. The course explores the role of language in everyday life of peoples in various parts of the world and the nature of the relationship between language and culture. Topics include world-view as reflected in language, formal vs. informal language, word taboo, and ethnography of speaking. (Same as ANTH 320.) LEC.

LING 321. Language in Culture and Society, Honors. 3 Hours. SC AE41/AE61 / S.
An honors section of LING 320 for students with superior academic records. Not open to students who have had ANTH 320 or LING 320. (Same as ANTH 321.) Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

LING 325. Syntax I. 3 Hours. H.
An introduction to generative syntax with special attention to theory and method. The course covers such topics as phrase structure, the lexicon, transformations and derivation. Prerequisite: LING 106. LEC.

LING 326. Syntax II. 3 Hours. AE61 / S.
An advanced course covering one or more current theories of syntax. The course provides in-depth reading and discussion on the major areas of syntactic theory including universal grammar, phrase structure theory; lexicon and argument structure; binding, control, locality conditions; constraints on representation and derivation; and the relation between syntax and the semantic module. Prerequisite: LING 325. LEC.

LING 327. Morphology. 3 Hours. S.
An exploration of several topics in word structure and formation. Covers three broad areas: traditional morphology, morphe-phonology, and morphy-syntactic. Traditional morphology includes a survey of several kinds of word formation processes, the internal structure of words, morpheme types, inflection, paradigms, derivation, and compounding. Morpho-phonology deals with phonological constraints on morphological processes and prosodic morphology. Morpho- syntax concentrates on the syntactic properties of morphological phenomena and interaction of syntactic processes and morphology. The course has a strong emphasis on cross-linguistic comparative morphology. Prerequisite: LING 312 and LING 325, or permission of instructor. LEC.

LING 331. Semantics. 3 Hours. S.
A study of meaning in natural language usage. Emphasis on referential semantics. Set theory, propositional and first-order logic, and intensional and modal logic as they relate to natural language sentences in a formalized language. Prerequisite: A course in syntax. LEC.

LING 338. Languages of the Jews. 3 Hours. H.
From the beginning, Jewish history and culture is closely tied to language, from Hebrew and Aramaic to the languages of diaspora such as Yiddish and Ladino. Focusing on issues of language in society, this course will survey the languages spoken by the Jews throughout their long history in diverse communities around the world. We will learn about Hebrew as a spoken and a sacred language, examine how Jewish languages are born and die, and discuss the resurrection of Modern Hebrew in the state of Israel. All readings are in English. No prior knowledge of languages or linguistics is required. (Same as JWSH 338.) LEC.

LING 339. Languages of the Jews, Honors. 3 Hours. H.
Honors version of LING 338 or JWSH 338, Languages of the Jews. (Same as JWSH 339.) Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

LING 340. Sociolinguistics. 3 Hours. S.
The formal features of language reflect a broad range of social factors, including age, context, culture, occupation, sex and social class. This course will introduce students to the ways social variables affect the forms of spoken and written language. Prerequisite: An introductory linguistics course or consent of instructor. LEC.

LING 343. Bilingualism. 3 Hours. S.
This course provides an introduction to bilingualism and bilingual education exploring the linguistic, sociolinguistic, and psycholinguistic aspects of bilingualism. We read about and discuss bilingualism in the world and in the U.S.; language maintenance and language loss; effects of languages in contact; bilingual acquisition; the cognitive advantages of bilingualism; and the processing of language in the multilingual mind. Students are guided in conducting a small research project on one of these areas, learning how to read scientific studies about bilingualism and developing an understanding of the relationship between primary research sources and the popular press. LEC.

LING 345. Language and Gender. 3 Hours. S.
This course explores the relationship between language use and gender. The course will specifically focus on how gender affects the ways we use spoken language as well as how we interpret the speech of others. Topics to be discussed will include the function of language in social relationships and language variation in different social contexts. LEC.

LING 350. Comparative and Historical Linguistics. 3 Hours. S.
Human language may be characterized as possessing flexibility, which causes languages to be different from one another in different degrees.
This course explores the way languages undergo change in time (historical linguistics), and the ways two or more languages are similar or different (comparative linguistics). The course teaches students how to establish whether languages are genetically related or belong to totally different language families. Prerequisite: An introductory course in linguistics. LEC.

**LING 370. Introduction to the Languages of Africa. 3 Hours. NW AE42/GE3H / H/W.**

A survey of the indigenous languages of Africa from a linguistic perspective, covering the main language families and their geographic distribution, and focusing on the features and structure of the more widely spoken and representative languages in each family (e.g., Fula, Hausa, Maninka, Swahili, Yoruba). (Same as AAAS 370.) LEC.

**LING 415. Second Language Acquisition. 3 Hours. H.**

Introduction to the study of second language acquisition: The application of theoretical linguistics to the description of the language that a learner acquires, and to the process of acquisition. Prerequisite: An introductory course in linguistics. LEC.

**LING 416. Second Language Acquisition II. 3 Hours. AE61 / S.**

This advanced course provides in-depth reading and discussion of several current topics including second language acquisition within a generative framework, processing approaches to second language acquisition, and the role of input and learnability principles in second language acquisition. Both theoretical and methodological issues are discussed. Prerequisite: LING 415 and LING 325; or permission of instructor. LEC.

**LING 418. Introduction to Cognitive Science. 3 Hours. S.**

Examines the data and methodologies of the disciplines that comprise Cognitive Science, an interdisciplinary approach to studying the mind and brain. Topics may include: consciousness, artificial intelligence, linguistics, education and instruction, neural networks, philosophy, psychology, anthropology, evolutionary theory, cognitive neuroscience, human-computer interaction, and robotics. (Same as PHIL 418, PSYC 418, and SPLH 418.) Prerequisite: Consent of instructor. LEC.

**LING 420. Capstone: Research in Language Science. 3 Hours. AE61 / S.**

This course provides a foundation for designing, conducting, and critically evaluating quantitative and qualitative research in the language sciences. Topics include formulating a research hypothesis, participant selection, ethical considerations, the scientific method, dependent and independent variables, data collection, descriptive and inferential statistics. Students apply their knowledge of linguistics to formulate a research hypothesis and design an experiment to evaluate this hypothesis. Prerequisite: LING 305, LING 312, LING 325, and either LING 415, LING 425, LING 435, or LING 438. LEC.

**LING 421. Capstone: Typology-Unity and Diversity of Human Language. 3 Hours. H.**

This course explores the similarities and differences among the worlds' languages. Students apply their knowledge of phonetics, phonology, morphology, and syntax in describing and analyzing phenomena from a number of languages. The typological perspective that students develop is applied to topics such as word order, morphological typology, case, lexical categories, and valency. In addition to lecture style instruction, students get hands on practice in collecting, transcribing, and analyzing data from different languages through face to face elicitation with native speakers. Prerequisite: LING 305, LING 312, and LING 325. LEC.

**LING 425. First Language Acquisition. 3 Hours. S.**

An introductory course in the acquisition of child language. The course will cover relevant historical studies of child language but will focus primarily on recent psycholinguistic approaches toward the description of the process by which a child acquires his native language. Phonological, syntactic, semantic, cognitive, pragmatic, sociolinguistic, and anthropological aspects of the acquisition process are covered. Prerequisite: An introductory course in linguistics. LEC.

**LING 430. Linguistics in Anthropology. 3 Hours. S.**

The study of language as a symbolic system. Exploration into the interrelatedness of linguistic systems, of nonlinguistic communicative systems, and of other cultural systems. (Same as ANTH 430.) LEC.

**LING 435. Psycholinguistics. 3 Hours. S.**

A detailed examination of issues in the processing of language. The course provides a survey of research and theory in psycholinguistics, reflecting the influence of linguistic theory and experimental psychology. Spoken and written language comprehension and language production processes are examined. Prerequisite: An introductory course in linguistics or permission of instructor. LEC.

**LING 437. Topics in Psycholinguistics. 3 Hours. AE61 / S.**

An in-depth examination of selected topics in psycholinguistics. Topics may include spoken language processing, written language processing, psycholinguistics, prosody, and syntactic processing. Prerequisite: LING 435 or consent of instructor. LEC.

**LING 438. Neurolinguistics I. 3 Hours. S.**

The course explores how language is represented and processed in the human brain. This includes a critical survey of the foundations and the current research in the cognitive neuroscience of language, focusing on the techniques of functional brain imaging (fMRI, PET, EEG, MEG, and related methods), and research on aphasia and other language disorders. This course also includes a component providing laboratory experience with brain imaging research on language. Prerequisite: At least one course in linguistics or permission of the instructor. LEC.

**LING 440. Linguistic Data Processing. 3 Hours. H.**

This course introduces the tools and techniques necessary to analyze fieldwork data, including research design, recording and elicitation techniques, computational data processing and analysis, and field ethics. The course also covers field recording and data analysis technology, along with methods of phonetic transcription, grammatical annotation and analysis of language context. Practice of techniques is provided via short studies of at least one language. Prerequisite: LING 305 or permission of instructor. LEC.

**LING 441. Field Methods in Linguistic Description. 3 Hours. AE61 / H.**

The elicitation and analysis of phonological, grammatical, and discourse data from a language consultant. In-depth research on one language. Techniques of research design, methods of phonetic transcription, grammatical annotation, and analysis of language context. Prerequisite: LING 305, LING 312, and LING 325 or permission of instructor. LEC.

**LING 442. Neurolinguistics II. 3 Hours. S.**

An in-depth discussion of the representation and processing of language from a cognitive neuroscience perspective. This course involves critical discussion of selected topics of current research interest in neurolinguistics. The course also includes a significant hands-on component, in which students receive training in research on the cognitive neuroscience of language by developing and implementing a new EEG study on an aspect of language, as well by completing as a series of mini-labs introducing neuroimaging methods and analyses. Prerequisite: LING 438 or permission of the instructor. LEC.

**LING 447. North American Indian Languages. 3 Hours. AE41 / S.**

This course introduces students to the indigenous languages of North America. Students critically examine the structures and status of these languages, which have greatly expanded our knowledge of human language and linguistic theory. Topics include the history and future of
LING 451. Topics in Research in Acquisition and Processing: _____. 3 Hours. H.
This course is primarily intended for students actively engaged in linguistic research on language acquisition, language processing, and neurolinguistics. Students in this course present and discuss study design, methods, data analysis and interpretation of results for their research projects. Professional development topics such as CV development, applications for fellowships, grants and jobs, and the dissemination of research findings are also discussed. May be repeated. Prerequisite: Permission of instructor. LEC.

LING 470. Language and Society in Africa. 3 Hours. NW AE42/GE3H / H/W.
Examines issues and problems associated with language use in sub-Saharan Africa from a sociological perspective. Topics covered include an overview of the types of languages spoken on the continent: indigenous languages, colonial languages, pidgins and creoles, and Arabic as a religious language; problems associated with the politics of literacy and language planning; writing and standardization of indigenous languages; and the cultural and ideological dilemmas of language choice. (Same as AAAS 470.) Prerequisite: AAAS 103, AAAS 305, or LING 106; or consent of instructor. LEC.

LING 483. Computational Linguistics. 3 Hours. S.
A survey of computer-based approaches to the study of morphology and syntax. In addition to its relevance for basic linguistic research, computer-based syntactic analysis in the form of parsers and syntactic/string generators, provide model testers for the linguistic and analytical tools for the computer scientist concerned with language applications. When taught with LING 783, students at the 700 level will have different course requirements. Prerequisite: An introductory course in linguistics. LEC.

LING 490. Independent Study. 1-3 Hours. AE61 / U.
A special research project or directed readings in an area of linguistics not covered in other courses. No more than 3 hours of LING 490 may be applied toward the requirements for the major. Prerequisite: Consent of instructor. IND.

LING 491. Topics in Linguistics: _____. 1-3 Hours. H.
The content, prerequisites, and credits of this course will vary. May be repeated. IND.

LING 492. Topics in Linguistics: _____. 1-3 Hours. S.
The content, prerequisites, and credits of this course will vary. May be repeated. (Distribution credit given for two or three hours only.) Prerequisite: Consent of instructor. IND.

LING 496. Honors Essay in Linguistics. 1-3 Hours. AE61 / H.
Individual directed research and preparation of an essay on a linguistic topic. Prerequisite: A grade-point average of 3.5 in linguistics and 3.25 in all courses, and consent of the major adviser. IND.

LING 539. First Language Acquisition II. 3 Hours.
A second semester course in child language that explores the acquisition of morphology, syntax, and the ways in which morphology and syntax interact in linguistic theory and language development. Topics covered in the course include agreement, case, null subjects, question formation, pronoun binding, quantification, and control. Prerequisite: LING 325 or LING 425 or consent of instructor. LEC.

LING 543. Language and Culture in Arabic-Speaking Communities. 3 Hours. NW AE42/GE3H / H.
The course examines the links between structure, patterns of use, language choice, and language attitudes in the diglossic and bi-lingual Arabic-speaking communities. It also explores language as a reflector and creator of Arab culture (e.g. linguistic encoding of politeness, the Quranic text as the spoken and written word, the role of tropes in Arabic rhetoric). The topics for discussion range from the micro-level language choice to the macro-level issues of national language policies and planning within the domain of government and education across the Arab world. (Same as AAAS 543) LEC.

LING 550. The Structure of Japanese. 3 Hours. H.
A detailed study of the phonological and grammatical structure of Japanese and the use of the language in social/cultural contexts. Primarily for students who want a linguistic knowledge of the language rather than a practical command of it. (Same as EALC 550.) LEC.

LING 570. The Structure of Chinese. 3 Hours. H.
A detailed study of the phonological and grammatical structure of Chinese and the interactions between language and culture. Depending on student interests, a unit on the pedagogy of teaching Chinese as a foreign language may also be included. Primarily for students who want a linguistic knowledge of the language rather than a practical command of it. (Same as EALC 570.) LEC.

LING 575. The Structure of: _____. 3 Hours. S.
A detailed study of a language, including its phonological, morphological, syntactic and semantic characteristics. The course provides students with a linguistic knowledge of the language rather than a practical command of it. Prerequisite: A course in linguistics. LEC.

LING 700. Introduction to Linguistic Science. 3 Hours.
An introduction to the theory and techniques of linguistic science for majors and others intending to do advanced work in linguistics and linguistic anthropology. Emphasis on the sound system, grammatical structure, and semantic structure of languages. Lectures and laboratory sessions. (Same as ANTH 725.) Not open to students who have taken ANTH/LING 106 or ANTH/LING 107. Prerequisite: Graduate standing. LEC.

LING 705. Phonetics I. 3 Hours.
This course provides a basic introduction to the study of human speech sounds. Topics to be covered include anatomy and physiology of the speech production apparatus, transcription and production of the world's sounds, basic acoustics, computerized methods for speech analysis, acoustic characteristics of speech sounds, stress, and intonation. A 'hands on' laboratory project is part of the course. Prerequisite: LING 700 or equivalent course. LEC.

LING 706. Current Linguistic Anthropology. 3 Hours.
The fundamental issues, methods, and theories in contemporary linguistic anthropology. (Same as ANTH 706.) Prerequisite: Graduate standing or consent of the instructor. LEC.
LING 707. Phonetics II. 3 Hours.
This course is a continuation of Phonetics I (Ling 705) and provides a more detailed survey of acoustic and auditory phonetics. Topics to be covered include vocal tract acoustics, quantal theory, speaker normalization, theories of speech perception, prosody, the phonetics of second language acquisition, and the production and perception of cues to gender, talker, region, and socio-economic status. In addition, a number of laboratory projects will be required. Prerequisite: LING 705. LEC.

LING 708. Linguistic Analysis. 3 Hours.
Practice in applying the techniques of phonological, grammatical, and syntactic analysis learned in introductory linguistics to data taken from a variety of languages of different structural type. (Same as ANTH 736.) Prerequisite: An introductory course in linguistics. Not open to students who have taken LING 308. LEC.

LING 709. First Language Acquisition. 3 Hours.
Introduction to the study of language acquisition: the significant findings, the basic methodological procedures, and some of the more recent theoretical accounts. Not open to students who have taken LING 425. Prerequisite: LING 700 or equivalent course. LEC.

LING 710. Linguistics in Anthropology. 3 Hours.
This is a survey course on modern phonological theory. It starts with the discussion of the conspiracy and duplication problems in rule-based phonology and works its way to Optimality Theory (OT). Topics in OT include its conceptual and empirical advantages over rule-based phonology, its potential problems and their possible remedies, the relevance of phonetics in OT constraints, correspondence theory, and how OT can be applied to prosodic phenomena such as stress and tone. It also focuses on theory-building in phonology, with discussions on the external motivations for phonological grammar, how to lay out the predictions of a theoretical proposal, and how phonological predictions can be empirically tested. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. Prerequisite: LING 705. LEC.

LING 711. Morphology. 3 Hours.
This is an advanced course on modern phonological theory. It discusses phonology as an interdisciplinary and experimental discipline and presents current development in both experimental techniques that shed light on speakers' phonological knowledge and the formal modeling of speakers' phonological grammar. Issues of learnability and how phonological acquisition can be modeled will also be touched upon. Prerequisite: LING 712. LEC.

LING 712. Syntax I. 3 Hours.
The basics of theoretical syntax, examining the principles of universal grammar. Topics include phrase structure, relations among syntactic constituents, and the nature of syntactic rules and lexical categories. Prerequisite: LING 700 or equivalent course. LEC.

LING 713. Syntax II. 3 Hours.
An advanced course covering one or more current theories of syntax. The course will provide in-depth reading and discussion on the major areas of syntactic theory including universal grammar, phrase structure theory, lexical projections of argument structure, binding, control, locality condition, constraints on representation, and the relation between syntax and the semantic module. Prerequisite: LING 725. LEC.

LING 714. Phonological Theory II. 3 Hours.
This is an advanced course in modern phonological theory. It discusses phonology as an interdisciplinary and experimental discipline and presents current development in both experimental techniques that shed light on speakers' phonological knowledge and the formal modeling of speakers' phonological grammar. Issues of learnability and how phonological acquisition can be modeled will be touched upon. Prerequisite: LING 712. LEC.

LING 715. Linguistics and Second Language Acquisition. 3 Hours.
Introduction to the study of second language acquisition: The application of theoretical linguistics to the description of the language a learner acquires, and to the process of acquisition. Prerequisite: LING 700 or equivalent course. LEC.

LING 716. Second Language Acquisition II. 3 Hours.
This advanced course will provide in-depth reading and discussion of several current topics including second language acquisition within a generative framework, processing approaches to second language acquisition, and the role of input and learnability principles in second language acquisition. Both theoretical and methodological issues will be discussed. Prerequisite: LING 715; LING 725, which may be taken concurrently, or permission of instructor. LEC.

LING 720. Research Methods in Linguistics. 3 Hours.
This course provides a foundation for designing, conducting, and critically evaluating quantitative and qualitative research in the language sciences. Topics include formulating a research hypothesis, participant selection, ethical considerations, the scientific method, validity, reliability, data collection, dependent and independent variables, descriptive and inferential statistics. This course will serve students who are interested in the basics of research design and statistics for the study of language. Prerequisite: LING 700 or equivalent course. LEC.

LING 721. Phonetics I. 3 Hours.
The basics of theoretical phonetics, examining the principles of universal grammar. Topics include pronunciation and change, relations among phonological, phonetic, and morphological phenomena, and the nature of the phonology of speech. Prerequisite: LING 700 or equivalent course. LEC.

LING 722. Linguistic Typology. 3 Hours. H.
Different languages use different linguistic mechanisms to encode meanings. This course surveys grammatical concepts and categories found in the world's languages including tense, aspect, mood, voice, person, and number as well as case relations such as nominative, accusative, ergative, and absolutive. Basic word order typology and discourse functions such as topic, focus, and cohesion are introduced. Examples will be drawn from a wide variety of languages to illustrate how the same concept may be encoded differently, i.e., morphologically, syntactically, or lexically, in different languages. Prerequisite: LING 700 or equivalent course. LEC.

LING 725. Syntax I. 3 Hours.
The basics of theoretical syntax, examining the principles of universal grammar. Topics include phrase structure, relations among syntactic constituents, and the nature of syntactic rules and lexical categories. Prerequisite: LING 700 or equivalent course. LEC.

LING 726. Syntax II. 3 Hours.
An advanced course covering one or more current theories of syntax. The course will provide in-depth reading and discussion on the major areas of syntactic theory including universal grammar, phrase structure theory, lexical projections of argument structure, binding, control, locality condition, constraints on representation, and the relation between syntax and the semantic module. Prerequisite: LING 725. LEC.

LING 727. Morphology. 3 Hours.
An exploration of several topics in word structure and formation. Covers three broad areas: traditional morphology, morpho-phonology, and morpho-syntax. Traditional morphology includes a survey of several kinds of word formation processes, the internal structure of words, morpheme types, inflection, paradigms, derivation, and compounding. Morpho-phonology deals with phonological constraints on morphological processes and prosodic morphology. Morpho syntax concentrates on the syntactic properties of morphological phenomena and interaction of syntactic processes and morphology. The course has a strong emphasis on cross-linguistic comparative morphology. Prerequisite: LING 712, LING 725, or permission of instructor. LEC.

LING 730. Linguistics in Anthropology. 3 Hours.
The study of language as it concerns anthropology. Language systems in relation to culture, language taxonomy, semantics, linguistic analysis as an ethnographic tool. (Same as ANTH 730.) LEC.

LING 731. Semantics. 3 Hours.
A study of meaning in natural language usage. Emphasis on referential semantics. Set theory, propositional and first-order logic, and intensional and modal logic as they relate to meaning. Questions that arise in representing the meanings of natural language sentences in a formalized language. Prerequisite: LING 725. LEC.

LING 732. Discourse Analysis. 3 Hours.
This course focuses on linguistic frameworks for the analysis of discourse. Discourse is a linguistic system larger than the sentence (utterance), which connects and contextualizes speech and written text. This course focuses on current issues and theoretical frameworks in the analysis of discourse. Using oral and written data, students will examine how contexts influence and shape linguistic form. Topics covered include transcription systems, the structure and organization of different genres of language, and the performance of social actions, including stance-taking, framing, and the construction of identity. Students will also have
an opportunity to perform discourse analytic research on the data of their choice. (Same as ANTH 732.) Prerequisite: ANTH 706 or permission of the instructor. LEC.

LING 733. Language, Gender, and Sexuality. 3 Hours.
This course focuses on the complex relationship between language use and the social construction of gender and sexuality i.e. how language is used in the construction of gender and sexuality, and how gender and sexuality are performed and enacted through language. Examines theoretical notions of language, gender, and sexuality from linguistics, linguistic anthropology, and sociology. Among the topics covered are cross-cultural definitions of masculinity and femininity, construction of gendered and sexual identities through language use, language and power, ideologies, style, and performativity. The course will consider research on language, gender, and sexuality from a variety of cultures within the last 50 years. (Same as ANTH 733.) Prerequisite: ANTH 706 or permission of the instructor. LEC.

LING 734. Language Evolution. 3 Hours.
Human language demonstrates a level of complexity not found in the communicative systems of other species. This course focuses on the development of human language, so as to obtain a better understanding of the origin and development of human language. Questions addressed include: what features of language are distinct from other communicative systems, when did human language originate, in what stages did human language evolve, and how does language relate to properties of the brain and mind? Data from a variety of disciplines will be considered, including primatology, human development, cognition, evolutionary biology, archaeology, and linguistics. (Same as ANTH 734.) Prerequisite: ANTH 106 or LING 106 or ANTH 107 or LING 107 or ANTH 736 or LING 708 or ANTH 725. LEC.

LING 735. Psycholinguistics I. 3 Hours.
A detailed examination of issues in the processing of language. The course will provide a survey of research and theory in psycholinguistics, reflecting the influence of linguistic theory and experimental psychology. Spoken and written language comprehension and language production processes will be examined. (Same as PSYC 735.) LEC.

LING 737. Psycholinguistics II. 3 Hours.
An in-depth examination of selected topics in psycholinguistics. Topics may include spoken language processing, written language processing, neurolinguistics, prosody, and syntactic processing. (Same as PSYC 737.) Prerequisite: PSYC 735/LING 735 or consent of instructor. LEC.

LING 738. Neurolinguistics I. 3 Hours.
We will explore how language is represented and processed in the human brain. This will include a critical survey of the foundations and the newest state-of-the-art research in the cognitive neuroscience of language, focusing on the techniques of functional brain imaging (fMRI, PET, EEG, MEG, and related methods), and research on aphasia and other language disorders. This course will also include a laboratory component providing hands-on experience with brain imaging research on language. Prerequisite: LING 700 or equivalent course. LEC.

LING 739. First Language Acquisition II. 3 Hours.
A second semester course in child language which explores the acquisition of morphology, syntax and the ways in which morphology and syntax interact in linguistic theory and language development. Topics covered in the course include agreement, Case, null subjects, question formation, pronoun binding, quantification, and control. Prerequisite: LING 709 and LING 725 or permission of the instructor. LEC.

LING 740. Linguistic Data Processing. 3 Hours.
The tools and techniques necessary to analyze linguistic fieldwork data, including research design, recording and elicitation techniques, computational data processing and analysis, and field ethics. Techniques of research, field recording, and data analysis technology. Methods of phonetic transcription, grammatical annotation, and analysis of language context. Practice of techniques via short studies of at least one language. (Same as ANTH 740.) Prerequisite: LING 700 or permission of instructor. LEC.

LING 741. Field Methods in Linguistic Description. 3 Hours.
The elicitation and analysis of phonological, grammatical, and discourse data from a language consultant. In-depth research on one language. Techniques of research design, methods of phonetic transcription, grammatical annotation, and analysis of language context. (Same as ANTH 741.) Prerequisite: LING 705 or permission of instructor. LEC.

LING 742. Neurolinguistics II. 3 Hours.
An in-depth discussion of the representation and processing of language from a cognitive neuroscience perspective. This course involves critical discussion of selected topics of current research interest in neurolinguistics. The course also includes a significant hands-on component, in which students receive training in research on the cognitive neuroscience of language by developing and implementing a new EEG study on an aspect of language, as well as completing as a series of mini-labs introducing neuroimaging methods and analyses. Prerequisite: LING 738 or permission of the instructor. SEM.

LING 747. North American Indian Languages. 3 Hours.
This course introduces student to the indigenous languages of North America. Students will critically examine the structures and status of these languages, which have greatly expanded our knowledge of human language and linguistic theory. Topics include the history and future of North American languages and indigenous speech communities, the history of the field of Americanist linguistics, as well as important linguistic questions raised by phenomena from American languages in phonology, morphology, syntax, semantics, and historical linguistics. Prerequisite: An introductory course in linguistics. LEC.

LING 748. Language Contact. 3 Hours.
Theories and case studies of languages in contact. Areal and genetic linguistics, genesis of pidgins and creoles, multilingualism. Social, political, economic, and geographic factors in language change. (Same as ANTH 748.) Prerequisite: A course in Linguistics. LEC.

LING 749. Linguistics and Ethnolinguistics of China and Central Asia: ______. 3 Hours.
Selected topics in Linguistics and Linguistic Anthropology, focusing on dominant and/or minority languages of China, Central Asia, or a particular region of Central and Eastern Eurasia. Topics may include any subfield of linguistics, including language contact, typology, dialectology, and sociolinguistics. Topic for semester to be announced. (Same as ANTH 749.) Prerequisite: A course in Linguistics. LEC.

LING 782. Research Methods in Child Language. 3 Hours.
A survey of methods for studying phonological, morphological, syntactic, and semantic change during language development. Methods include: diary interpretation, language sample analysis, probe elicitation tasks, and clinical assessment. (Same as PSYC 782.) LEC.

LING 783. Computational Linguistics. 3 Hours.
A survey of computer-based approaches to the study of phonology, morphology, and syntax. In addition to its relevance for basic linguistic research, computer-based work on phonology is central to current research in speech analysis, speech synthesis, and the major artificial intelligence effort described as speech understanding. Computer-based morphological analysis is of theoretical interest to the linguist as well as a major component in content analysis, information retrieval, and other related application areas. Computer-based parsers and syntactic/string
generators provide model testers for the linguist and analytical tools for
the computer scientist concerned with language applications. Prerequisite:
An introductory linguistics course. LEC.

LING 791. Topics in Linguistics: ______. 1-3 Hours.
The content and prerequisites of this course will vary. May be repeated.
Prerequisite: Consent of instructor. LEC.

LING 794. Proseminar. 3 Hours.
Introduction to the field of linguistics. Topics include research literature
and research methods, thesis and grant writing, and ethics in linguistic
research. Required for all first-year graduate students in linguistics.
Graded on satisfactory/unsatisfactory basis. LEC.

LING 799. Proseminar in Child Language. 2 Hours.
A review and discussion of current issues in children's language
acquisition. May be repeated for credit. Students are graded S/F. (Same
as ABSC 797, PSYC 799 and SPLH 799.) (Formerly HDFL 797.) LEC.

LING 810. Seminar in Ethnolinguistics: ______. 2-3 Hours.
An advanced study of the relations between language and culture.
Subject will vary each semester. Students may repeat the course more
than once. (Same as ANTH 810.) LEC.

LING 822. Seminar on Acquisition of Language. 3 Hours.
An analysis of recent theoretical issues and research problems in the
study of children's acquisition of language. Prerequisite: LING 709 or
consent of instructor. LEC.

LING 850. Topics in Research in Experimental Linguistics: ______. 3
Hours.
This course is primarily for students actively engaged in experimental
linguistic research. The course provides students with the opportunity
to focus on their current research projects and involves critical analysis,
presentation, and discussion of research design, methods, statistical
analysis, and data interpretation. May be repeated. Prerequisite: An
advanced course in Linguistics or permission of instructor. SEM.

LING 851. Research in Language Acquisition and Processing. 3
Hours.
This course is primarily intended for students actively engaged in
linguistic research on language acquisition, language processing,
and neurolinguistics. Students in this course present and discuss
study design, methods, data analysis and interpretation of results for
their research projects. Professional development topics such as CV
development, applications for fellowships, grants and jobs, and
the dissemination of research findings are also discussed. May be repeated.
Prerequisite: Permission of instructor. SEM.

LING 860. Seminar in Second Language Acquisition. 3 Hours.
Analysis of recent theoretical and methodological issues in the study of
second language acquisition. Prerequisite: LING 716 or permission of
instructor. LEC.

LING 899. Master's Research Project. 1-3 Hours.
A course for students working on their M.A. Research Project. Normally to
be taken during the semester in which the student is submitting the M.A.
Research Project. Students must enroll for at least one credit hour. Up to
three credits will count toward the minimum number of credits required for
the M.A. degree in linguistics. RSH.

LING 910. Linguistic Seminar: ______. 1-3 Hours.
The content and prerequisites of this course will vary. May be repeated.
LEC.

LING 947. Seminar in Amerindian Linguistics. 1-3 Hours.
The aim of the seminar is to provide opportunity for interaction among
faculty and students sharing an interest in North American Native
languages and linguistics. Activities include reading, discussion, and
criticism of literature on Amerindian languages and linguistics, and reports
on current research of the participants. May be repeated. Prerequisite:
LING 747. LEC.

LING 980. Linguistics Field Work. 3-6 Hours.
Independent field work with an informant on a language not normally
offered at the University of Kansas, or on a non-standard dialect of one
of the more accessible languages. Student must show evidence (file slips
for grammatical and phonological analysis, dictionary slips, etc.) of having
done the required amount of work without necessarily being able to turn
in a completed analysis. Normally for three credits; six credits would be
available under certain circumstances such as intensive summer work on
location away from the university. Graded on satisfactory/unsatisfactory
basis. Prerequisite: LING 712 and LING 725. FLD.

LING 997. Ph.D. Examinations. 1-12 Hours.
A course for students writing answers to the preliminary Ph.D.
examination and/or preparing to take the Oral Comprehensive
Examination. Normally to be taken during the semester in which the
student is submitting answers to the written preliminary examination. May
be taken for a maximum of two semesters or twelve credits, whichever
comes first. Does not count toward the minimum number of credits
required for a graduate degree in linguistics. Graded satisfactory/
unsatisfactory on the results of the examination. RSH.

LING 998. Independent Study. 1-12 Hours.
Prerequisite: Written consent of instructor. RSH.

LING 999. Doctoral Dissertation. 1-12 Hours.
THE.

Mathematics Courses

MATH 2. Intermediate Mathematics. 3 Hours. U.
Mathematics (primarily algebra) preparatory to MATH 101. Qualification:
Two years of high school college preparatory mathematics, algebra and
geometry, and a score of 16 or more on ACT mathematics; or a qualifying
score on the mathematics placement test. MATH 002 is the lowest level
mathematics course offered at the University of Kansas. Students not
prepared for MATH 101 will be permitted to enroll in MATH 002. However,
before enrolling in MATH 002, such students are encouraged to prepare
by self-study or by completing a beginning algebra course in high school,
community college, or correspondence study. LEC.

MATH 101. College Algebra. 3 Hours. GE12 / U.
Coordinate systems, functions and their graphs; linear, quadratic, general
polynomial, rational, exponential, and logarithmic functions; equations
and inequalities; linear and non-linear systems and matrices. Not open to
students with credit in MATH 104. Prerequisite: MATH 002, or two years
of high school algebra and a score of 22 or higher on ACT mathematics,
or a qualifying score on the mathematics placement test. LEC.

MATH 103. Trigonometry. 2 Hours. U.
The circular functions and their applications. Not open to students with
credit in MATH 104. May not be used to fulfill the College mathematics
requirement. Prerequisite: MATH 101, or two years of high school
algebra and a score of 26 or higher on enhanced ACT mathematics, or a qualifying score on the mathematics placement test. LEC.

MATH 104. Precalculus Mathematics. 5 Hours. GE12 / U.
An introduction to the elementary functions (polynomial, rational, exponential, logarithmic, and trigonometric) and their properties. Intended primarily for students intending to enroll in MATH 121. Open for only two hours credit for students with credit in MATH 101. Not open to students with credit in MATH 103. Prerequisite: MATH 002, or two years of high school algebra and a score of 22 or higher on ACT mathematics, or a qualifying score on the mathematics placement test. LEC.

MATH 105. Introduction to Topics in Mathematics. 3 Hours. GE12 / N.
This course has two purposes. First, to provide the student with some experience and insight into several areas of mathematics not normally covered in elementary courses. Typical topics which may be covered are number theory, geometries, introductory calculus, introductory probability and statistics. Second, to provide the student with some skill in handling abstract mathematical concepts. The material will develop dually the intuitive and axiomatic approach. A high degree of manipulative skill is not required for this course. Prerequisite: MATH 101 or MATH 104, or two years of high school algebra and a score of 26 or higher on ACT mathematics, or a qualifying score on the mathematics placement test. LEC.

MATH 109. Mathematics for Elementary School Teachers I. 3 Hours. U.
This course is designed to give the prospective elementary school teacher an overview of several components of the elementary school mathematics curriculum, including number systems, estimation, inequalities and order, sequences and patterns, sets, and relations and functions. The class meets each week for three one-hour instruction sessions and one two-hour laboratory session. This course may not be used to satisfy the College mathematics requirement. Prerequisite: MATH 101 or equivalent placement. LEC.

MATH 110. Mathematics for Elementary School Teachers II. 3 Hours. U.
Continuation of MATH 109, including geometry (including transformations) and elementary probability and statistics. Class meets each week for three one-hour instruction sessions and one two-hour laboratory session. This course does not serve as a prerequisite for any mathematics course. It may not be used to satisfy the College mathematics requirement. Prerequisite: MATH 109. LEC.

MATH 111. Matrix Algebra, Probability, and Statistics. 3 Hours. N.
Introduction to topics in matrix algebra, probability, and statistics. Topics will include matrix operations, the use of matrices to solve systems of linear equations, elementary data analysis, elementary statistical procedures, sample spaces and probability measures, random variables, probability models, links between probability and statistics, and applications. Prerequisite: MATH 101 or MATH 104, or two years of high school algebra and a score of 26 or higher on the ACT mathematics, or a qualifying score on the mathematics placement test. LEC.

MATH 115. Calculus I. 3 Hours. GE12 / N.
Elementary differential and integral calculus, with applications in management and the biological sciences. Not open to students with credit in MATH 121. Prerequisite: MATH 101 or MATH 104, or two years of high school algebra and a score of 26 or higher on ACT mathematics, or a qualifying score on the mathematics placement test. LEC.

MATH 116. Calculus II. 3 Hours. NM / N.
Continuation of MATH 115 including exponential, logarithmic, and trigonometric functions, techniques of integration, and the calculus of functions of several variables. Not open to students with credit in MATH 122 or MATH 118. Prerequisite: MATH 115, plus a course in trigonometry, or MATH 121. MATH 103 may be taken concurrently. LEC.

MATH 118. Trigonometry and Calculus. 3-5 Hours. N.
A course combining the material of MATH 103 and MATH 116. Open for only three hours credit to students with credit in MATH 103 or MATH 104, or five hours credit for students who do not have credit in MATH 103 or MATH 104. Not open for credit for students with credit in MATH 116. Prerequisite: MATH 115. LEC.

MATH 119. Differential Calculus. 4 Hours. GE21 / N.
Study of limits and derivatives of algebraic, trigonometric, exponential and logarithmic functions. Curve sketching, optimization and other applications of the derivative. Antiderivatives, Riemann sums, the definite integral, and the fundamental theorem of calculus. Intended to facilitate appropriate transfer credit and course placement. Open for only 1 hour credit to students with credit in MATH 115. Not open for credit to students with credit in MATH 116 or 121. Prerequisite: MATH 103 or MATH 104, or 3 years of college preparatory mathematics including trigonometry, with a score of 28 or higher on the enhanced ACT Mathematics exam. LEC.

MATH 120. Integration Techniques and Applications. 1 Hour. U.
A study of techniques and applications of integration. Techniques include integration by parts, integration by trigonometric substitution, integration by partial fractions and improper integrals. Applications of integration include area, volume, arc length, average value, and physical applications such as work and hydrostatic force. Not open for credit to students with credit in MATH 116 or MATH 121. Prerequisite: MATH 119. LEC.

MATH 121. Calculus I. 5 Hours. GE12 / N.
Differentiation and integration of algebraic and trigonometric functions. Applications to physical sciences and engineering. Open for only two hours credit to students with credit in MATH 115. Prerequisite: MATH 104; or MATH 103; or three years of college preparatory mathematics including trigonometry and a score of 28 or higher on ACT mathematics; or a qualifying score on the mathematics placement test. LEC.

MATH 122. Calculus II. 5 Hours. NM / N.
Sequences and series. Calculus of functions in polar and spherical coordinates. Three-dimensional vector geometry and vector-valued functions. Multivariable calculus: partial derivatives and multiple integration. Open only for three hours credit to students with credit in both MATH 121 and MATH 116. Prerequisite: MATH 121, MATH 141, MATH 116, or MATH 120. LEC.

MATH 125. Calculus I. 4 Hours. N.
Limits, continuity and derivatives of algebraic, trigonometric, exponential and logarithmic functions. Curve sketching, optimization and other applications of the derivative. Antiderivatives, Riemann sums, the definite integral, and the fundamental theorem of calculus. Open for only 1 hour credit to students with credit in MATH 115. Not open for credit to students with credit in MATH 116, MATH 121, MATH 141, or MATH 145. Prerequisite: MATH 103 or MATH 104, with a grade of C- or higher; or 3 years of college preparatory mathematics including trigonometry, with a score of 28 or higher on the ACT Mathematics exam. LEC.

MATH 126. Calculus II. 4 Hours. N.
Multivariable functions, partial derivatives and their applications, multiple integrals and their applications. Vector-valued functions, line and surface
integrals, Green, Gauss and Stokes Theorems. Open for only 2 hours credit to students with credit in MATH 122 or MATH 142. Not open for credit to students with credit in MATH 147, MATH 223 or MATH 243. Prerequisite: MATH 126 or MATH 146, with a grade of C- or higher. LEC.

MATH 141. Calculus I: Honors. 5 Hours. GE12 / N.
Differential and integral calculus and applications. Prerequisite: Three years of college preparatory mathematics including trigonometry, plus either (1) a score of 34 or more on ACT mathematics and a cumulative high school grade-point average of at least 3.5, or (2) a score of 32 or more on ACT mathematics and a cumulative high school grade-point average of at least 3.7. LEC.

MATH 142. Calculus II: Honors. 5 Hours. NM / N.
Transcendental functions, methods of integration, parametric equations, vector algebra and its applications to analytic geometry. Introduction to partial derivatives and multiple integration. Prerequisite: MATH 121, or equivalent, and invitation of the Department of Mathematics. LEC.

MATH 145. Calculus I, Honors. 4 Hours. N.
Limits, continuity and derivatives of algebraic, trigonometric, exponential and logarithmic functions. Curve sketching, optimization and other applications of the derivative. Antiderivatives, Riemann sums, the definite integral, and the fundamental theorem of calculus. Not open for credit to students with credit in MATH 116, MATH 121, MATH 125 or MATH 141. Prerequisite: An ACT Math score of 34 or higher, or membership in the University Honors Program and an ACT Math score of 32 or higher. LEC.

MATH 146. Calculus II, Honors. 4 Hours. N.
Techniques of integration, including integration by parts. Applications of integration, including volume, arc length, work and average value. Infinite sequences and series and Taylor series. Polar coordinates, vectors and the geometry of space. Open for only 2 hours credit to students with credit in MATH 116. Not open for credit to students with credit in MATH 122, MATH 126 or MATH 142. Prerequisite: MATH 121, MATH 125, MATH 141 or MATH 145, with a grade of C- or higher; and invitation of the Department of Mathematics. LEC.

MATH 147. Calculus III, Honors. 4 Hours. N.
Multivariable functions, partial derivatives and their applications, multiple integrals and their applications. Vector-valued functions, line and surface integrals, Green, Gauss and Stokes Theorems. Open for only 2 hours credit to students with credit in MATH 122 or MATH 142. Not open for credit to students with credit in MATH 127, MATH 223 or MATH 243. Prerequisite: MATH 126 or MATH 146, with a grade of C- or higher; and invitation of the Department of Mathematics. LEC.

MATH 177. First Year Seminar: _____. 3 Hours. NM GE11.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in math. May not contribute to major requirements in math. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

MATH 197. Mathematical Workshops: _____. 1-3 Hours. U.
Offered to provide opportunities for deeper understanding of freshman-sophomore mathematics through interactive learning. Topics will vary. May be repeated for additional credit. Prerequisite: Variable. LAB.

MATH 220. Applied Differential Equations. 3 Hours. N.
Linear ordinary differential equations, Laplace transforms, systems of equations, and applications. Not open to those who have taken MATH 320. Prerequisite: MATH 122 or MATH 142, or MATH 126 or MATH 146 with grade of C- or higher; previous or concurrent enrollment in MATH 290 or MATH 291 recommended. LEC.

MATH 221. Applied Differential Equations, Honors. 3 Hours. N.
Linear Ordinary Differential Equations, Laplace Transforms, Systems of Equations, Enrichment Applications. Prerequisite: Linear Ordinary Differential Equations, Laplace Transforms, Systems of Equations, Enrichment Applications. Prerequisite: MATH 122 or MATH 142, or MATH 126 or MATH 146 with grade of C- or higher, and invitation from the Department of Mathematics; previous or concurrent enrollment in MATH 290 or MATH 291 recommended. Not open to students with credit in MATH 320. LEC.

MATH 223. Vector Calculus. 3 Hours. N.
Multivariable calculus, multiple integration, and vector calculus. Prerequisite: MATH 122 or MATH 142 or equivalent. LEC.

MATH 224. Vector Calculus, Honors. 3 Hours. N.
Multivariable Calculus, Multiple Integration, Vector Calculus, Enrichment Applications. Prerequisite: MATH 122 or Math 142 or equivalent, and invitation from the Department of Mathematics. LEC.

MATH 290. Elementary Linear Algebra. 2 Hours. N.
Systems of linear equations, matrices, vector spaces, linear transformations, and applications. Not open to those who have taken MATH 590. Prerequisite: MATH 122 or MATH 142, or MATH 126 or MATH 146 with grade of C- or higher. LEC.

MATH 291. Elementary Linear Algebra, Honors. 2 Hours. N.
Systems of Linear Equations, Matrices, Vector Spaces, Linear Transformations, Enrichment Applications. Prerequisite: MATH 122 or MATH 142, or MATH 126 or MATH 146 with a grade of C- or higher, and invitation from the Department of Mathematics. Not open to students who have taken MATH 590. LEC.

MATH 296. Special Topics: _____. 1-3 Hours. N.
Designed for the study of special topics in mathematics at the freshman/sophomore level. May be repeated for additional credit; does not count toward the major or minor in mathematics. Prerequisite: Variable. LEC.

MATH 299. Directed Reading. 1-5 Hours. N.
Directed reading on a topic chosen by the student with the advice of an instructor. May be repeated for additional credit. Consent of the department required for enrollment. IND.

MATH 320. Elementary Differential Equations. 3 Hours. N.
Linear ordinary differential equations, series solutions. Laplace transforms. Systems of equations. Not open to those who have taken MATH 220. Prerequisite: MATH 223 or MATH 243, or MATH 127 or MATH 147 with a grade of C- or higher, and MATH 290 or MATH 291. LEC.

MATH 365. Elementary Statistics. 3 Hours. GE12 / N.
Elementary descriptive statistics of a sample of measurements; probability; the binomial, Poisson, and normal distributions, populations and sampling from populations; simple problems of statistical inference. May not be counted for junior-senior credit toward a major in mathematics. Not open to students with credit in DSCI 202, BIOL 570, MATH 465, MATH 526, or MATH 628. Prerequisite: MATH 101, MATH 104, or two years of high school algebra and a score of 26 or higher on ACT mathematics, or a qualifying score on the mathematics placement test. LEC.

MATH 409. Topics in Geometry for Secondary and Middle School Teachers. 2 Hours. N.
Study of selected topics from Euclidean, non-Euclidean, and transformation geometry chosen to give breadth to the mathematical background of secondary and middle school teachers. May not be counted for junior-senior credit towards a major in mathematics. Prerequisite: MATH 122 or MATH 126 or MATH 142 or MATH 146.
MATH 147. Cryptography. Prerequisite: MATH 122 or MATH 127 or MATH 142 or MATH 146. Students enrolled in MATH 410 must concurrently enroll in MATH 409. LEC.

MATH 450. Discrete Mathematics. 3 Hours. N.
Basic topics in discrete mathematics including sets, logic, relations and functions, graphs and combinatorics. Advanced topics chosen from partially ordered sets and lattices, Boolean algebras, automata, game theory, coding theory, cryptography, optimization and enumeration. Prerequisite: MATH 122 or equivalent or concurrent enrollment in MATH 122 or MATH 127 or MATH 142 or MATH 147 or concurrent enrollment in MATH 127 or MATH 147. LEC.

MATH 470. Problem Solving. 1-3 Hours. N.
An introduction to the general methods of solving mathematical problems. Particular techniques such as specialization, generalization, contradiction, and induction will be presented. Topics presented may vary from semester to semester. Prerequisite: MATH 122 or equivalent or concurrent enrollment in MATH 122 or MATH 127 or MATH 142 or MATH 147 or concurrent enrollment in MATH 127 or MATH 147. LEC.

MATH 500. Intermediate Analysis. 3 Hours. N.
A careful formulation of convergence and limits of sequences and functions; continuity and properties of continuous functions; differentiation; the Riemann integral; mean-value theorems and the fundamental theorem of calculus. Not open to students with credit in MATH 765. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 290 or MATH 291. LEC.

MATH 510. Introduction to the Theory of Computing. 3 Hours. N.
Finite state automata and regular expressions. Context-free grammars and push-down automata. Turing machines. Models of computable functions and undecidable problems. The course emphasis is on the theory of computability, especially on showing limits of computation. (Same as EECS 510.) Prerequisite: EECS 210 and upper-level EECS eligibility. LEC.

MATH 526. Applied Mathematical Statistics I. 3 Hours. NM / N.
A first course in statistics for students with the techniques of calculus at their disposal. The following topics are studied with illustrations and problems drawn from various fields of applications: basic notions of probability and probability distributions; classical estimation and testing procedures for one and two sample problems; chi-square test. Not open to those with credit in MATH 628 or DSCI 301. Prerequisite: MATH 122 or MATH 127 or MATH 142 or MATH 147 or MATH 116 (MATH 127 or MATH 147 recommended). LEC.

MATH 530. Mathematical Models. 3 Hours. N.
An introduction to mathematical models useful in a large variety of scientific and technical endeavors. Topics include: model construction, Markov chain models, models for linear optimization, graphs as models, and game theory. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 290 or MATH 291. LEC.

MATH 540. Elementary Number Theory. 3 Hours. N.
Divisibility, primes and their distribution, the Euclidean algorithm, perfect numbers, Fermat's theorem, Diophantine equations, applications to cryptography. Prerequisite: MATH 122 or MATH 127 or MATH 142 or MATH 147. LEC.

MATH 542. Vector Analysis. 2 Hours. N.
Vector algebra; vector and scalar fields; line and surface integrals; theorems of Gauss, Green, and Stokes. Curvilinear coordinates. Applications. Introduction to tensor analysis. Not open to those with credit in MATH 143. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 290 or MATH 291. LEC.

MATH 558. Introductory Modern Algebra. 3 Hours. N.
Development of the number systems. Polynomials. Introduction to abstract number systems such as groups and fields. Not open to students with credit in MATH 791. Prerequisite: MATH 290 or MATH 291. LEC.

MATH 559. Modern Geometries. 3 Hours. N.
Selected topics in Euclidean geometry. Synthetic and analytic projective geometry; duality, Desargues' theorem, perspectives, conics, Non-Euclidean and metric projective geometries. Prerequisite: MATH 122 or MATH 127 or MATH 142 or MATH 147. LEC.

MATH 581. Numerical Methods. 3 Hours. N.
An introduction to numerical methods and their application to engineering and science problems. Applied treatment of elementary algorithms selected from the subject areas: finding roots of a single nonlinear equation, numerical differentiation and integration, numerical solution of ordinary differential equations. Emphasis on implementing numerical algorithms using the computer. Not open to students with credit in MATH 781 or MATH 782. Prerequisite: MATH 220 and MATH 290, or MATH 320. LEC.

MATH 590. Linear Algebra. 3 Hours. N.
Vector spaces, linear transformations, and matrices. Canonical forms, Determinants. Hermitian, unitary and normal transformations. Not open to students with credit in MATH 792. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 290 or MATH 291. LEC.

MATH 591. Applied Numerical Linear Algebra. 3 Hours. N.
An introduction to numerical linear algebra. Possible topics include: applied canonical forms, matrix factorizations, perturbation theory, systems of linear equations, linear least squares, singular value decomposition, algebraic eigenvalue problems, matrix functions, and the use of computational software. Not open to students with credit in MATH 780 or MATH 782. Prerequisite: MATH 290 or MATH 291. EECS 138 or equivalent recommended. LEC.

MATH 596. Special Topics: ______. 1-3 Hours. N.
Arranged as needed to present appropriate material to groups of students. May be repeated for additional credit. Prerequisite: Variable. LEC.

MATH 597. Special Topics, Honors: ______. 3 Hours. AE61 / N.
A study of a specialized topic in mathematics. May be repeated for credit when the topic varies. Prerequisite: A previous Honors course in Mathematics or permission of instructor. Other prerequisites depending on topic possible. LEC.

MATH 601. Algebraic Coding Theory. 3 Hours. N.
An introduction to error correcting codes. Included are: linear codes, cyclic codes, BCH codes, and convolutional codes. Prerequisite: MATH 290 or MATH 291. LEC.

MATH 605. Applied Regression Analysis. 3 Hours. N.
The matrix approach to regression. Weighted least squares, transformations, examination of residuals, model selection, and analysis of variance. Prerequisite: MATH 290 or MATH 291, and MATH 526 or MATH 628. LEC.

MATH 611. Time Series Analysis. 3 Hours. N.
An introduction to the theory and computational techniques in time series analysis. Descriptive techniques: trends, seasonality, autocorrelations.
Time series models: autoregressive, moving average, ARIMA models; model specification and fitting, estimation, testing, residual analysis, forecasting. Stationary processes in the frequency domain: Fourier methods and the spectral density, periodograms, smoothing, spectral window. Prerequisite: MATH 122 and a calculus based statistics course. LEC.

MATH 624. Discrete Probability. 3 Hours. N.
Theory and applications of discrete probability models. Elementary combinatorial analysis, random walks, urn models, occupancy problems, and the binomial and Poisson distributions. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 290 or MATH 291. LEC.

MATH 627. Probability. 3 Hours. N.
Introduction to mathematical probability; combinatorial analysis; the binomial, Poisson, and normal distributions; limit theorems; laws of large numbers. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 290 or MATH 291. LEC.

MATH 628. Mathematical Theory of Statistics. 3 Hours. N.
An introduction to sampling theory and statistical inference; special distributions; and other topics. Prerequisite: MATH 627. LEC.

MATH 630. Actuarial Mathematics. 3 Hours. N.
This course is an introduction to some of the notions and computations in actuarial mathematics. Many computations are associated with compound interest with applications to bank accounts, mortgages, pensions, bonds, and annuities. Life contingencies are considered for annuities and insurance. Some introduction to option pricing is given, particularly the Black-Scholes formula. This course provides the background material needed for some of the initial examinations given by the societies for actuaries, including the Financial Mathematics Exam. Prerequisite: MATH 526 or MATH 627 or a comparable course in probability. LEC.

MATH 646. Complex Variable and Applications. 3 Hours. N.
Analytic functions of a complex variable, infinite series in the complex plane, theory of residues, conformal mapping and applications. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243. LEC.

MATH 647. Applied Partial Differential Equations. 3 Hours. N.
Boundary value problems; topics on partial differentiation; theory of characteristic curves; partial differential equations of mathematical physics. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 220 or MATH 221 or MATH 320. LEC.

MATH 648. Calculus of Variations and Integral Equations. 3 Hours. N.
Topics in the calculus of variations, integral equations, and applications. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 220 or MATH 221 or MATH 320. LEC.

MATH 650. Nonlinear Dynamical Systems. 3 Hours. N.
This course provides an introduction to nonlinear ordinary differential equations and dynamical systems theory with an emphasis on applications. Topics covered include the existence and uniqueness of solutions to initial value problems, as well as the qualitative behavior of solutions, including existence of equilibria, periodic and connecting orbits and their stability. Additional topics include an introduction to bifurcation theory and chaos. Prerequisite: MATH 122 or MATH 127 or MATH 142 or MATH 147, and MATH 220 or MATH 221 or MATH 320, and MATH 290 or MATH 291. LEC.

MATH 660. Geometry I. 3 Hours. N.
An introduction to modern geometry. Differential geometry of curves and surfaces, the topological classification of closed surfaces, dynamical systems, and knots and their polynomials. Other topics as time permits. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 290 or MATH 291. LEC.

MATH 661. Geometry II. 3 Hours. N.
Continuation of Math 660. Prerequisite: MATH 660 or permission of instructor. LEC.

MATH 696. Special Topics: ____. 1-3 Hours. N.
Arranged as needed to present appropriate material to groups of students. May be repeated for additional credit. Prerequisite: Variable. LEC.

MATH 699. Directed Reading. 1-3 Hours. AE61 / N.
Directed reading on a topic chosen by the student with the advice of an instructor. May be repeated for additional credit. Consent of the department required for enrollment. IND.

MATH 701. Topics in Mathematics for Teachers: _____. 1-6 Hours.
Material, including both mathematical content and teaching methodology, related to classroom use at various levels, elementary through secondary. Topics may vary. May not be counted for junior-senior credit towards a major in mathematics, nor for graduate credit towards a graduate degree in mathematics. Prerequisite: Permission of instructor. RSH.

MATH 715. Sampling Techniques. 3 Hours.
Statistical methodology of survey sampling. Data analysis and estimation methods for various experimental designs; fixed or random sample sizes, pre-and/or post-stratified samples, and multistage sampling. Estimates of totals, means, ratios and proportions with methods of estimating variances of such estimates. Prerequisite: A post-calculus probability or statistics course. LEC.

MATH 717. Nonparametric Statistics. 3 Hours.
Methods requiring few assumptions about the populations sampled. Topics include quantile tests, tolerance limits, the sign test, contingency tables, rank-sum tests, and rank correlation. Prerequisite: MATH 628 or permission of instructor. LEC.

MATH 722. Mathematical Logic. 3 Hours.
Propositional calculus. First order theories and model theory. Elementary arithmetic and Godel's incompleteness theorems. (Same as EECS 722.) Prerequisite: MATH 665 or MATH 691, or equivalent evidence of mathematical maturity. LEC.

MATH 724. Combinatorial Mathematics. 3 Hours.
Counting problems, with an introduction to Polya's theory; Mobius functions; transversal theory; Ramsey's theorem; Spender's theorem and related results. Prerequisite: MATH 290 and a math course numbered 450 or higher. LEC.

MATH 725. Graph Theory. 3 Hours.
Graphs; trees; connectivity; Menger's theorem; eulerian and hamiltonian graphs; planarity; coloring of graphs; factorization of graphs; matching theory; alternating chain methods; introduction to matroids with applications to graph theory. Prerequisite: MATH 290 and a math course numbered 450 or higher. LEC.

MATH 727. Probability Theory. 3 Hours.
A mathematical introduction to premeasure-theoretic probability. Topics include probability spaces, conditional probabilities and independent events, random variables and probability distributions, special discrete and continuous distributions with emphasis on parametric families used in applications, the distribution problem for functions of random variables, sequences of independent random variables, laws of large numbers, and the central limit theorem. Prerequisite: MATH 223 and MATH 290, or equivalent. LEC.
MATH 728. Statistical Theory. 3 Hours. N.
Theory of point estimation and hypothesis testing with applications. Confidence region methodologies and relations to estimation and testing. Prerequisite: MATH 727 or equivalent. LEC.

MATH 735. Optimal Control Theory. 3 Hours.
An examination of the mathematical methods of deterministic control theory is given by considering some specific examples and the general theory. The methods include dynamic programming, the calculus of variations, and Pontryagin's maximum principle. Various problems of linear control systems, e.g., the linear regulator problem, are solved. Prerequisite: MATH 320 or equivalent. LEC.

MATH 740. Number Theory. 3 Hours.
Divisibility, the theory of congruences, primitive roots and indices, the quadratic reciprocity law, arithmetical functions and miscellaneous additional topics. Prerequisite: MATH 223 and MATH 290, or equivalent. LEC.

MATH 750. Stochastic Adaptive Control. 3 Hours.
Stochastic adaptive control methods. Stochastic processes such as Markov chains and Brownian motion, stochastic integral, differential rule, stochastic differential equations, martingales and estimation techniques. Identification and control of discrete and continuous time linear stochastic systems. Specific applications and simulation results of stochastic adaptive control theory. Prerequisite: MATH 627 and some knowledge of control. LEC.

MATH 765. Mathematical Analysis I. 3 Hours.
MATH 765 and MATH 766 are theoretical courses on the fundamental concepts of analysis and the methods of proof. These two courses include the concept of a real number; limits, continuity, and uniform convergence; derivatives and integrals of functions of one and of several real variables. Prerequisite: MATH 223 and MATH 290, or equivalent. LEC.

MATH 766. Mathematical Analysis II. 3 Hours.
A continuation of MATH 765. Prerequisite: MATH 765. LEC.

MATH 780. Numerical Analysis of Linear Systems. 3 Hours.
Computational aspects of linear algebra, linear equations and matrices, direct and indirect methods, eigenvalues and eigenvectors of matrices, error analysis. Prerequisite: MATH 590 and MATH 781. LEC.

MATH 781. Numerical Analysis I. 3 Hours.
Finite and divided differences. Interpolation, numerical differentiation, and integration. Gaussian quadrature. Numerical integration of ordinary differential equations. Curve fitting. (Same as EECS 781.) Prerequisite: MATH 320 and knowledge of a programming language. LEC.

MATH 782. Numerical Analysis II. 3 Hours.
Direct and iterative methods for solving systems of linear equations. Numerical solution of partial differential equations. Numerical determination of eigenvectors and eigenvalues. Solution of nonlinear equations. (Same as EECS 782.) Prerequisite: MATH 781. LEC.

MATH 783. Applied Numerical Methods for Partial Differential Equations. 3 Hours.
Finite difference methods applied to particular initial-value problems (both parabolic and hyperbolic), to illustrate the concepts of convergence and stability and to provide a background for treating more complicated problems arising in engineering and physics. Finite difference methods for elliptic boundary-value problems, with a discussion of convergence and methods for solving the resulting algebraic system. Variational methods for elliptic problems. Prerequisite: MATH 647 or equivalent. LEC.

MATH 790. Linear Algebra II. 3 Hours.
A theoretical course on the fundamental concepts and theorems of linear algebra. Topics covered are: vector space, basis, dimension, subspace, norm, inner product, Banach space, Hilbert space, orthonormal basis, positive definite matrix, minimal polynomial, diagonalization and other canonical forms, Cayley-Hamilton, spectral radius, dual space, quotient space. Prerequisite: MATH 590. LEC.

MATH 791. Modern Algebra. 3 Hours.
This course includes the following topics: multiplicative properties of the integers and introductions to group theory, ring theory and field theory. Prerequisite: MATH 223 and MATH 290, or equivalent. LEC.

MATH 796. Special Topics. 1-3 Hours.
Arranged as needed to present appropriate material for groups of students. May be repeated for credit. Prerequisite: Variable. LEC.

MATH 799. Directed Readings. 1-3 Hours.
Directed readings on a topic chosen by the student with the advice of an instructor. May be repeated for additional credit. Consent of the department required for enrollment. RSH.

MATH 800. Complex Analysis I. 3 Hours.
Cauchy's theorem and contour integration; the argument principle; maximum modulus principle; Schwarz symmetry principle; analytic continuation; monodromy theorem; applications to the gamma function and Riemann's zeta function; entire and meromorphic functions; conformal mapping; Riemann mapping theorem; univalent functions. Prerequisite: MATH 766 or concurrently with MATH 766. LEC.

MATH 801. Complex Analysis II. 3 Hours.
Continuation of MATH 800. Prerequisite: MATH 800. LEC.

MATH 802. Set Theory. 3 Hours.
Axiomatic set theory; transfinite induction; regularity and choice; ordinal and cardinal arithmetic; miscellaneous additional topics (e.g., extra axioms such as GCH or MA; infinite combinatorics; large cardinals). Prerequisite: MATH 765 or MATH 791, or concurrent enrollment in MATH 765 or MATH 791, or equivalent evidence of mathematical maturity. LEC.

MATH 810. Real Analysis and Measure Theory I. 3 Hours.

MATH 811. Real Analysis and Measure Theory II. 3 Hours.
Continuation of MATH 810. Prerequisite: MATH 810. LEC.

MATH 820. Introduction to Topology. 3 Hours.
General topology. Set theory; topological spaces; connected sets; continuous functions; generalized convergence; product and quotient spaces; embedding in cubes; metric spaces and metrization; compact spaces; function spaces. Prerequisite: MATH 765. LEC.

MATH 821. Algebraic Topology I. 3 Hours.
The fundamental group and covering spaces (including classification); compact surfaces; homology theory; computations (including homotopy invariance) and applications (including Brouwer fixed point theorem); introduction to cohomology theory. Prerequisite: MATH 790 and MATH 791 and MATH 820, or permission of instructor. LEC.

MATH 822. Algebraic Topology II. 3 Hours.
Review of simplicial homology; Lefschetz fixed point theorem and degree theory; singular, cellular, and axiomatic homology; Jordan Brouwer separation theorems; universal coefficient theorems, products in cohomology, homotopy groups, and the Hurewicz Theorem. Prerequisite: MATH 821. LEC.

MATH 824. Algebraic Combinatorics. 3 Hours.
An introduction to the fundamental structures and methods of modern algebraic combinatorics. Topics include partially ordered sets and lattices,
matroids, simplicial complexes, polytopes, hyperplane arrangements, partitions and tableaux, and symmetric functions. Prerequisite: MATH 724 and MATH 791, or permission of the instructor. LEC.

MATH 830. Abstract Algebra. 3 Hours.
A study of some structures, theorems, and techniques in algebra whose use has become common in many branches of mathematics. Prerequisite: MATH 790 and MATH 791. LEC.

MATH 831. Abstract Algebra. 3 Hours.
Continuation of MATH 830. Prerequisite: MATH 830. LEC.

MATH 840. Differentiable Manifolds. 3 Hours.
Multilinear algebra of finite dimensional vector spaces over fields; differentiable structures and tangent and tensor bundles; differentiable mappings and differentials; exterior differential forms; curves and surfaces as differentiable manifolds; affine connections and covariant differentiation; Riemannian manifolds. Prerequisite: MATH 765 and MATH 790. LEC.

MATH 850. Differential Equations and Dynamical Systems. 3 Hours. N.
Discrete and differentiable dynamical systems with an emphasis on the qualitative theory. Topics to be covered include review of linear systems, existence and uniqueness theorems, flows and discrete dynamical systems, linearization (Hartman-Grobman theorem), stable and unstable manifolds, Poincare sections, normal forms, Hamiltonian systems, and an introduction to bifurcation theory and chaos. Prerequisite: MATH 320 and MATH 766, or permission of instructor. LEC.

MATH 851. Topics in Dynamical Systems. 3 Hours. N.
Topics to be covered include complex dynamical systems, perturbation theory, nonlinear analysis of time series, chaotic dynamical systems, and numerical methods as dynamical systems. This course may be repeated for credit. Prerequisite: MATH 850 or permission of instructor. LEC.

MATH 865. Stochastic Processes I. 3 Hours.
Markov chains; Markov processes; diffusion processes; stationary processes. Emphasis is placed on applications: random walks; branching theory; Brownian motion; Poisson process; birth and death processes. Prerequisite: MATH 627 and MATH 765. LEC.

MATH 866. Stochastic Processes II. 3 Hours.
This is a second course in stochastic processes, focused on stochastic calculus with respect to a large class of semi-martingales and its applications to topics selected from classical analysis (linear PDE), finance, engineering, and statistics. The course will start with basic properties of martingales and random walks and then develop into the core program on Ito's stochastic calculus and stochastic differential equations. These techniques provide useful and important tools and models in many pure and applied areas. Prerequisite: MATH 727 and MATH 865. LEC.

MATH 870. The Analysis of Variance. 3 Hours.
The general linear hypothesis with fixed effects; the Gauss-Markov theorem, confidence ellipsoids, and tests under normal theory; multiple comparisons and the effect of departures from the underlying assumptions; analysis of variance for various experimental designs and analysis of covariance. Prerequisite: MATH 628 or MATH 728, and either MATH 590 or MATH 790. LEC.

MATH 872. Multivariate Statistical Analysis. 3 Hours.
The multivariate normal distribution; tests of hypotheses on means and covariance matrices; estimation; correlation; multivariate analysis of variance; principal components; canonical correlation. Prerequisite: MATH 628 or MATH 728, and either MATH 590 or MATH 790. LEC.

MATH 874. Statistical Decision Theory. 3 Hours.
Game theory, admissible decision functions and complete class theorems; Bayes and minimax solutions; sufficiency; invariance; multiple decision problems; sequential decision problems. Prerequisite: MATH 628 and MATH 766. LEC.

MATH 881. Advanced Numerical Linear Algebra. 3 Hours. N.
Advanced topics in numerical linear algebra including pseudo-spectra, rounding error analysis and perturbation theory, numerical methods for problems with special structure, and numerical methods for large scale problems. Prerequisite: Math 781, 782, 790, or permission of the instructor. LEC.

MATH 882. Advanced Numerical Differential Equations. 3 Hours. N.
Advanced course in the numerical solution of ordinary and partial differential equations including modern numerical methods and the associated analysis. Prerequisite: MATH 781, 782, 783, or permission of the instructor. LEC.

MATH 890. Fourier Analysis. 3 Hours.
Introduction to modern techniques in Fourier Analysis in the Euclidean setting with emphasis in the study of functions spaces and operators acting on them. Topics may vary from year to year and include, among others, distribution theory, Sobolev spaces, estimates for fractional integrals and fractional derivatives, wavelets, and some elements of Calderón-Zygmund theory. Applications in other areas of mathematics, in particular partial differential equations and signal analysis, will be presented based on the instructor's and the students' interests. Prerequisite: Math 810 and Math 800, or instructor's permission. LEC.

MATH 896. Master's Research Component. 1-6 Hours.
RSH.

MATH 899. Master's Thesis. 1-10 Hours.
THE.

MATH 905. Several Complex Variables. 3 Hours.
Holomorphic functions in several complex variables, Cauchy's integral for poly-discs, multivariable Taylor series, maximum modulus theorem. Further topics may include: removable singularities, extension theorems, Cauchy-Riemann operator, domains of holomorphy, special domains and algebraic properties of rings of analytic functions. Prerequisite: MATH 800. LEC.

MATH 910. Algebraic Curves. 3 Hours.
Algebraic sets, varieties, plane curves, morphisms and rational maps, resolution of singularities, Reimann-Roch theorem. Prerequisite: MATH 790 and MATH 791. LEC.

MATH 915. Homological Algebra. 3 Hours.
Injective and projective resolutions, homological dimension, chain complexes and derived functors (including Tor and Ext). Prerequisite: MATH 830 and MATH 831, or consent of instructor. LEC.

MATH 920. Lie Groups and Lie Algebras. 3 Hours.
General properties of Lie groups, closed subgroups, one-parameter subgroups, homogeneous spaces, Lie bracket, Lie algebras, exponential map, structure of semi-simple Lie algebras, invariant forms, Maurer-Cartan equation, covering groups, spinor groups. Prerequisite: MATH 766 and MATH 790 and MATH 791. LEC.

MATH 930. Topics in General Topology. 3 Hours.
Paracompact spaces, uniform spaces, topology of continua, Peano spaces, Hahn-Mazurkiewicz theorem, dimension theory, and theory of retracts. Prerequisite: MATH 820. LEC.

MATH 940. Advanced Probability. 3 Hours.
Probability measures, random variables, distribution functions, characteristic functions, types of convergence, central limit theorem.
Laws of large numbers and other limit theorems. Conditional probability, Markov processes, and other topics in the theory of stochastic processes. Prerequisite: MATH 811. LEC.

MATH 950. Partial Differential Equations. 3 Hours.
Introduction; equations of mathematical physics; classification of linear equations and systems. Existence and uniqueness problems for elliptic, parabolic, and hyperbolic equations. Eigenvalue problems for elliptic operators; numerical methods. Prerequisite: MATH 766. LEC.

MATH 951. Advanced Partial Differential Equations II. 3 Hours.
The course uses functional analytic techniques to further develop various aspects of the modern framework of linear and nonlinear partial differential equations. Sobolev spaces, distributions and operator theory are used in the treatment of linear second-order elliptic, parabolic, and hyperbolic equations. In particular we discuss the kind of potential, diffusion and wave equations that arise in inhomogeneous media, with an emphasis on the solvability of equations with different initial/boundary conditions. Then, we will survey the theory of semigroup of operators, which is one of the main tools in the study of the long-time behavior of solutions to nonlinear PDE. The theories and applications encountered in this course will create a strong foundation for studying nonlinear equations and nonlinear science in general. Prerequisite: MATH 950 or permission of the instructor. LEC.

MATH 960. Functional Analysis. 3 Hours.
Topological vector spaces, Banach spaces, basic principles of functional analysis. Weak and weak-topologies, operators and adjoints. Hilbert spaces, elements of spectral theory. Locally convex spaces. Duality and related topics. Applications. Prerequisite: MATH 810 and MATH 820 or concurrent with MATH 820. LEC.

MATH 961. Functional Analysis. 3 Hours.
Continuation of MATH 960. LEC.

MATH 963. C*-Algebras. 3 Hours.
The basics of C*-algebras, approximately finite dimensional C*-algebras, irrational rotation algebras, C*-algebras of isometries, group C*-algebras, crossed products C*-algebras, extensions of C*-algebras and the BDF theory. Prerequisite: MATH 811 or MATH 960, or consent of instructor. LEC.

MATH 970. Analytic K-Theory. 3 Hours.
K0 for rings, spectral theory in Banach algebras, K1 for Banach algebras, Bott periodicity and six-term cyclic exact sequence. Prerequisite: MATH 790 and MATH 791 and MATH 960. LEC.

MATH 990. Seminar. ______. 1-10 Hours.
LEC.

MATH 993. Readings in Mathematics. 1-10 Hours.
RSH.

MATH 996. Special Topics: ______. 3 Hours.
Advanced courses on special topics; given as need arises. Prerequisite: Variable. LEC.

MATH 999. Doctoral Dissertation. 1-10 Hours.
THE.

Museum Studies Courses

MUSE 701. Museum Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as AMS 731, BIOL 785, GEOL 783, and HIST 728.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

MUSE 702. The Nature of Museums. 3 Hours.
The purpose of this course is to provide an overview of the kinds of museums, their various missions, and their characteristics and potentials as research, education, and public service institutions responsible for collections of natural and cultural objects. (Same as AMS 720, BIOL 788, GEOL 782, and HIST 720.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

MUSE 703. Introduction to Museum Exhibits. 3 Hours.
Presentation of principles and practices of exhibit management, design, and production. Topics will include developing a master plan for museum exhibits; concept development; design, installation, and maintenance of exhibits; design theory; design process; label writing and editing; selection of materials architectural requirements and building codes; cost estimating; publicity; security; and exhibit evaluation. Consideration will be given to exhibition problems in public and private museums in the areas of anthropology, art, history, natural history, and technology. (Same as AMS 700, BIOL 787, GEOL 781, and HIST 723.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

MUSE 704. Principles and Practices of Museum Collection Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museum collections, their associated data, and their use in scholarly research; cataloging, storage, fumigation, automated information management and related topics will be presented for museums of art, history, natural history and anthropology. (Same as AMS 730, BIOL 798, GEOL 785, and HIST 725.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

MUSE 705. Introduction to Museum Public Education. 3 Hours.
Consideration of the goals of an institution's public education services, developing programs, identifying potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as AMS 797, BIOL 784, GEOL 784, and HIST 721.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

MUSE 706. Conservation Principles and Practices. 3 Hours.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects will also be considered. (Same as AMS 714, BIOL 700, GEOL 780, and HIST 722.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

MUSE 707. Practical Archival Principles. 3 Hours.
Study of the principles and practices applicable to the preservation, care, and administration of archives and manuscripts. Practical experience will be an integral part of this course. (Same as HIST 727.) LEC.

MUSE 710. Current Trends in Curation and Collection Management. 2 Hours.
Seminar course to provide students with a working knowledge of the primary issues and current trends in building, administration, and care of scientific collections. Topics include permits, collecting, accessioning, cataloging, preservation, preventive conservation, and access to collections and data. The course format consists of readings, lectures, guest speakers, discussions, and visits to scientific collections on campus. (Same as BIOL 706.) LEC.
MUSE 780. Special Topics: _______. 1-3 Hours.
Advanced courses on special topics in museum studies, given as need arises. Lectures, discussions of readings, and guest speakers. Topic for semester to be announced. Prerequisite: Graduate standing in Museum Studies Program or permission of instructor. LEC.

MUSE 782. Seminar in Current Museum Topics: _______. 1-3 Hours.
In-depth examination of specific topics currently of concern to museums and museum professionals. Topic for semester to be announced. Prerequisite: Graduate standing in Museum Studies Program, or permission of instructor. LEC.

MUSE 790. Advanced Study. 1-3 Hours.
Individual research in a specialized topic not ordinarily treated in a Museum Studies core course for which there is a member of the graduate faculty competent and willing to direct a research project. Prerequisite: Consent of instructor. RSH.

MUSE 792. Directed Readings. 1-3 Hours.
Directed reading in an area of Museum Studies in which there is no particular course in the Museum Studies program or in cooperating departments but in which there is a member of the graduate faculty competent and willing to direct a program study. Prerequisite: Consent of instructor. INR.

MUSE 799. Museum Apprenticeship. 1-6 Hours.
Provides directed, practical experience in research, collection, care, and management, public education, and exhibits with emphasis on how to suit the particular requirements of each student. (Same as AMS 799, ANTH 799, BIOL 723, and HIST 799.) FLD.

MUSE 910. Materials Conservation. 3 Hours.
Preservation and collection conservation theory and principles, including condition reporting, conservation of furniture and wooden objects, inorganic-based materials, metal objects, organic-based materials, paintings, photographic materials, textiles, three-dimensional objects, and works on paper. LEC.

MUSE 930. Preventive Conservation. 3 Hours.
Theory and principles of preventive conservation, with emphasis on its application to storage environment quality, archival supports and housings, basic bookbinding, composite objects, integrated pest management, light and lighting, paper evaluation and mending, temperature, and relative humidity. LEC.

MUSE 940. Conservation Assessment. 3 Hours.
Understanding the conservator-curator relationship: principles of conservation assessment, documentation, conservation research, environmental monitoring, handling objects, photographic documentation, and development of a publishable preservation research project. LEC.

MUSE 980. Advanced Conservation. 3 Hours.
Application of conservation theory and practice to exhibition development, planning, and preparation; conservation bookbinding; health and safety in conservation; integrated pest management; ethics of conservation; parameters of professional conservation practice. LEC.

Philosophy Courses

PHIL 140. Introduction to Philosophy. 3 Hours. HR GE11/GE3H / H.
An introductory examination, based primarily on writings of major philosophers, of such central philosophical problems as religious belief, the mind and its place in nature, freedom and determinism, morality, and the nature and kinds of human knowledge. LEC.

PHIL 141. Introduction to Philosophy Honors. 3 Hours. HR GE11/GE3H / H.
An introductory examination, based primarily on writings of major philosophers, of such central philosophical problems as religious belief, the mind and its place in nature, freedom and determinism, morality, and the nature and kinds of human knowledge. Prerequisite: Open only to students in the University Honors Program or by consent of department. LEC.

PHIL 148. Reason and Argument. 3 Hours. GE11/GE3H / H.
An introduction to the theory and practice of logical analysis. Special emphasis is placed upon the logical appraisal of everyday arguments. LEC.

PHIL 150. Philosophical Communication. 3 Hours. GE22 / S.
This course provides an introduction to philosophy, with a focus on the traditional philosophical practice of oral communication and argument. Through exploration of perennial philosophical questions (e.g., Are there different ways of knowing? What makes for a good life? Could computers have minds? Are we obligated to obey the law? What makes you the same person over time?), students develop their ability to participate in various formats of philosophical communication. In this course, students have the opportunity to teach course material to peers, engage in class debates over philosophical issues, and craft short presentations exploring a facet of the course topic. LEC.

PHIL 160. Introduction to Ethics. 3 Hours. HR AE51/GE11/GE3H / H.
An introductory study of the nature of morality and of philosophical bases for the assessment of actions, agents, and institutions. Special emphasis will be placed upon the views of such important philosophers as Aristotle, Hume, Kant, and Mill. Some attention will be paid to applications of moral theory to practice. LEC.

PHIL 161. Introduction to Ethics Honors. 3 Hours. HR AE51/GE11/GE3H / H.
An introductory study of the nature of morality and of philosophical bases for the assessment of actions, agents, and institutions. Special emphasis will be placed upon the views of such important philosophers as Aristotle, Hume, Kant, and Mill. Some attention will be paid to applications of moral theory to practice. Prerequisite: Open only to students in the University Honors Program by consent of department. LEC.

PHIL 177. First Year Seminar: _______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Philosophy. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LAB.

PHIL 180. Introduction to Social and Political Philosophy. 3 Hours. HR AE51/GE3H / H.
An introductory study, based primarily on classic philosophical texts, of such central issues as the justification of governmental authority, the social sources of power, the nature of a just distribution of social resources, competing conceptions of human nature, and the proper limits of governmental interference with individual liberty. LEC.

PHIL 181. Introduction to Social and Political Philosophy, Honors. 3 Hours. HR AE51/GE11/GE3H / H.
An introductory study, based primarily on writings of major philosophers, of such central philosophical problems as religious belief, the mind and its place in nature, freedom and determinism, morality, and the nature and kinds of human knowledge. Prerequisite: Open only to students in the University Honors Program or by consent of department. LEC.
PHIL 200. Study Abroad Topics in Philosophy: _____. 1-6 Hours. H.
This course is designed for the study of special topics in Philosophy. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

PHIL 310. Introduction to Symbolic Logic. 3 Hours. GE11/GE3H / H.
An introduction to the theory and practice of elementary symbolic logic. Special emphasis will be placed upon the logical analysis of mathematical proof and upon a proof of the consistency of elementary logic. LEC.

PHIL 320. Philosophical Issues in the Life Sciences. 3 Hours. HR AE51/GE3H / H.
A philosophical analysis of theoretical and ethical issues that arise in the practice of the life sciences. Discusses the conceptual foundation of the life sciences—evolutionary theory and genetics. Critically explores the use of statistical and non-human-animal models. Examines ethical issues including problems that arise in human and other animal experimentation, obligations to the environment, proper use of patents, and conflicts in professional duties. LEC.

PHIL 350. Philosophical Issues in Religion. 3 Hours. GE3H / H.
This course will consider, from a philosophical perspective, some of the problems in religion which arise in the development of “Natural Theology” broadly conceived. (Same as REL 380.) LEC.

PHIL 360. Moral Issues in Business. 3 Hours. AE51 / H.
After a brief survey of techniques of moral argument and analysis, particular moral issues related to business will be discussed. These will include such topics as advertising, conflict of interest, personal and corporate responsibility, codes of conduct, private property, strikes, just wage, and the tension between moral ideals and business pressures. LEC.

PHIL 365. Moral Issues in the Professions. 3 Hours. H.
An analysis of the nature and justification of standards of professional conduct. Issues of professional behavior that concern more than one profession such as fidelity to a client’s interests, candor, confidentiality, obligations to human research subjects, obligations to uphold professional standards, professional strikes, and affirmative action will be discussed. LEC.

PHIL 368. Moral Issues in Sports. 3 Hours. H.
This course is a philosophical investigation of the nature and value of sports. Provides students with an overview of ethical theory and considers principled answers to questions about the values of sports and about how those values can be sustained or demeaned. Students debate a variety of live controversies in sports today such as drugs, cheating, sexism, racism, the role of sports in educational institutions, Title IX, commercialization, and violence. LEC.

PHIL 370. Moral Issues in Medicine. 3 Hours. H.
After a brief survey of techniques of moral argument and analysis, particular moral issues related to medicine will be discussed. The justification and limits of some rules of professional conduct that deal with such matters as confidentiality, truth-telling, and protection of medical research subjects will be considered. Issues relating to death and dying in medicine such as abortion, euthanasia, and the refusal of life-saving medical therapy also will be discussed. LEC.

PHIL 375. Moral Issues in Computer Technology. 3 Hours. AE51 / H.
After surveying the nature of ethics and morality and learning some standard techniques of moral argumentation, we shall examine such topics as: property and ownership rights in computer programs and software; privacy in computer entry and records; responsibility for computer use and failure; the “big brother” syndrome made possible by extensive personal data banks; censorship and the world-wide web; computer illiteracy and social displacement; and ethical limits to computer research. Prerequisite: EECS 168 or permission of instructor. LEC.

PHIL 380. Environmental Ethics. 3 Hours. AE51 / H.
After a brief survey of techniques of moral argument and analysis, particular moral issues related to the environment will be discussed. These will include such topics (one of which may be dealt with in depth) as animal rights, rights of future generations, wilderness preservation, population control, endangered species, and economics and public policy. Prerequisite: EVRN 148 or consent of instructor. LEC.

PHIL 381. Feminism and Philosophy. 3 Hours. AE41/GE3H / H.
An examination of topics of philosophical interest that are important in the feminist movement such as the nature of sexism, the concept of sexual equality, the ethics of sexual behavior, the nature of love, feminist analyses of the value of marriage and family, the ethics of abortion, and justifications for preferential treatment of women. (Same as WGSS 381.) LEC.

PHIL 384. Ancient Philosophy. 3 Hours. HR GE3H / H.
A survey of the thought of the principal philosophers of ancient Greece, with emphasis on the pre-Socratics, Plato, and Aristotle. LEC.

PHIL 386. Modern Philosophy from Descartes to Kant. 3 Hours. HR GE3H / H.
A survey of the writings of such principal philosophers of the modern period as Descartes, Spinoza, Leibniz, Hobbes, Locke, Berkeley, Hume, and Kant. LEC.

PHIL 388. Analytic Philosophy: Frege to Quine. 3 Hours. H.
An introduction to the principal figures in the philosophical tradition that forms the background to contemporary investigations in analytic philosophy of language. Particular attention will be paid to Frege, Russell, Wittgenstein, and Quine. Prerequisite: PHIL 310 or equivalent, or PHIL 310 may be taken concurrently. LEC.

PHIL 418. Introduction to Cognitive Science. 3 Hours. S.
Examines the data and methodologies of the disciplines that comprise Cognitive Science, an inter-disciplinary approach to studying the mind and brain. Topics may include: consciousness, artificial intelligence, linguistics, education and instruction, neural networks, philosophy, psychology, anthropology, evolutionary theory, cognitive neuroscience, human-computer interaction, and robotics. (Same as LING 418, PSYC 418, and SPLH 418.) Prerequisite: Consent of instructor. LEC.

PHIL 499. Senior Essay. 3 Hours. AE61 / H.
This course is required, in addition to regular major requirements, of those students wishing to work for departmental honors in Philosophy. Students wishing to enroll should first speak with the departmental adviser for majors. Prerequisite: Open to senior majors in Philosophy by consent of instructor. IND.

PHIL 500. Studies in Philosophy: _____. 1-6 Hours. H.
(Topic, instructor, and specific prerequisite to be announced in Schedule of Classes.) A study of particular philosophical problems or thinkers not covered by other courses. The course may be offered concurrently by different instructors under different subtitles, and may, with the consent of the chair, be taken more than once if content varies. LEC.

PHIL 504. Philosophy of Sex and Love. 3 Hours. H.
A discussion of philosophical issues such as the relation between love, autonomy, and friendship; heterosexual and homosexual relationships; marriage and adultery; rape and sexual harassment; prostitution; and pornography. LEC.

PHIL 506. Chinese Thought. 3 Hours. NW AE42/GE3H / H/W.
A survey of the principal modes of Chinese thought from their origins through the imperial period. Not open to students with credit in EALC 132.
A survey of the major works of Plato, with attention both to Plato's distinctive arguments and positions in the major areas of philosophy and to the distinctive literary form in which Plato presents his thinking. Prerequisite: PHIL 384. LEC.

PHIL 607. The Philosophy of Aristotle. 3 Hours. H.
A survey of the major works of Aristotle, with the aim of understanding Aristotle's distinctive formulations of central philosophical questions, the arguments he presents for his answers to those questions, and the systematic interconnections between his positions in the different areas of philosophy. Prerequisite: PHIL 384. LEC.

PHIL 608. Hellenistic Philosophy. 3 Hours. H.
Survey of Stoicism, Epicureanism, and Scepticism from their beginnings through the second century AD. Prerequisite: PHIL 384 and another course in philosophy. LEC.

PHIL 610. Symbolic Logic. 3 Hours. H.
Propositional calculus, predicate calculus, consistency, decidability of formal systems, the paradoxes and number concept will be covered. LEC.

PHIL 611. Topics in Symbolic Logic: _____ 1-3 Hours. H.
This course is a workshop in any of a variety of topics in symbolic logic of special importance to contemporary analytic philosophy, such as modal logic, tense logic, axiomatic set theory, Goedel's theorems, model theory, etc. May be repeated for credit as topics vary. Prerequisite: PHIL 310. LEC.

PHIL 620. Philosophy of Natural Science. 3 Hours. H.
An examination of conceptual and foundational issues in the natural sciences. Topics may include the methodology of science (the nature and status of laws, the precise way in which experiment contributes to theory) and puzzles concerning the content of science (the status of space and time, the problematic nature of quantum mechanics). Prerequisite: PHIL 310 or PHIL 610, or permission of instructor. LEC.

PHIL 622. Philosophy of Social Science. 3 Hours. H.
A critical examination of the methods, concepts, and practices of the social sciences. Topics to be considered may include: theories of explanation, methodological individualism vs. holism, objectivity, the role of rationality, myth and the unconscious in the explanation of behavior, and the value neutrality of science. Prerequisite: One previous course in philosophy, or permission of instructor. LEC.

PHIL 628. Philosophy of Logic. 3 Hours. H.
A systematic treatment of logical theory. Different types of logic will be studied along with their philosophical assumptions, motivations, implications, and uses. Prerequisite: PHIL 310 or PHIL 610. LEC.

PHIL 630. Philosophy of Mathematics. 3 Hours. H.
An examination of varying conceptions of the role and status of mathematical arguments. Topics may include realism/anti-realism, the consequences of Goedel's Incompleteness Theorems, the role of mathematics in the sciences, and an examination of such historical thinkers as Plato, Frege, Russell, Wittgenstein, Goedel, and Hilbert. Prerequisite: PHIL 310 or PHIL 610, or permission of instructor. LEC.

PHIL 638. Philosophy of Language. 3 Hours. AE61 / H.
An examination of the nature of language using the methods of analytic philosophy. Topics may include meaning, truth, reference, language and thought, and the nature of linguistic rules. Prerequisite: PHIL 388 or permission of instructor. LEC.

PHIL 648. Theory of Knowledge. 3 Hours. AE61 / H.
An examination of the nature of knowledge. Topics may include the concept of knowledge, knowledge of the external world, induction, theories of justification, and scientific knowledge. Prerequisite: PHIL 384 and PHIL 386, PHIL 388 (which may be taken concurrently), or permission of instructor. LEC.
PHIL 843. Heidegger. 3 Hours.
Prerequisite: PHIL 560 or PHIL 562 or PHIL 570 or PHIL 582 or PHIL 590 or PHIL 592 or permission of instructor. LEC.

PHIL 848. Wittgenstein. 3 Hours.
Prerequisite: PHIL 638 or PHIL 650 or PHIL 654 or permission of instructor. LEC.

PHIL 850. Topics in Recent Philosophy: ______. 3 Hours.
This course may be offered by different instructors under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic, instructor, and specific prerequisite to be announced in Schedule of Classes. Prerequisite: 500-600 level as specified or permission of instructor. LEC.

PHIL 852. Quine. 3 Hours.
A systematic study of the major work of W. V. Quine and its influence on subsequent analytic philosophy. Topics will include Quine's theory of meaning, philosophical logic, and philosophy of science. Prerequisite: PHIL 638 or PHIL 648 or PHIL 650 or PHIL 654 or permission of instructor. LEC.

PHIL 855. Davidson. 3 Hours.
An examination of Donald Davidson's seminal work in philosophy of language and philosophy of mind. Among the topics to be considered will be meaning, truth, interpretation, action, and propositional attitudes. Prerequisite: PHIL 638 or PHIL 654 or permission of instructor. LEC.

PHIL 860. Topics in Philosophy of Science: ______. 3 Hours.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 620 or PHIL 622 or PHIL 648 or PHIL 650 or permission of instructor. LEC.

PHIL 862. Topics in Logic: ______. 3 Hours.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 610 or PHIL 628 or PHIL 630 or permission of instructor. LEC.

PHIL 868. Topics in Philosophy of Language: ______. 3 Hours.
This course may be offered under different subtitles and may be taken more than once if the subject matter varies sufficiently. Prerequisite: PHIL 638 or permission of instructor. LEC.

PHIL 870. Topics in Metaphysics: ______. 3 Hours.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 650 or permission of instructor. LEC.

PHIL 872. Topics in Theory of Knowledge: ______. 3 Hours.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 648 or permission of instructor. LEC.

PHIL 877. Topics in Philosophy of Mind: ______. 3 Hours.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 654 or permission of instructor. LEC.

PHIL 880. Topics in Ethics: ______. 3 Hours.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 670 or PHIL 672 or permission of instructor. LEC.

PHIL 884. Topics in Social and Political Philosophy: ______. 3 Hours.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 555 or PHIL 666 or PHIL 668 or PHIL 674 or permission of instructor. LEC.

PHIL 885. Topics in Law and Philosophy. 3 Hours.
Explores various topics at the intersection of law and philosophy. Content varies but may include: What is freedom and what role should government play in a free society? What is equality and what is the best way to achieve it? What is the relationship between law and social justice? What is the source and value of human rights? Should social and economic rights be legally guaranteed? How should government redress historical injustices such as slavery, apartheid, and the Holocaust? Students must complete a substantial seminar paper. (Same as LAW 962.) LEC.

PHIL 886. Topics in Applied Ethics: ______. 3 Hours.
This course may be offered under different subtitles, such as professional ethics or some issue in business ethics (e.g., corporate responsibility) or in medical ethics (e.g., the definition of death); it may be taken more than once if the subject matter varies sufficiently. Topic, instructor, and specific prerequisite to be announced in Schedule of Classes. Prerequisite: PHIL 670 or PHIL 672 or 500-600 level course as specified or permission of instructor. LEC.

PHIL 888. Topics in the Philosophy of the Social Sciences: ______. 3 Hours.
This course may be offered under different subtitles, such as philosophy of a particular social science (e.g., economics, psychology) or a particular issue in the social sciences (e.g., ideology, reductionism), and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 622 or permission of instructor. LEC.

PHIL 890. Topics in Continental Philosophy: ______. 3 Hours.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topics, instructor, and specific prerequisites to be announced in the Schedule of Classes. LEC.

PHIL 899. Master's Thesis. 1-6 Hours.
Six hours of credit will be awarded upon completion of the master's thesis, but no more than six hours of credit may be obtained in this course altogether. Graded on a satisfactory/unsatisfactory basis. THE.

PHIL 900. Research in Philosophy: ______.1-3 Hours.
Intensive research in philosophy. This course may be taken through individual arrangement, or in connection with small research seminars which are offered occasionally. Students may only enroll for three hours in any given semester. May be repeated if content varies significantly. Prerequisite: Twelve hours of graduate work. RSH.

PHIL 901. Ph.D. Tutorial. 3 Hours.
Independent research on any topic that a graduate student and a faculty member shall agree on. It shall result in a tightly focused 20-30 page paper. The student's written work will be repeatedly evaluated over the semester by the director, and the final product must be defended in an oral examination conducted by a three-member faculty committee (including the director). Prerequisite: Students must be admitted to the Ph.D. program and have successfully completed the Ph.D. core courses requirement. RSH.
PHIL 999. Dissertation. 1-12 Hours.
This course may be taken more than once, but not for more than twelve hours of credit in any one semester. Graded on a satisfactory/unsatisfactory basis. THE.

Physics Astronomy Courses

ASTR 177. First Year Seminar: _______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Astronomy. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

ASTR 190. Astronomy and Civilization. 3 Hours. N.
A survey course that describes the interplay between the science of astronomy and cultural beliefs. It uses, among others, examples of how religious and philosophical tenets have enhanced or conflicted with scientific principles. Not for astronomy majors. LEC.

ASTR 191. Contemporary Astronomy. 3 Hours. NP GE3N / N.
The structure and evolution of the universe, from nearby planets to distant quasars, are examined. Topics include recent discoveries concerning planets, stars, pulsars and black holes as well as their evolution, the structure of the universe today and how it will be in the future. The emphasis is descriptive rather than mathematical. Prerequisite: Eligibility for MATH 101. LEC.

ASTR 293. Astronomy Bizarre. 3 Hours. GE3N / N.
An exploration of physical phenomena found in astrophysical extremes. Topics may include the following: the most violent explosions in the Universe (supernovae and gamma ray bursts); the biggest collisions in nature (galaxy interactions); the densest and most bizarre forms of matter (white dwarfs, neutron stars); the strongest magnetic fields (magnetars, pulsars); the amazing range of exo-planetary properties; and the mysteries of black holes. Prerequisite: Eligibility for MATH 101. LEC.

ASTR 290. Undergraduate Problems. 1-3 Hours. AE61 / N.
Undergraduate observational or theoretical problems in astronomy. Maximum credit, six hours. Prerequisite: Permission of department. IND.

ASTR 291. Physical Astronomy, Honors. 3 Hours. NP GE12/GE3N / N.
An honors, calculus-based introduction to astronomy and astrophysics, required for astronomy majors. Components of the Universe - from planetary systems, stellar systems, large scale structure and cosmology - are examined to illuminate the physical principles which govern their evolution. Prerequisite: MATH 125, and either permission of instructor, or participation in the University Honors Program. LEC.

ASTR 394. The Quest for Extraterrestrial Life. 3 Hours. NP GE11 / N.
An introduction to the search for planets around other stars and for life in the universe beyond the earth. A discussion of the astronomical conditions under which life might form and the biological conditions of life formation and evolution. Methods of searching for extraterrestrial life. Prerequisite: An introductory course in biology, astronomy or geology. LEC.

ASTR 400. Topics in Astronomy: _______. 1-3 Hours. N.
A course on special topics in astronomy. Course may be repeated for different topics. Each section may have additional prerequisites to be determined by the instructor. LEC.

ASTR 503. Undergraduate Research. 1-4 Hours. AE61 / N.
This course is for students seeking to fulfill the undergraduate research requirement. Students are expected to participate in some area of ongoing research in the department, chosen with the help of their advisor. At the end of the term, students will present their results in a seminar to other students and faculty. (Same as EPHX 503 and PHSX 503.) Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics, or permission of instructor. IND.

ASTR 591. Stellar Astronomy. 3 Hours. N.
Fundamentals of stellar astronomy including astronomical optics and techniques, coordinate and time systems, stellar spectroscopy, properties of normal, binary and variable stars. Prerequisite: PHSX 212 and PHSX 236. An introductory astronomy course is desirable. LEC.

ASTR 592. Galactic and Extragalactic Astronomy. 3 Hours. N.
A study of stellar groups, the interstellar medium, galactic structure and dynamics, galaxies, and cosmology. Prerequisite: ASTR 591 or consent of instructor. LEC.

ASTR 596. Observational Astrophysics. 2 Hours. AE61 / N.
Students acquire practical experience with astronomical equipment and data reduction techniques used in research and educational contexts. ASTR 596, combined with an independent research experience, provides a pathway for students to demonstrate creativity and integration of background knowledge. Prerequisite or corequisite: ASTR 591. LEC.

ASTR 597. Analysis in Astrophysics. 1-3 Hours.
A seminar designed to cover current topics in the physics of the Universe beyond the solar system. Content will vary. Graduate students engaged in or preparing for research may repeat enrollments in this course. Open to undergraduates with twelve hours of physics/astronomy courses numbered 500 or above, or consent of instructor. LEC.

ASTR 598. Advanced Astrophysics. 3 Hours.
Topics in advanced astrophysics. Maximum credit, six hours. Prerequisite: ASTR 598 or consent of instructor. LEC.

ASTR 691. Astrophysics I. 3 Hours. N.
The formation and evolution of stars, nucleosynthesis of the elements, and the physical processes of high energy physics. Prerequisite: ASTR 691 or consent of instructor. LEC.

ASTR 791. Seminar in Astrophysics. 1-3 Hours.
Seminar designed to cover current topics in the physics of the Universe beyond the solar system. Content will vary. Graduate students engaged in or preparing for research may repeat enrollments in this course. Open to undergraduates with twelve hours of physics/astronomy courses numbered 500 or above. Prerequisite: ASTR 692 or permission of instructor. LEC.

ASTR 792. Topics in Advanced Astrophysics. 3 Hours.
This course will address one or more of the following advanced topics in astrophysics: high energy astrophysics, nuclear astrophysics, galactic and extragalactic astrophysics, space physics, cosmology, astrobiophysics, and the interstellar and intergalactic media (ISM/IGM.) This course may be repeated for credit if topical content differs. (Same as PHSX 792.) Prerequisite: ASTR 692 or permission of instructor. LEC.

ASTR 795. Space Plasma Physics. 3 Hours.
The physics of fully ionized gases in magnetic fields and their application to interplanetary processes, planetary radiation belts, and the surface of the sun. The motion of charged particles in magnetic fields, magnetohydrodynamic waves, the solar wind and the magnetosphere. (Same as PHSX 795.) Prerequisite: PHSX 621. Corequisite: PHSX 631. LEC.

ASTR 815. Computational Physics and Astronomy. 3 Hours.
Advanced computer applications in physics and astronomy. General discussion and illustration of problem organization and solution by numerical and other methods with examples from plasma, space, solid state, elementary particle, and nuclear physics and astronomy. Students will design, write, validate, and document a computer program to solve a physical problem. (Same as PHSX 815 and CHEM 914.) Prerequisite:
Six hours of computer science courses numbered 300 or above, and six hours of physics and/or astronomy courses numbered 300 or above. LEC.

ASTR 897. Seminar in Plasma and Space Physics. 1-3 Hours.
Graduate students engaged in or preparing for research may repeat enrollments in this course. The content will vary. (Same as PHSX 897.) LEC.

PHSX 111. Introductory Physics. 3 Hours. NP GE11/GE3N / N.
A one-semester survey of classical and modern physics, designed primarily for liberal arts students. Typical subjects include the laws of motion, gravity, electricity and magnetism, sound, light, quantum mechanics, atomic and subatomic physics. Subjects are treated mainly conceptually with some use of basic data. Prerequisite: Eligibility for MATH 104. LEC.

PHSX 112. Concepts in Physics, Honors. 3 Hours. NP GE3N / N.
A discussion of important concepts in physics. While basic concepts such as force, energy, and mass will be introduced as needed, the emphasis will be on an understanding and appreciation of contemporary science. Prerequisite: Eligibility for MATH 104 and participation in the University Honors Program or permission of instructor. LEC.

PHSX 114. College Physics I. 1-4 Hours. NP GE11/GE12/GE3N / N.
Principles and applications of mechanics, fluids, heat, thermodynamics, and sound waves. Three class hours and one laboratory per week. This course emphasizes the development of quantitative concepts and problem solving skills for students needing a broad background in physics as part of their preparation in other major programs, and for those who wish to meet the laboratory science requirement of the College. In special circumstances, permission to enroll in less than four hours may be obtained from the department. Not open to students with credit in PHSX 211 or PHSX 216 or PHSX 212 or PHSX 236. Prerequisite: MATH 104, or three and one-half years of college-preparatory mathematics including trigonometry and a score of 25 or higher on ACT mathematics. LEC.

PHSX 115. College Physics II. 1-4 Hours. N.
A continuation of PHSX 114. Principles and applications of electricity, magnetism, light, atomic physics, and nuclear physics. Three class hours and one laboratory per week. In special circumstances, permission to enroll in less than four hours may be obtained from the department. Not open to students with credit in PHSX 212 or PHSX 236. Prerequisite: PHSX 114. LEC.

PHSX 116. Introductory Physics Laboratory. 1 Hour. U.
A laboratory exploring classical and modern physics, designed primarily for liberal arts students. Experiments in motion gravity, electricity and magnetism, sound, light, atomic and subatomic physics are designed to teach physics concepts and basic laboratory techniques. One two-hour lab period per week. Counts as a laboratory science when preceded or accompanied by PHSX 111. Prerequisite: Eligibility for MATH 104. Corequisite: PHSX 111. LAB.

PHSX 150. Seminar in Physics, Astronomy and Engineering Physics. 0.5 Hours. N.
This course is intended for all students in physics, astronomy and engineering physics. Course content includes topics of current interest in all fields of physics and astronomy. LEC.

PHSX 177. First Year Seminar: ___, 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Physics. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

PHSX 201. Transition to General Physics. 1 Hour. N.
Classical mechanics and thermodynamics with calculus for students who have had a prior algebra-based course. Prerequisite: PHSX 114, either MATH 116 or 125; co-requisite MATH 126; and permission of the department. LEC.

PHSX 202. Calculus Supplement to College Physics II. 1 Hour. N.
A calculus-based course in electricity and magnetism for students who have had an algebra-based course in electricity and magnetism. This course, combined with PHSX 115, covers the content of PHSX 212. Prerequisite: PHSX 115 and permission of the department. Corequisite: MATH 126. LEC.

PHSX 210. General Physics I for Engineers. 3 Hours. GE11 / N.
Introduction to classical mechanics and thermodynamics designed for students in the School of Engineering. Students not admitted to the School of Engineering must receive permission from instructor. PHSX 210 and PHSX 211 cannot both be taken for credit. Students with credit in PHSX 114 can obtain only one hour of credit. Prerequisite: MATH 121 with a grade of C or better; courses in high school physics and/or chemistry recommended. LEC.

PHSX 211. General Physics I. 1-4 Hours. NP GE11/GE12/GE3N / N.
Introduction to classical mechanics and thermodynamics. Designed for students in engineering and physical science majors. In special circumstances, permission to enroll for fewer than four hours credit may be obtained from the department. Students with credit in PHSX 114 can obtain only one hour of credit. Prerequisite: MATH 116 or MATH 125; co-requisite MATH 126; courses in high school physics and/or chemistry are recommended. LEC.

PHSX 212. General Physics II. 1-3 Hours. GE3N / N.
Study of electricity and magnetism, waves and sound. In special circumstances, permission to enroll for fewer than three hours credit may be obtained from the department. Students with credit in PHSX 115 can obtain only one hour of credit. Prerequisite: PHSX 211, PHSX 210 or PHSX 213. MATH 116 or MATH 125; Co-requisite: MATH 126. LEC.

PHSX 213. General Physics I Honors. 1-5 Hours. NP GE11/GE12/GE3N / N.
An honors section of PHSX 211 and PHSX 216. Credit for fewer than five hours requires permission of the department. Recommended for students with a strong math background who are either in the University Honors Program or intending to major in a physical science. Courses in high school physics and chemistry are strongly recommended. Prerequisite: MATH 125; co-requisite MATH 126; and permission of instructor. LEC.

PHSX 214. General Physics II Honors. 1-4 Hours. N.
An honors section of PHSX 212 and PHSX 236. Credit for fewer than four hours requires permission of the department. Recommended for students with a strong math background who are either in the University Honors Program or intending to major in a physical science. Prerequisite: PHSX 216 together with either PHSX 211 or PHSX 210; or PHSX 213, and permission of instructor. Co-requisite: MATH 127. LEC.

PHSX 216. General Physics I Laboratory. 1 Hour. N.
Experiments in classical mechanics and thermodynamics. Counts as a laboratory science when accompanied by PHSX 210 or PHSX 211. Pre-or Corequisite: PHSX 210 or PHSX 211. LAB.

PHSX 236. General Physics II Laboratory. 1 Hour. N.
Experiments in electricity and magnetism, waves and sound. Pre-or Corequisite: PHSX 212. LAB.

PHSX 313. General Physics III. 3 Hours. GE3N / N.
Introduction to modern physics. Topics include special relativity, optics, and introductions to quantum mechanics and solid state physics.
Prerequisite: PHSX 212 and PHSX 236 or PHSX 214 or EECS 220. Corequisite: MATH 320 or MATH 220. LEC.

PHSX 316. Intermediate Physics Laboratory I. 1 Hour. U.
Experiments in optics and modern physics. Development of experimental skills, data reduction, error analysis, and technical writing. One lab meeting per week and one lecture per week on topics including error analysis and experimental design. Pre-or corequisite: PHSX 313. LAB.

PHSX 400. Topics in Physics and Astronomy: ______. 1-3 Hours. N.
A course on special topics in physics and astronomy, given as the need arises. Course may be repeated for different topics. Each section may have prerequisites to be determined by the instructor. LEC.

PHSX 500. Special Problems. 1-5 Hours. AE61 / N.
Work in some area of physics beyond the topics or material covered in other courses. For some problems, continued enrollment in consecutive semesters may be appropriate. Prerequisite: One junior-senior course in science in an area related to the problem and consent of instructor. IND.

PHSX 501. Honors Research. 1-4 Hours. AE61 / N.
This course is to enable students seeking departmental Honors in Astronomy, Engineering Physics, or Physics to fulfill the undergraduate research requirement. At the completion of the required 4 hours of total enrollment, a written and oral report of the research is required. (Same as EPHX 501.) Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics, or permission of instructor. IND.

PHSX 502. Seminar in Physics and Astronomy Instruction. 1-3 Hours. N.
One meeting per week to plan and report progress on projects which may include tutoring of students in personalized modes of study; developing, administering, and scoring test items; designing and improving demonstration and laboratory experiments. Amount of credit depends on projects contracted for and completed. (Distribution credit given for two-three hours only.) Prerequisite: Evidence of prior academic experience relevant to the student’s proposed activities in the seminar and permission of instructor. LEC.

PHSX 503. Undergraduate Research. 1-4 Hours. AE61 / N.
This course is for students seeking to fulfill the undergraduate research requirement. Students are expected to participate in some area of ongoing research in the department, chosen with the help of their advisor. At the end of the term, students will present their results in a seminar to other students and faculty. (Same as ASTR 503 and EPHX 503.) Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics, or permission of instructor. IND.

PHSX 511. Introductory Quantum Mechanics. 3 Hours. N.
An introduction to quantum mechanics, emphasizing a physical overview. Topics should include the formalisms of non-relativistic quantum mechanics, the 3-dimensional Schrodinger equation with applications to the hydrogen atom; spin and angular momentum; multi-particle systems of Fermi-Dirac and Bose-Einstein particles; time-independent perturbation theory. (Same as EPHX 511.) Prerequisite: PHSX 313 and MATH 290. LEC.

PHSX 516. Physical Measurements. 4 Hours. N.
A laboratory course emphasizing experimental techniques and data analysis, as well as scientific writing and presentation skills. Experiments will explore a range of classical and modern physics topics. (Same as EPHX 516.) Prerequisite: PHSX 313, PHSX 316 and PHSX 521. (PHSX 521 may be taken concurrently.) LAB.

PHSX 518. Mathematical Physics. 3 Hours. N.
Applications of modern mathematical methods to problems in mechanics and modern physics. Techniques include application of partial differential equations and complex variables to classical field problems in continuous mechanics, unstable and chaotic systems, electrodynamics, hydrodynamics, and heat flow. Applications of elementary transformation theory and group theory, probability and statistics, and nonlinear analysis to selected problems in modern physics as well as to graphical representation of experimental data. Prerequisite: PHSX 313 and MATH 320 or permission of instructor. (Same as EPHX 518.) LEC.

PHSX 521. Mechanics I. 3 Hours. N.
Newton’s laws of motion. Motions of a particle in one, two, and three dimensions. Motion of a system of particles. Moving coordinate systems. (Same as EPHX 521.) Prerequisite: PHSX 211 and PHSX 216, or PHSX 213; MATH 223; MATH 290; and MATH 220 or MATH 320. LEC.

PHSX 528. Geodynamics and Plate Tectonics. 3 Hours. N.
Study of physical processes in the solid Earth and of geophysical approaches to studying Earth systems at regional and global scales. Topics include global potential fields, thermal regime, rheology and Earth deformation, earthquakes and seismic structure, plate motions and global tectonics. (Same as GEOL 573) Prerequisite: An introductory course in geology; MATH 116 or MATH 122; and PHSX 115, PHSX 214, or PHSX 212 and PHSX 236. LEC.

PHSX 531. Electricity and Magnetism. 3 Hours. N.
The properties of electric and magnetic fields, including electrostatics, Gauss’ Law, boundary value methods, electric fields in matter, electromagnetic induction, magnetic fields in matter, the properties of electric and magnetic dipoles, and of dielectric and magnetic materials. (Same as EPHX 531.) Prerequisite: PHSX 214, or PHSX 212 and PHSX 236; PHSX 521 or special permission; MATH 223; MATH 290; and MATH 220 or MATH 320. LEC.

PHSX 536. Electronic Circuit Measurement and Design. 4 Hours. N.
A laboratory course that explores the theory and experimental techniques of analog and digital electronic circuit design and measurements. Topics include transient response, transmission lines, transistors, operational amplifiers, and digital logic. (Same as EPHX 536.) Prerequisite: PHSX 214 or PHSX 212 and PHSX 236; PHSX 521 or special permission; MATH 223; MATH 290; and MATH 220 or MATH 320. LAB.

PHSX 557. Topics in Mechanics, Properties of Materials, Thermodynamics. 1-3 Hours.
This course covers the principles and applications of classical mechanics, fluids, heat, thermodynamics and sound. Teaching of these topics is strongly emphasized. Some laboratory work is included. This course is intended for students accepted to the BS Education major in Physics. This course does not count towards Physics or Astronomy major requirements in the College of Liberal Arts and Sciences. Prerequisite: Math 115 and 116, and either PHSX 114 or PHSX 211. LEC.

PHSX 558. Topics in Electricity and Magnetism and Optics. 1-3 Hours.
This course covers the principles and applications of electricity, magnetism and optics. Teaching of these topics is strongly emphasized. Some laboratory work is included. This course is intended for students accepted to the BS Education major in Physics. This course does not count towards Physics or Astronomy major requirements in the College of Liberal Arts and Sciences. Prerequisite: Math 115 and 116, and either PHSX 115 or PHSX 212. LEC.

PHSX 559. Topics in Modern Physics. 1-3 Hours.
This course covers the principles and applications of quantum mechanics, atomic and nuclear physics. Teaching of these topics is strongly emphasized. Some laboratory work is included. This course is intended for students accepted to the BS Education major in Physics. This course does not count towards Physics or Astronomy major requirements in the
College of Liberal Arts and Sciences. Prerequisite: MATH 115 and 116, and either PHSX 115 or PHSX 313. LEC.

PHSX 594. Cosmology and Culture. 3 Hours. AE42 / N.
A survey of modern physical cosmology, its recent historical roots, and creation myths from many world cultures. An examination of the effects of these stories on their parent cultures. LEC.

PHSX 600. Special Topics in Physics and Astrophysics: ______. 3 Hours. N.
Different topics will be covered as needed. This course will address topics in physics and astrophysics not covered in regularly offered courses. May be repeated if topic differs. (Same as EPHX 600.) Prerequisite: Permission of instructor. LEC.

PHSX 601. Design of Physical and Electronic Systems. 4 Hours. AE61 / N.
A laboratory course emphasizing the application of physical principles to the design of systems for research, monitoring, or control. Topics include the use of microcomputers as controllers, interfacing microcomputers with measurement devices, and use of approximations and/or computer simulation to optimize design parameters, linear control systems, and noise. (Same as EPHX 601.) Prerequisite: Twelve hours of junior-senior credit in physics or engineering, including one laboratory course. LAB.

PHSX 615. Numerical and Computational Methods in Physics. 3 Hours. N.
An introduction to the use of numerical methods in the solution of problems in physics for which simplifications allowing closed-form solutions are not applicable. Examples are drawn from mechanics, electricity, magnetism, thermodynamics, and optics. (Same as EPHX 615.) Prerequisite: PHSX 313, MATH 320 or equivalent, and EECS 138 or equivalent. LEC.

PHSX 621. Mechanics II. 3 Hours. N.
Continuation of PHSX 521. Lagrange's equations and generalized coordinates. Mechanics of continuous media. Tensor algebra and rotation of a rigid body. Special relativity and relativistic dynamics. (Same as EPHX 621.) Prerequisite: PHSX 521. LEC.

PHSX 623. Physics of Fluids. 3 Hours. N.
An introduction to basic fluid mechanics in which fundamental concepts and equations are covered. Topics include hydrostatics, hydrodynamics, wave propagation in fluids, and applications in the areas such as astrophysics, atmospheric physics, and geophysics. (Same as EPHX 623.) Prerequisite: MATH 223; MATH 290; PHSX 212 and PHSX 236 (or PHSX 214 can replace PHSX 212 and PHSX 236.) LEC.

PHSX 631. Electromagnetic Theory. 3 Hours. N.
Maxwell's equations, wave propagation, optics and waveguides, radiation, relativistic transformations of fields and sources, use of covariance and invariance in relativity. Normally a continuation of PHSX 531. (Same as EPHX 631.) Prerequisite: PHSX 531. LEC.

PHSX 641. Introduction to Nuclear Physics. 3 Hours. N.
Experimental methods and elementary concepts in nuclear physics, including nuclear forces, alpha and beta decay, gamma radiation, nuclear structure, and reaction systematics. (Same as EPHX 641.) Prerequisite: PHSX 313 and PHSX 511. LEC.

PHSX 655. Optics. 3 Hours. N.
Geometric optics. Wave properties of light: interference, diffraction, coherence. Propagation of light through matter. Selected topics in modern optics, e.g., lasers, fibers. (Same as EPHX 655.) Prerequisite: PHSX 313 and PHSX 316. LEC.

PHSX 661. Introduction to Elementary Particle Physics. 3 Hours. N.
Properties and interactions of quarks, leptons, and other elementary particles; symmetry principles and conservation laws; broken symmetry; gauge bosons; the fundamental interactions, grand unified theories of strong, electromagnetic, and weak interactions; the cosmological implications of elementary particle physics. (Same as EPHX 661.) Prerequisite: PHSX 313 and MATH 320. LEC.

PHSX 671. Thermal Physics. 3 Hours. N.
Development of thermodynamics from statistical considerations. Techniques of calculating thermodynamic properties of systems. Application to classical problems of thermodynamics. Elementary kinetic theory of transport processes. Fermi-Dirac and Bose-Einstein systems. (Same as EPHX 671.) Prerequisite: PHSX 511. LEC.

PHSX 681. Astrophysics I. 3 Hours. N.
An introduction to radiation processes, thermal processes, and radiative transfer in stellar atmospheres and the interstellar medium. (Same as ASTR 691 and EPHX 691.) Prerequisite: PHSX 313 or consent of instructor. LEC.

PHSX 691. Astrophysics I. 3 Hours. N.
An overview of topics relevant to gravitation and modern cosmology: special relativity, tensor notation, the equivalence principle, the Schwarzschild solution, black holes, and Friedmann models. Cosmic black body radiation, dark matter, and the formation of large-scale structure. The idea of quantum gravity and an introduction to the current literature in cosmology. (Same as EPHX 693.) Prerequisite: PHSX 313 and MATH 320. LEC.

PHSX 700. Colloquium. 1 Hour.
Topics of current interest in physics, astronomy, and atmospheric science. Repeated enrollments are permitted. LEC.

PHSX 701. Major Experiments and Observations in Classical and Contemporary Physics. 1-3 Hours.
Critique, discussions, and interpretation of the most important discoveries and observations in physics. LEC.

PHSX 702. Introductory Physics Pedagogy. 1 Hour.
This course will address basic elements of pedagogy in specific relation to the teaching of physics and astronomy labs. It contains such elements as: peer and instructor evaluations of teaching, reading and discussion of pedagogical materials, development of online course material, and discussion of teaching methods. This course may be repeated for credit. Prerequisite: Permission of instructor. LEC.

PHSX 711. Quantum Mechanics I. 3 Hours.

PHSX 717. Graduate Seminar. 1 Hour.
First year graduate students meet to survey research opportunities in the department and develop skills in giving oral presentations in physics and related areas. Students will also learn about topics in responsible scholarship that may include: the origin of ideas and the allocation of credit, the treatment of data, scientific misconduct, intellectual property
and entrepreneurship, the researcher in society, collaborative research, mentor/trainee responsibilities, and safe practices. LEC.

PHSX 718. Mathematical Methods in Physical Sciences. 3 Hours. Review of complex variable theory; introduction to the partial differential equations of physical systems; Fourier analysis; special functions of mathematical physics; and chemistry. (Same as CHEM 718.) Prerequisite: Two semesters of junior-senior mathematics. LEC.

PHSX 721. Chaotic Dynamics. 3 Hours. Topics covered may include the following: dynamical systems, attractors, sensitive dependence on initial conditions, chaos, one-dimensional maps, strange attractors and fractal dimensions, fat fractals, the horseshoe map, symbolic dynamics, linear stability of periodic orbits, stable and unstable manifolds, Lyapunov exponents, topological entropy, quasiperiodicity, strange nonchaotic attractors, nonattracting chaotic sets, fractal basin boundaries, renormalization group analysis, intermittency, crisis and chaotic transients. Prerequisite: Mechanics (PHSX 521, or its equivalent), ordinary differential equations (MATH 320, or its equivalent), and some computer programming knowledge. LEC.

PHSX 722. Geophysical Data Analysis. 3 Hours. Fourier analysis, sampling theory, prediction and interpretation of geophysical data, filtering theory, correlation techniques. Deconvolution. Examples will be chosen from various fields of geophysics. (Same as GEOL 772.) Prerequisite: MATH 250/AE 250/ARCE 250/CE 250/CPE 250/EECS 250/EPHX 250/ME 250 and either GEOL 572 or GEOL 573 or PHSX 528. LEC.

PHSX 723. Seismology. 3 Hours. General theory of seismic waves, wave field extrapolation (migration) by finite difference methods, construction of travel-time curves, reflection and attenuation coefficients, earthquake source mechanism, distribution and forecasting of earthquakes. (Same as GEOL 773.) Prerequisite: MATH 250/AE 250/ARCE 250/CE 250/CPE 250/EECS 250/EPHX 250/ME 250 and either GEOL 572 or GEOL 573 or PHSX 528. LEC.

PHSX 724. Potential Fields in Geophysics. 3 Hours. Reduction and interpretation of gravity and magnetic data with emphasis on exploration techniques. Spectral, analytical and modeling methods of analysis of gravity and magnetic anomalies are emphasized. Prerequisite: MATH 250/AE 250/ARCE 250/CE 250/CPE 250/EECS 250/EPHX 250/ME 250 and either GEOL 572 or GEOL 573 or PHSX 528 or consent of instructor. LEC.

PHSX 727. Advanced Geophysics: _____. 1-3 Hours. Topics to vary with demand and include heat flow, wave propagation, synthetic seismograms, groundwater exploration, geothermal exploration, electrical methods in exploration, rock mechanics-geotechnophysics, rock magnetism, geomagnetism, paleomagnetism, geophysical inverse theory, and others upon sufficient demand. May be repeated for different topics. (Same as GEOL 771.) Prerequisite: GEOL 572 or GEOL 573/PHSX 528 or consent of instructor. LEC.

PHSX 731. Molecular Biophysics. 3 Hours. Methods and concepts in contemporary molecular biophysics are discussed. Particular emphasis is placed on the thermodynamics of macromolecular interactions and quantitative methods of data analysis. Basic enzymology and biophysical spectroscopy will also be reviewed. Prerequisite: PHSX 212, MATH 122, and CHEM 188. LEC.

PHSX 741. Nuclear Physics I. 3 Hours. Experimental methods in nuclear physics, elementary concepts and simple considerations about nuclear forces, alpha and beta decay, gamma radiation, nuclear structure, and reaction systematics. Prerequisite: PHSX 511. LEC.

PHSX 761. Elementary Particles I. 3 Hours. Particle accelerators and detectors; quarks and leptons; invariance principles and conservation laws; strong, electromagnetic, and weak interactions of elementary particles; unification of electroweak and other interactions. Prerequisite: PHSX 711. LEC.

PHSX 781. Solid State Physics I. 3 Hours. Classification of solids, structure and symmetry of crystals; lattice vibrations and thermal properties of solids; electric and magnetic properties; electron theory of metals and semiconductors; electronic and atomic transport processes; theory of ionic crystals. Prerequisite: PHSX 511 (or CHEM 648) and PHSX 671 (or CHEM 646). LEC.

PHSX 791. Seminar in Astrophysics. 1-3 Hours. Seminar designed to cover current topics in the physics of the universe beyond the solar system. Content will vary. Graduate students engaged in or preparing for research may repeat enrollments in this course. Open to undergraduates with twelve hours of physics/astronomy courses numbered 500 or above, or consent of instructor. LEC.

PHSX 792. Topics in Advanced Astrophysics. 3 Hours. This course will address one or more of the following advanced topics in astrophysics: high energy astrophysics, nuclear astrophysics, galactic and extragalactic astrophysics, space physics, cosmology, astrobiophysics, and the interstellar and intergalactic media (ISM/IGM). This course may be repeated for credit if topical content differs. (Same as ASTR 792.) Prerequisite: ASTR 692 or permission of instructor. LEC.

PHSX 793. Physical Cosmology. 3 Hours. Discussion of how fundamental laws of physics govern the evolution of the universe as a whole along with its structure. Survey of cosmogenic clues in the observable universe, including observed structures, cosmic background radiation and evidence for dark matter. Development of the universe, including theories of initial conditions; cosmological phase transitions; generation of possible relics and dark matter; symmetry breaking; baryon asymmetry; nucleosynthesis; recombination, gravitational instability and the formation of structure; current experimental techniques. Prerequisite: PHSX 718. Recommended: PHSX 593. LEC.

PHSX 795. Space Plasma Physics. 3 Hours. The physics of fully ionized gases in magnetic fields and their application to interplanetary processes, planetary radiation belts, and the sun. The motion of charged particles in magnetic fields, magnetohydrodynamic waves, the solar wind, the ionosphere, and the magnetosphere. (Same as ASTR 795.) Prerequisite: PHSX 621. Corequisite: PHSX 631. LEC.

PHSX 800. Graduate Problems. 1-5 Hours. Advanced laboratory problems, special research problems, or library reading problems. Repeated enrollments are permitted. RSH.

PHSX 801. Advanced Topics. 1-3 Hours. Lectures on advanced material not covered by regular courses. The topics are not limited but generally address recent experimental or theoretical developments in subjects such as superconductivity, nuclear physics, elementary particle physics, quantum field theory, gauge and unified theories, nonlinear or chaotic systems, space plasma physics, and astrophysics and cosmology. Repeated enrollments are permitted. LEC.

PHSX 811. Quantum Mechanics II. 3 Hours. Time dependent perturbation theory. Gauge invariance and electromagnetic interactions. Quantization of the electromagnetic field and applications. The Dirac equation, its transformation properties and applications to relativistic problems. Scattering theory, elementary applications, and formal properties. Prerequisite: PHSX 711. LEC.
**PHSX 815. Computational Methods in Physical Sciences. 3 Hours.** Advanced computer applications in physical science. General discussion and illustration of problem organization and solution by numerical and other methods with examples from physics, astronomy, and other physical sciences. Students will design, write, validate, and document a computer program to solve a physical problem. (Same as ASTR 815 and CHEM 914.) Prerequisite: Six hours of computer science courses numbered 300 or above, and six hours of physics and/or astronomy courses numbered 300 or above. LEC.

**PHSX 817. Graduate Seminar. 1 Hour.** First year graduate students meet to survey research opportunities in the department and develop skills in giving oral presentations in physics and related areas. Prerequisite: Only one hour of 817 can count toward required hours for degree. LEC.

**PHSX 821. Classical Mechanics. 3 Hours.** Vector and tensor notation; review of Newtonian mechanics; Lagrangian mechanics; linear vector spaces and matrix theory with applications to the theory of small oscillations; rigid bodies; Hamiltonian formalism. Special relativity. Prerequisite: Twelve hours of junior-senior courses in physics. LEC.

**PHSX 831. Electrodynamics I. 3 Hours.** Electrostatics and magnetostatics; Maxwell's equations; plane waves; waveguides. Prerequisite: PHSX 718 and PHSX 821. LEC.

**PHSX 841. Nuclear Physics II. 3 Hours.** Nuclear forces and the two-body problem; nuclear models; phenomenological treatment of nuclear reactions and decay processes. Prerequisite: PHSX 741 and PHSX 811. LEC.

**PHSX 861. Elementary Particles II. 3 Hours.** Theoretical analysis of the standard model of strong and electroweak interactions. Applications to decay and scattering processes with comparison to experiments. Selected topics in non-perturbative physics. Examples of tests to probe beyond the standard model. Prerequisite: PHSX 761. Corequisite: PHSX 911. LEC.

**PHSX 871. Statistical Physics I. 3 Hours.** Review of and advanced topics in thermodynamics; the Maxwell relations; the third law; phase transitions. Kinetic theory: the Boltzmann equation; transport phenomena. Statistical mechanics: ideal Maxwell-Boltzmann, Fermi-Dirac and Bose-Einstein gases; ensemble theory; derivation of the laws of thermodynamics. Prerequisite: PHSX 711 and PHSX 821. PHSX 671 is recommended. LEC.

**PHSX 881. Solid State Physics II. 3 Hours.** More advanced topics in solid state physics that may include: diamagnetism, paramagnetism, ferromagnetism, and antiferromagnetism; electron and nuclear spin magnetic resonance; dielectric properties and ferroelectricity; photoconductivity and luminescence. Prerequisite: PHSX 631 and PHSX 711 (or CHEM 915). LEC.

**PHSX 895. Plasma Physics. 3 Hours.** Magnetohydrodynamics, including discussion of shocks, waves, and stability theory; statistical mechanical foundations; kinetic theory; microstability; non-linear phenomena. Prerequisite: PHSX 795. LEC.

**PHSX 897. Seminar in Plasma and Space Physics. 1-3 Hours.** Graduate students engaged in or preparing for research may repeat enrollments in this course. The content will vary. (Same as ASTR 897.) LEC.

**PHSX 899. Master's Research/Thesis. 1-10 Hours.** Research work (either experimental or theoretical) in physics for students working toward the master's degree. Repeated enrollments are permitted. THE.

**PHSX 911. Quantum Mechanics III. 3 Hours.** Path integral formulation of quantum mechanics. Introduction to quantum field theory using the canonical approach and using the path integral approach. Application of perturbation theory in quantum electrodynamics. Selected applications in condensed matter, nuclear, and particle physics. Prerequisite: PHSX 811. LEC.

**PHSX 912. Quantum Field Theory. 3 Hours.** Survey of problems in quantum field theory. Functional methods. Renormalization and renormalization group. Role of symmetries. Gauge field theories. Symmetry breaking. Prerequisite: PHSX 911. LEC.

**PHSX 915. Relativity. 3 Hours.** Reviews of special relativity, manifolds, tensors, and geometry. General coordinate covariance and general relativity. Applications to classical theory of gravitation: weak field tests, isotropic, homogeneous cosmology, Schwarzschild solution. Selected advanced topics. Prerequisite: A total of 10 hours of junior/senior work in physics and mathematics, including at least concurrent enrollment in MATH 646. LEC.

**PHSX 917. Seminar in Theoretical Physics. 1-3 Hours.** Graduate students engaged in or preparing for research may repeat enrollments in this course. Content will vary. LEC.

**PHSX 931. Electrodynamics II. 3 Hours.** Inhomogeneous Maxwell's equations and multipole radiation fields; special theory of relativity; radiation from accelerated charges: scattering and dispersion. Prerequisite: PHSX 831. LEC.

**PHSX 947. Seminar in Nuclear Physics. 1-3 Hours.** Graduate students engaged in or preparing for research may repeat enrollments in this course. The content will vary. LEC.

**PHSX 957. Seminar in Particle Physics. 1-3 Hours.** Graduate students engaged in or preparing for research may repeat enrollments in this course. The content will vary. LEC.

**PHSX 971. Advanced Statistical Mechanics. 3 Hours.** Advanced equilibrium statistical mechanics and introduction to nonequilibrium statistical mechanics. Topics include: the theory of liquids, critical phenomena, linear response theory and time correlation functions, Langevin dynamics, and molecular hydrodynamics. (Same as CHEM 950.) Prerequisite: PHSX 871 or CHEM 917. LEC.

**PHSX 987. Seminar in Solid State Physics. 1-3 Hours.** Graduate students engaged in or preparing for research may repeat enrollments in this course. The content will vary. LEC.

**PHSX 999. Ph.D. Dissertation Research. 1-10 Hours.** Research work (either experimental or theoretical) in physics for students working toward the Ph.D. degree. Repeated enrollments are permitted. THE.

**Political Science Courses**

**POLS 102. Introduction to Political Science as a Career. 1 Hour. S.** Provides an overview of the discipline of political science; emphasizes developing an understanding of opportunities in political science at the University of Kansas and careers with a political science degree. Major sub-fields within the discipline are discussed as well as the benefits of particular tracks within the departmental coursework. The course helps students plan their goals for their education and match those goals to career goals. Graded on a satisfactory/ unsatisfactory basis. Prerequisite: Enrollment by permission of the instructor only. LEC.

**POLS 110. Introduction to U.S. Politics. 3 Hours. SF GE3S / S.** An introduction to basic American governmental institutions, political processes, and policy. LEC.
POLS 111. Introduction to U.S. Politics Honors. 3 Hours. SF GE3S / S.
Open only to students in the College Honors Program or by consent of instructor. LEC.

POLS 150. Introduction to Comparative Politics. 3 Hours. SF AE42/GE3S / S.
An introduction to the comparative study of political systems emphasizing governmental structures, parties, electoral techniques, and recent trends in the field. The course also considers major differences between (1) representative and autocratic systems, and (2) developed and underdeveloped nations. LEC.

POLS 151. Introduction to Comparative Politics Honors. 3 Hours. SF AE42/GE3S / S.
Open only to students in the College Honors Program or by consent of instructor. LEC.

POLS 170. Introduction to International Politics. 3 Hours. SF AE42/GE3S / S.
A study of the nation-state system including the role of nationalism, sovereignty, and power. Patterns of state action including neutralism, collective security, war, and cooperation through international organizations are stressed. Specific examples of contemporary international problems are also analyzed and discussed. LEC.

POLS 171. Introduction to International Politics Honors. 3 Hours. SF AE42/GE3S / S.
Open only to students in the College Honors Program or by consent of instructor. LEC.

POLS 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Political Science. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

POLS 249. Study Abroad Topics in Political Science: ____. 1-6 Hours. S.
This course is designed for the study of special topics in Political Science at the freshman/sophomore level. Course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

POLS 301. Introduction to Political Theory. 3 Hours. GE3S / S.
An examination of the perennial issues and major concepts in political philosophy. Ideas such as community, liberty, equality, justice, and democracy will be examined in order to understand the various meanings given to these concepts in political discourse and to understand the role to these ideas in various political theories. Prerequisite: Either POLS 110 or POLS 150 or POLS 170, or their honors equivalents. LEC.

POLS 302. Introduction to Political Theory, Honors. 3 Hours. S.
Prerequisite: Either POLS 110, POLS 150, or POLS 170, or their honors equivalents and open only to students in the College Honors Program, or by consent of instructor. LEC.

POLS 306. Political Science Methods of Inquiry. 3 Hours. GE12 / S.
An introduction to the social science methods of investigation and analysis that are used in political science as a discipline and, in many cases, in public and private sector analytical work as well. The nature of political science data sources and methods of data collection, the logic of social scientific inquiry, and key methods of data analysis are emphasized. Prerequisite: POLS 110 and POLS 150 and POLS 170 (or their Honors equivalents); or consent of instructor. LEC.

POLS 308. Political Science Research Methods. 3 Hours. S.
Offers an understanding of the logic of hypothesis construction and the process of data collection. Emphasis is placed on the role of identification of data as a component of the research process. Prerequisite: POLS 110 or POLS 150 or POLS 170 and consent of instructor. LEC.

POLS 310. Contemporary Issues in U.S. Politics. 3 Hours. S.
An examination of issues and problems concerning government and politics in American society. This course is intended primarily for non-majors, and does not meet the junior/senior level course field distribution requirement. LEC.

POLS 320. Introduction to Public Policy. 3 Hours. GE3S / S.
Offers an introduction to the policy-making process covering policy formulation, adoption, and implementation. Overview of major theories of the policy-making process, the actors involved in the process, and the constraints and enhancements offered by the broader political environment. The theoretical frameworks are applied to several substantive policy areas. Prerequisite: POLS 110. LEC.

POLS 330. Introduction to Public Administration. 3 Hours. S.
Introduction to administration, public policy and policy making is the study of government workers, the organizations in which they work, how they are financed, and how government engages citizens to help form and maintain community. In various ways, the class sessions explore the three important issues of public administration: discretion, authority, and accountability. (Same as PUAD 330.) Prerequisite: POLS 110. LEC.

POLS 331. Introduction to Public Administration, Honors. 3 Hours. S.
Introduction to administration, public policy and policy making, for honors students, is the study of government workers, the organizations in which they work, how they are financed, and how government engages citizens to help form and maintain community. In various ways, the class sessions explore the three important issues of public administration: discretion, authority, and accountability. (Same as PUAD 331.) Prerequisite: POLS 110. LEC.

POLS 350. Contemporary Issues in Comparative Politics. 3 Hours.
This course will survey selected current political issues around the globe. The focus of the course will be on understanding and analyzing the wide diversity of political phenomena that mark countries around the world. Topics may include such things as elections and electoral politics; political parties; government stability; democratization; ethnic, racial, caste, or religious conflict; protest and revolutionary movements; social movements (environmental, feminist, and others); and the politics of economic reform. This course is intended primarily for non-majors, and does not meet the junior/senior level course field distribution requirement. LEC.

POLS 370. Contemporary Issues in International Politics. 3 Hours. S.
A survey of selected issues in current international relations. Topics include global economic interdependence, regional conflicts and nationalism, United States military and economic policy in the post-Cold War era, the role of international organizations such as the United Nations and the European community, global environmental problems and the contemporary role of international law. This course is intended primarily for non-majors and does not meet the junior/senior level course field distribution requirement. LEC.

POLS 492. Field Work in Politics and Policy-Making. 3-6 Hours. AE61 / S.
This offering provides course credit for field work in politics and policy-making that takes place outside the department's Spring Semester internship programs in Washington, D.C. and Topeka. Consent of Instructor is required prior to enrollment. FLD.

POLS 493. Directed Readings. 1-3 Hours. AE61 / U.
Individual and supervised readings in selected areas of political science. Course is repeatable for different areas; however, only 3 hours of directed readings can be applied to the major. Prerequisite: Six hours of political science, 2.5 overall grade-point average, and prior consent of department. IND.
POLS 494. Washington Semester Intern Seminar. 3 Hours. AE61 / S.
Intern seminar in Washington, D.C. Students meet weekly during Washington Semester program, in speaker/seminar format. Participation is expected, and a term paper is a requirement. Prerequisite: Consent of instructor. FLD.

POLS 495. Topeka Semester Intern Seminar. 3 Hours. AE61 / S.
Intern seminar at statehouse in Topeka. Students meet weekly during this program, in speaker/seminar format. Participation is expected, and a term paper is a requirement. Prerequisite: Consent of instructor. FLD.

POLS 496. Washington Semester Field Work. 3-6 Hours. AE61 / S.
Supervised internships in public and private agency offices in the Washington, D.C. area. This course is open only to students who are participating in the department's organized, supervised, semester-long Washington internship program. In order to be eligible for the program, students must have junior or senior standing, an overall grade-point average of 2.75, must have completed POLS 110 and have a 3.0 grade point average in all political science courses. Course will be graded satisfactory/unsatisfactory. Prerequisite: Consent of instructor is required prior to enrollment. FLD.

POLS 497. Topeka Semester Field Work. 3-6 Hours. AE61 / S.
Supervised internships in public and private agency offices in the Topeka area. This course is open only to students who are participating in the department's organized, supervised, semester-long Topeka internship program. In order to be eligible for the program, students must have junior or senior standing, an overall grade point average of 2.75, must have completed POLS 110 and have a 3.0 grade-point average in all political science courses. Course will be graded satisfactory/unsatisfactory. Prerequisite: Consent of instructor is required prior to enrollment. FLD.

POLS 498. Honors Thesis. 3-6 Hours. AE61 / S.
Political science majors who in their senior year who wish to become candidates for graduation with honors in political science must enroll in and successfully complete six hours of honors thesis work. Consent of the department is required and candidate must have minimum grade point averages of 3.5 in political science courses and 3.25 in all courses, in both in-residence and combined work. IND.

POLS 501. Contemporary Political Thought. 3 Hours. S.
An examination of the major theoretical questions concerning citizenship and government in modern society. Major ideologies and important contemporary philosophers are examined to determine how they address such issues as the meaning of the public interest, the just distribution of power and privilege, the proper role of government in society, and legitimate methods for making collective decisions. Prerequisite: POLS 301, or (for non-majors) completion of the Western Civilization requirement, or consent of instructor. LEC.

POLS 502. History of Political Thought. 3 Hours. S.
A survey of major concepts and theories in political philosophy from Plato to Marx. The emphasis is on understanding major classics in western political thought. Prerequisite: POLS 301, or (for non-majors) completion of the Western Civilization requirement, or consent of instructor. LEC.

POLS 503. Politics in Literature. 3 Hours. S.
An examination and analysis of the portrayal of politics and political problems in literature. Classical and modern texts will be considered, including dramas, poems, and novels. Prerequisite: POLS 301, or (for non-majors) completion of the Western Civilization requirement, or consent of instructor. LEC.

POLS 504. Millenarian Movements. 3 Hours. S.
A historical survey of millenarian movements (the belief in imminent, total, ultimate, this-worldly, collective salvation), with particular attention to their psychological, sociological, and political dimensions. (Same as REL 504.) Prerequisite: POLS 301 or honors equivalent or for non-majors completion of Western Civilization requirement, or consent of instructor. LEC.

POLS 506. Honors Seminar in Political Research. 3 Hours. S.
Students will be exposed to a variety of topics related to the conduct of political science research. Emphasis will be on how one discerns what is known and what remains to be discovered about a research topic, the development of theories and the hypotheses about the unknown, and the collection of information for testing theories. Students will be expected to begin independent research on a topic that might eventually culminate in an honors thesis. This seminar is intended for political science majors who are in the honors or deans programs, who hold departmental scholarships, and/or who intend to write honors theses. Prerequisite: POLS 306. IND.

POLS 511. The Judicial Process. 3 Hours. S.
Covers judicial functions, organizations, personnel, and processes. Examines the goals of the law and the operations of the legal system in meeting these objectives. Focuses on norm enforcement, conflict resolution, and judicial policy-making. Prerequisite: POLS 110. LEC.

POLS 512. Latino Politics. 3 Hours. S.
An overview of the political position of Latinas/os in the United States. The focus is on the three largest Latino groups in the U.S.: Mexican-Americans, Cuban-Americans, and Puerto Ricans; as well as an examination of other South American and Central American populations in the U.S. The main topics include identity formation, the political circumstances of Latinos, relationship to the electoral process, political behavior, and the policy process. LEC.

POLS 515. American Political Parties. 3 Hours. S.
Survey of the development of the American political party system, stressing party organization, nominating systems, campaigns, elections, role of mass media, and party finances. Prerequisite: POLS 110. LEC.

POLS 516. Public Opinion and American Democracy. 3 Hours. S.
This course examines the construction, administration, and interpretation of public opinion polls. The course will also examine the role of public opinion in the democratic process and the formation of public opinion. LEC.

POLS 520. Political Communication. 3 Hours. H.
This course will focus on contemporary political communication theory and illustrate how such theories are exemplified in modern political contexts: political arguments and developing consensus, constitutional issues and hearings, the rhetorical presidency, the dissemination of political information, and political uses of definition. (Same as COMS 607.) Prerequisite: COMS 130 or COMS 150. LEC.

POLS 521. Rhetoric, Politics and the Mass Media. 3 Hours. H.
This course investigates the ways in which rhetorical strategies (persuasive and linguistic usage) permeate the relationship between politics and politicians and the mass media. We will analyze media coverage of political debates, the presidential use of radio, television and press conferences, and the network evening news coverage of political events to see how political decisions are influenced by and influence the media. (Same as COMS 335.) Prerequisite: COMS 130 or COMS 150. LEC.

POLS 528. Environmental Justice and Public Policy. 3 Hours. S.
This course provides an overview of environmental justice, both as a social movement and as a public policy initiative. Environmental justice examines the distribution of environmental externalities across different socio-economic and racial groups. We will discuss several different public policy areas that have been impacted by the environmental justice movement: hazardous waste facility siting, urban redevelopment and Brownfields, transportation policy, and Native American sovereignty. We
will also touch upon international environmental policy in an environmental justice context. Throughout the course we will evaluate empirical issues in studying environmental justice. (Same as EVRN 528.) Prerequisite: POLS 306 or a statistics class or consent of instructor. LEC.

POLS 553. Comparative Environmental Politics. 3 Hours. S.
This course compares environmental policies and politics across a number of countries, including those in North America, Western Europe, East Asia, and Latin America. (Same as EVRN 553.) LEC.

POLS 561. Liberation in Southern Africa. 3 Hours. NW AE42 / S.
This course examines struggles for freedom in southern Africa and the consequences of political, economic, and social changes in the region. The end of colonial rule, the demise of white-settler domination, and the fall of the apartheid regime is discussed. As a major political event of the twentieth century, the liberation of southern Africa had both local and global consequences. The course analyzes transnational issues of liberation and resistance to consider broader regional and international perspectives. Course themes pay particular attention to gender and ethnicity and include a focus on democratization and contemporary meanings of liberation. Prior coursework in African Studies is strongly recommended, but not required. (Same as AAAS 561 and HIST 561.) LEC.

POLS 562. Women and Politics. 3 Hours. S.
This course exposes students to contemporary research on women and politics by surveying the sub-fields of political science. Topics include women's representation in the U.S., women and U.S. public policy, gender and legal theory, international women's movements, women and revolution, and women as political elites. We will examine the ways in which feminist theory and women's activism have challenged the narrow focus of the discipline as well as redefined women's place in society. (Same as WGSS 562.) Prerequisite: A 100-level POLS course or WGSS 201 or permission of instructor. LEC.

POLS 563. Comparative Political Economy. 3 Hours. S.
This course studies fiscal, monetarist, and trade policies to assess the usefulness and problems posed by these policy instruments across countries. This includes examining exchange rates, interest rates, budget deficit, trade deficit, and debt, to understand their composition and relevance to domestic economy, employment, investment, development, and international trade, the problems they pose, and how these may be overcome. We then examine when, how, and why government enacts these instruments across countries and regions. Prerequisite: POLS 150 or POLS 151. LEC.

POLS 564. Elections and Political Parties Around the World. 3 Hours. S.
An examination of the diverse forms of election rules and their consequences for political parties, politicians, and voters. The course will survey election rules in theory and practice; the design and re-design of election rules in new and established democracies; and how elections affect party strategies or governance and representation, and the types of party systems that emerge. The course will also incorporate intensive studies of election campaigns occurring during the semester that the course meets. Prerequisite: POLS 150. LEC.

POLS 565. Political Change in Asia. 3 Hours. S.
This course focuses on three periods of major political changes in Asia since 1945: independence from colonization; adoption of governance; and steps toward democratization. The focus on political change is to help students see that a) many countries initiate political reforms domestically; b) the ability to implement changes is correlated to ability to win support; c) the constitutional process may favor some groups over others; d) the ability to mediate political stability depends on (a), (b), and (c). Prerequisite: POLS 150 or equivalent. LEC.

POLS 566. Social Welfare, Taxation, and the Citizen. 3 Hours. S.
Most developed countries provide for the basic needs of their citizens. Many provide health care, free education, and even retirement funding in exchange for taxes. The U.S. is an exception. The course presents taxation systems in most developed countries, then explores the dimensions of social welfare, and the differential roles of citizens in each country. The final section of the course outlines legislative and legal possibilities for U.S. citizens. Prerequisite: POLS 150. LEC.

POLS 600. Contemporary Feminist Political Theory. 3 Hours. S.
A detailed introduction to feminist thought post-1960. Examines feminism in relation to the categories of political theory: liberal feminism, socialist feminism, radical feminism, and postmodern feminism. Within these categories and separately, we will also consider feminism as it is influenced by women traditionally excluded from mainstream feminist thought, namely U.S. woman of color and women of post-colonial societies. (Same as WGSS 600.) Prerequisite: WGSS 201 or a 100-level POLS course or permission of instructor. LEC.

POLS 601. Political Ideologies. 3 Hours. S.
A systematic survey of the major political ideologies of the 19th and 20th centuries such as anarchism, socialism, liberalism, fascism, communism, and participatory democracy. Prerequisite: POLS 301, or (for non-majors) completion of the Western Civilization requirement, or consent of instructor. LEC.

POLS 602. American Political Ideas. 3 Hours. S.
A study of political movements and thinkers from the Puritan period to the present that have influenced the development of contemporary political ideas. Prerequisite: POLS 301, or (for non-majors) completion of the Western Civilization requirement, or consent of instructor. LEC.

POLS 603. Democratic Theory. 3 Hours. S.
Detailed study of the typical and perennial dilemmas that arise in theories of democratic governance with an emphasis on contemporary analytical investigations of democratic systems. Prerequisite: POLS 301, or (for non-majors) completion of the Western Civilization requirement, or consent of instructor. LEC.

POLS 604. Religion and Political Theory. 3 Hours. S.
An examination of the relationship between religious faith and politics in Western political thought and theory. The approach will be both historical and philosophical, beginning with Moses on the one hand, and the Greeks on the other. Texts will include biblical, Greek philosophical, Jewish and Christian philosophical and theological writings. (Same as REL 604.) Prerequisite: POLS 301, or for non-majors completion of Western Civilization requirement, or consent of instructor. LEC.

POLS 605. A Study of Political Thought in Antiquity. 3 Hours. S.
Possible authors for examination may include Homer, Hesiod, Plato, Aristotle, Cicero, and Augustine, among others. Central topics will include the problems of truth and knowledge, justice, power, human rule, and the relationship of the individual to the community. Prerequisite: POLS 301, or for non-majors completion of the Western Civilization requirement, or consent of the instructor. LEC.

POLS 607. Modern Political Theory. 3 Hours. S.
An analysis of works by various authors, with the intention of exploring the political ideas that emerge in conjunction with the appearance of modern science, the Enlightenment, the Industrial Revolution, and Romanticism. Topics will include the modern conceptions of the nature of being, truth, justice, and the relationship of the individual to the community. Prerequisite: POLS 301, or (for non-majors) completion of the Western Civilization requirement, or consent of instructor. LEC.
POLS 608. Social Choice and Game Theory. 3 Hours. S.
A survey of the political economic approach to individual and collective choice behavior called "rational choice." The course focuses on models of voting systems and other political institutions as seen from a game theoretic perspective. Prerequisite: Nine hours of political science and completion of the College of Liberal Arts and Sciences mathematics requirement for the B.A. degree. LEC.

POLS 609. Topics in Political Theory: ______. 3 Hours. S.
A study of selected theorists in relation to a topic in political theory. Sample topics include: revolution; authority and community; elements of political power; political elites: ideology, human nature in politics, political conflict, etc. Theorists will range from ancient to contemporary. Course is repeatable for different topics. Prerequisite: POLS 301, or (for non-majors) completion of the Western Civilization requirement, or consent of instructor. LEC.

POLS 610. Constitutional Law: Governmental Powers. 3 Hours. S.
The Supreme Court viewed as a political branch of our government. Special emphasis on the Court's role in determining powers of government and their relationships. Prerequisite: POLS 110. LEC.

POLS 611. Constitutional Law: Civil Liberties. 3 Hours. S.
The constitutional limits on governmental powers are studied with special emphasis on constitutional guarantees of individuals freedom. Prerequisite: POLS 110. POLS 610 is recommended. LEC.

POLS 612. Psychology in Politics. 3 Hours. S.
An examination of psychological perspectives on political phenomena. Topics include political personality, foreign policy decision making, international conflict and cooperation, voting behavior, and political participation and socialization. Prerequisite: Nine hours of political science, including POLS 110 and POLS 170. LEC.

POLS 613. Comparative U.S. State Politics. 3 Hours. S.
A systematic comparative analysis of structures, functions, and policies of state political systems. Prerequisite: POLS 110 or consent of instructor. LEC.

POLS 614. Urban Politics. 3 Hours. S.
A survey of the social, cultural, economic, and structural differences among cities and an investigation into how these factors affect urban politics and policies. Specific topics include leadership, governmental reform, citizen participation, inter-ethnic conflict, and economic development. Prerequisite: POLS 110. LEC.

POLS 615. Campaigns and Elections. 3 Hours. S.
This course examines the behavior of candidates, campaigns, and voters in the electoral process. Topics will include the role of media, the impact of money, the operations of political campaigns and the effect of campaign laws. LEC.

POLS 616. Interest Group Politics. 3 Hours. S.
Study of internal group organization and the politics of interests within the U.S. policy-making process. Prerequisite: POLS 110. LEC.

POLS 617. The Congress. 3 Hours. S.
Descriptive and comparative analysis of legislative institutions and processes in the United States, covering Congress and state legislatures. Prerequisite: POLS 110. LEC.

POLS 618. The Presidency. 3 Hours. S.
The office of the President of the United States, its place in the constitutional and political system. Emphasis is given to modern experience and current problems. Prerequisite: POLS 110. LEC.

POLS 619. Topics in American Politics: ______. 1-3 Hours. S.
A study of selected contemporary problems of policy or politics in the United States. Course is repeatable for different topics. Prerequisite: POLS 110. LEC.

POLS 620. Formulation of Public Policy. 3 Hours. S.
Analysis and evaluation of the structures and processes involved in the formulation of public policy at all levels of government. Prerequisite: POLS 110. LEC.

POLS 621. Public Policy Analysis. 3 Hours. S.
An introduction to the study and analysis of public policy with emphasis on the concepts and techniques of policy thinking. The methods of policy description, explanation, evaluation, and choice will be applied to a variety of policy topics, e.g. health care, defense, environmental protection, education, etc. Prerequisite: POLS 110. LEC.

POLS 622. Government and the Economy. 3 Hours. S.
An examination of the formulation and execution of government policies in the economy and the business sector; the impact of the economy and business on government policies and the impact of government policies on the economy and business. Prerequisite: POLS 110 or consent of instructor. LEC.

POLS 623. The Politics of Social Policy. 3 Hours. S.
An examination of the formulation and execution of key social policies in the United States, such as welfare policy, crime and drug control policy, disability rights policy, education policy, and social regulatory policy concerning controversial social issues such as abortion and gun control. Prerequisite: POLS 110. LEC.

POLS 624. Environmental Politics and Policy. 3 Hours. S.
Analysis of environmental politics and the formulation and implementation of environmental policy. Examines the history and development of environmental politics as well as current trends. Themes include interest groups, business interests, political institutions, and specific environmental policy issues. (Same as EVRN 620.) LEC.

POLS 625. Extremist Groups and Government Response. 3 Hours. S.
Examines left- and right-wing extremist political groups in America and how the government has developed policies and respond to these groups. Special attention will be given to the process of policy adoption and implementation and how the government might respond to extremist groups in the future. Issues and themes will include groups such as the left-wing terrorists of the 1960s and 1970s, right-wing anti-communist groups of the 1950s and 1960s, international terrorists acting in the U.S., hate crime, ecoterrorism, citizen militia groups, and pro- and anti-abortion extremist groups. Prerequisite: POLS 110. LEC.

POLS 626. Introduction to Survey Research. 3 Hours. S.
This course introduces the theory and methods used in survey research. The topics include types of surveys, type of sampling methods, questionnaire and codebook construction and analysis. Prerequisite: POLS 306. LEC.

POLS 627. Advanced Issues in Survey Research. 3 Hours. S.
This course focuses on the problems encountered while implementing surveys in specific populations (in the United States and Europe) and in developing countries. The course identifies problem areas such as in sampling and questionnaire design; and addresses how researchers overcome these problems. Prerequisite: POLS 306 and POLS 626. LEC.

POLS 628. The Politics of Public Health. 3 Hours. S.
This course examines the social, institutional and political context of public health policy in the United States. We will examine factors that shape the nation's public health, explore the role of government in reducing risk and promoting well being, and analyze the major institutions responsible for addressing these issues.
for monitoring, protecting and promoting general public health. Themes include the social determinants of health, health disparities, emerging infectious diseases, food safety, transportation, and environmental health. (Same as EVRN 628.) Prerequisite: POLS 110 and POLS 306 are recommended. LEC.

POLS 629. Topics in Public Policy: __________. 1-3 Hours. S.
Examination of the U.S. political system and policy formulation and administration through intensive analysis of selected current public policy problems. Sample topics include the environment, education, and economic well-being. Course is repeatable for different topics. Prerequisite: POLS 110. LEC.

POLS 630. Politics of Identity. 3 Hours. AE41 / S.
This seminar explores the nature of identity and how identity is relevant to politics and policy with a focus on political attitudes and behavior, institutions, and public policy. Topics include individual and group identity, identities such as gender, racial, sexual orientation, and partisan, and the enduring importance of identity for understanding politics as well as the policy process. The approach is multidisciplinary but political science perspectives are relied on more heavily. (Same as WGSS 630.) Prerequisite: POLS 110 and POLS 306 are recommended. LEC.

POLS 634. Bureaucratic Politics. 3 Hours. S.
Examination of U.S. governmental agencies with special attention to their development and role in the American political system. Prerequisite: POLS 330. LEC.

POLS 640. Politics of Reproductive Policy. 3 Hours. S.
Reproductive policy has historically been a highly politicized policy arena, which has elicited attention from the political community as well as the public. This course moves beyond the popular rhetoric associated with reproductive issues, by critically investigating the history, development, implementation and the relative success of various reproductive policies in the United States. These policies are compared to, and assessed against, policies governing similar topics in various countries. (Same as WGSS 640.) Prerequisite: POLS 110 or consent of instructor. LEC.

POLS 644. Justice and Public Policy in Democratic Societies. 3 Hours. S.
Examines the ethical and philosophical choices that inform public policy in democratic societies. The guiding idea of the course is that public policies reflect underlying decisions about the nature of state authority and the just use of that authority. The theoretical focus is on modern European and American liberal democratic thought; the empirical focus is global. Among the policy issues examined in the course are public education, immigration, gender equality, same-sex marriage, and drugs. Prerequisite: POLS 150 or POLS 301. LEC.

POLS 645. Corruption, Crisis and Scandal. 3 Hours. S.
This course investigates political events and decisions that are considered illegal or illegitimate. Cases from the U.S. and around the world are considered. Issues discussed include the misuse of governmental power and funds, electoral fraud, and bribery. Conditions under which problems arise and reforms that address them are considered. Prerequisite: POLS 110 and POLS 150. LEC.

POLS 650. Palestinians and Israelis. 3 Hours. S.
Examines the international relations, political institutions, and social politics of these two ethnonational communities in relation to each other. Specific topics include the historical evolution of the Israeli-Palestinian conflict, prospects for conflict resolution, electoral systems and political parties in the two nations, state-society relations, social movements, and roles of gender and religion. Prerequisite: Nine hours of Political Science, including POLS 150/POLS 151 or POLS 170/POLS 171, or permission of instructor. LEC.

POLS 651. Women and Politics in Latin America. 3 Hours. S.
This course examines the ways in which Latin American women have engaged in politics in the past two decades. Cases will draw from a variety of countries in Latin America. Students are expected to develop insights, through comparative analysis, into why women "do politics" in certain ways, the role of the State in women's politics, the (dis)advantages of various political strategies, and the ways in which political, economic, and social changes over time have affected women's political opportunities and interests. (Same as WGSS 651.) Prerequisite: Six hours of course work in Political Science and/or Women's Studies and/or Latin American Studies. LEC.

POLS 652. Politics in Europe. 3 Hours. S.
The study of the politics and government of Europe. Major countries are covered in depth, while smaller democracies are grouped according to political concepts. Prerequisite: POLS 150. LEC.

POLS 653. Gender, War, and Peace. 3 Hours. S.
This course explores ways in which militarization and warfare are gendered processes. We ask, what does war tell us about gender, and what does gender tell us about war? Though the majority of fighters are men, women are essential to war efforts. They also represent a high proportion of the casualties of war. Yet women are rarely examined in relation to war; thus we work to uncover women's experiences of war. We also look to women's contributions to the peace movement in terms of both theory and practice, asking: Is peace a feminist issue? Should feminists support women's access to combat positions or oppose the military? What if women ruled the world--would that end wars? Does militarized masculinity harm men more than benefit them? How do states mobilize citizens to war and how is the process gendered? (Same as WGSS 653.) Prerequisite: One of the following: POLS 150, POLS 151, POLS 170, POLS 171, WGSS 201, WGSS 202. LEC.

POLS 654. Politics and Government of Russia and the Central Asian States. 3 Hours. S/W.
The collapse of the Soviet system and the problems of transforming a central planned authoritarian state into a free market democracy. The roles of ethnic and national tensions, economic decay, and cultural factors. Prerequisite: Eight hours in the social sciences and/or history, including POLS 150, or consent of instructor. LEC.

POLS 655. Politics of East-Central Europe. 3 Hours. S/W.
This course analyzes Communist political theory in its application to the countries of East-Central Europe with consideration of their traditional backgrounds and their patterns of political, social, and economic developments. It constructs a theoretical model of the communist state and discusses its variations by description and comparison of the governments and political processes of Albania, Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, Rumania, and Yugoslavia. Prerequisite: POLS 150 and three hours in the social sciences or East European history, or consent of instructor. LEC.

POLS 656. Governments and Politics of East Asia. 3 Hours. NW AE42 / S/W.
A comparative examination of the contemporary political institutions, processes and ideas of China, Japan, and Korea. (Same as EALC 656.) Prerequisite: POLS 150 or a course in East Asian studies. LEC.

POLS 657. Government and Politics of Southeast Asia. 3 Hours. NW AE42 / S/W.
An evaluation of the traditional and contemporary political institutions, behavior and ideas of the countries of Southeast Asia. Prerequisite: POLS 150 or a course in Asian history or Southeast Asian history. LEC.
POLS 658. Theories of Politics in Latin America. 3 Hours. S/W.
This course examines how political science can be used to explain the political dynamics of Latin America. The course will be devoted to understanding different theories about politics -- many of which have been devised by political scientists whose primary focus of study is not Latin America -- and examining their uses and limitations in understanding Latin America. Among the themes we will be examining are the relationships between economic growth, political culture, and democracy, the role of the military in politics, the political impact of new social movements (such as the women's movement and religious movements), theories of revolution, and understanding the prevalence of political corruption in the region. Along the way, we will analyze how political scientists attempt to develop hypotheses, gather data, and test theories. Prerequisite: POLS 150 or a social science course in Latin American topics. LEC.

POLS 659. Political Dynamics of Latin America. 3 Hours. S/W.
Study of the institutions, processes, and special problems of selected Latin American countries. Prerequisite: POLS 150 or a course concerning Latin America in the social sciences or history. LEC.

POLS 660. The Politics and Problems of Developing Countries. 3 Hours. NW AE42 / S/W.
A focus on topics pertinent to all of the underdeveloped areas such as the role of the military, styles of political leadership, land tenure systems, the role of the middle sectors, the nature of bureaucracy, the activity of the students, and foreign policy attitudes. Prerequisite: One of the following: POLS 652, POLS 653, POLS 654, POLS 655, POLS 656, POLS 657, POLS 658, POLS 659. LEC.

POLS 661. Politics of the Middle East. 3 Hours. NW AE42 / S/W.
Survey of domestic and international political developments in the Middle East. Topics include: emergence of the modern nation-state, the role of Islam, leadership patterns, competing political ideologies, prospects for democratization, foreign policy relations, and regional conflicts. Prerequisite: Nine hours in political science, including POLS 150 and POLS 170 or their honors equivalents, or permission of instructor. LEC.

POLS 663. Protest and Revolution. 3 Hours. S.
An exploration of what happens when protesters challenge a state. The course focuses on the interactions and outcomes of dissident and state conflict. Topics include the relation between coercion and protest, strategy, violence, terrorism as adaption, civil war and regime transition. Prerequisite: POLS 150. LEC.

POLS 664. Middle East Politics, Honors. 3 Hours. S.
Honors Version of POLS 661. Survey of domestic and international political developments in the Arab countries, Iran, Turkey, and Israel. Topics include state-society relations (e.g., forms of political organization, electoral politics, opposition movements, human rights, political Islam, gender), regional and international foreign relations, and the Arab-Israeli conflict. Prerequisite: Nine hours of Political Science, including POLS 150/151 and POLS 170/171, and membership in the University Honors Program; or by permission of instructor. LEC.

POLS 665. Politics in Africa. 3 Hours. NW AE42 / S.
A survey of politics in Africa, focused on the countries of sub-Saharan or Black Africa. The course includes a historical discussion of precolonial Africa, colonization and the creation of contemporary states, and the politics of independence, before examining contemporary political systems and the forces influencing patterns of politics on the continent. (Same as AAAS 600.) Prerequisite: POLS 150 or AAAS 105 or AAAS 305 or consent of instructor. LEC.

POLS 666. Political Economy of East Asia. 3 Hours. S.
This course provides basic understanding of fiscal, monetarist, and trade politics; how governments in East Asia use them to pursue growth; the extent to which these governments follow or controvert economics to pursue growth; and how the performances of economies in East Asia relate to the U.S. and global economies. (Same as EALC 666.) Prerequisite: POLS 150. LEC.

POLS 667. Islam and Politics. 3 Hours. NW AE42/AE51 / S.
This course gives students a basic understanding of Islam and Islamic movements, explores the economic, social, political, and cultural context in which these movements take place, and examines the impact of Islam on politics in select countries. Issues such as compatibility of political Islam and democratic politics, political economy in Muslim societies, fundamentalism in Islam, gender relations, identity politics and questions on clash of civilizations are explored. (Same as SOC 640.) Prerequisite: A principal course in sociology, POLS 150, or consent of instructor. LEC.

POLS 668. Reform in Contemporary China. 3 Hours. NW AE42 / H/W.
Examines the epochal changes that have occurred in China from Deng Xiaoping's rise to power in 1978 to the present. Includes a focus on the historical background of the revolutionary period before examining the political and economic changes that spawned the 1989 "prodemocracy" movement at Tiananmen. The course includes an analysis of the events of the 1990s focusing on U.S.-China political and economic relations and the destabilizing effects of inflation, infrastructural reform, political and economic decentralization, and leadership succession. A previous course on China is helpful, but not mandatory. (Same as EALC 585.) LEC.

POLS 669. Topics in Comparative Politics: _____. 2-3 Hours. S.
A study of selected contemporary problems of policy or politics affecting several countries. Course is repeatable for different topics. Prerequisite: POLS 150. LEC.

POLS 670. United States Foreign Policy. 3 Hours. S.
An evaluation of the formulation of United States foreign policy in the post-World War II period. Economic, military, and diplomatic dimensions of policy; internal and external influences on policy; theories of foreign policy decision-making. Prerequisite: Nine hours of political science, including POLS 170. LEC.

POLS 671. International Cooperation. 3 Hours. S.
An examination of the gains possible from international cooperation and the barriers to achieving cooperation. Theoretical perspectives on international cooperation will be explored along with cases such as trade, the environment, arms control, and the European community. Prerequisite: POLS 170 or consent of instructor. LEC.

POLS 672. International Political Economy. 3 Hours. S.
Structural theories of the international political economy provide the framework for a consideration of the nature of hegemony, the management problem of multinational corporations, the role of international regimes and organizations, development, and dependency. Prerequisite: Nine hours of political science, including POLS 170. LEC.

POLS 673. International Organization. 3 Hours. S.
International organizations are examined with special emphasis devoted to the United Nations. A central theme of the course rests upon the question of whether strengthened international organization offers the only alternative to further world wars. Prerequisite: POLS 170 and three additional hours of political science. LEC.

POLS 674. International Ethics. 3 Hours. H.
This course reviews how philosophical perspectives elucidate the role ethics plays in foreign policy. It covers human rights doctrines, issues of economic and political justice, just war theory (jus ad bellum) and just conduct of war (jus en bello) and humanitarian intervention. Prerequisite: POLS 170 or POLS 171. LEC.
POLS 675. Russian Foreign Policy. 3 Hours. S/W.
Examination of the history of Soviet and Russian foreign policy and current issues of foreign policy in the Post-Soviet era. Analysis of foreign policy making in Russia and the other Post-Soviet states. Emphasis on the changed nature of international security problems after the cold war and on the role of foreign policy in economic development. Prerequisite: Eight hours in the social sciences or history, including either POLS 170 or a course in Russian history. LEC.

POLS 676. International Relations of Asia. 3 Hours. S/W.
An intensive study of the problems of ideological conflict, diplomatic relations, strategic arrangements, economic cooperation, and cultural exchange in East and Southeast Asia with special emphasis upon the roles of major world powers. (Same as EALC 676.) Prerequisite: POLS 170 or a course in East Asian studies. LEC.

POLS 677. U.S. National Security Policy. 3 Hours. S.
An investigation into (1) how security policy is made; (2) the evolution of changing assumptions, strategies and goals since 1945; and (3) the present policy and its alternatives. Prerequisite: Six hours of political science, including POLS 170. LEC.

POLS 678. Chinese Foreign Policy. 3 Hours. S/W.
In-depth examination of China's changing policies toward other countries with special emphasis on policy-making process, negotiating behavior, military strategy, economic relations, and cultural diplomacy. (Same as EALC 678.) Prerequisite: POLS 170 or a course in East Asian studies. LEC.

POLS 679. International Conflict. 3 Hours. S.
Examination of the historical and theoretical issues surrounding the sources and control of international conflict. Topics will include political and anthropological theories of conflict, the role of force in the international system, international law and just war approaches, nuclear conflict, arms control, and nonviolent alternatives to conflict. Prerequisite: Nine hours of political science, including POLS 170; POLS 306 is recommended. LEC.

POLS 680. International Relations in Political Philosophy. 3 Hours. S.
A consideration of classical and modern theories of the international system, such as the writing of Thucydides, Machiavelli, twentieth-century realists, and others. Topics include, theories of the state, the role of ethics and normative judgments in the world order, the nature and use of power, the relationship between domestic and international politics. Prerequisite: POLS 301, or (for non-majors) completion of the Western Civilization requirement, or consent of instructor. LEC.

POLS 681. Comparative Foreign Policy. 3 Hours. S.
An examination of theories that seek to explain the foreign policy behavior and decision making processes of states in international relations and a survey of past and present foreign policies of several states in Latin America, Western and Eastern Europe, Africa, the Middle East, and the Far East. Prerequisite: Nine hours of political science, including POLS 150 and POLS 170. LEC.

POLS 683. International Mediation, Honors. 3 Hours. S.
This seminar examines the theories about, research on, and the practice of international mediation and other forms of non-militarized third party intervention used to address interstate, intrastate, and nonstate disputes. Specific topics include how mediation differs from other forms of non-militarized peace-building and conflict resolution; the conditions for mediation success (and how 'success' is defined; third party involvement after protracted civil conflict; the role of third parties in the implementation of peace agreements; the relationship between mediation, peace-building, and international law; and proactive conflict management. Prerequisite: Nine hours of political science, including POLS 170/171 and membership in the University Honors Program, or by permission of instructor. LEC.

POLS 684. International Law: The State and the Individual. 3 Hours. S.
International law has assumed an increasingly significant role in international life. This course will examine major law including (but not limited to): the changing status and role of the state; rights of minorities and self-determination; the environment; and human rights. The course will examine the central questions and the relevant international legal principles associated with each issue. Prerequisite: Six hours of Political Science, including POLS 170. LEC.

POLS 685. International Law: Laws of Armed Conflicts. 3 Hours. S.
This course examines the principles, roles, and functions of international law in the conduct of war. As the course reviews the development and application of the basic rules of armed conflict, several current issues and conflicts are addressed including: the legitimate use of force; the proper definitions of combatants and civilians; actions that constitute war crimes, the legality of new weapons technology, and, if the laws of armed conflict apply to the current "war on terrorism." Prerequisite: Six hours of Political Science, including POLS 170. LEC.

POLS 686. International Law: The State and the Individual. 3 Hours. S.
This course examines the principles, roles, and functions of international law in the conduct of war. As the course reviews the development and application of the basic rules of armed conflict, several current issues and conflicts are addressed including: the legitimate use of force; the proper definitions of combatants and civilians; actions that constitute war crimes, the legality of new weapons technology, and, if the laws of armed conflict apply to the current "war on terrorism." Prerequisite: Six hours of Political Science, including POLS 170. LEC.

POLS 688. Topics in International Relations: 2-3 Hours.
A study of selected problems in international relations. Course is repeatable for different topics. Prerequisite: POLS 170. LEC.

POLS 701. Political Theory. 3 Hours. S.
This course is intended to introduce graduate and advanced undergraduate students to the kinds of activities engaged in by political theorists. Thus the course focuses on several approaches to doing political theory, such as interpreting the work of great political philosophers, clarifying political concepts, organizing and integrating political ideas, evaluating political practices, and creating new political perspectives. The course focuses on historical and contemporary treatments of both epistemological issues (the possibility and grounds for political knowledge) and selected substantive issues (e.g., the legitimacy of the state, the merits and limitations of democracy, the requirements of justice, and the nature and importance of ideologies). LEC.

POLS 703. Social Choice and Game Theory. 3 Hours.
A survey of the political economic approach to individual and collective choice behavior called "rational choice." The course focuses on models of voting systems and other political institutions as seen from a game theoretic perspective. Prerequisite: Nine hours of political science or admission into the M.A. or Ph.D. LEC.

POLS 704. Quantitative Methods Primer in Political Science. 1 Hour.
Provides an introduction of basic quantitative methods in political science to prepare graduate students for the quantitative methods sequence in the Ph.D. program; basic statistics, statistical analysis techniques, and probability are explored. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Permission of the Instructor. LEC.

POLS 705. Research Design for Political Science. 3 Hours.
Introduction to the discipline of political science, the philosophy of science, research design, and data acquisition. Prerequisite: Graduate standing or consent of instructor. LEC.

POLS 706. Research Methods I. 3 Hours.
An introduction to quantitative research methods, including probability theory, hypothesis-tests, and multiple regression. Includes regression diagnostics, the treatment of numeric and categorical predictors, interaction effects and elementary nonlinear models. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and lab sessions where computing applications are taught. LEC.
POLS 707. Research Methods II. 3 Hours.
This course covers basic techniques for multivariate analysis, focusing on multiple regression. Topics include interpretation of regression statistics, diagnostics for common problems, dummy variables, instrumental variables, basic time series methods including adjustment for autocorrelated error, logistic models, and nonlinear modeling; additional techniques may be covered at the discretion of the instructor. Prerequisite: POLS 706. LEC.

POLS 708. Advanced Qualitative Research Methods. 3 Hours.
An examination of qualitative research approaches frequently employed within political science. Topics may include the use of case studies, archival and documentary research, content analysis, interviewing and focus group techniques, ethnographic fieldwork, narrative and discourse analysis, and others. The course will examine the strengths and limitations of these methods in relation to major research traditions such as culturalist approaches, historical institutionalism, rational choice, and constructivism. Prerequisite: POLS 705 and either graduate standing or consent of instructor. LEC.

POLS 709. Topics in Political Theory: ______. 3 Hours.
At the discretion of the instructor, this course will select one or more important areas of political theory for in-depth analysis. Prerequisite: Six hours in Political Theory. LEC.

POLS 710. American Public Philosophies. 3 Hours.
Surveys scholarly attempts to describe and analyze critically the changing public philosophies that have dominated American society and politics. Liberalism, republicanism, ascriptiveism, and pluralism are examples of such public philosophies. Also considered are some philosophies that are important but have not dominated American politics. Transcendentalism, populism, communitarianism, racial nationalism, and religious fundamentalism are examples of such philosophies. Prerequisite: Graduate standing or consent of the instructor. SEM.

POLS 711. The Psychological Base of Political Behavior. 3 Hours.
Examination of the relations between psychological mechanisms and social milieu factors and individual political behavior. Particular attention is devoted to understanding the development of politically relevant psychological traits and dispositions, and to the methodology employed in studying the socio-psychological factors which underlie individual political behavior. Prerequisite: Twelve hours of political science and consent of instructor. LEC.

POLS 712. The Electoral Process. 3 Hours.
A study of the characteristics of voting behavior and the influences upon such behavior in the United States. Emphasis is placed upon relevant research findings concerning partisanship and participation in politics, and on the methodology employed in the study of political behavior. Prerequisite: Twelve hours of political science and consent of instructor. LEC.

POLS 713. Law and Society. 3 Hours.
A study of the province and function of law in the context of relevant social, economic, and political factors. The impact of these factors on the law will be illustrated through readings and discussions of selected case histories. Emphasis will be placed upon law as a social phenomenon rather than upon its technical aspects. Prerequisite: Twelve hours of political science and permission of instructor for undergraduates. LEC.

POLS 714. Political Behavior. 3 Hours.
A seminar for students interested in understanding the public opinion, voting, and other forms of political participation. This course will include a discussion of the formation, measurement of political attitudes as well as an examination of protest and other forms of extra-legal participation. Prerequisite: Graduate standing or consent of instructor. LEC.

POLS 719. Topics in the American Political Institutions: ______. 3 Hours.
A seminar to be offered as occasion demands, dealing with, but not limited to special topics in the presidency, congress, and judicial processes. Prerequisite: Graduate standing or consent of instructor. LEC.

POLS 720. The Scope of Public Policy. 3 Hours.
Introductory graduate course in the examination of public policy making. Considers institutions, basic theoretical frameworks, and standard methods, and places policy-making within a broad political context. Emphasizes American examples, but relevant comparative material is employed. Prerequisite: Twelve hours of political science. LEC.

POLS 721. Intergovernmental Relations. 3 Hours.
A survey of characteristic legal, political, and administrative relationships among different units of American government, with particular emphasis upon the role of state agencies. Prerequisite: Nine hours of political science. LEC.

POLS 726. Public Policy in Comparative Perspective. 3 Hours.
This seminar examines the application of policy theory in regional and comparative contexts. Much of the research examined focuses on comparative public policy, but select weeks focus on specific regions of the world. A key goal is to help students understand which theories of policy may be best suited for universal application. LEC.

POLS 754. Politics and Government of Russia and the Central Eurasian States. 3 Hours.
The collapse of the Soviet system and the problems of transforming a central planned authoritarian state into a free market democracy. The roles of ethnic and national tensions, economic decay, and cultural factors. Prerequisite: Eight hours in the social sciences and/or history, including POLS 150, or consent of instructor. LEC.

POLS 758. Revolutionary Politics of Latin America. 3 Hours.
Primarily a comparative analysis of the Mexican, Bolivian, and Cuban revolutions within a framework of theories of revolutions. Some attention also to revolutionary political groupings and conditions in other Latin American countries. Prerequisite: POLS 150 or a course concerning Latin America in the social sciences or history. LEC.

POLS 774. International Law. 3 Hours.
Study of topics in international law, relating these closely to the dynamics of international relations. Special emphasis will be given to regulating force, resolving disputes, the law of the sea, human rights, and emerging problem areas such as the environment, outer space, the oceanic seabed, and genocide. Prerequisite: Six hours of courses in international relations including POLS 170 and/or relevant courses in the social sciences and modern history. LEC.

POLS 789. Topics in International Relations: ______. 2-3 Hours.
A study of selected problems in international relations. Prerequisite: Consent of instructor. RSH.

POLS 810. American Politics. 3 Hours.
A survey and critical examination of recent theoretical developments and research focusing on national institutions, electoral behavior, and policy-making processes. Emphasis is given to conceptualizing and analyzing the changing nature of the American political system. LEC.

POLS 812. Political Psychology. 3 Hours.
A critical examination of the principal areas in current literature in political psychology, including psychological perspectives on mass political behavior, elite decision making, and international relations. Attention will be given to articulating and evaluating theories, constructing research questions and programs, and comparing methodologies. LEC.
POLS 820. Policy Formulation and Adoption. 3 Hours.
Survey of the literature on the institutional, socioeconomic, and political forces influencing the formulation and adoption of public policy, as well as policy change, at all levels of government. Topics include problem definition, agenda setting, and the methods of decision-making. This is a research seminar so students will be required to conduct an original research project. LEC.

POLS 821. Policy Implementation and Analysis. 3 Hours.
An overview of the policy implementation process and the analysis of public policy. The course covers a variety of theories and methods related to the study of the implementation process, policy evaluation, policy analysis, and policy change and learning. Substantive policy areas covered include environmental regulation, education, criminal justice, public safety, and health care. LEC.

POLS 825. Urban Policy and Administration. 3 Hours.
This course explores the development, implementation and evaluation of public policy in the local government context. It examines a variety of policy tools used to address urban problems and applies theories of the policy process, intergovernmental relations, and institutions to municipal governance. (Same as PUAD 825.) LEC.

POLS 830. Advanced Research Methods for Public Policy. 3 Hours.
Research seminar organized around advanced quantitative and qualitative method skills for research on American and comparative politics and public policy. The course will combine advanced statistical estimation procedures (e.g., hazard analysis, event history analysis, hierarchical “contextual effects” models) with methods for the collection and integration of data. This course is intended to facilitate research efforts of students in the fields of American politics, comparative politics, and public policy. The course is open to Ph.D. students from other departments who have completed a course in intermediate regression analysis. Prerequisite: POLS 707 or similar graduate level course. LEC.

POLS 849. Law, Courts, and Public Policy. 3 Hours.
This course provides an overview of the role of law, litigation, and courts in the public policy process, with an emphasis on bureaucratic institutions. The course covers the main theories and empirical research on the policy effects of litigation and intervention, with a particular focus on civil rights in the areas of employment, policing, welfare, prisons, and environmental policy. (Same as PUAD 849.) Prerequisite: Graduate standing or consent of instructor. LEC.

POLS 850. Introduction to Comparative Politics. 3 Hours.
This course provides a graduate level introduction to the field of Comparative Politics. Among topics it will survey are: the history and development of the field; classic works and major founding concerns of the field; methodological and epistemological debates; competing paradigms which had characterized Comparative Politics (structural-functionalism, culturalists, state-centrists, institutionalists, rational choice, and other); theory building and the role of area studies. LEC.

POLS 851. Comparative Institutions and Government. 3 Hours.
This course provides a survey of the subfield of political institutions within Comparative Politics. Among the topics it will cover are: identifying regime types (democracy vs. non-democracy); comparative electoral systems; party systems; presidential vs. parliamentary systems; comparative legislatures; constitutional engineering and democratic transitions, and others. Prerequisite: POLS 850. LEC.

POLS 852. Comparative Political Economy. 3 Hours.
This course provides a survey of some of the major works, research traditions, and current debates in the subfield of comparative political economy. This includes such topics as: The political economy of development and underdevelopment; dependency and world systems theory; the relationship between economic development and democracy; capitalist development and democracy; the political economy of dual transitions; the political economy of privatization and structural adjustment; comparative welfare states; and comparative labor-business-government relations. Prerequisite: POLS 850. LEC.

POLS 853. Comparative Social Politics. 3 Hours.
This course provides a survey of some major research traditions and current debates in the subfield of political sociology. This includes such topic as: culture and politics; elites, social structures, and politics; the politics of cultural pluralism and ethnonationalism; social movements and protest; gender and politics; state-society relation; and religion and politics. Prerequisite: POLS 850. LEC.

POLS 870. International Relations. 3 Hours.
Critical evaluation of the major approaches to international relations and their application to conflict and conflict resolution, foreign policy, and international political economy. LEC.

POLS 878. Conducting and Analyzing Fieldwork in Developing Countries. 3 Hours.
An introduction to fieldwork and surveys conducted in developing and non-democratic countries. The course covers the challenges of conducting interviews and surveys in these countries. The intent is to develop the research skills necessary for data collection and fieldwork as well as evaluating an analyzing survey data collected by other researchers in developing countries. Prerequisite: POLS 705 or equivalent or consent of the instructor. SEM.

POLS 888. Contemporary China Studies. 3 Hours.
This course will review and analyze the current literature on China's social and political development, including a wide range of topics within political science. There is a rich body of literature within each topic such as civil society in China, legal reform, political culture, nationalism, gender issues, ethnicity, political behavior, elections, economic development, and inequality. This course will introduce key literature within each topic focusing on the debates among China scholars as well as how these debates fit in the general field of political science. (Same as EALC 888 and POLS 888.) Prerequisite: POLS 668 or permission of the instructor. LEC.

POLS 898. Non-Thesis Research. 1 Hour.
Research course used to fulfill continuous enrollment requirement for master's degree students. Hours cannot count toward degree. Must be graded Satisfactory/Unsatisfactory. RSH.

POLS 899. Thesis. 1-6 Hours.
Enrollment for writing thesis for master's degrees. THE.

POLS 904. Statistical Computing Foundations. 3 Hours.
This is an interdisciplinary course for social science researchers who need to develop routines to estimate and evaluate statistical models. It introduces tools for software development, primarily with the statistical programming language R (and related languages like C). Topics include code organization and optimization, concurrent version management, LaTeX document preparation, and high-performance computing on the KU Linux cluster. Examples from various fields are considered. Prerequisite: Two courses in graduate level statistics and familiarity with R. LEC.

POLS 905. Complex Adaptive Systems, Agent-Based Modeling and Computer Simulation. 3 Hours.
This seminar addresses the rapidly growing science of complex systems. Topics addressed include political, economic, ecological, and biological systems. Includes a survey of the theory of complexity and computer models that are used to study complex adaptive systems. The main focus is on agent-based models, but attention is also given to traditional cellular
automata. Methods of designing, programming, and interpreting results of agent-based models are addressed. Students who have no formal training in computer programming are welcome in the course, but they should expect to do some extra work on fundamentals of programming. A preparatory course in Java, C++, Objective-C, or another object-oriented language would significantly facilitate the student's research effort. SEM.

POLS 906. Advanced Regression. 3 Hours.
Covers topics appropriate for a second course in regression analysis. The content will vary according to the interest of the instructor and students, but will generally include such topics as multiple imputation of missing data, the generalized linear model (GLM), and specialized models for longitudinal data. The course will include a review of the principles of maximum likelihood estimation and applications of matrix algebra and differential calculus in statistical applications. LEC.

POLS 907. Research Methods in International Studies. 3 Hours.
This course focuses on quantitative methods of research relevant to international relations and comparative politics. Topics will vary with the instructor and student interests, but may include time series analysis, classification algorithms, computer programming and computational modeling, simulation, event data and content analysis, and dynamic models. Prerequisite: POLS 707. LEC.

POLS 908. Individual and Collective Choice. 3 Hours.
This course surveys rational choice theories of politics as they are applied to decisions by individuals and groups. Models of individual behavior are drawn primarily from economics and decision theory. The primary approaches to collective choice are social choice theory and game theory. Prerequisite: POLS 707. LEC.

POLS 909. Topics in Methodology: _____. 3 Hours.
An intensive seminar in a method (or a variety of relevant methods) of theoretical or empirical research designed for Ph.D. students only. Emphasis is on deepening the understanding and ability to use advanced methods of analysis. Prerequisite: Admission to the Ph.D. program or consent of instructor. RSH.

POLS 910. Research Seminar in American Government. 2-3 Hours.
A faculty and advanced graduate student collegial research experience focusing on American politics, policy-making and administration, with faculty and students engaged in the production of scholarly research articles, books and conference papers. Topics will be chosen by individual students with consent of the seminar professor. LEC.

POLS 911. The U.S. Congress. 3 Hours.
This seminar employs various theoretical and methodological perspectives to explore the burgeoning post-1960 literature on Congress. Traditional subjects such as committees, parties, and elections are examined through applications of formal models, behavioral analyses, and participant observation. LEC.

POLS 912. Elections and Voting Behavior. 3 Hours.
A research seminar for students interested in theoretical and empirical approaches to the behavior of candidates, voters and contributors in campaigns and elections. The impact of campaign laws and other institutional influences will also be examined. LEC.

POLS 913. State and Local Politics. 3 Hours.
Research seminar on various aspects of state and local government, such as reformed institutions, fiscal stress, citizen participation, and various policy problems. LEC.

POLS 914. Political Behavior. 3 Hours.
Survey of various approaches to the analysis of political behavior, including an evaluation of each approach in terms of its utility in building empirically-based political theory. Examples of the application of the various approaches will focus upon the American political process. LEC.

POLS 915. American Political Parties. 3 Hours.
A survey of the theories and research findings dealing with political parties in American politics, including third and minor parties. Topics to be covered include the development and evolution of the party system, the nature of party organization and the recruitment of party activists, the role of parties in the electoral process, the impact of parties upon public policy, and party reform. LEC.

POLS 916. Group Politics. 3 Hours.
The focus of this course is upon the theories and research findings dealing with political groups in American politics, including protest groups, movements, as well as conventional interest groups. Topics to be covered include group mobilization and maintenance, group involvement in the political party and electoral processes, methods and strengths of group influence, and the impact of political groups on the policy process. LEC.

POLS 917. The Presidency. 3 Hours.
An advanced research seminar for students interested in theoretical and empirical approaches to the American presidency. This seminar will examine the powers and organizations of the White House through a study of the literature. LEC.

POLS 919. Topics in U.S. Government and Politics: _____. 2-3 Hours.
A seminar to be offered as occasion demands, dealing with, but not limited to, bureaucracy, legislative policy, federalism, and special problems in U.S. politics. LEC.

POLS 920. Policy Analysis Research Seminar. 3 Hours.
Research seminar designed to apply public policy theory and policy analysis methods to evaluate the impact of public policies. Students will be required to design and conduct an original research project with the intention of presenting the work at a professional conference or publishing the work in a professional journal. LEC.

POLS 921. Public Law. 3 Hours.
This seminar is designed to initiate the advanced graduate student to research in judicial and jury behavior. Requirements include mastery of literature on the psychological foundations of legal judgment and research designed to test propositions derived from this literature. LEC.

POLS 929. Topics in Public Policy: _____. 1-3 Hours.
Study of selected topics in public policy. LEC.

POLS 940. Teaching Political Science. 1 Hour.
A discussion of teaching methods and approaches. Students are expected to develop a personal teaching portfolio that describes their outlook on teaching political science and provides sample teaching materials. This course must be taken by all graduate teaching assistants and assistant instructors during the first year of their appointment. Grades are issued on a pass/fail basis. LEC.

POLS 950. Research Seminar in International Studies. 2-3 Hours.
A faculty and advanced graduate student collegial research experience, focusing on comparative politics, area studies, and international relations, with faculty and students engaged in the production of scholarly research articles, books, and conference papers. Topics will be chosen by individual students with consent of the seminar professor. RSH.

POLS 951. Mobilization. 3 Hours.
A study of how politicians, interest group leaders, and dissident leaders exhort citizens to act in or preclude them from acting in politics. LEC.

POLS 952. Comparative Electoral and Party Systems. 3 Hours.
This research seminar addresses the major theoretical and empirical issues in the study of electoral and party systems. In addition to evaluating the classic works of Arrow, Duverger, Lipset and Rokkan, Rae,
and Taagepera and Shugart, students will assess contemporary work on electoral and party systems that has evolved from this source material. The course will address the design and reform of electoral systems, institutional rules and the strategic environment they create for political actors, the role of institutional and social factors in the development of political party systems, and the role of election administration. Students will develop and present original research papers related to these topics. Prerequisite: POLS 850. LEC.

POLS 953. Comparative Legislatures. 3 Hours.
This research seminar addresses the major theoretical and empirical issues in the study of legislatures. Students will discuss the design of institutions, government formation, accountability, legislative process and role of committees, agenda setting, elections and parties, and representation. The course will familiarize students with the core debates in legislative studies, extend knowledge of regional variation in the design and function of representative institutions, develop skills in the analysis of legislative records, and enhance professional socialization. Prerequisite: POLS 810, POLS 850, or consent of instructor. LEC.

POLS 954. Politics in Post-Soviet States. 3 Hours.
In-depth study of the politics of Russia, Ukraine, and the other Post-Soviet states. Focus on the problems of transforming a centrally planned authoritarian system to a free market democracy. LEC.

POLS 955. Politics of Advanced Industrial Societies. 3 Hours.
Theory and research on the patterns of behavior that characterize the politics of North America, Europe, and developed regions of Asia. Topics include corporatism and alternative forms of interest intermediation, economic theories of socialization and electoral choice, and the role of the state; its finances, adaptation, and the problem of power and legitimacy. Prerequisite: POLS 850 or permission of instructor. LEC.

POLS 956. The Governments and Politics of Asia. 2-3 Hours.
A research seminar on selected subjects and issues in the governments and politics of selected Asian countries. The particular focus each year will depend upon the instructor. LEC.

POLS 957. Comparative Political Behavior. 3 Hours.
The course introduces students to the vast literature on comparative elections and comparative political parties. It pursues a twofold goal. First, the course surveys the large comparative electoral behavior literature. The themes covered in the first half include a discussion of why voters participate in elections, how voters form preferences, how psychological processes affect mass views, and how these, in turn, influence party preferences. Second, the course introduces students to the supply-side of politics and the role of political parties. This second part of the course, therefore, examines why parties form in the first place, what motives they have, what choices they offer in short, how and why parties compete. Together, the way voters form preferences and the logic of party formation illuminate a central element of the democratic process. LEC.

POLS 959. Topics in Comparative Politics: ______. 1-3 Hours.
Study of selective topics in comparative government and politics. LEC.

POLS 960. Politics of Developing Countries. 2-3 Hours.
LEC.

POLS 961. The Politics of Culturally Plural Societies. 3 Hours.
This is an advanced graduate seminar on the comparative study of politics in countries characterized by sub-cultural cleavages, including ethnicity, language, religion and race. The course will first survey and critique competing theoretical explanations for different patterns of conflict or peaceful cohabitation among such groups in a variety of world regions. Students will then examine the utility of these theories in individual in-depth research papers which will be presented in class and critiqued by seminar participants. LEC.

POLS 970. Foreign Policy Analysis. 3 Hours.
Designed to acquaint students with the principal theories, approaches and types of empirical analysis generally employed to explain and interpret the creation and implementation of foreign policy. Topics include rational actor models, collective and bureaucratic processes, societal influences, cognitive and psychological factors, and comparative foreign policy. Prerequisite: POLS 870. An undergraduate United States foreign policy class is recommended. LEC.

POLS 972. Theories of International Conflict. 3 Hours.
An in-depth survey of theories and research on international conflict. Topics will range from anthropological studies of conflict in primitive societies to contemporary theories of nuclear conflict. The course will also cover current empirical research methodology and results of research on international conflict, as well as models of conflict processes. Prerequisite: POLS 870. LEC.

POLS 973. International Political Economy. 3 Hours.
Provides an eclectic survey of major developments in the field. Topics include the intellectual origins of IPE; the historical evolution of the international system; North-South and Western trade, investment, and monetary relations; foreign aid, debt technology transfer, development, international economic institutions (e.g., IMF, IBRD, MNCs, etc.). (Same as SOC 873.) Prerequisite: POLS 870 or consent of instructor. LEC.

POLS 974. International Mediation and Conflict Resolution. 3 Hours.
The course examines the theory and practice of international mediation and other forms of third party intervention used to resolve interstate and nonstate disputes. Topics include explanations of mediation success and failure, conditions of conflict escalation where mediation is likely to be counterproductive or resisted by recalcitrant disputants, the ethics of intervention, citizen diplomacy, and the role of international organizations such as the United Nations. Prerequisite: POLS 870. LEC.

POLS 977. Ethics in International Relations Theory. 3 Hours.
This course examines how issues of International Ethics have been treated in International Relations theory. This course begins by reviewing several theoretical perspectives of International Relations and how these perspectives have historically understood the role ethics plays in international politics. By the end of the semester, students should have a firm understanding of (1) the salient issues of international ethics in world politics and (2) whether and how IR scholars have (theoretically and methodologically) placed those issues in their research paradigms. The issue areas the course will cover include, but are not limited to, human rights doctrines, issues of economic and political justice, just war theory (jus ad bellum) and just conduct of war (jus in bello), and humanitarian intervention. The course will assess the role international law has played in stemming and/or punishing human rights abuses. Students will review several historical cases of genocide, as well as several cases of truth and reconciliation commissions. LEC.

POLS 978. Advanced Topics in International Relations Theory. 3 Hours.
Intensive examination of key theoretical debates in international relations. Topics covered will include Classical Realism and Liberalism, Neorealism/Neoliberal debate, and post-structural critiques of mainstream international relations theory. Prerequisite: POLS 870. LEC.

POLS 979. Topics in International Relations: ______. 3 Hours.
To be offered periodically when topics of special interest arise. LEC.

POLS 980. International Organizations. 3 Hours.
Considers theoretical and empirical work on international governmental and non-governmental organizations (IOs). Specifically highlights the evolving scholarly debates regarding the function, design, and delegation of authority to IOs as well as their behavior and change.
Explores these questions in depth through a wide range of cases, including comprehensive coverage of the United Nations, Bretton Woods Institutions, and the European Union, and their activities in issue areas concerning international security, trade, finance, development, humanitarian aid, and the environment. LEC.

**POLS 981. Global Development. 3 Hours.**
Considers the nature and problems of development and underdevelopment from a cross-regional and interdisciplinary perspective. Deals with the historical origins of the enormous disparities in wealth that exist today, both between and within countries. Considers the explanations for those differences, prescriptions for how to narrow them, and specific cases (both successes and failures) from various regions of the globe. LEC.

**POLS 993. Directed Readings. 1-5 Hours.**
Designed to meet the needs of graduate students whose study in political science cannot be met with present course. Prerequisite: Consent of instructor. RSH.

**POLS 995. Directed Research. 2 Hours.**
Designed for advanced graduate students who are concurrently enrolled or who will be enrolled in a subsequent semester in one of the Research Seminars in American Government or International Studies. Students enrolling in this course should have the prior approval of the faculty member with whom they wish to conduct the research. RSH.

**POLS 997. Preparation for the Comprehensive Examination. 1-6 Hours.**
An independent reading course for students preparing to take the Ph.D. comprehensive examination. May be taken for two semesters or six credits, whichever comes first. Graded on A, B, C, D, or F depending on the results of the comprehensive examination. RSH.

**POLS 999. Doctoral Dissertation. 1-15 Hours.**
Enrollment for writing doctoral dissertations. THE.

**Psychology Courses**

**PSYC 102. Orientation Seminar in Psychology. 1 Hour. S.**
Provides an overview of the discipline of psychology. Emphasizes developing an understanding of opportunities in psychology at the University of Kansas, exploring service-learning options related to the major, and helping students plan goals for their education through an understanding of their personal values and options within and outside the discipline. Open to KU-degree-seeking students only. Contact the Psychology Department to enroll in the course. Non-degree-seeking and non-KU students may enroll in the course by signing up with KU Continuing Education. Graded on a satisfactory/unsatisfactory basis. LEC.

**PSYC 104. General Psychology. 3 Hours. SI GE3S / S.**
A basic introduction to the science of psychology. LEC.

**PSYC 105. General Psychology, Honors. 3 Hours. SI GE3S / S.**
Open to students in College or Departmental Honors programs or by permission of instructor. LEC.

**PSYC 120. Personality. 3 Hours. SI GE3S / S.**
An introductory survey of personality theories, development, assessment and current research. LEC.

**PSYC 121. Personality, Honors. 3 Hours. SI GE3S / S.**
Open to students in College or Departmental Honors programs or by permission of instructor. LEC.

**PSYC 177. First Year Seminar: ______. 3 Hours. SI GE11.**
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in psychology. May not contribute to major requirements in psychology. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

**PSYC 200. Research Methods in Psychology. 3 Hours. S.**
An examination of the scientific "ways of knowing" employed by psychologists to discover the laws governing human behavior across a wide domain. The focus of the course is upon these methods and the statistical techniques that support them. Prerequisite: PSYC 104 and MATH 101 or equivalent placement. LEC.

**PSYC 201. Research Methods in Psychology, Honors. 3 Hours. S.**
An examination of the scientific "ways of knowing" employed by psychologists to discover the laws governing human behavior across a wide domain. The focus of the course is upon these methods and the statistical techniques that support them. Open to students in University and Departmental Honors programs or by permission of instructor. Not open to students taking PSYC 200. Prerequisite: PSYC 104 and MATH 101. LEC.

**PSYC 202. Study Abroad Topics in: ______. 1-4 Hours. S.**
This course is designed for the study of special topics in Psychology. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

**PSYC 210. Statistics in Psychological Research. 3 Hours. S.**
An introduction to statistical concepts and methods as they relate to analysis and interpretation of psychological data. Prerequisite: PSYC 104 and MATH 101 or equivalent placement. LEC.

**PSYC 211. Statistics in Psychological Research, Honors. 3 Hours. S.**
An introduction to statistical concepts and methods as they relate to analysis and interpretation of psychological data. Open only to student in University and Departmental Honors programs or by permission of instructor. Not open to students who have taken PSYC 210. Prerequisite: PSYC 104 and MATH 101 or equivalent placement. LEC.

**PSYC 318. Cognitive Psychology. 3 Hours. S.**
An introduction to contemporary research and theory in human learning and memory, relevant perceptual processes, and higher functions such as language. Prerequisite: PSYC 104 and one of the following: PSYC 200, PSYC 201, PSYC 210, PSYC 211, MATH 101, MATH 104 or equivalent placement. LEC.

**PSYC 319. Cognitive Psychology, Honors. 3 Hours. S.**
Open to students in University or Departmental Honors programs by permission of instructor. Prerequisite: PSYC 104 and one of the following: PSYC 200, PSYC 201, PSYC 210, PSYC 211, MATH 101, MATH 104 or exemption based on ACT or SAT score. LEC.

**PSYC 333. Child Development. 3 Hours. S.**
A survey course on the science and application of child and adolescent development; including physical, motoric, social, emotional, and cognitive changes from conception through adolescence. The course covers methods and theory, genetics, and may incorporate content on aggression, morality, parenting, media, and peers. Prerequisite: PSYC 104 and one of the following: PSYC 200, PSYC 201, PSYC 210, PSYC 211, MATH 101, MATH 104 or exemption based on ACT or SAT score. LEC.

**PSYC 334. Child Development, Honors. 3 Hours. S.**
A survey course on the science and application of child and adolescent development; including physical, motoric, social, emotional, and cognitive changes from conception through adolescence. The course covers methods and theory, genetics, and may incorporate content on aggression, morality, parenting, media, and peers. Open to students in University or Departmental Honors Programs or by permission of instructor. Prerequisite: PSYC 104 and one of the following: PSYC 200,
PSYC 201, PSYC 210, PSYC 211, MATH 101, MATH 104 or exemption based on ACT or SAT score. LEC.

PSYC 350. Abnormal Psychology. 3 Hours. S.
An examination of psychopathology including anxiety disorders, psycho-physiological disorders, affective disorders, and schizophrenic disorders. Disorders are considered from psychodynamic, behavioral, cognitive, and biological perspectives. Prerequisite: PSYC 104. LEC.

PSYC 351. Abnormal Psychology, Honors. 3 Hours. S.
Open to students in College or Departmental Honors programs or by permission of instructor. Prerequisite: PSYC 104. LEC.

PSYC 360. Social Psychology. 3 Hours. S.
An introduction to the psychology of social behavior. Systematic consideration of such concepts as social influence, conformity and deviation, social attitudes and prejudice, socialization and personality, communication and propaganda, morale, and leadership. Prerequisite: PSYC 104 and one of the following: PSYC 200, PSYC 201, PSYC 210, PSYC 211, MATH 101, MATH 104 or exemption based on ACT or SAT score. LEC.

PSYC 361. Social Psychology, Honors. 3 Hours. S.
An introduction to the psychology of social behavior. Systematic consideration of such concepts as social influence, conformity and deviation, social attitudes and prejudice, socialization and personality, communication and propaganda, morale, and leadership. Prerequisite: PSYC 104 and one of the following: PSYC 200, PSYC 201, PSYC 210, PSYC 211, MATH 101, MATH 104 or exemption based on ACT or SAT score. LEC.

PSYC 370. Behavioral Neuroscience. 3 Hours. N.
A survey of topics related to the biological processes underlying behavior in humans and in animals, including the physiology of neuronal and synaptic transmission, neurochemistry, and neuropharmacology. Selected topics within the area of behavioral neuroscience are also covered, such as motivation, appetite, reward, homeostasis, biological rhythms, addiction, aggression, stress, emotion, and sleep. Prerequisite: An introductory course in Psychology; an introductory course in Biology; and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211. LEC.

PSYC 371. Behavior Neuroscience, Honors. 3 Hours. N.
A survey of basic topics related to the biological processes underlying behavior in humans and in animals, including the physiology of neuronal and synaptic transmission, neurochemistry, and neuropharmacology. Selected topics within the area of behavioral neuroscience are also covered, such as motivation, appetite, reward, homeostasis, biological rhythms, addiction, aggression, stress, emotion, and sleep. Open to students in University or Departmental Honors programs or by permission of instructor. Prerequisite: An introductory course in Psychology, an introductory course in Biology and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211. LEC.

PSYC 375. Cognitive Neuroscience. 3 Hours. N.
A survey of topics related to the biological processes underlying cognition in humans and in animals, including the physiology of neuronal and synaptic transmission, neurochemistry, and functional neuroanatomy. Selected topics within the area of cognitive neuroscience also covered, such as sensory processing, hearing, vision, learning and memory, attention, motor control, language, hemispheric asymmetry, executive function, and neuroplasticity. Prerequisite: An introductory course in Psychology; an introductory course in Biology; and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211. LEC.

PSYC 380. Clinical Neuroscience. 3 Hours. N.
The organization and function of the nervous system as it relates to topics of interest to psychologists, including pain, anxiety, stress, sleep, depression, schizophrenia, akinetic and dyskinetic movement disorders, and senile dementia. Prerequisite: An introductory course in Psychology, an introductory course in Biology, and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211. LEC.

PSYC 381. Clinical Neuroscience, Honors. 3 Hours. N.
The organization and function of the nervous system as it relates to topics of interest to psychologists, including pain, anxiety, stress, sleep, depression, schizophrenia, akinetic and dyskinetic movement disorders, and senile dementia. Open to students in University or Departmental Honors programs or by permission of instructor. Prerequisite: An introductory course in Psychology, an introductory course in Biology, and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211. LEC.

PSYC 402. Study Abroad Topics in: _____ 1-4 Hours. S.
This course is designed for the study of special topics in Psychology equivalent to courses at the 300 to 600 level at KU. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

PSYC 405. Children and Media. 3 Hours. H.
The applied study of child development theories and research methods on the influences and effects of television and related visual media on childhood in the contexts of families, schools, and society. (Same as ABSC 405 and THR 405.) LEC.

PSYC 406. Individual Differences. 3 Hours. S.
A survey of the nature and sources of differences in human behavior and a consideration of the consequences of these differences for society. Prerequisite: PSYC 104. LEC.

PSYC 410. Intimate Relationships. 3 Hours. S.
A social psychological perspective on adult intimate relationships, examining friendship, dating, committed relationships, and the dissolution of committed relationships. Topics include romance, jealousy, self-disclosure, power, loneliness, and social support. Discussion of heterosexual and homosexual relationships, traditional forms (e.g., marriage) of relationships as well as alternative lifestyles (e.g. cohabitation) and gender-linked differences in relationships. Prerequisite: PSYC 104. LEC.

PSYC 415. Social and Cultural Sources of Self. 3 Hours. S.
An interdisciplinary exploration of the social and cultural sources of self-experience. The first part of the course emphasizes a general process: how the development and experience of self, though it might seem essentially personal, is shaped by social interaction. The second part of the course highlights particular cases: how self-experience may be constructed differently depending on the particular social and cultural settings a person inhabits. Cases include influences of gender, socioeconomic status, and age group on the construction of self-experience within societies from around the world, and ethnic-identity groups within the USA. Prerequisite: PSYC 104. LEC.

PSYC 418. Introduction to Cognitive Science. 3 Hours. S.
Examines the data and methodologies of the disciplines that comprise Cognitive Science, an inter-disciplinary approach to studying the mind and brain. Topics may include: consciousness, artificial intelligence, linguistics, education and instruction, neural networks, philosophy, psychology, anthropology, evolutionary theory, cognitive neuroscience, human-computer interaction, and robotics. (Same as LING 418, PHIL 418, and SPLH 418.) Prerequisite: Consent of instructor. LEC.
PSYC 420. Fundamentals of Personality. 3 Hours. S.
Clinical application of personality theories; personality development and assessment research. Prerequisite: PSYC 104. LEC.

PSYC 430. Cognitive Development. 3 Hours. S.
A basic survey course in the development of thinking and understanding in normal children. The course will cover Piaget's theory and information processing theories at the advanced undergraduate level. Topics include perception, attention, learning, memory, language, problem solving, and individual differences from birth to the mid-teens. Prerequisite: PSYC 104 or ABSG/HDFL 160. LEC.

PSYC 432. Human Behavioral Genetics. 3 Hours. S.
A survey of human behavioral genetics for upper division undergraduates. Emphasis is on how the methods and theories of quantitative, population, medical, and molecular genetics can be applied to individual and group differences in humans. Both normal and abnormal behaviors are covered, including intelligence, mental retardation, language and language disorders, communication, learning, personality, and psychopathology. (Same as ANTH 447, BIOL 432, SPLH 432.) Prerequisite: Introductory courses in biology/genetics or biological anthropology and psychology are recommended. LEC.

PSYC 435. Social and Personality Development. 3 Hours. S.
An introduction to social and personality development with consideration of both classic and contemporary theoretical viewpoints. The role of social contexts is considered (e.g., family, peers, communities), as well as biological influences (e.g., behavioral genetics). Topics include parent-infant attachment, peer relationships, aggression, etc. Prerequisite: PSYC 104. LEC.

PSYC 449. Laboratory/Field Work in Human Biology. 1-3 Hours. AE61 / N.
Faculty supervised laboratory or field research for Human Biology majors. Students design and complete a research project in collaboration with a Human Biology faculty member. (Same as ANTH 449, BIOL 449, and SPLH 449.) Prerequisite: Consent of instructor and Human Biology major. FLD.

PSYC 453. Psychological Foundations of Musical Behavior. 3 Hours. S.
Study of human musical behavior, including basic psychoacoustic phenomena, musical taste, functional music, musical ability, cultural organization of musical sounds, and the affective response. Prerequisite: General Psychology, MGMT 370, or consent of instructor. LEC.

PSYC 460. Honors in Psychology. 1-2 Hours. AE61 / S.
A seminar for juniors and seniors in the Honors Program in Psychology. Students who have been admitted to the Honors Program in Psychology may enroll for one credit for one or both semesters of their junior year and are required to enroll for two credits for both semesters in their senior year. IND.

PSYC 465. Stereotyping and Prejudice Across Cultures. 3 Hours. S.
This course covers a variety of theoretical views concerning the origins of stereotypes and the factors that maintain them, as well as how and when the revision of such beliefs take place. Analysis of various stereotypes (including gender and race) and the experience of prejudice across a variety of cultural contexts is examined. Many difficult social issues are discussed in depth. Prerequisite: PSYC 360 or PSYC 361; or consent of instructor. LEC.

PSYC 468. Psychology of Women. 3 Hours. S.
A survey of the psychological theories about women; similarities and differences in behavior of women and men; the effects of biological and social factors on the behavior of women and men; and issues of concern to women of different races, sexual orientations, ages, and so forth. (Same as WGSS 468.) Prerequisite: PSYC 104 or WGSS 201. LEC.

PSYC 470. Introduction to Contemporary Psychotherapies. 3 Hours. S.
Review of current psychotherapies with special references to their underlying philosophies, theories of personality, techniques, and effectiveness. Issues concerning the use of drugs in the treatment of mental disorders are also reviewed. Prerequisite: PSYC 104. LEC.

PSYC 472. Psychology of Sleep and Dreaming. 3 Hours. S.
This course reviews recent evidence on the roles of dreaming and dreamless sleep. Psychological, developmental, personality, and social psychological aspects are considered. Prerequisite: PSYC 104. LEC.

PSYC 475. Cognitive Neuroscience. 3 Hours. S.
The neurobiology of higher mental processes such as perception, attention, learning, memory, thinking, and language, as studied by techniques such as recording from individual neurons, electrical brain stimulation, brain damage, and brain scans and measurements of regional cerebral blood flow in conscious people. Emphasis will be placed on in-class analysis of original research articles. Prerequisite: One of the following courses - PSYC 318, 319, 370, 371, 380, or 381; or consent of instructor. LEC.

PSYC 480. Independent Study. 1-5 Hours. U.
Investigation of a special research problem or directed reading in an area not covered in regular courses. No more than 3 hours of PSYC 480 may be counted toward the minimum hours required for the major. Prerequisite: Consent of instructor. IND.

PSYC 481. Research Practicum. 1-5 Hours. U.
Guided participation in ongoing research programs to augment quantitative skills through direct practicum experience. No more than 3 hours of PSYC 481 may be counted toward the Psychology minor or the Psychology, Developmental Psychology, and Behavioral Neuroscience major requirements. Prerequisite: PSYC 200 or PSYC 201 or PSYC 210 or PSYC 211 or consent of instructor. RSH.

PSYC 482. Sensation and Perception. 3 Hours. S.
Introduction to human sensory and perceptual capabilities. Topics include: sensory systems, perceptual development, and perceiving color, objects, space, movement, sound, speech, touch, smell, and taste as well as various perceptual illusions. Prerequisite: PSYC 104. LEC.

PSYC 483. Undergraduate Internship in Psychology. 1-3 Hours. U.
Students conduct psychology focused fieldwork in an organization related to their professional/career goals. Credit hours are determined on the basis of 120 clock hours for 3 credit hours, 80 clock hours for 2 credit hours, and 40 clock hours for 1 credit hour. An internship plan (contract) is developed by the student in conjunction with the student's academic adviser and signed off by the academic adviser and an authorized agent of the internship site. At the conclusion of the internship experience, the authorized agent of the internship site writes the academic adviser indicating that the student has met the goals of the internship plan and the hours required. No more than 3 hours of PSYC 483 may be counted toward the minimum hours required for the major. Prerequisite: Admission to the Psychology major. FLD.

PSYC 490. Theories and Concepts of Child Development. 3 Hours. S.
An advanced course in the theories and basic concepts of child development. Coverage includes: (a) analyses of the general logic, assumptions, and principles of the five major approaches: normative-maturation, psychoanalytic, social learning theory, cognitive-developmental, and behavior analysis; (b) historical background of developmental theory; (c) social-cultural influences on theory construction; and (d) some cross-cultural perspectives. Not open to students previously
enrolled in HDFL 290. Prerequisite: PSYC 104, or HDFL 160, HDFL 161, HDFL 432, or consent of instructor. LEC.

PSYC 492. Psychology and Social Issues. 3 Hours. S.
A study of psychological aspects of selected social issues in contemporary American society. Race relations and the civil rights movement. Political extremism. Public opinion and social change. Social psychological approaches to a variety of social problems. Prerequisite: PSYC 360 or 361, or consent of instructor. LEC.

PSYC 499. Conceptual Issues in Psychology. 3 Hours. S.
This course examines classic issues in psychology--free-will and determinism, nature and nurture, the mind-body problem, approaches to human action, cultural influences on psychological theories, the evolution of intellectual paradigms, and inductive and deductive approaches to social scientific research--from multiple perspectives within psychology and related social sciences. Prerequisite: PSYC 104 or equivalent. LEC.

PSYC 500. Intermediate Statistics in Psychological Research. 3 Hours. U.
A second course in statistics with emphasis on applications. Analysis of variance, regression, analysis, analysis of contingency tables; possibly selected further topics. Prerequisite: Grade of B- or better in PSYC 210 or PSYC 211. LEC.

PSYC 502. Human Sexuality. 3 Hours. S.
An introduction to the field of human sexuality. Topics to be covered include sexual anatomy and physiology, fertilization, pregnancy, birth and lactation, contraception, human sexual response, sexuality across the life cycle, love, marriage, alternatives to marriage, sexual orientation, sex differences in behavior, parenthood, sexually transmitted diseases, sex and the law, and sex education. Prerequisite: PSYC 104. LEC.

PSYC 511. Laboratory Research in Infant Behavior. 3 Hours. S.
Optional course for students currently enrolled in PSYC 510 or may be taken after completion of PSYC 510. Will offer students practical experience in an infant research laboratory. Students must spend a minimum of nine hours a week (on three different half days) in laboratory. They will learn to observe and record infant behavior, to handle data from experiments and participate in the planning and discussion of laboratory research. Acquaintance with and involvement in the issues of obtaining informed consent and ethical aspects of infant research will be included. Prerequisite: Current enrollment or previous enrollment in PSYC 510 and consent of instructor. LAB.

PSYC 518. Human Memory. 3 Hours. S.
In-depth coverage of human memory phenomena, including phenomena concerning acquisition, storage and retrieval, unconscious forms of memory, memory monitoring and control, and practical aspects of memory such as autobiographical memory, mnemonic techniques and eyewitness memory. Prerequisite: PSYC 104. LEC.

PSYC 520. Memory and Eyewitness Testimony in Children. 3 Hours. S.
A review of the literature on the development of memory in young children, and the implications of this research for understanding children's eyewitness testimony. The course will present current research on children's long-term memory abilities, the impact of stress on recall performance, the effectiveness of various types of interviewing techniques, and the suggestibility of children's recollections. Policy issues and potential guidelines for the elicitation and evaluation of children's memory reports in both clinical and legal arenas will be discussed. Prerequisite: PSYC 104 or ABSC/HDFL 160, or consent of instructor. LEC.

PSYC 521. Women and Violence. 3 Hours. S.
An examination of research on women and violence, including rape, domestic violence, sexual harassment, stalking, and child sexual abuse. The nature, prevalence, causes, and consequences of violence against women are discussed. (Same as WGSS 521.) Prerequisite: PSYC 104. LEC.

PSYC 531. Language Development. 3 Hours. S.
Introduction to the study of language development; emphasis on the psychological processes underlying syntactic, semantic, and pragmatic aspects of language development in children. Prerequisite: One of the following courses - PSYC 318, 319, 333, or 334; or consent of instructor. LEC.

PSYC 535. Developmental Psychopathology. 3 Hours. S.
A review of the literature on contemporary psychological and developmental disorders of children and youth. Course will present current models of psychopathology, classification systems, assessment methods, and treatment approaches designed for the individual, the family, and the community. Specific attention will be given to age, gender, and cultural differences and similarities. Topics include: anxiety disorders, oppositional behavior disorders, physical/sexual abuse, learning disabilities, and autism. (Same as ABSC 535.) Prerequisite: ABSC 160, PSYC 333, or consent of instructor. LEC.

PSYC 536. The Psychology of Language. 3 Hours. S.
A survey of recent research on psycholinguistics covering the perception, production, and comprehension of language. Topics include: the biological basis for language, the nature of comprehension processes, and memory for the syntactic, semantic, and pragmatic components of language. Prerequisite: One of the following courses - PSYC 318, 319, 333, or 334; or consent of instructor. LEC.

PSYC 545. Culture and Psychology. 3 Hours. S.
The course considers the relationship between culture and psyche. One theme throughout the course involves revealing the cultural grounding of psychological functioning. The second and complementary theme involves identifying the psychological processes involved in the phenomenon of culture. Prerequisite: PSYC 333, 334, 360 or 361 or consent of instructor. LEC.

PSYC 555. Evolutionary Psychology. 3 Hours. S.
A review of evolutionary theory and its application to human personality, cognition, interpersonal relationships, family dynamics, and development. Prerequisite: PSYC 104 and at least 3 additional hours in Psychology, or consent of instructor. LEC.

PSYC 556. Applied Developmental Psychology. 3 Hours. S.
An advanced study of the application of theories and concepts of developmental and behavioral psychology to a range of specific issues and problems of childhood and adolescence. This course will rely heavily upon the empirical research literature. Topics include contemporary social issues and child development, research in applied settings, assessment, intervention, and prevention, as well as program evaluation. (Same as ABSC 565.) Prerequisite: ABSC 160 or PSYC 333, and ABSC/PSYC 535. LEC.

PSYC 556. Psychology and the Law. 3 Hours. S.
An application of psychological processes and concepts to the American legal system. Among the topics covered are the socialization of legal attitudes, opinions about the purposes of the criminal justice system and especially of prisons, the concept of "dangerousness," the nature of jury decision making, and the rights of prisoners, patients, and children. LEC.

PSYC 570. Group Dynamics. 3 Hours. S.
A study of the processes underlying the dynamics of the group, including the observation of group phenomena and a consideration of their relation
PSYC 572. Psychology and International Conflict. 3 Hours. S.
A study of psychological approaches to analysis and intervention in the field of international conflict and peace-making. Focus on major contributions and important paradigms for explanation and action. Prerequisite: PSYC 360 or consent of instructor. Background study in international relations or recent world history desirable. LEC.

PSYC 578. Social Attitudes. 3 Hours. S.
An introduction to the study of attitudes focusing on problems of measurement and on empirical findings and theories of attitude acquisition and change. Prerequisite: PSYC 360, 361, or consent of instructor. LEC.

PSYC 580. Research Lab. 1-5 Hours. S.
Supervised research under the guidance of a faculty member in the Department of Psychology. Students will be part of a collaborative laboratory environment, and will be involved in research design, data collection, and data analysis, and will take part in regularly scheduled laboratory meetings. Prerequisite: Permission of instructor. LEC.

PSYC 581. Psychology of Religion. 3 Hours. S.
Consideration of the psychological antecedents of religious experience, the nature of religious experience, and the behavioral consequences of religion. Focus will be on psychological theory and research relevant to religious thought, feeling, belief, and behavior. (Same as REL 581.) Prerequisite: PSYC 104. LEC.

PSYC 590. Nonverbal Communication. 3 Hours. S.
Examination of non-linguistic behavior in human communication, including proxemics (spacing), kinesics (movement and expression), and paralinguistics (voice quality). Includes phylogenetic and developmental perspectives, methods of analysis, applications to interpersonal problems. (Same as COMS 590.) Prerequisite: COMS 356 or PSYC 210 or PSYC 211. LEC.

PSYC 592. Psychological Significance of Physical Illness and Disability. 3 Hours. S.
A lecture course to help students become more aware of and responsive to the psychological needs of persons with physical illnesses or disabilities. Emphasis is upon the meanings of such conditions in individuals' lives and the effects of treatment and rehabilitation settings on psychological adaptation. Prerequisite: PSYC 104. LEC.

PSYC 598. Positive Psychology. 3 Hours. S.
An introduction to the core assumptions and research findings associated with human strengths and positive emotions. Also an exploration of interventions and applications informed by positive psychology in counseling and psychotherapy, and its application to school, work, family and other close relationships. (Same as EPSY 580.) Prerequisite: PSYC 104 or consent of instructor. LEC.

PSYC 602. Basis and Nature of Individuality. 3 Hours. S.
Individuality in cognitive and personality attributes is surveyed, and analyzed by current psychological theory. The course includes topics on the structure of intellect and personality, cognitive theory, brain research and behavior genetics as relevant to the understanding of individuality. Prerequisite: An introductory course in psychology. LEC.

PSYC 605. Health Psychology. 3 Hours. S.
Review of research and theory concerning the role of psychological factors in the development of physical illness and the contribution of psychologists to the treatment and prevention of physical illness. Prerequisite: PSYC 104. LEC.
PSYC 630. Clinical Psychology. 3 Hours. S.
The historical and empirical foundations of clinical psychology. Significant trends in theory, research, and social organization which have shaped clinical practice. A review of clinical practice. Prerequisite: PSYC 104. LEC.

PSYC 632. Advanced Child Behavior and Development. 3 Hours. S.
An advanced course in child development that includes a survey of the field's principles and theoretical approaches, and current issues in research and practice. Topics will include: prenatal development, cognition and language, social-emotional development, socialization influences in childhood, developmental psychopathology, and social policies. (Same as ABSC 632.) Prerequisite: ABSC/HDFL 160, PSYC 333, or instructor permission, and senior or graduate status. LEC.

PSYC 642. The Psychology of Families. 3 Hours. S.
Study of the family as a psychosocial system. Emphasis is placed on factors affecting contemporary families including family structures, development, communication patterns, disorders, and treatment approaches. Theory, empirical evidence, and practical principles that may lead to maximizing individual growth in the family unit are discussed. Prerequisite: PSYC 104. LEC.

PSYC 644. Behavioral Pharmacology. 3 Hours. S.
Addresses psychological and behavioral effects of drugs, including psychotropic medications. A central theme is that effects of drugs frequently cannot be characterized solely from a pharmacological perspective. Thus, emphasis is placed on examining the interaction of pharmacological and behavioral variables. For example, how do psychological factors moderate responses to drugs? The nature of this area assumes some knowledge of general psychology, research methods, biology, chemistry, neurophysiology, and the nervous system. Prerequisite: PSYC 104 or consent of instructor. LEC.

PSYC 646. Mental Health and Aging. 3 Hours. S.
Reviews recent research and application in the field of mental health and aging. Theoretical perspectives appropriate for understanding mental health issues with increased age are discussed. The epidemiology, assessment, diagnosis, and treatment methods associated with a variety of mental health conditions are surveyed. The community mental health resources available for older adults are discussed as well as practically-related issues such as evaluations of functional independence and competency among older adults. Prerequisite: PSYC 104 or consent of instructor. LEC.

PSYC 650. Statistical Methods in Behavioral and Social Science Research I. 4 Hours. S.
Elementary distribution theory; t-test; simple regression and correlation; multiple regression and multiple correlation; curvilinear regression; logistic regression; general linear model. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 790 will have different course requirements. Prerequisite: A grade of B- or better in a beginning course in statistics (e.g., PSYC 210 or PSYC 211, MATH 365, POLS 306, COMS 356, SOC 510, or equivalent) is recommended, or consent of instructor. LEC.

PSYC 651. Anova and Other Factorial Designs. 4 Hours. S.
Course covers one-way analysis of variance, linear trends, contrasts, post hoc tests; multi-way analysis of variance for crossed, blocked, nested, and incomplete designs; analysis of covariance; repeated measures analysis of variance; general linear model. Applications across the social, educational, and behavior sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 791 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor. LEC.

PSYC 652. Behavior Therapy. 3 Hours. S.
A review of the principal techniques of behavior therapy, exclusive of operant-based therapies. Emphasis upon systematic desensitization, implosion, assertion training, and modeling techniques. Special attention given to outcome research relevant to the effectiveness of these techniques. Recommended: A course in abnormal psychology. Prerequisite: PSYC 104. LEC.

PSYC 678. Drugs and Behavior. 3 Hours. S.
A survey of the methods used to study the effects of drugs on behavior, and of the effect of selected drugs on behavior, particularly the narcotics, hallucinogens, and drugs used in the treatment of mental illness. Prerequisite: PSYC 104. LEC.

PSYC 679. Applied Nonparametric Statistical Methods. 4 Hours. S.
This course covers nonparametric statistical methods for testing hypotheses. Topics include a review of parametric statistics, sampling distributions, hypothesis testing, and motivations for using nonparametric techniques. In-depth coverage is given to distribution-free procedures, goodness-of-fit tests, resampling methods, and theory underlying nonparametric methods. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 879 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor. LEC.

PSYC 685. Human Factors Psychology. 3 Hours. S.
Research techniques and methods useful in quantifying parameters of human performance that affect system functioning. Special emphasis is placed on modeling visual, auditory, and orienting systems and on human information processing. Prerequisite: PSYC 210 or PSYC 211 or consent of instructor. LEC.

PSYC 687. Factor Analysis. 4 Hours. S.
This course covers the theory behind, and application of, exploratory factor analysis. Topics include a review of multiple linear regression and matrix algebra. In-depth coverage is devoted to diagrams, model specification, goodness of fit, model selection, parameter estimation, rotation methods, scale development, and sample size and power issues. Extensions to confirmatory settings are elaborated. Both the theory underlying factor analytic techniques and hands-on application using software are emphasized. Applications across the social and behavioral sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 887 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor. LEC.

PSYC 689. Conceptual Issues in Human Sexuality. 3 Hours. S.
An examination of the social construction of sexuality and research methods and issues relevant to sexuality. These concepts are applied to various topics, such as defining and conceptualizing sex and gender, sexual dysfunction, sexual orientation, the social control of sexuality, sexual coercion and abuse, and abstinence-only sex education. The course does not cover anatomical or physiological aspects of sexuality. (Same as WGSS 689.) Prerequisite: PSYC 104 or WGSS 201. LEC.

PSYC 690. Seminar: ______. 1-5 Hours. U.
Discussion of current problems in psychological theory and research. Prerequisite: PSYC 104 and sophomore status. LEC.
PSYC 691. The Psychology of Aging. 3 Hours. S.
Social, psychological, and economic adjustments required by aging; changes in cognition, role and personality necessitated by advancing age. Prerequisite: PSYC 210 or PSYC 211 and one of the following: PSYC 318, PSYC 319, PSYC 350, PSYC 351, PSYC 360, PSYC 361, PSYC 370, PSYC 371, PSYC 380, or PSYC 381; or graduate standing; or consent of instructor. LEC.

PSYC 692. Test Theory. 4 Hours. S.
This course begins with recommendations for how to write a test, covers basics of classical test theory, and then emphasizes modern statistical methods for analyzing item data. Methods include factor analysis of categorical responses, methods for identifying measurement invariance (differential item functioning), and item response theory. Approximately one-half of the meetings are labs (primarily consisting of data analysis). The course is offered at the 600 and 800 levels with additional assignments at the 800 level. Prerequisite: PSYC 790/650 or equivalent, or consent of the instructor. LEC.

PSYC 693. Multivariate Analysis. 4 Hours. S.
Introduction to the central methods used in the analysis of multivariate data. Includes linear transformations, multivariate analysis of variance, multivariate multiple regression, discriminant analysis, canonical correlation, factor analysis, and an introduction to methods for clustering and classification. Applications across the behavior and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 893 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor. LEC.

PSYC 694. Multilevel Modeling I. 4 Hours. S.
Introduction to statistical methods for modeling multilevel (hierarchically structured) data. Topics include a review of ordinary least squares regression analysis, random effects ANOVA, intraclass correlation, multilevel regression, testing and probing interactions, maximum likelihood estimation, model assumptions, model evaluation, and the analysis of longitudinal data. Emphasis will be on the theory underlying multilevel modeling techniques and hands-on application using software. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 894 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor. LEC.

PSYC 695. Categorical Data Analysis. 4 Hours. S.
Introduction to multivariate analyses of count data, including error models, statistical inference, loglinear models, logit models, logistic regression, homogeneity, symmetry, and selected other topics. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 895 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor. LEC.

PSYC 696. Structural Equation Modeling I. 4 Hours. S.
Introduction to statistical methods for modeling latent variables. Topics include a review of latent variables, covariance structures analysis, mean structures analysis, confirmatory factor analysis (CFA), structural equation modeling (SEM), multiple group CFA, longitudinal CFA, longitudinal SEM, and hierarchical CFA. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 896 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor. LEC.

PSYC 697. Longitudinal Data Analysis. 3 Hours. S.
Reviews and contrasts various statistical models for the analysis of change. Course focuses on techniques to analyze longitudinal (repeated measures) data beyond the repeated-measures ANOVA framework. Applications across the behavioral and social sciences are emphasized. Students taking this course as PSYC 991 will have different course requirements. Prerequisite: PSYC 696 or equivalent, or consent of instructor. LEC.

PSYC 704. Research Practicum in Clinical Child Psychology. 3 Hours.
This course provides students in the Clinical Child Psychology Program with the opportunity to enhance and consolidate their research activities by fulfilling one of the elective cluster course requirements. This practicum involves a contract with a research advisor and the program director. The contract includes definable products and dates for completion to prepare research for submission for publication, develop a grant proposal, or conduct additional research project independent of other requirements in the program. The course is not to be taken as an overload, but is to be part of a full-time course schedule. May be repeated. (Same as ABSC 704, formerly HDFL 704.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. LEC.

PSYC 706. Special Topics in Clinical Child Psychology: ______. 3 Hours.
A course offering detailed discussion of the literature and research methods of a special topic within clinical child and pediatric psychology. Topic and instructor may change by semester and will be announced in the Schedule of Classes. May be repeated. (Same as ABSC 706, formerly HDFL 706.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. LEC.

PSYC 710. Feminist Issues in Psychology. 3 Hours.
Detailed examination and discussion of psychological theory and research from a feminist perspective. Specific topics will vary. The goal of the course is to facilitate students' ability to develop feminist critiques of existing research and theory as well as to generate nonsexist alternative approaches. Open to advanced undergraduates with consent of instructor. Prerequisite: Some familiarity with research methods in the social sciences. LEC.

PSYC 723. Advanced Cognitive Psychology. 3 Hours.
Advanced cognitive psychology reviewing theories of pattern recognition, attention, working memory, language comprehension and problem solving. Emphasis will be placed upon the application of these theories to real-life situations. Prerequisite: PSYC 104 and six additional credit hours in psychology, or permission of the instructor. LEC.

PSYC 725. Cognitive Neuroscience. 3 Hours.
A survey of the critical issues within cognitive and behavioral neuroscience. The course will provide information about neuronal physiology, functional neuroanatomy, and psychophysiological research methods. Human cognition and the neurophysiology that subserves the primary cognitive functions will be discussed. LEC.

PSYC 735. Psycholinguistics I. 3 Hours.
A detailed examination of issues in the processing of language. The course will provide a survey of research and theory in psycholinguistics, reflecting the influence of linguistic theory and experimental psychology. Spoken and written language comprehension and language production processing will be examined. (Same as LING 735.) LEC.

PSYC 737. Psycholinguistics II. 3 Hours.
An in-depth examination of selected topics in psycholinguistics. Topics may include spoken language processing, written language processing,
PSYC 750. Advanced Seminar in Gender Identity and Sexual Orientation. 3 Hours.
Design and execution of research on the causes and consequences of variations in gender identity, sexual orientation or affectional preference, sex roles, and sex-linked behaviors. Prerequisite: Consent of instructor. LEC.

PSYC 757. Theories of Perception. 3 Hours.
A consideration of the facts and theories of human perception. The emphasis will be on vision, although hearing, smell, pain, and other senses will also be discussed. Of particular concern is the question of perceptual modifiability and the response of the human observer to unusual sensory environments. Prerequisite: PSYC 104. LEC.

PSYC 774. Advanced Social Psychology I. 3 Hours.
First semester of a two-semester course. Designed to provide a thorough background in social psychology and to motivate a continuing exploration of theoretical problems and issues in the field. Combines examination of historical development of theories and methods in social psychology with analysis of theoretical and methodological approaches to a variety of contemporary topics. LEC.

PSYC 775. Advanced Social Psychology II. 3 Hours.
A continuation of PSYC 774. LEC.

PSYC 777. Social Psychology: Theory, Research, and Clinical Applications. 3 Hours.
Basic theories in social psychology, as well as their applications to the process of coping with life events. The focus is on the nature of each theory, including the history and more recent developments; however, where clinical applications have been made of a particular theory, these will be discussed. LEC.

PSYC 780. Research Lab. 1-5 Hours. S.
Supervised research under the guidance of a faculty member in the Department of Psychology. Students will be part of a collaborative laboratory environment, and will be involved in research design, data collection, and data analysis, and will take part in regularly scheduled laboratory meetings. Prerequisite: Permission of instructor. LEC.

PSYC 782. Research Methods in Child Language. 3 Hours.
A survey of methods for studying phonological, morphological, syntactic, and semantic change during language development. Methods include: diary interpretation, language sample analysis, probe elicitation tasks, and clinical assessment. (Same as LING 782.) LEC.

PSYC 784. Proseminar in Communication and Aging. 1 Hour.
A weekly forum for students and faculty to discuss professional issues and interdisciplinary research in communication and aging. May be repeated for credit. (Same as COMS 784.) (Same as SPLH 784.) Prerequisite: Consent of instructor. LEC.

PSYC 787. Gerontology Proseminar. 3 Hours.
A proseminar coordinated by the Gerontology Center. The proseminar explores essential areas of gerontology for researchers and practitioners, providing a multidisciplinary (psychology, biology, sociology, and communication) perspective on aging. The proseminar surveys contemporary basic and applied research, service programs, and policy and management issues in gerontology. (Same as ABSC 787, AMS 787, COMS 787, and SOC 787.) (Formerly HDFL 787.) LEC.

A course emphasizing the practical application of inferential statistics to a variety of research designs and outcome variables. Topics will include both parametric and nonparametric statistical procedures, and various applications of both ANOVA and multiple regressions. Prerequisite: Graduate standing in the Department of Psychology or consent of instructor. LEC.

PSYC 790. Statistical Methods in Psychology I. 4 Hours.
Elementary distribution theory; t-test; simple regression and correlation; multiple regression and multiple correlation; curvilinear regression; logistic regression; general linear model. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: A beginning course in statistics and graduate standing, or consent of instructor. LEC.

PSYC 791. Statistical Methods in Psychology II. 4 Hours.
Continuation of PSYC 790. One-way analysis of variance, linear trends, contrasts, post hoc tests; multi-way analysis of variance for crossed, blocked, nested, and incomplete designs; analysis of covariance; repeated measures analysis of variance; general linear model. Applications across the social, educational, and behavior sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor. LEC.

PSYC 795. Computing and Psychology. 3 Hours.
Introduction to the use of personal computers to facilitate and standardize administration of research protocols and to automate data collection. Lectures and projects emphasize direct application to research in the behavioral sciences. Prerequisite: Graduate standing in the Department of Psychology and consent of instructor. LEC.

PSYC 796. Computer Models of Brain and Behavior. 3 Hours.
An introduction to the techniques of computer modeling with applications in the study of brain-behavior mechanisms. Early and contemporary efforts to simulate the neuron, neural networks, and neural processes which regulate behavior, are reviewed. Application of modeling techniques in sample brain-behavior problem areas are used to illustrate the operation of thresholds, feedback, dynamic equilibrium, redundancy, plasticity, network structure, and similar constructs. Programming skill in a high-level language available on personal computers or mainframe is required. Prerequisite: EECS 128 or EECS 138 or PSYC 795, and PSYC 370, or equivalent courses or experience. LEC.

PSYC 798. Introduction to Mathematical Methods in Psychology. 3 Hours.
A first course in scaling and modeling psychological processes. Substantive areas treated selected from sensation, perception, learning, memory, preference, choice and decision processes, problem solving, games, social interaction, and individual differences. May be repeated with permission. Prerequisite: Previous course work beyond the introductory level in psychology or a closely related area, a course in statistics, and a course in calculus. LEC.

PSYC 799. Proseminar in Child Language. 2 Hours.
A review and discussion of current issues in children's language acquisition. May be repeated for credit. Students are graded S/F. (Same as ABSC 797, LING 799, and SPLH 799.) (Formerly HDFL 797.) LEC.

PSYC 800. Experimental Psychology: _____. 3 Hours.
An advanced survey of theory and research in a selected area of experimental psychology. Continual enrollment for four semesters is required of entering graduate students in experimental psychology. Open to other students with graduate standing in psychology or a closely related field. May be repeated with permission. LEC.
PSYC 802. Social-Psychological Aspects of Health, Disability, and Associated Life Stress. 3 Hours.
Disabling myths; perception of causes and effects of disease and disability; attitudes and interpersonal relations; hoping, coping, and reality issues; values; professional-client relations; public media and societal rehabilitation. A departmental core course for graduate students. LEC.

PSYC 803. Fundamentals of Psychological Assessment and Intervention with Children. 3 Hours.
Lecture and supervised experience covering the theoretical and empirical literature on assessment and intervention methods for children, adolescents, and families. Students will learn and demonstrate evidence-based clinical interviewing skills, behavioral observation techniques, risk assessment techniques, therapeutic communication approaches, strategies for providing assessment feedback to families, and ethical principles related to the provision of assessment and psychotherapy (including client file and resource management.) The course requires interaction with clinical populations and communication with referral sources. (Same as ABSC 803.) Prerequisite: Graduate student in clinical child psychology program. LEC.

PSYC 805. History of Psychology. 3 Hours.
A historical survey of basic concepts and theories in psychology with emphasis on their relationship to contemporary problems in theory. LEC.

PSYC 809. Professional Issues: Clinical Child Psychology. 1 Hour.
Consideration of special problems confronting the child and family oriented scientist-practitioner, and in the development of a professional identity. Topics include critical issues including ethical, legal, cultural, empirical, and clinical aspects of research and practice. May be repeated. (Same as ABSC 809, formerly HDFL 809.) Prerequisite: Graduate standing in clinical child psychology. LEC.

PSYC 811. Achievement and Intellectual Assessment in Clinical Child Psychology. 3 Hours.
Course covers the basic theory, research, administration, and reporting of psychological assessment of development, intelligence, and achievement for children, adolescents, and adults within cultural and developmental contexts. The range of psychological instruments examined includes, for example, WIAT, K-ABC, W-J, S-B, WISC, WAIS, and WPPSI. (Same as ABSC 811.) Prerequisite: Graduate student in clinical child psychology. LEC.

PSYC 812. Behavioral and Personality Assessment of Children. 3 Hours.
Lecture, laboratory, field work, and supervision appointment. Theory and applications in the psychological evaluation of children with standardized assessment techniques. The administration, scoring, interpretation, and reporting of behavioral and personality functioning in children. (Same as ABSC 812, formerly HDFL 812.) Prerequisite: Graduate standing in clinical child psychology. LEC.

PSYC 814. Advanced Child and Family Assessment. 3 Hours.
Lecture, laboratory, field work, and supervision appointment. Supervised experience in specialized psychological assessment approaches for children and families. Emphasis on interviewing, observation, psychometric scales, and consultation. Rationale, administration, analysis, and reporting of mental health functioning of children and families. Experience with clinical populations, and communication with referral sources. (Same as ABSC 814, formerly HDFL 814.) Prerequisite: Graduate student in clinical child psychology. LEC.

PSYC 815. Design and Analysis for Developmental Research. 3 Hours.
Coverage of the philosophy and basic principles of group-design research, with a special emphasis on designs that are appropriate for developmental studies. Designs for both experimental and quasi-experimental research are covered, and appropriate statistical procedures are presented concomitantly with the designs. Individual-difference analyses and statistical control issues are also addressed. LEC.

PSYC 816. Design and Analysis for Neuroimaging Research. 3 Hours.
Course covers research design and analysis issues for event-related potential (ERP) and functional magnetic resonance imaging (fMRI) studies. Repeated measures, statistical parametric mapping, principal components analysis, and independent components analysis techniques are covered. Both practical and theoretical aspects of these statistical techniques will be explored in Matlab environment. Matrix algebra recommended but not required. Prerequisite: PSYC 790 and 791 or equivalent are required. LEC.

PSYC 818. Experimental Research Methods in Social Psychology. 3 Hours.
Systematic discussion of the techniques of research in social psychology, with practice in the utilization of selected methods. Prerequisite: One course in social psychology in addition to introductory social psychology. LEC.

PSYC 819. Field and Evaluation Research Methods in Social Psychology. 3 Hours.
Basic principles and practices of field methods in basic and applied research in social psychology and related fields; relationships between field and laboratory studies; special emphasis on survey and evaluation research methods and study designs; client and respondent relationships; research and public policy. LEC.

PSYC 820. Advanced Child Development. 3 Hours.
A survey of the basic empirical research in the field of child development, covering intelligence, cognition, perception, attention, personality, social behavior, and socialization processes. These literatures are integrated and their implications for social application are addressed. (Same as ABSC 820, formerly HDFL 820.) Prerequisite: A course in child development or equivalent. LEC.

PSYC 821. Women and Violence. 3 Hours.
An examination of research on women and violence, including rape, domestic violence, sexual harassment, stalking, and child sexual abuse. Research on the nature, prevalence, causes, and consequences of violence against women is discussed. (Same as WGSS 821.) Prerequisite: Six hours in WGSS or PSYC, or permission of instructor. LEC.

PSYC 825. Social Development. 3 Hours.
A lecture and discussion course in social development. It includes such topics as theoretical approaches to the study of social development, as well as the literature on family processes, peer relations, aggression and prosocial behavior, child abuse and neglect, family violence, child care, and the media. (Formerly PSYC 880.) (Same as ABSC 825.) Prerequisite: A course in child psychology or development. LEC.

PSYC 831. Advanced Human Learning and Memory. 3 Hours.
An in-depth analysis of current research and theory. Focus will be on experimental methodology in these areas. LEC.

PSYC 832. Clinical Health Psychology I: Health Promotion and Disease Prevention. 3 Hours.
An overview of the field of health psychology as applied to health promotion and disease prevention. Content areas include history and current research regarding behavioral and psychosocial risk factors for disease, as well as empirically supported assessment and therapeutic techniques for risk factor reduction and health promotion. Prerequisite:
Graduate student in psychology or health-related fields, or permission of instructor. LEC.

**PSYC 833. Clinical Health Psychology II: Acute and Chronic Illness. 3 Hours.**

An overview of the field of health psychology as applied to acute and chronic illness in adult, adolescent, and child populations. Content areas include psychosocial aspects of acute and chronic illness, including relevant empirically supported assessment and intervention strategies, adherence to medical regimens, pain, and enhancement of the psychologist’s role in medical settings. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor. LEC.

**PSYC 834. Clinical Health Psychology III: Physical Aspects of Health and Disease. 3 Hours.**

An overview of physical manifestations of health and disease. Content areas include overview of anatomy and physiology of each body system, description of how deviations form normal anatomical development and physiological function result in common disorders, methods for distinguishing psychological from organic etiologies, indications of side effects of medications for common disorders, and description of roles of key members of health care team members. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor. LEC.

**PSYC 835. Clinical Practicum IV: Health. 3 Hours.**

Supervised assessment and treatment of individuals and families within a medical setting, as well as multidisciplinary consultation. Inpatient and outpatient clinical health psychology rotations may include pediatrics, oncology, pain, rehabilitation, and other health psychology related fields. Emphasis in selection of and training in psychological intervention strategies is on the use of empirically supported treatments where possible. Grading on Satisfactory/Fail basis. Prerequisite: PSYC 970 and graduate student in clinical health psychology specialty. FLD.

**PSYC 836. Clinical Practicum V: Health. 3 Hours.**

Continuation of PSYC 835. Prerequisite: Graduate student in clinical health psychology specialty. FLD.

**PSYC 838. Pain and Its Management. 3 Hours.**

Focuses on biological, cognitive/affective, and social causes and effects of pain. Emphasis on basic research methods in pain, origins of pain, and how the experience of pain alters many aspects of the individual’s life. Topics include anatomy and physiology of pain, impact of pain on a variety of aspects of individuals’ lives, treatments for pain, and the role of various health care professionals in treating pain. Discussions also will include basic research methods in pain, tools for assessing pain, barriers to adequate pain management, and ethical/legal/public policy issues in working with pain patients. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor. LEC.

**PSYC 839. Palliative Care in Health Psychology. 3 Hours.**

Based on the biopsychosocial model, this course focuses on the current practice of palliative care in community and hospital settings by health care professionals. Classes will be discussion based, centered on current issues and controversies in care of the chronically ill and dying. Recent research will be highlighted, as will cultural perspectives on death. Students will be expected to identify applicable literature for presentation and class discussion, along with assigned readings. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor. LEC.

**PSYC 840. Psychology of Women’s Health. 3 Hours.**

A seminar devoted to examination of psychosocial and behavioral factors in women’s health. Content areas include women and the health care system, social roles and health, gender differences, and similarities in morbidity and mortality, gynecologic health, chronic diseases, and health-related behaviors. Prerequisite: Graduate student in psychology or health-related field, or by permission of instructor. LEC.

**PSYC 841. Stress and Coping. 3 Hours.**

Theories and research on conceptualization, assessment, and effects of stress. Focus on coping processes and other determinants of adjustment to stressful conditions. Discussion of psychological interventions for managing stress and trauma. Prerequisite: Graduate student in psychology or related fields. LEC.

**PSYC 842. Specialized Health Psychology Practicum. 1-3 Hours.**

Specialized advanced practicum in clinical health psychology, with an area of emphasis mutually defined by student and instructor. Prerequisite: Consent of instructor. FLD.

**PSYC 843. Behavioral Pharmacology. 3 Hours.**

Addresses psychological and behavioral effects of drugs, including psychotropic medications. A central theme is that effects of drugs frequently cannot be characterized solely from a pharmacological perspective. Thus, emphasis will be placed on examining the interaction of pharmacological and behavioral variables. For example, how do psychological factors moderate responses to drugs? The nature of this area assumes some knowledge of general psychology, research methods, biology, chemistry, neurophysiology, and the nervous system. Specific course structure will be modified to suit student interests. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor. LEC.

**PSYC 844. Mental Health and Aging. 3 Hours.**

Reviews recent research and application in the field of mental health and aging. Theoretical perspectives appropriate for understanding mental health issues with increased age are discussed. The epidemiology, assessment, diagnosis, and treatment methods associated with a variety of mental health conditions are surveyed. The community mental health resources available for older adults are discussed as well as practically-related issues such as evaluations of functional independence and competency among older adults. Prerequisite: Graduate student in psychology or related health field, or permission of instructor. LEC.

**PSYC 845. Impression Formation and Interpersonal Behavior. 3 Hours.**

Intensive investigations of the processes involved in impression formation and of the effects of established impressions upon interpersonal communications. (Same as COMS 835.) Prerequisite: PSYC 670 or COMS 535. LEC.

**PSYC 846. Practicum in Clinical Child Psychology I. 1-3 Hours.**

Introductory practicum experience for the Clinical Child Psychology Program. Orientation to psychological evaluation and treatment of children, adolescents, and their families and initial development of professional self-assessment skills. Students acquire specific clinical competencies through shadowing cases, assisting with interpretation of test of intelligence and academic achievement, conducting behavioral observations in field settings, and performing co-therapy of cases presenting to the KU Child and Family Services Clinic. May be taken in more than one semester. (Same as ABSC 846.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

**PSYC 847. Practicum in Clinical Child Psychology II. 1-3 Hours.**

Intermediate practicum experience for the Clinical Child Psychology Program. Development of specific competencies in assessment and intervention with children, adolescents, and their families through didactics, field experience, and supervision. Students acquire specific clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Program.
Clinic. Students develop ability to identify specific treatment goals and select therapeutic interventions that are conceptually congruent with clients’ presenting problems and are based on sound empirical evidence. Students also develop the ability to integrate and synthesize test results, interview material, and behavioral observations into coherent case conceptualizations. May be taken in more than one semester. (Same as ABSC 847.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

PSYC 850. Assessment I: Foundations of Psychological Assessment. 3 Hours.
Introduction to the history, methods and theory underlying psychological assessment techniques and methods. Students learn to administer, score, and interpret mental status exams and intelligence tests for children, adolescents and adults. Structured diagnostic assessments are introduced and practiced. Psychological report writing is introduced and practiced. The psychometric theory underlying the construction and validation of personality assessment instruments is reviewed. Prerequisite: Graduate student in clinical psychology or consent of instructor. FLD.

PSYC 853. Advanced Acoustical and Psychological Aspects of Musical Behavior. 3 Hours.
Study and experimental investigation of acoustic, psychoacoustic, and psychological phenomena as they influence music. Attention will be given to physical parameters; perception of pitch, loudness, and timbre; magnitude estimation; theories of consonance; experimental aesthetics; and measurement and prediction of musical ability. Each student will be expected to complete an experiment or quasi-experiment related to human musical behavior. (Same as MEMP 953.) Prerequisite: PSYC 453 or equivalent; or consent of instructor. LEC.

PSYC 855. Assessment II: Integrative Psychological Assessment. 3 Hours.
Lecture, laboratory and field work. Students learn to administer, score and interpret various personality assessment instruments. Students apply skills acquired in previous coursework to write integrated psychological assessment reports based on anamnesis, structured interview data, intelligence tests, and both objective and projective personality assessment instruments. Prerequisite: PSYC 850 or consent of instructor. FLD.

PSYC 856. Clinical Neuropsychology Across the Lifespan. 3 Hours.
Reviews neural development and the brain-behavior relationships in intact, injured, and diseased brain systems. Details basic issues in clinical assessment and reporting of cognitive impairment resulting from developmental disorders, stroke, traumatic brain injury, and brain-disease. Selected topics include perception, speech, memory/dementia, judgment, and attention. Prerequisite: Graduate status and PSYC 961 or consent of instructor. LEC.

PSYC 864. Clinical Neuropsychology. 3 Hours.
Brain-behavior relationships in humans; structure and function of the brain; evaluation of function; the interpretation of neuropsychological data. Lecture and laboratory. LEC.

PSYC 865. Advanced Psychological Assessment: Interview Based Techniques. 3 Hours.
Lecture and fieldwork. Advanced clinical interviewing. Structured diagnostic interviewing. Coverage of specialized areas of clinical interviewing (e.g., motivational interviewing). Report writing focused on documentation of clinical and structured interviewing. Prerequisite: PSYC 855 or consent of instructor. FLD.

PSYC 870. Cognitive Development. 3 Hours.
A lecture/discussion course in cognitive development. The course will contrast the theory and research of Jean Piaget and his followers, with an information processing or cognitive psychology approach to issues. Topics include development of perception, attention and information getting; memory and metamemory; problem solving; discrimination learning and concept formation; and individual differences in cognitive styles and strategies. Prerequisite: A course in child psychology or development, a course in cognitive psychology, or consent of instructor. LEC.

PSYC 872. Attention, Perception, and Learning in Infancy. 3 Hours.
Coverage of the basic literatures on perceptual-cognitive behavior during the first three years of life, as assessed by measures of attention, perception, learning, and memory. Course material is approached from an information-processing framework. LEC.

PSYC 875. Advanced Assessment: Integration of Assessment Techniques. 3 Hours.
Lecture and fieldwork on selection, administration, scoring and interpretation and integration of data from personality and abilities tests. Focus on assessments includes history, theory and application in psychological assessment batteries. Emphasis on advanced training in objective personality assessment, projective personality assessment, psychometric theory and integrated report writing. Prerequisite: PSYC 855 or consent of instructor. FLD.

PSYC 879. Applied Nonparametric Statistical Methods. 4 Hours.
This course covers nonparametric statistical methods for testing hypotheses when the assumptions of ordinary parametric statistics are not met. Topics include a review of parametric statistics, sampling distributions, the logic of hypothesis testing, and motivations for using nonparametric techniques. In-depth coverage will be given to distribution-free procedures, sign tests, contingency tables, median tests, chi-square and other goodness-of-fit tests, rank correlations, randomness tests, Monte Carlo methods, resampling methods, tests of independence, 1-sample, 2-sample, and k-sample methods, permutation tests, and function smoothing and splines. There will be an emphasis on the theory underlying nonparametric methods. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 and 791 or equivalent, or consent of instructor. LEC.

PSYC 881. Proseminar in Quantitative Behavioral and Social Sciences. 1 Hour.
This course is an open forum discussion of issues, topics, and presentations in quantitative behavioral and social sciences. The course can be repeated for credit and is open to any graduate student in any discipline across the behavioral and social sciences. SEM.

PSYC 882. Theory and Method for Research of Human Environments. 3 Hours.
Conceptual and technical methods for analysis of behavioral environments; theory and research utilization of behavior settings and other ecobehavioral units. Prerequisite: Nine hours of social science including at least one course dealing with research methods and consent of instructor. LEC.

PSYC 885. Altruism and Helping Behavior. 3 Hours.
Review of contemporary research of prosocial behavior. Topics to be covered include the existence of altruism, why people do and do not help others, and the effect of institutional roles on the behavior of service professionals such as therapists, counselors, and social workers. LEC.
PSYC 886. Item Response Theory. 4 Hours.
This course covers the basic concepts and methods of item response models. Focal topics include the theory underlying IRT models and their general properties. Also covered are methods for checking model assumptions and interpreting IRT estimates. The course uses examples from the social and behavioral sciences to demonstrate how IRT methods can be used to inform and refine survey development, to assess measurement equivalence, link survey scores, and build item banks for short forms or computer-adaptive testing (CAT). Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 and 791 or equivalent, or consent of instructor. LEC.

PSYC 887. Factor Analysis. 4 Hours.
This course covers the theory behind, and application of, exploratory factor analysis. Topics include a review of multiple linear regression and matrix algebra. In-depth coverage is devoted to diagrams, model specification, goodness of fit, model selection, parameter estimation, rotation methods, scale development, and sample size and power issues. Extensions to confirmatory settings are elaborated. Both the theory underlying factor analytic techniques and hands-on application using software are emphasized. Applications across the social and behavioral sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor. LEC.

PSYC 888. Diversity Issues in Clinical Psychology. 3 Hours.
Review of individual differences pertaining to culture, ethnicity, race, gender, sexual orientation, age, etc., as these have an impact upon theory, research, assessment, and treatment issues in clinical psychology. (Same as ABSC 888.) Prerequisite: Graduate status in clinical psychology, or instructor permission. LEC.

PSYC 889. Conceptual Issues in Human Sexuality. 3 Hours.
An examination of the social construction of sexuality and research methods and issues relevant to sexuality. These concepts are applied to various topics, such as defining and conceptualizing sex and gender, sexual dysfunction, sexual orientation, the social control of sexuality, sexual coercion and abuse, and abstinence-only sex education. The course does not cover anatomical or physiological aspects of sexuality. (Same as WGSS 889.) Prerequisite: Six hours in WGSS and/or PSYC, or permission of instructor. LEC.

PSYC 891. Intelligence and Cognition. 3 Hours.
This course concerns the nature of intelligence. Theory and research on cognitive abilities, reasoning, and complex problem solving are surveyed. Special emphasis is given to contemporary cognitive ability research that applies both experimental and correlation methods to understand the nature of intelligence. LEC.

PSYC 892. Test Theory. 4 Hours.
This course begins with recommendations for how to write a test (with or without correct answers, for assessing a wide variety of constructs of interest in social and behavioral sciences), covers basics of classical test theory, and then emphasizes modern statistical methods for analyzing item data. Methods include factor analysis of categorical responses, methods for identifying measurement invariance (differential item functioning), and item response theory. Lectures and Laboratory. This course is offered at the 600 and 800 levels, with additional assignments at the 800 level. Prerequisite: PSYC 790/650 or equivalent, or consent of instructor. LEC.

PSYC 893. Multivariate Analysis. 4 Hours.
Introduction to the central methods used in the analysis of multivariate data. Includes linear transformations, multivariate analysis of variance, multivariate multiple regression, discriminant analysis, canonical correlation, factor analysis, and an introduction to methods for clustering and classification. Applications across the behavior and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor. LEC.

PSYC 894. Multilevel Modeling. 4 Hours.
Statistical methods for modeling multilevel (hierarchically structured) data. Topics include a review of ordinary least squares regression analysis, random effects ANOVA, intraclass correlation, multilevel regression, testing and probing interactions, maximum likelihood estimation, model assumptions, model evaluation, and the analysis of longitudinal data. There will be a heavy emphasis on the theory underlying multilevel modeling techniques and hands-on application using software. Applications across the social, educational, and behavioral sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor. LEC.

PSYC 895. Categorical Data Analysis. 4 Hours.
Multivariate analyses of count data. Error models, statistical inference, loglinear models, logit models, logistic regression. Homogeneity, symmetry, and selected other topics. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor. LEC.

PSYC 896. Structural Equation Modeling I. 4 Hours.
Introduction to statistical methods for modeling latent variables. Topics include a review latent variables, covariance structures analysis, mean structures analysis, confirmatory factor analysis (CFA), structural equation modeling (SEM), multiple group CFA, longitudinal CFA, longitudinal SEM, Hierarchical CFA, and Multi-trait Multi-Method SEM. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor. LEC.

PSYC 897. Master's Thesis in Clinical Child Psychology. 1-10 Hours.
Supervised research experience completing thesis leading to master's degree. (Same as ABSC 897.) RSH.

PSYC 898. Proseminar: Professional Issues in Clinical and Health Psychology. 1 Hour.
Discussion of current theoretical, empirical, and applied issues in clinical and clinical health psychology involving students, faculty, guest speakers. Prerequisite: Graduate student in clinical psychology. RSH.

PSYC 899. Thesis. 1-10 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

PSYC 902. Proseminar in Experimental Psychology. 1 Hour.
Seminar in experimental psychology to be conducted in rotation by the experimental psychologists on the staff and a monthly visiting experimental psychologist. LEC.

PSYC 903. Proseminar in Social Psychology. 1 Hour.
A series of research talks on topics relevant to social and personality psychology featuring different weekly speakers from inside and outside the university. SEM.

PSYC 905. Psychopathology in Children. 3 Hours.
Diagnosis and treatment of psychological problems in childhood and adolescence. (Same as ABSC 905.) Preference given to graduate students in child clinical psychology, school psychology, and counseling
psychology. Prerequisite: Fifteen hours of graduate credit in psychology or consent of instructor. LEC.

PSYC 921. Seminar in Early Development. 3 Hours.
A seminar devoted to factors affecting early human development with some attention to theoretical formulations and the relevant animal literature. LEC.

PSYC 923. History and Systems of Developmental Psychology: Developmental Theory. 3 Hours.
An intensive study of traditional and recent developmental theories with an emphasis upon the role of heredity, early stimulation, reinforcement, and modification as each affects the course of the development of children. LEC.

PSYC 927. Seminar in Psychobiology. 3 Hours.
A detailed study of a specific research area dealing with the biological foundations of behavior. Each week articles will be assigned from the journal literature. LEC.

PSYC 930. Research Seminar on Intimate Relationships. 3 Hours.
Consideration of current psychological theory and research on adult intimate relationships: friendship, dating, committed relationships, dissolution of committed relationships. Students will be expected to be involved in on-going empirical research in the area. Prerequisite: Graduate level courses in research design and statistics. LEC.

PSYC 933. Seminar: The Measurement of Attitudes. 3 Hours.
An examination of the concept of attitude and the methods developed to assess the various aspects of attitudes. Prerequisite: PSYC 578 or consent of instructor. LEC.

PSYC 935. Seminar in Group Dynamics. 3 Hours.
Intensive examination of selected problems in the functioning of small groups. May be taken for two semesters. LEC.

PSYC 936. Group Therapeutic Techniques. 3 Hours.
LEC.

PSYC 943. Advanced Practicum in Clinical Child Psychology III. 1-3 Hours.
Advanced practicum experience for the Clinical Child Psychology Program. Development of advanced competencies in assessment and intervention with children, adolescents, and their families through didactics, field experience, and supervision. Students acquire advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum (i.e., formal case presentation), and modeling of clinical competencies for junior students. Students will develop and demonstrate the ability to provide effective supervision and consultation in clinical psychology. Prerequisite: Previous or concurrent enrollment in PSYC 947. Prerequisite: Graduate standing in clinical child psychology and instructor permission. LEC.

PSYC 947. Advanced Practicum in Clinical Child Psychology V. 1-5 Hours.
Fieldwork in supervision under direction of instructor. Practice in supervision of clinical work, assessment, psychotherapy, and documentation. Prerequisite: Previous or concurrent enrollment in PSYC 950 and PSYC 969, or consent of instructor. LEC.

PSYC 949. Empirically Supported Treatment. 3 Hours.
This course provides an overview of theoretical and applied issues germane to the contemporary empirically supported treatments movement in clinical psychology. The course will include an in-depth examination of several psychotherapy protocols (e.g., cognitive therapy for depression) which have been identified as "empirically supported," with considerable attention accorded to implementation of the characteristic techniques of such interventions. LEC.

PSYC 950. Clinical Supervision and Consultation: Theory & Research. 1 Hour.
Lecture, readings, and discussion of theory and research related to the practices of clinical supervision and consultation. Developmental and competency based approaches to supervision with exposure to other approaches. Professional issues, ethics, and multicultural aspects of supervision and consultation. Prerequisite: Previous or concurrent enrollment in PSYC 969 or consent of instructor. LEC.

PSYC 951. Clinical Supervision Practicum. 1-3 Hours.
Fieldwork in supervision under direction of instructor. Practice in supervision of clinical work, assessment, psychotherapy, and consultation. Prerequisite: Previous or concurrent enrollment in PSYC 950 and PSYC 969, or consent of instructor. LEC.

PSYC 955. Close Relationships and Adult Attachment: Theory, Research, and Current Controversies. 3 Hours.
Review of attachment theory literature and the research it has generated in clinical developmental, personality, and social psychology. The course will allow discussion of a wide range of issues including the evolution of behavioral systems that underlie close human relationships, the developmental roots of relational styles and affect-regulation processes, the role of mental representations in interpersonal behavior, and some of the attachment and close relationship processes involved in good and poor mental health. Prerequisite: Graduate standing or consent of instructor. LEC.
PSYC 956. Social Neuroscience. 3 Hours.
Acquaint students with the Social Neuroscience approach as well as recent findings using this approach. The course will focus on particular social phenomena and (a) evaluate the utility of current social neuroscience research examining these phenomena and (b) consider future experimental designs using the Social Neuroscience approach to further our understanding of each phenomenon. After being acquainted with foundational concepts, students will analyze findings in a number of core content domains (including emotions, emotion regulation, self, stereotyping, attitudes and beliefs, social decision making, cooperation, close relationships), focusing on neuroscience's contribution beyond traditional methods. Prerequisite: Graduate standing or consent of instructor. LEC.

PSYC 960. Advanced Psychopathology. 3 Hours.
Review of current nosology of adult psychopathological syndromes emphasizing development of diagnostic skills. Critical survey of recent research and theory related to the etiology, course, prognosis, and treatment of adult psychopathological conditions. Prerequisite: Graduate student status in clinical psychology, clinical child psychology, or counseling psychology. LEC.

PSYC 961. Biological Foundations of Psychopathology. 3 Hours.
A review of fundamental topics in the neurosciences and their relevance to selected psychopathological disorders. The fundamental topics are taken from genetics, neuroanatomy, neurophysiology, and neurochemistry. The disorders include schizophrenia, depression, anxiety disorders, Alzheimer's disease, Parkinson's disease, and Huntington's disease. Prerequisite: Graduate student in clinical psychology or consent of instructor. LEC.

PSYC 962. Advanced Personality. 3 Hours.
A survey of selected advanced topics in the area of personality. Includes review of theoretical and research issues in the area of personality. Prerequisite: Consent of instructor. LEC.

PSYC 963. Clinical Child Psychology Internship. 1 Hour.
Three consecutive enrollments, covering a minimum of eleven months of experience in an approved clinical psychology field setting; supervision by qualified clinical child psychology faculty and field staff clinicians. Required of all clinical child psychology program students. An intensive guided experience in application of clinical child psychology theory, methods, and practices. Integrates scientific and clinical aspects of field. (Same as ABSC 963, formerly HDFL 963.) Prerequisite: Completion of Ph.D. comprehensive examinations and permission of clinical psychology faculty. LEC.

PSYC 964. Clinical Practicum I. 3 Hours.
Lecture, laboratory and field work, and supervision appointment. Psychological evaluation and treatment of individuals, couples, families, and groups; supervised, progressive experience in psychological treatment and in the clinical evaluation of intellectual, personality, and social functioning. Emphasis in selection of and training in psychological intervention strategies is on the use of empirically supported treatments where possible. Grading on Satisfactory/Fail basis. Prerequisite: Graduate student in clinical psychology program. LEC.

PSYC 965. Clinical Practicum II. 3 Hours.
A continuation of PSYC 964. Grading on Satisfactory/Fail basis. Prerequisite: PSYC 964 or permission of instructor. LEC.

PSYC 966. Clinical Practicum III. 3 Hours.
A continuation of PSYC 964. Grading on Satisfactory/Fail basis. Prerequisite: PSYC 964 or permission of instructor. LEC.

PSYC 967. Psychotherapy with Families. 3 Hours.
Clinical approaches to marriage and family therapy. Intensive consideration of the theoretical positions, research findings, clinical methods, and technical problems in marriage and family therapy. Prerequisite: PSYC 946. LEC.

PSYC 968. Research Methods in Clinical Psychology. 3 Hours.
Systematic consideration of research methods in clinical psychology including identification of a research problem, selection of the research design and assessment strategies, and methods of evaluating the results. The principles, pitfalls, artifacts, biases, and sources of controversy in research in this area are also covered. Prerequisite: Graduate standing in clinical or counseling psychology. LEC.

PSYC 969. Clinical Practicum IV. 3 Hours.
Lecture, laboratory, field work, and supervision appointment. Advanced psychological treatment of the individual, couple, family, and group client; supervised, progressive experience in the clinical application of psychotherapeutic treatment methods with emphasis on the use of empirically supported interventions where possible. Grading on Satisfactory/Fail basis. Prerequisite: PSYC 966 or consent of instructor. LEC.

PSYC 970. Clinical Practicum V. 3 Hours.
A continuation of PSYC 969. Grading on Satisfactory/Fail basis. Prerequisite: PSYC 969 or consent of instructor. LEC.

PSYC 974. Clinical Psychology Internship. 1-3 Hours.
Three consecutive enrollments, covering a minimum of eleven months of experience in an approved clinical psychology field setting; supervision by clinical psychology faculty and field staff clinical psychologists. Required of all clinical psychology program students. An intensive guided experience in the application of clinical psychology theory, methods, and practices. An emphasis upon the relationships between scientific and clinical functions. Integrations between research and clinical practice. Prerequisite: Completion of Ph.D. comprehensive examinations and consent of clinical psychology faculty. LEC.

PSYC 975. Professional and Ethical Problems in Clinical Psychology. 3 Hours.
Interprofessional relationships, case security, legal aspects, ethical code of practice, clinic administration, and problems in the clinical practice of psychology. Issues involving ethics in research will also be explored. Prerequisite: Consent of instructor. LEC.

PSYC 976. Therapeutic Interventions with Children. 3-5 Hours.
Clinical approaches to the therapeutic treatment of children with special emphasis on research findings and laboratory (practicum) experience. A survey of relationship therapies, operant strategies, system approaches, parent education and play therapy by the right therapist for a specific child with a particular problem. Prerequisite: Instructor permission. LEC.

PSYC 977. Specialized Clinical Practicum. 1-4 Hours.
Lecture; laboratory and field work, and supervision appointment. Specialized psychological services for the evaluation and/or treatment of the individual client or the group or the institution. Investigation of and experience in a special practicum area not covered in regular courses. Prerequisite: Students must consult with members of the clinical faculty and propose an acceptable project in advance of enrollment. LEC.

PSYC 980. Special Problems in Psychology. 1-5 Hours.
Investigation of a special research problem or directed reading in an area not covered in regular courses. Prerequisite: Consent of instructor. RSH.
PSYC 981. Teaching Psychology. 1 Hour.
Discussion of the problems and techniques of teaching psychology at the undergraduate level. A minimum of one credit of this course must be taken by all assistant instructors during the two semesters of the first year of their appointment in the department. Only three hours may count toward the Ph.D. degree. LEC.

PSYC 982. Issues in Scientific Conduct. 3 Hours.
Lectures and discussion on issues in the conduct of a scientific career, with emphasis on practical topics of special importance in behavioral science. Topics will include the academic and scientific roles of behavioral scientists, establishing a research lab, communicating research findings, tenure processes, gender equity, ethical conduct, and good scientific citizenship. Discussions will highlight important case studies. (Same as SPLH 982.) LEC.

PSYC 983. Methodology. 3 Hours.
Inferential problems in experimental psychology. Prerequisite: PSYC 790 and PSYC 791 or consent of instructor, LEC.

PSYC 984. Missing Data Analysis. 3 Hours.
The primary goal of the course is to promote a solid understanding of the logic and implementation of modern missing data techniques. The following topics are included: missing data theory, traditional missing data techniques, maximum likelihood estimation, EM algorithm, multiple imputation, planned missing data designs, and techniques for missing not at random data. Students will learn how to implement the missing data techniques in SAS, Mplus and R. Prerequisite: PSYC 790 and PSYC 896. LEC.

PSYC 988. Modeling of Intraindividual Observations. 4 Hours.
Many statistical methods are apt for modeling cross-sectional data or growth processes. These methods are often not ideal for researchers collecting intensive intra-individual observations, such as those from diary studies, ecological momentary assessments, and physiological data, which often exhibit complex, nonlinear changes over time. This class examines methods for extracting information from intensive intra-individual observations. This class will survey methods and concepts from areas such as dynamical systems, chaos theory, time series analysis and differential equation modeling. Some prior experience with R or related language strongly encouraged. Some prior experience with R or related language strongly encouraged. Prerequisite: PSYC 790 or equivalent and a course in Structural Equation Modeling or Multilevel Modeling (Hierarchical Linear modeling, Mixed Models.) LEC.

PSYC 990. Methods for Clustering and Classification. 3 Hours.
Statistical methods for identifying classes, clusters, and taxa. Topics include K-means, discriminant analysis, hierarchical clustering algorithms, additive trees, neural network models for clustering, latent class models, finite mixture models, and models for skills/cognitive diagnosis. Applications across the social and behavior sciences are emphasized. Prerequisite: PSYC 790 and PSYC 791 or equivalent, or consent of instructor. LEC.

PSYC 991. Longitudinal Data Analysis. 3 Hours.
Reviews and contrasts various statistical methods for the analysis of change. Course focuses on various techniques to analyze longitudinal (repeated-measures) data beyond the repeated-measures ANOVA framework. Techniques covered included latent change scores, latent difference scores, individual-differences modeling of latent residual and change scores, intra-individual differences modeling (e.g., growth curve, mixed modeling) and growth mixture modeling. Applications across the behavioral and social sciences are emphasized. Prerequisite: PSYC 896 or equivalent, or consent of instructor. LEC.

PSYC 993. Seminar: _____. 1-5 Hours.
LEC.

PSYC 996. Structural Equation Modeling II. 3 Hours.
Continuation of PSYC 896. Advanced applications of modern methods for testing hypotheses on multivariate correlational data in the behavioral and social sciences. Topics include advanced confirmatory factor analysis, mediation and moderation among latent variables, latent growth curve modeling, and other latent variable mean and covariance structures analysis techniques. Applications across the behavioral and social sciences are emphasized. Prerequisite: PSYC 896 or equivalent, or consent of instructor. LEC.

PSYC 998. Doctoral Dissertation in Clinical Child Psychology. 1-10 Hours.
Research experience making original contribution to literature in clinical child psychology. (Same as ABSC 998, formerly HDFL 998.) THE.

PSYC 999. Dissertation. 1-12 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

Public Affairs Adm, School Courses

PUAD 177. First Year Seminar: ______. 3 Hours. SF GE11.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in public administration. May not contribute to major requirements in public administration. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

PUAD 330. Introduction to Public Administration. 3 Hours. S.
Introduction to administration, public policy and policy makings is the study of government workers, the organizations in which they work, how they are financed, and how government engages citizens to help form and maintain community. In various ways, the class sessions explore the three important issues of public administration: discretion, authority, and accountability. (Same as POLS 330.) Prerequisite: POLS 110. LEC.

PUAD 331. Introduction to Public Administration, Honors. 3 Hours. S.
Introduction to administration, public policy, and policy making, for honors students is the study of government workers, the organizations in which they work, how they are financed, and how government engages citizens to help form and maintain community. In various ways, the class sessions explore the three important issues of public administration: discretion, authority, and accountability. (Same as POLS 331.) Prerequisite: POLS 110. LEC.

PUAD 332. Quantitative Methods for Public Administration. 3 Hours. S.
Focuses on building the quantitative analysis skills of students in public administration. Students learn basic and intermediate statistics, and methods of data analysis and interpretation. Students gain exposure to the uses of data in public organizational settings. Prerequisite: Math 101 or equivalent placement. LEC.

PUAD 333. Hard Choices in Public Administration: ______. 3 Hours. GE33 / S.
Focuses on some of America's most vexing public policy challenges and emphasizes the political context of difficult choices. Course examines models of decision-making and the process of policy analysis. Students learn how to apply the tools of policy analysis to make policy judgments. Prerequisite: PUAD 330 or PUAD 331. LEC.

PUAD 431. Bureaucracy, Public Administration, and the Private Sector. 3 Hours. S.
Examines the problems posed by behaviors within and by bureaucracies. Provides students with a set of conceptual tools for understanding the
PUAD 432. Conducting the People's Business Ethically. 3 Hours. AE51 / S.
Addresses the moral challenges facing leaders in the public and nonprofit sectors. Examines the values and virtues important to sustained ethical leadership, as well as strategies to build strong institutional cultures and support ethical practices in institutions. Considers moral and political theory by focusing on contemporary cases and issues. Students learn how to identify moral issues in public life and public management. There is a special focus on the integration of moral concerns into public discussion in a manner that contributes to good policy and does not polarize issues. This course considers moral and political theory by focusing on contemporary cases and issues. Prerequisite: PUAD 330 or PUAD 331. LEC.

PUAD 433. Metropolitics and Macroproblems: The American City in Local and Global Context. 3 Hours. S.
An interdisciplinary study of American cities, focusing on the rapidly changing demographic, physical, political, social, and economic changes. Sunbelt cities, edge cities, the rustbelt cities, planned and unplanned suburban communities, as well as declining center cities and newly revitalized downtowns are considered. The role of immigration and migration in reshaping the urban environment, and the effects of globalization are also examined. Prerequisite: PUAD 330 or PUAD 331. LEC.

PUAD 435. Generating, Allocating and Managing Public Resources. 3 Hours. U.
This course is devoted to topics in public budgeting, finance and financial management. These activities play a central role in public management. The intent of this course is to understand the role these activities play in local, state, and federal governments and to see how policy and management are shaped and influenced by budgets, financial reports, and tax policy. Prerequisite: PUAD 330 or PUAD 331. LEC.

PUAD 436. Managing People in Public Organizations. 3 Hours. U.
Effective human resources management is one of the key goals of organizations in both the public and private sectors. This course focuses on human resources management in a public sector context with particular emphasis placed upon past, current, and future challenges in the field. The course covers topics such as the recruitment, selection, and compensation of public sector employees, as well as more contemporary issues such as diversity management and public sector personnel reform. Prerequisite: PUAD 330 or PUAD 331. LEC.

PUAD 494. Topics in Public Administration: ______. 3 Hours. S.
An introductory study of selected topics in public affairs and administration. Course may be repeated for credit if content varies. Course may be offered in lecture or online format. Prerequisite: PUAD 330 or PUAD 331. LEC.

PUAD 601. Crime and Punishment. 3 Hours. AE41 / S.
Examines the administration of justice and focuses on differential and discriminatory treatment in policing, criminal prosecutions, trials, sentencing, or imprisonment. Also considered are the basis and impact of racial profiling, harassment, arbitrary detention, and abusive treatment of members of racial and ethnic groups, immigrants, and/or other vulnerable groups by law enforcement, and disparate treatment by prosecutors and the courts. Prerequisite: PUAD 330 or PUAD 331. LEC.

PUAD 602. Diversity in Public Administration. 3 Hours. AE41 / S.
Analyzes diversity and leadership in public and private institutions along ethnic, racial, and gender lines and the challenges of the facilitation of open dialogue on diversity. Examines the political, historical, social, and economic reasons why Americans of different ethnic, racial, and gender groups hold divergent views about major public policy areas, as well as fundamental views about democratic participation. Prerequisite: PUAD 330 or PUAD 331. LEC.

PUAD 603. Foundations of the Nonprofit Sector. 3 Hours. H/S.
This course provides an overview of the U.S. nonprofit sector, its history, scope, diversity and its positioning among and between the private and public sectors of the U.S. economy. The course explores the legal framework under which nonprofit organizations operate and are regulated. Economic, political, social, organizational and giving theories of the sector are reviewed in order to understand the sectors existence, roles and activities with particular attention to philanthropy and voluntarism. Distinct contributions to society as well as contemporary challenges faced by the sector are examined. Prerequisite: PUAD 330, or POLS 110, or MGMT 305, or a PUAD master's core course, or consent of instructor. Junior status or above is also required. LEC.

PUAD 604. Resource Development and Management in Nonprofit Organizations. 3 Hours. H.
This course provides an overview of the broad range of activities relevant to acquisition, management and utilization of resources in nonprofit organizations. The course identifies the primary strategies through which resources are generated with emphasis on grantwriting, fundraising, social entrepreneurship, and public/private partnerships. Development of organizational identity and management of public relations is examined in relation to resource and relationship development. Strategies for management of resources to ensure long-term benefit and sustainability are explored. Prerequisite: PUAD 603. LEC.

PUAD 605. Managing Nonprofit Relationships. 3 Hours. H.
This course considers the set of relationships that nonprofit leaders must balance within the organization and beyond organizational boundaries. Both internal relationships (with staff, volunteers, and board members) and external relationships (with stakeholders, other organizations, and the community at large) are critical to mission accomplishment. This course provides students with the resources necessary to understand the challenges and opportunities related to building and LEC.

PUAD 606. Nonprofit Accountability: Public Needs and Public Values. 3 Hours. H.
This course examines the role of the nonprofit sector in society by posing broad questions about why nonprofit organizations are held accountable, to whom they are accountable, and detailing how organizations can satisfy accountability demands. The course investigates the public role of the nonprofit sector in society, identifies the stakeholders that are integral to an organization’s mission, and describes and critiques the financial and evaluation tools that nonprofits can use to ensure their social viability. Prerequisite: PUAD 603. LEC.

PUAD 607. Introduction to Project Management. 3 Hours. H.
An exploration of the technical aspects of project management and the human aspects of project leadership. The course integrates conceptual approaches with practical applications of knowledge and skill sets. The course addresses the Project Management Body of Knowledge (PMBOK-- as created by the Project Management Institute) and project leadership competencies including leading, communicating, negotiating, problem solving, and influencing. Prerequisite: Junior standing. LEC.

PUAD 608. Collaboration in Public Administration. 3 Hours. S.
Managers must work effectively across organizational and sector boundaries to solve problems and produce public value. This course
considers the forces contributing to the need for collaborative governance, changing management tasks and competencies, and how to address key collaborative challenges. Prerequisite: PUAD 330 or POLS 330, or permission of the instructor. LEC.

PUAD 639. Concepts of Civil Society. 3 Hours. U.
Concepts of community, social capital, and civil capacity building, and their relations to effective community functioning, democratic politics, and administrative expertise. LEC.

PUAD 641. Public Service Leadership. 3 Hours. U.
Concepts of leadership in community, political, and administrative settings. These settings include government and all non-business organizations (e.g., certain for-profit organizations). LEC.

PUAD 660. Organizations and Management I. 3 Hours. U.
An exploration of management in the context of public organizations. Management is explored at the individual, group and organizational level including conflict resolution, problem-solving, planning and legal aspects of organizations. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Permission of instructor. LEC.

PUAD 661. Organizations and Management II. 3 Hours. U.
A continuation of PUAD 660. The context for leading public organizations is explored through knowledge management, collaboration, innovation, process improvement and leadership succession. Graded on a satisfactory/unsatisfactory basis. Prerequisite: PUAD 660, and permission of instructor. LEC.

PUAD 691. Internship in Public Service. 1-6 Hours. AE61 / U.
Designed to provide public administration students an applied learning experience in either a public or nonprofit organization. Open to majors in Public Administration only. Prerequisite: One of the following: PUAD 330, 331, PUAD 332, PUAD 333, and consent of instructor required. FLD.

PUAD 692. Research Experience in Public Administration. 1-6 Hours. U.
Designed for advanced public administration students. Students learn research skills by working one-on-one with a faculty member to assist in his/her program of research. Open to majors in Public Administration only. Students are required to complete a final project or presentation, through advising and consultation with the designated faculty member. Prerequisite: One of the following: PUAD 330, 331, PUAD 332, PUAD 333 and consent of instructor required. LEC.

PUAD 693. Directed Readings. 1-3 Hours. U.
For advanced undergraduate students who wish to study a specific topic of interest that is not covered in the curriculum. Each student must complete a proposal outlining his or her topic request and submit to the Undergraduate Advisor. Intended for students majoring in Public Administration. Prerequisite: One of the following: PUAD 330, 331, PUAD 332, PUAD 333, and consent of instructor required. IND.

PUAD 694. Topics in Public Administration: ______. 3 Hours. U.
Study of selected topics in public administration. Course may be repeated for credit if content varies. Course may be offered in lecture or online format. Prerequisite: PUAD 330 or PUAD 331. LEC.

PUAD 824. Public Policy and Administration. 3 Hours.
An exploration of the ways in which public policy is made in the United States, focusing on the role of the administrator at each stage of the policy process: formulation, implementation, and evaluation. Various theories of policy-making with application to specific areas of public policy will be examined. LEC.

PUAD 825. Urban Policy and Administration. 3 Hours.
This course explores the development, implementation and evaluation of public policy in the local government context. It examines a variety of policy tools used to address urban problems and applies theories of the policy process, intergovernmental relations, and institutions to municipal governance. (Same as PUAD 825.) LEC.

PUAD 826. Public Policy and Administration of State Government. 3 Hours.
An examination of political and administrative aspects of state government focusing on legislative and executive branches of government. LEC.

PUAD 827. Health Care Policy and Administration. 3 Hours.
A seminar designed to explore the development of public health policy in the United States. Particular attention will be given to (1) the development of public institutions and policy goals; (2) current policy problems such as expenditure-cost controls, prospective reimbursement, utilization review, access, and public and private investment planning; and (3) administrative problems in the current health care system. (Same as HPM 837.) LEC.

PUAD 828. Nonprofit Management and Policy. 3 Hours.
This course focuses on the economic, social, and legal foundations of the nonprofit sector. Nonprofits are examined in the context of a three-sector economy, with emphasis on the ways in which nonprofits compensate for market failures and government failures. The course examines government-nonprofit relations in the modern welfare and offers an in-depth examination of the health, education, and welfare functions as performed by nonprofits. This course also provides exposure to selected topics in nonprofit management such as grant writing, board relations, advocacy, fundraising and volunteer management. LEC.

PUAD 830. Administrative Ethics. 3 Hours.
A survey of ethical issues faced by public administrators. Special attention will be given to ethical problems arising within hierarchical organizations and to the ethical implications of particular public policies. LEC.

PUAD 831. Public Administration Practicum. 1 Hour.
Exposes students to day-to-day operational facets of public management through workshops, speakers, exercises. LEC.

PUAD 832. Organizational Theory. 3 Hours.
An introductory theory course designed to develop an understanding about organizations, their environments, and the political subsystems in which they exist. LEC.

PUAD 833. Administrative Behavior. 3 Hours.
An examination of individual and group behavior within organizations, focusing on motivation, leadership, conflict and conflict resolution, group dynamics and communication. LEC.

PUAD 834. Human Resource Management. 3 Hours.
This course presents the context and practice of effective human resource management, with emphasis on the political, legal, historical, and ethical dimensions of public employment. This course considers the functions of workforce management, including: 1) planning of work and the allocation of labor to that work, 2) acquisition of employees and their competencies, knowledge, skills, and abilities, 3) development of employees to channel, improve and create new knowledge, skills, and abilities, and 4) maintaining the working relationship between employee and employer. Students will apply workforce management theories and techniques to contemporary organizational challenges and investigate the tensions inherent to balancing competing values (such as: responsiveness/neutrality and efficiency/equity) and meeting conflicting demands of organizational stakeholders and society. LEC.

PUAD 835. State and Local Public Finance. 3 Hours.
Focuses on the tax, spending, and debt practices of state and local governments. Drawing on the tools of positive and normative economic analysis, the course explores the implications of these activities on
broader economic outcomes, including private allocation of resources and the distribution of wealth. LEC.

**PUAD 836. Introduction to Quantitative Methods. 4 Hours.**
Introduces quantitative approaches to examine public management and public policy decisions. Concepts of research design, probability, and inferential statistics are covered. LEC.

**PUAD 837. Budgeting and Resource Allocation. 3 Hours.**
Examines the practices and the political, economic, and organizational contexts of public and nonprofit budgeting, tools of financial analysis, and ethics of financial management. LEC.

**PUAD 838. Urban Service Delivery. 3 Hours.**
Focuses on organizational arrangements for the provision of basic urban services and the character of service delivery politics. Methods for evaluating the efficiency and responsiveness of alternative organizational arrangements are treated. LEC.

**PUAD 839. Topics in Public Administration: ____. 3 Hours.**
Study of selected topics in public administration. LEC.

**PUAD 840. Theory of Public Administration. 3 Hours.**
Survey of the development of ideas about public administration among public officials and research investigators. Emphasis on basic concepts, research reports, and theoretical treatises on the nature of public administration. LEC.

**PUAD 841. The Role, Context, and Ethics of Public Administration in American Society. 3 Hours.**
Provides students with an overview of the social context of public administration with an emphasis on political issues, intellectual history, ethics, and the tensions between democracy and bureaucracy. LEC.

**PUAD 842. Law and Public Management. 3 Hours.**
Course investigates major concepts that make up the legal environment of public administration. The accepted uses and procedures of the field, relationships among courts, agencies, the legislature, and basic legal research are examined. LEC.

**PUAD 843. Constitutional Foundations of Public Administration. 3 Hours.**
This course provides a grounding in the constitutional premises of public administration including executive, legislative, and judicial powers, and federalism, and those issues associated with the development of economic institutions and processes such as taxation, employment regulation, and commerce controls. LEC.

**PUAD 844. Advanced Seminar in State and Local Budgeting. 3 Hours.**
This course studies the theories behind selected topics in public budgeting and compares the theories with the actual practice of budgeting in the State of Kansas and its communities. LEC.

**PUAD 845. Organizational Analysis and Public Management. 3 Hours.**
Explores concepts and practices in organization behavior and management theory as they apply to public organizations. Emphasis is placed on understanding the dynamics of individuals, groups, and teams within organizations, dynamics associated with organizational structures, accountability, and culture and dynamics of risk in leadership, collaboration, and contracting. LEC.

**PUAD 846. Kansas and Its Government. 3 Hours.**
This course is designed to offer students the opportunity to obtain a comprehensive overview of the culture, history, economy, and geography of Kansas along with the review of state and local government infrastructure. The review of governments will include the financing of governments in Kansas. LEC.

**PUAD 847. Legislative Process. 3 Hours.**
This course is designed to acquaint students with the workings of the policy process at the level of state government. Its focus will give students an understanding of the political process to enable them to function more effectively in state policy development and implementation. Prerequisite: PUAD 824, PUAD 825, PUAD 826 or PUAD 827. LEC.

**PUAD 848. Advanced Management Practices in State Government. 3 Hours.**
This course offers the student an opportunity to enhance skills developed in PUAD 826 in an experiential learning environment that simulates actual management practice. Complex cases will be rank ordered and resolved on a work schedule developed by each work group. Groups will work simultaneously on two or more cases at all times. Prerequisite: PUAD 826. LEC.

**PUAD 849. Law, Courts, and Public Policy. 3 Hours.**
This course provides an overview of the role of law, litigation, and courts in the public policy process, with an emphasis on bureaucratic institutions. The course covers the main theories and empirical research on the policy effects of litigation and intervention, with a particular focus on civil rights in the areas of employment, policing, welfare, prisons, and environmental policy. (Same as POLS 849.) Prerequisite: Graduate standing or consent of instructor. LEC.

**PUAD 850. Intergovernmental Relations. 3 Hours.**
This course focuses on the fiscal and administrative relationships among the three levels of government - federal, state, and local - in the United States. A number of topics will be examined, including a history of intergovernmental relations, the political, constitutional, and legal foundations of the intergovernmental system, and intergovernmental fiscal policy. The impact of the intergovernmental system will be assessed from the perspective of specific areas and intergovernmental programs. LEC.

**PUAD 851. Infra-Structure Management. 3 Hours.**
A survey of land-use, infra-structure, and technology issues in municipalities. LEC.

**PUAD 852. Comparative Public Policy and Administration. 3 Hours.**
This seminar examines the application of theories in public administration, public management, and public policy in international and comparative contexts. Particular attention is given to how governments and publics are connected by way of intergovernmental strategies, governance, and differing political and administrative arrangements. LEC.

**PUAD 853. Policy Analysis and Evaluation. 3 Hours.**
This course will introduce students to the conceptual foundations and applied techniques associated with identifying, describing, and seeking solutions to public policy problems (policy analysis) and evaluating the performance of public programs and organizations (program evaluation). Basic microeconomic theory is introduced. LEC.

**PUAD 854. Innovation and Organizational Change. 3 Hours.**
This course will examine theories of innovation and organizational change as applied to public organizations. Particular emphasis will be placed on the concepts of innovation in bureaucratic organizations, on the process of successful change in organizations, and on leadership and employees’ roles. LEC.

**PUAD 855. Financial Management for Public and Not-for-Profit Organizations. 3 Hours.**
Financial management focuses on the use of financial information for decision making and evaluation. This course will rely on fundamental accounting concepts as they relate to the basic financial statements of government and not-for-profit organizations. Time will also be spent on financial management practices (e.g. cash management, debt
management, etc.) and financial condition analysis. Material presented in this course expands on the foundational material covered in PUAD 837. Prerequisite: PUAD 837 or permission from the instructor. LEC.

**PUAD 856. Management and Information Technology. 3 Hours.**
An introduction to the concepts of information policy and management of technology within governmental organizations. The course covers the effects of technology on government and society as well as information policy (privacy, security and access) and their importance to democracy. The course also includes a leadership perspective on planning, funding, and implementation of technology systems in governmental organizations as well as the role of Chief Information Officer. LEC.

**PUAD 857. Performance Management and Governance. 3 Hours.**
This course examines the practice and governance challenges of performance management and budgeting in the public sector. Topics covered in this course include: a) the governance context of performance measurement and management; b) the historical and theoretical foundation of performance measurement and management; c) the global trend of performance-oriented reforms; d) the practice and politics of performance measurement and management; and e) governance and ethical issues in managing for results. LEC.

**PUAD 858. Performance Audit. 3 Hours.**
This course examines the practice of performance audit at the national, state, and local levels. Topics covered in the course include: a) the concept of performance audit and the roles of auditors in performance management; b) performance audit systems and standards at the national, state and local levels; c) performance audit methodologies and techniques; d) the establishment of audit criteria; e) the concept and practice of risk and vulnerability analysis; f) the reporting and communication of performance audit results. LEC.

**PUAD 859. Service Management. 3 Hours.**
This course provides an introduction to service management in the public sector and will focus on providing students with the conceptual understanding and skills to design, promote, manage, and deliver public services. The course will integrate concepts of service management with quality assurance, business process analysis, and project management. Through this course, students will develop a better understanding of methods for improving responsiveness and accountability to organizational goals and mission. LEC.

**PUAD 892. Public Administration Internship. 3 Hours.**
A part-time supervised professional work experience designed to provide students the knowledge, background, and practical experience in public service. A written summary of the experience including a job description, projects the student, and a reflective statement on integrating the internship with theoretical issues regarding public administration. This course brings theory and practice together. Graded on a satisfactory/unsatisfactory basis. FLD.

**PUAD 893. Directed Readings. 1-3 Hours.**
Designed to meet the needs of advanced students whose study in public administration cannot be met with current course work. RSH.

**PUAD 894. Professional Development Seminar I. 3 Hours.**
Open only to precareer students with internships, this intensive seminar is designed around issues intern confront in their working relationships. Emphasis is placed on the transition of the student from an academic environment to a professional work relationship. Class sessions deal with issues like employee socialization, power and trust, and administrative change. Graded on a satisfactory/unsatisfactory basis. FLD.

**PUAD 895. Professional Development Seminar II. 3 Hours.**
Continuation of PUAD 894. Graded on a satisfactory/unsatisfactory basis. FLD.

**PUAD 897. Public Administration Contemporary Issues and Competency Assessment. 3 Hours.**
This course exposes students to the contemporary issues in public management and analysis of competencies for public management in four theme areas. Students will participate in discussions of issues and in three assessments of their preparation to lead public organizations. Students will complete the MPA Final Essay which focuses on integration of course and work experience in relation to the values theme of the MPA program. Graded on a satisfactory/unsatisfactory basis. LAB.

**PUAD 898. Leadership, Professionalism, and Citizen Engagement. 3 Hours.**
This course explores connections between facilitative political and administrative leadership, professional expertise, and citizen engagement. It will explore politics and the political arena; administrative/technical expertise and the relationship between the arenas of politics and administration. It will present the concept of citizen engagement and adaptive work, complicating as well as enriching public policy making and implementation. LEC.

**PUAD 930. Research Seminar in Public Administration and Democracy. 3 Hours.**
This course focuses on the democratic context of public administration. Topics could include how democracy shapes the practice of public administration; the functioning of public administration in a constitutional democracy; issues relating to control and discretion of public administrators; citizenship and representative bureaucracy; theories of bureaucratic values such as equity, justice and efficiency, ethics and accountability; theories of institutions. SEM.

**PUAD 931. Research Seminar in Public Management. 3 Hours.**
This course focuses on the intellectual currents that undergird the theories and concepts in public administration. There are three primary perspectives crosscutting the topics. They are historical, cultural and analytical. SEM.

**PUAD 932. Seminar in the Intellectual History of Public Administration. 3 Hours.**
This course will analyze the intellectual currents that undergird the theories and concepts in public administration. There are three primary perspectives crosscutting the topics. They are historical, cultural and analytical. SEM.

**PUAD 933. Research Methods in Public Administration. 3 Hours.**
The course examines issues of research and epistemology with an emphasis on connecting theory and research and doing research in field settings. RSH.

**PUAD 934. Advanced Quantitative Methods for Public Administration. 3 Hours.**
This seminar will assist students to develop a thorough competence in both theory and application of multivariate statistical models of the types that are commonly used to study questions of organization and policy in the public sector. These will include inference for the general linear regression model under a wide variety of specifications, as well as a consideration of path models and systems of simultaneous equations. The principal goal of this course is to strengthen the ability of doctoral students in public administration to work methodologically as independent scholars using relatively advanced designs and technique in their work. SEM.

**PUAD 935. Policy Analysis and Program Evaluation. 3 Hours.**
This course examines the theoretical foundations and analytical components of policy analysis and program evaluation, common tools for
assessing alternative courses of public action and program effectiveness. This examination will include a review and critique of common quantitative and qualitative approaches, including cost-benefit analysis, cost-effectiveness analysis, and quasi-experimental design. LEC.

PUAD 937. Qualitative Methods in Public Administration. 3 Hours. This course examines the concepts and practices of qualitative research. The focus will be on field research and the collection of "textual data" through observation, interviewing, and documents. The course will also examine the interpretation and analysis of qualitative data and how to present qualitative findings. RSH.

PUAD 939. Topics in Public Administration: ______. 1-3 Hours. A study of selective topics in public administration. Course may be taken more than once. LEC.

PUAD 943. Constitutional Foundations of Public Administration. 3 Hours. This course provides grounding in the constitutional premises of public administration including executive, legislative, and judicial powers, and federalism, and those issues associated with the development of economic institutions and processes such as taxation, employment regulation, and commerce controls. LEC.

PUAD 949. Law, Courts, and Public Policy. 3 Hours. This course provides an in-depth analysis of the role of law, litigation, and courts in the public policy process, with an emphasis on bureaucratic institutions. The course covers the main theories and empirical research on the policy effects of litigation and intervention, with a particular focus on civil rights in the areas of employment, policing, welfare, prisons, and environmental policy. As part of the course requirements, students will conduct original empirical research. LEC.

PUAD 990. Research Practicum in Public Policy and Administration. 3 Hours. This course will provide students with an opportunity to conduct applied research in a field setting with faculty guidance. May be pursued as an independent study or as a regularly scheduled class with a group of students. Prerequisite: PUAD 934 and PUAD 935. RSH.

PUAD 998. Directed Reading on Public Administration. 1-6 Hours. Designed to meet the needs of graduate students whose study in public administration cannot be met with present course. Prerequisite: consent of instructor. RSH.

PUAD 999. Dissertation. 1-15 Hours. Enrollment for writing doctoral dissertations. Graded on a satisfactory/unsatisfactory basis. THE.

**Religious Studies Courses**

REL 104. Introduction to Religious Studies. 3 Hours. HR AE42/GE3H / H. A basic introduction to religion in India, China, and Japan with emphasis upon religions that affect the modern period. Not open to students who have taken REL 108/EALC 108. (Same as EALC 105.) LEC.

REL 107. Living Religions of the West. 3 Hours. HR GE3H / H. A basic introduction to the major religious traditions of the Near East, Europe, and the Americas, with an emphasis on their development through the modern period and their expressions in contemporary life. Not open to students who have taken REL 109. (Same as JWSH 107.) LEC.

REL 108. Living Religions of the East, Honors. 3 Hours. HR NW AE42/GE3H / H. A basic introduction to religion in India, China, and Japan, with emphasis upon religions that affect the modern period. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken REL 109. (Same as JWSH 107.) LEC.

REL 109. Living Religions of the West, Honors. 3 Hours. HR AE42/GE3H / H. A basic introduction to the major religious traditions in the Near East, Europe, and the Americas, with an emphasis on their development through the modern period and their expressions in contemporary life. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken REL 107. LEC.

REL 124. Understanding the Bible. 3 Hours. HR AE42/GE3H / H. An introduction to the literature of the Bible, exploring the relationships among the various types of literature present and the function of each type in the history and religious life of the people who produced and used them. Cannot be taken concurrently with REL 311 or JWSH 321 or REL 315. Not open to students who have taken REL 125 or JWSH 125. (Same as JWSH 124.) LEC.

REL 125. Understanding the Bible, Honors. 3 Hours. HR AE42/GE3H / H. An introduction to the literature of the Bible, exploring the relationships among the various types of literature present and the function of each type in history and religious life of the people who produced and used them. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken REL 124 or JWSH 124. (Same as JWSH 125.) LEC.

REL 130. Myth, Legend, and Folk Belief in East Asia. 3 Hours. NW / H/W. A survey of the commonly held ideas about the beginning of the world, the role of gods and spirits in daily life, and the celebrations and rituals proper to each season of the year. The purpose of the course is to present the world view of the ordinary peoples of East Asia. (Same as ANTH 293, EALC 130.) LEC.

REL 171. Religion in American Society. 3 Hours. HR AE41/GE3H / H. A broad introduction to religion in American culture. This class emphasizes the well-established religions with large followings (viz. Judaism, Catholicism, Eastern Orthodoxy, and Protestantism). Some attention is also given to other religions active in America. Other topics covered include the relationship of church and state, religion in ethnic and racial minority groups, and women and religion. Not open to students who have taken REL 172. (Same as AMS 290.) LEC.

REL 172. Religion in American Society, Honors. 3 Hours. HR AE41/GE3H / H. Honors version of REL 171. A broad introduction to religion in American culture. This class emphasizes the well-established religions with large followings (viz. Judaism, Catholicism, Eastern Orthodoxy, and Protestantism). Some attention is also given to other religions active in
REL 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Religious Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

REL 200. Study Abroad Introductions to: _____. 1-4 Hours. H.
This course is designed for the study of special topics in Religious Studies. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

REL 311. Religion of Ancient Israel. 3 Hours. H/W.
A study of the development of the Hebrew Bible from its earliest stages of oral tradition to its canonization with an emphasis on the relationship of the historical, intellectual, and cultural contexts shaping that development. (Same as JWSH 321.) Prerequisite: REL 124 or JWSH 124 or permission of instructor. LEC.

REL 315. History and Literature of Early Christianity. 3 Hours. H/W.
An examination of the literature produced by early Christians. In addition to New Testament texts, the course includes a broad range of diverse texts produced by early Christians, Jews, and others. Prerequisite: REL 124 or permission of instructor. LEC.

REL 325. Introduction to Judaism. 3 Hours. H.
Analyzes a selection of the core texts, teachings, and practices of Jewish religious traditions in terms of classical and contemporary understanding. (Same as JWSH 325.) LEC.

This course demystifies the Talmud, arguably the most central yet also the most mysterious text of rabbinic Judaism. Students are introduced to the scope, substance, styles, and major figures of the Talmud, and also learn how the text came into being over the course of several centuries. (Same as JWSH 326.) Prerequisite: REL 104, REL 107, or REL 124 or REL 125, or permission of instructor. LEC.

REL 330. Native American Religions. 3 Hours. NW AE41 / H.
A survey of religious traditions among selected Native American peoples. Topics include religious freedom, ritual activity, cultural narrative (myth) kinship, healing practices, ecology, government relations, impact of colonization, impact of missionization, contact between cultures, and secularization. Not open to students who have completed REL 331. (Same as ISP 330.) LEC.

REL 331. Native American Religions, Honors. 3 Hours. NW AE41 / H.
A survey of religious traditions among selected Native American peoples. Topics include religious freedom, ritual activity, cultural narrative (myth) kinship, healing practices, ecology, government relations, impact of colonization, impact of missionization, contact between cultures, and secularization. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have completed REL 330. (Same as ISP 331.) LEC.

REL 339. History of Religion in America. 3 Hours. H.
Survey of the development of religious institutions and ideas in America from colonial times to the present. Emphasis is given to the mainstream religious traditions (Protestant, Catholic, Jewish), but attention is also paid to other phenomena, including nonwestern and native American religions. LEC.

REL 341. Mysticism. 3 Hours. H.
The nature of mystical experience and reflection as expressed in selected mystical literature of the world's religions. LEC.

REL 342. Religion and Literature. 3 Hours. H.
An examination of contemporary writings to explore the authors' presuppositions concerning the nature of God, the nature of human beings, the meaning of good and evil, the significance of human existence, and the means of attaining fulfillment or salvation. LEC.

REL 345. Christianity. 3 Hours. H.
An introductory examination of the history, doctrines, and practices of Christianity. Selected readings from the creeds, papal decrees, and major Christian theologians. LEC.

REL 350. Islam. 3 Hours. NW AE42/GE3H / H/W.
Origins of Islam; the Prophet Muhammad; the Holy Koran; religious symbols and moral mandates; historical developments. (Same as AAAS 349.) LEC.

REL 355. Muslim Societies. 3 Hours. H.
In this class we study Muslim societies throughout the world. We examine variation between regions by looking at Muslim history and culture in different countries, such as Pakistan, Indonesia, Mali, Bosnia, Egypt, Yemen, and others. LEC.

REL 360. The Buddhist Tradition in Asia. 3 Hours. NW AE42/GE3H / H.
A historical and geographical survey of the Buddhist tradition from its origins in India to modern day developments in the three major regional Buddhist cultures of Southeast Asia, Tibet, and East Asia (China, Korea, and Japan). Prerequisite: Prior coursework in Asian studies or permission of instructor. LEC.

REL 365. Hinduism. 3 Hours. H.
An introduction to the diversity and richness of Hinduism from the Vedic period to the present; explores Hindu practices, beliefs, and communities using primary texts and extensive audio-visual resources. LEC.

REL 371. Religion and Society in Tension. 3 Hours. H.
Specific issues of conflict between the values of certain religious groups and those of the larger society. Includes problems of church and state, birth control and abortion, civil disobedience and dissent, education, war and peace, and "civil religion. LEC.

REL 373. The Supreme Court and Religious Issues in the United States. 3 Hours. H.
Historical study of the interpretation of the religion clauses of the First Amendment with special reference to the questions of establishment, the free exercise of religion, freedom of religious belief, worship, and action, and religion and the public schools. Not open to freshmen. (Same as HIST 373.) LEC.

REL 374. Religious Perspectives on Selfhood and Sexuality. 3 Hours. H.
The nature of the self in its individual and social dimensions. Self experienced and expressed in sexuality. Survey of viewpoints in religious literature. LEC.

REL 375. The Supreme Court and Religious Issues in the United States, Honors. 3 Hours. H.
Historical study of the interpretation of the religion clauses of the First Amendment with special reference to the questions of establishment, the free exercise of religion, freedom of religious belief, worship, and action, and religion and the public schools. Open only to students in the University Honors Program or by permission of the instructor. (Same as HIST 375.) LEC.
REL 376. American Judaism: Life and Thought. 3 Hours. H.
A study of the conflicts between secularists and religious Jews, between Zionists and synagogue representatives, and the patterns of compromise in American Jewish life. Questions of Americanism and Jewish survival, support for the State of Israel, and the bureaucratic structure of rabbinical training and philanthropy in America will be raised. LEC.

REL 377. Religious Ethics and Moral Decisions. 3 Hours. AE51 / H.
When faced with ethical dilemmas, how do we decide what is the right course of action? In what ways are our decisions affected by religious ideas about morality? In this class we examine the ethical problems we encounter every day in light of the solutions offered from various religious traditions. Cases to be examined include issues of life and death, war and peace, sexual morals, torture, the treatment of animals and the environment. LEC.

REL 378. Religion and Moral Decisions, Honors. 3 Hours. H.
Honors version of REL 377. Introduction to religious viewpoints on individual and social ethics. Influence of religious thought on the making of moral decisions, and on value development. Examined in relation to specific moral issues. Open only to students who have been admitted to the University Honors Program or by permission of instructor. LEC.

REL 380. Philosophical Issues in Religion. 3 Hours. GE3H / H.
This course will consider, from a philosophical perspective, some of the problems in religion which arise in the development of “Natural Theology” broadly conceived. (Same as PHIL 350.) LEC.

REL 400. Study Abroad Special Topics: _____ 1-4 Hours. H.
This course is designed for the study of special topics in Religious Studies equivalent to courses at the 300 to 600 level at KU. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

REL 404. Undergraduate Seminar in Religion: _____ 1-3 Hours. H.
Topic, instructor, prerequisite and hours of credit to be announced in Schedule of Classes. Particular subject matter may be arranged by students according to student interest and taking advantage of special faculty competence. Class discussion, readings, and individual projects. LEC.

REL 405. Directed Study in Religion. 1-4 Hours. AE61 / H.
Investigation of a special topic or project selected by the student with advice, approval, and supervision of an instructor. Such study may take the form of directed reading or special research. Individual reports and conferences. May be repeated, with maximum cumulative credit of four hours. Course taken for one hour of credit may not be used to fulfill College distribution requirement. Prerequisite: One previous course in religious studies at the University of Kansas and permission of instructor. IND.

REL 406. Reading Asian Religious Classics. 3 Hours. H.
A close reading of classic texts of Asian religions in English translation, with emphasis on their construction and reception as sacred “scripture” in both their indigenous Asian contexts and in the post-colonial West. No prior knowledge of Asia is required, although some background is desirable. LEC.

REL 425. Religion and Film. 3 Hours. H.
An examination of the treatment of religious themes through the medium of film and an examination of the attitudes of religious organizations toward films and film production. Selected films will be viewed and analyzed from the perspectives taken within religious studies. LEC.

REL 447. Islamic Law in the Digital Age. 3 Hours. H.
In this class we trace how Islamic law has changed in the modern era, beginning with an overview of shari’a and its traditional function in Muslim society, and then examine how the practice of Islamic law was altered by colonialism and the rise of the nation state. We mark these transformations by studying how Islamic law is used in the online environment today. LEC.

REL 450. Popular Culture in the Muslim World. 3 Hours. NW / H.
A study of pop songs, television, comics, and other idioms of popular culture from different parts of the Muslim world, with attention to Muslims’ sense of humor, tragedy, aesthetics, and pertinent issues of the day. (Same as AAAS 450.) LEC.

REL 464. Visions in Art and Literature. 3 Hours. H.
A study of the phenomenon of visions, their expression in various media, and theories of visionary experience from the humanities and social sciences, with a particular emphasis on critically evaluating the relationship between the visionary experience and its expression. (Same as HWC 464.) LEC.

REL 468. Illness in Art and Literature. 3 Hours. H.
An examination of how illness and health have been conceptualized, expressed, and explored in Western literature and art, as well as as a consideration of issues of illness and health from the perspectives of philosophy and religious studies. (Same as HWC 468.) LEC.

REL 475. Loving Relationships. 3 Hours. H.
Theories and elements of love in a variety of types of relationships, with attention to religious ethical traditions and social and behavioral sciences. Includes small group discussions and application to personal experience. Prerequisite: Junior standing or above. LEC.

REL 477. Gender and Religion. 3 Hours. H.
Examination of symbols, images, scriptures, rites and teachings that define gender in various religious traditions. (Same as HWC 477.) LEC.

REL 478. Women and Religion, Honors. 3 Hours.
Examination of symbols, images, scriptures, rites, and teachings defining women’s roles in various religious traditions. Prerequisite: Open only to students in the University Honors Program, or by permission of instructor. LEC.

REL 490. Senior Seminar in Theories and Methods. 3 Hours. AE61 / H.
A capstone course for religious studies majors to survey methods and theories in religious studies. Prerequisite: Religious Studies major or permission of the instructor. LEC.

REL 499. Undergraduate Honors Research. 1-3 Hours. AE61 / H.
Required for Departmental Honors. May be taken more than once; total credit not to exceed 6 hours. Prerequisite: Open only to candidates for degree with departmental honors and with consent of the student’s research supervisor. IND.

REL 500. Readings in Non-English Religious Texts. 1-4 Hours.
This course provides directed readings for students in either primary or secondary texts related to religious studies utilizing material in languages other than English. IND.

REL 502. Special Topics in Religion: _____ 1-4 Hours. H.
Topic and instructor to be announced in Schedule of Classes. Enables qualified students to participate in current research interests of faculty and/or pursue specific current topics. May be offered by different instructors under different subtitles, and may be taken more than once if subject matter varies sufficiently. Prerequisite: Consent of instructor. LEC.

REL 504. Millenarian Movements. 3 Hours. S.
A historical survey of millenarian movements (the belief in imminent, total, ultimate, this-worldly, collective salvation), with particular attention to their psychological, sociological, and political dimensions. (Same as POLS 504.) Prerequisite: POLS 301 or honors equivalent or for non-majors...
completion of Western Civilization requirement, or consent of instructor.
LEC.

REL 507. Religion in India. 3 Hours. NW AE42/GE3H / H/W.
Survey of religious thought and practice in India from the Vedic period to
the present. LEC.

REL 508. Religion in China. 3 Hours. NW AE42/GE3H / H/W.
Survey of religious thought and practice in China from the Shang to the
People's Republic. (Same as EALC 508.) LEC.

REL 509. Religion in Japan. 3 Hours. NW AE42/GE3H / H/W.
Survey of religious thought and practice in Japan from the Jomon period to
the present. (Same as EALC 509.) LEC.

REL 510. Religion in Korea. 3 Hours. NW AE42/GE3H / H.
Survey of religious thought and practice in Korea from the Three
Kingdoms period to the present. Prerequisite: REL 106/EALC 105; EALC
104; or permission of instructor. LEC.

REL 511. Buddhist Art of Korea. 3 Hours. H.
Introduction to the history of Buddhist architecture, painting, sculpture and
illuminated scriptures in Korea from the 4th through the 19th centuries,
with particular emphasis on their stylistic, geographical, social, devotional
and literary contexts. Not open to students who have taken HA 361 or HA
561. Work requirements will be greater for graduate students. (Same as
HA 561.) Prerequisite: A college level introduction to Asian art history, or
consent of instructor. LEC.

REL 515. Studies in Early Christian Literature and History. 3 Hours.
H.
Contemporary research in the history and literature of earliest Christianity
including most of the following: (1) the use of critical method, (2)
philosophical and theological contexts, (3) sociological analyses, (4)
interpretation of archaeological data (5) papyrology and the medieval
manuscript tradition, (6) relations between Christians and the Roman
government, (7) relations between Christians and Jews, (8) development
of diverse literary genres, and (9) the origins of gnosticism and Christian
gnosticism. Prerequisite: REL 124 or permission of instructor. LEC.

REL 523. The Dead Sea Scrolls. 3 Hours. H.
A study of the archeological evidence and texts from the Dead Sea area
that provide primary evidence for Jewish religious belief and practice in
the Greek and Roman periods (ca. 250 B.C.E. - 135 C.E.). (Same as
JWSH 523.) Prerequisite: REL 124 or JWSH 124 or consent of instructor.
LEC.

REL 524. Studies in Ancient Egyptian Culture and Religion. 3 Hours.
H.
A study of the basic features of Egyptian history, culture, and religion
from the beginning of the Pharaonic period (ca. 3500 B.C.E.) to the rise of
Greek rule in Egypt (ca. 350 B.C.E.). Prerequisite: A principal course in
Religious Studies or consent of instructor. LEC.

REL 525. Jews and Christians. 3 Hours. H/W.
This course examines the ways Jews and Christians have interacted
with and characterized one another at various points in their histories.
Special emphasis is placed on the gradual separation of the two religious
traditions in the 1st-4th centuries. (Same as JWSH 325.) Prerequisite:
A previous course in Religious Studies or Jewish Studies; or consent of
instructor. LEC.

REL 526. Jewish History and Literature in the Greek and Roman
Periods. 3 Hours. H/W.
The history and literature of the Jewish people from the hellenistic
period (late fourth century B.C.E. to the codification of the Mishnah 210
C.E.). Select texts from the Hebrew Bible, the so-called apocrypha and
pseudepigrapha, the Qumran scrolls, Philo, Josephus, related early
Christian texts, and Rabbinic texts will be studied. (Same as JWSH 526.)
Prerequisite: REL 124 or JWSH 124 or permission of instructor. LEC.

REL 527. Ancient Mesopotamian Culture and Religion. 3 Hours. H.
A study of the basic features of Mesopotamian history, culture and religion
from the origins of writing (ca. 3500 B.C.E.) to the rise of Greek rule in the
region (ca. 350 B.C.E.). Prerequisite: A principal course in religious
studies or consent of instructor. LEC.

REL 528. The Apostle Paul and Early Christian Paulinism. 3 Hours. H.
Biographical issues related to the Apostle Paul, his teachings in relation to
Greek and Jewish thought as exemplified in his letters, and his reception
by later diverse Paulinists. Prerequisite: REL 124/125, or REL 315. LEC.

REL 530. Christian Origins: from the Beginnings to Augustine. 3
Hours. H/W.
This course covers the major political, literary, and theological
developments in Christianity from the first century through Augustine in the
early fifth century, including: (1) the development and significance of the
New Testament canon, (2) relations between Christians, Jews, and
the Roman government, (3) the nature of orthodoxy and heresy, and the
rise of the major gnostic systems, (4) the growth of the orthodox network,
(5) theological debates and councils, and (6) the biography and theology
of Augustine and his influence on the medieval church. Prerequisite:
Junior standing or above. LEC.

REL 531. Studies in Christianity. 3 Hours. H.
Study of religious thought, practice, and institutions of Christianity with an
emphasis on the examination of primary documents. LEC.

REL 532. Studies in Islam. 3 Hours. H.
Study of religious thought, practice, and institutions of Islam with an
emphasis on the examination of primary documents. (Same as AAAS
532.) LEC.

REL 534. Studies in Ritual: _____ . 3 Hours. H.
A study of ritual theory and a comparative study of ritual activity among
selected religious traditions. May be taken more than once if content
differs sufficiently. LEC.

REL 535. The History of Islam in Africa. 3 Hours. H/W.
A study of the history and institutions of Islam in Africa. Emphasis will be
placed on the impact of Islam on African traditional religions and African
civilization in general; the historiographical traditions of Islam in Africa.
(Same as AAAS 542.) LEC.

REL 541. Gods and Goddesses of South Asia. 3 Hours. H.
This course explores the dynamic diversity of gods and goddesses in
South Asian religious life through examination of their basic
iconography, religious narratives and devotional poetry, temple images
and architecture, ritual practices, performance traditions, and film.
Prerequisite: An introductory course in religious studies or consent of
instructor. LEC.

REL 543. Hindu Epics, Past and Present. 3 Hours. H.
This interdisciplinary course considers the roles that the two great
Indian epics, the Mahabharata and the Ramayana, have played in the
history of religion, literature, art, and politics in South Asia (and beyond).
Prerequisite: An introductory course in religious studies or consent of
instructor. LEC.

REL 545. Yoga in Theory, Practice, and History. 3 Hours. H.
Historical and thematic investigation into Yoga, including classical
formulations, esoteric practices, and contemporary developments and
debates. LEC.
REL 550. Gender Issues in Islam. 3 Hours. H.
Focusing on issues of gender, this course follows major religious developments in the Islamic tradition. Also examines how Muslim women have impacted those developments. LEC.

REL 551. Shari'a, Democracy, and Society. 3 Hours. H.
In this class we examine the question of whether or not democracy and shari'a can coexist. Is there a necessary opposition between democratic visions of society and the institutionalization of Islamic law? As a case study we look at changes in the modern Egyptian political system and the role religious ideals have played in these changes, especially the push for democracy. Prerequisite: An introductory course in religious studies or consent of instructor. LEC.

REL 552. Classical Islamic Literature. 3 Hours. NW / H.
An examination of major developments in classical Islamic literature in the Middle East and beyond, with attention to the poetic and prose works (in translation) that emerged from them. (Same as AAAS 552.) LEC.

REL 555. Buddhists and Buddhism in China. 3 Hours. NW AE42 / H.
A reading and media-rich survey of institutional, ritual, literary, educational, and exegetical practices that have shaped the lives of Buddhists in China, past and present. Alterities within the Buddhist tradition, and interactions with other religious options, are considered. (Same as EALC 555.) LEC.

REL 557. Modern Islamic Reform Movements. 3 Hours. H.
This course examines movements of renewal and reform in the Islamic world today. Also studies the conditions that gave rise to calls for reform throughout the Muslim majority world, as well as the impact reform movements have had on the practices and beliefs of Muslims today. LEC.

REL 558. Religion in Britain Since the Reformation: A Survey. 3 Hours. H.
This course deals analytically and synoptically with religion in Britain from the Reformation to the present with special reference to the Church of England, and focuses on the themes of ecclesiology, ecclesiastical polity, and political theology. It is essentially an examination of religious history from a perspective of history of ideas. (Same as HIST 558.) LEC.

REL 559. Religion in Britain Since the Reformation: A Survey, Honors. 3 Hours. H.
This course deals analytically and synoptically with religion in Britain from the Reformation to the present with special reference to the Church of England, and focuses on the themes of ecclesiology, ecclesiastical polity, and political theology. It is essentially an examination of religious history from a perspective of the history of ideas. Open only to students in the University Honors Program or by permission of instructor. (Same as HIST 559.) LEC.

REL 560. Classical and Contemporary Jewish Thought. 3 Hours. H.
An introduction to individual Jewish thinkers and collective projects from Philo to the present, including The Talmud and Midrash, Middle Age and Early Modern Jewish philosophical and Talmudic rationalism and mysticism. Considers such thinkers as Spinoza, Cohen, Solovelvichik, Rosenzweig, and Levinas. (Same as JWSH 560.) Prerequisite: A previous course in Religious Studies or Jewish Studies; or consent of instructor. LEC.

REL 570. Studies in Judaism. 3 Hours. H.
A study of the major intellectual sources of the Jewish tradition from the Mishna, Talmud, Midrash, prayerbook, philosophers, the Zohar, and the Shulchan Aruch. (Same as JWSH 570.) Prerequisite: A course in Religious Studies or Jewish Studies numbered 300 or above. LEC.

REL 571. Religion in Kansas. 3 Hours. H.
A survey of religions active in Kansas in the past or present. The course has a strong fieldwork component in which students, after receiving training in fieldwork methods, conduct interviews and gather information to contribute to a public archive of religion in Kansas. FLD.

REL 580. Religious Perspectives on Illness, Health, and Healing. 3 Hours. H.
An examination of the perspectives of selected religious traditions on the meaning of illness and health, methods of diagnosis and treatment, and the place of these themes and experiences within each tradition. LEC.

REL 581. Psychology of Religion. 3 Hours. S.
Consideration of the psychological antecedents of religious experience, the nature of religious experience, and the behavioral consequences of religion. Focus will be on psychological theory and research relevant to religious thought, feeling, belief, and behavior. (Same as PSYC 581.) Prerequisite: PSYC 104. LEC.

REL 585. New Religious Movements (Western). 3 Hours. H.
A survey of the beliefs, practices, and social impact of religious minorities in the United States, both contemporary and historical, rooted primarily in Christianity and Judaism. LEC.

A survey of the beliefs, practices, and social impact of religious minorities in the United States, both contemporary and historical, which have developed primarily from sources other than Christianity and Judaism. LEC.

REL 601. Approaches to the Study of Religion. 3 Hours. H.
An introduction to the various methods by which social scientists, historians, philosophers, and theologians study the meaning, influence, and significance of religion as an integral part of society and its cultural heritage. Prerequisite: REL 104 required for undergraduate students. No prerequisite for graduate students. LEC.

REL 604. Religion and Political Theory. 3 Hours. S.
An examination of the relationship between religious faith and politics in Western political thought and theory. The approach will be both historical and philosophical, beginning with Moses on the one hand, and the Greeks on the other. Texts will include biblical, Greek philosophical, Jewish and Christian philosophical and theological writings. (Same as POLS 604.) Prerequisite: POLS 201, or for non-POLS majors completion of Western Civilization requirements, or consent of instructor. LEC.

REL 650. Sufism. 3 Hours. NW / H.
A survey of developments in Sufi (Islamic Mystical) thought, poetry, and ritual throughout Muslim history and across the Muslim world. (Same as AAAS 650.) Prerequisite: AAAS 349/REL 350 or permission of instructor. LEC.

REL 657. Gender in Islam and Society. 3 Hours. NW / H.
An investigation of the relationship between Islam, and gender roles and status in religious texts (Quran and Hadith) and in societies across the Muslim world, past and present. (Same as AAAS 657.) Prerequisite: AAAS349/REL 350 or permission of instructor. LEC.

REL 665. Religious Ethics. 3 Hours. H.
Main themes and traditions in ethical thought. Religious thought as basis of systems of ethics. Contemporary approaches to methods of value organization and moral choices. Prerequisite: A basic course in religious studies. LEC.

REL 667. Religious Perspectives on War and Peace. 3 Hours. H.
Views of war and peace in various faith traditions throughout the world. Examination of teachings and action of religious groups and selected individuals, including use of war rhetoric and differing theological and
social understandings of peace. Lecture, seminar discussion, and research assignment require preparation and participation by students. Prerequisite: Junior standing or above. LEC.

REL 669. Human Conflict and Peace. 3 Hours. H.
Study of religious, cultural, and social traditions toward understanding the nature and purposes of human conflict. Analysis of various meanings of peace, with emphasis on study of nonviolent approaches to management of conflict. Class discussion, readings, and individual research projects. (Same as COMS 669.) Prerequisite: Junior standing or above. LEC.

REL 671. American Communes. 3 Hours. H.
An examination of utopian communities in North America from the seventeenth century to the present. The course will survey the history, literature, and social dynamics of representative communal societies and movements including the Shakers, the Hutterites, the Oneida Community, Catholic religious communities, egalitarian communities, and other religious and secular communities. LEC.

REL 677. Women in Christianity. 3 Hours. H.
An examination of the roles, images, and status of women in Christianity from its origin to the contemporary period and in its missionary expansion from the ancient Near East through Europe, North and South America, Africa, and Asia. LEC.

REL 704. Russian Orthodoxy in Historical Perspective. 3 Hours.
This course examines Russian Orthodoxy as a religious system and the institution of the Russian Orthodox Church from its first appearance in Russia to the present. It focuses on beliefs and practices of the clergy and the laity; institutional structures; the relationships between Church and State; interaction with non-Orthodox religious communities; responses to Soviet atheist policies; Orthodox influences on political theory, philosophy, literature, and the fine arts. (Same as REES 704.) LEC.

REL 727. Seminar in Religion, Text and Textuality. 3 Hours.
This seminar explores issues surrounding the production and use of authoritative religious texts (sacred texts) in religious traditions, including such topics as scripturality and canon, scriptural hermeneutics, and material and ritual dimensions of scriptural practice. Specific case studies and content to be selected by the instructor. SEM.

REL 732. Seminar in Western Religious Texts: ____. 3 Hours.
An analysis of selected religious text or texts from Judaism, Islam, or Christianity in translation. May be taken more than once if subject matter varies sufficiently. Prerequisite: REL 512, REL 515, REL 526, REL 530, REL 532, REL 539, or REL 570 or permission of the instructor. LEC.

REL 733. Seminar in Eastern Religious Texts: ____. 3 Hours.
Analysis of a selected religious text or texts from India, China, or Japan, in translation. May be taken more than once if subject matter varies sufficiently. (Same as EALC 733.) Prerequisite: REL 507, REL 508, REL 509, or permission of instructor. LEC.

REL 737. Seminar in Religion, Media and Performance. 3 Hours.
This seminar explores aspects of performance and the media of performance in lived religion, which might include such topics as ritual, the body, mass media and the internet, and visual and material culture. Specific case studies and content to be selected by the instructor. SEM.

REL 747. Seminar in Religion, Society and Social Change. 3 Hours.
This seminar explores issues regarding the social dimensions of religiosity/lived religion, ranging from aspects of religious institutionalization, authority, and normativity to alternative religiousities and alterity. Specific case studies and content to be selected by the instructor. SEM.

REL 757. Seminar in Religious Subjectivity, Experience, and Narrative. 3 Hours.
This seminar explores issues regarding the subjective and experiential dimension of lived religiosity, including such things as religious experience and mysticism, modes of personal religious expression and embodiment, and dynamics of personal and collective religious narrative and identity. Specific case studies and content to be selected by the instructor. SEM.

REL 761. Seminar in Western Religious Thought: ____. 3 Hours.
An analysis of the thought of selected thinkers of the Christian, Jewish, and/or Islamic traditions. May be taken more than once if subject matter varies sufficiently. Prerequisite: REL 512, REL 515, REL 526, REL 530, REL 532, REL 539, or REL 570 or permission of the instructor. LEC.

REL 762. Seminar in Eastern Religious Thought: ____. 3 Hours.
Analysis of the religious thought of selected thinkers of India, China, and/or Japan, traditional and modern. May be taken more than once if subject matter varies sufficiently. (Same as EALC 732.) Prerequisite: REL 507, REL 508, REL 509, or permission of the instructor. LEC.

REL 767. Seminar in Theory, Method, and History in Religious Studies. 3 Hours.
This seminar explores theoretical, methodological, and historical issues that are instrumental to our notions of religion as an analytic category and foundational to the study of religion as a field of academic enquiry. Specific case studies and content to be selected by the instructor. SEM.

REL 771. Seminar in Religious Movements and Social Change: ____. 3 Hours.
Relationship of religious groups to movements for social change: influence of religious groups on social change, and the impact of efforts toward social change in religious groups. Prerequisite: REL 171, REL 371, REL 377, or equivalent. LEC.

REL 772. Seminar in Religion and Modern Social Criticism: ____. 3 Hours.
Seminar focusing on religious issues in some important texts of modern social criticism from the French Revolution to the present day. Prerequisite: An introductory course in religion. LEC.

REL 773. Seminar in Religion and National Identity: ____. 3 Hours.
Analysis of selected issues wherein religion and the formation and definition of a selected nation or nations intersect. LEC.

REL 775. Seminar in Religion and Society in the West: ____. 3 Hours.
Analysis of selected Western religions and their relationships to selected Western societies. May be taken more than once if subject matter varies sufficiently. Prerequisite: REL 512, REL 515, REL 526, REL 530, REL 532, REL 539, or REL 570 or permission of instructor. LEC.

REL 776. Seminar in Religion and Society in Asia: ____. 3 Hours.
Analysis of selected Asian religions and their relationship to selected Asian societies. May be taken more than once if subject matter varies sufficiently. (Same as EALC 776.) Prerequisite: REL 507, REL 508, REL 509, or permission of the instructor. LEC.

REL 777. Seminar in Religion and Gender. 3 Hours.
Examination of symbols, images, scripturality, rites, teachings and scholarship regarding gender definitions and performance in various religious traditions. LEC.

REL 787. Seminar in Ethical Issues in Health Care: ____. 3 Hours.
Interdisciplinary seminar, drawing on the literature of social, medical, and professional ethics, with special attention to religious perspectives on meanings of health and the delivery of health care. Of particular interest to health-related professions. Prerequisite: Permission of instructor. LEC.
REL 800. Readings. 1-4 Hours. 
RSH.

REL 839. Topics in the History and Literature of Religion: ____. 3 Hours.
Selected studies, as announced in Schedule of Classes, in the history and religious literature of Judaism, Christianity, religion in America, Islam, and Asian religions. Course may be taken more than once if the subject matter varies sufficiently. Prerequisite: Permission of instructor. LEC.

REL 864. Topics in Religious Thought and Symbol: ____. 3 Hours.
Selected studies, as announced in Schedule of Classes, in Asian, Middle Eastern, and Western religious thought, mysticism, and religious ethics. Course may be taken more than once if subject matter varies sufficiently. Prerequisite: Permission of instructor. LEC.

REL 875. Topics in Religion and Society: ____. 3 Hours.
Special topics to be announced in Schedule of Classes, according to research interests of faculty and students. A particular aspect of the study of religion and culture will be emphasized. Course may be taken more than once if the subject matter varies. Prerequisite: Permission of instructor. LEC.

REL 877. Topics in Women and Religion: ____. 3 Hours.
Selected studies, as announced in Schedule of Classes, in the history and analysis of symbols, images, scriptures, rites, and teachings defining women's roles in various religious traditions. Course may be taken more than once if the subject matter varies sufficiently. Prerequisite: Permission of instructor. LEC.

REL 889. Thesis. 1-3 Hours.
The University of Kansas

**Russian East European St Courses**

REES 110. Understanding Russia and Eastern Europe. 3 Hours. SC AE42 / S.
A multidisciplinary introduction to the former communist states of Russia, the western Newly Independent States, Central Europe, and the Balkans. The course addresses the geography and history of the region, as well as the cultures of its peoples, as presented in literature, film, and music. Special attention is devoted to the current political, economic, and social situations, as they are reflected by the transition from communism and the rise of nationalism. LEC.

REES 111. Understanding Russia and Eastern Europe, Honors. 3 Hours. SC AE42 / S.
A multidisciplinary introduction to the former communist states of Russia, the western Newly Independent States, Central Europe, and the Balkans. The course addresses the geography and history of the region, as well as the cultures of its peoples, as presented in literature, film, and music. Special attention is devoted to the current political, economic, and social situations, as they are affected by the transition from communism and the rise of nationalism. Prerequisite: Open only to students in the University Honors Program, or by permission of instructor. LEC.

REES 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Russian, East European, and Eurasian Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

REES 220. Societies and Cultures of Eurasia. 3 Hours. NW AE42 / S.
A broad, survey-type course that examines all the former Soviet republics-Ukraine, Belarus, Moldova, Lithuania, Latvia, Estonia, Georgia, Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan—with additional coverage of neighboring regions. The course addresses the history of the region, literature, culture, geography, religion, and the building of post-Soviet states and societies. (Same as GEOG 590.) LEC.

REES 221. Societies and Cultures of Eurasia, Honors. 3 Hours. NW AE42 / S.
Examines the unique cultures and societies of the Eurasian region (Georgia, Azerbaijan, Armenia, Kazakhstan, Uzbekistan, Kyrgyzstan, Turkmenistan, Tajikistan and to a lesser degree, Russia, Mongolia and Afghanistan). For the better part of the 20th Century, this distinct region of the world was hidden beneath the communist veneer of the Soviet Union. With the collapse of the USSR, the countries of this region are returning to their historic roots, and this course introduces students to the history, politics, economics, literature and general culture of these countries. Open only to students admitted to the University Honors Program or by permission of instructor. LEC.

REES 480. Topics in Russian and East European Studies: ____. 1-3 Hours.
Interdisciplinary examination of topics involving two or more disciplines in Russian, East European, and Eurasian studies. LEC.

REES 485. War and Peace in Russian Culture. 3 Hours. H/W.
Lectures, readings, oral discussion, and written analyses of selected major works of Russian writing and other modes of creative expression and discourse that treat the subject of war and peace, such as imaginative literature, works of history, memoirs, cinema, music, and painting. Reading examples are The Song of Igor's Campaign, Alexander Pushkin's The Captain's Daughter and A History of Pugachev, Leo Tolstoy's War and Peace, Nadezhda Durova's The Notes of a Girl-Cavalryman, Boris Pasternak's Doctor Zhivago, and George Kennan's Russia Leaves the War. Not open to students who have taken REES 685. LEC.

REES 492. Research Methods in Russian, East European, and Eurasian Studies. 3 Hours. AE61 / H.
Development of interdisciplinary research skills and familiarity with resources and issues in the study of Russian, East European, and Eurasian Studies. Preparation for REES 496. LEC.

REES 496. Capstone Research Seminar in Russian and East European, and Eurasian Studies. 3 Hours. AE61 / H.
Interdisciplinary original research conducted using at least one REES language and resulting in a research paper. Prerequisite: REES 482. LEC.

REES 498. Directed Readings. 1-3 Hours. H.
Individual and supervised readings in selected areas of Russian, East European, and Eurasian Studies. Prerequisite: Prior permission of instructor and either CREES director or associate director. LEC.

REES 499. Capstone Research Seminar in Russian, East European, and Eurasian Studies, Honors. 3 Hours. AE61 / H.
Research and writing of a substantial paper, involving interdisciplinary original research and use of sources in at least one REES language, and presentation of this paper to an Honors committee of three REES faculty members. This thesis must be substantially different from any other Honors thesis. Prerequisite: REES 492. LEC.

REES 510. Understanding Central Asia. 3 Hours. NW AE42 / S/W.
An intensive, multidisciplinary survey of Central Asia, focusing on the former Soviet republics-Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan—with additional coverage of neighboring regions (the Caucasus and the Caspian basin, Afghanistan, and western China). The course addresses the history of the region (from the Silk Road to Soviet rule), geography, religion, and the building of post-Soviet states and societies. (Same as GEOG 590.) LEC.
REES 512. Siberia: Yesterday and Today. 3 Hours. NW AE42 / H/W.
An interdisciplinary course examining the development of Siberia from its beginnings to the present day. Topics to be covered are selected from the following list: topography and natural resources; conquest and exploitation by Russian and other European settlers; Siberia's role as a place of imprisonment and exile; the development of towns and transportation systems; Siberian historiography; Siberian Russian literature; and Siberia's place in Russia's economy and national defense. LEC.

REES 513. Siberia: Russia's Eastern Frontier. 3 Hours. NW AE42 / H/W.
An interdisciplinary course examining the terrain, peoples, and cultures of the vast expanse in northern Asia known as Siberia. Areas of inquiry include geology, archeology, ethnography, religions, folk culture, the arts, science and education, politics, and environmental problems. With an emphasis on the natural and social sciences, and exploration of the relationship between Siberia and its neighbors in all directions, including the United States (Alaska, "Russian America"), this course can be taken without duplication by students who have already taken REES 512 (or SLAV 512) Siberia Yesterday and Today. LEC.

REES 532. Russian Strategy and Military Power. 3 Hours. H.
Examines the central role the Russian military has played in its country's politics, society, and culture in the modern period. Treats Russia's victories and defeats in war, the course highlights the continuities in Russian strategic practices and illuminates the current and future strategic policies and military developments of the contemporary Russian state. LEC.

REES 573. Borderland Between Russia & Europe. 3 Hours. H/W.
Examines the history of relations between the governments, emerging national elites, and populations of Russia, Ukraine, Poland, and other East European countries, and the different regional perceptions and stereotypes, including the new post-Soviet states and their European neighbors. LEC.

REES 574. Ethnicity and Nationalism in Eastern Europe. 3 Hours. AE42 / H/W.
Examines the emergence and evolution of regional ethno-cultural and national identities in Eastern Europe. Discusses the theories and definitions of ethnicity, nationality, and nationalism, and offers a practical approach to understanding nationalism's and nationalist movements in Eastern Europe. LEC.

REES 646. Translation in Theory and Practice. 3 Hours. H.
Students undertake substantial work in the translation of non-technical writing, (e.g. poems, short stories, novels, essays, works of history, scientific treatises), from any REES language into English, and examine the practical and theoretical problems encountered in translation from the source to the target language. Prerequisite: BCRS 508, PLSH 508, RUSS 508, or permission of instructor. LEC.

REES 685. War and Peace in Russian Culture (in Russian). 3 Hours. H/W.
This course is taught in Russian. Lectures, readings, oral discussion, and written analyses of selected major works of Russian writing and other modes of creative expression and discourse that treat the subject of war and peace, such as imaginative literature, works of history, memoirs, cinema, music, and painting. Reading examples are Slovo o polku Igoreve, Pushkin's Kapitanskaia dochka and Istor'ia Pugacheva, Tolstoy's Voina i mir, Evgenii Tarle's Napoleon, Pasternak's Doktor Zhivago and Andrei Petukhov's Pamiat' o služhbe. Not open to students who have taken REES 485. Prerequisite: 3 years of Russian at the college level. LEC.

REES 687. Biography of a City: St. Petersburg. 3 Hours. AE42 / H.
Examination in depth of the historical, social, intellectual, and artistic development of St. Petersburg as a major urban center. LEC.

REES 704. Russian Orthodoxy in Historical Perspective. 3 Hours.
This course examines Russian Orthodoxy as a religious system and the institution of the Russian Orthodox Church from its first appearance in Russia to the present. It focuses on beliefs and practices of the clergy and laity; institutional structures; the relationships between Church and State; interactions with non-Orthodox religious communities; responses to Soviet atheist policies; Orthodox influences on political theory, philosophy, literature, and the fine arts. (Same as REL 704.) LEC.

REES 715. Seminar in the History of Russian Thought. 3 Hours.
Topics in the development of social radicalism and of philosophical positivism and materialism from Radishchev through the Russian Marxists. A reading knowledge of Russian is desirable but not required. Prerequisite: REES 723 or PHIL 580. LEC.

REES 799. Directed Readings in Russian and East European Studies. 1-5 Hours. RSH.

REES 895. Special Problems in Area Studies: _____ 3 Hours.
Interdisciplinary examination of topics involving two or more of the cooperating disciplines in Russian and East European studies. LEC.

REES 897. Research. 1 Hour.
Enrollment to fulfill Masters continuous enrollment rule. Prerequisite: Completion of all degree requirements except submission of seminar paper or comprehensive examination. RSH.

REES 898. Seminar in Russian and East European Studies. 3 Hours.
Mastery of interdisciplinary research skills, and knowledge of resources and scholarship on the study of Russian, east European, and Eurasian Studies. LEC.

REES 899. Capstone Research Seminar in Russian, East European, and Eurasian Studies. 3 Hours.
Research, write, and present a professional-quality paper, involving interdisciplinary original research, consultation with REES faculty, and substantial use of sources in at least one REES language. Prerequisite: REES 898. SEM.

Slavic Languages Literatures Courses

BCRS 104. Elementary Bosnian/Croatian/Serbian I. 5 Hours. U.
First Semester. Five hours of recitation and drill in the spoken language per week. Essentials of grammar, practice in reading, writing and speaking Bosnian/Croatian/Serbian. LEC.

BCRS 105. Elementary Bosnian/Croatian/Serbian I, Honors. 5 Hours. U.
Similar to BCRS 104 but with additional work aimed at accelerating the student's progress to proficiency and widening understanding of cultural context. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

BCRS 108. Elementary Bosnian/Croatian/Serbian II. 5 Hours. U.
Second Semester. A continuation of BCRS 104. Prerequisite: BCRS 104. LEC.

BCRS 109. Elementary Bosnian/Croatian/Serbian II, Honors. 5 Hours. U.
Continues BCRS 105. Similar to BCRS 108 but with additional work aimed at accelerating the student's progress to proficiency and widening understanding of cultural context. Prerequisite: BCRS 104 or 105. Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.
BCRS 177. First Year Seminar: _____, 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Bosnian/Croatian/Serbian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

BCRS 204. Intermediate Bosnian/Croatian/Serbian I. 3 Hours. U.
Second-year language course. Further development of communicative and cultural competencies with a content-based, interactive approach. Students develop the ability to understand and produce short written and spoken texts in BCS through engagement with a variety of authentic materials representative of cultural diversity of the studied area. They contrast and compare features of individual BCS-speaking countries and their cultures as well as differing aspects of B/C/S and American life, culture, and values. Prerequisite: BCRS 108 or permission of instructor. LEC.

BCRS 205. Intermediate Bosnian/Croatian/Serbian I, Honors. 3 Hours. U.
Similar to BCRS 204 but with additional work aimed at accelerating the student's progress to proficiency and widening understanding of cultural context. Prerequisite: Open only to students who have received an A in BCRS 108 or an A or B in BCRS 109, and who are admitted to the University Honors Program, or by permission of instructor. LEC.

BCRS 208. Intermediate Bosnian/Croatian/Serbian II. 3 Hours. AE42 / U.
A continuation of BCRS 204. Prerequisite: BCRS 204. LEC.

BCRS 209. Intermediate Bosnian/Croatian/Serbian II, Honors. 3 Hours. AE42 / U.
Similar to BCRS 208 but with additional work aimed at accelerating the student's progress to proficiency and widening understanding of cultural context. Prerequisite: BCRS 204 or 205. Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

BCRS 380. Intensive Croatian. 6 Hours. U.
This program consists of a six-week intensive language course in intermediate and advanced Croatian phonetics, conversation, and grammar, and is offered each summer in Croatia. In addition to the practical language work, there is a program of lectures on modern Croatian history, literature, and other cultural topics. Various excursions and tours bring the students into first-hand contact with the people, natural beauty and culture of Croatia. This program is a cooperative effort between the University of Kansas and faculty of the University of Zadar. LEC.

BCRS 504. Advanced Bosnian/Croatian/Serbian I. 3 Hours. H/W.
A practical Bosnian/Croatian/Serbian course involving the advanced study of the grammar, reading of texts on a variety of subjects, conversation and composition. Taught in Bosnian/Croatian/Serbian. Designed for students who have had two or more years of Bosnian/Croatian/Serbian language. Prerequisite: BCRS 208, or equivalent. LEC.

BCRS 508. Advanced Bosnian/Croatian/Serbian II. 3 Hours. H/W.
A practical Bosnian/Croatian/Serbian course involving the advanced study of the grammar, reading of texts on a variety of subjects, conversation and composition. Taught in Bosnian/Croatian/Serbian. Designed for students who have had two and one-half or more years of Bosnian/Croatian/Serbian language. Prerequisite: BCRS 504, or equivalent. LEC.

BCRS 675. Readings in Bosnian/Croatian/Serbian. 1-6 Hours. H/W.
Individually tailored readings and independent work in Bosnian/Croatian/Serbian language and culture. Prerequisite: Two years of Bosnian/Croatian/Serbian, and consent of instructor. IND.

CZCH 104. Elementary Czech I. 5 Hours. U.
First semester. Essentials of grammar, practice in speaking and writing Czech. Simple readings from selected texts. LEC.

CZCH 108. Elementary Czech II. 5 Hours. U.
Second semester. A continuation of CZCH 104. Prerequisite: CZCH 104. LEC.

CZCH 177. First Year Seminar: _____, 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Czech. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

CZCH 204. Intermediate Czech I. 3 Hours. U.
Second-year course in the language with emphasis on reading, composition, and conversation. Prerequisite: CZCH 108. LEC.

CZCH 208. Intermediate Czech II. 3 Hours. U.
A continuation of CZCH 204. Prerequisite: CZCH 204. LEC.

CZCH 675. Readings in Czech. 1-6 Hours. H/W.
Prerequisite: Reading knowledge of Czech language, and consent of instructor. IND.

PLSH 104. Elementary Polish I. 5 Hours. U.
First Semester. Essentials of grammar, practice in reading, writing, and speaking Polish. LEC.

PLSH 105. Elementary Polish, Honors. 5 Hours. U.
Honors version of PLSH 104, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

PLSH 108. Elementary Polish II. 5 Hours. U.
Second semester. A continuation of PLSH 104. Prerequisite: PLSH 104. LEC.

PLSH 109. Elementary Polish II. 5 Hours. U.
A continuation of PLSH 105. Honors version of PLSH 108, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: PLSH 104 or PLSH 105. Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

PLSH 177. First Year Seminar: _____, 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Polish. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

PLSH 204. Intermediate Polish I. 3 Hours. U.
Second-year course in the language with emphasis on reading, composition, and conversation. Prerequisite: PLSH 108. LEC.

PLSH 205. Intermediate Polish I, Honors. 3 Hours. U.
Honors version of PLSH 204, with additional work aimed at accelerating students' progress to proficiency and expanding their cultural competence. Prerequisite: Open only to students who have received an A in PLSH 108 or an A or B in PLSH 109, and who are admitted to the University Honors Program; or by permission of instructor. LEC.

PLSH 208. Intermediate Polish II. 3 Hours. U.
A continuation of PLSH 204. Prerequisite: PLSH 204. LEC.
Prerequisite: PLSH 204 or PLSH 205. Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

PLSH 312. Polish Language and Civilization in Poland: Summer Program. 8 Hours. H/W.
Polish grammar, conversation, and composition with select aspects of Polish civilization. Available only to participants in Polonicum, Warsaw University. LEC.

PLSH 504. Advanced Polish I. 3 Hours. H/W.
A practical Polish language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Polish. Designed for students who have had two or more years of Polish language. Prerequisite: PLSH 504 or equivalent. LEC.

PLSH 508. Advanced Polish II. 3 Hours. H/W.
A practical Polish language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Polish. Designed for students who have had two and one-half or more years of Polish. Prerequisite: PLSH 504 or equivalent. LEC.

PLSH 675. Readings in Polish Language and Literature. 1-6 Hours. H/W.
Directed individual readings on various topics concerning Polish literature and/or language. Prerequisite: Two years or four semesters of Polish, and consent of instructor. IND.

RUSS 100. Russian Reading Course I. 3 Hours. U.
A special reading course for candidates for advanced degrees, faculty members, and graduate or undergraduate students from other schools or departments, designed to aid them in obtaining a reading knowledge for purposes of research. An intensive study of the fundamentals of grammar proceeding to the reading of material of medium difficulty. The course does not satisfy any part of the undergraduate language requirement. Presupposes no previous study of Russian. LEC.

RUSS 101. Russian Reading Course II. 3 Hours. U.
A continuation of RUSS 100. Completion and review of the fundamentals of grammar, with emphasis on reading and translation of learned, scientific, or technical writing and other material of an advanced nature. Each student will also have special assignments in his or her particular field. This course does not satisfy any part of the undergraduate language requirement. Prerequisite: RUSS 100. LEC.

RUSS 104. Elementary Russian I. 5 Hours. U.
First semester. Five hours of basic language acquisition and oral practice per week. Essentials of grammar, practice in comprehending, speaking, reading, and writing Russian. LEC.

RUSS 105. Elementary Russian I, Honors. 5 Hours. U.
Honors version of RUSS 104, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

RUSS 108. Elementary Russian II. 5 Hours. U.
Second semester. Five hours of basic language acquisition and oral practice per week. Essentials of grammar, practice in comprehending, speaking, reading, and writing Russian. A continuation of RUSS 104. Prerequisite: RUSS 104. LEC.

RUSS 109. Elementary Russian II, Honors. 5 Hours. U.
A continuation of RUSS 105. Honors version of RUSS 108, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: RUSS 104 or RUSS 105. Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

RUSS 110. Intensive Elementary Russian. 10 Hours. U.
Intensive course in elementary Russian providing the student with a complete survey of Russian grammar, and proficiency in understanding, reading, and speaking basic Russian. Twenty contact hours per week. Same content as RUSS 104 and RUSS 108 combined. LEC.

RUSS 150. Beginning Russian I. 3 Hours. U.
Fundamentals of Russian grammar, reading, speaking, and writing. Course designed to accommodate the needs of students regardless of age, educational background, or occupation. No previous knowledge of Russian or other foreign languages required. LEC.

RUSS 152. Beginning Russian II. 3 Hours. U.
Continuation of RUSS 150. Does not fulfill BA foreign language requirement. Prerequisite: RUSS 150 or equivalent. LEC.

RUSS 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Russian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

RUSS 204. Intermediate Russian I. 5 Hours. U.
This course is designed to develop speaking, reading, and listening proficiency within the context of a review of grammar. Prerequisite: RUSS 108, RUSS 110, or equivalent. LEC.

RUSS 205. Intermediate Russian II, Honors. 5 Hours. U.
Honors version of RUSS 204 with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: Open only to students who have received an A in RUSS 108 or an A or B in RUSS 109, and who are admitted to the University Honors Program, or by permission of instructor. LEC.

RUSS 208. Intermediate Russian II. 5 Hours. U.
Continuation of RUSS 204. Completes the undergraduate foreign language requirement. The course is designed to develop speaking, reading, and listening proficiency within the context of detailed grammatical review. Prerequisite: RUSS 204 or equivalent. LEC.

RUSS 209. Intermediate Russian II, Honors. 5 Hours. U.
Honors version of RUSS 208, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: RUSS 204 or 205. Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

RUSS 250. Continuing Russian I. 3 Hours. U.
Fundamentals of Russian grammar, reading, speaking, and writing. Course designed to accommodate the needs of students regardless of age, educational background, or occupation. Does not count towards the fulfillment of the undergraduate language requirement. Does not count towards the undergraduate major in Slavic. Prerequisite: RUSS 152 or equivalent. LEC.

RUSS 252. Continuing Russian II. 3 Hours. U.
A continuation of RUSS 250. Does not count towards the fulfillment of the undergraduate language requirement. Does not count towards the undergraduate major in Slavic. Prerequisite: RUSS 250 or equivalent. LEC.

RUSS 504. Advanced Russian I. 3 Hours. H/W.
A practical Russian language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Russian. Designed for students who have had four semesters of Russian. Prerequisite: RUSS 208 or RUSS 216. LEC.
RUSS 508. Advanced Russian II. 3 Hours. H/W.
A practical Russian language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Russian. Designed for students who have had two and one-half or more years of Russian language. Prerequisite: RUSS 504. LEC.

RUSS 512. Russian for the Professions I. 3 Hours. U.
This course focuses on the active mastery of language structures and vocabulary needed for people using Russian in professional capacities, particularly such as business and journalism. Materials will be drawn from the current Russian press and electronic media. Designed for students who have had basic language training and want to develop specialized language skills. Prerequisite: RUSS 208 or RUSS 216. LEC.

RUSS 516. Russian for the Professions II. 3 Hours. U.
A continuation of RUSS 512. Prerequisite: RUSS 504, RUSS 512, or RUSS 522. LEC.

RUSS 522. Problems in Translating Russian into English I. 3 Hours. H/W.
Preparation of hitherto untranslated works, possibly with the intention of submitting for publication. Training and practice in the skills of oral interpretation. Prerequisite: Two years minimum of Russian language courses. LEC.

RUSS 526. Problems in Translating Russian into English II. 3 Hours. H/W.
A continuation of RUSS 522. LEC.

RUSS 550. Advanced Conversation, Composition, and Grammar in Russian: Summer Program. 6 Hours. H/W.
Held in Russia. Twenty-four hours of class work weekly, plus lectures and excursions, for six weeks at St. Petersburg University. Prerequisite: RUSS 208 or the equivalent of twenty-two hours of Russian language courses. LEC.

RUSS 552. Advanced Russian Language at Saint Petersburg University: Semester Program. 14 Hours. H/W.
Sixteen weeks of intensive Russian language and literature classes held at Saint Petersburg University, Russia. Classes in advanced phonetics, conversation, and grammar as well as lectures on literary and other cultural topics. Prerequisite: Minimum of five semesters of Russian language study at the college level or its equivalent. LEC.

RUSS 552. Advanced Russian Language at Saint Petersburg University: Semester Program. 14 Hours. H/W.
Second semester. Essentials of grammar, practice in speaking and writing Russian. Second semester. Essentials of grammar, practice in speaking and writing Russian. Prerequisite: RUSS 508 or equivalent. LEC.

RUSS 560. Classics of Russian Culture. 3 Hours. H.
This advanced Russian language class explores the monuments of Russian culture (1700-1980) in the context of the country's history, customs, artistic traditions and literary trends. It is designed to develop reading, writing, and speaking skills of advanced language students and includes the preparation of written and oral reports in Russian. Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent. LEC.

RUSS 604. Contemporary Russian Culture. 3 Hours. H/W.
This advanced Russian language class explores issues in contemporary Russian culture (literature and the arts, societal trends and issues, politics, and national life) based on Russian film, television, and print materials. It is designed to develop reading, writing, and speaking skills of advanced language students who wish to develop high levels of fluency, accuracy, and idiomatic expressiveness. Includes the preparation of both written and oral reports. Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent. LEC.

RUSS 608. Russian Phonetics and Grammar. 3 Hours. H/W.
A survey of fundamental issues in Russian phonetics, morphology, and syntax. The course will develop reading, writing, and speaking skills necessary for discussing and analyzing the major linguistic categories of Russian. Includes the preparation of both written and oral reports. Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent. LEC.

RUSS 612. Introduction to Russian Literature. 3 Hours. H/W.
Readings for this advanced Russian language class will be drawn from representative prose, poetry, and drama of 19th or 20th century authors. The course will develop reading, writing, and speaking skills necessary for discussing and analyzing the major texts and literary trends of the Russian tradition. Includes the preparation of both written and oral reports. Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent. LEC.

RUSS 616. Stylistics. 3 Hours. H/W.
Practical examination of the features of stylistic registers available in contemporary Russian, ranging from slang to colloquial speech to educated journalistic, scientific, and literary styles. The course will develop reading, writing, and speaking skills necessary for discussing and analyzing stylistic registers. Includes the preparation of both written and oral reports. Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent. LEC.

RUSS 675. Readings in Russian. 1-6 Hours. H/W.
Prerequisite: Two years of Russian, and consent of instructor. IND.

SLAV 104. Elementary Slavic Language I: _____. 5 Hours. U.
First semester. Essentials of grammar, practice in speaking and writing a Slavic language. Simple readings from selected texts. Course may be used to teach the fundamentals of any Slavic language, for example, Slovenian, Macedonian, Slovak, etc. LEC.

SLAV 108. Elementary Slavic Language II: _____. 5 Hours. U.
Second semester. Essentials of grammar, practice in speaking and writing a Slavic language. A continuation of SLAV 104 in those languages whose fundamentals were being taught in SLAV 104. Prerequisite: SLAV 104 or equivalent (in same language). LEC.

SLAV 110. Introduction to the Peoples and Cultures of Kazakhstan Through Russian. 1 Hour. U.
This 8-week course prepares students of all majors with little or no knowledge of Russian to function effectively in the experiential internship program in Almaty, Kazakhstan, with appropriate cultural sensitivity and survival Russian-language skills. The focus is basic grammar and key vocabulary terms of Russian (e.g., reading signs, menus; understanding key conversational phrases). Weekly readings treat the history, business culture, and language politics of Kazakhstan. LEC.

SLAV 140. Introduction to Russian Culture. 3 Hours. HT AE42/GE3H / H/W.
An introduction to the principal achievements of Russian cultural history, with particular emphasis on literature, folklorie, spirituality, and the visual arts. LEC.

SLAV 141. Introduction to Russian Culture, Honors. 3 Hours. HT AE42/GE3H / H/W.
An introduction to the principal achievements of Russian cultural history, with particular emphasis on literature, folklorie, spirituality, and the visual arts. LEC.

SLAV 144. Survey of Russian Literature in Translation. 3 Hours. HL AE42/GE3H / H/W.
A survey of the principal works of Russian literature including such authors as Pushkin, Gogol, Dostoevsky, Tolstoy, Chekhov, Pasternak, Solzhenitsyn, and others. LEC.
SLAV 145. Survey of Russian Literature in Translation, Honors. 3 Hours. HL AE42/GE3H / H/W.
A survey of the principal works of Russian literature including such authors as Pushkin, Gogol, Dostoevsky, Tolstoy, Chekhov, Pasternak, Solzhenitsyn, and others. LEC.

SLAV 148. Introduction to Slavic Folklore. 3 Hours. HL AE42/GE3H / H/W.
An introduction to the various forms of folklore among the Slavic peoples, with particular emphasis on the folk literature, customs, and artifacts of Russia, Poland, and the South Slavic countries. LEC.

SLAV 149. Introduction to Slavic Folklore, Honors. 3 Hours. HL AE42/GE3H / H/W.
An introduction to the various forms of folklore among the Slavic peoples, with particular emphasis on the folk literature, customs, and artifacts of Russia, Poland, and the South Slavic countries. LEC.

SLAV 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Slavic. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

SLAV 204. Intermediate Slavic Language I: ______. 3 Hours. U.
Second-year level course in a Slavic language, for example, Slovenian, Macedonian, Slovak, with emphasis on reading, composition, and conversation. Prerequisite: SLAV 108 (in same language). LEC.

SLAV 208. Intermediate Slavic Language II: ______. 3 Hours. U.
Second-year level course in a Slavic language, for example, Slovenian, Macedonian, Slovak, with emphasis on reading, composition, and conversation. Prerequisite: SLAV 204 or equivalent (in same language). LEC.

SLAV 316. The Peoples and Cultures of Southeastern Europe Through Film. 3 Hours. HL AE42/GE3H / H.
This course presents an introduction to the study of the culture of the South Slavs and other peoples of Southeastern Europe, combining background modules in geography, linguistic culture, history, folklore and contemporary cultural criticism with critical viewings of artistic films. The course serves as an introduction to humanistic inquiry about the peoples and cultures of Southeastern Europe. LEC.

SLAV 317. The Peoples and Cultures of Southeastern Europe Through Film, Honors. 3 Hours. HL AE42/GE3H / H.
This course is similar in content to SLAV 316, but with an additional honors project. Prerequisite: Eligibility for or admission to the university Honors Program. LEC.

SLAV 318. Jews and Slavs in Eastern Europe. 3 Hours. H.
Jews and Slavs have shared territory from the Middle Ages to the present day. The contact between these culturally and linguistically distinct groups has shaped many centuries of Eastern European history - from the extreme violence of the pogroms to long periods of peaceful coexistence and cooperation. "Jews and Slavs" examines the history and cultural geography of Slavic-Jewish contact from the perspectives of both groups. Through literature, film, journalism, and folklore, students learn about the profound influence Jews and Slavs have had on each other, the uneasy feelings that accompanied their interactions, and the creative and fascinating impact their interaction had on both cultures. (Same as JWSH 318.) LEC.

SLAV 340. Introduction to the Languages and Peoples of Russia and East-Central Europe. 3 Hours. HT AE42/GE3H / H.
An overview of the languages and peoples of Russia and East-Central Europe, including the Slavic and Baltic languages, Romanian, and Albanian. Topics addressed include language prehistory, writing systems, and the relationship between language and national identity. Emphasis on language issues as a background to current events in order to impart an appreciation of the area, its uniqueness and complexity. LEC.

SLAV 341. Introduction to the Languages and Peoples of Russia and East-Central Europe, Honors. 3 Hours. HT AE42/GE3H / H.
An overview of the languages and peoples of Russia and East-Central Europe, including the Slavic and Baltic languages, Romanian, and Albanian. Topics addressed include language prehistory, writing systems, and the relationship between language and national identity. Emphasis on language issues as a background to current events in order to impart an appreciation of the area, its uniqueness and complexity. Prerequisite: Membership in the College Honors Program or consent of instructor. LEC.

SLAV 370. War and Violence Russian Literature and Film. 3 Hours. S.
This course focuses on artistic representations of violence resulting from historical events such as World War II, Soviet collectivization, the Gulag, and political purges. We consider Soviet literature and film, including works by Isaac Babel, Andrei Platonov, Anna Akhmatova, and Alexander Solzhenitsyn. Readings in English. The course is offered at the 300 and 500 levels, with additional assignments at the 500 level. LEC.

SLAV 379. Topics in ______. 1-3 Hours. H.
Exploration of Slavic cultural forms such as literature, film, linguistics, arts, and press. Topics vary, and course may address topics across a narrow or broad time frame. May be repeated if content varies. LEC.

SLAV 390. Slovene Folk Culture: ______. 3 Hours. H/W.
A broad exposure, both theoretical and practical, to various aspects of the traditional native culture of a particular Slavic country or ethnic group, including folk dance, song and musicianship, as well as forms of the material culture such as folk architecture, costumes and art in everyday life. Taught in the pertinent Slavic country in conjunction with the appropriate language course. LEC.

SLAV 495. Senior Capstone Seminar. 3 Hours. AE61 / H.
The Senior Capstone Seminar offers undergraduate majors an opportunity to define, design and execute a substantial research/creative project under the mentorship of a faculty member. The project integrates the knowledge and skills gained in the coursework for the major and across the undergraduate curriculum, and demonstrates the students competence in the field of Slavic studies. Prerequisite: Slavic major status, senior standing. LEC.

SLAV 499. Honors Thesis. 3 Hours. H/W.
Independent study and preparation of honors thesis. Required of all students working for a degree with honors in Slavic languages and literatures. IND.

SLAV 500. Russia Today. 3 Hours. H/W.
Study and discussion of contemporary problems in Russia and the former Soviet Union; readings in Russian, based on articles in newspapers, journals, etc. Conducted in Russian. Prerequisite: RUSS 208 or equivalent. LEC.

SLAV 502. Introduction to Russian Culture and Society: ______. 3 Hours. H/W.
An interdisciplinary course introducing the student to the principal features of Russian cultural and societal development in the modern era. Readings in English, no prerequisite for non-Russian majors. Majors and graduate students in Slavic languages and literatures will be required to do readings in Russian. LEC.
SLAV 503. Post-Soviet Communication. 3 Hours. H.
The course is designed to acquaint students with the shifting manner
of public discourse in Post-Soviet Russia and help them to explore in
some depth cross-cultural communication between America and Russia.
In addition to contemporary and historical background on Russian
communicative practices, students examine discourse in business
development, mass media, marketing, and advertising. All readings in
English. (Same as COMS 503). LEC.

SLAV 504. Introduction to East-Central European Culture and
Society: ______. 3 Hours. H/W.
An interdisciplinary course introducing the student to the principal features
of East-Central European cultural and societal development in the modern
era. Countries that may be considered are: Poland, the Czech Republic,
Slovakia, Hungary, Romania, Bulgaria, the South Slavic countries, Latvia,
Lithuania, Estonia, Belarus, and Ukraine. LEC.

SLAV 505. Introduction to Czech Culture. 3 Hours. H.
This study-abroad trip offers a survey of Czech art, architecture, literature,
theater, and film from the medieval period to the present with emphasis
on the late 19th and 20th centuries. Combines 18 hours of lectures on
campus and a ten-day trip to Prague. LEC.

SLAV 506. West Slavic Literature and Civilization (Polish and Czech).
3 Hours. H/W.
A survey of West Slavic Literature and Civilization (Polish and Czech)
from its beginnings to the present with emphasis on the most important
trends: Renaissance, Romanticism, Positivism/Realism, Modernism
and Avant-guard; Socialist realism, and Post-modernism. The course
combines lecture, discussion and small group activities. Movie clips,
recordings, and slides are used to reflect various cultural dimensions of
West Slavic Civilization. No knowledge of Polish or Czech is required.
LEC.

SLAV 508. South Slavic Literature and Civilization. 3 Hours. NW
AE42 / H/W.
An introductory survey of the literature and culture of the South Slavic
peoples: the Slovenes, Croats, Bosniacs, Serbs, Montenegrins,
Macedonians and Bulgarians. No language required. LEC.

SLAV 510. The Russian Literary Genius. 3 Hours. H/W.
Topics and problems in Russian cultural history as treated in the
masterworks of Russian literature. Readings selected from the works of
Pushkin, Tolstoy, Dostoevsky, Pasternak, Bulgakov, Solzhenitsyn, and
other great Russian writers. Readings in English, no prerequisite for non-
Russian majors. Russian majors will do some of the readings in Russian.
LEC.

SLAV 514. Totalitarianism and Literature in Central Europe. 3 Hours.
H.
This course asks how fiction written in Central Europe engaged and
grappled with the totalitarian experience imposed by Nazi and Soviet
forms of government. The course focuses on the works by 20th-century
Polish, Czech, and Hungarian writers that deal with totalitarianism. (Same
as HWC 514.) LEC.

SLAV 516. Film Adaptations of Polish and Czech Literature. 3 Hours.
A comparative study of several most representative and best works of
19th- and 20th-century Polish and Czech fiction and drama and their film
adaptations. By providing a broad cultural and historical background of
the works, the course offers a thorough introduction to modern culture of
Poland and the Czech Republic. Readings and discussions are in English,
and no knowledge of Polish or Czech is required. LEC.

SLAV 520. Russian Phonetics, Phonology, and Inflectional
Morphology. 3 Hours. H/W.
An analysis of the phonological and morphological systems of
contemporary standard Russian, including normative and dialectal
pronunciation of speech sounds, phonemics, morphophonemic
alterations, and nominal and verbal inflections. Graduate students
enrolled in this course will be held to a more stringent curriculum and
grading system. Prerequisite: Two years of Russian language study or the
equivalent. LEC.

SLAV 522. The Grammatical Categories of Russian: Linguistic Units,
Functions and Meanings. 3 Hours. H/W.
This course covers the main grammatical categories of Russian, including
word formation, case, animacy, voice and reflexive verbs, imperatives,
aspect, and word order. It is intended not only for linguists but anyone
seeking a better understanding of the grammatical systems of Russian.
Designed as a continuation of SLAV 520. Prerequisite: Two years of
Russian language study or the equivalent. LEC.

SLAV 524. Russian Since the Revolution. 3 Hours. H/W.
An examination of changes in the Russian language during the course
of this century. Topics covered include changes in pronunciation,
morphological and syntactic variation, and the impact of foreign
borrowings, particularly from English. Graduate students enrolled in this
course will be held to a more stringent curriculum and grading system.
Prerequisite: Two years of Russian language study or the equivalent.
LEC.

SLAV 528. Comparative Study of Slavic Literatures. 3 Hours. H/W.
The course is intended as an introduction to the most significant writers
and works in Slavic literatures. The emphasis will be on some of the
themes and ideological concepts that have shaped the literatures of the
Slavic world. Representative works of Turgenev, Dostoeyevsky, Mrozek,
Rozewicz, Capek, Hasek, Djlas, Havel, Ivo Andric and others, will be
studied. The diversity of expression and, at the same time, homogeneity
of spirit in the works of these writers will be stressed. No knowledge of
Slavic languages is required. LEC.

SLAV 530. Introduction to Russian Poetry. 3 Hours. H/W.
An introduction to the principles of Russian versification and to
masterpieces of Russian poetry selected from the 18th, 19th, and 20th
centuries. Students will learn to read, translate, and analyze poems in
terms of rhyme, meter, euphony, metaphor, and other prosodic features.
Emphasis will be placed upon preparing students for independent study
and appreciation of Russian poetry in the original. Prerequisite: Language
proficiency. LEC.

SLAV 532. Dostoeyevsky. 3 Hours. H/W.
A study of the life and works of Fyodor Dostoeyevsky. In translation. No
prerequisite. LEC.

SLAV 534. Tolstoy. 3 Hours. H/W.
A study of the life and works of Leo Tolstoy. In translation. LEC.

SLAV 536. Turgenev. 3 Hours. H/W.
A study of the life and works of Ivan Turgenev. In translation; however,
note that Russian majors will be required to read selected works in
Russian. LEC.

SLAV 538. The Modern Polish Short Story. 3 Hours. H/W.
A study of the development of the Polish short story from Positivism to
the present. Readings of major Polish writers including Prus, Sienkiewicz,
Schulz, Borowski, Andrzejewski, and others. Emphasis on trends in the
Polish short story within the context of West European literatures. No
prerequisites. Readings in English. Students with knowledge of Polish
will read some works in Polish. LEC.
SLAV 540. Language and Identity in East-Central Europe and the Former Soviet Union. 3 Hours. H.
The course treats the formation of modern nation states as defined by language, where the history of the linguistic community played a central, if mythic role. Focus is on sociolinguistic case studies of the connection between language and identity in the former USSR and Yugoslavia, as well as transnational groups defined by common language and culture. The impact of global English, EU membership, and migration on language and identity issues are also discussed. LEC.

SLAV 558. Readings in Slovene. 1-6 Hours. H.
Individually tailored coursework in Slovene, from beginning to advanced level. Can include development of all four skills depending on the needs of the student. Prerequisite: Consent of instructor. IND.

SLAV 560. Introduction to Slavic Language: ______. 3 Hours. H/W.
Basic introduction to the language, with emphasis on grammar and reading skills. Prerequisite: Two years of a different Slavic language at the college level. LEC.

SLAV 561. Readings in Slavic Language: ______. 1-6 Hours. H/W.
A course of readings and discussion of grammar in a Slavic language as a continuation of SLAV 560, for example, in Bulgarian, Macedonian, etc. Prerequisite: SLAV 560 or the equivalent. LEC.

SLAV 562. Russian Theatre and Drama from Stanislavsky and Chekhov to the Present. 3 Hours. H/W.
A study of the development of Russian theatre and dramatic literature from 1898 to the present. Lectures and readings in English. (Same as THR 725.) LEC.

SLAV 564. The "Woman Question" in Nineteenth-Century Russian Literature. 3 Hours. H.
An exploration of the "woman question" in nineteenth-century Russia as treated in literary texts. Authors to be included are: Tolstoy, Turgenev, Dostoevsky, Chekhov, as well as women writers such as Karolina Pavlova and Evgenia Tur, and prominent literary and social critics. Readings in English. LEC.

SLAV 566. The Devil in Russian Literature. 3 Hours. H.
This course traces the various manifestations of the Devil through Russian and European folklore, myth, theology, culture, and literature. Although the focus is on Russian literature, classic European works are discussed, as they had a powerful impact on the modern Russian Conception of the Evil One. Readings in English. (Same as HWC 566.) LEC.

SLAV 568. Biblical Themes in Modern Russian Literature. 3 Hours. H.
An exploration of the creative process of modern Russian literature (1700 to present) through the ways in which Russian writers have responded to the Bible, the cornerstone of both Western and Eastern Christianity. LEC.

SLAV 570. War and Violence Russian Literature and Film. 3 Hours. S.
This course focuses on artistic representations of violence resulting from historical events such as World War II, Soviet collectivization, the Gulag, and political purges. We consider Soviet literature and film, including works by Isaac Babel, Andrei Platonov, Anna Akhmatova, and Alexander Solzhenitsyn. Readings in English. The course is offered at the 300 and 500 levels, with additional assignments at the 500 level. LEC.

SLAV 600. Biography of a City: ______. 3 Hours. H/W.
Examination in depth of the historical, social, intellectual, and artistic development of one or more major Slavic urban centers. LEC.

SLAV 612. Introduction to Russian Literature of the Nineteenth Century. 3 Hours. H/W.
Pushkin, Dostoevsky, Tolstoy, and others with an introduction to Russian culture. Lectures and readings in Russian. Prerequisite: Three years of Russian language study or its equivalent. LEC.

SLAV 614. Russian Literature in Translation: ______. 3 Hours. H/W.
A survey of the principal Russian authors and literary works of the 19th and/or 20th century. Readings in English, no prerequisites for non-Russian majors. Students with a sound knowledge of Russian will be expected to do some of the readings in Russian. LEC.

SLAV 616. Introduction to Russian Literature of the Twentieth Century. 3 Hours. H/W.
A survey of recent Russian and Soviet literature. Lectures and readings in Russian. Prerequisite: Three years of Russian language study or its equivalent. LEC.

SLAV 626. The Cultural Impact of Ottoman Empire on the South Slavs. 3 Hours. H.
An examination of the cultural development of the South Slavs in the context of the Ottoman invasions and subsequent rule (14th-19th century), focusing on the frontier aspects of the Balkans, military culture, religion, economics and banditry, as well as other aspects of material and folk culture. No language requirement. Prerequisite: SLAV 316 or SLAV 508, or consent of instructor. LEC.

SLAV 630. Slavic Folklore. 3 Hours. H/W.
Introduction to the phenomena and problems of Slavic folklore. Prerequisite: Two years of Russian on the college level. LEC.

SLAV 635. Language, Culture and Ethnicity in Prehistoric Eastern Europe. 3 Hours. S.
The course is for students who wish to understand the prehistory of Eastern Europe with special attention to the Slavs. The interdisciplinary course examines East European prehistory from the perspectives of archaeology and linguistics, considering also how ideologies have influenced the interpretation of results. No language prerequisite. (Same as ANTH 696) LEC.

SLAV 642. Pushkin and Evgenij Onegin. 3 Hours. H/W.
Lectures, reading, and analysis of Pushkin’s "novel in verse." Prerequisite: Three years of Russian language courses or the equivalent. LEC.

SLAV 650. The Russian Short Story. 3 Hours. H/W.
Readings from the short stories of major Russian writers of the 19th and/or 20th centuries, e.g., Pushkin, Gogol, Dostoevsky, Turgenev, Tolstoy, Chekhov; readings and discussion in English for non-Russian majors. Russian majors will be expected to read most stories in Russian. Prerequisite: None for non-majors in the department; two years of college-level Russian for majors. LEC.

SLAV 656. Russian Literature of the Eighteenth Century. 3 Hours. H/W.
Readings from Kantemir, Trediakovskiy, Lomonosov, Derzhavin, Karamzin, and others in their literary and intellectual contexts. Readings in Russian. Prerequisite: Three years of Russian language study or its equivalent. LEC.

SLAV 660. Nineteenth Century Russian Prose and Fiction. 3 Hours. H/W.
Readings from the prose works of Pushkin, Lermontov, Gogol, Turgenev, Goncharov, Dostoevsky, and Tolstoy. In translation. No prerequisite for non-Russian majors. Russian majors will be required to have achieved senior standing and will read most works in Russian. LEC.
SLAV 662. Russian Literary Modernism: 1880-1930. 3 Hours. H/W.
Readings from late Tolstoy through the period of the 1920's. In translation; no prerequisites for non-Russian majors. Russian majors will be required to have achieved senior standing and will read most works in Russian. LEC.

SLAV 664. Soviet Russian Literature: 1930-1990. 3 Hours. H/W.
Readings in the period, in all genres. In translation; no prerequisite for non-Russian majors. Russian majors are required to have senior standing and read most works in Russian. LEC.

SLAV 667. Post-Soviet Literature. 3 Hours. H.
A survey of post-Soviet literary art, from approximately 1985 to the present, dealing with a range of subjects including the emergence of literature from the strictures of socialist realism and its relationship to concepts of postmodernism and postcolonialism. LEC.

SLAV 668. Nabokov. 3 Hours. H/W.
A study of the life and works of Vladimir Nabokov. In translation. No prerequisite. LEC.

SLAV 675. Readings in Slavic Studies (English). 1-3 Hours. H.
Directed readings on Slavic culture in English. For non-majors. Prerequisite: Instructor permission. LEC.

SLAV 678. Readings in Slavic Linguistics. 1-6 Hours. H/W.
Directed individual readings on various topics concerning Slavic linguistics. Prerequisite: Proficiency in at least one Slavic language, and consent of instructor. IND.

SLAV 679. Topics in: ______. 1-6 Hours. H.
Intensive study of a selected topic from Slavic languages, literatures, linguistics, or pedagogy. IND.

SLAV 684. Main Currents of Russian Thought I. 3 Hours. H/W.
A study of philosophical, theological, and literary monuments designed to acquaint the student with main cultural forces that have shaped Russian thought and manners. From the origins to Peter the Great. (Same as PHIL 684.) LEC.

SLAV 686. Main Currents of Russian Thought II. 3 Hours. H/W.
A continuation of SLAV 684. From the age of Peter the Great to revolutions of 1917. (Same as PHIL 686.) LEC.

SLAV 710. Introduction to Slavic Languages and Linguistics. 3 Hours.
The Slavic languages and peoples, including briefly: their origin, prehistory, and early culture. Basic linguistic methodology as applied to Slavic material from the beginnings of Slavic linguistics to the present. LEC.

SLAV 711. Russian Poetry: Nineteenth Century. 3 Hours.
Readings from the works of the major poets, in Russian. Prerequisite: Three years of Russian language study or the equivalent. LEC.

SLAV 712. Russian Poetry: Twentieth Century. 3 Hours.
Readings from the works of the major poets, in Russian. Prerequisite: Language proficiency. LEC.

SLAV 714. Russian Theatre and Drama to 1900. 3 Hours.
A study of the development of Russian theatre and dramatic literature from their beginnings to 1900. Readings in English. Students with knowledge of Russian will read some works in Russian. LEC.

SLAV 715. Russian Drama and Theatre 1953 to the Present. 3 Hours.
A study of the development of Russian theatre and dramatic literature from 1953 to the present. Readings in English. Students with knowledge of Russian will read some works in Russian. LEC.

SLAV 716. History of Russian Literary Criticism: Late Eighteenth and Nineteenth Century. 3 Hours.
A study of the various literary periods, such as sentimentalism, romanticism, naturalism, realism, with particular reference to individual literary critics and critical journals. LEC.

SLAV 719. Philosophical and Aesthetic Thought of the Russian Silver Age. 3 Hours.
A survey of the works of Solovyov, Florensky, Berdyaev, Merezhkovsky, Ivanov, and others, and their relation to the literature and culture of the Silver Age. LEC.

SLAV 721. Pushkin. 3 Hours.
A study of the life and works of Alexander Pushkin. Readings in Russian, open to senior Russian majors and graduate students. Prerequisite: Three years of Russian or the equivalent. LEC.

SLAV 726. Chekhov. 3 Hours.
A study of the life and works of Anton Chekhov. Open to senior Russian majors and graduate students. Readings in Russian. Prerequisite: Three years of Russian or the equivalent. LEC.

SLAV 727. Bely and Blok. 3 Hours.
A study of the life and works of the Symbolist writers, Andrei Bely and Aleksandr Blok. Readings in Russian. LEC.

SLAV 728. 19th Century Russian Prose. 3 Hours.
Readings from the works of Turgenev, Chekhov, Leskov, Saltykov, and others. Readings and discussion in English. Russian majors will be expected to read some works in Russian. No prerequisite. LEC.

SLAV 730. Russian Emigre Literature. 3 Hours.
A study of representative works in all genres, by Russian emigre writers. Readings in English. LEC.

SLAV 740. Introduction to Graduate Studies in Slavic Languages and Literatures. 3 Hours.
This course is an introduction to the skills required of students doing graduate degrees in Slavic languages and literatures; areas covered include 1) introduction to literary theory and criticism, 2) bibliography and research methods, including database management software, 3) preparation and presentations of a research/conference paper, 4) technology training, including web design, on-line portfolio, and digital humanities, and 5) professional ethics and awareness of the academic market and alternative careers. We will also be working on practical, professionally useful goals, such as how to (better) make use of technology, how to create a CV and modify it for different positions, how to write an abstract, and how to produce a conference paper. Course requirements will include a variety of smaller assignments and two larger projects, a web-based professional portfolio and an 8 to 10-page conference paper. LEC.

SLAV 748. Old Church Slavic. 3 Hours.
A course in the first written language of the Slavs (9-12th centuries AD), with discussion of Indo-European, Baltic and Common Slavic background. Prerequisite: Two years of Russian or the study of another ancient Indo-European language. LEC.

SLAV 750. Introduction to Russian Historical Grammar. 3 Hours.
The linguistic history of Russian from the emergence of East Slavic dialects of Common Slavic to the modern period, with emphasis on fundamental structural changes and the introduction of skills necessary for the reading and analysis of Old and Middle Russian texts. Prerequisite: Three years of Russian or the equivalent. LEC.

SLAV 752. Old Russian Grammar and Texts. 3 Hours.
An examination of the Russian language from its beginnings to the 17th century through close reading of Old and Middle Russian texts and
SLAV 754. Seminar in Slavic Verbal Aspect. 3 Hours.
A detailed examination of the morphology and usage of verbal aspect in Russian and other Slavic languages, which is a particularly troublesome area for foreign learners of Russian. Prerequisite: SLAV 748, SLAV 750, or equivalent. LEC.

SLAV 756. Structure of Russian: ______. 3 Hours.
Synchronic study of the contemporary Russian language with special emphasis on problems of functional morphology and syntax. Prerequisite: Three years of Russian language study or its equivalent. LEC.

SLAV 799. M.A. Seminar in Slavic Linguistics. 3 Hours.
Topics in Slavic linguistics. Content will vary. May be repeated. LEC.

SLAV 802. Thesis. 1-6 Hours.
THE.

SLAV 804. Comparative Slavic Linguistics. 3 Hours.
An examination of the development of the Slavic languages from the Common Slavic period to the present, proceeding from Indo-European. Prerequisite: Graduate standing in Russian. LEC.

SLAV 806. East Slavic Linguistics. 3 Hours.
An examination of the linguistic phenomena and historical development of the East Slavic languages (Russian, Belorussian, and Ukrainian). Prerequisite: Graduate standing in Russian. LEC.

SLAV 808. West Slavic Linguistics. 3 Hours.
An examination of linguistic phenomena and historical development of the Western Slavic languages (Polish, Czech, Slovak, and Upper and Lower Sorbian). LEC.

SLAV 810. South Slavic Linguistics. 3 Hours.
An examination of linguistic phenomena and historical development of Bulgarian, Macedonian, Croatian-Serbian, Slovene. LEC.

SLAV 820. Old Russian Literature: Beginnings to 1700. 3 Hours.
Readings of selected texts in Russian. Prerequisite: SLAV 752. LEC.

SLAV 822. Seminar in Russian Literature: Eighteenth Century. 3 Hours.
An investigation of specific themes or authors in the literature, culture, and thought of the 18th century. All readings in Russian. Prerequisite: Graduate standing and advanced Russian language. LEC.

SLAV 824. Proseminar in Methods of Teaching Slavic Languages I. 1-3 Hours.
Required for all teaching assistants, assistant instructors engaged in the teaching of Slavic languages and persons planning for careers in teaching Slavic languages. Combines discussion of theoretical teaching concepts with practical solution of problems arising concurrently in Slavic language courses. Students enrolled for two or three hours will study advanced Slavic grammar topics and stylistics as they apply to the teaching of Slavic languages. LEC.

SLAV 825. Investigation and Conference. 1-3 Hours.
Individual work in language or literature of the teaching of Slavic languages by qualified students under direction of members of the department. RSH.

SLAV 826. Proseminar in Methods of Teaching Slavic Languages II. 1-3 Hours.
Required for all teaching assistants, assistant instructors engaged in the teaching of Slavic languages and persons planning for careers in teaching Slavic languages. Combines discussion of theoretical teaching concepts with practical solution of problems arising currently in Slavic language courses. Students enrolled for two or three hours will study advanced Slavic grammar topics and stylistics as they apply to the teaching of Slavic languages. LEC.

SLAV 850. Seminar in Russian Literature: Nineteenth Century: ______. 3 Hours.
A regular seminar for graduate students, devoted to special problems in Russian literature. (Ancient Russian literature, Classicism, Romanticism, Realism, Symbolism, etc.) Designed to introduce the student to the more advanced methods in criticism, literary analysis, and research. Prerequisite: Graduate standing in Slavic Languages and Literatures, or permission of instructor. LEC.

SLAV 852. Seminar in Russian Literature: Twentieth Century. 3 Hours.
Various topics including pre- and post-Revolutionary poetry, the prose of the 1920s, the development of Socialist Realism, individual authors, etc. LEC.

SLAV 899. Ph.D. Seminar Slavic Linguistics. 3 Hours.
Topics in Slavic linguistics. Content will vary. May be repeated. Prerequisite: Ph.D. student in Slavic Languages and Literatures. LEC.

SLAV 912. Seminar: Topics in Contemporary Slavic Linguistics. 3 Hours.
Synchronic examination of specific topics, i.e., phonology, morphology, syntax, and lexicology of several Slavic languages. LEC.

SLAV 914. Seminar: Topics in Historical Slavic Linguistics. 3 Hours.
Diachronic examination of selected topics, i.e., phonology, morphology, syntax, or lexicology, of one or more Slavic languages. LEC.

SLAV 917. Seminar in Russian Culture and Society. 3 Hours.
Examination of selected topics in Russian cultural history, especially as treated in the works of Russian literature and intellectual history. Prerequisite: At least one course in Russian history, or one of the following courses: SLAV 502, SLAV 510, SLAV 684, SLAV 686, plus graduate standing. LEC.

SLAV 932. Seminar: Topics in Slavic Folklore. 3 Hours.
Investigation and concentrated study of one or more themes (e.g., mythology, demonology, life rituals, folklore and literature), figures (e.g., Baba Yaga), or genres (e.g., magic tales, byliny, riddles) of Slavic folklore. All readings in Russian. Prerequisite: SLAV 630. LEC.

SLAV 940. Seminar: Topics in Comparative Slavic Literature. 3 Hours.
Prerequisite: Graduate standing in Slavic Languages and Literatures. LEC.

SLAV 999. Dissertation. 1-6 Hours.
THE.

TURK 104. Elementary Turkish I. 5 Hours. U.
Basic language acquisition, including essentials of grammar, speaking, and writing standard (Osmanli) Turkish. LEC.

TURK 108. Elementary Turkish II. 5 Hours. U.
Continuation of TURK 104. Prerequisite: TURK 104. LEC.

TURK 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Turkish. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

TURK 204. Intermediate Turkish I. 3 Hours. U.
Second-year course in Turkish language with emphasis on reading, composition, and conversation. Prerequisite: TURK 108. LEC.
TURK 208. Intermediate Turkish II. 3 Hours. U.
Continuation of TURK 204. Prerequisite: TURK 204. LEC.

TURK 314. Turkish Culture Through Film and Literature. 3 Hours. H.
This course introduces the student to Turkish culture, with a focus on the 20th and 21st centuries, mainly through films and literature. Among the topics are Turkey's geography, politics, history, religion, feminism, poetry, music and cuisine. This interdisciplinary course does not require any previous knowledge of Turkey or the Turkish Language; it is open to both undergraduate and graduate students. Representative works of major authors and film directors will be discussed and analyzed in their historical, political and theoretical contexts. The course is offered at the 300 and 500 levels, with additional assignments at the 500-level. LEC.

TURK 514. Turkish Culture Through Film and Literature. 3 Hours. H.
This course introduces the student to Turkish culture, with a focus on the 20th and 21st centuries, mainly through films and literature. Among the topics are Turkey's geography, politics, history, religion, feminism, poetry, music and cuisine. This interdisciplinary course does not require any previous knowledge of Turkey or the Turkish Language; it is open to both undergraduate and graduate students. Representative works of major authors and film directors will be discussed and analyzed in their historical, political and theoretical contexts. The course is offered at the 300 and 500 levels, with additional assignments at the 500-level. Prerequisite: REES 550 or permission of instructor. LEC.

TURK 675. Readings in Turkish: ______. 3 Hours. U.
Prerequisite: Two years of college-level Turkish and consent of instructor. May be repeated for credit if content varies. IND.

UKRA 104. Elementary Ukrainian I. 5 Hours. U.
First semester. Five hours per week of recitation and drill in the spoken language. Essentials of grammar, practice reading, writing and speaking Ukrainian. LEC.

UKRA 108. Elementary Ukrainian II. 5 Hours. U.
Second semester. Continuation of UKRA 104. Prerequisite: UKRA 104. LEC.

UKRA 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Ukrainian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

UKRA 204. Intermediate Ukrainian I. 3 Hours. U.
Second year course in Ukrainian language with emphasis on reading, composition, and conversation. Prerequisite: UKRA 108. LEC.

UKRA 208. Intermediate Ukrainian II. 3 Hours. U.
Second semester. Continuation of UKRA 204. Prerequisite: UKRA 204. LEC.

UKRA 512. Intensive Ukrainian Language and Culture I. 3 Hours. U.
A practical Ukrainian language course involving advanced study of the grammar, conversation, composition. Reading of texts on a variety of subjects (culture, literature, history, folklore etc.), taught in Ukrainian. Prerequisite: Three years of a Slavic language or permission of instructor. LEC.

UKRA 516. Intensive Ukrainian Language and Culture II. 3 Hours. U.
A practical Ukrainian language course involving advanced study of the grammar, conversation, composition. Reading of texts on a variety of subjects (culture, literature, history, folklore etc.), taught in Ukrainian. Prerequisite: Three years of a Slavic language or permission of instructor. LEC.

UKRA 675. Readings in Ukrainian Language. 1-6 Hours. H.
Directed individual readings on various topics concerning the Ukrainian language. Prerequisite: Two years of Ukrainian. IND.

YDSH 104. Elementary Yiddish I. 5 Hours. U.
Essentials of grammar, practice in speaking, reading, and writing Yiddish. Not open to native speakers of Yiddish. LEC.

YDSH 108. Elementary Yiddish II. 5 Hours. U.
Continuation of grammar, practice in conversation, composition, and reading. Not open to native speakers of Yiddish. Prerequisite: YDSH 104 or equivalent. LEC.

YDSH 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Yiddish. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

YDSH 212. Intermediate Yiddish I. 3 Hours. U.
Structured grammar review, composition, conversation, with readings of literary and cultural texts. Not open to native speakers of Yiddish. Prerequisite: YDSH 108 or equivalent. LEC.

YDSH 216. Intermediate Yiddish II. 3 Hours. U.
A continuation of YDSH 212. Structured grammar review, composition, conversation, with readings of literary and cultural texts. Not open to native speakers of Yiddish. Prerequisite: YDSH 212 or equivalent. LEC.

YDSH 300. Studies in Yiddish: ______. 3 Hours. H.
Examination of special topics in Yiddish. May be repeated if topic varies. LEC.

YDSH 395. Study Abroad Topics in Yiddish: ______. 3-6 Hours. H.
This course is designed for the study abroad of special topics in Yiddish at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

SOC 104. Elements of Sociology. 3 Hours. SC AE41/GE11/GE3S / S.
The study of social life, including how human groups are organized, how they change, and how they influence individuals. Consideration is given to a variety of human organizations and social institutions and how these groups and institutions both determine, and are determined by, human beings. This course may not be taken for credit by those who have taken SOC 304. LEC.

SOC 105. Elements of Sociology, Honors. 3 Hours. SC AE41/GE11/GE3S / S.
The study of social life, including how human groups are organized, how they change, and how they influence individuals. Consideration is given to a variety of human organizations and social institutions and how these groups and institutions both determine, and are determined by, human beings. Open only to students on dean's honor roll or enrolled in Honors Program, or consent of instructor. May not be taken by those who also have credit for SOC 304. LEC.

SOC 110. American Identities. 3 Hours. SC AE41/GE3S / S.
An interdisciplinary introduction to individual and group identities over time. Students explore theories and methods relating to identity from various perspectives, such as race, class, gender, sexuality, age, religion, and region. Not open to students who have taken AMS 112 or SOC 112. (Same as AMS 110.) LEC.
SOC 112. American Identities, Honors. 3 Hours. SC AE41/GE3S / S.
An interdisciplinary introduction to individual and group identities over time. Students explore theories and methods relating to identity from various perspectives, such as race, class, gender, sexuality, age, religion, and region. Not open to students who have taken AMS 110 or SOC 110. (Same as AMS 112.) Prerequisite: Membership in the University Honors Program or approval by the American Studies Program. LEC.

SOC 130. Comparative Societies. 3 Hours. NW AE42 / S/W.
Description and analysis of the culture, structure, and development of societies that are historically unrelated to the traditions of Western civilization. LEC.

SOC 131. Comparative Societies, Honors. 3 Hours. NW AE42 / S.
Description and analysis of the culture, structure, and development of societies that are historically unrelated to the traditions of Western Civilization. Open only to students enrolled in the University Honors program or by consent of instructor. May not be taken by students who have credit in SOC 130. LEC.

SOC 132. American Society, Honors. 3 Hours. SC / S.
The social structure and organization of American society with special reference to long-term and recent social changes. Not open to students who have credit for AMS 330 or SOC 330. Open to College honors students, students on the dean's honor roll, and by permission of the department. LEC.

SOC 150. Self and Society, 3 Hours. SI AE51/GE11 / S.
Discusses the way our identities, values, and behavior have been and continue to be shaped by social and situational factors. Attention is paid to the influence of factors like language, culture, social roles, specific social institutions, and broad structures of inequality and power on how we see ourselves and others. May not be taken by anyone who has completed SOC 305 or its equivalent. LEC.

SOC 151. Self and Society, Honors. 3 Hours. SI / S.
Discusses the way our identities, values, and behavior have been and continue to be shaped by social and situational factors. Attention is paid to the influence of factors like language and culture, social roles, specific social institutions, and broad structures of inequality and power on how we see ourselves and others. This course may not be taken for credit by those who have taken SOC 305. Open only to students admitted to the University Honors Program or by consent of instructor. LEC.

SOC 160. Social Problems and American Values. 3 Hours. SF AE41/ AE51/GE11 / S.
This course is designed to explore competing explanations for the causes of, and cures for, the enduring problems of American society. The course critically analyzes dominant definitions of social problems, the political and economic roots of these problems, and the public policies aimed at reducing them. May not be taken by anyone who has already completed SOC 306 or its equivalent. LEC.

SOC 161. Social Problems and American Values, Honors. 3 Hours. SF / S.
Explores competing explanations for the causes of, and cures for, the enduring problems of American society. Critically analyzes dominant definitions of social problems, the political and economic roots of these problems, and the public policies aimed at reducing them. This course may not be taken for credit by those who have taken SOC 160 or SOC 306. Open only to students admitted to the University Honors Program or by consent of instructor. LEC.

SOC 177. First Year Seminar: _____, 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Sociology. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

SOC 220. Sociology of Families. 3 Hours. SC AE41/GE3S / S.
Analysis of the family as a social institution primarily in the U.S. context. Topics considered are: current and historical changes in how the family is constituted, contrasting sociological theories of family relationships, sexuality in relation to family life, the coexistence of love and hate in families, family dissolution and reformation, and the care of children. A key theme is diversity: social class, gender, race/ethnicity, and age. May not be taken by anyone who has already taken SOC 308 or its equivalent. LEC.

SOC 230. Introduction to Social Inequality in the U.S. 3 Hours. S.
By the end of this course, students will be able to describe the major dimensions of inequality in the U.S. (including race, class, and gender), understand the structural basis of inequality, critically assess how inequality exists in major social institutions, and understand how inequalities in race, class, and gender shape social interaction. LEC.

SOC 260. America's Latinos/Latinas, 3 Hours. U.
An introduction to the Latino/a population (Mexican-Americans, Puerto Ricans, Cuban-Americans, Dominican-Americans, and Central and South Americans) in the US. Students discuss how US and Latin American societies have shaped Latino incorporation into the United States. We also discuss contemporary political, cultural and social issues that pertain to Latinos/as in the US. (Same as AMS 260) LEC.

SOC 273. Women in Society. 3 Hours. S.
A sociological exploration of the image and status of women in society, including family, work, and politics. Socialization, education, and the women's movement are also analyzed. Includes an introduction to feminist theories in sociology. LEC.

SOC 295. Study Abroad Topics in: _____, 1-6 Hours. S.
This course is designed for the study of special topics in Sociology at the freshman/sophomore level. Course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. No more than 6 hours of SOC 295 or SOC 495 may count towards the Sociology major or minor. LEC.

SOC 304. Principles of Sociology. 3 Hours. SC AE41/GE11/GE3S / S.
An introduction to sociological concepts, methods, and substantive findings more intensive than that provided in SOC 104. Students may take this course in lieu of SOC 104 to satisfy requirements for the major and the minor. This course may not be taken for credit by those who have taken SOC 104. LEC.

SOC 305. Principles of Self and Society, 3 Hours. SI GE11 / S.
Discusses the way our identities, values, and behavior have been and continue to be shaped by social and situational factors. Attention is paid to the influence of factors like language, culture, social roles, specific social institutions, and broad structures of inequality and power on how we see ourselves and others. This course provides a more intensive coverage of the subject matter than that provided in SOC 150. May not be taken by anyone who has already taken SOC 150 or its equivalent. LEC.

SOC 306. Principles of Social Problems. 3 Hours. SF / S.
This course is designed to explore competing explanations for the causes of, and cures for, the enduring problems of American society. The course critically analyzes dominant definitions of social problems, the political and economic roots of these problems, and the public policies aimed at reducing them. This course provides a more intensive coverage of the subject matter than that provided in SOC 160. May not be taken by anyone who has already completed SOC 160 or its equivalent. LEC.
SOC 308. Principles of Family Sociology. 3 Hours. SC / S.
Analysis of the family as a social institution primarily in the U.S. context. Topics considered are: current and historical changes in how the family is constituted, contrasting sociological theories of family relationships, sexuality in relation to family life, the coexistence of love and hate in families, family dissolution and reformation, and the care of children. A key theme is diversity: social class, gender, race/ethnicity, and age. This course provides a more intensive coverage of the subject matter than that provided in SOC 220. May not be taken by anyone who has already taken SOC 220 or its equivalent. LEC.

SOC 310. Introduction to Social Research. 3 Hours. S.
An introduction to the nature and methods of social research. Topics may include: hypothesis formulation and testing; how to design a research project, collect and analyze data; elementary statistical procedures; and ethical issues. Prerequisite: Six hours of Sociology credit, including Sociology 104. A minimum GPA of 2.3 in all SOC courses is strongly recommended for students planning to enroll in this course. LEC.

SOC 312. Population and Society. 3 Hours. AE41 / S.
An examination of the causes and consequences of population change in the United States and around the world with special focus on the impact of changes in populations on social institutions. We use social demographic perspectives to explore patterns of birth, illness, death, population concentration, population migration and immigration, and changes in these over time. Prerequisite: One of the following: SOC 104, SOC 110, SOC 150, SOC 160, or SOC 220. LEC.

SOC 320. Organizations in Society. 3 Hours. S.
An analysis of complex organizations in modern societies. Attention is given to the rise of bureaucracy in business and government; the way organizations influence and respond to their social cultural environments; and the various roles that individuals play in organizations. Prerequisite: A principal course in sociology. LEC.

SOC 326. Health, Gender, and Society. 3 Hours. S.
Comparative examination of the health status of men and women in relation to key elements of contemporary societies, including not only medicine and health care services, but also systems of social inequality and stratification, cultural constructions of gender, and social policies. Emphasis will be placed on the U.S.; however, the course also will provide international comparisons and an overall global context. LEC.

SOC 330. American Society. 3 Hours. AE41 / S.
The social structure and organization of American society with special reference to long-term and recent social changes. (Same as AMS 330.) Not open to students with credit for SOC 132. Prerequisite: A principal course in sociology. LEC.

SOC 332. The United States in Global Context. 3 Hours. AE42 / S.
Examines the influence abroad of U.S. culture, policies and practices and the impact of other countries on U.S. culture, society, and politics. Among the topics that may be examined are race, ethnicity, colonialism, imperialism, migration, technology, communications and media, popular culture, language, health, domestic and transnational organizations, as well as economic, political, religious, military and educational institutions. (Same as AMS 332.) LEC.

SOC 340. The Community. 3 Hours. S.
Structures, functions, and processes of change in local communities; interrelations of towns and small cities with rural areas and metropolitan centers with their hinterlands. Prerequisite: A principal course in sociology or ANTH 108 or ANTH 308. LEC.

SOC 341. Urban Sociology. 3 Hours. S.
Examination of the process of urbanization in modern societies, including the size, growth, functions, and ecology of cities and systems of cities; such urban social institutions as the economy, politics, and the family; and major contemporary urban policies and problems. Each topic will be analyzed from several sociological perspectives. Prerequisite: A principal course in sociology. LEC.

SOC 342. Sociology of Immigration. 3 Hours. S.
International migration reshapes politics, economics, social relations, and racial/ethnic identities. Using the United States and other countries as case studies, we explore the variations among immigrant groups and their experiences in social institutions such as the family, religion, education, labor market, and government. We consider the influence of national origin, gender, class, and culture on immigration and reception experiences, as well as issues of assimilation, transnationalism and identity. Prerequisite: SOC 104. LEC.

SOC 351. Africa Today. 3 Hours. U.
An examination of Africa's social dynamics. Topics considered include: the origins of modern African societies, nations, and states; family structures and values; ethnicity, gender relations and patriarchy; social, political, economic and cultural institutions; African exceptionalism; contemporary African social dynamics; transnational migration; HIV/AIDS; political transitions; and Africa's place in the emerging global order. Prerequisite: SOC 104. LEC.

SOC 352. Sociology of Sex Roles. 3 Hours. S.
An examination of sex roles, sex stereotypes, and major issues involved in sex-role research. Emphasizes explanations of inequality between American males and females in the family and at work. The course is designed around lectures, panels, workshops, and films. LEC.

SOC 360. Sociology of Social Control. 3 Hours. S.
This course examines changing methods of social control in society. Social control can be formal (e.g., law and criminal justice system) or informal (e.g., families, peer groups). This course examines the ways that we, as a society, attempt to respond to matters such as deviance, illness, crime, and poverty. This course will survey the many varieties of formal and informal social control faced by individuals in society, and the ways in which individuals resist and conform to various disciplinary and control regimes. Prerequisite: a principal course in Sociology. LEC.

SOC 364. Society, Popular Culture, and the Media. 3 Hours. S.
An overview of sociological theory and research on culture created and distributed through the mass media and its role in shaping our common sense interpretations of our daily lives. Topics include the social organization of the media, the relation between popular culture and the media, themes communicated in various elements of popular culture, and how various groups interpret cultural messages and incorporate them in their lives. LEC.

SOC 365. Society, Popular Culture, and the Media, Honors. 3 Hours. S.
Similar in content to SOC 364. An overview of sociological theory and research on culture created and distributed through the mass media and its role in shaping our common sense interpretations of our daily lives. Topics include the social organization of the media, the relation between popular culture and the media, themes communicated in various elements of popular culture, and how various groups interpret cultural messages and incorporate them in their lives. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

SOC 370. Conflict Resolution. 3 Hours. S.
This course is an introduction to the field of conflict resolution. Collaborative approaches to dealing with conflict will be examined from the micro, interpersonal group level to the macro, organizational level. The causes and consequences of conflict will be presented as well as problem solving techniques for the resolution of conflict in social groups. LEC.
SOC 371. Marginal Groups and Subcultures. 3 Hours. S.
The sociological study of groups that differ from the mainstream practices of their societies and of conditions affecting their careers. The primary objectives are to introduce and analytically apply sociological conceptualizations of groups, group careers, group mainstream interactions, and participant orientations. The principal cases examined are the Hutterites, the Shakers, and the Oneida Community, supplemented by briefer analyses of a variety of other groups. Questions concerning the formation, organization, processes, participants, and transformations of groups are emphasized. LEC.

SOC 385. Environmental Sociology. 3 Hours. S.
This course invites students to study society and its impact on the environment. Environmental problems are social problems. This course will address such items as social paradigms, theories, inequalities, movements, and research. (Same as EVRN 385.) LEC.

SOC 410. Sociology of Death and Dying. 3 Hours. S.
This course covers theoretical, practical, cross-cultural and historical aspects of death and dying. Social, psychological, biomedical, economic and legal issues surrounding death and dying are explored. Students examine their own ideas, feelings, and attitudes towards death and dying, and reflect on the origins and significance of those beliefs. Prerequisite: Junior or Senior Standing. LEC.

SOC 420. Armed Forces and Society. 3 Hours. U.
Examines the military as a social institution. Students analyze both the internal organization and practices of the armed forces and the relationships between the military and other social institutions. It considers the historical forces that have shaped the present. Thus, past events and policies as well as current ones are covered in the course. The primary focus of this course is on the American military and its relationship to American society, but considers the armed forces of other societies. Prerequisite: SOC 104 or permission of instructor. LEC.

SOC 424. Sociology of Health and Medicine. 3 Hours. S.
This introductory course in medical sociology examines how social factors influence health and the organization of medical services. Students explore the distribution and experiences of illnesses across key social categories (e.g., gender, social class, etc.) The course also addresses contemporary issues in health and medicine, such as how health care systems vary cross-nationally, the training of health care workers, patient-physician relationships, and the use of medical technologies. LEC.

SOC 427. School and Society. 3 Hours. S.
This course examines education as a social institution and the reciprocal relationship between schools and society. It focuses particularly on the relationship between education and inequality and on education in the U.S., but also includes international comparisons. LEC.

SOC 450. Gender and Society. 3 Hours. AE41 / S.
An overview of sociological theory and research on the social practices constructing men and women as "opposites" and creating systematic inequality between them in class-, race-, and nation-specific ways. We consider arguments and evidence that gender is something we are, something we do, a part of every social institution, and a major aspect of how we are organized as a society. LEC.

SOC 454. Women and Work. 3 Hours. S.
Sociological investigation of women's changing relationship to paid and unpaid labor in the economy and the family. Several theories are compared in these contexts: Characteristics of employed women, including occupational distribution and pay; women's experiences in "traditional" and "nontraditional" occupations, including professions and management; socialization and education for employment; integration of marriage, housework, and child care; anti-discriminatory laws and policies. Prerequisite: A principal course in Sociology. LEC.

SOC 490. Internship in Sociology. 3 Hours. AE61 / S.
The purpose of this course is to encourage students to think sociologically about social issues by working as volunteer interns for non-profit community or campus organizations. Enrollment must be approved by a faculty mentor and the departmental Undergraduate Studies Committee. For additional information go to the Sociology department website. Prerequisite: 21 credits in sociology with a 3.0 GPA and permission of the instructor. FLD.

SOC 495. Study Abroad Advanced Topics in: _____. 1-6 Hours. S.
This course is designed for the study of special topics in Sociology at the junior/senior level. Course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. No more than 6 hours of SOC 295 or SOC 495 may count towards the Sociology major or minor. LEC.

SOC 499. Honors Course. 3-6 Hours. AE61 / S.
Intensive study and research under faculty direction including the writing of a thesis. Enrollment may be split between two semesters, but no grade will be given until completion of the thesis. Admission to honors candidacy is open only to majors who have shown a marked capability for independent study and have completed either SOC 310 or SOC 500. IND.

SOC 500. Sociological Theory. 3 Hours. S.
An introduction to the principal texts in sociological theory and the ideas that made them important. Primary materials are emphasized, ranging from medieval to the current age. The goal of the course is to show continuity and change in the theoretical tradition of sociology, and to demonstrate the continued importance of classical ideas. Prerequisite: SOC 104 or permission of instructor. LEC.

SOC 510. Elementary Statistics and Data Analysis. 3 Hours. S.
An introduction to social scientific data analysis, with an emphasis on descriptive and inferential statistics. Specific topics include sampling, measures of association and correlation, significance testing, the logic of causal inference, the use of computer programs for data analysis, multivariate analysis, and the critical evaluation of social science research findings. Prerequisite: SOC 310 and MATH 101, or instructor permission. LEC.

SOC 519. Sociology of Global Food. 5 Hours. U.
The Sociology of Global Food offers a critical examination of the global food system since the Industrial Revolution. Topics include the industrialization of agriculture, sustainable agriculture, and the role of food and agriculture in organizing society. This course discusses the emergence of current debates around food and agriculture including food activism, technological developments, human/environment relationships, and labor issues. There is a lab component to this course. (Same as EVRN 519.) Prerequisite: Junior standing. LEC.

SOC 520. Groups and Organizations. 3 Hours. S.
A comparative study of groups, associations, and institutions as types of social systems with special attention to structural characteristics and organizational processes; the nature of membership and leadership, including recruitment, selection and training; the social position, relationship, and function of these groups in communities and societies. Prerequisite: A principal course in sociology. LEC.

SOC 521. Wealth, Power, and Inequality. 3 Hours. AE41 / S.
This class focuses on economic inequality and the political and social forces that create and sustain it in the United States and internationally. The variables of race, ethnicity, status, and gender are analyzed as they relate to the differences in the distribution of wealth and power, and attention is paid to how these multiple variables shape opportunities. LEC.
SOC 522. American Racial and Ethnic Relations. 3 Hours. AE41 / S.
Analysis of the basic sociological concepts that apply to majority/minority relations; with special emphasis on racial and ethnic interaction in the United States. (Same as AMS 522.) Prerequisite: A principal course in sociology. LEC.

SOC 523. Sociology of Aging and the Life Course. 3 Hours. AE41 / S.
An advanced survey of theory and research in social gerontology; giving primary attention to aging and the aged as affected by social organization, including such social institutions as familial, economic, political, and health care; organizational processes such as social stratification; and living environments including community and housing. In these contexts, certain demographic, cross-cultural, social-psychological, and physiological aspects of aging will also be considered. Prerequisite: A principal course in sociology. LEC.

SOC 524. Sociology of the Economy. 3 Hours. S.
An analysis of the social organization of production with attention being given to such topics as: world economic crises and their social bases, capitalist and socialist economies, primitive and advanced economic systems, multinational corporations, the nature of housework, and the transformation of economic systems. Prerequisite: A principal course in sociology. LEC.

SOC 525. Sociology of Work. 3 Hours. S.
A consideration of problems in the conceptual and empirical definition of occupations and professions. It will involve the examination of the process of professionalization, the differentiation and integration of labor, career patterns, the work situation, the study of leisure, and the social consequences of changes in occupations and professions. Prerequisite: A principal course in sociology. LEC.

SOC 529. Globalization. 3 Hours. S.
Addresses sociological aspects of the growth of transnational economic, cultural, institutional, and political interconnections, the freer and faster movement of goods, images, ideas, people, and institutional forms across national borders, and the consequences and problems of these processes. The focus is on recent (later 20th century to the present) global restructuring in the context of historical shifts in capitalist development. Prerequisite: SOC 104. LEC.

SOC 530. Industrial Revolution and Capitalist Development. 3 Hours. S.
Focuses on the social forces that generated industrial capitalism. Emphasis will be on comparative social structures and their meaning for the nature and quality of life. The transformation from medieval to mercantilist to industrial capitalism will be analyzed in detail. Possibilities of post-industrial society will be discussed. This course will consider exclusively Western development. Prerequisite: A principal course in sociology. LEC.

SOC 531. Global Social Change. 3 Hours. S.
Comparative study of social, economic, political, and ideological factors influencing global social change, and analysis of different theoretical orientations related to social change in various societies. Prerequisite: A principal course in Sociology. LEC.

SOC 532. Sociology of the Middle East. 3 Hours. NW AE42/AE61 / S.
The sociological analysis of social, historical, and contemporary issues pertaining to the Middle East and to relations between the Middle East and other regions of the world. We use sociological theoretical perspectives to address such topics as nationalism and identity; religion, race and ethnicity; gender, socioeconomic development, and sociopolitical and economic relations with the United States. Prerequisite: One of the following: SOC 104, SOC 110, SOC 150, SOC 160, or SOC 220. LEC.

SOC 533. Industrialization in Developing Nations. 3 Hours. S.
Comparative study of problems associated with industrialization in developing nations, including population problems, unemployment, social and welfare problems, and various political issues. Prerequisite: A principal course in sociology. LEC.

SOC 534. Global Ethnic and Racial Relations. 3 Hours. NW AE42 / S.
An examination of constructions of race and ethnicity around the world. Emphasis is on the social, political, historical, cultural and economic factors that lead to the creation of ethnic and racial identities, ethnic conflict and accommodation, ethnic movements, and ethnic political organization. Racial and ethnic relations in the U.S. are compared with other countries. Major focus is placed on ethnicity in Africa, Asia, Latin America, the Caribbean and/or the Middle East. (Same as AAAS 510 and AMS 534.) LEC.

SOC 535. Gender in the Global Context. 3 Hours. S.
This course examines gender roles and identity in the global context and focuses specifically on historical comparative analysis of women's participation in--and impact on--social, political, economic, and cultural aspects of their communities and nations. Major emphasis will be placed on women in Africa, Asia, Latin America, and the Middle East. Prerequisite: A principal course in Sociology. LEC.

SOC 536. Ethnicity in the United States: ______. 3 Hours. AE41 / S.
An examination of the history, sociology, and culture of U.S. ethnic categories (e.g., American Indians, Latinos, Asian Americans, Jewish Americans, Irish Americans). The specific group studied varies from semester to semester. Course may be repeated for credit. (Same as AMS 536.) Prerequisite: A principal course in American Studies, Sociology, or Anthropology, or permission of instructor. LEC.

SOC 560. Law and Criminal Justice. 3 Hours. S.
An analysis of the sources and procedures of development of the criminal law and analysis of the practices of law enforcement, prosecution, and judicial action, principally in the United States. Prerequisite: A principal course in sociology. LEC.

SOC 561. Sociology of Deviance. 3 Hours. S.
General analysis of the ways in which individuals and actions come to be defined as deviant in a society, including the political, economic, social, and cultural processes of labeling, rulemaking, and rule breaking: Why are some acts and groups considered deviant at some points in time and in some places, but not in others? Prerequisite: A principal course in sociology. LEC.

SOC 562. Sociology of Law. 3 Hours. S.
A survey of the effects of social structure, societal values, and social change upon the creation and alteration of law. Various perspectives from the social sciences will be employed in the introductory examination of the general place of law in societies. The emphasis of the course will be on the sociological analysis of law in Western history as well as the present. Prerequisite: A principal course in sociology. LEC.

SOC 570. Social Conflict. 3 Hours. S.
The nature of social conflict, with special emphasis on the more persistent conflict areas of modern social life such as industrial, racial, religious, and national conflicts. Prerequisite: A principal course in sociology. LEC.

SOC 571. Collective Behavior. 3 Hours. S.
An analysis of such collective phenomena as crowd behavior, social epidemics, fads, fashions, popular crazes, and mass movements; the nature of the public; functional analysis of public opinion; the problems of democracy as viewed from the standpoint of organizing collective action. Prerequisite: A principal course in sociology. LEC.
SOC 572. Dispute Settlement. 3 Hours. S.
Processes of negotiation and mediation in settling disputes in communities and organizations over controversial issues, policies, and decisions. Knowledge of skills are developed through studying theories and research findings, and by case analysis, role playing, and simulation. LEC.

SOC 573. Sociology of Violence. 3 Hours. S.
This course will examine violence in social and political life. The causes and consequences of various types of violence will be examined in a variety of social settings. Examples include violence in the family, schools, the workplace, violence in cities, and violence as a part of the political process: assassination, revolution, coups, terrorism, and government repression. Prerequisite: A principal course in sociology. LEC.

SOC 590. Sociology in the Community. 3 Hours. S.
The purpose of this course is to encourage students to develop their understanding of the relationship between individual biography and social organization while they contribute to their community by working as volunteers in non-profit community or campus organizations. Not open to students who have completed SOC 490. Prerequisite: SOC 310 and SOC 510. LEC.

SOC 598. Practicum in Crime and Delinquency Studies. 3-6 Hours. S.
A one- or two-semester course in which students are provided the opportunity, as interns, to gain practical experience working in the criminal justice system agency. A report in the format of a research paper is required at the conclusion of the practicum. Open only to Crime and Delinquency Studies majors. Prerequisite: Consent of the instructor. FLD.

SOC 600. Sociological Perspectives: _____, 3 Hours. S.
Analysis of various sociological perspectives and/or the application of various perspectives to a given social phenomenon. May be repeated as topics vary. Prerequisite: A principal course in sociology. LEC.

SOC 601. Introduction to Feminist Social Theory. 3 Hours. S.
Feminist theories accord a central role to gender and the oppression of women in developing an analysis of social life. This course will explore and evaluate accounts of social structure, social processes, and consciousness developed from a feminist perspective. A broad range of theoretical models will be presented, drawing on liberal, historical materialist, psychoanalytical, cultural, and Black feminist theories. Prerequisite: A principal course in Sociology and at least junior standing. LEC.

SOC 602. Sociology in the Community. 3 Hours. S.
The course includes a focus on historical patterns in women’s health issues and social change actions. (Same as HPM 620.) LEC.

SOC 619. Political Sociology. 3 Hours. S.
The study of politics and society in the United States and abroad, including power and authority-who has them, how are they acquired, when are they challenged; state formation, the expansion of central governments, and patterns of political domination; political and nationalist movements; the politics of gender, class, race, and ethnicity; political culture and ideology; ethnic and nationalist conflict; revolution and political change. Prerequisite: A principal course in sociology or consent of instructor. LEC.

SOC 620. Social Organization. 3 Hours. S.
Comparative analysis of social organization in simple and complex societies. Consideration of the process of differentiation, specialization, institutionalization, and change, with special attention given to the emergence of intergroup and interorganizational forms of social organization typical of complex societies. Prerequisite: A principal course in sociology. LEC.

SOC 621. Cross-Cultural Sociology. 3 Hours. NW AE42/GE3H/GE3S / S.
A systematic introduction to cross-cultural issues from the standpoint of sociology, designed to acquaint students with the full range of substantive and methodological issues that arise in comparative sociological inquiry, with a primary focus on non-western societies. Specific topics to be addressed may include war and peace, stratification and inequality, race and ethnicity, and political authority and power, all viewed in the light of cross-cultural research and theory. Prerequisite: A previous Sociology course or consent of instructor. LEC.

SOC 622. Sociology of Science. 3 Hours. S.
The social roles of science in relation to other institutions, to technology, and to social change; and, within the scientific community, enculturation, information-flow, creativity, decision-making, administration, and leadership. Prerequisite: A principal course in sociology. LEC.

SOC 625. Work Roles in Health and Medicine. 3 Hours. S.
A sociological examination of medical and health-care occupations and professions. The selection of careers, socialization processes, and the development of professional identities. Interactions among practitioners, health-care teams, consumers, and professional and community power structures. Control and coordination of work. The impact of increasing specialization and changes in the demographic makeup of client and professional populations. Coping with medical failure and other problems inherent in medical and health-care work. LEC.

SOC 626. Religion and Society. 3 Hours. S.
A comparative study of the nature of religion in human societies both primitive and civilized; the functioning of religion for the community and the individual; the analysis of belief, myths, rituals, sacred attitudes, cults, religious movements, and church organization. Prerequisite: A principal course in sociology or ANTH 108 or ANTH 308. LEC.

SOC 628. Families and Social Inequalities. 3 Hours. S.
This course examines families in the context of social inequalities based on race-ethnicity, social class, gender, and sexuality. It analyzes the link between family diversity and social inequalities in the U.S. and elsewhere and theorizes families using a critical lens that focuses on social policies and power relations that perpetuate social inequalities. We also explore the growing complexities of families and how they affect and are affected by other social institutions, especially the labor market. Prerequisite: SOC 220 or consent of instructor. LEC.

Critical analysis of the current health status and health needs of women, exploring how lay, medical, and research assumptions have influenced both the clinical/scientific literature and the organization of health services.
SOC 629. Sociology of Sport. 3 Hours. S.
Examination of organized sport as a social institution and its relation to other social institutions (e.g., political, economic, educational, and religious), with special emphasis on American society. Analysis of the social correlates of sports participation and a consideration of the role of sport in social change. (Same as AMS 629.) Prerequisite: A principal course in sociology. LEC.

SOC 630. Latin American Society. 3 Hours. S/W.
Aspects of the social organization of main Latin American nations, including, e.g., race/ethnicity, social class, gender, urbanization, socioeconomic development, revolution, and relations with the U.S. Emphasis on sociological theories of Latin American development. Prerequisite: A principal course in Sociology or ANTH 108 or ANTH 308, plus junior-senior or graduate standing. LEC.

SOC 634. The Sociology of Culture. 3 Hours. S.
An introduction to a branch of sociology, mainly European in origin, that considers the relation between social structure and "high" and "mass" culture. Specific theories of these relations will be applied to works of literature, the fine arts, or music. Some preliminary acquaintance with these subjects is desirable but not mandatory for admission to the course. LEC.

SOC 640. Political Islam. 3 Hours. NW AE42/AE51 / S.
This course gives students a basic understanding of Islam and Islamic movements, explores the economic, social, political, and cultural context in which these movements take place, and examines the impact of Islam on politics in select countries. Issues such as compatibility of political Islam and democratic politics, political economy in Muslim societies, fundamentalism in Islam, gender relations, identity politics and questions on clash of civilizations are explored. (Same as POLS 667). Prerequisite: A principal course in sociology, POLS 150, or consent of instructor. LEC.

SOC 650. Transnational Migration. 3 Hours. S.
A historically-conscious, sociological exploration of political, cultural and health issues involved in transnational migration, this course invites the student to situate current transnational migration within specific historical social processes within both postcolonial Africa and the postcolonial West. The course examines parallels from the experience of migration in other parts of the world, specifically Asia and Latin America. The aim is an understanding and appreciation of both the interconnectedness of the world's peoples and, crucially, of the world's histories. Prerequisite: SOC 104. LEC.

SOC 660. Sociology of Mental Illness. 3 Hours. S.
The sociology of mental illness concerns itself with the study of mental disorders as social phenomena. The course will be concerned with (1) the social factors and social processes that contribute to mental disorders, (2) the social definitions of mental disorders as forms of social deviance, (3) the social facets in the treatment and care of disordered persons, and (4) the social aspects of the prevention of mental disorders. Prerequisite: A principal course in sociology. LEC.

SOC 661. Causation of Crime and Delinquency. 3 Hours. S.
The individual and social processes that produce violation of legal norms, dealing with society's responses to these violations only insofar as the responses influence the violators. Prerequisite: A principal course in sociology. LEC.

SOC 662. Corrections. 3 Hours. S.
Legal systems for handling offenders and the development of the laws creating these systems. Emphasis on the various parts (police, courts, probation, penal institutions, and parole) of the system will vary. Prerequisite: A principal course in sociology. LEC.

SOC 671. Social Movements. 3 Hours. S.
Social movements as collective action to establish forms of social organization; consideration of reform, revolutionary, sectarian and fashion movements; ideology, esprit de corps, morale and leadership as factors in development and organization. Prerequisite: A principal course in sociology. LEC.

SOC 672. Sociology of War and Peace. 3 Hours. S.
Descriptive and analytic account of cold and hot wars. The concept of enemy. Types of war. Emphasis on personal and collective action in warlike situations. War and international politics. The ideologies of war from the classics to the present. Prerequisite: A principal course in sociology. LEC.

SOC 678. Individual Undergraduate Research. 1-12 Hours. AE61 / S.
Library or field research either as part of an ongoing project or as an independent study project. One to twelve hours. May be taken from one or more faculty during one or more semesters, the total hours not to exceed 12. No more than 3 credits may be applied to satisfy requirements for the sociology major. Prerequisite: Two courses in sociology and consent of instructor. IND.

SOC 699. Capstone in Sociology. 3 Hours. AE61 / S.
In this capstone course, students synthesize the knowledge gained in their substantive courses and use the skills developed in their methodology courses to design and conduct a research project on a current social issue or meeting the research needs of a local community group. The outcome will be a professional quality research report. Prerequisite: SOC 510. LEC.

SOC 707. Seminar in Historical Sociology. 1-4 Hours.
Each seminar will explore problems at the intersection of sociology and history. Topic, instructors, and hours of credit will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics and students may take more than one topic. No prerequisite. LEC.

SOC 722. Sociology of Gender. 3 Hours.
This course will offer a range of sociological perspectives on the role of gender in society. The particular substantive focus will vary each semester to allow flexibility for in-depth analysis of gender relationships in such areas as politics, health and aging, and work. LEC.

SOC 760. Social Inequality. 3 Hours.
A comprehensive review of the major theoretical and empirical approaches used in the study of institutionalized social inequality. Reference to the origins, forms, cultural and structural variations and their changes over time, consequences and ideologies of social inequality. Prerequisite: A distribution course in sociology. LEC.

SOC 762. Seminar in Social Deviation and Control: _____. 3 Hours.
Advanced study of theory and practice relating to deviation. May be repeated as topics vary. Prerequisite: SOC 662 or SOC 661. LEC.

SOC 767. Gerontological Proseminar. 3 Hours.
A proseminar coordinated by the Gerontology Center. The proseminar explores essential areas of gerontology for researchers and practitioners, providing a multidisciplinary (psychology, biology, sociology, and communication) perspective on aging. The proseminar surveys contemporary basic and applied research, service programs, and policy and management issues in gerontology. (Same as ABSC 787, AMS 767, COMS 787, and PSYC 787.) (Formerly HDFL 787.) LEC.
SOC 770. Social Systems and Social Change in the United States. 3 Hours.
Analysis of approaches to the study of sociocultural change in America, with special emphasis on a systems perspective. Seniors by consent of instructor. LEC.

SOC 771. Intergroup Relations and Conflict in American Society. 3 Hours.
Analysis of the dynamics of intergroup relations (e.g., class, religious, ethnic, racial, political) in America with special emphasis on the examination of major theoretical and empirical approaches employed in the study of societal conflict and consensus. LEC.

SOC 780. Advanced Topics in Sociology: _____. 3 Hours.
Topics will vary from semester to semester and instructor to instructor to allow flexibility for in-depth analysis of particular topics. LEC.

SOC 790. Proseminar. 3 Hours.
Introduction to major disciplinary issues, departmental research specialties, faculty research interests, interdisciplinary connections, funding sources, and professional writing. Required of M.A. students entering the graduate program in sociology. May not be taken by those who have credit for SOC 990. Graded on satisfactory/unsatisfactory basis. LEC.

SOC 801. The Rise of Social Theory. 3 Hours.
This is less a survey of intellectual history than an effort to trace the "preclassical" roots of sociological theory. We explore the rise of paradigmatic concerns in the writings of such key figures as Aristotle, Marsilius of Padua, Martin Luther, Etienne de la Boetie, Michel de Montaigne, Charles de Montesquieu, Jean-Jacques Rousseau, Immanuel Kant, G.W.F. Hegel, Flora Tristan, and Ludwig Feuerbach, among others. LEC.

SOC 802. Modern Social Theory. 3 Hours.
This seminar will focus on the late 19th and early 20th century "theories of society," addressing the origins and developmental tendencies of Western modernity and their relation to premodern social orders. Primary texts of the major theorists (e.g., Marx, Durkheim, Nietzsche, Weber, Simmel, and Mead) will be studied in historical context. The tradition's analytical and critical resources and problematic features will also be explored. Finally, the connections between this tradition and contemporary sociological approaches will be explored. LEC.

SOC 803. Issues in Contemporary Theory: _____. 3 Hours.
A critical examination of recent trends and debates in sociological theory. This is a thematically oriented course in which classical as well as contemporary views will be explored. Attention will be directed to theoretical issues under discussion in fields such as symbolic interactionism, semiology, ethnomethodology, critical theory, macrosociology, and others. LEC.

SOC 804. Sociology of Knowledge. 3 Hours.
This course reviews the major sociological approaches to the study of the relationship between thought and the social context within which it arises. A central concern is an examination of the relationship between ideology and social structures, particularly as expressed in the construction of official knowledge. LEC.

SOC 808. Feminist Theories. 3 Hours.
This course will explore and evaluate accounts of social structure, social processes, and consciousness developed in the feminist literature. We will review a range of theoretical arguments, including liberal, historical, materialist, psychoanalytic, cultural, and Black feminist theories. Some of the readings will focus on limitations and distortions within mainstream social theory; others will center on the development of alternative social theory using the standpoint of women as a point of departure. LEC.

SOC 810. Sociological Inquiry. 3 Hours.
The goals of this course are to understand the characteristics of sociologically interesting and rigorous research and to design a research proposal that shares those characteristics. The focus of students' proposals will be the M.A. thesis project for students at the M.A. level and the dissertation project for students at the Ph.D. level. Students will read books and articles representing a variety of research approaches (ethnographies, surveys, interviews, document analyses, historical studies, comparative research, etc.), and will analyze those approaches in order to understand their theoretical and methodological significance. Students will also distribute their proposals to the other students in the course for comment and critique. Assignments will include a completed M.A. thesis proposal for students at the M.A. level and a completed dissertation proposal for students at the Ph.D. level. Course may be repeated for credit toward graduate degree. Prerequisites: The course is open only to students enrolled in the Sociology graduate program. LEC.

SOC 811. Sociological Research. 3 Hours.
The use of the scientific method to study social phenomena including: the formulation and testing of hypotheses; techniques for collecting data; measuring social variables; interpreting research findings; the relationship of theory and facts. Course may be repeated for credit toward graduate degree. Prerequisite: The course is open only to students enrolled in the Sociology graduate program. LEC.

SOC 812. Analytic Methods in Sociology. 3 Hours.
Consideration of quantitative methods of analysis including both parametric and non-parametric techniques. Prerequisite: A course in statistics. LEC.

SOC 813. Field Methods and Participant Observation. 3-5 Hours.
Will acquaint the student both theoretically and empirically with the procedures and logics of the research techniques employed by individuals or small research teams conducting qualitative fieldwork. Prerequisite: A distribution course in sociology. FLD.

SOC 814. Health Services Research: Epidemiology, Evaluation, and Survey Methods. 3 Hours.
Students learn the logic, assumptions, designs, and procedures involved in conducting the major types of research found in the health services field. Students develop an informed basis for critically evaluating the methodological adequacy of research studies in the areas of descriptive and analytic epidemiology, program evaluation, and health-related survey research as well as working knowledge of the research process itself. Emphasis is placed on examining basic health services issues such as measuring quality of care, understanding the role of social factors in the etiology of disease, determining the health status and health needs of populations, and incorporating health services research into organizational policy and decision-making. LEC.

SOC 820. Political Sociology. 3 Hours.
This course offers an overview of the different perspectives and key arguments comprising the field of political sociology, including both classical and contemporary readings. The issues studied in this field include the nature of power and the nature of the state, relations between state and society, and social movements, political organization and civic participation, political culture, voting behavior, comparative political systems, warfare, democracy and economic development, citizenship, nationalism, revolutions, and globalization. LEC.

SOC 824. Health and Social Behavior. 3 Hours.
This course provides students with an analytic understanding of the organization, professional, and interpersonal behavior that characterizes contemporary health and health care. Emphasis is placed on examination and integration of conceptual frameworks theories, and research findings.
bearing on basic behavioral/managerial issues such as authority relations in health care settings, models of illness behavior and health services utilization, the impact of organizational structure on employee and client attitudes and behavior, and the culture of professional medicine in relation to patient care. LEC.

SOC 830. Latin American Society. 3 Hours.
Aspects of the social organization of main Latin American nations, including, e.g., race/ethnicity, social class, gender, urbanization, socioeconomic development, revolution, and relations with the U.S. Emphasis on sociological theories of Latin American development. Prerequisite: A principal course in sociology or ANTH 108 or ANTH 308, plus junior-senior or graduate student standing. LEC.

SOC 873. International Political Economy. 3 Hours.
Provides a broad survey of major developments in the field. Topics include the intellectual origins of international political economy; the historical evolution of the international system; North-South and Western trade, investment, and monetary relations; foreign aid, debt technology transfer, development, international economic institutions (e.g., International Monetary Funds, World Bank, Multinational Corporations, etc.). (Same as POLS 973.) LEC.

SOC 875. The Political Economy of Globalization. 3 Hours.
The course will acquaint students with recent developments in the global economy, including its impact on politics and society. Topics include theories of globalization, the role of the nation-state and international agencies in socioeconomic development, inequality from a global perspective, immigration and citizenship, globalization and democracy, and the rise of transnational social movements. LEC.

SOC 891. Individual Master's Readings. 1-6 Hours.
Individual study of special topics or problems by students working on a master's degree. RSH.

SOC 892. Teaching Seminar. 1-3 Hours.
Seminar on sociology course design and development. Topics covered include syllabus design, exam strategies and design, course design, content of and approaches to teaching introductory and other sociology courses, student grading and evaluation. Required of all teaching assistants assigned to courses in sociology. May not be repeated for credit toward graduate degree. LEC.

SOC 899. Thesis. 1-8 Hours.
TUE.

SOC 900. Seminar on Special Topics in Theory: _____ 1-4 Hours.
Each seminar will explore problems of theory in sociology. Topic, instructor, and hours of credit will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics, and a student may take more than one topic. LEC.

SOC 910. Seminar on Special Topics in Methods: _____ 1-4 Hours.
Each seminar will explore problems of methods in sociology. Topic, instructor, and hours of credit will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics, and a student may take more than one topic. LEC.

SOC 920. Seminar on Special Topics in Social Organizations: _____ 1-4 Hours.
Each seminar will explore problems of social organization in sociology. Topic, instructor, and hours of credit will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics, and a student may take more than one topic. LEC.

SOC 930. Seminar on Special Topics in Comparative Studies: _____ 1-4 Hours.
Each seminar will explore problems of comparative studies in sociology. Topic, instructor, and hours of credit will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics, and a student may take more than one topic. LEC.

SOC 940. Seminar on Topics in Demography, Ecology, and Community: _____ 1-4 Hours.
Each seminar will explore problems of demography, ecology, and community in sociology. Topic, instructor, and credit hours will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics, and a student may take more than one topic. LEC.

SOC 950. Seminar on Special Topics in Social Psychology: _____ 1-4 Hours.
Each seminar will explore problems of social psychology in sociology. Topic, instructor, and hours of credit will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics, and a student may take more than one topic. LEC.

SOC 960. Seminar on Special Topics in Deviance and Social Problems: _____ 1-4 Hours.
Each seminar will explore problems of deviance and social problems in sociology. Topic, instructor, and hours of credit will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics, and a student may take more than one topic. LEC.

SOC 970. Seminar on Special Topics in Social Conflict and Change: _____ 1-4 Hours.
Each seminar will explore problems of social conflict and change in sociology. Topic, instructor, and hours of credit will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics, and a student may take more than one topic. LEC.

SOC 980. Special Topics in Sociology: _____ 1-3 Hours.
Topics will vary by semester and instructor to allow flexibility for in-depth analysis of particular topics that do not fit into one of the other 900 level seminars. LEC.

SOC 991. Individual Doctoral Readings. 1-6 Hours.
Individual study of special topics or problems by students working on a doctorate. RSH.

SOC 999. Dissertation. 1-12 Hours.
TUE.

Spanish Portuguese Courses
PORT 104. Elementary Brazilian Portuguese I. 5 Hours. U.
Five hours of class per week, plus supplementary work in language laboratory. Essentials of grammar, elementary syntax and composition, easy reading. Emphasis on conversation. LEC.

PORT 106. Elementary Brazilian Portuguese, Accelerated I. 3 Hours. U.
Three meetings weekly, plus supplementary work in language laboratory. Designed for students proficient in Spanish (or with previous work in Portuguese) to acquire proficiency in Portuguese more rapidly. Covers the same material as PORT 104. Prerequisite: SPAN 216 or equivalent. LEC.

PORT 108. Elementary Brazilian Portuguese II. 5 Hours. U.
Five hours of class per week plus supplementary work in language laboratory. A continuation of PORT 104. Prerequisite: PORT 104. LEC.

PORT 110. Elementary Brazilian Portuguese, Accelerated II. 3 Hours. U.
A continuation of PORT 106. Prerequisite: PORT 106. LEC.
PORT 177. First Year Seminar: _______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Portuguese. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

PORT 212. Intermediate Brazilian Portuguese I. 3 Hours. U.
A review of Brazilian Portuguese grammar, with practice in reading, composition, and conversation through the study and discussion of Brazilian prose selections. Prerequisite: PORT 108 or PORT 110. LEC.

PORT 216. Intermediate Brazilian Portuguese II. 3 Hours. U.
A continuation of PORT 212. Prerequisite: PORT 212. LEC.

PORT 220. Intensive Intermediate Brazilian Portuguese. 3-6 Hours. U.
Five hours of class and an additional hour in the language laboratory. The course is designed for students who began the study of Portuguese in PORT 106 and PORT 110, and for superior students in PORT 104 and PORT 108. The material covered is the same as in PORT 212 and PORT 216. Prerequisite: PORT 110, PORT 108 with a grade of A or B, or consent of instructor. Open only to members of the Summer Language Institute in Vitoria-Vila Velha, Brazil. LEC.

PORT 300. Brazilian Culture. 3 Hours. HT AE42 / H.
Prehistoric and colonial Portuguese origins of Brazil and its independent development in the nineteenth and twentieth centuries. Key aspects of economic, political, and social factors; special attention to intellectual history. Readings in English. LEC.

PORT 320. Introduction to Portuguese and Brazilian Literatures. 3 Hours. H/W.
A more advanced reading course serving as an introduction to the study of Luso-Brazilian literature, with discussion in Portuguese of the material read. Prerequisite: A fourth semester course in Portuguese or consent of instructor. LEC.

PORT 340. Textual Analysis and Critical Reading. 3 Hours. HL / H.
Introduction to Brazilian cultural and literary studies. Critical readings and interpretation of Brazilian cultural expressions with emphasis on acquiring the skills and vocabulary for discussing and writing critical analyses. Conducted in Portuguese. Not open to students who have taken PORT 540. Prerequisite: Grade of A or B in PORT 216 or consent of instructor. LEC.

PORT 347. Brazilian Studies: _______. 3 Hours. H.
A topics course dedicated to the study of special historical moments, topics, authors, or themes in literary and cultural history. The course may cover multiple genres and periods. Course conducted in Portuguese and may be repeated for credit as the topic varies. Not open to students who have taken PORT 547. Prerequisite: PORT 216 or consent of instructor. LEC.

PORT 348. Portuguese Language and Brazilian Culture for Business. 3 Hours. H.
Cultural studies approach to contemporary Brazilian society for students interested in business. Explores how Brazilians negotiate their place in a global cultural context and how they perceive business (negocios). Readings include selections from literature, history, journalism, social analysis, and popular culture. Exercises help English speakers develop analytical skills as well as vocabulary and communication skills related to business and professional life in Brazil. Conducted in Portuguese. Not open to students who have taken PORT 548. Prerequisite: PORT 216 or consent of instructor. LEC.

PORT 365. Studies in Brazilian Film: _______. 3 Hours. H.
A theoretical and historical approach to Brazilian film with particular attention to thematic concerns, such as cultural and national identity, and of literary discourse. Given in Portuguese or English. May be repeated for credit as topic varies. Students will be expected to attend film screenings in addition to regular class meetings. Not open to students who have taken PORT 565. Prerequisite: Consent of instructor. LEC.

PORT 388. Intermediate Brazilian Portuguese Conversation. 1 Hour. U.
Two recitations weekly. Prerequisite: PORT 104 or PORT 106. LEC.

PORT 394. Special Readings in Brazilian Studies. 1-3 Hours. H.
Direct readings in (a) fields not covered by student's course work, and/or (b) field of student's special interest approved by the department. May be repeated for credit if content varies. Prerequisite: PORT 216 and three-hours upper-division credit in Portuguese, or consent of instructor. LEC.

PORT 471. Studies in Brazilian Culture and Civilization: _______. 1-3 Hours. H.
A study of Brazilian culture with emphasis on one or more of the following aspects: history, politics, ethnology, anthropology, religious and secular traditions, issues of cultural identity, music, art, architecture, and popular culture. Available only to study-abroad participants. May be repeated for credit if content varies. LEC.

PORT 475. Studies in Brazilian Literature: _______. 1-3 Hours. H.
A study of the literature of a particular author, group of authors, period, genre, region, or theme. Available only to study-abroad participants. May be repeated for credit if content varies. LEC.

PORT 488. Advanced Brazilian Portuguese Conversation. 1 Hour. U.
Two recitations weekly. More advanced than PORT 388. Prerequisite: PORT 108, PORT 110, or PORT 388. LEC.

PORT 490. Intensive Advanced Portuguese. 3-6 Hours. H/W.
Advanced composition, conversation, and stylistics, plus an introduction to Brazilian culture. Offered only during the Summer Language Institute in Brazil. Prerequisite: Four semesters of Portuguese, or consent of instructor. Open only to members of the Summer Language Institute in Vitoria-Vila Velha, Brazil. LEC.

PORT 509. Portuguese Phonetics and Phonology. 3 Hours. H/W.
A study of the phonology of the carioca (Rio de Janeiro) dialect of Brazilian Portuguese, and an introduction to other major Brazilian and Portuguese dialects. Prerequisite: Nine hours of Portuguese, or consent of instructor. LEC.

PORT 540. Textual Analysis and Critical Reading. 3 Hours. HL / H.
A more intensive treatment of the content of PORT 340. Not open to students who have taken PORT 340. Prerequisite: Consent of instructor. LEC.

PORT 547. Brazilian Studies: _______. 3 Hours. H.
A more intensive treatment of the content of PORT 347. Not open to students who have taken PORT 347. Prerequisite: PORT 216 or consent of instructor. LEC.

PORT 548. Portuguese Language and Brazilian Culture for Business. 3 Hours. H.
A more intensive treatment of the content of PORT 348. Not open to students who have taken PORT 348. Prerequisite: Consent of instructor. LEC.

PORT 560. Survey of Portuguese Literature. 3 Hours. H/W.
Emphasis on Gil Vicente, Camoes, Eca de Queiroz, and Fernando Pessoa. Prerequisite: A fourth semester course in Portuguese or consent of instructor. LEC.
PORT 565. Studies in Brazilian Film: ______. 3 Hours. H.
A more intensive treatment of the content of PORT 365. Not open to students who have taken PORT 365. Prerequisite: Consent of instructor. LEC.

PORT 611. Accelerated Basic Portuguese for Spanish Speakers. 3 Hours. U.
Contrastive phonological and morphological analysis of standard Spanish and the major dialect of Brazilian Portuguese, followed by a presentation of major grammatical and phonological stumbling blocks for Spanish speakers. Drills on grammar, syntax, and pronunciation emphasize those areas in which Brazilian Portuguese differs most significantly from Spanish. Prerequisite: Graduate student status in Spanish. Undergraduates in Spanish may be admitted with consent of instructor. LEC.

PORT 612. Accelerated Basic Portuguese for Spanish Speakers II. 3 Hours. U.
A continuation of PORT 611, with special emphasis on reading and writing skills. Prerequisite: PORT 611. LEC.

PORT 740. Survey of Brazilian Literature. 3 Hours.
A survey of Brazilian literature from 1500 to present. Prerequisite: A fourth semester course in Portuguese or consent of instructor. LEC.

PORT 742. The Brazilian Novel. 3 Hours.
The development of the novel in Brazil and analysis of representative works of the nineteenth and twentieth centuries. Prerequisite: A fourth semester course in Portuguese or consent of instructor. LEC.

PORT 746. The Brazilian Short Story. 3 Hours.
The development of the short story in Brazil and analysis of representative works of the nineteenth and twentieth centuries. Prerequisite: A fourth semester course in Portuguese or consent of instructor. LEC.

PORT 750. Brazilian Poetry. 3 Hours.
A study of the principal movements and an analysis of representative works from the colonial period to the present. Emphasis on modernists and post-modernists. Prerequisite: A fourth semester course in Portuguese or consent of instructor. LEC.

PORT 760. Contemporary Brazilian Literature. 3 Hours.
A survey of Brazilian cultural expressions and literature in the Twentieth Century. Conducted in Portuguese. Prerequisite: PORT 216 or consent of instructor. LEC.

PORT 780. Special Readings in Portuguese and Brazilian Literature. 1-3 Hours.
May be taken more than once; total credit not to exceed five hours. Directed private readings with conferences with instructor. Prerequisite: Consent of department. RSH.

PORT 785. Special Topics in Brazilian Cultural and Literary Studies: ______. 3 Hours.
Topics vary by semester. The course may be taken more than once, with full credit, provided there is no duplication in the material covered. Conducted in Portuguese. LEC.

PORT 930. Seminar in Portuguese Literature: ______. 3 Hours. LEC.
PORT 970. Seminar in Brazilian Literature: ______. 3 Hours. LEC.

SPAN 100. Spanish Reading Course. 3 Hours. U.
A special course for candidates for advanced degrees designed to aid them in obtaining a reading knowledge of Spanish. Intensive study of the fundamentals of grammar, proceeding to the reading of material of medium difficulty. Open to graduate students and to seniors who are applying for entrance to a graduate school. The course does not satisfy any part of the undergraduate language requirement. This course is primarily for graduate students who are fulfilling their language requirement(s) for advanced degrees. LEC.

SPAN 101. Orientation Seminar in Spanish and Portuguese. 1 Hour. H.
Provides an overview of the field of Hispanic Studies. Emphasizes developing an understanding of opportunities in Spanish and Portuguese at KU and the Spanish and Portuguese program curricula, exploring service-learning and other extracurricular options available at KU and beyond, and helping students plan goals for their education through an understanding of their personal values and aspirations as they relate to the field. Graded on a satisfactory/unsatisfactory basis. LEC.

SPAN 104. Elementary Spanish I. 5 Hours. U.
For beginning students of Spanish. Not open to students who have had any previous study of Spanish. Active preparation and participation required. Classes conducted in Spanish. Not open to native speakers of Spanish. Offered in fall semester. LEC.

SPAN 107. Elementary Spanish Conversation. 1-4 Hours. U.
Activities to improve elementary level conversation skills. Does not fulfill any portion of the College of Liberal Arts and Sciences foreign language requirement. Available only to study abroad participants. LEC.

SPAN 108. Elementary Spanish II. 5 Hours. U.
Only for students who have completed SPAN 104 at the University of Kansas. This course prepares students for Intermediate level study of Spanish. Active preparation and participation is required. Classes conducted in Spanish. Not open to native speakers of Spanish. Offered in spring semester. Prerequisite: SPAN 104. LEC.

SPAN 111. Intensive Elementary Spanish. 5 Hours. AE41 / U.
For students who have had some previous study of Spanish, but who do not place into the Intermediate level. This course prepares students for Intermediate level study of Spanish. Active preparation and participation required. Classes conducted in Spanish. Not open to native speakers of Spanish. Prerequisite: At least one previous high school or college course in Spanish. LEC.

SPAN 170. Hispanic Language, Culture and Civilization I-A: ______. 1-3 Hours. U.
For students in their first year of language study or the equivalent. An intensive orientation to the culture of Spanish-speaking countries. Includes elements of grammar, conversation, and composition. Available only to study abroad participants. Will not count toward the Spanish major nor the language requirement. May be repeated for credit if content varies. LEC.

SPAN 171. Hispanic Language, Culture and Civilization I-B: ______. 1-3 Hours. U.
A continuation of SPAN 170. For students in their first year of language study or the equivalent. An intensive orientation to the culture of Spanish-speaking countries. Includes elements of grammar, conversation, and composition. Available only to study abroad participants. Will not count toward the Spanish major nor the language requirement. May be repeated for credit if content varies. LEC.

SPAN 177. First Year Seminar: ______. 3 Hours. HL GE11.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in Spanish. May not contribute to major requirements in Spanish. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.
SPAN 212. Intermediate Spanish I. 3 Hours. AE42 / U.
A fully integrated content-based and form-focused approach to intermediate-level Spanish. Students process and practice a wide range of vocabulary and grammatical structures in order to complete tasks that promote critical exploration of the Spanish-speaking world and the development of listening, reading, speaking, writing, and intercultural competencies. Classes conducted in Spanish. Not open to native speakers of Spanish. Prerequisite: SPAN 108 or SPAN 111 with grade of A, or permission of the department LEC.

SPAN 216. Intermediate Spanish II. 3 Hours. AE42 / U.
A continuation of SPAN 212. A fully integrated content-based and form-focused approach to intermediate-level Spanish. Students process and practice a wide range of vocabulary and grammatical structures in order to complete tasks that promote critical exploration of the Spanish-speaking world and the development of listening, reading, speaking, writing, and intercultural competencies. Emphasis on process writing. Classes conducted in Spanish. Not open to native speakers of Spanish. Prerequisite: SPAN 212 or placement. LEC.

SPAN 217. Honors Intermediate Spanish II. 3 Hours. AE42 / U.
Not open to native speakers of Spanish. Prerequisite: SPAN 212 or SPAN 213 with a grade of A, or permission of the department. LEC.

SPAN 220. Intensive Intermediate Spanish. 6 Hours. U.
This course is designed for students who would like to acquire proficiency in Spanish more rapidly. The material covered in the course is the same as in SPAN 212 and 216. Not open to native speakers of Spanish. Available only to study abroad participants in KU's Summer Language Institute in Barcelona, Spain. Prerequisite: SPAN 108 or SPAN 111, with a grade of A or B. LEC.

SPAN 270. Hispanic Language, Culture and Civilization II-A: _____.
1-3 Hours. U.
For students in their second year of language study or the equivalent. An intensive orientation to the culture of Spanish-speaking countries. Includes elements of grammar, conversation, and composition. Available only to study abroad participants. Will not count toward the Spanish major nor the language requirement. May be repeated for credit if content varies. LEC.

SPAN 271. Hispanic Language, Culture and Civilization II-B: _____.
1-3 Hours. U.
A continuation of SPAN 270. For students in their second year of language study or the equivalent. An intensive orientation to the culture of Spanish-speaking countries. Includes elements of grammar, conversation, and composition. Available only to study abroad participants. Will not count toward the Spanish major nor the language requirement. May be repeated for credit if content varies. LEC.

SPAN 300. Developments in Hispanic Cultures. 3 Hours. HL AE42 / H.
The development of social and cultural patterns in the Spanish-speaking world, including the intersection of those patterns with issues related to politics, economics and/or personal values. Assigned readings may be in English or in Spanish. Does not count toward the Spanish major. Prerequisite: SPAN 108, SPAN 109, or SPAN 111; or two years of high school Spanish. LEC.

SPAN 302. The Spanish Inquisition. 3 Hours. H.
A broad historical study of the Spanish Inquisition from 1478 to its aftermath in modern culture, including its use in political debates and its depiction in popular culture. Topics include anti-Semitism, the nature of the inquisitorial investigation, the use of torture, censorship and the relationship between the Inquisition, the Spanish monarchy and other religious and lay authorities. Taught in English. Will not count toward the Spanish major. (Same as HIST 325 and JWSH 315.) LEC.

SPAN 322. Spanish Grammar: Form and Meaning in Context. 3 Hours. U.
Analysis of the most important morphological and syntactic phenomena with an emphasis on their form and function through a review of salient grammatical points in preparation for advanced work in Spanish. Recommended for students who have completed SPAN 216, 217, or 220 with a grade of C or higher, or placement through examination. Course does not count toward the Major. Prerequisite: Four semesters of college-level Spanish or the equivalent. Students who have taken Spanish 324 may take this course with the permission of instructor. LEC.

SPAN 323. Spanish Composition and Cultural Analysis. 3 Hours. U.
Systematic review of writing in Spanish, intensive study of vocabulary and stylistics for formal written communication, and development of essential writing and analytical skills for advanced courses in Spanish. Prerequisite: SPAN 216, or SPAN 217, or SPAN 220, or consent of instructor. LEC.

SPAN 324. Grammar and Composition. 3 Hours. U.
Systematic grammar review and development of essential writing skills for advanced courses in Spanish. Concurrent enrollment in SPAN 328 required. Recommended for students with a grade of B or better in SPAN 216, SPAN 217, or SPAN 220. Prerequisite: SPAN 216 or SPAN 217 with a grade of "C" or higher, or SPAN 220, or SPAN 322, or consent of instructor. LEC.

SPAN 326. Spanish for Health Care Workers. 3 Hours.
This course is designed to provide students with the linguistic and cultural competencies necessary to communicate with and help treat Spanish speaking patients with limited English proficiency. Includes a general review of pertinent grammar, specific vocabulary groups relating to assessment and care of patients, vocabulary to establish rapport, and discussions leading to cultural competencies. Not open to students who have completed SPAN 424 or above. Prerequisite: Completion of Spanish 216 with a grade of C or better. LEC.

SPAN 328. Intermediate Spanish Conversation. 2 Hours. U.
Conversational reinforcement of topics presented in SPAN 324 with an emphasis on oral communication skills in a cultural context. Concurrent enrollment in SPAN 324 required. Two class meetings per week. Not available to study abroad participants. Prerequisite: SPAN 216 or SPAN 217 with a grade of C or higher; or SPAN 220; or SPAN 322; or consent of instructor. LEC.

SPAN 329. Intermediate Spanish Conversation II. 1 Hour. U.
Two class meetings per week. Continuation of SPAN 328. Not open to native speakers of Spanish. Prerequisite: SPAN 328 or consent of instructor. LEC.

SPAN 330. Service Learning Internship Spanish I. 3 Hours. U.
An opportunity for students to utilize and improve their Spanish language skills in an internship or volunteer work in business, schools, government, hospitals, churches, and various types of service organizations. Students must have approval of instructor to register and must provide written confirmation of acceptance for volunteer work in an agency that provides service to a Spanish-speaking public before the course begins. Periodic supervisor evaluations and a reflection journal in Spanish are required, in addition to other materials requested by the instructor. Class format may be an independent internship taken for variable credit under instructor supervision. Will not count toward Spanish major. Prerequisite: Students must have completed a minimum of 12 hours of Spanish in courses at the 200-level or above, and completion of SPAN 324 with a grade of B or better. LEC.
SPAN 340. Textual Analysis and Critical Reading. 3 Hours. HL GE3H / H/W.
Critical readings and interpretation of Hispanic literatures, with emphasis on acquiring the skills and vocabulary necessary for discussing and writing literary analyses. Prerequisite: SPAN 324 and SPAN 328 with a grade of B- or higher, or consent of instructor. LEC.

SPAN 346. Transatlantic Hispanic Cultures. 3 Hours. H.
This course offers an introductory overview of Hispanic cultures, focusing on the political, economic, social, linguistic, and artistic development that shaped the historical and cultural bonds between Latin America and Spain. Enhances the cultural competence acquired in previous Spanish classes and prepare students for upper-level work in the major. Taught in Spanish. Prerequisite: Span 324. A grade of “C” or better in SPAN 324 is strongly recommended for students enrolling in this course. Not open to students who have already taken SPAN 370, SPAN 371, SPAN 446, SPAN 447, SPAN 470, or SPAN 471. LEC.

SPAN 370. Hispanic Language, Culture and Civilization III-A: ____. 1-3 Hours. U.
An intensive orientation to the culture of Spanish-speaking countries. Also includes elements of grammar, conversation, and composition. Available only to study-abroad participants. Will not count toward the Spanish major. May be repeated for credit if content varies. LEC.

SPAN 371. Hispanic Language, Culture and Civilization III-B: ____. 1-3 Hours. U.
A continuation of SPAN 370. An intensive orientation to the culture of Spanish-speaking countries. Also includes elements of grammar, conversation, and composition. Available only to study abroad participants. Will not count toward the Spanish major. May be repeated for credit if content varies. LEC.

SPAN 390. Interpretation of Hispanic Literature. 3 Hours. H.
A study of selected works in literary theory that are pertinent to the field of Hispanism and of selected problems in literary interpretation and comparative literature methodology, designed to examine and apply systematically basic critical principles and approaches to the field of Hispanic literature. Discussion of these approaches is related to the previous study of literature and deepened through individual papers written by participants and presented to the group. Does not count toward the major in Spanish. Prerequisite: Completion of one junior-senior course in a language and literature department. LEC.

SPAN 424. Advanced Spanish Composition and Grammar. 3 Hours. H/W.
Extensive practice in writing, with attention to vocabulary, grammar usage, and discourse structure. Thorough review of syntax and grammar. Conducted in Spanish. Concurrent enrollment in SPAN 428 is strongly recommended. Prerequisite: SPAN 428 or consent of instructor. A grade of “C” or better in SPAN 424 is strongly recommended for students enrolling in this course. LEC.

SPAN 428. Advanced Spanish Conversation. 2 Hours. U.
Emphasis on developing fluid expression of opinions, ideas, and points of view through discussion of selected texts and cultural materials. Two class meetings per week. Concurrent enrollment in SPAN 424 recommended. Prerequisite: SPAN 424 or consent of instructor. A grade of C or higher in SPAN 424 is strongly recommended for students enrolling in this course. LEC.

SPAN 429. Spanish Phonetics. 3 Hours. H/W.
An analytical and practical study of contemporary Spanish phonetics. Prerequisite: SPAN 424 and SPAN 428, or consent of instructor. LEC.

SPAN 440. Hispanic Studies: _____. 3 Hours. H/W.
A topics course dedicated to the study of special historical moments, topics, authors, or themes in literary and cultural history. Readings may include selections from both Spain and the countries of Spanish America. The course may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of “C” or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 441. Special Topics in Spanish Literature and Culture: _____. 1-3 Hours. H.
A topics course dedicated to the study of special historical moments, topics, authors, or themes in Spanish literary and cultural history. The course may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and may be repeated for credit as the topic varies. This course may be used to partially or fully fulfill 400-level peninsular Spanish literature requirement. Prerequisite: SPAN 340. LEC.

SPAN 442. Special Topics Latin American Literature and Cultures: _____. 1-3 Hours. H.
A topics course dedicated to the study of special historical moments, topics, authors, or themes in Latin American literary and cultural history. The course may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and may be repeated for credit as the topic varies. This course may be used to partially or fully fulfill 400-level peninsular Latin American literature requirement. Prerequisite: SPAN 340. LEC.

SPAN 446. Spanish Culture. 3 Hours. H/W.
A study of the development of Spanish culture with particular emphasis on history, customs and traditions, and literary trends and artistic tendencies that constitute Spain’s specific contribution to Western civilization. Conducted in Spanish. Prerequisite: SPAN 440 or consent of instructor. A grade of “C” or better in SPAN 446 is strongly recommended for students enrolling in this course. LEC.

SPAN 447. Latin American Cultures: _____. 3 Hours. H/W.
The description and interpretation of Latin American cultures, with particular attention to history, ethnology, folklore, and the arts. The course may focus on particular countries or geographical areas. Conducted in Spanish. May be repeated for credit as topic varies. Prerequisite: SPAN 440 or consent of instructor. A grade of “C” or better in SPAN 447 is strongly recommended for students enrolling in this course. LEC.

SPAN 448. Spanish Language and Culture for Business. 3 Hours. H.
Cultural studies approach to contemporary Spanish American societies for students with an interest in business. Explores how individuals from Spanish American countries negotiate their place in a new cultural context, and how different groups in Spanish America perceive business (negocios). Readings include selections from literature, history, journalism, social analysis, and popular culture. Exercises help non-native speakers develop analytical skills as well as vocabulary and communication skills related to international business and professional life. Conducted in Spanish. Prerequisite: SPAN 323 or SPAN 324, or consent of instructor. LEC.

SPAN 450. Medieval Spanish Studies: _____. 3 Hours. H.
Reading and analysis of Spanish literature and culture to 1500. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 440 or consent of instructor. A grade of “C” or better in SPAN 450 is strongly recommended for students enrolling in this course. LEC.
SPAN 451. Early Modern Spanish Studies: ______. 3 Hours. H.
Reading and analysis of Spanish literature and culture from 1500 to 1800. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 452. Nineteenth Century Spanish Studies: ______. 3 Hours. H.
Reading and analysis of the literature and culture of Spain of the 1800s. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 453. Twentieth Century Spanish Studies: ______. 3 Hours. H.
Reading and analysis of the literature and culture of Spain from 1900 to the present. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 460. Colonial Spanish-American Studies: ______. 3 Hours. H.
Reading and analysis of Spanish-American literature and culture from the Conquest to Independence, organized by topic. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 461. Nineteenth Century Spanish-American Studies: ______. 3 Hours. H.
Reading and analysis of Spanish-American literature and culture from Independence to 1900, organized by topic. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 462. Twentieth Century Spanish-American Studies: ______. 3 Hours. H.
Reading and analysis of Spanish-American literature and culture from 1900 to the present, organized by topic. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 463. National Traditions in Spanish America: ______. 3 Hours. H.
Reading and analysis of Spanish-American literature and cultural history from the perspective of a selected nation or nations. The course explores the role of literature and cultural expression in constructing the modern nation and local traditions. Readings may cover selections from multiple genres, authors, and periods. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 464. Reading and Analysis of U.S. Latino/a Literatures: ______. 3 Hours. H.
The course covers multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of C or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 470. Studies in Spanish Culture and Civilization: ______. 1-3 Hours. H.
A study of Spanish culture with emphasis on one or more of the following aspects: history, politics, ethnology, anthropology, religious and secular traditions, issues of cultural identity, music, art, architecture, and popular culture. Available only to study-abroad participants. Maybe repeated for credit if content varies. LEC.

SPAN 471. Studies in Spanish-American Culture and Civilization: ______. 1-3 Hours. H.
A study of Spanish American national or regional culture with emphasis on one or more of the following aspects: history, politics, ethnology, anthropology, religious and secular traditions, issues of cultural identity, music, art, architecture, and popular culture. Available only to study-abroad participants. Maybe repeated for credit if content varies. LEC.

SPAN 474. Studies in Spanish Literature and Culture: ______. 1-3 Hours. H.
A study of the literature and cultural production of a particular author, group of authors, period, genre, region, or theme. Available only to study-abroad participants. Maybe be repeated for credit if content varies. LEC.

SPAN 475. Studies in Latin-American Literature and Culture: ______. 1-3 Hours. H.
A study of the literature and cultural production of a particular author, group of authors, period, genre, country, region, or theme. Available only to study-abroad participants. May be repeated for credit if content varies. LEC.

SPAN 494. Special Readings in Spanish. 1-3 Hours. H/W.
Directed reading in (a) fields not covered by student's course work, and/or (b) field of student's special interest approved by the department. Conferences. May be repeated for credit if content varies. Prerequisite: Twenty-five hours of Spanish. IND.

SPAN 496. Honors in Spanish. 3 Hours. AE61 / H/W.
Honors seminar. May be repeated for credit. Required of all students working for a degree with honors in Spanish. IND.

SPAN 500. Hispanic Literature in Translation: ______. 3 Hours. H.
A study of the literature in English translation of a particular author, period, genre, country, region, or theme. Discussion in English and frequent critical papers. All course readings and writing assignments are also in English. May be repeated for credit as the topic varies. Will not count toward the Spanish major. Prerequisite: Completion of one junior-senior level literature course in any language. LEC.

SPAN 501. Studies in Hispanic Literature: ______. 3 Hours. H.
A study of the literature of a particular author, period, genre, country, region, or theme. Discussion in English and frequent critical papers. May be repeated for credit as the topic varies. May be taken for elective credit in the Spanish major. All course readings and writing assignments are in Spanish. Will not count toward the Latin American literature requirement in the Spanish major. Prerequisite: SPAN 340, plus completion of one junior-senior level literature course in any language. LEC.

SPAN 520. Structure of Spanish. 3 Hours. H/W.
A study of the Spanish language as it is spoken today, from perspectives of contemporary linguistics. Reading and analysis of recent publications in the field. Prerequisite: SPAN 424 and SPAN 428, or consent of the instructor. LEC.
SPAN 522. Advanced Studies in Spanish Language: ______. 3 Hours. H/W.
Extensive language analysis and practice on one topic such as stylistics, translation, conversation/spoken discourse, or creative writing. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 424 and SPAN 428, or consent of the instructor. LEC.

SPAN 540. Colloquium on Hispanic Studies: ______. 3 Hours. AE61 / H.
An advanced course dedicated to the critical study of special historical moments, topics, authors or themes in literary and cultural history. This course is designed to provide sophistication, focus, and analytical depth in literary and cultural study through exploration of secondary sources as well as theoretical material. Reading may include selections from both Spain and the countries of Spanish America and may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 424 and six hours of 400-level Spanish literature courses. LEC.

SPAN 550. Colloquium on Spanish Film. 3 Hours. AE61 / H.
A theoretical and historical exploration of Spanish cinema with particular attention devoted to the films of Berlanga, Bunuel, Gutierrez Aragon, Saura, Eiric, and Almodovar. Students will be expected to attend film screenings in addition to regular class meetings. Prerequisite: SPAN 424 and six hours of 400-level Spanish literature courses. LEC.

SPAN 560. Colloquium on Latin American Film. 3 Hours. AE61 / H.
An overview of Latin American cinema from its origins to the present with particular attention to thematic concerns, such as cultural and national identity, and of literary discourse. Students will be expected to attend film screenings in addition to regular class meetings. Prerequisite: SPAN 424 and six hours of 400-level Spanish literature courses. LEC.

SPAN 566. Latin American Folklore. 3 Hours. H.
An examination of Latin American folk traditions, the ways they are used to give meaning to life and to define local and national identity. Folk literature, songs, music, dance, foods, fiestas, and material culture are looked at in the light of current folklore theory. Lectures and discussion are in English, some readings may be in Spanish. Prerequisite: SPAN 424 and six hours of 400-level Spanish literature courses. LEC.

SPAN 568. Spanish Ballads. 3 Hours. H/W.
A study of the various types of ballads; traditional, artistic, and popular. Prerequisite: A survey of Spanish literature through the Golden Age. LEC.

SPAN 570. Studies in Hispanic Linguistics: _____. 3 Hours. U.
Theoretical and applied analysis of one or more of the following components of the Spanish language: phonology/phonetics, morphology, syntax, semantics, pragmatics. May be repeated for credit if content varies. Prerequisite: SPAN 424 and SPAN 428. LEC.

SPAN 681. Language Teaching for Oral Proficiency. 1 Hour. U.
A summer course designed principally for secondary school language teachers. Provides an orientation to proficiency-based models in foreign language instruction, national standards in the rating of foreign language proficiency, and curriculum development sessions which address issues of articulation in foreign language curricula. (Not applicable toward a major or graduate degree in Spanish.) (Same as FREN 681 and GERM 681.) LEC.

SPAN 717. History of the Spanish Language. 3 Hours.
The phonological and lexical development of the Spanish language from spoken Latin to the present; major dialectal features. Prerequisite: A course in Spanish phonetics. LEC.

SPAN 720. Syntax and Composition. 3 Hours.
Syntactical analysis of modern Spanish usage; principles of expository writing. Prerequisite: A course in advanced composition or structure, or graduate standing. LEC.

SPAN 722. Special Topics in Spanish Literature: ______. 2-3 Hours.
The content of this course will vary, and the course may be taken more than once with full credit, provided there is no duplication in the material studied. Prerequisite: A survey course in Spanish peninsular literature taught in Spanish. LEC.

SPAN 730. Topics in the Literature of 13th- and 14th-Century Iberia: ______. 3 Hours.
A theoretically informed study of representative works from 13th- and 14th-century Iberia. Course may be repeated for credit provided that the topic changes. LEC.

SPAN 733. Print Culture in Early Modern Spain. 3 Hours.
A study of the literature produced during the period of early printed books with emphasis on the diffusion of new literary forms during the late 15th- and early 16th-centuries. LEC.

SPAN 735. Poetry and Sentimental Romance in Fifteenth-Century Castile. 3 Hours.
Survey of the poetry and prose of the fifteenth century with particular attention to the literature produced during the reign of Isabel de Castilla. LEC.

SPAN 739. Topics in Early Modern Spanish Drama: ______. 3 Hours.
Selected plays of such authors as Lope de Vega, Tirso de Molina, Calderón, and María de Zayas. Course may be repeated for credit provided that the topic changes. LEC.

SPAN 742. Topics in the Early Modern Spanish Prose: ______. 3 Hours.
From the Celestina to the middle of the seventeenth century. Course may be repeated for credit provided that the topic changes. LEC.

SPAN 744. Topics in Early Modern Spanish Poetry: ______. 3 Hours.
A theoretically informed study of selected works of poetry in Spanish from the 15th through 17th centuries. Course may be repeated for credit provided that the topic changes. LEC.

SPAN 745. Don Quixote. 3 Hours.
Linguistic and literary study. Examination of traditional interpretations. The life and thought of Cervantes. Theoretical readings. LEC.

SPAN 750. Spanish Literature of the 18th Century. 3 Hours.
The neo-classic movement; the traditionalist reaction; the beginnings of Romanticism. Prerequisite: A survey course in Spanish literature from the 18th century to the present. LEC.

SPAN 754. Romanticism. 3 Hours.
The development of the Romantic movement in Spain. Prerequisite: A survey course in Spanish literature from the 18th century to the present. LEC.

SPAN 755. 19th Century Spanish Novel. 3 Hours.
The rise and development of realism. Prerequisite: A course in Spanish literature from the 18th century to the present. LEC.

SPAN 760. 19th Century Spanish Drama. 3 Hours.
A survey of the main currents and aesthetics in the nineteenth-century Spanish theatre: Neoclassicism, Romanticism, Costumbrismo, Realismo (Alta Comedia), NeoRomanticism, and the innovations of Galdós and Benavente. Prerequisite: A survey course in Spanish literature from the 18th century to the present. LEC.
SPAN 761. 20th Century Spanish Drama. 3 Hours.
A survey of major plays and playwrights of 20th century Spain with reference to critical theory of text as literature and performance. LEC.

SPAN 762. The Spanish Novel Since the Civil War. 3 Hours.
A study of the major works and movements occurring since the Spanish Civil War. LEC.

SPAN 764. Modern Spanish Poetry. 3 Hours.
Modern poetry of Spain, beginning with Becquer and ending with the “Generation of the 1920’s.” Close study of the works of the major poets; readings in poetic theory. Prerequisite: A general survey course of the literature of Spain of the 18th, 19th, and 20th centuries. LEC.

SPAN 765. Contemporary Spanish Poetry. 3 Hours.
Contemporary poetry of Spain, beginning with the “Generation of the 1920’s” and including the post-Civil War period. Close study of the work of several poets; readings in poetic theory. Prerequisite: A general survey course in the literature of Spain since the Golden Age. LEC.

SPAN 766. The Spanish Modernist Novel. 3 Hours.
A diachronic study of the syntax and morphology of Spanish from the thirteenth century to the present; sound change and orthography; evolution of literary styles. Prerequisite: A course in Spanish phonetics. LEC.

SPAN 770. Spanish-American Drama. 3 Hours.
Study of several exceptional plays of 20th century Spanish America in light of critical methodologies, national theatre movements, and performance aspects. LEC.

SPAN 771. Spanish-American Literature: ___. 3 Hours.
A survey by region or country (Mexican literature, Cuban literature, Argentine literature, Caribbean literature, etc.) of Spanish American literature from the beginning to the present, with emphasis on the 19th and 20th centuries. Course title will vary by country or region. Prerequisite: A survey course in Spanish American literature. LEC.

SPAN 772. The Modern Spanish-American Novel, 1900-1950. 3 Hours.
A study of selected novels in Spanish America from the 1900 to 1950. Topics may vary. Prerequisite: A survey course in Spanish American literature. LEC.

SPAN 773. The Modern Spanish-American Novel Since 1950. 3 Hours.
A study of selected novels in Spanish America since 1950. Topics may vary. Prerequisite: A survey course in Spanish American literature. LEC.

SPAN 774. Spanish-American Poetry. 3 Hours.
A study of the twentieth century poetic tradition in Spanish America, including major movements and a range of poets who represent the variety of writing in the genre until the 21st century. LEC.

SPAN 776. Spanish-American Short Story. 3 Hours.
A study of aspects of the short story tradition in Spanish America from its origins to the present. Topics may vary. Prerequisite: A survey course in Spanish American literature. LEC.

SPAN 781. Colonial Identities. 3 Hours.
This course centers on the dynamics of identity of Creoles, Amerindians, Blacks and members of the castes in colonial Spanish America. It concentrates on how members of these racial and ethnic groups relate to coloniality, space, place and gender. LEC.

SPAN 782. Spanish-American Prose Fiction: ___. 3 Hours.
A survey by region or country (Mexican Prose Fiction, Cuban Prose Fiction, Argentine Prose Fiction, Caribbean Prose Fiction, etc.) of Spanish American Prose Fiction from the beginning to the present, with emphasis on the 19th and 20th centuries. Course title will vary by country or region. Prerequisite: A survey course in Spanish American literature. LEC.

SPAN 784. Spanish-American Modernism and Vanguards. 3 Hours.
A study of the poetry and/or prose of modernismo and the vanguards in Spanish America. Prerequisite: One course in Spanish American literature or permission of instructor. LEC.

SPAN 785. Special Topics in Spanish-American Literature: ___. 2-3 Hours.
The content of this course will vary, and the course may be taken more than once, with full credit provided there is no duplication in the material covered. Prerequisite: A survey course in Spanish American literature. LEC.

SPAN 790. Spanish Linguistics: Theory and Application to Teaching. 3 Hours.
An introduction to linguistics and applied linguistics focused on the phonology, morphology, and syntax of Spanish, including work in tagmemics and transformational grammar. Part of the course deals with problems of language instruction, testing, and use of the language laboratory. LEC.

SPAN 792. Topics in the Picaresque Novel: ___. 3 Hours.
A theoretically informed study of the picaresque mode in Spanish and Spanish-American literature. Course may be repeated for credit provided that the topic changes. LEC.

SPAN 795. Literary Theory and Criticism. 3 Hours.
Systematic study of the development of theories of literature. Emphasis usually placed on twentieth century although scope may vary. Prerequisite: 700-level course in Spanish or concurrent enrollment. LEC.

SPAN 801. Teaching Spanish in Institutions of Higher Learning. 3 Hours.
Required of all teaching assistants who teach beginning Spanish at the University of Kansas for the first time. Instruction in classroom procedures for first year Spanish, demonstration of teaching techniques, and survey of current methodology. FLD.

SPAN 802. Colloquium in Methods of Teaching Spanish Language. 1-3 Hours.
Combines discussion of theoretical teaching concepts and development of pedagogical materials with practical solutions arising concurrently in Spanish languages courses. LEC.

SPAN 817. Spanish Historical Grammar. 3 Hours.
A diachronic study of the syntax and morphology of Spanish from the thirteenth century to the present; sound change and orthography; evolution of literary styles. Prerequisite: A course in Spanish phonetics. LEC.

SPAN 898. Investigation and Conference. 1-10 Hours.
Individually directed work to fill the student's needs not met by available organized courses. One to three hours of credit in any semester. Maximum total credit for the M.A. degree is three hours. May be taken with full credit as often as recommended by department. THE.

SPAN 922. Seminar in Spanish Literature and Culture: ___. 3 Hours.
An intensive investigation of a particular topic in Spanish Literature and Culture; content will vary in terms of topics, genres, and time periods covered. The course may be taken more than once with full credit, provided there is no duplication. Prerequisite: Graduate standing. LEC.

SPAN 940. Seminar in Trans-Atlantic Literatures and Cultures: ___. 3 Hours.

genres, and time periods covered. The course may be taken more than once, with full credit provided there is no duplication. Prerequisite: Graduate standing. SEM.

SPAN 950. Seminar: Spanish Drama: _____ 3 Hours. LEC.
SPAN 952. Seminar: Spanish Novel: _____ 3 Hours. LEC.
SPAN 954. Seminar: Spanish Poetry: _____ 3 Hours. LEC.
SPAN 956. Seminar: Spanish Short Story: _____ 3 Hours. LEC.
SPAN 958. Seminar: Spanish Essay: _____ 3 Hours. LEC.
SPAN 961. Seminar: Medieval Literature: _____ 3 Hours. LEC.
SPAN 962. Seminar: Cervantes: _____ 3 Hours. LEC.
SPAN 970. Seminar: Spanish American Drama: _____ 3 Hours. LEC.
SPAN 972. Seminar: Spanish American Novel: _____ 3 Hours. LEC.
SPAN 974. Seminar: Spanish American Poetry: _____ 3 Hours. LEC.
SPAN 976. Seminar: Spanish American Short Story: _____ 3 Hours. LEC.
SPAN 978. Seminar: Spanish American Essay: _____ 3 Hours. LEC.
SPAN 985. Seminar in Spanish American Literature and Culture: _____ 3 Hours.

An intensive investigation of a particular topic in Spanish American Literatures and Cultures; content will vary in terms of topics, genres, and time periods covered. The course may be taken more than once, with full credit provided there is no duplication. Prerequisite: Graduate standing. SEM.

SPAN 999. Dissertation. 1-12 Hours.

THE.

Speech-Language-Hearing Courses

SPLH 120. The Physics of Speech. 4 Hours. N.

An introduction to the acoustic structure of speech intended for nonscience majors. Emphasis will be placed on the methods and standards by which scientists measure and evaluate the physical characteristics of speech. Topics will include: simple harmonic motion, the propagation of sound waves, aerodynamic aspects of vocal fold vibration, resonance, digital speech processing, frequency analysis, and speech synthesis. Three class hours and one laboratory per week. (Same as LING 120.) Prerequisite: MATH 101 or 104 or equivalent. LEC.

SPLH 177. First Year Seminar: _____ 3 Hours. GE11 / U.

A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Speech-Language and Hearing. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

SPLH 250. Study Abroad Topics in: _____ 1-5 Hours. S.

A course designed to enhance international experience in topic areas related to speech-language-hearing at the freshman/sophomore level.

Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission. LEC.

SPLH 261. Survey of Communication Disorders. 3 Hours. SI GE3S / S.

Provides a general understanding of normal and deviant speech, language, and hearing in adults and children. This course considers the normal development of communication behavior, the nature of communication disorders, and the interaction of speech pathology and audiology with allied fields (e.g., education, medicine, psychology, special education). LEC.

SPLH 320. The Communicating Brain: The Ultimate Personal Computer. 3 Hours. U.

This course introduces the study of human neuroscience with a particular focus on human communication. The course provides an overview of the relevant anatomical structures and function along with an introduction to the methods used to investigate central nervous system function. Students are introduced to the study of perceptual, motor, and language function in the nervous system through a series of examples drawn from normal function and clinical cases. The examples are selected to highlight how these systems develop and are influenced by experience, implantable devices developed to interface with the nervous system, and how computers and animals are used as models to learn about nervous system function. LEC.

SPLH 418. Introduction to Cognitive Science. 3 Hours. S.

Examines the data and methodologies of the disciplines that comprise Cognitive Science, an inter-disciplinary approach to studying the mind and brain. Topics may include: consciousness, artificial intelligence, linguistics, education and instruction, neural networks, philosophy, psychology, anthropology, evolutionary theory, cognitive neuroscience, human-computer interaction, and robotics. (Same as LING 418, PHIL 418, and PSYC 418.) Prerequisite: Consent of instructor. LEC.

SPLH 432. Human Behavioral Genetics. 3 Hours. S.

A survey of human behavioral genetics for upper division undergraduates. Emphasis is on how the methods and theories of quantitative, population, medical, and molecular genetics can be applied to individual and group differences in humans. Both normal and abnormal behaviors are covered, including intelligence, mental retardation, language and language disorders, communication, learning, personality, and psychopathology. (Same as ANTH 447, BIOL 432, PSYC 432.) Prerequisite: Introductory courses in biology/genetics or biological anthropology and psychology are recommended. LEC.

SPLH 449. Laboratory/Field Work in Human Biology. 1-3 Hours. AE61 / N.

Faculty supervised laboratory or field research for Human Biology majors. Students design and complete a research project in collaboration with a Human Biology faculty member. (Same as ANTH 449, BIOL 449, and PSYC 449.) Prerequisite: Consent of instructor and Human Biology major. FLD.

SPLH 450. Study Abroad Topics in: _____ 1-5 Hours. S.

A course designed to enhance international experience in topic areas related to speech-language-hearing at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission. LEC.

SPLH 451. Directed Study Abroad in Speech-Language-Hearing. 1-3 Hours. S.

An independent study designed to enhance international experience in topic areas related to speech-language hearing. Investigation of
special topic or project selected by the student with advice, approval, and supervision by a KU SPLH instructor and an authorized agent of the study abroad site. Experience must be arranged through the Office of KU Study Abroad. Such study may take the form of directed reading and/or directed research/clinical observation. A daily journal and final report is required. A maximum of six hours of credit may be counted, with no more than three in a single area of study. Prerequisite: Consent of instructor IND.

**SPLH 462. Principles of Speech Science. 3 Hours. N.**
Survey of the physiology of speech production, and the physics of sound. Emphasis upon methodologies in the laboratory study of normal speech. Prerequisite: SPLH 120, or concurrent enrollment in SPLH 120 or consent of instructor. LEC.

**SPLH 463. Principles of Hearing Science. 3 Hours. N.**
This class discusses the concepts and principles relevant to normal hearing processing: anatomy, psychophysical methods, and basic subjective correlates of the auditory system. Prerequisite: SPLH 120, or concurrent enrollment in SPLH 120, or consent of instructor. LEC.

**SPLH 464. Undergraduate Seminar in: ____. 1-3 Hours. S.**
Course organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. (Distribution credit given for two-three hours only.) LEC.

**SPLH 465. Fundamentals of Clinical Phonetics. 1 Hour. S.**
Introduction to classification of American English speech sounds based on articulatory phonetics. Practice in phonetic transcription and analysis of normal and abnormal speech. Laboratory exercises to give students hands-on experience with selected topics from lecture. Prerequisite or Corequisite: SPLH 120. LEC.

**SPLH 466. Language Science. 3 Hours. S.**
Introduction to structure/function of human languages as it relates to language development and disorders; processes involved in the expression and reception of language and the methodologies employed to study these processes. LEC.

**SPLH 497. Mentored Research Experience. 2-8 Hours. AE61 / S.**
Study may be directed toward either reading for integration of knowledge and insight in Speech-Language-Hearing, or original research in the field. Student creates a plan of activities at the beginning of each semester under the mentor's guidance. Student and mentor review this plan at the end of each semester to evaluate progress. In the final semester of enrollment, student must complete a written report or a public oral presentation detailing the purpose, methods, results, and impact of the research. This final product partially meets the requirements for Research Experience Certification. (Eight hours maximum credit, which may be distributed through 4 semesters. No student may enroll for less than two hours credit or more than 4 hours of credit in a given semester). Prerequisite: Consent of Departmental Research Experience Coordinator. IND.

**SPLH 498. Departmental Honors Research. 2-8 Hours. AE61 / S.**
Study may be directed toward either reading for integration of knowledge and insight in Speech-Language-Hearing, or original research in the field. Student creates a plan of activities at the beginning of each semester under the mentor's guidance. Student and mentor review this plan at the end of each semester to evaluate progress. In the final semester of enrollment, student must complete a written report or a public oral presentation detailing the purpose, methods, results, and impact of the research. This final product partially fulfills the requirements for Departmental Honors. (Eight hours maximum credit, which may be distributed through 4 semesters. No student may enroll for less than two hours credit or more than 4 hours of credit in a given semester). Prerequisite: Consent of Departmental Honors Coordinator. IND.

**SPLH 499. Directed Study in Speech-Language-Hearing. 1-3 Hours. AE61 / S.**
Investigation of special topic or project selected by the student with advice, approval, and supervision of an instructor. Such study may take the form of directed reading and/or directed research/clinical observation. Individual reports and conferences. (Distribution credit given for two-three hours only.) A maximum of six hours of credit may be counted, with no more than four in a single area of study.) Prerequisite: Consent of instructor. IND.

**SPLH 565. Language Sample Analysis Lab. 1 Hour. S.**
The study of the analysis of language produced by children with respect to its phonological, lexical, morphological, syntactic, and pragmatic characteristics. Prerequisite or corequisite: SPLH 566. LAB.

**SPLH 566. Language Development. 3 Hours. SI GE3S / S.**
Study of language acquisition in children, including phonologic, morphologic, syntactic, and semantic components. Methods of language measurement, the role of comprehension, and pragmatic aspects of language use are included. May be taught in lecture or online format. LEC.

**SPLH 568. Introduction to Audiological Assessment and Rehabilitation. 4 Hours. U.**
Introduction to methods for assessing and treating hearing disorders in adults and children, as well as conditions that result in hearing loss. Course includes clinical observation and extensive hands-on experience with clinical techniques. Prerequisite: SPLH 663. LEC.

**SPLH 571. Introduction to Speech-Language Pathology. 4 Hours. U.**
This course provides training in clinical management of communicative disorders in children and adults. Principles of evaluation, application of diagnostic information, intervention planning, intervention process, data collection and application, report writing, and interactions with parents and other professionals are examined. Participation in observation and laboratory activities is required. LEC.

**SPLH 660. Research Methods in Speech-Language-Hearing. 3 Hours. AE61.**
Research Methods is about the methods used to conduct, describe and evaluate science in communication disorders. Goals for learner outcomes include: 1) evaluation of research including adequacy of research to address scientific and clinical problems, 2) reading, summarizing and describing research through a literature review, 3) describing a hypothetical research study that addresses a specific question or hypothesis identified by the student, and 4) providing constructive peer reviews of research paper drafts. Prerequisite: 9 credits of SPLH course work; English 101 and ENGL 102 (or course meeting core skill in written communication); or consent of instructor. LEC.

**SPLH 670. Beginning Clinical Practice in Audiology. 1-3 Hours. N.**
Testing of hearing using pure tone air and bone conduction tests with both normal and hearing-impaired individuals. Prerequisite: Completion of or concurrent enrollment in SPLH 668. FLD.

**SPLH 672. Clinical Practice in Speech-Language Pathology. 3 Hours. S.**
Clinical practice with children and adults. Group and individual conferences with staff required. Repeatable once for credit. Prerequisite: SPLH 671 and overall GPA of 3.0. FLD.

**SPLH 699. Speech-Language Pathology. 3 Hours. S.**
Concepts and principles relevant to the perception of speech with emphasis on the auditory system; acoustics, psychophysical methods,
and basic subjective correlates of speech perception. Prerequisite: SPLH 662 and SPLH 663, or consent of instructor. LEC.

SPLH 761. Aural Rehabilitation. 3 Hours.
Study of the communication problems associated with hearing loss. Introduction to aural habilitative intervention related to speech, language, and academic achievement in children with early hearing loss, as well as, communication strategies training for adults with acquired hearing loss. Prerequisite: SPLH 669 or equivalent. LEC.

SPLH 764. Seminar in: ______. 1-3 Hours.
The subject matter of this seminar will be special topics from speech pathology and audiology. Special prerequisite may be established for a given topic. LEC.

SPLH 784. Proseminar in Communication and Aging. 1 Hour.
A weekly forum for students and faculty to discuss professional issues and interdisciplinary research in communication and aging. May be repeated for credit. (Same as COMS 784.) (Same as PSYC 784.) Prerequisite: Consent of instructor. LEC.

SPLH 799. Proseminar in Child Language. 2 Hours.
A review and discussion of current issues in children's language acquisition. May be repeated for credit. Students are graded S/F. (Same as ABS 797, LING 799 and PSYC 799.) (Formerly HDFL 797.) LEC.

SPLH 816. Language Development. 3 Hours.
Study of language acquisition in children, including the morphologic, syntactic, and semantic components. Methods of language measurement, the role of comprehension, and pragmatic aspects of language use will be included. Not open to students who have credit for SPLH 566. Laboratory by appointment. LEC.

SPLH 820. Developmental Phonological Disorders. 2 Hours.
Focuses on speech and non-speech characteristics of children with developmental phonological disorders. Emphasis placed on collection and phonetic transcription of speech samples, phonological analysis of transcribed data, and decision-making processes in assessment and intervention. LEC.

SPLH 822. Dysarthria/Apraxia. 2 Hours.
This course describes the neuroanatomic bases of motor-speech processes, the diagnosis, classification, assessment, prognosis, and treatment of dysarthria(s) and apraxia(s). LEC.

SPLH 824. Fluency Disorders. 2 Hours.
The nature of stuttering in children and adults is discussed. Theories regarding etiology, development, and maintenance of the disorder are presented. Emphasis is placed on various clinical approaches to assessment, measurement, and treatment. LEC.

SPLH 826. Phonatory Disorders. 2 Hours.
This course reviews the function of the laryngeal and respiratory mechanisms including the parameters and processes of phonation. Primary content addresses diagnosis, description, and treatment of organic and non-organic disorders of phonation. LEC.

SPLH 828. Speech Disorders in Special Populations. 2 Hours.
This course reviews anatomy and physiology of the velopharyngeal mechanism. Diagnosis and management of velopharyngeal dysfunction and associated problems considered. Anatomy, physiology, and rehabilitation associated with certain oral, pharyngeal, and laryngeal abnormalities discussed. Emphasis is on the speech problems of adults following medical management. Populations include individuals with laryngectomies, glossectomies, and tracheotomies. LEC.

SPLH 832. Dysphagia. 2 Hours.
This course covers normal and disordered swallowing. Evaluation and treatment of swallowing disorders, the dysphagia team, and dysphagia in special populations are considered. LEC.

SPLH 836. Genetics of Communication and Learning Disorders. 2 Hours.
This course focuses on the description, assessment, and treatment of communication problems associated with particular genetic syndromes (e.g., Down's, Turner's syndromes). Also covered are current data about the genetic factors involved in nonsyndromic communication and learning problems, such as those commonly seen in the schools. Ethical and practical issues in these areas are discussed. LEC.

SPLH 840. Language Disorders of Children: Infants and Toddlers. 2 Hours.
This course examines factors relating to language disorders in the birth to three population. At-risk populations, as well as those with known etiologies, are considered. Information on assessment, intervention, and service delivery models is addressed. Issues relating to Public Law 99-457 are also examined. LEC.

SPLH 842. Language Disorders of Children: Preschool. 2 Hours.
This course examines language disorders of preschool-age children in the late preschool years. The course includes information on incidence, characteristics, assessment, and intervention. Theoretical issues and their implication for language intervention are also examined. LEC.

SPLH 844. Language Disorders of Children: School Age. 2 Hours.
This course examines language development during the school years and how problems in this development interact with school performance. Emphasis is placed on the role of the speech-language pathologist in the early identification, assessment, and remediation of language-learning problems. LEC.

SPLH 846. Language Disorders of Adults. 2 Hours.
Neurological aspects of language processes, classification of aphasia, and assessment of language deficits are discussed. Management approaches including intervention strategies and rehabilitation are also considered. LEC.

SPLH 848. Language Disorders of Special Populations. 2 Hours.
This course focuses on the unique language impairments of individuals with mental retardation, autism, cerebral palsy, hearing impairments, dual sensory impairments, and other communication disorders (e.g., ADD). Language characteristics as well as assessment and intervention strategies are studied. LEC.

SPLH 850. Language Disorders Secondary to Closed Head Injury and Dementia. 2 Hours.
Neuroanatomy and physiology relevant to diffuse brain injury are discussed. Characteristics and intervention strategies relating to traumatic brain injury and dementia are studied. LEC.

SPLH 852. Augmentative and Alternative Communication. 2 Hours.
This course describes augmentative and alternative communication (AAC) assessment and intervention issues as they apply to children and adults with both congenital and acquired speech and/or language disabilities. Areas of study include AAC systems, assessment strategies and procedures, intervention strategies, and AAC information resources. LEC.

SPLH 854. Reading Disorders. 2 Hours.
This course addresses the perceptual, linguistic, and cognitive processes utilized in written communication. Acquired and developmental disorders of written language are examined in relation to issues concerning
characteristics, etiology, early identification, assessment, and remediation. LEC.

SPLH 860. Evaluation of Speech and Language. 2 Hours.
Provides a general framework for speech and language evaluations. Issues related to initiation and termination of treatment are discussed. Practice is provided in evaluating norm- and criterion-referenced information used in diagnostic, referral, and treatment decisions. LEC.

SPLH 861. Seminar in Research Methodology in Speech Pathology and Audiology: _____. 3 Hours.
This seminar is concerned with the design, instrumentation, execution, and reporting of research in audiology and speech pathology. SPLH 760 or its equivalent and some statistics are recommended before entering this seminar. LEC.

SPLH 862. Clinical Processes. 1 Hour.
Orients student to clinical procedures, policies, requirements, and expectations of program. Therapy models, planning, and philosophies are discussed along with implementation and evaluation of therapy procedures. Professional issues are also considered. May be repeated for credit. LEC.

SPLH 864. Advanced Clinical Practice in Speech-Language Pathology. 1-6 Hours.
Students conduct supervised clinical work in a variety of settings. May be repeated for credit. Prerequisite: Department approval. Group and individual conferences with staff required. FLD.

SPLH 866. Field Study in Speech-Language Pathology. 5-12 Hours.
The field study provides work experiences in clinical and/or research activities. The student takes this course near the end of the degree program. Assignments include supervised work in a variety of approved settings. May be repeated for credit. Prerequisite: Advisor's consent. FLD.

SPLH 868. Professional Seminar. 1 Hour.
Forum for the presentation and discussion of scientific and professional issues by faculty and advanced graduate students. May be repeated for credit. LEC.

SPLH 874. Research Practicum. 1-3 Hours.
Application of research methodology in a laboratory situation. Emphasis is on direct participation in designing and conducting an experimental investigation in speech, language, or hearing. May be repeated for up to a maximum of 3 credits. Prerequisite: SPLH 660 or equivalent research methods course. RSH.

Investigation of special topics by individual master's level students. Paper required. Prerequisite: Consent of instructor. RSH.

SPLH 880. Seminar in Speech-Language Pathology: _____. 1-3 Hours.
May be repeated for credit. LEC.

SPLH 898. Investigation and Conference (For Master's Candidates). 1-8 Hours.
(Limited to eight hours credit toward the M.A. degree.) Directed research and experimentation for M.A. students in some phase of speech science. RSH.

SPLH 899. Master's Thesis. 1-6 Hours.
THE.

SPLH 900. Proseminar in Communicative Disorders. 1 Hour.
A weekly forum for students and faculty to discuss professional issues and interdisciplinary research in communicative disorders and related fields. May be repeated for credit. Limited to two hours credit counted toward an MA or AuD degree. Limited to four hours credit counted toward the PhD degree. Graded on satisfactory/unsatisfactory basis. SEM.

SPLH 961. Experimental Phonetics I. 3 Hours.
This course will provide a description of the acoustic properties of the major classes of speech sounds, and will describe how these properties are utilized perceptually. It will also provide an understanding of the acoustic theory of speech production, and will discuss the implications of that theory relative to the modification of impaired speech. LEC.

SPLH 962. Experimental Phonetics II. 3 Hours.
This course will examine the current methodologies utilized in speech physiology research, and will review the findings of recent research into the movement patterns of individual speech articulators. The course will emphasize the interpretation of individual research results in terms of an overall theory of speech motor timing and control. LEC.

SPLH 963. Seminar in Hearing Science. 3 Hours.
Considers more advanced research problems in hearing science including psychoacoustics, speech perception, physiology. Prerequisite: Consent of instructor. LEC.

SPLH 964. Seminar in: _____. 1-3 Hours.
The subject matter of this seminar will be special topics from speech pathology and audiology, including those related to research methodology and research or academic careers. Special prerequisites may be established for a given topic. LEC.

SPLH 966. Seminar in Language Development. 3 Hours.
The course pertains to relevant research regarding infant speech development, vocabulary development, linguistic development, articulation development, and language retardation. (Same as ABSC 920, formerly HDFL 920.) LEC.

SPLH 967. Seminar in Articulation. 3 Hours.
Research and important clinical procedures pertaining to discrimination, structural, and physiological considerations, causal factors in defective articulation, and principal therapeutic approaches are carefully examined. LEC.

SPLH 968. Seminar in Communication Disorders. 3 Hours.
Study in depth of the communication behavior associated with brain injury and/or oral anomalies. LEC.

SPLH 969. Laboratory Instrumentation for Speech and Hearing Research. 3 Hours.
Instruments for speech and hearing research, their design and application. Experimental projects using laboratory equipment. Designing equipment for special purposes. Prerequisite: SPLH 962. FLD.

SPLH 970. Independent Study in Problems of Speech and Hearing. 1-6 Hours.
Investigation of special topics by individual students. Paper required. RSH.

SPLH 972. Extensions of Clinical Management. 3 Hours.
This course is designed to provide didactic and practical experience in methods of obtaining diagnostic information and generalization of speech and language responses away from the clinical setting. Models for effecting behavioral change and data collection will be discussed and utilized. FLD.

SPLH 974. Research Practicum. 1-6 Hours.
Application of research methodology in a laboratory situation. Emphasis is on direct participation in designing and conducting an experimental investigation in speech or hearing. FLD.
SPLH 975. Directed Teaching: Speech Pathology and Audiology. 1-3 Hours.
Provides experiences in classroom and laboratory instruction under
supervision of graduate faculty. Variable credit to reflect amount of
instructional responsibility assumed. May be repeated up to a maximum of
six semester hours. FLD.

SPLH 976. Independent Study in Grant Writing. 1-3 Hours.
Students will identify a funding agency appropriate for their research,
learn the application procedures for that agency, and draft a grant
application following the identified agency's format. The faculty mentor will
arrange for a review of the grant application following the agency's review
criteria and format. May be repeated up to a maximum of three credits.

IND.

SPLH 982. Issues in Scientific Conduct. 3 Hours.
Lectures and discussion on issues in the conduct of a scientific career,
with emphasis on practical topics of special importance in behavioral
science. Topics will include the academic and scientific roles of behavioral
scientists, establishing a research lab, communicating research findings,
tenure processes, gender equity, ethical conduct, and good scientific
citizenship. Discussions will highlight important case studies. (Same as
PSYC 982.) LEC.

SPLH 998. Investigation and Conference (For Doctoral Candidates).
1-8 Hours.
(Limited to eight hours credit towards the Ph.D. degree.) Directed
research and experimentation for Ph.D. students in some phase of
speech science. RSH.

SPLH 999. Doctoral Dissertation. 1-12 Hours.
THE.

System Analysis and Design Courses

SA&D 401. Introduction to Systems Analysis and Design. 3 Hours. U.
An introduction to the Systems Development Life Cycle (SDLC) and
alternatives to SDLC uses in information studies projects and applications.
Case studies will be used to illustrate methods of successful analysis
of entire projects, including problem definition and analysis, design
processes, testing, and implementation. Prerequisite: One year of
programming experience or classes. Restricted to students admitted to the
Systems Analysis and Design Certificate program. LEC.

SA&D 402. Introduction to Project Management. 3 Hours. U.
An introduction to the Project Management Body of Knowledge (PMBOK)
including the need for project management, phases of the project life
cycle, tools and techniques for planning (PERT, CPM), and the role of
team work and communication. Not open to students with credit for BBA
410 Project Management. LEC.

SA&D 404. Software Development Methods. 3 Hours. U.
This course will focus on the specifications through implementation phase
of the Systems Development Life Cycle (SDLC) at an advanced level
including technical design, coding and testing, problem management,
systems testing, implementation and post-implementation. Prerequisite:
SA&D 401. Restricted to students admitted to the Systems Analysis and
Design Certificate program. LEC.

SA&D 405. Object Oriented Analysis and Design. 3 Hours. U.
Introduces the student to the basic Object Oriented (OO) terminology and
how OO differs from a procedural approach. It details the deliverables that
are created in the analysis and design phase using the Unified Modeling
Language (UML). Students will also learn to use a CASE tool to document
the analysis and design deliverables. Prerequisite: SA&D 401. Restricted
to students admitted to the Systems Analysis and Design Certificate
program. LEC.

SA&D 406. Systems Architecture. 3 Hours. U.
Survey of elements of systems architecture including types of
architecture, quality attributes, design patterns and frameworks,
deployment issues, and developing architecture plans. Prerequisite: SA&D
401. Restricted to students admitted to the Systems Analysis and Design
Certificate program. LEC.

Women, Gender, Sexuality Std Courses

WGSS 101. Introduction to Women, Gender, and Sexuality Studies. 3
Hours. SC AE41/GE3S / S.
This course examines the extensive role of gender in human life and
examines the ways that gender structures power relations among
individuals and within economic, political, educational and other social
structures, with special attention paid to women's issues and movements
in the United States and globally. Through readings drawn from the
fields of women's studies, gender studies, and sexuality studies, this
course examines and explores alternatives to traditional and/or normative
constructions of gender and sexuality, and also considers other markers
of difference, such as disability, race, class, and religion, which intersect
with gender identity and sexual identity. LEC.

WGSS 102. Introduction to Women, Gender, and Sexuality Studies,
Honors. 3 Hours. SC AE41/GE3S / S.
This course examines the extensive role of gender in human life and
examines the ways that gender structures power relations among
individuals and within economic, political, educational and other social
structures, with special attention paid to women's issues and movements
in the United States and globally. Through readings drawn from the
fields of women's studies, gender studies, and sexuality studies, this
course examines and explores alternatives to traditional and/or normative
constructions of gender and sexuality, and also considers other markers
of difference, such as disability, race, class, and religion, which intersect
with gender identity and sexual identity. Similar in content to WGSS 201.
Open only to students in the University Honors Program or by consent of
the instructor. LEC.

WGSS 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing
current issues in Women, Gender and Sexuality Studies. Course is
designed to meet the critical thinking learning outcome of the KU Core.
First-Year Seminar topics are coordinated and approved by the Office of
First-Year Experience. Prerequisite: First-time freshman status. LEC.

WGSS 196. Study Abroad Topics in: ______. 1-6 Hours. S.
This course is designed for the study of special topics in Women's
Studies. Coursework must be arranged through the Office of KU Study
Abroad. May be repeated for credit if content varies. LEC.

WGSS 301. Research Methods in Women, Gender and Sexuality
Studies. 3 Hours. S.
This course explores feminist epistemologies and research methods. It
focuses on research design, feminist critiques of dominant theories of
knowledge, and the major methodologies employed in the social sciences
and humanities. Prerequisite: WGSS 101. LEC.

WGSS 317. African American Women: Colonial Era to the Present. 3
Hours. H.
This interdisciplinary course covers the history of African American
women, beginning in West and Central Africa, extending across
the Middle Passage into the Americas, and stretching through
enslavement and freedom into the 21st century. The readings cover their
experiences through secondary and tertiary source materials, as well as
autobiographies and letters, plays and music, and poems, novels, and
speeches. (Same as AAAS 317, AMS 317, and HIST 317.) LEC.
WGSS 320. From Goddesses to Witches: Women in Premodern Europe. 3 Hours. HT GE11/GE3H / H.
This course examines the social, cultural, and political contexts of women's spirituality and their relations to gender relations in Europe from about 30,000 B.C.E. to the 16th century Protestant Reformation. Lectures move both chronologically and topically, covering such subjects as goddess-worshiping cultures, women's roles in Christian and Jewish societies, symbols of women, and male attitudes toward women. Students will be able to participate in weekly discussions of primary and secondary source readings about women. (Same as HIST 320.) LEC.

WGSS 321. From Mystics to Feminists: Women's History in Europe 1600 to the Present. 3 Hours. HT AE42/GE11/GE3H / H.
This survey of women's history in Europe looks at changing patterns of women's economic roles and family structures in preindustrial and industrial society, the importance of women in religious life, cultural assumptions underlying gender roles, and the relationship of women to political movements, including the rise of feminism. (Same as HIST 321.) LEC.

WGSS 324. History of Women and the Body. 3 Hours. H.
This course examines different notions about women and their bodies from a historical perspective. It discusses the arguments and circumstances that have shaped women's lives in relation to their bodies, and women's responses to those arguments and circumstances. This course covers a wide geographical and chronological spectrum, from Ancient societies to the present, from Latin America and the Middle East, to North America and Western Europe. (Same as HIST 324.) LEC.

WGSS 327. Perspectives in Lesbian, Gay, Bisexual, and Transgender Studies. 3 Hours. AE41 / S.
An exploration of the experiences and histories of people who identify as lesbian, gay, bisexual, and/or transgender (LGBT); of the influences on these experiences by individuals, the state, and artistic, legal and medical discourses; and of the intersections between sexual orientation, sexuality, ethnicity, class, and religion. LEC.

WGSS 330. Women in Contemporary African Literature. 3 Hours. NW AE42/GE3H / H.
A critical study of issues and questions raised about women in contemporary African literature and implications for the larger society through the analysis of theme, language, characterization, roles and functions of women in selected works. (Same as AAAS 340.) LEC.

WGSS 333. The Politics of Physical Appearance. 3 Hours. AE41/GE11 / S.
An interdisciplinary analysis of standards of physical attractiveness and cultural conceptions of women's bodies. Includes analysis of how these standards change across time and cultural groups, and of the impact of these standards on women as individuals and on social and political outcomes. LEC.

WGSS 335. History of Jewish Women. 3 Hours. H.
This course explores the history of Jewish women from antiquity to the twentieth century. It examines the historical constructions of women's gender roles and identities in Jewish law and custom as well as the social and cultural impact of those constructions in the context of the realities of women's lives in both Jewish and non-Jewish society. There are no prerequisites for this course. (Same as HIST 335, JWSH 335.) LEC.

WGSS 345. Popular Culture in Africa: Spiritual Thrills, Romance and Sexualities. 3 Hours. H.
This course examines how the different constituents of popular culture mobilize, construct and structure gender, and spiritual and sexual identities in select contemporary African countries. Discussions also focus on how popular culture mediates the contesting spaces of indigenous local constructs and the push and pull of global forces to create geographic and contemporary specificities. (Same as AAAS 345.) LEC.

WGSS 351. Women and Leadership: The Legislative Process. 3 Hours. S.
Examines current and historical roles and impacts of women involved in legislatures. Explores what difference women make when they are public officials. Students meet with local women legislators, lobbyists and political officials. Students learn how to analyze issues, access power, lobby, and organize at the grassroots. The course is designed to prepare students for an optional legislative internship during the subsequent semester. LEC.

WGSS 363. Gendered Modernity in East Asia. 3 Hours. S.
This course explores rapidly changing gender relationships and the sense of being "modern" in East Asia by examining marriage and family systems, work, education, consumer culture, and geopolitics. The class seeks to understand how uneven state control over men and women shapes desires, practices, and norms and how men and women act upon such forces. Avoiding biological or social determinism, this course treats gender as an analytical category and examines how modern nation-states and global geopolitics are constituted and operated. (Same as ANTH 363 and EALC 363.) LEC.

WGSS 381. Feminism and Philosophy. 3 Hours. AE41/GE3H / H.
An examination of topics of philosophical interest that are important in the feminist movement such as the nature of sexism, the concept of sexual equality, the ethics of sexual behavior, the nature of love, feminist analyses of the value of marriage and family, the ethics of abortion and justifications for preferential treatment of women. (Same as PHIL 381.) LEC.

WGSS 389. The Anthropology of Gender: Female, Male, and Beyond. 3 Hours. NW AE42/GE21/GE3H/GE3S / S.
This course will introduce students to cultural constructions and performances of masculinity, femininity, and alternative genders across time and space. Topics and cases will be drawn from primarily non-Western cultures, ranging from Japanese markets to Pacific Rim gardens, and from Haitian voudou to Maya royal politics. This course uses research by archeologists, linguists, biological anthropologists, and sociocultural anthropologists. (Same as ANTH 389.) LEC.

WGSS 396. Studies in: ______. 3 Hours. H.
The interdisciplinary study of selected and different aspects of women's studies in different semesters. LEC.

WGSS 397. Study Abroad Topic in: ______. 1-6 Hours.
This course is designed for the study of special topics in Women's Studies at the junior/senior level. Course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

WGSS 430. Skin, Sex, and Disease. 3 Hours. H.
This course explores the complex historical relationships between gender, race, health, sickness, and oppression over time. Students examine the impact race and gender have on structuring experiences of health, sickness and health care; and examine the political activism surrounding definitions and concepts of health. LEC.

WGSS 440. Communication and Gender. 3 Hours. AE41 / S.
Focuses attention on the relationship between communication and gender, including both physical and psychological dimensions. Topics include: sex role orientations and stereotypes; perceived and actual differences in verbal and nonverbal communication behaviors; the influence of gender on communication in a variety of contexts. (Same as COMS 440.) Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.
WGSS 468. Psychology of Women. 3 Hours. S.
A survey of the psychological theories about women; similarities and differences in the behavior of men and women; the effects of biological and social factors on the behavior of men and women; and issues of concern to women of different races, sexual orientations, ages, and so forth. (Same as PSYC 468.) Prerequisite: PSYC 104 or WGSS 201. LEC.

WGSS 498. Independent Study. 1-3 Hours. S.
Intensive reading or research under faculty supervision culminating in the writing of a paper or research report. IND.

WGSS 499. Honors in Women, Gender and Sexuality Studies. 3 Hours. S.
An individual research project under the direction of a specialist in the area of the student's interest. May be counted towards the total hours required for the major. Prerequisite: Majors only, with approval of the project adviser and the Women, Gender and Sexuality Studies honors coordinator. IND.

WGSS 510. History of American Women: Colonial Times to 1870. 3 Hours. H.
A survey of women's history in the United States, which will consider women's roles as housewives, mothers, consumers, workers, and citizens in pre-industrial, commercial and early industrial America. (Same as AMS 510 and HIST 530.) LEC.

WGSS 511. History of American Women: 1870 to Present. 3 Hours. AE41 / H.
A survey of women's history in the United States, which includes radical and reform movements, the impact of war and depression, professionalization, immigration, women's work, and the biographies of leading figures in women's history. (Same as AMS 511 and HIST 531.) LEC.

WGSS 512. History of Women and Work in Comparative Perspective. 3 Hours. H.
This course explores the connection between historical changes in the labor process and the occupational choices available to women in different countries. Through discussion and analyses of texts, students will evaluate the construction of a gendered division of work as shaped over time by economic, cultural, and political forces. The chronological and geographical focus may vary depending on the instructor. (Same as AMS 512 and HIST 532.) LEC.

WGSS 513. Modern American Women in Film and Literature. 3 Hours. H.
Exploration of the images both real and ideal found in twentieth century popular culture. By using popular culture as social history, it examines the connections between these images and the life experiences of women in the family, at work, in war, and in economic depression. LEC.

WGSS 515. Gender and Sexuality in Greek Culture. 3 Hours. H.
This course explores various approaches to the study of gender and sexuality in Greek antiquity. Contents will vary, and the course may focus on methodology and case studies, or on particular themes, historical periods, or artistic or literary genres. No knowledge of Greek or Latin is required. (Same as CLSX 515.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, or Women, Gender and "Sexuality Studies; or permission of instructor. LEC.

WGSS 516. Gender and Sexuality in Roman Culture. 3 Hours. H.
This course explores various approaches to the study of gender and sexuality in Roman antiquity. Contents vary, and the course may focus on methodology and case studies, or on particular themes, historical periods, or artistic or literary genres. No knowledge of Greek or Latin is required. (Same as CLSX 516.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, or Women, Gender and "Sexuality Studies; or permission of instructor. LEC.

WGSS 521. Women and Violence. 3 Hours. S.
An examination of research on women and violence, including rape, domestic violence, sexual harassment, stalking, and child sexual abuse. The nature, prevalence, causes, and consequences of violence against women are discussed. (Same as PSYC 521.) Prerequisite: PSYC 104. LEC.

WGSS 530. Sex and Gender in New Media. 3 Hours. S.
This course examines the construction of sexuality and gender in new media platforms. Students will explore how contemporary media platforms are used to reify dominant representations, and produce new or alternative expressions of identity, culture or political engagement. LEC.

WGSS 549. History of Feminist Theory. 3 Hours. H.
This discussion course will cover the development of feminist theories from the late Middle Ages to the 1970s. Reading will include Pisan, Wollstonecraft, Mill, Freud, Woolf, Beauvoir, Friedan, Daly, Kristeva, and others. (Same as HIST 649.) LEC.

WGSS 560. Race, Gender, and Post-Colonial Discourses. 3 Hours. H.
An examination of the ways in which the concept of race, gender, and post-colonialism frame African literatures from the Caribbean, North America, and the continent itself. The course will focus on these discourses grounding them in critical frameworks within which they can be contextually analyzed and evaluated, at the same time examining their impact in literary praxis and theory. (Same as AAS 560.) LEC.

WGSS 562. Women and Politics. 3 Hours. S.
This course exposes students to contemporary research on women and politics by surveying the sub-fields of political science. Topics include women's representation in the U.S., women and U.S. public policy, gender and legal theory, international women's movements, women and revolution, and women as political elites. We will examine the ways in which feminist theory and women's activism have challenged the narrow focus of the discipline as well as redefined women's place in society. (Same as POLS 562.) Prerequisite: A 100-level POLS course or WGSS 201 or permission of instructor. LEC.

WGSS 563. Gender, Sexuality and the Law. 3 Hours. AE41/GE11 / H.
This course provides a broad introduction to Western legal systems (especially the American legal system) and then focuses on how sex, gender, and sexuality operate in and are understood by those systems and how the law is a site of social and political struggle. Topics may include intimate relations, First Amendment law, sexual harassment and employment discrimination; reproduction policies and governance; rape and sexual assault; gender identity discrimination; and the legal understandings and constructions of equal protection and due process. No prior knowledge of legal concepts is necessary. LEC.

WGSS 565. Gender, Culture, and Migration. 3 Hours. H.
This course brings a human face to the 21st century manifestation of globalization by focusing on the issues of culture, gender and migration. How do these three aspects create the "global village" amongst both the host and donor peoples? When people move from one place to another, what do they leave behind, what do they take with them? What is gained, or lost by the host community? What is the impact of migration on a specific group's and individual's sense of identity? How has migration affected the people's construction, understanding, and practice of gender? Given their primary roles in the home and within the culture, these questions and more are posed with particular attention to women. Migration theories, interviews and personal testimonies as well as literary and dramatic works are critical to our analyses of the issues raised and enable us to hold conversations with, and listen to the stories of the
ordinary people who make globalization happen and sustain it. (Same as AAAS 565 and AMS 565.) LEC.

WGSS 570. Men and Masculinities. 3 Hours. H.
An intensive examination of the history and theory of masculinities in the Western world. Students become acquainted with some of the key theories of men and masculinities, and develop research projects on a topic negotiated with the instructor. (Same as HIST 626, HWC 570.) Prerequisite: An upper-division course in HIST, HWC, or WGSS; or permission of instructor. LEC.

WGSS 575. Body, Self and Society. 3 Hours. H.
An intensive examination of the role of the human body in the creation of personal and social identities in the Western world. Students become acquainted with contemporary theories of embodiment and the senses as they are applied to a variety of historical themes, and develop research projects on a topic negotiated with the instructor. (Same as HIST 625, HWC 575.) Prerequisite: An upper-division course in HIST, HWC, or WGSS; or permission of instructor. LEC.

WGSS 580. Feminism and Anthropology. 3 Hours. S.
This seminar will introduce students to feminism in anthropology, including feminist theories, methodologies, ethnographic styles, and the history of women in the discipline since the late 1800s. Emphasis is on the social contexts for feminist theory-building since the 1960s and changing ideas about gender and power. (Same as ANTH 580.) Prerequisite: One of the following: ANTH 389, ANTH 460, WGSS 201; or permission of instructor. LEC.

WGSS 583. Love, Sex, and Globalization. 3 Hours. S.
Escalating transnational flows of information, commodities, and people have created innumerable kinds of "intimate" contacts on a global scale, such as mail order brides, child adoption, sex tourism, commodified romance, and emotional labor. Exploring the ways that cultural artifacts of intimacy are rendered, fetishized, and reified in a free market economy, this course examines how discourses on love and sex encounter, confront, and negotiate the logics of the capitalist market, the discrepant narratives of (colonial) modernity, and the ethics of pleasure. In so doing, this course navigates the treacherous interplay among emotions-specifically love, sex, and money, seeking the potential and limits of cultural politics of emotions. (Same as ANTH 583.) LEC.

WGSS 600. Contemporary Feminist Political Theory. 3 Hours. S.
A detailed introduction to feminist thought post-1960. Examines feminism in relation to the categories of political theory: liberal feminism, socialist feminism, radical feminism, and postmodern feminism. Within these categories and separately, we will also consider feminism as it is influenced by women traditionally excluded from mainstream feminist thought, namely U.S. women of color and women of post-colonial societies. (Same as POLS 600.) Prerequisite: WGSS 201 or a 100-level POLS course or permission of instructor. LEC.

WGSS 601. Seminar in Women, Gender and Sexuality Studies. 3 Hours. AE61 / S.
Investigation of a topic related to women, gender or sexuality from an interdisciplinary perspective. Open only to women's studies majors and human sexuality majors. Suggested for the senior year. LEC.

WGSS 630. Politics of Identity. 3 Hours. S.
This seminar explores the nature of identity and how identity is relevant to politics and policy with a focus on political attitudes and behavior, institutions, and public policy. Topics include individual and group identity, identities such as gender, racial, sexual orientation, and partisan, and the enduring importance of identity for understanding politics as well as the policy process. The approach is multidisciplinary but political science perspectives are relied on more heavily. (Same as POLS 630.) Prerequisite: POLS 110 and POLS 306 are recommended. LEC.

WGSS 640. Politics of Reproductive Policy. 3 Hours. S.
Reproductive policy has historically been a highly politicized policy arena, which has elicited attention from the political community as well as the public. This course moves beyond the popular rhetoric associated with reproductive issues, by critically investigating the history, development, implementation and the relative success of various reproductive policies in the United States. These policies are compared to, and assessed against, policies governing similar topics in various countries. (Same as POLS 640.) Prerequisite: POLS 110 or consent of instructor. LEC.

WGSS 646. Witches in European History and Historiography. 3 Hours. H.
This course examines witches, witchcraft, and magic in Europe in the late medieval and early modern period (approximately 1200-1700 C.E.). Particular emphasis will be on the variety of historical and anthropological approaches that have been used to study the subject and their meaning in the context of gender politics and gender theory. (Same as HIST 646.) LEC.

WGSS 650. Service Learning in Women's Studies. 3 Hours. S.
This course, to be taken in the senior year, is designed to give students the opportunity to apply women's studies knowledge and ideas gained through course work to real-life situations in various agencies and women's centers. Open to Women's Studies majors and others with significant Women's Studies backgrounds. Permission of instructor is required. FLD.

WGSS 651. Women and Politics in Latin America. 3 Hours. S.
This course examines the ways in which Latin American women have engaged in politics in the past two decades. Cases will draw from a variety of countries in Latin America. Students are expected to develop insights, through comparative analysis, into why women "do politics" in certain ways, the role of the State in women's politics, the (dis)advantages of various political strategies, and the ways in which political, economic, and social changes over time have affected women's political opportunities and interests. (Same as POLS 651.) Prerequisite: Six hours of course work in Political Science and/or Women's Studies and/or Latin American Studies. LEC.

WGSS 652. Jazz and American Culture. 3 Hours. H.
This course considers cultural and social histories of jazz, from the 1920s through the present day, as sites for exploring ideological struggles over such fields as race, class, gender, sexuality, democracy, capitalism, freedom, community, Americanness, and globalization in the U.S. The course will explore such questions as the following: What music was called jazz at what times and places? What did it mean to whom? Who played it? Who wrote about it? Who listened to it? Who danced to it? Who policed it? Who produced it? Who used it to rebel? Who used it to survive? What did all of these practices mean to participants? The course will examine struggles over social meanings in the U.S. through a study of jazz performance, labor, representation, marketing, consumption, censorship, and historiography. Prerequisite: A course in American studies, American history, or consent of instructor. (Same as AMS 650.) LEC.

WGSS 653. Gender, War, and Peace. 3 Hours. S.
This course explores ways in which militarization and warfare are gendered processes. We ask, what does war tell us about gender, and what does gender tell us about war? Though the majority of fighters are men, women are essential to war efforts. They also represent a high proportion of the casualties of war. Yet women are rarely examined in relation to war; thus we work to uncover women's experiences of war. We also look to women's contributions to the peace movement in terms
of both theory and practice, asking: Is peace a feminist issue? Should feminists support women's access to combat positions or oppose the military? What if women ruled the world—would that end wars? Does militarized masculinity harm men more than benefit them? How do states mobilize citizens to war and how is the process gendered? (Same as POLS 653.) Prerequisite: One of the following: POLS 150, POLS 151, POLS 170, POLS 171, WGSS 201, WGSS 202. LEC.

WGSS 660. Human Reproduction: Culture, Power, and Politics. 3 Hours. S.
This seminar analyzes and critiques the socially constructed nature of reproductive practices and their articulation with relations of power. Topics range from conception to menopause, infertility to population. Cases are drawn from a wide variety of cultural contexts. This course is the second part of a two-semester sequence (beginning with ANTH 650) that examines in detail biological and cultural determinants of human reproduction. (Same as ANTH 660.) Prerequisite: ANTH 650, or 6 hours in Women's Studies, or permission of instructor. LEC.

WGSS 662. Gender and Politics in Africa. 3 Hours. S.
This course is designed to explore the field of gender and African politics. We begin by paying particular attention to African women's political roles during the pre-colonial and colonial society. Next, we examine the impetus, methods, and path of liberation struggles and how gender roles were shaped, shifted, and changed during these struggles. The majority of the class focuses on current issues in African politics, including gender and development; HIV/AIDS and women's health; gender and militarism. We also explore women's roles in political institutions; civil society organizations; trade and labor unions; and transnational movements. We also examine contemporary constructions of masculinity and femininity in African states and explore how these constructions affect social policy and national political agendas. (Same as AAAS 662.) LEC.

WGSS 665. Women, Health, and Healing in Latin America. 3 Hours. S.
This seminar uses a life-cycle approach to examine women's health (physical, mental, and spiritual) and their roles as healers. Special consideration is given to the effects of development programs on well-being, access to health care, and hanging roles for women as healers. Cases will be drawn from a variety of Latin American contexts. (Same as ANTH 665 and LAA 665.) Prerequisite: 6 hours coursework in Anthropology and/or Women's Studies and/or Latin American Studies. LEC.

WGSS 689. Conceptual Issues in Human Sexuality. 3 Hours. S.
An examination of the social construction of sexuality and research methods and issues relevant to sexuality. These concepts are applied to various topics, such as defining and conceptualizing sex and gender, sexual dysfunction, sexual orientation, the social control of sexuality, sexual coercion and abuse, and abstinence-only sex education. The course does not cover anatomical or physiological aspects of sexuality. (Same as PSYC 689.) Prerequisite: PSYC 104 or WGSS 201. LEC.

WGSS 696. Studies in: _____. 3 Hours. S.
Interdisciplinary study of different aspects of women's studies in different semesters. LEC.

WGSS 701. Seminar in: ____. 3 Hours.
A research seminar in women's studies. Instructor and topic will vary. LEC.

WGSS 789. Anthropology of Gender: Advanced Seminar in the Four Fields. 3 Hours.
This seminar is intended primarily for graduate students in anthropology or other disciplines who share an interest in any of the subdisciplines of anthropology (archaeology, linguistics, biological anthropology, and sociocultural anthropology) and/or anthropological theories and methods. Undergraduates pursuing Honors or other major research projects are also encouraged to participate. Students will receive training in the contemporary theories, research, and pedagogies informing the anthropology of gender. Class participants will explore how these materials intersect with their current thesis or research projects and develop syllabi specific to their subdiscipline. (Same as ANTH 789.) Prerequisite: Permission of instructor. LEC.

WGSS 797. Directed Readings. 1-3 Hours.
Directed reading in an area of women's studies in which there is no appropriate course in the offerings of the Women's Studies Program, but in which there is a member of the cooperating graduate faculty competent and willing to direct the program of study. RSH.

WGSS 800. History of Women, Gender and Sexuality Studies. 3 Hours.
An introduction to the field of women, gender, and sexuality studies, paying particular attention to its development, its reception by and influence on academic disciplines, and its institutionalization. Prerequisite: Graduate standing and consent of the instructor. SEM.

WGSS 801. Feminist Theory. 3 Hours.
A survey of contemporary feminist theories produced within and across disciplines (including but not limited to, eco-feminism, and liberal, cultural, materialist, psychoanalytic, radical, and black feminist thought). Prerequisite: Graduate standing and consent of the instructor. LEC.

WGSS 802. Feminist Methodologies. 3 Hours.
An introduction to the methods used in feminist research in the humanities, social sciences, and natural sciences (e.g., quantitative and qualitative research methods, archival research, and oral histories). We will consider examples of applications of each method, the strengths and limitations of each method, and how each method relates to feminist theories and principles. Prerequisite: Graduate standing and consent of the instructor. SEM.

WGSS 803. Topics in Feminist Pedagogy: _____. 0.5 Hours.
The goal of the course is to teach students to teach. By reading core texts of feminist pedagogy, understanding critical theories, and attending seminars at the Center for Teaching Excellence selected by instructor and student, students will learn how to present knowledge and stimulate learning in the classroom, as well as such practical skills as leading discussion sections, preparing and presenting class sessions, developing syllabi, devising fair grading and helpful advising, and solving pedagogical problems like maintaining civility in the classroom and coping with academic misconduct. Must be repeated twice for a total of 1 credit hour while actively teaching. Prerequisite: Must be Women, Gender, and Sexuality Studies graduate students. SEM.

WGSS 804. Topics in Professional Development: _____. 1 Hour.
The goal of this course is to train students in the skills essential to becoming effective scholars and educators, and successful members of the profession. The material to be covered by these three iterations includes 1) the ethics and practice of feminist research (e.g., protection of human subjects, conflicts of interest, confidentiality, legal strictures); 2) the practical aspects of producing knowledge (e.g., writing research papers, proper citation methods, conference presenting, responding to peer reviews); and 3) acquiring and securing a place in the work force (e.g., CV preparation, job interviews, grant writing, getting promotion [and, in the academy, tenure]). Must be repeated three times for a total of 3 credit hours. Prerequisite: Must be Women, Gender, and Sexuality Studies graduate students. SEM.

WGSS 810. Comparative Sexualities. 3 Hours.
Employing an interdisciplinary and comparative perspective, this course introduces the study of human sexuality in various disciplines. Students
will also gain an understanding of the historical development and cross-cultural analysis of sexuality research, including the methodological, theoretical, and ethical issues involved in investigating sexual behavior and meanings. Prerequisite: Graduate standing and consent of the instructor. SEM.

WGSS 821. Woman and Violence. 3 Hours. An examination of research on women and violence, including rape, domestic violence, sexual harassment, stalking, and child sexual abuse. Research on the nature, prevalence, causes, and consequences of violence against women is discussed. (Same as PSYC 821.) Prerequisite: Six hours in WGSS and/or PSYC, or permission of instructor. LEC.

WGSS 835. Colloquium in the History of Gender. 3 Hours. This colloquium will cover theoretical and topical readings on the history of manhood, womanhood, and gender systems. (Same as AMS 835 and HIST 895.) LEC.

WGSS 836. Colloquium in United States Women's History. 3 Hours. This colloquium will cover theoretical and topical readings on the history of women in the United States from the pre-contact period to the present. It is designed to familiarize students with the most important and current historiography in the field. (Same as AMS 836 and HIST 896.) LEC.

WGSS 837. Comparative Colloquium in Women's History. 3 Hours. This colloquium will approach the history of women from a comparative perspective through theoretical and topical readings on women in at least two different cultures. (Same as AMS 837 and HIST 897.) LEC.

WGSS 873. Seminar in United States Women's History. 3 Hours. This research seminar will focus on the history of women in the United States from the pre-contact period to the present. Students will research and write a paper using primary sources, and present those papers to the seminar for evaluation. (Same as HIST 973 and AMS 973.) LEC.

WGSS 880. Advanced Feminist Anthropology: ____. 3-6 Hours. Intensive consideration of special problems in feminist anthropology. Topics for the semester to be announced. May be repeated for a total of six hours credit. (Same as ANTH 880.) Prerequisite: Permission of instructor. LEC.

WGSS 889. Conceptual Issues in Human Sexuality. 3 Hours. An examination of the social construction of sexuality and research methods and issues relevant to sexuality. These concepts are applied to various topics, such as defining and conceptualizing sex and gender, sexual dysfunction, sexual orientation, the social control of sexuality, sexual coercion and abuse, and abstinence-only sex education. The course does not cover anatomical or physiological aspects of sexuality. (Same as PSYC 889.) Prerequisite: Six hours in WGSS and/or PSYC, or permission of instructor. LEC.

WGSS 898. Research Colloquium. 3 Hours. This course is the "capstone" to the Women's Studies Graduate Certificate program. Members of the seminar will produce a major paper and will share their research. During the first part of the term a small number of visitors (professors at KU and/or visiting speakers from other universities) will be invited to assign readings and subsequently present their work on women and gender. Students will be expected to attend the Gender Seminar of the Hall Center for the Humanities. Prerequisite: WGSS 801 and at least 3 hours of other graduate work in the Women's Studies graduate certificate program, or by special permission. LEC.

WGSS 999. Doctoral Dissertation. 1-12 Hours. Original research that is to be incorporated into a PhD dissertation. THE.
the social sciences, but provides an option for concentration in either African or African-American Studies.

The integrative focus of the curriculum is an important characteristic of the interdisciplinary nature of this program. In this regard, the candidate should develop the capacity to continue as a self-educator throughout his/her career. Broad background study in this field enables the graduate to assimilate newly acquired skills and methodologies quickly. Graduates should be prepared to cope with the rapid changes in Africa and the African diaspora. The program places considerable emphasis on both the internal and external forces which affect African and African-American societies. The continuity and change in Africa and its impact on world civilization are emphasized in both the required courses and through electives.

Kansas African Studies Center

The Kansas African Studies Center (http://www.kasc.ku.edu) coordinates and develops the interdisciplinary interests of Africans across the University of Kansas, and promotes the understanding and study of Africa in the university, the state, and the region. Its mission includes the enhancement of curriculum, the sponsorship of research, the organization of conferences, the promotion of special projects, the acquisition of library and related sources, the conduct of outreach programs, the seeking and acquisition of grants and special funding to make these activities possible and to assist the university in their realization.

Langston Hughes Center

The Langston Hughes Center (http://www2.ku.edu/~lhcaas/Home.html) (formerly the Langston Hughes Resource Center, founded in 1998) is an academic research and educational center that builds upon the legacy and creative and intellectual insight of African American author, poet, playwright, folklorist, and social critic, Langston Hughes. The center coordinates, strengthens, and develops teaching, research, and outreach activities in African American studies, and the study of race and culture in American society at the University of Kansas and throughout the region. The center is a hub of critical examination of black culture, history, literature, politics, and social relations. In addition, like Hughes himself, the center has a Diasporic focus, promoting research and discussions on Africans in the Americas, the Caribbean, and Africa. Toward these ends, the Langston Hughes Center, regularly sponsors conferences, lectures, seminars, and forums on a variety of topics; coordinating activities with, among other groups, the Kansas African Studies Center and the Center of Latin American Studies and Caribbean Studies at KU.

Courses

AAAS 102. Arabic and Islamic Studies. 3 Hours. NW/SC AE42/GE3H/GE3S / U.

An introduction to the study of Islam and the Arabic language in relation to Islamic cultures in Africa, the Mediterranean region, and beyond. Topics covered include the historical origins of Islam in relation to the Arabic language and its cultures of origin. This course is interdisciplinary, including attention to the topic from the perspectives of historical unfolding of both the language and religion, geographic and cultural perspectives, political and economic concerns, and aesthetic perspectives, including literature and the arts. LEC.

AAAS 103. Introduction to Africa. 3 Hours. NW/SC GE3H/GE3S / S/W.

An introduction to the interdisciplinary study of African cultures and societies focusing on contemporary life on the continent. Topics to be covered include the geography, history, politics, and economics of the continent, as well as the religion, languages and literatures, music, and the arts. The interdisciplinary perspective will provide students with a sound basis for understanding contemporary African societies. LEC.

AAAS 104. Introduction to African-American Studies. 3 Hours. SC AE41 / U.

Interdisciplinary introduction to the basic concepts and literature in the disciplines covered in African American Studies. Includes the social sciences, and humanities (including history, religion, and literature) as well as conceptual framework for investigation and analysis of Black history and culture and society. LEC.

AAAS 105. Introduction to African History. 3 Hours. NW GE11/GE3H / H/W.

An introduction to important historical developments in Africa, mainly south of the Sahara. Topics will include pre-history, empires, kingdoms and city-states, the slave trade, southern Africa, partition and colonialism, the independence era, military and civilian governments, and liberation movements. Approaches will include literature, the visual arts, politics, economics, and geography. (Same as HIST 104.) LEC.

AAAS 106. The Black Experience in the Americas. 3 Hours. HT AE41 / H/W.

An interdisciplinary study of the history of the African peoples of the New World, relating their cultures and institutions to the African background and to their peculiar New World experiences up to and including the nineteenth century. While the main emphasis is on the U.S.A., attention is also paid to the Caribbean and Latin America. Approaches include demography, economics, social and political developments, literature, and music. (Same as HIST 109.) LEC.

AAAS 115. Introduction to African History, Honors. 3 Hours. NW GE3H / H.

An intensive version of AAAS 105/HIST 104. An introduction to important historical developments in Africa, mainly south of the Sahara. Topics include early history, empires, kingdoms and city-states, the slave trade, southern Africa, partition and colonialism, the independence era, military and civilian governments, and liberation movements. Approaches include literature, the visual arts, politics, economics, and geography. Open only to students in the University Honors Program or by consent of instructor. (Same as HIST 111.) LEC.

AAAS 116. The Black Experience in the Americas, Honors. 3 Hours. HT AE41 / H.

An intensive version of AAAS 106. Open only to students on Dean's Honor Roll or enrolled in Honors Program, or consent of instructor. LEC.

AAAS 160. Introduction to West African History. 3 Hours. NW AE42/GE3H / H.

This course treats West African history through the first part of the twentieth century. The student is provided with a perspective on the major historical patterns that gave rise to West Africa's development as an integral part of world history. Special attention is paid to anthropological, geographical, and technological developments that influenced West African political and socioeconomic changes. (Same as HIST 160.) LEC.

AAAS 177. First Year Seminar: ______. 3 Hours. GE11 / U.

A limited-enrollment, seminar course for first-time freshmen, addressing current issues in African American Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

AAAS 200. Directed Studies. 3 Hours. U.

This course is designed for the study of special topics related to Africana at the freshman/sophomore level. It prepares students for continued practice in cultural reading and writing and for the academic rigor that
awaits them at the upper levels. Prerequisite: Consent of department. IND.

**AAAS 210. Brazil and Africa: Atlantic Encounters. 3 Hours. H.**
This is a survey course on the history of the relationships between Brazil and Western Africa from the sixteenth century onward. We examine the shape of the Atlantic world, the nature of the Portuguese empire in Brazil and Africa, the presence of Brazilian born agents in Western Africa, the cultural exchanges, the impact of colonial rule, and the responses of indigenous societies to these developments. Among the topics to receive attention are Brazil/Portuguese slave trade; slavery in Western Africa, urban and rural context of African slavery in Brazil; the family and religious life in both sides of the Atlantic; Brazilian communities in the coast of Africa; the abolition of slavery; and the long lasting relationships between Western Africa and Brazil. Students develop familiarity with major historical concepts, themes, and subjects. The course also aims to explore history as process to make sense of the past and the present. (Same as HIST 210.) LEC.

**AAAS 300. African Traditional Religion and Thought. 3 Hours. NW / H/W.**
A study of African traditional religious beliefs, systems and practices and how these have conditioned spiritual, moral and social values, attitudes, social relationships and institutions, art, literature and music. Topics covered include the African world-view, concepts of birth, life, marriage, death and reincarnation; the concurrent practice or monotheism, polytheism and the cult of the ancestors; and the extent of relevance to Black societies in the New World. Prerequisite: AAAS 103 or AAAS 105 or AAAS 106 or consent of instructor. LEC.

**AAAS 301. Portrait of a Third-World Nation: Haiti. 3 Hours. NW / H/W.**
Case study of Third-World problems and aspirations through the first Black nation to win independence from colonialism. Topics include: profile of the Third World; Caribbean diversity; the Columbian exchange; piracy; slavery and plantocracy; Revolution and the burden of freedom; U.S. occupation; Papa Doc, Baby Doc, and the Tontons Macoute; Liberation theology; peasant life; government and corruption; poverty and hunger; morality of foreign aid; Voodoo; folk medicine. No knowledge of Haitian or French required. Students may not receive credit for both HAIT 200 and AAAS 301. LEC.

**AAAS 302. Contemporary Haiti. 3 Hours. NW.**
Detailed analysis of recent Haitian history. The focus will include interactions between religion, social structure, politics, economics and international relations. (Same as HAIT 300.) Prerequisite: AAAS 301/HAIT 200, or consent of instructor. LEC.

**AAAS 303. Peoples and Cultures of North Africa and the Middle East. 3 Hours. NW / S.**
This course familiarizes students with the peoples and cultures of North Africa and the Middle East. It examines the cultural, demographic, and religious diversity of the region, as well as the development of the early Islamic community and the formation of Islamic institutions. Issues such as religion and politics, inter-religious relations, nation-building, Islamic response to colonialism, Palestinian-Israeli conflict, Islamic resurgence, secularism, democratization, and gender, are also explored. (Same as ANTH 303.) LEC.

**AAAS 305. Modern African History. 3 Hours. NW AE42 / H/W.**
A survey of social, political, and economic developments during the colonial era and independence struggles, followed by a closer examination of the contemporary experience in a selected country or region. (Same as HIST 305.) LEC.

**AAAS 306. The Black Experience in the U.S. Since Emancipation. 3 Hours. H.**
An interdisciplinary study of the history and culture of Black people in America from Reconstruction to the present. Topics covered include an analysis of Reconstruction, Black leaders, organizations and movements, the Harlem Renaissance, migration, and race relations. Demographic variables covered include socio-economic class, education, political persuasion, and influence by avant-garde cultural changes. (Same as HIST 369.) LEC.

**AAAS 307. Modern African History, Honors. 3 Hours. NW AE42 / H.**
An intensive version of AAAS 305. A survey of social, political and economic developments during the colonial era and independence struggles, followed by a closer examination of the contemporary experience in a selected country or region. Open only to students admitted to the University Honors Program, or by consent of the instructor. (Same as HIST 307.) LEC.

**AAAS 316. Ministers and Magicians: Black Religions from Slavery to the Present. 3 Hours. H.**
This course examines the history and diversity of African American religious expression from slavery until the present, emphasizing both mainstream and alternative faiths. It covers the religious world views of enslaved Africans, and examines faiths inside and outside of Christianity. Topics may include: independent black churches, magical practices, the Holiness and Pentecostal movements, black Islam, religious freemasonry, and esoteric faiths. The class emphasizes the influence of gender, class, race, migration, and urbanization on black religion. (Same as AMS 316 and HIST 316.) LEC.

**AAAS 317. African American Women: Colonial Era to the Present. 3 Hours. H.**
This interdisciplinary course covers the history of African American women, beginning in West and Central Africa, extending across the Middle Passage into the Americas, and stretching through enslavement and freedom into the 21st century. The readings cover their experiences through secondary and tertiary source materials, as well as autobiographies and letters, plays and music, and poems, novels, and speeches. (Same as AMS 317, HIST 317, and WGST 317.) LEC.

**AAAS 320. African Studies In: _____, 3 Hours. NW AE42 / H/W.**
Lecture and discussion course in African area of current interest. May be repeated for credit toward the major. Prerequisite: AAAS 103 or AAAS 105 or consent of instructor. LEC.

**AAAS 321. African Studies In, Honors: _____, 3 Hours. H/W.**
Lecture and discussion course in African area of current interest. May be repeated for credit toward the major. Only open to students admitted to the University Honors Program or with permission of the instructor. Prerequisite: AAAS 103 or AAAS 105 or AAAS 115 or consent of instructor. LEC.

**AAAS 322. Legal Issues and the African American. 3 Hours. H.**
This course examines civil issues in African-American communities and populations, and their legal ramifications. Topics such as the penal system, court sentencing, death penalty, cultural norms, law enforcement and civil liberties are critically examined within social and humanistic theories. LEC.

**AAAS 323. African-American Studies In: _____, 3 Hours. H.**
Lecture and discussion course in African-American area of current interest. May be repeated for credit toward the major. Prerequisite: AAAS 106 or consent of instructor. LEC.

**AAAS 324. African-American Studies In, Honors: _____, 3 Hours. H.**
Lecture and discussion course in African-American area of current interest. May be repeated for credit toward the major. Only open to
students admitted to the University Honors Program or with permission of the instructor. Prerequisite: AAAS 106 or AAAS 116 or consent of instructor LEC.

AAAS 325. Popular Black Music. 3 Hours. H.
This is a comparative study of popular music produced in Africa, and the African Diaspora. The praxis, theories, histories, forms, artists and audiences are discussed. LEC.

AAAS 327. African American Culture. 3 Hours.
This course defines African American culture and seeks to identify ways in which it is distinct, both in terms of its roots and ongoing evolution. LEC.

AAAS 328. African American Urban Community and Class in the Midwest. 3 Hours. H.
This course provides historical perspective on African Americans and the politics of economic class within black urban spaces from the end of Reconstruction to the post-World War II era. It focuses on the development of an upwardly mobile urban black middle class, and impoverished black urban “underclass,” since the 1960s. Students are encouraged to successfully complete one of three courses: AAAS 104, AAAS 106, or AAAS 306. (Same as HIST 338.) LEC.

AAAS 330. Black Leadership. 3 Hours. H.
The course focuses on the concept of leadership and on Black leadership in the United States. An in-depth analysis of selected case studies of Black leaders both historical and contemporary. Some attention will be given to the dispersion of Africans into the Americas and the leadership that emerged, conditioned both by environmental factors and the psychology engendered by the system of slavery. Selected successful Black leaders will be invited to visit the class from time to time. (Same as AMS 340.) LEC.

AAAS 332. Introduction to African Literature. 3 Hours. NW AE42 / H/W.
Reading, analysis, and discussion of contemporary fiction, poetry, and drama from sub-Saharan Africa. Brief attention is paid to historical development and to traditional literature. Prerequisite: Open only to students admitted to the University Honors Program or with consent of instructor. Not open to students who have taken AAAS 332. LEC.

AAAS 340. Women in Contemporary African Literature. 3 Hours. NW AE42/GE3H / H.
A critical study of issues and questions raised about women in contemporary African literature and implications for the larger society through the analysis of theme, language, characterization, roles and functions of women in selected works. (Same as WGSS 330.) LEC.

AAAS 345. Popular Culture in Africa: Spiritual Thrills, Romance and Sexualities. 3 Hours. H.
This course examines how the different constituents of popular culture mobilize, construct and structure gender, and spiritual and sexual identities in select contemporary African countries. Discussions also focus on how popular culture mediates the contesting spaces of indigenous local constructs and the push and pull of global forces to create geographic and contemporary specificities. (Same as WGSS 345.) LEC.

AAAS 349. Islam. 3 Hours. NW AE42/GE3S / H/W.
Islam's Origins, the prophet Muhammad, the Holy Koran, religious symbols and moral mandates, and historical developments. (Same as REL 350.) LEC.

AAAS 350. Physical Geography of Africa. 3 Hours. N.
This course is a survey of the basic physical features of the African continent including structure and relief, rivers and lakes, soils and mineral resources. It includes characteristics and processes of African climates, and the ecology of Africa's four major biomes: tropical rain forest, savanna, steppe, and desert. Climatic and environmental variations of the past, emergence of humankind, and development of pastoral and farming systems are discussed. Contemporary environmental concerns also include deforestation and desertification, the impacts of drought, methods for monitoring African environments, and Africa's prospects in a 21st century suffering from global warming. (Same as GEOG 350.) LEC.

AAAS 351. Africa's Human Geographies. 3 Hours. NW AE42/GE3S / S/W.
An introduction to historical, cultural, social, political, and economic issues in Africa from a geographic perspective. The course begins with the historical geography of humanity in Africa, from ancient times through to the present. Other topics include cultural dynamics, demography, health, rural development, urbanization, gender issues, and political geography. Case studies from Eastern and Southern Africa will be used to illustrate major themes. (Same as GEOG 351.) LEC.

AAAS 353. Modern and Contemporary African Art. 3 Hours. H.
In this course, we examine the development of artistic modernisms in Africa in historical context. We also study the content, production, patronage, and display of modern and contemporary African art. In doing so, we consider African artists' engagement with modernity, globalization, and contemporary issues, as well as interrogate influential myths and assumptions regarding African artists and the work they produce. Course themes include the workshop as a critical site, independence movements and the creation of national art forms, art as global commodity, and art in resistance, remembrance, and revolution. (Same as HA 353.) LEC.

AAAS 355. African Theatre and Drama. 3 Hours. NW / H/W.
A study of the origin and development of continental African theatre and its affinity to the Levant. Traditional, colonial and contemporary dramatic theories and experiments will be examined in play selections. (Same as THR 326.) LEC.
AAAS 356. African-American Theatre and Drama. 3 Hours. H.
A historical study of Black theatre in the U.S.A. from its African genesis to its contemporary American-ness. Epochs in African-American dramaturgy will be critically examined. (Same as THR 327) LEC.

AAAS 370. Introduction to the Languages of Africa. 3 Hours. NW AE42/GE3S / H/W.
A survey of the indigenous languages of Africa from a linguistic perspective, covering the main language families and their geographic distribution, and focusing on the features and structure of the more widely spoken and representative languages in each family (e.g., Fula, Hausa, Maninka, Swahili, Yoruba). (Same as LING 370.) LEC.

AAAS 372. Religion, Power, and Sexuality in Arab Societies. 3 Hours. NW / S.
This course examines theories of religion, discourse, power, gender and sexuality in their application to Arab societies. The course introduces different aspects of Arab cultures. Through canonical works, we study political domination, tribal social organization, honor, tribe, shame, social loyalty, ritual initiations and discuss how these issues speak generally to anthropological inquiry. Regionally specific works are then framed by an additional set of readings drawn from anthropological, linguistics, and social theories. (Same as ANTH 372.) LEC.

AAAS 376. West African Art. 3 Hours. NW / H/W.
Introduction to the rich visual art traditions of West Africa. Emphasis is given to the major art-producing cultures of the Western Sudan and the Guinea Coast, including the pre-historic cultures of Nigeria, Mali, and Ghana. The diverse forms of figure sculptures and masquerade performance and meanings of these arts in historical and cultural contexts are examined. (Same as HA 376.) LEC.

AAAS 388. The Black Woman. 3 Hours. S/W.
An interdisciplinary study of the role of Black women in our society, from the African background through the plantation experience to the present. Prerequisite: One course in the social sciences and/or humanities or consent of instructor. LEC.

AAAS 400. Readings in: _____, 3 Hours. U.
Investigation of a subject selected by a student in consultation with a departmental adviser and conducted under supervision. Individual reports and conferences. Open only to students who have completed at least six credit hours in African and African-American studies. Cannot be repeated for credit. Prerequisite: Consent of instructor. IND.

AAAS 415. Women and Islam. 3 Hours. H/W.
Addresses the widely-held stereotype of Muslim women as pawns in a patriarchal socio-religious context. Investigating the Muslim cultures of certain regions, the course will examine the manner in which indigenous culture was influenced by the introduction of Islam and the historical impact of Islam on women's social roles. Focusing principally on social change in the 20th century, the course will consider how socio-political change affects religious roles where religion is integrally involved in daily life. To what extent is individualism valued, and how are the pressures of late 20th century life mediated? The course will draw on texts from history, sociology, and literature. Prerequisite: REL 107 or AAAS 349/REL 350 or consent of instructor. LEC.

AAAS 420. Intercultural Communication: The Afro-American. 3 Hours. AE41 / H.
An examination of the barriers to effective communication between Black Americans and non-Black Americans. (Same as COMS 447.) Prerequisite: Skills in basic composition essential. LEC.

AAAS 429. Postcolonial Theatre and Drama. 3 Hours. NW AE42/GE3S / H.
The course develops an understanding of the postcolonial concept and its different manifestations in theatre and drama across nations and cultures. It approaches postcolonialism as a way of reading theatre, and as a genre within theatre by exploring how the "colonial project" has reconfigured the concept, content, and context of theatre in both colonized and colonizing cultures. In addition to the study of postcolonial playwrights and their works, the course is also an introduction to postcolonial theory and its critics. (Same as THR 429.) LEC.

AAAS 432. Francophone African Literature. 3 Hours. NW AE42/GE3S / H/W.
This course is an introduction to 20th century African literature written in French, covering selected works by major authors from both sub-Saharan Africa and the Maghreb. Attention will be given primarily to the novel, although some poetry will also be read. Topics and themes include negritude, African identity in the wake of colonialism, Islam, and women's writing. Classes will be conducted in English. Students may read the texts in French or in translation. (Same as FREN 432.) Prerequisite: ENGL 102 and a 200-level English course. LEC.

AAAS 433. Islamic Literature. 3 Hours. NW AE51 / H/W.
This course focuses on literature that reflects Islamic culture from its inception to contemporary times. Beginning with attention to the importance of the spoken word in the establishment of Islam, course readings and lectures follow the place of literary works in confirming Islamic perspectives. Readings include selections from the Qur'an, classical works of poetry and narrative, and contemporary autobiography. Authors are from Africa and the region of the Golden Age of Islam, including the best known: al-Ghazali (d.1111 C.E.), Atar (d. circa 1193-1235), Ibn Arabi (d. 1240 C.E.), Rumi (d. 1273), Saadi (d.1291), Hafiz (d. 1389 C.E.), and Shah (contemporary), as well as readings by and about less well known Muslim women scholars and Sufis in all historical periods. Readings are all in English translations. LEC.

AAAS 434. African Women Writers. 3 Hours. NW / H/W.
This course focuses on four decades of African women's writing from all regions of the continent. Works included deal with a wide variety of issues relevant to African women, as well as universal issues of conceptions of gender roles, and the struggle to attain personal rights and freedom within traditional cultural frameworks. LEC.

AAAS 435. Muslim Women's Autobiography. 3 Hours. NW / H/W.
This course examines the realities of Muslim women's experiences as conveyed in their own voices. Works are drawn from all over the world, from Africa and the Middle East to Europe and the U.S. and cover the nineteenth and twentieth centuries. LEC.

AAAS 440. The Afro-American Family: A Psychological Approach. 3 Hours. S.
The examination of the structure, values, and behavior patterns of the contemporary African-American family as influenced by African cultures and kinship systems and the institution of slavery in association with other factors. Social and psychological forces that have enhanced or blocked family survival, stability, and advancement will be explored. The orientation of Black family life will emphasize its strengths, weaknesses, adaptations, strong kinship bonds, and equilibrarian family roles. LEC.

AAAS 445. Arab Thought and Identity. 3 Hours. NW / N/W.
The intention of this course is to present a comprehensive portrait and a deeper understanding of the Arab society and its cultural background. We will focus on the debate that is still raging about traditionalism versus modernity, and authenticity (assala) and specificity (Khususiyya) versus westernization. Moreover, we will discuss the question of Arab identity which manifests itself through a sense of belonging and diversity of
affiliations, and relies as well on shared culture and its variations, and shared place in history and common experiences. It is designed for any student interested in this ethnic group. LEC.

**AAAS 450. Popular Culture in the Muslim World. 3 Hours. NW / H.**
A study of pop songs, television, comics, and other idioms of popular culture from different parts of the Muslim world, with attention to Muslims' sense of humor, tragedy, aesthetics, and pertinent issues of the day. (Same as REL 450.) LEC.

**AAAS 460. Topics and Problems in African and African-American Studies. 1-3 Hours. H/W.**
Individual investigation of special topics in African and African-American studies. May not be repeated for credit toward the major. Prerequisite: Six hours in African and African-American studies or consent of instructor. IND.

**AAAS 470. Language and Society in Africa. 3 Hours. NW AE42/GE3S / H/W.**
Examines issues and problems associated with language use in sub-Saharan Africa from a sociological perspective. Topics covered include an overview of the types of languages spoken on the continent: indigenous languages, colonial languages, pidgins and creoles, and Arabic as a religious language; problems associated with the politics of literacy and language planning, writing and standardization of indigenous languages; and the cultural and ideological dilemmas of language choice. (Same as LING 470.) Prerequisite: AAAS 103, AAAS 305, or LING 106; or consent of instructor. LEC.

**AAAS 496. Field Experience. 3 Hours. AE61 / H/W.**
A supervised placement in practical situations where students actively participate in organized work within the community, to be completed with an acceptable paper. The course may be taken in the United States, Caribbean, or Africa to meet the B.A. degree requirement in African and African-American Studies. Open only to junior and senior majors or by consent of the department. FLD.

**AAAS 501. Regional History: ______. 3 Hours. H/W.**
A survey of the major political, social, economic and intellectual trends in a region of Africa or the Americas. Prerequisite: Five hours of distribution courses in history. LEC.

**AAAS 502. Directed Language Study: ______. 5 Hours. U.**
Study of an African language at Elementary I and Elementary II levels under individual supervision and with the aid of self-instructional material. Open to juniors and seniors in good standing and graduate students only and with permission of the department. May be repeated for up to 10 credit hours. Cannot be used to fulfill BA foreign language requirement. IND.

**AAAS 503. Directed Language Study: ______. 3 Hours. U.**
Study of an African language at Intermediate I and Intermediate II levels under individual supervision and with the aid of self-instructional material. Open to juniors and seniors in good standing and graduate students only and with permission of the department. May be repeated for up to 6 credit hours. Cannot be used to fulfill BA foreign language requirement. IND.

**AAAS 504. Directed Language Study I: ______. 3 Hours. U.**
Study of an African language at Advanced I and Advanced II levels under individual supervision and with the aid of self-instructional material. Open only to juniors and seniors in good standing, graduate students and with permission of the department. May be repeated for up to 6 credit hours. Cannot be used to fulfill BA language requirement. IND.

**AAAS 505. Directed Language Study II: ______. 3 Hours. U.**
Designed for native and near native speakers, this course involves reading of materials published in an African language intended for conversation, oral presentation, and writing by native speakers. May be repeated for up to 6 credit hours. Prerequisite: Native or near native speaker proficiency or consent of instructor. IND.

**AAAS 510. Global Ethnic and Racial Relations. 3 Hours. NW AE42 / S.**
An examination of constructions of race and ethnicity around the world. Emphasis is on the social, political, historical, cultural and economic factors that lead to the creation of ethnic and racial identities, ethnic conflict and accommodation, ethnic movements, and ethnic political organization. Racial and ethnic relations in the U.S. are compared with other countries. Major focus is placed on ethnicity in Africa, Asia, Latin America, the Caribbean, and/or the Middle East. (Same as AMS 534 and SOC 534.) LEC.

**AAAS 511. The Civil Rights Movement. 3 Hours. H.**
An examination of the Civil Rights Movement in American History. Emphasis is placed on the activities of major Civil Rights organizations, Civil Rights legislation and its impact on American life, and conflicts between integrationist and separatist forces in politics, economics, education, culture and race relations in the United States. LEC.

**AAAS 512. African and Western Cosmologies. 3 Hours. H/W.**
Ancient and modern Western world views will be compared to African world views, with special attention paid to the way these are supported in the underpinnings of sociocultural institutions. Prerequisite: A course in African Studies and a course in the philosophy of science or consent of instructor. LEC.

**AAAS 517. Roots of Human Trafficking: Modern Slavery and Africa. 3 Hours. H.**
This reading-intensive seminar explores human trafficking in the modern world. It examines labor exploitation and commercialization in a historical perspective. The course aims to explore how Imperialism led to the expansion of human trafficking and how women, men and children experienced labor exploitation in different ways. We examine how forced labor was/is behind the car and bicycle industries, sugar, coffee, and chocolate consumption. Today more than 27 million people are held, sold, and trafficked as slaves around the world. This course discusses similarities and differences between contemporary and historical slavery and analyzes why and how it persists nowadays. Readings include accounts of people held in bondage, case studies, and reports. Students develop familiarity with major historical concepts, themes, and subjects. Students also engage, investigate, and understand history as a process to explain how we make sense of the past and the present. Students carry on a research project throughout the semester about the historical roots of a modern case of slavery and/or human trafficking, producing original scholarship. (Same as HIST 517.) Prerequisite: Successful completion of a history course numbered below 500, or permission of instructor. LEC.

**AAAS 520. African Studies in: ______. 3 Hours. NW AE42 / H/W.**
Upper level lecture and discussion courses in African area of current interest and/or taking advantage of faculty resources in topics relevant to the major. May be repeated for credit toward the major. Prerequisite: Junior/Senior in good standing. LEC.

**AAAS 521. African Studies In, Honors: ______. 3 Hours. H/W.**
Upper level lecture and discussion courses in African area of current interest and/or taking advantage of faculty resources in topics relevant to the major. May be repeated for credit toward the major. Only open to students admitted to the University Honors Program or with permission of the instructor. Prerequisite: Junior/senior in good standing LEC.
Historical development, systematic ideas and rites of selected periods, cultural settings, and movements. Prerequisite: Five hours of distribution courses in the humanities or AAAS 512 and consent of instructor. LEC.

Upper level lecture and discussion courses in African-American area of current interest and/or taking advantage of faculty resources in topics relevant to the major. May be repeated for credit toward the major. Prerequisite: Junior/Senior in good standing. LEC.

AAAS 524. African-American Studies In, Honors: ______. 3 Hours. H.
Upper level lecture and discussion courses in African-American area of current interest and/or taking advantage of faculty resources in topics relevant to the major. May be repeated for credit toward the major. Only open to students admitted to the University Honors Program or with permission of the instructor. Prerequisite: Junior/senior in good standing. LEC.

AAAS 525. Social History of Black Aging in America. 3 Hours. H.
The purpose of this course is to provide a comprehensive historical examination of American society's changing attitudes and responses to aging and older adults, with emphasis on the Black aged. Beginning with the African background where older adults were highly valued, the course explores the impact of slavery, the industrial Revolution, urbanization and the development of the youth-oriented culture prevalent in the United States today. Subsequently, the course focuses on the emergence of twentieth century social gerontological problems and the role of the modern Black movements, public agencies, and private organizations in addressing the issues. Film, essays, drama, and/or fiction are utilized to illustrate the cultural attitudes of each historical period. Prerequisite: AAAS 103 or AAAS 105 or AAAS 106 or a course in American history, or consent of instructor. LEC.

AAAS 527. Popular Culture in Africa. 3 Hours. S/W.
This course examines multiple expressions of popular culture in contemporary Africa, focusing on the aesthetics of forms such as music, theater, dress, street art, and popular literary genres, as well as the social themes they deal with and the societies that produce them. The approach will be based on a critical reconsideration of notions such as traditional versus modern culture, elite versus folk art, westernization, and cultural hybridity, in order to find better ways of discussing the cultural vibrancy of everyday life in contemporary Africa. LEC.

AAAS 532. Studies in Islam. 3 Hours. H.
Study of religious thought, practice, and institutions of Islam with an emphasis on the examination of primary documents. (Same as REL 532.) LEC.

AAAS 534. The Rhetoric of Black Americans. 3 Hours. H.
A study of the rhetoric of Black Americans, from their earliest protest efforts to the contemporary scene, with the focus on the methods and themes employed to alter their status in American society. (Same as COMS 551.) Prerequisite: COMS 130. Skills in basic composition essential. LEC.

AAAS 536. Islamic Art and Architecture in Africa. 3 Hours. N.
Study of Islamic art and architecture in various cultural and geographical settings, from the first mosques of North African and the Swahili coast to contemporary Islamized masquerades in West Africa. We consider art objects and architectural sites in terms of religious practice, trade and commerce, ritual and political power, and contemporary expression. (Same as HA 536.) Prerequisite: AAAS 102, AAAS 103, HA 100, or HA 150; or permission of instructor. LEC.

AAAS 542. The History of Islam in Africa. 3 Hours. NW / H/W.
A study of the history and institutions of Islam in Africa. Emphasis will be placed on the impact of Islam on African traditional religions and African civilizations in general; the historiographical traditions of Islam in Africa. (Same as REL 535.) Prerequisite: Five hours of distribution courses in the humanities. LEC.

AAAS 543. Language and Culture in Arabic-Speaking Communities. 3 Hours. NW AE42/GE3S / H.
The course examines the links between language structure, patterns of use, language choice, and language attitudes in the diglossic and bilingual Arab-speaking communities. It also explores language as a reflector and creator of Arab culture (e.g., linguistic encoding of politeness, the Quranic text as the spoken and written word, the role of tropes in Arabic rhetoric). The topics for discussion range from the micro-level language choice to the macro-level issues of national language policies and planning within the domain of government and education across the Arab world. (Same as LING 543.) LEC.

AAAS 545. Unveiling the Veil. 3 Hours. NW / H.
This course seeks to unveil a complex cultural practice that has been misconstrued by many scholars. It explores the versatility of the meaning of the veil. It examines the ways in which the veil has become a symbol of privacy, cultural identity, religious assertion, resistance and liberation, besides being a symbol of constraint, oppression, backwardness, and sexual mystery. LEC.

AAAS 550. Senior Seminar in: ______. 3 Hours. AE61 / H/W.
Small discussion groups, each designed to consider a specific, clearly defined topic, using an interdisciplinary approach and requiring the demonstration of a comprehensive knowledge of the fundamentals in the field as appropriate to the topic. Class discussion based on student presentations. Prerequisite: Senior majors; special departmental permission for other seniors. LEC.

AAAS 551. Environmental Issues in Africa. 3 Hours. S.
Acquaints students with the complexities of debates on environmental problems in Sub-Saharan Africa. Topics addressed may include deforestation, desert expansion, wildlife conservation, soil erosion, climate change, coral reef destruction, water resources development, mangrove preservation, and the environmental effects of war, industrialization, and urbanization. Class presentations and projects synthesize the perspectives of both human and physical geography. (Same as GEOG 550.) Prerequisite: GEOG 104 or permission of instructor. LEC.

AAAS 552. Classical Islamic Literature. 3 Hours. NW / H.
An examination of major developments in classical Islamic literature in the Middle East and beyond, with attention to the poetic and prose works (in translation) that emerged from them. (Same as REL 552.) LEC.

AAAS 553. Geography of African Development. 3 Hours. NW AE42/GE3S / S.
Acquaints students with the values and social parameters of African agricultural and pastoral practice. Topics include customary land rights, African perspectives on the natural world, gender issues in African agriculture, and the urbanization of African cultures. The course also contrasts African views with those of Western development practitioners and donor agencies. Case studies from different countries are used to highlight the continent's regional differences. (Same as GEOG 553.) LEC.

AAAS 554. Contemporary Health Issues in Africa. 3 Hours. S.
The course examines health and nutrition in African communities, using the methods of biological and medical anthropology. Fundamental to the approach taken in the course is the understanding that the health of human groups depends on interactions between biological and cultural phenomena in a particular ecological context. One topic will be selected
per semester to examine in detail the full array of epidemiological factors contributing to patterns of specific diseases. AIDS, childhood diseases, and reproductive health of African women are among possible topics. Course material will be selected from scholarly and medical publications, as well as coverage in the popular media. The use of a variety of sources will enhance understanding of the biological and cultural issues involved, and will help students identify possible bias and misinformation in popular coverage of events such as famine or epidemic in African settings. (Same as ANTH 545.) Prerequisite: An introductory course in either Anthropology or African Studies. LEC.

AAAS 555. African Film. 3 Hours. NW / H.
A critical study of Africa and its peoples as depicted in films. The aesthetic, cultural, economic, political, historical, and ideological aspects of African films are examined. (Same as FMS 544.) LEC.

AAAS 557. Cities and Development. 3 Hours. S.
An intermediate level course in urban geography, with an emphasis on cities in the developing world. Example cities in Latin America and the Caribbean, Sub-Saharan Africa, the Middle East, South Asia, and/or Southeast Asia may be examined. The main focus is on the intersection between urbanization and economic development, but social, political, and cultural aspects of development in cities are considered. Other topics include the geographic impacts of European colonialism, urbanization and industrialization, rural-to-urban migration, urban structure and spatial dynamics, urban planning, and environmental sustainability. (Same as GEOG 557.) LEC.

AAAS 560. Race, Gender, and Post-Colonial Discourses. 3 Hours. H.
An examination of the ways in which the concept of race, gender, and post-colonialism frame African literatures from the Caribbean, North America, and the continent itself. The course will focus on these discourses grounding them in critical frameworks within which they can be contextually analyzed and evaluated, at the same time examining their impact in literacy praxis and theory. (Same as WGSS 560.) LEC.

AAAS 561. Liberation in Southern Africa. 3 Hours. NW AE42 / U.
This course examines struggles for freedom in southern Africa and the consequences of political, economic, and social changes in the region. The end of colonial rule, the demise of white-settler domination, and the fall of the apartheid regime is discussed. As a major political event of the twentieth century, the liberation of southern Africa had both local and global consequences. The course analyzes transnational issues of liberation and resistance to consider broader regional and international perspectives. Course themes pay particular attention to gender and ethnicity and include a focus on democratization and contemporary meanings of liberation. Prior coursework in African Studies is strongly recommended, but not required. (Same as HIST 561 and POLS 561.) LEC.

AAAS 565. Gender, Culture, and Migration. 3 Hours. H.
This course brings a human face to the 21st century manifestation of globalization by focusing on the issues of culture, gender and migration. How do these three aspects create the “global village” amongst both the host and donor peoples? When people move from one place to another, what do they leave behind, what do they take with them? What is gained, or lost by the host community? What is the impact of migration on a specific group’s and individual’s sense of identity? How has migration affected the people’s construction, understanding, and practice of gender? Given their primary roles in the home and within the culture, these questions and more are posed with particular attention to women. Migration theories, interviews and personal testimonies as well as literary and dramatic works are critical to our analyses of the issues raised and enable us to hold conversations with, and listen to the stories of the ordinary people who make globalization happen and sustain it. (Same as AMS 565 and WGSS 565.) LEC.

AAAS 568. Kongo Trans-Atlantic. 3 Hours. S.
This seminar explores Kongo culture and history through a cross-section of the African-Atlantic World: Western Equatorial Africa and related New World societies in Jamaica, Brazil, Haiti, Cuba, and the Georgia and Carolina coasts, and New Orleans (thus in former British, Portuguese, French, Spanish, and U.S. colonial territories). The seminar will assess recent scholarship on patterns of slavery and resistance, cultural and linguistic change, creolization and hybridization. (Same as ANTH 568.) LEC.

AAAS 574. Slavery in the New World. 3 Hours. H/W.
Slavery, slave culture, and the slave trade in the U.S., Latin America, and the Caribbean will be examined comparatively. Attention will also be given to African cultures, the effects of the slave trade on Africa, and the effects of African cultures on institutions in the New World. (Same as HIST 574.) LEC.

AAAS 578. Central African Art. 3 Hours. NW / H/W.
Introduction to the arts and cultures of Central Africa. Emphasis is given to the major art-producing cultures of the Equatorial forest and the Southern Savanna regions of Cameroon, Gabon, Congo, Zaire, and Angola. The historical and cultural contexts for the visual arts associated with centralized leadership and non-centralized societies are explored. (Same as HA 578.) LEC.

AAAS 584. Black American Literature. 3 Hours. H.
A study of the literature written by Black Americans from the pre-Civil War period to the present. Emphasis upon specific historical periods in the development of Black literature as well as on a critical analysis of major autobiographical, poetic, and fictional works. LEC.

AAAS 585. Race and the American Theatre. 3 Hours. U.
The representation(s) of race in significant texts and performance styles in American theatre analyzed according to political ideologies, dramatic movements and the impact of these factors on the representation of the “other” in the theatre. (Same as AMS 529 and THR 529.) LEC.

AAAS 590. The Rise and Fall of Apartheid. 3 Hours. H.
This course will deal with the last fifty years of South African history during which apartheid came to be formulated, supported, and perpetuated, and the forces that were responsible for its disintegration by 1990. Reference will also be made to the transformation process since April 1994. (Same as HIST 599.) LEC.

AAAS 598. Sexuality and Gender in African History. 3 Hours. NW AE42 / H.
An examination of the history of sexuality and gender in Africa with a focus on the 19th and 20th centuries. Major issues and methods in the historical scholarship on gender and sexuality will be covered. Topics of historical analysis include life histories, rites of passage, courtship, marriage, reproduction, education, masculinities, homosexuality, colonial control, and changing gender relations. Prior course work in African history is suggested. Graduate students will complete an additional project in consultation with the instructor. (Same as HIST 598.) LEC.

AAAS 600. Politics in Africa. 3 Hours. NW AE42 / S.
A survey of politics in Africa, focused on the countries of sub-Saharan or Black Africa. The course includes a historical discussion of precolonial Africa, colonization and the creation of contemporary states, and the politics of independence, before examining contemporary political systems and the forces influencing patterns of politics on the continent. (Same as POLS 685.) Prerequisite: POLS 150 or AAAS 105 or AAAS 305 or consent of instructor. LEC.
AAAS 611. History of the Black Power Movement. 3 Hours. H.
Examines the Black Power Movement in its many manifestations, beginning with a discussion of its political and cultural background: the transition from Civil Rights to Black Power in the African American Freedom Movement of the 1960s; the impact on African Americans of African decolonization and the spread of anti-colonial and anti-imperialist movements throughout other parts of the globe. The course also examines the Black Arts Movement and its influence on the Black Power Movement and vice versa. Therefore, some attention will also be paid to the music, literature, theater, and the graphic arts of the period, and the aesthetic and political critiques of these artistic forms. Prerequisite: AAAS 511 not required but recommended. LEC.

AAAS 630. The Life and Intellectual Thought of W.E.B. Du Bois. 3 Hours. H.
A critical examination of W. E. B. Du Bois, paramount black scholar and activist whose massive body of scholarly work spans the period from late 19th through the mid-20th centuries. Course covers the major works of Du Bois. Topics include Du Bois as sociologist, historian, propagandist, and creative writer. Moreover, the course deals with Du Bois as an intellectual in conversation with other black thinkers, including individuals such as, Booker T. Washington, Alexander Crummell, Anna Julia Cooper, Ida B. Wells-Barnett, Marcus Garvey, E. Franklin Frazier, Walter White and Thurgood Marshall. LEC.

AAAS 650. Sufism. 3 Hours. NW / H.
A survey of developments in Sufi (Islamic Mystical) thought, poetry, and ritual throughout Muslim history and across the Muslim world. (Same as REL 650.) Prerequisite: AAAS 349/REL 350 or permission of instructor. LEC.

AAAS 657. Gender in Islam and Society. 3 Hours. NW / H.
An investigation of the relationship between Islam, and gender roles and status in religious texts (Quran and Hadith) and in societies across the Muslim world, past and present. (Same as REL 657.) Prerequisite: AAAS 349/REL 350 or permission of instructor. LEC.

AAAS 662. Gender and Politics in Africa. 3 Hours. S.
This course is designed to explore the field of gender and African politics. We begin by paying particular attention to African women's political roles during the pre-colonial and colonial society. Next, we examine the impetus, methods, and path of liberation struggles and how gender roles were shaped, shifted, and changed during these struggles. The majority of the class focuses on current issues in African politics, including gender and development, HIV/AIDS and women's health, gender and militarism. We also explore women's roles in political institutions, civil society organizations, trade and labor unions, and transnational movements. We also examine contemporary constructions of masculinity and femininity in African states and explore how these constructions affect social policy and national political agendas. (Same as WGSS 662.) LEC.

AAAS 663. The Anthropology of Islam. 3 Hours. NW / H.
This course uses critical readings of major anthropological works on Islam to: 1) analyze various interpretations of "Islamic cultures" through a discussion of regionally-grounded works, and 2) examine how the anthropological study of Islam also is informed by theoretical and philosophical approaches to major anthropological questions, such as religion, myth, kinship, social organization, and power. The course offers both a history of various interpretations of Islam as well as a history of theories of these interpretations. (Same as ANTH 663.) LEC.

AAAS 676. West African Art. 3 Hours. NW / H/W.
Introduction to the rich visual art traditions of West Africa. Emphasis is given to the major art-producing cultures of the Western Sudan and the Guinea Coast, including the archaeological cultures of Nigeria, Mali, and Ghana. The diverse forms of figure sculptures and masquerade performance and meanings of these arts in historical and cultural contexts are examined. This course requires more intensive work than AAAS 376 and is open to upper division and graduate students only. Not open to students who have taken AAAS 376/HA 376. (Same as HA 676.) LEC.

AAAS 677. African Design. 3 Hours. NW / H/W.
A survey of sub-Saharan African media, emphasizing textiles, ceramics, metal and bead work, the artist's techniques, working methods and apprenticeship, and historical and contemporary cultural contexts, including the influence of tourism and the international art market on artistic production and style. Open to juniors, seniors, and graduate students only. (Same as HA 677.) Prerequisite: AAAS 376 or HA 376, or AAAS 578 or HA 578, or an introductory course in art history at the college level, or consent of instructor. LEC.

AAAS 679. African Expressive Culture: ______. 3 Hours. NW / H/W.
An in-depth examination of an artistic tradition shared by a number of African cultures. Discussion includes historical development related to style, use and meaning and other relevant issues. Open to juniors, seniors, and graduate students only. (Same as HA 679.) Prerequisite: AAAS 376 or HA 376, or AAAS 578 or HA 578, or an introductory course in art history at the college level, or consent of instructor. LEC.

AAAS 680. Introduction to Modern Africa. 3 Hours. H/W.
An interdisciplinary approach to cross-cultural understanding of Africa's place in the modern world. Specific emphasis will be given to the role of Africa in world history, African cultures, modern African history, and problems of development and nation building in Africa. Prerequisite: Consent of instructor. LEC.

AAAS 690. Investigation and Conference. 1-3 Hours. AE61 / H/W.
Individual and supervised readings in selected areas of African and African-American studies which will be an investigation of a subject selected by the student with the advice and direction of an instructor. Individual reports and conferences. Prerequisite: Seniors and consent of department. IND.

AAAS 695. Honors Project in: ______. 3 Hours. AE61 / H.
An individual research project in African-American or African studies under the direction of a specialist in the area of the student's interest, the results of the project to be presented in written form and to be defended before a committee of three faculty members as provided for under the requirements for Honors. Majors only and permission of instructor. IND.

AAAS 700. Africa in World Politics. 3 Hours.
A 20th-century and 21st-century study of the combined internal and external forces that precipitated the rise of Africa, the major African issues in international relations, and Africa's impact on the modern world. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 701. Politics in Africa. 3 Hours.
A survey of politics in Africa, focused on the countries of sub-Saharan or Black Africa. The course includes a historical discussion of precolonial Africa, colonization and the creation of contemporary states, and the politics of independence, before examining contemporary political systems and the forces influencing patterns of politics on the continent. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 715. Seminar in African Art. 3 Hours.
A concentrated study of a special topic relating to African Art studies. Different topics are offered in different semesters. (Same as HA 715.) Prerequisite: Nine hours of Art History and/or consent of instructor. SEM.
AAAS 716. Women in Islam. 3 Hours.
Addresses the widely-held stereotype of Muslim women as pawns in a patriarchal socio-religious context. Investigating the Muslim cultures of certain regions, the course will examine the manner in which indigenous culture was influenced by the introduction of Islam and the historical impact of Islam on women's social roles. Focusing principally on contemporary social change, the course will consider how socio-political change affects religious roles where religion is integrally involved in daily life. To what extent is individualism valued, and how are the pressures of late 20th-century and early 21st-century life mediated? The course will draw on texts from history, sociology, and literature. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 720. Intercultural Communication: The Afro-American. 3 Hours.
An examination of the barriers to effective communication between Black Americans and non-Black Americans. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 723. Special Topics in Africana Studies: _____. 3 Hours.
Seminar in an area of current interest in African and African-American Studies. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 727. African-American Culture. 3 Hours.
This course defines African American culture and identifies ways in which it is distinct. The course identifies the roots of African American culture, as well as the transformations occurring over time. The course covers identity issues and considers the possibility of complex, multi-identity structures. The course addresses the issues of whether there is a common narrative or a common root metaphor for African American culture, how this is known epistemologically, internally and externally, and how epistemological "knowledge" is appropriated. Course pedagogy includes text readings, case studies, performance events, and media events.

AAAS 730. Black Leadership. 3 Hours.
The course focuses on the concept of leadership and on Black leadership in the United States. An in-depth analysis of selected case studies of Black leaders both historical and contemporary. Some attention will be given to the dispersion of Africans into the Americas and the leadership that emerged, conditioned both by environmental factors and the psychology engendered by the system of slavery. Selected successful Black leaders will be invited to visit the class from time to time. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 731. African Literature. 3 Hours.
Introduction to African Literature. Reading, analysis, and discussion of contemporary fiction, poetry, and drama from sub-Saharan Africa. Brief attention will be paid to historical development and to traditional literature. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 732. Francophone African Literature. 3 Hours.
This course is an introduction to 20th-century and modern Francophone African literature covering selected works by major authors from both sub-Saharan Africa and the Maghreb. Attention will be given primarily to the novel, although some poetry will also be read. Topics and themes include negritude, African identity in the wake of colonialism, Islam, and women's writing. Classes will be conducted in English. Students may read the texts in French or in translation. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 733. Islamic Literature. 3 Hours.
Contemporary literature that is set in the context of Muslim cultures provides for an examination of Muslim identity on its own terms. This course focuses on the literary examination of works by Muslim authors from Egypt, Sudan, Senegal, Guinea, Mali, Morocco, Nigeria, and Niger. From the perspective of both male and female authors, the issue of what it means to be a Muslim is considered through fictional accounts set in contemporary contexts. Some works will be read in translation from Arabic or French; others are written originally in English. Cultures considered in this course vary widely in their origins and customs, which allows for a focus on the one pervasive element they share in common: Islam as it shapes people's lives. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 734. African Women Writers. 3 Hours.
This course focuses on African women's writing from all regions of the continent. Works included deal with a wide variety of issues relevant to African women, as well as universal issues of conceptions of gender roles, and the struggle to attain personal rights and freedom within traditional cultural frameworks. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 735. Muslim Women's Autobiography. 3 Hours.
This course examines the realities of Muslim women's experiences as conveyed in their own voices. Works are drawn from all over the world, from Africa and the Middle East to Europe and the U.S. and cover from the 19th-century to the present. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 740. The Afro-American Family: A Psychological Approach. 3 Hours.
The examination of the structure, values, and behavior patterns of the contemporary African-American family as influenced by African cultures and kinship systems and the institution of slavery in association with other factors. Social and psychological forces that have enhanced or blocked family survival, stability, and advancement will be explored. The orientation of Black family life will emphasize its strengths, weaknesses, adaptations, strong kinship bonds, and equilallitarian family roles. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 743. Islamic Thought and Identity. 3 Hours.
The intention of this course is to present a comprehensive portrait and a deeper understanding of the Arab society and its cultural background. We will focus on the debate that is still raging about traditionalism versus modernity, and authenticity (’assala) and specificity (Khususiyya) versus westernization. Moreover, we will discuss the question of Arab identity which manifests itself through a sense of belonging and diversity of affiliations, and relies as well on shared culture and its variations, and shared place in history and common experiences. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 749. Islam. 3 Hours.
Islam's origins, the prophet Muhammed, the Holy Koran, religious symbols and moral mandates, and historical developments. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.
AAAS 750. Popular Culture in the Muslim World. 3 Hours.
A study of pop songs, television, comics, and other idioms of popular culture from different parts of the Muslim world, with attention to Muslims' sense of humor, tragedy, aesthetics, and pertinent issues of the day. LEC.

AAAS 760. Topics and Problems in African and African-American Studies. 3 Hours.
Individual investigation of special topics in African and African-American studies. May not be repeated for credit. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 770. Language and Society in Africa. 3 Hours.
Examines issues and problems associated with language use in sub-Saharan Africa from a sociological perspective. Topics covered include an overview of the types of languages spoken on the continent: indigenous languages, colonial languages, pidgins and creoles, and Arabic as a religious language; problems associated with the politics of literacy and language planning, writing and standardization of indigenous languages; and the cultural and ideological dilemmas of language choice. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 774. Topics in Literatures of Africa and the African Diaspora: 3 Hours.
An intensive study of the literatures of Africa and/or African diaspora (people of African descent dispersed around the world). This study will focus on the major characteristics of a particular period, genre, mode, and/or theme in literatures such as African, Caribbean, Afro-Brazilian, African American, African Canadian, Black British. Critical theories pertinent to writers and their work will be covered. Topics may include studies in drama, poetry, or the novel; migration narratives; literature of a particular era, such as the Harlem Renaissance, Negritude, or the Black Arts Movement; representations of gender, etc. As topics vary by semester, the course may be repeated for credit. (Same as ENGL 774.) LEC.

AAAS 788. The Black Woman. 3 Hours.
An interdisciplinary study of the role of Black women in our society, from the African background through the plantation experience to the present. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 801. Introduction to Africana Studies: African-American. 3 Hours.
An introduction to, and overview of, the historical, intellectual, and professional foundations of African-American Studies; a multidisciplinary examination of the key texts and issues in the field. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 802. Introduction to Africana Studies: African. 3 Hours.
An introduction to, and overview of, the historical, intellectual, and professional foundations of African Studies; a multidisciplinary examination of the key texts and issues in the field. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 803. Research Methods in Africana Studies. 3 Hours.
A multidisciplinary introduction to the range of research methods employed to examine African and African-American history, cultures, and societies. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 804. Seminar in Africana Studies. 3 Hours.
An interdisciplinary, comparative exploration of the histories, cultures, and societies of Africans and peoples of African descent. Students will be required to utilize the skills gained in AAAS 801 and AAAS 802 to design and implement a project that will be critically assessed in the seminar. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. Prerequisite: AAAS 801 and AAAS 802 or consent of instructor. LEC.

AAAS 810. Comparative Racial and Ethnic Relations. 3 Hours.
An examination of constructions of race and ethnicity around the world. Emphasis is on the social, political, historical, cultural and economic factors that lead to the creation of ethnic and racial identities, ethnic conflict and accommodation, ethnic movements, and ethnic political organization. Racial and ethnic relations in the U.S. are compared with other countries. Major focus is placed on ethnicity in Africa, Asia, Latin America, the Caribbean, and/or the Middle East. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 811. The Civil Rights Movement. 3 Hours.
An examination of the Civil Rights Movement in American History. Emphasis is placed on the activities of major Civil Rights organizations, Civil Rights legislation and its impact on American life, and conflicts between integrationist and separatist forces in politics, economics, education, culture and race relations in the United States. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 812. The Black Power Movement. 3 Hours.
This course will examine the Black Power Movement in its many manifestations, beginning with a discussion of its political and cultural background: the transition from Civil Rights to Black Power in the Afro-American freedom movement of 1960's; the impact on African Americans of African decolonization and the spread of anti-colonial and anti-imperialist movements throughout other parts of the globe. There will also be some examination of the Black Arts Movement and its influence on the Black Power Movement and vice versa. Therefore, some attention will also be paid to the music, literature, theater, and the graphic arts of the period, and the aesthetic and political critiques of these artistic forms. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 822. African and African-American Religion. 3 Hours.
Historical development, systematic ideas and rites of selected periods, cultural settings, and movements. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 825. Social History of Black Aging in America. 3 Hours.
The purpose of this course is to provide a comprehensive historical examination of American society's changing attitudes and responses to aging and older adults, with emphasis on the Black aged. Beginning with the African background where older adults were highly valued, the course explores the impact of slavery, the industrial Revolution, urbanization and the development of the youth-oriented culture prevalent in the United States today. Subsequently, the course focuses on the emergence of twentieth-century social gerontological problems and the role of the modern Black movements, public agencies, and private organizations in addressing the issues. Film, essays, drama, and/or fiction are utilized to illustrate the cultural attitudes of each historical period. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.
AAAS 827. Popular Culture in Africa. 3 Hours.
This course examines multiple expressions of popular culture in contemporary Africa, focusing on the aesthetics of forms such as music, theatre, dress, street art, and popular literary genres, as well as the social themes they deal with and the societies that produce them. The approach will be based on a critical reconsideration of notions such as traditional versus modern culture, elite versus folk art, westernization, and cultural hybridity, in order to find better ways of discussing the cultural vibrancy of everyday life in contemporary Africa. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 830. The Life and Times of W.E.B. Du Bois. 3 Hours.
A critical examination of the life and thought of W. E. B. Du Bois, paramount black scholar and activist whose massive body of scholarly work spans the period from late 19th through the mid-20th centuries. Course covers the major works of Du Bois. Topics include Du Bois as sociologist, historian, propagandist, and creative writer, taking into account his often shifting views on art and culture, politics, leadership, civil rights and the color line, trade unionism, Pan-Africanism, socialism, internationalism, and, of course, double consciousness, among other issues. Moreover, the course will deal with Du Bois as an intellectual in conversation with other black thinkers, including individuals such as Booker T. Washington, Alexander Crummell, Anna Julia Cooper, Ida B. Wells-Barnett, Marcus Garvey, E. Franklin Frazier, Walter White and Thurgood Marshall. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 832. Comparative Black Literature. 3 Hours.
Reading, analysis, and discussion of contemporary fiction, poetry, and drama from Africa, the Caribbean, and the United States. Brief attention will be paid to historical development and to traditional literature. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 834. The Rhetoric of Black Americans. 3 Hours.
A study of the rhetoric of Black Americans, from their earliest protest efforts to the contemporary scene, with the focus on the methods and themes employed to alter their status in American society. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 843. Language and Culture in Arabic-Speaking Communities. 3 Hours.
The course examines the links between language structure, patterns of use, language choice, and language attitudes in the diglossic and bilingual Arabic-speaking communities. It also explores language as a reflector and creator of Arab culture (e.g. linguistic encoding of politeness, the Quranic text as the spoken and written word, the role of tropes in Arabic rhetoric). The topics for discussion range from the micro-level language choice to the macro-level issues of national language policies and planning within the domain of government and education across the Arab world. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 845. Unveiling the Veil. 3 Hours.
This course seeks to unveil a complex cultural practice that has been misconstrued by many scholars. It explores the versatility of the meaning of the veil. It examines the ways in which the veil has become a symbol of privacy, cultural identity, religious assertion, resistance and liberation, besides being a symbol of constraint, oppression, backwardness, and sexual mystery. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 851. Environmental Issues in Africa. 3 Hours.
Acquaints students with the complexities of debates on environmental problems in Sub-Saharan Africa. Topics addressed may include deforestation, desert expansion, wildlife conservation, soil erosion, climate change, coral reef destruction, water resources development, mangrove preservation, and the environmental effects of war, industrialization, and urbanization. Class presentations and projects synthesize the perspectives of both human and physical geography. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 852. Classical Islamic Literature. 3 Hours.
An examination of major developments in classical Islamic literature in the Middle East and beyond, with attention to the poetic and prose works (in translation) that emerged from them. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 853. Geography of African Development. 3 Hours.
A critical study of Africa and its peoples as depicted in films and videos. The aesthetic, cultural, economic, political, historical, and ideological aspects of African films and videos will be examined. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 855. African Film and Video. 3 Hours.
A critical study of Africa and its peoples as depicted in films and videos. The aesthetic, cultural, economic, political, historical, and ideological aspects of African films and videos will be examined. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 857. Cities and Development. 3 Hours.
An intermediate-level course in urban geography, with an emphasis on cities in the developing world. Example cities in Latin America and the Caribbean, Sub-Saharan Africa, the Middle East, South Asia, and/or Southeast Asia may be examined. The main focus is on the intersection between urbanization and economic development, but social, political, and cultural aspects of development in cities are considered. Other topics include the geographic impacts of European colonialism, urbanization and industrialization, rural-to-urban migration, urban structure and spatial dynamics, urban planning, and environmental sustainability. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 860. Race, Gender, and Post-Colonial Discourses. 3 Hours.
An examination of the ways in which the concept of race, gender, and post-colonialism frame African literatures from the Caribbean, North America, and the continent itself. The course will focus on these discourses grounding them in critical frameworks within which they can be contextually analyzed and evaluated, at the same time examining their impact in literacy praxis and theory. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 874. Slavery in the New World. 3 Hours.
Slavery, slave culture, and the slave trade in the U.S., Latin America, and the Caribbean will be examined comparatively. Attention will also be given to African cultures, the effects of the slave trade on Africa, and the effects
of African cultures on institutions in the New World. Additional advanced-
level coursework is required for students in this course beyond lower-level
courses of the same name and/or description. LEC.

**AAAS 880. Introduction to Modern Africa. 3 Hours.**
An interdisciplinary approach to cross-cultural understanding of Africa’s place in the modern world. Specific emphasis will be given to the role of Africa in world history, African cultures, modern African history, and problems of development and nation building in Africa. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

**AAAS 884. Black American Literature. 3 Hours.**
A study of the literature written by Black Americans from the pre-Civil War period to the present. Emphasis upon specific historical periods in the development of Black literature as well as on a critical analysis of major autobiographical, poetic, and fictional works. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

**AAAS 885. Race and the American Theatre. 3 Hours.**
The representation(s) of race in significant texts and performance styles in American theatre analyzed according to political ideologies, dramatic movements and the impact of these factors on the representation of the "other" in the theatre. LEC.

**AAAS 890. The Rise and Fall of Apartheid. 3 Hours.**
This course will deal with the fifty years of South African history during which apartheid came to be formulated, supported, and perpetuated, and the forces that were responsible for its disintegration by 1990. Reference will also be made to the transformation process since April 1994. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

**AAAS 898. Sexuality and Gender in African History. 3 Hours.**
An examination of the history of sexuality and gender in Africa focused on the 19th-century to the present. Major issues and methods in the historical scholarship on gender and sexuality will be covered. Topics of historical analysis include life histories, rites of passage, courtship, marriage, reproduction, education, masculinities, homosexuality, colonial control, and changing gender relations. Prior course work in African history is suggested. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

**AAAS 899. Thesis. 1-6 Hours.**
Investigation and research of a topic for a master's thesis. A maximum of 6 thesis hours may be counted toward the 33 hours required for the degree. THE.

**AMHR 110. Elementary Amharic I. 5 Hours. U.**
Basic level of oral fluency and aural comprehension. Vocabulary acquisition, pronunciation, grammar, and writing. Reading of simple texts. Not open to native speakers of Amharic. LEC.

**AMHR 120. Elementary Amharic II. 5 Hours. U.**
A continuation of AMHR 110. Readings in cultural texts. Prerequisite: AMHR 110. LEC.

**AMHR 177. First Year Seminar: _____ 3 Hours. GE11 / U.**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Amharic. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

**AMHR 210. Intermediate Amharic I. 3 Hours. U.**
Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern Amharic texts and discussion in Amharic. Prerequisite: AMHR 120. LEC.

**AMHR 220. Intermediate Amharic II. 3 Hours. U.**
Continuation of AMHR 210. Discussion in Amharic of texts studied. Prerequisite: AMHR 210. LEC.

**ARAB 110. Elementary Arabic I. 5 Hours. U.**
Five hours of class per week. Basic level of oral fluency and aural comprehension. Vocabulary acquisition, pronunciation, grammar, and writing. Reading of simple texts. Not open to native speakers of Arabic. LEC.

**ARAB 120. Elementary Arabic II. 5 Hours. U.**
Five hours of class per week. A continuation of ARAB 110. Readings in cultural texts. Prerequisite: ARAB 110. LEC.

**ARAB 177. First Year Seminar: _____ 3 Hours. GE11 / U.**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Arabic. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

**ARAB 210. Intermediate Arabic I. 3 Hours. U.**
Three hours of class conducted in Arabic. Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern Arabic texts and discussion in Arabic. Prerequisite: ARAB 120. LEC.

**ARAB 220. Intermediate Arabic II. 3 Hours. U.**
Three hours of class conducted in Arabic. A continuation of ARAB 210. Discussion in Arabic of texts studied. Prerequisite: ARAB 210. LEC.

**ARAB 310. Advanced Arabic I. 3 Hours. U.**
A practical Arabic language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Arabic. Designed for students who have had two or more years of Arabic study. Open to native speakers. Prerequisite: ARAB 220 or consent of instructor. LEC.

**ARAB 320. Advanced Arabic II. 3 Hours.**
A continuation of ARAB 310. Prerequisite: Satisfactory completion of ARAB 310 or consent of instructor. LEC.

**ARAB 401. Readings in Arabic I. 3 Hours. U.**
Designed for native and near-native speakers, this course involves reading newspapers and other publications in the language intended for native speakers, conversation, oral presentations, and advanced grammar. Prerequisite: Native or near-native speaker proficiency or consent of instructor. LEC.

**ARAB 402. Readings in Arabic II. 3 Hours. U.**
Continuation of ARAB 401. LEC.

**HAIT 110. Elementary Haitian I. 3 Hours. U.**
Beginning course in the vernacular language of Haiti, Martinique, Guadeloupe and other areas of the Caribbean and the Indian Ocean. Conversational approach, with essentials of grammar. Reading of basic texts. Special attention to folk culture as expressed by language. No previous knowledge of another foreign language is required. LEC.

**HAIT 120. Elementary Haitian II. 3 Hours. U.**
Continuation of HAIT 110, with further readings in Haitian literature. Prerequisite: HAIT 110 or consent of instructor. LEC.
HAIT 177. First Year Seminar: _____ 3 Hours. GE11 / U. 
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Haitian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

HAIT 230. Intermediate Haitian I 3 Hours. U. 
Continued practice in conversation and composition; intensive and extensive readings from contemporary press, short story, poetry, and folk tales. Prerequisite: HAIT 120 or consent of instructor. LEC.

HAIT 240. Intermediate Haitian II 3 Hours. U. 
Continuation of HAIT 230, with additional readings from theatre, novel, and historical texts. Prerequisite: HAIT 230 or consent of instructor. LEC.

HAIT 300. Contemporary Haiti. 3 Hours. NW / H. 
Detailed analysis of recent Haitian history. The focus will include interactions between religion, social structure, politics, economics and international relations. (Same as AAAS 302.) Prerequisite: AAAS 301/HAIT 200, or consent of instructor. LEC.

HAIT 350. Advanced Haitian I 3 Hours. U. 
Course objective is a sophisticated command of understanding, speaking, reading, and writing Haitian. Texts include newspapers and other Haitian publications as well as spoken material produced especially for native speakers. Conversation and oral presentations. Keeping of personal journal in Haitian. LEC.

HAIT 360. Advanced Haitian II 3 Hours. U. 
Continuation of HAIT 350, plus advanced readings from Haitian authors such as Carrie Paultre, Frank Etienne, Lyonel Desmarattes, and Michel-Rolph Trouillot. LEC.

May be taken more than once, total credit not to exceed fifteen hours. Material not covered by course work, and/or in field of student's special interest. Conferences. Course taken for one hour of credit may not be used to fulfill College's humanities distribution requirement. Prerequisite: Six hours of Haitian Creole and consent of instructor. IND.

Advanced work in either language or literature or both. May be taken more than once, total credit not to exceed fifteen hours. Conferences. As a three-credit-hour course, it may count toward a major in African and African-American studies. Prerequisite: Four semesters of Haitian Creole or equivalent and consent of instructor. IND.

Advanced work in Haitian culture. May be taken more than once, total credit not to exceed fifteen hours. Conferences. As a three-credit-hour course, it may count toward a major in African and African-American studies. Knowledge of Haitian or French is required. Prerequisite: AAAS 301 or HAIT 200, or consent of instructor. IND.

HAIT 700. Investigation and Conference. 1-6 Hours. 
Supervised individual readings in selected areas of Haitian language, literature, and culture. Individual reports and conferences. Prerequisite: Consent of instructor. RSH.

HAUS 110. Elementary Hausa I 5 Hours. U. 
Five hours of class per week. Basic level of oral fluency and aural comprehension. Vocabulary acquisition, pronunciation, grammar, and writing. Reading of simple texts. Not open to native speakers of Hausa. LEC.

HAUS 120. Elementary Hausa II 5 Hours. U. 
Five hours of class per week. A continuation of HAUS 110. Readings in cultural texts. Prerequisite: HAUS 110. LEC.

HAUS 177. First Year Seminar: _____ 3 Hours. GE11 / U. 
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Hausa. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

HAUS 210. Intermediate Hausa I 3 Hours. U. 
Three hours of class conducted in Hausa. Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern Hausa texts and discussion in Hausa. Prerequisite: HAUS 120. LEC.

HAUS 220. Intermediate Hausa II 3 Hours. U. 
Three hours of class conducted in Hausa. Continuation of HAUS 210. Discussion in Hausa of texts studied. Prerequisite: HAUS 210. LEC.

HAUS 310. Advanced Hausa I 3 Hours. U. 
A practical Hausa language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Hausa. Designed for students who have had two or more years of Hausa study. Open to native speakers. Prerequisite: HAUS 220 or consent of instructor. LEC.

HAUS 320. Advanced Hausa II 3 Hours. U. 
A continuation of HAUS 310. Prerequisite: Satisfactory completion of HAUS 310 or consent of instructor. LEC.

HAUS 401. Readings in Hausa I 3 Hours. U. 
Designed for native and near-native speakers, this course involves reading newspapers and other publications in the language intended for native speakers, conversation, oral presentation, and advanced grammar. Prerequisite: Native or near-native speaker proficiency or consent of instructor. LEC.

HAUS 402. Readings in Hausa II 3 Hours. U. 
Continuation of HAUS 401. LEC.

KISW 110. Elementary KiSwahili I 5 Hours. U. 
Five hours of class per week. Basic level or oral fluency and aural comprehension. Vocabulary acquisition, pronunciation, grammar, and writing. Reading of simple texts. Not open to native speakers of KiSwahili. LEC.

KISW 120. Elementary KiSwahili II 5 Hours. U. 
Five hours of class per week. A continuation of KISW 110. Readings in cultural texts. Prerequisite: KISW 110. LEC.

KISW 177. First Year Seminar: _____ 3 Hours. GE11 / U. 
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in KiSwahili. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

KISW 210. Intermediate KiSwahili I 3 Hours. U. 
Three hours of class conducted in KiSwahili. Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern KiSwahili texts and discussion in KiSwahili. Prerequisite: KISW 120. LEC.

KISW 220. Intermediate KiSwahili II 3 Hours. U. 
Three hours of class conducted in KiSwahili. Continuation of KISW 210. Discussion in KiSwahili of texts studied. Prerequisite: KISW 210. LEC.
**Bachelor of Arts and Bachelor of General Studies in African and African-American Studies**

Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your advisor for details). *Other years' catalogs*

**First- and Second-Year Preparation**

Students in the African studies concentration should enroll in AAAS 103 and AAAS 105 in the first year and AAAS 305 in the sophomore year. Students in the African-American studies concentration should enroll in AAAS 104 and AAAS 106 in the first year and AAAS 306 in the sophomore year. Students in the Arabic and Islamic Studies concentration should enroll in AAAS 102 in the first year and AAAS 349 in the sophomore year. For the B.A. degree in all concentrations, enrollment in a second language should begin no later than the sophomore year.

For further advising, contact the main office, 9 Bailey Hall, 785-864-3054, afs@ku.edu (celang@ku.edu), or Professor Clarence Lang, celang@ku.edu, 785-864-5569.
Requirements for the B.A. or B.G.S. Major
African Studies Concentration

 Majors choosing this concentration must complete a course in each of the following areas:

African Language Proficiency (0)
Satisfied by one of the following. Required for BA only.
- AMHR 220 Intermediate Amharic II
- ARAB 220 Intermediate Arabic II
- HAIT 240 Intermediate Haitian II
- HAUS 220 Intermediate Hausa II
- KISW 220 Intermediate KiSwahili II
- WOLO 220 Intermediate Wolof II
  or an approved African-related language

African Studies Core Knowledge & Skills (12)
Majors choosing this option must complete each of the following categories:
- Introduction to Africa. Satisfied by the following:
  - AAAS 103 Introduction to Africa 3
- Introduction to African History. Satisfied by the following:
  - AAAS 105 Introduction to African History 3
- African Traditional Religion & Thought. Satisfied by the following:
  - AAAS 300 African Traditional Religion and Thought 3
- Modern African History. Satisfied by the following:
  - AAAS 305 Modern African History 3

African Studies Required Electives (15)
Select five of the following at the 300+ level:
- AAAS 301 Portrait of a Third-World Nation: Haiti
- AAAS 302 Contemporary Haiti
- AAAS 303 Peoples and Cultures of North Africa and the Middle East
- AAAS 320 African Studies In: _______
- AAAS 332 Introduction to African Literature
- AAAS 333 Introduction to Caribbean Literature
- AAAS 334/ DANC 230/ THR 226 Introduction to African Dance Theatre
- AAAS 335 Introduction to Southern African Literature
- AAAS 336 Introduction to African Literature, Honors
- AAAS 340/ WGSS 330 Women in Contemporary African Literature
- AAAS 345 Popular Culture in Africa: Spiritual Thrills, Romance and Sexualities
- AAAS 349/ REL 350 Islam
- AAAS/GEOG 350 Physical Geography of Africa
- AAAS/GEOG 351 Africa’s Human Geographies
- AAAS 355/ THR 326 African Theatre and Drama
- AAAS/LING 370 Introduction to the Languages of Africa

AAAS/ANTH 372 Religion, Power, and Sexuality in Arab Societies
AAAS/HA 376 West African Art
AAAS 400 Readings in: _______
AAAS 415 Women and Islam
AAAS 429 Postcolonial Theatre and Drama
AAAS/FREN 432 Francophone African Literature
AAAS 433/ ENGL 479/ AAAS 520 Islamic Literature
AAAS 434 African Women Writers
AAAS 435 Muslim Women’s Autobiography
AAAS 445 Arab Thought and Identity
AAAS/REL 450 Popular Culture in the Muslim World
AAAS 460 Topics and Problems in African and African-American Studies
AAAS 470 Language and Society in Africa
AAAS 501 Regional History: _______
AAAS 502 Directed Language Study: _______
AAAS 503 Directed Language Study: _______
AAAS 504 Directed Language Study I: _______
AAAS 505 Directed Language Study II: _______
AAAS 512 African and Western Cosmologies
AAAS 520 African Studies in: _______
AAAS 522 African and African-American Religion: _______
AAAS 527 Popular Culture in Africa
AAAS/REL 532 Studies in Islam
AAAS 542 The History of Islam in Africa
AAAS/LING 543 Language and Culture in Arabic-Speaking Communities
AAAS 545 Unveiling the Veil
AAAS 551/ GEOG 550 Environmental Issues in Africa
AAAS 552 Classical Islamic Literature
AAAS/GEOG 553 Geography of African Development
AAAS 554 Contemporary Health Issues in Africa
AAAS 555/ FMS 544 African Film
AAAS/WGSS 560 Race, Gender, and Post-Colonial Discourses
AAAS/HIST/ POLS 561 Liberation in Southern Africa
AAAS 565 Gender, Culture, and Migration
AAAS 568 Kongo Trans-Atlantic
AAAS/HIST 574 Slavery in the New World
AAAS/HA 578 Central African Art
AAAS 590 The Rise and Fall of Apartheid
AAAS/HIST 598 Sexuality and Gender in African History
AAAS 600/ POLS 665 Politics in Africa
AAAS/REL 650 Sufism
AAAS/REL 657 Gender in Islam and Society
AAAS/ANTH 663 The Anthropology of Islam
AAAS 662 Gender and Politics in Africa
AAAS/HA 676 West African Art
AAAS/HA 677 African Design
AAAS 679 African Expressive Culture:
AAAS 680 Introduction to Modern Africa

Capstone Experience (6)
Major's capstone experience must relate to the student's elective emphasis and be so certified by the advisor.

AAAS 550 Senior Seminar in: _____ 3
AAAS 496 Field Experience 3
or AAAS 690 Investigation and Conference

African and African-American Studies Major – African Studies Concentration Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 33 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior (300+) Hours
Satisfied by a minimum of 27 hours from junior/senior courses (300+) in the major.

Major Junior/Senior (300+) Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator.

African-American Studies Concentration

African-American Studies Core Knowledge & Skills (18)
AAAS 104 Introduction to African-American Studies 3
AAAS 106 The Black Experience in the Americas 3
AAAS 300 African Traditional Religion and Thought 3
AAAS 306 The Black Experience in the U.S. Since Emancipation 3
AAAS 550 Senior Seminar in: _____ 3
AAAS 496 Field Experience 3
or AAAS 690 Investigation and Conference

African-American Studies Required Electives (15)
Select five of the following at the 300+ level: 15

AAAS 317 African American Women: Colonial Era to the Present
AAAS 323 African-American Studies In:_____ 
AAAS 330 Black Leadership
AAAS 388 The Black Woman
AAAS 400 Readings in:_____
AAAS 415 Women and Islam
AAAS 420 Intercultural Communication: The Afro-American
AAAS 440 The Afro-American Family: A Psychological Approach
AAAS 445 Arab Thought and Identity
AAAS 460 Topics and Problems in African and African-American Studies
AAAS 501 Regional History:_____
AAAS 502 Directed Language Study:_____
AAAS 503 Directed Language Study:_____
AAAS 504 Directed Language Study I:_____
AAAS 505 Directed Language Study II:_____
AAAS 510 Global Ethnic and Racial Relations
AAAS 511 The Civil Rights Movement
AAAS 512 African and Western Cosmologies
AAAS 522 African and African-American Religion:_____
AAAS 523 African-American Studies in:_____ 
AAAS 525 Social History of Black Aging in America
AAAS 534 The Rhetoric of Black Americans
AAAS 584 Black American Literature
AAAS 585 Race and the American Theatre
AAAS 611 History of the Black Power Movement
AAAS 630 The Life and Intellectual Thought of W.E.B. Du Bois
AAAS 650 Sufism

1 AAAS 496, AAAS 550, and AAAS 690 may not be taken until AAAS 300, AAAS 305, and AAAS 306 (as appropriate) have been passed, subject to other stipulations in the catalog.

B.A. majors with a Haitian emphasis also must take 16 hours of an African language.

African and African-American Studies Major – African-American Studies Concentration Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 33 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior (300+) Hours
Satisfied by a minimum of 27 hours from junior/senior courses (300+) in the major.
Major Junior/Senior (300+) Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator.

African and African-American Studies Concentration

African and African-American Studies Core Knowledge & Skills (21)

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tr>
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<tr>
<td>or AAAS 105</td>
<td>Introduction to African History</td>
<td>3</td>
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<tr>
<td>AAAS 106</td>
<td>The Black Experience in the Americas</td>
<td>3</td>
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<tr>
<td>AAAS 300</td>
<td>African Traditional Religion and Thought</td>
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<td>AAAS 305</td>
<td>Modern African History</td>
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<td>AAAS 306</td>
<td>The Black Experience in the U.S. Since Emancipation</td>
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<td>AAAS 550</td>
<td>Senior Seminar in: ______</td>
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<tr>
<td>AAAS 496</td>
<td>Field Experience</td>
<td>3</td>
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<tr>
<td>or AAAS 690</td>
<td>Investigation and Conference</td>
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</table>

African and African-American Studies Required Electives (18)

Select five of the following at the 300+ level: 15

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<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AAAS 302</td>
<td>Contemporary Haiti</td>
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<td>AAAS 303</td>
<td>Peoples and Cultures of North Africa and the Middle East</td>
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<td>AAAS 317</td>
<td>African American Women: Colonial Era to the Present</td>
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<td>AAAS 301</td>
<td>Portrait of a Third-World Nation: Haiti</td>
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<td>AAAS 320</td>
<td>African Studies In: ______</td>
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<td>AAAS 323</td>
<td>African-American Studies In: ______</td>
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<td>AAAS 330</td>
<td>Black Leadership</td>
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<tr>
<td>AAAS 332</td>
<td>Introduction to African Literature</td>
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<td>AAAS 333</td>
<td>Introduction to Caribbean Literature</td>
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<td>AAAS 334</td>
<td>Introduction to African Dance Theatre</td>
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<td>AAAS 335</td>
<td>Introduction to Southern African Literature</td>
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<td>AAAS 336</td>
<td>Introduction to African Literature, Honors</td>
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<td>AAAS 340</td>
<td>Women in Contemporary African Literature</td>
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<tr>
<td>AAAS 345</td>
<td>Popular Culture in Africa: Spiritual Thrills, Romance and Sexualities</td>
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<tr>
<td>AAAS 349</td>
<td>Islam</td>
<td></td>
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<td>AAAS 350</td>
<td>Physical Geography of Africa</td>
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<td>AAAS 351</td>
<td>Africa's Human Geographies</td>
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<td>AAAS 355</td>
<td>African Theatre and Drama</td>
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<td>AAAS 370</td>
<td>Introduction to the Languages of Africa</td>
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<td>AAAS 372</td>
<td>Religion, Power, and Sexuality in Arab Societies</td>
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<td>AAAS 376</td>
<td>West African Art</td>
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<td>AAAS 388</td>
<td>The Black Woman</td>
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<td>AAAS 400</td>
<td>Readings in: ______</td>
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<td>AAAS 415</td>
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<td>AAAS 420</td>
<td>Intercultural Communication: The Afro-American</td>
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<td>AAAS 429</td>
<td>Postcolonial Theatre and Drama</td>
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<td>Islamic Literature</td>
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<td>AAAS 434</td>
<td>African Women Writers</td>
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<td>Muslim Women's Autobiography</td>
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<td>AAAS 440</td>
<td>The Afro-American Family: A Psychological Approach</td>
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<td>Arab Thought and Identity</td>
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<td>AAAS 450</td>
<td>Popular Culture in the Muslim World</td>
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<td>AAAS 460</td>
<td>Topics and Problems in African and African-American Studies</td>
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<td>AAAS 470</td>
<td>Language and Society in Africa</td>
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<td>Directed Language Study: ______</td>
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<td>AAAS 505</td>
<td>Directed Language Study II: ______</td>
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<td>Global Ethnic and Racial Relations</td>
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<td>AAAS 511</td>
<td>The Civil Rights Movement</td>
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<td>AAAS 512</td>
<td>African and Western Cosmologies</td>
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<td>AAAS 520</td>
<td>African Studies in: ______</td>
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<tr>
<td>AAAS 522</td>
<td>African and African-American Religion: ______</td>
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<td>AAAS 523</td>
<td>African-American Studies in: ______</td>
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<td>AAAS 525</td>
<td>Social History of Black Aging in America</td>
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<td>AAAS 527</td>
<td>Popular Culture in Africa</td>
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<td>AAAS 532</td>
<td>Studies in Islam</td>
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<td>AAAS 534</td>
<td>The Rhetoric of Black Americans</td>
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<td>AAAS 542</td>
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<td>AAAS 543</td>
<td>Language and Culture in Arabic-Speaking Communities</td>
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<td>AAAS 545</td>
<td>Unveiling the Veil</td>
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<td>AAAS 551</td>
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<td>Classical Islamic Literature</td>
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<td>AAAS 553</td>
<td>Geography of African Development</td>
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<td>Contemporary Health Issues in Africa</td>
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<td>AAAS 555</td>
<td>African Film</td>
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<td>Race, Gender, and Post-Colonial Discourses</td>
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<td>AAAS 565</td>
<td>Gender, Culture, and Migration</td>
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<td>AAAS 568</td>
<td>Kongo Trans-Atlantic</td>
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<td>AAAS 574</td>
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<td>AAAS 578</td>
<td>Central African Art</td>
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<td>AAAS 585</td>
<td>Race and the American Theatre</td>
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<td>History of the Black Power Movement</td>
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<td>The Life and Intellectual Thought of W.E.B. Du Bois</td>
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<td>AAAS 677</td>
<td>African Design</td>
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</tbody>
</table>
Bachelor of Arts and Bachelor of General Studies in African and African-American Studies

African and African-American Studies Major – African and African-American Studies Concentration Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 39 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior (300+) Hours**

Satisfied by a minimum of 30 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior (300+) Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator.

B.A. majors in this concentration also must take 16 hours of an African language (Amharic, Arabic, Hausa, Kiswahili, or Wolof).

**Fields of Emphasis**

In each concentration, at least 3 elective courses and AAAS 496 and AAAS 690 must relate to the student’s emphasis and be so certified by the advisor. Examples are arts and culture; language and linguistics; social, political and economic development; women; Africa and the Diaspora, Caribbean and Haitian studies. The department keeps a list of fields and courses appropriate to them.

**Note:** Consult the major advisor during pre-enrollment advising each semester. Prospective majors should consult the department as early as possible. The department may require a student to take and pass a preparatory course not already taken before enrolling for a given elective. The department has guidelines for substitutions at all levels, pre-major and major. Each substitution must be approved.

Arabic and Islamic Studies Concentration

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<td>AAAS 349/REL</td>
<td>Islam</td>
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<td>AAAS 433</td>
<td>Islamic Literature</td>
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<td>AAAS 543</td>
<td>Language and Culture in Arabic-Speaking Communities</td>
<td>3</td>
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<tr>
<td>AAAS 550</td>
<td>Senior Seminar in: _____</td>
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<tr>
<td>AAAS 496</td>
<td>Field Experience</td>
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<tr>
<td>or AAAS 690</td>
<td>Investigation and Conference</td>
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<tr>
<td>Select five courses numbered above 300, including, but not limited to 15 hours.</td>
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AAAS 320 African Studies In: _____

AAAS/ANTH 303 Peoples and Cultures of North Africa and the Middle East

AAAS/ANTH 372 Religion, Power, and Sexuality in Arab Societies

AAAS 415 Women and Islam

AAAS 432 Francophone African Literature

AAAS 435 Muslim Women’s Autobiography

AAAS 445 Arab Thought and Identity

AAAS/REL 450 Popular Culture in the Muslim World

AAAS 504 Directed Language Study I: _____

AAAS 505 Directed Language Study II: _____

AAAS 542 The History of Islam in Africa

AAAS 545 Unveiling the Veil

AAAS 552 Classical Islamic Literature

AAAS 679 African Expressive Culture: _____

AAAS 680 Introduction to Modern Africa

AAAS/REL 650 Sufism

AAAS/REL 657 Gender in Islam and Society

AAAS/ANTH 663 The Anthropology of Islam

African and African-American Studies Major – Arabic and Islamic Studies Concentration Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 33 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior (300+) Hours**

Satisfied by a minimum of 30 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior (300+) Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator.

**Note:** Consult the major advisor during pre-enrollment advising each semester. Prospective majors should consult the department as early as possible. The department may require a student to take and pass a preparatory course not already taken before enrolling for a given elective. The department has guidelines for substitutions at all levels, pre-major and major. Each substitution must be approved.

Fieldwork

Field experience is a junior/senior option for majors. Fieldwork may be done anywhere in the U.S. or abroad. Careful arrangements must be
made long in advance. Consult the department a full semester before enrollment.

Double Majors
African and African-American studies majors are encouraged to take a second major in a related or compatible field. Because the major is interdisciplinary, a second major is relatively easy to achieve in the usual period of undergraduate study.

Sample 4-year plans for the BA degree in African and African-American Studies with the following concentrations can be found here: African and African-American Studies (http://catalog.ku.edu/liberal-arts-sciences/african-studies/ba-bgs/ba-african-and-african-american-studies), African Studies (http://catalog.ku.edu/liberal-arts-sciences/african-studies/ba-bgs/ba-african-studies), African-American Studies (http://catalog.ku.edu/liberal-arts-sciences/african-studies/ba-bgs/ba-african-american-studies), and Arabic and Islamic Studies (http://catalog.ku.edu/liberal-arts-sciences/african-studies/ba-bgs/ba-arabic-islamic-studies) or by using the left-side navigation.

Sample 4-year plans for the BGS degree in African and African-American Studies will be coming soon.

Departmental Honors
For graduation with honors, an undergraduate must maintain a minimum overall grade-point average of 3.25 and of 3.5 in the major and must complete 3 additional hours by enrolling in AAAS 695. AAAS 695 is evaluated by a committee composed of the instructor plus two other faculty members approved by the chair. An affirmative recommendation by this committee is essential to graduation with honors, provided that the other requirements have been met. A student who plans to graduate with honors must file a declaration of intent form with the departmental honors coordinator, preferably during his or her junior year, but no later than at enrollment for the final undergraduate semester.

The department encourages majors in the African studies and Arabic and Islamic studies concentrations to spend a semester or an academic year in Africa. Similarly, majors in the African-American studies concentration may spend a semester or an academic year in the Caribbean. Consult the department and the Office of Study Abroad (http://www.studyabroad.ku.edu).

Minor in African and African-American Studies
Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your advisor for details). Other years' catalogs> 

Undergraduate Admission

Admission to KU
All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences
Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Requirements for the Minor
For students whose programs make it attractive and feasible for them to focus on an African or American region, country, or topic, the department provides a minor in African and African-American studies. Minors must select 1 of the 4 tracks.

African-American Studies Track

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAS 106</td>
<td>The Black Experience in the Americas</td>
<td>3</td>
</tr>
<tr>
<td>or AAAS 104</td>
<td>Introduction to African-American Studies</td>
<td></td>
</tr>
<tr>
<td>AAAS 306</td>
<td>The Black Experience in the U.S. Since Emancipation</td>
<td>3</td>
</tr>
</tbody>
</table>

Select 12 additional hours of African-American-related AAAS courses at the 300 level or above

African and African-American Studies Track

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAS 105</td>
<td>Introduction to African History</td>
<td>3</td>
</tr>
<tr>
<td>or AAAS 103</td>
<td>Introduction to Africa</td>
<td></td>
</tr>
<tr>
<td>or AAAS 102</td>
<td>Arabic and Islamic Studies</td>
<td></td>
</tr>
<tr>
<td>AAAS 106</td>
<td>The Black Experience in the Americas</td>
<td>3</td>
</tr>
<tr>
<td>or AAAS 104</td>
<td>Introduction to African-American Studies</td>
<td></td>
</tr>
</tbody>
</table>

Select 12 additional hours of AAAS courses at the 300 level or above

African Studies Track
Students choosing this track must select 1 of 6 options.

Option 1: Advanced African Language Study

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAS 103</td>
<td>Introduction to Africa</td>
<td>3</td>
</tr>
<tr>
<td>or AAAS 105/</td>
<td>Introduction to African History</td>
<td></td>
</tr>
<tr>
<td>HIST 104</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or AAAS 102</td>
<td>Arabic and Islamic Studies</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARAB 310</td>
<td>Advanced Arabic I</td>
<td></td>
</tr>
<tr>
<td>&amp; ARAB 320</td>
<td>Advanced Arabic II</td>
<td></td>
</tr>
<tr>
<td>&amp; ARAB 401</td>
<td>Readings in Arabic I</td>
<td></td>
</tr>
<tr>
<td>&amp; ARAB 402</td>
<td>Readings in Arabic II</td>
<td></td>
</tr>
</tbody>
</table>
KISW 310 & KISW 320 & KISW 401 & KISW 402
Advanced KiSwahili I and Advanced KiSwahili II and Readings in KiSwahili I and Readings in KiSwahili II

HAUS 310 & HAUS 320 & HAUS 401 & HAUS 402
Advanced Hausa I and Advanced Hausa II and Readings in Hausa I and Readings in Hausa II

WOLO 310 & WOLO 320 & WOLO 401 & WOLO 402
Advanced Wolof I and Advanced Wolof II and Readings in Wolof I and Readings in Wolof II

OR two advanced language courses (AAAS 504 or AAAS 505) and a Language and Society course (LING 370/AAAS 370, LING 470/AAAS 470). Other languages may apply with consent of faculty.

Select one of the following:

AAAS 550 Senior Seminar in: ______
AAAS 690 Investigation and Conference
AAAS 496 Field Experience

Option 2: African Societies and Civilizations

AAAS 103 Introduction to Africa 3
or AAAS 105/ HIST 104 Introduction to African History
or AAAS 102 Arabic and Islamic Studies

Select four of the following: 12

AAAS 300 African Traditional Religion and Thought
ANTH 564 The Peoples of Africa
AAAS 545 Unveiling the Veil
WGSS 330/ AAAS 340 Women in Contemporary African Literature
AAAS 415 Women and Islam
WGSS/AAAS 560 Race, Gender, and Post-Colonial Discourses
AAAS 320 African Studies In: ______
AAAS/REL 532 Studies in Islam
AAAS 542/ REL 535 The History of Islam in Africa
HIST 300/ AAAS 305 Modern African History
HIST/AAAS 598 Sexuality and Gender in African History
HIST 599/ AAAS 590 The Rise and Fall of Apartheid
HIST 600/ AAAS 520 West African History
JOUR 500 Topics in Journalism: ______

Select one of the following: 3

AAAS 550 Senior Seminar in: ______
AAAS 690 Investigation and Conference
AAAS 496 Field Experience

Option 3: African Arts and Literature

AAAS 103 Introduction to Africa 3
or AAAS 105/ HIST 104 Introduction to African History
or AAAS 102 Arabic and Islamic Studies

Select four of the following: 12

THR 226/ Introduction to African Dance Theatre
DANC 230/ AAAS 334
THR 302/ Undergraduate Seminar in: ______
AAAS 320
THR 326/ African Theatre and Drama
AAAS 355
FMS 544/ AAAS 555 African Film
ENGL 324/ AAAS 320 Contemporary Authors: ______
ENGL 326/ AAAS 332 Introduction to African Literature
ENGL 479/ AAAS 433 The Literature of: ______
ENGL 479/ AAAS 434 The Literature of: ______
ENGL 674 African Literature: ______
FREN/AAAS 432 Francophone African Literature
HA/AAAS 376 West African Art
HA/AAAS 578 Central African Art

Select one of the following: 3

AAAS 550 Senior Seminar in: ______
AAAS 690 Investigation and Conference
AAAS 496 Field Experience

Option 4: Political Economy of Health and Development in Africa

AAAS 103 Introduction to Africa 3
or AAAS 105/ HIST 104 Introduction to African History
or AAAS 102 Arabic and Islamic Studies

Select four of the following: 12

ANTH 542 Biology of Human Nutrition
ANTH 543 Nutrition Through the Life Cycle
ANTH 650 Human Reproduction: Biology and Behavior
ANTH 762 Human Growth and Development
ANTH 461 Introduction to Medical Anthropology
ANTH 540 Demographic Anthropology
ANTH 783 Doing Ethnography
ANTH 684 Anthropology and the Health Sciences
ECON 587 Economic Development of Africa
GEOG/AAAS 553 Geography of African Development
POLS 665/ AAAS 600 Politics in Africa
POLS 667 Islam and Politics
HIST 599/AAAS 590  The Rise and Fall of Apartheid
AAAS 680  Introduction to Modern Africa
ANTH 545/AAAS 554  Contemporary Health Issues in Africa

Select one of the following: 3
AAAS 550  Senior Seminar in: _____
AAAS 690  Investigation and Conference
AAAS 496  Field Experience

Option 5: People and Space in Africa
AAAS 103  Introduction to Africa 3
or AAAS 105/HIST 104  Introduction to African History
or AAAS 102  Arabic and Islamic Studies

Select four of the following: 12
GEOG/AAAS 350  Physical Geography of Africa
GEOG/AAAS 351  Africa’s Human Geographies
GEOG/AAAS 553  Geography of African Development
ANTH 564  The Peoples of Africa
ANTH 549  Human Paleontology: Fossil Apes to Australopithecus
ANTH 501/AAAS 520  Topics in Sociocultural Anthropology: _____
HIST 599/AAAS 590  The Rise and Fall of Apartheid
AAAS/WGSS 560  Race, Gender, and Post-Colonial Discourses
GEOG 550/AAAS 551/EVRN 420  Environmental Issues in Africa

Select one of the following: 3
AAAS 550  Senior Seminar in: _____
AAAS 690  Investigation and Conference
AAAS 496  Field Experience

Option 6: Student-Designed Cluster
AAAS 103  Introduction to Africa 3
or AAAS 105/HIST 104  Introduction to African History
or AAAS 102  Arabic and Islamic Studies

Four courses created from a student’s academic concentration 12
Select one of the following: 3
AAAS 550  Senior Seminar in: _____
AAAS 690  Investigation and Conference
AAAS 496  Field Experience

Haitian Studies Track
HAIT 110  Elementary Haitian I 3
HAIT 120  Elementary Haitian II 3
HAIT 230  Intermediate Haitian I 3

HAIT 240  Intermediate Haitian II 3
12 additional hours of the language or related courses at the 300 level or above

Minor Hours & Minor GPA
While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

Minor Hours
Satisfied by a minimum of 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 hours of KU resident credit in the minor.

Minor Junior/Senior (300+) Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Master of Arts in African and African-American Studies
All the faculty members of the Department of African and African-American Studies hold the Ph.D. and graduate faculty appointments.

The Department of African and African-American Studies offers an interdisciplinary substantive and language courses leading to the Master of Arts degree in two areas of concentration: (1) African, and (2) African-American studies.

The master’s degree in African and African-American Studies has two related objectives: (1) it fulfills the educational needs of persons who seek positions with organizations in both the public and private sectors, and (2) it prepares persons who desire to pursue the terminal degrees in their field. The program emphasizes the broader concepts in the humanities and the social sciences, but provides an option for concentration in either African or African-American Studies.

The integrative focus of the curriculum is an important characteristic of the interdisciplinary nature of this program. In this regard, the candidate should develop the capacity to continue as a self-educator throughout his/her career. Broad background study in this field enables the graduate to assimilate newly-acquired skills and methodologies quickly. Graduates should be prepared to cope with the rapid changes in Africa and the African diaspora. The program places considerable emphasis on both the internal and external forces which affect African and African-American societies. The continuity and change in Africa and their impact on world civilizations are emphasized in both the required courses and through electives.

Required courses emphasize basic tool areas, such as research methods and languages. Through elective courses the student may obtain a concentration in an area of African or African-American Studies. All students, except those in the non-thesis option, must prepare and defend an M. A. thesis.
Accommodations are made under African Studies component for Arabic and Islamic Studies concentration, and under African-American Studies component for students who may be interested in an Haitian Studies concentration. Accommodation also exists for members of the Armed Forces to complete their studies on any and all regions of the African continent in less than two years if they are willing to study through summer.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**

Prospective students are admitted to the M. A. program for the fall or spring semester. The deadline to submit applications for fall admission is MAY 1ST, and October 1ST for spring admission. Online applications can be completed and submitted through the KU Graduate Studies website (http://www.graduate.ku.edu). Send all other requested application materials to the department:

Admission Requirements include:

- Graduate Application
- All academic transcripts (transcripts can be uploaded and attached to the online application).
- GRE scores (KU Code: 6871)
- TOEFL required (if student’s native language is not English)
- Personal statement of purpose explaining your academic objectives
- 3 letters of recommendation from qualified individuals, preferring most recent professors.
- Sample of your writing. A paper from a previous course should be satisfactory.

Transcripts, statement of purpose and writing sample can be uploaded and attached to the online application. Letters of recommendation can also be submitted online.

**M.A. Degree Requirements**

The African and African-American studies M.A. program takes 2 years of full-time study. Nine upper-division and graduate courses, in addition to a thesis or additional course work for a nonthesis option, are required for the degree—a total of 33 credit hours. There are 4 core courses:

<table>
<thead>
<tr>
<th>Core courses (12)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAS 801</td>
<td>Introduction to Africana Studies: African-American</td>
<td>3</td>
</tr>
<tr>
<td>AAAS 802</td>
<td>Introduction to Africana Studies: African</td>
<td>3</td>
</tr>
<tr>
<td>AAAS 803</td>
<td>Research Methods in Africana Studies</td>
<td>3</td>
</tr>
<tr>
<td>AAAS 804</td>
<td>Seminar in Africana Studies</td>
<td>3</td>
</tr>
<tr>
<td>Area of specialization (15)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students are expected to choose 5 courses in their areas of specialization.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credit hours outside the department (6)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Students can take 6 credit hours outside the department in related course offerings including among others American studies; anthropology; art; communication studies; economics; education; English; film and media studies; geography; history; philosophy; political science; religion; sociology; theatre; and women, gender, and sexuality studies.</td>
<td></td>
</tr>
</tbody>
</table>

**Research Skills**

Students will fulfill a language/research skills requirement in accordance with the concentration chosen. Language/research skills courses must be at the 500 level or above to be counted toward the 33 hours required for the degree.

1. A master’s degree in African and African-American studies with an African studies concentration requires proficiency in an African language. Proficiency may be fulfilled by 1 of the following:
   - Completing 2 years of college-level language study at KU, at an equivalent institution, or through an intensive course. Language courses offered on a regular basis at KU that count toward proficiency are Amharic, Arabic, Hausa, KiSwahili, Somali, Wolof and any one of the number of African languages for which the Kansas African Studies Center has pedagogical materials and proficiency-testing capabilities.
   - The equivalent of 2 years of an approved language.
   - Proof that the student is a native speaker of an African language.

2. A master’s degree in African and African-American studies with an African-American Studies concentration requires that a student
   - Fulfill the African language requirement outlined above, or
   - Fulfill Haitian Creole or any other non-African language requirement employing standards comparable to those governing the African language requirement outlined above, or
   - Demonstrate competence in a research skill relevant to the student’s specific concentration in African-American studies. Competence in a research skill is certified by the department’s graduate studies director.

In consultation with their advisors and to the satisfaction of the department, students must demonstrate that their choice of a language or research skill is appropriate for their specific research interest in the field of African-American studies.

**Handbook for Graduate Students**

Detailed information, application deadlines, and general information may be found in The M.A. Program in African and African-American Studies, available on request from the department (http://afs.ku.edu).

**Plan of Study**

Students are expected to discuss their plans of study with the graduate advisor. The information that follows is only a guide toward that discussion, using fall admission as an example:
Admission to another graduate program at KU should send a letter of application stating their interests in African Studies and request a letter stating that they have been admitted from the other department or school upon admission thereto. They may be admitted to the African Studies Graduate Certificate Program on the condition that they are admitted by the other program in regular status. If they are not admitted to the other program in regular status, they may use the following procedure for admission to the Graduate Certificate program.

Non-KU graduate students (Non-degree C category students) should complete the graduate application (http://graduate.ku.edu/application-process) through Graduate Studies and send an application fee of $35, two copies of official transcripts from all previous post-secondary educational institutions, a personal statement of interest in African Studies, and two letters of recommendation from persons familiar with their academic work or potential for graduate school. Minimum requirements will be a bachelor's degree; a GPA of 3.0 or higher in undergraduate work is normally required for admission, but the GPA requirement may be waived at the discretion of the Graduate Director. An admissions committee consisting of the AAAS Graduate Program Committee will meet at least once each semester to make admissions decisions.

All inquiries should be directed to:

The University of Kansas
African and African-American Studies
Shawn Leigh Alexander, AAAS Graduate Director
Bailey Hall
1440 Jayhawk Blvd., Room 15
Lawrence, KS 66045-7549
lalexan@ku.edu

or

The University of Kansas
KASC Director
Bailey Hall
1440 Jayhawk Blvd., Room 207
Lawrence, KS 66045

Requirements for the Graduate Certificate in African Studies

General requirements (12)

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>AAAS 801 Introduction to Africana Studies: African History</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>Electives</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>AAAS 802 Introduction to Africana Studies: African Geography</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>Thesis or 2 courses</td>
</tr>
</tbody>
</table>

Total Hours: 33

Why study American studies?

Because American studies offers a creative environment to learn, think, and reflect about American culture, history, and communities from both a national and global perspective.
Undergraduate Programs

American studies offers an interdisciplinary undergraduate program in which faculty and students think critically about the many institutional and cultural meanings of America, popular culture, society, and identity. Through studying topics such as film, jazz, literature, visual culture, gender, race, and religion, American studies investigates America in the present and the past, beyond both disciplinary and national boundaries. Given our recognition of the critical impact of difference and power in American life, we insist that a student's program consider the profound impact of diversity on society and address differential power structures in American life and social relations. Motivated advanced students have the opportunity to work independently on research and service projects.

Graduate Programs

American studies is an interdisciplinary program offering graduate work on society and culture in the United States — past, present, and in global context. It accommodates a variety of individual academic objectives. All students are asked to define 3 concentrations — such as historical periods, conceptual problems, or topical subjects — and to draw on appropriate university resources relating to those areas. Students must demonstrate coherence in their graduate work and be able to show relationships between their concentrations and the wider sociocultural system. To accomplish this, students must develop knowledge (including historical perspective) in the humanities and social sciences.

For a current list of participating faculty members, please visit the department’s website (http://americanstudies.ku.edu/faculty).

Courses

AMS HR. Philosophy and Religion. 3 Hours. HR GE3H / H. LEC.

AMS 100. Introduction to American Studies. 3 Hours. HT AE41/GE3H / H.
An introduction to the history and key concepts of American Studies. Students explore major changes in American culture through the critical reading and analysis of primary and secondary source material. Not open to students who have taken AMS 101. LEC.

AMS 101. Introduction to American Studies, Honors. 3 Hours. HT AE41/GE3H / H.
An introduction to the history and key concepts of American Studies. Students explore major changes in American culture through the critical reading and analysis of primary and secondary source material. Not open to students who have taken AMS 100. Prerequisite: Membership in the University Honors Program or approval by the American Studies Program. LEC.

AMS 110. American Identities. 3 Hours. SC AE41/GE3S / S.
An interdisciplinary introduction to individual and group identities over time. Students explore theories and methods relating to identity from various perspectives, such as race, class, gender, sexuality, age, religion, and region. Not open to students who have taken AMS 112 or SOC 112. (Same as SOC 110.) LEC.

AMS 112. American Identities, Honors. 3 Hours. SC AE41/GE3S / S.
An interdisciplinary introduction to individual and group identities over time. Students explore theories and methods relating to identity from various perspectives, such as race, class, gender, sexuality, age, religion, and region. Not open to students who have taken AMS 110 or SOC 110. (Same as SOC 112.) Prerequisite: Membership in the University Honors Program or approval by the American Studies Program. LEC.

AMS 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in American Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

AMS 260. America's Latinos/Latinas. 3 Hours. AE41 / U.
An introduction to the Latino/a population (Mexican-Americans, Puerto Ricans, Cuban-Americans, Dominican-Americans, and Central and South Americans) in the US. Students discuss how US and Latin American societies have shaped Latino incorporation into the United States. We also discuss contemporary political, cultural and social issues that pertain to Latinos/as in the US. (Same as SOC 260) LEC.

AMS 290. Religion in American Society. 3 Hours. HR AE41/GE3S / H.
A broad introduction to religion in American culture. This class emphasizes the well-established religions with large followings (viz. Judaism, Catholicism, Eastern Orthodoxy, and Protestantism). Some attention is also given to other religions active in America. Other topics covered include the relationship of church and state, religion in ethnic and racial minority groups, and women and religion. Not open to students who have taken REL 172. (Same as REL 171.) LEC.

AMS 310. American Culture, 1600-1876. 3 Hours. H.
An examination of the major historical shifts, trends, and conflicts that have shaped the multicultural nature of life in the United States from the initial European settlements to 1876. In addition to tracing developments in literature, architecture, drama, music, and the visual arts, this course will investigate patterns and changes in the popular, domestic, and material culture of everyday life in America. (Same as HIST 310.) Prerequisite: AMS 100 or AMS 110 or HIS 128. LEC.

AMS 312. American Culture, 1877 to the Present. 3 Hours. H.
An examination of the major historical shifts, trends, and conflicts that have shaped the multicultural nature of life in the United States from 1877 to the present. In addition to tracing developments in literature, architecture, drama, music, and the visual arts, this course will investigate patterns and changes in the popular, domestic, and material culture of everyday life in America. (Same as HIST 312.) LEC.

AMS 316. Ministers and Magicians: Black Religions from Slavery to the Present. 3 Hours. AE41 / H.
This course examines the history and diversity of African American religious expression from slavery until the present, emphasizing both mainstream and alternative faiths. It covers the religious world views of enslaved Africans, and examines faiths inside and outside of Christianity. Topics may include: independent black churches, magical practices, the Holiness and Pentecostal movements, black Islam, religious freemasonry, and esoteric faiths. The class emphasizes the influence of gender, class, race, migration, and urbanization on black religion. (Same as AAAS 316 and HIST 316.) LEC.

AMS 317. African American Women: Colonial Era to the Present. 3 Hours. H.
This interdisciplinary course covers the history of African American women, beginning in West and Central Africa, extending across the Middle Passage into the Americas, and stretching through enslavement and freedom into the 21st century. The readings cover their experiences through secondary and tertiary source materials, as well as autobiographies and letters, plays and music, and poems, novels, and speeches. (Same as AAAS 317, HIST 317, and WGSS 317.) LEC.

AMS 320. Border Patrolled States. 3 Hours. H.
Examines the politics of immigrant, citizenship and space through official, intellectual and popular responses to the growth of Latino/a populations.
in the U.S. and to international migration to and from Mexico and Central America. Topics include consideration of how responses to immigration articulate racialized and culturally specific (including linguistic and religious) concepts of the nation, and how questions of citizenship and residency dovetail with issues of community "voice", public space, and diverse notions of "security". LEC.

AMS 322. Modernism. 3 Hours. H.
Examines modernism as a transnational cultural movement primarily from the 1890s to the 1940s, but also considers the impact of modernism on later twentieth century cultural production. Provides an interdisciplinary exploration of art, architecture, film, literature and music. Topics include debates related to periodization, the nature of progress, the impact of colonialism and imperialism, the power of reason, and the relationship to previous "traditional" ideas. LEC.

AMS 330. American Society. 3 Hours. H.
The social structure and organization of American society with special reference to recent social changes. (Same as SOC 330.) Prerequisite: An introductory course in sociology or American studies. LEC.

AMS 332. The United States in Global Context. 3 Hours. AE42 / S.
Examines the influence abroad of US culture, policies and practices and the impact of other countries on US culture, society, and politics. Among the topics that may be examined are race, ethnicity, colonialism, imperialism, migration, technology, communications and media, popular culture, language, health, domestic and transnational organizations, as well as economic, political, religious, military and educational institutions. (Same as SOC 332). LEC.

AMS 340. Black Leadership. 3 Hours. H/W.
The course focuses on the concept of leadership and on black leadership in the United States; an in-depth analysis of selected case studies on black leaders, both historical and contemporary. Some attention will be given to the dispersion of Africans into the Americas and the leadership that emerged, conditioned both by environmental factors and the psychology engendered by the system of slavery. Selected successful black leaders will be invited to visit the class from time to time. (Same as AAAS 330.) LEC.

AMS 344. Case Study in American Studies: _____. 3 Hours. H.
This course examines in depth a specific American studies or theme. LEC.

AMS 345. Cultural Studies. 3 Hours. H.
Students gain awareness of major scholars and "schools" that have pursued critical, interdisciplinary research or cultural processes and products in the field of American Studies. Topics may include cultural materialism, semiotics, nationalism, ethnic/racial identity, gender and sexuality, cultural politics, mass media, public spheres, social space and place, commodity consumption, music, and popular culture. LEC.

AMS 350. Visual Culture and the Harlem Renaissance. 3 Hours. H.
Examines the African American cultural movement through art; the artistic gaze in novels; representations of African Americans in film; as well as the influence of musical and dramatic performance on the African American image. Considers the impact of American, European, and other cultural influences on black artists of the time. LEC.

AMS 360. Theory and Method. 3 Hours. H.
An introduction through a topical theme to theories and methods currently used in American Studies. Prerequisite: AMS 100, AMS 110 and AMS 332 or their equivalent, or consent of instructor. LEC.

AMS 390. Geography of the United States and Canada. 3 Hours. S.
A study of the different physical, economic, and cultural settings in the United States and Canada which form the basis for the various forms of livelihood. Emphasis on the United States. (Same as GEOG 390.) Prerequisite: An introductory geography course, or background in United States or Canadian history, social science, or culture, or consent of instructor. LEC.

AMS 494. Topics in: _____. 1-4 Hours. H.
Interdisciplinary study of selected aspects of American society or culture or of the American experience. LEC.

AMS 510. History of American Women--Colonial Times to 1870. 3 Hours. H.
A survey of women's roles as housewives, mothers, consumers, workers, and citizens in pre-industrial, commercial, and early industrial America. (Same as HIST 530 and WGSS 510.) LEC.

AMS 511. History of American Women--1870 to Present. 3 Hours.
AE41 / H.
A survey of women's history in the United States that will include radical and reform movements, the impact of war and depression, professionalization, immigration, women's work and the biographies of leading figures in women's history. (Same as HIST 531 and WGSS 511.) LEC.

AMS 512. History of Women and Work in Comparative Perspective. 3 Hours. H.
This course explores the connection between historical changes in the labor process and the occupational choices available to women in different countries. Through discussion and analyses of texts, students will evaluate the construction of a gendered division of work as shaped over time by economic, cultural, and political forces. The chronological and geographical focus may vary depending on the instructor. (Same as HIST 532 and WGSS 512.) LEC.

AMS 515. American Women and World War II. 3 Hours. H.
Examines histories of U.S. women during World War II through an interdisciplinary approach that draws on popular culture and oral history. Utilizes theories and methods of oral history and examines representations of women such as Rosie the Riveter, GI Jane and the Sweetheart at Home. Topics include the consumption of images, the function of images in war and the relationship between popular culture and war. LEC.

AMS 520. Topics in Latino Studies: _____. 3 Hours. U.
The study of special topics in Latino Studies. Students may repeat this course when different topics are offered. LEC.

AMS 522. American Racial and Ethnic Relations. 3 Hours. S.
Analysis of the basic sociological concepts that apply to majority-minority relations; with special emphasis on racial and ethnic interaction in the United States. (Same as SOC 522.) Prerequisite: A distribution course in sociology or American studies. LEC.

AMS 529. Race and the American Theatre. 3 Hours. U.
The representation(s) of race in significant texts and performance styles in American theatre analyzed according to political ideologies, dramatic movements and the impact of these factors on the representation of the "other" in the theatre. (Same as AAAS 585 and THR 529.) LEC.

AMS 534. Global Ethnic and Racial Relations. 3 Hours. NW / S.
An examination of constructions of race and ethnicity around the world. Emphasis is on the social, political, historical, cultural and economic factors that lead to the creation of ethnic and racial identities, ethnic conflict and accommodation, ethnic movements, and ethnic political organization. Racial and ethnic relations in the U.S. are compared with other countries. Major focus is placed on ethnicity in Africa, Asia, Latin America, the Caribbean, and/or the Middle East. (Same as AAAS 510 and SOC 534.) LEC.
AMS 536. Ethnicity in the United States: ____. 3 Hours. S.
An examination of the history, sociology, and culture of U.S. ethnic categories (e.g., American Indians, Latinos, Asian Americans, Jewish Americans, Irish Americans). The specific group studied varies from semester to semester. Course may be repeated for credit. (Same as SOC 536.) Prerequisite: A principal course in American Studies, Sociology, or Anthropology, or permission of instructor. LEC.

AMS 540. Culture, Space and Power in Urban America. 3 Hours. H.
Surveys scholarship on urban expressive culture as it illuminates the politics to identity and public space by African American and Latino/a urban communities. Explores how race, class and gender positionally affect and reflect access to public space and recognition in the public sphere through aesthetic practices such as hip-hop, graffiti writing and custom car cruising. LEC.

AMS 550. Research Seminar in: ____. 3 Hours. AE61 / H.
A seminar exploring a specific American studies theme. A research paper or equivalent project is required. Prerequisite: AMS 360 (a grade of C or better is recommended) or consent of instructor. Cannot be taken concurrently with AMS 551, AMS 552 or AMS 553. LEC.

AMS 551. Research Project in American Studies. 3 Hours. AE61 / H.
Independent research on a selected topic under the direction of a faculty member. Students write an original research paper or complete an equivalent project in another medium, grounded in primary as well as secondary sources. Prerequisite: AMS 550 or consent of instructor. RSH.

AMS 552. Public Service in American Studies. 3 Hours. AE61 / H.
Independent public service in a selected area undertaken in consultation with and under the direction of a faculty member. Students produce a final written project on the experience that integrates the public service experience and academic materials, or complete an equivalent project in another medium. Prerequisite: AMS 550 or consent of instructor. FLD.

AMS 553. Honors in American Studies. 3 Hours. AE61 / H.
Honors equivalent of AMS 551. May be taken twice for credit. Three hours of AMS 553 may be substituted for a course in an appropriate category in the American Studies major. Prerequisite: AMS 550, eligibility for departmental honors, or consent of instructor. RSH.

AMS 554. Advanced Topics in American Literature to 1865: ____. 3 Hours. S.
Study of American literary works before 1865. Topics may focus on a particular genre, theme, topic, historical period, author, or group of authors. May be repeated for credit as the topic changes. (Same as ENGL 576.) Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

AMS 555. Advanced Topics in American Literature Since 1865: ____. 3 Hours. H.
Study of American literary works after 1865. Topics may focus on a particular genre, theme, topic, historical period, author, or group of authors. May be repeated for credit as the topic changes. (Same as ENGL 577.) Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

AMS 565. Gender, Culture, and Migration. 3 Hours. H.
This course brings a human face to the 21st century manifestation of globalization by focusing on the issues of culture, gender and migration. How do these three aspects create the “global village” amongst both the host and donor peoples? When people move from one place to another, what do they leave behind, what do they take with them? What is gained, or lost by the host community? What is the impact of migration on a specific group's and individual's sense of identity? How has migration affected the people's construction, understanding, and practice of gender? Given their primary roles in the home and within the culture, these questions and more are posed with particular attention to women. Migration theories, interviews and personal testimonies as well as literary and dramatic works are critical to our analyses of the issues raised and enable us to hold conversations with, and listen to the stories of the ordinary people who make globalization happen and sustain it. (Same as AAAS 565 and WGSS 565.) LEC.

AMS 576. Cultural Geography of the United States. 3 Hours. S.
Distributions of major culture elements including folk architecture, religion, dialect, foodways, and political behavior are systematically studied from a predominantly historical perspective. These discussions are followed by a survey of the major culture regions in America. Although not absolutely necessary, familiarity with concepts treated in any of the following courses would be helpful: AMS 100, AMS 110, ANTH 108, ANTH 308, GEOG 102, or GEOG 390. (Same as GEOG 576.) LEC.

AMS 579. Geography of American Foodways. 3 Hours.
An interdisciplinary approach to food that explores the diversity of eating habits across the United States and the role of food as an indicator of cultural identity and change. Current regional and ethnic food consumption patterns are stressed. Topics include multiculturalism and regional identity, the symbiotic relationship between restaurant food and home cooking, the recent interest in farmers' markets and organic foods, and the importance of the food industry and the popular press in setting trends. (Same as GEOG 579.) LEC.

AMS 580. American Art. 3 Hours. H.
A survey of American painting, sculpture, and architecture from colonial to recent times. (Same as HA 570.) Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

AMS 590. Transnational Asian Film. 3 Hours. H.
Examines the ways that contemporary East Asian films and the American film industry appropriate cinematic techniques, styles and themes from one another. Uses cultural studies theories to examine the construction of cultural and historical narratives of transnational interaction among East Asian countries. Explores the impact of economic globalization on transnational film production. LEC.

AMS 629. Sociology of Sport. 3 Hours. S.
Examination of organized sport as a social institution and its relation to other social institutions (e.g., political, economic, educational, and religious), with special emphasis on American society. Analysis of the social correlates of sports participation and a consideration of the role of sport in social change. (Same as SOC 629.) Prerequisite: A principal course in American studies or sociology, or consent of instructor. LEC.

AMS 650. Jazz and American Culture. 3 Hours. H.
This course considers cultural and social histories of jazz, from the 1920s through the present day, as sites for exploring ideological struggles over such fields as race, class, gender, sexuality, democracy, capitalism, freedom, community, Americanness, and globalization in the U.S. The course will explore such questions as the following: What music was called jazz at what times and places? What did it mean to whom? Who played it? Who wrote about it? Who listened to it? Who danced to it? Who policed it? Who produced it? Who used it to rebel? Who used it to survive? What did all of these practices mean to participants? The course will examine struggles over social meanings in the U.S. through a study of jazz performance, labor, representation, marketing, consumption, censorship, and historiography. Prerequisite: A course in American studies, American history, or consent of instructor. (Same as WGSS 652.) LEC.

AMS 652. Jazz I, Roots to 1955. 3 Hours. H.
Survey of jazz music, from ragtime and blues to jazz of the 1940s and 50s. Covers various styles of jazz, including New Orleans, swing,
AMS 653. Jazz II, 1955-Present. 3 Hours. H.
Survey of jazz music, from 1950s to the present. Covers various styles of jazz, including free jazz, postmodern jazz and fusion. Students are expected to have a basic understanding of melody, harmony and rhythm, although ability to read scores is not necessary. Graduate students will complete additional work to be determined in consultation with the instructor. LEC.

AMS 680. Jazz Autobiography. 3 Hours. H.
Examines the literary and musical significance of jazz autobiographies since the 1940s. Authors include Louis Armstrong, Jelly Roll Morton, Billie Holiday, Charles Mingus, Nina Simone and others. Graduate students will complete additional work to be determined in consultation with the instructor. LEC.

AMS 682. Jazz Narratives in Novels and Films. 3 Hours. H.
Examines jazz and musicians’ life stories in prose fiction and fictional or biographical films. Novels may include works by John Ciellon Holmes and Nathaniel Mackey. Films may include Lady Sings the Blues and Space is the Place. Graduate students will complete additional work to be determined in consultation with the instructor. LEC.

AMS 690. Black Cultural Studies. 3 Hours. H.
Examines critical approaches to the study of African American cultural production. Uses literature, films, music, art and performance to explore the development of interpretations of black culture. Covers major developments in black aesthetics in the twentieth century, various theoretical schools of thought, and significant writers such as bell hooks, Stuart Hall, and Gina Dent. Graduate students will complete additional course work to be determined in consultation with the instructor. LEC.

AMS 694. Directed Readings. 1-4 Hours. H.
Consent of instructor is required. IND.

AMS 696. Studies in: _____. 3 Hours. H.
Interdisciplinary study of different aspects of the American experience in different semesters. LEC.

AMS 700. Introduction to Museum Exhibits. 3 Hours.
This course will consider the role of exhibits as an integrated part of museum collection management, research, and public service. Lecture and discussion will focus on issues involved in planning and producing museum exhibits. Laboratory exercises will provide first hand experience with basic preparation techniques. Emphasis will be placed on the management of an exhibit program in both large and small museums in the major disciplines. (Same as BIOL 787, GEOL 781, HIST 723, and MUSE 703.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

AMS 714. Conservation Principles and Practices. 3 Hours.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects will also be considered. (Same as BIOL 700, GEOL 780, HIST 722 and MUSE 706.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

AMS 720. The Nature of Museums. 3 Hours.
The purpose of this course is to provide an overview of the kinds of museums, their various missions, and their characteristics and potentials as research, education, and public service institutions responsible for collections of natural and cultural objects. (Same as BIOL 788, GEOL 782, HIST 720, and MUSE 702.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

AMS 725. Museum Studies Workshop: _____. 1-3 Hours.
Short term, intensive workshops presented to provide specialized background in a variety of skills required in historical archives or museums. FLD.

AMS 730. Principles and Practices of Museum Collection Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museum collections, their associated data, and their use in scholarly research; cataloging, storage, fumigation, automated information management and related topics will be presented for museums of art, history, natural history and anthropology. (Same as BIOL 798, GEOL 785, HIST 725, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

AMS 731. Museum Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as BIOL 785, GEOL 783, HIST 728, and MUSE 701.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

AMS 737. Music in America. 3 Hours.
A survey of historical developments from the Pilgrims to the present. (Same as MUSC 759.) Prerequisite: One course in the field of music history and literature or consent of instructor. LEC.

AMS 767. Gerontology Proseminar. 3 Hours.
A proseminar coordinated by the Gerontology Center. The proseminar explores essential areas of gerontology for researchers and practitioners, providing a multidisciplinary (psychology, biology, sociology, and communication) perspective on aging. The proseminar surveys contemporary basic and applied research, service programs, and policy and management issues in gerontology. (Same as ABSC 787, COMS 787, PSYC 787, and SOC 787.) (Formerly HDFL 787.) LEC.

AMS 787. Field Work. 1-12 Hours.
Supervised field research in aspects of American civilization. Prerequisite: Consent of instructor. FLD.

AMS 797. Introduction to Museum Public Education. 3 Hours.
Consideration of the goals of an institution's public education services, developing programs, identifying potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as BIOL 784, GEOL 784, HIST 721, and MUSE 705.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

AMS 799. American Studies Museum Apprenticeship. 1-6 Hours.
Provides directed, practical experience in research, collection care and management, public education, and exhibits with emphasis to suit the particular requirements of each student. (Same as ANTH 799, BIOL 799, GEOL 723, HIST 799, and MUSE 799.) FLD.
AMS 801. Introduction to American Studies. 3 Hours.
An introduction to the field of American Studies through an examination of some of the classic and innovative works, issues, debates, and controversies in the history and the literature of American Studies. LEC.

AMS 802. Theorizing America. 3 Hours.
Drawing from a broad range of perspectives (e.g., cultural theory, social theory, literary theory, etc.), this course will introduce students to current theoretical debates in American studies and the concepts that inform them. LEC.

AMS 803. Research Methods in American Studies. 3 Hours.
An introduction to the range of interdisciplinary research methods in American studies. Emphasis will be placed on an examination of the assumptions, logics, and procedures involved in various approaches to understanding American society and culture. LEC.

AMS 804. Research Seminar. 3 Hours.
An intensive application of theoretical and methodological issues to the development of specific substantive research problems. Students will be expected to design and implement a study that will be critically assessed in the seminar. LEC.

AMS 805. American Pluralism: Race, Ethnicity, and Religion in American Life. 3 Hours.
Analysis of the dynamics of intercultural and intergroup relations in America with special emphasis on the examination of major conceptual perspectives that have characterized the study of race, ethnicity, and religion in American life. LEC.

AMS 808. Studies in: ____. 3 Hours.
Interdisciplinary study of different aspects of the American experiences in different semesters. LEC.

AMS 809. Advanced Research Seminar. 3 Hours.
An intensive application of theoretical and methodological issues to the development of specific substantive research problems. Students will be expected to design and implement a study that will be critically assessed in the seminar. Prerequisite: AMS 804. Permission of the instructor required. LEC.

AMS 835. Colloquium in the History of Gender. 3 Hours.
This colloquium will cover theoretical and topical readings on the history of manhood, womanhood, and gender systems. (Same as HIST 895 and WGSS 835.) LEC.

AMS 836. Colloquium in United States Women's History. 3 Hours.
This colloquium will cover theoretical and topical readings on the history of women in the United States from the pre-contact period to the present. It is designed to familiarize students with the most important and current historiography in the field. (Same as HIST 896 and WGSS 883.) LEC.

AMS 837. Comparative Colloquium in Women's History. 3 Hours.
This colloquium will approach the history of women from a comparative perspective through theoretical and topical readings on women in at least two different cultures. (Same as HIST 897 and WGSS 837.) LEC.

AMS 896. Examination Preparation. 1-6 Hours.
Directed and independent study in preparation for the M.A. examination. May be repeated. RSH.

AMS 899. Thesis. 1-6 Hours.
Investigation of a topic for master's thesis. Total enrollment in this course may not exceed six hours of credit. THE.

AMS 900. Teaching Seminar. 1-6 Hours.
This seminar is designed to assist students in the preparation, presentation, and evaluation of teaching in American Studies. Graded on a satisfactory/unsatisfactory basis. LEC.

AMS 973. Seminar in United States Women's History. 3 Hours.
This research seminar will focus on the history of women in the United States from the pre-contact period to the present. Students will research and write a paper using primary sources, and present those papers to the seminar for evaluation. (Same as HIST 973 and WGSS 873.) LEC.

AMS 996. Examination Preparation. 1-9 Hours.
Directed and independent study in preparation for the doctoral comprehensive examinations. May be repeated. RSH.

AMS 997. Directed Readings. 1-4 Hours.
Directed reading in an area of American culture in which there is no appropriate course in the offerings of the American Studies program or of the cooperating departments, but in which there is a member of the graduate faculty competent and willing to direct a program of study. RSH.

AMS 998. Seminar in: ____. 3 Hours.
Topics vary from semester to semester. Graduate students are consulted in selecting topics. LEC.

AMS 999. Dissertation. 1-12 Hours.
THE.

Bachelor of Arts and Bachelor of General Studies in American Studies

Career Opportunities

Graduates have prepared for occupations in federal, state, and local government, law, medicine, politics, journalism, business, and education. Many have entered graduate work in American studies or disciplines in their concentrations. See an advisor for a list of American studies courses that may meet teacher licensure requirements in history and social sciences.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.
First- and Second-Year Preparation

Students planning to major in American studies should take AMS 100 and AMS 110 during their first and second years. Students should take AMS 360 no later than the first semester of the third year. As soon as a student decides that American studies is a possible major, he or she should schedule an appointment with the undergraduate director to declare the major and consider concentration options, ideally no later than the second year.

Admission to the Major

Admission Requirements

Course Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 105</td>
<td>Freshman Honors English</td>
<td></td>
</tr>
<tr>
<td>AMS 100</td>
<td>Introduction to American Studies</td>
<td>3</td>
</tr>
<tr>
<td>or AMS 101</td>
<td>Introduction to American Studies, Honors</td>
<td></td>
</tr>
<tr>
<td>AMS 110</td>
<td>American Identities</td>
<td>3</td>
</tr>
<tr>
<td>or AMS 112</td>
<td>American Identities, Honors</td>
<td></td>
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<tr>
<td>Total Hours</td>
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<td>9</td>
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1 Unless the student has received a waiver or, for transfer students, an equivalent course.

Grade-Point Average Requirements

Minimum Admission Grade-Point Average

Satisfied by a minimum GPA in required admission courses designated above. University Course Repeat Policy will apply.

Admission Grade-Point Average Calculation

The admission grade-point average includes all admission courses above. KU’s course repeat policy (https://documents.ku.edu/policies/governance/USRP.html#art2sect2) applies to grade-point average calculation.

Application Term

Semester in which admission requirements will be completed, normally no later than 60 hours, or for transfer students, normally during the initial term at KU. Application to this major after completion of 60 hours, or the initial term for transfer students, will likely delay graduation.

Requirements for the B.A. or B.G.S. Major

American Studies Core Knowledge and Skills

Majors must complete a course in each of the following areas:

Introduction to American Studies (3)

Satisfied by the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>AMS 100</td>
<td>Introduction to American Studies</td>
<td>3</td>
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<tr>
<td>or AMS 101</td>
<td>Introduction to American Studies, Honors</td>
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American Identities (3)

Satisfied by the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>AMS 110</td>
<td>American Identities</td>
<td>3</td>
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<tr>
<td>or AMS 112</td>
<td>American Identities, Honors</td>
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The United States in Global Context (3)

Satisfied by the following:

<table>
<thead>
<tr>
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<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>AMS 332</td>
<td>The United States in Global Context</td>
<td>3</td>
</tr>
<tr>
<td>or SOC 332</td>
<td>The United States in Global Context</td>
<td></td>
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</tbody>
</table>

Theory and Method (18-19)

Satisfied by the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>AMS 360</td>
<td>Theory and Method</td>
<td>3</td>
</tr>
</tbody>
</table>
| Select one additional course that explores methodological and theoretical approaches used in American studies. See your advisor for appropriate options or select from the following:
| AAAS/WGSS 560 | Race, Gender, and Post-Colonial Discourses |       |
| ANTH 361  | The Third World: Anthropological Approaches |       |
| ANTH 460  | Theory in Anthropology                     |       |
| HIST 301  | The Historian's Craft                      | 3     |
| POLS 301  | Introduction to Political Theory           |       |
| POLS 306  | Political Science Methods of Inquiry       |       |
| POLS 320  | Introduction to Public Policy              |       |
| POLS/WGSS 600 | Contemporary Feminist Political Theory |       |
| HIST 649/ | History of Feminist Theory                 |       |
| WGSS 549  |                                            |       |
| ENGL 508  | Contemporary Literary Theory               |       |
| POLS 609  | Topics in Political Theory: ____           |       |
| PSYC 210  | Statistics in Psychological Research       | 3     |
| PSYC 200  | Research Methods in Psychology             | 3     |
| SOC 310   | Introduction to Social Research            |       |
| SOC 500   | Sociological Theory                        |       |
| SOC 510   | Elementary Statistics and Data Analysis    |       |
| SOC 601   | Introduction to Feminist Social Theory     |       |
| PSYC/WGSS 468 | Psychology of Women                    | 3     |

American Studies Required Electives/Emphases

Majors must select 1 of 7 special emphases or design their own. Self-designed emphases must be approved in their entirety by an American studies advisor and the undergraduate studies director before implementation. Meet with your academic advisor to determine course options that best meet your interests in this option. Prepare for this advising session by completing a key word search in the Schedule of Classes (https://classes.ku.edu/Classes/ExternalDisplay.action).

- American Cultural Studies. Satisfied by 4 courses, 3 of which are at 300+ level (possible key words: American culture).
  - AMS 310 | American Culture, 1600-1876 | 3 |
  - AMS 312 | American Culture, 1877 to the Present | 3 |
  - AMS 576 | Cultural Geography of the United States | 3 |
  - AMS 650 | Jazz and American Culture | 3 |
  - AMS 652 | Jazz I, Roots to 1955 | 3 |
  - AMS 653 | Jazz II, 1955-Present | 3 |
  - AMS 680 | Jazz Autobiography | 3 |
  - AMS 682 | Jazz Narratives in Novels and Films | 3 |
  - AMS 690 | Black Cultural Studies | 3 |
  - ENGL 316 | Introduction to Major American Writers | 3 |
  - ENGL 320 | American Literature I | 3 |
  - ENGL 322 | American Literature II | 3 |
• Race Ethnicity. Majors must complete the following (possible key words: race, ethnicity, stereotyping, cultural diversity, slavery, ethnic relations, black experience):

**Race and Ethnicity Group A (3)**
Select one of the following from AAAS, AMS, ENGL, or HIST at the junior/senior level (300+):
- **AAAS 306** The Black Experience in the U.S. Since Emancipation
- **AAAS 440** The Afro-American Family: A Psychological Approach
- **AAAS 460** Topics and Problems in African and African-American Studies
- **AMS 522** American Racial and Ethnic Relations
- **AMS 534** Global Ethnic and Racial Relations
- **ENGL 336** Jewish American Literature and Culture
- **ENGL 337** Introduction to U.S. Latina/o Literature
- **ENGL 338** Introduction to African-American Literature
- **ENGL 339** Introduction to Caribbean Literature
- **ENGL 571** American Indian Literature: ______
- **HIST 353** Indigenous Peoples of North America
- **HIST 574** Slavery in the New World
- **HIST 631** The Contemporary Afro-American Experience

**Race and Ethnicity Group B (3)**
Select one of the following from ANTH, PSYC, or SOC at the junior/senior level (300+):
- **ANTH 308** Introduction to Cultural Anthropology
- **ANTH 360** The Varieties of Human Experience
- **ANTH 563** Cultural Diversity in the United States
- **PSYC 465** Stereotyping and Prejudice Across Cultures
- **SOC 341** Urban Sociology
- **SOC 522** American Racial and Ethnic Relations
- **SOC 534** Global Ethnic and Racial Relations
- **SOC 536** Ethnicity in the United States: ______

**Race and Ethnicity Required Electives (0)**
Satisfied by 2 electives, at least 1 at the 300+ level, from the following related to race and ethnicity: AAAS, AMS, ANTH, ENGL, HIST, POLS, SOC, WS.

• Visual Culture. Satisfied by 4 courses from at least 2 departments, 3 of which are at the 300+ level (possible key words: American documentary, American art, American theater, American film).

**Visual Culture (3)**
- **AMS 580** American Art
- **AAAS 585** Race and the American Theatre
- **AAAS 611** History of the Black Power Movement
- **ANTH 301** Anthropology Through Films
- **HA 370** American Art
- **HA 525** Aegean Archaeology and Art
- **HA 581** American Art to 1860: Inventing a Nation
- **HA 582** American Art 1860-1900: Gilded Age
- **HIST 310** American Culture, 1600-1876
- **HIST 312** American Culture, 1877 to the Present
- **HIST 313** Conspiracies and Paranoia in American History
- **HIST 347** Environmental History of North America
- **HIST 353** Indigenous Peoples of North America
- **HIST 360** Science and Religion
- **LAA 505** U.S. Latino and Latin American Film and Literature
- **REL 339** History of Religion in America
- **THR 327** African-American Theatre and Drama
- **THR 380** Popular Culture: ______
- **THR 528** History of U.S. Theatre and Drama

• Local and Global. Majors must complete the following:

**Local and Global Group A (3)**
Satisfied by 1 of the following courses from AMS, ENGL, HIST, GEOG, SOC at the junior/senior level (300+):
- **AMS 534** Global Ethnic and Racial Relations
- **ENGL 339** Introduction to Caribbean Literature
- **ENGL 536** Readings in the Holocaust
- **GEOG 350** Physical Geography of Africa
- **GEOG 396** East Asia
- **GEOG 591** Geography of Latin America
- **GEOG 593** Central American Peoples and Lands
- **HIST 300** Modern African History
- **HIST 331** Atlantic Societies, 1450-1800: A Comparative History of European Colonization
- **HIST 343** The Holocaust in History
- **HIST 350** The Korean War, 1950-1953
- **HIST 365** Invention of the Tropics
- **HIST 371** The Cultural History of Modern Latin America
- **HIST 397** From Mao to Now: China's Red Revolution
- **HIST 398** Introduction to History of Japan: Anime to Zen
- **HIST 574** Slavery in the New World
- **SOC 536** Ethnicity in the United States: ______
- **SOC 621** Cross-Cultural Sociology

**Local and Global Group B (3)**
Satisfied by 1 of the following courses from EALC, LAA, AAAS at the junior/senior level (300+):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EALC 332</td>
<td>Asian Literature in Translation: _____</td>
<td>3</td>
</tr>
<tr>
<td>EALC 563</td>
<td>Cultural History of Korea</td>
<td></td>
</tr>
<tr>
<td>EALC 590</td>
<td>Topics in East Asian Languages and Cultures:</td>
<td></td>
</tr>
<tr>
<td>LAA 334</td>
<td>Indigenous Traditions of Latin America</td>
<td></td>
</tr>
<tr>
<td>LAA 503</td>
<td>Race, Gender, Ethnicity, and Nationalism in Latin America</td>
<td></td>
</tr>
<tr>
<td>LAA 505</td>
<td>U.S. Latino and Latin American Film and Literature</td>
<td></td>
</tr>
</tbody>
</table>

**Local and Global Required Electives (0)**

Satisfied by 2 electives, at least 1 at the 300+ level, from the following courses related to race and ethnicity: AAAS, AMS, EALC, ENGL, GEOG, HA, HIST, LAA, POLS, SPAN.

- **Popular Culture.** Satisfied by 4 courses from at least 2 departments, 3 of which are at the 300+ level (possible key words: popular culture, American culture, popular literature, sport, conspiracies).

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 344</td>
<td>Case Study in American Studies: _____</td>
<td>3</td>
</tr>
<tr>
<td>EALC 365</td>
<td>Japanese People through Films</td>
<td>3</td>
</tr>
<tr>
<td>EALC 565</td>
<td>Popular Images in Japanese Culture, Literatures, and Films</td>
<td></td>
</tr>
<tr>
<td>ENGL 325</td>
<td>Recent Popular Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 506</td>
<td>Science Fiction</td>
<td>3</td>
</tr>
<tr>
<td>HIST 310</td>
<td>American Culture, 1600-1876</td>
<td>3</td>
</tr>
<tr>
<td>HIST 312</td>
<td>American Culture, 1877 to the Present</td>
<td>3</td>
</tr>
<tr>
<td>HIST 313</td>
<td>Conspiracies and Paranoia in American History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 470</td>
<td>Popular Culture in Latin America and Africa</td>
<td>3</td>
</tr>
<tr>
<td>FMS 380</td>
<td>American Popular Culture of: _____</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 299</td>
<td>American Popular Song</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 303</td>
<td>The Film Musical</td>
<td>3</td>
</tr>
<tr>
<td>SOC 364</td>
<td>Society, Popular Culture, and the Media</td>
<td>3</td>
</tr>
<tr>
<td>SOC 365</td>
<td>Society, Popular Culture, and the Media, Honors</td>
<td>3</td>
</tr>
<tr>
<td>SOC 629</td>
<td>Sociology of Sport</td>
<td>3</td>
</tr>
<tr>
<td>SOC 634</td>
<td>The Sociology of Culture</td>
<td>3</td>
</tr>
<tr>
<td>THR 327</td>
<td>African-American Theatre and Drama</td>
<td>3</td>
</tr>
<tr>
<td>THR 380</td>
<td>Popular Culture: _____</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 513</td>
<td>Modern American Women in Film and Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

- **Jazz Studies.** Satisfied by 4 courses from at least 2 departments, 3 of which are at the 300+ level (possible key words: jazz, music, American poetry, American pop culture):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 650</td>
<td>Jazz and American Culture</td>
<td>3</td>
</tr>
<tr>
<td>AMS 652</td>
<td>Jazz I, Roots to 1955</td>
<td>3</td>
</tr>
<tr>
<td>AMS 653</td>
<td>Jazz II, 1955-Present</td>
<td>3</td>
</tr>
<tr>
<td>AMS 680</td>
<td>Jazz Autobiography</td>
<td>3</td>
</tr>
<tr>
<td>AMS 682</td>
<td>Jazz Narratives in Novels and Films</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 298</td>
<td>Introduction to Jazz</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 299</td>
<td>American Popular Song</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 300</td>
<td>Jazz Styles, 1920-1980</td>
<td>3</td>
</tr>
</tbody>
</table>

- **Gender and Sexuality.** Satisfied by 4 courses from at least 2 departments, 3 of which are at the 300+ level (possible key words: gender, sexuality, body image, sex roles, intimate relationships):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 511</td>
<td>History of American Women--1870 to Present</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 359</td>
<td>Anthropology of Sex</td>
<td>3</td>
</tr>
<tr>
<td>HIST 531</td>
<td>History of American Women--1870 to Present</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 504</td>
<td>Philosophy of Sex and Love</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 410</td>
<td>Intimate Relationships</td>
<td>3</td>
</tr>
<tr>
<td>REL 374</td>
<td>Religious Perspectives on Selfhood and Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>SOC 522</td>
<td>American Racial and Ethnic Relations</td>
<td>3</td>
</tr>
<tr>
<td>SOC 352</td>
<td>Sociology of Sex Roles</td>
<td>3</td>
</tr>
<tr>
<td>SOC 617</td>
<td>Women and Health Care</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 333</td>
<td>The Politics of Physical Appearance</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 440</td>
<td>Communication and Gender</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 468</td>
<td>Psychology of Women</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 562</td>
<td>Women and Politics</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 563</td>
<td>Gender, Sexuality and the Law</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 653</td>
<td>Gender, War, and Peace</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 660</td>
<td>Human Reproduction: Culture, Power, and Politics</td>
<td>3</td>
</tr>
</tbody>
</table>

- **Religion.** Satisfied by 4 courses from at least 2 departments, 3 of which are at the 300+ level (possible key words: American religion):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAS 300</td>
<td>African Traditional Religion and Thought</td>
<td>3</td>
</tr>
<tr>
<td>AAAS 522</td>
<td>African and African-American Religion: _____</td>
<td>3</td>
</tr>
<tr>
<td>AMS 290</td>
<td>Religion in American Society</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 484</td>
<td>Magic, Science, and Religion</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 666</td>
<td>Anthropology of Religion</td>
<td>3</td>
</tr>
<tr>
<td>HIST 360</td>
<td>Science and Religion</td>
<td>3</td>
</tr>
<tr>
<td>HIST 373</td>
<td>The Supreme Court and Religious Issues in the United States</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 350</td>
<td>Philosophical Issues in Religion</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 581</td>
<td>Psychology of Religion</td>
<td>3</td>
</tr>
<tr>
<td>REL 330</td>
<td>Native American Religions</td>
<td>3</td>
</tr>
<tr>
<td>REL 339</td>
<td>History of Religion in America</td>
<td>3</td>
</tr>
<tr>
<td>REL 671</td>
<td>American Communes</td>
<td>3</td>
</tr>
<tr>
<td>SOC 626</td>
<td>Religion and Society</td>
<td>3</td>
</tr>
</tbody>
</table>

Students considering graduate study should take at least 2 courses beyond major requirements. These should be selected in consultation with a faculty advisor.

**Capstone experience**

Majors must complete 1 of the following:


- By application, advanced students may pursue a focused project of research or service under the supervision of a faculty member. Satisfied by AMS 551, AMS 552, or AMS 553.
American Studies Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 30 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior (300+) Hours**
Satisfied by a minimum of 18 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior (300+) Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

**Major Junior/Senior Major Attempts**
Summary includes American Studies junior/senior (300+) hours attempted, including F’s and incompletes.

**Graduation Plan**
With careful planning and commitment to a full-time course load, you can graduate in 4 years (http://clas.ku.edu/undergrad). Download a sample 4-year plan (http://clas.ku.edu/undergrad/advising/plans) for American studies.

**Double Majors**
American studies majors are encouraged to take a second major in a related field, such as history, English, political science, sociology, anthropology, religious studies, African and African-American studies, economics, or art history. Because the major is interdisciplinary, a second major is relatively easy to achieve during the usual 4 years of undergraduate study.

**Opportunities for Original Projects**
By application, advanced students may pursue a focused project of research or service under the supervision of a faculty member. AMS 551, AMS 552, and AMS 553 function as independent research and service project electives.

A sample 4-year plan for the BA degree in American Studies can be found here: American Studies (http://catalog.ku.edu/liberal-arts-sciences/american-studies/ba-bgs/ba-american-studies), or by using the left-side navigation.

A sample 4-year plan for the BGS degree in American Studies will be coming soon.

**Departmental Honors**
An honors program allows seniors with overall grade-point averages of 3.25 to do independent work under faculty direction toward completion of an honors thesis. Enrollment in AMS 553 is required. By special arrangement, students may design independent study programs to meet concentration requirements. Graduation with honors is awarded to students who meet College honors requirements, which, in addition to the above overall KU GPA and course requirements includes a major GPA of 3.5.

---

**Minor in Latino/a Studies**

**Why study American studies?**

Because American studies offers a creative environment to learn, think, and reflect about American culture, history, and communities from both a national and global perspective.

**Requirements for the Minor**

Students selecting this minor must complete the following:

**Core Courses (12)**
Select by at least 4 courses (12 hours) of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS/SOC 260</td>
<td>America’s Latinos/Latinas</td>
</tr>
<tr>
<td>AMS 520</td>
<td>Topics in Latino Studies: _____ (may be repeated for credit as the topic changes)</td>
</tr>
<tr>
<td>ANTH 562</td>
<td>Mexamerica</td>
</tr>
<tr>
<td>LAA 302</td>
<td>Topics in Latin American Area Studies: _____</td>
</tr>
<tr>
<td>LAA 602</td>
<td>Topics in Latin American Studies: _____</td>
</tr>
<tr>
<td>ENGL 337</td>
<td>Introduction to U.S. Latino/a Literature</td>
</tr>
<tr>
<td>ENGL 573</td>
<td>U.S. Latina/o Literature: _____ (may be repeated for credit as the topic changes)</td>
</tr>
<tr>
<td>POLS 619</td>
<td>Topics in American Politics: _____ (Latino Politics)</td>
</tr>
<tr>
<td>SPAN 464</td>
<td>Reading and Analysis of U.S. Latino/a Literatures: _____ (conducted in Spanish)</td>
</tr>
<tr>
<td>SW 455</td>
<td>Topics in Social Welfare: _____ (Social Work with Latinos)</td>
</tr>
</tbody>
</table>

The following topics courses also may count toward the minor, if the particular topic offered in a given semester focuses on U.S. Latino/as:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 344</td>
<td>Case Study in American Studies: _____</td>
</tr>
<tr>
<td>AMS 536</td>
<td>Ethnicity in the United States: _____</td>
</tr>
<tr>
<td>AMS 494</td>
<td>Topics in: _____</td>
</tr>
<tr>
<td>AMS 551/553</td>
<td>Research Project in American Studies (if the research focuses on U.S. Latino/as)</td>
</tr>
<tr>
<td>SPAN 440</td>
<td>Hispanic Studies: _____ (conducted in Spanish)</td>
</tr>
<tr>
<td>SPAN 540</td>
<td>Colloquium on Hispanic Studies: _____ (conducted in Spanish)</td>
</tr>
<tr>
<td>SW 555</td>
<td>Diversity, Oppression, and Social Justice: Culturally Competent Social Work</td>
</tr>
</tbody>
</table>

A course with a service-learning component, such as one of the following, may also count in this category, with permission of the Latino/a studies advisor, if the service learning component is in a Latino/a community in the U.S.:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 552</td>
<td>Public Service in American Studies</td>
</tr>
<tr>
<td>SPAN 330</td>
<td>Service Learning Internship Spanish I (variable credit)</td>
</tr>
<tr>
<td>SOC 490</td>
<td>Internship in Sociology</td>
</tr>
</tbody>
</table>

Other courses with at least 75 percent U.S. Latino/a content may count toward the minor with permission of the Latino/a studies advisor.

**Latino/a Studies Required Electives (6)**

Students selecting this minor must complete 2 additional courses (6 hours) from any course above not used to satisfy the requirement and any of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 344</td>
<td>Case Study in American Studies: _____</td>
</tr>
<tr>
<td>AMS 536</td>
<td>Ethnicity in the United States: _____</td>
</tr>
<tr>
<td>AMS 494</td>
<td>Topics in: _____</td>
</tr>
<tr>
<td>AMS 551/553</td>
<td>Research Project in American Studies (if the research focuses on U.S. Latino/as)</td>
</tr>
<tr>
<td>SPAN 440</td>
<td>Hispanic Studies: _____ (conducted in Spanish)</td>
</tr>
<tr>
<td>SPAN 540</td>
<td>Colloquium on Hispanic Studies: _____ (conducted in Spanish)</td>
</tr>
<tr>
<td>SW 555</td>
<td>Diversity, Oppression, and Social Justice: Culturally Competent Social Work</td>
</tr>
</tbody>
</table>

A course with a service-learning component, such as one of the following, may also count in this category, with permission of the Latino/a studies advisor, if the service learning component is in a Latino/a community in the U.S.:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 552</td>
<td>Public Service in American Studies</td>
</tr>
<tr>
<td>SPAN 330</td>
<td>Service Learning Internship Spanish I (variable credit)</td>
</tr>
<tr>
<td>SOC 490</td>
<td>Internship in Sociology</td>
</tr>
</tbody>
</table>

Other courses with at least 75 percent U.S. Latino/a content may count toward the minor with permission of the Latino/a studies advisor.
### Latino/a Minor Discipline Breadth (0)

Satisfied by courses from at least 3 departments.

### Latino/a Studies Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

**Minor Hours**
Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**
Satisfied by a minimum of 9 hours of KU resident credit in the minor.

**Minor Junior/Senior (300+) Hours**
Satisfied by a minimum of 15 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

### Minor in American Studies

The minor in American Studies offers students an opportunity to incorporate American Studies as an interdisciplinary field of study along with their chosen major and degree. The minor is open to all students, and is a particularly complimentary field of study for those who are currently majoring in other fields within the humanities, social sciences, or natural sciences.

### Requirements for the Minor

Students selecting this minor must complete the following:

**Choose one introductory course from the following:** (3)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 100</td>
<td>Introduction to American Studies</td>
</tr>
<tr>
<td>or SOC 110</td>
<td>American Identities</td>
</tr>
<tr>
<td>AMS 101</td>
<td>Introduction to American Studies, Honors</td>
</tr>
<tr>
<td>AMS 110</td>
<td>American Identities</td>
</tr>
<tr>
<td>AMS 112</td>
<td>American Identities, Honors</td>
</tr>
</tbody>
</table>

**Choose one course from the following:** (3)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 177</td>
<td>First Year Seminar: _____</td>
</tr>
<tr>
<td>AMS 260</td>
<td>America’s Latinos/Latinas</td>
</tr>
<tr>
<td>or SOC 260</td>
<td>America’s Latinos/Latinas</td>
</tr>
<tr>
<td>AMS 290</td>
<td>Religion in American Society</td>
</tr>
<tr>
<td>or REL 171</td>
<td>Religion in American Society</td>
</tr>
<tr>
<td>AMS 310</td>
<td>American Culture, 1600-1876</td>
</tr>
<tr>
<td>or HIST 310</td>
<td>American Culture, 1600-1876</td>
</tr>
<tr>
<td>AMS 312</td>
<td>American Culture, 1877 to the Present</td>
</tr>
<tr>
<td>or HIST 312</td>
<td>American Culture, 1877 to the Present</td>
</tr>
<tr>
<td>AMS 330</td>
<td>American Society</td>
</tr>
<tr>
<td>or SOC 330</td>
<td>American Society</td>
</tr>
<tr>
<td>AMS 332</td>
<td>The United States in Global Context</td>
</tr>
</tbody>
</table>
Choose four American Studies courses (any course with an AMS prefix or courses cross-listed with AMS courses) (12 hours) at the junior/senior level (12)

Note: Only 1 course in the minor may be shared with your major.

Minor Hours & GPA
While completing all required courses, minors must also meet each of the following hour and grade point average minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 hours of junior/senior (300+) hours of KU resident credit in the minor.

Minor Junior/Senior (300+) Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA
Satisfied by a minimum of a 2.0 GPA in all courses in the minor. GPA calculations include all courses in the field of study including Fs and repeated courses.

Master of Arts in American Studies

The Master of Arts in American Studies is a free-standing degree. Students admitted to the M.A. program may hold bachelor's degrees in any field and will be considered for admission based on the merit of their application. Students nearing completion of the M.A. program may apply to a doctoral program, either at KU or another university.

Admission to Graduate Studies
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission to the M.A. in American Studies
Completion of a bachelor's degree is required of all applicants. Admission is based primarily on the applicant's statement of academic objectives, record of prior studies at the undergraduate or graduate level, and references from persons familiar with the applicant's work. Evidence of preparation for graduate study may include substantial work in American Studies or related fields, such as American history, literature, art, media, sociology, anthropology, political science, journalism, or interdisciplinary studies. Prospective students must take the Graduate Record Examination and have the results forwarded to the Graduate Application Processing Center (http://www.graduate.ku.edu).

Submit your graduate application online (http://www.graduate.ku.edu). Send all other requested application materials to the department:

The University of Kansas
American Studies Program
Graduate Applications
Bailey Hall
1440 Jayhawk Blvd., Room 213
Lawrence, KS 66045-7545

M.A. Degree Requirements
The Master of Arts in American Studies requires 30 credit hours, including courses and the completion of a research article or thesis.

Core Courses (12)

<table>
<thead>
<tr>
<th>Course</th>
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<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>AMS 801</td>
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<td>3</td>
</tr>
<tr>
<td>AMS 802</td>
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<td>3</td>
</tr>
<tr>
<td>AMS 803</td>
<td>Research Methods in American Studies (offered every spring)</td>
<td>3</td>
</tr>
<tr>
<td>AMS 804</td>
<td>Research Seminar (offered every fall)</td>
<td>3</td>
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</table>

Elective Methods (3)

1 course selected by the student and advisor provides methodological support for the student's research.

Elective Topics (9)

Three courses constitute a coherent concentration, including historical depth in a defined area that prepares the student for either the master's thesis or publishable article.

Thesis Hours (6)

After completing required courses, the student enrolls in AMS 899 and continues enrolling in thesis hours until their article or thesis is accepted by their committee.

Research Project and Defense (0)

Students complete a project of original research, resulting in a thesis or scholarly article. A committee of three faculty members evaluates the project, and the student provides an oral defense.

Handbook for Graduate Students

The department has prepared a handbook that summarizes procedures that a graduate student follows in working toward any 1 of the 3 graduate degrees. It contains a summary of regulations and departmental procedures and the rationale behind these regulations. The handbook is available online via the department webpage (http://americanstudies.ku.edu/overview-graduate-phd).
# Master of Urban Planning and Master of Arts in American Studies

**M.U.P. and M.A. in American Studies**

This joint degree combines in a 2 1/2-year program the normal 2-year Master of Urban Planning degree offered through the School of Architecture, Design and Planning and the normal 2-year M.A. degree in American studies offered through the College of Liberal Arts and Sciences. It is designed for students interested in careers in policy planning and research involving the arts, social planning, cultural activities and facilities, and historic preservation. For more information, consult the respective program chairs. See also Urban Planning (p. 96) in the School of Architecture, Design and Planning section of the online catalog.

# Doctor of Philosophy in American Studies

The Ph.D. is the terminal degree in American Studies. In the Ph.D. program, we seek to educate, mentor, and place scholars who will make innovative contributions to American Studies and related fields, both inside and outside of the academy. We do this by providing advanced training and practice in interdisciplinary research as well as by fostering an intellectual community of students and faculty within the department and across the wider University. We emphasize the development of independent programs of study while directing and enabling students' professionalism as researchers and teachers.

## Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

## Admission to the Ph.D. in American Studies

Completion of a bachelor’s degree is required of all applicants. Preference may be granted to students who hold a master’s degree in American Studies or a related field. Admission is based primarily on the applicant’s statement of academic objectives, record of prior studies at the undergraduate or graduate level, and references from persons familiar with the applicant’s work. Evidence of preparation for graduate study may include substantial work in American Studies or related fields, such as American history, literature, art, media, sociology, anthropology, political science, journalism, or interdisciplinary studies. Prospective students must take the Graduate Record Examination and have the results forwarded to the Graduate Application Processing Center (http://www.graduate.ku.edu).

Submit your graduate application online (http://www.graduate.ku.edu). Send all other requested application materials to the department:

**The University of Kansas**  
American Studies Program  
Graduate Applications  
Bailey Hall  
1440 Jayhawk Blvd., Room 213  
Lawrence, KS 66045-7545

## Ph.D. Degree Requirements

The Doctor of Philosophy in American Studies usually requires at least 30 credit hours beyond the Master’s degree. Courses taken to fulfill requirements for the Master of Arts in American Studies at KU also fulfill the requirements listed below. In consultation with the advisor, the student develops a plan of work that will provide expertise in three defined fields of study. The comprehensive examination certifies the student’s preparation in the chosen fields, and readiness to conduct research at a professional level. The degree program culminates in the completion and defense of the dissertation.

### Core Courses (12)

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<td>3</td>
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</tbody>
</table>

### Graduate Seminars (9)

- 3 seminars with additional hours as needed for exam preparation.  
- 9

### Research Skills Course (3)

- 1 elective methods course selected by the student and advisor provides methodological support for the student’s program of research and fulfills the Research Skills requirement.  
- 3

### Doctoral Residency

The student spends at least 2 semesters (http://www.policy.ku.edu/graduate-studies/doctoral-program-time-contraints) enrolled full-time at the Lawrence campus.

### Comprehensive Examination

A combined written and oral examination (http://policy.ku.edu/graduate/studies/doctoral-oral-exams) is evaluated by a committee of 5 faculty members, 1 of whom represents Graduate Studies. After completing required courses, the student prepares for the comprehensive examination by taking AMS 996 Exam Preparation hours.

### Continuous Enrollment

Following the comprehensive examination, the student enrolls full-time every semester (http://policy.ku.edu/graduate-studies/doctoral-candidacy) (spring, summer, and fall) until completing 18 hours. Following the 18-hour mark, students enroll continuously every semester (spring, summer, and fall) in 1-9 hours of AMS 999 Dissertation until graduating.

### Prospectus

The student writes a brief proposal of the dissertation (http://policy.ku.edu/graduate-studies/doctoral-dissertation) project, which is evaluated and accepted by a committee of 5 faculty members, including a representative of Graduate Studies.

### Dissertation Defense

Having completed the dissertation, the student defends it in an oral examination (http://policy.ku.edu/graduate-studies/final-oral-exams) before the committee of 5 faculty members.
**Filing.** The student files copies of the dissertation with the university and the department, in compliance with all university policies and deadlines.

**Comprehensive Examination**

The comprehensive examination has written and oral components. Before sitting for the written component, the student develops preparation in the three concentration fields, including an understanding of the current state of scholarship in each; major prior research and scholarly controversies in the fields; the principal theoretical, conceptual, and methodological approaches informing that scholarship; and the directions that contemporary work is taking. When the advisor deems the student ready for examination, the examination committee presents questions covering these areas, and the student writes a time-limited response to each. After the written examination has been reviewed and accepted by the committee, the student may sit for the oral comprehensive examination, which covers issues raised in the written examination as well as any other aspect of the student’s work in the doctoral program to date.

**Dissertation**

An interdisciplinary dissertation is required. The department has established a detailed description of the procedures for completing a dissertation. The student’s dissertation committee is composed of at least 4 faculty members, who initially review and approve the student’s research proposal and direct the research to its completion, and a fifth faculty member that serves as a representative of Graduate Studies.

**Final Examination**

All students must pass a final oral defense of the dissertation.

**Handbook for Graduate Students**

The department has prepared a handbook that summarizes procedures that a graduate student follows in working toward any one of the three graduate degrees. It contains a summary of regulations and departmental procedures and the rationale behind these regulations. The handbook is available online (http://americanstudies.ku.edu).

**Graduate Certificate in American Studies**

The Graduate Certificate in American Studies is designed to offer KU graduate students in the humanities and social sciences a portable credential demonstrating their engagement with the field of American Studies, including exposure to interdisciplinary theory and methods. This certificate also provides enrichment or an introductory experience to the field for non-degree-seeking students.

**Current KU Students**

Current graduate students wishing to enroll in the Graduate Certificate program will apply through Graduate Studies (http://graduate.ku.edu/ku-graduate-application). Students must be in good standing with their graduate degree program in order to participate in the certificate program. A graduate GPA of 3.0 or higher is required for admission. The application process entails completing the online application, paying a $30.00 application fee, and submitting materials required for the American Studies Certificate:

1. A letter stating your interest in American Studies and its relationship to your graduate course of study;
2. An unofficial copy of your KU transcript; and
3. A letter of support from your graduate degree program.

**Non-KU Graduate Students**

Non-KU graduate students must complete an application to Graduate Studies (http://graduate.ku.edu/ku-graduate-application) for admission into the certificate program and submit an application fee along with the following materials:

1. A letter stating your interest in the American Studies Certificate Program
2. A copy of your college transcript
3. 2 letters of recommendation from persons familiar with your academic work or potential graduate study.

**Graduate Certificate in American Studies**

The American Studies Graduate Certificate will require 12 hours of course work.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AMS 801</td>
<td>3</td>
</tr>
<tr>
<td>Choose 1</td>
<td>3</td>
</tr>
<tr>
<td>AMS 802</td>
<td>Theorizing America</td>
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<tr>
<td>or</td>
<td></td>
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<tr>
<td>AMS 803</td>
<td>Research Methods in American Studies</td>
</tr>
<tr>
<td>2 Electives in American Studies</td>
<td>6</td>
</tr>
</tbody>
</table>

**Total Hours** 12

1. The elective seminars must be 700 level or higher and carry an AMS catalog number. Due to their Department-specific purpose and content, AMS 804 Research Seminar and AMS 900 Teaching Seminar do not qualify as elective seminars for the certificate.

**Department of Anthropology**

**Why study anthropology?**

Because anthropology explains the diversity of humanity.

**Undergraduate Programs**

Undergraduate course work in anthropology is designed for students majoring in anthropology as part of a liberal education, for students majoring in anthropology as preparation for postgraduate professional training, and for students in other areas who wish to do supplementary work in anthropology.

**Courses for Nonmajors**

Most courses are open to nonmajors and, depending on the course, can be used to meet College principal course distribution requirements in natural sciences, social sciences, or humanities. The department offers many courses that fulfill the non-Western culture requirement. ANTH 100 General Anthropology and ANTH 160/ANTH 360 The Varieties of Human Experience are recommended for students interested in anthropology who do not intend to major in it.

**Graduate Programs**

The graduate program consists of 21 faculty members and about 80 students, giving a professor-student ratio of about one to four and allowing a great deal of direct interaction between faculty and students.
The department awards M.A. and Ph.D. degrees and has successfully placed most recipients of graduate degrees in professional positions.

The department offers graduate training in archaeology, biological anthropology, linguistic anthropology, and social/cultural anthropology. It has expertise in applied anthropology, anthropological genetics, molecular genetics, evolutionary studies, language contact and endangerment, medical anthropology, paleoanthropology, symbolic anthropology, visual anthropology, New World and Old World prehistory, and geoarchaeology. Geographic strengths include Asia, Europe, Latin America, Native North America, the Pacific, Sub-Saharan Africa, and the contemporary United States.

The department is closely associated with the Laboratory of Biological Anthropology and the Center for Archaeological Research.

Courses

**ANTH 100. General Anthropology. 3-4 Hours. SC AE42/GE3S / S.**
Lecture and discussion sections covering the four primary fields of Anthropology: Biological Anthropology, Linguistics, Social Anthropology, and Archaeology. Concepts and approaches to each field, using past and present examples from around the world, will be examined with an emphasis on the unity of the anthropological approach. Future directions of human experience are explored. Discussion sections will be used to examine material covered in lecture and in readings in specific cultural and evolutionary contexts. Discussion and application of fundamental concepts to contemporary events, examination of fossil collections, and viewing and discussion of relevant visual materials are among topics to be covered in sections. LEC.

**ANTH 102. Succeeding in Anthropology. 1 Hour. S.**
This course is designed to enhance students’ chances for success in anthropology major and life after college. Students will learn how to maximize their possibilities for gaining academic assistance, grants, and career building, as well as design strategies for winning jobs, entry into graduate programs, and paid internships at home and abroad. Graded on a satisfactory/unsatisfactory basis. LEC.

**ANTH 104. Fundamentals of Physical Anthropology. 3-4 Hours. NB GE3N / N.**
Lecture and discussion sections covering the mechanisms and principles of Darwinian evolution with special emphasis on human and primate data. Lecture topics include genetics, variation, primates ethology, and the fossil evidence for human evolution. Discussion sessions include topics in Mendelian and population genetics, blood group systems, quantitative morphological variation, and fossil human and primate skeletal material. LEC.

**ANTH 105. Fundamentals of Physical Anthropology, Honors. 3-4 Hours. NB GE3N / N.**
An honors section of ANTH 104 for students with superior academic records. LEC.

**ANTH 106. Introductory Linguistics. 3 Hours. SC AE42/GE11/GE3S / S.**
Introduction to the fundamentals of linguistics, with emphasis on the description of the sound system, grammatical structure and semantic structure of languages. The course will include a survey of language in culture and society, language change, computational linguistics and psycholinguistics, and will introduce students to techniques of linguistic analysis in a variety of languages including English. (Same as LING 106.) LEC.

**ANTH 107. Introductory Linguistics, Honors. 3 Hours. SC AE42/GE11/GE3S / S.**
Introduction to the fundamentals of linguistics, with emphasis on the description of the sound system, grammatical structure, and semantic structure of languages. The course includes a survey of language in culture and society, language change, computational linguistics and psycholinguistics, and introduces students to techniques of linguistic analysis in a variety of languages including English. Open only to students admitted to the University Honors Program or by consent of instructor. (Same as LING 107.) LEC.

**ANTH 108. Introduction to Cultural Anthropology. 3-4 Hours. SC AE42/GE3S / S.**
An introduction to the nature of culture, language, society, and personality. Included in this survey are some of the major principles, concerns, and themes of cultural anthropology. The variety of ways in which people structure their social, economic, political, and personal lives. Emphasized are the implications of overpopulation, procreative strategies, progress and growth of cultural complexity, developments in the Third World, and cultural dynamics in Western as well as non-Western societies. LEC.

**ANTH 109. Introduction to Cultural Anthropology, Honors. 3-4 Hours. SC / S.**
An honors section of ANTH 108 for students with superior academic records. LEC.

**ANTH 110. Introduction to Archaeology. 3-4 Hours. HT GE3H / H.**
A general introduction to the study of archaeology. Evolution of prehistoric cultures in adaptive response to changing natural and social environments, from the early Paleolithic to the emergence of urban civilizations. LEC.

**ANTH 111. Introduction to Archaeology, Honors. 3-4 Hours. HT GE3H / H.**
An honors section of ANTH 110 for students with superior academic records. LEC.

**ANTH 160. The Varieties of Human Experience. 3 Hours. NW AE42/GE3H/GE3S / S/W.**
An introduction to basic concepts and themes in cultural anthropology by means of the comparative study of selected cultures from around the world, for the purpose of appreciating cultural diversity. Emphasis is on systems of belief and meaning. Not open to students who have taken ANTH 360. LEC.

**ANTH 161. The Third World: Anthropological Approaches. 3-4 Hours. NW / S/W.**
Violent change, revolution, planned change, and peaceful transition in non-Western cultures. A study of development, modernization, nation-building, rapid acculturation, and war. LEC.

**ANTH 162. The Varieties of Human Experience, Honors. 3 Hours. NW AE42/GE3H/GE3S / S/W.**
An honors section of ANTH 160 for students with superior academic records. Not open to students who have had ANTH 160 or ANTH 360. LEC.

**ANTH 177. First Year Seminar: _____. 3 Hours. GE11 / U.**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Anthropology. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.
ANTH 293. Myth, Legend, and Folk Beliefs in East Asia. 3 Hours. NW
AE42 / H/W.
A survey of the commonly held ideas about the beginning of the world, the
role of gods and spirits in daily life, and the celebrations and rituals proper
to each season of the year. The purpose of the course is to present the
traditional world view of the peoples of East Asia. (Same as EALC 130,
REL 130.) LEC.

ANTH 300. General Anthropology. 3 Hours. AE42/GE3H/GE3S / S.
A more intensive treatment of the content of ANTH 100. Not open to
students who have had ANTH 100. LEC.

ANTH 301. Anthropology Through Films. 3 Hours. AE42 / S.
An exploration of the human ways through films. Cross-cultural
interpretations by filmed records of varieties of interpersonal relations
seen through such aspects of culture as hunting, war, marriage, religion,
sex, kinship, and death. Patterns of interactions are analyzed by
examples from cultures around the world, primarily the non-Western
world. LEC.

ANTH 303. Peoples and Cultures of North Africa and the Middle East.
3 Hours. NW / S.
This course familiarizes students with the peoples and cultures of North
Africa and the Middle East. It examines the cultural, demographic, and
religious diversity of the region, as well as the development of the early
Islamic community and the formation of Islamic institutions. Issues such
as religion and politics, inter-religious relations, nation-building, Islamic
response to colonialism, Palestinian-Israeli conflict, Islamic resurgence,
secularism, democratization, and gender, are also explored. (Same as
AAAS 303.) LEC.

ANTH 304. Fundamentals of Physical Anthropology. 3-4 Hours. NB
GE3N / N.
A more intensive treatment of the content of ANTH 104. Not open to
students who have had ANTH 104 or ANTH 105. LEC.

ANTH 308. Introduction to Cultural Anthropology. 3-4 Hours. SC
AE42/GE3S / S.
An introduction to the nature of culture, language, society, and
personality. Included in this survey are some of the major principles,
concerns, themes of cultural anthropology, and the variety of ways in
which people structure their social, economic, political, and personal
lives. Emphasized are the implications of overpopulation, procreative
strategies, progress and growth of culture complexity, developments in
the Third World, and cultural dynamics in Western as well as in non-
Western societies. Not open to students who have taken ANTH 108 or
ANTH 109. LEC.

ANTH 310. Introduction to Archaeology. 3-4 Hours. HT GE3H / H.
A more intensive treatment of the content of ANTH 110. Not open to
students who have taken ANTH 110 or ANTH 111. LEC.

ANTH 313. New Discoveries in Archaeology. 3 Hours. S.
Recent discoveries in anthropological archaeology in various areas of
the world and their impact on existing bodies of fact and theory, and on
established methods of archaeological discovery. LEC.

ANTH 315. The Prehistory of Art. 3 Hours. S.
A survey of prehistoric art focusing on the material record and
interpretations of rock art (paintings, engravings on rock surfaces in
rock-shelters, caves and in open air sites) and portable art created by
prehistoric people. The emphasis is on the small-scale societies
(hunter-gatherer and early food producers) around the world before the
appearance of written records in respective geographic areas.
Environmental, social and cultural contexts in which these art forms were
created are discussed along with a review of past scholarship and current
interpretive approaches to this old and enduring expression of human
creativity. Course may be offered in lecture or online format. (Same as HA
315.) LEC.

ANTH 317. Prehistory of Europe. 3 Hours. S.
A survey of one million years of prehistory from the peopling of the
European continent to the Roman Empire. The course will focus on
the growth of culture, considering economy and technology, art and
architecture. Topics will include the Neanderthals, the big game hunters of
the Ice Age, the megalith builders, the Celts. Prerequisite: An introductory
course in anthropology, history, or cultural geography. LEC.

ANTH 318. Prehistory of Kansas. 3 Hours. S.
A survey of the changing lifeways of Native Americans in Kansas from
the time of the earliest inhabitants of at least 12,000 years ago to the
period of Euro-American contact. Extensive use will be made of Museum
of Anthropology collections. LEC.

ANTH 320. Language in Culture and Society. 3 Hours. SC AE41/
AE61 / S.
Language is an integral part of culture and an essential means by which
people carry out their social interactions with the members of their society.
The course explores the role of language in everyday life of peoples in
various parts of the world and the nature of the relationship between
language and culture. Topics include world-view as reflected in language,
formal vs. informal language, word taboo, and ethnography of speaking.
(Same as LING 320.) LEC.

ANTH 321. Language in Culture and Society, Honors. 3 Hours. SC
AE41/AE61 / S.
An honors section of ANTH 320 for students with superior academic
records. Not open to students who have had ANTH 320 or LING 320.
(Same as LING 321.) Prerequisite: Membership in the University Honors
Program or consent of instructor. LEC.

ANTH 340. Human Variation and Evolution. 3 Hours. AE41 / N.
An examination of biochemical and physical variability in contemporary
human populations. Topics include: genetic basis of human diversity,
evolutionary theory, population genetics, blood groups, biochemical
variations, body size and shape, pigmentation, and other morphological
characteristics. Prerequisite: An introductory course in physical
anthropology, biology, or permission of instructor. LEC.

ANTH 341. Human Evolution. 3 Hours. N.
The evolutionary processes and events leading to the development of
humans and the humanlike forms from primate ancestors; fossil hominids
and the origin of modern Homo Sapiens. Prerequisite: An introductory
course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 343. Food, Nutrition and Culture. 3 Hours. U.
The course is a cross-cultural survey of human dietary practices
(foodways). Students are introduced to the concepts of nutrition, diet and
cuisine. Evolutionary and adaptive aspects of human diets and cuisines
are considered. Nutritional, environmental/technological, social and
ideological aspects of regional and ethnic foodways are examined. Invited
lecturers from different cultural traditions offer indigenous perspectives on
their foodways. LEC.

ANTH 350. Human Adaptation. 3 Hours. S.
A survey and examination of present-day human populations focusing
upon adaptations in different environments and the interaction of culture
and biology. General evolutionary theory is treated with an emphasis
on the mechanisms of evolutionary change. Genetic, physiological, and
cultural adaptations to environmental stress are discussed from the
standpoint of their past evolutionary significance and their influence on
contemporary human variation. Prerequisite: ANTH 104 or ANTH 304.
LEC.
ANTH 352. Controversies on the Living and the Dead. 3 Hours. N.
The pros and cons of conflicting theories on the past and present
evolution are examined. Race and intelligence, evolution of skin color, and
genetic future of humans are among the considered topics. Prerequisite:
an introductory course in physical anthropology, biology, or permission of
instructor. LEC.

ANTH 359. Anthropology of Sex. 3 Hours. N.
An evolutionary perspective on the behavior and biology of males and
females in human society. Topics will include the evolution of sexual
dimorphism, social and biological issues in human reproduction, primate
social patterns, human sexual behavior and taboos, sex and social
structure, and the sociobiology of sex. LEC.

ANTH 360. The Varieties of Human Experience. 3 Hours. NW AE42/
GE3H/GE3S / S/W.
A more intensive treatment of ANTH 160. An introduction to basic
concepts and themes in cultural anthropology by means of the
comparative study of selected cultures from around the world, for the
purpose of appreciating cultural diversity. Emphasis is on systems of
belief and meaning. Not open to students who have taken ANTH 160.
LEC.

ANTH 361. The Third World: Anthropological Approaches. 3-4 Hours.
NW / S/W.
A more intensive treatment of the content of ANTH 161. Not open to
students who have had ANTH 161. LEC.

ANTH 362. Peoples of Southeast Asia. 3 Hours. NW / S/W.
An analysis of the cultural diversity and unity of the peoples of Burma,
Thailand, Laos, Cambodia, Vietnam, Malaysia, Indonesia, and the
Philippines. Emphasis on cultural-historical relationships and theories
of cultural development and change. LEC.

ANTH 363. Gendered Modernity in East Asia. 3 Hours. S.
This course explores rapidly changing gender relationships and the
sense of being “modern” in East Asia by examining marriage and family
systems, work, education, consumer culture, and geopolitics. The class
seeks to understand how uneven state control over men and women
shapes desires, practices, and norms and how men and women act upon
such forces. Avoiding biological or social determinism, this course treats
gender as an analytical category and examines how modern nation-states
and global geopolitics are constituted and operated. (Same as EALC 363
and WGSS 363.) LEC.

ANTH 364. Peoples of Japan and Korea. 3 Hours. NW / S/W.
An analysis of the cultural diversity and unity of the peoples of Japan
and Korea. Emphasis on historical and ethological relationships, social
structure, and ethics. (Same as EALC 364.) LEC.

ANTH 365. Japanese People through Film. 3 Hours. NW / S/W.
Japanese people’s culture and society through an extensive examination
of both documentary and feature films. Readings from social science
fields and literature will be used—the former to supply a theoretical
framework for the study of Japanese people and the latter to further the
inquiry into the individual sentiment motivating actions. (Same as EALC
365.) LEC.

ANTH 366. The Life Cycle in Japanese Culture and Literature. 3
Hours. NW / H/W.
A study of the Japanese people from birth to death: what it means to be
born in a Japanese family, to grow up Japanese, and to die Japanese.
Anthropological works and selections from Japanese literature and film
will be used to examine ways in which Japanese people live through the
critical periods in their life cycle. (Same as EALC 366.) LEC.

ANTH 367. Introduction to Economic Anthropology. 3 Hours. S.
This course uses ethnographic case materials to explore the ways
humans provision themselves under different social and environmental
conditions. It introduces the basic theories, concepts, and debates of
economic anthropology and provides a foundation for more advanced
courses in this subdiscipline. Prerequisite: ANTH 108 or ANTH 308, or
ANTH 160 or ANTH 360, or permission of instructor. LEC.

ANTH 368. The Peoples of China. 3 Hours. NW / S/W.
An analysis of the cultural origin, diversity, and unity of the peoples of
China. Emphasis on historical development, social structure, cultural
continuity and change, and ethics. (Same as EALC 368.) LEC.

ANTH 370. Peoples and Cultures of the Pacific. 3 Hours. NW / S/W.
A survey of the native cultures of Australia, Melanesia, Micronesia, and
Polynesia. Investigation of the origins and dispersal of Pacific peoples,
their cultural adaptations to differing habitats, their forms of social,
political, and religious organization. Consideration of the problems
and cultural changes resulting from colonization and modernization.
Prerequisite: ANTH 100, ANTH 108, ANTH 160, ANTH 308, ANTH 360,
or consent of instructor. LEC.

ANTH 372. Religion, Power, and Sexuality in Arab Societies. 3 Hours.
NW / S.
This course examines theories of religion, discourse, power, gender and
sexuality in their application to Arab societies. The course introduces
different aspects of Arab cultures. Through canonical works, we study
political domination, tribal social organization, honor, tribe, shame, social
loyalty, ritual initiations and discuss how these issues speak generally
to anthropological inquiry. Regionally specific works are then framed by
an additional set of readings drawn from anthropological, linguistics, and
social theories. (Same as AAAS 372.) LEC.

ANTH 376. North American Indians. 3 Hours. NW AE41 / S/W.
A survey of American Indian cultures north of Mexico at the time of the
first contact with Western civilization; detailed studies of selected Indian
cultures. LEC.

ANTH 379. Indigenous Traditions of Latin America. 3 Hours. NW / S/
W. A survey of the major indigenous traditions of Mesoamerica, the
Andes, and lowland tropical Latin America. Coverage emphasizes how
indigenous cultural traditions and societies have both continued and
changed since the European Invasion and addresses such current issues
as language rights, territorial rights, sovereignty, and state violence.
Students enrolled in the 600-level section will be required to complete
additional research and class leadership tasks. Not open to students who
have taken LAA 634. (Same as LAA 334.) LEC.

ANTH 380. Peoples of South America. 3 Hours. NW / S/W.
A survey of native peoples and cultures of South America from the time of
initial Western contacts to the present day. LEC.

ANTH 382. People and the Rain Forest. 3 Hours. S.
An analysis of the cultural origin, diversity, and unity of the peoples of the
neotropics. Emphasizing the peoples of Amazonia, the course introduces
students to topics associated with the economic, political, and cultural
dimensions of social life in rain forest communities. LEC.

ANTH 387. Field Research on Gender. 3 Hours. S.
This course examines gender roles and gender culture in Costa Rica,
especially in the southern part of the country. Students will be introduced,
both theoretically and practically, to feminist anthropology as well as
gender ethnography. It covers academic literature about the topic, and
literature written by women. The class will also discuss different types of
machismo culture and the structures and functioning of families in
southern Costa Rica. Class taught in Golfito, Costa Rica. Course taught in
Spanish. Contact the Department of Anthropology, or the Office of Study Abroad. LEC.

ANTH 389. The Anthropology of Gender: Female, Male, and Beyond. 3 Hours. NW GE21.
This course will introduce students to cultural constructions and performances of masculinity, femininity, and alternative genders across time and space. Topics and cases will be drawn from primarily non-Western cultures, ranging from Javanese markets to Pacific Rim gardens, and from Haitian voudou to Maya royal politics. This course uses research by archeologists, linguists, anthropologists, and sociocultural anthropologists. (Same as WGSS 389.) LEC.

ANTH 397. Museum Anthropology. 3 Hours. S.
An introduction to the historical background, practice, and ethical issues involved in the creation, presentation, and dissemination of anthropological information in a museum setting. Students participate in the study of a collection of material culture (artifacts) from the Museum of Anthropology, culminating in development of a script for an exhibit. FLD.

ANTH 400. Topics in Anthropology, Honors: ____. 3 Hours. H.
Selected issues and theories in contemporary anthropology (cultural, linguistic, biological, archaeological) for honors students. Topic for semester to be announced. May be repeated for credit if content varies. Prerequisite: Admission to the University Honors Program or consent of instructor. LEC.

ANTH 401. Integrating Anthropology. 3 Hours. S.
Capstone course that integrates the primary fields of anthropology. Students apply concepts and approaches from each field to a particular topic in preparation for and presentation of a cross-disciplinary and integrative final project. Prerequisite: Completion of all required introductory anthropology courses and two anthropology courses LEC.

ANTH 406. Laboratory Techniques in Archaeology. 3 Hours. S.
A survey of basic laboratory procedures associated with specimen preparation, analysis, classification, and measurement of archaeological materials, with emphasis on lithic and ceramic technology. Formal lectures and laboratory sections. LEC.

ANTH 410. Archaeological Myths and Realities. 3 Hours. S.
A more intensive treatment of the content of ANTH 210. Not open to students who have had ANTH 210. LEC.

ANTH 415. The Rise of Civilization. 3 Hours. S.
A study of evolutionary processes leading to the birth of the early great urban civilizations of the Old World and the New World. Patterns of growth and similarities and differences in the rise of urban complexes and states in Mesopotamia, Egypt, the Indus Valley, and in Mexico/Guatemala and Peru. LEC.

ANTH 418. Summer Archaeological Field Work. 1-8 Hours. AE61 / S.
Under the direction of a professional archaeologist, undergraduate and graduate students are taught proper procedures for the excavation and laboratory analysis of data from a prehistoric or historic archaeological site. Data gathered may be used for additional graduate research. Enrollment by application; limited to twenty students. A fee for subsistence costs will be charged. FLD.

ANTH 419. Training in Archaeological Field Work. 1-6 Hours. S.
Undergraduate and graduate students are taught techniques of archaeological field work, including survey and excavation, as well as laboratory procedures, including artifact classification and curation. FLD.

ANTH 430. Linguistics in Anthropology. 3 Hours. S.
The study of language as a symbolic system. Exploration into the interrelatedness of linguistic systems, of nonlinguistic communicative systems, and of other cultural systems. (Same as LING 430.) LEC.

ANTH 440. Introduction to Primates. 3 Hours. N.
A review of the evolution and behavior of nonhuman primates. The survey includes the stages of primate evolution, morphology of living primates, and descriptions and analyses of primate behavioral patterns. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 442. Anthropological Genetics. 3 Hours. N.
Principles of human genetics involved in biological anthropology. The genetics of non-Western populations considered within an evolutionary framework. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 445. Topics in Biological Anthropology: ____. 3 Hours. N.
Seminar concentrating on selected problems and issues in contemporary biological anthropology. Topic for semester to be announced. Course may be repeated for a maximum of nine hours of credit. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 447. Human Behavioral Genetics. 3 Hours. S.
A survey of human behavioral genetics for upper division undergraduates. Emphasis is on how the methods and theories of quantitative, population, medical, and molecular genetics can be applied to individual and group differences in humans. Both normal and abnormal behaviors are covered, including intelligence, mental retardation, language and language disorders, communication, learning, personality, and psychopathology. (Same as BIOL 432, PSYC 432, SPLH 432.) Prerequisite: Introductory courses in biology/genetics or biological anthropology and psychology are recommended. LEC.

ANTH 449. Laboratory/Field Work in Human Biology. 1-3 Hours. AE61 / N.
Faculty supervised laboratory or field research for Human Biology majors. Students design and complete a research project in collaboration with a Human Biology faculty member. (Same as BIOL 449, SPLH 449, and PSYC 449.) Prerequisite: Consent of instructor and Human Biology major. FLD.

ANTH 459. Anthropology of Sex, Honors. 3 Hours. H.
The course is an introduction to the evolutionary study of human sexual behavior. Using an explicitly Darwinian framework, it examines the biological basis for human mate selection, male and female mating strategies, child-birth and child-care practices, parental care, marriage, and family structure. The power of Darwinian theory to predict human sexual behavior is tested in anthropological field studies, designed and carried out by students in the class. Class time is allocated for discussion of students' research as it progresses through each stage, and results are presented in the last weeks of the semester. Prerequisite: Introductory class in biology or biological anthropology. Open only to students in the University Honors Program, or by consent of instructor. LEC.

ANTH 460. Theory in Anthropology. 3 Hours. GE3H / S.
A critical examination of the main theories and concepts in cultural anthropology. Consideration of the philosophical presuppositions underlying past and current theoretical issues and trends. LEC.

ANTH 461. Introduction to Medical Anthropology. 3 Hours. S.
An introduction to the social and cultural practices that contribute to health and disease, including a survey of therapy systems in both Western and non-Western societies (e.g., Native American, African, Western allopathic medicine, etc.). This course should be of special interest to premedical students and majors in the allied health professions. LEC.

ANTH 462. Field Methods in Cultural Anthropology. 3 Hours. H.
This course introduces students to ethical considerations, methods used in ethnographic fieldwork, field notes, coding data, analysis, and write-
up. Students design and carry out research projects. Prerequisite: ANTH 108 or ANTH 308, or ANTH 160 or ANTH 360 or ANTH162, or instructor's approval. LEC.

**ANTH 465. Genocide and Ethnocide. 3 Hours. S.**
Study of the killing of peoples and cultures. Case studies, focusing primarily on tribal South America. Examination of the implications of these studies as regards our definition of culture and our evaluation of aid programs, missionary efforts, and international business expansion. LEC.

**ANTH 474. Applied Cultural Anthropology. 3 Hours. S.**
Applications of anthropological theory, methods, and findings in programs of community and national development, public health, international aid, and military assistance. Examination of the role of the anthropologist, of ethics and values in intervention schemes, and of the organization of planned change in applied programs. Intensive analysis of selected case studies. IND.

**ANTH 480. Technology and Society in the Contemporary World. 3 Hours. AE61 / S.**
The impact of scientific and technological advances on social and personal life in contemporary society. A wide range of topics will be dealt with during the semester; examples include the internet and new modes of communication, developments in genetics and medicine, and testing for intelligence, drugs, lie detection, and other purposes. LEC.

**ANTH 482. Psychological Anthropology. 3 Hours. S.**
Introduction to the interrelationship of individual and society: processes of socialization, perception and cognition, personality and culture, with emphasis on the psychological interpretation of human behavior and the sociocultural contexts of psychological processes. Both ethnographic and cross-culturally comparative perspectives are introduced. LEC.

**ANTH 484. Magic, Science, and Religion. 3 Hours. NW / S/W.**
A comparative study of religion and systems of value and belief in non-Western cultures. LEC.

**ANTH 496. Reading and Research. 1-6 Hours. S.**
Individual investigation of special problems in anthropology. Maximum of three credit hours in any one semester. Prerequisite: Consent of instructor. IND.

**ANTH 498. Seminar in Technology: ______. 3 Hours. S.**
Topic for semester to be announced. LEC.

**ANTH 499. Senior Honors Research. 1-6 Hours. S.**
Individual research under the direction of one or more instructors in the department. Maximum of four credit hours in any one semester. Prerequisite: A grade-point average of 3.5 in anthropology and 3.0 in all courses, and consent of instructor. IND.

**ANTH 500. Topics in Archaeology: ______. 3 Hours. S.**
Seminar concentrating on selected problems and issues in contemporary archaeology. Topic for semester to be announced. Course may be repeated for a maximum of nine hours of credit. Prerequisite: Successful completion of a course in archaeology at any level, or by permission of instructor. LEC.

**ANTH 501. Topics in Sociocultural Anthropology: ______. 3 Hours. S.**
Course concentrating on selected problems, theories, and issues in contemporary sociocultural anthropology. Topic for semester to be announced. LEC.

**ANTH 502. Topics in Anthropological Linguistics: ______. 3 Hours. S.**
Course concentrating on selected problems, theories, and issues in contemporary anthropological linguistics. Topic for semester to be announced. LEC.
ANTH 512. Ethnohistory: ____. 3 Hours. S.
A critical evaluation of the records (local traditions, written documents, maps, photographs, etc.) relevant to a reconstruction of the history of cultures. Topic for the semester to be announced. LEC.

ANTH 514. The Near East in Prehistory. 3 Hours. S.
A broad examination of the prehistory of the Near East, emphasizing selected regional and research themes. Discussion will include a consideration of cultural adaptation and environmental diversity, early history of archaeological work, and current research trends. While all cultural periods will be examined, a major emphasis will be on the origins of food production and Neolithic economies. LEC.

ANTH 515. Topics in Old World Prehistory: ____. 3 Hours. S.
Topic for the semester to be announced. An introductory course in archaeology recommended. LEC.

ANTH 516. Hunters and Gatherers. 3 Hours. S.
The diversity of hunter-gatherer cultures documented in the ethnographic and archaeological records is considered on a global scale, with particular attention given to the relationships between environment, technology, and organization. The evolution of hunter-gatherers from the earliest hominids until their interaction with more complex societies is considered, with emphasis given to the variation and nature of change in these societies. Prerequisite: ANTH 108 or ANTH 110, or ANTH 308 or ANTH 310. LEC.

ANTH 517. Geoarchaeology. 3 Hours. N.
Application of the concepts and methods of the geosciences to interpretation of the archeological record. The course will focus primarily on the field aspects of geoarchaeology (e.g., stratigraphy, site formational processes, and landscape reconstruction), and to a lesser extent on the array of laboratory approaches available. (Same as GEOG 532.) Prerequisite: GEOG 104, ANTH 110, or ANTH 310. LEC.

ANTH 518. Environment and Archaeology. 3 Hours. S.
An investigation of the relationships between the biophysical world and the development of human cultures. Examination of archaeological methods employed in the study of these relationships. LEC.

ANTH 519. Lithic Technology. 3 Hours. S.
An introduction to the analysis and interpretation of prehistoric stone industries. Topics discussed include origins and development of lithic technology, principles of description and typology, use and function of stone tools; interpretation of flint knapping. Prerequisite: An introductory course in archaeology. LEC.

ANTH 520. Archaeological Ceramics. 3 Hours. S.
Practicum in the method and theory of pottery analysis in archaeology. Topics include manufacturing techniques, classification, and compositional analysis of pottery artifacts, as well as strategies for interpreting the role of ceramic vessels in food production, storage, and consumption; social and ritual activities; trade and exchange; and the communication of ideas. Prerequisite: ANTH 110 or ANTH 310. LEC.

ANTH 521. Zooarchaeology. 3 Hours. S.
This course is intended to complement faunal identification with practical involvement in analyses and interpretation of archaeological faunal assemblages using a variety of modern methods. Students will participate in the study of specific archaeological faunal remains, development of comparative zooarchaeological collections, and in middle-range research to document the variety of agents that affect faunal remains. Prerequisite: ANTH 110 or ANTH 310. LEC.

ANTH 522. Paleoenthobotany. 3 Hours. S.
This course discusses the relationship between past human groups and their plant environment, including the use of plants for food, fuel, shelter, and household articles. Topics include a review of the development of paleoenthobotanical research, methods and techniques of data recovery, basics in plant identification, methods of data quantification and interpretation, and current research topics. In addition to selected readings, students will participate with the development of comparative botanical collections and the interpretation of botanical remains recovered from archaeological contexts. Prerequisite: ANTH 110 or ANTH 310. LEC.

ANTH 523. Great Plains Archaeology. 3 Hours. S.
A survey is provided of the archaeological record and its interpretations for the Great Plains area of North America. The records from earliest human occupation, variation in hunter and gatherer societies, to horticultural and farming societies, and the historic period are reviewed. The history of archaeological research in the region, explanatory frameworks and models, and discussion of changes in economy, technology, mobility, social organization, and population movements are among the topics of concern. LEC.

ANTH 540. Demographic Anthropology. 3 Hours. S.
This course will survey demographic topics that are relevant to anthropological research and theory. Topics will include family and household structure, fertility, nuptiality, mortality, migration, and paleodemography. Emphasis will be placed on methods in use in these areas and applications from the literature. Prerequisite: Three courses in anthropology (at least one in physical and one in cultural) or graduate standing. LEC.

ANTH 542. Biology of Human Nutrition. 4 Hours. N.
Lecture and discussion. A comprehensive introduction to human nutrition, focusing on the anatomical, biochemical, and physiological aspects of nutrition. The essential nutrients and their role in human metabolism are covered in detail, and the course's systemic approach places a strong emphasis on integration of metabolism. Students also are introduced to human dietary evolution, the concept of nutritional adaptation, and cross-cultural differences in diet and nutritional physiology. Discussion sections focus on applied aspects of human nutrition, including dietary assessment. The course is a prerequisite for ANTH 543, which is recommended as the second course in a sequence on human nutrition. Prerequisite: ANTH 104 or ANTH 304, and BIOL 152. Students who have not had BIOL 152 should have taken a comparable introductory course in organismal physiology. LEC.

ANTH 543. Nutrition Through the Life Cycle. 3 Hours. N.
The first half of the course focuses on nutrition through the life cycle, with an emphasis on biological, cultural, and environmental factors that influence human dietary intake and nutrition across the life span. Particular attention is given to the role of nutrition in cross-cultural variation in human growth, development, and aging. The second half of the course examines evolutionary aspects of human nutrition, including the origins and adaptive significance of regional and cultural basis. The development of taste and food preferences, at the level of the individual and population, as well as symbolic aspects of dietary behavior also will be considered. Prerequisite: ANTH 542 or permission of instructor. LEC.

ANTH 544. Origins of Native Americans. 3 Hours. N.
A survey of the genetic, linguistic, historic, archaeological, and morphological evidence for the origins of indigenous populations of the Americas. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 545. Contemporary Health Issues in Africa. 3 Hours. S.
The course examines health and nutrition in African communities, using the methods of biological and medical anthropology. Fundamental to the approach taken in the course is the understanding that the health of human groups depends on interactions between biological and cultural phenomena in a particular ecological context. One topic will be selected per semester, to examine in detail the full array of epidemiological factors.
ANTH 549. Human Paleontology: Fossil Apes to Australopithecus. 3 Hours. N.
This course is an intensive survey of the fossil evidence for hominoid evolution up to the emergence of the first hominids--Australopithecus. Topics include the origin and evolution of the great apes, gibbons, and extinct forms such as Ramapithecus and Gigantopithecus, as well as the appearance of Australopithecines. Functional morphology is stressed. This course may be taken either before or after ANTH 550. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 550. Human Paleontology: Homo Erectus to Homo Sapiens. 3 Hours. N.
The rise of genus Homo is the theme of this course. Fossils representing erectus, Neanderthal, Upper Paleolithic, and post-Pleistocene forms are discussed in detail with particular emphasis on the relationship between cultural and morphological change. The course is a continuation of ANTH 549, but may be taken out of sequence. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 555. Evolution of Human Diseases. 3 Hours. N.
This course traces the evolution of human diseases over the past 3 million years. Topics include paleopathology, epidemics/pandemics, genetic adaptations to diseases, and emerging/reemerging diseases. In addition, interrelationships between humans and diseases, coupled with interactions with other animals, vectors, and natural and cultural environments are discussed. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 561. Indigenous Development in Latin America. 3 Hours. AE42 / S.
Surveys the history of the development enterprise since WW II, examines the marginalization and impoverishment of Latin America's indigenous peoples, and provides training to carry out projects for and with them to enhance their quality of life. Development is understood as not merely technological or economic, but also social, emotional, and educational. Students work in teams to design their own mock development project. A 3-credit non-obligatory companion course, Applied Anthropological Field School among the Ch'ort' Maya, will follow in the intersession after each version of this course. (Same as LAA 561.) Prerequisite: ANTH 100, ANTH 108, ANTH 160 or LAA 100; or consent of instructor. LEC.

ANTH 562. Mexamerica. 3 Hours. AE41 / S.
This class surveys the relations between Mexico and the U.S. as nation-states, and among Mexicans, Mexican Americans, and Anglo Americans (to a lesser extent other U.S. citizens) in historical perspective. Issues of sovereignty, national and ethnic identity, immigration, migration, labor relations, popular culture, media, and transnational economics are covered. Prerequisite: ANTH 108/308 or ANTH 160/360 or LAA 100. LEC.

ANTH 563. Cultural Diversity in the United States. 3 Hours. SC / S.
Anthropological approaches to racial, ethnic, religious, and localized communities in contemporary U.S. Surveys major theories from social science, considers case studies of immigrant indigenous peoples from historical and contemporary, local, national, and international perspectives, and addresses questions concerning the sources, conditioners, and consequences of in-group and out-group identities. Prerequisite: Introductory cultural anthropology and one cultural course numbered 300 or above, or permission of instructor. LEC.

ANTH 564. The Peoples of Africa. 3 Hours. NW / S/W.
“Peoples of Africa” examines the anthropology of Sub-Saharan Africa through selected case studies of particular societies and issues that have wider comparative relevance. Normally two to four societies are selected for the semester and studied through ethnographic, historical, and literary monographs. These case studies are examined in their pre-colonial, colonial, and postcolonial histories. Lectures, readings, and exercises emphasize three kinds of reasoning – geographical, historical, and cultural context – required to grasp events and issues in unfamiliar societies. The course also features major anthropological ideas that emerged in the study of African society, and tracks how anthropology has been adapted by African scholars, policy makers, and activists. LEC.

ANTH 565. Popular Images in Japanese Culture, Literatures, and Films. 3 Hours. NW / S/W.
The course examines recurring themes and images in Japanese culture through films, literary works, and anthropological and other social science literature. These themes and images are studied in the contexts of both modern and traditional cultures. Although the popular deviates from the orthodox, nevertheless, the energy and pervasiveness of these bastard offspring enforce and sustain “proper” cultural values. As a result of exploration of both highways and backroads of cultural expression, a holistic picture of Japanese ethos will emerge. (Same as EALC 565.) LEC.

ANTH 566. Kongo Trans-Atlantic. 3 Hours. S.
This seminar explores Kongo culture and history through a cross-section of the African-Atlantic World: Western Equatorial Africa and related New World societies in Jamaica, Brazil, Haiti, Cuba, and the Georgia and Carolina Coasts, and New Orleans (thus in former British, Portuguese, French, Spanish, and U.S. colonial territories). The seminar will assess recent scholarship on patterns of slavery and resistance, cultural and linguistic change, creolization and hybridization. (Same as AAAS 568.) LEC.

ANTH 567. Japanese Ghosts and Demons. 3 Hours. NW / S/W.
An investigation of deeply rooted Japanese beliefs about intimate relationships among humans, animals, and nature - beliefs which help to explain the mysterious and to lend order to the world. Anthropological works, selections from Japanese literature, historical documents, artworks, and films will be used to examine supernatural themes. (Same as EALC 567.) LEC.

ANTH 568. Contemporary Central America and Mexico. 3 Hours. S.
Mexico and Central America have formed a cultural interaction zone for thousands of years, and today share common challenges, particularly political, economic, and social ones related to the Spanish colonial legacy, U.S. involvement, and their place in the global economy. Some of the issues addressed include racism, civil war, migration, youth gangs, narco-trafficking, resource extraction, homeless children, the transition from local subsistence economies to low-income work, and struggles for indigenous rights. Prerequisite: ANTH 160 or ANTH 162, or ANTH 360, ANTH 108 or ANTH 308, or LAA 100 LEC.

ANTH 570. Anthropology of Violence. 3 Hours. S.
Introduces students to the comparative and cross-cultural study of violence. The course begins by surveying different anthropological approaches to the study of violence, with special attention paid to classical social theorists as well as ethnographic works. Topics may include (post) coloniality and identity politics, nationalism, race, religion, and political culture; geographic areas to be covered may include Africa, Europe, Latin America, the Middle East, and South Asia. LEC.
ANTH 571. Violence, Aggression, and Terrorism in the Modern World. 3-4 Hours. S.
A cultural and psychological analysis of the sources, dynamics, effects, and practices of modern patterns of violence. Variations in psycho/social reactions to violence will be examined with reference to personal, social, and cross-cultural characteristics. Particular attention will be given to the cultural and individual characteristics of people who successfully survive violence and terrorism targeted at them. Emphasis will be upon the psychological and cultural origins of terrorism and violence in modern societies. Prerequisite: Introductory course in anthropology or psychology. LEC.

ANTH 580. Feminism and Anthropology. 3 Hours. S.
This seminar will introduce students to feminism in anthropology, including feminist theories, methodologies, ethnographic styles, and the history of women in the discipline since the late 1800s. Emphasis is on the social contexts for feminist theory-building since the 1960s and changing ideas about gender and power. (Same as WGSS 580.) Prerequisite: One of the following: ANTH 389, ANTH 460, WGSS 201; or permission of instructor. LEC.

ANTH 582. Ethnobotany. 3 Hours. S.
Course will involve lectures and discussion of ethnobotany - the mutual relationship between plants and traditional people. Research from both the field of anthropology and botany will be incorporated in this course to study the cultural significance of plant materials. The course has 7 main areas of focus: 1) Methods in Ethnobotanical Study; 2) Traditional Botanical Knowledge - knowledge systems, ethnolinguistics; 3) Edible and Medicinal Plants of North America (focus on North American Indians); 4) Traditional Phytochemistry - how traditional people made use of chemical substances; 5) Understanding Traditional Plant Use and Management; 6) Applied Ethnobotany; commercialization and conversation (focus on traditional harvest of plant materials); 7) Ethnobotany in Sustainable Development (focus on medicinal plant exploration by pharmaceutical companies in Latin America). (Same as EVRN 542.) Prerequisite: ANTH 104, ANTH 108, EVRN 148, or consent of instructor. LEC.

ANTH 583. Love, Sex, and Globalization. 3 Hours. S.
Escalating transnational flows of information, commodities, and people have created innumerable kinds of "intimate" contacts on a global scale, such as mail order brides, child adoption, sex tourism, commodified romance, and emotional labor. Exploring the ways that cultural artifacts of intimacy are rendered, fetishized, and reified in a free market economy, this course examines how discourses on love and sex encounter, confront, and negotiate the logics of the capitalist market, the discrepant narratives of (colonial) modernity, and the ethics of pleasure. In so doing, this course navigates the treacherous interplay among emotions-specifically love, sex, and money, seeking the potential and limits of cultural politics of emotions. (Same as WGSS 583.) LEC.

ANTH 586. Visual Anthropology. 3 Hours. U.
This course takes a hands-on approach to the study of theory, ethics, and methods in visual ethnographic representation. Students also read and consider historical dimensions in this subdiscipline and complete individual and team projects in photographic and videographic media. Prerequisite: An introductory course in cultural anthropology or permission of the instructor. LEC.

ANTH 587. Multidisciplinary Field School in Partnership with the Chorti Maya. 3 Hours. S.
Teams of interdisciplinary students partner with the Chorti Maya of Guatemala and Honduras to share information and experiences. One third of the course consists of readings and 4-5 orientation sessions on campus, and two thirds entails two weeks in Central America. Examples of activities might include historical research, water testing and improvement, photography, art, music, tourism consultation, marketing of crafts, human rights advocacy, web design, computer training, and museum work, among others. There are no prerequisites, but students with a working knowledge of Spanish will receive preference for admission. (Same as LAA 587.) LEC.

ANTH 595. The Colonial Experience. 3 Hours. NW / S/W.
An anthropological and historical examination of the processes and dynamics of the colonial experience. Cross-cultural psychosocial phenomena that have profoundly affected the values and social organizations of both colonizers and colonized will be emphasized. Specific examples will be chosen from the former American, Japanese, and European colonial empires with emphasis on Asia. LEC.

ANTH 603. Shamanism Past and Present. 3 Hours. S.
This course explores shamanism, broadly defined as the practice of gaining insight through the use of ecstatic techniques (dance, drumming, trance, vision quests, and the use of psychotrophic substances) for the purpose of interpreting existence and healing illnesses, through a consideration of theories and evidence for its practice from Upper Paleolithic times to the present day. Examples from the ancient cultures of Asia, Europe, Africa, Australia, and the Americas are used to explore current theoretical approaches in order to identify shamans and shamanism in the past. Issues of identifying shamans and shamanism in art and archaeological contexts are discussed. The course also explores the role that shamanism plays in a wide variety of cultures. The principal goal of the course is to provide a reasoned, critical interpretation of shamanism in the context of contemporary debates about its definition and active practice. Prerequisite: ANTH 108/308 or ANTH 110/310 or ANTH 160/360. LEC.

ANTH 605. Mortuary Practices in the Archaeological Record. 3 Hours. S.
Students study theories and methods of burials practices in the archaeological record. They learn about past communities; attitudes toward death and burial and how social organization, complexity, ideology, power, gender and age roles contribute to mortuary practices. The course examines a variety of Old and New World examples from different chronological periods through class presentations, debates and written assignments. The course focuses on comparisons and evaluation of traditional and current methods and approaches. Prerequisite: ANTH 100/300 or ANTH 110/310 or instructor's consent. LEC.

ANTH 619. Field Concepts and Methods in Geoarchaeology. 3 Hours. S.
A field course taught during the three week summer session. Involves all-day excursions to different regions in order to introduce students to a variety of archaeological landscapes and environments. Focuses on the application of geoscientific concepts and methods in archaeological field investigations, emphasizing natural processes such as erosion, deposition, weathering, and biological and human activity that create and modify the archaeological record, and on soil-stratigraphic and geophysical approaches to landscape and site investigations. LEC.

ANTH 648. Human Osteology. 4 Hours. N.
Techniques in bone identification, sex, race, age determination, stature reconstruction, paleopathology, and bone biology are reviewed. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LAB.

ANTH 650. Human Reproduction: Biology and Behavior. 3 Hours. N.
This is a comprehensive course in the biology of human reproduction (anatomy, physiology, and endocrinology). The implications of human reproductive biology for the evolution of human behavior are considered as well. Students also examine in detail the methods and theories underlying two interconnected approaches utilized by biological
anthropologists in the study of human reproduction: human reproductive ecology, which focuses on the biological determinants of human reproductive function and reproductive success, and human behavioral ecology, which focuses on evolutionary relationships between human reproductive strategies and human social behavior. The course is the first part of a two-semester sequence (ANTH 650 and ANTH 660) that examines in detail biological and cultural determinants of human reproductive strategies. Prerequisite: ANTH 359 or BIOL 152 or permission of instructor. LEC.

ANTH 652. Population Dynamics. 3 Hours. N.
Examination of possible interrelationships between the demographic structure of a population and the forces of evolution. Students are exposed to field methods and techniques of population studies. Prerequisite: An introductory course in anthropology, biology, or permission of instructor. LEC.

ANTH 660. Human Reproduction: Culture, Power, and Politics. 3 Hours. S.
This seminar analyzes and critiques the socially constructed nature of reproductive practices and their articulation with relations of power. Topics range from conception to menopause, infertility to population. Cases are drawn from a wide variety of cultural contexts. This course is the second part of a two-semester sequence (beginning with ANTH 650) that examines in detail biological and cultural determinants of human reproduction. (Same as WGSS 660.) Prerequisite: ANTH 650, or 6 hours in women's studies, or permission of instructor. LEC.

ANTH 661. Cultural Dynamics. 3 Hours. S.
A survey of representative studies of the processes of cultural stability and change, and of theories of innovation, diffusion, acculturation, growth, and planned intervention in cultural processes. LEC.

ANTH 663. The Anthropology of Islam. 3 Hours. NW / H.
This course uses critical readings of major anthropological works on Islam to: 1) analyze various interpretations of "Islamic cultures" through a discussion of regionally-grounded works, and 2) examine how the anthropological study of Islam also is informed by theoretical and philosophical approaches to major anthropological questions, such as religion, myth, kinship, social organization, and power. The course offers both a history of various interpretations of Islam as well as a history of theories of these interpretations. (Same as AAAS 663.) LEC.

ANTH 664. Women, Health, and Healing in Africa. 3 Hours. H.
The course explores the values, practices, cultural systems and social-economic conditions that influence the sickness and health of women in Africa. The focus is on theoretical and applied debates and issues including: contraception, infertility, and reproduction; HIV/AIDS and other sexually transmitted infections; spiritual suffering and mental illness; trauma and violence; chronic illness, disability, and aging; pharmaceuticals, biotechnologies, and clinical research. Prerequisite: 6 hours of coursework in Anthropology and/or Women's Studies and/or African American Studies. LEC.

ANTH 665. Women, Health, and Healing in Latin America. 3 Hours. S.
This seminar uses a life-cycle approach to examine women's health (physical, mental, and spiritual) and their roles as healers. Special consideration is given to the effects of development programs on well-being, access to health care, and changing roles for women as healers. Cases will be drawn from a variety of Latin American contexts. (Same as WGSS 665 and LAA 665.) Prerequisite: 6 hours of coursework in anthropology and/or women's studies and/or Latin American studies. LEC.

ANTH 666. Anthropology of Religion. 3 Hours. S.
An examination of the various approaches (individual, ritual, and cognitive) anthropologists have adopted in the study of religion, with emphasis on millenarian and prophetic movements as examples of radical change. LEC.

ANTH 667. Primitive Mythology. 3 Hours. S/W.
Methods of studying the mythology of nonliterate peoples; historical survey of theories of myth; consideration of worldwide myths and primitive mythologies from specific cultures. LEC.

ANTH 670. Contemporary American Culture. 3 Hours. S.
An anthropological investigation, in seminar format, of the social consequences of transformations in today's society. Specific topics may include: the information explosion; developments in science and technology; genetics and assisted reproduction; ethnic and cultural diversity; and changing views of the normal and abnormal, sexual and other forms of relationships, and of the self. Prerequisite: An introductory course in cultural anthropology, sociology, or American studies. LEC.

ANTH 671. The Culture of Consumption: (E.G. United States and Japan). 3 Hours. S.
Examines the ideologies of capitalism and consumerism as they influence social institutions and daily life. Topics for consideration grow out of instructors' interests and may include areas such as class, religion, advertising, politics, gender, medicine, environment, childhood, and education. Prerequisite: ANTH 560 or permission of instructor. LEC.

ANTH 672. Meat and Drink in America. 3 Hours. S.
This seminar examines food and beverage production and consumption in the United States. Organized metaphorically as a meal, the course explores where food and beverages come from, how they are produced and by whom, and what they mean to us as eaters and drinkers. Although the course surveys food and beverage production and consumption in general, special attention is given to meat and poultry, alcohol, coffee, carbonated drinks, regional foods, opposition to consumption of meat and alcohol, and tobacco. LEC.

ANTH 673. Neoliberalism and Globalization. 3 Hours. S.
Transnational processes profoundly shape the 21st century human experience. This course links theories of economic globalization with ethnographic case materials. It explores the spread of the dominant ideology driving these processes and the effects of neoliberal policies on the urgent and vital matters facing humanity today: war and peace, social justice, democracy, cultural pluralism, and ecologically sustainable development. The course thereby links macro-economic policies to the experiences of families, workers, communities, women, indigenous peoples, and other social groups. Prerequisite: ANTH 560 or permission of instructor. LEC.

ANTH 674. Political Anthropology. 3 Hours. S.
Analysis of political systems of tribal societies and of pre-industrial states. LEC.

ANTH 675. Anthropology of Law. 3 Hours. S.
Comparative analysis of the legal and political strategies used to achieve social control in both Western and non-Western cultures. Focuses on the differential use of customary and legal sanctions, formalized procedures of negotiation or adjudication, and the role of legal specialists in society. LEC.

ANTH 676. Culture Wars. 3 Hours. S.
A seminar exploring the political, religious, cultural and ideological antagonisms that divide contemporary society. Topics of discussion to be treated may include Christianity vs. Islam, evolutionism vs. intelligent design, attitudes pertaining to sexual orientation, and the proper relation between church and state. LEC.
ANTH 680. Culture and Human Biology. 3 Hours. S.
A lecture course concerned with the relationship between culture and biological systems; the prohibition of incest; socialization and aggression in ethnological studies; disease and therapy; and other alterations of mind and body states. LEC.

ANTH 684. Anthropology and the Health Sciences. 3 Hours. S.
Ecology of human cultural and natural factors in the etiology of human diseases; social and cultural variables involved in health practices, programs, the organization of healing systems and the diagnostic process; the consequences of health innovations and medicotechnical apparatus. LEC.

ANTH 690. The Social Construction of the Self. 3 Hours. AE42/GE3H / S.
A seminar exploring concepts of the self as the product of variable social and cultural conditions. Consideration of dominant anthropological and interdisciplinary theories of the self and how the self is construed in various societies from Asia, the Pacific, and elsewhere. LEC.

ANTH 695. Cultural Ecology. 3 Hours. S.
Investigation of the interrelations between sociocultural systems and the natural environment, including a survey of major theories and descriptive studies. (Same as GEOG 670.) LEC.

ANTH 696. Language, Culture and Ethnicity in Prehistoric Eastern Europe. 3 Hours. S.
The course is for students who wish to understand the prehistory of Eastern Europe with special attention to the Slavs. The interdisciplinary course examines East European prehistory from the perspectives of archaeology and linguistics, considering also how ideologies have influenced the interpretation of results. No language prerequisite. (Same as SLAV 635) LEC.

ANTH 699. Anthropology in Museums. 3 Hours. S.
The course reviews the history of archeological, ethnographic, physical anthropological and other types of collections. It also considers current issues facing anthropologists, such as: contested rights to collections and the stories that accompany them; representation and interpretation of cultures; art and artifact; conceptualization, design and building of exhibitions; and anthropological research and education in the museum. LEC.

ANTH 701. History of Anthropology. 3 Hours.
Development of the field of anthropology and its relations with intellectual history. Emphasis on method and theory in historical context. Required of all M.A.-level students in anthropology. Prerequisite: Consent of instructor or graduate standing. LEC.

ANTH 702. Current Archaeology. 3 Hours.
An introduction to fundamental theoretical orientations and methodological approaches in world archaeology. Case studies illustrate data acquisition, dating methods, culture history, paleoenvironmental models, and culture processes. Required of all M.A.-level students in anthropology. Prerequisite: Consent of instructor or graduate standing. LEC.

ANTH 703. Current Biological Anthropology. 3 Hours.
The fundamental issues, methods, and theories in contemporary biological anthropology. Required of all M.A.-level students in anthropology. Prerequisite: Consent of instructor or graduate standing. LEC.

ANTH 704. Current Cultural Anthropology. 3 Hours.
The fundamental issues, methods, and theories in contemporary cultural anthropology and anthropological linguistics. Required of all M.A.-level students in anthropology. Prerequisite: Consent of instructor or graduate standing. LEC.

ANTH 705. Technological Change: _____. 3 Hours.
Studies in technological change through invention, evolution, and diffusion. Topic for semester to be announced. LEC.

ANTH 706. Current Linguistic Anthropology. 3 Hours.
This course will cover fundamental issues, methods, and theories in contemporary linguistic anthropology. (Same as LING 706.) Prerequisite: Graduate standing or consent of the instructor. LEC.

ANTH 707. Responsible Research and Scholarship in Anthropology. 3 Hours.
This course examines a range of issues critical to responsible research, scholarship, and practice in anthropology. Required for all doctoral students in Anthropology. Prerequisite: Graduate standing in anthropology or consent of instructor. SEM.

ANTH 710. History of American Archaeology. 3 Hours.
A survey of the development of method and theory in American archaeology, with emphasis on North America. Prerequisite: Graduate standing or consent of instructor. LEC.

ANTH 715. Seminar in North American Archaeology. 2-4 Hours.
In-depth examination of specific problems and issues in the study of archaeology in North America including the Arctic. Prerequisite: Graduate standing in Archaeology or instructor's consent. SEM.

ANTH 718. Seminar in Latin American Archaeology:_____. 3 Hours.
In-depth examination of specific problems and issues in the study of Precolombian societies of Mesoamerica, Central America, and South America. Topic for semester to be announced. Prerequisite: ANTH 506, ANTH 508, and/or consent of instructor. LEC.

ANTH 720. Seminar in Old World Prehistory:_____. 2-4 Hours.
Studies of prehistoric cultures and their natural environments. Topic for semester to be announced. Prerequisite: Graduate standing in anthropology or consent of instructor. LEC.

ANTH 725. Introduction to Linguistic Science. 3 Hours.
An introduction to the theory and techniques of linguistic science for majors and others intending to do advanced work in linguistics and linguistic anthropology. Emphasis on the sound system, grammatical structure, and semantic structure of languages. Lectures and laboratory sessions. (Same as LING 700.) Not open to students who have taken ANTH/LING 106 or ANTH/LING 107. Prerequisite: Graduate standing. LEC.

ANTH 730. Linguistics in Anthropology. 3 Hours.
The study of language as it concerns anthropology. Language systems in relation to culture, language taxonomy, semantics, and linguistic analysis as an ethnographic tool. (Same as LING 730) Prerequisite: Graduate standing. LEC.

ANTH 732. Discourse Analysis. 3 Hours.
This course focuses on linguistic frameworks for the analysis of discourse. Discourse is a linguistic system larger than the sentence (utterance), which connects and contextualizes speech and written text. This course focuses on current issues and theoretical frameworks in the analysis of discourse. Using oral and written data, students will examine how contexts influence and shape linguistic form. Topics covered include transcription systems, the structure and organization of different genres of language, and the performance of social actions, including stance-taking, framing, and the construction of identity. Students will also have an opportunity to perform discourse analytic research on the data of their choice. (Same as LING 732.) Prerequisite: ANTH 706 or permission of the instructor. LEC.
ANTH 733. Language, Gender and Sexuality. 3 Hours.
This course focuses on the complex relationship between language use and the social construction of gender and sexuality (i.e., how language is used in the construction of gender and sexuality, and how gender and sexuality are performed and enacted through language. Examines theoretical notions of language, gender, and sexuality from linguistics, psychological anthropology, and sociology. Among the topics covered are cross-cultural definitions of masculinity and femininity, construction of gender and sexual identities through language use, language and power, ideologies, style, and performativity. The course will consider research on language, gender, and sexuality from a variety of cultures within the last 50 years. (Same as LING 733.) Prerequisite: ANTH 706 or permission of the instructor. LEC.

ANTH 734. Language Evolution. 3 Hours.
Human language demonstrates a level of complexity not found in the communicative systems of other species. This course focuses on the development of human language, so as to obtain a better understanding of the origins and development of human language. Questions addressed include: what features of language are distinct from other communicative systems, when did human language originate, in what stages did human language evolve, and how does language relate to properties of the human brain and mind? Data from a variety of disciplines will be considered, including primatology, human development, cognition, evolutionary biology, archaeology, and linguistics. (Same as LING 734.) Prerequisite: ANTH 106 or ANTH 107 or LING 106 or LING 107 or ANTH 736 or LING 708 or ANTH 725. LEC.

ANTH 736. Linguistic Analysis. 3 Hours.
Practice in applying the techniques of phonological, grammatical, and syntactic analysis learned in introductory linguistics to data taken from a variety of languages of different structural types. (Same as LING 708.) Prerequisite: An introductory course in linguistics. Not open to students who have taken LING 308. LEC.

ANTH 740. Linguistic Data Processing. 3 Hours.
The tools and techniques necessary to analyze linguistic fieldwork data, including research design, recording and elicitation techniques, computational data processing and analysis, and field ethics. Techniques of research, field recording, and data analysis technology. Methods of phonetic transcription, grammatical annotation, and analysis of language context. Practice of techniques via short studies of at least one language. (Same as LING 740.) Prerequisite: LING 700 or permission of instructor. LEC.

ANTH 741. Field Methods in Linguistic Description. 3 Hours.
The elicitation and analysis of phonological, grammatical, and discourse data from a language consultant. In-depth research on one language. Techniques of research design, methods of phonetic transcription, grammatical annotation, and analysis of language context. (Same as LING 741.) Prerequisite: LING 705 or permission of instructor. LEC.

ANTH 743. Nutritional Anthropology: Methods and Theory. 3 Hours.
This is an intensive course aimed explicitly at graduate students whose research involves some aspect of human dietary behavior (foodways) and human nutrition. It examines the application of both biological and cultural theory to the study of human nutrition and cross-population variation in nutritional strategies and dietary practices. Topics include, among others, the evolution of human nutrition, environment and nutrition, nutritional epigenetics, effects of food scarcity, the cultural meanings of food, food as metaphor, and food and language. A second emphasis of the course is on field methods in nutritional anthropology, including dietary interviews, observation of dietary behaviors, nutritional and anthropometric assessment, nutrient analysis and ever-expanding field methods in nutritional ecology (nutritional endocrinology, physiology and genetics). Ethical issues in nutritional anthropology also are considered. Prerequisite: Graduate student status or permission from instructor. LEC.

ANTH 747. North American Indian Languages. 3 Hours.
Introduction to the nature and distribution of North American Indian languages. Prerequisite: ANTH 306 or ANTH 430 or ANTH 730. LEC.

ANTH 748. Language Contact. 3 Hours.
Theories and case studies of languages in contact. Areal and genetic linguistics, genesis of pidgins and creoles, multilingualism, Social, political, economic, and geographic factors in language change. (Same as LING 748.) Prerequisite: A course in linguistics. LEC.

ANTH 749. Linguistics and Ethnolinguistics of China and Central Asia. 3 Hours.
Selected topics in linguistics and linguistic anthropology, focusing on dominant and/or minority languages of China, Central Asia, or a particular region of Central and Eastern Eurasia. Topics may include any subfield of linguistics, including language contact, typology, dialectology, and sociolinguistics. Topic for semester to be announced. (Same as LING 749.) Prerequisite: A course in linguistics. LEC.

ANTH 754. Biological Bases of Human Behavior. 3 Hours.
The role of behavioral genetics in normal behavior is examined in this seminar. There is special emphasis on the genetics of complex human behavior such as sensory perception, aggression, intelligence, proxemics, kinesics, and learning. Several abnormal conditions, such as schizophrenia, chromosomal aberrations, alcoholism, and brain dysfunction are discussed in terms of the genetic and environmental interactions. LEC.

ANTH 756. Genetics of Isolates. 3 Hours.
The evolutionary effects of finite population size and reproductive isolation are discussed in this seminar. Stochastic processes, isolates, genetic distances, approaches to population structure, and measures of inbreeding are considered. Prerequisite: ANTH 652 or consent of instructor. LEC.

ANTH 759. Dental Anthropology. 3 Hours.
An intensive study of human teeth. Principles of eruption, growth, genetics, anatomy, pathology, measurements, casting, and cultural changes in teeth will be presented. Prerequisite: Consent of instructor. LEC.

ANTH 761. Introduction to Medical Anthropology. 3 Hours. SC.
An introduction to the social and cultural practices that contribute to health and disease, including a survey of therapy systems in both Western and non-Western societies (e.g., Native American, African, Western allopathic medicine, etc.). This course should be of special interest to premedical students and majors in the allied health professions. Graduate version of ANTH 461 with more advanced requirements. Prerequisite: Graduate standing or consent of instructor. LEC.

ANTH 762. Human Growth and Development. 3 Hours.
Consideration of comparative physical growth patterns throughout the human life cycle. Sex and population differences in skeletal, dental, and sexual maturation. Effect of genetic and environmental factors upon growth and maturation. Prerequisite: An introductory course in biological anthropology or consent of instructor. LEC.

ANTH 764. Selected Topics in Human Paleontology: _____ 3 Hours.
Intensive, high-level survey and critique of the application of modern biological theory of evolution and taxonomy to the problems of primate and human evolution. Prerequisite: Consent of instructor. LEC.

ANTH 766. Topics in Biological Anthropology: ______ 3 Hours.
Topic for semester to be announced. Students may repeat the course for different topics. Prerequisite: Consent of instructor. LEC.
ANTH 769. Seminar in Primate Studies. 3 Hours.
Survey of field and laboratory investigations of the comparative anatomy and behavior of nonhuman primates. LEC.

ANTH 770. Research Methods in Physical Anthropology. 3 Hours.
A practical course in the use of special laboratory techniques of biological anthropological research and methods of data presentation. Prerequisite: Consent of instructor. LAB.

ANTH 775. Seminar in Cultural Anthropology: ______. 3-9 Hours.
Intensive consideration of special problems in cultural anthropology. Topic for semester to be announced. LEC.

ANTH 778. Seminar in Applied Cultural Anthropology. 3 Hours.
Selected problems in applying anthropological theory, methods, and findings in programs of directed change. FLD.

ANTH 780. Social Organization. 3 Hours.
Comparative analysis of the structure, development, and function of human social groups. Emphasis on kinship, legal, economic, and political institutions. Prerequisite: Graduate standing or consent of instructor. LEC.

ANTH 781. Symbolic Anthropology. 3 Hours.
An examination of anthropological approaches to religion, world view, and other symbol systems in simple and complex societies. Prerequisite: Graduate standing or consent of instructor. LEC.

ANTH 783. Doing Ethnography. 3 Hours.
Ethnography is both process and product. The product, a representation of a culture (or selected aspects of a culture), is based on fieldwork, the common term for the ethnographic process. This course explores how ethnographers prepare for the field, do their fieldwork, then report it. LEC.

ANTH 785. Topics in Ethnology: ______. 3 Hours.
Topic for semester to be announced. Usually the course will focus on selected problems in the social and cultural life of a people in a particular geographic region of the world. Coverage will include both the classical ethnological literature as well as special issues of current concern. Students may repeat the course for different topics. Prerequisite: Graduate standing or consent of instructor. LEC.

ANTH 786. Ethnographic Documentary Production. 3 Hours.
This course combines classroom and fieldwork in applications of theories, ethics, and methods of visual representation. Students carry out team-based ethnographic fieldwork projects through which they learn about pre-production, video production, and nonlinear post-production of ethnographic video documentaries. Prerequisite: Successful completion of ANTH 564 or permission of instructor. LEC.

ANTH 788. Symbol Systems: ______. 3 Hours.
Anthropological approaches to the study of worldview, religion, folklore, mythology, art, and other expressive behavior. Topic for the semester to be announced. Prerequisite: Graduate standing or consent of instructor. LEC.

ANTH 789. Anthropology of Gender: Advanced Seminar in the Four Fields. 3 Hours.
This seminar is intended primarily for graduate students in anthropology or other disciplines that share an interest in any of the subdisciplines of anthropology (archaeology, linguistic anthropology, biological anthropology, and sociocultural anthropology) and/or anthropological theories and methods. Undergraduates pursuing Honors or other major research projects are also encouraged to participate. Students will receive training in the contemporary theories, research, and pedagogies informing the anthropology of gender. Class participants will explore how these materials intersect with their current thesis or research projects and develop syllabi specific to their subdiscipline. (Same as WGSS 789.) Prerequisite: Permission of instructor. LEC.

ANTH 794. Material Culture. 3 Hours.
The historical and cross-cultural study of artifacts as embodiments of technological, social, organizational, and ideological aspects of culture. LEC.

ANTH 799. Anthropology Museum Apprenticeship. 1-6 Hours.
Provides directed, practical experience in research, collection care and management, public education, and exhibits, with emphasis to suit the particular requirements of each student. Limit of six hours of credit for the M.A. degree. (Same as AMS 799, BIOL 799, GEOL 723, HIST 799, and MUSE 799.) FLD.

ANTH 810. Seminar in Ethnolinguistics: ______. 2-3 Hours.
An advanced study of the relations between language and culture. Subject will vary each semester; students may repeat the course more than once. (Same as LING 810.) LEC.

ANTH 811. Quantitative Archaeology. 3 Hours.
Instruction in statistical methods for analyzing quantitative data in archaeological research. Topics will include techniques for handling nominal, ordinal, and radio-scale variables, the collection and presentation of quantitative information, and the use of computers. Prerequisite: Graduate standing and college-level algebra and/or consent of instructor. LEC.

ANTH 849. Seminar in Archaeology: ______. 2-4 Hours.
Subject matter of seminar to be announced for semester. LEC.

ANTH 851. Data Analysis in Archaeology: ______. 1-6 Hours.
A two-semester course designed to provide graduate students with basic principles in the analysis of archaeological data. Course content will include an introduction to archaeological systematics, analytical procedures, application of multivariate statistics, and computer applications. Topic for semester to be announced. FLD.

ANTH 853. Theory and Current Problems in Archaeology. 3 Hours.
Consideration of scientific methodology, basic assumptions of anthropological archaeology, relationship of archaeology and anthropology, and current theoretical and methodological trends in archaeology. LEC.

ANTH 856. Advanced Medical Anthropology: ______. 3-6 Hours.
This course provides advanced training in selected aspects of medical anthropology; the topic for a particular semester will reflect the current interests of the instructor. It is expected that the course content will alternate between theoretical and applied emphases. May be repeated for a total of six hours credit. Prerequisite: ANTH 461 or consent of instructor. LEC.

ANTH 880. Advanced Feminist Anthropology: ______. 3-6 Hours.
Intensive consideration of special problems in feminist anthropology. Topic for the semester to be announced. May be repeated for a total of six hours credit. (Same as WGSS 880.) Prerequisite: Permission of instructor. LEC.

ANTH 889. Summer Archaeological Field Work. 1-8 Hours.
Under the direction of a professional archaeologist, undergraduate and graduate students are taught proper procedures for the excavation and laboratory analysis of data from a prehistoric or historic archaeological site. Data gathered may be used for additional graduate research. Enrollment by application; limited to twenty students. A fee for subsistence costs will be charged. FLD.

ANTH 890. Training in Archaeological Field Work. 1-6 Hours.
Graduate students are taught techniques of archaeological field work, including survey and excavation, as well as laboratory procedures, including artifact classification and curation. FLD.
ANTH 896. Graduate Research. 1-9 Hours.  
Individual investigation of special problems in anthropology. Limit of six hours credit for the M.A. degree. RSH.

ANTH 897. Internship Research. 4-6 Hours.  
Experiential learning in the application of anthropology through placement in business, government, community, research, or social service organization or agency. Students design and implement an anthropological project under faculty supervision. Prerequisite: Graduate standing in Anthropology. RSH.

ANTH 898. Internship Analysis. 1-6 Hours.  
Experiential learning in the application of anthropology through placement in business, government, community, research, or social service organization or agency. This course is a sequel to ANTH 897. Students finish up any remaining research and deliver their findings to the client. They also prepare a written report and a verbal presentation for the Department of Anthropology. Prerequisite: ANTH 897 and Graduate standing in Anthropology. RSH.

ANTH 899. Master’s Thesis. 1-12 Hours.  
Limit of six hours credit for the M.A. degree. Graded on a satisfactory/unsatisfactory basis. THE.

ANTH 996. Graduate Research. 1-9 Hours.  
Individual investigation of special problems in anthropology. RSH.

ANTH 999. Doctoral Dissertation. 1-12 Hours.  
Graded on a satisfactory/unsatisfactory basis. THE.

Bachelor of Arts and Bachelor of General Studies in Anthropology

Why study anthropology?  
Because anthropology explains the diversity of humanity.

Undergraduate Admission

Admission to KU  
All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences  
Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

First- and Second-Year Preparation  
To complete the requirements for the degree in 4 years, the department recommends the following:

1. Prospective majors should have completed all general education and language requirements no later than the end of the fall semester of the junior year.
2. Prospective majors should meet with the undergraduate advisor upon declaration of the major  
a. to assess their progress toward completing the degree in 4 years, and  
b. to develop a plan for their course work in their remaining semesters.
3. Prospective majors are advised to take required courses in part 1 before the junior year.

Requirements for the B.A. or B.G.S. Major  
A minimum of 31-34 hours is required. The major offers a systematic introduction to each of the subdisciplines along with advanced training in specific areas. These normally are taken before moving on to upper-level courses. Students should select courses listed in part 2 in consultation with faculty advisors.

Anthropology Core Knowledge and Skills  
Majors must complete a course in each of the following areas. Two should be at the 300 level.

Anthropology Core Knowledge and Skills

Majors must complete a course in each of the following areas:

Succeeding in Anthropology. (1)

Satisfied by:
ANTH 102  Succeeding in Anthropology  1

Fundamentals of Physical Anthropology (3)

Satisfied by one of the following:
ANTH 104  Fundamentals of Physical Anthropology
ANTH 105  Fundamentals of Physical Anthropology, Honors
ANTH 304  Fundamentals of Physical Anthropology

Introduction to Linguistics or Language in Culture & Society (3)

Satisfied by one of the following:
ANTH 106  Introductory Linguistics
ANTH 107  Introductory Linguistics, Honors
ANTH 320  Language in Culture and Society
ANTH 321  Language in Culture and Society, Honors

Introduction to Cultural Anthropology or the Varieties of Human Experience (3)

Satisfied by one of the following:
ANTH 108  Introduction to Cultural Anthropology
ANTH 109  Introduction to Cultural Anthropology, Honors
ANTH 308  Introduction to Cultural Anthropology
ANTH 160  The Varieties of Human Experience
ANTH 162  The Varieties of Human Experience, Honors
ANTH 360  The Varieties of Human Experience

Introduction to Archaeology (3)

Satisfied by one of the following:
ANTH 110  Introduction to Archaeology
ANTH 111 Introduction to Archaeology, Honors
ANTH 310 Introduction to Archaeology

Anthropology Subdiscipline Required Electives

Majors must complete a course in the following areas. Majors should consult with their academic advisor to select courses that best meet their interests.

- **Archaeology.** Satisfied by completing at least 1 course in archaeology from ANTH 313-319, ANTH 406-419, ANTH 500, ANTH 504-526, ANTH 604-619.
  
  ANTH 313 New Discoveries in Archaeology 3
  ANTH 315 The Prehistory of Art 3
  ANTH 317 Prehistory of Europe 3
  ANTH 318 Prehistory of Kansas 3
  ANTH 406 Laboratory Techniques in Archaeology 3
  ANTH 410 Archaeological Myths and Realities 3
  ANTH 415 The Rise of Civilization 3
  ANTH 418 Summer Archaeological Field Work 1-8
  ANTH 419 Training in Archaeological Field Work 1-6
  ANTH 500 Topics in Archaeology: _____ 3
  ANTH 504 North American Archaeology 3
  ANTH 505 Prehistory of Eastern North America 3
  ANTH 506 Ancient American Civilizations: Mesoamerica 3
  ANTH 507 The Ancient Maya 3
  ANTH 508 Ancient American Civilizations: The Central Andes 3
  ANTH 510 An Introduction to Southwestern Archaeology 3
  ANTH 512 Ethnohistory: _____ 3
  ANTH 514 The Near East in Prehistory 3
  ANTH 515 Topics in Old World Prehistory: _____ 3
  ANTH 516 Hunters and Gatherers 3
  ANTH 517 Geoarchaeology 3
  ANTH 518 Environment and Archaeology 3
  ANTH 519 Lithic Technology 3
  ANTH 520 Archaeological Ceramics 3
  ANTH 521 Zooarchaeology 3
  ANTH 522 Paleoen ethnobotany 3
  ANTH 523 Great Plains Archaeology 3
  ANTH 605 Mortuary Practices in the Archaeological Record 3
  ANTH 619 Field Concepts and Methods in Geoarchaeology 3
  ANTH 705 Technological Change: _____ 3
  ANTH 710 History of American Archaeology 3
  ANTH 715 Seminar in North American Archaeology 2-4
  ANTH 718 Seminar in Latin American Archaeology: _____ 3
  ANTH 720 Seminar in Old World Prehistory: _____ 2-4
  ANTH 799 Anthropology Museum Apprenticeship 1-6

- **Sociocultural Anthropology.** Satisfied by completing at least 1 course in sociocultural or linguistic anthropology that does not have a specific geographical focus from: ANTH 301, ANTH 322-339, ANTH 361-395, ANTH 420-439, ANTH 460-495, ANTH 501-ANTH 502, ANTH 527-539, ANTH 560-ANTH 595, ANTH 620-639, ANTH 660-ANTH 695.

  ANTH 301 Anthropology Through Films 3
  ANTH 320 Language in Culture and Society 3
  ANTH 321 Language in Culture and Society, Honors 3
  ANTH 361 The Third World: Anthropological Approaches 3-4
  ANTH 367 Introduction to Economic Anthropology 3
  ANTH 389 The Anthropology of Gender: Female, Male, and Beyond 3
  ANTH 415 The Rise of Civilization 3
  ANTH 430 Linguistics in Anthropology 3
  ANTH 460 Theory in Anthropology 3
  ANTH 461 Introduction to Medical Anthropology 3
  ANTH 465 Genocide and Ethnocide 3
  ANTH 474 Applied Cultural Anthropology 3
  ANTH 480 Technology and Society in the Contemporary World 3
  ANTH 482 Psychological Anthropology 3

- **Biological Anthropology.** Satisfied by completing at least 1 course in biological anthropology: ANTH 340-359, ANTH 440-459, ANTH 503, ANTH 540-559, ANTH 640-659.

  ANTH 340 Human Variation and Evolution 3
  ANTH 341 Human Evolution 3
  ANTH 350 Human Adaptation 3
  ANTH 352 Controversies on the Living and the Dead 3
  ANTH 359 Anthropology of Sex 3
  ANTH 449 Anthropology of Sex, Honors 3
  ANTH 440 Introduction to Primates 3
  ANTH 442 Anthropological Genetics 3
  ANTH 445 Topics in Biological Anthropology: _____ 3
  ANTH 447 Human Behavioral Genetics 3
  ANTH 449 Laboratory/Field Work in Human Biology 1-3
  ANTH 503 Topics in Biological Anthropology: _____ 3
  ANTH 555 Evolution of Human Diseases 3
  ANTH 540 Demographic Anthropology 3
  ANTH 542 Biology of Human Nutrition 4
  ANTH 543 Nutrition Through the Life Cycle 3
  ANTH 544 Origins of Native Americans 3
  ANTH 545 Contemporary Health Issues in Africa 3
  ANTH 549 Human Paleontology: Fossil Apes to Australopithecus 3
  ANTH 550 Human Paleontology: Homo Erectus to Homo Sapiens 3
  ANTH 648 Human Osteology 4
  ANTH 650 Human Reproduction: Biology and Behavior 3
  ANTH 652 Population Dynamics 3
  ANTH 754 Biological Bases of Human Behavior 3
  ANTH 756 Genetics of Isolates 3
  ANTH 762 Human Growth and Development 3
  ANTH 764 Selected Topics in Human Paleontology: _____ 3
  ANTH 766 Topics in Biological Anthropology: _____ 3
  ANTH 769 Seminar in Primate Studies 3
  ANTH 770 Research Methods in Physical Anthropology 3
  ANTH 301 Anthropology Through Films 3
  ANTH 320 Language in Culture and Society 3
  ANTH 321 Language in Culture and Society, Honors 3
  ANTH 361 The Third World: Anthropological Approaches 3-4
  ANTH 367 Introduction to Economic Anthropology 3
  ANTH 389 The Anthropology of Gender: Female, Male, and Beyond 3
  ANTH 415 The Rise of Civilization 3
  ANTH 430 Linguistics in Anthropology 3
  ANTH 460 Theory in Anthropology 3
  ANTH 461 Introduction to Medical Anthropology 3
  ANTH 465 Genocide and Ethnocide 3
  ANTH 474 Applied Cultural Anthropology 3
  ANTH 480 Technology and Society in the Contemporary World 3
  ANTH 482 Psychological Anthropology 3
• Geographic Area. Satisfied by completing at least 1 course in any sub-discipline of anthropology that focuses on a specific geographic area.

  ANTH 303 Peoples and Cultures of North Africa and the Middle East 3
  ANTH 317 Prehistory of Europe 3
  ANTH 318 Prehistory of Kansas 3
  ANTH 362 Peoples of Southeast Asia 3
  ANTH 363 Gendered Modernity in East Asia 3
  ANTH 364 Peoples of Japan and Korea 3
  ANTH 365 Japanese People through Film 3
  ANTH 366 The Life Cycle in Japanese Culture and Literature 3
  ANTH 368 The Peoples of China 3
  ANTH 370 Peoples and Cultures of the Pacific 3
  ANTH 372 Religion, Power, and Sexuality in Arab Societies 3
  ANTH 376 North American Indians 3
  ANTH 379 Indigenous Traditions of Latin America 3
  ANTH 380 Peoples of South America 3
  ANTH 382 People and the Rain Forest 3
  ANTH 504 North American Archaeology 3
  ANTH 505 Prehistory of Eastern North America 3
  ANTH 506 Ancient American Civilizations: Mesoamerica 3
  ANTH 507 The Ancient Maya 3
  ANTH 508 Ancient American Civilizations: The Central Andes (NW / S / W) 3
  ANTH 510 An Introduction to Southwestern Archaeology (NW / S) 3
  ANTH 512 Ethnohistory: _______ 3
  ANTH 514 The Near East in Prehistory 3
  ANTH 544 Origins of Native Americans 3
  ANTH 545 Contemporary Health Issues in Africa 3
  ANTH 562 Mexamerica 3
  ANTH 563 Cultural Diversity in the United States 3
  ANTH 564 The Peoples of Africa 3
  ANTH 565 Popular Images in Japanese Culture, Literatures, and Films 3
  ANTH 567 Japanese Ghosts and Demons 3
  ANTH 568 Kongo Trans-Atlantic 3
  ANTH 665 Women, Health, and Healing in Latin America 3
  ANTH 670 Contemporary American Culture 3
  ANTH 671 The Culture of Consumption: (E.G. United States and Japan) 3
  ANTH 672 Meat and Drink in America 3
  ANTH 696 Language, Culture and Ethnicity in Prehistoric Eastern Europe 3
  ANTH 707 Responsible Research and Scholarship in Anthropology 3
  ANTH 715 Seminar in North American Archaeology 2-4
  ANTH 718 Seminar in Latin American Archaeology: _______ 3
  ANTH 720 Seminar in Old World Prehistory: _______ 2-4
  ANTH 736 Linguistic Analysis 3
  ANTH 740 Linguistic Data Processing 3
  ANTH 741 Field Methods in Linguistic Description 3
  ANTH 747 North American Indian Languages 3
  ANTH 748 Language Contact 3
  ANTH 749 Linguistics and Ethnolinguistics of China and Central Asia: _______ 3
  ANTH 786 Ethnographic Documentary Production 3
  ANTH 788 Symbol Systems: _______ 3
  ANTH 789 Anthropology of Gender: Advanced Seminar in the Four Fields 3
  ANTH 794 Material Culture 3
  ANTH 797 North American Indian Languages 3
  ANTH 799 Linguistics and Ethnolinguistics of China and Central Asia: _______ 3
  ANTH 785 Topics in Ethnology: _______ 3

• Capstone Experience
  ANTH 401 Integrating Anthropology 3

Students considering graduate school should take at least 2 courses beyond major requirements. These should be selected in consultation with a faculty advisor.
Anthropology Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade point average minimum standards:

**Major Hours**
Satisfied by 31-34 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 12 hours of KU resident credit in the major.

**Major Junior/Senior (300+) Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior (300+) Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

A sample 4-year plan for the BA degree in Anthropology can be found here: Anthropology (http://catalog.ku.edu/liberal-arts-sciences/anthropology/ba-bgs/ba-anthropology), or by using the left-side navigation.

A sample 4-year plans for the BGS degree in Anthropology will be coming soon.

**Departmental Honors**

To qualify for honors, an undergraduate must achieve an in-residence and combined minimum grade-point average of 3.25 overall and 3.5 in anthropology. Students must file a declaration of intent form with the instructor with whom they choose to work. In addition to the required hours, the student must enroll in 3 to 6 hours of ANTH 499 Senior Honors Research and complete a senior thesis based on this work. It is recommended that all candidates make an oral presentation of their research results. One copy of the thesis must be bound and placed in the departmental thesis library.

College of Liberal Arts & Sciences

Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your advisor (http://www.advising.ku.edu) for details). Other years’ catalogs (http://catalog.ku.edu/archives).

I'm looking for

**African and African-American Studies (p. 1074)**
Bachelor of Arts and Bachelor of General Studies in African and African-American Studies (p. 1088)
Minor in African and African-American Studies (p. 1093)
Master of Arts in African and African-American Studies (p. 1095)
Graduate Certificate in African Studies (p. 1097)

**American Studies (p. 1097)**
Bachelor of Arts and Bachelor of General Studies in American Studies (p. 1102)
Minor in Latino/a Studies (p. 1106)
Minor in American Studies (p. 1107)
Master of Arts in American Studies (p. 1108)
Master of Urban Planning and Master of Arts in American Studies (p. 1109)
Doctor of Philosophy in American Studies (p. 1109)
Graduate Certificate in American Studies (p. 1110)

**Anthropology (p. 1110)**
Bachelor of Arts and Bachelor of General Studies in Anthropology (p. 1123)
Minor in Anthropology (p. 1427)
Master of Arts in Anthropology (p. 1427)
Doctor of Philosophy in Anthropology (p. 1428)

**Applied Behavioral Science (p. 1429)**
Joint Degree: Ph.D. in Behavioral Psychology and Master of Public Health (p. 1461)
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Bachelor of Science in Astronomy (p. 1913)
Minor in Astrobiology (p. 1919)
Minor in Astronomy (p. 1920)

**Atmospheric Science (p. 1461)**
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Master of Science in Chemistry (p. 1543)
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Bachelor of Arts and Bachelor of General Studies in Classical Languages (p. 1553)
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Master of Arts in Classics (p. 1555)

Clinical Child Psychology (p. 1556) Doctor of Philosophy in Clinical Child Psychology (p. 1557)

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Minor in Communication Studies (p. 1569)
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Computational Biology (p. 1573) Doctor of Philosophy in Computational Biology (p. 1574)

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Master of Arts in English (p. 1651)
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- Minor in French (p. 1686)
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- Bachelor of Science in Atmospheric Science (p. 1706)
- Minor in Geography (p. 1709)
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- Bachelor of Science in Geology (p. 1723)
- Minor in Geology (p. 1730)
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- Minor in European Studies (p. 1765)
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- Minor in Jewish Studies (p. 1766)
- Minor in Middle East Studies (p. 1768)
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- Global Master of Arts/Master of Business Administration (p. 1770)
- Graduate Certificate in Global and International Studies (p. 1772)

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- Bachelor of Arts and Bachelor of General Studies in History (p. 1794)
- Minor in History (p. 1798)
- Master of Arts in History (p. 1801)
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- Bachelor of Arts and Bachelor of General Studies in History of Art (p. 1813)
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- Doctor of Philosophy in History of Art (p. 1815)

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- Minor in Humanities (p. 1825)
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Liberal Arts and Sciences (p. 1842)
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<th>Major</th>
<th>Degrees Available</th>
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<td>Minor in Linguistics (p. 1853)</td>
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<tr>
<td></td>
<td>Master of Arts in Linguistics (p. 1853)</td>
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<td></td>
<td>Doctor of Philosophy in Linguistics (p. 1854)</td>
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<tr>
<td><strong>Mathematics</strong> (p. 1856)</td>
<td>Bachelor of Arts in Mathematics (p. 1863)</td>
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<td></td>
<td>Bachelor of Science in Mathematics (p. 1865)</td>
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<td></td>
<td>Minor in Mathematics (p. 1868)</td>
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<tr>
<td></td>
<td>Master of Arts in Mathematics (p. 1868)</td>
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<td></td>
<td>Doctor of Philosophy in Mathematics (p. 1869)</td>
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<tr>
<td><strong>Molecular Biosciences</strong> (p. 1871)</td>
<td>M.A. in Biochemistry &amp; Biophysics; Microbiology; or Molecular, Cellular, &amp; Developmental Biology (p. 1887)</td>
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<tr>
<td></td>
<td>Ph.D. in Biochemistry &amp; Biophysics; Microbiology; or Molecular, Cellular, &amp; Developmental Biology (p. 1888)</td>
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<tr>
<td><strong>Museum Studies</strong> (p. 1890)</td>
<td>Master of Arts in Museum Studies (p. 1891)</td>
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<td>Museum Studies Graduate Certificate (p. 1893)</td>
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<td><strong>Philosophy</strong> (p. 1894)</td>
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<td>Minor in Philosophy (p. 1900)</td>
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<tr>
<td></td>
<td>Master of Arts in Philosophy (p. 1900)</td>
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<td></td>
<td>Juris Doctor and Master of Arts in Philosophy (p. 1902)</td>
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<td></td>
<td>Doctor of Philosophy in Philosophy (p. 1902)</td>
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<tr>
<td><strong>Physics and Astronomy</strong> (p. 1904)</td>
<td>Bachelor of Arts in Astronomy (p. 1910)</td>
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<td></td>
<td>Bachelor of Science in Astronomy (p. 1913)</td>
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<tr>
<td></td>
<td>Bachelor of Arts in Physics (p. 1915)</td>
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<td></td>
<td>Bachelor of Science in Physics (p. 1917)</td>
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<td></td>
<td>Minor in Astrobiology (p. 1919)</td>
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<td></td>
<td>Minor in Astronomy (p. 1920)</td>
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<td></td>
<td>Minor in Physics (p. 1920)</td>
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<td></td>
<td>Master of Science in Physics (p. 1921)</td>
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<td>Doctor of Philosophy in Physics (p. 1923)</td>
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<tr>
<td><strong>Political Science</strong> (p. 1927)</td>
<td>Bachelor of Arts and Bachelor of General Studies in Political Science (p. 1938)</td>
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<td>Minor in Public Policy in the United States (p. 1940)</td>
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<td>Master of Arts in Political Science (p. 1941)</td>
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<td>Doctor of Philosophy in Political Science (p. 1942)</td>
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<tr>
<td><strong>Psychology</strong> (p. 1946)</td>
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<td>Premedical Professions (p. 1943)</td>
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<tr>
<td><strong>Religious Studies</strong> (p. 1972)</td>
<td>Bachelor of Arts and Bachelor of General Studies in Religious Studies (p. 1979)</td>
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<td>Minor in Religious Studies (p. 1980)</td>
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<td></td>
<td>Master of Arts in Religious Studies (p. 1981)</td>
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<tr>
<td></td>
<td>Minor in Russian, East European, and Eurasian Studies (p. 1988)</td>
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<tr>
<td></td>
<td>Master of Arts in Russian, East European, and Eurasian Studies (p. 1989)</td>
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<tr>
<td></td>
<td>Graduate Certificate in Russian, East European, and Eurasian Studies (p. 1990)</td>
</tr>
<tr>
<td><strong>Slavic Languages and Literatures</strong> (p. 1991)</td>
<td>Bachelor of Arts in Slavic Languages and Literatures (p. 2001)</td>
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<td>Minor in Slavic Languages and Literatures (p. 2005)</td>
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<tr>
<td></td>
<td>Master of Arts in Slavic Languages and Literatures (p. 2008)</td>
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<tr>
<td></td>
<td>Doctor of Philosophy in Slavic Languages and Literatures (p. 2009)</td>
</tr>
<tr>
<td><strong>Sociology</strong> (p. 2011)</td>
<td>Bachelor of Arts and Bachelor of General Studies in Sociology (p. 2019)</td>
</tr>
<tr>
<td></td>
<td>Minor in Sociology (p. 2020)</td>
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<tr>
<td></td>
<td>Doctor of Philosophy in Sociology (p. 2020)</td>
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</tbody>
</table>


Women, Gender and Sexuality Studies (p. 2045) Bachelor of Arts and Bachelor of General Studies in Human Sexuality (p. 2050) Bachelor of Arts and Bachelor of General Studies in Women's Studies (p. 2053) Minor in Women's Studies (p. 2057) Minor in Human Sexuality (p. 2058) Doctor of Philosophy in Women, Gender, and Sexuality Studies (p. 2060) Graduate Certificate in Women's Studies (p. 2060)

The College of Liberal Arts and Sciences

Aims

The College of Liberal Arts and Sciences (called the College or CLAS) is KU's largest academic unit with more than 50 departments and programs. The liberal arts and sciences include disciplines in the humanities, social and behavioral sciences, and natural and mathematical sciences, as well as international and interdisciplinary studies options. The humanities are the study of the constructions or creations of humans over time (literature, religion, philosophy, history, culture, language, etc.). The social sciences are the study of how and why humans behave as they do individually, in groups, or in society (psychology, sociology, anthropology, etc.). The natural sciences involve explanations and predictions of the natural world. Each department lends a unique perspective on the world. Look at each department's overview page to begin to understand their unique contribution to your education.

Liberal education at the undergraduate level is typically broad rather than specialized. Its aim is to develop a citizenry that is broadly informed and capable of critical appraisal and to provide fundamental knowledge in many fields. The mission of the College, as reflected in KU's bachelor's degree requirements, is to provide such an education. The College takes full advantage of KU's role as a research institution to ensure that the knowledge imparted to students is current and that they learn the skills of inquiry and critical evaluation.

Undergraduate Programs

It is the students' responsibility to become thoroughly acquainted with all requirements for the degree programs in which they plan to participate. These include all university requirements, as well as the requirements of the College outlined in this section of the catalog. Students are also responsible for understanding the requirements that are unique to individual programs.

In general, the student is subject to the requirements in place at the time of admission as a degree-seeking student.

CLAS Baccalaureate Degrees

The College of Liberal Arts and Sciences offers 4 degrees at the baccalaureate level:

- Bachelor of Arts (B.A.),
- Bachelor of General Studies (B.G.S.),
- Bachelor of Science (B.S.),
- Bachelor of Applied Science (B.A.S.)

The majority of students in the College earn a B.A. degree. The B.A. degree may be earned with a major in all departments and programs in the College except atmospheric science. The B.A. is the traditional baccalaureate degree, structured to ensure both breadth and depth of knowledge through completion of the KU Core, degree specific requirements in writing, mathematics, foreign language, and laboratory science, as well as coursework in the major.

The B.G.S. degree is an option allowing intentional breadth, consisting of the completion of the KU Core and one of two options for degree completion.

The B.S. degree is offered by all natural science areas except human biology, as well as economics and behavioral neuroscience. General education degree and major requirements are determined by each program offering the degree and may be different for each B.S. degree in the College. With fewer required non-science general education degree requirements, the B.S. permits more depth in the major. It requires additional work in supporting science areas.

View the list of College of Liberal Arts and Sciences Departments & Programs (p. 774).

Two Degrees

Double Degrees in the College of Liberal Arts and Sciences

The following combinations of degrees are allowable within the College as long as the student has completed at least 15 hours unique to each major:

- 2 (or more) B.S. degrees. These must be different B.S. degrees, not different concentrations within the same B.S. degree.
- B.A. and B.S. degrees as long as the degrees are in different majors. Students may not, for example, earn both a B.A. and a B.S. in mathematics.
- B.G.S. and B.S. degrees as long as the degrees are in different majors. Students may not, for example, earn both a B.G.S. and a B.S. in economics.
- Students may complete the requirements for more than one emphasis area or concentration in a major or degree program but should be aware that they are not completing a second degree or major. The
following example illustrates this point: A student who completes all requirements for both the traditional English option and the creative-writing option is earning one degree, either the B.A. in English or the B.G.S. in English.

- Students may earn a B.A. or a B.G.S. with more than one major but not more than one B.A. or B.G.S. degree from the College.
- Students normally may not earn a B.A. degree and a B.G.S. degree. Exceptions to this must be approved by the Committee on Undergraduate Studies and Advising (CUSA). Requests for exceptions should be discussed with the director of College Student Academic Services.

Double Degrees in the College and a Professional School

Students who wish to work simultaneously for a degree from the College and a degree from one of the professional schools may do so, with the expectation that all general education requirements are met for both degrees.

The College of Liberal Arts & Sciences Online Degree Completion Programs

For students who are unable to take their coursework on the Lawrence or Edwards campuses, the College offers an online degree completion program leading to the Liberal Arts & Sciences, Bachelor of General Studies (BGS) degree. More information is available on The College of Liberal Arts & Sciences Online website (http://thecollegeonline.ku.edu), or students may contact us directly at thecollegeonline@ku.edu.

KU Edwards Campus Undergraduate Programs

Students who would like to complete a bachelor's degree in the Kansas City area may choose from 4 CLAS undergraduate majors offered on the KU Edwards Campus (http://edwardscampus.ku.edu) in Overland Park. Contact the CLAS undergraduate advisor, 864-8659 (from Lawrence) or 913-897-8659 (outside of Lawrence), about each of these degrees.

- Literature, Language, and Writing
  B.A. and B.G.S. degrees are offered. See requirements for the major under English (p. 1648).

- Molecular Biosciences
  The B.S. degree is offered. See requirements for the major under Biology Undergraduate Program (p. 1524).

- Public Administration
  B.A. and B.G.S. degrees are offered. See requirements for the major under Public Administration (p. 2344).

- Applied Science - Biotechnology
  The B.A.S. or Bachelor of Applied Science is offered. See requirements for the major under Biotechnology.

Special Opportunities in the College

KULAC is a pioneering program that seeks to equip students with real competency in a second language through a curriculum of courses and discussion sections taught in world languages in fields like business, history, politics, and the environment. KULAC classes allow you to study subjects that meet your interests (and graduation requirements) while sharpening your language skills, including the specialized vocabulary used in your career. Employers are looking for graduates who combine a disciplinary specialty with a second language proficiency and a knowledge of other cultures. KULAC makes it possible for you to develop these skills without slowing progress toward your degree. KULAC courses are open to any student who has completed at least two years of college-level classes in the relevant language. Courses are taught in Spanish, French, German, Italian, and Russian. There are new offerings each semester. For more information, consult the Center for Global and International Studies (http://global.ku.edu).

UKanTeach

UKanTeach (http://ukanteach.ku.edu) prepares future secondary (6th through 12th-grade) math and science teachers by encouraging students to learn to teach while pursuing a 4-year bachelor's degree. UKanTeach invites all KU students to take LA&S 290 (1 hour), the first course in the UKanTeach sequence. This career-exploration course allows students to design lessons and teach them in local schools. First-year students through seniors may enroll. Through course work and classroom experiences, students quickly learn whether they are suited to teaching.

Students pursuing any related undergraduate degree at KU can add the UKanTeach requirements to their major and earn a teaching license along with their degree.

The teaching licenses available in the UKanTeach program and some majors and interests commonly paired with each licensure area:

- Total hours: 120
- Hours in CLAS and/or School of the Arts: 100
- Junior/senior hours (courses numbered 300 or above): 45
- Hours in residence at KU (all must be taken at the junior/senior level): 30
- KU cumulative grade-point average: 2.0
- Grade-point average in KU junior/senior hours in the major: 2.0
- Grade-point average in KU hours in the minor: 2.0

If you know that you want to teach secondary mathematics or science (or if you want to explore the idea), the UKanTeach program can help you accomplish this while you continue to pursue your bachelor's degree at KU.

UKanTeach advisors would be happy to meet with you to discuss the program in more detail and show you how UKanTeach can fit into your plan to graduate.

Degree Requirements

Early and Continuous Enrollment in English and Math (All Undergraduate Degrees)

Undergraduate students enrolled in the College of Liberal Arts and Sciences Students are expected to make timely progress towards completing their degree requirements. In an effort to have students remain compliant with the requirements of the KU Core and the College, students are required to complete the Written Communication and Quantitative Literacy requirements of both the KU Core and their degrees within the first year of undergraduate study.
Written Communication

Students are expected to enroll in two courses that meet Goal 2, Learning Outcome 1 of the KU Core in their first year of study. Students should pay close attention to their degree specific requirements (such as for the Bachelor of Arts) given that certain degrees require specific Goal 2, Learning Outcome 1 courses despite advanced standing in writing courses due to examination scores. To ensure compliance with this policy, students may be administratively registered for courses if the College determines that they are not on track to complete this requirement in the first year of study. If a student is found to be in non-compliance with this policy, the College retains the right to place a hold on their records to prevent future registrations.

Quantitative Literacy

Students are expected to meet the requirement of Goal 1, Learning Outcome 2 of the KU Core in their first year of study. Students should pay close attention to their degree specific requirements (such as for the Bachelor of Arts) given that certain degrees require specific Goal 1, Learning Outcome 2 courses to meet both KU Core and degree specific requirements. To ensure compliance with this policy, students may be administratively registered for courses if the College determines that they are not on track to complete this requirement in the first year of study. If a student is found to be in non-compliance with this policy, the College retains the right to place a hold on their records to prevent future registrations.

Requirements for Graduation (All Undergraduate Degrees)

Grade-Point Average Required for Graduation

To be eligible to graduate from the College of Liberal Arts and Sciences with any of the 3 degrees (B.A., B.G.S., or B.S.), a student must earn at least a 2.0 grade-point average in courses taken at KU (including grades earned in Independent Study courses through KU Continuing Education) and at least a 2.0 in KU junior/senior courses (courses numbered 300 and above) in the major. All junior/senior level major-eligible courses attempted at KU will be included in the GPA calculation.

Hours Required for Graduation

To be eligible to graduate from CLAS with any of the degrees, a student must successfully complete at least 120 credit hours, 45 of which must be junior/senior hours (courses numbered 300 and above), and 100 of which must be completed in Liberal Arts and Sciences/School of the Arts course work. The required 120 hours are divided into 4 categories: the KU Core, College specific degree requirements, major, and elective requirements. The total hours are increased by enrollment in MATH 2 or any developmental course numbered below 100. The total also is increased by enrollment in excess of 64 hours of community college credit, 4 hours in physical education activity courses, 6 hours in music organization courses, and any repeated courses for which a student has already received credit.

Minimum and Maximum Hour and Grade-Point Average Requirements for All CLAS Degrees (B.A., B.G.S., B.S.)

Minimums

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total hours</td>
<td>120</td>
</tr>
<tr>
<td>Hours in CLAS and/or School of the Arts</td>
<td>100</td>
</tr>
</tbody>
</table>

Maximums

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior/senior hours (courses numbered 300 or above)</td>
<td>45</td>
</tr>
<tr>
<td>Hours in residence at KU (all must be taken at the junior/senior level)</td>
<td>30</td>
</tr>
<tr>
<td>KU cumulative grade-point average</td>
<td>2.0</td>
</tr>
<tr>
<td>Grade-point average in KU junior/senior hours in the major</td>
<td>2.0</td>
</tr>
<tr>
<td>Grade-point average in KU hours in the minor</td>
<td>2.0</td>
</tr>
</tbody>
</table>

General Education Degree Requirements

All degrees require courses that reflect the breadth of the disciplines in the College.

All undergraduate degrees from the University of Kansas require completion of the KU Core Curriculum (http://kucore.ku.edu). In addition to the KU Core, students must satisfy the degree specific and major requirements of the degree they are pursuing. Below are the degree specific requirements of the various degrees of the College. Major requirements may be found on the specific departmental pages in this catalog.

Electives Required for Graduation

The Bachelor of Arts degree requires:

- **Quantitative Reasoning.** 3 credits. This course must have MATH 101 (College Algebra) or a higher mathematics course as a prerequisite. Additionally, this course must also be either approved for Goal 1, Learning Outcome 2 of the KU Core or another course approved by CUSA.
- **Laboratory or Field Experience.** Variable credits. This course must be an academic-credit bearing laboratory or field experience. This course may be taken in conjunction with a lecture but the course combination must contain a laboratory.
- **Writing.** 6 credits. Students must complete six credit hours (two courses) of collegiate writing-level instruction. Students must complete ENGL 101, Composition and ENGL 102/ENGL 105, Critical Reading and Writing /Freshman Honors English. Students who place in ENGL 102/ENGL 105 by examination, must complete ENGL 102/ENGL 105 and another course meeting Goal 2, Learning Outcome 1 of the KU Core.
- **Non-English Language Proficiency**

Variable credits. Students must demonstrate fourth semester proficiency in a single non-English language, or third semester proficiency in a first non-English language and first semester proficiency in a second non-English language. This requirement may be met through coursework or examination by the appropriate language department.

The Bachelor of General Studies degree has two distinct options for completion and requires either:
• **Option A.** Completion of the requirements of a single BGS major AND a secondary field of academic study (a second major or minor) OR
• **Option B.** Completion of the B.G.S. in Liberal Arts and Sciences. This degree program requires:
  • Liberal Arts and Sciences Breadth Requirement.
  • Additional Natural Sciences and Mathematics. Satisfied by the completion of two additional courses from the natural sciences (requirement code N) and/or mathematics (MATH prefix courses) beyond the KU Core.

The Bachelor of Science degree:

  • All Bachelor of Science degree requirements are listed on their respective academic department pages within this catalog.
  
Each degree allows a certain number of elective hours. In addition to general education degree and major requirements, students may choose elective courses to bring the total credit hours to 120. In choosing electives, students should be aware of limits in certain areas listed under Hours Required for Graduation.

**Junior/Senior Hours Required for Graduation**

KU requires all students pursuing bachelor's degrees to complete a minimum of 45 credit hours at the junior/senior level (courses numbered 300 and above).

**Majors and Minors**

**Major Requirements**

Students must complete a major to graduate with a degree in the College. Students pursuing the B.G.S. in Liberal Arts and Sciences may not choose a secondary field of study.

A major requires the student to study at least one discipline in depth. The average number of required credit hours in the major for the B.A. degree is 30 hours. The Board of Regents requires a major to be at least 24 credit hours. See the individual major listings for specific minimum requirements. View a current list of all CLAS majors and minors (p. 774).

Degree requirements and course descriptions are subject to change. Check with department offices or College Student Academic Services (http://clas.ku.edu/undergrad) for current information.

**Declaration of Major**

The College expects that every student declare a major or be admitted to a professional school no later than the semester after completion of 60 credit hours. A student should meet with an academic advisor to discuss course selection and choice of major each term until the major is declared. For a major to be officially declared, CLAS Student Academic Services must receive a copy of the Major Declaration form signed by the student and the major department representative. If a student is pursuing a double major, he or she should complete a Major Declaration form in each major department.

Departments may reserve enrollment in courses in the department for declared majors.

Changing majors late in the academic career may delay graduation. Consult a graduation advisor in the College Student Academic Services office, 109 Strong Hall for further information regarding a change in major.

Students are encouraged to explore different disciplines before choosing their majors. Students who are not ready to declare a major can register in the pre-major program. Departments may reserve enrollment in courses in the department for pre-majors.

A double major requires the completion of two additional major programs and the completion of a secondary field of academic study (a second major or minor). Departments may reserve enrollment in courses in the department for double majors, he or she should complete a Major Declaration form in each major department.

CLAS department admission requirements include the following:

**Designated Admission Course Requirements and Minimum Admission Grade-Point Average**

Departments may designate up to 4 courses and require an admission grade-point average from 2.2 to 3.0. If a student may choose from a set of course requirement options, and he or she has taken more than the minimum number of course options in the application term, grades received in any designated admission course requirement up to and including that term may be computed in the grade-point average for admission consideration. Only course grades from repeated lower-level courses, meeting the standards of KU's course repeat policy (https://documents.ku.edu/policies/governance/USRR.htm#art2sect2), are removed from the grade-point average calculation.

The Credit/No Credit option is not available for any course that is an admission requirement. If a student has mistakenly requested the CR/NC option for a course required for admission, 1.7 grade points for any CR grade recorded and 0.0 points for any NC grade recorded are calculated into the grade-point average for admission purposes. A department may
determine that any designated admission course taken with the CR/NC option must be repeated.

**Application Term**

Students must complete all requirements for admission to a major by the first semester of the junior year or before. Application to the major should occur in the term in which admission requirements will be completed. If a student does not meet established admission grade-point average criteria or neglects to apply for admission in this term, she or he must petition the department for permission for late application. The department, as part of an approved petition, determines late admission requirements (including grade-point average and course requirements) and the final admission deadline.

**Hours in the Major: Maximums and Minimums**

There is no limit on hours taken in the major for the B.A., B.G.S., or B.S. degree. Departments are not allowed to require more than 40 hours in the major for the B.A. or more than 50 hours in the major for the B.S. Some skills courses and supporting science courses are not included in this maximum limit. A minimum of 12 hours in the major must be in courses numbered 300 or above. At least 15 of these hours in the major must be taken in residence at KU.

**Major Grade-Point Average Graduation Requirement**

A student must earn a grade-point average of at least 2.0 in KU junior/senior courses (numbered 300 and above) completed in the major. All junior/senior level major-eligible courses attempted at KU will be included in the GPA calculation. If a student has mistakenly requested the Credit/No Credit option for a course in the major, 1.7 grade points for any CR grade recorded and 0.0 points for any NC grade recorded are calculated into the major grade-point average for certification purposes. A department may determine that any major course taken with the CR/NC option must be repeated.

**Double Major**

A student may earn a double major if he or she satisfies the requirements of both majors and completes 15 hours unique to each major in consultation with advisors in each department.

**Special Major**

Students who feel that their best interests cannot be served by the majors listed may petition for a special major (B.A. or B.G.S.), if they follow the guidelines below. Such majors are supervised by special committees of three faculty members recruited by the student. Interested students should consult College Student Academic Services (http://clas.ku.edu) or neglect to apply for admission in this term, she or he must petition the department for permission for late application. The department, as part of an approved petition, determines late admission requirements (including grade-point average and course requirements) and the final admission deadline.

**Hours in the Major: Maximums and Minimums**

There is no limit on hours taken in the major for the B.A., B.G.S., or B.S. degree. Departments are not allowed to require more than 40 hours in the major for the B.A. or more than 50 hours in the major for the B.S. Some skills courses and supporting science courses are not included in this maximum limit. A minimum of 12 hours in the major must be in courses numbered 300 or above. At least 15 of these hours in the major must be taken in residence at KU.

**Major Grade-Point Average Graduation Requirement**

A student must earn a grade-point average of at least 2.0 in KU junior/senior courses (numbered 300 and above) completed in the major. All junior/senior level major-eligible courses attempted at KU will be included in the GPA calculation. If a student has mistakenly requested the Credit/No Credit option for a course in the major, 1.7 grade points for any CR grade recorded and 0.0 points for any NC grade recorded are calculated into the major grade-point average for certification purposes. A department may determine that any major course taken with the CR/NC option must be repeated.

**Double Major**

A student may earn a double major if he or she satisfies the requirements of both majors and completes 15 hours unique to each major in consultation with advisors in each department.

**Special Major**

Students who feel that their best interests cannot be served by the majors listed may petition for a special major (B.A. or B.G.S.), if they follow the guidelines below. Such majors are supervised by special committees of three faculty members recruited by the student. Interested students should consult College Student Academic Services (http://clas.ku.edu/undergrad), preferably before the end of the sophomore year.

The following guidelines apply to special majors:

1. An official endorsement by one or more of the CLAS departments or degree programs involved must accompany a petition for a special major. The petition must be submitted to the committee on undergraduate studies and advising (CUSA).
2. At least 12 credit hours numbered 300 or above counted toward the special major must be taken after approval of the special major.
3. At least 2 committee members must be from the CLAS faculty.
4. At least 2/3 of the credit hours to be counted toward the special major must be CLAS courses.

5. Special majors must not overlap significantly with existing KU major programs and should not have the same titles as existing majors.

6. A student seeking a special major must fulfill the general education degree requirements necessary for the B.A. or B.G.S degree.

**Note:** Students considering classes to include in a special major should be guided by the fact that most CLAS majors require about 30 hours.

**Minors**

CLAS offers more than 40 approved minors. These are open to all students in the College regardless of the degree they are pursuing. The schools of Architecture, Design and Planning (http://www.sadp.ku.edu); Business (http://business.ku.edu); Education (http://soe.ku.edu); Engineering (http://www.engr.ku.edu); Journalism and Mass Communications (http://www.journalism.ku.edu); Music (http://music.ku.edu); Nursing (http://www2.kumc.edu/son); and Social Welfare (http://www.socwel.ku.edu) permit their students to earn CLAS minors.

Requirements for the minor vary, but all must be at least 18 hours including 12 hours at the junior/senior level (numbered 300 and above). 9 of the junior/senior-level courses must be taken in residence at KU. One course overlap may be used to fulfill requirements for both the major and the minor. Students may not earn a minor unless they have completed a major and have completed at least one course for the minor after the date the minor was approved by College Assembly. Successful completion of a minor requires a minimum KU grade-point average of 2.0 in all courses taken for the minor. For requirements for each minor, see the programs listed on the Departments & Programs (p. 774) page.

The Credit/No Credit option is not available for any course that may satisfy minor requirements. If a student has mistakenly requested the CR/NC option for a course in the minor, 1.7 grade points for any CR grade recorded and 0.0 points for any NC grade recorded are calculated into the major grade-point average for certification purposes. A department may determine that any minor course taken with the CR/NC option must be repeated.

View a current list of all CLAS majors and minors (p. 774).

**KU Core**

The KU Core curriculum, coupled with degree and major requirements in the College, ensure a balance of breadth and depth of knowledge critical in today’s world.

See the General Education Degree Requirements section above for details regarding College-specific requirements.

**Bachelor of Science Degree Requirements**

All general education degree, major, and supporting requirements for each B.S. program are specified by department faculty, with approval of the College Assembly. They are listed under the department or program on the Departments & Programs (p. 774) page. B.S. candidates are held to a more prescribed program with fewer electives than B.A. candidates. Students pursuing the B.S. may complete an approved minor.

**Overlap Between Requirements**

A course may be used to fulfill a KU Core or College degree-specific requirement and a minor or major requirement.
A student may earn more than one major if he or she satisfies the requirements of all majors and completes 15 hours unique to each major in consultation with advisors in each department.

One course overlap is allowed between major requirements and minor requirements.

**Graduate Programs**

The College of Liberal Arts and Sciences (called the College or CLAS) is KU’s largest academic unit with more than 50 departments and programs. Graduate programs in the liberal arts and sciences include disciplines in the arts, humanities, social and behavioral sciences, and natural and mathematical sciences, as well as many interdisciplinary degree programs where often highly diverse disciplines come together to offer students a unique graduate experience. Each graduate program’s page contains program-specific information about admission, course curriculum, and faculty mentors.

The College’s participation in graduate education reflects a long and distinguished commitment to higher learning and research across the liberal arts and sciences. The College takes full advantage of KU’s role as an international research institution to ensure that the knowledge imparted to students is current and that they learn the skills of inquiry and critical evaluation. Graduate students are central to the research and teaching missions of the College. They are also the next generation of scholars who will make contributions to our communities and the production of knowledge for many years to come.

It is the students’ responsibility to become thoroughly acquainted with all requirements for the degree programs in which they plan to participate. These include the university requirements for graduate studies at KU outlined in the College and Graduate Studies sections of the KU Policy Library (http://www.policy.ku.edu), the University Senate Rules and Regulations (p. 12), the Graduate Studies (p. 2369) sections of the online catalog, as well as the requirements of the College outlined in this catalog section. Additionally, students are responsible for understanding the requirements that are unique to individual graduate programs outlined in the graduate handbooks of individual academic units and the Departments & Programs (p. 774) sections of the online catalog.

In general, the student is subject to the regulations in force at the time of admission as a degree-seeking student. If degree requirements change, the student may opt to follow the new requirements or to continue under the regulations in force at the time of admission. Any student readmitted 10 years or more after his or her initial term as a degree-seeking student must fulfill the requirements in effect on the date of readmission to the graduate program.

**Graduate Degrees in the College**

The College offers graduate degrees in more than 90 areas of study. **Master of Arts** (M.A.) or **Master of Science** (M.S.) degrees can be earned in more than 40 disciplines and the **Master of Fine Arts** (M.F.A.) degree is offered in creative writing, visual art, and theatre design with a concentration in scenography. Other professional degrees are offered at the master’s level in the **Master of Public Administration** (M.P.A.) program and the **Professional Science Master's** (PSM) program.

The College offers **Doctor of Philosophy** (Ph.D.) degrees in 38 fields, including 2 fields within the School of the Arts.

For students whose academic and professional goals can best be achieved through investigations at the interface of 2 or more disciplines, the College offers master’s and doctoral degrees in Interdisciplinary Studies. Please see the policy governing graduate degrees in Interdisciplinary Studies section of the online catalog.

The College currently offers Graduate Certificates in 17 fields, with more certificate programs in development.

View the College's Departments & Programs (p. 774) section of the online catalog for more information on specific fields of study.

**KU Edwards Campus Graduate Programs**

Students who would like to complete a graduate degree in the Kansas City area may choose from 4 College graduate degrees and 5 graduate certificates that are offered on the KU Edwards Campus (http://edwardscampus.ku.edu) in Overland Park. Information about program requirements, facilities, tuition, and fees is available on the Edwards Campus website (http://edwardscampus.ku.edu). Residents of Kansas City metro area counties admitted as degree-seeking students to one of these programs may qualify for the MetroKC tuition rate for Edwards Campus courses. For more information, contact the College's Graduate Advisor at the Edwards Campus at (913) 897-8510.

The following graduate degrees are offered on the Edwards Campus:

- Master of Arts, Communication Studies (p. 1571), MA
- Master of Arts, Global and International Studies (p. 1769), MA
- Master of Public Administration (p. 2339), MPA
- Professional Science Masters in Environmental Assessment, PSM

The following graduate certificates are offered on the Edwards Campus:

- City and County Management
- Environmental Assessment
- Global and International Studies
- Performance Management

**Degree Requirements**

Requirements for the completion of master’s and doctoral degrees in the College are governed by department- or program-specific policy, College policies and procedures, Graduate Studies policies, and the University Senate Rules and Regulations.

Information on degree requirements presented in this section are limited to the most frequently consulted policies and key milestones in the graduate career. Students will find additional information under the KU Policy Library (http://policy.ku.edu), the Graduate Studies (p. 2369) and College’s graduate regulations sections of the online catalog, the academic unit’s handbook, and the University of Kansas Rules and Regulations (p. 12).

**Master’s Degree Requirements**

**Coursework**

Coursework requirements for the Master’s degree are established and tracked by the department or program, and their completion verified and approved by the College. Please consult with your advisor, the academic unit’s graduate handbook, and the relevant Departments & Programs section of the online catalog for further information on specific courses or course sequences required for the degree.
Thesis

Final Examination
A final general examination in the major subject is required for MA and MS degrees. The examination is held during the semester of the student’s final enrollment in course work and, in the case of thesis students, when the thesis has been substantially completed. In thesis programs, an oral thesis defense may be one of the degree requirements. Such a defense may be offered in addition to, or in conjunction with, the required general examination in the major field. Students earning a master’s thesis degree must have completed at least 1 hour of thesis enrollment before the master’s degree can be awarded. See also Master’s Degree Requirements (p. 2369), M.A. and M.S. Degrees, in the Graduate Studies section of the online catalog.

Doctor of Philosophy Degree Requirements
Coursework
Coursework requirements for the doctoral degree are established and tracked by the department or program, and their completion verified and approved by the College. Please consult with your advisor, the academic unit’s graduate handbook, and the relevant Departments & Programs section of the online catalog for further information on specific courses or course sequences required for the degree.

Research Skills and Responsible Scholarship
Graduate Studies requires that all doctoral students meet the Research Skills and Responsible Scholarship requirement before proceeding to the Comprehensive Exam. Specific requirements are determined by each department or program in consultation with Graduate Studies. Information on these requirements is contained in the department or program’s approved research skills requirement plan. Consult with your advisor and the Departments & Programs section of the online catalog for further information.

Residency
Two semesters, which may include one summer session, must be spent in resident study at KU. The College requires that residency be fulfilled before the comprehensive oral examination is scheduled. For more information on residency requirements, please see the Graduate Studies section (p. 2372) of the online catalog.

Comprehensive Oral Examination
The comprehensive oral examination covers the major field and any outside work for which the academic unit wishes to hold the student responsible. The examination is expected to be broader than a mere defense of the dissertation proposal.

The student must be enrolled the semester or summer session in which he or she completes the comprehensive oral examination. This enrollment may count toward the post-comprehensive enrollment requirements as described in Graduate Studies’ Candidacy for Doctoral Degree policy. If more than 5 years elapses between the completion of the comprehensive exam and degree completion, the student may be required to retake the oral comprehensive.

More information about comprehensive exam requirements may be found in the Graduate Studies section (p. 2372) of the online catalog.

Dissertation and Final Exam
Completion of the dissertation is the culminating phase of a doctoral program, marked by the final oral examination and defense of the dissertation. In all but the rarest cases, tentative approval of the dissertation is followed promptly by the final oral examination. Refer to the Graduate Studies section (p. 2369) of the online catalog for further information on the regulations governing the final oral examination, including committee composition and attendance regulations.


Ceremonies
At the end of each spring semester, the College holds a master’s hooding ceremony and Graduate Studies organizes the annual doctoral hooding ceremony. The School of the Arts hosts a separate ceremony for SOTA graduates. University Commencement information is available in the KU Commencement section of the KU website.

Attendance at these ceremonies is optional. Please consult the COGA website (http://coga.ku.edu) for more information.

Undergraduate Advising
Academic advising helps undergraduate students develop educational plans, clarify career and life goals, and appreciate the values of a liberal arts education. College Student Academic Services, in partnership with our faculty and staff across the University, is dedicated to helping undergraduate students achieve their educational and personal goals, and to maintaining the academic integrity of our degree programs. We welcome students, encourage them to be active participants in their educational experience, and celebrate their milestones.

CLAS encourages students to consult frequently with advisors, and to declare their majors as soon as possible in order to get connected with all resources in their chosen area of study. Academic advisors serve as guides, helping students explore options and make decisions. Undeclared CLAS students with fewer than 90 hours are assigned advisors in the University Advising Center (http://advising.ku.edu), 126 Strong Hall. UAC also provides prelaw, premedical and prehealth professions advising. When students declare majors, they are advised by faculty advisors and professional advisors in their major departments and in 109 Strong Hall.

College Student Academic Services (http://clas.ku.edu/undergrad), 109 Strong Hall, provides additional full-time advisors for students who entered KU before fall 1987 and students at all levels who have policy or petition questions or issues. In addition, SAS provides advising for prospective or new transfer seniors and refers them to faculty academic advisors in their majors as soon as possible. Finally, advisors in SAS work with graduating seniors to ensure timely completion of degree requirements through workshops, degree audits, and graduation advising appointments.

Degree Progress Report
The Degree Progress Report (DPR) is a computerized advising and degree-audit system, used to assist students and advisors in tracking progress toward completion of general education degree and major requirements for B.A., B.G.S., and B.S. degrees. Students should
review their DPR each semester and be prepared to review and discuss information contained in the DPR at all advising appointments. The DPR can be accessed through the student's account in the KYou Portal under the Advising tab. Although the DPR provides a list of courses taken and grades earned, it is not an official transcript and can be used only for internal advising. Students must obtain all official transcripts from the Student Records Center (http://www.registrar.ku.edu), 121 Strong Hall.

4-Year Graduation Plans

With careful planning and commitment to a full-time course load, students can graduate in 4 years. Degree Plans for all BA degrees are available through the catalog "degree plan" tab. Degree Plans for BGS, BS, BAS, BAE, and BFA degrees are in progress.

Graduate Advising

Advising of graduate students is primarily conducted within the graduate programs by program staff members and the individual faculty members who act as mentors and advisors. Students are encouraged to work with the director of graduate studies in their program regarding course selections and individual program requirements to ensure that all program milestones are reached as expected by the program faculty and the College. The graduate studies director or coordinator is also responsible for the regular assessment of students in the program and can address questions regarding a student's progress toward the degree.

Students seeking information on specific policy or procedures should review the relevant content in the KU Policy Library (http://policy.ku.edu) as well as the College and Graduate Studies (p. 2369) sections and the relevant Department or Program section of the online catalog. The College Office of Graduate Affairs (http://clas.ku.edu/coga), 102 Strong Hall, coga@ku.edu, is also available for assistance.

Students who have completed all degree requirements and are preparing to graduate are encouraged to schedule a Graduation Appointment with the College Office of Graduate Affairs.

Undergraduate University Regulations

For information about university regulations, see Regulations (p. 12) or visit the University of Kansas Policy Library (http://www.policy.ku.edu).

Academic Integrity

The College of Liberal Arts and Sciences strictly enforces KU and CLAS policies on academic misconduct. Academic integrity requires honest performance of academic responsibilities by students. These include preparation of assignments, reports and research papers, taking examinations, completing administrative requirements, and a sincere and conscientious effort by students to abide by the policies set forth by instructors. See Academic Integrity on the Regulations (p. 12) page.

Change of School

Students with a KU cumulative GPA of 2.00 or higher (or in their first semester) can fill out a Change of School Form requesting to be admitted to the College of Liberal Arts and Sciences and/or School of the Arts, from a KU professional school, through the last day of class for the current semester. Requests made after that will be for admission in the upcoming semester. This process is for active KU students. Students not admitted to KU follow the University’s admission policy.

Students with a KU cumulative GPA of less than 2.00 will be evaluated according to the College’s academic standing policy and may not be admissible based on past academic performance at KU. Students that have been dismissed from another KU School will need to submit a change of school request one week or earlier prior to classes starting. Non-dismissed students may request to change schools through the 20th day of the current semester; after that date requests will be considered for the next semester.

- Change of school requests will not be reviewed until current semester grades are posted.
- Students admitted to the College on probation will need to meet the College’s academic probation requirements during the semester they are admitted or face an academic dismissal.
- The College reserves the right to deny admission to students who have had consecutive semesters of failing grades (or multiple semester withdrawals) regardless of their KU cumulative GPA in previous semesters.
- Students dismissed from another school at KU and are found to be inadmissible to the College can follow our readmission policy to return to KU for a future semester.

To change from one school to another, you must submit a Change of School form in the dean’s office of the school you plan to enter or in College Student Academic Services (http://clas.ku.edu/undergrad) if you plan to enter the College. Follow the deadlines on the form. See the school’s requirements for admission.

Students applying for admission to the College from other schools in the university must meet the same minimum grade-point average requirements in KU attempted course work as continuing College students. Consult College Student Academic Services, Strong Hall, 1450 Jayhawk Blvd., Room 109, Lawrence, KS 66045-7518, 785-864-3500.

Credit/No Credit

A Credit/No Credit option is available to all degree-seeking undergraduates. You may enroll in 1 course a semester under the option, if the course is not in your major or minor. To exercise the option, you must fill out a card at the dean’s office of the school in which you are enrolled during the fifth and sixth weeks of the semester (or the third week of summer session and 8-week courses). See the Schedule of Classes (p. 10) for current dates for electing this option. After the close of the option period, the choice cannot be changed. Under the option, a grade of Credit is recorded for grades of A, B, or C; No Credit is recorded for grades of D or F. Courses graded Credit or No Credit do not count in computing the grade-point average. Courses graded Credit are included in the total hours counted toward graduation. Courses graded No Credit do not count toward graduation. For more information, visit the KU Policy Library (https://documents.ku.edu/policies/governance/USRR.htm#art2sect2).

Warning: Certain undesirable consequences may result from exercising the option. Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of No Credit to F when computing grade-point averages.

Students in the College must fill out a request in College Student Academic Services (http://clas.ku.edu/undergrad). The university-established timeline for exercising this option is strictly enforced.

Enrollment

See the Enrollment Guide (http://www.registrar.ku.edu/enrollment) for complete enrollment information.
New and Readmitted Student Enrollment

Immediately before the beginning of classes each term, an enrollment session is scheduled for new students. New students admitted for summer or fall term have an additional option of enrolling in fall courses during one of several summer orientation sessions. Invitations to orientation are sent automatically to newly admitted and readmitted students who applied for the spring, summer, or fall terms (except nondegree-seeking students). Readmitted students may attend a special abbreviated orientation session, may enroll during continuing enrollment, or may attend the enrollment sessions immediately before the start of the semester. Readmitted students whose readmission applications are completed by a designated date also may enroll during continuing enrollment, after meeting with an advisor. All students must preregister for orientation and enrollment sessions.

International students must complete the required check-in processes before enrollment and are encouraged to attend International Student Orientation, which includes advising and enrollment sessions.

Continuing Enrollment

This enrollment allows students who are currently enrolled during one term to enroll for the next term. Spring-enrolled students enroll in April for the following summer session or fall semester or both. Fall-enrolled students enroll in October or November for the following spring semester.

Late Enrollment

Each semester, the Schedule of Classes (p. 10) announces dates for late enrollment and the last day to submit a Petition to Late Enroll. Petitions are evaluated based on past academic performance. A student may enroll in a course or change class sections after the semester has been in session for 4 weeks only if the course has met fewer than 25 percent of the class sessions. For most classes, the faculty have established earlier dates for beginning class attendance and participation. A fee is assessed for late enrollment.

Grading

The letters A, B, C, D, S (satisfactory), and Credit indicate passing work. The letters F and U (unsatisfactory) and No Credit indicate that the quality of work was such that, to obtain credit, the student must repeat regular course work. P represents satisfactory progress (an interim grade pending completion of a subsequent term’s course work). See the KU Policy Library (https://documents.ku.edu/policies/governance/USRl.htm#art2sect2) for more information.

Graduation with Honors

Undergraduates may earn honors upon graduation in 3 ways. The student may graduate with distinction or highest distinction, earn departmental honors in the major, or complete the University Honors Program (http://www.honors.ku.edu). It is possible to earn honors in 1 of these areas, any combination of them, or all 3. The award of honors is noted on the student’s transcript and in the Commencement program. Distinction and highest distinction are noted on the diploma.

Graduation with Distinction or Highest Distinction

The top 10 percent of each year’s graduating class is designated as graduating with distinction. Of these, the top one-third is designated as graduating with highest distinction. To be eligible, students must have completed at least 60 credit hours, graded A through F, in residence at KU. See Required Work in Residence below.

Graduation with Departmental Honors

Most departments and programs allow qualified majors to work toward graduation with departmental honors. Graduation with departmental honors is awarded in recognition of exceptional performance in the major, completion of a program of independent research or an alternative project, and a strong overall academic record.

In addition to the requirements of individual departments and programs (which must be approved by the College committee on undergraduate studies and advising), the College requires the following for graduation with departmental honors:

1. Candidates must declare the intention to work for departmental honors with the appropriate departmental honors coordinator(s) no later than the time of enrollment for the final undergraduate semester, but sooner if required by the department(s). Copies of the intent form should be returned to College Student Academic Services.

2. At the end of the final undergraduate semester, the candidate must have achieved an overall grade-point average of at least 3.25 and a grade-point average of at least 3.5 in the major. Both overall and major grade-point averages include work completed at other institutions, as well as at KU. No minimum grade-point average is required to declare candidacy for graduation with departmental honors unless specified by the department.

3. Each candidate’s departmental honors work must include independent research or an acceptable alternative project. The results of research are presented in a form appropriate to the requirements of the major department. Equivalents to the independent research component are established by approved departmental honors programs. In courses meeting the independent research requirement, the candidate must earn a grade of B or higher. Successful completion of all departmental honors requirements must be certified to the departmental honors coordinator(s) by a panel composed of at least three members of the College faculty who have read the report of the independent research and heard the oral presentation, where required.

Petitions

A department or program may petition to award graduation with departmental honors to deserving students who, for good reason, do not meet every College and departmental requirement. Send petitions to the committee on undergraduate studies and advising, College Student Academic Services (http://clas.ku.edu/undergrad).

Late Completion of Honors Requirement

Requirements for graduation with honors may be completed after the date on which certifications are requested from departments, and in some cases, requirements, if not needed for graduation, may be completed after a student has graduated. However, the Incomplete policy does apply and grades would lapse at the time of graduation. When a candidate finishes all requirements, departments must notify College Student Academic Services (http://collegesas.ku.edu) in writing.

Honor Roll

Undergraduates with grade-point averages of 3.5 who have completed at least 12 hours with letter grades are recognized on the honor roll.
or dean’s list in fall and spring. An Honor Roll notation appears on the transcript.

**Honors Program**

The University Honors Program (http://www.honors.ku.edu) provides opportunities for outstanding and creative undergraduates in all schools at KU to develop their full potential during their undergraduate years. See Honors (p. ) in this section of the online catalog for further information.

**Incompletes**

The letter I indicates incomplete work, such as may be completed without re-enrollment in the course. The letter I should not be used when a definite grade can be assigned for the work done. It is not given for the work of a student in any course except to indicate that some part of the work has, for reasons beyond the student’s control, not been done, while the rest has been satisfactorily completed. At the time an I is reported on the electronic roster, the character and amount of work needed, as well as the date required for completion and lapse grade if further work is not completed by this date, should be indicated.

A student who has an I posted for a course must make up the work by the date determined by the instructor, in consultation with the student, which may not exceed 1 calendar year, or the last day of the term of graduation, whichever comes first. An I not removed according to this rule automatically converts to a grade of F or U, or the lapse grade assigned by the course instructor, and appears on the student’s record.

Extensions to the time limit may be granted by the dean’s representative upon submission of a petition from the student containing the endorsement of the course instructor who assigned the I grade, or the department chairperson if the instructor is unavailable, prior to the expiration of the Incomplete. After the I grade is converted to a grade of F or U, the grade may only be changed in accordance with USRR Article II, Section 3 (https://documents.ku.edu/policies/governance/USRR.htm#art2sect3).

**Maximum and Minimum Undergraduate Semester Enrollment**

No undergraduate may enroll for more than 20 hours a semester except by permission of the director of Student Academic Services. Summer enrollment is limited to 10 hours. Permission is not considered unless the student has demonstrated high levels of academic ability in previous semesters.

**Prerequisites and Corequisites**

Students are advised to enroll according to prerequisites and corequisites noted in individual course descriptions. These prerequisites are enforced in a variety of ways including blocking enrollment, administrative drops without notice, etc.

**Probation**

The College reviews all students’ records at the end of fall and spring semesters and summer term to determine their academic standing. Students must maintain a 2.0 cumulative KU grade-point average to be in good academic standing. Students below that average are placed on probation.

- **Freshmen and Sophomores on Probation** (between 0 and 59 completed hours): Each student in this category must earn a 2.0 KU term grade-point average until his or her cumulative KU grade-point average reaches 2.0, returning the student to good academic standing. Students who fail to meet these requirements are dismissed.

- **Juniors and Seniors on Probation** (60 or more completed hours): Each student in this category must earn a 2.5 KU term grade-point average until his or her cumulative KU grade-point average reaches 2.0, returning the student to good academic standing. Students who fail to meet these requirements are dismissed.

To return to the College of Liberal Arts and Sciences, the student must follow CLAS readmission guidelines.

**Readmission after Dismissal**

Students dismissed for the first time from the College of Liberal Arts and Sciences must wait at least 1 full fall or spring semester before returning to KU. Summer session does not count as a full semester. In addition, a dismissed student must demonstrate academic success by completing a minimum of 6 hours of transferable academic course work at another higher education institution. To be readmitted, students must attain a grade-point average of 2.5 or higher in all hours taken after dismissal. All course work taken at every institution is calculated into the grade-point average since dismissal, even if the student opted for that institution’s retake policy. If students are lacking math or English courses to fulfill the Early and Continuous Enrollment requirements, they must complete all the courses necessary, through ENGL 101 (or equivalent) meeting or progressing on Written Communication requirements as established by KU Core and/or degree specific requirements and MATH 1011 (or equivalent) meeting or progressing Quantitative Reasoning and Literacy requirements as established by KU Core and/or degree specific requirements during the dismissal period. The College reviews the status of students dismissed from another KU school, based on CLAS regulations, beginning with the initial KU term. If the student would have been dismissed under CLAS regulations, this is considered a first dismissal, even though the student was not a CLAS student. Upon readmission, the student must maintain at least a 2.5 semester grade-point average until reaching good academic status to be allowed to continue in the College.

1 This may mean that some students must actually wait more than 1 semester to meet these conditions and apply for readmission.

Students dismissed for the second time from the College of Liberal Arts and Sciences must wait at least one academic year before applying for readmission. In addition, a dismissed student must demonstrate academic success by completing a minimum of 12 hours of transferable academic course work at another higher education institution. To be readmitted, students must attain a grade-point average of 2.5 or higher in all hours taken after dismissal. All course work taken at every institution is calculated into the grade-point average since dismissal, even if the student opted for that institution’s retake policy. If students are lacking ENGL 102 (or equivalent) and the second required math course (MATH 105, MATH 111, MATH 115, MATH 121, MATH 365 or BIOL 570 or an equivalent course), they must complete these courses during the dismissal period. Upon readmission, the student must maintain at least a 2.5 semester grade-point average until reaching good academic status to be allowed to continue in the College of Liberal Arts and Sciences.
Note: Students who are in their last 30 hours must meet with the readmission advisor in College Student Academic Services to discuss their options.

A third dismissal is final.

**Required Undergraduate Work in Residence**

**Junior/Senior Hours Required for Graduation**

KU requires all students pursuing bachelor’s degrees to complete a minimum of 45 credit hours at the junior/senior level (courses numbered 300 and above). The College of Liberal Arts and Sciences requires that 30 of these 45 credit hours be completed in residence.

**Hours in the Major: Maximums and Minimums**

There is no limit on hours taken in the major for the B.A., B.G.S., or B.S. degree. Departments are not allowed to require more than 40 hours in the major for the B.A. or more than 50 hours in the major for the B.S. Some skills courses and supporting science courses are not included in this maximum limit. A minimum of 12 hours in the major must be in courses numbered 300 or above. At least 15 hours in each major(s) must be taken in residence at KU.

**Time Limits**

Undergraduates are strongly encouraged to complete the bachelor’s degree within 4 academic years. Students should complete a minimum of 30 credit hours each year. If a student is unable to complete 30 hours in the fall and spring terms, summer enrollment should be strongly considered.

Students have a maximum of ten years to complete their undergraduate work in the College of Liberal Arts and Sciences under degree requirements in effect at the initial term of matriculation. Students experiencing a break in enrollment during these ten years will follow their curricular requirements at the point of matriculation provided that the break in enrollment does not exceed two calendar years. Students readmitted after two years are held to the curricular requirements in place at the term of readmission. Students maintaining continuous enrollment but who do not complete their degree requirements within ten years, may petition the College to complete their degree requirements under the curricular requirements in effect during the term of admission.

**Transfer of Credit**

CredTran (http://credittransfer.ku.edu) is a transfer course equivalency system that lists more than 2,200 colleges and universities from which KU has accepted transfer courses in the past. If your school or course is not listed, your evaluation will be completed when you are admitted to KU.

Only transfer grades of C or higher contribute to total hours earned for students entering KU in spring 1990 or after, and for courses taken in spring 1990 or after by all students. For questions about transfer work fulfilling College requirements, contact College Student Academic Services (http://clas.ku.edu/undergrad), 109 Strong Hall.

**Graduate University Regulations**

The pursuit of graduate study in the College of Liberal Arts and Sciences at KU is governed by department- or program-specific policy, College policies and procedures, Graduate Studies policies, and University Senate Rules and Regulations. Information on the most frequently consulted policies is contained in this section. Students should also consult the academic unit’s handbook, Graduate Studies and College sections of the KU Policy Library, and the Graduate Studies and University of Kansas Regulations sections of the online catalog.

**Academic and Research Integrity**

The College of Liberal Arts and Sciences strictly enforces KU and College policies on academic and scholarly misconduct. Academic integrity requires honest performance of academic and research responsibilities by students. These include, but are not limited to, ethical preparation of assignments, reports, and research papers; completion of examinations; ethical treatment of human and animal subjects; execution of administrative requirements; and a sincere and conscientious effort by students to abide by the policies set forth by instructors and research advisors.

**Enrollment**

**Full-time, Half-Time and Part-Time Enrollment**

Graduate Studies defines full-time enrollment as 9 credit hours in Fall or Spring semester and 6 hours in the summer session. Maximum enrollment for graduate students, except in rare instances, is 16 hours in Fall or Spring semester and 9 hours in the summer session. Please see the Full-time Enrollment for Graduate Students policy in the Graduate Studies (p. 2369) section of the online catalog and the KU Policy Library (http://policy.ku.edu) for more information on what constitutes full-time, half-time, and part-time enrollment, including variations on this policy for GTA/GRA/GA appointments and active duty military. At a minimum, all graduate students should be continuously enrolled in the Fall and Spring semesters while completing the credit hours required for the fulfillment of their degrees. Please consult the Graduate Studies (p. 2369) section of the online catalog and the KU Policy Library (http://policy.ku.edu) for other enrollment regulations.

**Continuous Enrollment for Master’s Students**

All master’s students in the College who have completed the required coursework for their degrees must be continuously enrolled in the Fall and Spring semesters until all remaining requirements for the degree, including thesis when applicable, are completed. No enrollment is required during the summer session unless it is the semester during which the student will graduate, in which case enrollment is required. Certain academic units have rules governing summer enrollment.

**Post-Comprehensive Enrollment for Doctoral Students**

After passing the Comprehensive Oral Exam, doctoral candidates must be continuously enrolled. During this time, until all requirements for the degree are completed (including the filing of the dissertation) or until 18 post-comprehensive hours have been completed (whichever comes first), the candidate must enroll for a minimum of 6 hours a semester and 3 hours a summer session. At least one of these hours must be in dissertation or approved dissertation equivalent coursework.

In addition, the College requires a period of at least 5 months to elapse between the comprehensive oral exam and the final exam. Students that have completed all degree requirements before completing 18 hours are still required to continue enrollment until this 5-month requirement has been met.
Upon completion of the 18-hour requirement, a student’s level of enrollment should reflect as accurately as possible the faculty time he or she utilizes. This may be as little as one hour per semester.

Special enrollment requirements apply to those with GTA/GRA/GA appointments. Please consult the Graduate Studies (p. 2369) section of the online catalog and the KU Policy Library (http://policy.ku.edu).

Lapses in Enrollment
Generally, no student is allowed to enroll after the first 4 weeks of a semester or the first 2 weeks of a summer session. If a student does not intend to enroll, he or she must determine the appropriate course of action in consultation with the department or program.

The student may elect to Voluntarily Discontinue from the program, and must inform the department or program in writing of this decision, which will in turn file the necessary forms with the College. This option requires the student to seek re-admission to the program if they choose to return at a future date. They remain eligible to seek admission to another department or program in the College.

The student may also petition for a Leave of Absence of up to one calendar year. If granted, the Leave of Absence maintains the student’s place in the program. Leave of Absence petitions must be filed by the department or program and provide evidence of the department or program’s endorsement of the student’s petition. Students interested in this option should begin by consulting with their advisor.

The time spent on Leave of Absence does not count toward the student’s time to degree, and therefore does not shorten the time available to complete their degree requirements. Similarly, if a student that has elected to Voluntarily Discontinue subsequently returns to the program, the time that has elapsed since his or her last enrollment does not count toward the time to degree.

Students who fail to enroll without completing the Voluntary Discontinuance process or without being granted a Leave of Absence are reviewed by the College Office of Graduate Affairs and the students’ academic units for possible dismissal. Any time that accrues during these lapses of enrollment in which the student does not occupy any approved enrollment category (e.g., Enrolled, Voluntarily Discontinued, On Leave) is counted toward the time to degree.

Students on an international student visa should consult with the International Programs office prior to any change in enrollment status.

Please see Graduate Studies policies governing Leave of Absence and Voluntary Discontinuance in the Graduate Studies (p. 2369) section of the online catalog and in the KU Policy Library (http://policy.ku.edu).

Dual Enrollments
Students enrolled in two schools or working on two degrees at the same time must complete the work for both degrees. Courses may not be counted toward both degrees, except in the joint degree programs that have been established (e.g., M.P.A./J.D., M.A. in Economics/J.D., M.B.A./M.A. in Area Studies, etc.). Please refer to the Combined Degrees information in the Graduate Studies (p. 2369) section of the online catalog for a complete list of approved joint degree programs.

University Regulations on Grading

Article II of the University Senate Rules and Regulations provides detailed information on regulations governing the grading of graduate coursework.

Students should also consult the Graduate Studies (p. 2369) section of the online catalog and the KU Policy Library (http://policy.ku.edu) for more information on the Grading Policy.

The following are of particular relevance for graduate students in the College:

Passing Grades for Graduate Coursework

Only courses graded C or above are considered passing and may be counted for graduate credit. Courses graded C-, D or F may not be used to fulfill degree requirements.

Incomplete (I) and Waiting Grades (WG)

Incomplete (I) grades are used to note, temporarily, that students have been unable to complete a portion of the required course work during that semester due to circumstances beyond their control. Incomplete work must be completed and assigned an A-F or S/U grade within the time period prescribed by the course instructor. After one calendar year from the original grade due date, an Incomplete (I) grade will automatically convert to a grade of F or U, or the lapsed grade assigned by the course instructor.

Waiting Grades (WG) are placeholders and should only be used in rare instances when, for reasons beyond his or her control, an instructor is not able to assign a course grade by the deadline.

Credit/No Credit (CR/NC)

Graduate students may select the Credit/No Credit option only for those courses that do not fulfill a degree requirement. This includes courses used to fulfill the Research Skills and Responsible Scholarship requirement. Students should consult with their advisor prior to electing the CR/NC option.

College-Specific Grading Policy

Plus/Minus (+/-) Grades

Plus/minus (+/-) grades may be used in the College. The plus or minus sign describes intermediate levels of performance between a maximum of A and a minimum of F. Intermediate grades are calculated as 0.3 units above or below the corresponding letter grade.

Participation (P) Grades

Use of the Participation (P) grade is restricted in the College. It is only approved for a limited number of courses for which special permission has been sought. When permission is granted, it is only used to indicate participation in thesis, dissertation, or research enrollments (related to thesis or dissertation), or in the first semester enrollment of a two-semester sequence course. In any semester, the instructor may elect to assign a letter grade of A, B, C, D, or F when evidence about performance is available. A letter grade (A, B, C, D, or F) must be assigned in the last semester of enrollment to characterize the quality of the final product.

A-F or S/U grades are used in all other courses, including those that are repeated across semesters. The latter include courses in which students are collecting, assembling, or analyzing data; reviewing a research or scholarly literature; creating portfolios; or writing theses or dissertations (e.g., research, thesis, and dissertation hours). Students in these courses are expected to develop plans of study with their instructors and to contact these instructors throughout the semester to discuss their progress or changes in their plans. Instructors assign grades each semester based on the quantity and quality of the work students complete that semester. The
grades that students receive in the last semester of these courses (e.g., for completing data analyses and literature reviews, exhibiting portfolios, defending theses or dissertations) apply only to that semester.

If a department or program has a course for which the P grading system may be more appropriate than the A-F or S/U grading system, it must seek special approval from the College.

Incompletes (I) and Waiting Grades (WG)

The College does not allow graduate students to take oral comprehensive final examinations or to go forward with a thesis or dissertation defense if a waiting grade (WG) or an incomplete (I) grade is listed on the student’s transcript.

Probation and Dismissal Guidelines

To be in good standing, a student must maintain a 3.0 cumulative grade-point average and be making satisfactory progress toward the degree, as determined by the department or program.

If the grade-point average falls below 3.0, the department or program notifies the student in writing that they are being recommended for probation and outlines the expectations of the graduate program and the College that the student must meet to return to good standing. This is followed by a letter from the College confirming their probationary status.

When the rationale for probation is based on grade-point average, a student is typically placed on probation for 1 academic semester. If the cumulative grade-point average has not risen to 3.0 at the end of that semester, the student can either be dismissed or be allowed to continue on probation, depending on the department or program’s assessment of the student’s progress.

Students may also be placed on probation for failing to make satisfactory progress toward the degree. This may include, but is not limited to, failed exams or failure to make adequate and timely progress on the dissertation or thesis.

A graduate student is dismissed upon recommendation of the student’s department or program. This typically occurs when a student fails to raise the grade point average to 3.0 after one or more semesters of probation, or otherwise fails to meet the terms of the probationary period. Academic dismissal should occur before a semester begins. If a student is dismissed during the semester, the dismissal is effective only at the end of the semester in which the department or program gives notification of dismissal. The department or program will notify the student in writing of the reasons for their dismissal. This will be followed by a letter from the College confirming the dismissal from the program and from the College.

In cases when a student’s grade point average is so low that their ability to ever achieve the 3.0 grade-point average required for graduation is in serious doubt, the department or program should move to dismissal. If they wish to allow the student to continue, they must petition the College on the student’s behalf.

A student who has been dismissed from a graduate department or program in the College is not eligible for readmission to graduate study in any department or program in the College of Liberal Arts and Sciences.

Time Limits

The University and the College have established time limits governing various stages of the graduate student career.

Maximum Time to Count Required Course Work

Courses completed at the University of Kansas, or transfer credits from another university, are valid for a period of 10 years. Courses that were completed more than 10 years before the scheduling of the final defense may not be used to fulfill graduate degree requirements in the College of Liberal Arts and Sciences.

With the endorsement of their graduate programs, students may petition the College to accept out-of-date course work to fulfill the requirements for their graduate degrees, provided they are able to justify why this course work meets the current standards of scholarship in the discipline.

Maximum Time to Submit Thesis or Dissertation

Students must make all final revisions and file the final version of the thesis or dissertation manuscript to UMI/ProQuest within six months of the date of final presentation and/or defense of the thesis or dissertation work. Until the final manuscript of a thesis or dissertation is filed, the student must be enrolled in accordance with enrollment policy. Graduate students in the College who do not file the final manuscript within the six-month time limit must enroll in 3 hours a semester until the thesis or dissertation is completed and filed.

Maximum Time to Complete the Degree

Graduate Studies has established time limits on master’s and doctoral degree completion. Please see Graduate Studies policies on Doctoral Program Time Constraints and Master’s Program Time Constraints in the Graduate Studies (p. 2369) sections of the online catalog and in the KU Policy Library (http://policy.ku.edu) for full details.

Master’s degree students have a total of seven calendar years, excluding any periods of absence due to an approved leave of absence or voluntary discontinuation from a program, in which to complete the work for a master’s degree.

Doctoral degree students have a total of eight calendar years, excluding any periods of absence due to an approved leave of absence or voluntary discontinuation from a program, to complete the Ph.D. This includes students who enter with a master’s degree from an institution other than KU and bachelor’s degree holders who bypass the master’s and are admitted directly to a Ph.D. program.

Students who complete the master’s degree at KU and subsequently begin doctoral studies have 10 years to complete both degrees.

A time limit extension may be granted by the College. All extension petitions require the department to prepare and file a Graduate Degree Completion Agreement, which must then be approved by a designated subcommittee of the Committee on Graduate Studies. Per Graduate Studies policy, extensions may be granted for up to one year. However, additional time may be requested in the Completion Agreement. If the Completion Agreement is approved, subsequent petitions will receive an expedited review.

Academic units may set their own, more rigorous time limits. Consult with your advisor and review your academic unit’s handbook and the
relevant Departments and Programs section of the online catalog for program-specific information, requirements, and restrictions.

Graduation

All graduate students must be enrolled the semester they complete all degree requirements.

Graduate Studies establishes an early deadline for degree completion for each semester and summer session, usually occurring at the end of the first 2 weeks of a semester or the end of the first week of summer session. If the student meets all degree requirements including the submission of all required documentation by this date, they are not required to enroll for that semester.

The final Graduate Application for Graduation Deadline is set by the Registrar for each semester. Please consult the official Academic Calendar for specific dates. To be eligible for graduation, an application for degree must be submitted and all degree requirements met by this deadline. This includes the submission of all required documentation to the College Office of Graduate Affairs. See the Graduation section of the COGA (http://clas.ku.edu/coga/graduation) website for more information.

Undergraduate Awards

Graduation with Honors

Undergraduates may earn honors upon graduation in 3 ways, in addition to making the honor roll each semester. Students may graduate with distinction or highest distinction, earn departmental honors in the major, or complete the University Honors Program. It is possible to earn honors in 1 of these areas, any combination of them, or all 3. The award of honors is noted on the student’s transcript and in the Commencement program. Distinction and highest distinction are noted on the diploma.

Graduation with Distinction or Highest Distinction

The top 10 percent of each year’s graduating class is designated as graduating with distinction. Of these, the top one-third is designated as graduating with highest distinction. To be eligible, students must have completed at least 60 credit hours, graded A through F, in residence at KU. See Required Work in Residence below.

Graduation with Departmental Honors

Most departments and programs allow qualified majors to work toward graduation with departmental honors. Graduation with departmental honors is awarded in recognition of exceptional performance in the major, completion of a program of independent research or an alternative project, and a strong overall academic record.

In addition to the requirements of individual departments and programs (which must be approved by the College committee on undergraduate studies and advising), the College requires the following for graduation with departmental honors:

1. Candidates must declare the intention to work for departmental honors with the appropriate departmental honors coordinator(s) no later than the time of enrollment for the final undergraduate semester, but sooner if required by the department(s). Copies of the intent form should be returned to College Student Academic Services.

2. At the end of the final undergraduate semester, the candidate must have achieved an overall grade-point average of at least 3.25 and a grade-point average of at least 3.5 in the major. Both overall and major grade-point averages include work completed at other institutions, as well as at KU. No minimum grade-point average is required to declare candidacy for graduation with departmental honors unless specified by the department.

3. Each candidate’s departmental honors work must include independent research or an acceptable alternative project. The results of research are presented in a form appropriate to the requirements of the major department. Equivalents to the independent research component are established by approved departmental honors programs. In courses meeting the independent research requirement, the candidate must earn a grade of B or higher. Successful completion of all departmental honors requirements must be certified to the departmental honors coordinator(s) by a panel composed of at least three members of the College faculty who have read the report of the independent research and heard the oral presentation, where required.

Late Completion of Honors Requirement

Requirements for graduation with honors may be completed after the date on which certifications are requested from departments, and in some cases, requirements, if not needed for graduation, may be completed after a student has graduated. However, the Incomplete policy does apply and grades would lapse at the time of graduation. When a candidate finishes all requirements, departments must notify College Student Academic Services in writing.

Honor Roll

Undergraduates with grade-point averages of 3.5 who have completed at least 12 hours with letter grades are recognized on the honor roll or dean’s list in fall and spring. An Honor Roll notation appears on the transcript.

Honors Program

The University Honors Program provides opportunities for outstanding and creative undergraduates in all schools at KU to develop their full potential during their undergraduate years. See Honors in this section of the online catalog for further information.

Graduate Awards

The College of Liberal Arts and Sciences offers several awards to recognize outstanding graduate students, faculty service, teaching excellence, and exemplary advising. Below, you will find a brief description of each award. More specific information about eligibility and the call for nominations each year can be found on the College’s website under Faculty Awards (http://clas.ku.edu/resources/faculty-staff/awards) and Graduate Student Awards (http://clas.ku.edu/resources/faculty-staff/awards).

Graduate Student Awards

Howard J. Baumgartel Peace and Justice Award

This is an annual award to support a graduate student in the College or the School of Business for thesis or dissertation research whose interests, achievements, and talents are in the peace and justice field.

Outstanding Thesis/Research Project Award

The Committee on Graduate Studies in the College has established 2 annual awards for students receiving a master's degree. The awards carry
a $500 stipend. Students are nominated for the award by their advisors. Each department may nominate one master's student for each award.

Graduate Faculty Awards

Byron A. Alexander/John C. Wright Graduate Mentor Awards

Graduate students (current or those who have graduated since May of the calendar year prior to the award deadline) may nominate any tenured or tenure-track faculty member in the College of Liberal Arts and Sciences who has served as an outstanding mentor.

Career Achievement Teaching Award

This annual award recognizes a retired faculty member in the College of Liberal Arts and Sciences who has made a significant contribution to the teaching of College students at either the undergraduate or graduate level and who has distinguished him/herself through excellence in teaching. The award amount is $1,000.

African African-American St Courses

AAAS 102. Arabic and Islamic Studies. 3 Hours. NW/SC AE42/GE3H/GE3S / U.

An introduction to the study of Islam and the Arabic language in relation to Islamic cultures in Africa, the Mediterranean region, and beyond. Topics covered include the historical origins of Islam in relation to the Arabic language and its cultures of origin. This course is interdisciplinary, including attention to the topic from the perspectives of historical unfolding of both the language and religion, geographic and cultural perspectives, political and economic concerns, and aesthetic perspectives, including literature and the arts. LEC.

AAAS 103. Introduction to Africa. 3 Hours. NW/SC GE3H/GE3S / S/W.

An introduction to the interdisciplinary study of African cultures and societies focusing on contemporary life on the continent. Topics to be covered include the geography, history, politics, and economics of the continent, as well as the religion, languages and literatures, music, and the arts. The interdisciplinary perspective will provide students with a sound basis for understanding contemporary African societies. LEC.

AAAS 104. Introduction to African-American Studies. 3 Hours. SC AE41 / U.

Interdisciplinary introduction to the basic concepts and literature in the disciplines covered in African American Studies. Includes the social sciences, and humanities (including history, religion, and literature) as well as conceptual framework for investigation and analysis of Black history and culture and society. LEC.

AAAS 105. Introduction to African History. 3 Hours. NW GE11/GE3H / H/W.

An introduction to important historical developments in Africa, mainly south of the Sahara. Topics will include pre-history, empires, kingdoms and city-states, the slave trade, southern Africa, partition and colonialism, the independence era, military and civilian governments, and liberation movements. Approaches will include literature, the visual arts, politics, economics, and geography. (Same as HIST 104.) LEC.

AAAS 106. The Black Experience in the Americas. 3 Hours. HT AE41 / H/W.

An interdisciplinary study of the history of the African peoples of the New World, relating their cultures and institutions to the African background and to their peculiar New World experiences up to and including the nineteenth century. While the main emphasis is on the U.S.A., attention is also paid to the Caribbean and Latin America. Approaches include demography, economics, social and political developments, literature, and music. (Same as HIST 109.) LEC.

AAAS 115. Introduction to African History, Honors. 3 Hours. NW GE3H / H.

An intensive version of AAAS 105/HIST 104. An introduction to important historical developments in Africa, mainly south of the Sahara. Topics include early history, empires, kingdoms and city-states, the slave trade, southern Africa, partition and colonialism, the independence era, military and civilian governments, and liberation movements. Approaches include literature, the visual arts, politics, economics, and geography. Open only to students in the University Honors Program or by consent of instructor. (Same as HIST 111.) LEC.

AAAS 116. The Black Experience in the Americas, Honors. 3 Hours. HT AE41 / H.

An intensive version of AAAS 106. Open only to students on Dean's Honor Roll or enrolled in Honors Program, or consent of instructor. LEC.

AAAS 160. Introduction to West African History. 3 Hours. NW AE42/GE3H / H.

This course treats West African history through the first part of the twentieth century. The student is provided with a perspective on the major historical patterns that gave rise to West Africa's development as an integral part of world history. Special attention is paid to anthropological, geographical, and technological developments that influenced West African political and socioeconomic changes. (Same as HIST 160.) LEC.

AAAS 177. First Year Seminar: ______. 3 Hours. GE11 / U.

A limited-enrollment, seminar course for first-time freshmen, addressing current issues in African-American Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

AAAS 200. Directed Studies. 3 Hours. U.

This course is designed for the study of special topics related to African and the freshman/sophomore level. It prepares students for continued practice in cultural reading and writing and for the academic rigor that awaits them at the upper levels. Prerequisite: Consent of department. IND.

AAAS 210. Brazil and Africa: Atlantic Encounters. 3 Hours. H.

This is a survey course on the history of the relationships between Brazil and Western Africa from the sixteenth century onward. We examine the shape of the Atlantic world, the nature of the Portuguese empire in Brazil and Africa, the presence of Brazilian born agents in Western Africa, the cultural exchanges, the impact of colonial rule, and the responses of indigenous societies to these developments. Among the topics to receive attention are Brazil/Portuguese slave trade; slavery in Western Africa, urban and rural context of African slavery in Brazil; the family and religious life in both sides of the Atlantic; Brazilian communities in the coast of Africa; the abolition of slavery; and the long-lasting relationships between Western Africa and Brazil. Students develop familiarity with major historical concepts, themes, and subjects. The course also aims to explore history as process to make sense of the past and the present. (Same as HIST 210.) LEC.

AAAS 300. African Traditional Religion and Thought. 3 Hours. NW / H/W.

A study of African traditional religious beliefs, systems and practices and how these have conditioned spiritual, moral and social values, attitudes, social relationships and institutions, art, literature and music. Topics covered include the African world-view, concepts of birth, life, marriage, death and reincarnation; the concurrent practice or monotheism, polytheism and the cult of the ancestors; and the extent of relevance to
Black societies in the New World. Prerequisite: AAAS 103 or AAAS 105 or AAAS 106 or consent of instructor. LEC.

AAAS 301. Portrait of a Third-World Nation: Haiti. 3 Hours. NW / H/W.
Case study of Third-World problems and aspirations through the first Black nation to win independence from colonialism. Topics include: profile of the Third World; Caribbean diversity; the Columbian exchange; piracy; slavery and plantocracy; Revolution and the burden of freedom; U.S. occupation; Papa Doc, Baby Doc, and the Tontons Macoute; Liberation theology; peasant life; government and corruption; poverty and hunger; morality of foreign aid; Voodoo; folk medicine. No knowledge of Haitian or French required. Students may not receive credit for both HAIT 200 and AAAS 301. LEC.

AAAS 302. Contemporary Haiti. 3 Hours. NW.
Detailed analysis of recent Haitian history. The focus will include interactions between religion, social structure, politics, economics and international relations. (Same as HAIT 300.) Prerequisite: AAAS 301/HAIT 200, or consent of instructor. LEC.

AAAS 303. Peoples and Cultures of North Africa and the Middle East. 3 Hours. NW / S.
This course familiarizes students with the peoples and cultures of North Africa and the Middle East. It examines the cultural, demographic, and religious diversity of the region, as well as the development of the early Islamic community and the formation of Islamic institutions. Issues such as religion and politics, inter-religious relations, nation-building, Islamic response to colonialism, Palestinian-Israeli conflict, Islamic resurgence, secularism, democratization, and gender, are also explored. (Same as ANTH 303.) LEC.

AAAS 305. Modern African History. 3 Hours. NW AE42 / H/W.
A survey of social, political, and economic developments during the colonial era and independence struggles, followed by a closer examination of the contemporary experience in a selected country or region. (Same as HIST 300.) LEC.

AAAS 306. The Black Experience in the U.S. Since Emancipation. 3 Hours. H.
An interdisciplinary study of the history and culture of Black people in America from Reconstruction to the present. Topics covered include an analysis of Reconstruction, Black leaders, organizations and movements, the Harlem Renaissance, migration, and race relations. Demographic variables covered include socio-economic class, education, political persuasion, and influence by avant-garde cultural changes. (Same as HIST 359.) LEC.

AAAS 307. Modern African History, Honors. 3 Hours. NW AE42 / H.
An intensive version of AAAS 305. A survey of social, political and economic developments during the colonial era and independence struggles, followed by a closer examination of the contemporary experience in a selected country or region. Open only to students admitted to the University Honors Program, or by consent of the instructor. (Same as HIST 307.) LEC.

AAAS 316. Ministers and Magicians: Black Religions from Slavery to the Present. 3 Hours. H.
This course examines the history and diversity of African American religious expression from slavery until the present, emphasizing both mainstream and alternative faiths. It covers the religious world views of enslaved Africans, and examines faiths inside and outside of Christianity. Topics may include: independent black churches, magical practices, the Holiness and Pentecostal movements, black Islam, religious freemasonry, and esoteric faiths. The class emphasizes the influence of gender, class, race, migration, and urbanization on black religion. (Same as AMS 316 and HIST 316.) LEC.

AAAS 317. African American Women: Colonial Era to the Present. 3 Hours. H.
This interdisciplinary course covers the history of African American women, beginning in West and Central Africa, extending across the Middle Passage into the Americas, and stretching through enslavement and freedom into the 21st century. The readings cover their experiences through secondary and tertiary source materials, as well as autobiographies and letters, plays and music, and poems, novels, and speeches. (Same as AMS 317, HIST 317, and WGSS 317.) LEC.

AAAS 320. African Studies In: ______. 3 Hours. NW AE42 / H/W.
Lecture and discussion course in African area of current interest. May be repeated for credit toward the major. Prerequisite: AAAS 103 or AAAS 105 or consent of instructor. LEC.

AAAS 321. African Studies In, Honors: ______. 3 Hours. H/W.
Lecture and discussion course in African area of current interest. May be repeated for credit toward the major. Only open to students admitted to the University Honors Program or with permission of the instructor. Prerequisite: AAAS 103 or AAAS 105 or AAAS 115 or consent of instructor. LEC.

AAAS 322. Legal Issues and the African American. 3 Hours. H.
This course examines civil issues in African-American communities and populations, and their legal ramifications. Topics such as the penal system, court sentencing, death penalty, cultural norms, law enforcement and civil liberties are critically examined within social and humanistic theories. LEC.

AAAS 323. African-American Studies In: ______. 3 Hours. H.
Lecture and discussion course in African-American area of current interest. May be repeated for credit toward the major. Prerequisite: AAAS 106 or consent of instructor. LEC.

AAAS 324. African-American Studies In, Honors: ______. 3 Hours. H.
Lecture and discussion course in African-American area of current interest. May be repeated for credit toward the major. Only open to students admitted to the University Honors Program or with permission of the instructor. Prerequisite: AAAS 106 or AAAS 116 or consent of instructor. LEC.

AAAS 325. Popular Black Music. 3 Hours. H.
This is a comparative study of popular music produced in Africa, and the African Diaspora. The praxis, theories, histories, forms, artists and audiences are discussed. LEC.

AAAS 327. African American Culture. 3 Hours.
This course defines African American culture and seeks to identify ways in which it is distinct, both in terms of its roots and ongoing evolution. LEC.

AAAS 328. African American Urban Community and Class in the Midwest. 3 Hours. H.
This course provides historical perspective on African Americans and the politics of economic class within black urban spaces from the end of Reconstruction to the post-World War II era. It focuses on the development of an upwardly mobile urban black middle class, and impoverished black urban "underclass," since the 1960s. Students are encouraged to successfully completed one of three courses: AAAS 104, AAAS 106, or AAAS 306. (Same as HIST 338.) LEC.

AAAS 330. Black Leadership. 3 Hours. H.
The course focuses on the concept of leadership and on Black leadership in the United States. An in-depth analysis of selected case studies of Black leaders both historical and contemporary. Some attention will be given to the dispersion of Africans into the Americas and the leadership that emerged, conditioned both by environmental factors and the psychology engendered by the system of slavery. Selected successful
Black leaders will be invited to visit the class from time to time. (Same as AMS 340.) LEC.

**AAAS 332. Introduction to African Literature. 3 Hours. NW AE42 / H/W.**

Reading, analysis, and discussion of contemporary fiction, poetry, and drama from sub-Saharan Africa. Brief attention is paid to historical development and to traditional literature. (Same as ENGL 339.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

**AAAS 333. Introduction to Caribbean Literature. 3 Hours. AE42 / H/W.**

Reading, analysis, and discussion of fiction, poetry, and drama from the Caribbean, including a small selection of Spanish, French, and Dutch Antillean works in translation. (Same as ENGL 339.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

**AAAS 334. Introduction to African Dance Theatre. 2 Hours. NW / U.**

Introduction to the general techniques of non-verbal theatrical conventions in African cultures. Practical training in movement vocabulary supplemented by lectures on the "text" of performance. There will be an end of semester "studio performance." (Same as DANC 230 and THR 226.) LEC.

**AAAS 335. Introduction to Southern African Literature. 3 Hours. NW / H/W.**

This course deals with the literatures of the southern Africa region, including works by both women and men from South Africa, Botswana, Lesotho, Zaire, Zimbabwe, and Mauritius. Course includes close attention to the political and cultural bases of social conflict in the region. LEC.

**AAAS 336. Introduction to African Literature, Honors. 3 Hours. NW / H/W.**

Reading, analysis and discussion of contemporary fiction, poetry, and drama from Africa. Brief attention is paid to historical development and to traditional literature. Prerequisite: Open only to students admitted to the University Honors Program or with consent of instructor. Not open to students who have taken AAAS 332. LEC.

**AAAS 340. Women in Contemporary African Literature. 3 Hours. NW AE42/GE3H / H.**

A critical study of issues and questions raised about women in contemporary African literature and implications for the larger society through the analysis of theme, language, characterization, roles and functions of women in selected works. (Same as WGSS 330.) LEC.

**AAAS 345. Popular Culture in Africa: Spiritual Thrills, Romance and Sexualities. 3 Hours. H.**

This course examines how the different constituents of popular culture mobilize, construct and structure gender, and spiritual and sexual identities in select contemporary African countries. Discussions also focus on how popular culture mediates the contesting spaces of indigenous local constructs and the push and pull of global forces to create geographic and contemporary specificities. (Same as WGSS 345.) LEC.

**AAAS 349. Islam. 3 Hours. NW AE42/GE3S / H/W.**

Islam's Origins, the prophet Muhammad, the Holy Koran, religious symbols and moral mandates, and historical developments. (Same as REL 350.) LEC.

**AAAS 350. Physical Geography of Africa. 3 Hours. N.**

This course is a survey of the basic physical features of the African continent including structure and relief, rivers and lakes, soils and mineral resources. It includes characteristics and processes of African climates, and the ecology of Africa's four major biomes: tropical rain forest, savanna, steppe, and desert. Climatic and environmental variations of the past, emergence of humankind, and development of pastoral and farming systems are discussed. Contemporary environmental concerns also include deforestation and desertification, the impacts of drought, methods for monitoring African environments, and Africa's prospects in a 21st century suffering from global warming. (Same as GEOG 350.) LEC.

**AAAS 351. Africa's Human Geographies. 3 Hours. NW AE42/GE3S / S/W.**

An introduction to historical, cultural, social, political, and economic issues in Africa from a geographic perspective. The course begins with the historical geography of humanity in Africa, from ancient times through to the present. Other topics include cultural dynamics, demography, health, rural development, urbanization, gender issues, and political geography. Case studies from Eastern and Southern Africa will be used to illustrate major themes. (Same as GEOG 351.) LEC.

**AAAS 353. Modern and Contemporary African Art. 3 Hours. H.**

In this course, we examine the development of artistic modernisms in Africa in historical context. We also study the content, production, patronage, and display of modern and contemporary African art. In doing so, we consider African artists' engagement with modernity, globalization, and contemporary issues, as well as interrogate influential myths and assumptions regarding African artists and the work they produce. Course themes include the workshop as a critical site, independence movements and the creation of national art forms, art as global commodity, and art in resistance, remembrance, and revolution. (Same as HA 353.) LEC.

**AAAS 355. African Theatre and Drama. 3 Hours. NW / H/W.**

A study of the origin and development of continental African theatre and its affinity to the Levant. Traditional, colonial and contemporary dramatic theories and experiments will be examined in play selections. (Same as THR 326.) LEC.

**AAAS 356. African-American Theatre and Drama. 3 Hours. H.**

A historical study of Black theatre in the U.S.A. from its African genesis to its contemporary Americanness. Epochs in African-American dramaturgy will be critically examined. (Same as THR 327) LEC.

**AAAS 370. Introduction to the Languages of Africa. 3 Hours. NW AE42/GE3S / H/W.**

A survey of the indigenous languages of Africa from a linguistic perspective, covering the main language families and their geographic distribution, and focusing on the features and structure of the more widely spoken and representative languages in each family (e.g., Fula, Hausa, Maninka, Swahili, Yoruba). (Same as LING 370.) LEC.

**AAAS 372. Religion, Power, and Sexuality in Arab Societies. 3 Hours. NW / S.**

This course examines theories of religion, discourse, power, and sexuality in their application to Arab societies. The course introduces different aspects of Arab cultures. Through canonical works, we study political domination, tribal social organization, honor, tribe, shame, social loyalty, ritual initiations and discuss how these issues speak generally to anthropological inquiry. Regionally specific works are then framed by an additional set of readings drawn from anthropological, linguistics, and social theories. (Same as ANTH 372.) LEC.

**AAAS 376. West African Art. 3 Hours. NW / H/W.**

Introduction to the rich visual art traditions of West Africa. Emphasis is given to the major art-producing cultures of the Western Sudan and the Guinea Coast, including the pre-historic cultures of Nigeria, Mali, and Ghana. The diverse forms of figure sculptures and masquerade performance and meanings of these arts in historical and cultural contexts are examined. (Same as HA 376.) LEC.
AAAS 388. The Black Woman. 3 Hours. S/W.
An interdisciplinary study of the role of Black women in our society, from the African background through the plantation experience to the present. Prerequisite: One course in the social sciences and/or humanities or consent of instructor. LEC.

AAAS 400. Readings in: _____. 3 Hours. U.
Investigation of a subject selected by a student in consultation with a departmental adviser and conducted under supervision. Individual reports and conferences. Open only to students who have completed at least six credit hours in African and African-American studies. Cannot be repeated for credit. Prerequisite: Consent of instructor. IND.

AAAS 415. Women and Islam. 3 Hours. H/W.
Addresses the widely-held stereotype of Muslim women as pawns in a patriarchal socio-religious context. Investigating the Muslim cultures of certain regions, the course will examine the manner in which indigenous culture was influenced by the introduction of Islam and the historical impact of Islam on women's social roles. Focusing principally on social change in the 20th century, the course will consider how socio-political change affects religious roles where religion is integrally involved in daily life. To what extent is individualism valued, and how are the pressures of late 20th century life mediated? The course will draw on texts from history, sociology, and literature. Prerequisite: REL 107 or AAAS 349/REL 350 or consent of instructor. LEC.

AAAS 420. Intercultural Communication: The Afro-American. 3 Hours. AE41 / H.
An examination of the barriers to effective communication between Black Americans and non-Black Americans. (Same as COMS 447.) Prerequisite: Skills in basic composition essential. LEC.

AAAS 429. Postcolonial Theatre and Drama. 3 Hours. NW AE42/GE3S / H.
The course develops an understanding of the postcolonial concept and its different manifestations in theatre and drama across nations and cultures. It approaches postcolonialism as a way of reading theatre, and as a genre within theatre by exploring how the "colonial project" has reconfigured the concept, content, and context of theatre in both colonized and colonizing cultures. In addition to the study of postcolonial playwrights and their works, the course is also an introduction to postcolonial theory and its critics. (Same as THR 429.) LEC.

AAAS 432. Francophone African Literature. 3 Hours. NW AE42/GE3S / H/W.
This course is an introduction to 20th century African literature written in French, covering selected works by major authors from both sub-Saharan Africa and the Maghreb. Attention will be given primarily to the novel, although some poetry will also be read. Topics and themes include négritude, African identity in the wake of colonialism, Islam, and women's writing. Classes will be conducted in English. Students may read the texts in French or in translation. (Same as FREN 432.) Prerequisite: ENGL 102 and a 200-level English course. LEC.

AAAS 433. Islamic Literature. 3 Hours. NW AE51 / H/W.
This course focuses on literature that reflects Islamic culture from its inception to contemporary times. Beginning with attention to the importance of the spoken word in the establishment of Islam, course readings and lectures follow the place of literary works in confirming Islamic perspectives. Readings include selections from the Qur'an, classical works of poetry and narrative, and contemporary autobiography. Authors are from Africa and the region of the Golden Age of Islam, including the best known: al-Ghazali (d.1111 C.E.), Attar (d. circa 1193-1235), Ibn Arabi (d. 1240 C.E.), Rumi (d. 1273), Saadi (d.1291), Hafiz (d. 1389 C.E.), and Shah (contemporary), as well as readings by and about less well known Muslim women scholars and Sufis in all historical periods. Readings are all in English translations. LEC.

AAAS 434. African Women Writers. 3 Hours. NW / H/W.
This course focuses on four decades of African women's writing from all regions of the continent. Works included deal with a wide variety of issues relevant to African women, as well as universal issues of conceptions of gender roles, and the struggle to attain personal rights and freedom within traditional cultural frameworks. LEC.

AAAS 435. Muslim Women's Autobiography. 3 Hours. NW / H/W.
This course examines the realities of Muslim women's experiences as conveyed in their own voices. Works are drawn from all over the world, from Africa and the Middle East to Europe and the U.S. and cover the nineteenth and twentieth centuries. LEC.

AAAS 440. The Afro-American Family: A Psychological Approach. 3 Hours. S.
The examination of the structure, values, and behavior patterns of the contemporary African-American family as influenced by African cultures and kinship systems and the institution of slavery in association with other factors. Social and psychological forces that have enhanced or blocked family survival, stability, and advancement will be explored. The orientation of Black family life will emphasize its strengths, weaknesses, adaptations, strong kinship bonds, and equalitarian family roles. LEC.

AAAS 445. Arab Thought and Identity. 3 Hours. NW / N/W.
The intention of this course is to present a comprehensive portrait and a deeper understanding of the Arab society and its cultural background. We will focus on the debate that is still raging about traditionalism versus modernity, and authenticity (assala) and specificity (Khususiyya) versus westernization. Moreover, we will discuss the question of Arab identity which manifests itself through a sense of belonging and diversity of affiliations, and relies as well on shared culture and its variations, and shared place in history and common experiences. It is designed for any student interested in this ethnic group. LEC.

AAAS 450. Popular Culture in the Muslim World. 3 Hours. NW / H.
A study of pop songs, television, comics, and other idioms of popular culture from different parts of the Muslim world, with attention to Muslims' sense of humor, tragedy, aesthetics, and pertinent issues of the day. (Same as REL 450.) LEC.

AAAS 460. Topics and Problems in African and African-American Studies. 1-3 Hours. H/W.
Individual investigation of special topics in African and African-American studies. May not be repeated for credit toward the major. Prerequisite: Six hours in African and African-American studies or consent of instructor. IND.

AAAS 470. Language and Society in Africa. 3 Hours. NW AE42/GE3S / H/W.
Examines issues and problems associated with language use in sub-Saharan Africa from a sociological perspective. Topics covered include an overview of the types of languages spoken on the continent: indigenous languages, colonial languages, pidgins and creoles, and Arabic as a religious language; problems associated with the politics of literacy and language planning, writing and standardization of indigenous languages; and the cultural and ideological dilemmas of language choice. (Same as LING 470.) Prerequisite: AAAS 103, AAAS 305, or LING 106; or consent of instructor. LEC.

AAAS 496. Field Experience. 3 Hours. AE61 / H/W.
A supervised placement in practical situations where students actively participate in organized work within the community, to be completed with an acceptable paper. The course may be taken in the United States, Caribbean, or Africa to meet the B.A. degree requirement in African and
African-American Studies. Open only to junior and senior majors or by consent of the department. FLD.

AAAS 501. Regional History: ____. 3 Hours. H/W.
A survey of the major political, social, economic and intellectual trends in a region of Africa or the Americas. Prerequisite: Five hours of distribution courses in history. LEC.

AAAS 502. Directed Language Study: _____. 5 Hours. U.
Study of an African language at Elementary I and Elementary II levels under individual supervision and with the aid of self-instructional material. Open to juniors and seniors in good standing and graduate students only and with permission of the department. May be repeated for up to 10 credit hours. Cannot be used to fulfill BA foreign language requirement. IND.

AAAS 503. Directed Language Study: _____. 3 Hours. U.
Study of an African language at Intermediate I and Intermediate II levels under individual supervision and with the aid of self-instructional material. Open to juniors and seniors in good standing and graduate students only and with permission of the department. May be repeated for up to 6 credit hours. Cannot be used to fulfill BA foreign language requirement. IND.

AAAS 504. Directed Language Study I: _____. 3 Hours. U.
Study of an African language at Advanced I and Advanced II levels under individual supervision and with the aid of self-instructional material. Open only to juniors and seniors in good standing, graduate students and with permission of the department. May be repeated for up to 6 credit hours. Cannot be used to fulfill BA language requirement. IND.

AAAS 505. Directed Language Study II: _____. 3 Hours. U.
Designed for native and near native speakers, this course involves reading of materials published in an African language intended for conversation, oral presentation, and writing by native speakers. May be repeated for up to 6 credit hours. Prerequisite: Native or near native speaker proficiency or consent of instructor. IND.

AAAS 510. Global Ethnic and Racial Relations. 3 Hours. NW AE42 / S.
An examination of constructions of race and ethnicity around the world. Emphasis is on the social, political, historical, cultural and economic factors that lead to the creation of ethnic and racial identities, ethnic conflict and accommodation, ethnic movements, and ethnic political organization. Racial and ethnic relations in the U.S. are compared with other countries. Major focus is placed on ethnicity in Africa, Asia, Latin America, the Caribbean, and/or the Middle East. (Same as AMS 534 and SOC 534.) LEC.

AAAS 511. The Civil Rights Movement. 3 Hours. H.
An examination of the Civil Rights Movement in American History. Emphasis is placed on the activities of major Civil Rights organizations, Civil Rights legislation and its impact on American life, and conflicts between integrationist and separatist forces in politics, economics, education, culture and race relations in the United States. LEC.

AAAS 512. African and Western Cosmologies. 3 Hours. H/W.
Ancient and modern Western world views will be compared to African world views, with special attention paid to the way these are supported in the underpinnings of sociocultural institutions. Prerequisite: A course in African Studies and a course in the philosophy of science or consent of instructor. LEC.

AAAS 517. Roots of Human Trafficking: Modern Slavery and Africa. 3 Hours. H.
This reading-intensive seminar explores human trafficking in the modern world. It examines labor exploitation and commercialization in a historical perspective. The course aims to explore how Imperialism led to the expansion of human trafficking and how women, men and children experienced labor exploitation in different ways. We examine how forced labor was/is behind the car and bicycle industries, sugar, coffee, and chocolate consumption. Today more than 27 million people are held, sold, and trafficked as slaves around the world. This course discusses similarities and differences between contemporary and historical slavery and analyzes why and how it persists nowadays. Readings include accounts of people held in bondage, case studies, and reports. Students develop familiarity with major historical concepts, themes, and subjects. Students also engage, investigate, and understand history as a process to explain how we make sense of the past and the present. Students carry on a research project throughout the semester about the historical roots of a modern case of slavery and/or human trafficking, producing original scholarship. (Same as HIST 517.) Prerequisite: Successful completion of a history course numbered below 500, or permission of instructor. LEC.

AAAS 520. African Studies in: ____. 3 Hours. NW AE42 / H/W.
Upper level lecture and discussion courses in African area of current interest and/or taking advantage of faculty resources in topics relevant to the major. May be repeated for credit toward the major. Prerequisite: Junior/Senior in good standing. LEC.

AAAS 521. African Studies In, Honors: _____. 3 Hours. H/W.
Upper level lecture and discussion courses in African area of current interest and/or taking advantage of faculty resources in topics relevant to the major. May be repeated for credit toward the major. Only open to students admitted to the University Honors Program or with permission of the instructor. Prerequisite: Junior/Senior in good standing LEC.

Historical development, systematic ideas and rites of selected periods, cultural settings, and movements. Prerequisite: Five hours of distribution courses in the humanities or AAAS 512 and consent of instructor. LEC.

Upper level lecture and discussion courses in African-American area of current interest and/or taking advantage of faculty resources in topics relevant to the major. May be repeated for credit toward the major. Prerequisite: Junior/Senior in good standing. LEC.

AAAS 524. African-American Studies In, Honors: _____. 3 Hours. H.
Upper level lecture and discussion courses in African-American area of current interest and/or taking advantage of faculty resources in topics relevant to the major. Only open to students admitted to the University Honors Program or with permission of the instructor. Prerequisite: Junior/Senior in good standing. LEC.

AAAS 525. Social History of Black Aging in America. 3 Hours. H.
The purpose of this course is to provide a comprehensive historical examination of American society’s changing attitudes and responses to aging and older adults, with emphasis on the Black aged. Beginning with the African background where older adults were highly valued, the course explores the impact of slavery, the industrial Revolution, urbanization and the development of the youth-oriented culture prevalent in the United States today. Subsequently, the course focuses on the emergence of twentieth century social gerontological problems and the role of the modern Black movements, public agencies, and private organizations in addressing the issues. Film, essays, drama, and/or fiction are utilized to illustrate the cultural attitudes of each historical period. Prerequisite: AAAS 103 or AAAS 105 or AAAS 106 or a course in American history, or consent of instructor. LEC.
AAAS 527. Popular Culture in Africa. 3 Hours. S/W.
This course examines multiple expressions of popular culture in contemporary Africa, focusing on the aesthetics of forms such as music, theater, dress, street art, and popular literary genres, as well as the social themes they deal with and the societies that produce them. The approach will be based on a critical reconsideration of notions such as traditional versus modern culture, elite versus folk art, westernization, and cultural hybridity, in order to find better ways of discussing the cultural vibrancy of everyday life in contemporary Africa. LEC.

AAAS 532. Studies in Islam. 3 Hours. H.
Study of religious thought, practice, and institutions of Islam with an emphasis on the examination of primary documents. (Same as REL 532.) LEC.

AAAS 534. The Rhetoric of Black Americans. 3 Hours. H.
A study of the rhetoric of Black Americans, from their earliest protest efforts to the contemporary scene, with the focus on the methods and themes employed to alter their status in American society. (Same as COMS 551.) Prerequisite: COMS 130. Skills in basic composition essential. LEC.

AAAS 536. Islamic Art and Architecture in Africa. 3 Hours. N.
Study of Islamic art and architecture in various cultural and geographical settings, from the first mosques of North African and the Swahili coast to contemporary Islamized masquerades in West Africa. We consider art objects and architectural sites in terms of religious practice, trade and commerce, ritual and political power, and contemporary expression. (Same as HA 536.) Prerequisite: AAAS 102, AAAS 103, HA 100, or HA 150; or permission of instructor. LEC.

AAAS 542. The History of Islam in Africa. 3 Hours. NW / H/W.
A study of the history and institutions of Islam in Africa. Emphasis will be placed on the impact of Islam on African traditional religions and African civilizations in general; the historiographical traditions of Islam in Africa. (Same as REL 535.) Prerequisite: Five hours of distribution courses in the humanities. LEC.

AAAS 543. Language and Culture in Arabic-Speaking Communities. 3 Hours. NW AE42/GE3S / H.
The course examines the links between language structure, patterns of use, language choice, and language attitudes in the diglossic and bi-lingual Arabic-speaking communities. It also explores language as a reflector and creator of Arab culture (e.g. linguistic encoding of politeness, the Quranic text as the spoken and written word, the role of tropes in Arabic rhetoric). The topics for discussion range from the micro-level language choice to the macro-level issues of national language policies and planning within the domain of government and education across the Arab world. (Same as LING 543.) LEC.

AAAS 545. Unveiling the Veil. 3 Hours. NW / H.
This course seeks to unveil a complex cultural practice that has been misconstructed by many scholars. It explores the versatility of the meaning of the veil. It examines the ways in which the veil has become a symbol of privacy, cultural identity, religious assertion, resistance and liberation, besides being a symbol of constraint, oppression, backwardness, and sexual mystery. LEC.

AAAS 550. Senior Seminar in: _____ 3 Hours. AE61 / H/W.
Small discussion groups, each designed to consider a specific, clearly defined topic, using an interdisciplinary approach and requiring the demonstration of a comprehensive knowledge of the fundamentals in the field as appropriate to the topic. Class discussion based on student presentations. Prerequisite: Senior majors; special departmental permission for other seniors. LEC.

AAAS 551. Environmental Issues in Africa. 3 Hours. S.
Acquaints students with the complexities of debates on environmental problems in Sub-Saharan Africa. Topics addressed may include deforestation, desert expansion, wildlife conservation, soil erosion, climate change, coral reef destruction, water resources development, mangrove preservation, and the environmental effects of war, industrialization, and urbanization. Class presentations and projects synthesize the perspectives of both human and physical geography. (Same as GEOG 550.) Prerequisite: GEOG 104 or permission of instructor. LEC.

AAAS 552. Classical Islamic Literature. 3 Hours. NW / H.
An examination of major developments in classical Islamic literature in the Middle East and beyond, with attention to the poetic and prose works (in translation) that emerged from them. (Same as REL 552.) LEC.

AAAS 553. Geography of African Development. 3 Hours. NW AE42/GE3S / S.
Acquaints students with the values and social parameters of African agricultural and pastoral practice. Topics include customary land rights, African perspectives on the natural world, gender issues in African agriculture, and the urbanization of African cultures. The course also contrasts African views with those of Western development practitioners and donor agencies. Case studies from different countries are used to highlight the continent's regional differences. (Same as GEOG 553.) LEC.

AAAS 554. Contemporary Health Issues in Africa. 3 Hours. S.
The course examines health and nutrition in African communities, using the methods of biological and medical anthropology. Fundamental to the approach taken in the course is the understanding that the health of human groups depends on interactions between biological and cultural phenomena in a particular ecological context. One topic will be selected per semester to examine in detail the full array of epidemiological factors contributing to patterns of specific diseases. AIDS, childhood diseases, and reproductive health of African women are among possible topics. Course material will be selected from scholarly and medical publications, as well as coverage in the popular media. The use of a variety of sources will enhance understanding of the biological and cultural issues involved, and will help students identify possible bias and misinformation in popular coverage of events such as famine or epidemic in African settings. (Same as ANTH 545.) Prerequisite: An introductory course in either Anthropology or African Studies. LEC.

AAAS 555. African Film. 3 Hours. NW / H.
A critical study of Africa and its peoples as depicted in films. The aesthetic, cultural, economic, political, historical, and ideological aspects of African films are examined. (Same as FMS 544.) LEC.

AAAS 557. Cities and Development. 3 Hours. S.
An intermediate level course in urban geography, with an emphasis on cities in the developing world. Example cities in Latin America and the Caribbean, Sub-Saharan Africa, the Middle East, South Asia, and/or Southeast Asia may be examined. The main focus is on the intersection between urbanization and economic development, but social, political, and cultural aspects of development in cities are considered. Other topics include the geographic impacts of European colonialism, urbanization and industrialization, rural-to-urban migration, urban structure and spatial dynamics, urban planning, and environmental sustainability. (Same as GEOG 557.) LEC.

AAAS 560. Race, Gender, and Post-Colonial Discourses. 3 Hours. H.
An examination of the ways in which the concept of race, gender, and post-colonialism frame African literatures from the Caribbean, North America, and the continent itself. The course will focus on these discourses grounding them in critical frameworks within which they can be contextually analyzed and evaluated, at the same time examining their impact in literacy praxis and theory. (Same as WGSS 560.) LEC.
AAAS 561. Liberation in Southern Africa. 3 Hours. NW AE42 / U.
This course examines struggles for freedom in southern Africa and the consequences of political, economic, and social changes in the region. The end of colonial rule, the demise of white-settler domination, and the fall of the apartheid regime is discussed. As a major political event of the twentieth century, the liberation of southern Africa had both local and global consequences. The course analyzes transnational issues of liberation and resistance to consider broader regional and international perspectives. Course themes pay particular attention to gender and ethnicity and include a focus on democratization and contemporary meanings of liberation. Prior coursework in African Studies is strongly recommended, but not required. (Same as HIST 561 and POLS 561.) LEC.

AAAS 565. Gender, Culture, and Migration. 3 Hours. H.
This course brings a human face to the 21st century manifestation of globalization by focusing on the issues of culture, gender and migration. How do these three aspects create the "global village" amongst both the host and donor peoples? When people move from one place to another, what do they leave behind, what do they take with them? What is gained, or lost by the host community? What is the impact of migration on a specific group's and individual's sense of identity? How has migration affected the people's construction, understanding, and practice of gender? Given their primary roles in the home and within the culture, these questions and more are posed with particular attention to women. Migration theories, interviews and personal testimonies as well as literary and dramatic works are critical to our analyses of the issues raised and enable us to hold conversations with, and listen to the stories of the ordinary people who make globalization happen and sustain it. (Same as AMS 565 and WGSS 565.) LEC.

AAAS 568. Kongo Trans-Atlantic. 3 Hours. S.
This seminar explores Kongo culture and history through a cross-section of the African-Atlantic World: Western Equatorial Africa and related New World societies in Jamaica, Brazil, Haiti, Cuba, and the Georgia and Carolina coasts, and New Orleans (thus in former British, Portuguese, French, Spanish, and U.S. colonial territories). The seminar will assess recent scholarship on patterns of slavery and resistance, cultural and linguistic change, creolization and hybridization. (Same as ANTH 568.) LEC.

AAAS 574. Slavery in the New World. 3 Hours. H/W.
Slavery, slave culture, and the slave trade in the U.S., Latin America, and the Caribbean will be examined comparatively. Attention will also be given to African cultures, the effects of the slave trade on Africa, and the effects of African cultures on institutions in the New World. (Same as HIST 574.) LEC.

AAAS 578. Central African Art. 3 Hours. NW / H/W.
Introduction to the arts and cultures of Central Africa. Emphasis is given to the major art-producing cultures of the Equatorial forest and the Southern Savanna regions of Cameroon, Gabon, Congo, Zaire, and Angola. The historical and cultural contexts for the visual arts associated with centralized leadership and non-centralized societies are explored. (Same as HA 578.) LEC.

AAAS 584. Black American Literature. 3 Hours. H.
A study of the literature written by Black Americans from the pre-Civil War period to the present. Emphasis upon specific historical periods in the development of Black literature as well as on a critical analysis of major autobiographical, poetic, and fictional works. LEC.

AAAS 585. Race and the American Theatre. 3 Hours. U.
The representation(s) of race in significant texts and performance styles in American theatre analyzed according to political ideologies, dramatic movements and the impact of these factors on the representation of the "other" in the theatre. (Same as AMS 529 and THR 529.) LEC.

AAAS 590. The Rise and Fall of Apartheid. 3 Hours. H.
This course will deal with the last fifty years of South African history during which apartheid came to be formulated, supported, and perpetuated, and the forces that were responsible for its disintegration by 1990. Reference will also be made to the transformation process since April 1994. (Same as HIST 599.) LEC.

AAAS 598. Sexuality and Gender in African History. 3 Hours. NW AE42 / H.
An examination of the history of sexuality and gender in Africa with a focus on the 19th and 20th centuries. Major issues and methods in the historical scholarship on gender and sexuality will be covered. Topics of historical analysis include life histories, rites of passage, courtship, marriage, reproduction, education, masculinities, homosexuality, colonial control, and changing gender relations. Prior course work in African history is suggested. Graduate students will complete an additional project in consultation with the instructor. (Same as HIST 598.) LEC.

AAAS 600. Politics in Africa. 3 Hours. NW AE42 / S.
A survey of politics in Africa, focused on the countries of sub-Saharan or Black Africa. The course includes a historical discussion of precolonial Africa, colonization and the creation of contemporary states, and the politics of independence, before examining contemporary political systems and the forces influencing patterns of politics on the continent. (Same as POLS 665.) Prerequisite: POLS 150 or AAAS 105 or AAAS 305 or consent of instructor. LEC.

AAAS 611. History of the Black Power Movement. 3 Hours. H.
Examines the Black Power Movement in its many manifestations, beginning with a discussion of its political and cultural background: the transition from Civil Rights to Black Power in the African American Freedom Movement of the 1960s; the impact on African Americans of African decolonization and the spread of anti-colonial and anti-imperialist movements throughout other parts of the globe. The course also examines the Black Arts Movement and its influence on the Black Power Movement and vise versa. Therefore, some attention will also be paid to the music, literature, theater, and the graphic arts of the period, and the aesthetic and political critiques of these artistic forms. Prerequisite: AAAS 511 not required but recommended. LEC.

AAAS 630. The Life and Intellectual Thought of W.E.B. Du Bois. 3 Hours. H.
A critical examination of W. E. B. Du Bois, paramount black scholar and activist whose massive body of scholarly work spans the period from late 19th through the mid-20th centuries. Course covers the major works of Du Bois. Topics include Du Bois as sociologist, historian, propagandist, and creative writer. Moreover, the course deals with Du Bois as an intellectual in conversation with other black thinkers, including individuals such as, Booker T. Washington, Alexander Crummell, Anna Julia Copper, Ida B. Wells-Barnett, Marcus Garvey, E. Franklin Frazier, Walter White and Thurgood Marshall. LEC.

AAAS 650. Sufism. 3 Hours. NW / H.
A survey of developments in Sufi (Islamic Mystical) thought, poetry, and ritual throughout Muslim history and across the Muslim world. (Same as REL 650.) Prerequisite: AAAS 349/REL 350 or permission of instructor. LEC.

AAAS 657. Gender in Islam and Society. 3 Hours. NW / H.
An investigation of the relationship between Islam, and gender roles and status in religious texts (Quran and Hadith) and in societies across the Muslim world, past and present. (Same as REL 657.) Prerequisite: AAAS 349/REL 350 or permission of instructor. LEC.
AAAS 662. Gender and Politics in Africa. 3 Hours. S.
This course is designed to explore the field of gender and African politics. We begin by paying particular attention to African women’s political roles during the pre-colonial and colonial society. Next, we examine the impetus, methods, and path of liberation struggles and how gender roles were shaped, shifted, and changed during these struggles. The majority of the class focuses on current issues in African politics, including gender and development, HIV/AIDS and women’s health, gender and militarism. We also explore women’s roles in political institutions, civil society organizations, trade and labor unions, and transnational movements. We also examine contemporary constructions of masculinity and femininity in African states and explore how these constructions affect social policy and national political agendas. (Same as WCSS 662.) LEC.

AAAS 663. The Anthropology of Islam. 3 Hours. NW / H.
This course uses critical readings of major anthropological works on Islam to: 1) analyze various interpretations of “Islamic cultures” through a discussion of regionally-grounded works, and 2) examine how the anthropological study of Islam also is informed by theoretical and philosophical approaches to major anthropological questions, such as religion, myth, kinship, social organization, and power. The course offers both a history of various interpretations of Islam as well as a history of theories of these interpretations. (Same as ANTH 663.) LEC.

AAAS 676. West African Art. 3 Hours. NW / H/W.
Introduction to the rich visual art traditions of West Africa. Emphasis is given to the major art-producing cultures of the Western Sudan and the Guinea Coast, including the archaeological cultures of Nigeria, Mali, and Ghana. The diverse forms of figure sculptures and masquerade performance and meanings of these arts in historical and cultural contexts are examined. This course requires more intensive work than AAAS 376 and is open to upper division and graduate students only. Not open to students who have taken AAAS 376/HA 376. (Same as HA 676.) LEC.

AAAS 677. African Design. 3 Hours. NW / H/W.
A survey of sub-Saharan African media, emphasizing textiles, ceramics, metal and bead work, the artist's techniques, working methods and apprenticeship, and historical and contemporary cultural contexts, including the influence of tourism and the international art market on artistic production and style. Open to juniors, seniors, and graduate students only. (Same as HA 677.) Prerequisite: AAAS 376 or AA 376, or AAAS 578 or HA 578, or an introductory course in art history at the college level, or consent of instructor. LEC.

AAAS 679. African Expressive Culture: ________, 3 Hours. NW / H/W.
An in-depth examination of an artistic tradition shared by a number of African cultures. Discussion includes historical development related to style, use and meaning and other relevant issues. Open to juniors, seniors, and graduate students only. (Same as HA 679.) Prerequisite: AAAS 376 or HA 376, or AAAS 578 or HA 578, or an introductory course in art history at the college level, or consent of instructor. LEC.

AAAS 680. Introduction to Modern Africa. 3 Hours. H/W.
An interdisciplinary approach to cross-cultural understanding of Africa’s place in the modern world. Specific emphasis will be given to the role of Africa in world history, African cultures, modern African history, and problems of development and nation building in Africa. Prerequisite: Consent of instructor. LEC.

AAAS 690. Investigation and Conference. 1-3 Hours. AE61 / H/W.
Individual and supervised readings in selected areas of African and African-American studies which will be an investigation of a subject selected by the student with the advice and direction of an instructor. Individual reports and conferences. Prerequisite: Seniors and consent of department. IND.

AAAS 695. Honors Project in: ________, 3 Hours. AE61 / H.
An individual research project in African-American or African studies under the direction of a specialist in the area of the student's interest, the results of the project to be presented in written form and to be defended before a committee of three faculty members as provided for under the requirements for Honors. Majors only and permission of instructor. IND.

AAAS 700. Africa in World Politics. 3 Hours.
A 20th-century and 21st-century study of the combined internal and external forces that precipitated the rise of Africa, the major African issues in international relations, and Africa's impact on the modern world. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 701. Politics in Africa. 3 Hours.
A survey of politics in Africa, focused on the countries of sub-Saharan or Black Africa. The course includes a historical discussion of precolonial Africa, colonization and the creation of contemporary states, and the politics of independence, before examining contemporary political systems and the forces influencing patterns of politics on the continent. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 715. Seminar in African Art. 3 Hours.
A concentrated study of a special topic relating to African Art studies. Different topics are offered in different semesters. (Same as HA 715.) Prerequisite: Nine hours of Art History and/or consent of instructor. SEM.

AAAS 716. Women in Islam. 3 Hours.
Addresses the widely-held stereotype of Muslim women as pawns in a patriarchal socio-religious context. Investigating the Muslim cultures of certain regions, the course will examine the manner in which indigenous culture was influenced by the introduction of Islam and the historical impact of Islam on women's social roles. Focusing principally on contemporary social change, the course will consider how socio-political change affects religious roles where religion is integrally involved in daily life. To what extent is individualism valued, and how are the pressures of late 20th-century and early 21st-century life mediated? The course will draw on texts from history, sociology, and literature. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 720. Intercultural Communication: The Afro-American. 3 Hours.
An examination of the barriers to effective communication between Black Americans and non-Black Americans. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 723. Special Topics in Africana Studies: ________, 3 Hours.
Seminar in an area of current interest in African and African-American Studies. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 727. African-American Culture. 3 Hours.
This course defines African American culture and identifies ways in which it is distinct. The course identifies the roots of African American culture, as well as the transformations occurring over time. The course covers identity issues and considers the possibility of complex, multi-identity structures. The course addresses the issues of whether there is a common narrative or a common root metaphor for African American culture, how this is known epistemologically, internally and externally, and how epistemological "knowledge" is appropriated. Course pedagogy
includes text readings, case studies, performance events, and media events. LEC.

AAAS 730. Black Leadership. 3 Hours.
The course focuses on the concept of leadership and on Black leadership in the United States. An in-depth analysis of selected case studies of Black leaders both historical and contemporary. Some attention will be given to the dispersion of Africans into the Americas and the leadership that emerged, conditioned both by environmental factors and the psychology engendered by the system of slavery. Selected successful Black leaders will be invited to visit the class from time to time. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 731. African Literature. 3 Hours.
Introduction to African Literature. Reading, analysis, and discussion of contemporary fiction, poetry, and drama from sub-Saharan Africa. Brief attention will be paid to historical development and to traditional literature. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 732. Francophone African Literature. 3 Hours.
This course is an introduction to 20th-century and modern Francophone African literature covering selected works by major authors from both sub-Saharan Africa and the Maghreb. Attention will be given primarily to the novel, although some poetry will also be read. Topics and themes include negritude, African identity in the wake of colonialism, Islam, and women's writing. Classes will be conducted in English. Students may read the texts in French or in translation. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 733. Islamic Literature. 3 Hours.
Contemporary literature that is set in the context of Muslim cultures provides an examination of Muslim identity on its own terms. This course focuses on the literary examination of works by Muslim authors from Egypt, Sudan, Senegal, Guinea, Mali, Morocco, Nigeria, and Niger. From the perspective of both male and female authors, the issue of what it means to be a Muslim is considered through fictional accounts set in contemporary contexts. Some works will be read in translation from Arabic or French; others are written originally in English. Considered in this course vary widely in their origins and customs, which allows for a focus on the one pervasive element they share in common: Islam as it shapes people's lives. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 734. African Women Writers. 3 Hours.
This course focuses on African women's writing from all regions of the continent. Works included deal with a wide variety of issues relevant to African women, as well as universal issues of conceptions of gender roles, and the struggle to attain personal rights and freedom within traditional cultural frameworks. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 735. Muslim Women's Autobiography. 3 Hours.
This course examines the realities of Muslim women's experiences as conveyed in their own voices. Works are drawn from all over the world, from Africa and the Middle East to Europe and the U.S. and cover from the 19th-century to the present. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 736. The Afro-American Family: A Psychological Approach. 3 Hours.
The examination of the structure, values, and behavior patterns of the contemporary African-American family as influenced by African cultures and kinship systems and the institution of slavery in association with other factors. Social and psychological forces that have enhanced or blocked family survival, stability, and advancement will be explored. The orientation of Black family life will emphasize its strengths, weaknesses, adaptations, strong kinship bonds, and equalitarian family roles. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 740. Arab Thought and Identity. 3 Hours.
The intention of this course is to present a comprehensive portrait and a deeper understanding of the Arab society and its cultural background. We will focus on the debate that is still raging about traditionalism versus modernity, and authenticity (assala) and specificity (Khususiyya) versus westernization. Moreover, we will discuss the question of Arab identity which manifests itself through a sense of belonging and diversity of affiliations, and relies as well on shared culture and its variations, and shared place in history and common experiences. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 749. Islam. 3 Hours.
Islam's origins, the prophet Muhammad, the Holy Koran, religious symbols and moral mandates, and historical developments. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 750. Popular Culture in the Muslim World. 3 Hours.
A study of pop songs, television, comics, and other idioms of popular culture from different parts of the Muslim world, with attention to Muslims' sense of humor, tragedy, aesthetics, and pertinent issues of the day. LEC.

AAAS 760. Topics and Problems in African and African-American Studies. 3 Hours.
Individual investigation of special topics in African and African-American studies. May not be repeated for credit. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 770. Language and Society in Africa. 3 Hours.
Examines issues and problems associated with language use in sub-Saharan Africa from a sociological perspective. Topics covered include an overview of the types of languages spoken on the continent: indigenous languages, colonial languages, pidgins and creoles, and Arabic as a religious language; problems associated with the politics of literacy and language planning, writing and standardization of indigenous languages; and the cultural and ideological dilemmas of language choice. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 777. Language and Literature in Africa. 3 Hours.
An intensive study of the literatures of Africa and/or African Diaspora (people of African descent dispersed around the world). This study will focus on the major characteristics of a particular period, genre, mode, and/or theme in literatures such as African, Caribbean, Afro-Brazilian, African American, African Canadian, Black British. Critical theories pertinent to writers and their work will be covered. Topics may include studies in drama, poetry, or the novel; migration narratives; literature of a particular era, such as the Harlem Renaissance, Negritude, or the Black Arts Movement; representations of gender, etc. As topics vary by semester, the course may be repeated for credit. (Same as ENGL 774.) LEC.
AAAS 788. The Black Woman. 3 Hours.
An interdisciplinary study of the role of Black women in our society, from the African background through the plantation experience to the present. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 801. Introduction to Africana Studies: African-American. 3 Hours.
An introduction to, and overview of, the historical, intellectual, and professional foundations of African-American Studies; a multidisciplinary examination of the key texts and issues in the field. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 802. Introduction to Africana Studies: African. 3 Hours.
An introduction to, and overview of, the historical, intellectual, and professional foundations of African Studies; a multidisciplinary examination of the key texts and issues in the field. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 803. Research Methods in Africana Studies. 3 Hours.
A multidisciplinary introduction to the range of research methods employed to examine African and African-American history, cultures, and societies. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 804. Seminar in Africana Studies. 3 Hours.
An interdisciplinary, comparative exploration of the histories, cultures, and societies of Africans and peoples of African descent. Students will be required to utilize the skills gained in AAAS 801 and AAAS 802 to design and implement a project that will be critically assessed in the seminar. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. Prerequisite: AAAS 801 and AAAS 802 or consent of instructor. LEC.

AAAS 810. Comparative Racial and Ethnic Relations. 3 Hours.
An examination of constructions of race and ethnicity around the world. Emphasis is on the social, political, historical, cultural and economic factors that lead to the creation of ethnic and racial identities, ethnic conflict and accommodation, ethnic movements, and ethnic political organization. Racial and ethnic relations in the U.S. are compared with other countries. Major focus is placed on ethnicity in Africa, Asia, Latin America, the Caribbean, and/or the Middle East. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. Prerequisite: AAAS 801 and AAAS 802 or consent of instructor. LEC.

AAAS 811. The Civil Rights Movement. 3 Hours.
An examination of the Civil Rights Movement in American History. Emphasis is placed on the activities of major Civil Rights organizations, Civil Rights legislation and its impact on American life, and conflicts between integrationist and separatist forces in politics, economics, education, culture and race relations in the United States. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 812. The Black Power Movement. 3 Hours.
This course will examine the Black Power Movement in its many manifestations, beginning with a discussion of its political and cultural background: the transition from Civil Rights to Black Power in the Afro-American freedom movement of 1960’s; the impact on African Americans of African decolonization and the spread of anti-colonial and anti-imperialist movements throughout other parts of the globe. There will also be some examination of the Black Arts Movement and its influence on the Black Power Movement and vice versa. Therefore, some attention will also be paid to the music, literature, theater, and the graphic arts of the period, and the aesthetic and political critiques of these artistic forms. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 822. African and African-American Religion. 3 Hours.
Historical development, systematic ideas and rites of selected periods, cultural settings, and movements. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 823. Social History of Black Aging in America. 3 Hours.
The purpose of this course is to provide a comprehensive historical examination of American society’s changing attitudes and responses to aging and older adults, with emphasis on the Black aged. Beginning with the African background where older adults were highly valued, the course explores the impact of slavery, the industrial Revolution, urbanization and the development of the youth-oriented culture prevalent in the United States today. Subsequently, the course focuses on the emergence of twentieth-century social gerontological problems and the role of the modern Black movements, public agencies, and private organizations in addressing the issues. Film, essays, drama, and/or fiction are utilized to illustrate the cultural attitudes of each historical period. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 827. Popular Culture in Africa. 3 Hours.
This course examines multiple expressions of popular culture in contemporary Africa, focusing on the aesthetics of forms such as music, theatre, dress, street art, and popular literary genres, as well as the social themes they deal with and the societies that produce them. The approach will be based on a critical reconsideration of notions such as traditional versus modern culture, elite versus folk art, westernization, and cultural hybridity, in order to find better ways of discussing the cultural vibrancy of everyday life in contemporary Africa. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 830. The Life and Times of W.E.B. Du Bois. 3 Hours.
A critical examination of the life and thought of W. E. B. Du Bois, paramount black scholar and activist whose massive body of scholarly work spans the period from late 19th through the mid-20th centuries. Course covers the major works of Du Bois. Topics include Du Bois as sociologist, historian, propagandist, and creative writer, taking into account his often shifting views on art and culture, politics, leadership, civil rights and the color line, trade unionism, Pan-Africanism, socialism, internationalism, and, of course, double consciousness, among other issues. Moreover, the course will deal with Du Bois as an intellectual in conversation with other black thinkers, including individuals such as Booker T. Washington, Alexander Crummell, Anna Julia Cooper, Ida B. Wells-Barnett, Marcus Garvey, E. Franklin Frazier, Walter White and Thurgood Marshall. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 832. Comparative Black Literature. 3 Hours.
Reading, analysis, and discussion of contemporary fiction, poetry, and drama from Africa, the Caribbean, and the United States. Brief attention will be paid to historical development and to traditional literature. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.
AAAS 834. The Rhetoric of Black Americans. 3 Hours.
A study of the rhetoric of Black Americans, from their earliest protest efforts to the contemporary scene, with the focus on the methods and themes employed to alter their status in American society. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 843. Language and Culture in Arabic-Speaking Communities. 3 Hours.
The course examines the links between language structure, patterns of use, language choice, and language attitudes in the diglossic and bilingual Arabic-speaking communities. It also explores language as a reflector and creator of Arab culture (e.g., linguistic encoding of politeness, the Quranic text as the spoken and written word, the role of tropes in Arabic rhetoric). The topics for discussion range from the micro-level language choice to the macro-level issues of national language policies and planning within the domain of government and education across the Arab world. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 845. Unveiling the Veil. 3 Hours.
This course seeks to unveil a complex cultural practice that has been misconstrued by many scholars. It explores the versatility of the meaning of the veil. It examines the ways in which the veil has become a symbol of privacy, cultural identity, religious assertion, resistance and liberation, besides being a symbol of constraint, oppression, backwardness, and sexual mystery. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 851. Environmental Issues in Africa. 3 Hours.
Acquaints students with the complexities of debates on environmental problems in Sub-Saharan Africa. Topics addressed may include deforestation, desert expansion, wildlife conservation, soil erosion, climate change, coral reef destruction, water resources development, mangrove preservation, and the environmental effects of war, industrialization, and urbanization. Class presentations and projects synthesize the perspectives of both human and physical geography. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 852. Classical Islamic Literature. 3 Hours.
An examination of major developments in classical Islamic literature in the Middle East and beyond, with attention to the poetic and prose works (in translation) that emerged from them. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 853. Geography of African Development. 3 Hours.
Acquaints students with the values and social parameters of African agricultural and pastoral practice. Topics include customary land rights, African perspectives on the natural world, gender issues in African agriculture, and the urbanization of African cultures. The course also contrasts African views with those of Western development practitioners and donor agencies. Case studies from different countries are used to highlight the continent's regional differences. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 854. African Film and Video. 3 Hours.
A critical study of Africa and its peoples as depicted in films and videos. The aesthetic, cultural, economic, political, historical, and ideological aspects of African films and videos will be examined. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 857. Cities and Development. 3 Hours.
An intermediate-level course in urban geography, with an emphasis on cities in the developing world. Example cities in Latin America and the Caribbean, Sub-Saharan Africa, the Middle East, South Asia, and/or Southeast Asia may be examined. The main focus is on the intersection between urbanization and economic development, but social, political, and cultural aspects of development in cities are considered. Other topics include the geographic impacts of European colonialism, urbanization and industrialization, rural-to-urban migration, urban structure and spatial dynamics, urban planning, and environmental sustainability. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 860. Race, Gender, and Post-Colonial Discourses. 3 Hours.
An examination of the ways in which the concept of race, gender, and post-colonialism frame African literatures from the Caribbean, North America, and the continent itself. The course will focus on these discourses grounding them in critical frameworks within which they can be contextually analyzed and evaluated, at the same time examining their impact in literary praxis and theory. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 874. Slavery in the New World. 3 Hours.
Slavery, slave culture, and the slave trade in the U.S., Latin America, and the Caribbean will be examined comparatively. Attention will also be given to African cultures, the effects of the slave trade on Africa, and the effects of African cultures on institutions in the New World. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 884. Black American Literature. 3 Hours.
A study of the literature written by Black Americans from the pre-Civil War period to the present. Emphasis upon specific historical periods in the development of Black literature as well as on a critical analysis of major autobiographical, poetic, and fictional works. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 885. Race and the American Theatre. 3 Hours.
The representation(s) of race in significant texts and performance styles in American theatre analyzed according to political ideologies, dramatic movements and the impact of these factors on the representation of the "other" in the theatre. LEC.

AAAS 890. The Rise and Fall of Apartheid. 3 Hours.
This course will deal with the fifty years of South African history during which apartheid came to be formulated, supported, and perpetuated, and the forces that were responsible for its disintegration by 1990. Reference will also be made to the transformation process since April 1994. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 898. Sexuality and Gender in African History. 3 Hours.
An examination of the history of sexuality and gender in Africa focused on the 19th-century to the present. Major issues and methods in the historical scholarship on gender and sexuality will be covered. Topics
of historical analysis include life histories, rites of passage, courtship, marriage, reproduction, education, masculinities, homosexuality, colonial control, and changing gender relations. Prior course work in African history is suggested. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. LEC.

AAAS 899. Thesis. 1-6 Hours. Investigation and research of a topic for a master's thesis. A maximum of 6 thesis hours may be counted toward the 33 hours required for the degree. THE.

AMHR 110. Elementary Amharic I. 5 Hours. U. Basic level of oral fluency and aural comprehension. Vocabulary acquisition, pronunciation, grammar, and writing. Reading of simple texts. Not open to native speakers of Amharic. LEC.

AMHR 120. Elementary Amharic II. 5 Hours. U. A continuation of AMHR 110. Readings in cultural texts. Prerequisite: AMHR 110. LEC.

AMHR 177. First Year Seminar: ______. 3 Hours. GE11 / U. A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Amharic. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

AMHR 210. Intermediate Amharic I. 3 Hours. U. Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern Amharic texts and discussion in Amharic. Prerequisite: AMHR 120. LEC.

AMHR 220. Intermediate Amharic II. 3 Hours. U. Continuation of AMHR 210. Discussion in Amharic of texts studies. Prerequisite: AMHR 210. LEC.

ARAB 110. Elementary Arabic I. 5 Hours. U. Five hours of class per week. Basic level of oral fluency and aural comprehension. Vocabulary acquisition, pronunciation, grammar, and writing. Reading of simple texts. Not open to native speakers of Arabic. LEC.

ARAB 120. Elementary Arabic II. 5 Hours. U. Five hours of class per week. A continuation of ARAB 110. Readings in cultural texts. Prerequisite: ARAB 110. LEC.

ARAB 177. First Year Seminar: ______. 3 Hours. GE11 / U. A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Arabic. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

ARAB 210. Intermediate Arabic I. 3 Hours. U. Three hours of class conducted in Arabic. Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern Arabic texts and discussion in Arabic. Prerequisite: ARAB 120. LEC.

ARAB 220. Intermediate Arabic II. 3 Hours. U. Three hours of class conducted in Arabic. Continuation of ARAB 210. Discussion in Arabic of texts studied. Prerequisite: ARAB 210. LEC.

ARAB 310. Advanced Arabic I. 3 Hours. U. A practical Arabic language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Arabic. Designed for students who have had two or more years of Arabic study. Open to native speakers. Prerequisite: ARAB 220 or consent of instructor. LEC.

ARAB 320. Advanced Arabic II. 3 Hours. A continuation of ARAB 310. Prerequisite: Satisfactory completion of ARAB 310 or consent of instructor. LEC.

ARAB 401. Readings in Arabic I. 3 Hours. U. Designed for native and near-native speakers, this course involves reading newspapers and other publications in the language intended for native speakers, conversation, oral presentations, and advanced grammar. Prerequisite: Native or near-native speaker proficiency or consent of instructor. LEC.

ARAB 402. Readings in Arabic II. 3 Hours. U. Continuation of ARAB 401. LEC.

HAIT 110. Elementary Haitian I. 3 Hours. U. Beginning course in the vernacular language of Haiti, Martinique, Guadeloupe and other areas of the Caribbean and the Indian Ocean. Conversational approach, with essentials of grammar. Reading of basic texts. Special attention to folk culture as expressed by language. No previous knowledge of another foreign language is required. LEC.

HAIT 120. Elementary Haitian II. 3 Hours. U. Continuation of HAIT 110, with further readings in Haitian literature. Prerequisite: HAIT 110 or consent of instructor. LEC.

HAIT 177. First Year Seminar: ______. 3 Hours. GE11 / U. A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Haitian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

HAIT 230. Intermediate Haitian I. 3 Hours. U. Continued practice in conversation and composition; intensive and extensive readings from contemporary press, short story, poetry, and folk tales. Prerequisite: HAIT 120 or consent of instructor. LEC.

HAIT 240. Intermediate Haitian II. 3 Hours. U. Continuation of HAIT 230, with additional readings from theatre, novel, and historical texts. Prerequisite: HAIT 230 or consent of instructor. LEC.

HAIT 300. Contemporary Haiti. 3 Hours. NW / H. Detailed analysis of recent Haitian history. The focus will include interactions between religion, social structure, politics, economics and international relations. (Same as AAAS 302.) Prerequisite: AAAS 301/HAIT 200, or consent of instructor. LEC.

HAIT 350. Advanced Haitian I. 3 Hours. U. Course objective is a sophisticated command of understanding, speaking, reading, and writing Haitian. Texts include newspapers and other Haitian publications as well as spoken material produced essentially for native speakers. Conversation and oral presentations. Keeping of personal journal in Haitian. LEC.

HAIT 360. Advanced Haitian II. 3 Hours. U. Continuation of HAIT 350, plus advanced readings from Haitian authors such as Carrie Paultre, Frank Etienne, Lyonel Desmarattes, and Michel-Rolph Trouillot. LEC.

HAIT 497. Directed Studies in Haitian. 1-15 Hours. U. May be taken more than once, total credit not to exceed fifteen hours. Material not covered by course work, and/or in field of student's special interest. Conferences. Course taken for one hour of credit may not be used to fulfill College's humanities distribution requirement. Prerequisite: Six hours of Haitian Creole and consent of instructor. IND.
Advanced work in either language or literature or both. May be taken
more than once, total credit not to exceed fifteen hours. Conferences. As
a three-credit-hour course, it may count toward a major in African and
African-American studies. Prerequisite: Four semesters of Haitian Creole
or equivalent and consent of instructor. IND.

Advanced work in Haitian culture. May be taken more than once, total
credit not to exceed fifteen hours. Conferences. As a three-credit-hour
course, it may count toward a major in African and African-American
studies. No knowledge of Haitian or French is required. Prerequisite:
AAAS 301 or HAIT 200, or consent of instructor. IND.

HAIT 700. Investigation and Conference. 1-6 Hours.
Supervised individual readings in selected areas of Haitian language,
literature, and culture. Individual reports and conferences. Prerequisite:
Consent of instructor. RSH.

HAUS 110. Elementary Hausa I. 5 Hours. U.
Five hours of class per week. Basic level of oral fluency and aural
comprehension. Vocabulary acquisition, pronunciation, grammar, and
writing. Reading of simple texts. Not open to native speakers of Hausa.
LEC.

HAUS 120. Elementary Hausa II. 5 Hours. U.
Five hours of class per week. A continuation of HAUS 110. Readings in
cultural texts. Prerequisite: HAUS 110. LEC.

HAUS 177. First Year Seminar: _____, 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing
current issues in Hausa. Course is designed to meet the critical
thinking learning outcome of the KU Core. First-Year Seminar topics
are coordinated and approved by the Office of First-Year Experience.
Prerequisite: First-time freshman status. LEC.

HAUS 210. Intermediate Hausa I. 3 Hours. U.
Three hours of class conducted in Hausa. Intermediate oral proficiency
and aural comprehension. Systematic review of grammar. Writing
skills beyond the basic level. Introduction to modern Hausa texts and
discussion in Hausa. Prerequisite: HAUS 120. LEC.

HAUS 220. Intermediate Hausa II. 3 Hours. U.
Three hours of class conducted in Hausa. Continuation of HAUS 210.
Discussion in Hausa of texts studied. Prerequisite: HAUS 210. LEC.

HAUS 310. Advanced Hausa I. 3 Hours. U.
A practical Hausa language course involving advanced study of the
grammar, reading of texts on a variety of subjects, conversation, and
composition. Taught in Hausa. Designed for students who have had two
or more years of Hausa study. Open to native speakers. Prerequisite:
HAUS 220 or consent of instructor. LEC.

HAUS 320. Advanced Hausa II. 3 Hours. U.
A continuation of HAUS 310. Prerequisite: Satisfactory completion of
HAUS 310 or consent of instructor. LEC.

HAUS 401. Readings in Hausa I. 3 Hours. U.
Designed for native and near-native speakers, this course involves
reading newspapers and other publications in the language intended for
native speakers, conversation, oral presentation, and advanced grammar.
Prerequisite: Native or near-native speaker proficiency or consent of
instructor. LEC.

HAUS 402. Readings in Hausa II. 3 Hours. U.
Continuation of HAUS 401. LEC.

KISW 110. Elementary KiSwahili I. 5 Hours. U.
Five hours of class per week. Basic level or oral fluency and aural
comprehension. Vocabulary acquisition, pronunciation, grammar, and
writing. Reading of simple texts. Not open to native speakers of KiSwahili.
LEC.

KISW 120. Elementary KiSwahili II. 5 Hours. U.
Five hours of class per week. A continuation of KISW 110. Readings in
cultural texts. Prerequisite: KISW 110. LEC.

KISW 177. First Year Seminar: _____, 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing
current issues in KiSwahili. Course is designed to meet the critical
thinking learning outcome of the KU Core. First-Year Seminar topics
are coordinated and approved by the Office of First-Year Experience.
Prerequisite: First-time freshman status. LEC.

KISW 210. Intermediate KiSwahili I. 3 Hours. U.
Three hours of class conducted in KiSwahili. Continuation of KISW 210.
Discussion in KiSwahili of texts studied. Prerequisite: KISW 210. LEC.

KISW 310. Advanced KiSwahili I. 3 Hours. U.
A practical KiSwahili language course involving advanced study of the
grammar, reading of texts on a variety of subjects, conversation, and
composition. Taught in KiSwahili. Designed for students who have had two
or more years of KiSwahili study. Open to native speakers. Prerequisite:
KISW 220 or consent of instructor. LEC.

KISW 320. Advanced KiSwahili II. 3 Hours. U.
A continuation of KISW 310. Prerequisite: Satisfactory completion of
KISW 310 or consent of instructor. LEC.

KISW 401. Readings in KiSwahili I. 3 Hours. U.
Designed for native and near-native speakers, this course involves
reading newspapers and other publications in the language intended for
native speakers, conversation, oral presentations, and advanced grammar.
Prerequisite: Native or near-native speaker proficiency or consent of
instructor. LEC.

KISW 402. Readings in KiSwahili II. 3 Hours. U.
Continuation of KISW 401. LEC.

KISW 410. Advanced KiSwahili. 3 Hours. U.
The course objective is a sophisticated command of speaking, listening,
reading, and writing in KiSwahili. Texts used include newspapers
and other KiSwahili publications not expressly for language learners,
and spoken material intended for native speakers is introduced.
Conversation and oral presentations. Advanced grammar. Available for
elective credit in the major. Prerequisite: Native, near-native or second
language competence or satisfactory completion of fourth level language
proficiency. LEC.

SOMI 110. Elementary Somali I. 5 Hours. U.
Five hours of class per week. Basic level of oral fluency and aural
comprehension. Vocabulary acquisition, pronunciation, grammar, and
writing. Reading of simple texts. Not open to native speakers of Somali.
LEC.

SOMI 120. Elementary Somali II. 5 Hours. U.
Five hours of class per week. A continuation of SOMI 110. Readings in
cultural texts. Prerequisite: SOMI 110. LEC.
SOMI 210. Intermediate Somali I. 3 Hours. U.
Three hours of class conducted in Somali. Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern Somali texts and discussion in Somali. Prerequisite: SOMI 120. LEC.

SOMI 220. Intermediate Somali II. 3 Hours. U.
Three hours of class conducted in Somali. Continuation of SOMI 210. Discussion in Somali of texts studied. Prerequisite: SOMI 210. LEC.

WOLO 110. Elementary Wolof I. 5 Hours. U.
Five hours of class per week. Basic level of oral fluency and aural comprehension. Vocabulary acquisition, pronunciation, grammar, and writing. Reading of simple texts. Not open to native speakers of Wolof. LEC.

WOLO 120. Elementary Wolof II. 5 Hours. U.
Five hours of class per week. A continuation of WOLO 110. Readings in cultural texts. Prerequisite: WOLO 110. LEC.

WOLO 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Wolof. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

WOLO 210. Intermediate Wolof I. 3 Hours. U.
Three hours of class conducted in Wolof. Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern Wolof texts and discussion in Wolof. Prerequisite: WOLO 120. LEC.

WOLO 210. Intermediate Wolof II. 3 Hours. U.
Three hours of class conducted in Wolof. Continuation of WOLO 210. Discussion in Wolof of texts studied. Prerequisite: WOLO 210. LEC.

WOLO 310. Advanced Wolof I. 3 Hours. U.
A practical Wolof language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Wolof. Designed for students who have had two or more years of Wolof study. Open to native speakers. Prerequisite: WOLO 220 or consent of instructor. LEC.

WOLO 320. Advanced Wolof II. 3 Hours. U.
A continuation of WOLO 310. Prerequisite: Satisfactory completion of WOLO 310 or consent of instructor. LEC.

WOLO 401. Readings in Wolof I. 3 Hours. U.
Designed for native and near-native speakers, this course involves reading newspapers and other publications in the language intended for native speakers, conversation, oral presentations, and advanced grammar. Prerequisite: Native or near-native speaker proficiency or consent of instructor. LEC.

WOLO 402. Readings in Wolof II. 3 Hours. U.
Continuation of WOLO 401. LEC.

WOLO 420. Advanced Wolof II. 3 Hours. U.
Aspects of Wolof literature are examined at an advanced level, including differences between oral and written narrative, oral and poetic modes, varieties of registers as determined by gender and socio-economic level, and the effect of medium on literary style. Prerequisite: Native, near-native or second language competence, or satisfactory completion of fourth level language proficiency. LEC.

American Studies Courses

AMS HR. Philosophy and Religion. 3 Hours. HR GE3H / H. LEC.

AMS 100. Introduction to American Studies. 3 Hours. HT AE41 / GE3H / H.
An introduction to the history and key concepts of American Studies. Students explore major changes in American culture through the critical reading and analysis of primary and secondary source material. Not open to students who have taken AMS 101. LEC.

AMS 101. Introduction to American Studies, Honors. 3 Hours. HT AE41/GE3H / H.
An introduction to the history and key concepts of American Studies. Students explore major changes in American culture through the critical reading and analysis of primary and secondary source material. Not open to students who have taken AMS 100. Prerequisite: Membership in the University Honors Program or approval by the American Studies Program. LEC.

AMS 110. American Identities. 3 Hours. SC AE41/GE3S / S.
An interdisciplinary introduction to individual and group identities over time. Students explore theories and methods relating to identity from various perspectives, such as race, class, gender, sexuality, age, religion, and region. Not open to students who have taken AMS 112 or SOC 112. (Same as SOC 110.) LEC.

AMS 112. American Identities, Honors. 3 Hours. SC AE41/GE3S / S.
An interdisciplinary introduction to individual and group identities over time. Students explore theories and methods relating to identity from various perspectives, such as race, class, gender, sexuality, age, religion, and region. Not open to students who have taken AMS 110 or SOC 110. (Same as SOC 112.) Prerequisite: Membership in the University Honors Program or approval by the American Studies Program. LEC.

AMS 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Americna Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

AMS 260. America's Latinos/Latinas. 3 Hours. AE41 / U.
An introduction to the Latino/a population (Mexican-Americans, Puerto Ricans, Cuban-Americans, Dominican-Americans, and Central and South Americans) in the US. Students discuss how US and Latin American societies have shaped Latino incorporation into the United States. We also discuss contemporary political, cultural and social issues that pertain to Latinos/as in the US. (Same as SOC 260) LEC.

AMS 290. Religion in American Society. 3 Hours. HR AE41/GE3S / H.
A broad introduction to religion in American culture. This class emphasizes the well-established religions with large followings (viz. Judaism, Catholicism, Eastern Orthodoxy, and Protestantism). Some attention is also given to other religions active in America. Other topics covered include the relationship of church and state, religion in ethnic and racial minority groups, and women and religion. Not open to students who have taken REL 172. (Same as REL 171.) LEC.

AMS 310. American Culture, 1600-1876. 3 Hours. H.
An examination of the major historical shifts, trends, and conflicts that have shaped the multicultural nature of life in the United States from the initial European settlements to 1876. In addition to tracing developments in literature, architecture, drama, music, and the visual arts, this course will investigate patterns and changes in the popular, domestic, and
material culture of everyday life in America. (Same as HIST 310.)
Prerequisite: AMS 100 or AMS 110 or HIST 128. LEC.

AMS 312. American Culture, 1877 to the Present. 3 Hours. H.
An examination of the major historical shifts, trends, and conflicts that
have shaped the multicultural nature of life in the United States from
1877 to the present. In addition to tracing developments in literature,
architecture, drama, music, and the visual arts, this course will investigate
patterns and changes in the popular, domestic, and material culture of
everyday life in America. (Same as HIST 312.) LEC.

AMS 316. Ministers and Magicians: Black Religions from Slavery to
the Present. 3 Hours. AE41 / H.
This course examines the history and diversity of African American
religious expression from slavery until the present, emphasizing both
mainstream and alternative faiths. It covers the religious world views of
enslaved Africans, and examines faiths inside and outside of Christianity.
Topics may include: independent black churches, magical practices, the
Holiness and Pentecostal movements, black Islam, religious freemasonry,
and esoteric faiths. The class emphasizes the influence of gender, class,
race, migration, and urbanization on black religion. (Same as AAAS 316
and HIST 316.) LEC.

AMS 317. African American Women: Colonial Era to the Present. 3
Hours. H.
This interdisciplinary course covers the history of African American
women, beginning in West and Central Africa, extending across
the Middle Passage into the Americas, and stretching through
enslavement and freedom into the 21st century. The readings cover their
experiences through secondary and tertiary source materials, as well as
autobiographies and letters, plays and music, and poems, novels, and
speeches. (Same as AAAS 317, HIST 317, and WGSS 317.) LEC.

AMS 320. Border Patrolled States. 3 Hours. H.
Examines the politics of immigrant, citizenship and space through official,
intellectual and popular responses to the growth of Latino/a populations
in the U.S. and to international migration to and from Mexico and Central
America. Topics include consideration of how responses to immigration
articulate racialized and culturally specific (including linguistic and
religious) concepts of the nation, and how questions of citizenship and
residency dovetail with issues of community "voice", public space, and
diverse notions of "security". LEC.

AMS 322. Modernism. 3 Hours. H.
Examines modernism as a transnational cultural movement primarily from
the 1890s to the 1940s, but also considers the impact of modernism on
later twentieth century cultural production. Provides an interdisciplinary
exploration of art, architecture, film, literature and music. Topics include
debates related to periodization, the nature of progress, the impact of
colonialism and imperialism, the power of reason, and the relationship to
previous "traditional" ideas. LEC.

AMS 330. American Society. 3 Hours. H.
The social structure and organization of American society with special
reference to recent social changes. (Same as SOC 330.) Prerequisite: An
introductory course in sociology or American studies. LEC.

AMS 332. The United States in Global Context. 3 Hours. AE42 / S.
Examines the influence abroad of US culture, policies and practices
and the impact of other countries on US culture, society, and politics.
Among the topics that may be examined are race, ethnicity, colonialism,
imperialism, migration, technology, communications and media, popular
culture, language, health, domestic and transnational organizations, as
well as economic, political, religious, military and educational institutions.
(Same as SOC 332). LEC.

AMS 340. Black Leadership. 3 Hours. H/W.
The course focuses on the concept of leadership and on black leadership
in the United States; an in-depth analysis of selected case studies
on black leaders, both historical and contemporary. Some attention
will be given to the dispersion of Africans into the Americas and the
leadership that emerged, conditioned both by environmental factors and
the psychology engendered by the system of slavery. Selected successful
black leaders will be invited to visit the class from time to time. (Same as
AAAS 330.) LEC.

AMS 344. Case Study in American Studies: _____ 3 Hours. H.
This course examines in depth a specific American studies or theme.
LEC.

AMS 345. Cultural Studies. 3 Hours. H.
Students gain awareness of major scholars and "schools" that have
pursued critical, interdisciplinary research or cultural processes and
products in the field of American Studies. Topics may include cultural
materialism, semiotics, nationalism, ethnic/racial identity, gender and
sexuality, cultural politics, mass media, public spheres, social space and
place, commodity consumption, music, and popular culture. LEC.

AMS 350. Visual Culture and the Harlem Renaissance. 3 Hours. H.
Examines the African American cultural movement through art; the artistic
gaze in novels; representations of African Americans in film; as well as the
influence of musical and dramatic performance on the African American
image. Considers the impact of American, European, and other cultural
influences on black artists of the time. LEC.

AMS 360. Theory and Method. 3 Hours. H.
An introduction through a topical theme to theories and methods currently
used in American Studies. Prerequisite: AMS 100, AMS 110 and AMS
332 or their equivalent, or consent of instructor. LEC.

AMS 390. Geography of the United States and Canada. 3 Hours. S.
A study of the different physical, economic, and cultural settings in the
United States and Canada which form the basis for the various forms
of livelihood. Emphasis on the United States. (Same as GEOG 390.)
Prerequisite: An introductory geography course, or background in United
States or Canadian history, social science, or culture, or consent of
instructor. LEC.

AMS 494. Topics in: _____ 1-4 Hours. H.
Interdisciplinary study of selected aspects of American society or culture
or of the American experience. LEC.

AMS 510. History of American Women--Colonial Times to 1870. 3
Hours. H.
A survey of women's roles as housewives, mothers, consumers, workers,
and citizens in pre-industrial, commercial, and early industrial America.
(Same as HIST 530 and WGSS 510.) LEC.

AMS 511. History of American Women--1870 to Present. 3 Hours.
AE41 / H.
A survey of women's history in the United States that will include
radical and reform movements, the impact of war and depression,
professionalization, immigration, women's work and the biographies of
leading figures in women's history. (Same as HIST 531 and WGSS 511.)
LEC.

AMS 512. History of Women and Work in Comparative Perspective. 3
Hours. H.
This course explores the connection between historical changes in
the labor process and the occupational choices available to women in
different countries. Through discussion and analyses of texts, students
will evaluate the construction of a gendered division of work as shaped
over time by economic, cultural, and political forces. The chronological
and geographical focus may vary depending on the instructor. (Same as HIST 532 and WGSS 512.) LEC.

AMS 515. American Women and World War II. 3 Hours. H.
Examines histories of U.S. women during World War II through an interdisciplinary approach that draws on popular culture and oral history. Utilizes theories and methods of oral history and examines representations of women such as Rosie the Riveter, GI Jane and the Sweetheart at Home. Topics include the consumption of images, the function of images in war and the relationship between popular culture and war. LEC.

AMS 520. Topics in Latino Studies: ______. 3 Hours. U.
The study of special topics in Latino Studies. Students may repeat this course when different topics are offered. LEC.

AMS 522. American Racial and Ethnic Relations. 3 Hours. S.
Analysis of the basic sociological concepts that apply to majority-minority relations; with special emphasis on racial and ethnic interaction in the United States. (Same as SOC 522.) Prerequisite: A distribution course in sociology or American studies. LEC.

AMS 529. Race and the American Theatre. 3 Hours. U.
The representation(s) of race in significant texts and performance styles in American theatre analyzed according to political ideologies, dramatic movements and the impact of these factors on the representation of the "other" in the theatre. (Same as AAAS 585 and THR 529.) LEC.

AMS 534. Global Ethnic and Racial Relations. 3 Hours. NW / S.
An examination of constructions of race and ethnicity around the world. Emphasis is on the social, political, historical, cultural and economic factors that lead to the creation of ethnic and racial identities, ethnic conflict and accommodation, ethnic movements, and ethnic political organization. Racial and ethnic relations in the U.S. are compared with other countries. Major focus is placed on ethnicity in Africa, Asia, Latin America, the Caribbean, and/or the Middle East. (Same as AAAS 510 and SOC 534.) LEC.

AMS 536. Ethnicity in the United States: ______. 3 Hours. S.
An examination of the history, sociology, and culture of U.S. ethnic categories (e.g., American Indians, Latinos, Asian Americans, Jewish Americans, Irish Americans). The specific group studied varies from semester to semester. Course may be repeated for credit. (Same as SOC 536.) Prerequisite: A principal course in American Studies, Sociology, or Anthropology, or permission of instructor. LEC.

AMS 540. Culture, Space and Power in Urban America. 3 Hours. H.
Surveys scholarship on urban expressive culture as it illuminates the politics to identity and public space by African American and Latino/a urban communities. Explores how race, class and gender positionality affect and reflect access to public space and recognition in the public sphere through aesthetic practices such as hip-hop, graffiti writing and custom car cruising. LEC.

AMS 550. Research Seminar in: ______. 3 Hours. AE61 / H.
A seminar exploring a specific American Studies theme. A research paper or equivalent project is required. Prerequisite: AMS 360 (a grade of C or better is recommended) or consent of instructor. Cannot be taken concurrently with AMS 551, AMS 552 or AMS 553. LEC.

AMS 551. Research Project in American Studies. 3 Hours. AE61 / H.
Independent research on a selected topic under the direction of a faculty member. Students write an original research paper or complete an equivalent project in another medium, grounded in primary as well as secondary sources. Prerequisite: AMS 550 or consent of instructor. RSH.

AMS 552. Public Service in American Studies. 3 Hours. AE61 / H.
Independent public service in a selected area undertaken in consultation with and under the direction of a faculty member. Students produce a final written project on the experience that integrates the public service experience and academic materials, or complete an equivalent project in another medium. Prerequisite: AMS 550 or consent of instructor. FLD.

AMS 553. Honors in American Studies. 3 Hours. AE61 / H.
Honors equivalent of AMS 551. May be taken twice for credit. Three hours of AMS 553 may be substituted for a course in an appropriate category in the American Studies major. Prerequisite: AMS 550, eligibility for departmental honors, or consent of instructor. RSH.

AMS 554. Advanced Topics in American Literature to 1865: ______. 3 Hours. H.
Study of American literary works before 1865. Topics may focus on a particular genre, theme, topic, historical period, author, or group of authors. May be repeated for credit as the topic changes. (Same as ENGL 576.) Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

AMS 555. Advanced Topics in American Literature Since 1865: ______. 3 Hours. H.
Study of American literary works after 1865. Topics may focus on a particular genre, theme, topic, historical period, author, or group of authors. May be repeated for credit as the topic changes. (Same as ENGL 577.) Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

AMS 556. Gender, Culture, and Migration. 3 Hours. H.
This course brings a human face to the 21st century manifestation of globalization by focusing on the issues of culture, gender and migration. How do these three aspects create the "global village" amongst both the host and donor peoples? When people move from one place to another, what do they leave behind, what do they take with them? What is gained, or lost by the host community? What is the impact of migration on a specific group's and individual's sense of identity? How has migration affected the people's construction, understanding, and practice of gender? Given their primary roles in the home and within the culture, these questions and more are posed with particular attention to women. Migration theories, interviews and personal testimonies as well as literary and dramatic works are critical to our analyses of the issues raised and enable us to hold conversations with, and listen to the stories of the ordinary people who make globalization happen and sustain it. (Same as AAAS 565 and WGSS 565.) LEC.

AMS 576. Cultural Geography of the United States. 3 Hours. S.
Distributions of major culture elements including folk architecture, religion, dialect, foodways, and political behavior are systematically studied from a predominantly historical perspective. These discussions are followed by a survey of the major culture regions in America. Although not absolutely necessary, familiarity with concepts treated in any of the following courses would be helpful: AMS 100, AMS 110, ANTH 108, ANTH 308, GEOG 102, or GEOG 390. (Same as GEOG 576.) LEC.

AMS 579. Geography of American Foodways. 3 Hours.
An interdisciplinary approach to food that explores the diversity of eating habits across the United States and the role of food as an indicator of cultural identity and change. Current regional and ethnic food consumption patterns are stressed. Topics include multiculturalism and regional identity, the symbiotic relationship between restaurant food and home cooking, the recent interest in farmers' markets and organic foods, and the importance of the food industry and the popular press in setting trends. (Same as GEOG 579.) LEC.
AMS 580. American Art. 3 Hours. H.
A survey of American painting, sculpture, and architecture from colonial to recent times. (Same as HA 570.) Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

AMS 590. Transnational Asian Film. 3 Hours. H.
Examines the ways that contemporary East Asian films and the American film industry appropriate cinematic techniques, styles and themes from one another. Uses cultural studies theories to examine the construction of cultural and historical narratives of transnational interaction among East Asian countries. Explores the impact of economic globalization on transnational film production. LEC.

AMS 629. Sociology of Sport. 3 Hours. S.
Examination of organized sport as a social institution and its relation to other social institutions (e.g., political, economic, educational, and religious), with special emphasis on American society. Analysis of the social correlates of sports participation and a consideration of the role of sport in social change. (Same as SOC 629). Prerequisite: A principal course in American studies or sociology, or consent of instructor. LEC.

AMS 650. Jazz and American Culture. 3 Hours. H.
This course considers social and cultural histories of jazz, from the 1920s through the present day, as sites for exploring ideological struggles over such fields as race, class, gender, sexuality, democracy, capitalism, freedom, community, Americanness, and globalizaton in the U.S. The course will explore such questions as the following: What music was called jazz at what times and places? What did it mean to whom? Who played it? Who wrote about it? Who listened to it? Who danced to it? Who policed it? Who produced it? Who used it to rebel? Who used it to survive? What did all of these practices mean to participants? The course will examine struggles over social meanings in the U.S. through a study of jazz performance, labor, representation, marketing, consumption, censorship, and historiography. Prerequisite: A course in American studies, American history, or consent of instructor. (Same as WGSS 652.) LEC.

AMS 652. Jazz I, Roots to 1955. 3 Hours. H.
Survey of jazz music, from ragtime and blues to jazz of the 1940s and 50s. Covers various styles of jazz, including New Orleans, swing, bebop and cool. Students are expected to have a basic understanding of melody, harmony and rhythm, although ability to read scores is not necessary. Graduate students will complete additional work to be determined in consultation with the instructor. LEC.

AMS 653. Jazz II, 1955-Present. 3 Hours. H.
Survey of jazz music, from 1950s to the present. Covers various styles of jazz, including free jazz, postmodern jazz and fusion. Students are expected to have a basic understanding of melody, harmony and rhythm, although ability to read scores is not necessary. Graduate students will complete additional work to be determined in consultation with the instructor. LEC.

AMS 680. Jazz Autobiography. 3 Hours. H.
Examines the literary and musical significance of jazz autobiographies since the 1940s. Authors include Louis Armstrong, Jelly Roll Morton, Billie Holiday, Charles Mingus, Nina Simone and others. Graduate students will complete additional work to be determined in consultation with the instructor. LEC.

AMS 682. Jazz Narratives in Novels and Films. 3 Hours. H.
Examines jazz and musicians’ life stories in prose fiction and fictional or biographical films. Novels may include works by John Clellon Holmes and Nathaniel Mackey. Films may include Lady Sings the Blues and Space is the Place. Graduate students will complete additional work to be determined in consultation with the instructor. LEC.

AMS 690. Black Cultural Studies. 3 Hours. H.
Examines critical approaches to the study of African American cultural production. Uses literature, films, music, art and performance to explore the development of interpretations of black culture. Covers major developments in black aesthetics in the twentieth century, various theoretical schools of thought, and significant writers such as bell hooks, Stuart Hall, and Gina Dent. Graduate students will complete additional course work to be determined in consultation with the instructor. LEC.

AMS 694. Directed Readings. 1-4 Hours. H.
Consent of instructor is required. IND.

AMS 696. Studies in: ______. 3 Hours. H.
Interdisciplinary study of different aspects of the American experience in different semesters. LEC.

AMS 700. Introduction to Museum Exhibits. 3 Hours.
This course will consider the role of exhibits as an integrated part of museum collection management, research, and public service. Lecture and discussion will focus on issues involved in planning and producing museum exhibits. Laboratory exercises will provide first hand experience with basic preparation techniques. Emphasis will be placed on the management of an exhibit program in both large and small museums in the major disciplines. (Same as BIOL 787, GEOL 781, HIST 723, and MUSE 703.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

AMS 714. Conservation Principles and Practices. 3 Hours.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects will also be considered. (Same as BIOL 700, GEOL 780, HIST 722 and MUSE 706.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

AMS 720. The Nature of Museums. 3 Hours.
The purpose of this course is to provide an overview of the kinds of museums, their various missions, and their characteristics and potentials as research, education, and public service institutions responsible for collections of natural and cultural objects. (Same as BIOL 788, GEOL 782, HIST 720, and MUSE 702.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

AMS 725. Museum Studies Workshop: ______. 1-3 Hours.
Short term, intensive workshops presented to provide specialized background in a variety of skills required in historical archives or museums. FLD.

AMS 730. Principles and Practices of Museum Collection Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museum collections, their associated data, and their use in scholarly research; cataloging, storage, fumigation, automated information management and related topics will be presented for museums of art, history, natural history and anthropology. (Same as BIOL 798, GEOL 785, HIST 725, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

AMS 731. Museum Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as BIOL 785, GEOL...
AMS 737. Music in America. 3 Hours.
A survey of historical developments from the Pilgrims to the present. (Same as MUSC 759.) Prerequisite: One course in the field of music history and literature or consent of instructor. LEC.

AMS 767. Gerontology Proseminar. 3 Hours.
A proseminar coordinated by the Gerontology Center. The proseminar explores essential areas of gerontology for researchers and practitioners, providing a multidisciplinary (psychology, biology, sociology, and communication) perspective on aging. The proseminar surveys contemporary basic and applied research, service programs, and policy and management issues in gerontology. (Same as BIOL 784, GEOL 784, HIST 721, and MUSE 705.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

AMS 787. Field Work. 1-12 Hours.
Supervised field research in aspects of American civilization. Prerequisite: Consent of instructor. FLD.

AMS 797. Introduction to Museum Public Education. 3 Hours.
Consideration of the goals of an institution's public education services, developing programs, identifying potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as BIOL 784, GEOL 784, HIST 721, and MUSE 705.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

AMS 799. American Studies Museum Apprenticeship. 1-6 Hours.
Provides directed, practical experience in research, collection care and management, public education, and exhibits with emphasis to suit the particular requirements of each student. (Same as ANTH 799, BIOL 799, GEOL 723, HIST 799, and MUSE 799.) FLD.

AMS 801. Introduction to American Studies. 3 Hours.
An introduction to the field of American Studies through an examination of some of the classic and innovative works, issues, debates, and controversies in the history and the literature of American Studies. LEC.

AMS 802. Theorizing America. 3 Hours.
Drawing from a broad range of perspectives (e.g., cultural theory, social theory, literary theory, etc.), this course will introduce students to current theoretical debates in American studies and the concepts that inform them. LEC.

AMS 803. Research Methods in American Studies. 3 Hours.
An introduction to the range of interdisciplinary research methods in American studies. Emphasis will be placed on an examination of the assumptions, logics, and procedures involved in various approaches to understanding American society and culture. LEC.

AMS 804. Research Seminar. 3 Hours.
An intensive application of theoretical and methodological issues to the development of specific substantive research problems. Students will be expected to design and implement a study that will be critically assessed in the seminar. LEC.

AMS 805. American Pluralism: Race, Ethnicity, and Religion in American Life. 3 Hours.
Analysis of the dynamics of intercultural and intergroup relations in America with special emphasis on the examination of major conceptual perspectives that have characterized the study of race, ethnicity, and religion in American life. LEC.

AMS 808. Studies in: _____. 3 Hours.
Interdisciplinary study of different aspects of the American experiences in different semesters. LEC.

AMS 809. Advanced Research Seminar. 3 Hours.
An intensive application of theoretical and methodological issues to the development of specific substantive research problems. Students will be expected to design and implement a study that will be critically assessed in the seminar. Prerequisite: AMS 804. Permission of the instructor required. LEC.

AMS 835. Colloquium in the History of Gender. 3 Hours.
This colloquium will cover theoretical and topical readings on the history of manhood, womanhood, and gender systems. (Same as HIST 895 and WGSS 835.) LEC.

AMS 836. Colloquium in United States Women's History. 3 Hours.
This colloquium will cover theoretical and topical readings on the history of women in the United States from the pre-contact period to the present. It is designed to familiarize students with the most important and current historiography in the field. (Same as HIST 896 and WGSS 836.) LEC.

AMS 837. Comparative Colloquium in Women's History. 3 Hours.
This colloquium will approach the history of women from a comparative perspective through theoretical and topical readings on women in at least two different cultures. (Same as HIST 897 and WGSS 837.) LEC.

AMS 896. Examination Preparation. 1-6 Hours.
Directed and independent study in preparation for the M.A. examination. May be repeated. RSH.

AMS 899. Thesis. 1-6 Hours.
Investigation of a topic for master's thesis. Total enrollment in this course may not exceed six hours of credit. THE.

AMS 900. Teaching Seminar. 1-6 Hours.
This seminar is designed to assist students in the preparation, presentation, and evaluation of teaching in American Studies. Graded on a satisfactory/unsatisfactory basis. LEC.

AMS 973. Seminar in United States Women's History. 3 Hours.
This research seminar will focus on the history of women in the United States from the pre-contact period to the present. Students will research and write a paper using primary sources, and present those papers to the seminar for evaluation. (Same as HIST 973 and WGSS 873.) LEC.

AMS 996. Examination Preparation. 1-9 Hours.
Directed and independent study in preparation for the doctoral comprehensive examinations. May be repeated. RSH.

AMS 997. Directed Readings. 1-4 Hours.
Directed reading in an area of American culture in which there is no appropriate course in the offerings of the American Studies program or of the cooperating departments, but in which there is a member of the graduate faculty competent and willing to direct a program of study. RSH.

AMS 998. Seminar in: _____. 3 Hours.
Topics vary from semester to semester. Graduate students are consulted in selecting topics. LEC.

AMS 999. Dissertation. 1-12 Hours.
THE.

Anthropology Courses

ANTH 100. General Anthropology. 3-4 Hours. SC AE42/GE3S / S.
Lecture and discussion sections covering the four primary fields of Anthropology: Biological Anthropology, Linguistics, Social Anthropology, and Archaeology. Concepts and approaches to each field, using past and present examples from around the world, will be examined with an emphasis on the unity of the anthropological approach. Future directions of human experience are explored. Discussion sections will be used to examine material covered in lecture and in readings in specific cultural
and evolutionary contexts. Discussion and application of fundamental concepts to contemporary events, examination of fossil collections, and viewing and discussion of relevant visual materials are among topics to be covered in sections. LEC.

**ANTH 102. Succeeding in Anthropology. 1 Hour. S.**
This course is designed to enhance students' chances for success in anthropology major and life after college. Students will learn how to maximize their possibilities for gaining academic assistance, grants, and career building, as well as design strategies for winning jobs, entry into graduate programs, and paid internships at home and abroad. Graded on a satisfactory/unsatisfactory basis. LEC.

**ANTH 104. Fundamentals of Physical Anthropology. 3-4 Hours. NB GE3N / N.**
Lecture and discussion sections covering the mechanisms and principles of Darwinian evolution with special emphasis on human and primate data. Lecture topics include genetics, variation, primate ethnology, and the fossil evidence for human evolution. Discussion sessions include topics in Mendelian and population genetics, blood group systems, quantitative morphological variation, and fossil human and primate skeletal material. LEC.

**ANTH 105. Fundamentals of Physical Anthropology, Honors. 3-4 Hours. NB GE3N / N.**
An honors section of ANTH 104 for students with superior academic records. LEC.

**ANTH 106. Introductory Linguistics. 3 Hours. SC AE42/GE11/GE3S / S.**
Introduction to the fundamentals of linguistics, with emphasis on the description of the sound system, grammatical structure and semantic structure of languages. The course will include a survey of language in culture and society, language change, computational linguistics and psycholinguistics, and will introduce students to techniques of linguistic analysis in a variety of languages including English. (Same as LING 106.) LEC.

**ANTH 107. Introductory Linguistics, Honors. 3 Hours. SC AE42/GE11/GE3S / S.**
Introduction to the fundamentals of linguistics, with emphasis on the description of the sound system, grammatical structure and semantic structure of languages. The course includes a survey of language in culture and society, language change, computational linguistics and psycholinguistics, and introduces students to techniques of linguistic analysis in a variety of languages including English. Open only to students admitted to the University Honors Program or by consent of instructor. (Same as LING 107.) LEC.

**ANTH 108. Introduction to Cultural Anthropology. 3-4 Hours. SC AE42/GE3S / S.**
An introduction to the nature of culture, language, society, and personality. Included in this survey are some of the major principles, concerns, and themes of cultural anthropology. The variety of ways in which people structure their social, economic, political, and personal lives. Emphasized are the implications of overpopulation, procreative strategies, progress and growth of cultural complexity, developments in the Third World, and cultural dynamics in Western as well as in non-Western societies. LEC.

**ANTH 109. Introduction to Cultural Anthropology, Honors. 3-4 Hours. SC / S.**
An honors section of ANTH 108 for students with superior academic records. LEC.

**ANTH 110. Introduction to Archaeology. 3-4 Hours. HT GE3H / H.**
A general introduction to the study of archaeology. Evolution of prehistoric cultures in adaptive response to changing natural and social environments, from the early Paleolithic to the emergence of urban civilizations. LEC.

**ANTH 111. Introduction to Archaeology, Honors. 3-4 Hours. HT GE3H / H.**
An honors section of ANTH 110 for students with superior academic records. LEC.

**ANTH 160. The Varieties of Human Experience. 3 Hours. NW AE42/GE3H/GE3S / S/W.**
An introduction to basic concepts and themes in cultural anthropology by means of the comparative study of selected cultures from around the world, for the purpose of appreciating cultural diversity. Emphasis is on systems of belief and meaning. Not open to students who have taken ANTH 360. LEC.

**ANTH 161. The Third World: Anthropological Approaches. 3-4 Hours. NW / S/W.**
Violent change, revolution, planned change, and peaceful transition in non-Western cultures. A study of development, modernization, nation-building, rapid acculturation, and war. LEC.

**ANTH 162. The Varieties of Human Experience, Honors. 3 Hours. NW AE42/GE3H/GE3S / S/W.**
An honors section of ANTH 160 for students with superior academic records. Not open to students who have had ANTH 160 or ANTH 360. LEC.

**ANTH 177. First Year Seminar: _____, 3 Hours. GE11 / U.**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Anthropology. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

**ANTH 293. Myth, Legend, and Folk Beliefs in East Asia. 3 Hours. NW AE42 / H/W.**
A survey of the commonly held ideas about the beginning of the world, the role of gods and spirits in daily life, and the celebrations and rituals proper to each season of the year. The purpose of the course is to present the traditional world view of the peoples of East Asia. (Same as EALC 130, REL 130.) LEC.

**ANTH 300. General Anthropology. 3 Hours. AE42/GE3H/GE3S / S.**
A more intensive treatment of the content of ANTH 100. Not open to students who have had ANTH 100. LEC.

**ANTH 301. Anthropology Through Films. 3 Hours. AE42 / S.**
An exploration of the human ways through films. Cross-cultural interpretations by filmed records of varieties of interpersonal relations seen through such aspects of culture as hunting, war, marriage, religion, sex, kinship, and death. Patterns of interactions are analyzed by examples from cultures around the world, primarily the non-Western world. LEC.

**ANTH 303. Peoples and Cultures of North Africa and the Middle East. 3 Hours. NW / S.**
This course familiarizes students with the peoples and cultures of North Africa and the Middle East. It examines the cultural, demographic, and religious diversity of the region, as well as the development of the early Islamic community and the formation of Islamic institutions. Issues such as religion and politics, inter-religious relations, nation-building, Islamic response to colonialism, Palestinian-Israeli conflict, Islamic resurgence,
secularism, democratization, and gender, are also explored. (Same as AAAS 303.) LEC.

ANTH 304. Fundamentals of Physical Anthropology. 3-4 Hours. NB GE3N / N.
A more intensive treatment of the content of ANTH 104. Not open to students who have had ANTH 104 or ANTH 105. LEC.

ANTH 308. Introduction to Cultural Anthropology. 3-4 Hours. SC AE42/GE3S / S.
An introduction to the nature of culture, language, society, and personality. Included in this survey are some of the major principles, concerns, themes of cultural anthropology, and the variety of ways in which people structure their social, economic, political, and personal lives. Emphasized are the implications of overpopulation, procreative strategies, progress and growth of culture complexity, developments in the Third World, and cultural dynamics in Western as well as in non-Western societies. Not open to students who have taken ANTH 108 or ANTH 109. LEC.

ANTH 310. Introduction to Archaeology. 3-4 Hours. HT GE3H / H.
A more intensive treatment of the content of ANTH 110. Not open to students who have taken ANTH 110 or ANTH 111. LEC.

ANTH 313. New Discoveries in Archaeology. 3 Hours. S.
Recent discoveries in anthropological archaeology in various areas of the world and their impact on existing bodies of fact and theory, and on established methods of archaeological discovery. LEC.

ANTH 315. The Prehistory of Art. 3 Hours. S.
A survey of prehistoric art focusing on the material record and interpretations of rock art (paintings, engravings on rock surfaces in rock-shelters, caves and in open air sites) and portable art created by prehistoric people. The emphasis is on the small-scale societies (hunter-gatherer and early food producers) around the world before the appearance of written records in respective geographic areas. Environmental, social and cultural contexts in which these art forms were created are discussed along with a review of past scholarship and current interpretive approaches to this old and enduring expression of human creativity. Course may be offered in lecture or online format. (Same as HA 315.) LEC.

ANTH 317. Prehistory of Europe. 3 Hours. S.
A survey of one million years of prehistory from the peopling of the European continent to the Roman Empire. The course will focus on the growth of culture, considering economy and technology, art and architecture. Topics will include the Neanderthals, the big game hunters of the Ice Age, the megalith builders, the Celts. Prerequisite: An introductory course in anthropology, history, or cultural geography. LEC.

ANTH 318. Prehistory of Kansas. 3 Hours. S.
A survey of the changing lifeways of Native Americans in Kansas from the time of the earliest inhabitants of at least 12,000 years ago to the period of Euro-American contact. Extensive use will be made of Museum of Anthropology collections. LEC.

ANTH 320. Language in Culture and Society. 3 Hours. SC AE41/ AE61 / S.
Language is an integral part of culture and an essential means by which people carry out their social interactions with the members of their society. The course explores the role of language in everyday life of peoples in various parts of the world and the nature of the relationship between language and culture. Topics include world-view as reflected in language, formal vs. informal language, word taboo, and ethnography of speaking. (Same as LING 320.) LEC.

ANTH 321. Language in Culture and Society, Honors. 3 Hours. SC AE41/AE61 / S.
An honors section of ANTH 320 for students with superior academic records. Not open to students who have had ANTH 320 or LING 320. (Same as LING 321.) Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

ANTH 340. Human Variation and Evolution. 3 Hours. AE41 / N.
An examination of biochemical and physical variability in contemporary human populations. Topics include: genetic basis of human diversity, evolutionary theory, population genetics, blood groups, biochemical variations, body size and shape, pigmentation, and other morphological characteristics. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 341. Human Evolution. 3 Hours. N.
The evolutionary processes and events leading to the development of humans and the humanlike forms from primate ancestors; fossil hominids and the origin of modern Homo Sapiens. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 343. Food, Nutrition and Culture. 3 Hours. U.
The course is a cross-cultural survey of human dietary practices (foodways). Students are introduced to the concepts of nutrition, diet and cuisine. Evolutionary and adaptive aspects of human diets and cuisines are considered. Nutritional, environmental/ technological, social and ideological aspects of regional and ethnic foodways are examined. Invited lecturers from different cultural traditions offer indigenous perspectives on their foodways. LEC.

ANTH 350. Human Adaptation. 3 Hours. S.
A survey and examination of present-day human populations focusing upon adaptations in different environments and the interaction of culture and biology. General evolutionary theory is treated with an emphasis on the mechanisms of evolutionary change. Genetic, physiological, and cultural adaptations to environmental stress are discussed from the standpoint of their past evolutionary significance and their influence on contemporary human variation. Prerequisite: ANTH 104 or ANTH 304. LEC.

ANTH 352. Controversies on the Living and the Dead. 3 Hours. N.
The pros and cons of conflicting theories on the past and present evolution are examined. Race and intelligence, evolution of skin color, and genetic future of humans are among the considered topics. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 359. Anthropology of Sex. 3 Hours. N.
An evolutionary perspective on the behavior and biology of males and females in human society. Topics will include the evolution of sexual dimorphism, social and biological issues in human reproduction, primate social patterns, human sexual behavior and taboos, sex and social structure, and the sociobiology of sex. LEC.

ANTH 360. The Varieties of Human Experience. 3 Hours. NW AE42/ GE3H/GE3S / S/W.
A more intensive treatment of ANTH 160. An introduction to basic concepts and themes in cultural anthropology by means of the comparative study of selected cultures from around the world, for the purpose of appreciating cultural diversity. Emphasis is on systems of belief and meaning. Not open to students who have taken ANTH 160. LEC.

ANTH 361. The Third World: Anthropological Approaches. 3-4 Hours. NW / S/W.
A more intensive treatment of the content of ANTH 161. Not open to students who have had ANTH 161. LEC.
ANTH 362. Peoples of Southeast Asia. 3 Hours. NW / S/W.
An analysis of the cultural diversity and unity of the peoples of Burma, Thailand, Laos, Cambodia, Vietnam, Malaysia, Indonesia, and the Philippines. Emphasis on cultural-historical relationships and theories of cultural development and change. LEC.

ANTH 363. Gendered Modernity in East Asia. 3 Hours. S.
This course explores rapidly changing gender relationships and the sense of being "modern" in East Asia by examining marriage and family systems, work, education, consumer culture, and geopolitics. The class seeks to understand how uneven state control over men and women shapes desires, practices, and norms and how men and women act upon such forces. Avoiding biological or social determinism, this course treats gender as an analytical category and examines how modern nation-states and global geopolitics are constituted and operated. (Same as EALC 363 and WGSS 363.) LEC.

ANTH 364. Peoples of Japan and Korea. 3 Hours. NW / S/W.
An analysis of the cultural diversity and unity of the peoples of Japan and Korea. Emphasis on historical and ethnological relationships, social structure, and ethics. (Same as EALC 364.) LEC.

ANTH 365. Japanese People through Film. 3 Hours. NW / S/W.
Japanese people's culture and society through an extensive examination of both documentary and feature films. Readings from social science fields and literature will be used--the former to supply a theoretical framework for the study of Japanese people and the latter to further the inquiry into the individual sentiment motivating actions. (Same as EALC 365.) LEC.

ANTH 366. The Life Cycle in Japanese Culture and Literature. 3 Hours. NW / H/W.
A study of the Japanese people from birth to death: what it means to be born in a Japanese family, to grow up Japanese, and to die Japanese. Anthropological works and selections from Japanese literature and film will be used to examine ways in which Japanese people live through the critical periods in their life cycle. (Same as EALC 366.) LEC.

ANTH 367. Introduction to Economic Anthropology. 3 Hours. S.
This course uses ethnographic case materials to explore the ways humans provision themselves under different social and environmental conditions. It introduces the basic theories, concepts, and debates of economic anthropology and provides a foundation for more advanced courses in this subdiscipline. Prerequisite: ANTH 108 or ANTH 308, or ANTH 160 or ANTH 360, or permission of instructor. LEC.

ANTH 368. The Peoples of China. 3 Hours. NW / S/W.
An analysis of the cultural origin, diversity, and unity of the peoples of China. Emphasis on historical development, social structure, cultural continuity and change, and ethics. (Same as EALC 368.) LEC.

ANTH 370. Peoples and Cultures of the Pacific. 3 Hours. NW / S/W.
A survey of the native cultures of Australia, Melanesia, Micronesia, and Polynesia. Investigation of the origins and dispersal of Pacific peoples, their cultural adaptations to differing habitats, their forms of social, political, and religious organization. Consideration of the problems and cultural changes resulting from colonization and modernization. Prerequisite: ANTH 100, ANTH 108, ANTH 160, ANTH 308, ANTH 360, or consent of instructor. LEC.

ANTH 372. Religion, Power, and Sexuality in Arab Societies. 3 Hours. NW / S.
This course examines theories of religion, discourse, power, gender and sexuality in their application to Arab societies. The course introduces different aspects of Arab cultures. Through canonical works, we study political domination, tribal social organization, honor, tribe, shame, social loyalty, ritual initiations and discuss how these issues speak generally to anthropological inquiry. Regionally specific works are then framed by an additional set of readings drawn from anthropological, linguistics, and social theories. (Same as AAAS 372.) LEC.

ANTH 376. North American Indians. 3 Hours. NW AE41 / S/W.
A survey of American Indian cultures north of Mexico at the time of the first contact with Western civilization; detailed studies of selected Indian cultures. LEC.

ANTH 379. Indigenous Traditions of Latin America. 3 Hours. NW / S/W.
A survey of the major indigenous traditions of Mesoamerica, the Andes, and lowland tropical Latin America. Coverage emphasizes how indigenous cultural traditions and societies have both continued and changed since the European Invasion and addresses such current issues as language rights, territorial rights, sovereignty, and state violence. Students enrolled in the 600-level section will be required to complete additional research and class leadership tasks. Not open to students who have taken LAA 634. (Same as LAA 334.) LEC.

ANTH 380. Peoples of South America. 3 Hours. NW / S/W.
A survey of native peoples and cultures of South America from the time of initial Western contacts to the present day. LEC.

ANTH 382. People and the Rain Forest. 3 Hours. S.
An analysis of the cultural origin, diversity, and unity of the peoples of the neotropics. Emphasizing the peoples of Amazonia, the course introduces students to topics associated with the economic, political, and cultural dimensions of social life in rain forest communities. LEC.

ANTH 387. Field Research on Gender. 3 Hours. S.
This course examines gender roles and gender culture in Costa Rica, especially in the southern part of the country. Students will be introduced, both theoretically and practically, to feminist anthropology as well as gender ethnography. It covers academic literature about the topic, and literature written by women. The class will also discuss different types of machismo culture and the structures and functioning of families in southern Costa Rica. Class taught in Golfito, Costa Rica. Course taught in Spanish. Contact the Department of Anthropology, or the Office of Study Abroad. LEC.

ANTH 389. The Anthropology of Gender: Female, Male, and Beyond. 3 Hours. NW GE21.
This course will introduce students to cultural constructions and performances of masculinity, femininity, and alternative genders across time and space. Topics and cases will be drawn from primarily non-Western cultures, ranging from Javanese markets to Pacific Rim gardens, and from Haitian voudou to Maya royal politics. This course uses research by archeologists, linguists, anthropologists, and sociocultural anthropologists. (Same as WGSS 389.) LEC.

ANTH 397. Museum Anthropology. 3 Hours. S.
An introduction to the historical background, practice, and ethical issues involved in the creation, presentation, and dissemination of anthropological information in a museum setting. Students participate in the study of a collection of material culture (artifacts) from the Museum of Anthropology, culminating in development of a script for an exhibit. FLD.

ANTH 400. Topics in Anthropology, Honors: ______. 3 Hours. H.
Selected issues and theories in contemporary anthropology (cultural, linguistic, biological, archaeological) for honors students. Topic for semester to be announced. May be repeated for credit if content varies. Prerequisite: Admission to the University Honors Program or consent of instructor. LEC.
ANTH 401. Integrating Anthropology. 3 Hours. S.
Capstone course that integrates the primary fields of anthropology. Students apply concepts and approaches from each field to a particular topic in preparation for and presentation of a cross-disciplinary and integrative final project. Prerequisite: Completion of all required introductory anthropology courses and two anthropology courses LEC.

ANTH 406. Laboratory Techniques in Archaeology. 3 Hours. S.
A survey of basic laboratory procedures associated with specimen preparation, analysis, classification, and measurement of archaeological materials, with emphasis on lithic and ceramic technology. Formal lectures and laboratory sections. LEC.

ANTH 410. Archaeological Myths and Realities. 3 Hours. S.
A more intensive treatment of the content of ANTH 210. Not open to students who have had ANTH 210. LEC.

ANTH 415. The Rise of Civilization. 3 Hours. S.
A study of evolutionary processes leading to the birth of the early great urban civilizations of the Old World and the New World. Patterns of growth and similarities and differences in the rise of urban complexes and states in Mesopotamia, Egypt, the Indus Valley, and in Mexico/Guatemala and Peru. LEC.

ANTH 418. Summer Archaeological Field Work. 1-8 Hours. AE61 / S.
Under the direction of a professional archaeologist, undergraduate and graduate students are taught proper procedures for the excavation and laboratory analysis of data from a prehistoric or historic archaeological site. Data gathered may be used for additional graduate research. Enrollment by application; limited to twenty students. A fee for subsistence costs will be charged. FLD.

ANTH 419. Training in Archaeological Field Work. 1-6 Hours. S.
Undergraduate and graduate students are taught techniques of archaeological field work, including survey and excavation, as well as laboratory procedures, including artifact classification and curation. FLD.

ANTH 430. Linguistics in Anthropology. 3 Hours. S.
The study of language as a symbolic system. Exploration into the interrelatedness of linguistic systems, of nonlinguistic communicative systems, and of other cultural systems. (Same as LING 430.) LEC.

ANTH 440. Introduction to Primates. 3 Hours. N.
A review of the evolution and behavior of nonhuman primates. The survey includes the stages of primate evolution, morphology of living primates, and descriptions and analyses of primate behavioral patterns. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 442. Anthropological Genetics. 3 Hours. N.
Principles of human genetics involved in biological anthropology. The genetics of non-Western populations considered within an evolutionary framework. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 445. Topics in Biological Anthropology: ____. 3 Hours. N.
Seminar concentrating on selected problems and issues in contemporary biological anthropology. Topic for semester to be announced. Course may be repeated for a maximum of nine hours of credit. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 447. Human Behavioral Genetics. 3 Hours. S.
A survey of human behavioral genetics for upper division undergraduates. Emphasis is on how the methods and theories of quantitative, population, medical, and molecular genetics can be applied to individual and group differences in humans. Both normal and abnormal behaviors are covered, including intelligence, mental retardation, language and language disorders, communication, learning, personality, and psychopathology. (Same as BIOL 432, PSYC 432, SPLH 432.) Prerequisite: Introductory courses in biology/genetics or biological anthropology and psychology are recommended. LEC.

ANTH 449. Laboratory/Field Work in Human Biology. 1-3 Hours. AE61 / N.
Faculty supervised laboratory or field research for Human Biology majors. Students design and complete a research project in collaboration with a Human Biology faculty member. (Same as BIOL 449, SPLH 449, and PSYC 449.) Prerequisite: Consent of instructor and Human Biology major. FLD.

ANTH 459. Anthropology of Sex, Honors. 3 Hours. H.
The course is an introduction to the evolutionary study of human sexual behavior. Using an explicitly Darwinian framework, it examines the biological basis for human mate selection, male and female mating strategies, child-birth and child-care practices, parental care, marriage, and family structure. The power of Darwinian theory to predict human sexual behavior is tested in anthropological field studies, designed and carried out by students in the class. Class time is allocated for discussion of students' research as it progresses through each stage, and results are presented in the last weeks of the semester. Prerequisite: Introductory class in biology or biological anthropology. Open only to students in the University Honors Program, or by consent of instructor. LEC.

ANTH 460. Theory in Anthropology. 3 Hours. GE3H / S.
A critical examination of the main theories and concepts in cultural anthropology. Consideration of the philosophical presuppositions underlying past and current theoretical issues and trends. LEC.

ANTH 461. Introduction to Medical Anthropology. 3 Hours. S.
An introduction to the social and cultural practices that contribute to health and disease, including a survey of therapy systems in both Western and non-Western societies (e.g., Native American, African, Western allopathic medicine, etc.). This course should be of special interest to premedical students and majors in the allied health professions. LEC.

ANTH 462. Field Methods in Cultural Anthropology. 3 Hours. H.
This course introduces students to ethical considerations, methods used in ethnographic fieldwork, field notes, coding data, analysis, and write-up. Students design and carry out research projects. Prerequisite: ANTH 108 or ANTH 308, or ANTH 160 or ANTH 360 or ANTH162, or instructor's approval. LEC.

ANTH 465. Genocide and Ethnocide. 3 Hours. S.
Study of the killing of peoples and cultures. Case studies, focusing primarily on tribal South America. Examination of the implications of these studies as regards our definition of culture and our evaluation of aid programs, missionary efforts, and international business expansion. LEC.

ANTH 474. Applied Cultural Anthropology. 3 Hours. S.
Applications of anthropological theory, methods, and findings in programs of community and national development, public health, international aid, and military assistance. Examination of the role of the anthropologist, of ethics and values in intervention schemes, and of the organization of planned change in applied programs. Intensive analysis of selected case studies. FLD.

ANTH 480. Technology and Society in the Contemporary World. 3 Hours. AE61 / S.
The impact of scientific and technological advances on social and personal life in contemporary society. A wide range of topics will be dealt with during the semester; examples include the internet and new modes of communication, developments in genetics and medicine, and testing for intelligence, drugs, lie detection, and other purposes. LEC.
ANTH 482. Psychological Anthropology. 3 Hours. S.
Introduction to the interrelationship of individual and society: processes of socialization, perception and cognition, personality and culture, with emphasis on the psychological interpretation of human behavior and the sociocultural contexts of psychological processes. Both ethnographic and cross-culturally comparative perspectives are introduced. LEC.

ANTH 484. Magic, Science, and Religion. 3 Hours. NW / S/W.
A comparative study of religion and systems of value and belief in non-Western cultures. LEC.

ANTH 496. Reading and Research. 1-6 Hours. S.
Individual investigation of special problems in anthropology. Maximum of three credit hours in any one semester. Prerequisite: Consent of instructor. IND.

ANTH 498. Seminar in Technology: _____. 3 Hours. S.
Topic for semester to be announced. LEC.

ANTH 499. Senior Honors Research. 1-6 Hours. S.
Individual research under the direction of one or more instructors in the department. Maximum of four credit hours in any one semester. Prerequisite: A grade-point average of 3.5 in anthropology and 3.0 in all courses, and consent of instructor. IND.

ANTH 500. Topics in Archaeology: _____. 3 Hours. S.
Seminar concentrating on selected problems and issues in contemporary archaeology. Topic for semester to be announced. Course may be repeated for a maximum of nine hours of credit. Prerequisite: Successful completion of a course in archaeology at any level, or by permission of instructor. LEC.

ANTH 501. Topics in Sociocultural Anthropology: _____. 3 Hours. S.
Course concentrating on selected problems, theories, and issues in contemporary sociocultural anthropology. Topic for semester to be announced. LEC.

ANTH 502. Topics in Anthropological Linguistics: _____. 3 Hours. S.
Course concentrating on selected problems, theories, and issues in contemporary anthropological linguistics. Topic for semester to be announced. LEC.

ANTH 503. Topics in Biological Anthropology: _____. 3 Hours. S.
Course concentrating on selected problems, theories, and issues in contemporary biological anthropology. Topic for semester to be announced. LEC.

ANTH 504. North American Archaeology. 3 Hours. S.
A general survey of the archaeology of North America. Detailed coverage of selected problems. LEC.

ANTH 505. Prehistory of Eastern North America. 3 Hours. S.
A survey of the archaeological record of eastern North America from the late Pleistocene to the time of European contact. The diverse environments of eastern North America are considered in conjunction with the dynamic climatic and ecological changes which have occurred during the past 20,000 years to provide a background for study of the prehistoric groups who occupied the region. Topics will include the change in economies, technologies, and organization from the earliest hunter-gatherers through the development of pre-Colombian complex societies. Prerequisite: ANTH 110 or ANTH 310. LEC.

ANTH 506. Ancient American Civilizations: Mesoamerica. 3 Hours. NW / S/W.
An archaeological survey of the Precolumbian heritage of Mexico and Central America. The sites and cultures of the Olmecs, Teotihuacan, the Maya, the Zapotecs, the Toltecs, and the Aztecs will be considered in detail. Investigations of ancient art and architecture, crafts and technologies, trade and exchange, religious beliefs and practices, and writing and calendrical systems will be directed toward understanding the growth and the decline of these Native American civilizations. LEC.

ANTH 507. The Ancient Maya. 3 Hours. S/W.
An intensive examination of current scholarship on the ancient Maya civilization of Mexico and Central America. The course will consider Maya culture from its roots in early villages of the Preclassic period to the warring city-states of the Postclassic period. Topics will include settlement and subsistence systems, sociopolitical evolution, art and architecture, myth and symbolism, and Maya hieroglyphic writing. An important theme of the course will be the relevance of the Precolumbian Maya for understanding complex societies and contemporary Latin American Culture. Prerequisite: Successful completion of one of the following: ANTH 110, ANTH 310, ANTH 415, ANTH 506, or ANTH 508. LEC.

ANTH 508. Ancient American Civilizations: The Central Andes. 3 Hours. NW / S/W.
An archaeological survey of the ancient peoples of Peru and neighboring countries in South America. The origins of complex societies on the coast and in the Andean highlands will be reviewed with special consideration of the role of "vertical" environments in the development of Andean social and economic systems. Cultures such as Chavin, Moche, Nazca, Huari, Tiahuanaco, Chimú, and the rise of the imperial Inca state will be examined through artifacts, architectural remains, and ethnohistoric documents. LEC.

ANTH 510. An Introduction to Southwestern Archaeology. 3 Hours. NW / S.
Consideration of the history and processes of cultural development from the evidence of humans’ first presence to the historic period in the Southwestern United States and Northern Mexico. Special attention will be devoted to the origins, changes within, and connections to modern Southwestern native peoples of three long-lived traditions known as Hohokam, Mogollon, and Anasazi. Prerequisite: ANTH 110 or ANTH 310. LEC.

ANTH 512. Ethnohistory: _____. 3 Hours. S.
A critical evaluation of the records (local traditions, written documents, maps, photographs, etc.) relevant to a reconstruction of the history of cultures. Topic for the semester to be announced. LEC.

ANTH 514. The Near East in Prehistory. 3 Hours. S.
A broad examination of the prehistory of the Near East, emphasizing selected regional and research themes. Discussion will include a consideration of cultural adaptation and environmental diversity, early history of archaeological work, and current research trends. While all cultural periods will be examined, a major emphasis will be on the origins of food production and Neolithic economies. LEC.

ANTH 515. Topics in Old World Prehistory: _____. 3 Hours. S.
Topic for the semester to be announced. An introductory course in archaeology recommended. LEC.

ANTH 516. Hunters and Gatherers. 3 Hours. S.
The diversity of hunter-gatherer cultures documented in the ethnographic and archaeological records is considered on a global scale, with particular attention given to the relationships between environment, technology, and organization. The evolution of hunter-gatherers from the earliest hominids until their interaction with more complex societies is considered, with emphasis given to the variation and nature of change in these societies. Prerequisite: ANTH 108 or ANTH 110, or ANTH 308 or ANTH 310. LEC.

ANTH 517. Geoarchaeology. 3 Hours. N.
Application of the concepts and methods of the geosciences to interpretation of the archeological record. The course will focus primarily on the field aspects of geoarchaeology (e.g., stratigraphy, site formalional
processes, and landscape reconstruction), and to a lesser extent on the array of laboratory approaches available. (Same as GEOG 532.) Prerequisite: GEOG 104, ANTH 110, or ANTH 310. LEC.

ANTH 518. Environment and Archaeology. 3 Hours. S.
An investigation of the relationships between the biophysical world and the development of human cultures. Examination of archaeological methods employed in the study of these relationships. LEC.

ANTH 519. Lithic Technology. 3 Hours. S.
An introduction to the analysis and interpretation of prehistoric stone industries. Topics discussed include origins and development of lithic technology, principles of description and typology, use and function of stone tools; interpretation of flint knapping. Prerequisite: An introductory course in archaeology. LEC.

ANTH 520. Archaeological Ceramics. 3 Hours. S.
Practicum in the method and theory of pottery analysis in archaeology. Topics include manufacturing techniques, classification, and compositional analysis of pottery artifacts, as well as strategies for interpreting the role of ceramic vessels in food production, storage, and consumption; social and ritual activities; trade and exchange; and the communication of ideas. Prerequisite: ANTH 110 or ANTH 310. LEC.

ANTH 521. Zooarchaeology. 3 Hours. S.
This course is intended to complement faunal identification with practical involvement in analyses and interpretation of archaeological faunal assemblages using a variety of modern methods. Students will participate in the study of specific archaeological faunal remains, development of comparative zooarchaeological collections, and in middle-range research to document the variety of agents that affect faunal remains. Prerequisite: ANTH 110 or ANTH 310. LEC.

ANTH 522. Paleoethnobotany. 3 Hours. S.
This course discusses the relationship between past human groups and their plant environment, including the use of plants for food, fuel, shelter, and household artifacts. Topics include a review of the development of paleoethnobotanical research, methods and techniques of data recovery, basics in plant identification, methods of data quantification and interpretation, and current research topics. In addition to selected readings, students will participate with the development of comparative botanical collections and the interpretation of botanical remains recovered from archaeological contexts. Prerequisite: ANTH 110 or ANTH 310. LEC.

ANTH 523. Great Plains Archaeology. 3 Hours. S.
A survey is provided of the archaeological record and its interpretations for the Great Plains area of North America. The records from earliest human occupation, variation in hunter and gatherer societies, to horticultural and farming societies, and the historic period are reviewed. The history of archaeological research in the region, explanatory frameworks and models, and discussion of changes in economy, technology, mobility, social organization, and population movements are among the topics of concern. LEC.

ANTH 540. Demographic Anthropology. 3 Hours. S.
This course will survey demographic topics that are relevant to anthropological research and theory. Topics will include family and household structure, fertility, nuptiality, mortality, migration, and paleodemography. Emphasis will be placed on methods in use in these areas and applications from the literature. Prerequisite: Three courses in anthropology (at least one in physical and one in cultural) or graduate standing. LEC.

ANTH 542. Biology of Human Nutrition. 4 Hours. N.
Lecture and discussion. A comprehensive introduction to human nutrition, focusing on the anatomical, biochemical, and physiological aspects of nutrition. The essential nutrients and their role in human metabolism are covered in detail, and the course’s systemic approach places a strong emphasis on integration of metabolism. Students also are introduced to human dietary evolution, the concept of nutritional adaptation, and cross-cultural differences in diet and nutritional physiology. Discussion sections focus on applied aspects of human nutrition, including dietary assessment. The course is a prerequisite for ANTH 543, which is recommended as the second course in a sequence on human nutrition. Prerequisite: ANTH 104 or ANTH 304, and BIOL 152. Students who have not had BIOL 152 should have taken a comparable introductory course in organismal physiology. LEC.

ANTH 543. Nutrition Through the Life Cycle. 3 Hours. N.
The first half of the course focuses on nutrition through the life cycle, with an emphasis on biological, cultural, and environmental factors that influence human dietary intake and nutrition across the life span. Particular attention is given to the role of nutrition in cross-cultural variation in human growth, development, and aging. The second half of the course examines evolutionary aspects of human nutrition, including the origins and adaptive significance of regional and cultural basis. The development of taste and food preferences, at the level of the individual and population, as well as symbolic aspects of dietary behavior also will be considered. Prerequisite: ANTH 542 or permission of instructor. LEC.

ANTH 544. Origins of Native Americans. 3 Hours. N.
A survey of the genetic, linguistic, historic, archaeological, and morphological evidence for the origins of indigenous populations of the Americas. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 545. Contemporary Health Issues in Africa. 3 Hours. S.
The course examines health and nutrition in African communities, using the methods of biological and medical anthropology. Fundamental to the approach taken in the course is the understanding that the health of human groups depends on interactions between biological and cultural phenomena in a particular ecological context. One topic will be selected per semester, to examine in detail the full array of epidemiological factors contributing to patterns of specific diseases. AIDS, childhood diseases, and reproductive health of African women are among possible topics. Course material will be selected from scholarly and medical publications, as well as coverage in the popular media. The use of a variety of sources will enhance understanding of the biological and cultural issues involved and will help students identify possible bias and misinformation in popular coverage of events such as famine or epidemic in African settings. (Same as AAAS 554.) Prerequisite: An introductory course in either anthropology or African studies. LEC.

ANTH 549. Human Paleontology: Fossil Apes to Australopithecus. 3 Hours. N.
This course is an intensive survey of the fossil evidence for hominoid evolution up to the emergence of the first hominids—Australopithecus. Topics include the origin and evolution of the great apes, gibbons, and extinct forms such as Ramapithecus and Gigantopithecus, as well as the appearance of Australopithecines. Functional morphology is stressed. This course may be taken either before or after ANTH 550. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.

ANTH 550. Human Paleontology: Homo Erectus to Homo Sapiens. 3 Hours. N.
The rise of genus Homo is the theme of this course. Fossils representing erectus, Neanderthal, Upper Paleolithic, and post-Pleistocene forms are discussed in detail with particular emphasis on the relationship between cultural and morphological change. The course is a continuation of ANTH 549, but may be taken out of sequence. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LEC.
ANTH 555. Evolution of Human Diseases. 3 Hours. N.
This course traces the evolution of human diseases over the past 3
million years. Topics include paleopathology, epidemics/pandemics,
genetic adaptations to diseases, and emerging/reemerging diseases.
In addition, interrelationships between humans and diseases, coupled
with interactions with other animals, vectors, and natural and cultural
environments are discussed. Prerequisite: An introductory course in
physical anthropology, biology, or permission of instructor. LEC.

ANTH 561. Indigenous Development in Latin America. 3 Hours.
AE42 / S.
Surveys the history of the development enterprise since WWII, examines
the marginalization and impoverishment of Latin America's indigenous
peoples, and provides training to carry out projects for and with them to
enhance their quality of life. Development is understood as not merely
technological or economic, but also social, emotional, and educational.
Students work in teams to design their own mock development project.
A 3-credit non-obligatory companion course, Applied Anthropological
Field School among the Ch'orti' Maya, will follow in the intersession after
each version of this course. (Same as LAA 561.) Prerequisite: ANTH 100,
ANTH 108, ANTH 160 or LAA 100; or consent of instructor. LEC.

ANTH 562. Mексamérica. 3 Hours. AE41 / S.
This course surveys the relations between Mexico and the U.S. as nation-
states, and among Mexicans, Mexican Americans, and Anglo Americans
(to a lesser extent other U.S. citizens) in historical perspective. Issues
of sovereignty, national and ethnic identity, immigration, migration,
labor relations, popular culture, media, and transnational economics are
covered. Prerequisite: ANTH 108/308 or ANTH 160/360 or LAA 100. LEC.

ANTH 563. Cultural Diversity in the United States. 3 Hours. SC / S.
Anthropological approaches to racial, ethnic, religious, and localized
communities in contemporary U.S. Surveys major theories from social
science, considers case studies of immigrant indigenous peoples
from historical and contemporary, local, national, and international
perspectives, and addresses questions concerning the sources,
conditioners, and consequences of in-group and out-group identities.
Prerequisite: Introductory cultural anthropology and one cultural course
numbered 300 or above, or permission of instructor. LEC.

ANTH 564. The Peoples of Africa. 3 Hours. NW / S/W.
"Peoples of Africa" examines the anthropology of Sub-Saharan Africa
through selected case studies of particular societies and issues that
have wider comparative relevance. Normally two to four societies are
selected for the semester and studied through ethnographic, historical,
and literary monographs. These case studies are examined in their pre-
colonial, colonial, and postcolonial histories. Lectures, readings, and
exercises emphasize three kinds of reasoning -- geographical, historical,
and cultural context -- required to grasp events and issues in unfamiliar
societies. The course also features major anthropological ideas that
emerged in the study of African society, and tracks how anthropology has
been adapted by African scholars, policy makers, and activists. LEC.

ANTH 565. Popular Images in Japanese Culture, Literatures, and
Films. 3 Hours. NW / S/W.
The course examines recurring themes and images in Japanese culture
through films, literary works, and anthropological and other social science
literature. These themes and images are studied in the contexts of both
modern and traditional cultures. Although the popular deviates from the
orthodox, nevertheless, the energy and pervasiveness of these bastard
offspring enforce and sustain "proper" cultural values. As a result of
exploration of both highways and backroads of cultural expression, a
holistic picture of Japanese ethos will emerge. (Same as EALC 565.)
LEC.

ANTH 566. Japanese Ghosts and Demons. 3 Hours. NW / S/W.
An investigation of deeply rooted Japanese beliefs about intimate
relationships among humans, animals, and nature - beliefs which help
to explain the mysterious and to lend order to the world. Anthropological
works, selections from Japanese literature, historical documents,
artworks, and films will be used to examine supernatural themes. (Same as
EALC 567.) LEC.

ANTH 568. Kongo Trans-Atlantic. 3 Hours. S.
This seminar explores Kongo culture and history through a cross-section
of the African-Atlantic World: Western Equatorial Africa and related New
World societies in Jamaica, Brazil, Haiti, Cuba, and the Georgia and
Carolina Coasts, and New Orleans (thus in former British, Portuguese,
French, Spanish, and U.S. colonial territories). The seminar will assess
recent scholarship on patterns of slavery and resistance, cultural and
linguistic change, creolization and hybridization. (Same as AAAS 568).
LEC.

ANTH 569. Contemporary Central America and Mexico. 3 Hours. S.
Mexico and Central America have formed a cultural interaction zone for
thousands of years, and today share common challenges, particularly
political, economic, and social ones related to the Spanish colonial legacy,
U.S. involvement, and their place in the global economy. Some of the
issues addressed include racism, civil war, migration, youth gangs, narco-
trafficking, resource extraction, homeless children, the transition from low-income
subsistence economies to low-income work, and struggles for
indigenous rights. Prerequisite: ANTH 160 or ANTH 162, or ANTH 360, ANTH 108 or
ANTH 308, or LAA 100. LEC.

ANTH 570. Anthropology of Violence. 3 Hours. S.
Introduces students to the comparative and cross-cultural study of
violence. The course begins by surveying different anthropological
approaches to the study of violence, with special attention paid to
classical social theorists as well as ethnographic works. Topics may
include (post) coloniality and identity politics, nationalism, race, religion,
and political culture; geographic areas to be covered may include Africa,
Europe, Latin America, the Middle East, and South Asia. LEC.

ANTH 571. Violence, Aggression, and Terrorism in the Modern
World. 3-4 Hours. S.
A cultural and psychological analysis of the sources, dynamics, effects,
and practices of modern patterns of violence. Variations in psycho/social
reactions to violence will be examined with reference to personal, social,
and cross-cultural characteristics. Particular attention will be given to
the cultural and individual characteristics of people who successfully
survive violence and terrorism targeted at them. Emphasis will be upon
the psychological and cultural origins of terrorism and violence in modern
societies. Prerequisite: Introductory course in anthropology or psychology.
LEC.

ANTH 580. Feminism and Anthropology. 3 Hours. S.
This seminar will introduce students to feminism in anthropology, including
feminist theories, methodologies, ethnographic styles, and the history of
women in the discipline since the late 1800s. Emphasis is on the social
contexts for feminist theory-building since the 1960s and changing ideas
about gender and power. (Same as WGSS 580.) Prerequisite: One of the
following: ANTH 389, ANTH 460, WGSS 201; or permission of instructor.
LEC.

ANTH 582. Ethnobotany. 3 Hours. S.
Course will involve lectures and discussion of ethnobotany - the mutual
relationship between plants and traditional people. Research from both
the field of anthropology and botany will be incorporated in this course
to study the cultural significance of plant materials. The course has 7
main areas of focus: 1) Methods in Ethnobotanical Study; 2) Traditional
Botanical Knowledge - knowledge systems, ethnolinguistics; 3) Edible and
Medicinal Plants of North America (focus on North American Indians); 4) Traditional Phytochemistry - how traditional people made use of chemical substances; 5) Understanding Traditional Plant Use and Management; 6) Applied Ethnobotany; commercialization and conversation (focus on traditional harvest of plant materials); 7) Ethnobotany in Sustainable Development (focus on medicinal plant exploration by pharmaceutical companies in Latin America). (Same as EVRN 542.) Prerequisite: ANTH 104, ANTH 108, EVRN 148, or consent of instructor. LEC.

ANTH 583. Love, Sex, and Globalization. 3 Hours. S.
Escalating transnational flows of information, commodities, and people have created innumerable kinds of "intimate" contacts on a global scale, such as mail order brides, child adoption, sex tourism, commodified romance, and emotional labor. Exploring the ways that cultural artifacts of intimacy are rendered, fetishized, and reified in a free market economy, this course examines how discourses on love and sex encounter, confront, and negotiate the logics of the capitalist market, the discrepant narratives of (colonial) modernity, and the ethics of pleasure. In so doing, this course navigates the treacherous interplay among emotionally-specifically love, sex, and money, seeking the potential and limits of cultural politics of emotions. (Same as WGSS 583.) LEC.

ANTH 586. Visual Anthropology. 3 Hours. U.
This course takes a hands-on approach to the study of theory, ethics, and methods in visual ethnographic representation. Students also read and consider historical dimensions in this subdiscipline and complete individual and team projects in photographic and videographic media. Prerequisite: An introductory course in cultural anthropology or permission of the instructor. LEC.

ANTH 587. Multidisciplinary Field School in Partnership with the Chorti Maya. 3 Hours. S.
Teams of interdisciplinary students partner with the Chorti Maya of Guatemala and Honduras to share information and experiences. One third of the course consists of readings and 4-5 orientation sessions on campus, and two thirds entails two weeks in Central America. Examples of activities might include historical research, water testing and improvement, photography, art, music, tourism consultation, marketing of crafts, human rights advocacy, web design, computer training, and museum work, among others. There are no prerequisites, but students with a working knowledge of Spanish will receive preference for admission. (Same as LAA 587.) LEC.

ANTH 595. The Colonial Experience. 3 Hours. NW / S/W.
An anthropological and historical examination of the processes and dynamics of the colonial experience. Cross-cultural psychosocial phenomena that have profoundly affected the values and social organizations of both colonizers and colonized will be emphasized. Specific examples will be chosen from the former American, Japanese, and European colonial empires with emphasis on Asia. LEC.

ANTH 603. Shamanism Past and Present. 3 Hours. S.
This course explores shamanism, broadly defined as the practice of gaining insight through the use of ecstatic techniques (dance, drumming, trance, vision quests, and the use of psychotropic substances) for the purpose of interpreting existence and healing illnesses, through a consideration of theories and evidence for its practice from Upper Paleolithic times to the present day. Examples from the ancient cultures of Asia, Europe, Africa, Australia, and the Americas are used to explore current theoretical approaches in order to identify shamans and shamanism in the past. Issues of identifying shamans and shamanism in art and archaeological contexts are discussed. The course also explores the role that shamanism plays in a wide variety of cultures. The principal goal of the course is to provide a reasoned, critical interpretation of shamanism in the context of contemporary debates about its definition and active practice. Prerequisite: ANTH 108/308 or ANTH 110/310 or ANTH 160/360. LEC.

ANTH 605. Mortuary Practices in the Archaeological Record. 3 Hours. S.
Students study theories and methods of burial practices in the archaeological record. They learn about past communities; attitudes toward death and burial and how social organization, complexity, ideology, power, gender and age roles contribute to mortuary practices. The course examines a variety of Old and New World examples from different chronological periods through class presentations, debates and written assignments. The course focuses on comparisons and evaluation of traditional and current methods and approaches. Prerequisite: ANTH 100/300 or ANTH 110/310 or instructor's consent. LEC.

ANTH 619. Field Concepts and Methods in Geoarchaeology. 3 Hours. S.
A field course taught during the three week summer session. Involves all-day excursions to different regions in order to introduce students to a variety of archaeological landscapes and environments. Focuses on the application of geoscientific concepts and methods in archaeological field investigations, emphasizing natural processes such as erosion, deposition, weathering, and biological and human activity that create and modify the archaeological record, and on soil-stratigraphic and geophysical approaches to landscape and site investigations. LEC.

ANTH 648. Human Osteology. 4 Hours. N.
Techniques in bone identification, sex, race, age determination, stature reconstruction, paleopathology, and bone biology are reviewed. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor. LAB.

ANTH 650. Human Reproduction: Biology and Behavior. 3 Hours. N.
This is a comprehensive course in the biology of human reproduction (anatomy, physiology, and endocrinology). The implications of human reproductive biology for the evolution of human behavior are considered as well. Students also examine in detail the methods and theories underlying two interconnected approaches utilized by biological anthropologists in the study of human reproduction: human reproductive ecology, which focuses on the biological determinants of human reproductive function and reproductive success, and human behavioral ecology, which focuses on evolutionary relationships between human reproductive strategies and human social behavior. The course is the first part of a two-semester sequence (ANTH 650 and ANTH 660) that examines in detail biological and cultural determinants of human reproductive strategies. Prerequisite: ANTH 359 or BIOL 152 or permission of instructor. LEC.

ANTH 652. Population Dynamics. 3 Hours. N.
Examination of possible interrelationships between the demographic structure of a population and the forces of evolution. Students are exposed to field methods and techniques of population studies. Prerequisite: An introductory course in anthropology, biology, or permission of instructor. LEC.

ANTH 660. Human Reproduction: Culture, Power, and Politics. 3 Hours. S.
This seminar analyzes and critiques the socially constructed nature of reproductive practices and their articulation with relations of power. Topics range from conception to menopause, infertiltiy to population. Cases are drawn from a wide variety of cultural contexts. This course is the second part of a two-semester sequence (beginning with ANTH 650) that examines in detail biological and cultural determinants of human reproduction. (Same as WGSS 660.) Prerequisite: ANTH 650, or 6 hours in women's studies, or permission of instructor. LEC.
ANTH 661. Cultural Dynamics. 3 Hours. S.
A survey of representative studies of the processes of cultural stability and change, and of theories of innovation, diffusion, acculturation, growth, and planned intervention in cultural processes. LEC.

ANTH 663. The Anthropology of Islam. 3 Hours. NW / H.
This course uses critical readings of major anthropological works on Islam to: 1) analyze various interpretations of "Islamic cultures" through a discussion of regionally-grounded works, and 2) examine how the anthropological study of Islam also is informed by theoretical and philosophical approaches to major anthropological questions, such as religion, myth, kinship, social organization, and power. The course offers both a history of various interpretations of Islam as well as a history of theories of these interpretations. (Same as AAAS 663.) LEC.

ANTH 664. Women, Health, and Healing in Africa. 3 Hours. H.
The course explores the values, practices, cultural systems and social-economic conditions that influence the sickness and health of women in Africa. The focus is on theoretical and applied debates and issues including: contraception, infertility, and reproduction; HIV/AIDS and other sexually transmitted infections; spiritual suffering and mental illness; trauma and violence; chronic illness, disability, and aging; pharmaceuticals, biotechnologies, and clinical research. Prerequisite: 6 hours of coursework in Anthropology and/or Women's Studies and/or African American Studies. LEC.

ANTH 665. Women, Health, and Healing in Latin America. 3 Hours. S.
This seminar uses a life-cycle approach to examine women's health (physical, mental, and spiritual) and their roles as healers. Special consideration is given to the effects of development programs on well-being, access to health care, and changing roles for women as healers. Cases will be drawn from a variety of Latin American contexts. (Same as WGSS 665 and LAA 665.) Prerequisite: 6 hours of coursework in anthropology and/or women's studies and/or Latin American studies. LEC.

ANTH 666. Anthropology of Religion. 3 Hours. S.
An examination of the various approaches (individual, ritual, and cognitive) anthropologists have adopted in the study of religion, with emphasis on millenarian and prophetic movements as examples of radical change. LEC.

ANTH 667. Primitive Mythology. 3 Hours. S/W.
Methods of studying the mythology of nonliterate peoples; historical survey of theories of myth; consideration of worldwide myths and primitive mythologies from specific cultures. LEC.

ANTH 670. Contemporary American Culture. 3 Hours. S.
An anthropological investigation, in seminar format, of the social consequences of transformations in today's society. Specific topics may include: the information explosion; developments in science and technology; genetics and assisted reproduction; ethnic and cultural diversity; and changing views of the normal and abnormal, sexual and other forms of relationships, and of the self. Prerequisite: An introductory course in cultural anthropology, sociology, or American studies. LEC.

ANTH 671. The Culture of Consumption: (E.G. United States and Japan). 3 Hours. S.
Examines the ideologies of capitalism and consumerism as they influence social institutions and daily life. Topics for consideration grow out of instructors' interests and may include areas such as class, religion, advertising, politics, gender, medicine, environment, childhood, and education. Prerequisite: ANTH 560 or permission of instructor. LEC.

ANTH 672. Meat and Drink in America. 3 Hours. S.
This seminar examines food and beverage production and consumption in the United States. Organized metaphorically as a meal, the course explores where food and beverages come from, how they are produced and by whom, and what they mean to us as eaters and drinkers. Although the course surveys food and beverage production and consumption in general, special attention is given to meat and poultry, alcohol, coffee, carbonated drinks, regional foods, opposition to consumption of meat and alcohol, and tobacco. LEC.

ANTH 673. Neoliberalism and Globalization. 3 Hours. S.
Transnational processes profoundly shape the 21st century human experience. This course links theories of economic globalization with ethnographic case materials. It explores the spread of the dominant ideology driving these processes and the effects of neoliberal policies on the urgent and vital matters facing humanity today: war and peace, social justice, democracy, cultural pluralism, and ecologically sustainable development. The course thereby links macro-economic policies to the experiences of families, workers, communities, women, indigenous peoples, and other social groups. Prerequisite: ANTH 560 or permission of instructor. LEC.

ANTH 674. Political Anthropology. 3 Hours. S.
Analysis of political systems of tribal societies and of pre-industrial states. LEC.

ANTH 675. Anthropology of Law. 3 Hours. S.
Comparative analysis of the legal and political strategies used to achieve social control in both Western and non-Western cultures. Emphasis on the differential use of customary and legal sanctions, formalized procedures of negotiation or adjudication, and the role of legal specialists in society. LEC.

ANTH 676. Culture Wars. 3 Hours. S.
A seminar exploring the political, religious, cultural and ideological antagonisms that divide contemporary society. Topics of dissension to be treated may include Christianity vs. Islam, evolutionism vs. intelligent design, attitudes pertaining to sexual orientation, and the proper relation between church and state. LEC.

ANTH 680. Culture and Human Biology. 3 Hours. S.
A lecture course concerned with the relationship between culture and biological systems; the prohibition of incest; socialization and aggression in ethnological studies; disease and therapy; and other alterations of mind and body states. LEC.

ANTH 684. Anthropology and the Health Sciences. 3 Hours. S.
Ecology of human health; cultural and social factors in the etiology of human diseases; social and cultural variables involved in health practices, programs, the organization of healing systems and the diagnostic process; the consequences of health innovations and medicotechnical apparatus. LEC.

ANTH 690. The Social Construction of the Self. 3 Hours. AE42/GE3H / S.
A seminar exploring concepts of the self as the product of variable social and cultural conditions. Consideration of dominant anthropological and interdisciplinary theories of the self and how the self is construed in various societies from Asia, the Pacific, and elsewhere. LEC.

ANTH 695. Cultural Ecology. 3 Hours. S.
Investigation of the interrelations between sociocultural systems and the natural environment, including a survey of major theories and descriptive studies. (Same as GEOG 670.) LEC.

ANTH 696. Language, Culture and Ethnicity in Prehistoric Eastern Europe. 3 Hours. S.
The course is for students who wish to understand the prehistory of Eastern Europe with special attention to the Slavs. The interdisciplinary course examines East European prehistory from the perspectives of archaeology and linguistics, considering also how ideologies have
ANTH 699. Anthropology in Museums. 3 Hours.
The course reviews the history of archeological, ethnographic, physical anthropological and other types of collections. It also considers current issues facing anthropologists, such as: contested rights to collections and the stories that accompany them; representation and interpretation of cultures; art and artifact; conceptualization, design and building of exhibitions; and anthropological research and education in the museum. LEC.

ANTH 700. Seminar in Old World Prehistory. 2-4 Hours.
Studies of prehistoric cultures and their natural environments. Topic for semester to be announced. Prerequisite: Graduate standing in anthropology or consent of instructor. LEC.

ANTH 701. History of Anthropology. 3 Hours.
Development of the field of anthropology and its relations with intellectual history. Emphasis on method and theory in historical context. Required of all M.A.-level students in anthropology. Prerequisite: Consent of instructor or graduate standing. LEC.

ANTH 702. Current Archaeology. 3 Hours.
An introduction to fundamental theoretical orientations and methodological approaches in world archaeology. Case studies illustrate data acquisition, dating methods, culture history, paleoenvironmental models, and culture processes. Required of all M.A.-level students in anthropology. Prerequisite: Consent of instructor or graduate standing. LEC.

ANTH 703. Current Biological Anthropology. 3 Hours.
The fundamental issues, methods, and theories in contemporary biological anthropology. Required of all M.A.-level students in anthropology. Prerequisite: Consent of instructor or graduate standing. LEC.

ANTH 704. Current Cultural Anthropology. 3 Hours.
The fundamental issues, methods, and theories in contemporary cultural anthropology and anthropological linguistics. Required of all M.A.-level students in anthropology. Prerequisite: Consent of instructor or graduate standing. LEC.

ANTH 705. Technological Change: _____. 3 Hours.
Studies in technological change through invention, evolution, and diffusion. Topic for semester to be announced. LEC.

ANTH 706. Current Linguistic Anthropology. 3 Hours.
This course will cover fundamental issues, methods, and theories in contemporary linguistic anthropology. (Same as LING 706.) Prerequisite: Graduate standing or consent of the instructor. LEC.

ANTH 707. Responsible Research and Scholarship in Anthropology. 3 Hours.
This course examines a range of issues critical to responsible research, scholarship, and practice in anthropology. Required for all doctoral students in Anthropology. Prerequisite: Graduate standing in anthropology or consent of instructor. SEM.

ANTH 710. History of American Archaeology. 3 Hours.
A survey of the development of method and theory in American archaeology, with emphasis on North America. Prerequisite: Graduate standing or consent of instructor. LEC.

ANTH 715. Seminar in North American Archaeology. 2-4 Hours.
In-depth examination of specific problems and issues in the study of archaeology in North America including the Arctic. Prerequisite: Graduate standing in Archaeology or instructor's consent. SEM.

ANTH 718. Seminar in Latin American Archaeology: _____. 3 Hours.
In-depth examination of specific problems and issues in the study of Precolombian societies of Mesoamerica, Central America, and South America. Topic for semester to be announced. Prerequisite: ANTH 506, ANTH 508, and/or consent of instructor. LEC.
are discussed in this seminar. Stochastic processes, genetic distances,
the evolutionary effects of finite population size and reproductive isolation
interactions. LEC.

ANTH 741. Field Methods in Linguistic Description. 3 Hours.
The elicitation and analysis of phonological, grammatical, and discourse
data from a language consultant. In-depth research on one language.
Techniques of research design, methods of phonetic transcription,
grammatical annotation, and analysis of language context. (Same as
LING 741.) Prerequisite: LING 705 or permission of instructor. LEC.

ANTH 743. Nutritional Anthropology: Methods and Theory. 3 Hours.
This is an intensive course aimed explicitly at graduate students whose
research involves some aspect of human dietary behavior (foodways)
and human nutrition. It examines the application of both biological and
cultural theory to the study of human nutrition and cross-population
variation in nutritional strategies and dietary practices. Topics include,
among others, the evolution of human nutrition, environment and nutrition,
nutritional epigenetics, effects of food scarcity, the cultural meanings of
food, food as metaphor, and food and language. A second emphasis
of the course is on field methods in nutritional anthropology, including
dietary interviews, observation of dietary behaviors, nutritional and
anthropometric assessment, nutrient analysis and ever-expanding field
methods in nutritional ecology (nutritional endocrinology, physiology and
genetics). Ethical issues in nutritional anthropology also are considered.
Prerequisite: Graduate student status or permission from instructor. LEC.

ANTH 747. North American Indian Languages. 3 Hours.
Introduction to the nature and distribution of North American Indian
languages. Prerequisite: ANTH 306 or ANTH 430 or ANTH 730. LEC.

ANTH 748. Language Contact. 3 Hours.
Theories and case studies of languages in contact. Areal and genetic
linguistics, genesis of pidgins and creoles, multilingualism. Social,
political, economic, and geographic factors in language change. (Same as
LING 748.) Prerequisite: A course in linguistics. LEC.

ANTH 749. Linguistics and Ethnolinguistics of China and Central
Asia: _____. 3 Hours.
Selected topics in linguistics and linguistic anthropology, focusing on
dominant and/or minority languages of China, Central Asia, or a particular
region of Central and Eastern Eurasia. Topics may include any subfield
of linguistics, including language contact, typology, dialectology, and
sociolinguistics. Topic for semester to be announced. (Same as
LING 749.) Prerequisite: A course in linguistics. LEC.

ANTH 754. Biological Bases of Human Behavior. 3 Hours.
The role of behavioral genetics in normal behavior is examined in this
seminar. There is special emphasis on the genetics of complex
human behavior such as sensory perception, aggression, intelligence,
proxemics, kinesics, and learning. Several abnormal conditions, such
as schizophrenia, chromosomal aberrations, alcoholism, and brain
dysfunction are discussed in terms of the genetic and environmental
interactions. LEC.

ANTH 756. Genetics of Isolates. 3 Hours.
The evolutionary effects of finite population size and reproductive isolation
are discussed in this seminar. Stochastic processes, genetic distances,
approaches to population structure, and measures of inbreeding are
considered. Prerequisite: ANTH 652 or consent of instructor. LEC.

ANTH 759. Dental Anthropology. 3 Hours.
An intensive study of human teeth. Principles of eruption, growth,
genetics, anatomy, pathologies, measurements, casting, and cultural
changes in teeth will be presented. Prerequisite: Consent of instructor.
LEC.

ANTH 761. Introduction to Medical Anthropology. 3 Hours. SC.
An introduction to the social and cultural practices that contribute to health
and disease, including a survey of therapy systems in both Western and
non-Western societies (e.g., Native American, African, Western allopathic
medicine, etc.). This course should be of special interest to premedical
students and majors in the allied health professions. Graduate version
of ANTH 461 with more advanced requirements. Prerequisite: Graduate
standing or consent of instructor. LEC.

ANTH 762. Human Growth and Development. 3 Hours.
Consideration of comparative physical growth patterns throughout the
human life cycle. Sex and population differences in skeletal, dental, and
sexual maturation. Effect of genetic and environmental factors upon
growth and maturation. Prerequisite: An introductory course in biological
anthropology or consent of instructor. LEC.

ANTH 764. Selected Topics in Human Paleontology: _____. 3 Hours.
Intensive, high-level survey and critique of the application of modern
biological theory of evolution and taxonomy to the problems of primate
and human evolution. Prerequisite: Consent of instructor. LEC.

ANTH 766. Topics in Biological Anthropology: _____. 3 Hours.
Topic for semester to be announced. Students may repeat the course for
different topics. Prerequisite: Consent of instructor. LEC.

ANTH 769. Seminar in Primate Studies. 3 Hours.
Survey of field and laboratory investigations of the comparative anatomy
and behavior of nonhuman primates. LEC.

ANTH 770. Research Methods in Physical Anthropology. 3 Hours.
A practical course in the use of special laboratory techniques of biological
anthropological research and methods of data presentation. Prerequisite:
Consent of instructor. LAB.

ANTH 775. Seminar in Cultural Anthropology: _____. 3-9 Hours.
Intensive consideration of special problems in cultural anthropology. Topic
for semester to be announced. LEC.

ANTH 778. Seminar in Applied Cultural Anthropology. 3 Hours. S.
Selected problems in applying anthropological theory, methods, and
findings in programs of directed change. FLD.

ANTH 780. Social Organization. 3 Hours.
Comparative analysis of the structure, development, and function of
human social groups. Emphasis on kinship, legal, economic, and political
institutions. Prerequisite: Graduate standing or consent of instructor. LEC.

ANTH 781. Symbolic Anthropology. 3 Hours.
An examination of anthropological approaches to religion, world view,
and other symbol systems in simple and complex societies. Prerequisite:
Graduate standing or consent of instructor. LEC.

ANTH 783. Doing Ethnography. 3 Hours.
Ethnography is both process and product. The product, a representation
of a culture (or selected aspects of a culture), is based on fieldwork, the
common term for the ethnographic process. This course explores how
ethnographers prepare for the field, do their fieldwork, then report it. LEC.

ANTH 785. Topics in Ethnology: _____. 3 Hours.
Topic for semester to be announced. Usually the course will focus on
selected problems in the social and cultural life of a people in a
ANTH 786. Ethnographic Documentary Production. 3 Hours. This course combines classroom and fieldwork in applications of theories, ethics, and methods of visual representation. Students carry out team-based ethnographic fieldwork projects through which they learn about pre-production, video production, and nonlinear post-production of ethnographic video documentaries. Prerequisite: Successful completion of ANTH 564 or permission of instructor. LEC.

ANTH 788. Symbol Systems: ______. 3 Hours. Anthropological approaches to the study of worldview, religion, folklore, mythology, art, and other expressive behavior. Topic for the semester to be announced. Prerequisite: Graduate standing or consent of instructor. LEC.

ANTH 789. Anthropology of Gender: Advanced Seminar in the Four Fields. 3 Hours. This seminar is intended primarily for graduate students in anthropology or other disciplines that share an interest in any of the subdisciplines of anthropology (archaeology, linguistic anthropology, biological anthropology, and sociocultural anthropology) and/or archaeological theories and methods. Undergraduates pursuing Honors or other major research projects are also encouraged to participate. Students will receive training in the contemporary theories, research, and pedagogies informing the anthropology of gender. Class participants will explore how these materials intersect with their current thesis or research projects and develop syllabi specific to their subdiscipline. (Same as WGSS 789.) Prerequisite: Permission of instructor. LEC.

ANTH 794. Material Culture. 3 Hours. The historical and cross-cultural study of artifacts as embodiments of technological, social, organizational, and ideological aspects of culture. LEC.

ANTH 799. Anthropology Museum Apprenticeship. 1-6 Hours. Provides directed, practical experience in research, collection care and management, public education, and exhibits, with emphasis to suit the particular requirements of each student. Limit of six hours of credit for the M.A. degree. (Same as AMS 799, BIOL 799, GEOL 723, HIST 799, and MUSE 799.) FLD.

ANTH 810. Seminar in Ethnolinguistics: ______. 2-3 Hours. An advanced study of the relations between language and culture. Subject will vary each semester; students may repeat the course more than once. (Same as LING 810.) LEC.

ANTH 811. Quantitative Archaeology. 3 Hours. Instruction in statistical methods for analyzing quantitative data in archaeological research. Topics will include techniques for handling nominal, ordinal, and radio-scale variables, the collection and presentation of quantitative information, and the use of computers. Prerequisite: Graduate standing and college-level algebra and/or consent of instructor. LEC.

ANTH 849. Seminar in Archaeology: ______. 2-4 Hours. Subject matter of seminar to be announced for semester. LEC.

ANTH 850. Data Analysis in Archaeology: ______. 1-6 Hours. A two-semester course designed to provide graduate students with basic principles in the analysis of archaeological data. Course content will include an introduction to archaeological systematics, analytical procedures, application of multivariate statistics, and computer applications. Topic for semester to be announced. FLD.

ANTH 853. Theory and Current Problems in Archaeology. 3 Hours. Consideration of scientific methodology, basic assumptions of anthropological archaeology, relationship of archaeology and anthropology, and current theoretical and methodological trends in archaeology. LEC.

ANTH 876. Advanced Medical Anthropology: ______. 3-6 Hours. This course provides advanced training in selected aspects of medical anthropology: the topic for a particular semester will reflect the current interests of the instructor. It is expected that the course content will alternate between theoretical and applied emphases. May be repeated for a total of six hours credit. Prerequisite: ANTH 461 or consent of instructor. LEC.

ANTH 880. Advanced Feminist Anthropology: ______. 3-6 Hours. Intensive consideration of special problems in feminist anthropology. Topic for the semester to be announced. May be repeated for a total of six hours credit. (Same as WGSS 880.) Prerequisite: Permission of instructor. LEC.

ANTH 889. Summer Archaeological Field Work. 1-8 Hours. Under the direction of a professional anthropologist, undergraduate and graduate students are taught proper procedures for the excavation and laboratory analysis of data from a prehistoric or historic archaeological site. Data gathered may be used for additional graduate research. Enrollment by application; limited to twenty students. A fee for subsistence costs will be charged. FLD.

ANTH 890. Training in Archaeological Field Work. 1-6 Hours. Graduate students are taught techniques of archaeological field work, including survey and excavation, as well as laboratory procedures, including artifact classification and curation. FLD.

ANTH 896. Graduate Research. 1-9 Hours. Individual investigation of special problems in anthropology. Limit of six hours credit for the M.A. degree. RSH.

ANTH 897. Internship Research. 4-6 Hours. Experiential learning in the application of anthropology through placement in business, government, community, research, or social service organization or agency. Students design and implement an anthropological project under faculty supervision. Prerequisite: Graduate standing in Anthropology. RSH.

ANTH 898. Internship Analysis. 1-6 Hours. Experiential learning in the application of anthropology through placement in business, government, community, research, or social service organization or agency. This course is a sequel to ANTH 897. Students finish up any remaining research and deliver their findings to the client. They also prepare a written report and a verbal presentation for the Department of Anthropology. Prerequisite: ANTH 897 and Graduate standing in Anthropology. RSH.

ANTH 899. Master’s Thesis. 1-12 Hours. Limit of six hours credit for the M.A. degree. Graded on a satisfactory/unsatisfactory basis. THE.

ANTH 996. Graduate Research. 1-9 Hours. Individual investigation of special problems in anthropology. RSH.

ANTH 999. Doctoral Dissertation. 1-12 Hours. Graded on a satisfactory/unsatisfactory basis. THE.

Applied Behavioral Science Courses

ABSC 100. Introduction to Applied Behavioral Science. 3 Hours. SI GE11/GE3S / S. An introduction to the principles of behavioral science and their application to problems facing contemporary societies (e.g., autism, public health,
ABSC 101. Introduction to Applied Behavioral Science, Honors. 3 Hours. SI / S.
This course introduces students to the principles of scientific inquiry in applied behavioral science: objectivity, definitions, observation, reliability, validity, correlation and its limitations, causation, experimental design and analysis, and the interpretation of data. These principles are presented in the context of solving individual and societal problems across the lifespan, for example, in early childhood education, public health, developmental disabilities (e.g., autism), delinquency, independent living for people with disabilities, educational systems, and gerontology. Open only to students in the University Honors Program. LEC.

ABSC 150. Community Leadership, Honors. 3 Hours. SF AE51 / S.
An introduction to analysis, intervention, evaluation, and leadership in contemporary problems facing local communities. Readings, lectures, and service-learning activities enable students to understand community problems and how citizens and professionals can address them. (Formerly HDFL 150.) LEC.

ABSC 151. Community Leadership, Honors. 3 Hours. SF AE51 / S.
An introduction to analysis, intervention, evaluation, and leadership in contemporary problems facing local communities. Readings, lectures, and service-learning activities enable students to understand community problems and how citizens and professionals can address them. Open only to students in the University Honors Program. (Formerly HDFL 151.) LEC.

ABSC 160. Introduction to Child Behavior and Development. 3 Hours. SI GE3S / S.
An introduction to child behavior and development with an emphasis on the normal developmental range of growth, intelligence, cognition, emotion, language, and social skills from birth to adolescence. (Formerly HDFL 160.) LEC.

ABSC 177. First Year Seminar: _____, 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Applied Behavioral Science. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

ABSC 268. Introduction to Marriage and Family Relations. 3 Hours. S.
This course focuses on the family unit and the factors that affect its development. Topics include dating and cohabitation; family and lifestyle diversity; parental roles and child development; divorce and stepfamilies. The course emphasizes research related to these issues. (Formerly HDFL 288.) LEC.

ABSC 279. Study Abroad Topics in: _____, 1-5 Hours. S.
A course designed to enhance international experience in topic areas related to applied behavioral science at the freshman/sophomore level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission. LEC.

ABSC 304. The Principles and Procedures of Behavior Modification and Therapy. 3 Hours. GE3S / S.
An advanced examination of the principles of applied behavior analysis as used to address problems in developmental disabilities, childhood autism, language development, early childhood education, with adolescent and family life, and in normal everyday adult behavior. Issues in measurement, design, and evaluation of the effects of applied behavior analysis procedures and ethical implications of the use of these procedures are examined. Procedures used to teach and maintain appropriate behaviors, eliminate inappropriate behaviors, and develop comprehensive behavioral intervention programs are described. Prerequisite: ABSC 100 or ABSC 101. LEC.

ABSC 308. Research Methods and Application. 4 Hours. GE11 / S.
Examines research methods used to identify, describe, understand, and intervene on socially important problems occurring across the life span (e.g., early childhood, adolescence, elders) and in varied settings (homes, classrooms, group-care facilities, and communities). Discusses research methods and concepts (e.g., prediction, experimental control, reliability, validity) within scientific, psychological, and behavior-analytic frameworks. Presents strategies and tactics regarding descriptive and experimental methods, direct and indirect measurement, graphical and statistical analysis, and single-subject and group experimental designs. Examines ethics and social responsibility in research. Provides opportunities to read primary and secondary sources, develop research questions, write and present research proposals, and assist in the conduct of research projects. Prerequisite: ABSC 304. LEC.

ABSC 310. Building Healthy Communities. 3 Hours. SF AE51 / S.
This course teaches knowledge and skills for addressing issues in community health and development (e.g., substance abuse, adolescent pregnancy, child and youth development, prevention of violence). Students learn core competencies such as analyzing community problems and goals, strategic planning, intervention, and evaluation. In a service-learning component, students apply these skills to issues that matter to them and to the communities they serve. (Formerly HDFL 310.) LEC.

ABSC 311. Building Healthy Communities, Honors. 3 Hours. SF AE51 / S.
This course teaches knowledge and skills for addressing issues in community health and development (e.g., substance abuse, adolescent pregnancy, child and youth development, prevention of violence). Students learn core competencies such as analyzing community problems and goals, strategic planning, intervention, and evaluation. In a service-learning component, students apply these skills to issues that matter to them and to the communities they serve. (Formerly HDFL 311.) Prerequisite: Open only to students in the University Honors Program. LEC.

ABSC 342. Adult Development and Aging. 3 Hours. S.
An overview of environmental, cultural, and biological influences of adult development and aging. Course material is organized in terms of topics, rather than presenting a chronological account. (Formerly HDFL 342.) Prerequisite: ABSC 100 or ABSC 101, ABSC 150 or ABSC 151, or ABSC 160. LEC.

ABSC 350. The Behavioral Treatment of Children with Autism. 3 Hours. S.
Students learn about methods of teaching children with autism and about evaluating those methods. Topics include: basic methods of teaching as applied to imitation, productive and receptive language, self-help skills, and engagement in community activities, as well as observation and measurement of behavior in community settings and evaluating consumer satisfaction. The course consists of classroom lectures, discussions, demonstrations, examinations, and completion of laboratory and observation assignments. Enrollment priority is given to majors who intend to do practicum work with children with autism. (Formerly HDFL 350.) Prerequisite: ABSC/HDFL 304 or instructor permission. LEC.
ABSC 356. Foundations of Early Childhood Education. 3 Hours. S.
This course introduces students to the field of early childhood education. Contemporary perspectives and professional practices are examined through an analysis of historical and philosophical ideologies. (Formerly HDFL 356.) Prerequisite: ABSC/HDFL 160 or instructor permission. LEC.

ABSC 360. Drugs, Addiction, and Behavior. 3 Hours. S.
This course offers an overview of the basic and applied research in behavioral pharmacology and addictions, as well as interventions. Among the topics it covers are a history of drugs, addiction, and behavior; basic principles of drug action (e.g., pharmacodynamics); behavioral pharmacology testing paradigms (e.g., self-administration); drug action and effects (e.g., alcohol, nicotine, designer drugs, anti-depressants); behavioral deficits associated with addictions (e.g., memory); addiction treatment and recovery (e.g., maturing out, contingency management); and drugs and society. Prerequisite: ABSC 100. PSYC 104 is also recommended. LEC.

ABSC 405. Children and Media. 3 Hours. H.
The applied study of child development theories and research methods on the influences and effects of television and related visual media on childhood in the contexts of families, schools, and society. (Same as PSYC 405 and THR 405) (Formerly HDFL 405.) LEC.

ABSC 410. Behavioral Approaches in Working with Adolescents. 3 Hours. S.
Addresses some of the basic behavioral techniques used with juveniles who have problems in school, at home, or in the community: readings and role-playing sessions covering assessment of problems, relationship development, observing and defining behavior, teaching and contracting techniques, and counseling. Prerequisite: ABSC 304 highly recommended. LEC.

ABSC 425. Teaching Apprenticeship in Applied Behavioral Science. 3 Hours. S.
Students read new materials, become more fluent with ABSC 100 content, and acquire tutoring skills. Course may not be repeated. Prerequisite: ABSC 100 and consent of the instructor and department chair. LEC.

ABSC 433. Analysis of Cultural, Ethnic, and Gender Roles in Childhood and Adolescence. 3 Hours. S.
This course examines aspects of different cultures and ethnic groups, and the definitions of gender role behavior found in them. The research literature in these areas is reviewed and the implications for early childhood education settings are studied. The course examines this literature in order to provide an increased understanding of effective approaches to educational practices directly related to the structure of society in the United States. (Formerly HDFL 433.) Prerequisite: ABSC/HDFL 160 or instructor permission. LEC.

ABSC 437. Independent Living and People with Disabilities. 3 Hours. S.
A multi-disciplinary seminar exploring theory, method, research, and practice in independent living. The course reviews personal and environmental factors as they relate to everyday problems affecting people with varying disabilities. It also contains service-learning activities in which students apply skills and knowledge gained in the classroom. (Formerly HDFL 437.) Prerequisite: An introductory course in social sciences or consent of the instructor. LEC.

ABSC 441. Ethical, Legal and Professional Issues in Applied Behavioral Science. 3 Hours. S.
The course covers ethical and legal issues in the responsible conduct of basic, applied, intervention and prevention research (e.g., informed consent and assent with typical and atypical populations); inclusion of underrepresented groups, participatory action research; bias, fraud, and plagiarism, conflict of interest; reporting misconduct; authorship conflict. It also covers professional issues in behavioral consultation and training, review of the Behavior Analysis Certification Board task list on basic behavior-analytic skills, client-centered responsibilities, and foundational knowledge. This course satisfies the Behavior Analysis Certification Board requirement for 15 classroom contact hours of coursework related to Ethical Considerations in Behavior Analysis needed to take the BACB examination. This course is taught at the 400 and 800 levels, with additional assignments at the 800-level. Prerequisite ABSC 308. LEC.

ABSC 444. Curriculum Development for Young Children. 3 Hours. S.
A survey of educational materials and activities appropriate for young children. Students explore several components of effective curriculum development (e.g., objectives, methods of activity presentation, teaching strategies) and learn to integrate them to construct curricula for a range of content and skill areas. By focusing on functional components of a curriculum, students learn to construct, critically evaluate, and modify curricula for typically and atypically developing children. Prerequisite: ABSC 304 or instructor permission. LEC.

ABSC 455. Health, Safety, and Nutrition in Early Childhood Development. 3 Hours. S.
This course addresses children's health, safety, and nutritional needs and contemporary approaches to achieving wellness. Students develop analytical skills through reading, discussion, and application of theoretical and empirical concepts. Current research results are emphasized and applied to course problem sets and projects. (Formerly HDFL 455.) Prerequisite: ABSC/HDFL 160 or equivalent knowledge. LEC.

ABSC 469. Special Topics in: _____. 1-3 Hours. S.
A course designed for the study of special topics in applied behavioral science. Course content addresses major topics and specialized issues in the field. May be repeated for credit if the content differs. Prerequisite: Instructor permission. LEC.

ABSC 470. Organizational Behavior Management. 3 Hours. S.
This course offers detailed discussion of the organizational behavior management (OBM) literature including performance management, behavioral systems analysis, and behavior-based safety. This course also addresses empirically supported staff training procedures and research in implementation science. Students assist with OBM-relevant research and develop skills in both translational and applied OBM research. Prerequisite: ABSC 100. LEC.

ABSC 479. Study Abroad Topics in: _____. 1-5 Hours. S.
A course designed to enhance international experience in topic areas related to topics in applied behavioral science at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission. LEC.

ABSC 486. Issues in Parenting. 3 Hours. S.
Theoretical approaches to the study of parenting and parent-child relationships, techniques for analyzing common parenting problems, designing appropriate interventions, fostering effective communication skills, understanding issues of diversity, and promoting parent education programs. Professional collaboration and support of families and children are emphasized throughout. Students develop analytical skills through reading, discussion, and application of theoretical and empirical concepts. (Formerly HDFL 486.) Prerequisite: ABSC/HDFL 160 or equivalent knowledge of child development or child psychology. LEC.

ABSC 489. Directed Readings in: _____. 1-3 Hours. S.
A course designed for directed readings in applied behavioral science. Readings address major topics and specialized issues in the field.
May be repeated for credit if the content differs. (Formerly HDFL 484.)
Prerequisite: Instructor permission. IND.

ABSC 499. Directed Research in: ______. 1-3 Hours. AE61 / S.
Basic and applied research experience. The course provides training in
research methods, measures, and designs, and the conduct of research,
in the behavioral sciences. May be repeated for credit if the content
diffs. Prerequisite: Instructor permission. RSH.

ABSC 509. Contemporary Behavioral Science: Historical,
Conceptual, and Comparative Foundations. 3 Hours. AE61 / S.
This course provides a survey of modern behavioral science and its
applications. It reviews the field's history; integrates its sub-disciplines;
situates it within the natural sciences, social sciences, and humanities;
and compares and contrasts it with other perspectives. It covers recent
advances in research, their implications for understanding human
behavior, and their application to solving societal problems. And,
it addresses the ethical implications of applied behavioral science.
Prerequisite: ABSC 100 or ABSC 101 and ABSC 304, or instructor
permission. LEC.

ABSC 535. Developmental Psychopathology. 3 Hours. S.
A review of contemporary psychological and developmental disorders of
children and youth. Course presents current models of psychopathology,
classification systems, assessment methods, and treatment approaches
designed for the individual, the family, and the community. Specific
attention is given to age, gender, and cultural differences and similarities.
Topics include: anxiety disorders, oppositional behavior disorders,
physical/sexual abuse, learning disabilities, depression, chronic physical
illness, and autism. (Same as PSYC 535.) (Formerly HDFL 535.)
Prerequisite: ABSC/HDFL 160 or PSYC 333, or instructor permission.
LEC.

ABSC 542. Applied Gerontology. 3 Hours. S.
This course will provide an overview of social and behavioral problems
faced by older adults, people who provide for elders, and human service
programs for elders. It also surveys empirically-derived intervention
strategies designed to maintain abilities and reduce or eliminate problem
behaviors experienced by elders or their caregivers. (Formerly HDFL
542.) Prerequisite: ABSC/HDFL 304 and ABSC/HDFL 308, or instructor
permission. LEC.

ABSC 555. Issues in Administering Early Childhood Services. 2
Hours. S.
This course provides an overview of professional, social, legal, and
economic issues associated with the administration of early childhood
services and programs. Emphasis is placed on theoretical principles,
empirical research, and professional responsibilities inherent in the
 provision of quality service, including needs assessment, organizational
skills, delivery systems, human resource management, communication
skills, grant writing, legal and ethical considerations, and advocacy.
(Formerly HDFL 555.) Prerequisite: Senior standing in the early childhood
specialty area or instructor permission. LEC.

ABSC 560. The Juvenile Justice System: A Behavioral and Legal
Perspective. 3 Hours. S.
An overview of the juvenile justice system, including the history,
development, and current controversy over children's rights in the legal
system examined in light of relevant principles of behavioral science
and behavioral systems of rehabilitation. Topics include delinquency,
miscreancy, status offenses, dependent-neglected children, child abuse,
and juvenile court procedures and personnel (e.g., probation officers), and
rehabilitative programs. (Formerly HDFL 560.) Prerequisite: ABSC 100.
LEC.

ABSC 562. Behavioral Community Psychology. 3 Hours. S.
A seminar that provides an overview of the history and origin of
behavioral community psychology. The course examines the development
and future of behavioral community psychology as an integration
of two sub-disciplines, applied behavior analysis and community
psychology. Provides an integrated review of empirically-based behavioral
interventions applied in community-based settings. Prerequisite: ABSC
100, or ABSC 150, or ABSC 310, or instructor permission. Course is
offered at the 500 and 800 levels with additional assignments at the 800-
level. LEC.

ABSC 565. Applied Developmental Psychology. 3 Hours. S.
An advanced study of the application of theories and concepts of
developmental and behavioral psychology to a range of specific issues
and problems of childhood and adolescence. This course relies heavily
on the empirical research literature. Topics include contemporary social
issues and child development, research in applied settings, assessment,
intervention, and prevention, as well as program evaluation. (Same as
PSYC 565.) (Formerly HDFL 565) Prerequisite: ABSC/HDFL 160 or
PSYC 333, and ABSC/HDFL/PSYC 535. LEC.

Hours. AE61 / S.
A two-semester course combining small group discussions of selected,
advanced topics in applied behavioral science with honors thesis
supervision on a project of the student's own design. Students normally
enroll for one or two hours in fall semester and three to five hours in
spring semester. (Formerly HDFL 496.) Prerequisite: ABSC 304, ABSC/
HDFL 308, and instructor permission. IND.

ABSC 606. Special Projects in the Community. 1-10 Hours. S.
Structured opportunities to develop and apply knowledge and skills (e.g.,
analyzing problems, strategic planning, intervention, evaluation) in a
project that addresses a community problem or goal. (Formerly HDFL
606.) Prerequisite: Instructor permission. IND.

ABSC 620. Drug Abuse: From Basic Research to Public Policy. 3
Hours. S.
This course reviews basic and applied research in the social, behavioral,
and neural sciences on how environmental variables, brain mechanisms,
individual history, and cultural constraints interact and maintain drug
abuse. Topics include the mechanisms of drug action; the safety, toxicity,
stimulus properties, and functional impairments related to commonly
abused drugs; common models of treatment and prevention; and
historical and current legislative and judicial approach to drug abuse.
(Formerly HDFL 620.) Prerequisite: A course in biology and a course in
either applied behavioral science or psychology. LEC.

ABSC 626. Psychology of Adolescence. 3 Hours. S.
Impact of factors of social environment and physical growth upon
psychological development from puberty to young adulthood. (Same as
PSYC 626.) Prerequisite: PSYC 104, PSYC 333, or HDFL/ABSC 160.
LEC.

ABSC 632. Advanced Child Behavior and Development. 3 Hours. S.
An advanced course in child development that includes a survey of the
field's principles and theoretical approaches, and current issues in
research and practice. Topics will include: prenatal development,
cognition and language, social-emotional development, socialization
influences in childhood, developmental psychopathology, and social
policies. (Formerly HDFL 632.) (Same as PSYC 632.) Prerequisite:
ABSC/HDFL 160, PSYC 333, or instructor permission, and senior or
graduate status. LEC.
ABSC 671. Applied Behavior Analysis. 3 Hours. S.
This advanced course extends knowledge and skills in analyzing behavioral problems, designing interventions, and planning applied research projects. Topics include the selection of problems and target populations, analysis of problems/goals, designing measurement systems, developing interventions, and disseminating products from applied behavioral research. (Formerly HDFL 671) Prerequisite: ABSC/HDFL 304 or instructor permission. LEC.

ABSC 672. Applied Behavior Analysis, Honors. 3 Hours. S.
This advanced course extends knowledge and skills in analyzing behavioral problems, designing interventions, and planning applied research projects. Topics include the selection of problems and target populations, analysis of problems/goals, designing measurement systems, developing interventions, and disseminating products from applied behavioral research. Students design an intervention research project. Prerequisite: Open only to students in the University Honors Program; ABSC/HDFL 304 or instructor permission. LEC.

ABSC 675. Practicum in Infant-Toddler Care and Early Intervention I. 3-5 Hours. AE61 / S.
Experience in a classroom-based early intervention and child-care program serving children younger than 3 years. Students gain practical experience with care-giving and teaching practices appropriate for typically and atypically developing children. Students learn to develop and implement individualized curricula based on assessments of children's skills. (Formerly HDFL 558.) Prerequisite: ABSC/HDFL 444 (or concurrent enrollment) and instructor permission. FLD.

ABSC 676. Practicum in Infant-Toddler Care and Early Intervention II. 3-5 Hours. AE61 / S.
An advanced practicum providing experience in classroom-based early-intervention and child-care program serving children younger than 3 years. Students gain practical experience with care-giving and teaching practices appropriate for typically and atypically developing children. Students learn to develop and implement individualized curricula based on assessments of children's skills. (Formerly HDFL 559.) Prerequisite: ABSC/HDFL 444, HDFL 558 or ABSC 675, and instructor permission. FLD.

ABSC 677. Practicum in Preschool Education and Intervention I. 3-5 Hours. AE61 / S.
A one-semester practicum providing opportunities for students to assume responsibility for the education and guidance of young children in an early childhood program. Regularly scheduled individual and staff conferences enable students to evaluate personal growth and progress as teachers of young children. (Formerly HDFL 492.) Prerequisite: ABSC/HDFL 444 (or concurrent enrollment) and instructor permission. Must also meet special state requirements for child care employees and volunteers. FLD.

ABSC 678. Practicum in Preschool Education and Intervention II. 3-5 Hours. AE61 / S.
A one-semester advanced practicum providing opportunities for students to assume responsibility for the education and guidance of young children in an early childhood program. Regularly scheduled individual and staff conferences enable students to evaluate personal growth and progress as teachers of young children. (Formerly HDFL 493.) Prerequisite: ABSC/HDFL 444, HDFL 492 or ABSC 677, and instructor permission. Must also meet special state requirements for child care employees and volunteers. FLD.

ABSC 679. Practicum in Behavior Analysis Research in Early Childhood Education. 1-6 Hours. AE61 / S.
A two-semester practicum providing opportunities for supervised training in one of several ongoing research projects in the field of behavior analysis, either basic or applied. Students assist in conducting research and participate in individual and group meetings to discuss and evaluate research and related methodological issues. (Formerly HDFL 688.) Prerequisite: ABSC/HDFL 308 and instructor permission. FLD.

ABSC 680. Practicum in Advanced Laboratory in the Development of Behavioral Treatments for Children with Autism. 1-6 Hours. AE61 / S.
Students participate in an intensive behavioral treatment program teaching language, social skills, self-help skills, and academic skills to young children with autism. Students learn: to develop and implement treatment programs; design and use of a system of data collection and analysis; and apply the principles and philosophy of community and school mainstreaming. (Formerly HDFL 550.) Prerequisite: ABSC/HDFL 350 and instructor permission. LAB.

ABSC 682. Organizational Behavior Management Practicum. 1-5 Hours. AE61 / S.
This practicum course is designed to provide training and support practice in addressing socially significant problems and goals of community-based organizations using behavior analysis to guide assessment and intervention. Additionally, this course promotes community-university partnerships to support change and improvement in organizations through service learning. All practicum students are required to have previously completed ABSC 100 and selected applied behavioral science as a major or minor. FLD.

ABSC 685. Practicum in Community-based Residential or Day Treatment Programs for Disabled Adults. 3-6 Hours. AE61 / S.
A one or two-semester practicum in which students are provided with the opportunity to work directly with developmentally disabled adults in either community-based residential or day treatment programs. Students are required to read relevant literature, carry out treatment programs, and participate in weekly meetings to discuss treatment goals and progress. (Formerly HDFL 696.) Prerequisite: ABSC/HDFL 304, ABSC/HDFL 410, and instructor permission. FLD.

ABSC 687. Practicum in Behavioral Gerontology. 1-6 Hours. AE61 / S.
A one or two-semester practicum providing opportunities for supervised training in behavioral gerontology. Students: (a) read literature in the area of their specific practicum setting such as adult day care, senior centers, nursing homes; (b) assist in collecting information relevant to evaluating the program effectiveness of their efforts on behalf of the elderly; and (c) participate in discussions and planning meetings relevant to maintenance and improvement of operation of the practicum. (Formerly HDFL 644.) Prerequisite: ABSC/HDFL 342 or ABSC/HDFL 542 and instructor permission. FLD.

ABSC 690. Practicum in Community Health and Development. 1-6 Hours. AE61 / U.
A two-semester practicum in which students engage in structured opportunities to practice core competencies related to the work of promoting community health and development (e.g., strategic planning, intervention, evaluation). In weekly group meetings, students prepare for their individual working field settings (e.g., health and human service agencies, research and advocacy organizations, community organizations). (Formerly HDFL 690). Prerequisite: ABSC/HDFL 150, ABSC/HDFL 310, and instructor permission. FLD.

ABSC 691. Practicum in Community Health and Development, Honors. 1-6 Hours. AE61 / U.
A two-semester practicum in which students engage in structured opportunities to practice core competencies related to the work of promoting community health and development (e.g., strategic planning, intervention, evaluation). In weekly group meetings, students prepare for their individual working field settings (e.g., health and human service agencies, research and advocacy organizations, community...
ABSC 692. Practicum in Basic Research. 3 Hours. AE61 / S.
Practical supervised training in the laboratory study of human or animal behavior. Students assist in conducting basic research, read and discuss research articles, attend lab meetings, and acquire data analysis and presentation skills. Prerequisite: ABSC 308 (or concurrent enrollment) and permission of the instructor. FLD.

ABSC 693. Practicum in Historical and Conceptual Foundations. 3-6 Hours. AE61 / S.
Practical supervised training in the historical and conceptual foundations of applied behavioral science (e.g., behavior analysis). Students research and read primary source literatures and write papers that advances our understanding of the field's foundations (e.g., empirical, theoretical). Prerequisite: ABSC 100/101, ABSC 304, ABSC 308, and ABSC 509 (or concurrent enrollment), and permission of instructor. IND.

ABSC 694. Practicum in Juvenile Problems. 3-6 Hours. AE61 / S.
A one-semester practicum providing opportunities for students to aid professionals in the development and implementation of behavioral treatment plans with adolescents. Regularly scheduled individual and group meetings enable the evaluation of the practicum students’ progress while working in the rehabilitative process for juveniles who have problems that can bring them into contact with the juvenile justice system. (Formerly HDFL 694.) Prerequisite: ABSC/HDFL 410, ABSC/HDFL 560, and instructor permission. FLD.

ABSC 695. Special Practicum in: ____. 3-6 Hours. S.
A one or two-semester practicum providing opportunities for supervised, hands-on training outside the existing specialty areas or their options. This practicum must be arranged with the prior approval of a faculty advisor and the department's Undergraduate Curriculum Committee. Students should see an advisor about this practicum early in their junior year. Prerequisite: Instructor permission. FLD.

ABSC 696. Special Practicum in, Honors: ____. 3-6 Hours. S.
A one or two-semester practicum providing opportunities for supervised, hands-on training outside the existing specialty areas or their options. This practicum must be arranged with the prior approval of a faculty advisor and the department's Undergraduate Curriculum Committee. Students should see an advisor about this practicum early in their junior year. Prerequisite: Open only to students in the University Honors Program and instructor permission. FLD.

ABSC 698. Special Research Practicum in: ____. 3-6 Hours. S.
A one or two-semester research practicum providing opportunities for supervised, hands-on research training outside of the existing specialty areas or their options. This practicum must be arranged with the prior approval of a faculty advisor and the department's Undergraduate Curriculum Committee. Students should see an advisor early in their junior year about the practicum and its prerequisites and requirements. Prerequisite: Open only to students in the University Honors Program and instructor permission. FLD.

ABSC 701. Parenting in Modern Society. 3 Hours.
The theoretical study of parenting and parent-child relationships, techniques for analyzing common parenting problems, designing appropriate interventions, fostering effective communication skills, understanding issues of diversity, and promoting parent education programs are some of the issues addressed in this course. Professional collaboration and support of families and children are emphasized throughout. Students develop analytical skills through reading, discussion, and application of theoretical and empirical research. (Formerly HDFL 701.) Prerequisite: ABSC/HDFL 160 or equivalent knowledge of child development or child psychology. LEC.

ABSC 702. Curriculum Development for Young Children. 3 Hours.
A survey of educational materials and activities that are appropriate for young children (birth to age 8). Students explore several components of effective curriculum (e.g., objectives, effective methods of activity presentation, teaching strategies) and learn to combine them to construct curriculums for a range of content and skill areas. By focusing on the functional components of curriculums, students learn to construct, critically evaluate, and modify them for both typically developing children and children with special needs. A BACB® pre-approved course. (Formerly HDFL 702.) LEC.

ABSC 703. Leadership in Early Education Programs: Theory and Research. 3 Hours.
Effective leadership skills and professional roles associated with the administration of early childhood services and programs are examined in this course. Theoretical principles, empirical research, and professional responsibilities inherent in the provision of quality service, including needs assessment, organizational skills, delivery systems, human resource management, communication skills, grant writing, legal and ethical considerations, conflict resolution, and advocacy are explored through readings, discussion, and assigned projects. Not open to students who have completed ABSC 555. (Formerly HDFL 677.) Prerequisite: ABSC/HDFL 160 or equivalent knowledge of child development or child psychology. LEC.

ABSC 704. Research Practicum in Clinical Child Psychology. 3 Hours.
This course provides students in the Clinical Child Psychology Program with the opportunity to enhance and consolidate their research activities by fulfilling one of the elective cluster course requirements. This practicum involves a contract with a research advisor and the program director. The contract includes definable products and dates for completion to prepare research for submission for publication, develop a grant proposal, or conduct additional research project independent of other requirements in the program. The course is not to be taken as an overload, but is to be part of a full-time course schedule. May be repeated. (Same as PSYC 704.) (Formerly HDFL 704.) Prerequisites: Graduate standing in clinical child psychology and instructor permission. LEC.

ABSC 705. Pediatric Psychology. 3 Hours.
Discussion of behavior problems commonly encountered in the pediatric population, including reviews of data-based methodologies for remediation. Topics include general child rearing skills, bedtime problems, enuresis, encopresis, toilet training, self-injurious behavior, temper tantrums, behavior in community settings, child abuse, psychotropic drugs for children, adolescent behavior problems and selection of children's play materials. (Formerly HDFL 705.) Prerequisite: ABSC/HDFL 160, ABSC/HDFL 632, or PSYC 602. LEC.

ABSC 706. Special Topics in Clinical Child Psychology: ____. 3 Hours.
A course offering detailed discussion of the literature and research methods of a special topic within clinical child and pediatric psychology.
ABSC 709. Biology and Behavior. 3 Hours.
A course on the role of physiology and anatomy in behavior, with an emphasis on their participation in the basic behavioral processes and in typical and atypical behavioral development. The course also addresses issues in measurement and current research. (Formerly HDFL 709.) Prerequisite: ABSC/HDFL 796; ABSC/HDFL 798 recommended. LEC.

ABSC 710. Community Health and Development. 3 Hours.
This course extends knowledge and skills for addressing issues in community health and development (e.g., substance abuse, adolescent pregnancy, child and youth development, prevention of violence). Students learn core competencies such as analyzing community problems and goals, strategic planning, intervention, and evaluation, and then apply these skills to issues that matter to them and to the communities they serve. (Formerly HDFL 710.) (Same as ISP 871.) LEC.

ABSC 716. Experimental Problems in Community Settings. 1-5 Hours.
Research in the experimental design and analysis of community settings. No more than 10 hours total. (Formerly HDFL 716.) Prerequisite: Instructor permission. RSH.

ABSC 719. Experimental Field Work in Community Settings. 1-5 Hours.
Instruction in the methods and techniques of the experimental design and analysis of community settings through supervised participation in established research programs. Emphasizes the techniques of gathering original experimental data. No more than 10 hours total. (Formerly HDFL 719.) Prerequisite: Instructor permission. RSH.

ABSC 721. Biological Bases of Mental Retardation. 4 Hours.
This course deals with the biological substrates of mental retardation. Retardation is classified as a medical syndrome, rather than by behavioral patterns, but behavioral peculiarities are addressed where relevant. Attention is directed to both genetic causes such as the chromosomal anomalies (e.g., Mongolism) and molecular and metabolic errors (e.g., phenylketonuria), as well as to the environmentally produced retardation by nutritional deficiency, prenatal rubella, and brain trauma. (Formerly HDFL 721.) Prerequisite: One course in biology or equivalent. LEC.

ABSC 723. Adolescent Adjustment. 3 Hours.
An overview of adolescence with primary emphasis on various adjustment difficulties and respective therapeutic approaches. Content to provide perspectives on relevant practice, research, theory, and contemporary social forces. (Formerly HDFL 723.) Prerequisite: Instructor permission. LEC.

ABSC 725. Research Methods and Application. 3 Hours.
Surveys research methods used to identify, describe, understand, and intervene on socially important problems occurring across the life span (e.g., early childhood, adolescence, elders) and in varied settings (homes, classrooms, group-care facilities, and communities). Discusses research methods and concepts (e.g., prediction, control, reliability, validity) within scientific, psychological, and behavior-analytic frameworks. Presents strategies and tactics regarding descriptive and experimental methods, direct and indirect measurement, graphic and statistical analysis, and single-subject and group experimental designs. Examines ethics and social responsibility in research. Provides opportunities to read secondary and primary sources, develop research questions, write and present research proposals. (Formerly HDFL 725.) Prerequisite: Instructor permission. RSH.

ABSC 730. Developmental Neurobiology. 3 Hours.
This course consists of lectures and discussion sessions on topics that describe the structural and functional maturation of the nervous system. The areas covered deal with the morphological, physiological, and biochemical changes in the developing central nervous system of vertebrates (including human infants), and with the interaction of the external environment with some of these maturational processes. Prerequisite: Introductory human development, psychology, or biology course. LEC.

ABSC 735. Within Subjects Research Methodology and Direct Observation. 3 Hours.
A graduate level introduction to the logic of experimentation, direct observation strategies, and research conducted using individual (e.g., single subject) and time series experimental designs. An ABA-accredited and BACB® pre-approved course. (Formerly HDFL 735.) Prerequisite: Graduate standing in applied behavioral science or instructor permission. LEC.

ABSC 741. Readings in Gerontology. 3-5 Hours.
Supervised readings in topical areas of gerontology. A program of study, conferences, and reports are developed by the instructor and student. (Formerly HDFL 741.) Prerequisite: Instructor permission. RSH.

ABSC 742. Research in Gerontology. 1-10 Hours.
Original investigations of some unsolved problems relating to adult development and aging. (Formerly HDFL 742.) Prerequisite: Graduate standing or instructor permission. RSH.

ABSC 756. Philosophical Bases of Early Childhood Education. 3 Hours.
Historical influences and current theoretical models of early childhood education are addressed through a survey and analysis of the literature. Not open to students who have completed ABSC 356. (Formerly HDFL 756.) Prerequisite: ABSC/HDFL 160 or equivalent knowledge of child development or child psychology. LEC.

ABSC 765. Evaluating and Disseminating Scientific Material I. 1-3 Hours.
Intensive training in the evaluation and production of scientific critiques and reviews of current issues in the analysis of behavior, as disseminated through the media. May be repeated. (Formerly HDFL 765.) Prerequisite: Instructor permission. LEC.

ABSC 787. Gerontology Proseminar. 3 Hours.
A proseminar coordinated by the Gerontology Center. The proseminar explores essential areas of gerontology for researchers and practitioners, providing a multidisciplinary (e.g., psychology, biology, sociology, communication) perspective on aging. The proseminar surveys contemporary basic and applied research, service programs, and policy and management issues in gerontology. (Same as AMS 767, COMS 787, PSYC 787, and SOC 767.) (Formerly HDFL 787.) LEC.

ABSC 788. Designing Early Education Environments. 3 Hours.
This course reviews empirically-supported strategies for designing effective and socially valid care and education environments for young children with and without disabilities. Topics will include: early educational theory, individualized curricula and goal selection strategies, various instructional typologies (e.g., direct instruction, embedded teaching), specific teaching tactics (e.g., prompting, time delay, differential reinforcement), and management strategies. Current best practice recommendations for design of the social and physical environment, and methods for assessing children’s, caregivers’, and teachers’ programmatic preferences. Prerequisite: ABSC 796. LEC.
ABSC 796. Laboratory in Behavioral Development and Modification: The Analysis of Behavior I. 3 Hours.
An introductory graduate laboratory course on the basic principles of behavior, and related procedures for producing behavioral change, with nonhuman subjects. The principles and procedures have special relevance to analogous processes in child development, both normal and deviant. An ABA-accredited and BACB® pre-approved course. (Formerly HDFL 796.) Prerequisite: Instructor permission. LAB.

ABSC 797. Proseminar in Child Language. 2 Hours.
A review and discussion of current issues in children's language acquisition. May be repeated for credit. Students are graded S/F. (Same as LING 799, PSYC 799 and SPLH 799.) (Formerly HDFL 797.) LEC.

ABSC 799. Experimental Analysis of Behavior. 3 Hours.
This course provides an in-depth description of the basic principles of operant and respondent conditioning in the context of basic non-human and human subjects research. Students will learn various theoretical approaches to understanding effects of reinforcement and punishment. Special attention will be provided to the role of verbal processes in the learning of verbally competent individuals. Students will gain substantive experience with identifying laboratory derived principles present in the literature that are relevant to application through assigned projects. Prerequisite: ABSC 796 or equivalent. SEM.

ABSC 800. Conceptual Foundations of Applied Behavioral Science. 3 Hours.
A master's-level graduate seminar on the field's conceptual foundations, with special emphasis on behavior analysis and its application - applied behavior analysis. The course addresses the field's history, philosophy of science, and disciplinary purview; its advanced behavioral principles and processes; its analyses of various content domains in the behavioral, social, and cognitive sciences (e.g., emotion, language, cognition, culture); and its relation to other disciplines (e.g., biology, psychology, anthropology). It also considers professional issues in, for example, the ethical conduct of research and practice. An ABA-accredited and BACB pre-approved course. Prerequisite: ABSC 796. SEM.

ABSC 801. Design and Analysis of Community Development Methods. 1-6 Hours.
An examination of principles and practices of community development and evaluation of methods used to promote community improvement. May be repeated if the content differs. (Formerly HDFL 801.) Prerequisite: Instructor permission. RSH.

ABSC 802. Behavior Analysis in Developmental Disabilities. 3 Hours.
A graduate seminar that includes an overview of the behavioral characteristics of various developmental disabilities and examination of empirically-supported behavioral approaches to the study and treatment of developmental disabilities. Topics will include classification and etiology, motivation, methods for developing appropriate skills, assessment and treatment of behavior disorders, staff training, and legal and ethical issues related to treatment. Prerequisite: ABSC 796 and instructor permission. LEC.

ABSC 803. Fundamentals of Psychological Assessment and Intervention with Children. 3 Hours.
Lecture and supervised experience covering the theoretical and empirical literature on assessment and intervention methods for children, adolescents, and families. Students will learn and demonstrate evidence-based clinical interviewing skills, behavioral observation techniques, risk assessment techniques, therapeutic communication approaches, strategies for providing assessment feedback to families, and ethical principles related to the provision of assessment and psychotherapy (including client file and resource management.) The course requires interaction with clinical populations and communication with referral sources. (Same as PSYC 803.) Prerequisite: Graduate student in clinical child psychology program. LEC.

ABSC 804. Research in Community Health Promotion. 1-6 Hours.
Supervised, original investigations of problems relevant to community health, such as the prevention of substance abuse or promotion of child outcomes. As appropriate, the course is focused on any combination of: literature research, research planning, and preparation conducting research, analyzing data, writing research reports, or preparing oral reports of completed research. (Formerly HDFL 804.) Prerequisite: Instructor permission. RSH.

ABSC 805. Functional Behavioral Assessment. 3 Hours.
The strategies, tactics, and ethics of functional assessment are presented in the larger context of behavioral assessment (e.g., nomothetic and idiographic approaches). Research articles relevant to indirect, descriptive, and experimental functional assessment approaches and assessment-based interventions are carefully reviewed to determine the appropriate conditions for each type of assessment and intervention. (Formerly HDFL 805.) Prerequisite: ABSC 796 and instructor permission. LEC.

ABSC 806. Functional Behavioral Assessment Practicum. 1-6 Hours.
This course provides supervised experience in the use of functional behavioral assessment in home, clinic, or educational environments with young children presenting problem behaviors. (Formerly HDFL 806.) Prerequisite: ABSC 805 and instructor permission. FLI.

ABSC 807. Design and Evaluation of Community Health Promotion Methods. 1-6 Hours.
An examination of the methods used to develop and evaluate community health promotion programs. The course addresses topics of interest to participants, such as substance abuse, adolescent pregnancy, or child outcomes. May be repeated for credit if the content differs. (Formerly HDFL 807.) Prerequisite: Instructor permission. RSH.

ABSC 809. Professional Issues: Clinical Child Psychology. 1 Hour.
Consideration of special problems confronting the child and family oriented scientist-practitioner, and in the development of a professional identity. Topics include critical issues, including ethical, legal, cultural, empirical, and clinical aspects of research and practice. May be repeated. (Formerly HDFL 809.) (Same as PSYC 809.) Prerequisite: Graduate standing in clinical child psychology. LEC.

ABSC 810. Introduction to Developmental Assessment. 3 Hours.
A course covering the general principles of developmental assessment from birth through adulthood, with special emphasis on the history and nature of assessment instruments and the criteria for acceptance, reliability, and stability of results. Selected assessment techniques for infants, preschool children, elementary school children, adolescents, and adults are reviewed and evaluated for their utility, limitations, and applications. A critical analysis of assessment in general and particular assessment tools is made. (Formerly HDFL 810.) LEC.

ABSC 811. Achievement and Intellectual Assessment in Clinical Child Psychology. 3 Hours.
Course covers the basic theory, research, administration, and reporting of psychological assessment of development, intelligence, and achievement for children, adolescents, and adults within cultural and developmental contexts. The range of psychological instruments examined includes, for example, WIAT, K-ABC, W-J, S-B, WISC, WAIS, and WPSSI. (Same as PSYC 811.) Prerequisite: Graduate student in clinical child psychology. LEC.
ABSC 812. Behavioral and Personality Assessment of Children. 3 Hours.
Lecture, laboratory, field work, and supervision. Theory and applications in the psychological evaluation of children with standardized assessment techniques. The administration, scoring, interpretation, and reporting of behavioral and personality functioning in children. (Formerly HDFL 812.) (Same as PSYC 820.) Prerequisite: Graduate standing in clinical child psychology. LEC.

ABSC 813. Behavioral Science Research Proseminar. 1-3 Hours.
A master’s level professional seminar in which faculty and students present research proposals; offer formal presentations of completed empirical research, reviews of the literature, and other areas of scholarship; and engage discussion about contemporary empirical, conceptual, and professional issues in applied behavioral science. May be repeated for a total of six credits. (Formerly HDFL 813.) Prerequisite: Graduate standing in applied behavioral science or instructor permission. LEC.

ABSC 814. Advanced Child and Family Assessment. 3 Hours.
Lecture, laboratory, field work, and supervision. Supervised experience in specialized psychological assessment approaches for children and families. Emphasis on interviewing, observation, psychometric scales, consultation, rationale, administration, analysis, and reporting of mental health functioning of children and families. Experience with clinical populations, and communication with referral sources. (Formerly HDFL 814.) (Same as PSYC 814.) Prerequisite: Graduate student in clinical child psychology. LEC.

ABSC 820. Advanced Child Development. 3 Hours.
A survey of the basic empirical research in the field of child development, covering intelligence, cognition, perception, attention, personality, social behavior, and socialization processes. These literatures are integrated and their implications for social application are addressed. (Formerly HDFL 820.) (Same as PSYC 820.) Prerequisite: A course in child development or equivalent. LEC.

ABSC 821. Behavior Analysis of Child Development. 3 Hours.
An advanced graduate seminar on the behavior-analytic approach to child development. Students examine the behavior-analytic view of child development and compare and contrast this approach with other systems for understanding development. Students also review and critically evaluate current and seminal literature related to several different developmental domains (e.g., motor, emotional, social, cognitive development) and explore implications for the application of current knowledge. An ABA-accredited and BACB® pre-approved course. (Formerly HDFL 821.) Prerequisite: ABSC 798 and consent of instructor. LEC.

ABSC 822. Children and Public Policy. 3 Hours.
This course examines how public policies affect the development of children. Includes examination of child and family policy in the United States and other countries, policy-related research on children, major policy issues affecting children, and child advocacy. (Formerly HDFL 822.) Prerequisite: Instructor permission. LEC.

ABSC 824. Treatment of Severe Learning Problems. 3 Hours.
The course reviews new approaches to working with persons with retardation and autism; theoretical orientations and how they affect implementation of procedures; and current research outcomes in various developmental areas of persons with retardation. It covers approaches used with persons through the life span, from childhood through adulthood, that are based on ecological and stimulus control variables. Ethical and practical implications are the focus of class lectures and discussions. (Formerly HDFL 824.) LEC.

ABSC 825. Social Development. 3 Hours.
A lecture and discussion course in social development. It includes such topics as theoretical approaches to the study of social development, as well as the literature on family processes, peer relations, aggression and prosocial behavior, child abuse and neglect, family violence, child care, and the media. (Same as PSYC 825.) (Formerly HDFL 880.) Prerequisite: A course in child psychology or development. LEC.

ABSC 828. Research in Early Intervention with Children. 3 Hours.
A seminar on current issues in assessment and intervention for young children who are at risk for or who have special needs. Provides foundation for evaluating and understanding research in early intervention. Includes historical, conceptual and legislative underpinnings of early intervention, risk factors affecting development, methodological issues in early intervention research, best practice standards, and applications to social, language, and pre-academic domains. (Formerly HDFL 828.) LEC.

ABSC 831. Science of Human Behavior. 3 Hours.
A graduate seminar on the analysis of human behavior, grounded in basic behavioral principles. The focus is on the process and products of human development, among them motivation/emotion, social behavior, personality, sensation/perception, language, cognition, creativity, attitudes/beliefs, consciousness/unconsciousness, purpose/will, and values. The course is pre-approved by the Behavior Analysis Certification Board® for its BCBA® certification requirements. Prerequisite: ABSC 800 and Master's degree in Applied Behavioral Science or instructor permission. SEM.

ABSC 834. Directed Readings in Community Health Promotion. 1-5 Hours.
Supervised readings in topical areas of community health promotion, such as the prevention of substance abuse and promotion of child outcomes. A program of study, conferences, and reports is developed by the instructor and student. (Formerly HDFL 834.) RSH.

ABSC 837. Advanced Study of People with Disabilities. 3 Hours.
This course reviews major approaches in identifying disability pathogenesis and explores the biological bases of selected congenital physical disabilities, and etiologies of selected acquired physical disabilities. Rehabilitation approaches and the role of scientist-practitioners in working with people with disabilities are also discussed. This course primarily covers adults with physical disabilities. (Formerly HDFL 837.) Prerequisite: Graduate standing or instructor permission. LEC.

ABSC 840. Theoretical Concepts of Human Development and Child Care Practice. 3 Hours.
Basic introduction to treatment concepts and procedures related to child development and child-care programs. The major goal is to provide a theoretical framework that is effective in dealing with various types of child deviancy. (Formerly HDFL 840.) Prerequisite: Graduate standing or instructor permission. LEC.

ABSC 841. Ethical, Legal, and Professional Issues in Applied Behavioral Science. 3 Hours.
The course covers ethical and legal issues in (a) the responsible conduct of basic, applied, and intervention research (e.g., informed consent and assent with typical and atypical populations; inclusion of underrepresented groups; bias, fraud, and plagiarism in data collection and reporting; conflict of interest; reporting misconduct; authorship) and (b) professional issues in teaching, research, and service (e.g., written and presented scientific communication; grant preparation; the journal review process; cultural competence; teaching; vita preparation). The course will also include instruction in the preparation of editorial reviews for manuscripts submitted for publication to in peer-reviewed journals, in partial fulfillment...
of the department's doctoral requirement for preparing editorial reviews. A BACB pre-approved course. Prerequisite: Graduate standing in applied behavioral science. LEC.

ABSC 846. Practicum in Clinical Child Psychology I. 1-3 Hours. Introductory practicum experience for the Clinical Child Psychology Program. Orientation to psychological evaluation and treatment of children, adolescents, and their families and initial development of professional self-assessment skills. Students acquire specific clinical competencies through shadowing cases, assisting with interpretation of test of intelligence and academic achievement, conducting behavioral observations in field settings, and performing co-therapy of cases presenting to the KU Child and Family Services Clinic. May be taken in more than one semester. (Same as PSYC 846.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

ABSC 847. Practicum in Clinical Child Psychology II. 1-3 Hours. Intermediate practicum experience for the Clinical Child Psychology Program. Development of specific competencies in assessment and intervention with children, adolescents, and their families through didactics, field experience, and supervision. Students acquire specific clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic. Students develop ability to identify specific treatment goals and select therapeutic interventions that are conceptually congruent with clients’ presenting problems and are based on sound empirical evidence. Students also develop the ability to integrate and synthesize test results, interview material, and behavioral observations into coherent case conceptualizations. May be taken in more than one semester. (Same as PSYC 847.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

ABSC 848. Applied Gerontology: Practice and Intervention. 3 Hours. A survey of intervention research in gerontology. Program evaluations designed to determine the effectiveness of community-based interventions, current social service delivery practice, and contemporary social policies are examined. An ABA-accredited and BACB® pre-approved course. (Formerly HDFL 848.) LEC.

ABSC 856. An Interdisciplinary Approach to Intervention with the Handicapped. 3 Hours. This course surveys knowledge from various disciplines that address developmental disabilities across the life span. Its focus is on designing strategies for individual intervention and treatment programs by an interdisciplinary team. Designed for students in social work, speech pathology, psychology, nutrition, audiology, special education, physical therapy, nursing, child development, behavior analysis, and related fields. (Formerly HDFL 707.) Prerequisite: A basic course in child development or instructor permission. SEM.

ABSC 860. Behavioral Community Psychology. 3 Hours. An examination of the theory, principles, and methods of behavior analysis and their applications to problems of human behavior in complex organizations such as businesses, industries, human service organizations, and governments. (Formerly HDFL 888.) Prerequisite: Graduate standing or instructor permission. LEC.

ABSC 866. Service System and Consumer Issues in Developmental Disabilities. 3 Hours. This course provides a service-system perspective on developmental disabilities. Students learn (a) how service systems have developed for people with developmental disabilities; (b) about service systems from the perspective of agency administrators, program evaluation, and public and private payment systems (e.g., health insurance, Medicaid, Medicare, CHIPS, Title V); and (c) from consumers, themselves, about the barriers they face in obtaining needed services. Finally, students learn about advocating for service-system change at a consumer, program, and policy level. Prerequisite: Graduate standing or instructor permission. LEC.

ABSC 870. Practicum I in Behavioral Psychology. 1-6 Hours. Instruction and supervised laboratory or field work for master's students. Practica are offered by different instructors on different topics; may be repeated for credit if the content differs. Topics and instructors are announced in the Schedule of Classes. Prerequisite: Graduate standing in applied behavioral science or instructor permission. FLD.

ABSC 871. Practicum I in Behavior Analysis: ____. 1-6 Hours. Instruction and supervised laboratory or field work for master's students. Practica are offered by different faculty members on different topics; may be repeated for credit if the content differs. Topics and instructors are announced in the Schedule of Classes. (Formerly HDFL 871.) Prerequisite: Graduate standing in applied behavioral science or instructor permission. FLD.

ABSC 872. Practicum I in: ____. 1-6 Hours. Instruction and supervised laboratory or field work for master's students. Practica are offered by different faculty members on different topics; may be repeated for credit if the content is different. Topics and instructors are announced in the Schedule of Classes. Prerequisite: Graduate standing in applied behavioral science or instructor permission. FLD.

ABSC 873. Practicum in Educational Psychological/Rehabilitative Services: ____. 3-6 Hours. This course is for students who wish to complete practicum experiences in services related to persons with retardation, autism, or physical disabilities in programs in various settings, such as the Ann Sullivan Center in Lima, Peru and the Algeria School in Paraguay. The course is designed to give interested students opportunities to work with professionals in these programs on a semester or summer basis. The course consists of participation in professional activities associated with the practicum program and a report of these activities to the instructor. (Formerly HDFL 789.) Prerequisite: Instructor permission. FLD.

ABSC 874. Practicum in Consumer Evaluation of Behavioral Programs. 3-6 Hours. A practicum course designed to provide students with the knowledge, background, and practical experience in the conduct of consumer evaluations for behavioral treatment programs. (Formerly HDFL 855.) Prerequisite: Instructor permission. FLD.
ABSC 875. Practicum in Community Health Promotion. 1-6 Hours.
A practicum course designed to provide students with knowledge, background, and practical experience in the implementation of community health promotion projects and their evaluation. May be repeated for credit if the content differs. (Formerly HDFL 808.) Prerequisite: Instructor permission. FLD.

ABSC 876. Practicum in Community Development. 1-6 Hours.
A practicum course designed to provide students with knowledge, background, and practical experience in the implementation of community improvement projects and their evaluation. May be repeated for credit if the content differs. (Formerly HDFL 802.) Prerequisite: Instructor permission. FLD.

ABSC 877. Advanced Practicum in Gerontology. 1-6 Hours.
Supervised practical experience in working with elders in home, community, or institutional settings. Regular individual conferences with faculty are used to evaluate student progress. (Formerly HDFL 849.) Prerequisite: Graduate standing or instructor permission. FLD.

ABSC 880. Early Childhood Practicum for Allied Professionals. 1-6 Hours.
Professionals in fields such as journalism, social welfare, and psychology may have career interests that include work with or on behalf of young children. This practicum provides students with individualized opportunities to work with young children in a group setting in order to extend their professional skills. (Formerly HDFL 790.) Prerequisite: Instructor permission. FLD.

ABSC 881. Early Childhood Care and Intervention Practicum I. 1-6 Hours.
A course covering the specification of learning goals and the implementation and evaluation of curriculum design management of groups of young children. May be repeated for no more than a total of six credit hours. (Formerly HDFL 791.) Prerequisite: Instructor permission. FLD.

ABSC 882. Early Childhood Care and Intervention Practicum II. 1-6 Hours.
A course to assess and teach skills in diagnosis and evaluation of particular problems in the developmental process of young children (1-5 years of age), and to design and implement interventions. May be repeated for no more than a total of six credit hours. (Formerly HDFL 792.) Prerequisite: ABSC 791 and instructor permission. FLD.

ABSC 883. Early Childhood Administration Practicum. 1-6 Hours.
Experiences in understanding and developing parent satisfaction with care arrangements for their child(ren), providing services to personnel responsible for care and development of young children, and/or maximizing use of available services for young children on their behalf. May be repeated for no more than a total of six credit hours. (Formerly HDFL 793.) Prerequisite: ABSC 791 and instructor permission. FLD.

ABSC 884. Early Childhood Early Intervention Practicum. 1-6 Hours.
Laboratory teaching in an early childhood classroom that includes children who are developmentally delayed, demonstrate behavioral or learning difficulties, or have other developmental disabilities. Experience includes individualized programming for children with special needs, as well as group management and group curriculum planning. May be repeated for no more than a total of six credit hours. (Formerly HDFL 794.) Prerequisite: ABSC 791 and instructor permission. FLD.

ABSC 885. Early Childhood Teacher Training Practicum. 1-6 Hours.
Experience in supervising staff who work in programs for young children. Supervision includes orienting, monitoring, and evaluating staff performance; opportunities for interaction with other professionals; experience in facilitating staff communication; and consulting on research projects. (Formerly HDFL 795.) Prerequisite: ABSC 791 and instructor permission. FLD.

ABSC 886. Developmental Assessment Practicum: ______. 1-6 Hours.
This course provides direct experience in the developmental assessment of a selected age group, such as infants, preschool and elementary children, adolescents, or adults. It may be repeated providing the age group specification is not repeated. (Formerly HDFL 811.) Prerequisite: HDFL 810 or an equivalent course. FLD.

ABSC 887. Clinical Practicum in Pediatric Psychology. 1-6 Hours.
Supervised experience with pediatric patients referred for behavior problems, including, for example, temper tantrums, enuresis, encopresis, and hyperactivity. Also includes evaluation and treatment of children with commonly encountered behavior problems. In addition, students observe pediatric staff performing appropriate physical exams and observe the interaction between the medical staff and the pediatric psychologist. (Formerly HDFL 823.) Prerequisite: ABSC 705 and instructor permission. FLD.

ABSC 888. Diversity Issues in Clinical Psychology. 3 Hours.
Review of individual differences pertaining to culture, ethnicity, race, gender, sexual orientation, age, etc., as these have an impact upon theory, research, assessment, and treatment issues in clinical psychology. (Same as PSYC 888.) Prerequisite: Graduate status in clinical psychology, or consent of instructor. LEC.

ABSC 890. Seminar in: ______. 3 Hours.
A seminar for master's level students. It examines basic and applied research literatures in specialized fields of applied behavioral science. May be repeated for credit if the content differs. (Formerly HDFL 701.) Prerequisite: Graduate standing in applied behavioral science or instructor permission. LEC.

ABSC 891. Research in: ______. 1-6 Hours.
Supervised research investigations in basic or applied behavioral science for master's students. The course introduces observational measurement, research methods and designs, and the conduct of research in the behavioral sciences. May be repeated for credit if the content is different. (Formerly HDFL 800.) Prerequisite: Graduate standing or instructor permission. RSH.

ABSC 892. Readings in: ______. 1-3 Hours.
An individual, supervised study of recent research and scholarship for master's students. The course emphasizes current scholarship in selected areas of basic and applied behavioral science and its conceptual foundations. Designed for students whose needs cannot be met in other courses. May be repeated for credit if the content differs. (Formerly HDFL 833.) Prerequisite: Graduate standing or instructor permission. RSH.

ABSC 893. Special Topics in: ______. 1-3 Hours.
A research and readings course for master's students. It allows them to concentrate their studies on selected basic and applied problems in behavioral science and carry out independent research. May be repeated for credit if the content differs. (Formerly HDFL 722, HDFL 724, HDFL 725, HDFL 799.) Prerequisite: Graduate standing or instructor permission. LEC.

ABSC 894. Study Abroad Topics in: ______. 1-3 Hours.
A course designed to enhance international experience in topic areas related to behavioral science for master's students. May be repeated for credit if the content differs. Prerequisite: Graduate standing or instructor permission. LEC.

ABSC 897. Master's Thesis in Clinical Child Psychology. 1-10 Hours.
Supervised research experience for completing the thesis leading to master's degree. Graded on a satisfactory/unsatisfactory basis. (Formerly
Supervised research experience for the thesis leading to a master's degree in applied behavioral science. May be repeated. Graded on a satisfactory/unsatisfactory basis. (Formerly HDFL 899.) Prerequisite: Graduate standing in applied behavioral science or instructor permission. THE.

ABSC 900. Self-Control, Impulsivity, and Human Addictive Disorders. 3 Hours.
This course examines basic research designed to explore variables affecting animal and human decision making; particularly decisions classified as demonstrating impulsivity and self-control. The evidence for genetic and learning contributions to patterns of impulsive decision making will be explored, as will the relation between impulsivity and a range of addictive disorders. LEC.

ABSC 905. Psychopathology in Children. 3 Hours.
Diagnosis and treatment of psychological problems in childhood and adolescence. Preference given to graduate students in child clinical psychology, school psychology, and counseling psychology. (Same as PSYC 905.) Prerequisite: Fifteen hours of graduate credit in psychology or consent of instructor. LEC.

ABSC 908. Psychotropic Drugs: Effects Through the Life Span. 3 Hours.
This course covers basic pharmacological concepts, neuropharmacological principles, and the therapeutics of drug effects on behavior. Special attention is given to age and history as influences in psychopharmacological outcomes. (Formerly HDFL 908.) LEC.

ABSC 913. Behavioral Science Research Proseminar. 1-3 Hours.
A doctoral level professional seminar in which faculty and students present research proposals; offer formal presentations of completed empirical research, reviews of the literature, and other areas of scholarship; and engage discussion about contemporary empirical, conceptual, and professional issues in applied behavioral science. May be repeated for a total of eight credits. (Formerly HDFL 913.) Prerequisite: Graduate standing in behavioral psychology or instructor permission. LEC.

ABSC 920. Seminar in Language Development. 3 Hours.
The course pertains to relevant research regarding infant speech development, vocabulary development, linguistic development, articulation development, and language retardation. (Same as SPLH 966.) (Formerly HDFL 920.) LEC.

ABSC 921. The History and Systems of Psychology. 3 Hours.
An advanced graduate seminar on the history of psychology and its systems, and their relations to contemporary psychology. Pertinent issues in the history and philosophy of science are addressed (e.g., scientific revolutions), as are concerns in the historiography of psychology (e.g., presentism). (Formerly HDFL 891.) Prerequisite: Master's degree or instructor permission. LEC.

ABSC 931. Verbal Behavior. 3 Hours.
An advanced graduate seminar on the analysis of the verbal behavior of the proficient speaker and the biological, environmental, and motivational factors affecting it. Structural and developmental issues, as well as implications for language training and remediation are integrated throughout. Critiques and rebuttals are examined, along with current empirical and conceptual advances in research and theory. An ABA-accredited and BACB® pre-approved course. (Formerly HDFL 831.) Prerequisite: ABSC 800, advanced coursework in psycholinguistics or linguistics, or instructor permission. SEM.

ABSC 934. Directed Readings in Clinical Child Psychology. 3-5 Hours.
Designed to meet the needs of advanced students whose study in clinical child psychology cannot be met with present courses or for whom advanced work is desired in a specialized area of study. (Formerly HDFL 934.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. RSH.

ABSC 935. Experimental Foundations of Applied Behavior Analysis. 3 Hours.
A graduate level introduction to basic behavioral research. This course surveys seminal and current research in the experimental analysis of behavior and relates this work to research and practice in applied behavior analysis. Topics include respondent conditioning, complex schedule performance, avoidance, stimulus control, and choice. Prerequisite: ABSC 798 and consent of instructor. LEC.

ABSC 936. Quantitative Analysis of Behavior. 3 Hours.
Advanced experimental course (doctoral-level) that demonstrates the operations of principles of behavior, and the quantitative models that describe them, in the context of basic research. Specific review of the methods to obtain the data necessary to permit a quantitative analysis of behavior, along with the quantitative analyses themselves, will be discussed. Students will learn the advantages and disadvantages of quantitative analyses in the behavioral sciences, along with a behavioral perspective on quantitative models of behavior. Students will obtain hands-on experience selecting data for a quantitative analysis, reviewing whether the data and proposed model meet the requisite assumptions of EAB research on quantitative models, and analyzing behavioral data using quantitative models. Prerequisite: ABSC 799. SEM.

ABSC 940. Measurement and Experimental Design for Applied Research. 3 Hours.
This is an advanced course on research methods helpful in the development, evaluation, and dissemination of effective and sustainable behavior-analytic programs. The practices examined involve (a) selecting non-reactive measures of staff implementation behaviors; (b) selecting effective and sustainable components of a staff management program; and (c) experimentally analyzing the effectiveness and sustainability of the staff management program. Particular emphasis is placed on the analysis of the principles of behavior that determine the maintenance of staff interventions and, therefore, the survival of behavioral programs in their post-research phase. Students read and discuss the literature on factors that promote or impede program survival. Students design an intervention program using the practices examined in the course, simulate an experimental analysis of the program, and write a JABA-style manuscript describing the program and their simulated data. An ABA-accredited and BACB® pre-approved course. (Formerly HDFL 940.) Prerequisite: ABSC/HDFL 735 or HDFL 803, ABSC/HDFL 796, and ABSC/HDFL 871 or instructor permission. LEC.

ABSC 941. Teaching and Conference. 3-6 Hours.
This course is used by graduate students fulfilling the doctoral program teaching requirement. Students assist in class preparation and organization, teaching, grading, and office hours or serve as discussion section leaders or laboratory course supervisors. They meet regularly with the faculty members they are assisting. Students enroll for 3 hours for the equivalent of a 25% assistantship and 6 hours for a 50% equivalent. (Formerly HDFL 941.) Prerequisite: Instructor permission. FLD.

ABSC 942. Techniques of Data Analysis for Applied Research. 3 Hours.
This course examines data analysis procedures commonly used with both large group and single subject experimental designs. In addition to presenting specific data analysis techniques, the strengths and
weaknesses inherent in the various techniques are carefully reviewed and evaluated. (Formerly HDFL 942.) Prerequisite: ABSC/HDFL 735 or HDFL 803 and an intermediate statistics course. LEC.

**ABSC 943. Advanced Practicum in Clinical Child Psychology III. 1-3 Hours.**

Development of advanced competencies in assessment and intervention with children, adolescents, and their families through didactics, field experience, and supervision. Students acquire advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum (i.e., formal case presentation), and modeling of clinical competencies for junior students. Students will demonstrate the ability to implement empirically derived therapeutic interventions in consideration of individual differences, cultural values, and individual preferences. Students in external practicum sites will demonstrate an understanding of evidence-based models of consultation and provision of consultation to care providers in professional contexts. May be taken in more than one semester. (Same as PSYC 943.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

**ABSC 944. Advanced Practicum in Clinical Child Psychology IV. 1-3 Hours.**

Demonstration of advanced competencies in assessment, intervention, and consultation with children, adolescents, and their families through didactics, field experience, and supervision in the semester(s) prior to required clinical internship. Students demonstrate advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum (i.e., integrated case presentation), and modeling of clinical competencies for junior students. Course requirements include the development of portfolios for demonstration of clinical competencies and application to clinical internships. May be taken in more than one semester. (Same as PSYC 944.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

**ABSC 947. Advanced Practicum in Clinical Child Psychology V. 1-5 Hours.**

Specialized practicum experience for the Clinical Child Psychology Program. Demonstration of advanced competencies related to supervision and consultation in clinical psychology. With faculty supervision, students will develop and demonstrate the ability to provide effective supervision to less advanced students in the program in selected cases appropriate to the service setting. Further development of advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum, and modeling of clinical competencies for junior students. May be taken in more than one semester. (Same as PSYC 947.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

**ABSC 951. The Analysis of Cognition. 3 Hours.**

A graduate seminar on the behavior analysis of cognition. Topics include consciousness, attention, perception, memory, language, rule-governed behavior, problem-solving, decision-making, generativity, creativity, and beliefs and attitudes. Comparisons and contrasts are drawn among different theoretical orientations (information-processing, parallel-processing, nonmediational theories). Prerequisite: ABSC 800, advanced coursework in cognitive psychology, or instructor permission. SEM.

**ABSC 961. Advanced Seminar in Applied Behavior Analysis: ____. 3 Hours.**

An advanced seminar examining the literature and research methods in specialized areas of applied behavior analysis (e.g., developmental disabilities, community health, organizational development). May be repeated for credit if the content differs. An ABA-accredited and BACB® pre-approved course. (Formerly HDFL 971.) LEC.

**ABSC 963. Clinical Child Psychology Internship. 1 Hour.**

Three consecutive enrollments, covering a minimum of eleven months of experience in an approved clinical psychology field setting; supervision by qualified clinical child psychology faculty and field staff clinicians. Required of all clinical child psychology program students. An intensive guided experience in application of clinical child psychology theory, methods, and practices. Integrates scientific and clinical aspects of field. (Formerly HDFL 963.) (Same as PSYC 963.) Prerequisite: Completion of Ph.D. comprehensive examinations, graduation standing in clinical child psychology, and permission of clinical child psychology faculty. FLD.

**ABSC 965. Evaluating and Disseminating Scientific Material II. 1-3 Hours.**

Intensive training in the evaluation and production of scientific critiques and reviews on current issues in the analysis of behavior, as disseminated through the media. May be repeated. (Formerly HDFL 965.) Prerequisite: Instructor permission. LEC.

**ABSC 970. Practicum II in Behavioral Psychology. 1-6 Hours.**

Advanced instruction and supervised laboratory or field work for doctoral students beyond ABSC 870. May be repeated for credit if the content differs. Prerequisite: Graduate standing in behavioral psychology or instructor permission. FLD.

**ABSC 971. Practicum II in Behavior Analysis: ____. 1-6 Hours.**

Advanced instruction and supervised laboratory or field work for doctoral students beyond ABSC 871. May be repeated for credit if the content differs. Prerequisite: Graduate standing in behavioral psychology or instructor permission. FLD.

**ABSC 972. Practicum II in: ____. 1-6 Hours.**

Advanced instruction and supervised laboratory or field work for doctoral students beyond ABSC 872. May be repeated for credit if the content differs. Topic and instructor are announced in the Schedule of Classes. Prerequisite: Graduate standing in applied behavioral science or instructor permission. FLD.

**ABSC 976. Therapeutic Interventions with Children. 3-5 Hours.**

Clinical approaches to the therapeutic treatment of children with special emphasis on research findings and laboratory (practicum) experience. A survey of relationship therapies, operant strategies, system approaches, parent education and play therapy by the right therapist for a specific child with a particular problem. (Same as PSYC 976.) Prerequisite: Instructor permission. FLD.

**ABSC 981. History of Behavior Analysis. 3 Hours.**

An advanced graduate seminar on the long past, short history, recent origins, and modern history of applied behavioral science. This includes the field's history, internally: its conceptual system, sciences and discipline, profession, and institutions. It also includes the field's history, externally, for instance, the history of Western philosophy, science, American culture, and the behavioral and social sciences. Historiographic issues are addressed throughout. Prerequisite: ABSC 800 and Master's degree in ABSC or Instructor permission. SEM.

**ABSC 989. Methods of Obtaining External Research Funding. 1-3 Hours.**

The objective of this course is to demystify this process and prepare participants to submit their first independent research grant application.
Participants learn about the characteristics of different funding mechanisms and agencies, the characteristics of successful and unsuccessful application strategies, how to turn an initial research idea into a competitive application, ethical issues that influence each stage of the development and submission process, and the nuts and bolts of grant development and management. Specific activities include critiquing an actual NIH grant application, participating in a mock review panel, and developing an actual grant application. 

**ABSC 990. Advanced Seminar in: _____. 3 Hours.**
An advanced seminar for doctoral students. It examines basic and applied research literatures in specialized fields of applied behavioral science. May be repeated for credit if the content differs. (Formerly HDFL 900.) Prerequisite: Graduate standing in behavioral psychology or instructor permission. LEC.

**ABSC 991. Advanced Research in: _____. 1-9 Hours.**
Advanced, supervised research in basic or applied behavioral science for doctoral students. The course may focus on any combination of a literature review, research planning and preparation, conducting research, analyzing data, writing research reports, and preparing oral reports of completed research. May be repeated for credit if the content differs. (Formerly HDFL 990.) Prerequisite: Graduate standing in behavioral psychology or instructor permission. LEC.

**ABSC 992. Advanced Readings in: _____. 1-6 Hours.**
An advanced individual, supervised study of recent research and scholarship for doctoral students. The course emphasizes current scholarship in selected areas of basic and applied behavioral science and its conceptual foundations. Designed for students whose needs cannot be met in other courses. May be repeated for credit if the content differs. (Formerly HDFL 993.) Prerequisite: Graduate standing in behavioral psychology or instructor permission. RSH.

**ABSC 993. Advanced Special Topics in: _____. 1-3 Hours.**
An advanced research and readings course for doctoral students. It allows them to concentrate their studies on selected basic and applied problems in behavioral science and carry out independent research. May be repeated for credit if the content differs. (Formerly HDFL 931.) Prerequisite: Graduate standing in behavioral psychology or instructor permission. RSH.

**ABSC 994. Advanced Study Abroad Topics in: _____. 1-6 Hours.**
An advanced course designed to enhance international experience in topic areas related to behavioral science for doctoral level students. May be repeated for credit if the content differs. Prerequisite: Graduate standing in behavioral psychology or instructor permission. RSH.

**ABSC 998. Doctoral Dissertation in Clinical Child Psychology. 1-10 Hours.**
Research experience making an original contribution to literature in clinical child psychology. Graded on a satisfactory/unsatisfactory basis. (Same as PSYC 998.) (Formerly HDFL 998.) RSH.

**ABSC 999. Doctoral Dissertation in Behavioral Psychology. 1-9 Hours.**
Advanced supervised research that makes an original, empirical contribution to the literature in applied behavioral science leading to a doctoral degree in behavioral psychology. May be repeated. Graded on a satisfactory/unsatisfactory basis. (Formerly HDFL 999.) Prerequisite: Graduate standing in behavioral psychology or instructor permission. THE.

### Biology Courses

**BIOL 100. Principles of Biology. 3 Hours. NB GE3N / N.**
Intended for non-science majors. The basic concepts of biology at the cellular, organismal, and population levels of organization and their applications to humans and modern society. An honors section, BIOL 101, is offered for students with superior academic records. BIOL 100 and BIOL 102 (or BIOL 101 and BIOL 103, honors) satisfy the College natural science with laboratory requirement. Concurrent enrollment in BIOL 102 is recommended. LEC.

**BIOL 101. Principles of Biology, Honors. 3 Hours. NB GE3N / N.**
Intended for non-science majors with superior academic records. The basic concepts of biology at the cellular, organismal, and population levels of organization and their applications to humans and modern society. Concurrent enrollment in BIOL 102 or BIOL 103 is recommended. BIOL 101 and either BIOL 102 or BIOL 103 satisfy the College natural science with laboratory requirement. Prerequisite: Membership in the College Honors Program or consent of instructor. LEC.

**BIOL 102. Principles of Biology Laboratory. 1 Hour. U.**
Intended for non-science majors. Exercises are designed to give the student hands-on experience with selected topics from the associated lecture course (BIOL 100). An honors laboratory (BIOL 103) is offered for students with superior academic records. Prerequisite: Concurrent enrollment in BIOL 100 is recommended. LAB.

**BIOL 103. Principles of Biology Laboratory, Honors. 1 Hour. U.**
Intended for non-science majors with superior academic records. Exercises are designed to give the students hands-on experience with selected topics from the associated lecture course (BIOL 101). Prerequisite: Membership in the College Honors Program or consent of instructor. Concurrent enrollment in BIOL 101 is recommended. LAB.

**BIOL 105. Biology Orientation Seminar. 1 Hour. N.**
Introduces interested students to information about majoring in the biological sciences at the University of Kansas. Students learn about degree requirements, academic advising, research opportunities, and career options, as well as how to align academic and professional goals. Graded on a satisfactory/unsatisfactory basis. LEC.

**BIOL 110. Microorganisms in Your World. 3 Hours. NB / N.**
A course for students who are not science majors. Designed to acquaint students with some microbial activities which affect their lives. Includes the historical development of microbiology, the basic principles of microbial growth, disinfection, antibiotics, infection, and immunity; and some commercial, agricultural, and industrial uses of microorganisms. Emphasis is on infectious diseases. Not open to students with any credit in microbiology. May not be counted as a prerequisite for any other microbiology course. LEC.

**BIOL 116. Introduction to Evolutionary Biology. 3 Hours. N.**
An account of evolutionary thinking from classical to contemporary time. The emphasis is on mainstream developments (Darwinism, Mendelism, the Modern Synthesis, Cultural Ecology), but certain social issues will be examined (social Darwinism, creationism). LEC.

**BIOL 120. Insects in Your World. 3 Hours. NB GE3N / N.**
Students will learn about the global impact of insects on human concerns, both positive (pollination and decomposition) and negative (competition with humans for food, fiber, and shelter, and disease transmission) while developing an appreciation for the ways in which scientists work with real problems involving insects. The course will cover the overwhelming abundance and diversity of insects, and their life history, ecology, behavior, and physiology. This course is intended for both nonbiology and biology majors. Format: two lectures and one discussion section per week. LEC.
BIOL 150. Principles of Molecular and Cellular Biology. 4 Hours. NB GE3N / N.
An integrated lecture and laboratory course for biology majors and students planning to take additional courses in biology. This course covers basic biochemistry, cell structure and function, molecular biology, genetics, physiology, and development of plants and animals. Three hours of lecture and three hours of laboratory per week. An honors section (BIOL 151) is offered for students with superior academic records. Prerequisite: Concurrent or prior enrollment in CHEM 130, CHEM 190, CHEM 150, or CHEM 170, or consent of instructor. LEC.

BIOL 151. Principles of Molecular and Cellular Biology, Honors. 4 Hours. NB GE3N / N.
An integrated lecture and laboratory course for students with superior academic records who are biology majors or who plan to take additional courses in biology. This course covers basic biochemistry, cell structure and function, molecular biology, genetics, physiology, and development of plants and animals. Three hours of lecture and three hours of laboratory per week. An honors section: Membership in the University Honors Program and concurrent or prior enrollment in CHEM 130, CHEM 190, CHEM 150, or CHEM 170, or consent of instructor. LEC.

BIOL 152. Principles of Organismal Biology. 4 Hours. NB GE3N / N.
An integrated lecture and laboratory course for biology majors and students who plan to take additional courses in biology. This course covers basic elements of plant and animal morphology and physiology, principles of evolution, organismal diversity and phylogeny, population biology, population genetics, ecology, and behavior. Three hours of lecture and three hours of laboratory per week. An honors section (BIOL 153) is offered for students with superior academic records. Prerequisite: BIOL 150 or BIOL 151. LEC.

BIOL 153. Principles of Organismal Biology, Honors. 4 Hours. NB GE3N / N.
An integrated lecture and laboratory course for students with superior academic records who are biology majors or planning to take additional courses in biology. This course covers basic elements of plant and animal morphology and physiology, principles of evolution, organismal diversity and phylogeny, population biology, population genetics, ecology, and behavior. Three hours of lecture and three hours of laboratory per week. Prerequisite: BIOL 150 or BIOL 151 and membership in the University Honors Program or consent of instructor. LEC.

BIOL 155. Principle Lab in: ______. 1-3 Hours. U.
This introductory laboratory exposes the students to basic principles in biology and modern experimental techniques through an open-ended authentic research experience directed by a faculty member. Prerequisite: Consent of instructor. LEC.

BIOL 177. First Year Seminar: ______. 3 Hours. NB GE11.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in biology. Does not contribute to major requirements in biology. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

BIOL 200. Basic Microbiology. 3 Hours. NB GE3N / N.
Introduction to bacteria and viruses. Topics include historical development of microbiology, bacterial structure and growth, enzymes and energy production, disinfection, antibacterial drugs, gene transfer, viral replication, infection and immunity, with emphasis on infectious diseases. Can be substituted for BIOL 201 as a prerequisite for other microbiology courses by consent of department. Not open to those with credit in BIOL 110, BIOL 201, BIOL 400, or BIOL 401. Prerequisite: A course in high school biology and a course in high school chemistry. This course is not recommended for first semester freshmen. LEC.

BIOL 203. Introductory Microbiology Laboratory. 2 Hours. U.
Laboratory exercises to complement BIOL 200. Prerequisite: BIOL 200. May be taken concurrently. LAB.

BIOL 210. Introduction to Clinical Laboratory Sciences. 1 Hour. U.
An introductory overview of medical technology as a profession including types of analyses performed, specialties, interrelationships in the health care system and a visit to a clinical laboratory. This course will enable those considering a major in medical technology to have a clear definition of the profession. This course does not meet any degree requirements in biology. No prerequisite. (Same as CLS 210.) LEC.

BIOL 215. Plants Through Time. 3 Hours. NB / N.
Examines the evolution of plants and their environments from the origin of life to the present, including the historical development of the biosphere, mass extinctions (past and present), and social implications of future climate changes and deforestation. Not recommended for students with credit in GEOL 121. LEC.

BIOL 225. Evolution and the History of Life. 3 Hours. GE3N / N.
This introductory course for non-majors focuses on the significance of the history of life and the fossil record for our understanding of evolution. Key events in the history of life are considered, including the origins of life, the eukaryotic cell, and humans, and also various mass extinctions. The focus is on general scientific and evolutionary principles and mechanisms that can be extracted from the study of the fossil record. It also uses the lessons of the fossil record to consider the prospects for our own species. LEC.

BIOL 240. Fundamentals of Human Anatomy. 3 Hours. N.
Introduction to the gross anatomy of the human body. Covers the spatial arrangement and appearance of structures throughout the body, including visual identification of these structures. Musculoskeletal relationships, and the anatomy of major organ systems, are emphasized. Not intended for biology majors. Prerequisite: BIOL 100, or equivalent. LEC.

BIOL 241. Human Anatomy Observation Laboratory. 2 Hours. U.
One of the two laboratories in gross anatomy designed to complement BIOL 240. Emphasizes the three-dimensional appearance and spatial relationships of anatomical structures through supervised observations of pre-dissected human cadavers. Limited to students enrolled in, or seeking admission to, programs that require a human anatomy observation laboratory. Prerequisite: Concurrent or prior enrollment in BIOL 240 is required. LAB.

BIOL 242. Human Anatomy Dissection Laboratory. 3 Hours. U.
One of the two laboratories in gross anatomy designed to complement BIOL 240. Provides an opportunity to develop a comprehensive three-dimensional understanding of anatomical structures and spatial relationships while gaining substantial dissecting experience. Student perform supervised dissection of human cadavers. Limited to students enrolled in, or seeking admission to, programs that require a human anatomy laboratory. Concurrent or prior enrollment in BIOL 240 is required. LAB.

BIOL 246. Principles of Human Physiology. 3 Hours. N.
An introduction to the physiological and biochemical processes and general physiological principles necessary to sustain life. Organ and organ system processes are emphasized. Intended for students majoring in allied health or sports related curricula who require a course in human physiology. Not intended for biology majors. Prerequisite: BIOL 100 or equivalent. LEC.
BIOL 247. Principles of Human Physiology Laboratory. 2 Hours. U.
Designed to complement BIOL 246. Uses experiments and simulations to demonstrate laboratory techniques and representative processes in areas of human physiology. Concurrent or prior enrollment in BIOL 246 required. LAB.

BIOL 350. Principles of Genetics. 4 Hours. N.
Why are related individuals more similar than unrelated individuals and what is the basis for heritable traits? From Mendel's discoveries of the patterns of genetic inheritance, to the study of transmissible hereditary factors, genetics is central to understanding the biological sciences. Topics include molecular genetics and genetic engineering; Mendelian genetics and mapping; control of gene expression; cytogenetics; epigenetics and non-Mendelian genetics; and population and quantitative genetics. Examples are taken from a wide variety of organisms, including viruses, bacteria, plants, fungi, insects, and humans. Prerequisite: Two semesters of college-level chemistry and BIOL 150 or BIOL 152; or consent of the instructor. LEC.

BIOL 360. Principles of Genetics, Honors. 4 Hours. N.
The science of genetics aims to explain why individuals differ from one another and how these differences are inherited. Honors Genetics covers all core topics in fundamental genetics: Mendelian inheritance, meiosis and recombination, mutation, molecular genetics, population genetics, quantitative genetics and genomics. Special attention given to the practice of genetics and the complex relationship between genotype, phenotype and environment. A broader goal of Honors Genetics is to provide students a framework for understanding recent advances in medical genetics and the modern era of personal genomics. Prerequisite: Two semesters of college-level chemistry and BIOL 150 or BIOL 152; membership in the University Honors Program; or consent of the instructor. LEC.

BIOL 400. Fundamentals of Microbiology. 3 Hours. NB GE3N / N.
Fundamental principles of microbiology with emphasis on physical and chemical properties of the bacterial cell; microbial metabolism, cultivation, growth and death of bacteria; microbial genetics, pathogenesis and immunity, industrially important microorganisms. Prerequisite: BIOL 150 or BIOL 151 and two semesters of college chemistry, or consent of the instructor. LEC.

BIOL 401. Fundamentals of Microbiology, Honors. 3 Hours. N.
Honors section of BIOL 400 and BIOL 612, by application and invitation. Prerequisite: BIOL 151, two semesters of college chemistry, and membership in the University Honors Program, or consent of the instructor. LEC.

BIOL 402. Fundamentals of Microbiology Laboratory. 2 Hours. U.
Laboratory exercises designed to complement BIOL 400 or BIOL 700. Prerequisite: BIOL 400 or BIOL 612, or BIOL 400 or BIOL 612 concurrently. LAB.

BIOL 405. Laboratory in Genetics. 2 Hours. U.
A laboratory program which includes written reports on fruit fly crosses, exercises on meiosis, probability and statistics, human genetics and computer simulations of genetics problems. Prerequisite: Concurrent or prior (preferred) enrollment in BIOL 350 or its equivalent. LAB.

BIOL 408. Physiology of Organisms. 3 Hours. N.
A comprehensive and integrative approach to the study of organisms with an emphasis on physiological, ecological, structural, and behavioral adaptations to differing environments. Prerequisite: BIOL 152 or BIOL 153 and CHEM 130 or CHEM 190 or CHEM 170; or consent of the instructor. LEC.

BIOL 409. Physiology of Organisms, Laboratory. 2 Hours. U.
The laboratory exposes the students to the structure and function of the major groups of animals and plants. Students use basic techniques of biological observation, such as microscopy and dissection, and experimental techniques to analyze plant and animal function. Prerequisite: Concurrent or prior enrollment in BIOL 408, or consent of the instructor. LAB.

BIOL 410. Human Biogeography, Honors. 3 Hours. N.
Principles of evolution and earth change are used to examine distributions of human populations, wealth, and resources. Readings from the current literature will be included. Lecture and discussion. (Same as GEOG 410.) Prerequisite: BIOL 152 or BIOL 153 or GEOG 107 and membership in the University Honors Program or consent of instructor. LEC.

BIOL 412. Evolutionary Biology. 4 Hours. N.
Introduction to the patterns and processes of organic evolution. Considered are the history of evolutionary thought, molecular evolution, genetics and microevolution, selection and adaptation, and speciation and macroevolution. Emphasis will be placed on how scientists study and document change over time in natural populations, methods for testing hypotheses about events in evolutionary history, and how discovering evolutionary mechanisms at one level of organization can help to explicate general processes in the natural world. Prerequisite: BIOL 152 and BIOL 350, or consent of the instructor. LEC.

BIOL 413. History and Diversity of Organisms. 3 Hours. N.
An integrated lecture and laboratory course presenting an overview of the variety and ancestry of life on earth. Using representatives from prokaryotes, protists, plants, fungi, and animals, principles of phylogenetic reconstruction are illustrated and evolutionary trends in the life history features, functional morphology, and structural complexity of extant and extinct organisms are presented. Two hours of lecture and three hours of laboratory per week. Prerequisite: BIOL 152 or BIOL 153, or consent of the instructor. LEC.

BIOL 414. Principles of Ecology. 3 Hours. N.
Study of the principles underlying species population density changes, community structure and dynamics, biogeochemical cycles, and energy flow and nutrient cycling in ecosystems. Prerequisite: BIOL 152 or BIOL 153, or consent of the instructor. LEC.

BIOL 415. Field and Laboratory Methods in Ecology. 2 Hours. N.
This course complements BIOL 414 with field trips and laboratory exercises that illustrate the basic concepts of ecology. Topics covered include methodologies for quantitative sampling of terrestrial and aquatic systems, design of field studies, computer simulation and digital data analysis techniques, and scientific writing. Prerequisite: Concurrent or prior enrollment in BIOL 414. A statistics course is recommended. FLD.

BIOL 416. Cell Structure and Function. 3 Hours. N.
Lecture survey of cellular biology with emphasis on experimental approaches to understanding cell function; topics include biological membranes and transmembrane transport, vesicular trafficking (secretion and endocytosis), cell signaling, cell motility and the cytoskeleton, and the regulation of the cell division cycle. Prerequisite: BIOL 150 or BIOL 151; BIOL 350 or BIOL 360; CHEM 130 or CHEM 190 or CHEM 170; and CHEM 135 or CHEM 195 or CHEM 175, or consent of the instructor. LEC.

BIOL 417. Biology of Development. 3 Hours. N.
A general course designed to introduce students to the developmental biology of animals. Emphasis is placed on understanding how a single-celled fertilized egg develops into a complex multicellular organism by the processes of cell division, differentiation, growth, and morphogenesis. Lectures stress experimental approaches to investigating
development, including classic embryology and modern molecular genetics. Prerequisite: BIOL 350 or consent of the instructor. LEC.

BIOL 418. Laboratory in: ____. 1-3 Hours. U.  
A varied program of laboratory and fieldwork designed to introduce students to investigative approaches in the study of the basic concepts of biological science. Students may enroll in more than one section. Prerequisite: BIOL 100, BIOL 101, BIOL 150, BIOL 151, or exemption. Each section may have additional prerequisites to be determined by instructor. LAB.

BIOL 419. Topics in: ____. 1-3 Hours. N.  
Courses on special topics in biology, given as need arises. May be lectures, discussions, readings, laboratory, or fieldwork. Students may select sections according to their special needs. IND.

BIOL 420. Seminar: ____. 1-3 Hours. N.  
The preparation and presentation of oral reports on selected topics from the recent research literature. Students may choose any interest group each semester, but may enroll in a given interest group only once. Enrollment in each interest group limited to twenty students. Prerequisite: Course work varying with the topic of the seminar, or consent of instructor. LEC.

BIOL 421. Topics in Molecular Biosciences: ____. 3 Hours. N.  
Lecture instruction and the preparation and presentation of oral and written reports on selected topics from the recent research literature in molecular biosciences. Students may enroll in a given topic only once. Prerequisite: Course work varying with the topic of the seminar, or consent of instructor. LEC.

BIOL 422. Advanced Laboratory in: ____. 1-3 Hours. N.  
Original study in laboratory or field in selected topics of current research interest. May be undertaken only with the consent of the major advisor and of the faculty member who will guide the research. Prerequisite: Consent of instructor. IND.

BIOL 423. Non-laboratory Independent Study. 1-9 Hours. AE61 / N.  
Original study in discussion or preparation of review papers on selected topics of current interest. May be undertaken only with the consent of the major advisor and of the faculty member who will guide the research. Prerequisite: Consent of instructor. IND.

BIOL 424. Independent Study. 1-9 Hours. AE61 / N.  
Original study in laboratory or field in selected topics of current research interest. May be undertaken only with the consent of the major advisor and of the faculty member who will guide the research. Prerequisite: Consent of instructor. IND.

BIOL 425. Teaching Apprenticeship in Biology. 1-9 Hours. N.  
Involvement as teaching assistant for a course in Biology. Credit hours shall not exceed the credits offered for the course being taught. May be undertaken only with the consent of the Director of Undergraduate Biology and of the faculty member who will teach the course. Prerequisite: Consent of instructor and Director of Undergraduate Biology. FLD.

BIOL 426. Laboratory in Cell Biology. 3 Hours. U.  
Laboratory exercises will examine the function, organization, and composition of eukaryotic cells. Prerequisite: BIOL 150 or BIOL 151, CHEM 130 or CHEM 190 or CHEM 170; concurrent or prior enrollment in BIOL 416 or BIOL 536; or consent of the instructor. BIOL 350 or BIOL 360 is highly recommended. LAB.

BIOL 428. Introduction to Systematics. 3 Hours. N.  
Basic elements of systematic theory and practice; phylogenetic reconstruction using morphological and molecular data; interpretation of phylogenetic hypotheses; principles of nomenclature and classification; evolutionary processes and patterns of species diversity; discussion of the aims and needs of taxonomy; species and speciation; construction of keys; significance of biological collections. Prerequisite: BIOL 152 or BIOL 153. Not intended for students with advanced systematics background. LEC.

BIOL 430. Laboratory in Molecular Biology. 3 Hours. U.  
Practical experience in recombinant DNA technology and molecular cloning. Prerequisite: BIOL 416 or a course in biochemistry or molecular biology. LAB.

BIOL 432. Human Behavioral Genetics. 3 Hours. S.  
A survey of human behavioral genetics for upper division undergraduates. Emphasis is on how the methods and theories of quantitative, population, medical, and molecular genetics can be applied to individual and group differences in humans. Both normal and abnormal behaviors are covered, including intelligence, mental retardation, language and language disorders, communication, learning, personality, and psychopathology. (Same as ANTH 447, PSYC 432, SPLH 432.) Prerequisite: Introductory courses in biology/genetics or biological anthropology and psychology are recommended. LEC.

BIOL 435. Introduction to Neurobiology. 3 Hours. N.  
Basic principles of neurobiology. The focus will be on the nature of communication among nerve cells and their targets. Topics will include the development, structure and function of nerve cells, chemistry of neurotransmission, processing and integration including the cellular and molecular basis of higher functions and neurological disorders. Prerequisite: BIOL 150 or BIOL 151. LEC.

BIOL 440. Advanced Human Anatomy. 6 Hours. N.  
Integrated lecture and laboratory course designed to provide students with a detailed understanding of the structure of the human body. Cadaver dissection will reinforce three-dimensional relationships discussed in lecture and each of the main organ systems will be considered using a regional approach to the body. Prerequisite: BIOL 152 or equivalent; BIOL 240, BIOL 241, or BIOL 242; and instructor consent. LEC.

BIOL 448. Kansas Plants. 3 Hours. N.  
A study of common and important non-cultivated Kansas plants, with special emphasis on the ecology of the state; paleoclimatic and paleobotanical background of the central prairies and plains; present climate, physiography and vegetation; poisonous, edible, and medicinal plants; identification by means of simplified keys. Prerequisite: BIOL 100, BIOL 101, BIOL 150, or BIOL 151 and BIOL 152 or BIOL 153. LEC.

BIOL 449. Laboratory/Field Work in Human Biology. 1-3 Hours. AE61 / N.  
Faculty supervised laboratory or field research for Human Biology majors. Students design and complete a research project in collaboration with a Human Biology faculty member. (Same as ANTH 449, PSYC 449, and SPLH 449.) Prerequisite: Consent of instructor and Human Biology major. FLD.

BIOL 454. Brain Diseases and Neurological Disorders. 3 Hours. N.  
Major brain diseases and neurological disorders such as stroke, Alzheimer's Disease, Parkinson's Disease, Huntington's Disease, Multiple Sclerosis, Epilepsy, Schizophrenia, etc., will be discussed in terms of the etiology, molecular, and cellular basis of potential therapeutic interventions. Graduate students are required to present original research paper assigned by the instructor to the class in addition to other assignments for all the students enrolled. Prerequisite: BIOL 150, or consent of instructor. LEC.

BIOL 461. Biodiversity of the Rainforest. 3 Hours. N.  
An introduction to birds, bats, and plants of the rainforest, with emphasis on general characteristics of each of the taxa and their relationship to the tropical ecosystem, as well as their particular anatomy, ecology, behavior, and diversity. Field work focuses on identification of birds and bats (at species level), plants (at family level), and on capturing and preservation techniques. Taught in Golfito, Costa Rica. Contact Undergraduate Biology, or the Office of Study Abroad. Prerequisite: BIOL 150 or BIOL
151 and BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses are taught in Spanish; therefore, four semesters of Spanish are required. Summer courses are taught in English. LEC.

BIOL 463. Introduction to Ornithology of the Tropics. 4 Hours. N.
A theory and practice course on birds. Course covers morphology, reproduction, evolution, ecology, and behavior, as well as systematics of Costa Rican birds. Course includes field work on bird identification. Taught in Golfito, Costa Rica. Contact Undergraduate Biology, or the Office of Study Abroad. Prerequisite: BIOL 150 or BIOL 151 and BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses are taught in Spanish; therefore, four semesters of Spanish are required. Summer courses are taught in English. LEC.

BIOL 465. Marine Biology. 4 Hours. N.
A theory and practice course on biotic relations, the role of organisms and marine biodiversity. It covers basic marine principles and physico-chemical processes (temperature, salinity, dissolved oxygen, nutrients, and pH in the water) and their effect on the abundance, and horizontal and vertical distribution of marine organisms. Course includes field work on data collection. Taught in Golfito, Costa Rica. Contact Undergraduate Biology, or the Office of Study Abroad. Prerequisite: BIOL 150 or BIOL 151 and BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses are taught in Spanish; therefore, four semesters of Spanish are required. Summer courses are taught in English. LEC.

BIOL 466. Fresh Water Ecology. 4 Hours. N.
A theory and practice course which focuses on the techniques used for monitoring the growth of fish, shrimp, and mollusks, with the purpose of understanding the variables that could produce the best yields. The course covers ecology (population growth, competition, predators, ecosystem dynamics), and fishery biology (growth, fish yield, capture efficiency) applicable in the field experiments. Taught in Golfito, Costa Rica. Contact Undergraduate Biology, or the Office of Study Abroad. Prerequisite: BIOL 150 or BIOL 151 and BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses are taught in Spanish; therefore, four semesters of Spanish are required. Summer courses are taught in English. LEC.

BIOL 467. Marine Resources Management. 3 Hours. N.
A theory and practice course which focuses on the techniques used for monitoring the growth of fish, shrimp, and mollusks, with the purpose of understanding the variables that could produce the best yields. The course covers ecology (population growth, competition, predators, ecosystem dynamics), and fishery biology (growth, fish yield, capture efficiency) applicable in the field experiments. Taught in Golfito, Costa Rica. Contact Undergraduate Biology, or the Office of Study Abroad. Prerequisite: BIOL 150 or BIOL 151 and BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses are taught in Spanish; therefore, four semesters of Spanish are required. Summer courses are taught in English. LEC.

BIOL 477. Ecology and Global Change. 3 Hours. N.
Humans influence both natural and managed ecosystems. This course studies the effects of climate change, land-use change, and reductions in biodiversity on ecosystems. Emphasis is placed on how biological and physical processes may be perturbed by human influences. Topics include the greenhouse effect, species extinctions, human disease expansion, and the effects of global change on agricultural productivity. A combination of lectures and discussion address issues from a scientific basis and link these ecological issues to our everyday lives and society as a whole. Prerequisite: BIOL 152, BIOL 153, or equivalent, or permission of instructor. LEC.

BIOL 480. Biology and Diversity of Parasites. 3 Hours. N.
Introductory lecture course to the field of Parasitology. Provides basic knowledge about the morphology and biology of parasitic animals. Coverage includes a diversity of protozoan and metazoan groups parasitizing animals, including humans (e.g., malaria, amoebas, hookworms, tapeworms). Some emphasis is given to groups of parasites of particular medical and/or economic importance. Selected principles of parasitism are introduced. Prerequisite: BIOL 152 or BIOL 153, or permission of instructor. LEC.

BIOL 481. Parasitology Laboratory. 1 Hour. U.
Laboratory course in the study of protozoan and metazoan parasites of animal, including humans, emphasizing their diversity, classification, morphology, and identification. One three-hour laboratory each week. Prerequisite: Concurrent or prior enrollment in BIOL 480. LAB.

BIOL 484. Introduction to Mammalogy. 3 Hours.
A study of mammals, with emphasis on evolution, biogeography, systematics, and natural history. Lectures, laboratory, and field study. Prerequisite: BIOL 152 or 153 or permission of instructor. LEC.

BIOL 499. Introduction to Honors Research. 2 Hours. N.
Intended for sophomores planning to enroll in the Biology Honors Program. Students interested in pursing Biology Honors discuss with Biology faculty members the rationale, methods, and interpretations of research being carried out in individual faculty labs to learn how scientific research is conducted. Prerequisite: At least 17 credit hours of college level natural sciences coursework or consent of instructor. LEC.

BIOL 500. Biology of Insects. 3 Hours. N.
Lectures and demonstrations providing an introduction to the study of insects, including general classification, structure, phylogeny, identification, development, physiology, behavior, ecology, and relations to human affairs. Prerequisite: BIOL 152, 153, or equivalent, or permission of instructor. LEC.

BIOL 502. Laboratory in Insect Biology and Diversity. 2 Hours. U.
Laboratory and field studies of insects, emphasizing their diversity, classification, ecological relationships, morphology, and behavior. Course provides practical application of principles covered in BIOL 500. Prerequisite: Concurrent or prior enrollment in BIOL 500 or the equivalent. LAB.

BIOL 503. Immunology. 3 Hours. N.
Lectures on the nature and mechanisms of natural and acquired resistance including humoral and cellular immunity. Characteristics of antigens and antibodies and of their interaction; ontogeny and cellular basis of immune responsiveness, hypersensitivity; specific immunologic tolerance. Not open to those with credit in BIOL 524. Prerequisite: BIOL 400 or BIOL 401, or consent of instructor. LEC.

BIOL 504. Immunology Laboratory. 2 Hours. U.
Laboratory designed to complement BIOL 503. Prerequisite: BIOL 503, or BIOL 503 concurrently. LAB.

BIOL 505. Social Insects. 3 Hours. N.
Lectures and laboratory demonstrations on presocial and social insects, specifically termites, ants, wasps, and bees. Emphasis will be placed on evolution of social behavior and the place of social insects in sociobiology. Prerequisite: BIOL 152, BIOL 153, or equivalent. LEC.

BIOL 506. Pathogenic Microbiology. 3 Hours. N.
Lectures. Characteristics and mechanisms of pathogenic microorganisms and disease processes. Elements of host-parasite interactions. Not open to freshmen or sophomores. Prerequisite: BIOL 503, or consent of instructor. LEC.

BIOL 507. Pathogenic Microbiology Laboratory. 2 Hours. U.
Laboratory to complement BIOL 506. Cultivation of pathogenic microorganisms, diagnostic procedures, and experiments to demonstrate various aspects of microbial pathogenicity and host responses.
Prerequisite: BIOL 402 and BIOL 506 (or concurrent enrollment) or consent of instructor. LAB.

**BIOL 509. Biology of Spiders. 3 Hours. N.**

An introduction to the evolution, anatomy, physiology, behavior, and ecology of spiders and other arachnids. Special topics include the action of spider venoms; the composition and uses of silk; courtship and mating; predation; social behavior; and the role of spiders in natural and agricultural ecosystems. Concurrent enrollment in BIOL 511 is encouraged. Prerequisite: BIOL 152, BIOL 153 or permission of instructor. LEC.

**BIOL 510. Comparative Anatomy. 5 Hours. N.**

Structure, function, and evolution of the vertebrates. Lectures and laboratory study. A course designed for zoologists. Prerequisite: BIOL 100, BIOL 101, BIOL 150, or BIOL 151 and BIOL 152 or BIOL 153. LEC.

**BIOL 511. Biology of Spiders Laboratory. 1 Hour. U.**

Topics will include comparative biology of arachnid orders (spiders, scorpions, harvestmen, mites, and others), external and internal anatomy of spiders, identification of common spider families and genera, and spider behavior. Students will be required to make a small collection (collect, preserve, and identify specimens). Prerequisite: BIOL 509; concurrent enrollment is preferred. LAB.

**BIOL 512. General Virology. 3 Hours. N.**

Lectures and discussions covering the basic nature and characteristics of viruses from a general biological point of view: viruses of bacteria, animals and plants, physical-chemical properties; host-cell-viral interactions; mode of replication of DNA and RNA viruses, tumor viruses. Prerequisite: BIOL 400, BIOL 401 or consent of instructor. LEC.

**BIOL 513. Virology Laboratory. 2 Hours. U.**

Experiments involving cultivation, quantitation, and identification of animal viruses, continuous cell culture and primary chicken embryo culture techniques. Molecular biology techniques are used to demonstrate the steps in virus replication. The value of viruses as tools to understand normal cellular processes is emphasized in experiments which demonstrate the relative simplicity of viruses and the relative complexity of eukaryotic cells. Demonstrations include transformation of cells by tumor viruses and electron microscopy of virus particles. Prerequisite: BIOL 402 and BIOL 512, or consent of instructor. LAB.

**BIOL 514. Principles of Ecology. Honors. 3 Hours. N.**

Honors section of BIOL 414 for students with superior academic records. Course covers core concepts on the ecology of individuals, populations, communities, and ecosystems. Relative to BIOL 414, topics are presented in greater depth with increased student participation and stronger emphasis on the primary scientific literature. Prerequisite: BIOL 100, BIOL 101, BIOL 150, or BIOL 151 and BIOL 152 or BIOL 153. Open only to students admitted to the University Honors Program or by consent of instructor. LEC.

**BIOL 516. Microbial Physiology. 3 Hours. N.**

Elements of microbial physiology. Carbohydrate metabolism; enzymes and coenzymes; microbial nutrition; quantitative problems in microbial physiology; a survey of microbial metabolic types. Prerequisite: BIOL 400 or BIOL 612 and BIOL 402, and five hours of organic chemistry. LEC.

**BIOL 517. Microbial Physiology Laboratory. 2 Hours. U.**

Laboratory designed to complement BIOL 516. Prerequisite: BIOL 516, or BIOL 516 concurrently. LAB.

**BIOL 518. Microbial Genetics. 3 Hours. N.**

Bacteria and viruses as models of genetic systems. Mutagenesis and repair. Transformation, transductions, and recombination. Molecular biology of gene expression. Prerequisite: An introductory microbiology course. LEC.

**BIOL 519. Microbial Genetics Laboratory. 2 Hours. U.**

Laboratory designed to complement BIOL 518. Prerequisite: BIOL 402, BIOL 518, or BIOL 518 concurrently. LAB.

**BIOL 520. Marine Biology. 3 Hours. N.**

This introductory course covers biological, physical, and chemical ocean sciences, with an emphasis on ecological aspects. In addition to this Lawrence campus course, students may enroll for a supplementary 1 credit field trip class to a Caribbean coral reef island offered in December or January. Prerequisite: BIOL 414 or permission of the instructor. LEC.

**BIOL 521. Insect Systematics. 4 Hours. N.**

A study of the diversity of insects, including the classification of all living and fossil orders and the more common families primarily on the basis of external morphology. The biology, ecology, phylogeny, and geological history of each order is covered. Includes both lectures and laboratory exercises. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 500, BIOL 502 or equivalent, or permission of instructor. LEC.

**BIOL 525. Aquatic Entomology. 4 Hours. N.**

Designed to enable students to develop skill in the area of identification of aquatic insects and to gain a detailed comprehension of their community structure and dynamics. The external morphology of all aquatic orders is covered, followed by consideration of specific physiological and behavioral adaptations that facilitate an aquatic existence. Includes both lectures and laboratory exercises. Requirements include making a collection of aquatic insects. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 414 or BIOL 500. LEC.

**BIOL 526. Insect Physiology and Internal Morphology. 3 Hours. N.**

Mechanisms and integration of the internal life-supporting systems of insects, emphasizing the interdependence of structure and function. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 408 and BIOL 500, or permission of instructor. LEC.

**BIOL 527. External Morphology of Insects. 4 Hours. N.**

A study of external structure common to all insect orders, with detailed comparative laboratory studies of representative species. Includes both lectures and laboratory exercises. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 500, BIOL 502 or equivalent, or permission of instructor. LEC.

**BIOL 528. External Morphology of Insects. 3 Hours. N.**

The classification, structure, and ecological distribution of immature insects, especially larvae of Holometabola. Includes both lectures and laboratory exercises. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 502 or permission of instructor. LEC.

**BIOL 533. Biology of Fungi. 4 Hours. N.**

A study of the major groups of fungi from slime molds to mushrooms. Emphasis on their activities in natural substrates, isolation techniques, parasitic and mutualistic relationships with other organisms, uses in research, industrial applications, production of mycotoxins and poisons, and physiological, genetic and reproductive behavior. Lectures, laboratory, and field trips. Prerequisite: BIOL 100, BIOL 101, BIOL 150, or BIOL 151 and BIOL 152 or BIOL 153. LEC.

**BIOL 536. Cell Structure and Function (Honors). 3 Hours. N.**

BIOL 536 is the honors version of BIOL 416. Completion of this class will satisfy the BIOL 416 requirement. Open to students in the Honors Program.
BIOL 540. General Invertebrate Zoology. 4 Hours. N.
Phylogeny, physiology, and embryology; evolutionary processes; characteristics of major ecological groupings. Laboratory will consider major taxonomic categories with emphasis on functional morphology and its evolutionary modifications. Prerequisite: BIOL 152 or BIOL 153. LEC.

BIOL 545. Evolution of Development. 5 Hours. N.
An advanced course designed to expose students to evolutionary change in the developmental patterning of plant and animal form. This course includes a lecture component and a laboratory component to integrate multiple biological disciplines including comparative morphology, molecular evolution, developmental genetics and experimental development, to explore biodiversity at a mechanistic level. Lectures are designed to give students background on topics ranging from homology assessment to empirical examples of how changes in gene expression or function may have shaped morphological diversity. The laboratory complements these topics through observations of normal development in a diversity of plant and animal model organisms, and through conducting independent research experiments. Prerequisite: BIOL 350 or equivalent. LEC.

BIOL 555. General Plant Physiology. 3 Hours. N.
The principal physiological processes of higher plants including photosynthesis, respiration, water relations, mineral nutrition, and factors associated with morphogenesis. Prerequisite: BIOL 408 or consent of instructor. LEC.

BIOL 560. Histology. 3 Hours. N.
Study of detailed microscopic anatomy of cells, tissues, and organs of mammals. Examples are drawn from normal and abnormal tissue, histochemistry, and electron microscopy. Lecture and demonstrations. A course in anatomy and physiology is highly recommended. Prerequisite: BIOL 152 or BIOL 153. LEC.

BIOL 570. Introduction to Biostatistics. 3 Hours. N.
Statistical concepts related to biological problems. Topics include the scientific method, data representation, descriptive statistics, elementary probability distributions, estimation and hypothesis testing, emphasizing the analysis of variation. Prerequisite: College algebra and ten hours of natural science. LEC.

BIOL 571. Introduction to Biostatistics Laboratory. 2 Hours. U.
Introductory statistical analyses on microcomputers. Data entry and export; simple graphs and exploratory data analysis; descriptive statistics; sampling; point and interval estimation; one and two sample t-tests; Chi-square; regression and correlation; analysis of variance; and nonparametric methods. Prerequisite: BIOL 570 or equivalent (may be taken concurrently). LAB.

BIOL 582. Principles of Biogeography. 3 Hours. N.
An introduction to the study of the distribution of life on earth. Covers geographical patterns of species diversity and the processes that give rise to those patterns: speciation, extinction, dispersal, vicariance, continental drift, ecological interactions, and phylogeny. Topics are presented within the framework of evolutionary history and include discussion of the biology of species on islands, terrestrial biomes, altitudinal zonation of species, latitudinal species gradients, historical factors governing species distributions, macroevolutionary trends in the fossil record, and application of modern molecular techniques for testing biogeographical hypotheses. Prerequisite: BIOL 152 or 153 and past or concurrent enrollment in BIOL 412, 413, 414, or 550; or permission of Instructor. LEC.

BIOL 583. Herpetology. 3 Hours. N.
A study of amphibians and reptiles. This lecture course will explore the taxonomic diversity of amphibians and reptiles, and current areas of active research in herpetology. Topics will be considered within a phylogenetic framework, and include discussion on systematics, biogeography, tetrapod origins, skeletal systems, growth, circulatory system, locomotion, thermal and water regulation, hibernation, ecology, sexual behavior, parental care, and mimicry. LEC.

BIOL 592. Ichthyology. 4 Hours. N.
A study of fishes. Lecture topics include the structure and adaptations of fishes to the aquatic environment and a survey of major fish groups with emphasis on their evolution and biogeography. Laboratory topics include a survey of fish diversity using specimens and the use of keys to identify fishes, with emphasis on the Kansas fish fauna. This course meets with BIOL 792. Students taking this course at the 700 level will have additional work required of them. Prerequisite: BIOL 152 and/or BIOL 413. LEC.

BIOL 593. Ornithology. 3 Hours. N.
A lecture and laboratory course on the biology, evolution, and diversity of birds. Prerequisite: BIOL 412 (or BIOL 413), or permission of instructor. LEC.

BIOL 594. Forest Ecosystems. 3 Hours.
Students learn basic concepts of forest productivity, forest water relations, forest hydrology, nutrient cycling, through soils and vegetation, nutrient uptake, carbon cycling, decomposition, linkages to aquatic ecosystems, and agents of disturbance to these cycles. The class spends a significant part of the semester exploring forest soil profiles and the challenges they present to different forest ecosystems. We discuss the function of forested ecosystems in a global context and identify and understand smaller-scale processes that drive forest function. Prerequisite: CHEM 135 or CHEM 195 or CHEM 175, and BIOL 414. LEC.

BIOL 595. Human Genetics. 3 Hours. N.
A lecture course providing balanced coverage of Mendelian and molecular genetics of humans; includes discussions and presentations on current issues in human and medical genetics. Prerequisite: BIOL 350. LEC.

BIOL 598. Research Methods. 3 Hours. N.
An introduction for pre-service teachers to the tools used by scientists to solve scientific problems. Topics include design of experiments and interpretation of their results, use of statistics, mathematical modeling, laboratory safety, ethical treatment of human subjects, writing scientific papers, giving oral presentations, and obtaining data from the scientific literature. Open only to students in the UKanTeach program. LEC.

BIOL 599. Senior Seminar: ______. 1 Hour. AE61 / N.
A synthesis and discussion of current trends in a discipline or disciplines related to one of the degrees offered in the biological sciences. Emphasis is placed on providing seniors with an appreciation of the discipline’s state-of-the-art and on developing skills for success in the next stage of a career in the biological sciences. Topics depend on the associated degree program. Prerequisite: Must be taken in the final year of a degree and students must have completed most of the course work required for one of the degrees in the biological sciences. LEC.

BIOL 600. Introductory Biochemistry, Lectures. 3 Hours. N.
Designed to offer the essentials of the chemistry of the constituents of living organisms and the changes these constituents undergo (during life processes) in the human body and other living forms. Prerequisite: BIOL 150 or BIOL 151 and one semester of organic chemistry. LEC.

BIOL 601. Principles of Biochemistry Laboratory. 2 Hours.
Theory and methods in the development of protein separation and purification, enzyme structure/function, and enzyme kinetics derived from
primary literature searches and readings. Prerequisite or Co-requisite: BIOL 600; or consent of instructor. LAB.

BIOL 602. Plant Ecology. 3 Hours. N.
Introduction to basic concepts, focused at community and species level. Architectural ecomorphology of plants and their physiological responses to physical factors: solar radiation, climate, and soils. Plant succession as an interaction among species differing in ecomorphology and life style. Classification and ordination of plant communities: practice and theory. Other topics include: species diversity and lognormal distribution as to abundance classes; species/area relations and theory of island biogeography; allochthonous defenses; genealogy; paleoecology. Prerequisite: BIOL 414 or consent of instructor. Concurrent enrollment in parallel laboratory, BIOL 607, recommended. LEC.

BIOL 603. Systematic Botany. 3 Hours. N.
A lecture/laboratory course providing hands-on experience with plant identification, a history of plant classification, the principles of nomenclature and character analysis, the basics of systematics theory, and a phylogenically-oriented introduction to vascular plant diversity. Prerequisite: BIOL 413 or equivalent. LEC.

BIOL 606. Ecological Plant Physiology. 3 Hours. N.
Physiological responses of higher plants to environmental factors are discussed. Major topics are: water relations, heat transfer, resistance to water and temperature stress, dormancy, photoperiodism, photosynthesis and respiration under natural conditions, and effects of environmental pollution. Prerequisite: BIOL 408 or consent of instructor. LEC.

BIOL 607. Field and Laboratory Exercises in Plant Ecology. 2 Hours. U.
Introduction to quantitative analysis of plant communities and correlated environmental parameters; field and/or laboratory measurements of ecophysiological traits and comparative ecomorphology of principal species. Prerequisite: BIOL 414. Concurrent enrollment in parallel lecture, BIOL 602, recommended, but not required. LAB.

BIOL 609. Current Progress in Microbiology. 1 Hour. U.
A seminar course which will focus on current research in microbiology. A term paper will be required of each student. May be repeated for credit. Required of all majors in the senior year. Prerequisite: Two courses in microbiology. LEC.

BIOL 611. Molecular Systematics and Evolution. 4 Hours. N.
An introduction to the use of molecular data in systematics and population biology. Topics include: evolution of genes and proteins; properties of mitochondrial DNA, chloroplast DNA, ribosomal RNA genes, protein-coding genes, and repetitive DNAs; laboratory methods for data collection; and data analysis. Prerequisite: BIOL 350. BIOL 550 or equivalent is recommended. LEC.

BIOL 612. Fundamentals of Microbiology. 3 Hours. NB / N.
Lectures. Fundamental principles of microbiology with emphasis in physical and chemical properties of the bacterial cell; microbial metabolism, cultivation, growth and death of bacteria; microbial genetics; pathogenesis and immunity, industrially important microorganisms. Meets with BIOL 400, but students will be given additional and more advanced assignments, and will carry higher expectations. Prerequisite: BIOL 150 or BIOL 151 and two semesters of college chemistry, or consent of instructor. LEC.

BIOL 613. Biology of Honeybees. 3 Hours. N.
Social organization, evolution, behavior, morphology, communication, pollination biology, and ecology of honeybees. Experience will be gained with colony dynamics and behavior while working with bees in the field. Prerequisite: BIOL 152, BIOL 153, or consent of instructor. LEC.

BIOL 616. Medical Entomology. 3 Hours. N.
A study of the major human diseases transmitted by arthropods with emphasis on the biology and ecology of vectors, vector feeding mechanisms as related to disease transmission, epidemiology of arthropod-borne diseases, and the impact of arthropod-borne diseases on humans. Laboratory work on recognition of vector species, information sources, and use of taxonomic keys. Prerequisite: BIOL 152 or BIOL 153 and a course in microbiology or consent of instructor. LEC.

BIOL 622. Paleontology. 3 Hours. N.
A study of the structure and evolution of ancient life; the nature and diversity of life through time; the interactions of ancient organisms with their environments and the information that the study of fossils provides about ancient environments; the use of fossils to determine the ages of rocks and the timing of past events in earth history; and the patterns of extinction through time. (Same as GEOL 521.) Prerequisite: BIOL 100, BIOL 101, BIOL 152, BIOL 153, GEOL 105, or GEOL 304. LEC.

BIOL 623. Paleontology Laboratory. 1 Hour. U.
Laboratory course in the study of fossils with emphasis on the practice of paleontology and the morphology of ancient organisms. (Same as GEOL 523.) LAB.

BIOL 625. Behavioral Ecology and Sociobiology. 3 Hours. N.
The role of natural selection in animal behavior, and the influence of behavior on population biology and social dynamics of animal species. Topics include: game theory and optimization as applied to animal behavior; altruism, cooperation and competition; kin recognition and interactions; group formation and dynamics, dominance, aggression, and territoriality; feeding strategies; reproductive behavior including mate choice, parental care, and mating systems. Prerequisite: BIOL 152; either BIOL 350, BIOL 412 or BIOL 414 recommended; or consent of instructor. LEC.

BIOL 630. Conservation and Wildlife Biology. 3 Hours. N.
Examination of the concepts and processes involved in conservation of plant and animal populations and communities. Topics to be covered include conservation of endangered species, problems with invasions of exotic species and habitat fragmentation, wildlife management, and design of nature reserves. Prerequisite: BIOL 414, BIOL 412 strongly recommended. LEC.

BIOL 636. Biochemistry I. 3 Hours. N.
First semester of a two-semester lecture course in introductory biochemistry. Emphasis upon the physical structure of macromolecules and membranes, enzyme structure/function, and enzyme kinetics. Prerequisite: CHEM 335 or consent of instructor. LEC.

BIOL 637. Introductory Biochemistry Laboratory. 2 Hours. U.
The laboratory portion of BIOL 600 or 636. Experiments have been selected to introduce the student to cell constituents and biochemical reactions. One four-hour laboratory and one-hour lecture each week. Prerequisite: BIOL 600 or BIOL 636, or concurrent enrollment. LAB.

BIOL 638. Biochemistry II. 3 Hours. N.
Second semester of a two-semester lecture course in introductory biochemistry. Emphasis upon the metabolism of carbohydrates, lipids, amino acids, proteins, and nucleic acids. Prerequisite: BIOL 636. LEC.

BIOL 639. Advanced Biochemistry Laboratory. 2 Hours. U.
The laboratory portion of BIOL 638. One four-hour laboratory and a one-hour lecture each week. Experiments have been selected to familiarize students with experimental biochemical techniques using state-of-the-art methodology. Prerequisite: BIOL 637 and 638 (BIOL 638 may be taken concurrently). LAB.
BIOL 640. The Biology and Evolution of Fossil Plants. 3 Hours. N.
A lecture course in which fossil plants, protists and fungi are examined throughout geologic time. Emphasis will be directed at paleoecology, biogeography and the stratigraphic distribution and composition of ancient floras. (Same as GEOL 528.) Prerequisite: BIOL 413 or permission of instructor. LEC.

BIOL 641. Laboratory in Paleobotany. 1 Hour. U.
An examination of selected fossil plants throughout geological time and the techniques used to study them; laboratory will include identification and the use of plant fossils in biostratigraphy. (Same as GEOL 529.) Prerequisite: BIOL 413 or permission of instructor. Must be taken concurrently with BIOL 640. LAB.

BIOL 644. Comparative Animal Physiology. 3 Hours. N.
Lecture and discussion of the basic mechanism of organic maintenance and integration; a comparative treatment of the uniformities and diversity of animal function; emphasis on environmental adaptations and evolutionary relationships. Prerequisite: BIOL 152 or BIOL 153, and a course in organic chemistry, or consent of instructor. A college physics course is recommended but not required. LEC.

BIOL 646. Mammalian Physiology. 4 Hours. N.
Lectures and demonstrations. An intermediate course in the functions, mechanisms and interactions of mammalian organ systems. Discussions span topics from molecular to whole animal functions. Required for pharmacy students and strongly recommended for students planning advanced work in any area of physiology. The student is assumed to have the knowledge and ability to utilize their math and science background. Prerequisite: Five hours of organic chemistry, a course of college physics. LEC.

BIOL 647. Mammalian Physiology Laboratory. 2 Hours. U.
Laboratory experiments in representative areas of mammalian physiology designed to complement BIOL 646. Not open to students with credit in BIOL 247. Prerequisite or Co-requisite: BIOL 646. LAB.

BIOL 648. Systematics and Macroevolution. 3 Hours. N.
An introduction to the theory of macroevolution and the fundamental principles of systematics. Intended for students planning to pursue advanced studies in organismal biology, evolution, and/or systematics. Topics in macroevolution will include hierarchy theory, species concepts, speciation and species selection. Methods of phylogenetic estimation will be discussed and include parsimony, Maximum likelihood and Bayesian inference. Evolutionary studies utilizing phylogenies including tests of homology, studies of character evolution, and biogeography will be discussed. An overview of classification and nomenclature will also be provided. Prerequisite: BIOL 412 or equivalent. LEC.

BIOL 650. Advanced Neurobiology. 3 Hours. N.
The course builds an in depth knowledge about basic mechanisms of synaptic communication among nerve cells and their targets, and the structure and function of nervous systems. Topics include nervous system development and synapse formation, structure and function of neurons, physiological and molecular basis of synaptic communication between neurons, mechanisms of synaptic plasticity involved in learning and memory, sensory systems (vision, auditory, vestibular, motor reflexes and pain), processing of neural information at cellular and system levels, synapse regeneration and diseases of the nervous system. Prerequisite: BIOL 435 (Introduction to Neurobiology), or consent of instructor. LEC.

BIOL 652. Comparative Animal Behavior. 3 Hours. N.
A comparative analysis of behavior as an adaptive mechanism; emphasis on ontogenetic and evolutionary aspects of behavior. Prerequisite: BIOL 152 or BIOL 153; and BIOL 412. Alternatively, BIOL 412 may be taken as a corequisite. LEC.

BIOL 654. Comparative Animal Behavior, Laboratory. 1 Hour. U.
Laboratory and field phase of BIOL 652. Students may elect sections according to their special interests. Prerequisite: Prior or concurrent enrollment in BIOL 652. LAB.

BIOL 655. Behavioral Genetics. 3 Hours. N.
A survey of behavioral genetics in animals and humans. Emphasis is on how the methods and theories of quantitative, population and molecular genetics can be applied to individual and group differences in animals. Behaviors covered may include circadian rhythms, foraging, courtship, learning and memory, anxiety, social structures and human behaviors. Prerequisite: BIOL 350 or consent of instructor. LEC.

BIOL 656. Ecosystem Ecology. 3 Hours. N.
An introduction to the patterns and processes that affect terrestrial ecosystems. Emphasis is placed on understanding nutrient cycles (e.g., carbon nitrogen phosphorous), hydrologic cycles, and patterns of net primary productivity. The role of both natural and anthropogenic disturbances in structuring terrestrial ecosystems is examined in the context of global land-use patterns. Discussion of current research literature will be expected. (Same as EVRN 656.) Prerequisite: BIOL 414 and CHEM 130. LEC.

BIOL 661. Ecology of Rivers and Lakes. 3 Hours. N.
Study of the ecology and structure of creeks, rivers, ponds, lakes, and wetlands as well as some of the major human impacts. Prerequisite: One year of biology or permission of the instructor. BIOL 414 recommended. LEC.

BIOL 662. Aquatic Ecology Laboratory. 2 Hours. U.
A field and laboratory course introducing biological, physical, and chemical characteristics of lentic (ponds and lakes) and lotic (creeks and rivers) habitats. Students learn sampling and monitoring techniques and how to classify aquatic biota at higher taxonomic levels. Co- or prerequisite: CHEM 130 or CHEM 190 or CHEM 170, and BIOL 661. LAB.

BIOL 664. Vertebrate Biology. 3 Hours. N.
A laboratory course emphasizing principles of systematics and identification and the behavioral ecology of local vertebrate animals. Prerequisite: BIOL 152, BIOL 153 or consent of instructor. LAB.

BIOL 667. Chemical Communication in Sex, Feeding, and Fighting. 3 Hours. N.
The course focuses on the role of chemical information molecules in the interrelationships among organisms, with particular attention to interactions (a) within and between animal species, (b) within and between plant species, (c) between animals and plants, (d) between predators and prey, and (e) between parasites and hosts. Prerequisite: BIOL 100 or BIOL 101 or BIOL 152 or BIOL 153 or consent of instructor. LEC.

BIOL 668. Evolutionary Ecology. 3 Hours. N.
Emphasis will be on the themes that interface ecology and evolutionary studies. Topics will include selection theory; reproductive, foraging, and sex allocation problems; coevolution; patterns or morphological and behavioral adaptations; competition, predation, and population regulation. Special attention will be given to the philosophy and practice of resolving unanswered questions in evolutionary ecology. Prerequisite: BIOL 412 or permission of instructor. LEC.

BIOL 669. Biology of Freshwater Invertebrates. 3 Hours. N.
A lecture, field, and laboratory course examining the classification, biological characteristics, and ecology of invertebrates in lotic and lentic habitats. Major groups of benthic and planktonic invertebrates will be studied, including aquatic insects, crustaceans, molluscs, and others. Prerequisite: BIOL 540, BIOL 660, BIOL 661, or BIOL 663, or permission of instructor. LEC.
BIOL 672. Gene Expression. 3 Hours. N.
A study of the structure and expression of genes in prokaryotes and eukaryotes. Emphasis on the mechanisms of DNA, RNA, and protein biosynthesis. Prerequisite: A course in biochemistry or consent of instructor. LEC.

BIOL 673. Cellular and Molecular Neurobiology. 3 Hours.
Mechanisms of neural function and development will be considered at the cellular and molecular levels. Synaptic mechanisms of learning and memory, modulation of transmitter release, and the molecular basis of neurodegenerative disorders will also be discussed. Prerequisite: BIOL 435, BIOL 646, or permission of instructor. LEC.

BIOL 676. Mammalian Neuroanatomy. 3 Hours. N.
Lectures, video tape demonstrations, and laboratory dissection of mammalian nervous system with some attention to human material. Major emphasis on nervous system structure as it relates to function. For neurobiology and pre-health science majors. Prerequisite or Corequisite: A course in neurobiology (BIOL 435, BIOL 650), or permission of the instructor. LAB.

BIOL 688. The Molecular Biology of Cancer. 3 Hours. N.
The basic concepts of molecular biology are examined and used to probe the process by which a normal cell becomes a cancer cell. The course investigates DNA damage and repair, chemical carcinogenesis, gene cloning and manipulation, the control of gene expression in eukaryotes, tumor viruses, the roles of oncogenes and tumor suppressor genes in carcinogenesis, and cancer therapy. Prerequisite: BIOL 350 and BIOL 416; or BIOL 536; or consent of instructor. LEC.

BIOL 694. The Art of Becoming a Professional Scientist. 3 Hours. N.
Discusses aspects of graduate education that are directed at students entering graduate school and that focus on how to be successful in the post PhD phases of a career, but that must be initiated early in the graduate student program of study. One three hour discussion per week. Senior standing and planning on entering graduate school. LEC.

BIOL 695. Animal Communication and Sensory Ecology. 3 Hours. N.
Lectures and discussion sessions. A study of the propagation and perception of olfactory, acoustic, and visual signals produced by animals in the context of communication. Both physiological and evolutionary perspectives will be treated. Prerequisite: A course in behavior or consent of instructor. LEC.

BIOL 699. Biology Honors Research Colloquium. 1 Hour. AE61 / U.
Students pursuing Honors in Biology will meet weekly to discuss, both formally and informally, their honors research. Background information and experimental approaches of the research will be examined and critiqued. Prerequisite: Enrollment in Biology Honors program and consent of instructor. LEC.

BIOL 700. Conservation Principles and Practices. 3 Hours.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects will also be considered. (Same as AMS 714, GEOL 780, HIST 722 and MUSE 706.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 701. Topics in: __________. 1-3 Hours.
Advanced courses on special topics in biology, given as need arises. Lectures, discussions, readings, laboratory, or field work. Students may select sections according to their special interests. LEC.

BIOL 702. Laboratory Practice: Radiation Safety Procedures. 0.75 Hour.
An introduction to the basic properties of radioisotopes, and the fundamental safety practices needed for the safe use of low levels of radioactive materials. Risks associated with radiation exposures and applicable state and federal regulations are discussed. (Normally the content of the first ten hours of BIOL 703.) Prerequisite: Senior standing in one of the sciences. LAB.

BIOL 703. Radioisotopes and Radiation Safety in Research. 1.25 Hour.
An introduction to the properties of radioactive materials, radiations, and their interaction with matter, methods of radiation detection and measurement, protective measures, applicable state and federal regulations, design and implementation of safety management systems in the research laboratory, design of tracer experiments, and the risks associated with radiation exposure. Prerequisite: BIOL 702 or concurrent enrollment in BIOL 702, algebra and two semesters of either physics or chemistry. LEC.

BIOL 704. Research Animal Methods. 3 Hours.
Lectures, discussions, and laboratory sessions. Selection of proper animal models for specific research studies. Various external influences that alter research data. Routine techniques including restraint, sample collection, injection, anesthesia and euthanasia. Prevention and handling of common research animal problems or diseases. Proper and humane animal care as defined by the Federal Animal Welfare Act. Prerequisite: Senior or graduate standing in one of the biological sciences or permission of instructor. LEC.

BIOL 706. Current Trends in Curation and Collection Management. 2 Hours.
Seminar course to provide students with a working knowledge of the primary issues and current trends in building, administration, and care of scientific collections. Topics include permits, collecting, accessioning, cataloging, preservation, preventive conservation, and access to collections and data. The course format consists of readings, lectures, guest speakers, discussions, and visits to scientific collections on campus. (Same as MUSE 710.) LEC.

BIOL 708. External Morphology of Insects. 4 Hours.
A study of external structure common to all insect orders, with detailed comparative laboratory studies of representative species. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 500, BIOL 502 or equivalent, or permission of instructor. LEC.

BIOL 709. Immature Insects. 3 Hours.
The classification, structure, and ecological distribution of immature insects, especially larvae of Holometabola. Includes both lectures and laboratories. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 502 or consent of instructor. LEC.

BIOL 710. Insect Development. 3 Hours.
A study of the embryonic and postembryonic development of insects. Emphasis is placed on developmental physiology of the early embryonic stages, the morphogenesis of organ systems, and the action of hormones in postembryonic development. Laboratory includes demonstrations and histological and experimental work. Prerequisite: Consent of instructor or BIOL 500. LEC.

BIOL 711. Insect Systematics. 4 Hours. N.
A study of the diversity of insects, including the classification of all living and fossil orders and the more common families primarily on the basis of external morphology. The biology, ecology, phylogeny, and
geological history of each order will be covered. Includes both lectures and laboratory exercises. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 500 and BIOL 502 or equivalent, or permission of instructor. LEC.

**BIOL 712. Evolutionary Biology - Graduate. 3 Hours.**
A thorough survey of evolutionary biology. Topics include: the history of evolutionary thought, genetics and the nature of variation, adaptation, speciation, coevolution, macroevolution, the comparative method, and the history of life. Prerequisite: BIOL 350 or equivalent or consent of instructor. LEC.

**BIOL 714. Community and Ecosystem Ecology. 3 Hours.**
Study of factors determining distribution of organisms, community structures, energy flow in ecosystems, and functional analysis of ecosystems. Discussion periods will include reading from current scientific literature. Prerequisite: Intended for graduate students in biology who did not have an undergraduate course in community ecology. Consent of instructor. LEC.

**BIOL 716. Insect Physiology and Internal Morphology. 3 Hours.**
Mechanisms and integration of the internal life-supporting systems of insects, emphasizing the interdependence of structure and function. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 408 and BIOL 500, or permission of instructor. LEC.

**BIOL 717. Insect Ecology and Behavior. 3 Hours.**
Lectures and laboratory demonstrations. A study of insect population dynamics, life history strategies, co-evolutionary interactions, foraging, and reproductive and social behaviors. Approaches from basic population biology and behavioral ecology are emphasized. Prerequisite: A course in ecology or behavior, or consent of instructor. LEC.

**BIOL 718. Laboratory in Molecular Biology. 3 Hours.**
Practical experience in recombinant DNA technology and molecular cloning. Given concurrent with BIOL 418. Prerequisite: BIOL 416 or course in biochemistry or microbiology. Training in radiation safety preferred. LAB.

**BIOL 719. Light and Electron Microscopy. 3 Hours.**
A lecture and laboratory class emphasizing the theoretical and practical use of light microscopes and scanning and transmission electron microscopes. A variety of approaches using light microscopy will be employed, including brightfield, phase, fluorescence, DIC, polarization, and darkfield optics. A variety of techniques will be used to prepare specimens and view them using scanning and transmission electron microscopy. Video and computer-aided analysis of images as well as conventional photographic techniques will be included. Prerequisite: Permission of instructor. LEC.

**BIOL 720. Scientific Illustration. 3 Hours.**
Lectures, demonstrations, and studio participation. Instruction in the preparation of illustrations for scientific publications, theses, and oral and poster presentations. Emphasis on basic drafting and layout skills, and pen and ink and tone renderings intended for publication. Attention given to preparation of photographs for publication and oral presentations. Instruction provided in use of specialized optical equipment for drawing. Prerequisite: Upper division or graduate standing and permission of instructor. LEC.

**BIOL 721. Microbial Genetics. 3 Hours.**
Bacteria and viruses as models of genetic systems. Mutagenesis and repair. Transformation, transductions, and recombination. Molecular biology of gene expression. This course is the graduate-level section of BIOL 518 and MCRB 510. Graduate students will be assigned additional and more advanced studies. Prerequisite: An introductory microbiology course or permission of instructor. LEC.

**BIOL 725. Aquatic Entomology. 4 Hours.**
Identification of aquatic insects and detailed study of their community structure and dynamics. The external morphology of all aquatic orders will be covered, followed by consideration of specific physiological and behavioral adaptations that facilitate an aquatic existence. Includes both lectures and laboratory exercises. Requirements include making a collection of aquatic insects. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 414 or BIOL 500 or permission of instructor. LEC.

**BIOL 746. Principles of Systematics. 4 Hours.**
Lectures: historical and philosophical foundations of modern systematics; theory and practice of classifications; character analysis; phylogeny reconstruction; formulation and testing of systematic hypotheses; species concepts and specialization; the interface between systematics and evolutionary theory, particularly the origins of asymmetric diversity patterns, macroevolution, adaptation, coevolution, and the evolution of higher taxa; roles of paleontological, ontogenetic, biochemical, and molecular data in systematics; and biogeography. Laboratory work: practical applications of nomenclature, development of keys, descriptions and systematic revisions, character analysis, phylogeny reconstruction, hypothesis testing, interpretation of biogeographic patterns. (Three hours lecture and two hours laboratory per week.) Prerequisite: BIOL 628 or equivalent. Intended for graduate students planning to specialize in systematics. LEC.

**BIOL 747. Quantitative Genetics. 3 Hours.**
A discussion of genetic traits for which individual gene differences do not separate a population into qualitatively distinct groups. Includes the estimation of heritability, genetic determination, and number of loci, and a study of selection theory. Prerequisite: BIOL 404 or BIOL 412 or equivalent and a course in statistics. LEC.

**BIOL 749. Topics in Stable Isotopes in the Natural Sciences:. 2-3 Hours.**
Isotopic compositions of substances provide powerful insights into many topics in the natural sciences. Applications of isotopic analyses of carbon, hydrogen, oxygen, and nitrogen to selected research topics such as plant resource use, food web analysis, paleoecology, paleodiet reconstruction, hydrology, and soils genesis will be examined. Knowledge of isotope
chemistry is not required. (Concepts necessary to understand pertinent articles will be taught during the first class meetings.) May be repeated. (Same as GEOG 749.) LEC.

Biol 750. Advanced Biochemistry. 3 Hours.
The structures and dynamics of proteins and nucleic acids will be developed in terms of well-understood examples which will also be used to discuss the function of major classes of proteins. The application of structural and dynamical principles to biological membranes and their function will also be discussed. Prerequisite: Biol 807 and Biol 808, a general biochemistry course, or permission of instructor. LEC.

Biol 751. Plant Communities of North America. 3 Hours.
Physiognomic and floristic analysis of the vegetation, with emphasis on the Southwest; distribution of communities in relation to climate, substratum, and disturbance; recognition of dominant elements of vegetation through study of specimens and illustrative material. Prerequisite: Biol 602. LEC.

Biol 752. Cell Biology. 3 Hours.
A lecture course emphasizing biochemical, developmental, and molecular aspects of cell structure and function. Prerequisite: Biol 807 and Biol 808, or Biol 416 or Biol 536, or permission of instructor. LEC.

Biol 753. Advanced Genetics. 3 Hours.
An advanced course in modern genetic analysis of eukaryotes. Course material will consist mainly of primary literature in the field of genetics. Topics covered include: genomic structure and genome projects; nature of mutations; mutant analysis; genetic recombination and mapping; analysis of gene function; genetic buffering; RNAi and epigenetics; and the genetics of model organisms. This course is meant for graduate students in the Molecular Biosciences and Genetics programs. Prerequisite: Biol 807 and Biol 808, or a course in genetics and a course in biochemistry, or permission of the instructor. LEC.

Biol 754. Brain Diseases and Neurological Disorders. 3 Hours.
Major brain diseases and neurological disorders such as stroke, Alzheimer's Disease, Parkinson's Disease, Huntington's Disease, Multiple Sclerosis, Epilepsy, Schizophrenia, etc., will be discussed in terms of the etiology, molecular, and cellular basis of potential therapeutic interventions. Graduate students are required to present original research paper assigned by the instructor to the class in addition to the other assignments for all the students enrolled. Prerequisite: Biol 150, or consent of instructor. LEC.

Biol 755. Mechanisms of Development. 3 Hours.
Molecular aspects of differential gene function, signal transduction, and cell polarity in the regulation of morphogenesis. Prerequisite: Biol 807 and Biol 808 for graduate students; Biol 417 or equivalent for undergraduate students; or permission of instructor. LEC.

Biol 756. Cell and Tissue Culture Laboratory. 3 Hours.
An introduction to current laboratory methods of cell and tissue culture, intended to provide an understanding of and substantial experience in several aspects of animal cell growth, cell synchrony, cell nutrition, the production and selection of mutant cell lines, the production and use of heterokaryons and interspecific hybrids, cell transformation in vitro, the cultivation and characterization of differentiated cells in culture, enzyme induction, and cell karyotyping. Lab.

Biol 757. Carcinogenesis and Cancer Biology. 3 Hours.
This course surveys the field of cancer research. The major goal is to introduce the breadth of cancer research while, at the same time, providing sufficient depth to allow the student to recognize problems in cancer and to design experiments which study cancer biology. Toward that end, the student should (at the conclusion of the course) be able to: define cancer, identify and discuss its causes; identify and discuss the genetic basis for cancer development and progression; discuss the theoretical basis for cancer therapy design and efficacy testing; discuss the biochemical, molecular and cellular events involved in the natural history of major human neoplasms. Prerequisite: Permission of instructor. LEC.

Biol 757. The Vegetation of the Earth. 3 Hours.
a discussion of the world's vegetation in its natural condition and as affected by man. Included are aspects of its economic and cultural usefulness and the problem of its preservation. Prerequisite: Biol 634. LEC.

Biol 758. Plant Molecular Biology. 3 Hours.
Gene expression in chloroplasts, mitochondria, and plant nuclei, and regulatory interactions among these genomes. Special topics include the molecular biology of the photosynthetic apparatus, nitrogen fixation, stress and development, viruses and viroids, transposable genetic elements and gene evolution, and gene transfer and plant genetic engineering. Prerequisite: A course in biochemistry, cell or molecular biology, or permission of instructor. LEC.

Biol 770. Plant Biochemistry. 3 Hours.
A detailed study of plant biochemistry with emphasis on metabolic and regulatory processes particularly characteristic or unique in plants. Prerequisite: Biol 600 or equivalent. LEC.

Biol 772. Gene Expression. 3 Hours.
A study of the structure and expression of genes in prokaryotes and eukaryotes. Emphasis on the mechanisms of DNA, RNA, and protein biosynthesis. This course meets concurrently with Biol 672 and is open to graduate students seeking a more rigorous treatment of techniques in molecular biology that students receive in Biol 672. Prerequisite: A course in biochemistry or consent of instructor. LEC.

Biol 775. Chemistry of the Nervous System. 3 Hours.
A detailed study of the molecular aspects of nerve transmission will be covered with special emphasis on the uptake, storage, release, biosynthesis and metabolism of specific neurotransmitters. Drugs affecting these processes and current research on receptor isolation and receptor mechanisms will be discussed from a chemical viewpoint. (Same as Chem 775, MDCM 775, NURO 775, PTX 775, and PHCH 775.) Prerequisite: Biol 600 or equivalent or consent of instructor. LEC.

Biol 777. Integrative and Developmental Neurobiology. 3 Hours.
Cellular processing of neural information both at the local level and in long distance integration. Local computing functions, and integration of these functions among the various areas to produce coherent movement and perceptions will be discussed. A description of forces guiding the development of the nervous system to form a coherent working system in both invertebrate and vertebrate animals will be presented, as well as determinants of brain sexual dimorphism. Prerequisite: An upper level course in physiology or Biol 520. LEC.

Biol 780. Fisheries. 2 Hours.
Philosophy and practice of conservation as it applies to major world fisheries. Species principally utilized, factors affecting production, methods for appraisal and management of stocks. Historical and prospective roles of the fisheries in relation to human food supplies and recreational needs. Prerequisite: Biol 412. LEC.

Biol 781. Fisheries Laboratory. 2 Hours.
Training in field and laboratory techniques for fishery research and management. Prerequisite: Concurrent or prior enrollment in Biol 780. Lab.
BIOL 782. Principles of Biogeography. 3 Hours.
A synthesis of historical and ecological biogeography of plants and animals, treating vicariance, dispersal, and community patterns; lectures, readings, discussions. A course in systematics and a course in ecology are recommended. LEC.

BIOL 783. Herpetology. 3 Hours. N.
A study of amphibians and reptiles. This lecture course will explore the taxonomic diversity of amphibians and reptiles, and current areas of active research in herpetology. Topics will be considered within a phylogenetic framework, and include discussion on systematics, biogeography, tetrapod origins, skeletal systems, growth, circulatory system, locomotion, thermal and water regulation, hibernation, ecology, sexual behavior, parental care, and mimicry. Students taking the course at the 700 level will have additional work required of them. Prerequisite: BIOL 152 Principles of Organismal Biology, and/or BIOL 413 History and Diversity of Organisms. LEC.

BIOL 784. Introduction to Museum Public Education. 3 Hours.
Consideration of the goals of an institution's public education services, developing programs, potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as AMS 797, GEOL 784, HIST 721, and MUSE 705.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 785. Museum Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as AMS 731, GEOL 783, HIST 728, and MUSE 701.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 786. Fundamentals of Tropical Biology. 1-8 Hours.
The tropical environment and biota; ecological relations, communities and evolution in the tropics. Primarily a field course, taught in Costa Rica; two sessions per year, February-March, July-August. FLD.

BIOL 787. Introduction to Museum Exhibits. 3 Hours.
This course will consider the role of exhibits as an integrated part of museum collection management, research, and public service. Lecture and discussion will focus on issues involved in planning and producing museum exhibits. Laboratory exercises will provide first hand experience with basic preparation techniques. Emphasis will be placed on the management of an exhibit program in both large and small museums in the major disciplines. (Same as AMS 730, GEOL 781, HIST 723, and MUSE 703.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 788. The Nature of Museums. 3 Hours.
The purpose of this course is to provide an overview of the kinds of museums, their various missions, and their characteristics and potentials as research, education, and public service institutions responsible for collections of natural and cultural objects. (Same as AMS 720, GEOL 782, HIST 720, and MUSE 702.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 789. Field Course in Entomology. 1-6 Hours.
Field experiences in various habitats, with an emphasis in ecology, systematics, behavior, and collection techniques. FLD.

BIOL 790. Paleontology of Lower Vertebrates. 3 Hours.
General account of the osteology, geological distribution, and evolution of the principal groups of fishes, amphibians, reptiles, and birds. Lectures and laboratory. (Same as GEOL 725.) LEC.

BIOL 791. Paleontology of Higher Vertebrates. 3 Hours.
Evolution of mammals, and anatomical modifications involved in the process as ascertained from the fossil record. Lectures and laboratory. (Same as GEOL 726.) LEC.

BIOL 792. Ichthyology. 4 Hours.
A study of fishes. Lecture topics include the structure and function of fishes; the adaptations of fishes to the aquatic environment; and a survey of major fish groups with emphasis on evolutionary relationships and biogeography. Laboratory topics include a survey of fishes using specimens, and the use of keys to identify fishes with emphasis on the Kansas fish fauna. A research paper using primary scientific literature is required. Prerequisite: Graduate standing or permission of the instructor. LEC.

BIOL 794. Mammalogy. 3 Hours.
A study of mammals, with emphasis on systematics, biogeography, and natural history. Lectures, laboratory, and field study. Prerequisite: BIOL 100 or BIOL 413. LEC.

BIOL 795. Biology of Amphibians. 3 Hours.
Evolutionary biology of amphibians with emphasis on systematics, morphology, development, reproductive strategies, and distribution; lectures and laboratory. Prerequisite: BIOL 664 or permission of instructor. LEC.

BIOL 796. Biology of Reptiles. 3 Hours.
Evolutionary biology of reptiles with emphasis on systematics, morphology, reproductive strategies, and distribution; lectures and laboratory. Prerequisite: BIOL 664 or permission of instructor. LEC.

BIOL 797. Field Course in Vertebrate Paleontology. 3-6 Hours.
Training in the techniques of collecting vertebrate fossils, description and interpretation of the stratigraphy of fossiliferous sediments, and interpretation of the adequacy and bias of samples. FLD.

BIOL 798. Principles and Practices of Museum Collection Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museum collections, their associated data, and their use in scholarly research; cataloging, storage, fumigation, automated information management and related topics will be presented for museums of art, history, natural history and anthropology. (Same as AMS 730, GEOL 785, HIST 725, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 799. Natural History Museum Apprenticeship. 1-6 Hours.
Provides directed, practical experience in collection care and management, public education, exhibits and administration with emphases to suit the particular requirements of each student. Full time for one semester or half time for two semesters. (Same as AMS 799, ANTH 799, GEOL 723, HIST 799, and MUSE 799.) FLD.

BIOL 801. Topics in: 3 Hours.
Advanced courses on special topics in biology, given as need arises. Lectures, discussing readings, laboratory or field work. Students may select sections according to their special interests. LEC.

BIOL 802. The Art of Becoming a Professional Scientist. 3 Hours.
Discusses aspects of graduate education that are directed at the post PhD phases of a career, but that must be initiated early in the graduate student program of study. One 3-hour discussion per week. LEC.

BIOL 804. Scientific Integrity: Molecular Biosciences. 1 Hour.
This course introduces aspects and issues associated with being an ethical, responsible, and professional research scientist. Included topics are professional practices, regulations, and rules that define the responsible and ethical conduct of research. Graduate students
will become familiar with and prepare to navigate through challenges that occur during a career in research science. The format of individual classes is expected to incorporate both instruction and discussion. Prerequisite: Admission to the graduate program in Molecular Biosciences, or consent of instructor. LEC.

BIOL 806. Major Patterns in Insect Evolution. 3 Hours.
Extensive reading and discussion of the primary literature on topics relating to major patterns in the evolutionary history of insects, including the fossil history of insects, the monophyly of arthropods, the origin of wings, the changing role of insects in ecological communities, the origins of social behavior, modes and mechanisms of speciation, and patterns of species diversity. Assigned readings require a solid background in evolutionary theory and insect biology, especially morphology, development, and classification. Prerequisite: Permission of instructor. LEC.

BIOL 807. Graduate Molecular Biosciences. 6 Hours.
An introduction to the advanced study of biochemistry, microbiology, genetics, cell and developmental biology, and neurobiology for all Molecular Biosciences graduate students. Topics can include macromolecular structure, metabolism, kinetics and thermodynamics, bioinformatics, prokaryotic and eukaryotic genetic mechanisms, cell structure and function, signal transduction, basic and pathogenic bacteriology, immunology, virology, membrane potentials, synaptic transmission, and sensory neurophysiology. Prerequisite: Admission to the graduate program in Molecular Biosciences, or consent of instructor. LEC.

BIOL 809. Graduate Molecular Biosciences for Medicinal Chemists. 4 Hours.
An introduction to the advanced study of biochemistry, microbiology, and neurobiology for graduate students in Medicinal Chemistry. Prerequisite: Admission to the graduate program in Medicinal Chemistry and consent of instructor. LEC.

BIOL 810. Seminar in Biochemistry. 1 Hour.
Presentation and discussion of specific areas of recent research in biochemistry. This course may be taken more than once. LEC.

BIOL 811. Advanced Molecular and Cellular Immunology. 2 Hours.
Covers recent advances in immunochemistry and immunobiology. Topics include structure and function of antibodies, hybridoma systems, idiotypes, induction and regulation of the immune response through cell interactions and cytokine action, and the role of immune activity in disease states such as hypersensitivity, autoreactivity, and cancer. Prerequisite: BIOL 807 and BIOL 808, or an introductory course in immunology, or consent of instructor. LEC.

BIOL 812. Mechanisms of Host-Parasite Relationships. 2 Hours.
Emphasis is on virulence factors of microorganisms and the host response to infection. Topics will include pathogenesis of intracellular and extracellular parasites, bacterial adhesins, and toxins, and the role of innate and acquired immunity in host resistance and the response to infection. Prerequisite: BIOL 807 and BIOL 808, or a course in biochemistry, or consent of instructor. LEC.

BIOL 813. Advanced Bacterial Physiology. 2 Hours.
The intermediary reactions catalyzed by the bacterial cell during energy-requiring processes. Thermodynamic considerations of these processes are discussed. Knowledge of calculus is recommended. Prerequisite: BIOL 807 and BIOL 808, or a course in microbiology and a course in biochemistry, or consent of instructor. LEC.

BIOL 814. Advanced Molecular Virology. 2 Hours.
The course concentrates on evaluation of current literature concerning all aspects of molecular biology, biochemical characterization, and pathogenic mechanisms involved in host-virus interactions. Students will be expected to present articles and participate in discussions. Prerequisite: BIOL 807 and BIOL 808, or a course in microbial genetics and a course in virology, or consent of instructor. LEC.

BIOL 815. Advanced Molecular Genetics. 2 Hours.
A literature-based course that covers recent advances in microbial molecular genetics. Topics include transcription, translation, mutagenesis and repair, genetic exchange mechanisms, and regulation of gene expression. Prerequisite: BIOL 807 and BIOL 808, or a course in microbial genetics, or consent of instructor. LEC.

BIOL 816. Careers in Chemical Biology. 1 Hour.
Advanced course examining current research topics in chemical biology. An emphasis will be placed on career options open to PhD scientists in Chemical Biology, and preparation for the different career paths. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. This course will be graded satisfactory/unsatisfactory. (Same as CHEM 816, MDCM 816 and PHCH 816.) Prerequisite: Permission of instructor. SEM.

BIOL 818. Techniques in Molecular Biosciences. 2 Hours.
This course provides an introduction to common techniques used for research strategies in molecular biosciences. The course will cover common techniques in cell biology, biochemistry, microbiology, and neurobiology. Information will be presented in lectures and through practical demonstrations. This course is primarily intended for first year graduate students in the Department of Molecular Biosciences. Prerequisite: Enrollment in the Molecular Biosciences Graduate Program or consent of instructor. LAB.

BIOL 840. Scientific Communication. 2 Hours. N.
Principles of English communication skills for the professional scientist. The course explores the form, function, and practice (including ethics) of scientific communication, emphasizing elements of writing and speech that are important to clarity and precision. The course covers written and verbal communication of primary research results as well as composing correspondence, a curriculum vitae, reviews, etc. Prerequisite: Graduate standing. LEC.

BIOL 841. Biometry I. 5 Hours.
The application of statistical methods to data from various fields of biological research. Special emphasis is placed on practical computational procedures. Prerequisite: College algebra. LEC.

BIOL 842. Biometry II. 3 Hours.
This course is primarily devoted to special advanced topics in analysis of variance, analysis of covariance and regression analysis. Polynomial regression and multiple linear regression will be presented as will the general linear model. Elementary matrix algebra will be developed as needed. Prerequisite: BIOL 841. LEC.

BIOL 847. Phylogenetics. 3 Hours.
An introduction to the theory and practice of phylogenetic systematics. Includes principles of character analysis including determination of homology and determination of character polarity, testing alternate phylogenetic trees, and reconstructing trees using computer techniques. Also includes principles of constructing phylogenetic classifications and the nature of taxa in the phylogenetic system. Other topics, such as the nature of species and principles of biogeography are included. Prerequisite: Twenty hours natural history. LEC.

BIOL 848. Phylogenetic Methods. 4 Hours.
A survey of methods for inferring phylogenetic trees from character data and using phylogenies to address evolutionary questions. Lectures will present the relevant theory and algorithmic description of methods.
Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Graded on a satisfactory/unsatisfactory basis. Prerequisite: BIOL 845 and BIOL 841 or consent of instructor. LEC.

BIOL 860. Principles and Practice of Chemical Biology. 3 Hours. A survey of topics investigated by chemical biology methods including: transcription and translation, cell signaling, genetic and genomics, biochemical pathways, macromolecular structure, and the biosynthesis of peptides, carbohydrates, natural products, and nucleic acids. Concepts of thermodynamics and kinetics, bioconjugations and bioorthogonal chemistry will also be presented. (Same as CHEM 860, MDCM 860 and PHCH 860.) Prerequisite: Permission of instructor. LEC.

BIOL 872. Gene Expression II. 3 Hours. Second semester of a two-semester lecture course on gene expression. Emphasis on control of gene expression at the transcriptional and post-transcriptional levels. Prerequisite: BIOL 772 or consent of instructor. LEC.

BIOL 888. Topics in Evolutionary Morphology: ____. 2 Hours. Presentation and discussion by graduate students and faculty of selected topics centering on observed changes in structure and function of organisms from a phylogenetic point of view. Presentation will include results of original research when possible and appropriate, and otherwise, will be based on syntheses of recent literature. RSH.

BIOL 890. Advanced Study in Microbiology. 1-10 Hours. Original investigation by students at the master's degree level. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Ten or more hours of microbiology and consent of department. RSH.

BIOL 895. Human Genetics. 3 Hours. A lecture course providing balanced coverage of Mendelian and molecular genetics of humans; includes discussions and presentations on current issues in human and medical genetics. Prerequisite: A course in genetics. LEC.

BIOL 899. Master's Thesis. 1-10 Hours. Research which is to be incorporated into an M.A. thesis. Not more than ten hours may be earned. Graded on a satisfactory/unsatisfactory basis. THe.

BIOL 901. Graduate Seminar in Biochemistry and Biophysics. 1 Hour. Advanced course examining current research topics in biochemistry and biophysics. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Prerequisite: Enrollment in graduate school, and departmental admission. LEC.

BIOL 902. Graduate Seminar in Molecular, Cellular, and Developmental Biology. 1 Hour. Advanced course examining current research topics in molecular, cellular, and developmental biology. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Prerequisite: Enrollment in graduate school, and departmental permission. SEM.

BIOL 903. Graduate Seminar in Neurobiology. 1 Hour. Advanced course examining current research topics in neurobiology. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Prerequisite: Enrollment in graduate school, and departmental permission. LEC.

BIOL 904. Graduate Seminar in Microbiology. 1 Hour. Advanced course examining current research topics in microbiology. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Enrollment in graduate school, and departmental permission. RSH.

BIOL 905. Advanced Molecular Genetics. 1-3 Hours. A review of current literature in molecular genetics. RSH.

BIOL 906. Advanced Genetics. 1-3 Hours. May be repeated for credit up to six hours. Review of current literature and genetic theory of selected topics such as population, molecular, quantitative, and physiological genetics. RSH.

BIOL 911. Research Topics in Plant Physiology and Biochemistry. 1-6 Hours. Directed research on selected topics. Prerequisite: BIOL 770 or equivalent. RSH.

BIOL 918. Modern Biochemical and Biophysical Methods. 4 Hours. This course emphasizes the use of techniques for solving problems of structure and function of biological macromolecules. Students will complete several modules that consist of lectures relating to theory and practical aspects of each methodological approach, and apply these techniques to solving a specific problem. Students will submit a paper describing the resulting data and conclusions. Prerequisite: BIOL 807, BIOL 808, and BIOL 818, or permission of instructor. LEC.

BIOL 925. Research Grant Proposal Preparation. 3 Hours. This course introduces the basics of preparing a successful scientific grant application. Topics to be covered include how to develop a novel, fundable project, scientific writing and grantsmanship, and what criteria reviewers consider in evaluating grants. The course will be a mix of instruction and class discussion. Prerequisite: Admission to the graduate program in Molecular Biosciences, or consent of instructor. LEC.

BIOL 930. Ultrastructure and Cellular Mechanisms. 3 Hours. Two lectures and one seminar-recitation. A detailed consideration of electron microscopic analyses of cell structure as related to cell function. Prerequisite: BIOL 416. LEC.

BIOL 943. Multivariate Data Analysis. 3 Hours. Matrix formulation of multivariate models and data. Specific methods covered include Principal Components Analysis, Factor Analysis, Multiple Group Discriminant Analysis and Canonical Analysis, and Canonical Correlation Analysis. Prerequisite: BIOL 842 or knowledge of elementary matrix algebra. LEC.

BIOL 944. Topics in Quantitative Ecology: ____. 1-3 Hours. Presentation and discussion by instructor and students of mathematical and statistical concepts in ecology. Topics are selected from texts or sets of readings. LEC.

BIOL 950. Evolutionary Mechanisms. 3 Hours. Reading and discussions of evolutionary mechanisms from the genetic, ecologic, and systematic viewpoints. Prerequisite: BIOL 412. LEC.

BIOL 952. Introduction to Molecular Modeling. 3 Hours. Introduction to theory and practice of contemporary molecular modeling, including molecular mechanics, molecular dynamics, computer graphics, data analysis, use of structure and sequence databases, docking, and homology modeling. Weekly computer laboratory section aimed at allowing participants to pursue independent research projects that incorporate modeling aspects. Lectures, laboratory manuals, program descriptions, and technical notes are presented on course web page. (Same as MDCM 952.) Prerequisite: Graduate standing or consent of instructor. LEC.
BIOL 968. Seminar in Vegetation Geography. 2-3 Hours. (Same as GEOG 937.) LEC.

BIOL 985. Advanced Study. 1-10 Hours. Individual investigations; laboratory, field or museum; or reading assignments in specialized topics not ordinarily treated in other courses. Graded on a satisfactory/unsatisfactory basis. RSH.

BIOL 999. Doctoral Dissertation. 1-12 Hours. Original research that is to be incorporated into a Ph.D. dissertation. Graded on a satisfactory/unsatisfactory basis. THE.

BTEC 300. Introduction to Biotechnology. 3 Hours. N. Review of techniques used in food, agricultural, pharmaceutical, industrial, and environmental biotechnology. Role of regulatory agencies during the discovery, development, and manufacture of new medical devices, biotechnology, biomedical, and pharmaceutical products. Guest presentations in biotechnology. Prerequisite: BIOL 416. LEC.

BTEC 330. Biotechnology Regulation and Documentation Processes. 3 Hours. N. Current good manufacturing practices (GMP) as they apply in the biotechnology workplace. History, rationale, purpose, and GMP requirements applicable to the manufacturing, packaging, labeling, testing, and control of pharmaceutical products, and consequences of inaction. Prerequisite: BTEC 300. LEC.

BTEC 340. Biotechnology Research Methods and Applications. 3 Hours. N. Introduction to fermentation and protein chemistry. Theory behind laboratory techniques and overview of industrial scale expression systems. Bacterial cell culture techniques, principles of fermenter operation and purification, documentation procedures, important tasks for clean room operations, including sanitization, sterilization, cleaning procedures, calibration, and environmental monitoring. Prerequisite: BTEC 300; BIOL 600. LEC.

BTEC 341. Principles of Bioprocessing Laboratory I. 1 Hour. N. Laboratory sessions involve use of microbial expression vectors, fermentation systems, and large-scale purification of recombinant protein. Includes bacterial cell culture techniques, principles of bioreactor/fermentation operations and purification techniques, and calibration. Primary goal of this course is to provide students with an advanced background in bacterial upstream and downstream biotechnology. Prerequisite: BTEC 300; BTEC 340 or concurrent enrollment in BTEC 340. LAB.

BTEC 405. Microbial Genetics Laboratory. 4 Hours. N. Research projects center on using molecular genetics to examine the biology of the bacterium Pseudomonas aeruginosa, an opportunistic pathogen often found in the lungs of cystic fibrosis patients. Students engage in independent projects to probe various aspects of P. aeruginosa physiology such as antibiotic resistance, phase variation, toxin production, secondary metabolite production, twitching motility, swimming behaviors, and more. Projects aim to discover the molecular basis for these processes using both classical and new, cutting-edge techniques. These include plasmid manipulation, genetic complementation, mutagenesis, PCR, DNA sequencing, enzyme assays, and gene expression studies. Prerequisite: BIOL 350; BIOL 402. LAB.

BTEC 424. Independent Study in Biotechnology. 1-3 Hours. N. Independent project at a related bioscience industry partner or faculty in selected topics of current translational research interest. May be undertaken only with the consent of the major advisor who will guide the research after determining objectives with the interested industry partner or faculty. Prerequisite: Consent of instructor. IND.

BTEC 440. Biotechnology Research Methods and Applications II. 3 Hours. N. Theory and practicum behind laboratory techniques and overview of industrial scale expression systems of insect or mammalian protein chemistry. Cell culture techniques, principles of bioreactor operation and purification, documentation procedures, important tasks for clean room operations, including sanitization, sterilization, cleaning procedures, calibration, and environmental monitoring are evaluated. Prerequisite: BTEC 340; BTEC 341. LEC.

BTEC 441. Principles of Bioprocessing Laboratory II. 1 Hour. N. Mammalian cell culture techniques, principles of bioreactor operations and purification techniques, and calibration. The primary goal of this course is to provide students with an advanced background in mammalian upstream and downstream biotechnology. Prerequisite: BTEC 340; BTEC 440 or concurrent enrollment in BTEC 440. LAB.

BTEC 450. Applied Bioinformatics. 3 Hours. N. Overview of the fields of bioinformatics and genomics. Topics, tools, issues and current trends in these and related fields are discussed. Principles and practical application of bioinformatics tools in molecular biology and genetics are evaluated. The haploid human genome occupies a total of just over 3 billion DNA base pairs. This information is not contained in books, but stored in electronic databases. Computational biology utilizes infer function by comparative analysis. This course is designed for life scientists from all fields to introduce them to the power of bioinformatics and enable them to access and utilize biological information in databases for their own research. Prerequisite: BTEC 300; BIOL 570 or MATH 365 or PSYC 210. LEC.

BTEC 460. Introduction to Quality Control/Quality Assurance in Biotechnology. 3 Hours. N. Quality control techniques, assurance issues, and management methods. Quality in design and planning, in the constructed project, and in production of goods and services. Prerequisite: BTEC 330. LEC.

BTEC 475. Bioseparations Laboratory. 2 Hours. N. Develop novel and effective strategies for extraction and purification of recombinant and native biomolecules by understanding constraints posed by the biological system and the products. Research projects are geared toward developing cost-effective processes for recovery of industrial and biopharmaceutical products derived from a variety of native and/or transgenic sources. Prerequisite: BTEC 405; BTEC 441. LAB.

BTEC 494. Selected Topics in Biotechnology. 1 Hour. N. Course work varies with the topic of the seminar. The preparation and presentation of oral reports on selected topics from recent translational research literature. Students may choose one interest group each semester, but may enroll in a given interest group only once. May be repeated for credit when topics vary. Prerequisite: BTEC 300 and approval of instructor. LEC.

BTEC 501. Ethical Issues in Biotechnology. 1 Hour. N. Student investigations and discussions of current controversial issues in biotechnology. This course emphasizes thinking about new technologies in a rational and thoughtful way. Prerequisite: BTEC 300. LEC.

BTEC 541. Gene Expression Analysis: Microarrays. 2 Hours. N. This course covers current theory, techniques, instrumentation, troubleshooting, analysis tools, and advanced protocols for microarray analysis. Students have the opportunity to utilize skills learned during lecture in a laboratory environment. At the conclusion of this course, students understand microarray experimental design, its tools, and analysis of generated data. Prerequisites: BTEC 300. LAB.
CEAS 610. Minorities in Japan. 3 Hours. S.
This course offers a sociological and historical exploration of Japan's minorities: the Ainu, Okinawans, Burakumin, and Zainichi Koreans who are often excluded from narratives of Japanese history. Exclusion of the minority issue not only overlooks the existence of minority populations in Japan but also contributes to misconceptions of Japan as a homogeneous country. The course objective is to challenge the conventional master narrative of racial and cultural homogeneity. We shed light on Japan's minorities, their historical experiences, current struggles, and future challenges. Prerequisite: An introductory East Asian Studies course or consent of instructor. LEC.

BTEC 542. Protein Expression in Insect Cells. 2 Hours. N.
Introduction to the insect cells expression system, and its advantages and disadvantages. Introduction to expression of recombinant proteins with baculovirus. Outline of antibody and antibody fragments as well as other complex proteins. Basic techniques used for growth and maintenance of insect cell cultures. The lab portion of the course provides students with practical experience in protein expression techniques in the insect cells expression system. Prerequisite: BTEC 300. LAB.

BTEC 545. RNA Interference and Model Organisms. 2 Hours. N.
Introduction and history of RNA interference technology. Principles, mechanism, and applications of RNA interference in model organisms. Laboratory sessions include RNA interference-mediated silencing of genes in plants, C. elegans, and mammalian cell culture. Prerequisite: BTEC 300. LAB.

BTEC 547. Bioanalytical Lab. 2 Hours. N.
Analytical methods used for testing biotherapeutics are examined. Emphasis is placed on assessing protein concentration, purity, identity and activity. The importance of sample processing, throughput and level of validation are explored as samples from upstream processing, downstream processing and final bulk are interrogated. Students also learn key concepts used to validate the performance of analytical methods. Prerequisite: BTEC 300. LAB.

BTEC 599. Biotechnology Capstone Experience. 3 Hours. N.
Supervised internship at a biotech company; or an independent thesis; or honors thesis with Honors Program. Prerequisite: BTEC 441 and approval of instructor. FLD.

Center for East Asian Studies Courses

CEAS 200. Topics in East Asian Studies: _____. 1-3 Hours. U.
An introductory interdisciplinary topics course addressing contemporary issues related to one or more East Asian countries. Format and content will vary. Does not count toward the EALC major or minor requirements unless otherwise indicated by EALC in the Schedule of Classes. LEC.

CEAS 500. Seminar in East Asian Studies: _____. 1-3 Hours. U.
An interdisciplinary seminar addressing contemporary issues related to one or more East Asian countries. Prerequisites to be determined by instructor(s) on the basis of course content. Does not count toward the EALC major or minor requirements unless otherwise indicated by EALC in the Schedule of Classes. LEC.

CEAS 610. Minorities in Japan. 3 Hours. S.
This course offers a sociological and historical exploration of Japan's minorities: the Ainu, Okinawans, Burakumin, and Zainichi Koreans who are often excluded from narratives of Japanese history. Exclusion of the minority issue not only overlooks the existence of minority populations in Japan but also contributes to misconceptions of Japan as a homogeneous country. The course objective is to challenge the conventional master narrative of racial and cultural homogeneity. We shed light on Japan's minorities, their historical experiences, current struggles, and future challenges. Prerequisite: An introductory East Asian Studies course or consent of instructor. LEC.

CEAS 700. Contemporary East Asia. 3 Hours.
This graduate seminar explores rapidly changing societies in contemporary East Asia, particularly China, Japan, and Korea. The course provides a critical overview of East Asia and its diversity and complexity using cross-cultural perspectives and interdisciplinary social science approaches, and situates East Asian societies in the context of globalization. LEC.

CEAS 802. Research Seminar. 3 Hours.
Students will work with the instructor and, when appropriate, an additional faculty advisor to design, research and write up a research paper on an East Asian topic of their choosing. Students enrolling in this course are expected to have taken a social science research methods class prior to taking this course and to apply those methods to the research process. A core course for the MA in Contemporary East Asian Studies. Prerequisite: Permission of the instructor. SEM.

Chemistry Courses

CHEM 100. Chemistry in Context: _____. 3 Hours. NP GE3N / N.
An introduction to chemistry that focuses on basic chemical principles, designed for students with no previous background in chemistry. This course promotes the development of chemical literacy within a context that encourages an appreciation for the role and significance of chemistry in the modern world. Not intended for students who need to fulfill a specific chemistry requirement as part of their degree program. LEC.

CHEM 110. Introductory Chemistry. 5 Hours. NP GE3N / N.
This integrated lecture and laboratory course provides an introduction to basic concepts related to general, organic, and biological chemistry. Suitable for students seeking an introductory course and for students who are majoring in health and allied health fields. Students whose majors require more than one semester of chemistry should enroll in CHEM 130, CHEM 170, or CHEM 190. CHEM 110 and CHEM 150 cannot both be taken for credit. LEC.

CHEM 130. General Chemistry I. 5 Hours. NP GE12/GE3N / N.
This course seeks to develop a working knowledge of the conceptual foundation and the quantitative chemical relationships on which subsequent chemistry courses are built. Atomic structure, chemical bonding, reaction stoichiometry, thermochemistry, and periodic trends are emphasized in this integrated lecture and laboratory course. Students pursuing or considering a major in one of the chemical sciences should strongly consider taking CHEM 170 or CHEM 190. Students with credit in CHEM 110 will have two hours added on to their total number of hours required for graduation. Prerequisite: Must be eligible for MATH 115. LEC.

CHEM 135. General Chemistry II. 5 Hours. GE12/GE3N / N.
This course, which is a continuation of CHEM 130, focuses on chemical kinetics, chemical equilibrium, acid-base chemistry, and thermodynamics. Additional topics, such as environmental chemistry, electrochemistry, coordination chemistry, nuclear chemistry, organic chemistry, and/or polymers, may also be introduced in this integrated lecture and laboratory course. Students pursuing or considering a major in one of the chemical sciences should strongly consider taking CHEM 175 or CHEM 195. Prerequisite: CHEM 130, CHEM 170 or CHEM 190. LEC.

CHEM 150. Chemistry for Engineers. 5 Hours. GE12/GE3N / N.
This one semester course is designed for students in the School of Engineering who are not required to take additional chemistry courses at the college level. Topics covered in this integrated lecture and laboratory course include quantum theory, atomic structure, chemical bonding, solids, liquids, gases, thermodynamics, equilibrium, acids and bases, kinetics, polymer chemistry, and materials science. The application of these concepts to engineering problems and practices is emphasized. Prerequisite: Must have completed a course in high school chemistry and be eligible for MATH 121 or MATH 125 (or have Departmental consent). Students not admitted to the School of Engineering must receive permission from instructor. CHEM 110 and CHEM 150 cannot both be taken for credit. LEC.
CHEM 170. Chemistry for the Chemical Sciences I. 5 Hours. NP GE12/GE3N / N.
The first course in a two-course sequence focused on the principles and applications of modern chemistry. This integrated lecture and laboratory course is designed for students pursuing or considering a major in one of the chemical sciences (such as chemistry, biochemistry, chemical engineering or petroleum engineering). The CHEM 170/CHM 175 course sequence covers the same general topics as CHEM 130/CHM 135, but with an increased emphasis on modern applications of chemistry. Students with credit in CHEM 110 will have two hours added on to their total number of hours required for graduation. Prerequisite: Eligibility for MATH 115. LEC.

CHEM 175. Chemistry for the Chemical Sciences II. 5 Hours. N.
An integrated lecture and laboratory course which is a continuation of CHEM 170. Prerequisite: CHEM 130, CHEM 170 or CHEM 190. LEC.

CHEM 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Chemistry. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

CHEM 180. Seminar I. 0.5 Hours. U.
Special topics for chemistry majors such as using the chemical literature, educational and professional perspectives, scientific ethics, and undergraduate research opportunities. It is recommended that students take this half-semester course in their freshman or sophomore year. Prerequisite: A declared major in chemistry or consent of instructor. LEC.

CHEM 190. Foundations of Chemistry I, Honors. 5 Hours. NP GE12/GE3N / N.
This integrated lecture and laboratory course, which is designed for qualified and motivated students having a strong interest in chemistry, provides a more thorough treatment of the concepts and topics covered in CHEM 130 and CHEM 170. It is anticipated that students in CHEM 190 plan to take more than one year of chemistry at the college level. Students with credit in CHEM 110 will have two hours added on to their total number of hours required for graduation. Prerequisite: high-school chemistry and calculus; at least one of the following: (a) acceptance into the KU Honors Program, (b) an AP exam score in chemistry of 3 or higher, (c) a mathematics ACT score of 28 or higher; or permission of instructor. LEC.

CHEM 195. Foundations of Chemistry II, Honors. 5 Hours. GE12/GE3N / N.
A course designed for qualified and motivated students with strong interest in chemistry to provide a more thorough treatment of the concepts and topics of advanced general chemistry. It is anticipated that the students in CHEM 195 have completed CHEM 190 or excelled in CHEM 130 or CHEM 170. Prerequisite: Membership in the University Honors Program, CHEM 130, CHEM 170 or CHEM 190, or consent of the department. LEC.

CHEM 201. Laboratory Safety in the Chemical Sciences. 1 Hour. U.
A course for undergraduate students focusing on chemical safety in modern laboratories. The course will feature practical instruction in lab safety, an introduction to safety resources, and group discussions centered around case studies. Required for all B.S. majors, and for all B.A. majors participating in undergraduate research. Students with credit in CHEM 201 may not take CHEM 701 for credit. Prerequisite: CHEM 135, CHEM 175, or CHEM 195. LEC.

CHEM 202. Chemistry for the Chemical Sciences II. 5 Hours. N.
A continuation of CHEM 201. Emphasis is given to the laboratory techniques of modern chemistry. Prerequisite: CHEM 201. LEC.

CHEM 203. History of Chemistry. 3 Hours. H.
Birth of modern chemical science from roots in Greek natural philosophy, alchemy, Renaissance medicine and technology. The Chemical Revolution of Lavoisier and Dalton. Maturity of chemistry in the 19th and 20th centuries, along with an examination of growth of chemical institutions and the rise of chemical industry. Emphasis on developments from the 18th century to the present. (Same as HIST 309.) LEC.

CHEM 210. Fundamentals of Organic Chemistry. 3 Hours. GE3N / N.
A study of the structures and reactions of important classes of organic compounds. Along with the organic laboratory, CHEM 331, this course will fulfill the needs of students requiring a single semester of organic chemistry. Students requiring more than one semester of organic chemistry should enroll in CHEM 330. Prerequisite: CHEM 135, CHEM 175 or CHEM 195. LEC.

CHEM 230. Organic Chemistry I. 3 Hours. GE3N / N.
A study of the structure and reactivity of selected classes of organic compounds. CHEM 230 is the first course of a two-semester sequence. Students who require only one semester of organic chemistry should enroll in CHEM 310. Students with credit in CHEM 310 will have two hours added on to their total number of hours required for graduation. Prerequisite: CHEM 135, CHEM 175 or CHEM 195. LEC.

CHEM 231. Organic Chemistry Laboratory. 2 Hours. U.
Emphasis on basic techniques for the preparation, separation, and purification of organic compounds. Required for a major in chemistry and by those departments and programs specifying a complete undergraduate organic chemistry course. Prerequisite or corequisite: CHEM 310 or CHEM 330 or CHEM 380. LAB.

CHEM 235. Organic Chemistry II. 3 Hours. N.
A continuation of CHEM 230, intended for students who want further training in organic chemistry. Prerequisite: CHEM 330 or CHEM 380. LEC.

CHEM 236. Organic Chemistry II Laboratory. 2 Hours. U.
More advanced organic laboratory techniques with emphasis on modern spectroscopic methods for determining the structure and purity of organic compounds. Prerequisite: CHEM 331. Prerequisite or corequisite: CHEM 335 or CHEM 385. LAB.

CHEM 280. Organic Chemistry I, Honors. 3 Hours. GE3N / N.
This is the first half of a two-semester sequence in organic chemistry for students with strong records in previous chemistry courses and who are planning or considering a major in a chemistry-related field. The content is similar to that of CHEM 330 but with coverage in greater depth and more emphasis on developing problem-solving skills. Students requiring only one semester of organic chemistry should not enroll in this course but take CHEM 310. Students with credit in CHEM 310 who take and complete CHEM 380 will have two hours added to their total number of credit hours required for graduation. Prerequisite: CHEM 135, CHEM 175 or CHEM 195 and membership in the University Honors Program or consent of instructor. LEC.

CHEM 285. Organic Chemistry II, Honors. 3 Hours. N.
This is the second course in a two-semester sequence in organic chemistry for students with strong records in previous chemistry courses and who are planning or considering a major in chemistry or in a chemistry-related field. The content is similar to that of CHEM 335 but with coverage in greater depth and more emphasis on developing problem-solving skills. Prerequisite: CHEM 330 or CHEM 380 and membership in the University Honors Program, or consent of instructor. LEC.

CHEM 309. Topics in Chemistry, Honors: ______. 1-5 Hours. N.
A course on special topics in chemistry, given as the need arises. Course content applies and expands upon general chemistry concepts, such as
chemical thermodynamics, kinetics, and bonding. In this course, students gain knowledge in a topic of contemporary interest in chemistry, are challenged to examine the experimental and theoretical basis of this knowledge, and consider the broader impacts of this knowledge outside the discipline. Course may be repeated for different topics. Prerequisite: CHEM 135, CHEM 175 or CHEM 195 and membership in the University Honors Program; or permission of instructor. Each section may have additional prerequisites to be determined by the instructor. LEC.

CHEM 450. Directed Readings/Laboratory in Chemistry. 1-3 Hours. N. Individual and supervised study or laboratory work on special topics or problems in chemistry. Prerequisite: Ten hours of chemistry and a minimum overall grade-point average of 2.0 or consent of department. IND.

CHEM 510. Biological Physical Chemistry. 3 Hours. N. A one semester course, designed particularly for biology, biochemistry, and premedical students, which surveys the fundamentals of physical chemistry. The basic principles of thermodynamics, chemical kinetics, quantum chemistry, and spectroscopy will be introduced, and their application to aqueous solutions and biochemical systems will be emphasized. Prerequisite: One semester of organic chemistry, two semesters of calculus, and two semesters of physics. LEC.

CHEM 511. Biological Physical Chemistry Laboratory. 2 Hours. AE61 / U. A course particularly for biology, biochemistry, and premedical students. Experiments in physical chemistry illustrating the fundamental principles of quantum mechanics, spectroscopy, thermodynamics, and kinetics as applied to chemical systems. Prerequisite: CHEM 510. LAB.

CHEM 530. Physical Chemistry I. 3 Hours. N. An introduction to the basic principles of quantum mechanics, atomic and molecular structure, molecular rotations and vibrations, group theory, spectroscopy, and statistical mechanics. Prerequisite: CHEM 135, CHEM 175 or CHEM 195; PHSX 212; MATH 127 and MATH 220 or MATH 320; and completion of, or concurrent enrollment in MATH 290 or consent of instructor. LEC.

CHEM 531. Physical Chemistry I Laboratory. 2 Hours. U. Experiments in physical chemistry, with emphasis on the fundamental principles of quantum mechanics and spectroscopy as applied to chemical systems. Prerequisite: CHEM 530. LAB.

CHEM 535. Physical Chemistry II. 4 Hours. N. Emphasizes the thermodynamics of molecular systems with application to the structure and properties of gases, liquids, solids, materials, statistical thermodynamics, chemical kinetics, and reaction dynamics. Prerequisite: CHEM 530 and MATH 290 or consent of instructor. LEC.

CHEM 536. Physical Chemistry II Laboratory. 2 Hours. U. Experiments in physical chemistry, with emphasis on the fundamental principles of chemical thermodynamics and kinetics. Prerequisite: CHEM 535 or consent of instructor. LEC.

CHEM 598. Research Methods. 3 Hours. N. An introduction for pre-service teachers to the tools used by scientists to solve scientific problems. Topics include design of experiments and interpretation of their results, use of statistics, mathematical modeling, laboratory safety, ethical treatment of human subjects, writing scientific papers, giving oral presentations, and obtaining data from the scientific literature. Open only to students in the UKanTeach program. LEC.

CHEM 620. Analytical Chemistry. 3 Hours. N. Principles of analytical chemistry with emphasis on the fundamental reactions used for chemical analysis. Topics include chemical equilibria in acid/base, complexation, separations, and redox systems, data analysis, potentiometry and spectrophotometry. Prerequisite: One semester of organic chemistry and organic chemistry laboratory, CHEM 535 or CHEM 510 (or concurrent enrollment in CHEM 510), or permission of instructor. Corequisite: CHEM 621. LEC.

CHEM 621. Analytical Chemistry Laboratory. 2 Hours. U. Experiments illustrate fundamental principles of chemical analysis methods. The course serves as an introduction to advanced instrumental methods of analysis. Prerequisite: One semester of organic chemistry and organic chemistry laboratory, CHEM 535 or CHEM 510 (or concurrent enrollment in CHEM 510), or permission of instructor. Corequisite: CHEM 620. LAB.

CHEM 635. Instrumental Methods of Analysis. 2 Hours. AE61 / U. Theory and application of instrumental methods to modern analytical problems. Topics covered include atomic and molecular spectroscopy, electrochemistry, mass spectrometry, and separations. Prerequisite: CHEM 620 and CHEM 621 and one semester of physical chemistry laboratory, or permission of instructor. Corequisite: CHEM 636. LEC.

CHEM 636. Instrumental Methods of Analysis Laboratory. 2 Hours. AE61 / U. Theory and application of instrumental methods to modern analysis problems. Experiments covered in this capstone laboratory course include atomic and molecular spectroscopy, electrochemistry, and separation methods. Prerequisite: CHEM 620 and CHEM 621, and one semester of physical chemistry laboratory; or permission of instructor. Corequisite: CHEM 635. LAB.

CHEM 660. Systematic Inorganic Chemistry. 3 Hours. N. A systematic study of the elements and their compounds, emphasizing the relationship between properties of substances and their atomic and molecular structures and the positions of the elements in the periodic systems. Prerequisite: CHEM 510 or CHEM 530. LEC.

CHEM 661. Advanced Inorganic Laboratory. 2 Hours. U. Experiments concerning the synthesis and characterization of inorganic compounds. Prerequisite: CHEM 660 or concurrent enrollment in CHEM 660. LAB.

CHEM 680. Topics in Chemistry: ______. 1-5 Hours. N. Courses on special topics in chemistry, given as the need arises. Course may be repeated for different topics. Prerequisite: 20 hours of Chemistry. Each section may have additional prerequisites to be determined by the instructor. LEC.

CHEM 695. Seminar II. 0.5 Hours. U. Special topics and presentations by students and faculty in areas of current interest such as recent advancements in chemistry, professional development, societal issues facing chemists, and reports of ongoing research. This half-semester course is recommended for seniors. Prerequisite: CHEM 180. LEC.

CHEM 698. Undergraduate Research Problems. 1-6 Hours. AE61 / N. May be repeated to accumulate a maximum of 10 credit hours. An undergraduate research course, in any of the fields of chemistry, consisting of experimental or theoretical work, or the preparation of an extensive paper based on library investigation of a selected topic. A final report must be submitted to the instructor at the end of the semester. Prerequisite: CHEM 201, or CHEM 201 concurrently, or documentation of appropriate laboratory safety training. IND.

CHEM 699. Undergraduate Honors Research. 2-6 Hours. AE61 / N. To be taken two semesters for a total of no more than 8 hours. An undergraduate research course, in any of the fields of chemistry. At the completion of the research, a written thesis, and an oral presentation will be required. Open to students in the Chemistry Honors Program.
Prerequisite: CHEM 201, or CHEM 201 concurrently, or documentation of appropriate laboratory safety training. IND.

CHEM 700. Responsible Scholarship in the Chemical Sciences. 1 Hour.
A course for beginning graduate students with particular emphasis on scholarship issues relevant to the chemical sciences. Topics will include scientific ethics, codes of conduct, record keeping, authorship, and the responsibilities of a scientist. Group discussions, particularly centered around case studies, will be an significant component of the course. LEC.

CHEM 701. Laboratory Safety in the Chemical Sciences. 1 Hour.
A course for beginning graduate students focusing on chemical safety in modern laboratories. The course will feature practical instruction in lab safety, an introduction to safety resources, and group discussions centered around case studies. LEC.

CHEM 718. Mathematical Methods in Physical Sciences. 3 Hours.
Review of all complex variable theory; introduction to the partial differential equations of physics; Fourier analysis; and special functions of mathematical physics. (Same as PHSX 718.) Prerequisite: Two semesters of junior-senior mathematics. LEC.

CHEM 720. Fundamentals and Methods of Analytical Chemistry. 3 Hours.
An introductory graduate level course in analytical chemistry, in which the principles of electrochemistry, spectroscopy, and separation science are utilized to solve analytical problems in inorganic, organic and biochemistry. Prerequisite: An undergraduate course in analytical chemistry, a year of organic chemistry, and a year of physical chemistry. LEC.

CHEM 730. Coordination and Organometallic Chemistry. 3 Hours.
An examination of the basic foundations of coordination chemistry and organometallic chemistry including symmetry methods, bonding, magnetism, and reaction mechanisms. Prerequisite: Two semesters of organic chemistry and one semester of physical chemistry in which quantum chemistry is introduced. The latter course may be taken concurrently with CHEM 730. LEC.

CHEM 740. Principles of Organic Reactions. 3 Hours.
A consideration of the structural features and driving forces that control the course of chemical reactions. Topics will include acid and base properties of functional groups; qualitative aspects of strain, steric, inductive, resonance, and solvent effects on reactivity; stereo-chemistry and conformations; an introduction to orbital symmetry control; basic thermodynamic and kinetic concepts; and an overview of some important classes of mechanisms. Prerequisite: Two semesters of undergraduate organic and one semester of physical chemistry or concurrent enrollment. LEC.

CHEM 742. Spectroscopic Identification of Organic Compounds. 3 Hours.
The use of techniques such as infrared, nuclear magnetic resonance, and ultraviolet spectroscopy, and mass spectrometry for elucidating the structure of organic molecules. A lecture and workshop course. Prerequisite: CHEM 626 and CHEM 627. LEC.

CHEM 750. Introduction to Quantum Mechanics. 3 Hours.
An introduction to the basic principles of quantum theory relevant to atomic and molecular systems. Topics include operators and operator algebra, matrix theory, eigenvalue problems, postulates of quantum mechanics, the Schrödinger equation, angular momentum, electronic structure, molecular vibrations, approximation methods, group theory, and the foundations of spectroscopy. Prerequisite: Two semesters of physical chemistry. LEC.

CHEM 760. Introduction to Chemistry in Biology. 3 Hours.
A comprehensive introduction to the application of chemistry to address problems in biology at the molecular level. The fundamentals of biomolecules (nucleic acids, proteins, lipids and carbohydrates) and techniques of chemical biology research will be discussed. LEC.

CHEM 775. Chemistry of the Nervous System. 3 Hours.
A study of the overall concept of central nervous system functioning. A brief introduction to neuroanatomy and neurophysiological techniques as well as a relatively detailed discussion of the chemistry of neurotransmitters is included. (Same as BIOL 775, MDCM 775, NURO 775, PTX 775, and PHCH 775.) Prerequisite: One year of undergraduate organic chemistry. LEC.

CHEM 800. Research. 1-10 Hours.
Original investigation on the graduate level. RSH.

CHEM 810. Colloquium: ______. 1 Hour.
Colloquia on various topics of current interest are presented by students, faculty, and visiting scientists. LEC.

CHEM 812. Chemical Seminar. 1-3 Hours.
Individual studies of certain advanced phases of chemistry not covered in the regular graduate courses. IND.

CHEM 816. Careers in Chemical Biology. 1 Hour.
Advanced course examining current research topics in chemical biology. An emphasis will be placed on career options open to PhD scientists in Chemical Biology, and preparation for the different career paths. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. This course will be graded satisfactory/unsatisfactory. (Same as BIOL 816, MDCM 816 and PHCH 816.) Prerequisite: Permission of instructor. SEM.

CHEM 820. Analytical Separations. 3 Hours.
An advanced treatment of analytical separations techniques. The theory of separation science will be augmented with discussion of practical aspects of instrumentation and experiment design. Prerequisite: CHEM 720. LEC.

CHEM 822. Electrochemical Analysis. 3 Hours.
An advanced treatment of selected electroanalytical techniques and methodology. Prerequisite: CHEM 720. LEC.

CHEM 824. Spectrochemical Methods of Analysis. 3 Hours.
General concepts of encoding chemical information as electromagnetic radiation; major instrumental systems for decoding, interpretation, and presentation of the radiation signals; atomic emission, absorption, and fluorescence; ultraviolet, visible, infrared, and microwave absorption; molecular luminescence; scattering methods; mass spectrometry; magnetic resonance; automated spectrometric systems. Prerequisite: CHEM 720. LEC.

CHEM 826. Mass Spectrometry. 3 Hours.
An introduction to mass spectrometry. The various ionization techniques and mass analyzers will be discussed, and many examples of different mass spectrometric applications will be introduced. Prerequisite: CHEM 720. LEC.

CHEM 828. Bioanalysis. 3 Hours.
A course covering important aspects in modern chemical measurement with particular emphasis placed on bioanalysis. This course will survey the modern analytical challenges associated with the ongoing efforts in genomics and proteomics and discuss future trends in methods in instrumentation. Prerequisite: CHEM 720. LEC.
CHEM 830. Structure, Bonding and Spectroscopic Methods in Inorganic Chemistry. 3 Hours.
An introduction of quantum and group theories in relation to bonding and physicochemical properties of inorganic substances. Topics include vibrational and electronic spectroscopies, magnetism, and inorganic photochemistry. Prerequisite: CHEM 730. LEC.

CHEM 832. Inorganic Reaction Mechanisms and Catalysis. 3 Hours.
Mechanistic aspects of transition metal chemistry including substitution reactions, electron transfer reactions, rearrangement reactions, ligand reactions and inorganic photochemistry. Principles and applications of heterogeneous and homogeneous catalytic processes emphasizing catalysis at transition metal centers. Prerequisite: CHEM 730. LEC.

CHEM 840. Physical Organic Chemistry. 3 Hours.
An examination of the methods used to probe the mechanisms of organic reactions and of the chemistry of some important reactive intermediates. Topics will include isotope effects, kinetics, linear free energy relationships, solvent effects, a continuing discussion of orbital symmetry, rearrangements, carbocations, carbanions, carbenes, radicals, excited states, and strained molecules. Prerequisite: CHEM 740. LEC.

CHEM 842. Organic Synthesis I. 3 Hours.
A discussion of fundamental reactions for the formation of carbon-carbon bonds, oxidation, reduction, and functional group interchange. Prerequisite: CHEM 740. LEC.

CHEM 844. Problem Solving in Organic Chemistry. 1 Hour.
A course designed to develop a student's ability to apply fundamental concepts of mechanistic organic and organometallic chemistry, physical organic chemistry, biorganic chemistry, synthetic organic reactions and techniques for structure elucidation. Students will propose solutions to practice problems mimicking challenges that arise in contemporary research in organic chemistry. The format includes interactive problem-solving discussions led by faculty and peers and monthly written examinations. May be repeated up to three times until the student has passed at least four of the written exams. Graded on a Satisfactory/Unsatisfactory basis. Prerequisite: CHEM 740 or permission of instructor. SEM.

CHEM 850. Advanced Quantum Mechanics. 3 Hours.
The advanced mathematical and physical principles of quantum mechanics relevant to atomic and molecular systems. Topics may include abstract vector spaces and representations, time-dependent quantum dynamics, electronic structure theory, density matrices, second-quantization, advanced group theory, path integrals, and scattering theory. Prerequisite: CHEM 750 or its equivalent. LEC.

CHEM 852. Statistical Thermodynamics. 3 Hours.
Thermodynamics and introduction to equilibrium statistical mechanics with emphasis on problems of chemical interest. The course consists of two roughly equal parts: 1) An advanced overview of the laws and concepts of thermodynamics with application to specific problems in phase and chemical equilibria and 2) An introduction to equilibrium statistical mechanics for both classical and quantum systems. Prerequisite: CHEM 750 or its equivalent. LEC.

CHEM 854. Chemical Kinetics and Dynamics. 3 Hours.
A study of the rates, mechanisms, and dynamics of chemical reactions in gases and liquids. Topics include an advanced overview of classical kinetics, reaction rate theories (classical collision theory, transition-state theory and introductory scattering theory), potential energy surfaces, molecular beam reactions, photochemistry, Marcus electron transfer theory and other areas of current interest. Prerequisite: CHEM 750 or its equivalent. LEC.

CHEM 856. Molecular Spectroscopy. 3 Hours.
Quantitative molecular spectroscopy and its chemical applications. The basic principles of the molecular energy levels, selection rules and spectral transition intensities will be discussed and applied to rotational, vibrational, electronic, and nuclear magnetic spectroscopy. Linear and nonlinear spectroscopies will be addressed. Prerequisite: CHEM 750 or its equivalent. LEC.

CHEM 860. Principles and Practice of Chemical Biology. 3 Hours.
A survey of topics investigated by chemical biology methods including: transcription and translation, cell signaling, genetic and genomics, biochemical pathways, macromolecular structure, and the biosynthesis of peptides, carbohydrates, natural products, and nucleic acids. Concepts of thermodynamics and kinetics, bioconjugations and bioorthogonal chemistry will also be presented. (Same as BIOL 860, MDCM 860 and PHCH 860.) Prerequisite: Permission of instructor. LEC.

CHEM 899. Master's Thesis. 1-10 Hours.
Research work (either experimental or theoretical) in chemistry for students working toward the M.S. degree. Graded on a satisfactory/unsatisfactory basis. THE.

CHEM 900. Advanced Research. 1-10 Hours.
Original investigation in chemistry at the graduate level. Graded on satisfactory/unsatisfactory basis. Prerequisite: Advancement to doctoral candidacy. RSH.

CHEM 914. Computational Methods in Physical Sciences. 3 Hours.
Advanced computer applications in physical science. General discussion and illustration of problem organization and solution by numerical and other methods with examples from physics, astronomy, and other physical sciences. Students will design, write, validate, and document a computer program to solve a physical problem. (Same as ASTR 815 and PHSX 815.) Prerequisite: Six hours of computer science courses numbered 300 or above, and six hours of physics and/or astronomy courses numbered 300 or above. LEC.

CHEM 930. Bioinorganic Chemistry. 3 Hours.
A survey of metalloproteins and metalloenzymes, their structures and functions, including recent advances in biomimetic modeling, small molecule activation in biological systems, and related physical methods. Prerequisite: CHEM 832. LEC.

CHEM 942. Organic Synthesis II. 3 Hours.
A survey of important techniques in organic chemistry with respect to scope, limitations, mechanism, and stereochemistry. Emphasis will be placed on new synthetic methods and application of such methods to the synthesis of structurally interesting compounds, particularly natural products. Prerequisite: CHEM 842. LEC.

CHEM 950. Advanced Statistical Mechanics. 3 Hours.
Advanced equilibrium statistical mechanics and introduction to nonequilibrium statistical mechanics. Topics include: the theory of liquids, critical phenomena linear response theory and time correlation functions, Langevin dynamics, and molecular hydrodynamics. (Same as PHSX 971.) Prerequisite: CHEM 909 or equivalent. LEC.

CHEM 970. College Teaching Experience in Chemistry. 3 Hours.
A student will engage in a semester-long, planned instructional activity that shall include college classroom teaching under the supervision of a chemistry department faculty member. Prerequisite: Two semesters as a graduate teaching assistant. LEC.

CHEM 980. Advanced Topics in Chemistry: ____. 2-3 Hours.
A course covering special advanced topics in chemistry not included in other graduate courses. One or more topics will be covered in a given semester and an announcement of the course content and prerequisites
will be made at the end of the previous semester. This course may be taken more than once when the topic varies. LEC.

CHEM 999. Doctoral Dissertation. 1-10 Hours.
Research work (either experimental or theoretical) in chemistry for students working toward the Ph.D. degree. Graded on a satisfactory/unsatisfactory basis. THE.

Classics Courses

CLSX 148. Greek and Roman Mythology. 3 Hours. HL GE3H / H/W.
A systematic examination of the traditional cycles of Greek myth and their survival and metamorphosis in Latin literature. Some attention is given to the problems of comparative mythology and the related areas of archaeology and history. Slides and other illustrated materials. No knowledge of Latin or Greek is required. LEC.

CLSX 149. Greek and Roman Mythology Honors. 3 Hours. HL GE3H / H/W.
The study of Greek and Roman mythology through extensive readings in primary classical texts and secondary authors. Prerequisite: Admission to the Honors Program or consent of instructor. LEC.

CLSX 151. Introduction to Classical Archaeology. 3 Hours. HT GE11/GE3H / H/W.
An introduction to the history, methods, and excavation techniques of archaeology, with special emphasis on ancient Greece and Rome. Topics include stratigraphy, chronology, artifact analysis, the role of archaeology in our understanding of Greek and Roman society, and the treatment of archaeology in popular culture. Illustrated throughout with presentations of important archaeological sites of the ancient Mediterranean such as Athens and Pompeii, from the earliest times through late antiquity. LEC.

CLSX 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Classics. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

CLSX 178. Writing About Greek and Roman Culture. 3 Hours. GE21 / H.
This course uses focused content from Greek and Roman mythology as a vehicle for learning, applying, and practicing essential skills of writing. The content varies from term to term but is always circumscribed, such as Helen of Sparta, nature myths, the wandering hero, or children in Greek tragedy. Students complete a variety of writing exercises that build upon each other and include revision. The course will be taught in English. LEC.

CLSX 210. Greek Rhetoric in Theory and Practice. 3 Hours. H.
This course explores the theory and practice of ancient Greek rhetoric, with the aim of developing student's own rhetorical skills and habits. All readings are in translation; no knowledge of ancient Greek is required. Students study rhetoric in such authors as Homer, Demosthenes, Plato, and Lyasias and discuss such topics as the role of public speaking in maintaining Greek democracy, the difference between rhetorical skill and its transition to a pastime in the Imperial age; the ways the Romans connected oratorical style with humor, the body, and gender identity; and the leeway given to speakers in constructing an argument. Students practice delivery with ancient speeches; write and deliver speeches tailored to a variety of situations; and listen to and critique the speeches of their peers and others. LEC.

CLSX 230. Greek Literature and Civilization. 3 Hours. HL GE3H / H.
An introduction to ancient Greek literature and civilization. Studied against the historical and cultural background of their times will be authors such as Homer, Sappho, the tragedians, Aristophanes, Plato, and topics arising from the texts such as religion, athletics, oral performance, sexuality, and the development of literary genres. No knowledge of Greek required and no prerequisite. LEC.

CLSX 232. Word Power: Greek and Latin Elements in English. 3 Hours. H/W.
A study of English words drawn from Greek and Latin for all those interested in the sources of the English vocabulary. Enough Greek and Latin for essential purposes is also studied. No knowledge of Greek or Latin is required. A student may not receive credit for both CLSX 232 and CLSX 332. LEC.

CLSX 240. Roman Literature and Civilization. 3 Hours. HL GE3H / H.
An introduction to ancient Roman literature and civilization. Studied against the historical and cultural background of their times will be authors such as Plautus, Vergil, Livy, Petronius, and topics arising from the texts such as religion, oratory, slavery, political propaganda, the Roman games, and the development of Roman literature. No knowledge of Latin required and no prerequisite. LEC.

CLSX 241. Latin Language and Civilization, Honors. 4 Hours. GE3H / H.
A survey of the art of ancient Greece and Rome (ca. 1000 B.C.E.- 500 C.E.). Emphasis on major sites, architecture, sculpture, and painting. Illustrated lectures and discussion; use of the Wilcox Classical Museum. No knowledge of Greek or Latin is required. Not open to students who have taken both CLSX 526/HA 526 and CLSX 527/HA 537, except with permission of the instructor. (Same as HA 517, HWC 317.) LEC.

CLSX 330. Greek Literature and Civilization, Honors. 3 Hours. HL GE3H / H.
Honors version of CLSX 230. An introduction to ancient Greek literature and civilization through extensive readings in primary Greek texts. No knowledge of Greek required. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

CLSX 332. Scientific Word Power: Greek and Latin Elements in the Vocabulary of Science. 3 Hours. H.
A study of the terminology of science with reference to its debt to the Greek and Latin languages. While all the natural sciences will be treated, there will be some emphasis on the biological sciences. No knowledge of Greek or Latin is required. A student may not receive credit for both CLSX 232 and CLSX 332. LEC.

CLSX 340. Roman Literature and Civilization, Honors. 3 Hours. HL GE3H / H.
Honors version of CLSX 240. An introduction to ancient Roman Literature and civilization through extensive readings in primary Roman texts. No knowledge of Latin required. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

CLSX 350. Modern Themes, Ancient Models: ______. 3 Hours. H.
The study of the evolution of a cultural or literary tradition from the Graeco-Roman world into modern times. The theme of the course will
normally vary from semester to semester; topics such as these may be examined: the analysis of a literary genre (e.g. drama, satire, lyric), the transformation of the ancient mythical heritage, the reception of ancient astronomy. Students should consult the Schedule of Classes for the theme of the course in a given semester. With departmental permission, may be repeated for credit as topic varies. (Same as HWC 380.) LEC.

CLSX 351. Introduction to Classical Archaeology, Honors. 3 Hours. HT GE11/GE3H / H/W.
Honors version of CLSX 151, with the focus towards critical approaches and research. Special attention is paid to recent methodological, theoretical, and ethical debates within the profession of Classical archaeology. Assignments and activities may include position papers on contentious issues of the day, research assignments, and/or field trips to museums and related institutions. Prerequisite: Admission to the Honors Program or consent of instructor. LEC.

CLSX 355. Ancient Greece and Rome in Film. 3 Hours. H.
This course explores the reception of the cultures of ancient Greece and Rome in film. Students in this course learn about the cultures of ancient Greece and Rome through primary sources, and analyze several films from the 20th and 21st centuries for which these sources are relevant. The course considers the relationship between historical accuracy and artistic license in the films selected for the course, how each film reflects the concerns of the modern cultural context in which it was made, the common visual and thematic elements that link films set in ancient Greece or Rome, and the reuse of elements from Greek and Roman mythology and history in films set in the modern world. No knowledge of Latin or Greek required. LEC.

CLSX 374. Gender and Sexuality, Ancient and Modern. 3 Hours. AE42 / H.
Classical Greek and Roman attitudes to gender and sexuality compared and contrasted with modern notions and behaviors. Attention is paid to literature (dramatic, philosophical, medical, and legal texts) and archaeological evidence (vase painting, sculpture, and domestic architecture). The course may include the following topics: age divisions and rites of passage from childhood to maturity; marriage; conception, birth, and infanticide; the family; love; homoeroticism; property and economics; and sexuality and the law, politics, and religion. No knowledge of Greek or Latin is required: (Same as HWC 374.) LEC.

CLSX 375. Studies in: ______. 1-3 Hours. H/W.
Selected readings in Greek and Roman antiquity and the classical tradition for students who desire special work on a flexible basis. No knowledge of Greek or Latin is required. May be repeated for credit, the maximum being twelve hours. Prerequisite: Consent of instructor. LEC.

CLSX 384. The Rise of Greek Tragedy. 3 Hours. H.
Plays by Aeschylus, Sophocles, and Euripides will be read in translation. The criticism of the plays, and the role they play in Athenian (and Greek) culture of the 5th century. This course includes the Oresteia, Oedipus Tyrannus, Antigone, and Medea. No knowledge of Greek or Latin is required. LEC.

CLSX 388. Poetry and Politics in Fifth-Century Athens. 3 Hours. H.
The later plays of Euripides and Sophocles, selected plays by the comic dramatist Aristophanes, and passages from the historian Thucydides. Criticism of the plays, and discussion of themes common to literature and history in this period. The dissolution of a high culture. CLSX 384 is NOT a prerequisite. No knowledge of Greek required. LEC.

CLSX 490. Comprehensive Examination of Classical Antiquity. 1 Hour. U.
An examination covering the six areas of course work and reading for the Classical Antiquity major, to be taken by the student pursuing the major in the last semester of the senior year. Prerequisite: A declared major in Classical Antiquity and status as a graduating senior. IND.

CLSX 492. Independent Study for Classical Antiquity Majors. 3 Hours. U.
Under the supervision of an advisor in Classics, the student will do extensive reading in the area of Classics generously defined, to result in two or more papers as agreed upon between faculty and student. IND.

CLSX 496. Honors Essay in Classical Antiquity. 3 Hours. AE61 / H/W.
Individual directed research and preparation of an essay on a topic in Classical literature, culture, or language. Prerequisite: Eligibility for departmental honors and consent of essay advisor. IND.

CLSX 501. The History of the Latin Language. 3 Hours. H.
The place of Latin among the Indo-European languages and the languages of Italy, its development as a literary medium, and how it changed in pronunciation, vocabulary, and grammar from its beginnings through the Medieval period. LEC.

CLSX 502. Development of Ancient Greece, ca. 1000-300 B.C.. 3 Hours. H/W.
Emphasis on the ancient sources and texts, developments in political institutions and society, the changing definitions of personal, cultural, and national identities, and the cultural tensions between Greece and the cultures to the west and east, especially Italy and Persia. No knowledge of the ancient languages is required. (Same as HIST 502.) LEC.

CLSX 515. Gender and Sexuality in Greek Culture. 3 Hours. H.
This course explores various approaches to the study of gender and sexuality in Greek antiquity. Contents will vary, and the course may focus on methodology and case studies, or on particular themes, historical periods, or artistic or literary genres. No knowledge of Greek or Latin is required. (Same as WGSS 515.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, or Women, Gender and Sexuality Studies; or permission of instructor. LEC.

CLSX 516. Gender and Sexuality in Roman Culture. 3 Hours. H.
This course explores various approaches to the study of gender and sexuality in Roman antiquity. Contents vary, and the course may focus on methodology and case studies, or on particular themes, historical periods, or artistic or literary genres. No knowledge of Greek or Latin is required. (Same as WGSS 516.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, or Women, Gender and Sexuality Studies; or permission of instructor. LEC.

CLSX 525. Aegean Archaeology and Art. 3 Hours. H/W.
An interdisciplinary survey of the major cultures of the prehistoric Aegean (Greek) world from the Neolithic period to the end of the Bronze Age (ca. 3000-1100 B.C.E.), with special emphasis on the cultural and artistic achievements of the Mycenaeans, Minoans, and Cycladic islanders, including their contacts with the neighboring cultures of Anatolia (Hittites and Troy), the Levant, Egypt, and South Italy. Includes lecture with slides and discussion. For advanced undergraduates with backgrounds in the humanities and for graduate students (especially in Classics and History of Art). No knowledge of Greek or Latin is required. (Same as HA 525.) LEC.

CLSX 526. Greek Archaeology and Art. 3 Hours. H/W.
An interdisciplinary survey of the material culture of the ancient Greek world from the Protogeometric period to the end of the Hellenistic age (ca. 1100 - 30 B.C.E.), with emphasis on the major sites, monuments, and changing forms of social and artistic expression (e.g., architecture, sculpture, vase painting). Includes lectures with slides and discussion; use of the Wilcox Museum of Classical Antiquities. For advanced undergraduates with backgrounds in the humanities and for graduate
students (especially in Classics and History of Art). No knowledge of Greek or Latin is required. (Same as HA 526.) LEC.

CLSX 527. Roman Archaeology and Art. 3 Hours. H/W.
An interdisciplinary survey of the material culture of ancient Rome from its origins to the late empire (8th c.B.C.E. - 4th c.E.). Emphasis on major sites, monuments, and changing forms of social and artistic expression, as well as on Etruscan and Greek influence on Rome and Rome's influence on its provinces. Includes lectures with slides and discussion; use of the Wilcox Museum of Classical Antiquities. No knowledge of Greek or Latin is required. For advanced undergraduates with backgrounds in the humanities; and for graduate students (especially in Classics and History of Art). (Same as HA 537.) LEC.

CLSX 529. Archaeology and Art of the Ancient Near East. 3 Hours. H.
A cross-cultural survey of the material remains of the major civilizations of the ancient Near East, including Anatolia, Mesopotamia, the Levant, and Egypt from Neolithic period to the rise of the Roman empire (ca. 6000 B.C.E. - 30 B.C.E.). Includes lectures with slides and discussion. For advanced undergraduates with backgrounds in the humanities and for graduate students (especially in Classics and History of Art). No knowledge of Greek or Latin is required. (Same as HA 529.) LEC.

CLSX 538. Pompeii and Herculaneum. 3 Hours. H.
An interdisciplinary treatment of the art and archaeology of the ancient Roman cities of Pompeii and Herculaneum in Italy. Emphasis on the structures and decorations of major public spaces and houses and on aspects of cultural, social, political, commercial, and religious life from the period of the second century B.C.E. to 79 C.E., when Pompeii and Herculaneum were buried by the eruption of Mt. Vesuvius. Slide lectures and discussion. (Same as HA 538, HWC 538.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, History of Art, or permission of the instructor. LEC.

CLSX 550. Capstone in Classics. 1-3 Hours. AE61 / H.
This capstone seminar synthesizes various aspects in the discipline of Classics by focusing on recent award-winning scholarship or creative work in the field. Specific assignments and additional readings vary from one semester to another and will be stated on the instructor's syllabus. Introductory knowledge of Greek or Latin is required. Prerequisite: 15 hours in CLSX/LAT/GRK at the 200 level or above, or status as a senior major in the department, or permission of the instructor. LEC.

CLSX 570. Study Abroad Topics in Greek and Roman Culture: ______. 1-3 Hours. H.
This course is designed for the study of special topics in Classics at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

CLSX 575. Readings in: ______. 1-3 Hours.
Selected readings in Greek and Roman antiquity and the classical tradition for students who desire special work on a flexible basis. No knowledge of Greek or Latin is required. May be repeated for credit if topic varies. Only six hours may count toward the major. Prerequisite: Consent of instructor. LEC.

CLSX 576. Topics in Greek and Roman Literature: ______. 3 Hours. H.
Lecture and discussion course focusing on a theme, genre, or period of literature from the ancient classical world. No knowledge of Greek or Latin is required. May be repeated for credit if topic varies. Only 6 hours may count toward the major. LEC.

CLSX 577. Topics in the Archaeology and Art of the Ancient Mediterranean: ______. 3 Hours. AE61 / H.
Lecture and discussion course focusing on a theme, medium, region, or period in the archaeology and art of the ancient Near Eastern and classical world. May be repeated for credit if topic varies. Only 6 hours may count toward the major. LEC.

CLSX 675. Studies in: ______. 1-3 Hours. H/W.
Selected readings in Greek and Roman antiquity and the classical tradition for students who desire special work on a flexible basis. No knowledge of Greek or Latin is required. May be repeated for credit, the maximum being twelve hours. Prerequisite: Consent of instructor. IND.

CLSX 717. Investigations in Greek Drama I. 3 Hours.
Attendance at CLSX 384 required, plus one seminar per week, discussing the scholarly background of the major lecture, as well as the problems and aims of teaching Greek drama in English to undergraduates. No knowledge of Greek is required. RSH.

CLSX 718. Investigations in Greek Drama II. 3 Hours.
A continuation of CLSX 717. Attendance at CLSX 388 plus one seminar per week. No knowledge of Greek is required. RSH.

CLSX 790. Practicum in the Teaching of Classics. 0.5 Hours.
Required of all assistant instructors and teaching assistants in the teaching of Classics courses. May be repeated up to three semester hours credit in total. FLD.

CLSX 899. Thesis. 1-6 Hours.
Thesis hours. THE.

GRK 104. Elementary Ancient Greek. 5 Hours. U.
The essentials of ancient Greek grammar, with readings. LEC.

GRK 105. Elementary Ancient Greek, Honors. 5 Hours. U.
The essentials of ancient Greek grammar, with readings. Prerequisite: Membership in the University Honors Program or permission of instructor. LEC.

GRK 108. Ancient Greek Readings and Grammar. 5 Hours. U.
A continuation of Greek 104, with extensive readings from one or more classical authors. Prerequisite: GRK 104 or GRK 105. LEC.

GRK 109. Ancient Greek Readings and Grammar, Honors. 5 Hours. U.
A continuation of GRK 105, with extensive readings from one or more classical authors. Prerequisite: GRK 104 or 105; and membership in the University Honors Program or permission of instructor. LEC.

GRK 112. Intermediate Ancient Greek. 3 Hours. U.
Systematic grammar review and selected texts from Plato and Euripides. Prerequisite: GRK 108 or GRK 109 or consent of instructor. LEC.

GRK 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Greek. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

GRK 301. Philosophy and Oratory. 3 Hours. H/W.
Systematic grammar review in conjunction with readings selected from Plato, Aristotle and the Attic orators, with attention to issues of interpretation and social and cultural history. Prerequisite: GRK 108 or GRK 109. LEC.

GRK 302. Drama and Lyric Poetry. 3 Hours. H/W.
Systematic grammar review in conjunction with readings selected from Aeschylus, Sophocles, Euripides, and the lyric poets, with attention to issues of literary interpretation and cultural history. Prerequisite: GRK 108 or GRK 109. LEC.

GRK 303. Greek Narrative Prose. 3 Hours. H/W.
Systematic grammar review in conjunction with readings selected from the historians Herodotus, Thucydides, and Xenophon, as well as from the
Greek novels and the New Testament. Attention will be given to issues of interpretation and cultural history. Prerequisite: GRK 108 or GRK 109. LEC.

GRK 310. Homer's Odyssey. 3 Hours. H/W.
Selections from Homer's Odyssey, with attention to issues of literary translation and interpretation, performance, and social and cultural history. Prerequisite: GRK 301, or GRK 302, or GRK 303. LEC.

GRK 312. Homer's Iliad. 3 Hours. H/W.
Selections from Homer's Iliad, with attention to issues of literary translation and interpretation, performance, and social and cultural history. Prerequisite: GRK 301, or GRK 302, or GRK 303. LEC.

GRK 375. Readings in: ______. 1-3 Hours. H/W.
Readings in classical Greek texts. May be repeated for up to twelve hours. Prerequisite: GRK 108 or the equivalent. IND.

GRK 496. Honors Essay in Greek. 3 Hours. AE61 / H/W.
Individual directed research and preparation of an essay on a topic in Greek literature or language. Prerequisite: Eligibility for departmental honors and consent of essay advisor. IND.

GRK 508. Early Greek Philosophy. 3 Hours. H/W.
A study of the doctrines of Greek philosophy before Plato. Emphasis on the Pre-Socratic philosophers with some attention paid to the Sophists and the Hippocratic Corpus. (Same as PHIL 508.) Prerequisite: PHIL 384, or GRK 301, or GRK 302, or GRK 303, or GRK 310, or GRK 312, or permission of instructor. LEC.

GRK 701. Archaic Poetry. 3 Hours.
Close reading of texts from Homer, Hesiod, Pindar, the lyric poets. LEC.

GRK 702. Drama. 3 Hours.
Close reading of texts from Aeschylus, Sophocles, Euripides, Aristophanes. LEC.

GRK 703. History and Oratory. 3 Hours.
Close reading of texts from Herodotus, Thucydides, Xenophon, Attic orators. LEC.

GRK 704. Philosophy. 3 Hours.
Close reading of texts from Plato, Aristotle, the Pre-Socratics. LEC.

GRK 705. Readings in Classical Greek. 3 Hours.
Extensive reading in a variety of Greek authors. LEC.

GRK 790. Practicum in the Teaching of Greek. 0.5 Hours.
Required of all assistant instructors and teaching assistants in the teaching of Greek. May be repeated up to three semester hours credit in total. FLD.

GRK 798. Studies in: ______. 1-3 Hours.
Selected readings for qualified students who desire special work on a flexible basis. May be repeated for credit, the maximum being twelve hours. Prerequisite: Undergraduate proficiency in Greek or equivalent. RSH.

GRK 899. Thesis. 1-6 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

LAT 104. Elementary Latin I. 5 Hours. U.
An introduction to the Latin language. LEC.

LAT 105. Elementary Latin I, Honors. 5 Hours. U.
Integrates study of elementary Latin with study of Roman culture. Prerequisite: Admission to Honors Program or permission of department. LEC.

LAT 108. Elementary Latin II. 5 Hours. U.
Latin grammar concluded with selected readings. Prerequisite: LAT 104 or LAT 105, or permission of department. LEC.

LAT 109. Elementary Latin II, Honors. 5 Hours. U.
Latin grammar concluded with selected readings, integrated with study of Roman culture. Prerequisite: LAT 105 or permission of department. LEC.

LAT 112. Readings in Latin Literature. 3 Hours. U.
Systematic grammar review in conjunction with selected prose authors, such as Cicero or Caesar, with additional readings in Roman poetry. Attention to literary history and historical context. Prerequisite: LAT 108 or LAT 109, or permission of department. LEC.

LAT 113. Readings in Latin Literature, Honors. 3 Hours. U.
Systematic grammar review in conjunction with selected prose authors, such as Cicero or Caesar, with additional readings in Roman poetry. Exercises in literary analysis and/or prose composition. Prerequisite: LAT 109 or permission of department. LEC.

LAT 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Latin. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

LAT 200. Vergil's Aeneid. 3 Hours. H/W.
Selections from Vergil's Aeneid, with attention to literary interpretation and literary history. Prerequisite: LAT 112 or LAT 113 or permission of department. LEC.

LAT 201. Vergil's Aeneid, Honors. 3 Hours. H/W.
Selections from Vergil's Aeneid with attention to literary history. Exercises in literary interpretation and verse composition. Prerequisite: LAT 113 or permission of department. LEC.

LAT 300. Intermediate Latin Composition. 3 Hours. H/W.
Composition in Latin prose, stressing the basic principles of Latin syntax and style. Recommended for majors and minors. Prerequisite: LAT 200 or LAT 201. LEC.

LAT 301. Prose Fiction and Epistolography. 3 Hours. H/W.
Selected readings from such authors as Cicero, Seneca, Petronius, Pliny, and Apuleius, with attention to literary interpretation and historical context. Prerequisite: LAT 200 or LAT 201, or permission of department. LEC.

LAT 302. Hexameter Poetry. 3 Hours. H/W.
Selected readings from such authors as Lucretius, Vergil, Ovid, and the satirists, with attention to literary interpretation and historical context. Prerequisite: LAT 200 or LAT 201, or permission of department. LEC.

LAT 303. Roman Historians. 3 Hours. H/W.
Selected readings from such authors as Caesar, Livy, and Tacitus, with attention to issues in Roman history and historiography. Prerequisite: LAT 200 or LAT 201, or permission of department. LEC.

LAT 304. Lyric and Elegiac Poetry. 3 Hours. H/W.
Selected readings from such authors as Catullus, Horace, Tibullus, Propertius, Sulpicia, Ovid, and Martial, with attention to literary interpretation and historical context. Prerequisite: LAT 200 or LAT 201, or permission of department. LEC.

LAT 305. Roman Drama. 3 Hours. H/W.
Selected readings from such authors as Plautus, Terence, and Seneca, with attention to literary interpretation, theater history, and performance. Prerequisite: LAT 200 or LAT 201, or permission of department. LEC.

LAT 375. Readings in: ______. 1-3 Hours. H/W.
Readings in Latin literature, selected in consultation with the instructor. May be repeated for up to twelve hours. Prerequisite: LAT 200 or LAT 201, or consent of instructor. IND.
LAT 496. Honors Essay in Latin. 3 Hours. AE61 / H/W.
Individual directed research and preparation of an essay on a topic in Latin literature or language. Prerequisite: Eligibility for departmental honors and consent of essay advisor. IND.

LAT 700. Advanced Latin Prose Composition. 3 Hours.
An examination of the grammar, syntax, and style of the Latin language through exercises in composition. Prerequisite: Consent of instructor. LEC.

LAT 701. Hexameter Poetry. 3 Hours.
Close reading of texts from authors such as Lucretius, Vergil, Ovid, Statius. Prerequisite: Consent of instructor. LEC.

LAT 702. Lyric and Elegy Poetry. 3 Hours.
Close reading of texts from authors such as Catullus, Horace, Propertius, Tibullus, Sulpicia, Ovid, Martial. Prerequisite: Consent of instructor. LEC.

LAT 703. History, Oratory, Philosophy. 3 Hours.
Close reading of texts from authors such as Cicero, Livy, Seneca, Tacitus, Augustine. Prerequisite: Consent of instructor. LEC.

LAT 704. Drama, Satire, and Novel. 3 Hours.
Close reading of texts from Plautus, Terence, Horace, Petronius, Seneca, Juvenal, Apuleius. LEC.

LAT 705. Readings in Classical Latin. 3 Hours.
Extensive reading in a variety of Latin authors. LEC.

LAT 790. Practicum in the Teaching of Latin. 0.5 Hours.
Required of all assistant instructors and teaching assistants in the teaching of Latin. May be repeated up to three semester hours credit in total. FLD.

LAT 791. Seminar in the Teaching of Latin. 3 Hours.
An introduction to teaching required of all assistant instructors and teaching assistants. Topics to include: pronunciation, etymology, Latin style, testing methods, and the selecting of texts. LEC.

LAT 798. Studies in: _____. 1-3 Hours.
Selected readings for qualified students who desire special work on a flexible basis. May be repeated for credit, the maximum being twelve hours. Prerequisite: Undergraduate proficiency in Latin or equivalent. RSH.

LAT 899. Thesis. 1-6 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

**Communication Studies Courses**

COMS 104. Introduction to Communication Studies. 3 Hours. H.
Survey of the major areas of the Communication Studies field. Provides an overview of communication theory and research methods, and introduces key topics, approaches, and applications in core areas such as rhetoric, organizational communication, interpersonal communication, intercultural communication, and communication technology. LEC.

COMS 130. Speaker-Audience Communication. 3 Hours. GE22 / U.
Study of rhetorical theory and its application to the preparation, presentation, and criticism of oral discourse in audience situations. Special consideration of listening behavior and of the ethical conduct of speech in a free society. This course fulfills the College argument and reason requirement. LEC.

COMS 131. Speaker-Audience Communication, Honors. 3 Hours. GE22 / U.
The study of rhetorical theory and its application to the preparation, presentation, and criticism of oral discourse in audience situations. Special consideration of listening behavior and of the ethical conduct of speech in a free society. This course fulfills the College argument and reason requirement. This is an honors section of COMS 130 open only to students in the Honors Program. LEC.

COMS 132. Speaker-Audience Communication for the Professional Schools. 3 Hours. GE22 / H.
This course focuses on the study of oral communication: the application, preparation, presentation and criticism of messages appropriate in the business or organizational setting. Special consideration is given to speaker confidence, working in teams, listening behaviors and application of communication theories to the audience and rhetorical situation. Not open to students with credit in COMS 150. Prerequisite: Open only to students in the professional schools. LEC.

COMS 133. Speaker-Audience Communication for the Professional Schools, Honors. 3 Hours. GE22 / H.
This course focuses on the study of oral communication the application, preparation, presentation and criticism of messages appropriate in the business or organizational setting. Special consideration is given to speaker confidence, working in teams, listening behaviors and application of communication theories to the audience and rhetorical situation. Not open to students with credit in COMS 150. Prerequisite: Open only to students in the professional schools who are members of the University Honors Program. LEC.

COMS 150. Personal Communication. 3 Hours. U.
This course is an introduction to communication theory, process, and skill. The course seeks to increase the student's understanding of communication theory, both interpersonal and public, and of his or her own communicative behavior. Class projects and participation urge students to apply this theoretical knowledge to a variety of settings, including interpersonal and addressing groups and audiences. This course does not fulfill the College argument and reason requirement. Not open to those who have credit in COMS 130. LEC.

COMS 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Communication Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

COMS 201. Introduction to Leadership. 2 Hours. H.
This course introduces students to the study of the leadership process. The course covers theories and research on core themes of leadership, focusing on how course materials relate to students' own leadership experiences. This course is taught online. Concurrent enrollment in COMS 202 is recommended. Students considering the Leadership Studies Minor must complete COMS 202. Not open to seniors. LEC.

COMS 202. Introduction to Leadership Applications. 1 Hour. AE51 / H.
This course focuses on the application of information learned in COMS 201. Activities and discussions emphasize application, analysis, and engagement with the process of leadership. Concurrent enrollment in COMS 201 is recommended. Students considering the Leadership Studies Minor must complete COMS 201 and COMS 202. Not open to seniors. Prerequisite/co-requisite: COMS 201. LEC.

COMS 210. Communication in Organizational and Professional Contexts. 3 Hours. S.
Introduces foundational concepts in organizational communication, focusing on topics such as superior-subordinate relationships, information- and feedback-seeking, relationships with stakeholders, and dealing with organizational change. The course emphasizes individual communication practices and responsibilities that contribute to organizational outcomes and personal success in organizations. LEC.
COMS 230. Fundamentals of Debate. 3 Hours. GE11 / U.
Introduction to the principles of debating. Emphasis on debating techniques, analysis of the question, methods of using evidence, refutation, and brief making. This course fulfills the College argument and reason requirement. LEC.

COMS 231. Practicum in Forensics. 1 Hour. U.
For students selected by faculty supervisor for work on university debate squad. Students to enroll at time of their selection. Recurring enrollments permitted. FL D.

COMS 232. The Rhetorical Tradition. 3 Hours. HR / H.
Historical survey of theories of communication and persuasion, the people who produced them, and the philosophical assumptions upon which they rest. Beginning with the Greeks, especially Plato and Aristotle, and ending with selections from Kenneth Burke and other contemporary figures, the course focuses on changing concepts of rhetoric throughout a time span of some 2000 years. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 235. Introduction to Rhetoric and Social Influence. 3 Hours. HL GE11 / H.
This course examines in detail the texts of speeches and essays on controversial issues in order to illustrate the varied forms of rhetorical action and the diverse modes of analysis and evaluation that can be applied to them. Examples are drawn from the rhetorical literature of contemporary U. S. speakers and prose writers. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 238. Cases in Persuasion. 3 Hours. H.
An exploration of the principles of persuasion and the use of them in controversial issues in order to illustrate the varied forms of rhetorical action and the diverse modes of analysis and evaluation that can be applied to them. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 307. Introduction to Political Communication. 3 Hours. S.
The primary goal of this course is to encourage critical engagement in politics and political campaigns. This course addresses various elements of political communication, with primary focus on the political campaign. By the end of the semester students are able to understand the relevant theories of political communication, evaluate and use critical thinking skills in consuming political messages, and grasp the complex structural and situational factors that influence political discourse. Prerequisite: COMS 130. LEC.

COMS 310. Introduction to Organizational Communication. 3 Hours. SC GE3S / S.
This course provides a foundation for the study of communication in organizational contexts. It introduces students to various organization theories including classical, human relations, systems, and cultural approaches and examines the role of communication in each. Information flow, communication climate, communication networks, work relationships and managerial communication are discussed as well as organizational symbolism, conflict resolution, rituals and ethics. The course is designed to heighten students’ awareness of the role of communication in the organizing process and to develop their abilities to diagnose and prevent communication-related problems. Prerequisite: COMS 130 or COMS 150. LEC.

COMS 320. Communication on the Internet. 3 Hours. S.
This course introduces social and communication issues in the context of online interaction. Surveys a range of social internet technologies (e.g., newsgroups, chat, MUDs, etc.). Focus is on the interpersonal topics, including the establishment and maintenance of individual and cultural identities, personal relationships, the emergence of online communities, power and conflict in online groups, language use in online contexts, and how online groups are used to enhance or alter civic and global cultures. LEC.

COMS 330. Effective Business Communication. 3 Hours. S.
The purpose of this course is to develop effective written, spoken, and electronically mediated communication skills necessary for business. Students will write short technical reports, plan meetings and conferences, prepare and present briefings and persuasive proposals with visual aids, and examine the use of new communication technologies. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 333. Rhetoric, Politics and the Mass Media. 3 Hours. H.
This course investigates in detail the texts of speeches and essays on controversial issues in order to illustrate the varied forms of rhetorical action and the diverse modes of analysis and evaluation that can be applied to them. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 334. Relational Communication. 3 Hours. S.
This course studies communication issues, theories, research and skills applicable to sustaining and enriching long-term relationships, such as families, friendships and close workplace collaborations. Emphasis is given to applying course concepts to students’ own relationships and interaction in class. Prerequisite: COMS 244. LEC.
COMS 356. Introduction to Behavioral Research Methods in Communication. 3 Hours. GE12 / S.
An introduction to the nature of theory and theory building in the study of human communication. Research methods include experimentation, survey, content analysis, and field description. An introduction to statistics and statistical tests is included as well. Prerequisite: MATH 101 and admission to the Communication Studies major or consent of instructor. LEC.

COMS 410. Micro-Level Organizational Communication. 3 Hours. S.
An examination of dyadic level communication in organizations, with emphasis on contexts of superior-subordinate and peer communication. The course also addresses contexts of organizational entry and exit, perception and judgment, information seeking, feedback, and organizational attachment. Prerequisite: COMS 310. LEC.

COMS 411. Marco Level Organizational Communication. 3 Hours. S.
An exploration of the communication patterns and challenges between organizational groups and organizations as a whole. Key elements include networks, boundary spanning, inter-organizational collaboration, and the role of technology in linking large organizational components. Prerequisite: COMS 310 or instructor permission. LEC.

COMS 412. Communication in Distributed Organizations. 3 Hours. S.
Examination of the communication challenges faced by distributed organizations, especially those with a global presence. Topics include telework, virtual terms, and new processes required to support interaction among people located in several different places. Prerequisite: COMS 310 or permission of instructor. LEC.

COMS 420. Communication, Technology and Globalization. 3 Hours. H.
Examines the social, cultural, and economic challenges and opportunities advanced communication technologies and globalization pose to processes such as democratic deliberation, urban governance, and environmental sustainability. Prerequisite: COMS 130. LEC.

COMS 425. Communication and the American Presidency. 3 Hours. H.
Examination of the ways in which American presidents communicate with the American people and how such communication influences the public. Emphasis is on a number of approaches to better understanding presidential communication, including rhetorical, historical, and content analysis. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 431. Communication and Leadership. 3 Hours. H.
This course provides an overview of the role of communication in leadership in a variety of contexts, including: interpersonal, small group, intercultural, organizational, and public sphere. It will include theoretical and experiential approaches to effective leadership communication. Prerequisite: Admission to Leadership Minor or consent of instructor. LEC.

COMS 435. Forms and Styles of American Public Discourse. 3 Hours. H.
Changing styles of public discourse are examined from the beginning of the nation to contemporary times, and the generic forms of address that have emerged from our national dialogue, such as jeremiads, inaugurals and apologies, are studied from a formistic perspective. Prerequisite: COMS 235. LEC.

COMS 440. Communication and Gender. 3 Hours. AE41 / S.
Focuses attention on the relationship between communication and gender, including both physical and psychological dimensions. Topics include: sex role orientations and stereotypes; perceived and actual differences in verbal and nonverbal communication behaviors; the influence of gender on communication in a variety of contexts. (Same as WGSS 440.) Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 441. Health Communication. 3 Hours. H.
This course is a survey of the many disciplines found in the field of health communication, including persuasion that targets health-related behavior, negotiation of treatment with health care providers, emotional support of patients, news media coverage of medical research, and health campaign principles. Prerequisite: COMS 130. LEC.

COMS 447. Intercultural Communication: The Afro-American. 3 Hours. AE41 / H/W.
An examination of the barriers to effective communication between black Americans and non-black Americans. (Same as AAAS 420.) Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 450. Ethical Issues in Political Communication. 3 Hours. H.
Application of ethical standards to the evaluation of political communication. Examination of value questions related to advocacy in modern society (propaganda, demagoguery, credibility). Analysis of First Amendment rights and other issues pertaining to censorship and freedom of speech (defamation, dissent, incitement, public morals, privacy). Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 453. Communication in Political Campaigns. 3 Hours. H.
This course examines political communication as it evolves throughout a political campaign and includes such topics as theories and strategies, stages in political campaigns, influence of the mass media, television advertising, candidate debates, polling, and the use of new technologies in delivering campaign communication. Selected examples from recent campaigns illustrate the strategies and effects of political communication as we examine how politicians persuade us to vote for them. Prerequisite: A course in communication studies. LEC.

COMS 459. Undergraduate Seminar in: ______. 1-3 Hours. H.
Course organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. (Distribution credit given for two or three hours only.) LEC.

COMS 460. Undergraduate Seminar in: ______. 1-3 Hours. S.
Course organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. (Distribution credit given for two or three hour enrollments only.) LEC.

COMS 485. Communication and Organizational Change. 3 Hours. S.
Examines communication processes that support or hinder implementation of organizational change. Topics include stakeholder analysis, individual responses to change, communicating about change, generating support for change, and managing resistance to change. LEC.

COMS 496. Capstone in: ______. 3 Hours. S.
In the capstone course students synthesize and apply knowledge and skills gained through the major. Capstone coursework requires students to integrate practices and theories learned in their areas of concentration. Topics within each concentration change as needs and resources develop. Prerequisite: Senior standing, COMS 130, and completion of COMS 235 and COMS 356 or concurrent enrollment. LEC.

COMS 497. Honors Seminar. 3 Hours. AE61 / H.
This course is intended for honor students who want to learn more about the history of communication studies, major areas of research, or more in-depth knowledge about special communication-related topics. Areas to be covered may change as needs and resources change. LEC.
COMS 498. Honors Thesis. 2-6 Hours. AE61 / H.
(Six hours maximum credit, which may be distributed through two semesters.) Study should include readings directed toward original research, i.e., an intensive investigation of a specific problem in this field. Prerequisite: Consent of the Department Honors Committee. IND.

COMS 499. Directed Study in Communication Studies. 1-3 Hours. H.
(A maximum of six hours of credit may be counted, with not more than four in a single area of study.) Investigation of a special topic or project selected by the student with advice, approval, and supervision of an instructor. Such study may take the form of directed reading, or special research, individual reports and conferences. (Distribution credit given for two-three hours only.) Prerequisite: At least seven hours of credit in the department and consent of instructor. IND.

COMS 503. Post-Soviet Communication. 3 Hours. H.
This course is designed to acquaint students with the shifting manner of public discourse in Post-Soviet Russia and help them to explore in some depth cross-cultural communication between America and Russia. In addition to contemporary and historical background on Russian communicative practices, students examine discourse in business development, mass media, marketing, and advertising. All readings in English. (Same as SLAV 503). LEC.

COMS 530. Internship in Communication Studies. 1-3 Hours. AE61 / S.
Students do communication-centered fieldwork in an organization related to their career goals. Criteria for the organizations and work assignments suitable for internship credit are in an information brochure available at the COMS Department office and website. The internship plan is developed with field supervisor and internship faculty adviser. Reports and meetings are required. Prerequisite: Permission of instructor, admission to COMS major. FLD.

COMS 531. Seminar in Leadership Strategies and Applications. 3 Hours. H.
This seminar serves as the capstone course for the Leadership Studies minor. It includes advanced readings on leadership theory and practice, as well as major written and applied projects in which students integrate and demonstrate what they have learned in the program. Prerequisite: COMS 201, COMS 431, and admission to the Leadership Studies minor. LEC.

COMS 532. Leadership Studies Practicum. 1-3 Hours. AE61 / U.
Students engage in a variety of training programs and field experiences in which they learn about leadership, observe leaders in action, and involve themselves in leadership activities. Written assignments and group discussions are used to analyze their learning. Should be taken for a total of three credit hours, across more than one semester. Prerequisite: COMS 201 and admission to the Leadership Studies minor. FLD.

COMS 535. American Public Address, Puritans to 1900. 3 Hours. H.
A history of American public address from the Puritans to about 1900. Using the tools of rhetorical criticism, students describe, analyze, and evaluate select rhetoric from the period. Graduate students are assigned extra reading and a research paper. Prerequisite: COMS 235. LEC.

COMS 536. American Public Address, 1900-Present. 3 Hours. H.
A history of American public address from 1900 to the present. Using the tools of rhetorical criticism, students describe, analyze, and evaluate select rhetoric from the period. Graduate students are assigned extra reading and a research paper. Prerequisite: COMS 235. LEC.

COMS 537. Communication in Conflict Resolution. 3 Hours. S.
An examination of conflict situations and the manner in which communication can serve as a vehicle for their intensification or resolution. The focus is on the theory of games as it applies to conflict within interpersonal situations; implications will be drawn for larger social systems. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 538. Persuasion Theory and Research. 3 Hours. S.
This course focuses on the social scientific study of persuasion. Traditional theories of attitude change and persuasion research are studied along with techniques of measuring attitudes. Attention is also given to the attitude-behavior relationship and the production of compliance-gaining messages. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 539. Argumentation. 3 Hours. S.
Analysis of the theory and techniques of argumentation in historical and contemporary writings, with special emphasis on the works of Aristotle, John Stuart Mill, Richard Whateley, and Stephen Toulmin. Application of argumentation theory to political and legal discourse. Opportunity for student performances in the preparation and criticism of argument. Prerequisite: Four hours in the department. LEC.

COMS 543. Group Leadership Practicum. 1-3 Hours. S.
Theory and practice in leadership of small group interaction. Includes responsibility for conducting a semester-long series of group meetings in an educational context under the supervision of faculty, study and training in leadership skills, a weekly practicum seminar, and individual conferences with supervising instructor. May be taken more than once, but not for more than four hours total credit. (Distribution credit given for two-three hours only.) Prerequisite: COMS 344, COMS 455, and permission of instructor. FLD.

COMS 544. Advanced Interpersonal Communication: Theories and Research. 3 Hours. S.
Intensive exploration of contemporary theories and research in the field of interpersonal communication; emphasis on an array of theoretical models and research exemplars; comparative analysis of major theoretical and research paradigms. Prerequisite: COMS 244 or instructor consent. LEC.

COMS 546. Communication Across the Life-span. 3 Hours. S.
Examination of the ways in which communication changes across the life-span, and influences human development. Course will include topics such as barriers to communication among elderly populations; communication and mis-communication across generations; the role of language in constructing life-span development (e.g., the mid-life crisis); development of language and social interaction during childhood; peer relationships and communication in adolescence; uses and effects of mass communication across the life-span. Prerequisite: COMS 244 and COMS 356. LEC.

COMS 547. Communication and Culture. 3 Hours. S.
A study of the systematic relationship between communication and culture. Emphasis is on culture as a variable in communicative situations: cultural aspects of attitude and cognition, language interchange, cultural differences in extra-verbal behavior, interaction between oral traditions and mass media. Prerequisite: COMS 130, COMS 150, COMS 230, or an introduction course in anthropology. LEC.

COMS 548. Theories of the Interview. 3 Hours. S.
Comprehensive study of communication processes in dyadic, face-to-face situations commonly encountered in organizations and professional environments. Intensive analysis of simulated and real-life interviews. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 549. Communication In Service And Sales. 3 Hours. S.
This course will deal with communication between organizational personnel and their customers or clients. Case studies and research concerning communication behaviors of service providers and salespeople will be covered. Prerequisite: COMS 310. LEC.
COMS 551. The Rhetoric of Black Americans. 3 Hours. H/W.
A study of the rhetoric of black Americans, from their earliest protest efforts to the contemporary scene, with focus on the methods and themes employed to alter their status in American society. (Same as AAAS 534.) Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 552. The Rhetoric of Women's Rights. 3 Hours. AE41 / H.
An analysis of the themes and rhetorical strategies of the women's rights movement in America. The course will view the struggle for women's rights from a historical perspective and will conclude with contemporary issues concerning the role of women in society. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 554. Rhetoric of Popular Culture. 3 Hours. H.
A study of the social and cultural importance of popular culture. Emphasis is on using rhetorical analysis and a number of important theoretical perspectives to help examine popular culture's often unnoticed influence. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 555. Family Communication. 3 Hours. S.
An examination of trends and theory related to the scientific study of the family, with a focus on issues related to family interaction, functioning, relationships, and communication. Research and theories from communication, sociological, and psychological perspectives are employed to examine topics such as family violence, mental health problems, marital satisfaction, divorce, courtship, and the impact of the family on its children (and vice versa). Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 557. East Asian Communication. 3 Hours. S.
Explores the major communication theories and research in the East Asian cultural contexts by focusing on the Chinese, Japanese, and Korean cultures. Examines, from a broader perspective, certain cultural values (e.g., harmony, hierarchy, conservatism, and modernism) upheld in East Asian cultures and their influences on people's communicative behaviors in an age of globalization. Students explore issues of history, identity, verbal and non-verbal symbols, stereotypes, prejudice, values and thought patterning systems in the East Asian cultural context from a communicative perspective. This course is designed as a bridge course and meets with a graduate level section of the same title. Prerequisite: COMS 246. LEC.

COMS 559. Seminar in: ____. 1-3 Hours. H.
Course organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. (Distribution credit given for two-three hours only.) LEC.

COMS 560. Seminar in: ____. 3 Hours. S.
Course organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. (May be repeated for credit if content varies.) LEC.

COMS 590. Nonverbal Communication. 3 Hours. S.
Examination of non-linguistic behavior in human communication, including proxemics (spacing), kinesics (movement and expression), and paralinguistics (voice quality). Includes phylogenetic and developmental perspectives, methods of analysis, applications to interpersonal problems. (Same as PSYC 590.) Prerequisite: COMS 356 or PSYC 210 or PSYC 211. LEC.

COMS 603. Topics in Presidential Rhetoric: ____. 3 Hours. H.
This course involves an examination of presidential rhetoric, including a focus on the strategies present in presidential discourse, the function that this rhetoric serves, and the historical context in which it was presented. One or more important presidential rhetors will be covered each semester. This course can be repeated for credit if taken under a different topic. LEC.

COMS 605. Speech Writing. 3 Hours. H.
Emphasis is on actual practice in preparing speech manuscripts for oneself and others. Model speeches are examined to better understand language, evidence, and stylistic choices available to speech writers. The ethical dimensions of writing for others in corporate and political positions are stressed. Students are required to prepare a variety of speeches and analyses of others' speeches. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 607. Political Communication. 3 Hours. H.
This course will focus on contemporary political communication theory and illustrate how such theories are exemplified in modern political contexts: political arguments and developing consensus, constitutional issues and hearings, the rhetorical presidency, the dissemination of political information, and political uses of definition. (Same as POLS 520.) Prerequisite: COMS 130 or COMS 150. LEC.

COMS 608. Communication, Media and Terrorism. 3 Hours. S.
The course considers the topics of media and terrorism from a macro public opinion and politics perspective. This course addresses the nature of terrorism, who terrorists are, and what are their grievances with the larger society in which they are embedded. Terrorism has unique links to communication and these will be explored in various ways: consideration of acts of terror, recruiting new terrorists, and issues in choosing effective and ineffective means of fighting terrorism. Additional topics include media portrayals of terrorism in news discourse and mediated communication such as motion pictures and televised dramatic portrayals. Prerequisite: COMS 130. LEC.

COMS 620. Communication and New Technology. 3 Hours. S.
This course explores the impact of new communication technology on individuals and groups in various contexts. Topics include: The development of computer-mediated communication, social and psychological impacts of new communication technology, the evolution of telework and advances in interactive telecommunications. LEC.

COMS 639. Legal Communication. 3 Hours. S.
An analysis of how communication principles and theories operate within the context of the legal system. Topics covered will include the lawyer/client interview, depositions and pre-trial discovery, settlement negotiation, jury selection, opening and closing statements, and witness testimony. Prerequisite: COMS 130 or COMS 150. LEC.

COMS 647. Issues in Intercultural Communication. 3 Hours. S.
Examination of the processes and factors affecting communication in an intercultural context, and of methods of training for intercultural communication roles. Prerequisite: COMS 547 and an introductory course in anthropology, or consent of instructor. LEC.

COMS 656. Mass Media: Social Science Applications. 3 Hours. S.
This course introduces students to the major theories of and prominent research in mass communication. The aim is to stimulate critical thinking about the content and effects of mass communication, develop critical consumption skills, and enhance awareness of public policy issues relating to the media. Students are required to read a variety of chapters and articles on mass communication, promoting independent investigation into specific areas of interest. This course is a bridge course and meets with a graduate level section of the same title. Prerequisite: COMS 356. LEC.
COMS 667. Interpersonal Communication in Multinational Organizations. 3 Hours.
A study of interpersonal communication in management and professional development in intercultural situations. Focus on preparation of the global manager or professional in the organizational environment. Special attention to the problems and challenges of intercultural interactions in the context of multinational organizations. LEC.

COMS 669. Human Conflict and Peace. 3 Hours. H.
Study of religious, cultural, and social traditions toward understanding the nature and purposes of human conflict. Analysis of various meanings of peace, with emphasis on study of nonviolent approaches to management of conflict. Class discussion, readings, and individual research projects. (Same as REL 669.) Prerequisite: Junior standing or above. LEC.

COMS 710. Survey of Theory and Research in Organizational Communication. 3 Hours.
This course examines the theoretical and philosophical underpinnings of organizational communication research. Course topics cover various interpretive approaches to understanding communication in organizational contexts. Prerequisite: COMS 310 and permission of the instructor. LEC.

COMS 730. Writing and Speaking for Decision Makers. 3 Hours.
Theory and application of communication strategies for corporate communication. This course presents rhetorical analysis of organizational situations and audiences, focusing on corporate decision-makers. Included are informative and persuasive communications such as board presentations, requests for proposal and responses to RFPs, grant proposals, and persuasive presentations for adoption, implementation, or evaluation of organizational programs. Course is limited to Regents Center students only. LEC.

COMS 741. Special Topics in Communication Studies: _____, 2-3 Hours.
Examination of special topics in Communication Studies. Prerequisite: Instructor consent. LEC.

COMS 784. Proseminar in Communication and Aging. 1 Hour.
A weekly forum for students and faculty to discuss professional issues and interdisciplinary research in communication and aging. May be repeated for credit. (Same as PSYC 784.) (Same as SPLH 784.) Prerequisite: Consent of instructor. LEC.

COMS 787. Gerontology Proseminar. 3 Hours.
A proseminar coordinated by the Gerontology Center. The proseminar explores essential areas of gerontology for researchers and practitioners, providing a multidisciplinary (psychology, biology, sociology, and communication) perspective on aging. The proseminar surveys contemporary basic and applied research, service programs, and policy and management issues in gerontology. (Same as ABSC 787, AMS 767, PSYC 787, and SOC 767.) (Formerly HDFL 787.) LEC.

COMS 807. Rhetoric, Politics and the Mass Media. 3 Hours.
This course investigates the ways in which rhetorical strategies (persuasive and linguistic usage) permeate the relationship between politics and politicians and the mass media. We will analyze media coverage of political debates, the presidential use of radio, television and press conferences, the network evening news coverage of political events, the influence of political advertising to see how political decisions are influenced by and influence the media. LEC.

COMS 810. Organizational Communication: Theory and Research. 3 Hours.
This course examines the theoretical and philosophical underpinnings of organizational communication research. Course topics cover variable analytic traditions and systems theory, as well as cultural, critical, and various interpretive approaches to understanding communication in organizational contexts. Prerequisite: COMS 310 and permission of instructor. LEC.

COMS 811. Applied Organization Communication. 3 Hours.
This course addresses key communication processes in organizations, including developing and sustaining workplace relationships, providing and receiving feedback, processes of effective teams and in leadership situations. Students will apply these concepts to appreciate the dynamics of organizational culture, power, and ethics at work and will identify strategies to enhance workplace success. SEM.

COMS 835. Impression Formation and Interpersonal Behavior. 3 Hours.
Intensive investigation of the processes involved in impression formation and of the effects of established impressions upon interpersonal communication. (Same as PSYC 845.) Prerequisite: COMS 535 or PSYC 670. LEC.

COMS 844. Seminar in Interpersonal Communication. 3 Hours.
This class will address current theory and research in interpersonal communication. Issues addressed may include verbal or nonverbal communication in families, close relationships, initial interactions, and the like. LEC.

COMS 846. Communication and Aging. 3 Hours.
Examination of the interrelationship between communication and the aging process. The course will include current research and theory on such topics as intergenerational communication, language and age identity, age-stereotyping and communication, mass media and aging, age and health communication, and others of current interest in the field. LEC.

COMS 848. Communication Audits in Organizations. 3 Hours.
The principal thrust of this course is a hands-on analysis of the communication in 1-2 organizations. Students work as a consulting group to analyze dimensions of communication, communication channels, job satisfaction, organizational commitment, and communication strategies. Experience is gained in organizational research methods, instrument development, organizational analysis, feedback, and organizational development. LEC.

COMS 850. Introduction to Research Methods. 3 Hours.
An introduction to methodological approaches to the study of communication. Approaches considered will include (a) humanistic message analysis and evaluation; (b) ethnographic and observational techniques; (c) survey construction and execution; and (d) experimental design and procedures. Special focus on issues of validity, reliability, and ethics. LEC.

COMS 851. Communication Research: Historical and Descriptive. 3 Hours.
An introduction to types of historical and descriptive research in human communication. Library resources and methods of research will be covered. Emphasis will be placed upon preparing a research prospectus and upon writing the research report. LEC.

COMS 852. Communication Research: Experimentation and Quantitative Analysis. 3 Hours.
An introduction to the process of research in communication studies, including consideration of basic principles in research design, methods of observation and measurement, and the application of appropriate statistical techniques. LEC.
COMS 855. Qualitative Research Methods in Communication Studies. 3 Hours.
Study of strategies for describing communication behavior in particular contexts, emphasizing ethnography and specific observational and interview data gathering and analysis methods. Prerequisite: COMS 755 or equivalent. LEC.

COMS 856. Communication Research: Quantitative Analysis. 3 Hours.
An intermediate overview of statistical techniques commonly used in communication research. Content will include a review of univariate statistical tests such as t-test, correlation, chi-square, and other nonparametric techniques of data analysis. Additionally, factorial analysis of variance, multiple regression, and factor analysis will be covered, along with the application of appropriate statistical techniques. Prerequisite: COMS 850 and an introductory course in statistics. LEC.

COMS 859. Proseminar in Communication Studies. 3 Hours.
An overview and integration of communication studies based upon an examination of selected basic writings in the discipline. LEC.

COMS 860. New Communication Technology and the Work Place. 3 Hours.
An examination of changes in the work place and for workers associated with new communication technologies such as e-mail, voice mail, teleconferencing, distributed computer processing, and computer-supported decision making. Emphasis is on changes in organizational communication patterns, participant responses to the technologies, and evaluation of the outcomes of implementing work place communication technologies. To be taken by Regents Center students. LEC.

COMS 898. Investigation and Conference (For Master's Candidates). 1-8 Hours.
(Limited to eight hours credit toward the M.A. degree.) Directed research and experimentation for M.A. students in some phase of speech science or the teaching of speech and drama. RSH.

COMS 899. Master's Thesis. 1-6 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

COMS 907. Seminar in Political Communication. 3 Hours.
This course will focus on contemporary political communication theory and illustrate how such theories are exemplified in modern political contexts: political arguments and developing consensus, communication strategies in Congressional and bureaucratic decision-making, the rhetorical presidency, the dissemination of political information, political narrative, and political campaigns. LEC.

COMS 920. Introduction to Teaching Oral Communication. 3 Hours.
This seminar prepares new graduate teaching assistants for their first teaching experience. Students will develop course materials including lectures, discussion prompts, assignments, exams based on pedagogical best practices. Students will apply theoretical concepts related to teaching, learning and assessment, and apply those theories to their own classrooms. LEC.

COMS 930. Seminar in Speech: ___. 1-4 Hours.
Special problems in speech. Prerequisite: Twelve hours of credit in the department. LEC.

COMS 932. Theories of Rhetoric: Classical. 3 Hours.
An intensive study of the rhetorical theories of classical writers from 466 B.C. to the decline of Roman oratory. Principal emphasis will be on Isocrates, Plato, Aristotle, Quintilian, Cicero, and Longinus. LEC.

COMS 933. Theories of Rhetoric: Neo-Classical. 2-3 Hours.
A study of the development of rhetorical theory from 325 A.D. to the twentieth century. Notable departures from the classical tradition will be examined. Special concentration on the writings of Augustine and the tradition of medieval preaching. Alcuin, Ramus, Bacon, Campbell, Whately, Blair, John Quincy Adams, and the elocutionary movement. LEC.

COMS 936. Seminar in Language and Discourse. 3 Hours.
This seminar uses interdisciplinary readings to examine central theoretical questions regarding language and communication. The course moves from considering major theoretical positions to current research in communication on discourse. Methodological issues in the study of language and discourse are also addressed. LEC.

COMS 938. Seminar in Persuasion. 2-3 Hours.
Examination of selected topics in persuasion, with emphasis on the application of recent theories and experimental research to the analysis of persuasive discourse. Prerequisite: COMS 538 or equivalent. LEC.

COMS 939. Seminar in Argumentation. 2-3 Hours.
Examination of special problems in argumentation, with emphasis on the relationship of systems of argumentation to their philosophic presuppositions. Discussion of the writings of Toulmin, Natanson, Johnstone, Perelman, Dewey. Prerequisite: COMS 539 or equivalent. LEC.

COMS 941. Seminar in Health Communications. 3 Hours.
This course is a survey of the many disciplines of study found in the field of health communication. Emphases include decision making regarding health-related behaviors, the influence of interpersonal messages, negotiating treatment with health care providers, coping with medical difficulties, the critical examination of medical research, news, and health campaigns, and the impacts of new technologies. SEM.

COMS 945. Seminar in Social Support. 3 Hours.
This course is a survey of the many disciplines of the fundamental form of communication known as social or emotional support or comforting. Emphases include message-, receiver-, and interactionally-oriented approaches, as well as support contexts, dilemmas, structures, features, and positive effects on physical and mental health. SEM.

COMS 946. Seminar in Communication and Intergroup Relations. 3 Hours.
Conceptual and theoretical frameworks for exploring and understanding relations between individuals from different societal groups (e.g., cultural/ethnic, gender, age). Focus on issues of identity, power relations as manifested in interpersonal, mass media, and organizational contexts. The course will include methodological and applied implications for studying different groups, both within the USA and around the world. LEC.

COMS 947. Communication in Cultural Innovation and National Development. 3 Hours.
An examination of the role of speech and other types of communication in the introduction of change within cultures and the diffusion of innovation between cultures. Specific communication problems concerning agriculture, education, international aid, military assistance, and public health will be discussed. LEC.

COMS 948. Seminar in Organizational Communication. 2-3 Hours.
Analysis of speech communication functions in the organizational structures of business, industry, labor, military, education, government, and professional agencies. Development of conceptual schemes for conducting research and training programs on speech systems which characterize the operation of organized groups. LEC.

COMS 950. Seminar in Public Address: ___. 3 Hours.
The study of public address by historical periods or by topics. LEC.
COMS 951. Seminar in Movement Theory and Genre Criticism. 3 Hours.
This course examines the theoretical and methodological underpinnings of approaches to rhetorical analysis focusing on social movements and rhetorical genres. It will review existing theory on these topics, develop a methodological approach to both forms of critical analysis, and test each methodological approach via case studies. Prerequisite: COMS 755 or consent of instructor. LEC.

COMS 952. Seminar in Mythic and Narrative Approaches to Rhetorical Criticism. 3 Hours.
This course examines the theoretical and methodological underpinnings of approaches to rhetorical analysis focusing on narrative rhetoric, with a special emphasis on myth as a type of narrative. It will review existing theory on these topics, consider a number of alternative methodological approaches, and test each methodological approach via case studies. Prerequisite: COMS 755 or consent of instructor. LEC.

COMS 953. Seminar in Organizational Rhetoric. 3 Hours.
This course focuses on theoretical and methodological materials related to the use of rhetoric in an organizational setting. It will review existing theory and methodological development on this topic, paying special attention to the distinction between rhetoric used within an organization and rhetoric focused on audiences external to the organization. Multiple case-studies will be considered to illuminate the functioning of both internal and external organizational rhetoric. Prerequisite: COMS 755 or consent of instructor. LEC.

COMS 955. Seminar in Rhetorical Criticism. 3 Hours.
A study of contemporary and historical writings on rhetorical criticism. Emphasis is placed upon the development of critical methodology for future research and writing. Prerequisite: COMS 755. LEC.

COMS 958. Comparative Theories of Speech Communication. 3 Hours.
A descriptive and comparative analysis of theories of communication applicable to speech behavior. Prerequisite: COMS 859 or equivalent. LEC.

COMS 959. Theories of Rhetoric: Contemporary. 3 Hours.
A study of the writings on rhetorical theory in the twentieth century. Principal emphasis will be on the psychological treatment of rhetoric. I.A. Richards and Kenneth Burke, and the relationship in the twentieth century between rhetoric and dialectic, rhetoric and poetic. Prerequisite: COMS 859 or equivalent. LEC.

COMS 997. Research in: ____. 1-6 Hours.
Supervised research under the direction of a faculty member on a topic of mutual interest to the faculty and graduate student. RSH.

COMS 998. Investigation and Conference (For Doctoral Candidates). 1-8 Hours.
(Limited to eight hours credit towards the Ph.D. degree.) Directed research and experimentation for Ph.D. students in some phase of speech science or the teaching of speech and drama. RSH.

COMS 999. Doctoral Dissertation. 1-12 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

Computational Biology Courses

BINF 701. Bioinformatics I. 5 Hours.
First semester of a two-semester course in bioinformatics and computational biology. Topics include basic concepts of bioinformatics and molecular modeling, bioinformatics databases, computational tools and modeling methods, protein sequence and structure alignment, conformational analysis, secondary structure determination, tertiary structure modeling (homology, threading, ab initio, molecular dynamics and Monte Carlo simulations, protein folding and dynamics), as well as students presentations of material from current papers in the field of study and their own on-going research for discussion and critique. Prerequisite: College introductory biochemistry (no requirement for specific courses), math, and computer courses or concurrent enrollment in such courses and consent of instructor. LEC.

BINF 702. Bioinformatics II. 5 Hours.
Second semester of a two-semester course in bioinformatics and computational biology. Topics include protein quaternary structure modeling (protein-protein/DNA/small ligand docking, binding, computer-aided drug design), protein structure-function relationships, biological membranes (structure and function of integral membrane proteins, protein-membrane and protein-protein interactions in membranes), phylogenetic trees, modeling of genome-wide protein interaction networks based on structure, sequence, experiment and data-mining, as well as students presentations of material from current papers in the field of study and their own on-going research for discussion and critique. Prerequisite: BINF 701. LEC.

BINF 703. Advanced Computational Biology I. 5 Hours.
This is the first semester of an intensive two-semester course in Computational Biology, aimed at second-year graduate students. Topics include graph theory, systems biology, mathematical and computational modeling of complex systems, synthetic biology and protein design. Students will gain a mastery of cutting-edge topics in Computational Biology through lectures, careful reading of current literature, and advanced individual research projects. Prerequisite: BINF 701 and BINF 702, or consent of instructor. LEC.

BINF 704. Advanced Computational Biology II. 5 Hours.
This is the second semester of an intensive two-semester course in Computational Biology, aimed at second-year graduate students. Topics include graph theory, systems biology, mathematical and computational modeling of complex systems, synthetic biology and protein design. Students will gain a mastery of cutting-edge topics in Computational Biology through lectures, careful reading of current literature, and advanced individual research projects. Prerequisite: BINF 703. LEC.

BINF 709. Topics in: ____. 1-3 Hours.
Advanced courses on special topics in Bioinformatics, given as need arises, including lectures, discussions, readings, or laboratory. Students may select sections according to their special interests. LEC.

BINF 999. Doctoral Dissertation. 1-12 Hours.
Original research that is to be incorporated into a PhD dissertation. THE.

East Asian LanguagesCultures Courses

CHIN 100. Elementary Conversational Chinese I. 3 Hours. U.
Three hours of class per week plus outside use of recorded text materials. Basic spoken language instruction intended primarily for beginners planning travel or work in China and Taiwan. Introduction to basic written characters. Does not fulfill College of Liberal Arts and Sciences foreign language distribution requirements or department major and minor requirements. LEC.

CHIN 101. Elementary Conversational Chinese II. 3 Hours. U.
Continuation of CHIN 100. Prerequisite: CHIN 100 or equivalent. LEC.

CHIN 102. Beginning Chinese I. 4 Hours. U.
Taught mainly in the summer, this course covers about 75% of the material in CHIN 104, upon which this course is modeled. LEC.
CHIN 104. Elementary Chinese I. 5 Hours. U.
Three hours of lecture and three hours of spoken drill each week. An introduction to spoken and written modern standard Chinese (Mandarin). Not open to students with native ability in Mandarin or Chinese dialect. Students who have any previous knowledge of Chinese must take a placement exam before enrolling in Chinese classes at K.U. Consult Department of East Asian Languages and Cultures for details. LEC.

CHIN 106. Elementary Chinese for Advanced Beginners. 3 Hours. U.
This course is designed for students who have already acquired some elementary Chinese language abilities (in high school or from family), but cannot be placed in CHIN 108, Elementary Chinese II. The course focuses on perfecting listening, speaking, reading and writing skills, and prepares students for CHIN 108. For admission to the class, students must take the EALC Chinese placement exam, be interviewed by designated instructors, and approved. LEC.

CHIN 108. Elementary Chinese II. 5 Hours. U.
Continuation of CHIN 104. Prerequisite: CHIN 101, CHIN 104, or equivalent. LEC.

CHIN 148. Intensive Elementary Chinese. 10-12 Hours. U.
An accelerated one semester course in elementary Chinese, covering the material of CHIN 104 and CHIN 108. Classes meet for two hours of lecture and one hour of drill daily. Emphasis on spoken language with grammar and readings in selected texts. No prerequisite. LEC.

CHIN 177. First Year Seminar: _____ 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Chinese. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

CHIN 204. Intermediate Chinese I. 5 Hours. U.
Continuation of CHIN 108. Three hours of lecture and three hours of spoken drill. Prerequisite: CHIN 108 or equivalent. LEC.

CHIN 206. Intermediate Chinese Conversation. 2 Hours. U.
Practice in speaking, presentation of prepared talks, and guided discussions. This course is primarily used to award transfer credit and does not fulfill any portion of the College of Liberal Arts and Sciences foreign language requirement. Prerequisite: CHIN 204 or equivalent. FLD.

CHIN 208. Intermediate Chinese II. 5 Hours. U.
Continuation of CHIN 204. Prerequisite: CHIN 204. LEC.

CHIN 251. Reading and Writing Chinese I. 1-3 Hours. H.
Designed for those who speak modern standard (Mandarin) Chinese but lack reading and writing skills. Focuses on acquiring knowledge of the Chinese writing system and preparing students for possible entry into advanced courses in Chinese, e.g. CHIN 504 (Advanced Modern Chinese I), or, after appropriate testing, for possible exemption from the College of Liberal Arts and Sciences foreign language requirement. Students should take the online Chinese placement exam and consult with the Chinese Language Program Coordinator. Enrollment by permission of the Chinese Language Program Coordinator only. LEC.

CHIN 252. Reading and Writing Chinese II. 1-3 Hours. H.
Continuation of CHIN 251. Prerequisite: CHIN 251 or permission of the instructor. LEC.

CHIN 290. Accelerated Chinese. 3 Hours. U.
Instruction in reading and writing Chinese for students who already possess a degree of oral/aural proficiency. This course will prepare students for enrollment in CHIN 504, Advanced Modern Chinese I. No prerequisites. Consent of instructor required. LEC.

CHIN 342. Introduction to Classical Chinese. 3 Hours. H.
An introduction to Classical Chinese through detailed analysis of short original passages from a variety of early Chinese texts. Students gain a foundation in the grammar and vocabulary of Classical Chinese, preparing them for CHIN 544. The course is offered at the 300 and 500 levels, with additional requirements for students taking the 500 level. Prerequisite: A basic knowledge of Chinese characters (e.g. from CHIN 108 or JPN 108) and consent of the instructor, or CHIN 208 or JPN 208. Not open to students who have completed CHIN 542. LEC.

CHIN 386. Advanced Chinese Conversation. 2 Hours. U.
Guided discussions designed to increase fluency and further improve pronunciation. Prerequisite: CHIN 504 or equivalent. LEC.

CHIN 498. Directed Readings in Chinese. 1-4 Hours. H/W.
Readings in Chinese on a subject selected by a student with the advice and direction of the instructor. Individual meetings and reports. Prerequisite: Consent of instructor. IND.

CHIN 504. Advanced Modern Chinese I. 5 Hours. H/W.
Five hours of class and two of drill. Readings in selected modern Chinese literary texts and discussion in Chinese of recordings of stories and dramas. Prerequisite: CHIN 208 or equivalent. LEC.

CHIN 508. Advanced Modern Chinese II. 5 Hours. H/W.
Continuation of CHIN 504. Prerequisite: CHIN 504 or equivalent. LEC.

CHIN 512. Advanced Chinese I. 2 Hours. H/W.
Readings in modern Chinese texts on a variety of subjects and discussion in Chinese. Prerequisite: CHIN 218 or equivalent. LEC.

CHIN 513. Advanced Chinese II. 2 Hours. H/W.
Continuation of CHIN 512. Prerequisite: CHIN 512 or equivalent. LEC.

CHIN 542. Introduction to Classical Chinese. 3 Hours. H/W.
An introduction to Classical Chinese through detailed analysis of short original passages from a variety of early Chinese texts. Students gain a foundation in the grammar and vocabulary of Classical Chinese, preparing them for CHIN 544. The course is offered at the 300 and 500 levels, with additional requirements for students taking CHIN 542. Prerequisite: A basic knowledge of Chinese characters (e.g. from CHIN 108 or JPN 108) and consent of the instructor, or CHIN 208 or JPN 208. Not open to students who have completed CHIN 342. LEC.

CHIN 544. Readings in Classical Chinese: _____ 3 Hours. AE42/ AE61 / H/W.
Classical Chinese is the language of the most famous works of Chinese philosophy and most Chinese literature before the twentieth century. The course introduces readings from a specific philosophical school or literary genre, for example: Confucian Philosophical Texts, Daoist Philosophical Texts, Poetry, Ming/Qing fiction, etc. Prerequisite: CHIN 342 or CHIN 542 or consent of the instructor. May be repeated for credit if content varies. LEC.

CHIN 562. Modern Chinese Texts I. 3 Hours. NW AE61 / H/W.
Readings and interpretation of varied modern Chinese texts. Continued study of the language in the form of oral discussion and written reports. Prerequisite: CHIN 504 or equivalent. LEC.

CHIN 564. Modern Chinese Texts II. 3 Hours. H/W.
A continuation of CHIN 562 with materials of increasing difficulty. Prerequisite: CHIN 562. LEC.

CHIN 580. Introduction to Chinese Research Materials. 1 Hour. U.
An introduction to basic reference works in Chinese and Western languages, including dictionaries, encyclopedias, concordances, and bibliographies. Library organization and research methods will also be discussed. (Five week course.) Prerequisite: CHIN 208 or equivalent. LEC.
CHIN 598. Readings in: ______. 1-3 Hours. H/W.
Students will read selections from materials on a given topic or topics. May be repeated for credit. Prerequisite: CHIN 564 or permission of instructor. IND.

CHIN 690. Seminar in Chinese Texts. 1-3 Hours. H/W.
Varying topics with varying prerequisites. LEC.

CHIN 801. Directed Readings and Research in Chinese. 1-4 Hours.
Advanced language training for the study of Chinese sources in the humanities or social science field of the student. Prerequisite: Consent of instructor. RSH.

CHIN 880. Advanced Chinese Research Materials. 2 Hours.
A detailed examination of various Chinese language reference works and research materials. Emphasis will be placed on the use of different types of reference works to carry out research strategies. Prerequisite: CHIN 504 or equivalent and CHIN 580. LEC.

EALC 105. Living Religions of the East. 3 Hours. HR/NW AE42/GE3H / H/W.
A basic introduction to religion in India, China, and Japan with emphasis upon religions that affect the modern period. Not open to students who have taken REL 108/EALC 108. (Same as REL 106.) LEC.

EALC 108. Living Religions of the East, Honors. 3 Hours. HR/NW AE42/GE3H / H.
A basic introduction to religion in India, China, and Japan with emphasis upon religions that affect the modern period. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken REL 108/EALC 105. (Same as REL 108.) LEC.

EALC 121. Introduction to Contemporary China. 3 Hours. NW AE42 / H.
An overview of contemporary Chinese culture and society since the economic reforms and opening up launched in 1978, through the study of changes in politics, the economy, society, culture and everyday life in China. The course is taught in English. No prior knowledge of Chinese language is required. LEC.

EALC 130. Myth, Legend, and Folk Beliefs in East Asia. 3 Hours. NW AE42 / H/W.
A survey of the commonly held ideas about the beginning of the world, the role of gods and spirits in daily life, and the celebrations and rituals proper to each season of the year. The purpose of the course is to present the traditional world view of the peoples of East Asia. (Same as ANTH 293, REL 130.) LEC.

EALC 131. Myth, Legend, and Folk Beliefs in East Asia, Honors. 3 Hours. NW / H/W.
A survey of the commonly held ideas about the beginning of the world, the role of gods and spirits in daily life, and the celebrations and rituals proper to each season of the year. The purpose of the course is to present the world view of the ordinary peoples of East Asia in contrast to their more sophisticated systems of philosophy that are better known to the Western world. Open only to students in the University Honors Program or by permission of instructor. LEC.

EALC 136. The Japanese Tradition. 3 Hours. NW / H/W.
An examination of the cultural heritage of Japan from earliest times to Meiji Restoration. Emphasis will be placed upon Japan's literary tradition. Not open to students with credit in EALC 512. LEC.

EALC 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in East Asian Languages and Cultures. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

EALC 198. Studies in: ______. 1-5 Hours. H.
Special purpose subject in East Asia and contiguous regions. LEC.

EALC 231. Introduction to: ______. 1-3 Hours. NW / H/W.
Topics are various aspects of Chinese and Japanese cultures. LEC.

EALC 298. Studies in: ______. 1-5 Hours. H.
Special purpose subject in East Asia and contiguous regions. LEC.

EALC 301. Cultural Traditions of China, Inner Asia, and Tibet. 3 Hours. NW / H.
This course acquaints the student with the broad outlines of the traditional cultures and literatures of China and the contiguous regions of Inner Asia and Tibet. Course materials include translations and discussions of oral tales, epics, poetry, novels, and biography, which explore the interaction between these regions and cultures as well as their continuities and disparities. The course is most appropriate for students with no background in Asian culture. LEC.

EALC 302. Cultural Traditions of Japan and Korea. 3 Hours. NW / H/W.
A wide-ranging examination of the similarities and difference between Japanese and Korean culture through folklore, literature, film, and other texts. Format: Lecture and discussion. Designed for students with no background in Asian culture. LEC.

EALC 310. The Chinese Novel. 3 Hours. H/W.
Reading and analysis of the form and types of Chinese novel, its beginnings and development to the present day. LEC.

EALC 312. Traditional Japanese Literature in Translation. 3 Hours. H/W.
A survey of the major works of Japan's long literary heritage. Readings from such classics as the Tale of Genji, the world's first novel, No drama, and poetry will acquaint the student with one of the world's great literary traditions. (Not open to students with credit in EALC 712.) LEC.

EALC 314. Traditional Chinese Literature in Translation. 3 Hours. H/W.
A general survey of representative literary works of major genres in traditional China. Lectures, assigned readings, and discussions in English. A knowledge of Chinese is not required. (Not open to students with credit in EALC 714.) LEC.

EALC 315. Survey of Japanese Film. 3 Hours. NW AE42 / H.
This course surveys the major developments in and critical approaches to twentieth-century Japanese film. Focusing mostly on narrative films, the course introduces students to basic methodological issues in Japanese film history, especially questions of narrative, genre, stardom, and authorship. We examine Japanese cinema as an institution located within specific contexts focusing on the ways in which this institution shapes gender, race, class, ethnic and national identities. This course examines how patterns of distribution, exhibition, and reception have influenced film aesthetics and film style over the last century. Through secondary readings, lectures, and discussions students critically examine how Japanese cinema as an institution both responds to and intervenes in the social, cultural, and political history of twentieth-century Japan. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. (Same as FMS 315.) LEC.

EALC 316. Modern Japanese Literature in Translation: 1868-1945. 3 Hours. AE42 / H/W.
A survey of major literary works of Japan's modern era through the Pacific War. Topics include the social and spiritual challenges of modernization, urbanization, and the issues of race and national identity. Works by
EALC 317. Contemporary Japanese Literature in Translation: 1945-Present. 3 Hours. AE42 / H/W.
A survey of major literary works of Japan's post-war and contemporary eras. Topics include life during and after the war, the experience of the atomic bomb, and the postmodern landscape. Works by Dazai, Mishima, Oe, Abe, Murukami, and others will be covered. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. Not open to students who have completed EALC 717. LEC.

EALC 318. Modern Chinese Fiction and Film. 2-3 Hours. AE42 / H/W.
A general survey of important Chinese fiction and film of the 20th century. Lectures, readings, and discussions in English. Knowledge of Chinese is not required. Not open to students with credit in EALC 518. This course is taught at the 300 and 500 levels with additional assignments at the 500-level. LEC.

EALC 319. Contemporary Chinese Fiction and Film. 3 Hours. AE42 / H.
A general survey of important Chinese fiction and film from the late 20th century to the present. Lectures, readings, and discussions in English. A knowledge of Chinese is not required. (Not open to students with credit in EALC 519.) LEC.

EALC 320. Modern East Asia: Multiple Perspectives. 3 Hours. NW / H.
A survey of the major political changes in China, Japan, Korea and Tibet in the 20th century. Students will learn about the changes that swept through East Asia as it rapidly modernized via documentary films and lectures and will study the impact of these changes on individuals by reading autobiographies. LEC.

EALC 328. The Body in Japan. 3 Hours. H.
The course examines historical and cultural concepts of the body in Japan and then focuses upon the pivotal events of the last half-century as experienced through the body. Students are introduced to a wide range of extreme bodily experiences: the regimented body of wartime, the body irradiated by the atomic bomb, the body of malnutrition and national humiliation, possessed bodies, licentious bodies, creating life through the body, the aged body, self-immolation of the body, nurturing the body, beautifying the body, and others. The primary sources of investigation and discussion are novels written after the war, films, anthropological writings, and popular culture. All readings are in English. LEC.

EALC 330. Chinese Literature and Culture: Premodern Times. 3 Hours. NW / H/W.
An examination of Chinese literature and culture from earliest times to the modern period. Not open to students who have taken EALC 530. This course is taught at the 300 and 500 levels with additional assignments at the 500-level. LEC.

EALC 331. Studies In: _____. 1-3 Hours. H/W.
Topics in the Chinese and Japanese cultures. LEC.

EALC 332. Asian Literature in Translation: _____. 3 Hours. NW / H/W.
Introduction to Asian culture and society through close reading and analysis of important works of Asian literature. Themes and issues to be focused upon will vary (e.g., traditional or modern literature of China, Japan, or Korea, and special topics of interest). Lecture and discussion format. Knowledge of Asian languages is not required. LEC.

EALC 333. Asian Literature in Translation, Honors: _____. 3 Hours. NW / H/W.
Introduction to Asian culture and society through close reading and analysis of important works of Asian literature. Themes and issues to be focused upon will vary (e.g., traditional or modern literature of China, Japan, or Korea, and special topics of interest). Lecture and discussion format. Knowledge of Asian languages is not required. Open only to students in the University Honors Program or by permission of instructor. LEC.

EALC 340. Structure of Chinese. 3 Hours. H.
A detailed study of the phonological and grammatical structure of Chinese and the interactions between language and culture. Depending on student interest, a unit on the pedagogy of teaching Chinese as a foreign language may also be included. Primarily for students who want a linguistic knowledge of the language rather than a practical command of it. Students taking the course at the 500 level will have more work required of them. LEC.

EALC 345. Chinese Cinema. 3 Hours. H.
This course surveys representative Chinese films since the 1980s and their global reception. The most recent formalistic, industrial, and institutional developments of Chinese cinema are examined. Students view films, do secondary readings, and learn theories and methodologies of film studies. Lectures and class discussions also cover the socio-historical context of contemporary Chinese filmmaking. This course is taught at the 300 and 500-levels with additional assignments required at the 500-level. Prerequisite: Junior status, or permission of the instructor. Not open to students with credit in EALC 545. LEC.

EALC 350. Contemporary Japan. 3 Hours. NW / U.
An exploration of the Japanese way of life, self-concepts, and world view through lecture, discussion, reading, and field trips to businesses, community organizations, and cultural sites. Offered only during the Summer Institute in Hiratsuka, Japan. LEC.

EALC 361. Colonial Korea. 3 Hours. H.
This course examines the history, society, and culture of Korea from the end of Choson dynasty through the Colonial period (1910-1945) in its East Asian and global context. The course uses a multi-disciplinary approach, including history, anthropology, literature, and film. Not open to students with credit in EALC 561. LEC.

EALC 362. Post-Colonial Korea. 3 Hours. H.
This course examines the history, society, and culture of South Korea from the time of its liberation from Japan in 1945 to the present in its East Asian and global context. The course uses a multi-disciplinary approach, including history, anthropology, literature, and film. Prerequisite: EALC 361 or EALC 561, or permission of the instructor. Not open to students with credit in EALC 562. LEC.

EALC 363. Gendered Modernity in East Asia. 3 Hours. H.
This course explores rapidly changing gender relationships and the sense of being “modern” in East Asia by examining marriage and family systems, work, education, consumer culture, and geopolitics. The class seeks to understand how uneven state control over men and women shapes desires, practices, and norms and how men and women act upon such forces. Avoiding biological or social determinism, this course treats gender as an analytical category and examines how modern nation-states and global geopolitics are constituted and operated. (Same as ANTH 363 and WGSS 363.) LEC.

EALC 364. Peoples of Japan and Korea. 3 Hours. NW / S/W.
An analysis of the cultural diversity and unity of the peoples of Japan and Korea. Emphasis on historical and ethnological relationships, social structure, and ethics. (Same as ANTH 364.) LEC.
EALC 365. Japanese People through Films. 3 Hours. NW / S/W. Japanese people's culture and society through an extensive examination of both documentary and feature films. Readings from social science fields and literature will be used--the former to supply a theoretical framework for the study of Japanese people and the latter to further the inquiry into the individual sentiment motivating actions. (Same as ANTH 365.) LEC.

EALC 366. The Life Cycle in Japanese Culture and Literature. 3 Hours. NW / H/W. A study of the Japanese people from birth to death: what it means to be born in a Japanese family, to grow up Japanese, and to die Japanese. Anthropological works and selections from Japanese literature and film will be used to examine ways in which Japanese people live through the critical periods in their life cycle. (Same as ANTH 366.) LEC.

EALC 368. The Peoples of China. 3 Hours. NW / S/W. An analysis of the cultural origin, diversity, and unity of the peoples of China. Emphasis on historical development, social structure, cultural continuity and change, and ethics. (Same as ANTH 368.) LEC.

EALC 370. Chinese Folk Belief. 3 Hours. H/W. A survey of the beliefs of the ordinary Chinese people throughout the centuries with regard to myths, the other world, festivals, and the gods. Prerequisite: A course dealing with China. LEC.

EALC 380. Popular Cultures of East Asia. 3 Hours. NW / H. This course examines the contemporary popular cultures of Korea, Japan, China, and Taiwan, with particular emphasis on relations between East Asia and North America. Students study the issue of globalization and how the transnational flow of commodities and culture affects local societies and individual identities. They learn to identify, describe, and analyze the cross-cultural content of popular cultural artifacts and modes of expression relating to East Asia. To this end, they explore in detail such subjects as: fashion, foodways, cinema, manga, soap operas, and punk rock. Not open to students who have taken EALC 580. LEC.

EALC 410. The Culture of Play in Japan. 3 Hours. NW AE42 / N/W. This course examines the phenomenon and manifestations of play in Japanese culture. Topics include but are not confined to: the philosophy of play, the semiotics of play, the places of play, the role of laughter, play in Japanese religion, simulation and performance, and play and competition. LEC.

EALC 411. The Culture of Play in Japan, Honors. 3 Hours. NW AE42 / N/W. This course examines the phenomenon and manifestations of play in Japanese culture. Topics include but are not confined to: the philosophy of play, the semiotics of play, the places of play, the role of laughter, play in Japanese religion, simulation and performance, and play and competition. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

EALC 412. Visual and Literary Culture in Modern Japan. 3 Hours. H. This course examines the interconnections between the evolution of modern Japanese literature and vision technologies such as painting, panoramas, magic lanterns, stereoscopes, photography, motion pictures, television, and computers. The course provides an overview of modern Japanese literature from the perspectives of the visual culture in which that literature was conceived. The course considers such authors as Higuchi, Soseki, Ogai, Shimazaki, Akutagawa, Tanizaki, Yokomitsu, Kawabata, and Abe. Not open to students who have completed EALC 612. LEC.

EALC 413. Asian Media Studies. 3 Hours. H. This course examines new and emerging media in East Asia and how the media industries of East Asia function. Using recent scholarship and industry data on contemporary cyberculture, music studies, and television industries of East Asia we examine how such factors as globalization, post-colonialism, censorship, emerging technology, and national media legislation affect regional and transnational media industries in Japan, South Korea, and Mainland China/Taiwan/Hong Kong. (Same as FMS 413.) LEC.

EALC 415. Ancient China. 3 Hours. NW / H. A survey of ancient Chinese culture to the Qin period. Major archaeological discoveries and the literary tradition are taken as the primary evidence through which a number of topics are introduced (for example: environment, food, writing, art, thought, ritual). A knowledge of Chinese is not required. The course is offered at the 400 and 600 levels, with additional assignments at the 600 level. Not open to students who have completed EALC 615. LEC.

EALC 418. Sexual Politics in Chinese Literature and Culture: Premodern Times. 3 Hours. NW / H. This course uses myth, literature, history, biography, and other documents to discuss sexual politics in China from ca 1500 B.C.E. to the end of the last dynasty in 1911. Topics include: emperors, empresses, and consorts, polygamy, prostitution, love, yin and yang cosmology, the art of the bedchamber, women's literature, and erotic literature. Recommended: A course in East Asian studies. Not open to students who have taken EALC 618. This course is taught at the 400 and 600 levels with additional assignments at the 600-level. LEC.

EALC 420. Daily Life in China From the Opium War to the Present. 3 Hours. NW / H/W. Daily life and issues of social and cultural interaction between China and Western nations from the Opium War to the present. Fiction, travel diary, historical sources, film, and personal accounts will make up course materials. LEC.

EALC 431. Studies in: _____ 1-3 Hours. H/W. Topics in the Chinese and Japanese traditions. LEC.

EALC 488. Senior Seminar in East Asian Languages and Cultures. 3 Hours. AE61 / H/W. Open to seniors majoring in East Asian Languages and Cultures or by consent of instructor. LEC.

EALC 498. Directed Readings in East Asian Languages and Cultures. 1-4 Hours. AE61 / H/W. Readings in English on an East Asian subject, selected by a student with the advice and direction of the instructor. Individual meetings and reports. Prerequisite: ECIV 104 or ECIV 304 and consent of instructor. IND.

EALC 499. Honors Thesis. 3 Hours. AE61 / H/W. Required of all students working for a degree with honors. May be repeated for a total of nine semester hours. IND.

EALC 508. Religion in China. 3 Hours. NW AE42/GE3H / H/W. Survey of religious thought and practice in China from the Shang to the People's Republic. (Same as REL 508.) LEC.

EALC 509. Religion in Japan. 3 Hours. NW AE42/GE3H / H/W. Survey of religious thought and practice in Japan from the Jomon period to the present. (Same as REL 509.) LEC.

EALC 510. Education in Japan. 3 Hours. NW / N/W. An investigation of the relationship between education and Japanese national and cultural identity as expressed in conceptions of childhood: philosophical and political positions underlying curricular and administrative policies, teachers' training, and pedagogical styles; the interface between education, "work," and the economy in general; and the theme of "internationalization," (kokusaika). The course is taught in English. LEC.
EALC 518. Modern Chinese Fiction & Film. 3 Hours. AE42 / H.
A general survey of important Chinese fiction and film of the 20th century. Lectures, readings, and discussions in English. Knowledge of Chinese is not required. Not open to students with credit in EALC 318. This course is taught at the 300 and 500 levels with additional assignments at the 500-level. Prerequisite: An introductory East Asian studies course such as ECIV 104 or ECIV 304 or EALC 105; or consent of instructor. LEC.

EALC 519. Contemporary Chinese Fiction and Film. 3 Hours. H.
A general survey of important Chinese fiction and film from the late 20th century to the present. Lectures, readings, and discussions in English. A knowledge of Chinese is not required. This course is taught at the 300 and 500 levels with additional assignments at the 500-level. Prerequisite: An introductory East Asian studies course such as ECIV 104 or ECIV 304 or EALC 105; or consent of instructor. (Not open to students with credit in EALC 319.) LEC.

EALC 520. Entrepreneurship in East Asia. 3 Hours. NW / H.
An intensive examination of the history and current status of entrepreneurship in China, Japan, and other nations in East Asia. This course investigates the role of entrepreneurs in Asian economic development from the nineteenth century to the present, as well as the relation between entrepreneurship and Asian cultural traditions. The opportunities and challenges of entrepreneurship in East Asia today are also considered. (Same as HIST 640.) LEC.

EALC 527. Asian Theatre and Performance. 3 Hours. NW / H/W.
A survey of traditional and modern theatre and performance in Asia, with greatest attention given to India, China, and Japan. A study of plays, dramatic genres, history, conventions of play production, and acting styles and other performance forms. (Same as THR 527). LEC.

EALC 530. Chinese Literature and Culture: Premodern Times. 3 Hours. NW / H/W.
An examination of Chinese literature and culture from earliest times to the modern period. This course is taught at the 300 and 500 levels with additional assignments at the 500-level. Prerequisite: An introductory East Asian studies course, such as ECIV 104 or ECIV 304 or EALC 105; or consent of the instructor. Not open to students with credit in EALC 330. LEC.

EALC 536. Cultural Traditions of Japan. 3 Hours. NW / H/W.
An examination of the major intellectual and aesthetic trends in Japanese history. The course is designed to give teachers and professionals, as well as students with a general interest in Japan, an overview of its unique cultural tradition. Not open to students with credit in EALC 136. LEC.

EALC 541. Asian Film. 3 Hours. NW AE42 / H.
Seminar on various national film cultures of East and Southeast Asia. Representative films are studied from formal, stylistic, and socio-historic perspectives. Addresses the 12 impact of key cultural, economic, and political issues on each film industry. Class discussion, reports, and individual research papers. The course is offered at the 500 and 800 levels, with additional assignments at the 800 level. (Same as FMS 541.) Prerequisite: Junior status. LEC.

EALC 543. Contemporary Japanese Film. 3 Hours. NW AE42 / H.
Seminar on the major developments in the contemporary (1980-present) Japanese film industry examining how filmmaking practices and film criticism have been influenced by such issues as transnationalism, postcolonialism, critical race theory, postmodernism, and new media. We survey recent industrial and stylistic trends as well as key critical debates. Class discussion, reports, and individual research papers. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. (Same as FMS 543.) Prerequisite: Junior status. LEC.

EALC 545. Chinese Cinema. 3 Hours. H.
This course surveys representative Chinese films since the 1980s and their global reception. The most recent formalistic, industrial, and institutional developments of Chinese cinema are examined. Students view films, do secondary readings, and learn theories and methodologies of film studies. Lectures and class discussions also cover the socio-historical context of contemporary Chinese filmmaking. This course is taught at the 300 and 500-levels with additional assignments required at the 500-level. Prerequisite: Junior status, or permission of the instructor. Not open to students with credit in EALC 345. LEC.

EALC 555. Buddhists and Buddhism in China. 3 Hours. NW AE42 / H.
A reading and media-rich survey of institutional, ritual, literary, educational, and exegetical practices that have shaped the lives of Buddhists in China, past and present. Alterities within the Buddhist tradition, and interactions with other religious options, are considered. (Same as REL 555.) LEC.

EALC 561. Colonial Korea. 3 Hours. H.
This course examines the history, society, and culture of Korea from the end of the Choson dynasty through the colonial period (1920-1945) in its East Asian and global context. The course uses a multi-disciplinary approach, including history, anthropology, literature and film. Prerequisite: An introductory East Asian studies course, such as ECIV 104 or ECIV 304, or EALC 105; or consent of instructor. There are additional readings and more extensive writing assignments than in EALC 361. Not open to students with credit in EALC 361. LEC.

EALC 562. Post-Colonial Korea. 3 Hours. H.
This course examines the history, society, and culture of South Korea from the time of its liberation from Japan in 1945 to the present in its East Asian and global context. The course uses a multi-disciplinary approach, including history, anthropology, literature, and film. Prerequisite: EALC 361 or EALC 561, or permission of the instructor. There are additional readings and more extensive writing assignments than in EALC 362. Not open to students with credit in EALC 362. LEC.

EALC 563. Cultural History of Korea. 3 Hours. H.
This course examines the cultural history of Korea in periods prior to the 19th Century. Special attention is given to varying constructions of cultural value, heritage, and identity, together with the historically specific factors that engendered them. (Same as HIST 590.) LEC.

EALC 564. Modern Korean Culture and Society, 3 Hours. H.
This course examines the history, society, values, and political economy of Korea in its East Asian and global context. The course uses multi-disciplinary approaches, including those of history, anthropology, literature and film. Prerequisite: An introductory course in East Asian studies, or permission of instructor. LEC.

EALC 565. Popular Images in Japanese Culture, Literatures, and Films. 3 Hours. NW / S/W.
The course examines recurring themes and images in Japanese culture through films, literary works, and anthropological and other social science literature. These themes and images are studied in the contexts of both modern and traditional cultures. Although the popular deviates from the orthodox, nevertheless, the energy and pervasiveness of these offspring enforce and sustain "proper" cultural values. As a result of exploration of both highways and backroads of cultural expression, a holistic picture of Japanese ethos will emerge. (Same as ANTH 565.) LEC.

EALC 567. Japanese Ghosts and Demons. 3 Hours. NW / S/W.
An investigation of deeply rooted Japanese beliefs about intimate relationships among humans, animals, and nature - beliefs which help to explain the mysterious and to lend order to the world. Anthropological works, selections from Japanese literature, historical documents,
EALC 570. The Structure of Japanese. 3 Hours. H.
A detailed study of the phonological and grammatical structure of Japanese and the use of the language in social/cultural contexts. Primarily for students who want a linguistic knowledge of the language rather than a practical command of it. (Same as LING 570.) LEC.

EALC 572. The Structure of Chinese. 3 Hours. AE42 / H.
A detailed study of the phonological and grammatical structure of Chinese and the interactions between language and culture. Depending on student interests, a unit on the pedagogy of teaching Chinese as a foreign language may also be included. Primarily for students who want a linguistic knowledge of the language rather than a practical command of it. (Same as LING 572.) LEC.

EALC 575. Love, Sexuality and Gender in Japanese Literature. 3 Hours. H.
An examination of Japanese attitudes toward love, sexuality, and gender differences as revealed in literature from the tenth century to the present. Discussion format. LEC.

EALC 578. Gender and Society in Modern China. 3 Hours. H.
This course examines gender politics and social institutions in modern China by examining important literary works and films from the Republican era (1911-1949), the Maoist era (1949-1976), and the post-Mao era (1976-present). Secondary readings are also supplied. All the readings are in English. No knowledge of Chinese is required. Prerequisite: An introductory East Asian studies course such as ECV 104, ECV 304, or EALC 105; or consent of the instructor. LEC.

EALC 580. Popular Cultures of East Asia. 3 Hours. NW / H.
This course examines the contemporary popular cultures of Korea, Japan, China, and Taiwan, with particular emphasis on relations between East Asia and North America. Students study the issue of globalization and how the transnational flow of commodities and culture affects local societies and individual identities. They learn to identify, describe, and analyze the cross-cultural content of popular cultural artifacts and modes of expression relating to East Asia. To this end, they explore in detail such subjects as: fashion, foodways, cinema, manga, soap operas, and punk rock. More extensive writing requirements than 380. Not open to students who have taken EALC 380. LEC.

EALC 583. Imperial China. 3 Hours. NW / H/W.
An intensive survey of China's traditional civilization and its history, with emphasis on the last centuries of imperial rule under the Sung, Yuan, Ming, and Ch'ing dynasties (to 1850). (Same as HIST 583.) LEC.

EALC 584. Modern China. 3 Hours. NW AE42 / H/W.
An intensive survey of China's history from the early 19th century to the present. Key topics include the decline of the traditional system, the rise of communism, the Maoist era, and the tensions of change and control in the 1980s and 1990s. (Same as HIST 584.) LEC.

EALC 585. Reform in Contemporary China. 3 Hours. NW AE42 / H/W.
Examines the epochal changes that have occurred in China from Deng Xiaoping's rise to power in 1978 to the present. Includes a focus on the historical background of the revolutionary period before examining the political and economic changes that spawned the 1989 "prodemocracy" movement at Tiananmen. The course includes an analysis of the events of the 1990s focusing on U.S.-China political and economic relations and the destabilizing effects of inflation, infrastructural reform, political and economic decentralization, and leadership succession. A previous course on China is helpful, but not mandatory. (Same as POLS 668.) LEC.

EALC 587. Early Modern Japan. 3 Hours. NW AE42 / H/W.
Early modern Japan (16th to 19th century) examines the history, culture, and patterns of life during an era of rigid social control but artistic brilliance. After an historical overview of the period, students will explore topics including the social structure, travel, religion, thought, and the formation of traditional cultural forms such as Kabuki theater. (Same as HIST 587.) LEC.

EALC 588. Japan, 1853-1945. 3 Hours. NW / H/W.
This course provides an intensive survey of Japanese history from the arrival of Commodore Perry through the Pacific War. Social, economic, and political themes will be emphasized. Among the topics covered will be the Meiji Restoration, industrialization, Japanese imperialism, Taisho democracy, and wartime mobilization. (Same as HIST 588.) LEC.

EALC 589. Japan Since 1945. 3 Hours. NW / H/W.
This course provides an overview of Japanese history from the end of World War II to the present day. Among the topics covered will be the Allied Occupation, postwar politics and social change, the economic "miracle," popular culture, women and the family, crime and punishment, the educational system, and Japan's place in the world. (Same as HIST 589.) LEC.

EALC 590. Topics in East Asian Languages and Cultures: ____. 1-9 Hours. H/W.
Specific topical courses will be offered every year covering a number of disciplines. Credit, description, and prerequisites will vary. Note: May be repeated for credit up to the stated limit. LEC.

EALC 591. Topics in East Asian Languages and Cultures: ____. 1-9 Hours. S/W.
Specific topical courses will be offered every year covering a number of disciplines. Credit, descriptions, and prerequisites will vary. Note: May be repeated for credit up to the stated limit. LEC.

EALC 593. Modern Korea. 3 Hours. NW / H/W.
This course will examine selected topics in Modern Korean history in the 19th and 20th centuries, with special emphasis on Korea's connections to China and Japan. (Same as HIST 593.) Prerequisite: A college-level course in East Asian history or culture, or consent of instructor. LEC.

EALC 594. Law and Society in Traditional China. 3 Hours. H/W.
The course begins with a series of lectures on the main principles underlying Chinese social structure. The course then examines the application of those principles in legal cases. Students read legal cases in translation and argue them in class. (Same as HIST 594.) Prerequisite: A course in Chinese history. LEC.

EALC 596. Defining Japan: Marginalized Groups and the Construction of National Identity. 3 Hours. NW / H/W.
This course investigates the construction of national identity in modern Japan by examining the historical experiences of groups marginalized by mainstream society. We will explore the pressures of conformity, the pervasiveness of social ostracism and the surprising diversity in Japanese society. Among the groups discussed will be indigenous peoples (the Ainu, Okinawans), the Korean minority, the outcast class (burakumin), the sick and disabled, the Yakuza, and political activists. (Same as HIST 596.) LEC.

EALC 597. Japanese Theater History. 3 Hours. NW / H/W.
This course examines the historical development and characteristics of Japanese theater, with special attention to traditional theater and the genres of noh, kyogen, and kabuki in particular, tracing their origins in the pre-modern era and their continued performance today. To gain an understanding of the historical and artistic setting of these arts, lectures and readings will consider broader issues such as performance and ritual in religion and daily life, gender and representation, and folk theater.
A portion of this class will include practical studies of theatrical forms including noh dance and kabuki music (shamisen). (Same as HIST 597.) LEC.

EALC 598. History and Structure of the Japanese Language. 3 Hours. H/W.
The historical development of Japanese. Study of Japanese phonology, morphology and syntax, using the techniques of descriptive linguistics and generative grammar. Prerequisite: An introductory course in linguistics or one year of Japanese. LEC.

EALC 600. Biography of a City: ____. 3 Hours. H/W.
This interdisciplinary, team-taught course surveys the artistic, intellectual, and historical development of some of the great cities of the world, such as Kyoto or Tokyo. LEC.

EALC 612. Visual and Literary Culture in Modern Japan. 3 Hours. H.
This course examines the interconnections between the evolution of modern Japanese literature and visual technologies such as painting, panoramas, magic lanterns, stereoscopes, photography, motion pictures, television, and computers. The course provides an overview of modern Japanese literature from the perspectives of the visual culture in which that literature was conceived. The course considers such authors as Higuchi, Soseki, Ogai, Shimazaki, Akutagawa, Tanizaki, Yokomitsu, Kawabata, and Abe. There will be additional assignments for students in 612. Not open to students who have completed EALC 412. LEC.

EALC 615. Ancient China. 3 Hours. NW / H/W.
A survey of ancient Chinese culture to the Qin period. Major archaeological discoveries and the literary tradition will be taken as the primary evidence through which a number of topics are introduced (for example: environment, food, writing, art, thought, ritual). A knowledge of Chinese is not required. The course is offered at the 400 and 600 levels, with additional assignments at the 600 level. Not open to students who have completed EALC 415. LEC.

EALC 618. Sexual Politics in Chinese Literature and Culture: Premodern Times. 3 Hours. NW / H.
This course uses myth, literature, history, biography, and other documents to discuss sexual politics in China from ca 1500 B.C.E. to the end of the last dynasty in 1911. Topics include: emperors, empresses, and consorts, polygamy, prostitution, love, yin and yang cosmology, the art of the bedchamber, women’s literature, and erotic literature. Prerequisite: A course in East Asian studies. Not open to students who have taken EALC 418. This course is taught at the 400 and 600 levels with additional assignments at the 600-level. LEC.

EALC 620. Daily Life in China from the Opium War to the Present. 3 Hours. NW / H/W.
Daily life and issues of social and cultural interaction between China and Western nations from the Opium War to the present. Fiction, travel diary, historical sources, film, and personal accounts will make up course materials. LEC.

EALC 636. Women in Japanese Literature. 3 Hours. H/W.
An examination of women as subjects, readers, and writers of Japanese literature. Topics may include images and stereotypes of women in Japanese literature; feminist readings of this literature; female culture; and the psychodynamics of female creativity. LEC.

EALC 642. Chinese Thought. 3 Hours. NW AE42/GE3H / H/W.
A survey of the principal modes of Chinese thought from their origins through the imperial period. Not open to students with credit in EALC 132. (Same as HWC 524 and PHIL 506.) Prerequisite: Eastern civilizations course or a course in Asian history or a distribution course in philosophy. LEC.

EALC 646. Chinese Law. 3 Hours. H/W.
The history and development of civil and criminal law in China from its beginnings until the present. The course will be taught both by lectures and by discussion of cases. A section of the course will concern modern Chinese law. Prerequisite: A course on China, or general background in law or business. LEC.

EALC 649. Doing Business With China: Law and Policy. 3 Hours. NW / H/W.
A study of the issues involved in doing business with China. The current Chinese political and economic context will be examined, followed by a study of the Chinese legal system and Chinese economic law and regulation. Relevant U.S. law will also be considered. Prerequisite: A course on China, or general background in law or business. LEC.

EALC 655. Government and Politics of East Asia. 3 Hours. NW AE42 / S/W.
A comparative examination of the contemporary political institutions, processes and ideas of China, Japan, and Korea. (Same as POLS 656.) Prerequisite: A distribution course in political science or a course in East Asian studies. LEC.

EALC 666. Political Economy of East Asia. 3 Hours. S.
This course provides basic understanding of fiscal, monetarist, and trade policies; how governments in East Asia use them to pursue growth; the extent to which these governments follow or controvert economics to pursue growth; and how the performances of economies in East Asia relate to the US and global economies. (Same as POLS 666.) Prerequisite: POLS 170 or a course in East Asian studies. LEC.

EALC 676. International Relations of Asia. 3 Hours. S/W.
An intensive study of the problems of ideological conflict, diplomatic relations, strategic arrangements, economic cooperation, and cultural exchange in East and Southeast Asia with special emphasis upon the roles of major world powers. (Same as POLS 676.) Prerequisite: POLS 170 or a course in East Asian studies. LEC.

EALC 678. Chinese Foreign Policy. 3 Hours. S/W.
In-depth examination of China’s changing policies toward other countries with special emphasis on policy-making process, negotiating behavior, military strategy, economic relations, and cultural diplomacy. (Same as POLS 678.) LEC.

EALC 700. Introduction to East Asian Studies. 1 Hour.
Required of all M.A. students in the Department regardless of concentration. Introduction to resources in East Asian languages and literature. LEC.

EALC 701. Practicum in Teaching Chinese. 1 Hour.
This course is required every semester for graduate teaching assistants in the Chinese language program in EALC. The course will cover applicable second language acquisition theories and principles of foreign language pedagogy and focus on teaching methodologies, instructional techniques, and development of pedagogical materials specific to the Chinese classroom. This class will be conducted in a seminar format. Prerequisite: Teaching appointment in the East Asian Languages and Cultures department. SEM.

EALC 702. Practicum in Teaching Japanese. 1 Hour.
This course is required every semester for graduate teaching assistants in the Japanese language program in East Asian Languages and Cultures. The course will cover applicable second language acquisition theories and principles of foreign language pedagogy and focus on teaching methodologies, instructional techniques, and development of pedagogical materials specific to the, Japanese language classroom. This class will be conducted in a seminar format. Prerequisite: Teaching appointment in the East Asian Languages and Cultures department. SEM.
EALC 703. Practicum in Teaching Korean. 1 Hour.  
This course is required every semester for graduate teaching assistants in the Korean language program in East Asian Languages and Cultures. The course will cover applicable second language acquisition theories and principles of foreign language pedagogy and focus on teaching methodologies, instructional techniques, and development of pedagogical materials specific to the Korean language classroom. This class will be conducted in a seminar format. Prerequisite: Teaching appointment in the East Asian Languages and Cultures department. SEM.

EALC 790. Topics in East Asian Languages and Cultures: ____. 1-3 Hours.  
Special topical courses covering a number of disciplines. Credit descriptions and prerequisites will vary. NOTE: May be repeated for up to 12 total credits. RSH.

EALC 801. Directed Readings. 1-5 Hours.  
Designed to meet the needs of advanced students whose study in East Asian studies cannot be met with regular courses. Prerequisite: Consent of instructor. RSH.

EALC 841. Asian Film. 3 Hours.  
Seminar on various national film cultures of East and Southeast Asia. Representative films are studied from formal, stylistic, and socio-historic perspectives. Addresses the impact of key cultural, economic and political issues on each film industry. Class includes discussion, reports, and individual research papers. This course is offered at the 500 and 800 levels. (Same as HIST 841.) PREREQUISITE: Approval of the instructor.

EALC 702. Seminar in Teaching English. 1 Hour.  
This course provides support and guidance for teaching assistants in the East Asian Languages and Cultures program. The course will focus on teaching methodologies, instructional techniques, and development of pedagogical materials specific to teaching English as a Second Language. This class will be conducted in a seminar format. Prerequisite: Teaching appointment in the East Asian Languages and Cultures department. SEM.

EALC 712. Readings in Traditional Japanese Literature. 3 Hours.  
A survey of Japanese literature from earliest times to 1868. Students will study the major writers in each genre, with special emphasis on an individual research topic. A knowledge of Japanese is not required. (Not open to students with credit in EALC 314.) LEC.

EALC 714. Readings in Traditional Chinese Literature. 3 Hours.  
A general survey of representative literary works of major genres in traditional China. Lectures, assigned readings, and discussions in English. A knowledge of Chinese is not required. (Not open to students with credit in EALC 318.) LEC.

EALC 715. Survey of Japanese Film. 3 Hours.  
This course surveys the major developments in patterns of distribution, exhibition, and reception and their influence on film aesthetics in twentieth century Japanese film. Through secondary readings, lectures, and discussions, students will examine how Japanese cinema as an institution responds to and intervenes in the social, cultural, and political history of twentieth century Japan. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. (Same as FMS 715.) LEC.

A survey of major literary works of Japan's modern era through the Pacific War. Topics: the social and spiritual challenges of modernization, urbanization, and the issues of race and national identity. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. An individual research project in an area of the student's special interest will be required. Not open to students who have completed EALC 316. LEC.

EALC 717. Contemporary Japanese Literature in Translation: 1945-Present. 3 Hours.  
A survey of major literary works of Japan's post-war and contemporary eras. Topics include life during and after the war, the experience of the atomic bomb, and the postmodern landscape. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. An individual research project in an area of the student's special interest will be required. Not open to students who have completed EALC 317. LEC.

EALC 718. Readings in Modern Chinese Literature. 2-3 Hours.  
A general survey of the important writers of the 20th century and their works. Lectures, readings, and discussions in English. A knowledge of Chinese is not required. (Not open to students with credit in EALC 318.) LEC.

EALC 732. Seminar in Eastern Religious Thought: ____. 3 Hours.  
Analysis of the religious thought of selected thinkers of India, China, and/or Japan, traditional and modern. May be taken more than once if subject matter varies sufficiently. (Same as REL 762.) Prerequisite: REL 507, REL 508, REL 509, or permission of the instructor. LEC.

EALC 733. Seminar in Eastern Religious Texts: ____. 3 Hours.  
Analysis of a selected religious text or texts from India, China, or Japan, in translation. May be taken more than once if subject matter varies sufficiently. (Same as REL 733.) Prerequisite: REL 507, REL 508, REL 509, or permission of the instructor. LEC.

EALC 734. Seminar in Eastern Religious Thought: ____. 3 Hours.  
Analysis of the religious thought of selected thinkers of India, China, and/or Japan, traditional and modern. May be taken more than once if subject matter varies sufficiently. (Same as REL 762.) Prerequisite: REL 507, REL 508, REL 509, or permission of the instructor. LEC.

EALC 743. Contemporary Japanese Film. 3 Hours.  
Seminar on the major developments in the contemporary (1980-present) Japanese film industry examining how filmmaking practices and film criticism have been influenced by such issues as transnationalism, postcolonialism, critical race theory, postmodernism, and new media. We will survey recent industrial and stylistic trends as well as key critical debates. Class includes discussion, reports, and individual research papers. This course is offered at the 500 and 700 levels, with additional assignments at the 700 level. (Same as FMS 743.) SEM.

EALC 747. East Asian History and Culture for Teachers. 2 Hours.  
An advanced survey of the history, culture, and contemporary affairs of Japan, China, and Korea. Designed to meet the needs of advanced students whose study in East Asia will be emphasized. Topics covered will address relevant benchmarks in the state curricular standards in social studies, themes from the Advanced Placement world history examination, and the national standards in world history. (Same as HIST 747.) Prerequisite: Approval of the instructor.

EALC 762. Readings in Japanese Religion. 3 Hours.  
A high-level introduction to the traditional religions of Japan, with special emphasis on Japanese Buddhism. Texts to be used will include translations of original documents as well as secondary studies. Those students who have competence in Japanese will be required to do some readings in that language, but a knowledge of the language is not a prerequisite. LEC.

EALC 764. Modern Korean Culture and Society. 3 Hours.  
An examination of the history, society, values, and political economy of Korea in its East Asian and global context. The course will use a multi-disciplinary approach, including history, ethnography, fiction and film.

EALC 766. Japanese People: Their Culture and Literature. 3 Hours.  
A study of Japanese people's life cycle through a combination of theoretical social scientific observations of Japanese as a cultural group and personal literary descriptions of them. An individual research paper is required. (Not open to students with credit in EALC 366.) LEC.

EALC 776. Seminar in Religion and Society in Asia: ____. 3 Hours.  
Analysis of selected Asian religions and their relationships to selected Asian societies. May be taken more than once if subject matter varies sufficiently. (Same as REL 776.) Prerequisite: REL 507, REL 508, REL 509, or permission of the instructor. LEC.

EALC 790. Topics in East Asian Languages and Cultures: ____. 1-3 Hours.  
Special topical courses covering a number of disciplines. Credit descriptions and prerequisites will vary. NOTE: May be repeated for up to 12 total credits. RSH.

EALC 741. Asian Film. 3 Hours.  
Seminar on various national film cultures of East and Southeast Asia. Representative films are studied from formal, stylistic, and socio-historic perspectives. Addresses the impact of key cultural, economic and political issues on each film industry. Class includes discussion, reports, and individual research papers. This course is offered at the 500 and 800 levels. (Same as FMS 741.) PREREQUISITE: Approval of the instructor.

EALC 772. Seminar in Modern Chinese Literature: ____. 3 Hours.  
A seminar in modern Chinese literature, focusing on selected topics in Chinese literature from 1919 to the present. Students will read and discuss representative works of major authors and movements, with special emphasis on contemporary literary trends. Prerequisite: Approval of the instructor.
levels, with additional assignments at the 800 level. (Same as FMS 841.) SEM.

EALC 888. Contemporary China Studies. 3 Hours.
This course will review and analyze the current literature on China's social and political development, including a wide range of topics within political science. There is a rich body of literature within each topic such as civil society in China, legal reform, political culture, nationalism, gender issues, ethnicity, political behavior, elections, economic development, and inequality. This course will introduce key literature within each topic focusing on the debates among China scholars as well as how these debates fit in the general field of political science. (Same as GIST 888 and POLS 888.) Prerequisite: POLS 668 or permission of the instructor. LEC.

EALC 899. Thesis. 1-6 Hours.
An inquiry into the source material upon a specific subject. THE.

ECIV 104. Eastern Civilizations. 3 Hours. HL/NW AE42 / H/W.
An introductory course designed to acquaint the student with the broad outlines of the traditional cultures and literatures of East Asia, and explores the interaction between these regions and cultures as well as their continuities and disparities. Course materials include translations and discussions of original sources. The course is most appropriate for students with no background in Asian culture. Does not complete major requirement. Not open to students with credit in ECIV 304. LEC.

ECIV 105. Eastern Civilizations Honors. 3 Hours. HL/NW AE42 / H/W.
An introductory course designed to acquaint the student with the broad outlines of the traditional cultures and literatures of East Asia. By reading translations of original source materials, the student is able to see the interaction among the various cultures as well as their essential continuity. The course is most appropriate for students without any background in Asian culture. Offered for students with superior academic records. Open only to students in the University Honors Program or by permission of instructor. LEC.

ECIV 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Eastern Civilization. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

ECIV 304. Eastern Civilizations. 3 Hours. HL/NW AE42 / H/W.
This course acquaints the student with the broad outlines of the traditional cultures and literatures of East Asia, and explores the interaction between these regions and cultures as well as their continuities and disparities. Course materials include translations and discussions of original sources. The course is most appropriate for students with no background in Asian culture. Not open to students with credit in ECIV 104. If majoring in EALC and have completed ECIV 104, see major advisor about completing the ECIV 304 major requirement. LEC.

ECIV 305. Eastern Civilizations Honors. 3 Hours. HL/NW AE42 / H/W.
An introductory course designed to acquaint the student with the broad outlines of the traditional cultures and literatures of East Asia. By reading translations of original source materials, the student is able to see the interaction among the various cultures as well as their essential continuity. The course is most appropriate for students without any background in Asian culture. Similar to ECIV 304, but reading and writing assignments reflect the fact that this is an honors course. Open only to students in the University Honors Program or by permission of instructor. LEC.

JPN 100. Beginning Japanese I. 3 Hours.
An introduction to Japanese. Familiarity with the basic structural patterns of the language through conversation is stressed. The hiragana and katakana syllabaries are introduced and a few characters are learned. Usually offered as part of a Summer Study Abroad Program. LEC.

JPN 101. Beginning Japanese II. 3 Hours.
Continuation of JPN 100. Available to students who took JPN 100 as part of the Summer Study Abroad Program. Not available for credit for students who have previously completed JPN 104. Prerequisite: JPN 100 or equivalent. LEC.

JPN 104. Elementary Japanese I. 5 Hours.
Three hours of lecture, three hours of drill per week. Acquisition of basic language skills (listening, speaking, reading, writing). Not available for credit for students who have previously completed JPN 101. LEC.

JPN 108. Elementary Japanese II. 5 Hours.
Continuation of JPN 104. Prerequisite: JPN 101, JPN 104, or equivalent. LEC.

JPN 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Japanese. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

JPN 204. Intermediate Japanese I. 5 Hours.
Three hours of lecture, three hours of drill. Prerequisite: JPN 108 or equivalent. LEC.

JPN 206. Intermediate Japanese Conversation. 2-4 Hours.
Enhancement of conversational ability at the intermediate level. Used primarily to accommodate transfer credits. Prerequisite: JPN 204 or equivalent. LEC.

JPN 208. Intermediate Japanese II. 5 Hours.
Continuation of JPN 204. Prerequisite: JPN 204. LEC.

Supervised and individualized study and practice of language skills through direct experience in interviews and guided practical applications in various public settings in Japan. Some conventional classroom instruction in grammar included. Offered only during the Summer Institute in Hiratsuka, Japan. Prerequisite: Two semesters or the equivalent of Japanese language study. LEC.

JPN 233. Special Skills in Japanese: _____. 1-4 Hours.
Instruction in special skills in Japanese, such as pronunciation, recognition of Chinese characters, comprehension of broadcast media, etc. at the freshman/sophomore level. Course work must be arranged through the office of KU Study Abroad and approved by the Department of East Asian Languages and Cultures. May be repeated for credit if content varies. LEC.

JPN 306. Advanced Japanese Conversation I. 2 Hours.
Intensive practice of communicative skills at the advanced level. Prerequisite: JPN 208 or equivalent. LEC.

JPN 310. Advanced Japanese Conversation II. 2 Hours.
Continuation of JPN 306. LEC.

JPN 326. Japanese in Context - Advanced. 3 Hours.
Supervised and individualized study and practice of language skills through direct experience in interviews and guided practical applications in various public settings in Japan. Some conventional classroom instruction in grammar and usage. Offered only during the Summer Institute in Hiratsuka, Japan. Prerequisite: Four semesters or the equivalent of Japanese language study. LEC.
JPN 333. Special Skills in Japanese: ____. 1-4 Hours. U.
Instruction in special skills in Japanese, such as pronunciation, recognition of Chinese characters, comprehension of broadcast media, etc. at the junior/senior level. Course work must be arranged through the office of KU Study Abroad and approved by the Department of East Asian Languages and Cultures. May be repeated for credit if content varies. LEC.

JPN 386. Advanced Japanese Conversation III. 1-3 Hours. U.
Instruction in discussion in formal contexts and speech making. Prerequisite: JPN 504 or equivalent. LEC.

Readings in Japanese on a subject selected by a student with the advice and direction of the instructor. Individual meetings and reports. Prerequisite: Consent of instructor. IND.

JPN 504. Advanced Modern Japanese I. 3 Hours. H/W.
Readings in selected modern Japanese texts on various topics: history, education, language, society, business, and literature. Meets three hours per week. Prerequisite: JPN 208 or equivalent. LEC.

JPN 508. Advanced Modern Japanese II. 3 Hours. H.
Continuation of JPN 504. Prerequisite: JPN 504 or equivalent. LEC.

JPN 509. Business Japanese. 3 Hours. U.
Study of Japanese language especially appropriate to business situations. Although the course emphasizes developing conversational ability, the primary focus is on strengthening reading and writing in the specialized area. The course includes discussion of non-verbal aspects of Japanese business practices as well. Prerequisite: The first semester of third-year Japanese or the equivalent. LEC.

JPN 542. Introduction to Classical Japanese I. 3 Hours. H/W.
Introductory grammar and readings in classical Japanese texts. Prerequisite: JPN 508. LEC.

JPN 544. Introduction to Classical Japanese II. 3 Hours. H.
Continued readings of classical Japanese texts, on the intermediate and advanced level. Introduction to the elements of kambun (Sino-Japanese) and sorobun (epistolary) styles. Prerequisite: JPN 542 or equivalent. LEC.

JPN 562. Modern Japanese Texts I. 3 Hours. AE61 / H/W.
Readings and interpretation of modern Japanese texts from various fields. Continued study of the language in the form of oral discussion and written reports. Prerequisite: JPN 508. LEC.

JPN 564. Modern Japanese Texts II. 3 Hours. H/W.
A continuation of JPN 562. Prerequisite: JPN 562 or equivalent. LEC.

JPN 569. Advanced Business Japanese. 3 Hours. U.
This course strengthens reading and writing skills and continues developing conversational ability. It assumes a higher level of competency in Japanese than JPN 509 and includes both verbal and non-verbal aspects of Japanese business practices. Prerequisite: Completion of third-year Japanese or equivalent. LEC.

JPN 598. Readings in: ____. 1-3 Hours. H/W.
Students will read selections from materials on a given topic or topics. May be repeated for credit. Prerequisite: JPN 564 or permission of instructor. IND.

JPN 690. Seminar in: ____. 1-3 Hours. H/W.
Varying topics with varying prerequisites. LEC.

JPN 801. Directed Readings and Research in Japanese. 1-4 Hours.
Advanced language training for the study of Japanese sources in the humanities or social science field of the student. Prerequisite: JPN 564 or consent of instructor. RSH.

JPN 880. Advanced Japanese Research Materials. 2 Hours.
A detailed examination of various Japanese language reference works and research materials. Emphasis will be placed on the use of different types of reference works to carry out research strategies. Prerequisite: JPN 508 or equivalent and JPN 580. LEC.

KOR 104. Elementary Korean I. 5 Hours. U.
Five hours of class and two hours of drill in the spoken language each week. Grammar and readings in selected texts. LEC.

KOR 108. Elementary Korean II. 5 Hours. U.
Continuation of KOR 104. Prerequisite: KOR 104. LEC.

KOR 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Korean. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

KOR 204. Intermediate Korean I. 5 Hours. U.
Five hours of class and two hours of spoken drill. Readings in selected texts in modern Korean. Prerequisite: KOR 108 or equivalent. LEC.

KOR 208. Intermediate Korean II. 5 Hours. U.
Continuation of KOR 204. Prerequisite: KOR 204. LEC.

KOR 498. Directed Readings in Korean. 1-4 Hours. H/W.
Readings in Korean on a subject selected by a student with the advice and direction of the instructor. Individual meetings and reports. Prerequisite: Consent of instructor. IND.

KOR 504. Advanced Modern Korean I. 4 Hours. H/W.
Readings in and discussion of selected modern Korean texts on various topics: history, literature, society, and language. Prerequisite: KOR 208 or equivalent. LEC.

KOR 508. Advanced Modern Korean II. 4 Hours. H/W.
Readings and analysis of modern or contemporary texts from various fields. Includes oral discussion and written essays. Prerequisite: KOR 504 or equivalent. LEC.

KOR 562. Modern Korean Texts I. 1-5 Hours. H.
Readings and analysis of modern or contemporary texts from various fields. Includes oral discussion and written essays. Prerequisite: KOR 508 or equivalent. LEC.

KOR 564. Modern Korean Texts II. 1-5 Hours. H.
Continuation of KOR 562. Reading and analysis of modern or contemporary texts from various fields. Includes oral discussion and written essays. Prerequisite: KOR 562 or equivalent. LEC.

MONG 101. Elementary Mongolian I. 3 Hours. U.
The first semester of Elementary Mongolian is designed to give the student basic communicative competency, including pronunciation and intonation, structure, and syntax. Effective oral and written communication is stressed. LEC.

MONG 102. Elementary Mongolian II. 3 Hours. U.
A continuation of Elementary Mongolian I. Prerequisite: Elementary Mongolian I or the equivalent. LEC.

MONG 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Mongolian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.
TIB 101. Elementary Tibetan I. 3 Hours. U.
An introduction to the Tibetan language in both its literary and colloquial forms according to the Central Tibetan dialects. Four semesters of 3-credit Tibetan language courses fulfill the College of Liberal Arts and Sciences foreign language requirement. LEC.

TIB 102. Elementary Tibetan II. 3 Hours. U.
A continuation of TIB 101. Prerequisite: TIB 101 or equivalent. Four semesters of 3-credit Tibetan language courses fulfill the College of Liberal Arts and Sciences foreign language requirement. LEC.

TIB 177. First Year Seminar: _____ 3 Hours. GE11 / U.
A limited-enrollment seminar course for first-time freshmen, addressing current issues in Tibetan. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

TIB 201. Intermediate Tibetan I. 3 Hours. U.
Continuation of TIB 102. Prerequisite: TIB 102 or equivalent. Four semesters of 3-credit Tibetan language courses fulfill the College of Liberal Arts and Sciences foreign language requirement. LEC.

TIB 202. Intermediate Tibetan II. 3 Hours. U.
Continuation of TIB 201. Prerequisite: TIB 201 or equivalent. Four semesters of 3-credit Tibetan language courses fulfill the College of Liberal Arts and Sciences foreign language requirement. LEC.

UYGR 101. Elementary Uyghur I. 3 Hours. U.
Uyghur is an important Central Asian Turkic language spoken by nine million people in China. The first semester is designed to give the student basic communicative competency, including pronunciation and intonation, structure, and syntax. Effective oral and written communication is stressed. LEC.

UYGR 102. Elementary Uyghur II. 3 Hours. U.
Continuation of UYGR 101. Prerequisite: UYGR 101 or the equivalent. LEC.

UYGR 177. First Year Seminar: _____ 3 Hours. GE11 / U.
A limited-enrollment seminar course for first-time freshmen, addressing current issues in Uyghur. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

UYGR 201. Intermediate Uyghur I. 3 Hours. U.
Continuation of UYGR 102. Prerequisite: UYGR 102 or equivalent. LEC.

UYGR 202. Intermediate Uyghur II. 3 Hours. U.
Continuation of UYGR 201. Prerequisite: UYGR 201 or equivalent. LEC.

Economics Courses

ECON 104. Introductory Economics. 4 Hours. SF GE3S / S.
An introduction to modern economics designed primarily for students who do not plan to major in economics. Topics include economic history, the operation of economic institutions, and the formation and execution of economics policies to meet the current problems of the domestic and international economy. Course may be offered in lecture or online format. Prerequisite: MATH 101 or MATH 104, or eligibility for MATH 115 or MATH 121. LEC.

ECON 105. Introductory Economics, Honors. 4 Hours. SF GE3S / S.
An introduction to modern economics designed primarily for students who do not plan to major in economics. Topics include economic history, the operation of economic institutions, and the formation and execution of economic policies to meet the current problems of the domestic and international economy. Prerequisite: Consent of the Economics Department and MATH 101 or MATH 104, or eligibility for MATH 115 or MATH 121. LEC.

ECON 110. The Economics of Globalization. 3 Hours. SF AE42 / S.
The course emphasizes the application of economic methods of analysis to the public policy issues that globalization creates. Topics covered may include the following: winners and losers from trade; links between trade and labor markets; links between trade and foreign investment; the international financial system and exchange rates; outsourcing and multinational corporations; international institutions and regional trade agreements. LEC.

ECON 142. Principles of Microeconomics. 3 Hours. SF GE3S / S.
An analytical introduction to microeconomics. Topics include theory of markets, public policy, international trade, economic efficiency, and equity. Prerequisite: MATH 101 or MATH 104, or eligibility for MATH 115 or MATH 121. LEC.

ECON 143. Principles of Microeconomics, Honors. 3 Hours. SF GE3S / S.
An honors section of ECON 142. An analytical introduction to microeconomics. Topics include theory of markets, public policy, international trade, economic efficiency, and equity. Prerequisite: Consent of the Economics Department and MATH 101 or MATH 104, or eligibility for MATH 115 or MATH 121. LEC.

ECON 144. Principles of Macroeconomics. 3 Hours. SF GE3S / S.
An analytical introduction to macroeconomics. Topics include determination of aggregate income, employment, inflation, exchange rates, and the role of fiscal and monetary policy in dealing with unemployment, inflation, and economic growth. Prerequisite: MATH 101, MATH 104, or eligibility for MATH 115 or MATH 121. LEC.

ECON 145. Principles of Macroeconomics, Honors. 3 Hours. SF GE3S / S.
An honors section of ECON 144. An analytical introduction to macroeconomics. Topics include determination of aggregate income, employment, inflation, exchange rates, and the role of fiscal and monetary policy in dealing with unemployment, inflation, and economic growth. Prerequisite: Consent of the Economics Department and MATH 101, MATH 104, or eligibility for MATH 115 or MATH 121. LEC.

ECON 250. Study Abroad Topics in: _____. 1-5 Hours. S.
This course is designed for the study of special topics in economics at the freshman/sophomore level. Coursework must be arranged by the office of KU Study Abroad and approved by the Economics Department. This course may be repeated for credit if content varies. LEC.

ECON 310. Topics in Applied Economics: _____. 3 Hours. S.
(Topic, instructor, and specific prerequisites to be announced in the Schedule of Classes.) This course will focus on an area of applied economics of current interest. This course cannot be used to fulfill the elective course requirements for the Economics major or the Economics minor. LEC.

ECON 450. Study Abroad Topics in: _____. 1-5 Hours. S.
This course is designed for the study of special topics in economics at the junior/senior level. Coursework must be arranged by the office of KU Study Abroad, approved by the Economics Department, and may count
as an economics elective for economics majors. This course may be repeated for credit if content varies. LEC.

ECON 496. Research in Economics. 1-3 Hours. AE61 / S.
A directed reading and research course for economics majors. The course involves the preparation of a research paper under the supervision of a faculty member whose area of interest and specialization corresponds with the area of study selected by the student. Prerequisite: Approval of major adviser and selected faculty member. IND.

ECON 497. Senior Research Honors. 1-3 Hours. AE61 / S.
Open to seniors in the College who have a grade-point average of 3.5 or above in economics and a grade-point average of 3.25 or above in all courses. A directed reading and research course for qualifying seniors. Involves preparation of a research paper under the supervision of a faculty member whose area of interest and specialization corresponds with the area of study selected by the student. Prerequisite: Approval of major adviser and selected faculty member. IND.

ECON 498. Oswald Undergraduate Seminar in Economics. 3 Hours. S.
Examine issues in economics of contemporary interest. Enrollment is limited to current Oswald, Boynton, and Pritchard scholarship holders. May be repeated for credit, but does not fulfill the elective course requirements for the Economics major or minor. Prerequisite: ECON 520, ECON 522, and permission of department. LEC.

ECON 505. History of Economic Analysis. 3 Hours. S.
The history of intellectual efforts to understand economic phenomena and the impact of these efforts on the social and economic development of the modern world. Prerequisite: ECON 104 or ECON 142 and ECON 144. LEC.

ECON 510. Energy Economics. 3 Hours. S.
The application of basic economic concepts and methods to the analysis of energy markets, regulation, and policies. Topics covered include energy trends and projections, economic growth and resource exhaustion, the organization and regulation of fossil fuel industries, nuclear power and non-conventional energy technologies, the world oil market, energy conservation, environmental pollution, and national energy policies in the U.S. and other developed as well as developing countries. Prerequisite: ECON 142 and ECON 144 or permission of instructor. LEC.

ECON 515. Income Distribution and Inequality. 3 Hours. AE41 / S.
An analysis of the distribution of income and wealth in the United States and a few other developed countries. The concepts of economic inequality, economic justice, statistical measures of inequality and their applications will be discussed. Various theories of income distribution (e.g., Ricardian, Marxian, neoclassical, and neo-Keynesian) will be covered. Prerequisite: ECON 142 and ECON 144. LEC.

ECON 516. Income Distribution and Inequality, Honors. 3 Hours. AE41 / H.
This course examines the definition and impact of social and economic inequality. Beginning with a review of economic and philosophical perspectives of inequality, the course considers the measurement of inequality, current trends in U.S. and international inequality, and policies designed to eliminate inequality. The course requires both writing and quantitative analysis and includes a term paper. Students should be comfortable with methods of quantitative social science. The Honors section is taught as a seminar where philosophical perspectives on inequality are debated and discussed. Prerequisite: ECON 142 and ECON 144. Open only to students who have been admitted to the University Honors Program, or by consent of instructor. LEC.

ECON 520. Microeconomics. 3 Hours. S.
The theory of consumption, production, pricing, and resource allocation. Not open for credit to students with credit in ECON 524. Prerequisite: ECON 142, ECON 144, and Math 116 or Math 122 (or equivalent). LEC.

ECON 521. Microeconomics Honors. 3 Hours. S.
The theory of consumption, production, pricing, and resource allocation. Prerequisite: ECON 142 and ECON 144 and consent of department. LEC.

ECON 522. Macroeconomics. 3 Hours. S.
The theory of national income and employment, the analysis of aggregate demand, the general degree of utilization of productive resources, the general level of prices, and related questions of policy. Prerequisite: ECON 142 and ECON 144. LEC.

ECON 523. Macroeconomics Honors. 3 Hours. S.
The theory of national income and unemployment, the analysis of aggregate demand, the general degree of utilization of productive resources, the general level of prices, and related questions of policy. Prerequisite: ECON 142 and ECON 144 and consent of department. LEC.

ECON 526. Introduction to Econometrics. 3 Hours. S.
An introduction to the statistical analysis of economic data and its application to economic inquiry. Includes extensive use of statistical software. Prerequisite: ECON 142, ECON 144, and MATH 526 or equivalent. LEC.

ECON 530. American Economic Development. 3 Hours. H.
An introductory study of the development of the American economy from colonial times to the present. Investigates long-term trends in output, population, and output per capita, as well as short-term fluctuations, and the variables and institutions that determined these fluctuations and trends. (Same as HIST 628.) Prerequisite: ECON 104 or ECON 142 and ECON 144. LEC.

ECON 533. Economic History of Europe. 3 Hours. S.
An introductory study of European economic history from the Middle Ages to the 1980s. Investigates the sources of economic growth, and the interaction between economic forces and social institutions. Topics covered will include the rise of commerce, the agricultural and industrial revolutions, imperialism, the Great Depression, and European recovery after World War II. (Same as HIST 528.) Prerequisite: ECON 104 or ECON 142 and ECON 144. LEC.

ECON 536. Economic Issues of the European Union. 3 Hours. S.
A survey of the economies of the European Union, with a focus on the economic development of the member states since World War II, and an examination of the various economic issues confronting them today. (Same as EURS 536.) Prerequisite: ECON 104 or ECON 142 and ECON 144. LEC.

ECON 540. Recent American Economic History. 3 Hours. S.
An empirically oriented examination of the American economy designed to apply economic concepts to a wide variety of topics such as monetary and fiscal policy, income distribution, the Great Depression, poverty, population growth, the defense sector, education, research and development, technological change, and industrial organization. Prerequisite: ECON 104 or ECON 142 and ECON 144; ECON 520 and/or ECON 522 recommended. LEC.

ECON 550. Environmental Economics. 3 Hours. U.
This course provides an overview of the theory and empirical practice of economic analysis as it applies to environmental issues. Topics include externalities (a type of market failure), the valuation of nonmarket goods, the practice of benefit-cost analysis, and the efficiency and cost effectiveness of pollution control policies. Most importantly, the course permits students to perform economic field research, using state-of-the-art
techniques in a manner accessible to undergraduate students. (Same as EVRN 550.) Prerequisite: ECON 104 or ECON 142. LEC.

ECON 560. Economic Systems. 3 Hours. S.
Critical analysis of economic theories underlying such economic systems as capitalism, different types of socialism, communism, and fascism. Comparative study of economic planning, production, distribution, price formation, economic institutions, and forms of government in countries under different economic systems. Prerequisite: ECON 104 or ECON 142 and ECON 144. LEC.

ECON 562. The Russian Economy. 3 Hours. S/W.
An analytical survey of Russian economic development, with emphasis on the structure and operation of the Russian economy and transition issues. Prerequisite: ECON 104 or 142 and ECON 144 and consent of instructor. LEC.

ECON 563. Current Economic Issues of East Europe. 3 Hours. S.
An institutional and theoretical analysis of the issues arising from the transition from a command economy to a free market-oriented economy. With emphasis on the former Soviet Union, topics will include: assessment of the central planning experience; changes in property rights and their effect on resource allocation; market mechanisms and how they work when market institutions are at the formative stage; and public interest under privatization. Prerequisite: ECON 142 and ECON 144. LEC.

ECON 564. Topics in Applied Economics: ______. 3 Hours. S.
This course will focus on an area of applied economics of current interest. This course can be used to fulfill the elective course requirement for the Economics major. Prerequisite: ECON 142 and ECON 144. LEC.

ECON 570. Economics for Management Decisions. 3 Hours. S.
Economic analysis of the firm with emphasis on managerial decisions in a business environment. Topics include supply and demand with applications, consumer behavior, quantitative demand analysis, production and cost, transactions costs and the organization of the firm, strategic decisions in alternative market environments, risk and uncertainty, imperfect information, and project evaluation. Prerequisite: ECON 142. LEC.

ECON 582. Economic Development. 3 Hours. S.
An introduction to economic growth and development in high and low income countries, problems of development, and development policy. Prerequisite: ECON 104 or ECON 142. LEC.

ECON 583. Economic Issues of East Asia. 3 Hours. S.
This course will study the economics of the East Asian countries, especially China, Japan, Korea, and Taiwan. Topics to be covered include economic growth, development and change, international trade, inflation, unemployment, income distribution, and urbanization. Emphasis will be on the post World War II period. Prerequisite: ECON 104 or ECON 142 and ECON 144. ECON 522 recommended. LEC.

ECON 584. Economic Development of Latin America. 3 Hours. S.
This course explores development strategies followed in the countries of Latin America and the Caribbean, and analyzes current debates over development strategy. Topics covered include: debt, structural adjustment, and multilateral lending agencies; trade policy, and regional or hemispheric integration; state intervention in the economy; the role of elites; environmental degradation and sustainable development; land reform and agricultural policy; transnational enterprises and foreign investment; women in work and the household; migration (rural-urban, and international); and grassroots development projects. Prerequisite: ECON 104 or ECON 144. LEC.

ECON 586. Economic Issues in China. 3 Hours. S.
This course studies the Chinese economy, especially during the post-1979 reform period, and its relationship to the development of the Greater China Circle (China, Hong Kong, and Taiwan). Topics to be covered include economic development during the pre-1979 reform period, economic reform, and its impacts on China, Hong Kong, Taiwan, and lessons from the Chinese economic reforms. Prerequisite: ECON 142 and ECON 144. LEC.

ECON 587. Economic Development of Africa. 3 Hours. S.
This course studies current economic issues facing African countries. It studies the general characteristics of several African economies and examines the impact of economic development policies, including those of international organizations, on the economies of Africa. Topics include poverty, income inequality, debt, foreign investment policies, trade policies, and government regimes. Prerequisite: ECON 104 or ECON 142 and ECON 144. LEC.

ECON 590. Game Theory. 3 Hours. S.
Analysis of strategic choice problems. Firms, voters, bargainers, animals, sports competitors, and persons in everyday life choose alternative options with the outcomes depending on the choices of one or more other similar decision makers. Strategies of rational choices will be derived and analyzed in economic and other environments. Prerequisite: ECON 142. LEC.

ECON 600. Money and Banking. 3 Hours. S.
The basic principles of money, credit, and banking and their relation to prices and business fluctuations; a study of commercial and central banking and the problems of credit control. Prerequisite: ECON 522. LEC.

ECON 604. International Trade. 3 Hours. S.
An introduction to the nonmonetary theory of international trade, the cause and pattern of trade, the gains from trade, and the contemporary issues in international economic policy. Prerequisite: ECON 520 or ECON 524. LEC.

ECON 605. International Finance. 3 Hours. S.
This course surveys theories of exchange rate and balance of payments determination. Included are the elasticity approach, Keynesian models, and the monetary approach. The mechanics of foreign exchange trading, balance of payments accounting, and the working of the international monetary system are also discussed. Prerequisite: ECON 522. LEC.

ECON 606. Sports Economics. 3 Hours. S.
The course covers the microeconomics of the sports industry. Topics include analysis of teams, leagues, players, incomes, strategies, history, and government policy. Prerequisite: ECON 520 or permission of instructor. LEC.

ECON 610. Resource Economics and Environmental Policy. 3 Hours. S.
Survey of the economics of natural resources, designed to introduce the student to the economic models and analytical methods commonly used in natural resource problems and policy issues. Topics covered include environmental pollution and regulation, environmental case studies and applications of cost-benefit analysis, theoretical models, policy issues in the utilization of renewable and nonrenewable resources, sustainable development, and global environmental problems. Prerequisite: ECON 520 or ECON 524 or permission of instructor. LEC.

ECON 620. Elements of Mathematical Economics. 3 Hours. S.
Selected aspects of economic theory with emphasis on those parts where the spirit of mathematical analysis, rather than dexterity, is utilized. The simplification of the subject matter is accomplished by stressing complete treatment of special cases such as a two commodity-two individual world. Prerequisite: ECON 520 or ECON 524 and MATH 116 or MATH 121. LEC.
ECON 622. Public Finance. 3 Hours. S.
A general introduction to the science of public finance. Topics covered include public expenditures, public revenues and public credit, and the shifting and incidence of taxation. Prerequisite: ECON 520 or ECON 524. LEC.

ECON 630. Industrial Organization and Antitrust Policy. 3 Hours. S.
An examination of the structure, conduct and performance of American industry applying the concepts and techniques of economic analysis. Topics covered include the theories of monopoly, competition and oligopoly, concentration, barriers to entry, price-fixing and other restrictive practices, mergers, technological change, and public regulation. The course will also focus on the historical development of American antitrust law. Prerequisite: ECON 520 or ECON 524. LEC.

ECON 631. Economics of Regulation. 3 Hours. S.
This course studies topics in the economic effects of industry regulation by administrative agencies as a substitute for market competition. Topics include various theories of regulatory behavior, the theory of natural monopoly, the economic effects of rate of return regulation on the performance of electric utilities, and the effects of recent social and environmental regulation. Prerequisite: ECON 520 or ECON 524. LEC.

ECON 635. Science and Technology in Economic Growth. 3 Hours. S.
An analytical and historical exploration of the roles that science and technology have played in the economic growth of industrial societies. This course will examine the forces that have shaped the rate and direction of technological change, and the impact of technological change on Western living standards. Topics covered will include factors influencing the pace of innovation, the diffusion of new technologies, international technology transfers, growth accounting, and models of aggregate economic growth. Prerequisite: ECON 520 or ECON 524. LEC.

ECON 640. Labor Economics. 3 Hours. S.
Analysis of labor markets and differences in wage rates and incomes. Topics include returns to education and training, labor unions, unemployment, anti-poverty programs, and other government policies influencing the labor market. Prerequisite: ECON 520 or ECON 524. LEC.

ECON 669. The Economics of Financial Markets. 3 Hours. S.
This course provides an introduction to the theory of finance and its use in the understanding of the economic role of financial markets. There are two central themes: the allocation of resources over time and the allocation of resources under uncertainty. Topics may include: household saving and investment, investment projects, valuation of financial assets, choice under uncertainty, portfolio choice, and capital asset pricing. Prerequisite: ECON 520 and ECON 526. LEC.

ECON 675. Introduction to Welfare Economics. 3 Hours. S.
This course provides a nontechnical introduction to optimal resource allocation from the societal point of view as well as alternative individual mechanisms for achieving such an optimum. Prerequisite: ECON 520 or ECON 524. LEC.

ECON 680. Economic Growth. 3 Hours. S.
This course studies growth with an emphasis on national evidence and macroeconomic policy issues. Classic and modern growth theories are developed and evaluated on the basis of how well they fit empirical evidence. Theories are developed in which productivity growth results from endogenous changes in technology or in the efficiency with which factors are utilized. The fundamental factors that affect productivity are examined, and they may include government policies, income inequality, geography, climate, resources and other factors. Prerequisite: ECON 522. LEC.

ECON 700. Survey of Microeconomics. 3 Hours.
A comprehensive survey of microeconomics, including the theories of consumption, production, distribution, pricing, and resource allocation. Prerequisite: ECON 520 and MATH 116 or MATH 121; and completion of ECON 142 and ECON 144, ECON 520, and ECON 522 with a grade-point average of at least 3.00 or graduate standing. LEC.

ECON 701. Survey of Macroeconomics. 3 Hours.
A comprehensive survey of the modern theory of national income determination with particular emphasis on the foundation of macroeconomic models and their empirical implementation. Prerequisite: ECON 522 and MATH 116 or MATH 121. LEC.

ECON 705. Development of Economic Thought. 3 Hours.
The development of economic thought from the time of the physiocrats through the modern period. Consideration is given to the works of the English Classical school, the school of Vienna, the historical school, the Lausanne school, and Cambridge school. In addition, the development of economic thought in the United States during the period is treated. Prerequisite: ECON 520 and ECON 522. LEC.

ECON 715. Elementary Econometrics. 3 Hours.
An elementary analysis of the problems of estimation, prediction, and hypothesis testing in the context of general linear, stochastic difference equation and simultaneous equations models. Applications of econometric theory to practical economic problems will be emphasized. Prerequisite: DSCI 301 or its equivalent; MATH 116 or MATH 121; and completion of ECON 142 and ECON 144, ECON 520, and ECON 522 with a grade-point average of at least 3.00 (B) or graduate standing. LEC.

ECON 716. Econometric Forecasting. 3 Hours.
An analysis of econometric forecasting techniques, including time-series models, single-equation regression models, and multiple-equation regression models. The course will examine forecasts of (a) macroeconomic variables, such as interest rates, investment, GNP, and the rate of inflation; and (b) market variables, such as price and quantity. Prerequisite: ECON 715 or ECON 817. LEC.

ECON 730. Topics in Industrial Organization. 3 Hours.
Advanced study of recent research in applied microeconomics and business behavior. Topics include vertical integration, collusion, multi-plant and multi-product operations, regulated industries, tying arrangements, and the empirical links between monopoly power and profitability. Prerequisite: ECON 630 or equivalent. LEC.

ECON 735. Science and Technology in Economic Growth. 3 Hours.
An analytical and historical exploration of the roles that science and technology have played in the economic growth of industrial societies. Topics covered include factors influencing the pace and change of technological innovation, national systems of innovation, the diffusion of new technologies, measurement of the benefits of new technologies, and the role of technology in various growth theories. Prerequisite: ECON 520, or ECON 524, or consent of instructor. LEC.

ECON 740. Theory of Economic Growth and Development. 3 Hours.
Advanced study of the theory of economic growth and development. Recent growth models, theory of underdevelopment, programming, policies and plans for development. Prerequisite: ECON 520 and ECON 522. LEC.

ECON 741. Economic Planning. 3 Hours.
A study of the techniques employed in the preparation of a national economic plan and of the policies required for its implementation. Special attention is given to the purposes of a plan, development strategies, investment requirements, and project appraisal. The development plans of several countries are examined to illustrate problems of planning economic development. Prerequisite: ECON 520 and ECON 522. LEC.
ECON 750. The Theory of International Finance. 2-3 Hours.
This course examines the modern, financial-asset market approach to exchange rate determination as well as dynamic exchange rate models. Possible topics may include exchange rate overshooting, exchange rate crises, and international policy coordination. Prerequisite: ECON 605 and MATH 116. LEC.

ECON 760. The Theory of Public Finance. 3 Hours.
An analysis of governmental fiscal activity and its economic effects with emphasis on the determination and incidence of budget policy. Prerequisite: ECON 520 and ECON 522; ECON 622 recommended. LEC.

ECON 761. Public Sector: Urban and Regional Finance. 3 Hours.
An analysis of the American state and local finance scene with special emphasis on urban and regional tax and expenditure problems and issues. Prerequisite: ECON 520 and ECON 522; ECON 622 recommended. LEC.

ECON 765. Advanced American Economic Development. 3 Hours.
A study of the process of economic growth as it has occurred in the American economy, with emphasis on 19th century developments. The structural changes that accompanied growth and the impact of technological change are among the major topics considered. Prerequisite: ECON 520, ECON 522 and ECON 530, or consent of instructor. LEC.

ECON 766. Economic History. 3 Hours.
The development of market economies and economic institutions. The course will focus on Europe, but will include comparisons with other developed nations. Topics include: long-run economic growth, the rise of capitalistic agriculture and industry, the causes and consequences of technological change; changes in income distribution and economic organization; and the social and cultural effects of economic change. Prerequisite: ECON 520, ECON 522, and ECON 535 or ECON 530, or consent of instructor. LEC.

ECON 768. The Industrial Revolution. 3 Hours.
An examination of the development of the industrialization of England and its impact on the North Atlantic economy. Consideration will be given to the effects of demographic and technical changes upon economic structure and the changing economic relationships between nations. Prerequisite: ECON 520 and ECON 522 or consent of instructor. LEC.

ECON 769. Financial Economics. 3 Hours.
An introduction to the economic analysis of choice under uncertainty and asset pricing theory. Topics include the general equilibrium Arrow-Debreu model of complete markets; capital asset pricing model; stochastic dominance; portfolio frontiers; mutual fund separation theorems; arbitrage pricing theory; valuation of derivative securities. Both single-period models and multi-period models will be discussed. Students should have some background in elementary linear algebra, calculus, and probability theory. Prerequisite: DSCI 301 and ECON 700 or equivalent. LEC.

ECON 770. Economics of the Labor Market. 3 Hours.
A theoretical and empirical analysis of labor supply and demand, human capital, information and labor mobility, unemployment, discrimination, and union behavior and influence. Prerequisite: ECON 520, and MATH 121 or MATH 115 and MATH 116. LEC.

ECON 790. Game Theory and Applications. 3 Hours.
This course covers basic game theory and applications. Topics covered include strategic games with complete information, Bayesian games (with incomplete information), extensive games with perfect information, and extensive games with imperfect information. Equilibrium concepts covered include Nash equilibrium, mixed-strategy Nash equilibrium, rationalizability, Bayesian Nash equilibrium, sub-game perfect Nash equilibrium, and sequential equilibrium. Depending on availability of time, additional topics may include strictly competitive games and repeated games. The course may include diverse applications such as in business strategy, auctions, voting, international trade, military conflicts, contracts, regulation, and industrial organization. Prerequisite: MATH 122 and MATH 526. LEC.

ECON 791. Game Theory and Applications II. 3 Hours.
This course is a continuation of game theory and applications (ECON 790). Topics may include rationality and common knowledge, multi-stage games and repeated games, coalitional games and the core, and sequential rationality, including possible applications such as signaling, reputation, and information transmission. Additional topics may include, among others, strictly competitive games, auctions, and evolutionary game theory. The course may include diverse applications within and outside economics. Prerequisite: ECON 790 or consent of instructor LEC.

ECON 800. Optimization Techniques I. 3 Hours.
Economic models involving the maximization of a scalar (vector) function subject to equality and inequality constraint where the variables are in a finite dimensional Euclidean space. Characterization of optimal points by way of first and second order derivatives and by way of saddle points. Duality theorems of mathematical programming. Prerequisite: Consent of instructor. LEC.

ECON 801. Microeconomics I. 3 Hours.
An advanced course in price and distribution theory. Prerequisite: ECON 800 or consent of instructor. LEC.

ECON 802. Microeconomics II. 3 Hours.
The study of the operation of the economic system taking into account the diversity of goods and services. Primary attention is centered upon the competitive economy. A study is made of the existence, uniqueness, stability, and comparative statics of equilibrium positions. In addition, a study is made of ways of evaluating alternative states of the economy in terms of systems of value judgments. This includes a discussion of the Arrow Impossibility Theorem; the notion of a Pareto-satisfactory process is introduced and the relationship between Pareto-optimal states and competitive equilibrium positions is studied. Prerequisite: ECON 801. LEC.

ECON 803. Growth Theory. 3 Hours.
The study of Harrod-Domar growth models; the Solow model; Uzawa's two sector model; n-sector growth models; the Ranis-Fei development models; and other application of growth theory to public policy. Prerequisite: ECON 700 and ECON 701. LEC.

ECON 805. Teaching Methods in Economics. 3 Hours.
The goal of the course is to enhance undergraduate student learning by refining and expanding the teaching techniques in the teaching assistant's arsenal. The course begins by discussing and illustrating the importance of setting the tone on the first day of class. Then the course turns to ways of creating intellectually exciting lectures and discussion sections. Active learning comes next as the course presents techniques to involve actively the students in their learning experience. Then the course examines ways for recognizing and broadening our teaching styles to include different learning styles. The course also discusses the evaluation of students by emphasizing the importance of matching the assessment of students with course objectives. This course will not assume any prior teaching experience. Prerequisite: Consent of instructor. LEC.

ECON 809. Optimization Techniques II. 3 Hours.
Economic models involving the maximization of an integral (a vector of integrals) subject to differential equality (inequality), integral equality (inequality), and finite equality (inequality) constraints. Characterization of
optimal paths by way of first and second derivatives. Existence of optimal paths. Prerequisite: Consent of instructor. LEC.

ECON 810. Macroeconomics I. 3 Hours.
A survey of basic macroeconomic models, including Classical and Keynesian as well as more recent ones. Topics also cover monetary and fiscal stabilization policies, the role of rational expectations, and basic behavioral equations. Tradeoffs of inflation and unemployment are examined both theoretically and empirically. Prerequisite: ECON 809 or consent of instructor. LEC.

ECON 811. Macroeconomics II. 3 Hours.
Structure of dynamic models and intertemporal optimization. Monetary and real business cycle theories and long-run economic growth. Microeconomic foundations of macroeconomics, theories of explicit and implicit contracts, and implications of overlapping generations models. Prerequisite: ECON 810. LEC.

ECON 817. Econometrics I. 3 Hours.
An intensive study of the general linear model and distribution theory associated with the multivariate normal; stochastic difference equation; autocorrelation, errors in variables. Prerequisite: MATH 628. LEC.

ECON 818. Econometrics II. 3 Hours.
The study of estimation and hypothesis testing within the context of the stochastic simultaneous equations model. Prerequisite: ECON 817. LEC.

ECON 820. Applied General Equilibrium. 3 Hours.
A study of numerical applications of Walrasian general equilibrium theory to problems in public finance, international trade, and macroeconomics. The Arrow-Debreu model will be reviewed with emphasis on the use of Kakutani’s fixed point theorem to prove existence of equilibrium. Fixed point algorithms used to solve the general equilibrium model will be studied. The Shoven-Whalley method for introducing taxes into the general equilibrium model will be discussed and extended to open economy models with tariffs and quotas. Finally, dynamic macroeconomic models will be studied and financial assets will be introduced in perfect foresight models. Prerequisite: ECON 801. LEC.

ECON 825. Tutorial. 0 Hours.
This course is designed to provide extra assistance for graduate students in economics. RSH.

ECON 830. Game Theory and Industrial Organization. 3 Hours.
A comprehensive introduction to game theory and the theory of industrial organization. Basic game theoretic equilibrium concepts will be discussed in the context of static games, games of incomplete information, and dynamic games. These concepts will be applied to the theory of industrial organization. Topics may include mechanism design, market failure, monopoly, imperfect competition and oligopoly, limit pricing, predatory pricing, innovation and technical change, advertising and signaling theory, collusion and coordination, regulation under incomplete information, agency and auditing problems, incentives in hierarchies, job market signaling, insurance markets, nonlinear pricing and monopoly, and bargaining and long term relations. Prerequisite: ECON 801 and 802. RSH.

ECON 831. Economics of Regulation. 3 Hours.
This course provides an analytical introduction to the study of the economic rationale for and effects of government regulation of industry. Special emphasis will be placed on public utility regulation. Prerequisite: ECON 700. LEC.

ECON 835. Comparative Economic Systems. 3 Hours.
Comparative studies of the organization, operation, and performance of economic systems. Theoretical issues involving the comparison of different economic systems will be covered. Theoretical characterizations of different economic systems such as capitalistic economies, socialist economies, and centrally planned economies, will be developed. Case studies of economic institutions and economic performance in various countries will be examined. Prerequisite: ECON 700 and ECON 701. LEC.

ECON 840. Microeconomic Issues in Development Economics. 3 Hours.
This course will examine the process and policies of economic development from a microeconomic perspective. Selected topics may include: the use of input-output matrices in development planning; price controls and corrections for their allocative distortions; international trade policies; transformations from planned to market economies; labor markets and labor mobility; and capital markets and capital mobility. LEC.

ECON 842. Theory of Economic Planning. 3 Hours.
Formal construction of the foundations of economic planning with emphasis on concise discussion of the logic behind the techniques utilized in economic planning. Topics that will be studied include: social welfare, short-term planning, price guided planning procedures, non-price guided planning procedures, long-term planning objectives, and characteristics of optimal plans. Prerequisite: ECON 802 or consent of instructor. LEC.

ECON 844. Macroeconomic Issues in Development Economics. 3 Hours.
This course will examine the process and policies of economic development from a macroeconomic perspective. Topics will include the theory of growth in the dual economy, the role of foreign trade in economic development, inflation and stabilization in developing economies, the problem of foreign debt, the relationship between financial and real development, and various development policies. Prerequisite: ECON 810 or consent of instructor. LEC.

ECON 850. The Advanced Theory of International Finance. 3 Hours.
This is an advanced course in international finance. Possible topics include optimizing, equilibrium models of exchange rate determination, empirical tests of international asset-pricing models, international policy coordination, and properties of different international monetary arrangements. Prerequisite: ECON 811. LEC.

ECON 851. The Theory of International Trade. 3 Hours.
The study of the pure theory of international trade; factor-price equalization, trade and welfare, general equilibrium in the international economy, comparative statics, and stability conditions. Prerequisite: ECON 700 and ECON 701. LEC.

ECON 855. Natural Resources. 3 Hours.
Advanced analysis of the economic relationships between natural resources, population, and environment. Emphasis is on the analytical techniques useful for solving the economic problems of natural resource allocation over time. Prerequisite: ECON 700. LEC.

ECON 860. Advanced Public Finance. 3 Hours.
A rigorous treatment of the economics of the public sector. Emphasis will be placed on government expenditure and taxation. Possible topics include tax incidence, optimal taxation, dynamic analysis of fiscal policy, public goods, and cost benefit analysis. Prerequisite: ECON 801 or permission of instructor. LEC.

ECON 866. Selected Problems in American Economic History. 3 Hours.
A critical study of selected aspects of American economic history with particular emphasis upon the testing of hypotheses that have been advanced to explain the growth and development of the American economy. Prerequisite: ECON 766. LEC.
ECON 869. Advanced Financial Economics. 3 Hours.
This course presents an analysis of financial markets and instruments, together with the quantitative tools essential for research in the field. The material will be presented in a discrete time setting and will stress the link between financial economics and equilibrium theory. Topics will include securities pricing in the absence of arbitrage, the theory of risk and utility in the basic portfolio problem, mean variance analysis and the CAPM, the Martingale properties of security prices, restricted participation, asymmetric information, and recent research results. Prerequisite: ECON 802 or consent of instructor. LEC.

ECON 870. Applied Microeconomics. 3 Hours.
This course introduces students to the data and empirical methods used in the fields of applied economics such as labor economics, public finance, and industrial organization. The course will focus on how to adjust for self-selection and identify causal relationships in applied microeconomic fields. Topics covered include economic data and statistical programming, instrumental variables, difference-in-differences, regression discontinuity, count data, sample selection, treatment effects, and duration models. Attention will be given to the suitability of the methods to the research question under consideration. Each topic will emphasize the proper application of the methods using the standard textbook treatment as well as assigned papers that examine the basic economic issues, the econometric techniques, and the applications to data. Prerequisite: ECON 817 and ECON 818, or consent of instructor. ECON 915 is recommended. LEC.

ECON 880. Selected Topics in Economic Theory: ______. 1-3 Hours.
An advanced course in economic theory that will study selected topics in economic theory such as consumer theory, linear economics, decision theory, stability of economic equilibrium, comparative statics, etc. Prerequisite: Consent of instructor. LEC.

ECON 889. Master's Thesis. 1-10 Hours.
THE.

ECON 901. Advanced Economic Theory I. 3 Hours.
Advanced study of current general equilibrium analysis, the mathematical tools involved in such analysis, and some applications to other branches of economic theory. Prerequisite: ECON 802 and ECON 810. LEC.

ECON 902. Advanced Economic Theory II. 3 Hours.
A continuation of the advanced study of general equilibrium analysis. Prerequisite: ECON 901. LEC.

ECON 905. Economic Theory Seminar-Workshop. 1-3 Hours.
This seminar-workshop is designed to study advanced research topics in the areas of microeconomic and macroeconomic theory, and also provide assistance in the preparation and development of the dissertations of Ph.D. candidates in these areas of specialization. LEC.

ECON 911. Applied Macroeconomics. 3 Hours.
An advanced exploration of the microeconomic foundations of macroeconomics, neoclassical macroeconomics with and without money, Keynesian and neo-Keynesian macroeconomics, and economic stabilization, inflation, and unemployment. Prerequisite: ECON 802 and ECON 810. LEC.

ECON 912. Advanced Macroeconomics. 3 Hours.
An analysis of economic policy in dynamic economic models. The effects of various policies on the equilibrium, stability, and adjustment paths of the models will be considered. Both open and closed economies will be analyzed. Prerequisite: ECON 810. MATH 320 is recommended. LEC.

ECON 913. Monetary Economics. 3 Hours.
This course examines how money, monetary policy, and monetary institutions influence the macroeconomy. Modern theories of money demand are presented and critiqued. The function of commercial banks, non-bank financial intermediaries, and central banks in the money supply process is addressed. Interrelationships between the tools, the instruments, the operating procedures, the intermediate targets, and the goals of policy are examined. Additional topics may include the monetary transmission mechanism, the effect of uncertainty on optimal policy decisions, the rules versus discretion debate, the monetary implications of fiscal policy, the term structure of interest rates, the causes and consequences of bank runs and financial panics, and the optimal method of constructing weighted monetary aggregates. Prerequisite: ECON 811 or consent of instructor. LEC.

ECON 915. Advanced Econometrics I. 3 Hours.
The study of selected topics in applied cross-section econometrics for uses mainly in applied microeconomics, public finance, and labor economics. Topics include traditional econometrics of production and demand, latent variable models, panel data studies, probabilistic choice models, censored and truncated models, sample selection, disequilibrium models, duration studies, and semi- and non-parametric models. Prerequisite: ECON 818, or consent of instructor. LEC.

ECON 916. Advanced Econometrics II. 3 Hours.
A study of selected topics in applied time-series econometrics for use mainly in applied macroeconomics, public finance, and development economics. Topics include empirical applications of ARCH models, VAR models (study of impulse response function and variance decomposition), unit-root cointegration and long memory models. Bayesian unit root analysis, estimation and inference of dynamic general equilibrium models, model calibration and simulation are also possible topics of this course. Prerequisite: ECON 818, or consent of instructor. LEC.

ECON 917. Advanced Econometrics III. 3 Hours.
A study of structural and nonlinear time series approaches to econometric modeling and inference. The course emphasizes techniques needed to use economic theory in system-wide econometrics. Emphasis is placed on selection of functional form for approximation to theoretical functions and the use of duality theorems for derivation of the resulting econometric systems of equation. Inference with those models will be by nonlinear parametric, semi-parametric, and nonparametric methods. Prerequisite: ECON 818. LEC.

ECON 918. Financial Econometrics. 3 Hours.
This course is designed to provide a variety of new econometric tools useful to investigate financial data. It discusses how to measure and forecast financial volatility using models such as Stochastic Volatility, multivariate GARCH, and Dynamic Conditional Correlation models. It also covers Dynamic Factor models and State Space models, which can be used in many financial data analyses. The course will be particularly helpful for the students preparing dissertations in the field of finance, macro-finance, monetary economics, international finance, and development economics. It will also benefit the students interested in more practical use of tools in the field such as financial risk management, insurance, and commercial banking. Prerequisite: ECON 818. ECON 916 is recommended. LEC.

ECON 920. Econometrics Seminar-Workshop. 1-3 Hours.
This seminar-workshop is designed to study advanced research topics in the area of econometric theory and application, and also provide assistance in the preparation and development of the dissertations of Ph.D. candidates in this area of specialization. LEC.

ECON 925. Economic Dynamics. 3 Hours.
A study of the concepts of equilibrium and stability in various economic frameworks; static economies, changing economies, and disaggregated and aggregated economies. Prerequisite: ECON 802. LEC.
ENGL 101. Composition. 3 Hours. GE21 / U.

Instruction and practice in writing in a variety of rhetorical contexts, including academic ones. LEC.

ENGL 102. Critical Reading and Writing. 3 Hours. GE21 / U.

Builds upon the instruction in writing of ENGL 101, emphasizing critical thinking through careful, thoughtful reading and writing. Also instructs in the evaluation and use of secondary sources. Prerequisite: Completion of ENGL 101 or its equivalent, or an ACT score of 27-31, or an SAT score of 600-649, or an AP exam score of 3 on either the Language and Composition exam or the Language and Composition exam, or an IB score of 5. LEC.

ENGL 105. Freshman Honors English. 3 Hours. GE21 / U.

Study of significant works of world literature. The primary aims are to develop reading and writing skills and to introduce the students to works of literature drawn from a variety of genres and historical periods. Prerequisite: An ACT score of 31-36, or an SAT score of 650 or higher, or an AP exam score of 3 on either the Literature and Composition exam or the Language and Composition exam, or membership in the University Honors Program. LEC.

ENGL 102. Critical Reading and Writing. 3 Hours. GE21 / U.

Builds upon the instruction in writing of ENGL 101, emphasizing critical thinking through careful, thoughtful reading and writing. Also instructs in the evaluation and use of secondary sources. Prerequisite: Completion of ENGL 101 or its equivalent, or an ACT score of 27-31, or an SAT score of 600-649, or an AP exam score of 3 on either the Literature and Composition exam or the Language and Composition exam, or an IB score of 5. LEC.

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Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

**ENGL 302. Topics in British Literature Since 1800:** _____. 3 Hours. H.
Study of British literary works since 1800. Topics may focus on a particular genre, theme, topic, historical period, author, or group of authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

**ENGL 305. World Indigenous Literatures.** 3 Hours. NW AE42 / H.
A survey of contemporary world indigenous literatures that includes those from North America, Australia, New Zealand, the South Pacific, the Arctic, and Latin America. Texts are in English (original or translation). Genres studied include the novel, poetry, and drama, supplemented by works from the oral tradition, the visual arts, and film. (Same as ISP 305.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

**ENGL 306. Global Environmental Literature.** 3 Hours. H.
An examination of a variety of literary and other representations of human and non-human environments and environmentalism. Particular attention will be paid to how race, gender, class, sexuality, and geography produce and are produced by those representations. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

**ENGL 308. Introduction to Literary Criticism and Theory.** 3 Hours. GE3H / H.
Study of significant problems in literary interpretation and methodology, in which basic critical principles and approaches are systematically examined and applied. These approaches might include, but are not limited to, feminism, Marxism, deconstruction, psychoanalysis, and cultural studies. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

**ENGL 309. The British Novel.** 3 Hours. HL / H.
Study of five or more significant novels representative of developments in the British novel of the eighteenth, nineteenth, and twentieth centuries. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

**ENGL 310. Literary History I.** 3 Hours. H.
A study of literature in English, including major forms and movements, from the medieval period to Romanticism. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

**ENGL 312. Major British Writers to 1800.** 3 Hours. H.
Outstanding works of British literature, from the earliest times to the close of the eighteenth century, studied in chronological sequence and with some attention to the characteristics of the various periods of English literary history embraced. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

**ENGL 314. Major British Writers after 1800.** 3 Hours. H.
Outstanding works of British literature, from 1800 to the present, studied in chronological sequence and with some attention to the characteristics of the various periods of English literary history embraced. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

**ENGL 315. Studies in British Literature.** 3 Hours. HL AE42 / H.
For students enrolled in the annual summer Study Abroad program, an interdisciplinary program conducted with other humanities departments. British literature is studied in the context of visits to relevant sites such as London, the Lake District, and Edinburgh. Prerequisite: Prior completion of the KU Core Written Communication requirement. Approval for enrollment in the Summer Institute through the Study Abroad office is required. Recommended: Prior completion of one 200-level English course. LEC.

**ENGL 316. Introduction to Major American Writers.** 3 Hours. H.
Outstanding works of American literature, studied in chronological sequence and with some attention paid to the characteristics of the various periods of American literary history embraced. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

**ENGL 317. Topics in American Literature to 1865:** _____. 3 Hours. H.
Study of American literary works before 1865. Topics may focus on a particular genre, theme, topic, historical period, author, or group of authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

**ENGL 318. Topics in American Literature Since 1865:** _____. 3 Hours. H.
Study of American literary works since 1865. Topics may focus on a particular genre, theme, historical period, author, or group of authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

**ENGL 320. American Literature I.** 3 Hours. H.
From the beginnings to 1865, with emphasis on the major writers and movements. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

**ENGL 322. American Literature II.** 3 Hours. H.
From 1865 to the present, with emphasis on the major writers and movements. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

**ENGL 323. Twentieth Century Literature and Culture.** 3 Hours. H.
The study of British and American literature, emphasizing important figures and movements since World War I. On occasion, the study of literature will be enriched with an investigation of other arts, such as music, film, and painting. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

**ENGL 324. Contemporary Authors:** _____. 3 Hours. H.
Study of one or more recent British and/or American authors. (Different authors in different semesters.) May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

**ENGL 325. Recent Popular Literature.** 3 Hours. HL / H.
Study of recent best sellers or other works of popular interest. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.
ENGL 326. Introduction to African Literature. 3 Hours. NW AE42 / H.
Reading, analysis, and discussion of contemporary fiction, poetry, and
drama from sub-Saharan Africa. Brief attention is paid to historical
development and to traditional literature. (Same as AAAS 332.)
Prerequisite: Prior completion of the KU Core Written Communication
requirement. Recommended: Prior completion of one 200-level English
course. LEC.

ENGL 327. Studies in Twentieth-Century Drama: ______. 3 Hours. H.
A survey of major twentieth-century playwrights and theatre groups,
to be selected by the instructor. May be repeated for credit as the
topic changes. Prerequisite: Prior completion of the KU Core Written Communication
requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 328. Literature and Film: ______. 3 Hours. H.
The comparative study of the literary and film treatments of a particular
topic or theme, with special attention to the generic qualities of literature
and film. May be repeated for credit as the topic changes. Prerequisite:
Prior completion of the KU Core Written Communication requirement.
Recommended: Prior completion of one 200-level English course. LEC.

ENGL 330. Literary History II. 3 Hours. H.
A study of literature in English, including major forms and movements,
from the Romantics to the present. Prerequisite: Prior completion of the
KU Core Written Communication requirement. Recommended: Prior completion
of one 200-level English course. LEC.

ENGL 331. Chaucer. 3 Hours. H.
Prerequisite: Prior completion of the KU Core Written Communication
requirement. Recommended: Prior completion of one 200-level English
course. LEC.

ENGL 332. Shakespeare. 3 Hours. H.
A study of ten to fourteen of Shakespeare's plays. Prerequisite: Prior
completion of the KU Core Written Communication requirement.
Recommended: Prior completion of one 200-level English course. LEC.

ENGL 334. Major Authors: ______. 3 Hours. H.
Study of one or two major British and/or American authors. Different
authors in different semesters. May be repeated for credit as the
topic changes. Prerequisite: Prior completion of the KU Core Written Communication
requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 336. Jewish American Literature and Culture. 3 Hours. AE41 / H.
An examination of Jewish American literature and culture from the
17th century to the present. Materials may include a broad range of
literary genres as well as folklore, music, film, and visual art. (Same
as JWSH 336.) Prerequisite: Prior completion of the KU Core Written Communication
requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 337. Introduction to U.S. Latino/a Literature. 3 Hours. AE41 / H.
An historical survey of literature by U.S. Latina/o writers of Mexican,
Puerto Rican, Cuban, Dominican, and Central/South American descent.
Various genres, including oral forms such as corridos as well as novels,
poetry, essays, and autobiographical writing, will be considered.
Prerequisite: Prior completion of the KU Core Written Communication
requirement. Recommended: Prior completion of one 200-level English
course. LEC.

ENGL 338. Introduction to African-American Literature. 3 Hours.
AE41 / H.
An introduction to prominent works of African-American literature from the
18th century to the present as well as to the basic approaches to study
and principles of this body of work, including its connection with African
sources. Literature will include a wide variety of genres, and course
materials may be supplemented by folklore, music, film, and visual arts.
Prerequisite: Prior completion of the KU Core Written Communication
requirement. Recommended: Prior completion of one 200-level English
course. LEC.

ENGL 339. Introduction to Caribbean Literature. 3 Hours. AE42 / H.
Reading, analysis, and discussion of fiction, poetry, and drama from the
Caribbean, including a small selection of Spanish, French, and
Dutch Antillean works in translation. (Same as AAAS 333.) Prerequisite:
Prior completion of the KU Core Written Communication requirement.
Recommended: Prior completion of one 200-level English course. LEC.

ENGL 340. Topics in U.S. Ethnic Literature: ______. 3 Hours. AE41 / H.
A study of literature by authors from one or more ethnic groups within
the U.S., including but not limited to Asian American, African American,
American Indian, Jewish American, Italian American, U.S. Latina/o.
Different topics in different semesters. May be repeated for credit as
topic changes. Prerequisite: Prior completion of the KU Core Written Communication
requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 341. American Literature of Social Justice. 3 Hours. AE41 / H.
An examination of U.S. literature that addresses situations of political and
economic oppression or repression with the potential function of enlisting
readers' sympathies in a project of social justice. The course focuses on U.S.
literary texts dealing with social injustice and the curtailment of human
and civil rights and addresses debates surrounding cultural
authority and authenticity, identity politics, attempts to represent the voice of
the "oppressed," revision of strategies used in slave narrative or in
testimonio, and ethical and rhetorical appeals to an assumed readership.
Prerequisite: Prior completion of the KU Core Written Communication
requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 351. Fiction Writing I. 3 Hours. H.
A study of narrative techniques and practice in the writing of fiction.
Prerequisite: Prior completion of the KU Core Written Communication
requirement. Recommended: Prior completion of one 200-level English
course. LEC.

ENGL 352. Poetry Writing I. 3 Hours. H.
A study of prosody and practice in the writing of verse. Prerequisite:
Prior completion of the KU Core Written Communication requirement.
Recommended: Prior completion of one 200-level English course. LEC.

ENGL 353. Screenwriting I. 3 Hours. H.
An introduction to the practice of writing and evaluating scripts for film.
Prerequisite: Prior completion of the KU Core Written Communication
requirement. Recommended: Prior completion of one 200-level English
course. LEC.

ENGL 354. Playwriting I. 3 Hours. H.
An introduction to the practice of writing and evaluating scripts for stage.
Prerequisite: Prior completion of the KU Core Written Communication
requirement. Recommended: Prior completion of one 200-level English
course. LEC.

ENGL 355. Nonfiction Writing I. 3 Hours. H.
An introduction to the literary techniques of nonfiction and practice in
the writing of one or more of the genre's subtypes, such as the personal
essay, the familiar essay, the lyric essay, the memoir, nature writing,
or travel writing. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 359. English Grammar. 3 Hours. U.
A course in traditional English grammar for students who wish to understand and be able to analyze English sentence structure. Students might apply the course to studies of their own or other authors', rhetorical analysis, literary interpretation, or teaching. This course may be offered in either lecture or online format. Prerequisite: Prior completion of the KU Core Written Communication requirement. LEC.

ENGL 360. Advanced Composition: ______. 3 Hours. H.
The principles of effective composition, as applied to a specific topic such as critical writing, expository writing, pre-legal English, book reviewing, etc. May be repeated for credit as topic varies. Prerequisite: Prior completion of the KU Core Written Communication requirement. LEC.

ENGL 361. Professional Writing: ______. 3 Hours. H.
Principles of writing for specific professional contexts, which might include such areas as business writing, legal writing, and literary or arts reviewing, etc. May be repeated for credit as topic varies. Prerequisite: Prior completion of the KU Core Written Communication requirement. LEC.

ENGL 362. Foundations of Technical Writing. 3 Hours. H.
Introduces students to the principles of technical communication. Students learn to organize, develop, write, and revise various technical documents (e.g., letters, manuals, presentations, proposals, reports, resumes, websites) often needed in business, engineering and scientific settings. Includes an introduction to technical-writing software. This course fulfills the prerequisite for English 562 and English 564. Prerequisite: Prior completion of the KU Core Written Communication requirement. LEC.

ENGL 380. Introduction to Rhetoric and Composition. 3 Hours. GE3H / H.
Introduces students to rhetoric and composition, a field that investigates questions about the nature, processes, teaching and historical, social and cultural contexts of writing. Students survey the themes, debates, and trends that inform the work of scholars in this field. Students also become acquainted with the historical traditions of discourse instruction, and the relevance of those traditions to our current understandings of writing. Prerequisite: Prior completion of the KU Core Written Communication requirement. LEC.

ENGL 385. The Development of Modern English. 3 Hours. H.
An introduction to the history of the English language, with special attention to general structural changes throughout its history, especially changes in vocabulary and meaning, and past influences of other languages upon present usage. Prerequisite: Prior completion of the KU Core Written Communication requirement. LEC.

ENGL 387. Introduction to the English Language. 3 Hours. HL GE3H / H.
A survey of the English language, its historical development, and its grammatical structure. Prerequisite: Prior completion of the KU Core Written Communication requirement. LEC.

ENGL 390. Studies in: ______. 3 Hours. H.
A study of a specialized theme or topic in English studies. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 400. Teaching and Tutoring Writing. 3 Hours. U.
Students explore theories and strategies of teaching and tutoring writing across academic disciplines. They learn more about themselves as writers as they build a repertoire of writing techniques useful in their studies, in the workplace, and in their personal lives. By observing and consulting in the writing center, they understand how reflection leads to responsible/responsive and engaged practice. (Same as LAS 400.) LEC.

ENGL 466. Literature for Children. 3 Hours. H.
Wide reading in the great literature of the past and present suitable for children: folktales and epics, mythology, modern fantasy, fiction, poetry. Emphasis on extending the student's background and developing critical judgment. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 479. The Literature of: ______. 3 Hours. H.
A study of the literary treatment of a particular aspect of British and/or American society. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 492. The London Review. 3 Hours. AE42 / H.
This class meets one day a week throughout the semester and includes a nine-day visit to London over the spring break period. Students spend the early part of the semester selecting special interests, researching places to visit and study, and exchanging information. After the trip, students compile and publish a journal entitled "The London Review", which is comprised of essays, photos, art work, and other reflections about their experience in London. Prerequisite: Admission to University Honors Program or permission of instructor. LEC.

ENGL 494. Research Internship. 1-3 Hours. H.
Practical research experience in English studies gained by assisting a faculty member on a faculty research, editorial, pedagogical, or outreach project. Credit hours are graded by faculty on a satisfactory/unsatisfactory basis. May be used as a component of the Research Experience Program (REP). Prerequisite: At least one 300-level English course, declaration of English major, and permission of instructor. FLD.

ENGL 495. Directed Study: ______. 1-3 Hours. H.
Work for advanced majors in fields or on topics not covered in course work. May be repeated for a total of up to six hours. Does not satisfy specific course requirements for the English major. May be counted as part of the total junior-senior credit hours required. Prerequisite: Completion of three junior-senior courses in English and consent of instructor. IND.

ENGL 496. Internship. 1-3 Hours. H.
Practical experience in the use of English skills in supervised academic or professional settings. Credit hours are graded on a satisfactory/unsatisfactory basis, according to the written evaluation provided by the supervisor to the director. Prerequisite: At least one 300-level English course, declaration of English major, and permission of Undergraduate Director. FLD.

ENGL 497. Service Learning Internship. 1-3 Hours. H.
Practical experience in the use of English skills in a non-profit or advocacy context. Credit hours are graded by faculty on a satisfactory/unsatisfactory basis, according to the written evaluation student provided by the on-site supervisor and on the student's written reflective component assigned and evaluated by the supervising faculty member. May be used as a component of the Service Learning certification program. Prerequisite: At least one 300-level English course, declaration of English major, and permission of instructor. FLD.
ENGL 506. Science Fiction. 3 Hours. AE61 / H.
The development of science fiction as a literary genre, and as a literature of ideas for a future-oriented society. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 507. Science, Technology, and Society: Examining the Future through a Science-Fiction Lens. 3 Hours. AE61 / H.
Science and technology offer many benefits to individuals and to societies, yet they also present many challenges. This course explores the past, present, and possible future effects of science and technology on society through readings and discussions of nonfiction articles in conjunction with science-fiction stories and novels. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 508. Contemporary Literary Theory. 3 Hours. AE61 / H.
Study of selected works of literary theory and of current issues in literary studies. The course is designed for advanced undergraduates who intend to continue their study of literature in graduate school and for new graduate students who require a grounding in literary theory. According to each instructor's interest, the course may survey contemporary literary theory or may focus on a particular topic (e.g., authorship, canon formation, creativity, metaphor, narrative, rhetoric) or on a theoretical position (e.g., cultural studies, deconstruction, feminism, historicism, Marxism, psychoanalysis). A student may repeat the course with the permission of the appropriate director. Prerequisite: Completion of three junior-senior courses in English (or their equivalent) or graduate standing. LEC.

ENGL 520. History of the Book. 3 Hours. AE61 / H.
Brief history of writing materials and handwritten books; history of printed books from the fifteenth century as part of cultural history; technical progress and aesthetic change. (Same as HIST 500.) LEC.

ENGL 521. Advanced Topics in British Literature 1800: ______. 3 Hours. AE61 / H.
A study of texts written before 1800. May be organized around a particular genre, historical period, a group of writers, or a theme. May be repeated for credit as topic varies. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 522. Advanced Topics in British Literature After 1800: ______. 3 Hours. H.
A study of texts written after 1800. May be organized around a particular genre, historical period, group of writers, or a theme. May be repeated for credit as topic varies. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 525. Shakespeare: ______. 3 Hours. AE61 / H.
Intensive study of selected works. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 530. Irish Literature and Culture: ______. 3 Hours. AE61 / H.
Study of topics in Irish literature and culture. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. (Same as EURS 512.) Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 531. James Joyce. 3 Hours. AE61 / H.
A study of the major works of James Joyce, with the majority of the semester dedicated to Ulysses. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 532. Whitman and Dickinson. 3 Hours. AE61 / H.
A study of selected works of Walt Whitman and Emily Dickinson. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 533. William Faulkner. 3 Hours. AE61 / H.
A study of selected works of William Faulkner. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 534. Major Authors (Capstone): ______. 3 Hours. AE61 / H.
Study of one or two major authors. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 536. Readings in the Holocaust. 3 Hours. AE61 / H.
An examination of Holocaust literature, which may include fiction, nonfiction, poetry, drama, and film. Theoretical concerns may include such issues as memory, trauma, representation, imagination, exile, alienation, silence, the body and emotions, and intergenerational transmission. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 551. Fiction Writing II. 3 Hours. AE61 / H.
Continuation of ENGL 351. May be repeated for undergraduate credit up to a total of six hours. Prerequisite: ENGL 351 or equivalent. LEC.

ENGL 552. Poetry Writing II. 3 Hours. AE61 / H.
Continuation of ENGL 352. May be repeated for undergraduate credit up to a total of six hours. Prerequisite: ENGL 352 or its equivalent. LEC.

ENGL 553. Screenwriting II. 3 Hours. AE61 / H.
A continuation of ENGL 353. May be repeated for undergraduate credit up to a total of six hours. Prerequisite: ENGL 353 or its equivalent. LEC.

ENGL 554. Playwriting II. 3 Hours. AE61 / H.
A continuation of ENGL 354. May be repeated for undergraduate credit up to a total of six hours. Prerequisite: ENGL 354 or its equivalent. LEC.

ENGL 555. Nonfiction Writing II. 3 Hours. AE61 / H.
Continuation of ENGL 355. May be repeated for undergraduate credit up to a total of six hours. Prerequisite: ENGL 355 or its equivalent. LEC.

ENGL 560. British Literature of the 20th Century: ______. 3 Hours. AE61 / H.
Study of twentieth-century literary works. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 562. Advanced Technical Writing I. 3 Hours. AE61 / H.
Stresses research methods in technical communication and simulates on-the-job training through live interviews and other forms of research. Students master the relevant software tools and begin to develop a technical-writing portfolio. Prerequisite: ENGL 362. LEC.

ENGL 563. Advanced Technical Writing and Editing. 3 Hours. AE61 / H.
Students apply the principles of communicating business, scientific, and technical information to targeted readers. Concentration on the varying writing styles for online documents, proposals, reports, specifications, journal articles, and larger documents, as appropriate to their audience. Simulates an internship and helps students further develop a technical-writing or -editing portfolio. Students provide weekly status reports and a final report detailing their learning experience and present it to an appropriate technical communication class to help other students better understand the field. Prerequisite: Instructor permission. LEC.
ENGL 564. Advanced Technical Editing I. 3 Hours. AE61 / H. 
Students learn to use specialized vocabulary and editing tools such as proofreaders' marks, style guides, and standard editorial reference material; and they practice how to identify and correct common problems. Students usually work with writers in other technical writing courses, learning to work productively with other peoples' print and online documents. Students practice taking editing tests and develop a technical-editing portfolio. Prerequisite: ENGL 362. LEC.

ENGL 565. The Gothic Tradition. 3 Hours. H. 
This course explores and defines the Gothic tradition in British and American literature from its beginnings in the late eighteenth century to more recent twentieth-century texts in literature and film. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 567. Modern Drama: ____. 3 Hours. AE61 / H. 
A study of American, British, or comparative drama from the late nineteenth century to the present. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 568. American Literary Environmentalism. 3 Hours. AE61 / H. 
An examination of representations of nature and human/nature relations and their political, social and environmental consequences, with a special focus on the 19th and 20th centuries, including the writings of transcendentalists and conservationists, slave narratives, scientific writing on toxicity and other topics, and environmental justice literature. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 569. The Modern Tradition. 3 Hours. AE61 / H. 
An intensive study of the formative backgrounds of the "modern" spirit as it is expressed in imaginative literature. Readings from such influential spokesmen as W. James, Zola, Marx, Darwin, Henry Adams, Kierkegaard, Dostoevsky, Nietzsche, I.A. Richards, T.S. Eliot, Joyce, Auden, Rilke, Croce, Yeats, Malraux, Freud, Jung, D.H. Lawrence, Sartre, Camus, and Gide. Prerequisite: Prior completion of the freshman-sophomore English requirement or its equivalent. LEC.

ENGL 570. Topics in American Literature: _____. 3 Hours. AE61 / H. 
Different topics in different semesters. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 571. American Indian Literature: ____. 3 Hours. NW AE41/ AE61 / H/W. 
The study of a wide range of American Indian literature, from various tribes and in a variety of genres. Satisfies the non-western culture course requirement. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 572. Women and Literature: _____. 3 Hours. AE61 / H. 
Different topics in different semesters. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 573. U.S. Latina/o Literature: _____. 3 Hours. AE41/AE61 / H. 
A study of the literature written by U.S. Latina/o writers of Mexican, Puerto Rican, Cuban, Dominican, and other Central/South American descent, in a variety of genres. Attention is given to the cultural and historical contexts of the literature and to the specificity of particular U.S. Latina/o groups. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 574. African American Literature: _____. 3 Hours. AE41/AE61 / H. 
A study of the literature written by African Americans from the pre-Civil War period to the present. Emphasis upon specific historical periods in the development of African American literature as well as on a critical analysis of major autobiographical, poetic, and fictional works. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 575. Literature of the American South. 3 Hours. AE61 / H. 
A survey of fiction, non-fiction, poetry, and drama written by selected writers of the American South from the pre-Civil War period to the present. The course will emphasize the critical analysis of individual texts as well as the cultural and historical context of the works. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 576. Advanced Topics in American Literature to 1865: _____. 3 Hours. AE61 / H. 
Study of American literary works before 1865. Topics may focus on a particular genre, theme, topic, historical period, author, or group of authors. May be repeated for credit as the topic changes. (Same as AMS 554.) Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 577. Advanced Topics in American Literature Since 1865: _____. 3 Hours. AE61 / H. 
Study of American literary works after 1865. Topics may focus on a particular genre, theme, topic, historical period, author, or group of authors. May be repeated for credit as the topic changes. (Same as AMS 555.) Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 578. Poetry, 1900-1945. 3 Hours. AE61 / H. 
A Study of English-language poetry of the early twentieth century. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 579. Poetry since 1945. 3 Hours. AE61 / H. 
A study of English-language poetry from the mid-twentieth century to the present. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 580. Rhetoric and Writing: _____. 3 Hours. AE61 / H. 
A study of selected broad topics in rhetoric and writing, including such topics as the rhetoric of law, the rhetoric of education, persuasion in literature, literacy, and rhetorical genres. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 581. English Language Studies: _____. 3 Hours. AE61 / H. 
A study of selected topics in English language studies (e.g. World Englishes, Language and Literary Style, and The Secret Life of English Words). May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 587. American English. 3 Hours. AE61 / H. 
A study of the structure, history, and varieties of the English language in the United States from the period of colonization to the present. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 590. Studies in: _____. 1-3 Hours. AE61 / H. 
A study of a specialized theme or topic in English studies. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of the first-and second-year English requirement or its
ENGL 592. Survey of: ____. 3 Hours. AE61 / H.
A broad view of major works and authors in a particular period, genre, or
mode. May be repeated for credit as the topic varies. Capstone course.
Prerequisite: Prior completion of at least one 300- or 400-level English
course. LEC.

ENGL 596. Technical Communication Internship. 1-3 Hours. AE61 / H.
Practical experience in the use of technical-writing or editing skills in
supervised professional settings for which the student normally does not
receive pay. A 1-3 hour internship requires 40-120 hours of documented
on-site work in one semester (40 hours per credit). Credit hours are
graded on a satisfactory/unsatisfactory basis, according to a written
recommendation from the student's workplace manager, student work
logs and self-evaluation, and an oral report. Prerequisite: Advanced
Technical Writing 1 (English 562) and permission of instructor. LEC.

ENGL 598. Honors Proseminar: ____. 3 Hours. AE61 / H.
Directed reading and participation in small discussion groups, each
formed to consider a specific and limited subject during the semester.
Written work will be required, and will be judged on both content and
form. The course is part of a departmental program leading to Honors in
English. Prerequisite: Admission must be approved by the departmental
director of undergraduate studies. LEC.

ENGL 599. Honors Essay. 3 Hours. AE61 / H.
Independent study, culminating in a substantial essay prepared under the
direction of a member of the Department of English who is a specialist
in the area of the student's interest. Prerequisite: Admission must be
approved by the departmental director of undergraduate studies. LEC.

ENGL 610. The Literature of England to 1500. 3 Hours. AE61 / H.
A survey of the literature of medieval England (in translation). Capstone
course. Prerequisite: Prior completion of at least one 300- or 400-level
English course. LEC.

ENGL 620. Renaissance English Literature: ____. 3 Hours. AE61 / H.
A broad view of literary works written between 1485 and 1660. Surveys
may be offered with focus on a particular genre (poetry, drama, or prose),
historical period (16th- or 17th-century literature), or group of authors
(women writers). May be repeated for credit as topic varies. Capstone
course. Prerequisite: Prior completion of at least one 300- or 400-level
English course. LEC.

ENGL 633. Milton. 3 Hours. AE61 / H.
A close reading of Paradise Lost, Paradise Regained, Samson Agonistes,
and the minor poems, with illustrative selections of prose. Capstone
course. Prerequisite: Prior completion of at least one 300- or 400-level
English course. LEC.

ENGL 640. British Literature, 1600-1800: ____. 3 Hours. AE61 / H.
Study of literary works from the Restoration and eighteenth century.
Topics may focus on a particular genre, theme, historical period or group of
authors. May be repeated for credit as the topic changes. Capstone course.
Prerequisite: Prior completion of at least one 300- or 400-level
English course. LEC.

ENGL 650. Romantic Literature: ____. 3 Hours. AE61 / H.
Study of literary works from the British Romantic period. Topics may focus
on a particular genre, theme, historical period or group of authors. May be
repeated for credit as the topic changes. Capstone course. Prerequisite:
Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 655. Victorian Literature: ____. 3 Hours. AE61 / H.
Study of literary works from the Victorian period. Topics may focus on
a particular genre, theme, historical period or group of authors. May be
repeated for credit as the topic changes. Capstone course. Prerequisite:
Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 660. Ecocriticism. 3 Hours. AE61 / H.
A study of the relationship between various modes of representation
and environmentalism. Particular attention paid to the intersection between
ecocriticism and other forms of contemporary literary theory, including,
for example, critical race studies, poststructuralism, postcolonial theory,
gender and sexuality studies, class-based criticism, and animal theory.
Capstone course. Prerequisite: Prior completion of at least one 300- or
400-level English course. LEC.

ENGL 674. African Literature: ____. 3 Hours. NW AE42/AE61 / H.
An advanced study of a topic, genre, or area of written and/or oral African
literature. Emphasis is placed on the critical analysis of major works, as
well as their cultural and historical contexts. The course also addresses
central critical and theoretical debates in the field. May be repeated for
credit as the topic changes. Prerequisite: At least one 300- or 400-level
English course, or permission of instructor. LEC.

Study of a topic (such as mimesis, influence, deconstruction) that is
important in critical theory. May be repeated for credit as topic varies.
LEC.

ENGL 670. Literary Criticism to 1800. 3 Hours.
An introduction to the major writings of literary criticism, in their historical
context, from Plato and Aristotle to Samuel Johnson. LEC.

ENGL 708. Literary Criticism after 1800. 3 Hours.
An introduction to modern criticism, in its historical context, from
Wordsworth and Coleridge to the present. The emphasis will be on major
critics and predominant schools. LEC.

ENGL 709. Critical Theory: Problems and Principles: ____. 3 Hours.
Study of a topic (such as mimesis, influence, deconstruction) that is
important in critical theory. May be repeated for credit as topic varies.
LEC.

ENGL 710. Introduction to Old English. 3 Hours.
A study of the grammatical features of the earliest form of written English,
with readings in Old English prose and poetry. LEC.

ENGL 725. Shakespeare: ____. 3 Hours.
Intensive study of selected plays. May be repeated for credit as the topic
changes. LEC.

ENGL 730. Topics in Early Modern Literature: ____. 3 Hours.
Intensive study of texts written between 1485 and 1800. The course may
be organized around a particular genre (poetry, prose, drama), historical
period (e.g. Elizabethan literature), a major author (e.g. Milton), group
of authors (e.g. women writers), or theme (e.g. literature and politics
1660-1800). Students will be expected to read and apply relevant criticism
and theory as well as study primary texts. May be repeated for credit as topic varies. LEC.

**ENGL 750. British Literature of the 19th Century: _____, 3 Hours.**
Intensive study of British literary works of the 1800s. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. LEC.

**ENGL 751. Fiction Writing III. 1-3 Hours.**
Practice in the writing of fiction under the direction of a member of the department working in conjunction with one or more writers in residence. Membership is limited to students who submit, well in advance enrollment, manuscripts showing unusual ability. May be repeated for credit. LEC.

**ENGL 752. Poetry Writing III. 1-3 Hours.**
Practice in the writing of poetry under the direction of a member of the department working in conjunction with one or more writers in residence. Membership is limited to students who submit, well in advance of enrollment, manuscripts showing unusual ability. May be repeated for credit. LEC.

**ENGL 753. Writers Workshop. 1-3 Hours.**
An intensive course in writing prose fiction and/or verse. Criticism (NEW) of manuscripts through group meetings and individual conferences with the instructor. Membership limited to students who submit manuscripts showing special ability in at least one of the creative writing forms. May be repeated for credit. LEC.

**ENGL 756. Forms: _____, 3 Hours.**
A study of literary works belonging to a particular genre or to multiple genres (fiction, nonfiction, poetry, drama etc), either in a particular form (short story, essay, sonnet, etc.), concerned with a particular topic, or illustrative of a particular element of craft (voice, point of view, character development, etc.). Intended primarily for creative-writing students with an interest in developing their skills at reading as writers. May be repeated for credit as the topic varies. LEC.

**ENGL 757. Speculative Fiction Writing Workshop. 3 Hours.**
An intensive, 2-week course in writing speculative fiction, including genres such as slipstream, magical realism, fantasy, horror, and science fiction. The course is part of the Center for the Study of Fiction Summer Institute. Application period: January 1 - April 15. Application includes note to instructor expressing interest and one story. May be repeated for credit with instructor's permission. LEC.

**ENGL 760. British Literature of the 20th Century: _____, 3 Hours.**
Intensive study of British literary works written during the 20th century. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. LEC.

**ENGL 764. Modern Irish Literature: _____, 3 Hours.**
Intensive study of topics in modern Irish literature. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. LEC.

**ENGL 767. Studies in Modern Drama: _____, 3 Hours.**
Reading of selected works in modern and contemporary drama. May be repeated for credit as the topic changes. LEC.

**ENGL 770. Studies in Life Writing: _____, 3 Hours.**
This course focuses on or surveys individual writers in the tradition of life writing; or intensively examines topics such as "Autobiography," "Memoir and Diary," "Biography," "Slave Narrative," "Letters," "Personal Essays," or "Autobiographical Fictions." Special emphasis within a topic, such as period, gender, or ethnicity, are possible. May be repeated for credit up to a maximum of six hours. LEC.

**ENGL 774. Topics in Literatures of Africa and the African Diaspora: _____, 3 Hours.**
An intensive study of the literatures of Africa and/or African diaspora (people of African descent dispersed around the world). This study will focus on the major characteristics of a particular period, genre, mode, and/or theme in literatures such as African, Caribbean, Afro-Brazilian, African American, African Canadian, Black British. Critical theories pertinent to writers and their work will be covered. Topics may include studies in drama, poetry, or the novel; migration narratives; literature of a particular era, such as the Harlem Renaissance, Negritude, or the Black Arts Movement; representations of gender, etc. As topics vary by semester, the course may be repeated for credit. (Same as AAAS 774.) LEC.

**ENGL 776. American Literature to 1900: _____, 3 Hours.**
Intensive study of North American literary works before 1900. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. LEC.

**ENGL 777. American Literature after 1900: _____, 3 Hours.**
Intensive study of North American literary works after 1900. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. LEC.

**ENGL 779. U.S. Poetics Since 1900, 3 Hours.**
A colloquium for graduate students, sampling the range of poetics and poetical practices produced in the United States in the twentieth and twenty-first centuries. LEC.

**ENGL 780. Composition Studies. 3 Hours.**
This course surveys the field of composition studies, examining major issues and theories in the study of writing. The course may include theories from classical to contemporary rhetoric, composition theory from the twentieth century, and the most current debates in the study of writing. LEC.

**ENGL 781. Criticism and the Teaching of Literature. 3 Hours.**
A survey of selected critical theories and of the applicability of those theories to the teaching of literature. LEC.

**ENGL 785. History of the English Language. 3 Hours.**
Historical study of the phonology, morphology, syntax, vocabulary, and semantics of English; the relation between linguistic and cultural change. LEC.

**ENGL 787. Modern English Grammar. 3 Hours.**
A study of contemporary English: phonology, morphology, syntax, and usage. The emphasis is structural, but "traditional" grammar is referred to for contrast, example, and clarification. LEC.

**ENGL 790. Studies in: _____, 3 Hours.**
Examination of a significant topic in literature or the English language. May be repeated for credit as the topic varies. LEC.

**ENGL 800. Methods, Theory, and Professionalism. 3 Hours.**
Acquaintance with resources and practice in techniques that are essential to other graduate courses. Major concerns include the writing and documentation of scholarly papers; basic reference and bibliographical aids; critical approaches to literature and literary historiography; and the place of language and rhetoric in English studies today. LEC.

**ENGL 801. Study and Teaching of Writing. 3 Hours.**
A survey of major concepts and issues in the study of writing, especially as applied to teaching composition. Practices in writing pedagogy are also discussed, and students' teaching of composition is observed and explored. Required of and enrollment limited to new teachers of English 101. May not be repeated for credit toward graduate degree. FLD.
ENGL 802. Practicum in the Teaching of College English. 1 Hour.
A course concerned primarily with the pedagogy and practice of teaching
English 102. Includes weekly group meetings, individual conferences,
and class visitations. Required of and enrollment limited to new teachers
of English 102. May not be repeated for credit toward graduate degree.
Course graded on a satisfactory/unsatisfactory basis. FLD.

ENGL 803. Practicum in the Teaching of Creative Writing. 1 Hour.
A course for graduate teaching assistants pursuing the M.F.A. or
Ph.D. with emphasis in Creative Writing. Normally taken in the third
year. Concerns primarily the pedagogy of creative writing: workshop
techniques, approaches to conferencing, revision strategies, and the like.
Includes weekly group meetings as well as class visitations and individual
conferences. May not be repeated for credit toward graduate degree.
Graded on a satisfactory/unsatisfactory basis. Prerequisite: ENGL 801
and 802. FLD.

ENGL 880. Topics in Composition Studies and Rhetoric: _____ 3 Hours.
Examination of selected topics in composition and rhetoric, such as
literary studies, genre theory, dialogism, or writing across the curriculum.
May be repeated for credit as the topic changes. Prerequisite: ENGL 780
or equivalent. LEC.

ENGL 885. Writing Center Theory and Administration. 3 Hours.
This course explores theories motivating writing center administration
and practice. Students will investigate the multiple functions of writing
centers, from writing labs associated with college composition instruction,
to decentralized resources for writing faculty teaching writing across the
disciplines, to elementary, secondary, and community support centers for
writers, to online administrative perspective, design a research study and
propose actions such as creating policy, developing curricula, designing
materials, or conducting assessments. (Same as LAS 700.) Prerequisite:
LAS 400, ENGL 400, or consent of instructor. LEC.

ENGL 896. Internship. 1-3 Hours.
Practical experience under professional supervision in editing, theatrical
production, and other activities relevant to the completion of an advanced
degree in English. FLD.

ENGL 897. Preparation for the M.A. Examination. 1-3 Hours.
An independent reading course for students preparing to take the M.A.
examination. The grade in the course will be an S or U, as determined by
performance on the examination. Prerequisite: Consent of the Director of
Graduate Studies. RSH.

Graded on a satisfactory/unsatisfactory basis. THE.

ENGL 904. Seminar in Composition Theory: ______ 3 Hours.
Intensive study of one or more theoretical aspects of composition in
English (e.g., rhetoric, text grammar, stylistics). Prerequisite: ENGL 800.
LEC.

ENGL 905. Seminar in the English Language: ______ 3 Hours.
Close study of the English language in a particular period. Prerequisite:
ENGL 800. LEC.

ENGL 908. Seminar in Literary Criticism: ______ 3 Hours.
Close study of one or more major critics, of a major critical school, or of a
topic important in literary criticism. Prerequisite: ENGL 800. LEC.

ENGL 915. Seminar in Medieval English Literature: ______ 3 Hours.
Study may center on either Old or Middle English language and literature.
Prerequisite: ENGL 800. LEC.

ENGL 916. Seminar in Chaucer: ______ 3 Hours.
Prerequisite: ENGL 800. LEC.

ENGL 920. Seminar in Renaissance English Literature: ______ 3 Hours.
Close study of one or two major authors or of a group of related works.
Prerequisite: ENGL 800. LEC.

ENGL 926. Seminar in Shakespeare: ______ 3 Hours.
Prerequisite: ENGL 800. LEC.

ENGL 932. Seminar in Milton: ______ 3 Hours.
Prerequisite: ENGL 800. LEC.

ENGL 940. Seminar in Restoration and 18th Century British
Literature: ______ 3 Hours.
One or two authors are read closely, or a group of related works is
studied. Prerequisite: ENGL 800. LEC.

ENGL 950. Seminar in 19th Century British Literature: ______ 3 Hours.
Concentrated study of one or two authors, or a group of significant
writers, or an aspect of the literary scene. Prerequisite: ENGL 800. LEC.

ENGL 960. Seminar in 20th Century British Literature: ______ 3 Hours.
Concentrated study of one or two authors, or a group of significant writers,
or an aspect of the literary scene. Prerequisite: ENGL 800. LEC.

ENGL 970. Seminar in American Literature: ______ 3 Hours.
Concentrated study of one or two authors or of historical periods or
important movements. Prerequisite: ENGL 800. LEC.

ENGL 974. Seminar in Literatures of Africa and the African Diaspora:
________ 3 Hours.
Advanced study in a topic related to literature, language, and cultures
of Africa and the African Diaspora, such as a concentrated study of one or
two authors, a group of significant writers, an historical period or important
movement, or an aspect of the literary or cultural scene of Black writing.
May be repeated for credit as the topic varies. LEC.

ENGL 980. Seminar In: ______ 3 Hours.
Advanced study in a topic related to literature, language, theory, or a
special skill such as analytical bibliography or editing. Prerequisite: ENGL
800. LEC.

ENGL 997. Preparation for the Doctoral Examination. 1-12 Hours.
An independent reading course for students preparing to take the Ph.D.
comprehensive examination. May normally be taken in the semester
or summer session immediately preceding the semester in which
the comprehensive examination is taken. Does not count toward the
residence requirement. Graded on a satisfactory/unsatisfactory basis.
Prerequisite: Consent of the Director of Graduate Studies. RSH.

ENGL 998. Investigation and Conference: ______ 1-6 Hours.
Individual work in (a) language, (b) literature, (c) composition, or (d) the
Teaching of English, by properly qualified graduate students under the
direction of appropriate members of the Graduate Faculty as assigned
by the Graduate Director. Limited to 6 hours of credit toward the M.A. or
Ph.D. degree; only on three-hour enrollment may substitute for a formal
course in satisfying a field distribution requirement. Normally offered for
only up to three credit hours in any one enrollment. Permission of the
supervising faculty member and of the Graduate Director required for
enrollment. RSH.

ENGL 999. Doctoral Dissertation. 1-12 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.
Environmental Studies Courses

EVRN 103. Environment and History. 3 Hours. H.
Nature is our oldest home and newest challenge. This course surveys the environmental history of the earth from the extinction of the dinosaurs to the present with a focus on the changing ecological role of humans. It analyzes cases of ecological stability, compares cultural attitudes toward nature, and asks why this ancient relationship seems so troubled. (Same as HIST 103.) LEC.

EVRN 140. Global Environment I: The Discovery of Environmental Change. 5 Hours. GE3N / U.
This interdisciplinary course and laboratory sections survey the foundations of environmental understanding and the process of scientific discovery from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the history of environmental systems and life on earth, the discovery of biotic evolution, ecological change, and climate change. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as GEOG 140 and HIST 140.) LEC.

EVRN 142. Global Environment II: The Ecology of Human Civilization. 5 Hours. GE3S / U.
This interdisciplinary course and its laboratory sections survey the history of humanity’s relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the ecology of colonialism and industrial civilization, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to humanity’s engagement with the global environment using historical and present-day examples. (Same as GEOG 142 and HIST 142.) LEC.

EVRN 144. Global Environment I: Discovery of Environmental Change, Honors. 5 Hours. GE3N / U.
This interdisciplinary course surveys the foundations of environmental understanding and the process of scientific discovery from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the history of environmental systems and life on earth, the discovery of biotic evolution, ecological change, and climate change. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as GEOG 140 and HIST 144.) LEC.

EVRN 170. Introduction to Kansas Landscapes. 1 Hour. N.
A course focused on the land and environment of Kansas. Field trips provide students with direct experience of the diverse landscapes in our area. Coursework also emphasizes the dynamic nature of the current landscape and the natural and cultural processes that have shaped it. LEC.

EVRN 171. Understanding Kansas Landscapes. 1 Hour. N.
An introduction to the research methods used by scholars in diverse fields, applied to environmental issues introduced in EVRN 170. Prerequisite: EVRN 170. LEC.

EVRN 172. Kansas Landscape Projects. 1 Hour. N.
Students participate in the design and execution of a simple research project focused on a local environmental topic. Prerequisite: EVRN 170, and EVRN 171. LEC.

EVRN 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Environmental Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

EVRN 200. Study Abroad Topics In: _____. 1-6 Hours. S.
This course is designed for the study of special topics in Environmental Studies. Coursework must be arranged through the Office of Study Abroad. May be repeated for credit if content varies. LEC.

EVRN 304. Environmental Conservation. 3 Hours. NE GE3N / N.
A survey of current methods of describing and modeling the function, structure, and productivity of natural and anthropogenically modified earth resource systems, along with a discussion of contemporary views of what constitutes a natural landscape. Fundamental natural science principles about the interplay among lithospheric, atmospheric, hydrospheric, and...
biospheric components of earth systems are emphasized. Uses of natural resources, including fossil fuels, minerals, and water, are described with attention to the earth’s total energy budget. Human activities that affect preservation, conservation, and multiple uses of earth regions receive attention. Systems under stress through population and other contemporary forces serve as examples. (Same as GEOG 304.) LEC.

EVRN 320. Environmental Policy Analysis. 3 Hours. N.
An historical and analytical study of the formulation, implementation, and consequences of environmental policy in the United States. Attention will be directed at relevant interest groups, issues specific to both rural and urban populations, relationships between national policies and international organizations concerned with environmental problems. Prerequisite: EVRN 148/GEOG 148; and EVRN 103/HIST 103, EVRN 347/HIST 347 or EVRN 150/GEOG 150. LEC.

EVRN 332. Environmental Law. 3 Hours. U.
An introduction to how the American legal process improves, transforms, and damages the natural environment. Emphasizes and compares shifting responsibilities of legal forces and institutions: judges and litigants, legislators and statutes, agencies and administrations, and citizens and regulated entities. Prerequisite: EVRN 148 and EVRN 103/HIST 103, EVRN 347/HIST 347 or EVRN 150/GEOG 150. LEC.

EVRN 335. Introduction to Soil Geography. 4 Hours. N.
The course focuses on the properties and processes of soils as they occur in their environment. The student is introduced to the nature of soil as it functions as a body; genesis of soils; properties of soil solids, especially colloids; soil chemical composition, properties, and reactions; interaction between solid, liquid, and gaseous components in soils; plant-soil-water relationships; biological interactions with soil; classification of soils; and the distribution of soils on the landscape. Not open to students who have taken GEOG 535 or EVRN 535. (Same as GEOG 335.) Prerequisite: GEOG 104 or GEOL 101 or consent of instructor; BIOL 100 and CHEM 130 or CHEM 190 recommended. LEC.

EVRN 336. Ethics, Ideas and Nature. 3 Hours. AE51 / H.
This course examines the ethical frameworks developed for thinking about, using, and protecting the natural world. Examples of topics include indigenous approaches to nature, the history of ecological ideas, environmental movements, the role of the state in managing resources, utilitarianism and progressivism, environmental lawmaking, wilderness advocacy, nature and theology, the rights of nature, and environmental justice. Students are introduced to the theories of duty ethics, justice ethics, utilitarianism, and rights ethics, and required to apply ethical decision making to contemporary and historical environmental issues. Multiple perspectives on the history of human interactions with nature demonstrate the importance of reflecting upon the value systems inherent in human-centered environmental ethics and nature-centered environmental ethics. (Same as HIST 336.) LEC.

EVRN 338. Permaculture Design. 6 Hours. N.
Students learn how a local, sustainable design system known as permaculture design creates an ecologically sound and economically viable way of living. The course consists of lecture, field, and practicum sessions. Lecture topics include food security, permaculture ethics, ecological principles, system design, sustainable soils, food production, food forests, earth works, and construction of human habitats. LEC.

EVRN 347. Environmental History of North America. 3 Hours. H.
A survey of changes in the landscape and in people’s perceptions of the natural world from 1500 to present. Topics include agroecology, water and energy, the impact of capitalism, industrialism, urbanization, and such technologies as the automobile and the origins of conservation. (Same as HIST 347.) LEC.

EVRN 371. Environmental Geopolitics. 3 Hours. S.
This course examines how human relationships with the biophysical world are politicized. Examines key contributions to debates surrounding environmental security, resource conflicts, and related issues, as well as geopolitical assumptions on which these debates build. (Same as GEOG 371.) LEC.

EVRN 385. Environmental Sociology. 3 Hours. S.
This course invites students to study society and its impact on the environment. Environmental problems are social problems. This course will address such items as social paradigms, theories, inequalities, movements, and research. (Same as SOC 385.) LEC.

EVRN 410. Geospatial Analysis. 3 Hours. N.
Focuses on applications of geospatial technologies to environmental issues using case study examples and data, and provide students with a foundational skill-set in geographic information systems, remote sensing, and GPS techniques. Prerequisite: EVRN/GEOG 148/149; EVRN/HIST 103, EVRN/GEOG 150 or EVRN/HIST 347. LEC.

EVRN 420. Topics in Environmental Studies: _____. 1-6 Hours. N.
Courses on special topics in Environmental Science and/or Policy. These courses may be lecture, discussions, or readings. Students may enroll in more than one interest group but may enroll in a given interest group only once. LEC.

EVRN 425. Global Water Scarcity. 3 Hours. S.
Though natural factors are introduced, this course focuses primarily on the human factors that contribute to global water scarcity. This course also discusses the consequences of water scarcity and its effects on society. Prerequisite: EVRN 148 or permission of instructor. LEC.

EVRN 433. Biogeography Field and Laboratory Techniques. 3 Hours. N.
This course provides undergraduate students with practical experience in field data collection techniques and laboratory data analysis methods. During the first half of the semester, students work in the field using a variety of methods to measure such vegetation characteristics as: cover, density, biomass, leaf area, and canopy architecture. Students gain experience in the use of field instruments including a spectoradiometer, and techniques for quantifying biophysical attributes of vegetation. During the later part of the course, students learn to summarize their field data and examine relationships between the vegetation attributes and measurements made using remote sensing instruments. Recommended: GEOG 316 or an introductory statistics equivalent. (Same as GEOG 433.) FLD.

EVRN 460. Field Ecology. 3 Hours. N.
An introduction to research methods for environmental science. The course includes fieldwork in diverse ecosystems (lakes, streams, forests, prairies). It emphasizes the development of skills in data analysis and interpretation that are essential to a full understanding of environmental issues. Enrollment limited to environmental studies majors, or by instructor permission. Prerequisite: Junior or Senior standing, completion of the natural sciences requirement of the KU Core (GE3N), and either EVRN 320 or EVRN 332. FLD.

EVRN 490. Internship in Environmental Studies. 1-8 Hours. AE61 / N.
Supervised practical experience in a specific environmental area of interest. The advisor will schedule regular meetings to evaluate progress and provide assistance. A written summary of the internship experience and evaluation will be prepared independently by the student, a representative of the cooperating agency, and the advisor. Total credit may not exceed 8 hours. Prerequisite: Junior standing and consent of program director. Restricted to declared Environmental Studies majors. Restricted to students with a 2.5 overall GPA or above. FLD.
EVRN 510. Advanced Environmental Applications in Geospatial Techniques. 3 Hours. H/N.
This course focuses on applying advanced geospatial mapping and analysis techniques to "real-world" environmental issues. Course content may include lecture/lab time on advanced geospatial topics; a major class project, small-group projects, or individual projects; or half-semester internships with state agencies or campus entities that will culminate in an individual project. The specific nature of projects will be driven largely by student interest and ability, as well as agency/center needs. Prerequisite: EVRN 410 or equivalent course; or permission of the instructor. LEC.

EVRN 519. Sociology of Global Food. 5 Hours. U.
The Sociology of Global Food offers a critical examination of the global food system since the Industrial Revolution. Topics include the industrialization of agriculture, sustainable agriculture, and the role of food and agriculture in organizing society. This course discusses the emergence of current debates around food and agriculture including food activism, technological developments, human/environment relationships, and labor issues. There is a lab component to this course. (Same as SOC 519.) Prerequisite: Junior standing. LEC.

EVRN 526. Remote Sensing of the Environment I. 4 Hours. N.
Introduction to study of the environment through air photos and satellite imagery, including principles of remote sensing, interactions of electromagnetic energy with the atmosphere and earth's surface, aerial photography, satellite systems, and sensors (electro-optical, thermal, and radar). Emphasis in the latter part of the course is on such applications as global monitoring, land cover mapping, forestry, agriculture, and oceanography. Laboratory emphasizes visual interpretation of aerial photography and satellite imagery and an introduction to digital image processing in the department's NASA Earth Science Remote Sensing Laboratory. (Same as GEOG 526.) Prerequisite: MATH 101 or equivalent. GEOG 358 recommended. LEC.

EVRN 528. Environmental Justice and Public Policy. 3 Hours. S.
This course provides an overview of environmental justice, both as a social movement and as a public policy initiative. Environmental justice examines the distribution of environmental externalities across different socio-economic and racial groups. We will discuss several different public policy areas that have been impacted by the environmental justice movement: hazardous waste facility siting, urban redevelopment and Brownfields, transportation policy, and Native American sovereignty. We will also touch upon international environmental policy in an environmental justice context. Throughout the course we will evaluate empirical issues in studying environmental justice. (Same as POLS 528.) Prerequisite: POLS 306, or a statistics class, or consent of instructor. LEC.

EVRN 535. Soil Geography. 5 Hours. N.
A broad study of the principles and properties of soils and their distribution on the landscape. Topics covered include: pedology, clay mineralogy, soil physics, soil chemistry, management of soils, soil biology, taxonomy, and soil geomorphology. Laboratory section and a field project are required. Not open to students who have taken GEOG 335 or EVRN 335. (Same as GEOG 535.) Prerequisite: GEOG 104 or GEOG 101 or consent of the instructor; BIOL 100 and CHEM 130 or CHEM 190 recommended. LEC.

EVRN 538. Soil Chemistry. 3 Hours. N.
This course examines the chemical properties and processes of soils and methods of evaluation. Topics include solid and solution speciation, mineral solubility, soil colloidal behavior, ion exchange, surface complexation, soil salinity and sodicity, soil acidity, oxidation-reduction reactions, and kinetics of soil chemical processes. (Same as GEOG 538.) Prerequisite: GEOG 335 or GEOG 535 or EVRN 335 or EVRN 535, CHEM 135 or CHEM 195, MATH 121, PHSX 114, or consent of the instructor. LEC.

EVRN 542. Ethnobotany. 3 Hours. S.
Course will involve lectures and discussion of Ethnobotany - the mutual relationship between plants and traditional people. Research from both the field of anthropology and botany will be incorporated in this course to study the cultural significance of plant materials. The course has 7 main areas of focus: 1) Methods in Ethnobotanical Study; 2) Traditional Botanical Knowledge - knowledge systems, ethnolinguistics; 3) Edible and Medicinal Plants of North America (focus on North American Indians); 4) Traditional Phytochemistry - how traditional people made use of chemical substances; 5) Understanding Traditional Plant Use and Management; 6) Applied Ethnobotany; 7) Ethnobotany in Sustainable Development (focus on medicinal plant exploration by pharmaceutical companies in Latin America). (Same as ANTH 582.) Prerequisite: ANTH 104, ANTH 108, EVRN 148, or consent of instructor. LEC.

EVRN 550. Environmental Economics. 3 Hours. U.
This course provides an overview of the theory and empirical practice of economic analysis as it applies to environmental issues. Topics include externalities (a type of market failure), the valuation of nonmarket goods, the practice of benefit-cost analysis, and the efficiency and cost effectiveness of pollution control policies. Most importantly, the course permits students to perform economic field research, using state-of-the-art techniques in a manner accessible to undergraduate students. (Same as ECON 550.) Prerequisite: ECON 104, ECON 140, or ECON 142. LEC.

EVRN 553. Comparative Environmental Politics. 3 Hours. S.
This course compares environmental politics and policies across a number of countries, including those in North America, Western Europe, East Asia, and Latin America. (Same as POLS 553.) LEC.

EVRN 562. United States Environmental History in the 20th Century. 3 Hours. H.
Americans dramatically changed the natural world between 1900 and 2000. This course asks how transformed environments shaped the American experience during a century of technological innovation, democratic renewal, economic expansion, global conflict, and cultural pluralism. Topics include food and markets, energy and transportation, law and politics, protest and resistance, suburbanization, and environmentalism's fate in a global information era. (Same as HIST 562.) LEC.

EVRN 563. U.S. Environmental Thought in the 20th Century. 3 Hours. H.
Explores both leading and dissident ideas that Americans have had about the natural world since 1900. Broad chronological periods are explored in some depth, including the Progressive Era, New Deal, Cold War, the Sixties, and the Reagan Eighties. The course uses articles and books, as well as scholarly and literary works, are considered. (Same as HIST 563.) Prerequisite: EVRN 148 or HIST 129, or by permission of instructor. LEC.

EVRN 611. Water Quality, Land Use, and Watershed Ecosystems. 3 Hours. N.
Water quality issues are integrated with land use planning and the development of watershed management strategies. Interrelationships among the hydrologic cycle, atmospheric deposition, nutrient transformations and pesticide use are examined in regards to stream, lake, and groundwater quality. Prerequisite: CHEM 110 or CHEM 130 and BIOL 414, or consent of instructor. LEC.

EVRN 615. Capstone Project. 3 Hours. AE61 / N.
The capstone project provides students with a broad-based, interdisciplinary educational experience and allows them to integrate and synthesize the knowledge they have gained in their environmental studies major. It rejoins the cohort that has separately pursued the BA/BGS and BS tracks and places them in situations in which they address real world
Environmental issues with a team approach and produce professionally meaningful analytical reports. Prerequisite: Junior standing; EVRN 320, EVRN 332, and EVRN 460. Restricted to declared Environmental Studies majors. LEC.

EVRN 616. Environmental Impact Assessment. 3 Hours. N.
This course provides an overview of environmental laws and regulations. Additional focus is given to the process described in the National Environmental Policy Act (NEPA). Students will learn when NEPA is triggered, the difference between Environmental Impact Statements (EIS) and Environmental Assessments (EIA), and how to write an EIS/EIA. Prerequisite: An introductory course in environmental law, or consent of instructor. LEC.

EVRN 620. Environmental Politics and Policy. 3 Hours. S.
Analysis of environmental politics and the formulation and implementation of environmental policy. Examines the history and development of environmental politics as well as current trends. Themes include interest groups, business interests, political institutions, and specific environmental policy issues. (Same as POLS 624.) LEC.

EVRN 624. Independent Study. 1-9 Hours. AE61 / N.
A research course, in any of the fields of environmental studies, consisting of either experimental research, original policy analysis, or the preparation of an extensive paper based on library investigation. Project topic to be agreed upon in advance with supervising faculty member. Prerequisite: Consent of instructor. IND.

EVRN 625. Honors Research in Environmental Studies. 3 Hours. AE61 / N.
A course giving eligible majors the opportunity to earn Departmental Honors by engaging in an intensive program of study leading to an original piece of research. Prerequisite: Senior standing, approval of the Environmental Studies Program, the Honors Project Director, and an overall 3.25 cumulative grade point average during the semester of enrollment. Restricted to declared Environmental Studies majors. IND.

EVRN 628. The Politics of Public Health. 3 Hours. S.
This course examines the social, institutional and political context of public health policy in the United States. We will examine factors that shape the nation’s public health, explore the role of government in reducing risk and promoting well being, and analyze the major institutions responsible for monitoring, protecting and promoting general public health. Themes include the social determinants of health, health disparities, emerging infectious diseases, food safety, transportation, and environmental health. (Same as POLS 628.) Prerequisite: POLS 110 and POLS 306 are recommended. LEC.

EVRN 635. Soil Physics. 3 Hours. N.
Provides theoretical and practical foundations for understanding physical properties and processes of variably-saturated porous media. Focus is on the transport, retention, and transformation of water, heat, gas, and solutes through the soil. We examine modern vadose zone measurement methods, analytical tools, and numerical models for data collection and interpretation. (Same as GEG 635.) Prerequisite: GEG 335 or EVRN 335; or GEOG 535 or EVRN 535, and MATH 121, PHSX 114; or consent of instructor. LEC.

EVRN 656. Ecosystem Ecology. 3 Hours. N.
An introduction to the patterns and processes that affect terrestrial ecosystems. Emphasis is placed on understanding nutrient cycles (e.g., carbon nitrogen phosphorous), hydrologic cycles, and patterns of net primary productivity. The role of both natural and anthropogenic disturbances in structuring terrestrial ecosystems is examined in the context of global land-use patterns. Discussion of current research literature will be expected. (Same as BIOL 656.) Prerequisite: BIOL 414 and CHEM 130. LEC.

EVRN 700. Colloquium. 1 Hour.
Topics of current interest in environmental studies. May be repeated for credit for different topics. LEC.

EVRN 701. Climate Change, Ecological Change and Social Change. 3 Hours.
This interdisciplinary graduate seminar examines the history of climate change from natural and physical science, social science, and humanities perspectives. The class explores the ways that different disciplines approach understanding climate change and its impact on natural and human systems and how these understandings have changed over time. The course is team-taught by faculty from the natural and physical sciences, social sciences, humanities, and professional schools, and will include faculty guest speakers from KU and off-campus. Students will write a research paper on a climate change topic of their choice that reflects the historical and interdisciplinary approaches of the seminar. A goal of the seminar is to assemble student papers for presentation and possible publication. Prerequisite: Consent of instructor. LEC.

EVRN 702. Energy, Ecology and Community in Kansas. 3 Hours.
This interdisciplinary graduate seminar examines the role of climate in shaping energy, ecology, and community in Kansas from natural and physical science, social science, and/or humanities perspectives. The class will combine lectures, group projects, and field research to understand the ways that climate change and energy production are reshaping the human and natural systems in Kansas and the Great Plains. The course is team-taught by faculty from the natural and physical sciences, social science, humanities and professional schools, and will include faculty guest speakers from KU and off-campus. LEC.

EVRN 720. Topics in Environmental Studies: _____. 1-6 Hours.
Courses on special topics in Environmental Studies. These courses may be lecture, seminars, or readings. Students may enroll in more than one interest group but may enroll in a given interest group only once. LEC.

EVRN 721. Environmental Regulation and Policy. 3 Hours.
This course provides a survey of the environmental regulations, environmental problems, and environmental solutions that must be dealt with by environmental scientists in agencies and industry. Considers both theoretical and practical/applied aspects of environmental practices. LEC.

EVRN 730. Environmental Toxicology. 3 Hours.
Examines the effects of toxic chemicals on individuals, populations, communities and ecosystems. Topics include major classes of pollutants, movement, distribution and fate of pollutants in the environment, mechanisms of action, toxicity testing, and environmental assessment. LEC.

EVRN 740. Soil Science for Environmental Assessment. 3 Hours.
Provides students with a solid understanding of soils in the environment, particularly as it relates to environmental assessment. Topics include soil geomorphology, soil physics/chemistry/biology, management of soils, and soil contaminant. Prerequisite: CHEM 130 or CHEM 190 recommended or consent of the instructor. LEC.

EVRN 745. Environmental Data Analysis and Statistics. 3 Hours.
Survey of common statistical methods for analyzing environmental data. Includes techniques for environmental monitoring, impact assessment, and site reclamation, as well as methods for handling censored data, time series, and spatial analysis. Sampling design, data interpretation, and presentation of statistical results will be emphasized. Prior coursework or practical experience in statistics is expected. Prerequisite: Permission of instructor. LEC.
EVRN 750. Environmental Air Quality Assessment. 3 Hours.
Addresses scientific, regulatory, and technical aspects of air quality monitoring, including pollutant formation and dispersion, pollution control, national emissions standards, and methods for monitoring pollutants and air quality. Prerequisite: CHEM 130 or CHEM 190 recommended or consent of the instructor. LEC.

EVRN 815. Professional Science Masters Capstone. 3 Hours.
A culminating experience to develop a workforce project, producing a written report and presented orally to a committee that includes an industry member. Students will develop an applied workforce project in the student’s place of employment for full time employees or an internship for full time students. The students will document their project in a written report and present their project to the Environmental Studies faculty (2), and the student’s employer or representative if practical. LEC.

EVRN 915. Capstone. 3 Hours.
The goal of this research seminar is to discuss individual students’ research, culminating in the completion of a paper in Environmental Studies for presentation at a professional meeting and/or publication in a professional journal. SEM.

French Italian Courses

FREN 100. French for Reading Knowledge. 3 Hours. U.
Special course for candidates for advanced degrees in other departments. Fundamentals of grammar and reading of material of medium difficulty. Intended primarily for graduate students, but open also to seniors planning graduate study. Does not satisfy any part of the undergraduate language requirement. Presupposes no previous study of French. Conducted in English. LEC.

FREN 104. Elementary French, Overseas. 1-5 Hours. U.
Basic language instruction in French for beginners participating in study abroad programs in France or a French-speaking country. Graded satisfactory/unsatisfactory. LEC.

FREN 107. Elementary French I for the Professional Schools. 3 Hours.
Essentials of French grammar; practice in speaking, reading, and writing French. Introduction to French business culture. Three hours of class per week. This course does not satisfy the College of Liberal Arts and Sciences foreign language requirement. LEC.

FREN 108. Elementary French II for the Professional Schools. 3 Hours. U.
Essentials of French grammar; practice in speaking, reading, and writing French. Introduction to French business culture. Three hours of class per week. This course does not satisfy the College of Liberal Arts and Sciences foreign language requirement. Prerequisite: FREN 107 or equivalent. LEC.

FREN 109. Elementary French III for the Professional Schools. 3 Hours. U.
Essentials of French grammar; practice in speaking, reading, and writing French. Introduction to French business culture. Three hours of class per week. This course does not satisfy the College of Liberal Arts and Sciences foreign language requirement. Prerequisite: FREN 108 or equivalent. LEC.

FREN 110. Elementary French I. 5 Hours. U.
Five hours of class per week. A balanced approach stressing understanding, speaking, reading, and writing. LEC.

FREN 111. Introduction to French I. 3 Hours. U.
Introduction to French for special purposes; no previous French required. Provides basic familiarity with the French language, focusing on speaking, listening, reading and the essentials of French grammar. Introduction to the culture of the French-speaking world. Three class hours per week; may be delivered by videoconference or face-to-face. Does not satisfy any KU language requirement. Prerequisite: Instructor permission required. LEC.

FREN 112. Introduction to French II. 3 Hours. U.
Continuation of FREN 111. Further development of basic familiarity with the French language, focusing on speaking, listening, reading and the essentials of French grammar. Continued exploration of the culture of the French-speaking world. Three class hours per week; may be delivered by videoconference or face-to-face. Does not satisfy any KU language requirement. Prerequisite: FREN 111 or permission of instructor. LEC.

FREN 113. Introduction to French III. 1.5 Hour. U.
Continuation of FREN 112. Further development of basic familiarity with the French language, focusing on speaking, listening and the essentials of French grammar. Continued exploration of the culture of the French-speaking world. Three class hours per week; may be delivered by videoconference or face-to-face. Does not satisfy any KU language requirement. Prerequisite: FREN 112 or permission of instructor. LEC.

FREN 120. Elementary French II. 5 Hours. U.
Five hours of class per week. A balanced approach stressing understanding, speaking, reading, and writing. Prerequisite: FREN 110 or by departmental permission. LEC.

FREN 152. France and the French. 3 Hours. HL AE42/GE3H / H.
A comprehensive, interdisciplinary survey of French culture that may include topics ranging from the earliest times to the present, with particular attention to literature, the arts, thought, politics, society, food, and customs. Taught in English. Does not fulfill any requirement in the French major or minor. LEC.

FREN 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in French. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

FREN 230. Intermediate French I. 3 Hours. U.
Third-semester course stressing oral and written work in French; systematic review of grammar and introduction to reading in cultural texts. (See also FREN 231, FREN 234.) Prerequisite: FREN 120 or by departmental permission. LEC.

FREN 231. Intermediate French I, Honors. 3 Hours. U.
Similar in approach and content to FREN 230; smaller class size; open to students who have done very good to excellent work in previous French classes. Prerequisite: Grade of B or A in FREN 120 or departmental permission. LEC.

FREN 234. Intermediate French I and II. 6 Hours. U.
One-semester course meeting five times a week for six hours credit. Material same as in FREN 230 and FREN 240. (FREN 234, FREN 240, FREN 241--each completes foreign language requirement.) Prerequisite: FREN 120 or by departmental permission. LEC.

FREN 240. Intermediate French II. 3 Hours. U.
Continuation of FREN 230. (FREN 234, FREN 240, FREN 241--each completes foreign language requirement.) (See also FREN 241.) Prerequisite: FREN 230, FREN 231, or by departmental permission. LEC.

FREN 241. Intermediate French II. Honors. 3 Hours. U.
Similar in approach and content to FREN 240; smaller class size; open to students who have done very good to excellent work in previous
FREN 300. Intensive Review of French Grammar. 3 Hours. H/W.
Designed to provide essential skills for advanced courses. Prerequisite: FREN 234, FREN 240, FREN 241, or by departmental permission. LEC.

FREN 310. French Phonetics. 3 Hours. GE3S / H/W.
A course in practical phonetics with exercises stressing rhythm, intonation, and individual sounds. Prerequisite: FREN 240, FREN 241, or by departmental permission. LEC.

FREN 315. Le Francais Pratique. 1-6 Hours. H/W.
Supplementary non-major language course that can be a sequel to the first four semesters of French. Primarily for students studying abroad. Covers vocabulary study, oral exercises, discussion of texts, writing, and free conversation. Prerequisite: FREN 230/231 or FREN 234, FREN 240/241. LEC.

FREN 326. Introduction to French Literature. 3 Hours. HL AE42/GE3H / H.
Analysis of selected texts from various genres; special emphasis on explication de texte. Prerequisite: FREN 300 (or with FREN 300), or by departmental permission. LEC.

FREN 330. French Language and Civilization I. 3 Hours. H.
A study of French grammar, conversation, and composition, with selected aspects of French civilization. Available to participants in the Summer Language Institutes, and selected Study Abroad programs. LEC.

FREN 340. French Language and Civilization II. 3 Hours. H.
A study of French grammar, conversation, and composition, with selected aspects of French civilization. Available to participants in the Summer Language Institutes, and selected Study Abroad Programs. LEC.

FREN 350. Applied French Grammar and Composition I. 3 Hours. H/W.
Systematic grammar review with extensive practice in writing French. Prerequisite: FREN 300 or FREN 326. LEC.

FREN 352. French for Journalism and Business. 3 Hours. H/W.
Practical acquisition of skills necessary to understand the language of journalism and business. Prerequisite: FREN 300. LEC.

FREN 375. Intermediate French Conversation. 3 Hours. H/W.
Three meetings per week. Guided discussions designed to increase fluency, improve pronunciation, and acquire vocabulary. Sections limited to twelve students. May be designated a KULAC class at the discretion of the instructor. Prerequisite: FREN 300 or concurrent enrollment in FREN 300. LEC.

FREN 376. Advanced French Conversation. 3 Hours. H/W.
Three meetings per week. Guided discussions designed to increase fluency, improve pronunciation, and knowledge of French culture and language. Classes have centered around topics such as the French Revolution, the Arts, Renaissance Festivals, and French cinema. Sections limited to twelve students. May be designated a KULAC class at the discretion of the instructor. Prerequisite: FREN 375. LEC.

FREN 401. Paris, City of Lights and Legends. 3 Hours. HL AE42/GE3H / H.
An exploration of the French capital from its origins to present as emblem and icon of the social, literary, cultural, and political development of the French nation and of French ideals. Topics include great persons, events, works, symbols, and myths since the founding of the city to the present. Taught in English. Does not fulfill any requirement in the French major or minor. LEC.

FREN 405. French Literature in Translation. 3 Hours. HL AE42/GE3H / H.
Readings and discussions of representative great masterpieces of French literature from the medieval Arthurian romances and chansons de geste to the present, with particular emphasis on the question of the interrelations of form and content. Includes such authors as Rabelais, Montaigne, Racine, Moliere, Voltaire, Balzac, Flaubert, Baudelaire, Proust, Gide, Camus, and Beckett. Conducted in English. A reading knowledge of French is extremely useful but not a requirement. LEC.

FREN 406. Introduction to French Culture Through Film. 3 Hours. AE42/GE3H / H/W.
Discussion of great masterpieces of French film from the silent era to the present, with a particular emphasis on how film portrays and conveys important aspects of French culture past and present. The works of a variety of film-makers may be covered, and may include among others Georges Melies, Jean Vigo, Jean Renoir, Abel Gance, Rene Clair, Marcel Carne, Jean Cocteau, Alain Resnais, Jean-Luc Godard, Francois Truffaut, Agnes Varda, Louis Malle, Eric Rohmer, and Claude Berri. Films will be shown in French with subtitles in English. Knowledge of French is useful, but not required. LEC.

FREN 410. Survey of French Culture I. 3 Hours. AE42/GE3H / H/W.
A survey of the historical, philosophical, literary, and artistic development of France, from the beginning through the 17th century. Prerequisite: FREN 300 and FREN 326. May be designated a KULAC class at the discretion of the instructor. LEC.

FREN 420. Survey of French Culture II. 3 Hours. AE42/GE3H / H/W.
Continuation of FREN 410, from the 18th century to the present. Prerequisite: FREN 300 and FREN 326. May be designated a KULAC class at the discretion of the instructor. LEC.

FREN 430. La France d'Aujourd'Hui. 3 Hours. AE42/GE3H / H/W.
Social, political, and economic trends from 1939 to present, with emphasis on period since 1968. Prerequisite: FREN 300 and FREN 326. May be designated a KULAC class at the discretion of the instructor. LEC.

FREN 431. French-Speaking World (Outside France). 3 Hours. AE42/GE3H / H/W.
Cultures of the some 235 million persons in the five world areas whose everyday and/or official language is French: Canada; Caribbean (e.g., Haiti, Guadeloupe, Martinique); Europe (e.g., Belgium, Switzerland); Africa and Indian Ocean (23 former French or Belgian colonies); Pacific (e.g., Tahiti, New Caledonia). Also French-speaking settlers in the United States (Louisiana, South Carolina, New England, Kansas). French presence in Indo-China and the Near East. Prerequisite: FREN 300 and FREN 326. (May be taken concurrently with FREN 300 and/or FREN 326.) May be designated a KULAC class at the discretion of the instructor. LEC.

FREN 432. Francophone African Literature. 3 Hours. NW AE42/GE3H / H/W.
This course is an introduction of 20th Century African literature written in French, covering selected works by major authors from both sub-Saharan Africa and the Maghreb. Attention will be given primarily to the novel, although some poetry will also be read. Topics and themes include negritude, African identity in the wake of colonialism, Islam, and women's writing. Classes will be conducted in English. Students may read the texts in French or in translation. (Same as AAAS 432.) Prerequisite: ENGL 102 and a 200-level English course. LEC.

FREN 440. Studies in French Culture: _______. 3 Hours. H/W.
Representative topics are: History of Paris, Role of Women in French Literature and Culture, Interrelationships of the Arts, French-speaking African Culture, Culture of French Canada. May be repeated for credit.
with departmental permission; may also be repeated as part of major in French language and culture. Prerequisite: FREN 300 and FREN 326. May be designated a KULAC class at the discretion of the instructor. LEC.

FREN 450. French Literature of the Middle Ages. 3 Hours. AE42/GE3S / H/W.
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 300 and FREN 326. LEC.

FREN 455. French Literature of the Renaissance. 3 Hours. AE42/GE3S / H/W.
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 300 and FREN 326. LEC.

FREN 460. French Literature of the Seventeenth Century. 3 Hours. AE42/GE3S / H/W.
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 300 and 326. LEC.

FREN 462. French Literature of the Eighteenth Century. 3 Hours. AE42/GE3S / H/W.
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 300 and 326. LEC.

FREN 465. French Literature of the 19th Century. 3 Hours. AE42 / H/W.
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 300 and 326. LEC.

FREN 470. French Literature of the Twentieth Century. 3 Hours. AE42/GE3S / H/W.
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 300 and 326. LEC.

FREN 480. Studies in French Literature: _______ 3 Hours. H/W.
A study of a period, theme, group of authors, or movement. Subject matter will vary; may be taken more than once if subject differs. Prerequisite: FREN 300 and 326. LEC.

FREN 495. Directed Readings in French. 1-15 Hours. AE61 / U.
May be taken more than once, total credit not to exceed fifteen hours. Fields not covered by course work, and/or field of student's special interest. Conferences. Counts as humanities when taken for two or three hours. Prerequisite: Twenty-five hours of French and consent of instructor. IND.

FREN 499. Honors in French. 3 Hours. AE61 / H/W.
Various topics in French or Francophone literature or culture. May be taken more than once, total credit not to exceed nine hours. Minimum of six hours of FREN 499 required for B.A. with Honors in French. Student must discuss Honors eligibility and their topic with a faculty member before enrolling. IND.

FREN 500. Advanced French Phonetics. 3 Hours. GE3S / H/W.
Advanced theory and practice of French pronunciation. Not open to students who have taken FREN 310, except by departmental permission. Prerequisite: FREN 300 or FREN 326 or graduate standing. LEC.

FREN 530. Studies in Film: _______. 3 Hours. AE42/AE61 / H/W.
Studies in an aspect of film, a director or group of directors. Emphasis on French film. Given in French or English. LEC.

FREN 592. French Culture Through Film I, Beginnings to 1950. 3 Hours. AE42/AE61 / H/W.
A survey of the major public images of French culture as surveyed in French silent and sound film from the early 1900s through World War II and its immediate aftermath. Students will view and discuss a selection of films that address crucial aspects of French culture such as (but not limited to) gender, war and peace, daily life, art and artists, tradition and revolution, city life versus country life, social classes, moral choice, and individual freedoms. The course will include discussion of the cultural and artistic significance of major French film movements like Poetic Realism. In addition to viewing and discussing films, students will read and analyze the writings of a number of French intellectuals, writers, and artists who have had a major influence on French culture as it appears in films from 1900-1950. May be taught in French or English. For students who already have some knowledge of French culture. LEC.

FREN 593. French Culture Through Film II, 1950-Present. 3 Hours. AE42/AE61 / H/W.
A survey of the major public images of French culture as surveyed in French silent and sound film from 1950 to present. Students will view and discuss a selection of films that address crucial aspects of French culture such as (but not limited to) gender, war and peace, daily life, art and artists, tradition and revolution, city life versus country life, colonialism and post-colonialism, social classes, moral choice, and individual freedoms. The course will include discussion of the cultural and artistic significance of major French film movements like the New Wave. In addition to viewing and discussing films, students will read and analyze the writings of a number of French intellectuals, writers, and artists who have had a major influence on French culture as it appears in films from 1950-present. May be taught in French or English. For students who already have some knowledge of French culture. LEC.

FREN 600. Studies in: _______. 3 Hours. H/W.
Topics vary by semester. May be repeated for credit. Prerequisite: Departmental permission. LEC.

FREN 610. Theme et Version. 3 Hours. H/W.
Exercises in English-French and French-English translation, designed to enable the student to write with greater clarity and precision in both languages. LEC.

FREN 620. Expository French Writing. 3 Hours. H/W.
Intensive practice in writing French, designed to clarify fine points of grammar and usage and to aid the student in developing an accurate and graceful prose style. LEC.

FREN 660. Language Teaching and Advanced Conversation. 2-3 Hours. U.
A summer course designed principally for secondary school language teachers. Discussion of current theory in language acquisition integrated into an intensive oral review of French. Meets three hours daily for two weeks; includes lab. (Not applicable toward a major or graduate degree in French.) LEC.

FREN 681. Language Teaching for Oral Proficiency. 1 Hour. U.
A summer course designed principally for secondary school language teachers. Provides an orientation to proficiency-based models in foreign language instruction, national standards in the rating of foreign language proficiency, and curriculum development sessions which address issues of articulation in foreign language curricula. (Not applicable toward a major or graduate degree in French.) (Same as GERM 681 and SPAN 681.) LEC.

FREN 700. Old French. 3 Hours.
Introduction to grammar and structure through the reading of representative works. LEC.

FREN 701. History of the French Language. 3 Hours.
Major aspects of development and growth. Conducted in English. LEC.

FREN 702. Provencal. 3 Hours.
Introduction to grammar and structure of the language through a reading of representative works from the Troubadour period. LEC.
FREN 703. Structure of Modern French. 3 Hours.
Linguistic analysis of the phonological, morphological, and syntactic structure of modern French. Description in terms of current theories and models. Application of linguistic analyses to the teaching of French. LEC.

FREN 704. Methods in French Language Instruction. 3 Hours.
This course provides an overview of current and historical approaches to foreign language teaching, with reference to the instruction of French. Past and current trends and methodologies of language instruction are examined in order to acquaint students with various classroom approaches. Research findings in second language acquisition are explored and their implications discussed so as to show how these findings lead to more effective classroom practices. LEC.

FREN 720. Introduction to Graduate Studies in French. 3 Hours.
This course is an introduction to the skills required of students doing graduate degrees in French; areas covered include 1) introduction to literary theory and criticism, 2) bibliography and research methods, including database management software, 3) preparation and presentations of a research/conference paper, 4) technology training, including web design, on-line portfolio, and digital humanities, and 5) professional ethics and awareness of the academic market and alternative careers. LEC.

FREN 730. Introduction to French Poetry. 3 Hours.
A detailed introduction to versification, rhetoric, image and symbol as they apply to the study of poetry. Texts will be chosen from one or more periods of French literature and will include poems in verse and prose. Considerations and readings on the history of French poetry, on the composition of recueils, on poetic theory, and on the relation of poetry to other genres and media may be incorporated. LEC.

FREN 732. Francophone Studies. 3 Hours.
Selected movements, themes, genres, topics in the cultures and/or literatures of the French-speaking world outside France. May be repeated for credit. LEC.

FREN 740. Medieval French Literature. 3 Hours.
Literary history of the period, with discussion of representative works read for the most part in the original old French. LEC.

FREN 750. French Literature of the Sixteenth Century. 3 Hours.
A survey of the major writers, covering Rabelais, Sceve, Louise Labe, Marguerite de Navarre, Ronsard, Du Bellay, Montaigne, and d'Aubigne. LEC.

FREN 763. French Drama of the Seventeenth Century. 3 Hours.
Development of baroque and classical French drama, with emphasis on Corneille, Moliere, and Racine. LEC.

FREN 765. Nondramatic French Literature of the Seventeenth Century. 3 Hours.
Esthetics of baroque and classicism. Emphasis on Descartes, Pascal, La Rochefoucauld, Mme de Lafayette, although other authors may be studied. LEC.

FREN 770. French Literature of the Eighteenth Century. 3 Hours.
Special attention paid to Montesquieu, Voltaire, Diderot, and Rousseau; also development of novel and drama. LEC.

FREN 782. French Novel of the 19th Century. 3 Hours.
Emphasis on major novelists of the century: Balzac, Stendhal, Flaubert, and Zola. LEC.

FREN 785. French Romantic Movement. 3 Hours.
Major Romantic writers viewed in context of intellectual, esthetic, and social milieu of period 1800-1850. LEC.

FREN 787. French Post-Romanticism. 3 Hours.
Literary movements developing out of reaction to Romanticism: Realism, Naturalism, Parnassianism. LEC.

FREN 790. Contemporary French Writers. 3 Hours.
Major 20th century authors, stressing Proust, Gide, Giraudoux, Claudel, Sartre, and Camus. LEC.

FREN 792. Proust. 3 Hours.
Principal movements, structures, and tensions of A la recherche du temps perdu. LEC.

FREN 795. Investigation and Conference. 1-3 Hours.
Readings and research projects in French language, literature, and culture for students at the MA level. Directed work to fulfill needs not met by available courses. One-three hours credit in any semester. Maximum credit for M.A.: Three hours. By special departmental permission only. RSH.

FREN 800. Studies in: _____. 3 Hours.
Study of topics not limited to one century. May be repeated for credit. LEC.

FREN 810. Criticism and Critical Methods. 3 Hours.
Literary criticism from historical, theoretical, and practical point of view. LEC.

Selected topics to be specified. Study of form, movements, or themes in the French Novel, not limited to one century. May be repeated for credit. LEC.

FREN 814. Studies in the French Short Story: _____. 3 Hours.
Selected topics to be specified. Study of form and theory of the French short story, not limited to one century. LEC.

FREN 842. Arthurian Literature in France. 3 Hours.
Origins and development of Arthurian legend; analysis of major texts. Prerequisite: FREN 700. LEC.

FREN 848. Studies in Medieval French Literature: _____. 3 Hours.
Various movements, themes, or genres. May be repeated for credit. Prerequisite: FREN 700. LEC.

FREN 850. Early Renaissance Literature. 3 Hours.
Emphasis on Rabelais, Marguerite de Navarre, Marot, Maurice Sceve and Louise Labe. LEC.

FREN 858. Studies in Sixteenth Century French Literature: _____. 3 Hours.
Various movements, themes, or genres. May be repeated for credit. LEC.

FREN 888. Studies in Seventeenth Century French Literature: _____. 3 Hours.
Various movements, themes, or genres. May be repeated for credit. LEC.

FREN 871. Literature of the Enlightenment in France. 3 Hours.
Philosophical thought in 18th century as reflected in literature. Emphasis on philosophies, with discussion of external influences. LEC.

FREN 872. Novel of the Eighteenth Century in France. 3 Hours.
Origins and development to Revolution; thematic analysis with attention to critical attitudes and their influence upon evolution of novel as genre. LEC.

FREN 878. Studies in Eighteenth Century French Literature: _____. 3 Hours.
Various movements, themes, or genres. May be repeated for credit. LEC.
ITAL 110. Elementary Italian I. 5 Hours. U.
Introduction to Italian language and culture. Essentials of grammar and practice in speaking, understanding, reading, and writing. Active participation required. Five hours of class per week. LEC.

ITAL 120. Elementary Italian II. 5 Hours. U.
Five hours of class. Reading of simple texts; diction; speaking; elementary composition. Prerequisite: ITAL 110. LEC.

ITAL 152. Studies in Italian Heritage. 3 Hours. AE41/GE11 / H.
A comprehensive, interdisciplinary survey of the ways in which the historical culture of Italy can be found in Lawrence, KS. Emphasis is on politics, sciences, philosophy, media, and immigration. Uses materials from various KU collections. Taught in English. Does not fulfill any requirement in the Italian major or minor. LEC.

ITAL 155. Intensive Basic Italian I. 3 Hours. U.
First part of a two-course sequence (with ITAL 156) for students with previous language study or strong linguistic background. Same content as ITAL 110 but accomplished in three hours of class per week. Active participation required. Prerequisite: ITAL 155 or permission of instructor. LEC.

ITAL 156. Intensive Basic Italian II. 3 Hours. U.
A continuation of ITAL 155, second part of a two-course sequence for students with previous language study or strong linguistic background. Same content as ITAL 120 but accomplished in three hours of class per week. Active participation required. Prerequisite: ITAL 155 or permission of instructor. LEC.

ITAL 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Italian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

ITAL 203. Intermediate Italian Language and Civilization. 3 Hours. H.
A systematic review of Italian grammar through practice in conversation and composition, with an introduction to Italian culture. Available only to participants in study abroad programs. This course does not satisfy the College of Liberal Arts and Sciences foreign language requirement. No prerequisite. LEC.

ITAL 230. Intermediate Italian I. 3 Hours. U.
Review and expansion of grammatical structures introduced in Elementary Italian I and II, with continued practice in speaking, understanding, reading, and writing, coordinated with the study of cultural texts. Active participation required. Prerequisite: ITAL 120 or ITAL 156. LEC.

ITAL 240. Intermediate Italian II. 3 Hours. U.
Continuation of ITAL 230. (ITAL 240 completes foreign language requirement.) Review and expansion of grammatical structures introduced in Elementary Italian I and II, with continued practice in speaking, understanding, reading, and writing, coordinated with the study of cultural texts. Active participation required. Prerequisite: ITAL 230. LEC.

ITAL 300. Composition and Conversation. 3 Hours. H/W.
Study of advanced grammatical structures with extensive practice in writing and conversation. Guided discussions on a variety of contemporary Italian literary, journalistic, and cinematic works. Active participation required. Prerequisite: ITAL 240 or permission of instructor. LEC.
ITAL 301. Introduction to Italian Literature I. 3 Hours. AE42/GE3S / H/W.
Representative works and trends from origins to Renaissance. Prerequisite: ITAL 240 or reading knowledge of Italian. LEC.

ITAL 302. Introduction to Italian Literature II. 3 Hours. AE42/GE3S / H/W.
Representative works and trends from 17th century to present. Prerequisite: ITAL 240 or reading knowledge of Italian. LEC.

ITAL 303. Italian Language and Civilization I. 3 Hours. U.
An advanced study of Italian grammar, conversation, composition, with selected aspects of Italian civilization. Available only to participants in the KU summer language institute or semester abroad program in Florence or Rome. Prerequisite: ITAL 240. LEC.

ITAL 304. Italian Language and Civilization II. 3 Hours. U.
An advanced study of Italian grammar, conversation, composition, with selected aspects of Italian civilization. Available only to participants in the KU summer language institute or semester abroad program in Florence or Rome. Prerequisite: ITAL 303 or permission of instructor. LEC.

ITAL 315. Advanced Composition and Conversation. 3 Hours. H/W.
Continuation of ITAL 300. Study of advanced grammatical structures with extensive practice in writing and conversation. Guided discussions on a variety of contemporary Italian literary, journalistic, and cinematic works. Active participation required. Prerequisite: ITAL 300 or permission of instructor. LEC.

ITAL 335. Italy and the Italians I. 3 Hours. HL AE42/GE3H / H.
Survey of Italian culture with study of geography, history, government, education, Roman archaeology, and music. Lecture, discussion, and supportive readings. Not open to native speakers of Italian. LEC.

ITAL 336. Italy and the Italians II. 3 Hours. GE11/GE3H/GE3S / H.
Survey of Italian culture with study of art and architecture, literary masterpieces in translation, science, culinary arts, and cinema. Lecture, discussion, and supportive readings. Not open to native speakers of Italian. LEC.

ITAL 340. Studies in Italian Culture: _____ 3 Hours. AE42 / H.
A study of particular aspects of and/or periods in Italian culture. May be repeated for credit with departmental permission. Prerequisite: ITAL 240 or permission of instructor. LEC.

ITAL 405. Italian Literature in Translation: _____ 3 Hours. AE42/GE3S / H/W.
Major works representing various movements, themes, or genres. May be repeated with departmental permission. All work done in English. LEC.

ITAL 410. 19th and 20th Century Short Stories. 3 Hours. AE42 / H/W.
A survey of representative short stories of the 19th and 20th Centuries, including Verga, Panzini, Pirandello, Guareschi, Moravia, Calvino, Landolfi, and Bigarelli. Prerequisite: ITAL 240 or reading knowledge of Italian or permission of instructor. LEC.

ITAL 420. 19th and 20th Century Poetry. 3 Hours. AE42 / H/W.
A survey of 19th and 20th century poets and their works, including Leopardi, Pascoli, d’Annunzio, Govoni, Palazzeschi, Gozzano, Marinetti, Boccioni, Ungaretti, Montale, Quasimodo, and Pasolini. Prerequisite: ITAL 240 or reading knowledge of Italian or permission of instructor. LEC.

ITAL 430. Dante’s Masterpiece. 3 Hours. AE61 / H/W.
Detailed study of Dante’s epic poem with a close reading of the Inferno. Prerequisite: ITAL 300 or demonstrated knowledge of Italian. LEC.

ITAL 440. Italian Renaissance and Early Modern Literature. 3 Hours. H/W.
Detailed study of selected masterpieces of the Italian Renaissance from the 13th to the 18th centuries. Prerequisite: ITAL 300 or demonstrated knowledge of Italian. LEC.

ITAL 465. 19th and 20th Century Novels I. 3 Hours. AE42/GE3S / H/W.
With Italian 466, a survey of representative 19th and 20th century novels including those of Manzoni, Pirandello, Svevo, Deledda, Vittorini, Moravia, Pavese, Pratolini, Buzzati, Ginzburg, and Calvino. Prerequisite: ITAL 240 or reading knowledge of Italian or permission of instructor. LEC.

ITAL 466. 19th and 20th Century Novels II. 3 Hours. AE42/GE3S / H/W.
See ITAL 465. Prerequisite: ITAL 240 or reading knowledge of Italian or permission of instructor. LEC.

ITAL 480. Studies in Italian Literature: _____. 3 Hours.
A study of a period, theme, group of authors, or cultural movement. Subject matter will vary; may be taken more than once if subject differs. Prerequisite: ITAL 300 or demonstrated knowledge of Italian. LEC.

ITAL 495. Directed Readings in Italian. 1-3 Hours. AE61 / U.
May be taken more than once, total credit not to exceed nine hours. Various fields of Italian literature. Prerequisite: Consent of instructor, given only to those having demonstrated ease in reading Italian. IND.

ITAL 499. Honors in Italian. 3 Hours. AE61 / H.
Various topics in Italian literature or culture. Minimum of three hours of Italian 499 required for a B.A. with Honors in the Italian option of the French degree. Students must discuss Honors eligibility and their topic with a faculty member before enrolling. Honors paper must be written in Italian. LEC.

ITAL 502. Dante’s Divine Comedy I. 3 Hours. AE61 / H/W.
Detailed study of Dante’s masterpiece. Attention will also be given to such matters as the development of the Italian language at Dante’s period and the relation of the Comedy to Dante’s other works. Prerequisite: Reading knowledge of Italian. LEC.

ITAL 503. Dante’s Divine Comedy II. 3 Hours. AE61 / H/W.
Continuation of ITAL 502. Prerequisite: Completion of ITAL 502. LEC.

ITAL 695. Graduate Directed Readings in Italian. 1-3 Hours. U.
Directed readings, conferences with instructor. Prerequisite: ITAL 495 or consent of instructor. IND.

Geography Courses

ATMO 105. Introductory Meteorology. 5 Hours. NE GE3N / N.
A lecture and laboratory course introducing students to the atmosphere, weather and climate phenomena, and their controlling physical processes. Topics covered include: the structure of the atmosphere, energy and energy budgets, climate and climate change, air pollution, clouds and precipitation, pressure and wind systems, severe weather, and weather forecasting. LEC.

ATMO 106. Introductory Meteorology, Honors. 5 Hours. NE GE3N / N. Honors version of ATMO 105. A lecture and laboratory course introducing students to the atmosphere, weather and climate phenomena, and their controlling physical processes. Topics covered include: the structure of the atmosphere, energy and energy budgets, climate and climate change, air pollution, clouds and precipitation, pressure and wind systems, severe weather, and weather forecasting. Prerequisite: Membership in University Honors Program or by permission of instructor. LEC.
ATMO 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Atmospheric Science. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

ATMO 220. Unusual Weather. 3 Hours. NE GE11/GE3N / N.
An introductory lecture course which surveys the general principles and techniques of atmospheric science and illustrates their application through discussions of natural but unusual weather phenomena such as blizzards, hurricanes, tornados, and chinooks, of the effects of air pollution on weather, and of intentional human alteration of the atmosphere. LEC.

ATMO 310. Aviation Meteorology. 3 Hours. N.
This course introduces students to meteorological events that affect aircraft operations. Aviation applications of meteorological observations including satellite and radar observations are discussed. Students learn about graphical displays of meteorological information. Numerical forecasting models and how their output is applied for aviation is also considered. Forecasting of weather events of particular interest to aviation such as ceiling, visibility, icing and turbulence is emphasized. Prerequisite: ATMO 105 or AE 245 or equivalent. LEC.

ATMO 321. Climate and Climate Change. 3 Hours. N.
This course is designed to introduce students to the nature of the Earth’s physical climate. It introduces the basic scientific concepts underlying our understanding of our climate system. Particular emphasis is placed on energy and water balances and their roles in evaluating climate change. The course also evaluates the impact of climate on living organisms and the human environment. Finally, past climates are discussed and potential future climate change and its impact on humans is evaluated. (Same as GEOG 321.) Prerequisite: ATMO 105 or GEOG 104. LEC.

ATMO 499. Honors Course in Atmospheric Science. 2-3 Hours. AE61 / N.
Open to students with nine hours of upper level credit in Atmospheric Science, an average of at least 3.5 in all Atmospheric Science courses, and an overall average of at least 3.25. Includes the preparation of an honors paper and its defense before a committee of at least two regular faculty members. LEC.

ATMO 505. Weather Forecasting. 3 Hours. N.
A first course in synoptic meteorology designed to introduce students to weather analysis and forecasting through the application of hydrodynamic and thermodynamic principles to operational analysis and forecasting. Topics include analysis and interpretation of surface and upper-air observations and data from satellites, radars, and wind profilers; chart and sounding analysis; and three-dimensional, conceptual models of weather systems. The course includes student-led weather briefings and analysis exercises. Prerequisite: ATMO 105 and MATH 121 or MATH 115. LEC.

ATMO 506. Forecasting Models and Methods. 3 Hours. N.
Introduction to basic numerical weather prediction methods. Computer programs are used to apply numerical methods to weather data and to evaluate dynamical processes on numerical grids. Meteorological graphics packages are used to analyze current weather data and numerical model output. Current operational numerical models and output products are discussed. Prerequisite: ATMO 505, MATH 122, and EECS 138 or EECS 168. LEC.

ATMO 515. Energy and Water Balance. 3 Hours. N.
A study of the distribution and circulation of water in the air-earth system as influenced by atmospheric processes and surface conditions. The solar and terrestrial radiation budget and the water balance at the earth’s surface will be applied to agricultural and urban energy and water problems. Prerequisite: ATMO 105 or EECS 138. LEC.

ATMO 521. Microclimatology. 3 Hours. N.
A study of climatic environment near the earth-atmosphere interface. Consideration of rural climates in relation to agriculture and urban climates as influenced by air pollution and other factors. Emphasis is on physical processes in the lower atmosphere, distribution of atmospheric variables, the surface energy budget and water balance. (Same as GEOG 521.) Prerequisite: ATMO 105 and MATH 121. LEC.

ATMO 525. Air Pollution Meteorology. 3 Hours. N.
A study of background levels and concentrated sources of atmospheric pollution together with considerations of pollution buildup in urban areas as related to particular weather conditions. Inadvertent weather modifications and effects of atmospheric pollution on particular events and general climate will be discussed. Prerequisite: ATMO 105, MATH 121, and EECS 138. LEC.

ATMO 531. Topics in Atmospheric Science: _____. 1-3 Hours. N.
An investigation of special topics in atmospheric science. May include topics in dynamic, physical or synoptic meteorology or climatology as well as related topics in earth and physical sciences. May be repeated if topic differs. LEC.

ATMO 605. Operational Forecasting. 2 Hours. N.
Students enhance their forecasting expertise by preparing forecasts for presentation to the public through a variety of media. Classroom activities include weekly map discussions and analysis of current weather situations. Forecasting topics such as forecast verification, aviation forecast products, severe weather, flash floods and watches and warnings are examined. Credit for ATMO 605, ATMO 606, and ATMO 607 is limited to a total of eight hours, six of which may be counted toward a degree in atmospheric science. Prerequisite: ATMO 505. FLD.

ATMO 606. Forecasting Practicum - Private Industry. 2 Hours. AE61 / N.
Practical experience in private industry working with current and/or archived meteorological data. Possibilities include the preparation of forecasts for TV stations and meteorological consulting firms, and working with environmental consulting firms to assess air pollution hazards. May be repeated two times for credit. Credit for ATMO 605, ATMO 606, and ATMO 607 is limited to a total of eight hours, six of which may be counted toward a degree in atmospheric science. Prerequisite: ATMO 605. FLD.

ATMO 607. Forecasting Intern - National Weather Service. 2 Hours. AE52/AE61 / N.
Practical experience working in a National Weather Service forecasting center in analyzing weather data and preparing weather forecasts. May be repeated two times for credit. Credit for ATMO 605, ATMO 606, and ATMO 607 is limited to a total of eight hours, six of which may be counted toward a degree in atmospheric science. Prerequisite: ATMO 605. FLD.

ATMO 630. Synoptic Meteorology. 3 Hours. N.
Interpretation, development, and analysis of synoptic charts. Prerequisite: ATMO 505 and ATMO 640. LEC.

ATMO 634. Physical Climatology. 3 Hours. N.
Atmospheric processes are described and discussed in relation to the climate of the earth’s surface. Such topics as the greenhouse effect, ozone depletion, and the effect of solar irradiance on climatic change will be included. The physical processes and relationships between various climatic features will be studied. Prerequisite: ATMO 505 and DSCI 301 or MATH 526. LEC.
ATMO 640. Dynamic Meteorology. 3 Hours. N.
This course introduces the student to the fundamentals of fluid dynamics necessary for understanding large scale atmospheric motions. Fundamental physical laws of conservation of mass, momentum and energy are examined and applied to atmospheric flows. Rotation in the atmosphere is examined quantitatively in terms of both circulation and vorticity. Prerequisite: MATH 223 and PHSX 214 or PHSX 212 and PHSX 236. LEC.

ATMO 642. Remote Sensing. 3 Hours.
This course is designed to prepare students to effectively use remotely sensed data in operational or research settings for further work in this field. Topics include radiation and radiation transfer applied to active and remote sensing; radiative properties of space, sun, earth and atmosphere; instrument design considerations and operational characteristics; inversion methods for temperature or concentration profiling; surface temperature measurement; cloud top height determination; rain rate and wind velocity measurement; severe weather detection; satellite photograph interpretation. Prerequisite: ATMO 680, MATH 581. LEC.

ATMO 650. Advanced Synoptic Meteorology. 3 Hours. N.
Analysis and interpretation of synoptic weather charts including treatment of numerical weather forecasting. Prerequisite: ATMO 630 and ATMO 660. LEC.

ATMO 660. Advanced Dynamic Meteorology. 3 Hours. N.
Advanced study of the atmosphere including treatment of the vorticity equation. Prerequisite: ATMO 640 and MATH 220 or MATH 320. LEC.

ATMO 680. Physical Meteorology. 3 Hours. N.
This course is designed to enhance the student's understanding of atmospheric processes through the study of these processes at molecular through micro scales. Topics include the properties and behavior of gases; transfer processes; phase change; solar and earth radiation; cloud drop, ice crystal and precipitation formation; atmospheric electricity; stratospheric chemistry. Prerequisite: MATH 223; PHSX 214, or PHSX 212 and PHSX 236. LEC.

ATMO 690. Special Problems in Meteorology. 1-3 Hours. N.
Prerequisite: Nine hours in meteorology. IND.

ATMO 697. Seminar for Seniors. 1 Hour. AE61 / N.
Current research in atmospheric science will be discussed. May be repeated for a total of two credit hours. Prerequisite: Senior level in atmospheric science. LEC.

ATMO 699. Undergraduate Research. 2 Hours. AE61 / U.
Work on a research project under the supervision of a faculty member. Prerequisite: Nine credit hours in atmospheric science. May be taken up to three times for credit. IND.

ATMO 710. Atmospheric Dynamics. 3 Hours.
Presentation of contemporary approaches to the study of atmospheric dynamics. May include methodologies that provide insight into global, synoptic, mesoscale or microscale motions. Prerequisite: ATMO 660 or equivalent. LEC.

ATMO 720. Atmospheric Modeling. 3 Hours.
Illustration and application of contemporary approaches to mathematical and statistical description of atmospheric phenomena. Prerequisite: MATH 122, ATMO 640, ATMO 680, and a course in statistics, or consent of instructor. LEC.

ATMO 727. Atmospheric Storms. 3 Hours.
The physical processes and operating principles involved in the development and life cycles of extreme or unusual weather events including tornadoes, blizzards, lightning displays, and tropical storms. Prerequisite: EECS 138, MATH 121, and ATMO 320. LEC.

ATMO 731. Advanced Topics in Atmospheric Science: _____. 1-3 Hours.
Advanced investigation of special topics in atmospheric science. May include topics in dynamic, physical or synoptic meteorology or climatology as well as related topics in earth and physical sciences. May be repeated if topic differs. LEC.

ATMO 750. Numerical Weather Prediction. 3 Hours.
An exploration of the mathematical methods used to describe the current state of the atmosphere and to predict future states. Current operational numerical weather prediction techniques will be included. Prerequisite: ATMO 660. LEC.

ATMO 825. Seminar in Climatology. 2-3 Hours.
LEC.

ATMO 827. Seminar in Atmospheric Science. 1-3 Hours.
LEC.

ATMO 899. Master's Thesis. 1-10 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

GEOG 101. World Regional Geography, Honors. 3 Hours. SC AE42 / S.
An introductory survey of the environmental setting, historically formative periods, and present-day issues that distinguish the major culture areas of the world. LEC.

GEOG 102. Principles of Human Geography. 3 Hours. SC AE42 / GE3S / S.
An introduction to how human societies organize space and modify the world about them. Resultant patterns on the landscape are interpreted through principles of space perception, cultural ecology, diffusion, land use, and location theory. Comparisons are made between urban and rural areas and between subsistence and commercial societies. Open to students who have been accepted into the College Honors Program. LEC.

GEOG 103. Principles of Human Geography, Honors. 3 Hours. SC AE42 / GE3S / S.
An examination of the relationships between humans and their environments. The course introduces students to basic concepts in human geography relating to economic activities, landscapes, languages, migrations, nations, regions, and religions. Serves as the basis for further course work in cultural, economic, political, population, and urban geography. LEC.

GEOG 104. Principles of Physical Geography. 3 Hours. NE GE3N / N.
The components of the physical environment are discussed in order to familiarize the student with their distributions and dynamic nature. Major topics include the atmosphere, landforms, soils, and vegetation together with their interrelationships and their relevance to human activity. This course and GEOG 105 together satisfy the laboratory science requirement. Both courses are required for geography majors. LEC.

GEOG 105. Introductory Laboratory in Physical Geography. 2 Hours. U.
A laboratory course designed to complement GEOG 104 in satisfying the laboratory science requirement. It is required for geography majors. Laboratory exercises include a wide variety of analyses using data on the atmosphere, hydrosphere, biosphere, and lithosphere. Prerequisite: GEOG 104, which may be taken concurrently. LAB.
GEOG 107. Principles of Physical Geography, Honors. 3 Hours. NE
GE3N / U.
Interactive processes among the systems of the earth are studied and
discussed. Major topics include vegetation, soils, landforms, water, the
atmosphere, and cycles of matter between these portions of the earth.
The course includes lectures and critical discussions to address study
problems in physical geography. Open only to students in the University
Honors Program or by consent of the instructor. LEC.

GEOG 110. Geopolitics in the News. 3 Hours. S.
This course examines leading contemporary geopolitical events
and processes through the lens of geography. It focuses on major
political conflicts and struggles as they play out unevenly over space,
contextualizing them within broader themes of neocolonialism,
globalization, and the international system of nation-states. Emphasis
is put on making issues commonly found in the media understandable
to students by providing a relevant historical background and drawing
comparisons among events. LEC.

GEOG 111. Maps and Mapping. 4 Hours. H.
How do people find their way from here to there or just around? Simple--
they use maps. Maybe not maps on pieces of paper but maps in their
heads: mental maps. Different people have different maps, even of the
same place. Mapping is an ancient form of communication and maps
have created ideas and opinions, promoted understanding and confusion.
A non-technical approach to the transformation of space onto maps, to
their content and structure, and their role and impact in human activity,
past and present. Neither background in geography nor artistic skills are
required. LEC.

GEOG 140. Global Environment I: The Discovery of Environmental
Change. 5 Hours. GE3S / U.
This interdisciplinary course and laboratory sections survey the
foundations of environmental understanding and the process of
scientific discovery from perspectives that combine the principles and
methodologies of the humanities, physical, life and social sciences.
Key topics include the history of environmental systems and life on
earth, the discovery of biotic evolution, ecological change, and climate
time from perspectives that combine the principles and methodologies of
the humanities, physical, life and social sciences. Key topics include
the ecology of colonialism and industrial civilization, and the emergence
of human-environmental systems and life on earth, the discovery of
ecological and ethical perspectives on the relationship between
and culture. Laboratory sections apply the principles and methodologies
of the humanities, physical, life and social sciences to the humanity's
engagement with the global environment using historical and present-day
examples. (Same as EVRN 140 and HIST 140.) LEC.

GEOG 142. Global Environment II: The Ecology of Human
Civilization. 5 Hours. GE3S / U.
This interdisciplinary course and laboratory sections survey the
history of human's relationship with the natural world over the long
term from perspectives that combine the principles and methodologies
of the humanities, physical, life and social sciences. Key topics include
the evolution of Homo sapiens and cultural systems; the development
of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the
ecology of colonialism and industrial civilization, and the emergence of
ideological and ethical perspectives on the relationship between nature
and culture. Laboratory sections apply the principles and methodologies
of the humanities, physical, life and social sciences to the humanity's
engagement with the global environment using historical and present-day
examples. (Same as EVRN 142 and HIST 142.) LEC.

GEOG 144. Global Environment I: The Discovery of Environmental
Change, Honors. 5 Hours. U.
This interdisciplinary course surveys the foundations of environmental
understanding and the process of scientific discovery from perspectives
that combine the principles and methodologies of the humanities,
physical, life and social sciences. Key topics include the history of
environmental systems and life on earth, the discovery of biotic evolution,
include: 1) the unique nature of geographic data; 2) mapping techniques and technologies; 3) geographical information systems; 4) remote sensing (aerial photography and satellite imagery); and 5) methods of geographical analysis (e.g., statistic and spatial modeling). LEC.

GEOG 304. Environmental Conservation. 3 Hours. NE GE3N / N.
A survey of current methods of describing and modeling the function, structure, and productivity of natural and anthropogenically modified earth resource systems, along with a discussion of contemporary views of what constitutes a natural landscape. Fundamental natural science principles about the interplay among lithospheric, atmospheric, hydrospHERic, and biospheric components of earth systems are emphasized. Uses of natural resources, including fossil fuels, minerals, and water are described with attention to the earth's total energy budget. Human activities that affect preservation, conservation, and multiple uses of earth regions receive attention. Systems under stress through population and other contemporary forces serve as examples. (Same as EVRN 304.) LEC.

GEOG 311. Map Conception and Development. 4 Hours. N.
An examination of the map process with emphasis on two areas: 1) the mental map formed during interaction with the environment and 2) the map as a physical object which emerges from mapping activity. A local area will serve as the laboratory/environment for the mapping activity including production and use. LEC.

GEOG 313. Methods of Analyzing Geographical Data. 4 Hours. N.
Introduces the benefits and limitations of using quantitative methods to analyze geographical problems. Covers traditional descriptive (e.g., measures of central tendency) and inferential statistics (e.g., hypothesis testing) but also inherently geographical approaches such as shape and point pattern analysis, and spatial autocorrelation. Laboratory emphasizes using the computer to explore and analyze geographical problems. LEC.

GEOG 319. Topics in Techniques: _____, 1-3 Hours. N.
An investigation of special topics in Techniques. May include coursework in cartography, GIS, or remote sensing. May be repeated if topic differs. LEC.

GEOG 321. Climate and Climate Change. 3 Hours. N.
This course is designed to introduce students to the nature of the Earth's physical climate. It introduces the basic scientific concepts underlying our understanding of our climate system. Particular emphasis is placed on energy and water balances and their roles in evaluating climate change. The course also evaluates the impact of climate on living organisms and the human environment. Finally, past climates are discussed and potential future climate change and its impact on humans is evaluated. (Same as ATMO 321.) Prerequisite: ATMO 105 or GEOL 101. LEC.

GEOG 331. Regional Geomorphology of the United States. 3 Hours. N.
This course examines forces and processes affecting the earth's surface, and furthermore identifies and describes the physiographic regions that are the result of these processes. Special efforts are made to explore various photographic resources, satellite imagery, and Internet sources or geomorphic data from a regional perspective since there is no wholly satisfactory text available for the course. A research paper is required. Prerequisite: An introductory earth science course or consent of instructor. LEC.

GEOG 332. Glaciers and Landscape. 3 Hours. N.
Elements from glaciology, geology, and climatology are merged to examine the interactions between glaciers and their natural environments, including the processes involved in glacier formation, the relationship between glaciers and climate, the mechanisms of glacier flow, and interpretation of the Earth's glacial record. Emphasis is placed on an interdisciplinary approach to study environmental change and paleoclimate reconstruction. Prerequisite: GEOG 104 or GEOL 101, or consent of instructor. LEC.

GEOG 335. Introduction to Soil Geography. 4 Hours. N.
This course focuses on the properties and processes of soils as they occur in their environment. The student is introduced to the nature of soil as it functions as a body; genesis of soils; properties of soil solids, especially colloids; soil chemical composition, properties, and reactions; interaction between solid, liquid, and gaseous components in soils; plant-soil-water relationships; biological interactions with soil; classification of soils; and the distribution of soils on the landscape. Not open to students who have taken EVRN 535 or GEOG 535. (Same as EVRN 335.) Prerequisite: GEOG 104 or GEOL 101 or consent of instructor; BIOL 100 and CHEM 130 or CHEM 190 recommended. LEC.

GEOG 338. Introduction to River Systems. 3 Hours. N.
A course of fluvial geomorphology. Topics include the drainage basin, fluvial processes, river channel adjustment and forms, human disturbance and geomorphic response, and research methods in fluvial geomorphology. Field trip. Prerequisite: GEOG 104. LEC.

GEOG 350. Physical Geography of Africa. 3 Hours. N.
This course is a survey of the basic physical features of the African continent including structure and relief, rivers and lakes, soils and mineral resources. It includes characteristics and processes of African climates, and the ecology of Africa's four major biomes: tropical rain forest, savanna, steppe, and desert. Climatic and environmental variations of the past, emergence of humankind, and development of pastoral and farming systems are discussed. Contemporary environmental concerns also include deforestation and desertification, the impacts of drought, methods for monitoring African environments, and Africa's prospects in a 21st century suffering from global warming. (Same as AAAS 350.) LEC.

GEOG 351. Africa's Human Geographies. 3 Hours. NW AE42/GE3H/GE3S / S/W.
An introduction to historical, cultural, social, political, and economic issues in Africa from a geographic perspective. The course begins with the historical geography of humanity in Africa, from ancient times through to the present. Other topics include cultural dynamics, demography, health, rural development, urbanization, gender issues, and political geography. Case studies from Eastern and Southern Africa will be used to illustrate major themes. (Same as AAAS 351.) LEC.

GEOG 352. Economic Geography. 3 Hours. S.
This course offers an overview of contemporary economic geography with an underlying theme of uneven regional development. Topics examined include: the historical context in which capitalism emerged; the major theoretical approaches used to understand the temporal and spatial dynamics of capitalist society; a series of case studies of different economic sectors; and the global economy, including its development with respect to colonialism, neocolonialism, international trade, third world development, and population growth. LEC.

GEOG 354. Globalization. 3 Hours. S.
This course is designed to provide a broad overview of some major facets of the historical, economic, political, cultural, and geographical dimensions of contemporary globalization, the process by which individual regions and nations have become progressively linked to, and structured by, the world-system of states and markets, and the cultural contradictions associated with this process. LEC.
GEOG 357. History and Philosophy of Geographic Information Science. 3 Hours. N.
An examination of the development of geographic information science (GISc) from its roots in traditional geography, cartography, and remote sensing to modern geographic information systems (GIS). GIS is explored as a new scientific instrument, a "macroscope" for representing and analyzing complex earth processes, both physical and cultural. The societal benefits and risks of GIS are demonstrated and discussed. LEC.

GEOG 358. Principles of Geographic Information Systems. 4 Hours. N.
An introduction to computer-based analysis of spatial data. Covers basic principles of collecting, storing, analyzing, and displaying spatial data. Emphasis is on problem-solving activities using common spatial analytical techniques (e.g., map overlay). The student will gain extensive hands-on experience with state-of-the-art GIS software. LEC.

GEOG 370. Introduction to Cultural Geography. 3 Hours. GE3S / H.
Charts some of the major lines of research in cultural geography, including critical theory, political economy, poststructuralist thought, feminism, and global consumption. Through fieldwork, diverse research methods are applied to issues such as community development, cultural patterns on the landscape and global impacts on local economies. Prerequisite: GEOG 100, GEOG 101, GEOG 102 or GEOG 103; or consent of instructor. LEC.

GEOG 371. Environmental Geopolitics. 3 Hours. S.
This course examines how human relationships with the biophysical world are politicized. Examines key contributions to debates surrounding environmental security, resource conflicts, and related issues, as well as geopolitical assumptions on which these debates build. (Same as EVRN 371.) LEC.

GEOG 372. Environmental Policy. 3 Hours. N.
An historical and analytical study of the formulation, implementation, and consequences of environmental policy in the United States. Attention is directed at relevant interest groups, issues specific to both rural and urban populations, relationships between national policies and international organizations concerned with environmental problems. Prerequisite: GEOG 148 or EVRN 148; and either EVRN 103 or HIST 103, EVRN 347 or HIST 347, or GEOG 150 or EVRN 150. LEC.

GEOG 373. Political Geography. 3 Hours. S.
Political Geography is concerned with spatial dynamics of power. It concerns issues such as territory, boundaries, and identity as well as feminist, post-colonial, geopolitical, and environmental perspectives. This class will consider the development of this subfield, the role it has played in imperial expansion, and ways in which more recent critiques have shaped political geography to be a means of understanding different forms of power and its relationship to people and places. Prerequisite: GEOG 100 or GEOG 102 or equivalent or consent of instructor. LEC.

GEOG 375. Intermediate Human Geography. 3 Hours. S.
An examination of processes of cultural-economic interaction and patterns of human activity on a global scale. The topics cover the whole spectrum of human geography, with focus on urban-economic development, innovation and diffusion, and trade. Each week the third hour will be devoted to discussion of topics dealt with in lectures presented during the first two hours. Prerequisite: Introductory course in Geography or consent of the instructor. LEC.

GEOG 377. Urban Geography. 3 Hours. S.
This course explores the city from the multiple perspectives of its inhabitants. The cultural viewpoints of place, gender, age, and ethnicity are stressed. Traditional topics such as urban hierarchy, functions of the city, suburbanization, and ongoing changes in core and peripheral areas also receive attention. The distinctive landscapes of individual North American cities are emphasized, but examples also are drawn from throughout the world. LEC.

GEOG 379. Topics in Cultural Geography: ______. 1-3 Hours. S.
An investigation of special topics in Cultural Geography. May include coursework under headings of culture theory, material culture, language, foodways, or religion. May be repeated if topic differs. LEC.

GEOG 390. Geography of the United States and Canada. 3 Hours. S.
A study of the different physical, economic, and cultural settings in the United States and Canada which form the basis for the various forms of livelihood. Emphasis on the United States. (Same as AMS 390.) Prerequisite: An introductory geography course or background in the United States or Canadian history, social science, or culture or consent of instructor. LEC.

GEOG 395. Environmental Issues of: ______. 3 Hours. S.
This regional geography course examines contemporary environmental issues of a particular region of the world based on the expertise of the professor. Course emphasis is on the interaction of natural, socio-economic, and cultural factors of development that give rise to environmental problems. Students learn how local, national, and international government and non-governmental stakeholders address environmental problems. Course may be repeated with different professors. LEC.

GEOG 396. East Asia. 3 Hours. NW AE42/GE3H/GE3S / S/W.
This course is an introduction to the contemporary politics, economy, and culture of Korea, China, and Japan in the context of globalization. In addition to the discussion of individual countries, the course examines the cross-cutting themes such as international relations, cultural exchange, and economic development in the region of East Asia. LEC.

GEOG 397. Geography of Kansas and the Plains. 3 Hours. S.
A study of the different physical, economic, and cultural settings in Kansas and the Plains that form the basis for various kinds of livelihood. LEC.

GEOG 399. Topics in Regional Studies: ______. 1-3 Hours. S.
An investigation of special topics in Regional Studies. May include coursework related to a specific country or region. May be repeated if topic differs. LEC.

GEOG 410. Human Biogeography. Honors. 3 Hours. N.
Principles of evolution and earth change are used to examine distributions of human populations, wealth, and resources. Readings from the current literature will be included. Lecture and discussion. (Same as BIOL 410.) Prerequisite: BIOL 152 or 153 or GEOG 107 and membership in the University Honors Program or consent of instructor. LEC.

GEOG 418. Workshop in Production Cartography. 1-3 Hours. AE61 / N.
Theory and practice of map production and other related graphics using the latest graphic and GIS software. Projects vary but include the processes of design and production, editing and quality control, and a final printed or operational product. Involves a weekly consultation session and laboratory time in KU Cartographic GIS Services. Prerequisite: Completion of GEOG 311 and consent of instructor. IND.

GEOG 433. Biogeography Field and Laboratory Techniques. 3 Hours. N.
This course provides undergraduate students with practical experience in field data collection techniques and laboratory data analysis methods. During the first half of the semester, students work in the field using a variety of methods to measure such vegetation characteristics as: cover, density, biomass, leaf area, and canopy architecture. Students gain experience in the use of field instruments including a spectroradiometer,
and techniques for quantifying biophysical attributes of vegetation. During the later part of the course, students learn to summarize their field data and examine relationships between the vegetation attributes and measurements made using remote sensing instruments. Recommended: GEOG 316 or an introductory statistics equivalent. (Same as EVRN 433.) FLD.

GEOG 458. Geographical Information Systems: ______. 1-6 Hours. N. An introduction to the organization and components of geographic information systems and their software. Fundamental concepts and their implementation with applications to physical and human systems. LEC.

GEOG 490. Geographic Internship. 1-6 Hours. AE61 / N. Supervised practical experience. The student submits a proposal describing the internship prior to enrollment. Upon acceptance, regularly scheduled meetings with the advisor provide assistance, guidance and evaluation of progress in the professional experience. A written summary of the experience or outcomes of the research project are prepared independently by the student, a representative of the host agency, and the advisor. Total credit not to exceed six hours. Prerequisite: Fifteen hours of geography and permission of instructor. FLD.

GEOG 498. Special Topics in Geography: ______. 1-5 Hours. U. Prerequisite: Fifteen hours of geography. IND.

GEOG 499. Honors Course in Geography. 2-3 Hours. AE61 / U. Open to students with nine hours of upper level credit in geography, an average of at least 3.5 in all geography courses, and an overall average of at least 3.25. Includes the preparation of an honors paper and its defense before a committee of at least two regular faculty members. IND.

GEOG 500. Senior Capstone in Geography. 3 Hours. AE61 / N. The capstone project provides students with a broad-based, interdisciplinary educational experience and allows them to integrate and synthesize the knowledge they have gained in their studies. The course is designed to achieve several objectives: provide an overview of geography as a unified, coherent discipline with multiple perspectives, emphasize writing and analytical skills, introduce students to a major research project that integrates elements of physical and human geography, and cultivate knowledge of future professional development. Graduate students may take this course by permission only. Prerequisite: Nine hours in Geography and status as a senior major in the department; or permission of instructor. LEC.

GEOG 510. Human Factors. 4 Hours. N. An introduction to the concepts and theories underlying the study of human-technological systems. Human-machine interfaces and system properties and the environment are considered. Lecture-discussion sessions are supplemented by computer-supported laboratory and research activities. LEC.

GEOG 511. Intermediate Cartography: ______. 1-6 Hours. N. An investigation of special topics in cartography. Can be repeated for different topics. Prerequisite: A course in cartography and consent of instructor. LEC.

GEOG 512. Cartographic Design. 3 Hours. S. A study of graphic elements and their role in the physical and perceptual structure of the map image. Concepts and principles of design are stressed with particular emphasis on the figure-ground relationships, color and lettering. Prerequisite: GEOG 311. LEC.

GEOG 514. Visualizing Spatial Data. 4 Hours. N. Students use Visual Basic or other currently prominent programming language to visualize spatial data. Early projects cover basic principles such as color manipulation and spatial transformations. Later projects involve developing more sophisticated software for data presentation, data exploration, and map animation. Prerequisite: Some experience with Visual Basic or other programming language. LAB.

GEOG 516. Applied Multivariate Analysis in Geography. 3 Hours. N. An introduction to the application of multivariate statistical analysis in geography. Techniques covered include univariate and multivariate analysis of variance, multiple regression, logistic regression, principle components analysis, and spatial regression. Practical applications of the techniques in a geographical research context are emphasized. Students will learn how to use statistical packages such as SPSS. Prerequisite: GEOG 316 or equivalent. LEC.

GEOG 517. Data Handling and Map Symbolization. 3 Hours. N. An analysis of methods for manipulating and symbolizing spatial data. Techniques studied include dot, choropleth, proportional symbols, and isarithmic (contour) mapping. Topics covered include data classification, the use of color, and automated methods of interpolation (triangulation, inverse distance, and kriging). Emphasis is on developing maps that can be presented to the general public, although some consideration is given to visualization software that can be utilized by individuals to explore spatial data. Prerequisite: GEOG 111 or GEOG 210 or GEOG 311. LEC.

GEOG 519. History of Cartography. 3 Hours. H. A history of mapmaking worldwide from its origins to the present day. Emphasis on maps as historical records of evolving civilizations and cultural landscapes and methods of studying early maps. (Same as HIST 546.) LEC.

GEOG 521. Microclimatology. 3 Hours. N. A study of climatic environments near the earth-atmosphere interface. Consideration of rural climates in relation to agriculture and urban climates as influenced by air pollution and other factors. Emphasis is on physical processes in the lower atmosphere, distribution of atmospheric variables, the surface energy budget, and water balance. (Same as ATMO 521.) Prerequisite: ATMO 105 and MATH 121. LEC.

GEOG 526. Remote Sensing of Environment I. 4 Hours. N. Introduction to study of the environment through air photos and satellite imagery, including principles of remote sensing, interactions of electromagnetic energy with the atmosphere and earth’s surface, aerial photography, satellite systems, and sensors (electro-optical, thermal, and radar). Emphasis in the latter part of the course is on such applications as global monitoring, land cover mapping, forestry, agriculture, and oceanography. Laboratory emphasizes visual interpretation of aerial photography and satellite imagery and an introduction to digital image processing in the department’s NASA Earth Science Remote Sensing Laboratory. (Same as EVRN 526.) Prerequisite: MATH 101 or equivalent. GEOG 358 recommended. LEC.

GEOG 531. Topics in Physical Geography: ______. 1-3 Hours. N. An investigation of special topics in physical geography. May include specific course work under the headings of geomorphology, climatology, soils, vegetation, quaternary, paleoenvironments, hydrology, etc. May be repeated, if topic differs. LEC.

GEOG 532. Geoarchaeology. 3 Hours. N. Application of the concepts and methods of the geosciences to interpretation of the archeological record. The course will focus primarily on the field aspects of geoarchaeology (e.g., stratigraphy, site formational processes, and landscape reconstruction), and to a lesser extent on the array of laboratory approaches available. (Same as ANTH 517.) Prerequisite: GEOG 104, ANTH 110, or ANTH 310. LEC.

GEOG 535. Soil Geography. 4 Hours. N. A broad study of the principles and properties of soils and their distribution on the landscape. Topics covered include: pedology, clay mineralogy, soil physics, soil chemistry, management of soils, soil biology, taxonomy, and
soil geomorphology. Laboratory section and a field project are required. Not open to students who have taken GEOG 335 or EVRN 335. (Same as EVRN 535.) Prerequisite: GEOG 104 or GEOL 101 or consent of the instructor; BIOL 104 and CHEM 130 or 190 recommended. LEC.

GEOG 537. Elements of Plant Geography. 3 Hours. N.
An introduction to spatial and temporal variation in natural plant populations and communities. Included is an introduction to methods of analysis, and an overview of structure and process in the earth's major biomes. Prerequisite: GEOG 331; or an introductory biology/botany course and GEOG 104; or consent of instructor. LEC.

GEOG 538. Soil Chemistry. 3 Hours. N.
This course examines the chemical properties and processes of soils and methods of evaluation. Topics include solid and solution speciation, mineral solubility, soil colloidal behavior, ion exchange, surface complexation, soil salinity and sodicity, soil acidity, oxidation-reduction reactions, and kinetics of soil chemical processes. (Same as EVRN 538.) Prerequisite: GEOG 335 or GEOG 535 or EVRN 335 or EVRN 535, CHEM 135 or CHEM 195, MATH 121, PHSX 114, or consent of the instructor. LEC.

GEOG 541. Geomorphology. 4 Hours. N.
A critical study of land forms in relation to tectonics, climatic environment, and geologic processes. The use of geomorphic methods in the interpretation of Cenozoic history is emphasized. Laboratory exercises in analysis of field observations, maps, and photographs. Required field trip and fee. (Same as GEOL 541.) Prerequisite: GEOL 101 and GEOL 103, GEOG 104 and GEOG 105, or GEOG 103 and GEOL 304. LEC.

GEOG 550. Environmental Issues in Africa. 3 Hours. S.
Acquaints students with the complexities of debates on environmental problems in Sub-Saharan Africa. Topics addressed may include deforestation, desert expansion, wildlife conservation, soil erosion, climate change, coral reef destruction, water resources development, mangrove preservation, the environmental effects of war, industrialization, and urbanization. Class presentations and projects synthesize the perspectives of both human and physical geography. (Same as AAAS 551.) Prerequisite: GEOG 104 or permission of instructor. LEC.

GEOG 552. Topics in Urban/Economic Geography: ______. 1-3 Hours. S.
An investigation of special topics in urban/economic geography. May include specific course work under the headings of energy, economic development, international trade, environmental perception, housing, transportation, and migration. May be repeated. LEC.

GEOG 553. Geography of African Development. 3 Hours. NW AE42/GE3H/GE3S / S.
Acquaints students with the values of social parameters of African agricultural and pastoral practice. Topics include customary land rights, African perspectives on the natural world, gender issues in African agriculture, and the urbanization of African cultures. The course also contrasts African views with those of Western development practitioners and donor agencies. Case studies from different countries are used to highlight the continent's regional differences. (Same as AAAS 553.) LEC.

GEOG 556. Geography of the Energy Crisis. 3 Hours. S.
A discussion and analysis of the basic facts and causes of energy problems on a national and world scale. Examines current production, consumption, efficiency, reserves, conservation, and other energy policy options, including adjustments that will affect consumer use, national politics, and strategic issues. Prerequisite: GEOG 102 or GEOG 375. LEC.

GEOG 557. Cities and Development. 3 Hours. S.
An intermediate level course in urban geography, with an emphasis on cities in the developing world. Example cities in Latin America and the Caribbean, Sub-Saharan Africa, the Middle East, South Asia, and/or Southeast Asia may be examined. The main focus is on the intersection between urbanization and economic development, but social, political, and cultural aspects of development in cities are considered. Other topics include the geographic impacts of European colonialism, urbanization and industrialization, rural-to-urban migration, urban structure and spatial dynamics, urban planning, and environmental sustainability. (Same as AAAS 557.) LEC.

GEOG 558. Intermediate Geographical Information Systems. 4 Hours. N.
An intermediate level course in geographic information science designed for advanced undergraduate and graduate level students who already have an introductory understanding of GIS. Emphasis will be placed on the application of spatial analytical techniques to geographical problem-solving. Topics include spatial data structures, interpolation techniques, terrain analysis, cost surfaces, and database management technique. Students will apply knowledge gained in lecture and reading to natural resource, urban, and scientific applications using state-of-the-art GIS software. Prerequisite: GEOG 358 or consent of instructor. LEC.

GEOG 560. GIS Application Programming. 3 Hours. N.
This course teaches programming within Geographic Information Systems. Students learn how to customize GIS applications to automate data processing and spatial analysis through programming languages. GIS programming concepts and methods are introduced from the aspects of spatial data management and analysis covering both the vector and raster data models. Prerequisite: GEOG 558 and a course in programming languages. LEC.

GEOG 570. Geography of American Indians. 3 Hours. NW AE42/GE3H/GE3S / S.
A survey of the culture and history of selected indigenous peoples of the Americas. Emphasis is placed on the environmental setting, the settlement and subsistence patterns, and the impact of European colonization. Discussion includes present-day ethnic and resource issues. LEC.

GEOG 571. Topics in Cultural Geography: ______. 1-3 Hours. S.
An investigation of special topics in cultural geography. May include specific course work under the headings of cultural theory and methodology, material culture, foodways, religion, and similar topics. May be repeated, if topic differs. LEC.

GEOG 574. Exploring Oceania. 3 Hours. S.
Acquaints students with the culture and history of Oceania including its settlement and the impacts of European and American colonialism on Australasia, Melanesia, Micronesia and Polynesia. Emphasis is placed on applying broad geographical concepts to this vast Oceanic region through the lenses of development, media and migration studies. Prerequisite: GEOG 102 or GEOG 103; or consent of instructor. LEC.

GEOG 576. Cultural Geography of the United States. 3 Hours. S.
Distributions of major culture elements including folk architecture, religion, dialect, foodways, and political behavior are systematically studied from a predominately historical perspective. These discussions are followed by a survey of the major culture regions in America. Although not absolutely necessary, familiarity with concepts treated in any of the following courses would be helpful: AMS 100, AMS 110, ANTH 108, ANTH 308, GEOG 102, or GEOG 390. (Same as AMS 576.) LEC.
GEOG 579. Geography of American Foodways. 3 Hours.
An interdisciplinary approach to food that explores the diversity of eating habits across the United States and the role of food as an indicator of cultural identity and change. Current regional and ethnic food consumption patterns are stressed. Topics include multiculturalism and regional identity, the symbiotic relationship between restaurant food and home cooking, the recent interest in farmers’ markets and organic foods, and the importance of the food industry and the popular press in setting trends. (Same as AMS 579.) LEC.

GEOG 590. Understanding Central Asia. 3 Hours. NW / S/W.
An intensive, multidisciplinary survey of Central Asia, focusing on the former Soviet republics-Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan-with additional coverage of neighboring regions (the Caucasus and the Caspian basin, Afghanistan, and western China). The course addresses the history of the region (from the Silk Road to Soviet rule), geography, religion, and the building of post-Soviet states and societies. (Same as REES 510.) LEC.

GEOG 591. Geography of Latin America. 3 Hours. SC AE42/GE33 / S/W.
A study of the different physical, economic, and cultural settings in Latin America which form the basis for the various forms of livelihood. LEC.

GEOG 592. Middle American Geography. 3 Hours. S.
This regional study of the natural environments and cultural-historical backgrounds of Mexico, Central America, and the Caribbean details the physical and historical processes that have shaped the cultural landscape. LEC.

GEOG 593. Central American Peoples and Lands. 3 Hours. S.
This is a study of the natural and cultural history of the region’s lands and peoples that focuses on the cultural geography of the surviving indigenous populations, including their culture area, culture history, cultural landscape, and cultural ecology. LEC.

GEOG 594. Geography of the Former Soviet Union. 3 Hours. S/W.
An analysis of the spatial organization of the successor states to the USSR. A study of the diverse human and natural resources, demographic, cultural, and economic conditions. Prerequisite: An introductory geography course or background in Russian-East European history, social science, or culture, or consent of instructor. LEC.

GEOG 595. Geography of Eastern Europe. 3 Hours. S/W.
A study of nations and regions of Eastern Europe, excluding Russia. Prerequisite: An introductory geography course or background in Slavic-East European history, social science, or culture or consent of instructor. LEC.

GEOG 597. Geography of Brazil. 3 Hours. S.
Study of geographic factors, physical and cultural, that are basic to understanding the historical development of Portuguese South America and the contemporary and cultural geography of Brazil. Course also includes a survey of Brazil’s South American neighbors. LEC.

GEOG 601. Indigenous Peoples of the World. 3 Hours. S.
A survey of the varied responses of global Indigenous peoples as a result of the imposition of external economic and political systems. An overview of diverse, thematic issues such as land rights, economic development, resources and cultural patrimony, languages, knowledge systems, and women's rights from the perspectives of Indigenous societies around the world. Detailed studies of Indigenous peoples seeking recognition and protection under international law are used. (Same as ISP 601.) Prerequisite: Permission of instructor. LEC.

GEOG 635. Soil Physics. 3 Hours. N.
Provides theoretical and practical foundations for understanding physical properties and processes of variably-saturated porous media. Focus is on the transport, retention, and transformation of water, heat, gas, and solutes through the soil. We examine modern vadose zone measurement methods, analytical tools, and numerical models for data collection and interpretation. (Same as EVRN 635.) Prerequisite: GEOG 335 or EVRN 335, or GEOG 535 or EVRN 535, and MATH 121, PHSX 114; or consent of instructor. LEC.

GEOG 658. Topics in Geographic Information Science: ____. 1-6 Hours.
An investigation of special topics in geographic information science. May include specific coursework under the headings of methodology, basic research, thematic or regional applications, geographic information systems (GIS), Global Positioning System (GPS), and geostatistics. May be repeated if topic differs. LEC.

GEOG 670. Cultural Ecology. 3 Hours. S.
Investigation of the interrelations between socio-cultural systems and the natural environment, including a survey of major theories and descriptive studies. (Same as ANTH 695.) Prerequisite: An introductory course in geography or anthropology. LEC.

GEOG 710. Information Design. 3 Hours.
Concepts and principles for the organization of verbal, numerical, and graphic/spatial data and their application to the production of information displays and instruments. Examination of the evolution of the information design process from the traditional (communication system) perspective to interactive user-centered design approaches. The nature of human information processing in handling information for both visualization and analysis, with particular emphasis on decision-making and usability. Prerequisite: GEOG 510, INDD 510, PSYC 318, PSYC 685, or equivalent, or consent of instructor. LEC.

GEOG 711. Advanced Cartography: ____. 3 Hours.
An investigation of special topics in cartography. Can be repeated for different topics. Prerequisite: Consent of instructor. LEC.

GEOG 713. Practicum in Cartography. 1-6 Hours.
Experience in the organization and presentation of cartographic material in lecture, discussion, and laboratory formats. May be repeated to a total of six credits. Prerequisite: Consent of instructor. FLD.

GEOG 714. Field Experience. 3 Hours. AE61.
Working in a new environment presents problems unlike those encountered in a classroom situation. Data collection techniques and exercises discussed in this off-campus course are intended to provide experience in dealing with an unfamiliar situation. Course location is dictated by the interests and composition of the student group; offered in the first three weeks of August. Geography majors are encouraged to attend. This course is required for graduate students. Fee required. Prerequisite: Junior-senior standing and fifteen hours of geography or consent of instructor. FLD.

GEOG 715. Advanced Geostatistics. 3 Hours.
An introduction to the practical application of advanced geospatial statistical techniques. Potential topics include: spatial regression, interpolation, clustering, and advanced nonparametric statistics. Knowledge of a statistical package and GIS is assumed. Prerequisite: GEOG 516 or equivalent and GEOG 398 or equivalent. LEC.

GEOG 719. Development of Geographic Thought. 2-3 Hours.
Critical analysis of the growth of geographic thought from antiquity to the present: emphasis on structure of modern geography. Prerequisite: Twenty hours of geography or consent of instructor. LEC.
GEOG 726. Remote Sensing of Environment II. 4 Hours.
An overview of techniques for computer analysis of digital data from earth orbiting satellites for environmental applications. Topics covered include: data formats, image enhancements and analysis, classification, thematic mapping, and environmental change detection. The laboratory exercises provide hands-on experience in computer digital image processing in the department’s NASA Earth Science Remote Sensing Laboratory. Prerequisite: Introductory statistics and GEOG 526 or equivalent. LEC.

GEOG 731. Topics in Physical Geography: ____. 1-3 Hours.
An investigation of special topics in physical geography. May include specific course work under the headings of geomorphology, climatology, soils, vegetation, quaternary, paleoenvironments, hydrology, etc. May be repeated. RSH.

GEOG 733. Advanced Biogeography Field and Laboratory Techniques. 3 Hours.
This course provides graduate students with practical experience in field data collection techniques and laboratory data analysis methods. During the first half of the semester, students will work in the field using a variety of methods to measure such vegetation characteristics as: cover, density, biomass, leaf area, and canopy architecture. Students will gain experience in the use of field instruments including a spectroradiometer, and techniques for quantifying vegetation biophysical attributes. The laboratory analyses component will include: data summary, data entry, correlation, regression, MANOVA, cluster analysis, and data display, and reporting. Recommended: GEOG 516 or multivariate statistics equivalent. LEC.

GEOG 735. Soil Geomorphology. 3 Hours.
Examines the interaction of pedogenic and geomorphic processes during the Quaternary with an emphasis on strategies and methodologies employed in soil-geomorphic studies. Group research projects incorporating field data collection and analyses are required. Prerequisite: GEOG 335 or GEOG 535 or consent of the instructor. LEC.

GEOG 741. Advanced Geomorphology. 1-3 Hours.
Detailed discussions of processes and landforms characteristic of specific environments. Considered during separate semesters will be general methodology, and fluvial, arid regions, glacial, and shoreline geomorphology. Course may be taken more than once. (Same as GEOL 741.) Prerequisite: GEOG 541. LEC.

GEOG 749. Topics in Stable Isotopes in the Natural Sciences: 2-3 Hours.
Isotopic compositions of substances provide powerful insights into many topics in the natural sciences. Applications of isotopic analyses of carbon, hydrogen, oxygen, and nitrogen to selected research topics such as plant resource use, food web analysis, paleoecology, paleodiet reconstruction, hydrology, and soils genesis will be examined. Knowledge of isotope chemistry is not required. (Concepts necessary to understand pertinent articles will be taught during the first class meetings.) May be repeated. (Same as BIOL 749.) LEC.

GEOG 751. Analysis of Regional Development. 3 Hours.
An analytical approach to spatial organization of economic activities and aspects of growth and development. Location theory and the geography of trade and migration. A research paper is required. Prerequisite: GEOG 551, or a course in economics, or consent of instructor. LEC.

GEOG 752. Topics in Urban/Economic Geography: ____. 1-3 Hours.
An investigation of special topics in urban/economic geography. May include specific coursework under the headings of energy, economic development, international trade, environmental perception, housing, transportation, and migration. May be repeated. LEC.

GEOG 756. Energy Problems and the Economic-Physical Environment. 2-3 Hours.
This course investigates the economic, social, political, and environmental conditions of energy production, transport, and use: total energy consumption and mix, relations to the level and structure of the economy, substitutability of fuel and energy sources, resource endowment in an international setting. Prerequisite: GEOG 551 or a course in economics or consent of instructor. LEC.

GEOG 758. Geographic Information Science. 4 Hours.
This course integrates topics in geographical information science (GISci) with spatial analytical techniques to solve spatial problems. Focuses on the most current research in GISci and its relevance to the environmental sciences, natural resource management, and spatial decision-making. Students are expected to apply the concepts and techniques learned in this class to their own research projects. Prerequisite: GEOG 316 and GEOG 558, or consent of instructor. LEC.

GEOG 771. Topics in Cultural Geography: ____. 1-3 Hours.
An investigation of special topics in cultural geography. May include specific course methodology, material culture, foodways, religion, and similar topics. May be repeated. LEC.

GEOG 772. Problems in Political Geography. 3 Hours.
Case studies of regional and national power settings with particular emphasis upon the geographical analysis of political developments in unstable areas of the world. Prerequisite: GEOG 102 or GEOG 375. LEC.

GEOG 773. Humanistic Geography. 3 Hours.
A discussion and project-oriented course focused on ways of studying the character and meaning of places. Concepts examined include place image and image makers, landscapes as text, sense of place, vernacular regions, and alternate representations of space. Prerequisite: Graduate standing or fifteen hours of geography or consent of instructor. LEC.

GEOG 775. Proseminar in Population Geography. 3 Hours.
Evaluation of problem formulation data gathering, research methods, and substantive knowledge in the geography of human populations. Concurrent auditing of GEOG 575 plus an additional meeting each week is required. Prerequisite: GEOG 575 and GEOG 516, and SOC 514. LEC.

A detailed description and analysis of selected regions of North America. Prerequisite: An introductory geography course or background in United States or Canadian history, social science, or culture or consent of instructor. LEC.

GEOG 791. Latin American Regions: ____. 3 Hours.
A description and analysis of the principal sources of geographic information pertaining to portions or all of Latin America. Prerequisite: GEOG 591 or concurrent auditing of GEOG 591, or consent of instructor. LEC.

GEOG 794. Regions of the Former USSR. 3 Hours.
A description and analysis of geographic data pertaining to the successor states to the USSR. Prerequisite: Fifteen hours of Geography courses or background in Russian, East European or Middle East studies, or consent of instructor. LEC.

GEOG 795. European Regions: ____. 3 Hours.
Prerequisite: Fifteen hours of geography, background in specified area, or consent of instructor. LEC.

GEOG 796. Asian Regions: ____. 2-3 Hours.
Prerequisite: Fifteen hours in geography courses or background in Asia, or consent of instructor. LEC.
GEOG 801. Indigenous Peoples of the World. 3 Hours.
A survey of the varied responses of global Indigenous peoples as a result of the imposition of externally-dominated economic and political systems. An overview of diverse, thematic issues such as land rights, economic development, resources and cultural patrimony, languages, knowledge systems, and women's rights from the perspectives of Indigenous societies around the world. Detailed studies of Indigenous peoples seeking recognition and protection under international law will be used. The course is offered at the 600 and 800 levels, with additional assignments at the 800 level. (Same as ISP 801.) LEC.

GEOG 802. Urban Geographic Information Systems. 3 Hours.
An advanced survey of urban GIS/LIS focusing on: (1) history; (2) the wide range of applications from Automated Mapping/Facilities Management (AM/FM) to topologically related GIS; (3) generic analytical functions in both raster and vector modalities; and (4) software employed, hardware platforms, and institutional settings. A limited experience in the use of GIS is provided from exercises employing ARC/INFO software. Prerequisite: Some experience with DOS based computing. LEC.

GEOG 805. History of Geographic Thought. 2 Hours.
A course to familiarize students with the history and philosophy of geography as a science and humanity. The course summarizes, reviews, and explores the ongoing relevance of 2,500 years of theoretical and methodological advancements in human and physical geography. LEC.

GEOG 806. Basic Seminar. 2 Hours.
The second of two courses required of M.A. students designed to provide experience in the development of research proposals and exposure to methodologies in geography. This course deals with approaches to geographic problems, and involves individual examination of special topics which require preparation, presentation, and critical evaluation of research proposals. LEC.

GEOG 818. Problems in Production Cartography. 1-3 Hours.
Advanced instruction in the theory and practice of producing maps and other related graphics for classroom instruction and research projects. Emphasis will be on current photo-mechanical and automated techniques. Prerequisite: By appointment. Consent of instructor. LEC.

GEOG 835. Practicum in Soil Mapping and Soil Erosion. 3 Hours.
This course is designed to give graduate students field experience in soil mapping and in the evaluation of soils for loss through processes of erosion. Prerequisite: GEOG 535 or equivalent or consent of instructor. FLD.

GEOG 858. Environmental Geographic Information Systems. 4 Hours.
An introduction to the use of GIS for environmental inventory, monitoring, and modeling. This course integrates the principles of landscape ecology with the analytical tools of GIS, remote sensing, and spatial analysis. Students will be taught GIS methodologies used to address real world problems and the use of GIS spatial analysis techniques to characterize landscapes and monitor their change. Prerequisite: GEOG 316 and GEOG 558 or equivalents, multivariate analysis recommended. LEC.

GEOG 890. Geographic Internship. 1-6 Hours.
Supervised professional experience. The student submits to the program committee a proposal describing the internship prior to enrollment. Upon acceptance, regularly scheduled meetings with the advisor provide assistance, guidance and evaluation of progress in the professional experience. A written summary of the experience or outcomes of the research project are prepared independently by the student, a representative of the host agency, and the advisor. Total credit not to exceed six hours. Prerequisite: Twelve hours of graduate level geography courses and consent of program committee. FLD.

GEOG 898. Readings in Geography. 1-4 Hours.
RSH.

GEOG 899. Master's Thesis. 1-10 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

GEOG 911. Seminar in Cartography: _____. 1-4 Hours.
Study of selected topics in cartography. Can be repeated for different topics. Prerequisite: GEOG 513 or consent of instructor. LEC.

GEOG 912. Seminar in Quantitative Methods. 2-3 Hours.
LEC.

GEOG 926. Seminar in Remote Sensing. 2-4 Hours.
Study of selected topics in remote sensing theory and application. May include independent or group research and/or development work. Topic will be specified in advance. Prerequisite: GEOG 726 or consent of instructor. LEC.

GEOG 935. Seminar in Soil Geography. 2-3 Hours.
Study of selected topics in theory and method of soil geography. Sample topics include classification, paleopedology, and soil genesis. Field trip and fee may be required. Prerequisite: GEOG 735 or consent of instructor. LEC.

GEOG 937. Seminar in Vegetation Geography. 1-3 Hours.
(Same as BIOL 968.) LEC.

GEOG 939. Seminar in Fluvial Systems. 2-3 Hours.
Study of selected topics in theory and method of fluvial systems. Samples include hydraulic geometry, the nature of alluvial sediments, and basin case studies. Topic will be specified in advance. LEC.

GEOG 957. Seminar in Urban and Economic Geography. 2-3 Hours.
LEC.

GEOG 958. Seminar in Geographic Information Systems. 2-4 Hours.
Study of selected topics in analysis of digital geographic data. May include research and/or developmental work. Prerequisite: GEOG 758 or equivalent, or consent of instructor. LEC.

GEOG 970. Seminar in Cultural Geography: _____. 2-3 Hours.
Study of selected topics in the theory and method of cultural geography. Samples include religious patterns, folk architecture, and place-defining novels. Topic will be specified in advance. LEC.

GEOG 972. Seminar in Political Geography. 2-3 Hours.
Study of selected topics in the theory and method of political geography. Samples include insurgent states, electoral patterns, and political ecology. Topic will be specified in advance. Prerequisite: GEOG 772 or consent of instructor. LEC.

GEOG 975. Seminar in Population Geography. 2-3 Hours.
Study of selected geographic topics and problems dealing with the distribution of human populations. Prerequisite: GEOG 775 or consent of instructor. LEC.

GEOG 980. Seminar in Geography: _____. 1-3 Hours.
LEC.

GEOG 990. Seminar in Regional Geography: _____. 1-3 Hours.
(Selected areas to be specified.) LEC.

GEOG 998. Research in Geography. 1-5 Hours.
RSH.

GEOG 999. Doctoral Dissertation. 1-10 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.
Geology Courses

GEOL 101. The Way The Earth Works. 3 Hours. NE GE3N / N.
Introduction to the principles of earth science. Study of the formation, occurrence, and structure of minerals and rocks; action of streams, oceans, glaciers, and other agents in the formation and modification of the landscape; volcanism, earthquakes, and plate tectonics. Discussion of earth processes in the context of sustainable energy, environmental concerns, climate and other topical issues. This course with GEOL 103 satisfies the College laboratory science requirement. Concurrent enrollment in GEOL 103 is recommended for students taking both. Course may be offered in lecture or online format. LEC.

GEOL 102. The Way The Earth Works, Honors. 3 Hours. NE GE3N / N.
Honors section of GEOL 101. An introduction to the principles of earth science. Study of the formation, occurrence, and structure of minerals and rocks; action of streams, oceans, glaciers, and other agents in the formation and modification of the landscape; mountain building, volcanism, earthquakes, and plate tectonics. Discussion of earth processes in the context of sustainable energy, environmental concerns, climate and other topical issues. Not open to students who have taken GEOL 101. This course with GEOL 103 satisfies the College laboratory science requirement. Concurrent enrollment in GEOL 103 is recommended for students taking both. Course may be offered in lecture or online format. LEC.

GEOL 103. Geology Fundamentals Laboratory. 2 Hours. U.
A course in geologic laboratory studies. This course plus GEOL 101, GEOL 102, GEOL 105, GEOL 106, or GEOL 121 satisfies the College laboratory science requirement. Gives students practical, hands-on experience with identifying earth materials (rocks, minerals, fossils), understanding their relationships to earth processes, understanding topographic and geologic maps, interpreting results of surficial processes, and learning about deep-earth processes such as earthquakes. Includes short field trips to see geologic structures and results of local geologic processes. This lab course may be offered in on-campus lab or online format. Prerequisite: Previous or concurrent enrollment in GEOL 101, GEOL 102, GEOL 105, GEOL 106 or GEOL 121. LAB.

GEOL 105. History of the Earth. 3 Hours. NE GE3N / N.
An introduction to the physical and biological history of the earth, the methods used to decipher earth history, and the development of the geological sciences. This course with GEOL 103 satisfies the College laboratory science requirement. Concurrent enrollment in GEOL 103 is recommended for students taking both. Not open to students who have taken GEOL 106 or GEOL 304. LEC.

GEOL 106. History of the Earth Honors. 3 Hours. NE GE3N / N.
Honors section of GEOL 105. An introduction to the physical and biological history of the earth, the methods used to decipher earth history, and the development of the geological sciences. This course with GEOL 103 satisfies the College laboratory science requirement. Concurrent enrollment in GEOL 103 is recommended for students taking both. Not open to students who have taken GEOL 105 or GEOL 304. LEC.

GEOL 121. Life Through Times: DNA to Dinosaurs. 3 Hours. NB GE11/GE3N / N.
This course lead students on a journey through time to explore the interconnection between life and the geology of Earth, including our own complex relationship with the world around us. This course with GEOL 103 satisfies the College laboratory science requirement. Concurrent enrollment in GEOL 103 is recommended, but not required, for students taking both. LEC.

GEOL 171. Earthquakes and Natural Disasters. 3 Hours. NE GE3N / N.
Addresses the subject of natural disasters with concentration on earthquake effects and their mitigation. Briefly treats volcanic eruptions, tidal waves, floods, global warming, severe weather, and catastrophic meteorite impacts from the perspective of geological and human significance. Provides a basic background into earth-science processes. LEC.

GEOL 177. First Year Seminar: ____. 3 Hours. NE GE11.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in geology. May not contribute to major requirements in geology. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

GEOL 302. Oceanography. 3 Hours. NE GE3N / N.
Basic description of oceanography: description and discussion of the ocean as a dynamic system. Relationships between and dependence upon the interactions of submarine topography, water chemistry, wave action, and biota in understanding the ocean system. Review of part that humanity plays in perturbing the natural oceanic environment. Discussions of estuarine problems as related to the sea, cultural activities, and rivers. Course may be offered in lecture or online format. Prerequisite: An introductory science course. LEC.

GEOL 304. Historical Geology. 3 Hours. N.
An introduction to the physical and biological history of the Earth, the methods used to decipher earth history, and the development of the geological sciences. Concepts of lithostratigraphy, chemostratigraphy and biostatigraphy, and methods of analysis of stratigraphic data focus on the interpretation of Earth history. Prerequisite: GEOL 101 and GEOL 103. LEC.

GEOL 311. Mineralogy and Structure of the Earth. 3 Hours. GE3N / N.
Basic identification and properties of rocks and minerals in the context of whole-earth structure and evolution. Includes basic chemical equilibria for rock and mineral systems and their bearing on processes involved with formation and evolution of Earth's crust, mantle, and core. Two lectures and one lab per week. Prerequisite: GEOL 101, CHEM 130, and eligibility for MATH 121 or MATH 115. LEC.

GEOL 312. Mineral Structures and Equilibria Laboratory. 1 Hour. U.
A laboratory to accompany GEOL 311. Presents more rigorous analysis of the structures, compositions, and chemical equilibria governing the formation and stability of common rock-forming mineral systems. Prerequisite: GEOL 311 (may be taken concurrently), CHEM 130, and eligibility for MATH 121 or MATH 115. LAB.

GEOL 315. Gemstones. 3 Hours. N.
The properties, occurrence, description, determination, and mineral affinities of gems, ornamental stones, and gem materials. LEC.

GEOL 316. Geochemistry. 3 Hours. N.
The course is intended to be an introduction to all types of geochemistry. It focuses on the chemistry of the natural world and the chemical evolution of the Earth over geological time. The course is composed of three modules: (a) geochemical fundamentals; (b) natural and anthropogenically perturbed aspects of the Earth's hydrosphere and its interaction with surficial rocks, sediments, soils, the biosphere and the atmosphere and (c) the origin and evolution of Earth (crust-mantle-core) and the solar system through nuclear and high temperature chemical processes. Prerequisite: GEOL 101, CHEM 130 or 190; and eligibility for MATH 115. LEC.
GEOL 331. Sedimentology and Stratigraphy. 4 Hours. GE3N / N.
Basic principles used in the study of sedimentology and stratigraphy. Physical, chemical, and biological processes in sedimentary environments applied to the recognition of the depositional environment, preservation, and alteration of sedimentary rocks. Field and laboratory study of sedimentary rocks with emphasis on interpretation of original depositional environments and preservation in the stratigraphic record. Prerequisite: GEOL 101 and GEOL 103; and GEOL 304 or taken concurrently. LEC.

GEOL 351. Environmental Geology. 3 Hours. NE GE3N / N.
An introductory course dealing with the implications of geologic processes and materials for civilization. Topics to be considered include: geologic hazards such as floods, landslides, earthquakes, and volcanism; the availability of water, mineral, and energy resources; and the environmental impact of resource utilization. The importance of recognizing geologic constraints in land use planning and engineering projects is emphasized and illustrated by examples. LEC.

GEOL 360. Field Investigation. 2 Hours. N.
Summer session. A field-geology course that provides beginning geology students with an initial understanding of the nature of geological evidence in the field, the breadth of geological phenomena, and the importance of the interplay of information from many geological disciplines in solving problems. Given at various geologically diverse locations. Fee. Prerequisite: GEOL 101. LEC.

GEOL 391. Special Studies in Geology. 1-6 Hours. N.
Special reports upon subjects in which students have a particular interest. Prerequisite: Fifteen hours of geology. IND.

GEOL 399. Senior Honors Research. 2-5 Hours. AE61 / N.
Normally two to five hours in any one semester with a maximum of eight hours. An undergraduate research course, in any of the fields of geology, open by permission of the department to seniors in the College who have an average grade of B or higher in geology courses. Prerequisite: Thirty hours of geology, five of which may be taken concurrently with this course. IND.

GEOL 501. Error Analysis. 1 Hour. N.
This course covers basic error analysis as it applies to geology. The course will emphasize the description and propagation of errors in data collection and reduction. Subjects include: how to report data and associated errors, error propagation in simple and complex equations, the Normal, Gaussian, and Poisson distributions, linear and higher order regression, and X-squared test. Prerequisite: MATH 121. LEC.

GEOL 512. Igneous and Metamorphic Petrology. 3 Hours. N.
The study of minerals, rocks and fluids within the earth's crust and mantle in order to elucidate their mechanisms of formation and the pressure-temperature-composition conditions within the earth. The course emphasizes equilibrium thermodynamics, phase equilibria, fractionation mechanisms, tectonic control of petrogenesis, and quantitative analysis of mineral parageneses. Prerequisite: GEOL 311 and first semester calculus, or permission of instructor. LEC.

GEOL 513. Petrology Laboratory. 1 Hour. U.
A laboratory course to accompany GEOL 512. Material covered will include the use of the polarizing microscope in study of rocks in thin sections; identification of rock-forming minerals in thin section; study of textures as guides to the crystallization process; calculations of chemical changes during fractional crystallization and partial melting. Students will also make extensive study of igneous and metamorphic rocks in hand specimens, accompanied by thin section study, with emphasis on composition, texture, and structure. Students must co-enroll in GEOL 512. Prerequisite: GEOL 312. Concurrent enrollment in GEOL 512 required. LAB.

GEOL 521. Paleontology. 3 Hours. N.
A study of the structure and evolution of ancient life; the nature and diversity of life through time; the interactions of ancient organisms with their environments and the information that the study of fossils provides about ancient environments; the use of fossils to determine the ages of rocks and the timing of past events in earth history; and the patterns of extinction through time. (Same as BIOL 622.) Prerequisite: BIOL 100 or BIOL 152 or GEOL 105 or GEOL 304. LEC.

GEOL 523. Paleontology Laboratory. 1 Hour. U.
Laboratory course in the study of fossils with emphasis on the practice of paleontology and the morphology of ancient organisms. (Same as BIOL 623.) LEC.

GEOL 528. The Biology and Evolution of Fossil Plants. 3 Hours. N.
A lecture course in which fossil plants, protists and fungi are examined throughout geologic time. Emphasis will be directed at paleoecology, biogeography and the stratigraphic distribution and composition of ancient floras. (Same as BIOL 640.) Prerequisite: BIOL 413, or permission of instructor. LEC.

GEOL 529. Laboratory in Paleobotany. 1 Hour. U.
An examination of selected fossil plants throughout geological time and the techniques used to study them; laboratory will include identification and the use of plant fossils in biostratigraphy. (Same as BIOL 641.) Prerequisite: BIOL 413 or permission of instructor. Must be taken concurrently with GEOL 528. LAB.

GEOL 532. Stratigraphy. 4 Hours. AE61 / N.
A study of the principles of lithostratigraphy, biostratigraphy, and sequence stratigraphy. Methods of analysis of stratigraphic data focus on the interpretation of earth history. The stratigraphic record of North America is presented for evaluation of its geologic history. Three lectures and one laboratory per week. Required field trip. Prerequisite: GEOL 101, GEOL 521, and GEOL 331. LEC.

GEOL 534. Volcanology. 3 Hours. N.
Physical and geochemical volcanology. Considers relationship of tectonics and volcanism; types of magmas; rheology of lavas, pyroclastic density currents, and mass movements in volcanic environments; and interpretation of processes and conditions of formation of volcanic rocks from their field character. Field trips to ancient volcanic complexes. Prerequisite: GEOL 311 and GEOL 512, or permission of instructor. LEC.

GEOL 535. Petroleum and Subsurface Geology. 4 Hours. N.
A general study of the occurrence, properties, origin, and migration of petroleum. Studies of various oil fields and oil-bearing basins. Laboratory studies include well logs, subsurface mapping, and cross-sections. Prerequisite: GEOL 311, GEOL 562, and GEOL 572; or CPE 527, or permission of instructor. LEC.

GEOL 536. Geological Log Analysis. 1 Hour. U.
Application of well logging measurements to interpretation subsurface. LEC.

GEOL 537. Petroleum Reservoir Characterization. 3 Hours. N.
Geological, geophysical, and engineering characterization of a petroleum reservoir. Includes mapping; petrophysical, production, and pressure analysis; and numerical modeling. Considers economic analysis of steps to improve oil recovery. Students who have completed GEOL 837 may not take GEOL 537 for credit. Prerequisite: GEOL 535 and permission of instructor. LEC.

GEOL 541. Geomorphology. 4 Hours. N.
A critical study of landforms in relation to tectonics, climatic environment, and geologic processes. The use of geomorphic methods in the interpretation of Cenozoic history is emphasized. Laboratory exercises in
analysis of field observations, maps, and photographs. Required field trip and fee. (Same as GEOG 541.) Prerequisite: GEOL 101 and GEOL 103, GEOG 104 and GEOG 105, or GEOL 304 and GEOL 103. LEC.

GEOL 551. Engineering Geology. 3 Hours. N.
Consideration of geologic factors affecting engineering projects. Topics include: techniques of site exploration, engineering properties of soil and rock, geologic conditions important in the design of major structures, and geologic information useful in land-use planning. Prerequisite: An introductory course in geology or consent of instructor. LEC.

GEOL 552. Introduction to Hydrogeology. 3 Hours. N.
Physical description of hydrogeologic media. Elementary groundwater hydraulics: analytical and graphical solutions for steady-state application. Well hydraulics and pumping tests. Basic groundwater geology. Effects of topography and geology on regional flow systems. Field and numerical delineation and analysis of groundwater flow systems and applications. Chemical characteristics of groundwaters and their relationship to aquifer geology and hydrology. Investigations of groundwater quality and contamination. Prerequisite: Two semesters each of calculus, physics, and chemistry. LEC.

GEOL 560. Introductory Field Geology. 3 Hours. AE61 / N.
Summer session. The study of the principles of field geology and the application of field methods to solve geological problems. Includes use of topographic maps and aerial photographs for geological mapping, the study of stratigraphic methods by measuring sections, and working field trips to areas of regional geological interest. Given at the University of Kansas Geology Field Camp near Canon City, Colorado. Fee. Prerequisite: GEOL 331, GEOL 360, and GEOL 562, or consent of instructor. FLD.

GEOL 561. Field Geology. 3 Hours. N.
Summer session. The application of the principles of field geology to solve complex geological problems in the field. Given at the University of Kansas Geology Field Camp near Canon City, Colorado, or at other sites as appropriate. Fee. Prerequisite: GEOL 560. FLD.

GEOL 562. Structural Geology. 4 Hours. N.
A study of primary and secondary rock-structures and their genesis. Includes techniques of structural analysis and introduces mechanics of rock deformations. Lectures, laboratory, and required field trip. Prerequisite: GEOL 311; PHSX 111, PHSX 114, or PHSX 211 and PHSX 216; and MATH 115 or MATH 121. LEC.

GEOL 572. Geophysics. 3 Hours. N.
Introductory study of gravitational, magnetic, seismic, electrical, and thermal properties of the earth. Measurements, interpretation, and applications to exploration, earth structure, and global tectonics. Prerequisite: An introductory course in geology; MATH 116 or MATH 122; and PHSX 115 or PHSX 212 and PHSX 236. PHSX 115 or PHSX 212 may be taken concurrently. LEC.

GEOL 573. Geodynamics and Plate Tectonics. 3 Hours. N.
Study of physical processes in the solid Earth and of geophysical approaches to studying Earth systems at regional and global scales. Topics include global potential fields, thermal regime, rheology and Earth deformation, earthquakes and seismic structure, plate motions and global tectonics. (Same as PHSX 528.) Prerequisite: An introductory course in geology; MATH 116 or MATH 122; and PHSX 115, PHSX 214, or PHSX 212 and PHSX 236. LEC.

GEOL 575. Seismic Exploration. 3 Hours. N.
Application of seismic reflection and refraction techniques to the description of near-surface geology and the exploration for energy and mineral resources. Theory of seismic information, data collection, data processing using computers, and geologic interpretation. Prerequisite: A course in computer programming, either FORTRAN or C, which may be taken concurrently. An introductory geophysics course, such as GEOL 572. LEC.

GEOL 576. Potential Fields Exploration. 3 Hours. N.
Use of gravity, magnetic, and electrical signals in the exploration for energy and mineral resources. Elementary potential field theory, data collection methods, data analysis, and interpretation using computers. Prerequisite: A course in computer programming, either FORTRAN or C, which may be taken concurrently. An introductory geophysics course, such as GEOL 572. LEC.

GEOL 577. Environmental Geophysics. 3 Hours.
Application of the methods of geophysical exploration to evaluate, mitigate, and prevent environmental problems below the surface of the earth. Development of fundamental principles and discussion of environmental case histories using seismic, gravity, magnetic, electromagnetic, electrical, and radar methods. Prerequisite: An introductory course in geology; MATH 116 or MATH 122; and PHSX 115, or PHSX 212 and PHSX 236. LEC.

GEOL 578. Seismic Data Analysis and Interpretation. 3 Hours. N.
Interpretation methods applied to seismic exploration and reservoir characterization. Topics include: rock physics, the convolutional model, synthetic seismograms, seismic response of hydrocarbon reservoirs, resolution, seismic velocity, depth conversion, seismic attributes, AVO, inversion, seismic anisotropy, 3-D 4-D interpretation, S-wave and converted wave interpretation, laboratory use of commercial seismic interpretation software. Prerequisite: GEOL 575 or consent of the instructor. LEC.

GEOL 591. Topics in Geology: _____. 1-5 Hours. N.
May include lectures, discussions, readings, laboratory, and field work in geology. Will be given as needed. May be taken more than once. LEC.

GEOL 711. X-Ray Analysis. 1-2 Hours.
Introduction to the theory and practice of X-ray diffraction and X-ray fluorescence analysis as applied to geological materials. Includes safety training necessary for the operation of X-ray analytical equipment in the department. Prerequisite: GEOL 311 and PHSX 115 or PHSX 212. LEC.

GEOL 712. Microstructures and Petrofabrics. 3 Hours.
This course is geared towards developing a qualitative and quantitative understanding of the fundamentals of rock and mineral deformation necessary to interpret comprehensively microstructural data. Microstructures and petrofabrics contain a wealth of information on kinematics, rheology, and boundary conditions of deforming rocks, important information that often goes unnoticed and unused. This course builds on knowledge acquired in undergraduate structural geology and petrology courses and will give students the tools for a more rigorous and sophisticated evaluation of thin sections and quantitative microstructural and textural data. Required field trip. Prerequisite: GEOL 512 and GEOL 562; or consent of the instructor. LEC.

GEOL 713. Advanced Petrology. 1 Hour.
Advanced topics in igneous and metamorphic petrology with emphasis on chemical and isotopic modeling. Course may be repeated, as topics covered vary. LEC.

GEOL 714. Thermochronology. 3 Hours.
This advanced course is intended to provide students with an in-depth understanding of the fundamentals and an appreciation of the complexities of thermochronology. The primary focus of this course is on modern thermochronological dating methods, a quantitative understanding of noble gas diffusion, data acquisition and interpretation, numerical modeling of complex thermochronological data, and hands-on
laboratory experience in the KU thermochronology facilities. Prerequisite: MATH 122 and GEOL 717; or consent of the instructor. LEC.

GEOL 715. Geochemistry. 3 Hours.
Application of chemical equilibria and kinetics to geological environments and processes, with emphasis on processes involving solution equilibria. Includes introduction to thermodynamic aspects of equilibria. Prerequisite: CHEM 188 and MATH 122. LEC.

GEOL 716. Geologic Thermodynamics. 2 Hours.
Classical thermodynamics with an emphasis on phase equilibria, solid-solution chemistry, and modeling of natural systems. Prerequisite: Second semester calculus, or permission of instructor. LEC.

GEOL 717. Geochronology. 2-4 Hours.
Principles and applications of natural radioactive systems for geochronology and cosmochronology, including use of radiogenic isotopes as geochemical tracers. Prerequisite: GEOL 512 or consent of instructor. LEC.

GEOL 718. Stable Isotope Geochemistry. 1-3 Hours.
Principles and applications of equilibria among stable isotopes in the geological environment, with emphasis on the isotopic systems of hydrogen, carbon, and oxygen. Prerequisite: GEOL 715 or consent of instructor. LEC.

GEOL 721. Micropaleontology. 3 Hours.
Systematics, paleontology, evolution, and biostratigraphy of microfossils, particularly foraminifera, ostracodes, and conodonts. Preparation of material for study. Applications of micropaleontology to geologic problems. Prerequisite: GEOL 521 or BIOL 100 or 152. LEC.

GEOL 722. Paleoecology. 3 Hours.
Principles of ecology as applied to the interpretation of past environments. Prerequisite: GEOL 521. LEC.

GEOL 723. Paleontology Museum Apprenticeship. 1-6 Hours. N.
Provides directed, practical experience in care and management of paleontology collections, public education, exhibits, and museum administration with emphasis tailored to fit the needs and interests of each student. Students should expect to spend a minimum of five hours per week for each hour in which they are enrolled. (Same as AMS 799, ANTH 799, BIOL 799, HIST 799, and MUSE 799.) FLD.

GEOL 724. Paleobiogeography. 3 Hours.
The study of the coevolution of the Earth and its biota. The class will focus on using phylogenetic approaches with fossil taxa to study how tectonic change has influenced the evolution of life and also to determine what evolutionary patterns can tell us about the nature and sequence of geological events. Prerequisite: GEOL 521, or consent of the instructor. LEC.

GEOL 725. Paleontology of Lower Vertebrates. 3 Hours.
General account of the osteology, geologic distribution, and evolution of the principal groups of fishes, amphibians, reptiles, and birds. Lectures and laboratory. (Same as BIOL 790.) Prerequisite: GEOL 105 or GEOL 304, or GEOL 521. LEC.

GEOL 726. Paleontology of Higher Vertebrates. 3 Hours.
Evolution of mammals and anatomical modifications involved in the process as ascertained from the fossil record. Lectures and laboratory. (Same as BIOL 791.) Prerequisite: GEOL 105 or GEOL 304 or GEOL 521. LEC.

GEOL 727. Macroevolution. 3 Hours.
This course will present a broad survey of topics in macroevolution including the differences between micro- and macroevolutionary patterns and processes and the manners of formulating and analyzing macroevolutionary questions. Discussions will focus on the relevance of hierarchy theory and levels of selection; an overview of species concepts, both ontological and epistemological; and an analysis of the neo-Darwinian synthesis as related to innovations in evolutionary theory. In addition, the relevance of contingency and extinction to evolutionary theory will be emphasized. LEC.

GEOL 728. Paleopedology. 3 Hours.
Paleopedology is the study of ancient soils preserved in the geologic record. The course covers concepts of paleopedology and its applications to the interpretation of paleoenvironmental, paleoecologic, and paleohydrogeologic settings and its use in sequence stratigraphy and paleoclimatology. Prerequisite: GEOG 535, GEOL 331, or GEOL 532; or consent of the instructor. LEC.

GEOL 729. Ichnology. 3 Hours.
Ichnology is the study of organism-substrate interactions. The class will cover concepts and applications of ichnology in the marine and continental realms, including the behavior of such organisms as microbes, plants, invertebrates, and vertebrates preserved in the geologic record as trace fossils. Ichnology is applied in geology and in the petroleum industry to interpret ancient environments, hydrogeology, ecology, and climate. Prerequisite: GEOL 331, GEOL 521, or GEOL 532; or consent of the instructor. LEC.

GEOL 731. Terrigenous Depositional Systems. 4 Hours.
Processes that operate in recent sedimentary environments, responses of sediment to those processes, and criteria for determining depositional environments of ancient sedimentary rocks. Lectures, practical exercises, and field trips. Prerequisite: GEOL 331 or GEOL 532. LEC.

GEOL 732. Carbonate Depositional Systems. 3 Hours.
Patterns and processes of contemporaneous carbonate deposition and diagenesis, depositional models; applications to interpretation of carbonate rocks. Lecture, discussion, laboratory and field trips. Prerequisite: GEOL 532 (may be taken concurrently). LEC.

GEOL 741. Advanced Geomorphology. 1-3 Hours.
Detailed discussions of processes and landforms characteristic of specific environments. Considered during separate semesters will be general methodology, and fluvial, arid regions, glacial, and shoreline geomorphology. Course may be taken more than once. (Same as GEOG 741.) Prerequisite: GEOL 541. LEC.

GEOL 751. Physical Hydrogeology. 3 Hours.
Study of fluid flow in subsurface hydrologic systems. Investigation of the ground water environment including porosity, and hydraulic conductivity and their relationship to typical geologic materials. Examination of Darcy’s law and the continuity equation leading to the general flow equations. Discussion of typical hydraulic testing methods to estimate aquifer parameters in various situations and apply these to water resource problems. Study of the basic mechanisms that determine the behavior of typical regional flow systems. (Same as CE 752.) LEC.

GEOL 753. Chemical and Microbial Hydrogeology. 4 Hours.
Lecture and discussion of chemical and microbiological controls on groundwater chemistry. Topics include thermodynamic and microbiological controls on water-rock reactions; kinetics; and microbiological, chemical and isotopic tools for interpreting water chemistry with respect to chemical weathering and shallow diagenesis. Origins of water chemistry, changes along groundwater flow paths, and an introduction to contaminant biogeochemistry will be discussed through the processes of speciation, solubility, sorption, ion exchange, oxidation-reduction, elemental and isotopic partitioning, microbial metabolic processes and microbial ecology. An overview of the basics of environmental microbiology, including cell structure and function, microbial metabolism and respiration, microbial genetics and kinetics
of microbial growth will be covered. (Same as CE 753.) Prerequisite: One year of chemistry, one year of calculus, one year of biology, an introductory course in hydrogeology, or consent of the instructors. LEC.

GEOL 754. Contaminant Transport. 3 Hours.
A study of the transport of conservative and non-conservative pollutants in subsurface waters. Case studies are used to illustrate and develop a conceptual understanding of such processes as diffusion, advection, dispersion, retardation, chemical reactions, and biodegradation. Computer models are developed and used to quantify these processes. (Same as CE 754.) Prerequisite: Introductory Hydrogeology or consent of instructor. LEC.

GEOL 761. Regional Field Geology. 1-5 Hours.
A detailed field study of a carefully selected area that includes features of several phases of geology. Field trip fee. Prerequisite: GEOL 561 or equivalent and departmental approval. FLD.

GEOL 763. Tectonics and Regional Geology. 3 Hours.
Topics vary with demand and include fundamental features of plate tectonics, interpretation and distribution of regional geology of mountain belts with emphasis on tectonic setting and processes, regional geology, and tectonics of selected mountain belts. Prerequisite: GEOL 562, GEOL 512, or GEOL 331, and GEOL 572. LEC.

GEOL 771. Advanced Geophysics: _____ 1-3 Hours.
Topics vary with demand and include heat flow, wave propagation, synthetic seismograms, groundwater exploration, geothermal exploration, electrical methods in exploration, rock mechanics-tectonophysics, rock magnetism, geomagnetism, paleomagnetism, geophysical inverse theory, and others upon sufficient demand. May be repeated for different topics. (Same as PHSX 727.) Prerequisite: GEOL 572 or GEOL 573/PHSX 528 or consent of instructor. LEC.

GEOL 772. Geophysical Data Analysis. 3 Hours.
Fourier analysis, sampling theory, prediction and interpolation of geophysical data, filtering theory, correlation techniques, deconvolution. Examples will be chosen from various fields of geophysics. (Same as PHSX 722.) Prerequisite: MATH 250/AE 250/ARCE 250/CE 250/CPE 250/ECECS 250/EPHX 250/ME 250 and either GEOL 572 or GEOL 573 or PHSX 528. LEC.

GEOL 773. Seismology. 3 Hours.
General theory of seismic waves, wave field extrapolation (migration) by finite difference methods, construction of travel-time curves, reflection and attenuation of coefficients, earthquake source mechanism, distribution and forecasting of earthquakes. (Same as PHSX 723.) Prerequisite: MATH 250/AE 250/ARCE 250/CE 250/CPE 250/ECECS 250/EPHX 250/ME 250 and either GEOL 572 or GEOL 573 or PHSX 528. LEC.

GEOL 775. Near-Surface Seismology. 3 Hours.
Theoretical and applied study of all aspects of near-surface reflection, refraction, and surface-wave seismology from design and acquisition to interpretation. Prerequisite: MATH 250, GEOL 572, or consent of the instructor. LEC.

GEOL 776. Ground Penetrating Radar. 3 Hours.
Theoretical and applied study of radar methods used for imaging the subsurface. Topics include EM theory relating to wave propagation through earth environments, GPR data acquisition, processing and interpretation. Prerequisite: Consent of the instructor. LAB.

GEOL 780. Conservation Principles and Practices. 3 Hours.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects will also be considered. (Same as AMS 714, BIOL 700, HIST 722 and MUSE 706.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

GEOL 781. Introduction to Museum Exhibits. 3 Hours.
This course will consider the role of exhibits as an integrated part of museum collection management, research, and public service. Lecture and discussion will focus on issues involved in planning and producing museum exhibits. Laboratory exercises will provide first hand experience with basic preparation techniques. Emphasis will be placed on the management of an exhibit program in both large and small museums in the major disciplines. (Same as AMS 700, BIOL 787, HIST 723, and MUSE 703.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

GEOL 782. The Nature of Museums. 3 Hours.
The purpose of this course is to provide an overview of the kinds of museums, their various missions, and their characteristics and potentials as research, education, and public service institutions responsible for collections of natural and cultural objects. (Same as AMS 720, BIOL 788, HIST 720, and MUSE 702.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

GEOL 783. Museum Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as AMS 731, BIOL 785, HIST 728, and MUSE 701.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

GEOL 784. Introduction to Museum Public Education. 3 Hours.
Consideration of the goals of an institution's public education services, developing programs, identifying potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as AMS 797, BIOL 784, HIST 721, and MUSE 705.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

GEOL 785. Principles and Practices of Museum Collection Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museum collections, their associated data, and their use in scholarly research; cataloging, storage, fumigation, automated information management and related topics will be presented for museums of art, history, natural history and anthropology. (Same as AMS 730, BIOL 798, HIST 725, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

GEOL 789. Advanced Topics in Geology: ____. 1-5 Hours.
Selected offerings in geology. Intended primarily for graduate students and qualified seniors. May include lectures, discussions, reading, laboratory and field work. May be taken more than once. LEC.

GEOL 837. Geoscience and Petroleum Engineering. 3 Hours.
Advanced geological, geophysical, and engineering characterization of a petroleum reservoir. Includes mapping; petrophysical, production, and pressure analysis; and numerical modeling. Considers economic analysis of steps to improve recovery. Students who have completed GEOL 537 may not take GEOL 837 for credit. LEC.
GEOL 851. Field and Laboratory Methods: Physical Hydrogeology. 1 Hour.
Introduction to field and laboratory methods commonly used in physical hydrogeology. Practical experience with common water level measurement techniques, various well pumping techniques, well installation and geologic core sampling, and hydraulic testing. Prerequisite: Introductory course in hydrogeology and familiarity with computer use for data processing, or consent of instructor. FLD.

GEOL 852. Field and Laboratory Methods: Contaminant Transport. 1 Hour.
Introduction to laboratory methods for evaluating reactive transport parameters, followed by development and implementation of computer models. Students will gain experience building models starting from basic transport equations using a spreadsheet platform and, where appropriate, commercial software packages. Prerequisite: GEOL 751 (may be taken concurrently) or equivalent, or consent of the instructor. LAB.

GEOL 853. Field and Laboratory Methods: Chemical Hydrogeology. 1 Hour.
Practical experience in measuring unstable chemical parameters in groundwater, including pH, Eh, dissolved oxygen, temperature, alkalinity, specific conductance, and turbidity. Practical experience in collecting water samples for chemical analysis, choosing appropriate sample containers and preservation methods, and special techniques for collecting samples for determination of parameters sensitive to environmental changes such as oxygen level or temperature. Prerequisite: GEOL 753 (may be taken concurrently) or equivalent, or consent of the instructor. FLD.

GEOL 854. Field and Laboratory Methods: Geobiology. 1 Hour.
Practical experience in cultivating, enumerating and visualizing groundwater microorganisms. Geochemical and molecular techniques for studying microbial community diversity, biominereralization and mineral dissolution, and biodegradation of organic contaminants will be covered. Practical experience in collecting water samples for preservation of microorganisms sensitive to environmental changes such as oxygen level or temperature. Prerequisite: GEOL 753 (may be taken concurrently) or equivalent, or consent of the instructor. FLD.

GEOL 891. Special Studies in Geology. 1-5 Hours.
May be repeated. RSH.

GEOL 899. Master's Thesis. 1-12 Hours.
THE.

GEOL 901. Seminar in: _____. 1-5 Hours.
A review of the principles of the geological sciences. Fields considered are: geomorphology, igneous petrology, metamorphic petrology, invertebrate paleontology, groundwater, geochemistry, stratigraphy, sedimentation, micropaleontology, mineralogy, structural geology, and geophysics. Several may be taken concurrently. May be taken more than one semester. LEC.

GEOL 993. Sandstone Petrology. 3 Hours.
Description, classification, and interpretation of sedimentary rocks, emphasizing petrographic methods applied to terrigenous rocks and interpretation of provenance of sedimentary sequences. Prerequisite: GEOL 511 and GEOL 531 or GEOL 532. LEC.

GEOL 999. Doctoral Dissertation. 1-12 Hours.
THE.

Germanic LanguagesLiteratures Courses

DANE 100. Danish Reading Course. 3 Hours. U.
Special course designed to enable graduate students to develop a reading knowledge of Danish as a research skill. Enrollment for undergraduate credit is required. Does not satisfy any part of the undergraduate language requirement. Not open to native speakers of Danish. LEC.

DANE 101. Danish Reading Course II. 3 Hours. U.
Continuation of DANE 100 and introduction to reading Norwegian and Swedish. Not open to native speakers of Danish. Prerequisite: DANE 100 or equivalent. LEC.

DANE 104. Elementary Danish I. 5 Hours. U.
Essentials of grammar, practice in speaking, reading, and writing Danish. Five hours of recitation per week. Not open to native speakers of Danish. LEC.

DANE 105. Elementary Danish I, Honors. 5 Hours. H.
Course content similar to DANE 104, with additional work to expand the student's cultural context and understanding. Not open to native speakers of Danish or students who have completed DANE 104. Prerequisite: Open only to students admitted to the University Honors Program or by permission of instructor. LEC.

DANE 108. Elementary Danish II. 5 Hours. U.
Continuation of grammar; practice in conversation, composition, and reading. Five hours of recitation per week. Not open to native speakers of Danish. Prerequisite: DANE 104 or permission of instructor. LEC.

DANE 109. Elementary Danish II, Honors. 5 Hours. H.
Course content similar to DANE 108, with additional cultural study. Not open to native speakers of Danish or students who have completed DANE 108. Prerequisite: Open to students who received a grade of A in DANE 104 or an A or B in DANE 105. LEC.

DANE 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Danish. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

DANE 212. Intermediate Danish I. 3 Hours. U.
A continuation of DANE 108. Structured grammar review, composition, conversation with readings of literary and cultural texts. Not open to native speakers of Danish. Prerequisite: DANE 108 or permission of instructor. LEC.

DANE 213. Intermediate Danish I, Honors. 3 Hours. H.
Course content similar to DANE 212, with additional cultural study. Not open to native speakers of Danish or students who have completed DANE 212. Prerequisite: Completion of DANE 108 with a grade of A, or DANE 109 with a grade of A or B. LEC.
DANE 216. Intermediate Danish II. 3 Hours. U.
A continuation of DANE 212. Structured grammar review, composition, conversation with readings of literary and cultural texts. Not open to native speakers of Danish. Prerequisite: DANE 212 or permission of instructor. LEC.

DANE 217. Intermediate Danish II, Honors. 3 Hours. H.
Course content similar to DANE 216, with additional cultural study. Not open to native speakers of Danish or students who have completed DANE 216. Prerequisite: Completion of DANE 212 with a grade of A, or DANE 213 with a grade of A or B. LEC.

DANE 220. Intensive Danish. 16 Hours. U.
This course is designed to teach speaking, reading, writing, and comprehension skills of first and second year Danish in one semester. Classes are held for four hours a day Monday through Friday (8:30 a.m. - 12:20 p.m.). There are intensive drills in grammar, integrated language lab work, and homework assignments. Not open to native speakers of Danish. Prerequisite: Admission to Danish Institute at the University of Kansas. LEC.

DTCH 100. Dutch Reading Course. 3 Hours. U.
Special course designed to enable graduate students to develop a reading knowledge of Dutch as a research skill. Enrollment for undergraduate credit is required. Does not satisfy any part of the undergraduate language requirement. Not open to native speakers of Dutch. LEC.

DTCH 101. Dutch Reading Course II. 3 Hours.
Continuation of DTCH 100. Not open to native speakers of Dutch. Prerequisite: DTCH 100 or equivalent. LEC.

DTCH 104. Elementary Dutch I. 5 Hours. U.
Essentials of grammar; practice in speaking, reading, and writing Dutch. Five hours of recitation per week. Not open to native speakers of Dutch. LEC.

DTCH 105. Elementary Dutch I, Honors. 5 Hours. U.
Similar to DTCH 104 with additional work to expand the student's cultural context and understanding. Not open to native speakers of Dutch or students who have completed DTCH 104. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

DTCH 108. Elementary Dutch II. 5 Hours. U.
Continuation of grammar, practice in conversation, composition, and reading. Five hours of recitation per week. Not open to native speakers of Dutch. Prerequisite: DTCH 104 or equivalent. LEC.

DTCH 109. Elementary Dutch II, Honors. 5 Hours. U.
Course content similar to DTCH 108, with additional cultural study. Meets 5 days a week. Not open to native speakers of Dutch. Prerequisite: Open only to students admitted to the University Honors Program or by permission of instructor. LEC.

DTCH 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Dutch. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

DTCH 212. Intermediate Dutch I. 3 Hours. U.
A continuation of DTCH 108. Structured grammar review, composition, conversation, with readings of literary and cultural texts. Three class meetings per week. Not open to native speakers of Dutch. Prerequisite: DTCH 108 or equivalent. LEC.

DTCH 213. Intermediate Dutch I, Honors. 3 Hours. U.
Course content similar to DTCH 212, with additional cultural study. Three class meetings per week. Not open to native speakers of Dutch. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

DTCH 216. Intermediate Dutch II. 3 Hours. U.
A continuation of DTCH 212. Structured grammar review, composition, conversation, with readings of literary and cultural texts. Three class meetings per week. Not open to native speakers of Dutch. Prerequisite: DTCH 212 or equivalent. LEC.

DTCH 217. Intermediate Dutch II, Honors. 3 Hours. U.
Course content similar to DTCH 216, with additional cultural study. Three class meetings per week. Not open to native speakers of Dutch. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

DTCH 453. Investigation and Conference: ______. 1-3 Hours. H/W.
Independent study and directed reading on special topics. Permission of the instructor who will supervise the student's work is required. Not open to native speakers of Dutch. IND.

GERM 100. German Reading Course I. 3 Hours. U.
Primarily for graduate students in other departments but also open to seniors planning to pursue graduate study. Fundamentals of grammar and reading texts of medium difficulty. Does not count toward undergraduate language requirement. Previous study of German not necessary. Not open to native speakers of German. LEC.

GERM 101. German Reading Course II. 3 Hours. U.
Continuation of GERM 100. Advanced grammar and reading advanced texts in the students' respective fields. Does not count toward undergraduate language requirement. Not open to native speakers of German. Prerequisite: GERM 100 or permission of instructor. LEC.

GERM 104. Elementary German I. 5 Hours. AE42 / U.
Introductory German; no previous German required. Development of students' balanced knowledge of the German language and culture, including the ability to understand and produce short spoken, written, and multimedia texts on everyday topics and to interpret, compare, and contrast German and American cultural phenomena. Emphasis on interaction. Not open to native speakers of German. Students who complete this course successfully should take GERM 108. LEC.

GERM 108. Elementary German II. 5 Hours. AE42 / U.
Continuation of GERM 104. Further development of students' balanced knowledge of the German language and culture, including the ability to understand and produce short spoken, written, and multimedia texts on everyday topics and to interpret, compare, and contrast German and American cultural phenomena. Emphasis on interaction. Not open to native speakers of German. Students who complete this course successfully should take GERM 201. Prerequisite: GERM 104 or placement by examination. LEC.

GERM 111. Introduction to German I. 3 Hours. U.
Introduction to German for special purposes; no previous German required. Provides basic familiarity with the German language, focusing on speaking and reading skills and the essentials of German grammar. Introduction to the culture of the German-speaking world. Three class hours per week; may be delivered by video conference or face-to-face. Does not satisfy any KU language requirement. LEC.

GERM 112. Introduction to German II. 3 Hours. U.
Continuation of GERM 111. Further development of basic familiarity with the German language, focusing on speaking and reading skills and the essentials of German grammar. Continued exploration of the culture of the
German-speaking world. Three class hours per week; may be delivered by video conference or face-to-face. Does not satisfy any KU language requirement. Prerequisite: GERM 111 or permission of instructor. LEC.

GERM 113. Introduction to German III. 1.5 Hour. U.
Continuation of GERM 112. Further development of basic familiarity with the German language, focusing on speaking and reading skills and the essentials of German grammar. Continued exploration of the culture of the German-speaking world. Three class hours per week; may be delivered by video conference or face-to-face. Does not satisfy any KU language requirement. Prerequisite: GERM 112 or permission of instructor. LEC.

GERM 124. German Cinema in Context. 3 Hours. HL AE42 / H.
Taught in English. Screening and analysis of German films from the early 20th century to the present. Readings, lectures, and discussions on the films' sources, ideologies, techniques, and artistic achievements. Does not count toward the German major or minor. LEC.

GERM 125. German Cinema in Context (Honors). 3 Hours. HL AE42.
Course content similar to GERM 124. Taught in English. Screening and analysis of German films from the early 20th century to the present. Readings, lectures, and discussions on the films' sources, ideologies, techniques, and artistic achievements. Does not count toward German major or minor. LEC.

GERM 128. Introduction to the Arts in German-Speaking Europe. 3 Hours. H.
Taught in English. Exploration of the arts in German-speaking Europe: major cultural periods, movements, art forms, and people (artists, architects, composers, writers, filmmakers) from the Middle Ages to the present. Consideration of the arts within the larger European historical and cultural context from which they emerged. Does not count toward the German major or minor. This course is offered at the 100 and 300 levels with additional assignments at the 300-level. Not open to students who have completed GERM 328. LEC.

GERM 130. German-Speaking Europe and German-Speaking Europeans. 3 Hours. H.
A survey of contemporary German-speaking Europe that covers topics such as geography, the environment, technology, the arts, music, film, literature, politics, immigration, language, religion, customs. Focus on Germany, Austria, Switzerland, Belgium, Luxembourg, Liechtenstein. Taught in English. Does not count toward the German Studies major or minor. LEC.

GERM 132. The City of Berlin in German Culture. 3 Hours. H.
Taught in English. Introduction to Berlin within the context of major German and European historical, social, intellectual, and artistic developments since 1800. Exploration of complex epochs such as the Bismarck, Nazi, Cold War, and post-unification eras through journalism, literature, sociological writings, and film. Does not count toward German major or minor. This course is offered at the 100 and 300 levels with additional assignments at the 300-level. Not open to students who have completed GERM 332. LEC.

GERM 136. The German Transatlantic Experience. 3 Hours. HT AE41 / U.
Taught in English. Introduction to the migration of German-speaking Europeans to North America, 17th-century-present. Consideration of European and North American factors motivating migration, the journey to the New World, the experiences of immigrants and their descendants, and the ways in which German-speaking Europeans shaped the multicultural history of America. LEC.

GERM 148. Germanic Mythology, Religion, and Folklore. 3 Hours. H/W.
Taught in English. Introduction to the pagan myths and beliefs of Teutonic antiquity and their survival in the popular traditions of Germanic countries, within the framework of comparative mythology, archaeology, and anthropology. Does not count toward the German major or minor. LEC.

GERM 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in German. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

GERM 201. Intermediate German I. 3 Hours. AE42 / U.
Continuation of GERM 108. Further development of students' balanced knowledge of the German language and culture, including the ability to understand and produce short spoken, written, and multimedia texts in different genres and to interpret, compare, and contrast German and American cultural phenomena. Emphasis on interaction. Not open to native speakers of German. Students who complete this course successfully should take GERM 202. Prerequisite: GERM 108 or placement by examination. LEC.

GERM 202. Intermediate German II. 3 Hours. AE42 / U.
Continuation of GERM 201. Further development of students' balanced knowledge of the German language and culture, including the ability to understand and produce short spoken, written, and multimedia texts in different genres and to interpret, compare, and contrast German and American cultural phenomena. Emphasis on interaction. Not open to native speakers of German. Students who successfully complete this course should take GERM 301. Prerequisite: GERM 201 or placement by examination. LEC.

GERM 203. Introduction to Business German: Deutsch im Berufsalltag. 3 Hours. AE42 / H.
Continuation of GERM 201; completes language proficiency sequence. Further development of students' balanced knowledge of the German language and culture, including the ability to understand and produce short spoken, written, and multimedia texts on the topics related to professional communication and to interpret, compare, and contrast German and American business cultural phenomena. Emphasis on interaction. Recommended for students planning to take GERM 352 and GERM 462. Not open to native speakers of German. Prerequisite: GERM 201 or placement by examination. LEC.

GERM 220. Special Studies in Germanic Languages. 1-5 Hours. U.
Credits awarded for elementary instruction in a Germanic language while studying abroad. Transfer credits must be arranged through the KU Office of Study Abroad, with permission from the departmental undergraduate advisor. May be repeated for credit if content varies. LEC.

GERM 222. Special Studies in German: ______. 1-3 Hours. H/W.
Credits awarded for the study of special topics in German while studying abroad. Transfer credits must be arranged through the KU Office of Study Abroad, with permission from the departmental undergraduate advisor. May be repeated for credit if content varies. LEC.

GERM 301. High Intermediate German I. 3 Hours. AE42 / H/W.
Continuation of GERM 202. Further development of students' use of German through reading and discussion of literary and non-literary texts (spoken, written, multimedia, combined with intensive grammar review. Introduction to expressive functions of German with emphasis on spoken and written communication. Not open to native speakers of German. Students who complete this course successfully should take GERM 302. Prerequisite: GERM 202 or placement by examination. LEC.
GERM 302. High Intermediate German II. 3 Hours. AE42 / H/W.
Continuation of GERM 301. Refinement and expansion of students' use of German. Reading and discussion in German of literary and non-literary texts (spoken, written, multimedia), combined with continued intensive grammar review. Emphasis on better understanding German grammatical structures and acquisition of vocabulary. Not open to native speakers of German. Students who complete this course successfully should take GERM 401. Prerequisite: GERM 301 or placement by examination. LEC.

GERM 315. German Literature and the Modern Era. 3 Hours. H.
Introduction in English to German writers 1750-present. Discussion of themes such as technology, modern and postmodern developments, gender, war, politics, and culture in German-speaking Europe. Readings include works in translation by influential German writers. Open to first-year students and non-majors; qualifies for major or minor credit when taken with GERM 316, a one-hour discussion section. GERM 315 and GERM 316 are required for admission to all courses beyond GERM 402 (except GERM 444 and GERM 462). LEC.

GERM 316. Discussion Section for German Literature and the Modern Era. 1 Hour. H.
Discussion section to be taken with GERM 315: German Literature and the Modern Era. Introduction to critical German vocabulary for discussing German-language literature in its historical and cultural context. Prerequisite: GERM 202 or placement by examination. GERM 315 qualifies for major or minor credit when taken with GERM 316. LEC.

GERM 320. Border Crossings in German Culture. 3 Hours. HT AE42.
Taught in English. Exploration of writers, filmmakers, and artists who have emigrated from, or migrated to German-speaking Europe. Emphasis on both their transnational impact and their representations of border crossings. Topics may include exile communities before, during, and after World War II and multiculturalism in contemporary Germany, Austria, and Switzerland. Does not count toward German major or minor. LEC.

GERM 324. Magic, Monsters, and the Occult in German Literature. 3 Hours. HL AE42.
Taught in English. Reading and discussion of fictional and non-fictional works by German writers that address topics such as magic, monsters, the occult sciences, the Faust legend and pact with the devil, and the vampire. Consideration of the works' influence on other nations' literatures. Does not count toward the German major or minor. LEC.

GERM 325. Magic, Monsters, and the Occult in German Literature, Honors. 3 Hours. HL / H.
Taught in English. For centuries German scientists, philosophers and poets have produced groundbreaking literature that has featured magic, monsters and the occult sciences. German poets introduced popular themes, such as the Faust legend and the pact with the devil, and they introduced one of the most popular monsters into literature - the vampire. In this course we read and discuss fictional and nonfictional works by German authors that address these themes, and we discuss the influence that these works have had on other nations' literatures. Does not fulfill any requirement in the German major or minor. Prerequisite: Membership in the University Honors Program or permission of instructor. LEC.

GERM 328. The Arts in German-Speaking Europe. 3 Hours. HL AE42.
Taught in English. Exploration of the arts in German-speaking Europe: major cultural periods, movements, art forms, and people (artists, architects, composers, writers, filmmakers) from the Middle Ages to the present. Consideration of the arts within the larger European historical and cultural context from which they emerged. Does not count toward the German major or minor. This course is offered at the 100 and 300 levels with additional assignments at the 300-level. Not open to students who have completed GERM 128. LEC.

GERM 330. Topics in: ______. 3 Hours. H.
Taught in English. Interdisciplinary study of selected aspects of the society or culture of German-speaking Europe or of the European experience. Does not count toward the German major or minor. LEC.

GERM 332. Berlin in German Culture. 3 Hours. HL AE42.
Taught in English. Introduction to Berlin within the context of major German and European historical, social, intellectual, and artistic developments since 1800. Exploration of complex epochs such as the Bismarck, Nazi, Cold War, and post-unification eras through journalism, literature, sociological writings, and film. Does not count toward German major or minor. This course is offered at the 100 and 300 levels with additional assignments at the 300-level. Not open to students who have completed GERM 132. LEC.

GERM 333. German Conversation and Idioms. 3 Hours. H.
Intensive practice in conversational German with instruction in proper pronunciation as well as an introduction to idiomatic usage. Only for students in the KU Summer Language Institute in Holzkirchen, Germany. Prerequisite: GERM 202 or equivalent fourth-semester German course. LEC.

GERM 335. Love and the German Middle Ages. 3 Hours. H.
Taught in English. Introduction to German conceptions of love, marriage, and adultery in medieval and early modern German-speaking Europe. Exploration of the German contribution to discourse of love through theoretical, literary, and legal texts, as well as through visual and material culture. Examination of German discourse within the broader European context, and of similarities, differences, and continuities between medieval and modern constructs. Does not count toward German major or minor. LEC.

GERM 352. Business German: Deutsch Fur Den Beruf. 3 Hours. H/W.
Extensive practice in business communication: terminology, texts and correspondence, oral practice in business situations. Not open to native speakers of German. Prerequisite: GERM 202 or placement by examination. LEC.

GERM 353. German Conversation. 3 Hours. H/W.
Further development of practical conversational skills for students with intermediate proficiency in German. Discussion of topics from everyday German life and current affairs, based on German newspapers and magazines. May be repeated but counts only once toward the major or minor. Not open to native speakers of German. Prerequisite: GERM 202. LEC.

GERM 375. Topics in Film of German-Speaking Europe: ____. 3 Hours. H.
Examination of topics such as Expressionism, Turkish-German culture in contemporary German film, popular filmmaking, post-unification film, German literature as film, German film and national identity. Topics and periods vary. Prerequisite: GERM 302. LEC.

GERM 400. Introduction to German Literary Masterpieces. 3 Hours. H/W.
For students enrolled in the KU Summer Language Institute in Germany. Selected works of major German Language writers of the 19th and 20th centuries. Not open to native speakers of German. Prerequisite: GERM 302. LEC.

GERM 401. Advanced German I. 3 Hours. H.
Continuation of GERM 302. Expansion and refinement of proficiency in German (speaking, listening, reading, writing), increased understanding of German grammatical structures, development of a more sophisticated vocabulary, and introduction to stylistics through discussion and analysis of literary and nonliterary texts. Students successfully completing
GERM 401 may take all other GERM courses at the 400 and 500 levels. Prerequisite: GERM 302. LEC.

**GERM 402. Advanced German II. 3 Hours.**
Continuation of GERM 401. Development of advanced proficiency in German through analysis and discussion of literary and nonliterary texts and practice in advanced composition. Emphasis in both discussions and papers on style and rhetoric and on developing skill in textual analysis. Focus on advanced German grammar and on style and idiomatic expression in spoken and written German. Prerequisite: GERM 401. LEC.

**GERM 411. German Culture 1150-1750. 3 Hours. AE61 / H.**
Exploration of major cultural periods and movements within the framework of historical and political change, with investigation of themes such as nation and national identity, founding myths, geography, and language. Study of forms of culture in German-speaking Europe, including visual art, music, literature, architecture, and the press. Prerequisite: GERM 316 and GERM 401. LEC.

**GERM 412. German Culture 1750-Present. 3 Hours. AE61 / H.**
Exploration of major cultural periods and movements 1750-present within the framework of historical and political change, with investigation of themes such as nation and national identity, founding myths, geography, and language. Study of forms of culture in German-speaking Europe, including visual art, music, literature, architecture, and the press. Prerequisite: GERM 316 and GERM 401. LEC.

**GERM 453. Investigation and Conference: ______. 1-3 Hours. H/W.**
Independent study and directed reading on special topics. Permission of the instructor who will supervise the student's work is required. Not open to native speakers of German. IND.

**GERM 462. The German Business Environment. 3 Hours. H/W.**
Introduction to German business practices, including basic information about German economic and corporate life. Especially designed for students intending to participate in an internship with a German company and those who wish to enhance their knowledge of basic business German. Taught in German. Not open to native speakers of German. Prerequisite: One 300-level German course. LEC.

**GERM 475. Topics in German Studies: ______. 3 Hours. H.**
Exploration of cultural forms such as literature, film, philosophy, social institutions, linguistics, the arts, and the press. Examination of how cultural meaning is produced and interpreted. Topics vary, and course may address topics across a narrow or broad time frame. May be repeated if content varies. Prerequisite: GERM 316 and GERM 401. LEC.

**GERM 480. Literature and Culture of German-Speaking Europe 1150-1750. 3 Hours. AE61 / H.**
Exploration of medieval and early modern literature within the framework of major cultural movements and historical, political, and economic change. Prerequisite: GERM 316 and GERM 401. LEC.

**GERM 481. Literature and Culture of German-Speaking Europe 1750-1830. 3 Hours. AE61 / H.**
Exploration of literature within the framework of major cultural movements and historical, political, and economic change. Prerequisite: GERM 316 and GERM 401. LEC.

**GERM 482. Literature and Culture of German-Speaking Europe 1830-1918. 3 Hours. AE61 / H.**
Exploration of literature within the framework of major cultural movements and historical, political, and economic change. Prerequisite: GERM 316 and GERM 401. LEC.

**GERM 483. Literature and Culture of German-Speaking Europe 1918-Present. 3 Hours. AE61 / H.**
Exploration of literature within the framework of major cultural movements and historical, political, and economic change. Prerequisite: GERM 316 and GERM 401. LEC.

**GERM 501. Advanced German III. 3 Hours. H.**
Focus on usage-based grammar of contemporary German. Extensive reading and analysis of grammatical structures in context and integration of form, meaning, and use. Exploration of grammatical structures using contemporary electronic textual analysis tools. Prerequisite: GERM 402. LEC.

**GERM 550. German Language Seminar: History of the German Language. 3 Hours. H.**
Introduction to basic concepts of German philology and historical linguistics and exploration of the development of a national German language. Prerequisite: GERM 316 and GERM 401. LEC.

**GERM 560. German Language Seminar: Structure of the German Language. 3 Hours. H.**
This course provides an overview of the structure of modern standard German. Students will explore different levels of the linguistic system of German (including phonology, morphology, and syntax) and complete practical exercises. Prerequisite: GERM 316 and GERM 401. LEC.

**GERM 575. Topics in Genre: ______. 3 Hours. H.**
Study of the definition, style, form, and content of a specific literary genre in German-language literature and the social, cultural, political, and economic factors that led to its emergence. Consideration of the genre's suitability for particular writers or periods. Topic and period vary. May be repeated if content varies. Prerequisite: GERM 316 and GERM 401. LEC.

**GERM 579. Investigation and Conference: ______. 1-3 Hours. AE61 / H/W.**
Independent study and directed reading on special topics. Permission of the instructor who will supervise the student's work required. Prerequisite: GERM 316 and GERM 401. LEC.

**GERM 580. Senior Capstone Course: German-Speaking Europe Today. 3 Hours. AE61 / H.**
Focus on synthesizing students' knowledge of the history, culture, and politics of German-speaking Europe 1945-present. Consideration of scholarly articles, journalism, essays, literary texts, film, and the arts on topics including cultural identity in post-unified Germany; European integration; current debates and controversies; political parties and leading political figures; role of literature, film, music, visual arts, media, and popular culture; role of universities. Required of all German majors in senior year. Prerequisite: GERM 316, GERM 401, and senior standing. LEC.

**GERM 598. Research for Departmental Honors. 3 Hours. H.**
Research for a departmental honors project, on a topic chosen in conjunction with the faculty advisor. Emphasis on independent study and writing. Open to students with previous coursework in German at the 400 level, an overall 3.0 GPA, and at least a B+ average in advanced work in German. Prerequisite: GERM 316, GERM 401, senior standing, and permission of Undergraduate Advisor. LEC.

**GERM 599. Departmental Honors Project. 3 Hours. H.**
Continuation of GERM 598. Course consists of completion of Departmental Honors project. Quality of project determines whether student receives credit only or Honors in German. Prerequisite: GERM 598. LEC.
GERM 614. Course in Representative Authors: _____. 3 Hours. AE61 / H.
Readings and discussions in German of selected literary works by a major author (e.g., Goethe, Heine, Fontane, Brecht, Kafka, Grass, etc.). May be repeated. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416 and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent. LEC.

GERM 616. Topics in German Literature: _____. 3 Hours. AE61 / H/W.
Readings and discussions in German of selected literary works on a particular topic or theme (e.g., nature, women, art and literature, etc.). May be repeated. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416, and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent. LEC.

GERM 618. Topics in German Language and Linguistics: _____. 3 Hours. AE61 / H/W.
Readings and discussions in German in an area of specialized language or linguistic study (e.g., lexical fields, modern German dialects, etc.). May be repeated. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416, and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent. LEC.

GERM 620. Topics in German Culture and Folklore: _____. 3 Hours. AE61 / H/W.
Readings and discussions in German on some aspect of German culture or folklore, including Landeskunde (study of contemporary Germany). May be repeated. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416, and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent. LEC.

GERM 626. Idiomatic Usage in Modern Colloquial and Literary German. 3 Hours. AE61 / H/W.
Practical exercises in the systematic study of idioms and synonyms, designed to foster a more discriminating and effective usage of German. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416 and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent. LEC.

GERM 628. Translation into German (Advanced). 3 Hours. AE61 / H/W.
Exercises in the translation of expository and stylistically sophisticated texts from various fields. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416 and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent. LEC.

GERM 630. Advanced German Grammar. 3 Hours. AE61 / H/W.
Recommended for students intending to teach German. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416 and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent. LEC.

GERM 632. Deutscher Stil (Advanced German Composition). 3 Hours. AE61 / H/W.
Training in writing reports and seminar papers in German. Recommended for students intending to do graduate work in German. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416 and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent. LEC.

GERM 681. Language Teaching for Oral Proficiency. 1 Hour. AE61 / U.
A summer course designed principally for secondary school language teachers. Provides an orientation to proficiency-based models in foreign language instruction, national standards in the rating of foreign language proficiency, and curriculum development sessions which address issues of articulation in foreign language curricula. (Not applicable toward a major or graduate degree in German.) (Same as FREN 681 and SPAN 681.) LEC.

GERM 700. Introduction to Graduate Studies in German. 3 Hours.
An introduction to the skills required of students enrolled in graduate degree programs in German Studies; areas covered include 1) introduction to literary theory and criticism, 2) bibliography and research methods, including database management software, 3) preparation and presentations of a research/conference paper, 4) technology training, including web design, on-line portfolio, and digital humanities, and 5) professional ethics and awareness of the academic market and alternative careers. We will also be working on practical, professionally useful goals, such as how to (better) make use of technology, how to create a CV and modify it for different positions, how to write an abstract, and how to produce a conference paper. Course requirements will include a variety of smaller assignments and two larger projects, a web-based professional portfolio and an 8 to 10-page conference paper. LEC.

GERM 701. Introduction to the Study of Literature. 3 Hours.
Introduction to methods of literary research and presentation of seminar papers. Exercises in the use of basic guides to the study of German language and literature, in the documentation of scholarly research, and in the writing of interpretive essays, based on reading and discussion of selected works from different periods of the departmental "Basic Reading List. LEC.

GERM 703. Methods of Literary Criticism. 3 Hours.
Differentiation of critical methods. Exercises in textual criticism. LEC.

GERM 704. German Stylistics. 3 Hours.
Stylistic analysis of literary texts; writing in German. LEC.

GERM 705. German Phonetics. 3 Hours.
A systematic study of German phonetics. Prerequisite: Graduate standing or consent of instructor. LEC.

GERM 710. Workshop for M.A. Students. 1 Hour.
Discussion of policies in the M.A. program, examinations, thesis proposals, writing of theses, grant proposals, conference presentations, publications of scholarship, and entrance into the academic job market. Required of all M.A. students in the first year in the program. Does not count toward completion of 30 hours of course work for the M.A. RSH.

GERM 711. History of the German Language. 3 Hours.
A comprehensive introduction to the basic concepts of German philology and various aspects of historical linguistics, including the nature of language and linguistic change, discoveries of the pioneer philologists of the 19th century regarding the prehistory of German, and the beginnings of a national German language. LEC.

GERM 712. The Structure of Modern Standard German. 3 Hours.
A comprehensive introduction to the structure and usage of contemporary German, including phonetics, phonology, morphology, syntax, text linguistics, semantics, pragmatics, and language variation. Students will listen to lectures, read texts on German linguistics, participate in discussions, and work extensively on linguistic problems involving German. LEC.

GERM 716. Topics in German Literature: _____. 3 Hours.
Intensive study of a selected topic in German literature. May be repeated. Offered only in conjunction with GERM 616 when taught by a Max Kade Distinguished Visiting Professor. Graduate students will be assigned additional work. LEC.

GERM 718. Topics in German Language and Linguistics: _____. 3 Hours.
Intensive study of a selected topic in German language and linguistics. May be repeated for credit. LEC.
GERM 721. Introduction to Middle High German Literature. 3 Hours.
The elements of Middle High German as required for reading medieval
texts in the original. Intensive reading and literary study of at least one text
in full. LEC.

GERM 722. Early Modern Period. 3 Hours.
Reading and discussion of major literary works of the period; combined
with lectures and background readings on literary, cultural, and political
history. LEC.

GERM 734. Age of Goethe. 3 Hours.
Reading and discussion of major literary works in the period; combined
with lectures and background readings on literary, cultural, and political
history. LEC.

GERM 736. Post-Romantic Nineteenth Century. 3 Hours.
Reading and discussion of major literary works in the period; combined
with lectures and background readings on literary, cultural, and political
history. LEC.

GERM 738. Twentieth Century. 3 Hours.
Reading and discussion of major literary works in the period; combined
with lectures and background readings on literary, cultural, and political
history. LEC.

GERM 740. Introduction to the Culture of German-Speaking Central
Europe. 3 Hours.
An introduction to major cultural traditions, currents, and specific aspects
that shaped and continue to characterize modern Germany, Austria and
Switzerland. LEC.

GERM 751. Topics in German Studies: _____ . 3 Hours.
Course covers key topics in German Studies and represents the expertise
of faculty in the department as well as department-affiliated faculty. Topics
will vary from semester to semester and instructor to instructor to allow
flexibility for in-depth analysis of particular topics. May be repeated as
topics vary. LEC.

GERM 753. Investigation and Conference: _____ . 1-6 Hours.
To be taken only in exceptional cases. Permission of the instructor who
will supervise the student's work is required. RSH.

GERM 754. Studies in Humanism, Renaissance, and Reformation
Literature: _____ . 3 Hours.
LEC.

GERM 755. Studies in Baroque Literature: _____ . 3 Hours.
LEC.

GERM 756. Studies in Enlightenment Literature: _____ . 3 Hours.
LEC.

GERM 760. Studies on Writers of the Age of Goethe: _____ . 3 Hours.
LEC.

GERM 762. Studies in Romanticism: _____ . 3 Hours.
LEC.

GERM 764. Studies in the Literature of the 19th Century: _____ . 3
Hours.
LEC.

GERM 766. Studies in Literature since 1890: _____ . 3 Hours.
LEC.

GERM 800. Seminar: Teaching German as a Second Language. 3
Hours.
Introduction to selected aspects of second-language acquisition,
foreign-language pedagogy, and contrastive grammar, with the major
concentration on practical guidance in teaching elementary German, in
test preparation and grading, and in the use of equipment. LEC.

GERM 801. Practicum in GTAs. 1 Hour.
Discussion of matters relating to the teaching of German in specific
courses. Required of all GTAs in each semester of teaching, unless
enrolled in GERM 800. Does not count toward completion of 30 hours of
course work for the M.A. or 27 hours of course work for the Ph.D. IND.

GERM 822. Survey of Medieval German Literature. 3 Hours.
Text-oriented study of the literature of 750-1500 with selected readings in
the original and in translation. Prerequisite: GERM 721. LEC.

GERM 823. Readings in Middle High German Epics: ____. 3 Hours.
Reading and literary analysis of one of the following: Nibelungenlied, Erec
and Iwein, Tristan, Parzival. Prerequisite: GERM 721. LEC.

GERM 824. Readings in Middle High German Lyrics. 3 Hours.
Reading and literary analysis of one of the following: Minnesangs
Fruehling, Walther von der Vogelweide. Prerequisite: GERM 721. LEC.

GERM 851. Studies in Germanic Philology: ____. 3 Hours.
Topics to be announced. Emphasis on studies in etymology, semantics,
lexicography, medieval dialects, linguistic theories. Prerequisite: GERM
711. LEC.

GERM 852. Special Topics in Literature: ____. 3 Hours.
Prerequisite: GERM 701. LEC.

GERM 854. Studies in the Works of: ____. 3 Hours.
In-depth study of the work of a major author in German literature.
Prerequisite: GERM 701. LEC.

GERM 855. Introduction to German Applied Linguistics. 3 Hours.
Introduction to theories and topics in German applied linguistics. SEM.

GERM 860. Introduction to Modern German Dialects. 3 Hours.
Introduction to modern German dialects, methods of dialect research and
aspects of linguistic assimilation and loss as well as a survey of German-
American dialects. Prerequisite: Permission of instructor required. SEM.

GERM 898. Master's Project. 3 Hours.
Faculty directed project that satisfies the requirements for the degree of
Master of Arts in German Studies. Prerequisite: Restricted to German
Studies MA students. Prerequisite: Restricted to German Studies MA
students. RSH.

GERM 899. Master's Thesis. 3 Hours.
May not be repeated. THE.

GERM 900. Workshop for Ph.D. Students. 1 Hour.
Discussion of policies in the Ph.D. program, research specializations,
examinations, dissertation proposals, writing of dissertations, grant
proposals, conference presentations, publication of scholarship, and
entrance into the academic job market. Required of all Ph.D. students
in the first year in the program. Does not count toward completion of 27
hours of course work for the Ph.D. LEC.

GERM 901. Gothic. 3 Hours.
Reading of selected Gothic texts. Historical and descriptive study of
Gothic phonology and grammar, with an introduction to comparative
Germanic grammar. Prerequisite: GERM 711. LEC.

GERM 902. Old Saxon. 3 Hours.
Introduction to the elements of its grammar and discussion of its role in
the Germanic family of languages. Selected readings from the Heliand
and discussion of the entire work. Prerequisite: GERM 711. LEC.

GERM 903. Old High German. 3 Hours.
Reading and discussion of selected prose texts and poetic documents;
phonological and grammatical features of the Old High German dialects.
Prerequisite: GERM 711. LEC.
GERM 904. Gothic and Its Closest Relatives. 3 Hours.
A survey of the earliest Germanic languages with an emphasis on the comparative phonology and grammar of Gothic, Old High German, and Old Saxon as well as the reading of selections of major texts in those three language. LEC.

GERM 951. Seminar in Germanic Philology: _____. 3 Hours.
LEC.

GERM 952. Seminar in Medieval German Literature: _____. 3 Hours.
LEC.

GERM 953. Investigation and Conference: _____. 1-6 Hours.
To be taken only in exceptional cases. Permission of the instructor who will supervise the student’s work is required. RSH.

GERM 954. Seminar in Humanism, Renaissance, and Reformation Literature: _____. 3 Hours.
LEC.

GERM 955. Seminar in Baroque Literature: _____. 3 Hours.
LEC.

GERM 956. Seminar in Enlightenment Literature: _____. 3 Hours.
LEC.

GERM 960. Seminar on Writers of the Age of Goethe: _____. 3 Hours.
LEC.

GERM 962. Seminar in Romanticism: _____. 3 Hours.
LEC.

GERM 964. Seminar in the Literature of the 19th Century: _____. 3 Hours.
LEC.

GERM 966. Seminar in Problems in Literature since 1890: _____. 3 Hours.
LEC.

GERM 967. Seminar in Special Topics: _____. 3 Hours.
LEC.

GERM 999. Doctoral Dissertation. 1-10 Hours.
THE.

HNGR 103. Survival Hungarian. 3 Hours. U.
Practical training for people intending to live, study, travel, or work in Hungary. Focus on conversational skills. Intensive practice in speaking and listening, with vocabulary about Hungarian geography, culture, and business. Introduction to basic grammar. Not for native speakers LEC.

HNGR 104. Elementary Hungarian I. 5 Hours. U.
Essentials of grammar, practice in speaking, reading, and writing Hungarian. Five class meetings per week. Not open to native speakers of Hungarian. LEC.

HNGR 108. Elementary Hungarian II. 5 Hours. U.
Continuation of HNGR 104. Structured grammar review, composition, conversation, and reading. Five class meetings per week. Not open to native speakers of Hungarian. Prerequisite: HNGR 104 or equivalent. LEC.

HNGR 212. Intermediate Hungarian I. 3 Hours. U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Hungarian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

HNGR 216. Intermediate Hungarian II. 3 Hours. U.
A continuation of HNGR 212. Structured grammar review, composition, conversation, with readings of literary and cultural texts. Three class meetings per week. Not open to native speakers of Hungarian. Prerequisite: HNGR 216 or equivalent. LEC.

HNGR 453. Investigation and Conference: _____. 1-3 Hours. U.
Independent study and directed readings on special topics. Permission of the instructor who will supervise the student’s work is required. Not open to native speakers of Hungarian. Prerequisite: HNGR 216. IND.

NORW 104. Elementary Norwegian I. 5 Hours. U.
Essentials of grammar, practice in speaking, reading, and writing Norwegian. Five hours of recitation per week. Not open to native speakers of Norwegian. LEC.

NORW 108. Elementary Norwegian II. 5 Hours. U.
Continuation of grammar; practice in conversation, composition, and reading. Five hours of recitation per week. Not open to native speakers of Norwegian. Prerequisite: NORW 104 or permission of instructor. LEC.

NORW 212. Intermediate Norwegian I. 3 Hours. U.
A continuation of NORW 108. Structured grammar review, composition, conversation with readings of literary and cultural texts. Not open to native speakers of Norwegian. Prerequisite: NORW 108 or permission of instructor. LEC.

NORW 216. Intermediate Norwegian II. 3 Hours. U.
A continuation of NORW 212. Structured grammar review, composition, conversation with readings of literary and cultural texts. Not open to native speakers of Norwegian. Prerequisite: NORW 212 or permission of instructor. LEC.

SCAN 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Scandinavian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

SCAN 453. Investigation and Conference: _____. 1-3 Hours. U.
Independent study and directed reading on special topics. Prerequisite: Permission of instructor. IND.

SCAN 560. Scandinavia Past and Present. 3 Hours. H.
This course presents a historical survey of Denmark, Finland, Iceland, Norway and Sweden. In a comparative framework, the course focuses on a variety of central aspects that shaped Scandinavia from the Viking Age to the present. LEC.

SCAN 570. Scandinavian Life and Civilization. 3 Hours. H/W.
This course is designed to impart a general knowledge of life in Denmark, Finland, Iceland, Norway, and Sweden, with emphasis on social and cultural conditions, against a geographical and historical background, from the Viking age to the present. Slides and other illustrated materials. (Same as EURS 510.) LEC.
Scan 660. Representative Authors in English. 3 Hours. H/W.
Intensive study of one or more major authors from the literatures of Scandinavia. May be repeated. LEC.

Scan 661. Topics in Scandinavian Languages and Linguistics: _____ 3 Hours.
Intensive study of a selected topic in Scandinavian languages and linguistics. The course deals with the linguistic analysis of language rather than the acquisition of a particular language. May be repeated. Prerequisite: A course in linguistics. LEC.

Scan 753. Investigation and Conference: _____. 1-3 Hours.
Independent study and directed reading on special topics. Permission of the instructor is required. RSH.

Scan 906. Old Norse. 3 Hours.
Introduction to the grammar and reading of the prose literature of the "saga-age" (1100-1350). Varied selections from the literature provide the context in which the language is discussed. LEC.

Scan 907. Readings in Old Norse Literature. 3 Hours.
Intensive discussion of a single longer saga or several shorter works, or a combination of these on a single theme. Dialectal differences between W. Norse and older Germanic dialects will be noted. Prerequisite: Scan 906. LEC.

Swed 104. Elementary Swedish I. 5 Hours. U.
Essentials of grammar, practice in speaking, reading, and writing Swedish. Five hours of recitation per week. Not open to native speakers of Swedish. LEC.

Swed 105. Elementary Swedish I, Honors. 5 Hours. U.
Similar to Swed 104 with additional work to expand the student's cultural context and understanding. Not open to native speakers of Swedish or students who have completed Swed 104. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

Swed 108. Elementary Swedish II. 5 Hours. U.
Continuation of grammar; practice in conversation, composition, and reading. Five hours of recitation per week. Not open to native speakers of Swedish. Prerequisite: Swed 104 or permission of instructor. LEC.

Swed 109. Elementary Swedish II, Honors. 5 Hours. U.
Course content similar to Swed 108, with additional cultural study. Meets 5 days a week. Not open to native speakers of Swedish. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

Swed 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Swedish. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

Swed 212. Intermediate Swedish I. 3 Hours. U.
A continuation of Swed 108. Structured grammar review, composition, conversation with readings of literary and cultural texts. Not open to native speakers of Swedish. Prerequisite: Swed 108 or permission of instructor. LEC.

Swed 213. Intermediate Swedish I, Honors. 3 Hours. U.
Course content similar to Swed 212, with additional cultural study. Three class meetings per week. Not open to native speakers of Swedish. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.
EPRS 435. Islam in Europe. 3 Hours. AE42 / H.
Investigation of Muslim migration into Europe and day-to-day interactions of Muslims with other European populations. This is an integrated study of historical, political, religious and economic influences that determine Muslim experience in contemporary European culture. (Same as HWC 435.) LEC.

EPRS 500. Seminar in European Studies. 3 Hours. AE42/AE61 / H.
Provides an interdisciplinary approach to the study of modern European civilization. By discussing both classic and contemporary, controversial readings each week and writing several papers during the semester, students acquire an understanding of the development of modern European culture and society and Europe's contemporary problems. Topics for discussions and papers are drawn from the following subjects: the economic and political integration of European states; modernism and anti-modernism in European culture; imperialism, migration, and ethnic and racial division in European society; democracy versus dictatorship; American-European relations; mass culture, urban development, and the welfare state; and contrasts and comparisons between European Cultures--East and West, North and South. Seminar discussions are led by invited European Studies faculty as well as the instructor or instructors. Required of all European Studies majors. Prerequisite: Junior standing or consent of instructor. LEC.

EPRS 501. Senior Thesis in European Studies. 3 Hours. AE61 / H.
European Studies majors will do research and write a substantial paper on a topic in the culture, economy, history, or politics of Europe. Topics will be approved by the European Studies Committee. Students will work with an advisor chosen from among the European Studies faculty and with the European Studies Coordinator. The majority of the students' work will be done independently with their advisors, but students will meet with the European Studies Coordinator several times a week to report on their progress and present their final drafts. Required of all European Studies majors. Prerequisite: Completion of EPRS 500 and 15 hours toward the Co-Major. IND.

EPRS 502. Senior Honors Thesis in European Studies. 3 Hours. AE61 / H.
Open to European Studies majors doing their senior thesis for Honors. Prerequisite: Completion of EPRS 500, 15 hours toward the Co-Major, and approval of Honors thesis by European Studies Committee. Completion of or concurrent enrollment in EPRS 501. IND.

EPRS 503. Europe Today. 3 Hours. S.
This intensive, interdisciplinary seminar focuses on current social, political, and economic changes in Europe. Topics include European integration and the European Union, the conflict between nationalism and European consciousness, NATO and U.S.-European relations, and international business in Europe. The seminar will include guest lectures from an international array of scholars, political officials, and business representatives, as well as site visits to their institutions and companies. The seminar takes place in Brussels, Belgium, and enrollment is restricted to students accepted in the KU Summer Institute for European Studies study abroad program. LEC.

EPRS 505. Studies in Exile Literature. 3 Hours. H.
A multidisciplinary study of selected literary, scholarly, and creative works produced by those Europeans forced into exile, emphasizing their impact on culture and society both in Europe and in those countries in which the exiles resided. Examples: exile during the Nazi dictatorship in Germany (1933-1945), during Cold War crises (Berlin 1960, Prague 1968). LEC.

EPRS 506. Culture and Politics of the Cold War in Western Europe. 3 Hours. H.
An interdisciplinary overview of the Cold War period (1945-1985) focusing on Western European dimensions of the problem, based on the view that the Cold War structured political institutions, cultures, and societies in enduring ways that continue to be relevant today. LEC.

EPRS 507. Research in European Collections. 1-3 Hours. H.
This course allows students in the European Studies Co-Major and related disciplines to receive credit for research related to European Collections in one or more of the following institutions: Watson and Spencer Research Libraries, the Dole Institute, the Eisenhower and Truman Presidential Libraries, the U.S. Army Combined Arms Research and Foreign Military Studies Office at Fort Leavenworth, the Linda Hall Library in Kansas City, and the Winston Churchill Collection at the Westminster College Library in Fulton, Missouri. May be taken in place of EPRS 501 by European Studies Honors Students if taken for three credit hours. Permission of instructor necessary. IND.

EPRS 508. Politics and Economics of Cultural Production in Western Europe. 3 Hours. H.
Artists and intellectuals in their relation to state and society. This course is designed to introduce students (1) to the role European artists and intellectuals have often played in the arena of politics and (2) to the privileged place cultural production (arts, literature, media) occupies in the formation of various European identities and economies. LEC.

EPRS 509. Introduction to the Study of Southern European Societies. 3 Hours. H.
Social, historical, and economic study of Southern European societies with emphasis on modern period. Relevant to the study of European integration and EU enlargement. Consideration of the distinctive southern Mediterranean societies from the perspective of their collective identity as a regional economic and geopolitical bloc. LEC.

EPRS 510. Scandinavian Life and Civilization. 3 Hours. H.
This course is designed to impart a general knowledge of life in Denmark, Finland, Iceland, Norway, and Sweden with emphasis on social and cultural conditions, against a geographical and historical background, from the Viking Age to the present. Slides and other illustrated materials. (Same as SCAN 570.) LEC.

EPRS 511. Topics in European Studies: _____. 3 Hours. H.
A study of significant themes, movements, or problems in European history, literature, politics, society, or culture. May also relate European issues to issues in other world areas (Africa, North America, Asia, etc.) May be repeated for credit when topic varies. LEC.

EPRS 512. Irish Literature and Culture: _____. 3 Hours. H.
Study of topics in Irish literature and culture. Topics may focus on a particular genre, theme, historical period, or group of authors. May be repeated for credit as the topic changes. (Same as ENGL 530.) Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

EPRS 536. Economic Issues of the European Union. 3 Hours. S.
A survey of the economies of the European Union, with a focus on the economic development of the member states since World War II, and an examination of the various economic issues confronting them today. (Same as ECON 536) Prerequisite: ECON 104 or ECON 144. LEC.

EPRS 550. Classics of Peace Literature. 3 Hours. HL AE51/AE61 / H.
A study of influential proposals for world peace from Erasmus' The Complaint of Peace (1516) to the 1995 Hague Appeal for World Peace. Selected writings by such authors as Erasmus, Hugo Grotius, Jean-Jacques Rousseau, Immanuel Kant, Henry Thoreau, Henri Dunant, Berthe von Suttner, Woodrow Wilson, Mahatma Gandhi, and Martin
FARS 110. Elementary Farsi I. 5 Hours. U.
Vocabulary acquisition, pronunciation, grammar, and writing. Course includes reading of simple texts. Five hours of class per week. LEC.

FARS 120. Elementary Farsi II. 5 Hours.
Continuation of FARS 110. Vocabulary acquisition, pronunciation, grammar, and writing. Course includes reading of simple texts. Five hours of class per week. Prerequisite: FARS 110 or departmental permission. LEC.

FARS 210. Intermediate Farsi I. 3 Hours. U.
A continuation of FARS 120. Course emphasizes oral and written work in Farsi. Systematic review of grammar and introduction to reading in cultural texts. Prerequisite: FARS 120 or departmental permission. LEC.

FARS 220. Intermediate Farsi II. 3 Hours. U.
A continuation of FARS 210. Course emphasizes oral and written work in Farsi. Systematic review of grammar and introduction to reading in cultural texts. Prerequisite: FARS 210 or departmental permission. LEC.

FARS 310. Advanced Farsi I. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in Farsi. Readings from Farsi literature introduced. Prerequisite: FARS 220 or placement exam that establishes a level of proficiency in Farsi suited to Advanced Farsi I. LEC.

FARS 320. Advanced Farsi II. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in Farsi. Readings from Farsi literature introduced. Prerequisite: FARS 310 or placement exam that establishes a level of proficiency in Farsi suited to Advanced Farsi II. LEC.

FARS 530. Directed Study in Persian Culture and Literature: ____. 1-3 Hours. U.
This course is designed for students seeking proficiency in Farsi beyond FARS 320. The instructor directs the student through readings and materials in Farsi that add to the student's substantive knowledge of Iran and culture in the Farsi language. May be taken multiple semesters for credit with varying content. Prerequisite: FARS 320 and consent of instructor. LEC.

GIST 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Global International Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

GIST 201. Topics in: ____. 1-3 Hours. U.
An interdisciplinary study of international topics. Designed especially for freshmen and sophomores. May be repeated for credit if content varies. LEC.

GIST 202. Topics in South Asian Studies: ____. 1-3 Hours. U.
An interdisciplinary study of topics related to South Asia. Designed especially for freshmen and sophomores. May be repeated for credit if content varies. LEC.

GIST 203. Topics in Middle Eastern Studies: ____. 1-3 Hours. U.
An interdisciplinary study of topics related to the Middle East. Designed especially for freshmen and sophomores. May be repeated for credit if content varies. LEC.

GIST 250. Introduction to Globalization. 3 Hours. S.
Along with an overview of the origins and historical development of globalization, the course addresses various aspects of the growth of transnational economic, cultural, institutional, and political interconnections, including the implications of rapidly-developing information technology and social media, international security in a transnational world, and the issues related to the movement of goods, people (immigration), images, ideas, and institutional forms across national borders. LEC.

GIST 301. Introduction to Global and International Studies. 3 Hours. GE11 / S.
This course provides an overview to the major ways and themes involved in the study of world cultures, politics, and societies as applied by disciplines in the social sciences. Topics such as the construction and maintenance of cultures, comparative political systems, global and regional economies, popular culture, gender and the environment will be covered through their manifestations in particular regional and global contexts. LEC.
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GIST 320. Love, Sex and Marriage in India. 3 Hours. H.
This course addresses diverse aspects of the philosophies and expressions of intimacy and pleasure as found in India. Using old and new literature, including from the Kamasutra, as well as media, we examine the following: how and why in ancient times sensual pleasure was another path for ultimate bliss; how perspectives and traditions of intimacy have changed over time; diverse types of marriages; the culture and practice of arranged marriages; same-sex intimacy; and universal concepts of love. LEC.

GIST 325. Peoples and Cultures of South Asia. 3 Hours. S.
This course provides an introduction to the diversity of peoples in South Asia, including India, Pakistan, Nepal, Bangladesh and Bhutan. The particular cultures and language of the indigenous peoples in the region are highlighted through academic sources and the direct study of reproductions of these cultures in literature and film. LEC.

GIST 350. Study Abroad Topics in: ____. 1-5 Hours. U.
This course is designed for the study of special topics in global and international studies at the junior/senior level. Course work must be arranged through the KU Office of Study Abroad and approved by a faculty adviser in Global and International Studies. May be repeated for credit if content varies. LEC.

GIST 424. Nationalism(s) in Turkey. 3 Hours. S.
This course analyzes the major variations in nationalist paradigms existing in contemporary Turkey, including conservative nationalism, secular nationalism, religious (Islamic) nationalism, and Kurdish nationalism. Through the lens of seminal theories on the origins, development, and types of nationalism and the relevant historical background of the Turkish Republic, we explore how these competing visions of "the nation" and "homeland" have changed, fragmented, and manifested themselves in everyday Turkish politics and society. LEC.

GIST 493. Directed Readings. 3 Hours. U.
Individual and supervised readings in a selected area of international studies. Course is repeatable with permission of the program director. LEC.

GIST 495. Global Internship. 3 Hours. U.
Semester-long internship with a business or organization located abroad or that provides a global or international working context for the interning student. A term paper is required. Prerequisite: Consent of instructor. FLD.

GIST 501. Topics in: ____. 1-3 Hours. U.
An interdisciplinary study of international topics. Designed especially for juniors and seniors. May be repeated for credit if content varies. LEC.

GIST 502. Advanced Topics in South Asian Studies: ____. 1-3 Hours. U.
An interdisciplinary study of topics related to South Asia. May be repeated for credit if content varies. Prerequisite depends on specific topic offered. LEC.

GIST 503. Advanced Topics in Middle East Studies: ____. 3 Hours. U.
An interdisciplinary study of topics related to the Middle East. May be repeated for credit if content e depends on specific topic offered. LEC.

GIST 530. Politics and Society in the Contemporary Persianate World. 3 Hours. S.
This course examines the major currents of political developments and their linkages with religion, culture and civil society in Turkey, Iran, Afghanistan, Pakistan and India since the late nineteenth century. During the "pre-modern" period, all these countries formed part of "the Persianate world," a region that extended from the Iranian plateau to the Balkans, Central Asia and the Indian subcontinent, mostly under the Turkic administrations, and tied together by trade, Islam, and Persian as the lingua franca. The dissemination of modern Western political thought and nationalism during the colonial period led to nation-states and the end of the linguistic domination of Persian in the region. Though each of these nation-states ultimately took a different trajectory, they each were faced with similar challenges that offer the basis for interesting comparisons between them. This course explores the trajectories of these countries in regard to the relations between the state, religion, and politics, various strands of nationalism, pluralism, religious and ethnic minorities, social equality, and democratisation. Prerequisite: GIST 301 or POLS 150. LEC.

GIST 535. Literature and Society in the Contemporary Middle East. 3 Hours. H.
This course offers a general introduction to the modern Middle Eastern literatures in English translation. Through analyses of selected short stories and novels from Arabic, Turkish and Persian literature, the students develop an understanding of the issues that shape everyday life in the Contemporary Middle East. The course investigates issues of nation and national identity, war, ethnicity, class, religion, and gender and sexuality. We use a variety of paradigms, namely nationalist, Marxist, feminist, and Islamist, to provide a theoretical framework for discussion of the selected works. No prior knowledge of Arabic, Turkish or Persian language is needed. Prerequisite: GIST 301. LEC.

GIST 610. Interdisciplinary Methods for Global Contexts. 3 Hours. S.
An introduction to a variety of widely-employed quantitative and qualitative research methods in the social sciences and humanities, including methods such as statistical analysis, ethnography, and content analysis. LEC.

GIST 624. Social Movements in the Middle East. 3 Hours. S.
Using the major theories and approaches comparatively applied to social movements around the world, this course critically analyzes historical and existing cases of social movements and "nonmovements" in the Middle East. We cover examples of Islamist (and post-Islamist), women's, nationalist, democratic, youth and labor movements and their impact on the region. Contextual factors like technology and social networking, regime type, institutions, and socioeconomic structures are also considered for their role in supporting or inhibiting collective action. Prerequisite: GIST 301 or POLS 150. LEC.

GIST 684. International Law: The State and the Individual. 3 Hours. S.
International law has assumed an increasingly significant role in international life. This course examines major issues in international law including (but not limited to): the changing status and role of the state; rights of minorities and self-determination; the environment; and human rights. The course examines the central questions and the relevant international legal principles associated with each issue. Prerequisite: POLS 170. LEC.

GIST 685. International Law: Laws of Armed Conflict. 3 Hours. S.
This course examines the principles, roles, and functions of international law in the conduct of war. As the course reviews the development and application of the basic rules of armed conflict, several current issues and conflicts are addressed including: the legitimate use of force; the proper definitions of combatants and civilians; actions that constitute war crimes, the legality of new weapons technology, and, if the laws of armed conflict apply to the current "war on terrorism." Prerequisite: POLS 170. LEC.

GIST 697. Diplomacy Lab. 1-3 Hours. S.
This course is designed to partner with an innovative program implemented by the US Department of State. Students enrolling in this course team up with a group of four or more students to address a real world problem posed by a State Department officer. The team, with the assistance of the instructor, engages in extensive and systematic
research to address the problem and presents their finding in a formal report presented to the State Department in the desired format. Throughout the semester, the students teleconference with the State Department officer posing the question and utilize their accumulated cultural, linguistic and research knowledge to tackle a real-life, global issue. Prerequisite: GIST 301. LEC.

GIST 698. Capstone Seminar. 3 Hours. AE61 / H.
A seminar designed to introduce students to the theory and practice of global and international studies. A research paper will be required. May not be repeated for credit. Prerequisite: 12 hours of junior/senior level and above courses that satisfy requirements for the major. LEC.

GIST 699. Capstone Seminar, Honors. 3 Hours. AE61 / H.
A seminar designed to introduce honors students to the theory and practice of global and international studies. A research paper will be required. May not be repeated for credit. Prerequisite: 12 hours of junior/ senior level and above courses that satisfy requirements for the major. LEC.

GIST 701. Approaches to International Studies. 3 Hours.
This course examines various approaches to the study of cultures, politics, and societies in their global and international contexts through the exploration of a series of exemplary works of global/international research from a variety of disciplines (eg. anthropology, sociology, political science, economics, geography, history, etc.). The course will cover the major contributions of these disciplines in their approaches to global questions and themes and will provide a multi-disciplinary framework within which students can begin exploring their own global and international research questions. The course also provides an introduction to the major regions and many of the themes that students will be able to specialize in during the course of the MA program. LEC.

GIST 702. Globalization. 3 Hours.
A central issue in international studies is globalization, the increasing interconnectedness of societies and economies. This course examines globalization from an historical and contemporary perspective. Major topics include (but are not necessarily limited to) the historical expansion of the West since 1500, the growth of international economic institutions, conflict among global cultures, the future of state sovereignty, and the challenges of economic integration. LEC.

GIST 703. The World Economy. 3 Hours.
An introduction to international trade and finance, theories of economic development, and international economic structures. Not appropriate for economics majors. LEC.

GIST 704. Global Cultures and Societies. 3 Hours.
Examination of the components of culture, economic and political anthropology, major global cultural areas, and the impact of cultural differences as expressed through language, literature, religion, thought, and motivation in cross-cultural communications. LEC.

GIST 705. Globalization in History. 3 Hours.
A study of the increasing interaction among world societies since 1500 and an investigation of the long-term developments behind current world problems. Major topics include Western expansion since 1500, the spread of state sovereignty, the formation of a world economy, and the spread of international institutions. Current issues will vary, but may include environmental crises, human rights, migration, free trade and the spread of consumer culture, ethnicity and nationalism, and international intervention within states. (Same as HIST 705.) LEC.

GIST 706. Comparative Governments. 3 Hours.
Survey of different governmental structures in the contemporary world and the ways these countries have confronted issues such as modernization and development, economic security, ethnic pluralism and conflict, and globalization. LEC.

GIST 710. Interdisciplinary Research Methods for Global Contexts. 3 Hours.
This course addresses the challenges for students engaged in research in an interdisciplinary and international context. The course will take issues for research and place them within the structure of a research design process, including formulation of a general question, the appropriation of theory, the grounding of a literature review, and the positing of a testable research question and/or hypothesis. Students will also be exposed to research methodologies and how these manifest themselves through the logic of the disciplines—such as anthropology, sociology, geography, political science, history and literature. With a final thesis project design in mind, students will be expected to be expected to be able to utilize the research tools of accessing secondary analytical data, archival research, SPSS, ArcView and methods such as survey construction, implementation, and analysis, interviews, content analysis, discource analysis, case study, and GIS. Prerequisite: GIST 701 or consent of instructor. LEC.

GIST 750. Topics in International Studies: ____. 3 Hours.
A study of one or more selected topics in international studies. Course may be taken more than once. LEC.

GIST 793. Directed Readings. 1-5 Hours.
Individual and supervised readings in a selected area of international studies. Course is repeatable with permission of the program director. LEC.

GIST 888. Contemporary China Studies. 3 Hours.
This course will review and analyze the current literature on China's social and political development, including a wide range of topics within political science. There is a rich body of literature within each topic such as civil society in China, legal reform, political culture, nationalism, gender issues, ethnicity, political behavior, elections, economic development, and inequality. This course will introduce key literature within each topic focusing on the debates among China scholars as well as how these debates fit in the general field of political science. (Same as EALC 888 and POLS 888.) Prerequisite: POLS 668 or permission of the instructor. LEC.

GIST 897. Examination Preparation. 1 Hour.
Independent study in preparation for the Comprehensive M.A. examination. Graded on satisfactory/unsatisfactory basis. May be repeated. LEC.

GIST 898. Thesis Writing. 3 Hours.
This course guides MA students through the crafting of their academic or professional thesis. The students begin the course with a literature review and data/research completed, and they will be directed through in-class workshops and deadlines with the intention to produce a full draft of their thesis. Students may choose to draft a thesis that fits either academic conventions for a similar body of research, or they may develop a body of research whose target would be a business or professional audience. Course is designed to assist students in the development of theses with varying methodologies, methods, and audiences on global and international topics. Prerequisite: GIST 710. THE.

GIST 899. Thesis. 1-6 Hours.
Enrollment for writing thesis for master's degree. THE.

HEBR 110. Elementary Israeli Hebrew I. 5 Hours. U.
A beginning course in modern Israeli Hebrew. Essentials of grammar, syntax and conversational practice: elementary reading and writing. Note: Students with other previous experience in Hebrew must take a placement exam. LEC.
HEBR 120. Elementary Israeli Hebrew II. 5 Hours. U.
A continuation of HEBR 110. Note: Students with other previous experience in Hebrew must take a placement exam. Prerequisite: HEBR 110. LEC.

HEBR 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Hebrew. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

HEBR 210. Intermediate Israeli Hebrew I. 3 Hours. U.
Further development of language skills: listening comprehension, oral efficiency, intermediate grammar and syntax, reading and writing. Note: Students with other previous experience in Hebrew must take a placement exam. Prerequisite: HEBR 120. LEC.

HEBR 220. Intermediate Israeli Hebrew II. 3 Hours. U.
A continuation of HEBR 210. Note: Students with other previous experience in Hebrew must take a placement exam. Prerequisite: HEBR 210. LEC.

HEBR 230. Biblical Hebrew. 3 Hours. U.
This course introduces students to the grammatical structure and vocabulary of biblical Hebrew. It includes basic biblical passages for students to translate into English and analyze. LEC.

HEBR 240. Biblical Hebrew II. 3 Hours. U.
This is a continuation of HEBR 230. It continues the study of the grammatical structure and vocabulary of biblical Hebrew, and includes biblical texts for students to translate and analyze. Prerequisite: HEBR 230 or permission of the instructor. LEC.

HEBR 340. Advanced Israeli Hebrew I. 3 Hours. U.
Advanced study of Modern Hebrew. This course is designed to strengthen linguistic skills, enrich vocabulary, and further the study of grammar and syntax. Not open to native speakers of Hebrew. Prerequisite: HEBR 220 or permission of the instructor. LEC.

HEBR 350. Advanced Israeli Hebrew II. 3 Hours. U.
Continued advanced study of modern Hebrew. Not open to native speakers of Hebrew. Prerequisite: HEBR 340 or permission of the instructor. LEC.

HEBR 395. Study Abroad Topics in Hebrew: ____. 3-6 Hours. H.
This course is designed for the study abroad of special topics in Hebrew at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

HEBR 410. Studies in Modern Hebrew Literature. 3 Hours. H.
An introduction to Hebrew literature from the nineteenth century to the present day. The course emphasizes the development of basic interpretive skills and the understanding of basic literary movements, genres, and concepts. Not open to native speakers of Hebrew. Prerequisite: HEBR 220 or equivalent. LEC.

HEBR 420. Studies in Modern Hebrew. 3 Hours. U.
This course is designed to help students achieve fluency in speaking, listening, and writing Modern Hebrew. Not open to native speakers of Hebrew. Prerequisite: HEBR 220 or equivalent. LEC.

HEBR 490. Independent Study. 1-3 Hours. U.
Intensive reading or research under faculty supervision. Not open to native speakers of Hebrew. Prerequisite: HEBR 220 or equivalent. IND.

HNDI 110. Beginning Hindi I. 5 Hours. U.
An introduction to modern standard Hindi that emphasizes acquisition of basic language skills (speaking, comprehension, reading and writing) through a combination of lecture, drill, and work with the Devanagari script. LEC.

HNDI 120. Beginning Hindi II. 5 Hours. U.
A continuation of Beginning Hindi I that builds on basic skills of speaking and comprehension, and the writing and reading of the Devanagari script developed in Beginning Hindi I. Prerequisite: HNDI 110 or placement exam that establishes a level of proficiency in Hindi suited to Beginning Hindi II. LEC.

HNDI 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Hindi. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

HNDI 210. Intermediate Hindi I. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in modern standard Hindi, with emphasis on grammar. Readings will be introduced from representative genres of Hindi literature. Prerequisite: HNDI 120 or placement exam that establishes a level of proficiency in Hindi suited to Intermediate Hindi I. LEC.

HNDI 220. Intermediate Hindi II. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in modern standard Hindi, with emphasis on grammar. Readings will be introduced from representative genres of Hindi literature. Prerequisite: HNDI 210 or placement exam that establishes a level of proficiency in Hindi suited to Intermediate Hindi II. LEC.

HNDI 301. Topics in Hindi Culture, Language and Literature: ____. 3 Hours. U.
Investigation of special topics on Hindi culture, language and literature at the undergraduate level. May be repeated for credit when topic varies. LEC.

HNDI 310. Advanced Hindi I. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in Hindi. Readings are introduced from representative genres of Hindi literature. Prerequisite: HNDI 220 or placement exam that establishes a level of proficiency in Hindi suited to Advanced Hindi I. LEC.

HNDI 320. Advanced Hindi II. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in Hindi. Readings are introduced from representative genres of Hindi literature. Prerequisite: HNDI 310 or placement exam that establishes a level of proficiency in Hindi suited to Advanced Hindi II. LEC.

HNDI 593. Directed Study in Hindi Culture and Literature: ____. 1-3 Hours. H.
This course is designed for students seeking proficiency in Hindi beyond HNDI 320. Instructor will direct the student through readings and materials in Hindi that will add to the students substantive knowledge of India and culture in the Hindi language. May be taken multiple semesters for credit with varying content. Prerequisite: HNDI 320, and consent of instructor. LAB.

JWSH 107. Living Religions of the West. 3 Hours. HR / H.
A basic introduction to the major religious traditions of the Near East, Europe, and the Americas, with an emphasis on their development through the modern period and their expressions in contemporary life. Not open to students who have taken REL 109. (Same as REL 107.) LEC.

JWSH 124. Understanding the Bible. 3 Hours. HR / H.
An introduction to the literature of the Bible, exploring the relationships among the various types of literature present and the function of each type in the history and religious life of the people who produced and used
JWSH 125. Understanding the Bible, Honors. 3 Hours. HR / H.
An introduction to the literature of the Bible, exploring the relationships among the various types of literature present and the function of each type in history and religious life of the people who produced and used them. Open only to students who have taken REL 125 or JWSH 125. (Same as REL 124.) LEC.

JWSH 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Jewish Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

JWSH 300. Topics in Jewish Studies: ______. 3 Hours. H.
Examination of special topics in Jewish Studies. May be repeated if topic varies. LEC.

JWSH 311. Narratives of Jewish Life. 3 Hours. HL AE42 / H.
The course focuses on the narratives through which Jews made sense of their lives under the impact of the forces of modernity, beginning in the "old world," and moving through the 19th century and into the 20th. The goal is to analyze how the imagination of Jewish writers was captured by the changes in social structures such as new educational, residential and occupational opportunities, leading to increased interactions with the gentile society. Students read and discuss literary works based in the shtetl in revolutionary Russia, and in America. We will also look at memoirs and letters written by ordinary Jews. All assigned texts will be in English. LEC.

JWSH 315. The Spanish Inquisition. 3 Hours. H.
A broad historical study of the Spanish Inquisition from 1478 to its afterlife in modern culture, including its use in political debates and its depiction in popular culture. Topics include anti-Semitism, the nature of the inquisitorial investigation, the use of torture, censorship and the relationship between the Inquisition, the Spanish monarchy and other religious and lay authorities. Taught in English. Will not count toward the religious and lay authorities. Taught in English. Will not count toward the Spanish major. (Same as HIST 325 and SPAN 302.) LEC.

JWSH 318. Jews and Slavs in Eastern Europe. 3 Hours. H.
Jews and Slavs have shared territory from the Middle Ages to the present day. The contact between these culturally and linguistically distinct groups have shaped many centuries of Eastern European history - from the extreme violence of the pogroms to long periods of peaceful coexistence and cooperation. "Jews and Slavs" examines the history and cultural geography of Slavic-Jewish contact from the perspectives of both groups. Through literature, film, journalism, and folklore, students learn about the profound influence Jews and Slavs have had on each other, the uneasy feelings that accompanied their interactions, and the creative and fascinating impact their interaction had on both cultures. (Same as SLAV 318.) LEC.

JWSH 321. Religion of Ancient Israel. 3 Hours. H.
A study of the development of the Hebrew Bible from its earliest stages of oral tradition to its canonization with an emphasis on the relationship of the historical, intellectual, and cultural contexts shaping that development. (Same as REL 311.) Prerequisite: REL 124 or JWSH 124 or permission of instructor. LEC.

JWSH 325. Introduction to Judaism. 3 Hours. H.
An introduction to Judaism as a set of modern intellectual, literary, and cultural practices that have shaped many centuries of Eastern European history - from the "old world," and moving through the 19th century and into the 20th. The goal is to analyze how the imagination of Jewish writers was captured by the changes in social structures such as new educational, residential and occupational opportunities, leading to increased interactions with the gentile society. Students read and discuss literary works based in the shtetl in revolutionary Russia, and in America. We will also look at memoirs and letters written by ordinary Jews. All assigned texts will be in English. LEC.

This course demystifies the Talmud, arguably the most central yet also the most mysterious text of rabbinic Judaism. Students are introduced to the scope, substance, styles, and major figures of the Talmud, and also learn how the text came into being over the course of several centuries. (Same as REL 326.) Prerequisite: REL 104, REL 107, or REL 124 or REL 125, or permission of the instructor. LEC.

JWSH 327. Jewish Secular Culture. 3 Hours. HL AE42 / H.
By examining the modern concept of Yiddishkeit (Jewishness), this course explores Jewish secularism as a set of modern intellectual, literary, and cultural practices that have shaped many centuries of Eastern European history - from the "old world," and moving through the 19th century and into the 20th. The goal is to analyze how the imagination of Jewish writers was captured by the changes in social structures such as new educational, residential and occupational opportunities, leading to increased interactions with the gentile society. Students read and discuss literary works based in the shtetl in revolutionary Russia, and in America. We will also look at memoirs and letters written by ordinary Jews. All assigned texts will be in English. LEC.

JWSH 335. History of Jewish Women. 3 Hours. H.
This course explores the history of Jewish women from antiquity to the twentieth century. It examines the historical constructions of women's gender roles and identities in Jewish law and custom as well as the social and cultural impact of those constructions in the context of the realities of women's lives in both Jewish and non-Jewish society. (Same as HIST 335, WGSS 335.) LEC.

JWSH 336. Jewish American Literature and Culture. 3 Hours. AE41 / H.
An examination of Jewish American literature and culture from the 17th century to the present. Materials may include a broad range of literary genres as well as folklore, music, film, and visual art. (Same as ENGL 336.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

JWSH 338. Languages of the Jews. 3 Hours. H.
From the beginning, Jewish history and culture is closely tied to language, from Hebrew and Aramaic to the languages of diaspora such as Yiddish and Ladino. Focusing on issues of language in society, this course will survey the languages spoken by the Jews throughout their long history in diverse communities around the world. We will learn about Hebrew as a spoken and a sacred language, examine how Jewish languages are born and die, and discuss the resurrection of Modern Hebrew in the state of Israel. All readings are in English. No prior knowledge of languages or linguistics is required. (Same as LING 338.) LEC.

JWSH 339. Languages of the Jews, Honors. 3 Hours. H.
Honors version of JWSH 338 or LING 338, Languages of the Jews. Prerequisite: Membership in the University Honors Program or consent of instructor. (Same as LING 339.) LEC.

JWSH 340. Topics in Modern Jewish Literature: ______. 3 Hours. H.
This course treats Jewish literature in English or English translation in the 20th and 21st centuries either as a broad survey or according to specific themes. May be repeated for credit. LEC.

JWSH 341. Hitler and Nazi Germany. 3 Hours. H/W.
An examination of the rise of Hitler and Nazism, beginning with the breakdown of 19th century culture in the First World War and continuing through the failure of democracy under the Weimar Republic. The course
will also discuss the impact of Nazism on Germany and how Nazism led to
the Second World War and the Holocaust. (Same as HIST 341.) LEC.

JWSH 343. The Holocaust in History. 3 Hours. H.
The systematic murder of the Jews of Europe by the Nazis during World
War II is one of the most important events of modern history. This course
studies the Holocaust by asking about its place in history. It compares
other attempted genocides with the Holocaust and examines why most
historians argue that it is unique. Other topics covered include the reasons
the Holocaust occurred in Europe when it did, the changing role of anti-
Semitism, and the effects of the Holocaust on civilization. The course
also discusses why some people have sought to deny the Holocaust. The
course concludes by discussing the questions people have raised about
the Holocaust and such issues as support for democracy, the belief in
progress, the role of science, and the search for human values which are
common to all societies. (Same as HIST 344.) LEC.

JWSH 344. Modern Jewish History. 3 Hours. H.
This course explores the complex of interactions between Jews, Judaism,
and modernity by examining the challenges to Jewish life and thought,
community and culture, self-understanding and survival, from the early
modern period to the present day. Through the lenses of religious,
cultural, intellectual, and political expression, the course examines the
social, economic, and demographic changes in Jewish communities in
Western, Central and Eastern Europe, the United States, and Israel along
with the impact of antisemitism and the Holocaust. (Same as HIST 344.)
LEC.

JWSH 350. Contemporary Jewish Identities. 3 Hours. SC / H.
This course explores the variety of ways in which American Jews create
Jewish identities as individuals and groups. It traces the emergence of
the various current divisions within Judaism: Reform Judaism (which by
definition, implies Orthodoxy), then Conservative Judaism, and then the
later development of Reconstructionist Judaism. The course also explores
other contemporary options for being Jewish: cultural Jews, secular Jews,
unaffiliated Jews, religious Jews, and gay or lesbian or transgendered
Jews. LEC.

JWSH 361. Jewish Film. 3 Hours. HL / H.
An examination of the cultural history of the Jews through films that
explore Jewish themes, including but not limited to: issues of tradition
and modernity, religion and secularism, immigration, gender, Zionism,
anti-Semitism, and the Holocaust. Films studied may be in English and
in foreign languages (with English subtitles) like Yiddish, Hebrew, and
Russian. LEC.

JWSH 395. Study Abroad Topics in Jewish Studies: _____. 3-6
Hours. H.
This course is designed for the study of special topics in Jewish Studies at
the junior/senior level. Coursework must be arranged through the Office of
KU Study Abroad. May be repeated for credit if content varies. LEC.

JWSH 490. Directed Study in Jewish Studies. 3 Hours. AE61 / H.
Intensive reading or research under faculty supervision. Prerequisite:
Consent of instructor. IND.

JWSH 491. Directed Study in Jewish Studies, Honors. 3 Hours.
AE61 / H.
Honors version of JWSH 490. Intensive reading or research under faculty
supervision. Prerequisite: Membership in the University Honors Program
or consent of instructor. IND.

JWSH 523. The Dead Sea Scrolls. 3 Hours. H.
A study of the archeological evidence and texts from the Dead Sea area
that provide primary evidence for Jewish religious belief and practice in
the Greek and Roman periods (ca. 250 B.C.E. - 135 C.E.). (Same as REL
523.) Prerequisite: REL 124 or JWSH 124 or consent of instructor. LEC.

JWSH 525. Jews and Christians. 3 Hours. H.
This course examines the ways Jews and Christians have interacted
with and characterized one another at various points in their histories.
Special emphasis is placed on the gradual separation of the two religious
traditions in the 1st-4th centuries. (Same as REL 525.) Prerequisite: A
previous course in Religious Studies or Jewish Studies; or consent of
instructor. LEC.

JWSH 526. Jewish History and Literature in the Greek and Roman Periods. 3 Hours. H.
The history and literature of the Jewish people from the hellenistic
period (late fourth century B.C.E. to the codification of the Mishnah 210
C.E.). Select texts from the Hebrew Bible, the so-called apocrypha and
pseudepigrapha, the Qumran scrolls, Philo, Josephus, related early
Christian texts, and Rabbinic texts will be studied. (Same as REL 526.)
Prerequisite: REL 124 or JWSH 124 or permission of instructor. LEC.

JWSH 560. Classical and Contemporary Jewish Thought. 3 Hours. H.
An introduction to individual Jewish thinkers and collective projects from
Philo to the present, including The Talmud and Midrash, Middle Age
and Early Modern Jewish philosophical and Talmudic rationalism and
mysticism. Considers such thinkers as Spinoza, Cohen, Solovetchik,
Rosenzweig, and Levinas. (Same as REL 560.) Prerequisite: A previous
course in Religious Studies or Jewish Studies; or consent of instructor.
LEC.

JWSH 570. Studies in Judaism. 3 Hours. H.
A study of the major intellectual sources of the Jewish tradition from the
Mishna, Talmud, Midrash, prayerbook, philosophers, the Zohar, and the
Shulchan Aruch. (Same as REL 570.) Prerequisite: A course in Religious
Studies or Jewish Studies numbered 300 or above. LEC.

JWSH 572. Jewish Folklore. 3 Hours. H.
Jewish folklore is extraordinarily rich and varied. From folktales to riddles,
from legends about the exalted rabbis to irreverent jokes, folklore is
central to the Jewish way of life. This course traces the extent to which
oral elements appear in traditional Jewish literary texts such as the
Bible; read and discuss folktale, and examine minor genres such as
proverbs, riddles and jokes. Topics include the supernatural beings of
Jewish folklore dybbuks, seductive female demons, and golems. Students
acquire theoretical tools with which to analyze folklore (Jewish or
otherwise), read stories, watch movies, and collect samples of folklore
from informants. LEC.

JWSH 573. Jewish Folklore, Honors. 3 Hours. H.
Honors version of JWSH 572. Jewish folklore is extraordinarily rich
and varied. From folktales to riddles, from legends about the exalted
rabbis to irreverent jokes, folklore is central to the Jewish way of life.
This course traces the extent to which oral elements appear in traditional
Jewish literary texts such as the Bible; read and discuss folktales, and
examine minor genres such as proverbs, riddles and jokes. Topics include
the supernatural beings of Jewish folklore dybbuks, seductive female
demons, and golems. Students acquire theoretical tools with which to
analyze folklore (Jewish or otherwise), read stories, watch movies, and
collect samples of folklore from informants. Open only to students in the
University Honors Program or by permission of instructor. LEC.

JWSH 600. Advanced Topics in Jewish Studies: _____. 3 Hours. H.
Examination of advanced topics in Jewish Studies. May be repeated if
topic varies. Prerequisite: Consent of instructor. LEC.

JWSH 650. Service Learning in Jewish Studies. 3 Hours. S.
This course, to be taken in the junior or senior year, is designed to give
students the opportunity to apply the knowledge, concepts, and ideas
gained in courses in Jewish studies to real-life situations in appropriate
agencies and organizations. Open to students in the Jewish Studies program. Prerequisite: Permission of instructor. FLD.

TAJ 110. Elementary Tajik I. 5 Hours. U.
Vocabulary acquisition, pronunciation, grammar, and writing. Course includes reading of simple texts. Five hours of class per week. LEC.

TAJ 120. Elementary Tajik II. 5 Hours. U.
Continuation of TAJ 110. Vocabulary acquisition, pronunciation, grammar, and writing. Course includes reading of simple texts. Five hours of class per week. Prerequisite: TAJ 110 or departmental permission. LEC.

TAJ 210. Intermediate Tajik I. 3 Hours. U.
A continuation of TAJ 120. Course emphasizes oral and written work in Tajik. Systematic review of grammar and introduction to reading in cultural texts. Prerequisite: TAJ 120 or departmental permission. LEC.

TAJ 220. Intermediate Tajik II. 3 Hours. U.
A continuation of TAJ 210. Course emphasizes oral and written work in Tajik. Systematic review of grammar and introduction to reading in cultural texts. Prerequisite: TAJ 210 or departmental permission. LEC.

TAJ 310. Advanced Tajik I. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in Tajik. Readings from Tajik literature introduced. Prerequisite: TAJ 220 or placement exam that establishes a level of proficiency in Tajik suited to Advanced Tajik I. LEC.

TAJ 320. Advanced Tajik II. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in Tajik. Readings from Tajik literature introduced. Prerequisite: TAJ 220 or placement exam that establishes a level of proficiency in Tajik suited to Advanced Tajik II. LEC.

TAJ 510. Tajik for Geographers. 1 Hour. H.
The course is designed to facilitate the use of primary sources in Tajik for carrying out research in human geography of Tajikistan. TAJ 510 compliments REES 510. Prerequisite: TAJ 220, or consent of instructor. LEC.

TAJ 532. Tajik For Sociologists. 1 Hour. H.
The course is designed to facilitate the use of primary sources in Tajik for carrying out research in sociology of Tajikistan. TAJ 532 compliments SOC 532. Prerequisite: TAJ 220, or consent of instructor. LEC.

History of Art Courses

HA 100. Introduction to Western Art History. 3 Hours. HT AE42/GE3H / H.
A chronological survey of Western art and architecture, including the ancient Near East, Europe from antiquity to the present, and North America from the colonial period to the present. The course emphasizes major historical and cultural developments, analyzes key art works and monuments, and introduces basic art historical principles and analytical methods. The course is offered at the 100 and 300 levels, with additional reading and writing assigned at the 300 level. Intended for non-majors. Does not fulfill the 30 required hours in the major. Not open to students with credit in HA 100, HA 150, HA 151, HA 160, HA 161, HA 300, or HA 303. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

HA 105. Special Study: _____. 1-6 Hours. H.
This course is designed for the study of special topics in art history at the introductory level, including courses taken in the study abroad program. May deal with individual artists, special themes, or other topics not generally covered in courses offered by the department. May be repeated for credit if content varies. LEC.

HA 150. History of Western Art: Ancient Through Medieval. 3 Hours. HT AE42/GE3H / H.
A survey of the art of earlier periods in the West, from prehistoric times through the middle ages in Europe, with special emphasis on the relationship between artistic developments and cultural changes. Not open to students with credit in HA 160. LEC.

HA 151. History of Western Art: Renaissance to Contemporary. 3 Hours. GE3H / H.
A survey of the art in the West from the Renaissance to the contemporary period in Europe and America, with special emphasis on the achievements of individual artists in relation to the cultural movements of their times. Not open to students with credit in HA 161. LEC.

HA 160. History of Western Art: Ancient Through Medieval, Honors. 3 Hours. HT AE42/GE3H / H.
A survey of the art of earlier periods in the West, from prehistoric times through the middle ages in Europe, with special emphasis on the relationship between artistic developments and cultural changes. Not open to students with credit in HA 150. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

HA 161. History of Western Art: Renaissance to Contemporary, Honors. 3 Hours. GE3H / H.
A survey of the art in West from the Renaissance to the contemporary period in Europe and America, with special emphasis on the achievements of individual artists in relation to the cultural movements of their times. Not open to students with credit in HA 151. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

HA 165. Introduction to Asian Art. 3 Hours. HT/NW AE42/GE3H / H/W.
An introduction to the visual arts of India, China, Korea, and Japan. Emphasis is placed on cultural context, including religion, social class and gender, and on cultural interactions between these countries. LEC.

HA 166. The Visual Arts of East Asia. 3 Hours. HT/NW AE42/GE3H / H.
An introduction to the visual arts of India, China, Korea, and Japan. Emphasis is placed on cultural context, including religion, social class and gender, and on cultural interactions between these countries. LEC.

HA 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in History of Art. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

HA 261. Introduction to Modern Art. 3 Hours. HT GE3H / H.
A general survey of painting, sculpture, architecture, and graphic art of the 19th and 20th centuries. Emphasis is placed on major movements and their artists, including Neo-Classicism, Romanticism, Realism, Impressionism, Post-Impressionism, Fauvism, Expressionism,
Cubism, Surrealism, Abstract Art, Pop Art, and the developments of the contemporary period. LEC.

HA 300. Introduction to Western Art History. 3 Hours. HT AE42/GE3H / H.
A chronological survey of Western art and architecture, including the ancient Near East, Europe from antiquity to the present, and North America from the colonial period to the present. The course emphasizes major historical and cultural developments, analyzes key art works and monuments, and introduces basic art historical principles and analytical methods. The course is offered at the 100 and 300 levels, with additional reading and writing assigned at the 300 level. Intended for non-majors. Does not count toward the 30 required hours in the major. Not open to students with credit in HA 100, HA 103, HA 150, HA 151, HA 160, HA 161, or HA 303. LEC.

HA 303. Introduction to Western Art History, Honors. 3 Hours. HT / H.
A chronological survey of Western art and architecture, including the ancient Near East, Europe from antiquity to the present, and North America from the colonial period to the present. The course emphasizes major historical and cultural developments, analyzes key art works and monuments, and introduces basic art historical principles and analytical methods. The course is offered at the 100 and 300 levels, with additional reading and writing assigned at the 300 level. Intended for non-majors. Does not count toward the 30 required hours in the major. Not open to students with credit in HA 100, HA 103, HA 150, HA 151, HA 160, HA 161, or HA 303. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

HA 305. Special Study: ____. 1-6 Hours. H.
This course is designed for the study of special topics in art history, including courses taken in the study abroad program. May deal with individual artists, special themes, or other topics not generally covered in courses offered by the department. May be repeated for credit if content varies. LEC.

HA 307. Directed Readings. 1-6 Hours. U.
Supervised study and research into special fields of art of particular interest to the student. Weekly consultation and reports. LEC.

HA 310. The Art and Architecture of Florence and Paris. 3 Hours. H.
Taught in the Humanities and Western Civilization Program Abroad, this course examines the major movements that defined and shaped the art and architecture of Florence and Paris, with special attention to the Renaissance in Florence and the Gothic and modern periods in Paris. Through classroom lectures, readings, and visits to museums, churches, and other historic sites, selected works of art and architecture are analyzed in terms of their formal qualities, iconography, and cultural context. Prerequisite: Approval for enrollment in the Humanities and Western Civilization Study Abroad program through the KU Office of Study Abroad. LEC.

HA 311. The Art and Architecture of the British Isles. 3 Hours. H.
Taught in the British Summer Institute in the Humanities Study Abroad program, this course offers an introductory survey of British art and architecture. Through classroom lectures, readings, and visits to museums, churches, and other historic sites, selected works of art and architecture are analyzed in terms of their formal qualities, iconography, and cultural context. Prerequisite: Approval for enrollment in the British Summer Institute in the Humanities Study Abroad program through the KU Office of Study Abroad. LEC.

HA 315. The Prehistory of Art. 3 Hours. S.
A survey of prehistoric art focusing on the material record and interpretations of rock art (paintings, engravings on rock surfaces in rock-shelters, caves and in open air sites) and portable art created by prehistoric people. The emphasis is on the small-scale societies (hunter-gatherer and early food producers) around the world before the appearance of written records in respective geographic areas. Environmental, social and cultural contexts in which these art forms were created are discussed along with a review of past scholarship and current interpretive approaches to this old and enduring expression of human creativity. Course may be offered in lecture or online format. (Same as ANTH 315.) LEC.

HA 317. Greek and Roman Art. 3 Hours. H/W.
A survey of the art of ancient Greece and Rome (ca. 1000 B.C.E. - 500 C.E.). Emphasis on major sites, architecture, sculpture, and painting. Illustrated lectures and discussion; use of the Wilcox Classical Museum. No knowledge of Greek or Latin is required. Not open to students who have taken both CLSX 526/HA 526 and CLSX 527/HA 537, except with permission of the instructor. (Same as CLSX 317, HWC 317.) LEC.

HA 329. Politics and Conflict in Israel and Palestine. 3 Hours. H.
This course focuses on various aspects of the Israeli-Palestinian conflict including its history from the Ottoman period to the present day, the social and political effects on Israeli and Palestinian life and citizenship, official and unofficial narratives, and international responses. LEC.

HA 330. Italian Renaissance Art. 3 Hours. GE3H / H/W.
A survey of the art and architecture of Italy from c. 1300 to 1550. Special emphasis is placed on regional styles and the private, political, and devotional contexts in which works of art and architecture functioned. Some of the artists whose works are considered are Giotto, Duccio, Donatello, Botticelli, Leonardo, and Michelangelo. LEC.

HA 340. Special Study in Asian Art Before 1900: ____. 1-6 Hours. H.
This course is designed for the study of special topics in Asian art before 1900, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 341. Special Study in Islamic Art, 14th-17th Century: ____. 1-6 Hours. H.
This course is designed for the study of special topics in Islamic art of the 14th-17th centuries. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels LEC.

HA 342. Special Study in 18th/19th-Century European or American Art: ____. 1-6 Hours. H.
This course is designed for the study of special topics in European or American art of the 18th and/or 19th centuries, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels LEC.

HA 343. Special Study in 20th/21st-Century Art: ____. 1-6 Hours. H.
This course is designed for the study of special topics in art of the 20th and/or 21st centuries, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 353. Modern and Contemporary African Art. 3 Hours. H.
In this course, we examine the development of artistic modernisms in Africa in historical context. We also study the content, production, patronage, and display of modern and contemporary African art. In doing so, we consider African artists' engagement with modernity, globalization, and contemporary issues, as well as interrogate influential myths and
assumptions regarding African artists and the work they produce. Course themes include the workshop as a critical site, independence movements and the creation of national art forms, art as global commodity, and art in resistance, remembrance, and revolution. (Same as AAAS 353.) LEC.

HA 354. Japanese Prints. 3 Hours. NW / H/W.
This course explores the history of Japanese prints with special emphasis on ukiyo-e (pictures of the floating world) woodblock prints made during the Edo Period (early 17th to 19th century). The course is organized thematically as well as chronologically and examines woodblock prints by focusing on both design and socio-political history. The course is taught at the 300 and 500-levels with additional work required at the 500-level. LEC.

HA 361. Buddhist Art of Korea. 3 Hours. H.
Introduction to the history of Buddhist temple buildings, paintings, sculptures and illuminated hand-scrolls in Korea from the 4th through the 19th centuries, with special emphasis on their stylistic, geographical, social, devotional and literary contexts. Current theories and controversies pertinent to the history and study of Korean Buddhist art are also addressed. Not open to students who have taken HA 561 or REL 511. Work requirements will be greater for students enrolled at the 500 level than at the 300 level. Prerequisite: A college level introduction to Asian art history, or consent of instructor. LEC.

HA 362. Ceramics of Korea. 3 Hours. H.
A survey covering the history of Korean ceramics from prehistoric times through the early modern period, with special emphasis on their stylistic, geographical, social and political context. Topics include celadon-glazed, stamped and slip-decorated stoneware, Korean ceramics related to the Japanese tea ceremony and Mingei pottery. Not open to students who have taken HA 562. Work requirements will be greater for students enrolled at the 500 level than at the 300 level. Prerequisite: A college level introduction to Asian art history, or consent of instructor. LEC.

HA 363. Modern Korean Art and Culture. 3 Hours. H.
This course is a thematic introduction to Korean art and culture with an emphasis on modern and contemporary Korea. Pre-modern works are contextualized with respect to contemporary issues. Students learn how to conduct a comprehensive analysis of an artwork by considering the political, historical and social conditions of its time within a broader East Asian cultural framework. Prerequisite: An introductory course in art history at the college level, or consent of instructor. LEC.

HA 367. Art and Culture of Japan. 3 Hours. NW AE42/GE3H / H/W.
An introduction to the arts of Japan in historical and cultural context. Visual arts are stressed. LEC.

HA 368. Art and Culture of China. 3 Hours. NW AE42/GE3H / H/W.
An introduction to the arts of China in historical and cultural context. Visual arts are stressed. LEC.

HA 369. Art and Culture of Korea. 3 Hours. NW AE42/GE3H / H/W.
An introduction to the arts of Korea in historical and cultural context. Visual arts are stressed. LEC.

HA 370. American Art. 3 Hours. H.
A survey of American painting, sculpture, and architecture from colonial to recent times. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 376. West African Art. 3 Hours. NW / H/W.
Introduction to the rich visual art traditions of West Africa. Emphasis is given to the major art-producing cultures of the Western Sudan and the Guinea Coast, including the pre-historic cultures of Nigeria, Mali, and Ghana. The diverse forms of figure sculptures and masquerade performance and meanings of these arts in historical and cultural contexts are examined. (Same as AAAS 376.) LEC.

HA 380. History of Photography. 3 Hours. H.
An introduction to the history of photography as a means of artistic expression and visual communication. Special attention is placed on the relation between developments in photography and the artistic and cultural context of the time. LEC.

HA 388. Modern and Contemporary Visual Arts of Japan. 3 Hours. H.
This course covers Japanese visual arts from the Meiji era (1868-1912) through the present day. The course is designed thematically as well as chronologically, and examines painting, sculpture and architecture focusing on both socio-political contexts and artistic concerns that emerged at certain times in recent Japanese history. The aim of this course is to provide first-hand knowledge of Japanese modern and contemporary visual arts as well as an in-depth consideration of some of the key issues attached to Japan's modernization and modernity. The course is taught at the 300 and 500-levels with additional work required at the 500-level. LEC.

HA 390. Special Study in African Art: _____. 1-6 Hours. H.
This course is designed for the study of special topics in African art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 391. Special Study in Asian Art: _____. 1-6 Hours. H.
This course is designed for the study of special topics in Asian art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 392. Special Study in Ancient Art: _____. 1-6 Hours. H.
This course is designed for the study of special topics in ancient art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 393. Special Study in Medieval Art: _____. 1-6 Hours. H.
This course is designed for the study of special topics in medieval art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 394. Special Study in Renaissance Art: _____. 1-6 Hours. H.
This course is designed for the study of special topics in Renaissance art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 395. Special Study in Baroque Art: _____. 1-6 Hours. H.
This course is designed for the study of special topics in Baroque art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 396. Special Study in American Art: _____. 1-6 Hours. H.
This course is designed for the study of special topics in American art. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 397. Special Study in Modern Art: _____. 1-6 Hours. H.
This course is designed for the study of special topics in modern art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. LEC.
HA 467. Art and Culture of Japan, Honors. 3 Hours. NW / H/W.
An introduction to the arts of Japan using fundamental principles and analytical methods of art history. Emphasis is placed on cultural contexts of art production, including history and religion. Honors version of HA 367, with more classroom discussion and opportunities for original research. Prerequisite: Membership in the University Honors Program or permission of the instructor. Not open to freshmen or students with credit in HA 267 or HA 367. LEC.

HA 468. Art and Culture of China, Honors. 3 Hours. NW / H/W.
An introduction to the arts of China using fundamental principles and analytical methods of art history. Emphasis is placed on cultural contexts of art production, including history and religion. Honors version of HA 368, with more classroom discussion and opportunities for original research. Prerequisite: Membership in the University Honors Program or permission of the instructor. Not open to freshmen or students with credit in HA 268 or HA 368. LEC.

HA 469. Art and Culture of Korea, Honors. 3 Hours. NW / H/W.
An introduction to the arts of Korea using fundamental principles and analytical methods of art history. Emphasis is placed on cultural contexts of art production, including history and religion. Honors version of HA 369, with more classroom discussion and opportunities for original research. Prerequisite: Membership in the University Honors Program or permission of the instructor. Not open to freshmen or students with credit in HA 269 or HA 369. LEC.

HA 488. Chinese Painting, Honors. 3 Hours. NW / H/W.
A survey of the development of painting in China, beginning with the earliest forms of figural and landscape depiction. Emphasis will be placed on the major painting traditions of the Song, Yuan, Ming, and Qing Dynasties. Prerequisite: An introductory course in art history or Eastern Civilizations and membership in the University Honors Program or consent of instructor. LEC.

HA 498. Honors Essay in Art History. 3 Hours. AE61 / H.
Required for departmental honors. A course of directed research and the preparation of a paper on an art history topic, supervised by a professor. Prerequisite: A grade-point average of 3.5 in art history and 3.25 in all courses, and consent of a major advisor and supervising professor. IND.

HA 500. Prints and Printmakers. 3 Hours. H.
The major historical achievements in the field of printmaking, the artists who produced prints, and the impact of their work on the visual arts. Lectures supplemented by work with original material. Prerequisite: An introductory course in Western art history at the college level and three further hours of history of art or consent of instructor. LEC.

HA 505. Special Study: ____. 1-6 Hours. H.
This course is designed for the study of special topics in art history on a trial basis, open to both undergraduate and graduate students. Prerequisite: An introductory-level course in art history, appropriate to the specific special study topic; or consent of instructor. LEC.

HA 506. Early Medieval and Romanesque Art. 3 Hours. H.
This course examines the art of Europe from the Early Christian era through the Romanesque period, up to 1200. Architecture, sculpture, manuscript illumination, metalwork and painting are explored in relation to their political, religious and social contexts. Graduate students can expect to complete additional reading and writing assignments. Prerequisite: HA 100 or HA 150, or permission of the instructor. LEC.

HA 507. Gothic Art. 3 Hours. H.
This course examines the art of Europe during the Gothic period, from 1140-1500. Architecture, sculpture, manuscript illumination, metalwork, painting and furniture are explored in relation to their political, religious and social contexts. Graduate students can expect to complete additional reading and writing assignments. Prerequisite: HA 100 or HA 150, or permission of the instructor. LEC.

HA 508. The Italian Renaissance Home. 3 Hours. H.
This course explores the history of domestic art and architecture in Italy, with a special emphasis on Florence, from c. 1350 to 1600. Palace architecture, religious works made for private devotions, the increasing use of mythological themes in painting and sculpture, birth trays, painted cassoni, majolica, and various types of portraiture are examined within the contexts of contemporary theories of virtue and magnificence, the rituals of marriage and childbirth, the public and private promotion of political and personal agendas, and changing tastes. In addition to acquiring an in-depth knowledge of the artistic and architectural milieus of Italian Renaissance homes and expanding their cultural understanding, students enrolled in this course engage in a series of assignments designed to build and hone their reading, critical thinking, visual analysis, research, and writing skills. The same assignments allow students to integrate their knowledge of and to think creatively about the period, objects, and buildings in question. A high expectation of class participation and the opportunity to present their research provide students with the opportunity to build and strengthen their oral communications skills. Prerequisite: HA 100, HA 150, HA 151, HA 330, or the equivalent, or consent of instructor. LEC.

HA 510. Medieval Manuscripts and Early Printed Books. 3 Hours. H.
Students study the history of the book from 300 to 1500 A.D., concentrating on the role of visual imagery in books and the place of books in medieval and renaissance culture. In addition to discussing the relation between text and image, and studying the stylistic contexts for ancient, medieval, and Renaissance illumination and early woodcut illustration, participants in this course consider such additional topics as methods of book production, the development of cycles of illustration for religious and secular books, and the relationship between manuscripts and early printed books. Lectures and discussion are supplemented by visits to the fine collection of manuscripts, printed books, and facsimiles in the Kenneth Spencer Research Library. Prerequisite: An introductory course in Western art history at the college level, or consent of the instructor. LEC.

HA 525. Aegean Archaeology and Art. 3 Hours. H/W.
An interdisciplinary survey of the major cultures of the prehistoric Aegean (Greek) world from the Neolithic period to the end of the Bronze Age (ca. 3000-1100 B.C.E.), with special emphasis on the cultural and artistic achievements of the Mycenaeans, Minoans, and Cycladic islanders, including their contacts with the neighboring cultures of Anatolia (Hittites and Troy), the Levant, Egypt, and South Italy. Includes lecture with slides and discussion. For advanced undergraduates with backgrounds in the humanities and for graduate students (especially in Classics and History of Art). No knowledge of Greek or Latin is required. (Same as CLSX 525.) LEC.

HA 526. Greek Archaeology and Art. 3 Hours. H.
An interdisciplinary survey of the material culture of the ancient Greek world from the Protogeometric period to the end of the Hellenistic age (ca. 1100 - 30 B.C.E.), with an emphasis on the major sites, monuments, and changing forms of social and artistic expression (architecture, sculpture, vase painting, and other arts). Includes lectures with slides and discussion; use of the Wilcox Museum of Classical Antiquities. No knowledge of Greek or Latin is required. For advanced undergraduates and graduate students with backgrounds in the humanities; and for graduate students (especially those in History of Art and Classics). (Same as CLSX 526.) LEC.
HA 527. Late Medieval Art in Italy. 3 Hours. H.
This course examines the history of paintings, sculptures and buildings produced in Italy from c. 1250 to 1400. Important individual works, artists, and decorative complexes, such as Giotto's Scrovegni (Arena) Chapel, are analyzed in terms of their stylistic, geographical, social, historical, devotional, and literary contexts. Current theories and controversies pertinent to the history and study of 13th- and 14th-century Italian art are also addressed. Prerequisite: HA 100, HA 150, or the equivalent, or consent of instructor. LEC.

HA 529. Archaeology and Art of the Ancient Near East. 3 Hours. H.
A cross-cultural survey of the material remains of the major civilizations of the ancient Near East, including Anatolia, Mesopotamia, the Levant, and Egypt from Neolithic period to the rise of the Roman empire (ca. 6000 B.C.E. - 30 B.C.E.). Includes lectures with slides and discussion. For advanced undergraduates with backgrounds in the humanities and for graduate students (especially in Classics and History of Art). No knowledge of Greek or Latin is required. (Same as CLSX 529.) LEC.

HA 530. Renaissance Art in Italy: The 15th Century. 3 Hours. H/W.
The focus of this course is the history of Italian painting, sculpture, and architecture from 1400 to 1500. Special emphasis is placed on the diverse artistic styles and functions of works of art, as well as on the artists and patrons that produced them. Domestic art and the art and architecture of the 15th-century Italian courts are also discussed. Prerequisite: HA 100, HA 150, or the equivalent, or consent of instructor. LEC.

HA 531. Renaissance Art in Italy: The 16th Century. 3 Hours. H.
This course explores the history of Italian painting, sculpture, and architecture from c. 1500 to 1600. It focuses on the artistic centers of Florence, Rome, Parma, and Venice. Some of the artists whose works is considered are Leonardo, Michelangelo, Raphael, Pontormo, Titian, Cellini, and Giambologna. The history of 16th-century women patrons and artists is also addressed. Prerequisite: HA 100, HA 150, HA 151, or the equivalent, or consent of instructor. LEC.

HA 532. Michelangelo. 3 Hours. H.
During the sixteenth century, the writer Ludovico Ariosto described the Florentine artist Michelangelo Buonarroti (1475-1564) as “divine.” Since that time more has been written about Michelangelo than any other artist of the Italian Renaissance. His ability to work in diverse media, namely painting, sculpture, and architecture, as well as the power of his works, earned him this prominent position in the history of art and made him one of the most influential artists of the early modern period. This course will trace various aspects of Michelangelo’s long, sometimes troubled, and vibrant career, focusing on issues such as his techniques, patrons, and the innovative style of his works. Special emphasis will be placed on interpreting primary sources to understand better his life and works and place them within their artistic, historical, social, and religious contexts. Prerequisite: HA 100, HA 150, HA 151, HA 330, or the equivalent, or consent of instructor. LEC.

HA 533. European Art 1789-1848: Gender and Revolution. 3 Hours. H.
This course will analyze painting in Europe from the late 18th century to the mid-19th century. Particular attention will be paid to the ways in which images represent and/or repress such themes as politics, history, gender, ethnicity, race, and class. Assigned readings present a variety of methodological perspectives--social-historical, feminist, formalist, and psychoanalytic. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 534. Art in France 1848-1900: Modernisms. 3 Hours. H.
This course will examine painting in France from 1848 to 1900 with particular emphasis given to the visual articulation and/or repression of such constructs as gender, race, history, and ethnicity. Assigned readings present a variety of methodological perspectives--social-historical, feminist, formalist, and psychoanalytic. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.
HA 542. Special Study in 18th-19th Century European or American Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in European or American art of the 18th and/or 19th centuries, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor. LEC.

HA 543. Special Study in 20th/21st-Century Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in art of the 20th and/or 21st centuries, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor. LEC.

HA 545. Early Chinese Art. 3 Hours. NW / H.
A survey of Chinese art from Neolithic times through the Han Dynasty (ca. 200 C.E.). Emphasis will be placed on recent archaeological excavations and also on the development of bronze vessels of the Shang and Zhou Dynasties. Prerequisite: A college level introduction to Asian art history, or consent of the instructor. LEC.

HA 546. Chinese Sculpture. 3 Hours. H.
A survey of Chinese sculpture from the Shang dynasty through the Song dynasty (1600 BCE-1279 CE), focused on sculptural programs in native funerary art and Buddhist temples and cave-shrines. LEC.

HA 548. Buddhist Scriptures in Chinese Painting. 3 Hours. H.
Examination of Chinese paintings based on the major Buddhist scriptures (sutras) popular in China from the 8th century through the early modern period. Readings include selections from the sutras (in translation). Emphasis is placed on the cultural and religious reasons why certain scriptural themes were selected for representation and on the distinctively Chinese interpretation of these themes in pictorial art. Prerequisite: An introductory course in Asian art history, Eastern Civilizations, or Eastern religions or consent of instructor. LEC.

HA 549. Chinese Painting. 3 Hours. H.
An introductory survey of painting in China from the 7th through the 19th centuries. Prerequisite: One course in art history, or in East Asian languages cultures; or consent of instructor. LEC.

HA 550. Capstone in Art History: ______. 3 Hours. AE61 / H.
An advanced course dedicated to the in-depth study of special topics in art history. Students conduct research on a question within the parameters of the course topic and produce a research product that integrates knowledge from within the discipline of art history or in combination with other disciplines to generate new ideas. May be repeated for credit if content varies. Prerequisite: Junior or senior standing and twelve hours of art history, or consent of the instructor. LEC.

HA 554. Japanese Prints. 3 Hours. NW / H/W.
This course explores the history of Japanese prints with special emphasis on ukiyo-e (pictures of the floating world) woodblock prints made during the Edo Period (early 17th to 19th century). The course is organized thematically as well as chronologically and examines woodblock prints by focusing on both design and socio-political history. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Prerequisite: An introductory course in art history or consent of instructor. LEC.

HA 561. Buddhist Art of Korea. 3 Hours. H.
Introduction to the history of Buddhist temple buildings, paintings, sculptures and illuminated hand-scrolls in Korea from the 4th through the 19th centuries, with special emphasis on their stylistic, geographical, social, devotional and literary contexts. Current theories and controversies pertinent to the history and study of Korean Buddhist art are also addressed. Not open to students who have taken HA 361. Work requirements will be greater for students enrolled at the 500 level than at the 300 level. (Same as REL 511.) Prerequisite: A college level introduction to Asian art history, or consent of instructor. LEC.

HA 562. Ceramics of Korea. 3 Hours. H.
A survey covering the history of Korean ceramics from prehistoric times through the early modern period, with special emphasis on their stylistic, geographical, social and political context. Topics include celadon-glazed, stamped and slip-decorated stoneware, Korean ceramics related to the Japanese tea ceremony and Mingei pottery. Not open to students who have taken HA 362. Work requirements will be greater for students enrolled at the 500 level than at the 300 level. Prerequisite: A college level introduction to Asian art history, or consent of instructor. LEC.

HA 564. European Art, 1900-1945. 3 Hours. H.
A detailed survey of modern European art from the turn of the century through World War II. Movements to be considered may include post-impressionism, cubism, constructivism, dada, and surrealism. Graduate students may be expected to do additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 565. Art Since 1945. 3 Hours. H.
An international survey of modern and postmodern art since 1945. Topics to be covered may include abstract expressionism, pop, minimalism, happenings, and performance art, earth works, conceptual art, feminist art, photo-realism, crafts, and new media. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 566. Art From 1945 to the 1980s: Modernism to Post-Modernity. 3 Hours. H.
An international survey of modern and post-modern art from World War II to the 1980s. Topics may include abstract expressionism, pop art, minimalism, happenings and performance art, earth works, conceptual art, feminist art, photo-realism, the craft revival, and new media. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151 or the equivalent, or consent of instructor. LEC.

HA 567. Contemporary Art. 3 Hours. H.
An examination of recent developments internationally in art and visual culture. Emphases may include consideration of diverse critical perspectives, theoretical debates, post- and trans-national art, the impact of new media, and the internationalization of institutions, exhibitions, audiences, and markets. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 570. American Art. 3 Hours. H.
A survey of American painting, sculpture, and architecture from colonial times to the present. (Same as AMS 580.) Prerequisite: An introductory course in Western art history at the college level. LEC.

HA 571. Modern Sculpture. 3 Hours. H.
A survey of avant-garde sculpture in Europe and America from the late 19th century to recent times. Attention will focus on the work of major sculptors considered within larger artistic, cultural, and historical contexts.
Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 575. Northern Renaissance Art. 3 Hours. H.
French, Netherlandish, and German art in the 15th and 16th centuries. Manuscripts, painting, prints, and sculpture from Jan Van Eyck to Pieter Brueghel, the Elder. Prerequisite: HA 100, HA 150, HA 151, or the equivalent, or consent of instructor. LEC.

HA 576. Northern Baroque Art. 3 Hours. H.
Seventeenth-century art in the northern and southern Netherlands with emphasis on painting of Rubens and Rembrandt. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 577. Italian Baroque Art. 3 Hours. H.
This course explores the history of art and architecture in Italy during the late sixteenth and seventeenth centuries. The visual culture of the Italian Baroque is examined in terms of style, patronage, and religious or secular function. Attention is also paid to art theory, practice, gender issues, and foreign artists working in Italy, as well as to understanding and interpreting primary sources. Prerequisite: HA 100/HA 300, HA 151, or consent of instructor. LEC.

HA 578. Central African Art. 3 Hours. NW / H/W.
Introduction to the arts and cultures of Central Africa. Emphasis is given to the major art-producing cultures of the Equatorial Forest and the Southern Savanna regions of Cameroon, Gabon, Congo, Zaire, and Angola. The historical and cultural contexts for the visual arts associated with centralized leadership and non-centralized societies are explored. (Same as AAAS 578.) LEC.

HA 580. History of Photography. 3 Hours.
An advanced introduction to the history of photography as a means of artistic expression and visual communication. Special emphasis will be placed on critical readings and research projects. Prerequisite: Six hours of Western art history. LEC.

HA 581. American Art to 1860: Inventing a Nation. 3 Hours. H.
A survey of major artists and movements in painting, sculpture, and allied arts, from the period of initial European settlement to the mid-19th century. Consideration will be given to developments in portraiture, history painting, landscape, still-life, statuary, and decorative arts. Attention will be paid both to formal developments and to cultural context. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 582. American Art 1860-1900: Gilded Age. 3 Hours.
A survey of major artists and movements in painting, sculpture, and allied arts in the later 19th century. Consideration will be given to developments in landscape painting and images of the American West, the impact of impressionism and other European movements, and the decorative programs of the Gilded Age. Attention will be paid both to formal developments and to cultural context. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 583. American Art 1900-1945: Rise of Modernism. 3 Hours. H.
A survey of major artists and movements in painting, sculpture, and allied arts, from the early urban realists to the emergent avant-garde at mid century. Consideration will be given to the cosmopolitan tendencies of the 1910s and the 1920s, to regionalist impulses of the 1930s, and the assimilation of European modernism. Attention will be paid both to formal developments and to cultural context. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 584. Kansas Art, History, and Popular Culture. 3 Hours. H.
An overview of the art and cultural history of Kansas (and Kansas City) from territorial days to the present. Emphasis is placed on key issues, figures and events. A general familiarity with American history is recommended. (Same as FMS 414.) LEC.

HA 585. The Art of Buddhism. 3 Hours. NW / H/W.
A survey of the Buddhist arts (architecture, sculpture, and painting) of India, China, and Japan. LEC.

HA 586. Japanese Painting. 3 Hours. NW / H/W.
A survey covering the development of Japanese painting from the Kofun period to the early twentieth century. Topics include Buddhist and other religious paintings, narrative handscrolls, ink painting, decorative screens, ukiyo-e, and western-style paintings of the Meiji and Taisho periods. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: An introductory course in Asian art or consent of instructor. LEC.

HA 587. Japanese Sculpture. 3 Hours. NW / H.
A survey of Japanese sculpture from the Kofun period (300-700 C.E.) to the present day. Emphasis is placed on works of Buddhist sculpture from the 7th through the 13th centuries. Prerequisite: An introductory course in Asian art history or consent of instructor. LEC.

HA 588. Modern and Contemporary Visual Arts of Japan. 3 Hours. H.
This course covers Japanese visual arts from the Meiji era (1868-1912) through the present day. The course is designed thematically as well as chronologically, and examines painting, sculpture and architecture focusing on both socio-political contexts and artistic concerns that emerged at certain times in recent Japanese history. The aim of this course is to provide first-hand knowledge of Japanese modern and contemporary visual arts as well as an in-depth consideration of some of the key issues attached to Japan's modernization and modernity. Prerequisite: an introductory course in art history or consent of instructor. The course is taught at the 300 and 500-levels with additional work required at the 500-level. LEC.

HA 589. Japanese Artistic Encounters with Europe and the United States. 3 Hours. NW / H.
Consideration of Japanese artistic responses to visual culture from Europe and the United States. The course focuses upon Japanese art from the 16th century to the present. Prerequisite: A college-level introduction to Asian art history or consent of instructor. LEC.

HA 590. Special Study in African Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in African art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: an introductory-level course in art history or African Studies, or consent of the instructor. LEC.

HA 591. Special Study in Asian Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in Asian art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history or Asian Studies, or consent of the instructor. LEC.

HA 592. Special Study in Ancient Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in ancient art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-
levels. Prerequisite: An appropriate introductory-level course in Art History or Classics, or consent of the instructor. LEC.

HA 593. Special Study in Medieval Art: ____. 1-6 Hours. H.
This course is designed for the study of special topics in medieval art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor. LEC.

HA 594. Special Study in Renaissance Art: ____. 1-6 Hours. H.
This course is designed for the study of special topics in Renaissance art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor. LEC.

HA 595. Special Study in Baroque Art: ____. 1-6 Hours. H.
This course is designed for the study of special topics in Baroque art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor. LEC.

HA 596. Special Study in American Art: ____. 1-6 Hours. H.
This course is designed for the study of special topics in American art. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor. LEC.

HA 597. Special Study in Modern Art: ____. 1-6 Hours. H.
This course is designed for the study of special topics in modern art, including courses taken through study abroad. May be repeated for credit if content varies. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor. LEC.

HA 600. Biography of a City: ____. 3 Hours. H/W.
An interdisciplinary study of a city, covering its history, literature, and arts during the periods when the city’s culture reached its height. LEC.

HA 676. West African Art. 3 Hours. NW / H/W.
Introduction to the rich visual art traditions of West Africa. Emphasis is given to the major art-producing cultures of the Western Sudan and the Guinea Coast, including the archaeological cultures of Nigeria, Mali, and Ghana. The diverse forms of figure sculptures and masquerade performance and the meanings of these arts in historical and cultural contexts are examined. Upper division and graduate students can enroll for this course with appropriate course requirements. Not open to students who have taken AAAS 376/HA 376. (Same as AAAS 676.) LEC.

HA 677. African Design. 3 Hours. NW / H/W.
A survey of sub-Saharan African media, emphasizing textiles, ceramics, metal and bead work, the artist’s techniques, working methods and apprenticeship, and historical and contemporary cultural contexts, including the influence of tourism and the international art market on artistic production and style. Open to juniors, seniors, and graduate students only. (Same as AAAS 677.) Prerequisite: AAAS 376 or HA 376, or AAAS 578 or HA 578, or an introductory course in art history at the college level, or consent of instructor. LEC.

HA 679. African Expressive Culture: ____. 3 Hours. NW / H/W.
An in-depth examination of an artistic tradition shared by a number of African cultures. Discussion includes historical development related to style, use and meaning and other relevant issues critical to the topic. Open to juniors, seniors, and graduate students only. (Same as AAAS 679.) Prerequisite: AAAS 376 or HA 376, or AAAS 578 or HA 578, or an introductory course in art history at the college level, or consent of instructor. LEC.

HA 704. Seminar on Christian Iconography. 3 Hours.
A study of subject matter in the visual arts and of modes of representing certain themes and categories of ideas and meanings in the history of art. Prerequisite: Nine hours of history of art and knowledge of a foreign language. SEM.

HA 705. Major Artist: ____. 1-3 Hours.
The study in detail of a single artist or of an artist and his school or shop. Prerequisite: An introductory course in Western art history at the college level and the 400-level course in the period in which the artist’s work falls. SEM.

HA 706. Seminar on Special Problems in Art History: ____. 1-6 Hours.
Seminar dealing with particular art historical problems of a special and specific nature. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 707. Directed Readings. 1-6 Hours.
Supervised study and research into special fields of art of particular interest to the student. Weekly consultations and reports. RSH.

HA 710. Museum Techniques and Functions. 3 Hours.
Primarily for graduate students interested in pursuing a career in art museum work. The development of the museum idea, the activities of the art museum, as well as practical experience in the various fields of art museum curatorship and public activity are among the areas studied. SEM.

HA 712. Directed Museum Study. 1-6 Hours.
Supervised study and research projects related to art works in the permanent collections or special exhibitions of local museums of art. Planned in consultation with a faculty member and the director of the museum. RSH.

HA 715. Seminar in African Art. 3 Hours.
A concentrated study of a special topic relating to African Art studies. Different topics are offered in different semesters. (Same as AAAS 715.) Prerequisite: Nine hours of Art History and/or consent of instructor. SEM.

HA 716. Art of the Early Middle Ages in the West. 3 Hours.
A pro-seminar in the art of the West from the Migration Period through the art of the Carolingian Empire. SEM.

HA 719. Art Histories: Theory and Methodology. 3 Hours.
This course examines the major methodologies and theories that have shaped and continue to shape the field of art history. Through critical reading of primary, secondary, and interpretive texts, the course will analyze closely the history and current state of the discipline. Prerequisite: Nine hours of History of Art or consent of instructor. SEM.

HA 720. Asian Art: Theory and Method. 3 Hours.
This course examines important methodologies and theories of the past and present employed in the field of Asian art history. Through critical reading of primary documents and secondary scholarship, students will gain historical perspective on and practical tools for research in the history of Asian art and visual culture. Prerequisite: Nine hours of History of Art or consent of instructor. SEM.

HA 723. Romanesque Art. 3 Hours.
A study of Western European sculpture, painting, and architecture from the period of the Migrations, through the so-called "Dark Ages" to the creation of the Gothic style. Prerequisite: A survey of Medieval art. SEM.
HA 725. The Gothic Cathedral. 3 Hours.
The development and spread of Gothic architecture and sculpture in France, England, Spain, and Germany. Prerequisite: A college level introduction to Medieval art history. SEM.

HA 745. Dutch and Flemish Painting of the 17th Century. 3 Hours.
A detailed study of the art of Hals, Rembrandt and Vermeer, on the one hand, and of Rubens and Van Dyck on the other. Prerequisite: A survey of Northern Baroque art or consent of instructor. SEM.

HA 760. Proseminar in Korean Art. 3 Hours.
Intensive study of a selected topic in the visual arts of Korea; topics may focus on a particular genre, theme, historical period or group of artists, for example Buddhist painting and sculpture, Choson period landscape and genre painting, ceramics and lacquerware or modern and contemporary art in North and South Korea. May be repeated for credit up to a maximum of 12 hours. Prerequisite: Consent of instructor. SEM.

HA 782. Japanese Painting. 3 Hours.
A survey covering the development of Japanese painting from the Kofun period down to the early twentieth century. Topics will include Buddhist and other religious paintings, narrative handscrolls, suibokuga, decorative screens, genre paintings and ukiyo-e prints, and Western-style paintings of the Meiji and Taisho periods. Work requirements will be greater for students enrolled at the 700 level. Prerequisite: HA 265, or HA 267, or consent of instructor. LEC.

HA 788. Proseminar in Japanese Art. 3 Hours.
Critical analysis of readings on selected topics in Japanese art. May be repeated for credit up to a maximum of 12 hours. Prerequisite: Consent of instructor. SEM.

HA 789. Proseminar in Chinese Art. 3 Hours.
Critical analysis of readings on selected topics in Chinese art. May be repeated for credit up to a maximum of 12 credit hours. Prerequisite: Consent of instructor. SEM.

HA 805. Seminar in Graphic Arts: ______. 3 Hours.
A concentrated study of one or more artists, techniques, or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. Prerequisite: A course in graphic art, or in a discipline related to the field of the seminar. SEM.

HA 808. Problems in Connoisseurship West: ______. 3-6 Hours.
The analysis of the work of a specific artist, medium or period, and developing a knowledge of the methods and means of establishing standards of quality and authorship. Includes study in Spencer and/or Nelson Museums. Prerequisite: Nine hours of art history and a reading knowledge of a pertinent foreign language. SEM.

HA 822. Seminar in Buddhist Art: ______. 3 Hours.
A concentrated study of selected problems dealing with Buddhist art in Asia. Different topics are offered in different semesters. May be repeated for credit up to a maximum of twelve hours. Prerequisite: Reading knowledge of Chinese or Japanese and consent of instructor. SEM.

HA 824. Seminar in Edo Period Painting: ______. 3 Hours.
Special study of one or more schools of painting of the Edo period (1615-1868) in Japan. Individual works will be analyzed in depth. Prerequisite: A course in Japanese painting. SEM.

HA 870. Seminar in Photographic History: ______. 3 Hours.
Advanced study of photographic images as made and used in the nineteenth and twentieth centuries. Requires primary research. Prerequisites include study of nineteenth century history of art. Specific topics vary. SEM.

HA 898. Franklin Murphy Seminar in Art History: ______. 3 Hours.
This seminar is given each spring by the Murphy Lecturer of the year and includes two weeks of intensive study with a nationally known expert in a special field of art history. The other weeks of seminar meetings for the semester are conducted by the faculty member most closely specialized in this field. Prerequisite: Consent of supervising faculty member. SEM.

HA 899. Thesis. 1-6 Hours.

HA 906. Seminar on Special Problems in Art History: ______. 1-6 Hours.
Seminar dealing with particular art historical problems of a special and specific nature. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 907. Directed Readings in Art. 1-12 Hours.
Supervised study and research into special fields of art of particular interest to the student. Weekly consultation and reports. Prerequisite: Nine hours of art history and a reading knowledge of a pertinent foreign language. RSH.

HA 910. Curatorial Problems: 3-8 Hours.
Primarily for the graduate student interested in art museum work. The student will engage in specialized research related to museum activities resulting in either a research paper, an exhibition, or a catalogue of some portion of the museum's holdings. Prerequisite: Nine hours of history of art and a reading knowledge of a pertinent foreign language. SEM.

HA 920. Seminar in Early Medieval Art: ______. 3 Hours.
A study of selected problems dealing with the art of the early Middle Ages. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 925. Seminar in Late Medieval Art: ______. 3 Hours.
A study of selected problems dealing with the art of the later Middle Ages. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 930. Seminar in Italian Renaissance Art: ______. 3 Hours.
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 935. Seminar in Northern Renaissance Art: ______. 3 Hours.
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 940. Seminar in 17th Century Art: ______. 3 Hours.
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 950. Seminar in 18th Century Art: ______. 3 Hours.
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 955. Seminar in 19th Century Art: ______. 3 Hours.
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 960. Seminar in 20th Century Art: ______. 3 Hours.
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.
HA 965. Seminar in American Art: ______. 3 Hours.
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. Prerequisite: Consent of instructor. SEM.

HA 970. Seminar in Photography and Fine Art: ______. 3 Hours.
Advanced study of the relationships between photographic images, prints, painting, mass media, illustration, and other forms of visual expression. Specific periods and areas of emphasis will vary. Prerequisite: Advanced study of nineteenth century history of art. SEM.

HA 980. Seminar in Chinese Art: ______. 3 Hours.
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 982. Seminar in Later Chinese Art: ______. 3 Hours.
A concentrated study of artists, monuments or movements in Later Chinese art. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 16 credit hours. SEM.

HA 990. Seminar in Japanese Art: ______. 3 Hours.
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 995. Seminar in Korean Art: ______. 3 Hours.
Concentrated study of one particular genre, theme, historical period or group of artists. Readings will include primary and secondary language material in Korean, Japanese and/or Chinese including texts in classical forms of these languages. May be repeated for credit up to maximum of twelve hours. Prerequisite: Reading knowledge of Korean, Japanese or Chinese and consent of instructor. SEM.

HA 999. Doctoral Dissertation. 1-12 Hours.
THE.

History Courses

HIST 101. Introduction to History: ______. 3 Hours. HT GE11 / H.
An introduction to the study of history. The course will expose the student to the major issues and methods of historical study. This will be done through the study of a specific historical period or topical area. In the study of this period or topic, students will be introduced to schemes of interpretation, critical readings and analysis, primary sources, and evaluation of evidence. LEC.

HIST 102. Introduction to History, Honors: ______. 3 Hours. HT / H.
An introduction to the study of history. The course will expose the student to the major issues and methods of historical study. This will be done through the study of a specific historical period or topical area. In the study of this period or topic, students will be introduced to schemes of interpretation, critical readings and analysis, primary sources, and evaluation of evidence. Prerequisite: Membership in the College Honors Program or consent of department. LEC.

HIST 103. Environment and History. 3 Hours. H.
Nature is our oldest home and newest challenge. This course surveys the environmental history of the earth from the extinction of the dinosaurs to the present with a focus on the changing ecological role of humans. It analyzes cases of ecological stability, compares cultural attitudes toward nature, and asks why this ancient relationship seems so troubled. (Same as EVRN 103,) LEC.

HIST 104. Introduction to African History. 3 Hours. NW GE11/GE3H / H/W.
An introduction to important historical developments in Africa mainly south of the Sahara. Topics will include early history, empires, kingdoms, and city-states, the slave trade, southern Africa, partition and colonialism, the independence era, military and civilian governments, and liberation movements. Approaches will include literature, the visual arts, politics, economics, and geography. (Same as AAAS 105.) LEC.

HIST 105. Introduction to Ancient Near Eastern and Greek History. 3 Hours. NW GE3H / H/W.
A general survey of the political, social, and economic developments of Mesopotamia, Egypt, Asia Minor, and Greece from Paleolithic times to 323 B.C. LEC.

HIST 106. Introduction to Roman History. 3 Hours. H/W.
A general survey of the political, social, and economic developments of ancient Rome from 753 B.C. to 475 A.D. LEC.

HIST 107. Introduction to the Ancient World. 3 Hours. H.
This course covers the history of the ancient Near East, Greece and Rome with emphasis on the origins of agriculture, writing, cities, empires, and democracy. Students will be introduced to schemes of interpretation, critical readings, and analysis, primary sources, and evaluation of evidence. LEC.

HIST 108. Medieval History. 3 Hours. HT GE11 / H/W.
The history of Europe from the Barbarian Invasions to the beginning of the 16th century. LEC.

HIST 109. The Black Experience in the Americas. 3 Hours. HT AE41 / H/W.
An interdisciplinary study of the history of the African peoples of the New World, relating their cultures and institutions to the African background and to their peculiar New World experiences up to and including the nineteenth century. While the main emphasis is on the U.S.A., attention is also paid to the Caribbean and Latin America. Approaches include demography, economics, social and political developments, literature, and music. (Same as AAAS 106,) LEC.

HIST 111. Introduction to African History, Honors. 3 Hours. NW / H/W.
An intensive version of AAAS 105/HIST 104. An introduction to important historical developments in Africa, mainly south of the Sahara. Topics include early history, empires, kingdoms and city-states, the slave trade, southern Africa, partition and colonialism, the independence era, military and civilian governments, and liberation movements. Approaches include literature, the visual arts, politics, economics, and geography. Open only to students in the University Honors Program or by consent of instructor. (Same as AAAS 115,) LEC.

HIST 112. Introduction to British History. 3 Hours. H.
This course will introduce students to the concepts, issues, and methods of historical study, at the same time as it explores the main processes and events which shaped the history of Britain and its imperial dependencies. Students will be introduced to the nature and validity of different historical interpretations, and to the purpose and merit of historical writings. LEC.

HIST 113. Europe 1500-1789, Honors. 3 Hours. HT / H.
An introduction to early modern European history, with emphasis on the cultural, political, economic, and social processes and events which helped to shape the modern world: The renaissance, the rise of the nation states, the Reformation, absolutism, and constitutionalism, the Enlightenment, and the coming of the French Revolution. Not open to students who have taken HIST 114. This Honors course is a Humanities Historical Studies Principal Course. Prerequisite: Membership in the College Honors Program or consent of department. LEC.
HIST 114. Renaissance to Revolution: Europe 1500-1789. 3 Hours. HT GE11 / H/W.
An introduction to early modern European history, with emphasis on the cultural, political, economic, and cultural forces which have helped to shape the modern world. The renaissance, the rise of nation states, the Reformation, absolutism and constitutionalism, the Enlightenment, and the coming of the French Revolution. LEC.

HIST 115. French Revolution to the Present: Europe 1789-Present. 3 Hours. HT GE11/GE3H / H/W.
An introduction to recent European history, with emphasis on the social, political, economic, and cultural forces which have helped to create the Europe of today: the French Revolution, the romantic movement, the revolutions of 1848, nationalism, imperialism, Communism, and two World Wars, the cold war, and its aftermath. LEC.

HIST 116. French Revolution to the Present: Europe 1789 to Present, Honors. 3 Hours. HT GE11/GE3H / H.
An introduction to recent European history, with emphasis on the social, political, economic, and cultural forces which have helped to create the Europe of today: The French Revolution, the romantic movement, the revolutions of 1848, nationalism, imperialism, Communism, and two World Wars, the cold war and its aftermath. Not open to students who have taken HIST 115. This Honors course is a Humanities Historical Studies Principal Course. Prerequisite: Membership in the College Honors Program or consent of department. LEC.

HIST 117. Russia, an Introductory History. 3 Hours. HT / H/W.
A survey of the evolution of Russia from its origins to the present. The focus will be on the interaction of government and society and on internal and external pressures affecting modernization and reform, revolution, and territorial expansion. LEC.

HIST 118. History of East Asia. 3 Hours. NW AE42 / H/W.
A survey of the history of China, Japan, Korea, and other cultures in East Asia from premodern to modern times. Students are introduced to the major currents of East Asian history and historical methods used to study them. Not open to students with credit in upper division East Asian history. LEC.

HIST 119. History of East Asia, Honors. 3 Hours. NW AE42 / H/W.
A survey of the history of China, Japan, Korea, and other cultures in East Asia from premodern to modern times. Students are introduced to the major currents of East Asian history and historical methods used to study them. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

HIST 120. Colonial Latin America. 3 Hours. NW AE42/GE3H / H/W.
The principal focus is on the evolution and analysis of societies, economies, and religions of native American peoples, the impact of Spanish and Portuguese conquests and settlement, government, trade and culture upon native civilizations, the influence of African population and culture, and the creole nature of the resulting society in the colonial period. Changes in the society and economy which presaged the movements for independence are also discussed. LEC.

HIST 121. Modern Latin America. 3 Hours. HT GE3H / W.
Students are introduced to historical analysis within the context of the emergence of national identities and the process of modernization in the region. It also discusses key processes such as urbanization and industrialization and examines social movements for reform or revolution in the 20th Century. The course compares social, cultural, economic, and political changes across a variety of countries since 1810, giving particular attention to the legacies of colonialism. In this way the course deals with interpretations of the processes and movements and major issues of Latin American historiography. LEC.

HIST 122. Colonial Latin America, Honors. 3 Hours. NW AE42/GE3H / H/W.
The principal focus is on the evolution and analysis of societies, economies, and religions of native American peoples, the impact of Spanish and Portuguese conquests and settlement, government, trade and culture upon native civilizations, the influence of African population and culture, and the creole nature of the resulting society in the colonial period. Changes in the society and economy which presaged the movements for independence are also discussed. Prerequisite: Membership in the College Honors Program or permission of instructor. LEC.

HIST 123. Modern Latin America, Honors. 3 Hours. HT GE3H / W.
Similar in content to HIST 121. Students are introduced to historical analysis within the context of the emergence of national identities and the process of modernization in the region. The course compares social, cultural, economic, and political changes across a variety of countries since 1810, giving particular attention to the legacies of colonialism. It also discusses key processes such as urbanization and industrialization and examines social movements for reform and revolution in the 20th century. In this way the course deals with interpretations of these processes and movements and major issues of Latin American historiography. Prerequisite: Membership in the University Honors Program or permission of instructor. LEC.

HIST 124. Latin American Culture and Society. 3 Hours. SC AE42 / S.
An introduction to the interdisciplinary study of Latin America, as manifest in the arts and literature, history, and in environmental, political, economic, and social realities. Explores and critiques the principal themes and methodologies of Latin American Studies, with an aim towards synthesizing contributions from several different disciplines. Emphasizes the unique insights and perspectives made possible by interdisciplinary collaboration and provides students with the basic knowledge base for understanding Latin America today. (Same as LAA 100.) LEC.

HIST 128. History of the United States Through the Civil War. 3 Hours. HT GE3H / H.
A historical survey of the United States from the peopling of the continent through the Civil War. This survey is designed to reflect the diversity of the American experience, to offer the student a chronological perspective on the history of the United States, and to explore the main themes, issues, ideas, and events which shaped that history. LEC.

HIST 129. History of the United States After the Civil War. 3 Hours. HT GE3H / H.
A historical survey of the American people from Reconstruction to the present. This survey is designed to reflect the diversity of the American experience, to offer the student a chronological perspective on the history of the United States, and to explore the main themes, issues, ideas, and events that shaped American history. LEC.

HIST 130. History of the United States Through the Civil War, Honors. 3 Hours. HT GE3H / H.
A historical survey of the United States from the peopling of the continent through the Civil War. This survey is designed to reflect the diversity of the American experience, to offer the student a chronological perspective on the history of the United States, and to explore the main themes, issues, ideas, and events which shaped that history. Not open to students who have taken HIST 128. Prerequisite: Membership in the College Honors Program or consent of department. LEC.

HIST 131. History of the United States After the Civil War, Honors. 3 Hours. HT GE3H / H.
A historical survey of the American people from Reconstruction to the present. This survey is designed to reflect the diversity of the American
experience, to offer the student a chronological perspective on the history of the United States, and to explore the main themes, issues, ideas, and events which shaped that history. Not open to students who have taken HIST 129. Prerequisite: Membership in the College Honors Program or consent of department. LEC.

HIST 136. Early Science to 1700. 3 Hours. H.
Surveys the Western scientific tradition from roots in ancient Egypt, Mesopotamia, and Greece to the Scientific Revolution in seventeenth-century Europe. Focuses on the theoretical, methodological, and institutional development of the physical and bio-medical sciences. Addresses interactions of science with the technological, religious, philosophical, and social dimensions of Western culture. LEC.

HIST 137. History of Modern Science. 3 Hours. H.
Surveys the history of science from the seventeenth century to the present with study of the changing theoretical, institutional, and social character of the scientific enterprise. Addresses physical, biological, and social sciences with attention to the chemical revolution at the turn of the nineteenth century, evolutionary biology, the new physics of the early twentieth century, and the professionalization of social science. Relates scientific changes to historical developments in technology, religion, national traditions in Europe and the USA, and non-Western cultures. LEC.

HIST 140. Global Environment I: The Discovery of Environmental Change. 5 Hours. GE3H / U.
This interdisciplinary course and laboratory sections survey the foundations of environmental understanding and the process of scientific discovery from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the history of environmental systems and life on earth, the discovery of biotic evolution, ecological change, and climate change. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as EVRN 140 and GEOG 140.) LEC.

HIST 142. Global Environment II: The Ecology of Human Civilization. 5 Hours. GE3H / U.
This interdisciplinary course and its laboratory sections survey the history of humanity's relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the ecology of colonialism and industrial civilization, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to the humanity's engagement with the global environment using historical and present-day examples. (Same as EVRN 142 and GEOG 142.) Open only to students in the University Honors Program or by permission of instructor. LEC.

HIST 145. Global Environment II: The Ecology of Human Civilization, Honors. 5 Hours. U.
This interdisciplinary course and its laboratory sections survey the history of humanity's relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the ecology of colonialism and industrial civilization, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to the humanity's engagement with the global environment using historical and present-day examples. (Same as EVRN 140 and GEOG 140.) Open only to students admitted to the University Honors Program or by permission of instructor. LEC.

HIST 147. First Year Seminar: ______. 3 Hours. HT GE11.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in history. May not contribute to major requirements in history. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

HIST 206. Disasters in Mediterranean Antiquity. 3 Hours. H.
This course examines a variety of natural and man-made disasters in the ancient Mediterranean world including floods, volcanic eruptions, earthquakes, famines, plagues, and tsunamis. Emphasis throughout is on exploring the range of impacts, responses, and attempts at recovery documented by ancient sources and proposed by modern scholars. The focus lies on primary evidence, ranging from the Bible to Greece and Rome via Egypt and Mesopotamia. The course aims to familiarize students with several types of catastrophic events that occurred in antiquity in order to gain an understanding of their effects on the environment and on decision-making processes. In addition to investigating what these disasters entailed, we seek to appreciate how they affected societies in various ways including economically, psychologically, and demographically, and how individuals and governments reacted and responded to these crises. LEC.

HIST 210. Brazil and Africa: Atlantic Encounters. 3 Hours. H.
This is a survey course on the history of the relationships between Brazil and Western Africa from the sixteenth century onward. We examine the shape of the Atlantic world, the nature of the Portuguese empire in Brazil and Africa, the presence of Brazilian born agents in Western Africa, the cultural exchanges, the impact of colonial rule, and the responses of indigenous societies to these developments. Among the topics to receive attention are Brazil/Portuguese slave trade; slavery in Western Africa, urban and rural context of African slavery in Brazil; the family and religious life in both sides of the Atlantic; Brazilian communities in the coast of Africa; the abolition of slavery; and the long lasting relationships between Western Africa and Brazil. Students develop familiarity with major historical concepts, themes, and subjects. The course also aims
to explore history as process to make sense of the past and the present. (Same as AAAS 210.) LEC.

HIST 220. A Global History of Human Health. 3 Hours. H.
This course surveys how human populations have experienced diseases including those induced by infectious microbes, environmental agents, and dietary causes from prehistoric hunter-gatherer societies to today's global population. Particular emphasis is on major transitions and historical events that have led to major epidemics. These transitions and events include but are not limited to the transition to agriculture, urbanization, imperial expansion, colonialism, industrialization, world wars, factory farming, and the transportation revolution. The development of medicine, public policies, and global health organizations is a central theme as is the development of global health disparities. Students are challenged to think historically and apply a long-term perspective to understand today's global health problems. LEC.

HIST 250. Study Abroad Topics in:_____. 1-5 Hours. H.
This course is designed for the study of special topics in History at the freshman/sophomore level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

HIST 300. Modern African History. 3 Hours. NW AE42 / H/W.
A survey of social, political, and economic developments during the colonial era and independence struggles, followed by a closer examination of the contemporary experience in a selected country or region. (Same as AAAS 305.) LEC.

HIST 301. The Historian's Craft. 3 Hours. H.
This course introduces students to the practice and methods of the study of history and serves as the gateway to the major. Students learn (1) to think historically; (2) to understand how historians construct and write about the past through narratives, theory and analytical discussion; (3) to critically evaluate historical arguments and the material used to substantiate those arguments, including an introduction to the process of peer review; (4) to develop writing and research skills including the interpretation of primary sources; and (5) to master professional standards of presenting their findings. This course is required of all history majors and is a prerequisite for HIST 696 Seminar in: ______. Prerequisite: Open only to declared History majors or by consent of instructor. LEC.

HIST 302. The Historian's Craft, Honors. 3 Hours. H.
This course introduces students to the practice and methods of the study of history and serves as the gateway to the major. Students learn (1) to think historically; (2) to understand how historians construct and write about the past through narratives, theory and analytical discussion; (3) to critically evaluate historical arguments and the material used to substantiate those arguments, including an introduction to the process of peer review; (4) to develop writing and research skills including the interpretation of primary sources; and (5) to master professional standards of presenting their findings. This course, or HIST 301 - its non-honors equivalent, is required of all history majors and is a prerequisite for HIST 696 Seminar in: ______. Prerequisite: Open only to students admitted to the University Honors Program who are declared History majors, or by consent of instructor. LEC.

HIST 303. Sin Cities. 3 Hours. H.
This course offers a comparative global introduction to the history of the modern city by looking at the ways in which certain metropolii developed an attractive underbelly of decadence at the same time as they sought to be centers of refined and orderly cosmopolitan life. The course examines topics such as popular culture, gambling, prostitution, crime, violence, nightlife, tourism, and corruption in the context of the increased social mobility that characterized the beginning of the industrial age and that has extended into the 21st century. Students investigate the changing relation between work and leisure, spectacle and consumerism, and urban space and the struggle for order. LEC.

HIST 304. 1642, 1688, 1776: Three British Revolutions. 3 Hours. H.
Explains and analyzes the three revolutions in the English-speaking world which, more than any others, are held to have laid the foundations of modernity. Themes discussed include social, intellectual, and political developments, structures, and conflicts. 1642 and 1688 are treated in the setting of England's relations with Scotland and Ireland, and against the background of European wars of religion. 1776 is analyzed in a transatlantic context as a civil war within the wider British polity. LEC.

HIST 305. The Scientific Revolution. 3 Hours. H.
Describes and analyzes the factors producing a Scientific Revolution in early-modern Europe. Focuses on fundamental changes in astronomy-cosmology, physics, and biology from Copernicus to Newton. Examines the emergence of experimental method as an essential part of Western science. Portrays the development of new forms of scientific organization and the cultural frameworks that bore and shaped them. Surveys the various interpretations of this period expressed by current historians of science. LEC.

HIST 306. Science and Western Culture. 3 Hours. H.
Analyzes the institutional, social, technological, and political circumstances of science in the Western tradition. Examines the place of science in pre-modern European settings. Emphasizes the shifting centers of national scientific prominence since the seventeenth century from Italy to Britain to France to Germany to the USA. LEC.

HIST 307. Modern African History, Honors. 3 Hours. NW AE42 / H.
An intensive version of HIST 300. A survey of social, political, and economic developments during the colonial era and independence struggles, followed by a closer examination of the contemporary experience in a selected country or region. Open only to students admitted to the University Honors Program, or by consent of the instructor. (Same as AAAS 307.) LEC.

HIST 308. Key Themes in Modern Global History. 3 Hours. H.
A comparative historical analysis of major global developments from the late 15th century to the present. Some of the themes likely to be explored are empire-building, contact between cultures and colonial social relations; the attraction of cities, their role in a global economy and the shift to an urban world; and the impact of capitalism and industrialization on social organization including conflict between classes and changes in the nature of work. Students learn ways of interpreting primary historical documents and comparing historical investigations across time and space. Not open to students who have completed HIST 100. LEC.

HIST 309. History of Chemistry. 3 Hours. H.
Birth of modern chemical science from roots in Greek natural philosophy, alchemy, Renaissance medicine, and technology. The Chemical Revolution of Lavoisier and Dalton. Maturity of chemistry in the19th and 20th centuries, along with an examination of the growth of chemical institutions and the rise of chemical industry. Emphasis on developments from the 18th century to the present. (Same as CHEM 309.) LEC.

HIST 310. American Culture, 1600-1876. 3 Hours. H.
An examination of the major historical shifts, trends, and conflicts that have shaped the multicultural nature of life in the United States from the initial European settlements to 1876. In addition to tracing developments in literature, architecture, drama, music, and the visual arts, this course will investigate patterns and changes in the popular, domestic, and material culture of everyday life in America. (Same as AMS 310.) Prerequisite: AMS 100 or AMS 110 or HIST 128. LEC.
HIST 311. Great Lives in Science. 3 Hours. H.
This course examines the lives of selected great scientists. Lectures and biographical readings deal with scientists who lived in the period between the seventeenth century and the present. Through comparative biography, the course assesses the theoretical, methodological, institutional, and social development of modern science. LEC.

HIST 312. American Culture, 1877 to the Present. 3 Hours. H.
An examination of the major historical shifts, trends, and conflicts that have shaped the multicultural nature of life in the United States from 1877 to the present. In addition to tracing developments in literature, architecture, drama, music and the visual arts, this course investigates patterns and changes in the popular, domestic, and material culture of everyday life in America. (Same as AMS 312.) LEC.

HIST 313. Conspiracies and Paranoia in American History. 3 Hours. H.
The theme of conspiracy is a recurring motif in American history. This course uses a case-study method to revisit episodes such as the Salem witch trials, the movement against freemasonry, the Slave Power conspiracy, and more recent obsessions such as UFOs and the assassination of John F. Kennedy to explain why so many Americans have embraced conspiracy theories to explain mysterious events and dramatic social change. The course will rely on primary accounts, fiction, and film, as well as secondary historical literature, to examine both “real” and “imaginary” conspiracies and their effects on the politics, culture, and society of the United States. LEC.

HIST 314. Globalization: History and Theory. 3 Hours. H.
Explores the rise of global capitalism in the 19th and 20th centuries, contemporary debates about 21st century globalization, and the role of globalization in our everyday lives. Questions considered include: Is globalization an incremental process that has been going on for centuries, or is it a dramatic new force reshaping the post-Cold War world? Is it a cultural and social process or an economic and political one? Or is it all of these things? Not open to students who have completed HIST 315. LEC.

HIST 315. Globalization: History and Theory Honors. 3 Hours. H.
Explores the rise of global capitalism in the 19th and 20th centuries, contemporary debates about 21st century globalization, and the role of globalization in our everyday lives. Questions considered include: Is globalization an incremental process that has been going on for centuries, or is it a dramatic new force reshaping the post-Cold War world? Is it a cultural and social process or an economic and political one? Or is it all of these things? Not open to students who have completed HIST 314. Open only to students in the College Honors Program or consent of instructor. LEC.

HIST 316. Ministers and Magicians: Black Religions from Slavery to the Present. 3 Hours. H.
This course examines the history and diversity of African American religious expression from slavery until the present, emphasizing both mainstream and alternative faiths. It covers the religious world views of enslaved Africans, and examines faiths inside and outside of Christianity. Topics may include: independent black churches, magical practices, the Holiness and Pentecostal movements, black Islam, religious freemasonry, and esoteric faiths. The class emphasizes the influence of gender, class, race, migration, and urbanization on black religion. (Same as AAAS 316 and AMS 316.) LEC.

HIST 317. African American Women: Colonial Era to the Present. 3 Hours. AE41 / H.
This interdisciplinary course covers the history of African American women, beginning in West and Central Africa, extending across the Middle Passage into the Americas, and stretching through enslavement and freedom into the 21st century. The readings cover their experiences through secondary and tertiary source materials, as well as autobiographies and letters, plays and music, and poems, novels, and speeches. (Same as AAAS 317, AMS 317, and WGSS 317.) LEC.

HIST 318. Indian Territory. 3 Hours. H.
This course examines the cultural, social, economic, environmental, and political history of Indian Territory in what is now the state of Oklahoma. It surveys the diverse geographical regions, tribal cultures, the impact of Indian Removal Act, assimilation, acculturation, westward expansion, the Civil War, boarding schools, the Dawes Act, the Curtis Act, and land runs on Indian Territory residents. The course also treats post-Civil War violence, outlaws, and the role of tribal courts along with controversies over removals, Land Run celebrations, allotment scandals, and Osage oil murders. (Same as HWC 345 and ISP 345.) LEC.

HIST 319. History, Women, and Diversity in the U.S.. 3 Hours. AE41 / H.
This survey course explores the history of being female in America through a focus on the ways differences in race, sexuality, ethnicity, class, and life cycle have shaped various aspects of women’s lives. Themes to be explored could include, but are not limited to: social and political activism; intellectual developments; family; women’s communities; work; sexuality; and culture. LEC.

HIST 320. From Goddesses to Witches: Women in Premodern Europe. 3 Hours. HT GE11/GE3H / H.
This course examines the social, cultural, and political contexts of women’s spirituality and their relations to gender relations in Europe from about 30,000 B.C.E. to the 16th century Protestant Reformation. Lectures move both chronologically and topically, covering such subjects as goddess-worshiping cultures, women’s roles in Christian and Jewish societies, symbols of women, and male attitudes toward women. Students will be able to participate in weekly discussions of primary and secondary source readings about women. (Same as WGSS 320.) LEC.

HIST 321. From Mystics to Feminists: Women’s History in Europe 1600 to the Present. 3 Hours. HT AE42/GE11/GE3H / H.
This survey of women’s history in Europe looks at changing patterns of women’s economic roles and family structures in preindustrial and industrial society, the importance of women in religious life, cultural assumptions underlying gender roles, and the relationship of women to political movements, including the rise of feminism. (Same as WGSS 321.) LEC.

HIST 324. History of Women and the Body. 3 Hours. H.
This course examines different notions about women and their bodies from a historical perspective. It discusses the arguments and circumstances that have shaped women’s lives in relation to their bodies, and women’s responses to those arguments and circumstances. This course covers a wide geographical and chronological spectrum, from Ancient societies to the present, from Latin America and the Middle East, to North America and Western Europe. (Same as WGSS 324.) LEC.

HIST 325. The Spanish Inquisition. 3 Hours. H.
A broad historical study of the Spanish Inquisition from 1478 to its afterlife in modern culture, including its use in political debates and its depiction in popular culture. Topics include anti-Semitism, the nature of the inquisitorial investigation, the use of torture, censorship and the relationship between the Inquisition, the Spanish monarchy and other religious and lay authorities. Taught in English. Will not count toward the Spanish major. (Same as JWSH 315 and SPAN 302.) LEC.

HIST 326. Native American Civilizations and their European Conquerors. 3 Hours. NW AE42/GE11/GE3H / H/W.
The societies, economies, and cultures of Native American peoples in Brazil, Peru, Mexico, and the Southwestern United States will provide the
main focus of this course to understand the culture and values of those who preceded the Europeans in the Americas. European culture is also examined, including the motivations for exploration and conquest. The details of the particular conquests and how they affected the resulting composite society will also be discussed, using contemporary eye-witness accounts, films recreating the action, and modern accounts. LEC.

HIST 327. The Premodern Middle East. 3 Hours. NW AE42 / H.
A survey of the history of the Middle East from the origins of Islam in the seventh century to the rise and consolidation of the Ottoman Empire in the eighteenth century. Lectures and discussions focus on diversity within the Middle East at the height of the Islamic empires. Topics include the life of Muhammad and early Islamic communities, expansion of Islam into Asia, Africa and Europe, intellectual strength in the medieval period, and the everyday lives of women, Christians, Jews and other minority groups. LEC.

HIST 328. The Modern Middle East. 3 Hours. NW AE42 / H.
A survey of the history of the Middle East from 1800 to the present. Lectures and discussions focus on diversity within the Middle East over two centuries of major political and cultural change. Topics include causes for the decline of the Ottoman Empire, debates over modernization, European imperialism and the formation of nation-states, twentieth century cultural revolutions and women's activism, the Arab-Israeli conflict, and the revival of Islamic social movements. LEC.

HIST 329. History of War and Peace. 3 Hours. HL / H.
A study of the changing nature of warfare and the struggle to bring about peace. Topics include pacifism, the "military revolution" that created the first professional armies; the development of diplomatic immunity, truces, and international law; the peace settlements of Westphalia, Utrecht, Vienna, Versailles, and San Francisco; the creation of peace movements and peace prizes; the evolution of total war, civil war, and guerrilla warfare involving civilians in the twentieth century; the history of the League of Nations and United Nations; and the rise of intergovernmental and non-governmental organizations. (Same as EURNS 329 and PCS 329.) LEC.

HIST 330. Revolt and Revolution in Early Modern Europe. 3 Hours. H.
A study of forces giving rise to riots, rebellions, and revolution in Western Europe from 1600-1790. The course will examine social and ideological aspects of famine, religious persecution, taxation, war, landlord-peasant relations, and the increasing power of kings. LEC.

HIST 331. Atlantic Societies, 1450-1800: A Comparative History of European Colonization. 3 Hours. H.
This course offers a comparative history of the European (Portuguese, Spanish, French, English, and Dutch) colonization of the Americas. It examines the interaction among peoples and cultures across the Atlantic, from the age of European exploration to the start of the independence movements in the Americas. Themes that will receive special attention include: comparing patterns of colonization, the forging of American societies of European, Native American, and African cultures, the slave trade, and the history of sugar production. LEC.

HIST 332. Eurometro: Visions of the European Metropolis, 1849-1939. 3 Hours. H.
This course investigates the interrelated symbols of the European metropolis during the "Age of Great Cities", from the filth of the sewers to the "filthiness" of prostitution. Students investigate gender and class in the metropolis by exploring a few stereotypes: the juvenile delinquent, the woman on the street, and the flaneur. The course format stresses discussion of common texts, including short readings of literature from the period and historical scholarship. Students also analyze contemporary photographs, art, architecture, and advertising. LEC.

HIST 334. The Great War: The History of World War I. 3 Hours. H.
A historical survey of the causes, course, and consequences of the conflict, 1878-1919, stressing its socio-economic dimensions as well as its political ramifications and military aspects. Considerable use will be made of visual aids. No prerequisites. LEC.

HIST 335. History of Jewish Women. 3 Hours. H.
This course explores the history of Jewish women from antiquity to the twentieth century. It examines the historical constructions of women's gender roles and identities in Jewish law and custom as well as the social and cultural impact of those constructions in the context of the realities of women's lives in both Jewish and non-Jewish society. (Same as JWSH 335, WGSS 335.) LEC.

HIST 336. Ethics, Ideas, and Nature. 3 Hours. AE51 / H.
This course examines the ethical frameworks developed for thinking about, using, and protecting the natural world. Examples of topics include indigenous approaches to nature, the history of ecological ideas, environmental movements, the role of the state in managing resources, utilitarianism and progressivism, environmental lawmaking, wilderness advocacy, nature and theology, the rights of nature, and environmental justice. Students are introduced to the theories of duty ethics, justice ethics, utilitarianism, and right ethics, and required to apply ethical decision making to contemporary and historical environmental issues. Multiple perspectives on the history of human interactions with nature demonstrate the importance of reflecting upon the value systems inherent in human-centered environmental ethics and nature-centered environmental ethics. (Same as EVRN 336.) LEC.

HIST 337. History, Ethics, Modernity. 3 Hours. H.
This course will examine the question "How has human dignity been preserved or violated in the modern age?" Cast in a global framework, some of the probable themes are the history of human rights; the moral universe of genocide; the (in)divinity of industrial work; the shifting status of the poor and the colonized and their treatment by the state and society; the impact of changing technology on ethics in war, peace and the environment; and the violation of dignity as a factor in collective resistance. LEC.

HIST 338. African American Urban Community and Class in the Midwest. 3 Hours. H.
This course provides historical perspective on African Americans and the politics of economic class within black urban spaces from the end of Reconstruction to the post-World War II era. It focuses on the development of an upwardly mobile urban black middle class, and impoverished black urban "underclass," since the 1960s. Students are encouraged to have taken one of three courses: AAAS 104, AAAS 106, or AAAS 306. (Same as AAAS 328.) LEC.

HIST 340. The History of the Second World War. 3 Hours. H.
A survey of the origins, course, and consequences of the war, 1930-1945. Political, economic, military, and social aspects will be dealt with in the context of their global effects. Extensive use will be made of motion pictures and other media. LEC.

HIST 341. Hitler and Nazi Germany. 3 Hours. H/W.
An examination of the rise of Hitler and Nazism, beginning with the breakdown of 19th century culture in the First World War and continuing through the failure of democracy under the Weimar Republic. The course will also discuss the impact of Nazism on Germany and how Nazism led to the Second World War and the Holocaust. (Same as JWSH 341.) LEC.

HIST 343. The Holocaust in History. 3 Hours. H.
The systematic murder of the Jews of Europe by the Nazis during World War II is one of the most important events of modern history. This course studies the Holocaust by asking about its place in history. It compares
other attempted genocides with the Holocaust and examines why most historians argue that it is unique. Other topics covered include the reasons the Holocaust occurred in Europe when it did, the changing role of anti-Semitism, and the effects of the Holocaust on civilization. The course also discusses why some people have sought to deny the Holocaust. The course concludes by discussing the questions people have raised about the Holocaust and such issues as support for democracy, the belief in progress, the role of science, and the search for human values which are common to all societies. (Same as JWSH 344.) LEC.

HIST 344. Modern Jewish History. 3 Hours. H.
This course explores the complex of interactions between Jews, Judaism, and modernity by examining the challenges to Jewish life and thought, community and culture, self-understanding and survival, from the early modern period to the present day. Through the lenses of religious, cultural, intellectual, and political expression, the course examines the social, economic, and demographic changes in Jewish communities in Western, Central and Eastern Europe, the United States, and Israel along with the impact of antisemitism and the Holocaust. (Same as JWSH 344.) LEC.

HIST 345. Hard Times: The Depression Years in America, 1929-1941. 3 Hours. H.
An analysis of the experiences of the American people during the Great Depression. Attention will also be given to the global dimensions of the crisis, socioeconomic dislocation, cultural and institutional change, and the impact of the Asian and European wars. LEC.

HIST 346. Law and Society in America. 3 Hours. H.
Law and lawyers have powerfully shaped American values and institutions. This course explores law's impact on American society from the age of European colonization through present. Topics include liberty, public order, race and ethnicity, the family, property, speech, environment, and self-government. The course also examines the changing images of lawyers and the law over time. Course materials include not just statutes and court decisions, but literature, imagery, and popular culture materials. LEC.

HIST 347. Environmental History of North America. 3 Hours. H.
A survey of changes in the landscape and in people's perceptions of the natural world from 1500 to present. Topics include agroecology, water and energy, the impact of capitalism, industrialism, urbanization, and such technologies as the automobile, and the origins of conservation. (Same as EVRN 347.) LEC.

HIST 348. History of the Peoples of Kansas. 3 Hours. H.
A survey of culture and society in Kansas from prehistory to the present. Topics include Native American life, Euro-American resettlement, Bleeding Kansas and the Civil War, agricultural settlement, urbanization and industrialization, depression and recovery, and modern Kansas in transition. Emphasis in the course will be on social and economic conditions, the experience of ethnic and racial groups, inter-racial relations, and the role of women. LEC.

HIST 350. The Korean War, 1950-1953. 3 Hours. H.
An examination of the origins, pattern of development, and legacy of this still unsettled conflict, which in many ways set the tone for the entire post-1945 era of the Cold War. Points of emphasis will include the motives and policies of the major participants (Koreans, Americans, Chinese, and Soviets), as well as the effects of the war on their domestic politics and foreign policy positions. LEC.

HIST 351. American Indian and White Relations to 1865. 3 Hours. H.
This course provides an intensive survey of the Indians of North America from Prehistory to 1865, and focuses on ancient indigenous cultures, early European-Indian relations and the impact of European culture upon the indigenous peoples of North America. (Same as HWC 348, ISP 348.) LEC.

HIST 352. American Indians Since 1865. 3 Hours. H.
This course examines American Indian/White relations from reconstruction to the present. It surveys the impact of westward expansion and cultural changes brought about by the Civil War, forced education, intermarriage, the Dawes Act, the New Deal, the World Wars, termination and stereotypical literature and movies. The class also addresses the Red Power and AIM movements, as well as indigenous efforts to decolonize and to recover and retain indigenous knowledge. After learning about the past from both Native and non-Native source materials, students will multipe perspectives about historical events and gain understandings of diverse world views, values, and responses to adversity. (Same as HWC 350 and ISP 350.) LEC.

HIST 353. Indigenous Peoples of North America. 3 Hours. NW AE41 / H/W.
This course surveys the history of the first peoples to inhabit North America from prehistory to present. Commonly and collectively referred to as American Indians, indigenous peoples include a diverse array of nations, chiefdoms, confederacies, tribes, and bands, each of which has its own unique cultures, economies, and experiences in dealing with colonial and neocolonial powers. This class seeks to demonstrate this diversity while at the same time providing an understanding of the common struggle for political and cultural sovereignty that all indigenous nations face. Indigenous nations that have developed a relationship with the United States will receive primary focus, but comparative reference will be made to First Nations of Canada. LEC.

HIST 354. Spanish Borderlands in North America. 3 Hours. AE51 / H.
The Northern frontier provinces of the Viceroyalty of New Spain from their exploration and occupation by Spain until their absorption by the United States. LEC.

HIST 355. U.S. Borderlands Since 1848. 3 Hours. H.
This course discusses issues associated with the Mexican borderlands region after conquest and acquisition by the United States. Themes include race relations, immigration, labor, economics, politics, culture, and the environment. We discuss how the region was incorporated into the United States, and how this relationship is evolving. We also examine the notion of a borderlands region and whether or not this is a valid characterization for Kansas. LEC.

HIST 356. The Vietnam War. 3 Hours. H.
This course is a survey of the Vietnam War. It covers the early days of Cold War, 1945-54, and all phases of the Vietnam War: the advisory phase (1955-64); the Americanization phase (1965 -68); the Vietnamization Phase (1969-73); and the final phase, the Vietnam Civil War, 1972-75. This course covers the causes, course, conduct, and consequences of the war and in so doing provides a political, military, and social history of the war. LEC.

HIST 357. The Black Experience in the U.S. Since Emancipation. 3 Hours. H.
An interdisciplinary study of the history and culture of Black people in American from Reconstruction to the present. Topics covered include an analysis of Reconstruction, Black leaders, organizations and movements, the Harlem Renaissance, migration, and race relations. Demographic variables covered include socio-economic class, education, political persuasion, and influence by avant-garde culture changes. (Same as AAAS 306.) LEC.
HIST 360. Science and Religion. 3 Hours. H.
The interaction and significant confrontations between science and religion will be considered together with the religious responses to science and technology. LEC.

HIST 362. The American Way of War Since World War II. 3 Hours. H.
This course is a survey of American Military History from World War II to current military operations. It covers the Cold War, the Korean War, the Vietnam War, both Persian Gulf wars, the global war on terrorism, and the war in Afghanistan. The course examines the causes, course, conduct, and consequences of the wars and covers advances in technology and doctrine, civil-military relations, foreign policy, and inter-service rivalry, providing a political, military, and cultural history of the wars. LEC.

HIST 365. Invention of the Tropics. 3 Hours. H.
This course surveys the history of the tropical environment and its peoples from Europe's first encounter to today's ecotourism boom. It focuses on portrayals of the tropics in historical travel accounts and films. Through these sources, we seek to understand how science, technology, and tourism have been used, in turn, as instruments of progress and destruction, tools of empire and national liberation. Case studies are drawn from Latin America, Africa, Oceania, and Asia. LEC.

HIST 366. Old Regime and Revolution in France, 1648-1799. 3 Hours. H.
This course explores the political, social, and cultural system of early modern France. It culminates with study of the collapse of monarchy and establishment of republican government during the French Revolution. LEC.

HIST 367. Magic and Superstition in European History. 3 Hours. H.
This course traces the changing role and understanding of magic in European culture, religion, politics and science from the late Middle Ages through the early 20th century. Topics may include alchemy, miracles, magical healing, witchcraft, monsters and demonic possession. LEC.

HIST 368. A History of Afro-Latin America. 3 Hours. H.
This course examines the history of Africans and their descendants in Latin America. In this region, Africans could be found serving as militia commanders, laboring as skilled tradesmen, running their own businesses, working as household servants, and toiling on plantations. Students will study the varied experiences of these men and women across colonial and national boundaries. Topics include: acculturation/Creolization, manumission, family formation, social networks, economic roles, political mobilization, and interaction with indigenous peoples. LEC.

HIST 369. Colonialism and Revolution in the Third World, Honors. 3 Hours. NW AE42 / H.
This course will study the structure and dynamics of colonialism and neocolonialism in the third world beginning in the 19th Century and continuing to the 1980s. It will also examine responses to these systems, from small-scale resistance to nationalist revolutions. Attention will be given to the relationship between ideology and collective behavior. Case studies will be drawn from Africa, Asia, and Latin America. Prerequisite: Membership in the University Honors Program or permission of instructor. LEC.

HIST 370. Violence and Conflict in Latin American History. 3 Hours. H.
This course treats the history of Latin America since the European conquest through the prism of violence and social conflict. It traces the roots of the region's social collapse during the twentieth century to political and cultural factors in the colonial and early national periods. Using films and literature in addition to historical texts, the course discusses the sources of nationalism, civil wars, banditry, urbanization, violent dissent, military dictatorships, human rights abuses, and guerrilla insurgencies as well as the political uses of violence made by different social groups. LEC.

HIST 371. The Cultural History of Modern Latin America. 3 Hours. H.
This course explores themes such as the evolution of national identities, the conflict between the city and the countryside, exile, the surrealist imagination and the cultural resistance against foreign influences through an examination of the literature, film, art, music, religions and popular and material culture of 19th and 20th century Latin America. LEC.

HIST 372. Violence and Conflict in Latin American History, Honors. 3 Hours. H/W.
This course treats the history of Latin America since the European conquest through the prism of violence and social conflict. It traces the roots of the region's social collapse during the 20th century to political and cultural factors in the colonial and early national periods. Using films and literature in addition to historical texts, the course discusses the sources of nationalism, civil wars, banditry, urbanization, violent dissent, military dictatorships, human rights abuses, and guerrilla insurgencies as well as the political uses of violence made by different social groups. Not open to students who have taken HIST 370. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

HIST 373. The Supreme Court and Religious Issues in the United States. 3 Hours. H.
Historical study of the interpretation of the religion clauses of the First Amendment with special reference to the questions of establishment, the free exercise of religion, freedom of religious belief, worship, and action, and religion and the public schools. Not open to freshmen. (Same as REL 373.) LEC.

HIST 375. The Supreme Court and Religious Issues in the United States, Honors. 3 Hours. H.
Historical study of the interpretation of the religion clauses of the First Amendment with special reference to the questions of establishment, the free exercise of religion, freedom of religious belief, worship, and action, and religion and the public schools. Open only to students in the University Honors Program or by permission of the instructor. (Same as REL 375.) LEC.

HIST 377. Everyday Communism in Eastern Europe. 3 Hours. H.
This course investigates through film, literature, memoirs, photography, architecture, and scholarship the experience of ordinary citizens under Soviet-style communism in Eastern Europe. We study the ways people supported, resisted, opposed, and merely got by under state socialism from the late 1940s to the collapse of Communism in 1989. LEC.

HIST 378. Beyond the Iron Curtain: Soviet Perspectives on the Cold War. 3 Hours. AE42 / H.
This course reimagines the Cold War through Soviet eyes, challenging assumptions and offering less familiar perspectives on a global conflict. Analyzing Soviet and American mass media, popular culture, declassified documents, and personal stories, students investigate the following: Who started the Cold War, and who won it? Was it a time of relative peace or paranoia? How did the two sides view each other and did espionage help them know each other better? How did people and culture sometimes cross the iron curtain? What were the Soviets doing in places like Latin America and the Middle East? And why were both sides so concerned with Olympic athletes, ballet defectors, and cosmonauts? LEC.

HIST 380. Revolutionary Europe: The People in Arms. 3 Hours. H/W.
A survey of the political, social, economic and cultural transformation of Europe in a century of turmoil, from the Old Regime through the liberal and national revolts of 1848, the Paris Commune and the Russian Revolution. LEC.

HIST 385. Themes in British History. 3 Hours. H.
For students enrolled in the annual summer Study Abroad program. This course examines some of the main events and trends in British history,
from the earliest times to recent British history. The specific historical themes investigated will depend upon the instructor. The course can be taken only via enrollment in the KU British Summer Institute in the Humanities. Prerequisite: Approval for enrollment in the Summer Institute through the Study Abroad office. LEC.

HIST 390. Topics in: ____. 3 Hours. H.
A study of a specialized theme or topic in History. May be repeated for credit when topic varies. LEC.

HIST 391. Topics in (Honors): ____. 3 Hours. H.
A study of a specialized theme or topic in History. May be repeated for credit when topic varies. Open only to students admitted to the University Honors Program. Prerequisite: Permission of instructor. LEC.

HIST 392. Huns, Turks, and Mongols: The Nomad Factor in Asian History. 3 Hours. NW / H/W.
This course introduces the history of major nomadic powers in Eurasian Steppe and their impact in the world from the first Millennium BCE to around 1500 AD. The main topics include the culture of the Scythians, the Hun and Xiongnu confederacy, the Mongol conquest, and the Turkish empires in Central and West Asia. It investigates the natural and human forces that shape the identities of the nomads and their changing images in history. LEC.

HIST 393. The Silk Road. 3 Hours. H.
A comprehensive introduction to the cultural influence and material exchange among major civilizations along the Silk Road. It covers the period of more than one thousand years between the 2nd and the 15th centuries CE, during which time forces wielded by the Persians, the Chinese, the Indians, the Tibetans and the Mongols shaped the geopolitical landscape of the vast region that spreads from the Caspian Sea to the Gobi Desert. Students explore the role of the Silk Road in the formation of the religious and ethnic identities of these civilizations, as well as their perceptions towards one another. Along with textual materials, the course uses extensive visual and musical materials to present interesting phenomena, such as Sogdian burial practice, Arab accounts of Tang China, Nestorian Christianity at the Mongol court, and Marco Polo's journey to the East. The course begins and concludes with discussion of the contemporary significance of the Silk Road as a historical category. LEC.

HIST 394. Made in China: Chinese Business History. 3 Hours. H.
This course examines the development of business in China since 1900. Topics include the rise of industrialism, the role of foreign investment, China's role in the global market place, the relationship between business and the state, state-run enterprises, factory life, entrepreneurship, building a domestic market for industrial goods, advertising, consumerism, and economic nationalism LEC.

HIST 395. History of Sushi. 3 Hours. H.
Sushi, now served at Midwestern supermarkets and university cafeterias, reveals the transformation of an ancient Japanese dish into a global phenomenon. This course takes familiar Japanese dishes like sushi and ramen as starting points to ask how food accrues or sheds national characteristics in an age of globalization. To learn the origin of sushi and ramen, the class traces the evolution of the diet in the context of the development of Japanese civilization. Using the methodology of food history, course assignments include short research papers on Japanese foodstuffs; analyses of primary sources from statistics to comic books to movies; and short essays drawing from participant observation of Japanese foods now available locally. LEC.

HIST 397. From Mao to Now: China’s Red Revolution. 3 Hours. NW AE42/GE11 / H.
This course on China's Communist revolution considers the evolution of Maoism, or Chinese Communism, from its ideological origins through its implementation during and after the Chinese Communist revolution. It examines major Maoist movements such as Land Reform, the Great Leap Forward, the Cultural Revolution, and the cult of Mao. It further considers the globalization of Maoism by examining examples of other Maoist revolutions and revolutionary in places like Cambodia, Peru, and Nepal. LEC.

HIST 398. Introduction to History of Japan: Anime to Zen. 3 Hours. NW / H/W.
This course provides a foundation for study of Japanese history. It combines lectures on the scope of Japanese history over the past 2,000 years with discussions of topics key to the development of Japanese civilization such as religion and literature. We analyze how different media, such as film, Japanese animation (anime), and art can be used as historical sources, and how these shape our understanding of Japan. Students hone their ability to analyze both thematic and historical questions through writing assignments and discussions. LEC.

HIST 399. The Samurai. 3 Hours. NW AE42/GE11 / H/W.
Japan's warrior class, the samurai, dominated politics and society for more than half of Japan's recorded history. This course traces the history of the samurai from their origins to the dissolution of their class in 1877, examining their military role, philosophy, and cultural contributions. It also considers continued references to the "spirit of the samurai" in the twentieth century. LEC.

HIST 401. Case Studies in: ____. 2-3 Hours. H.
Examination of a limited aspect of a general subject; other aspects of the same subject may be offered other semesters. LEC.

HIST 402. Roman Military History. 3 Hours. H.
The Defense of the Roman Frontiers. This course emphasizes the development of the frontiers of the Roman empire from Caesar to the late second century. It includes the origins of the Germans and their society, the Celtic background, and the relationship between the emperor and the army. LEC.

HIST 404. Technology: Its Past and Its Future. 3 Hours. H.
An examination of the role of technology and its influence on society. The historical development of technology will be traced up to modern times with an emphasis on its relations to the humanities. Attention will be given to the future of different branches of technology and alternative programs for their implementation. (Same as ENGR 304.) LEC.

HIST 407. History of Science in the United States. 3 Hours. H.
Traces the evolution of a scientific tradition in American culture. Examines the growth of scientific ideas and institutions under European and indigenous influences. Studies the interactions of science with technological, theological, political, and socio-economic developments. LEC.

HIST 410. The American Revolution. 3 Hours. H.
This course will focus on the meaning the American Revolution had for different groups of Americans. Particular emphasis will be on the relationship between ideology and experience, and the impact of the Revolution on such groups as women, slaves, Indians, African-Americans, the poor, merchants, and loyalists. LEC.

HIST 411. The New Republic: U.S. History 1787-1848. 3 Hours. H.
This course traces the history of the United States from the debates over the ratification of the Constitution until 1848. Major topics include the republican experiment, the Market Revolution, the Age of Jackson, religious revivals and reform, slavery and the cotton kingdom, the
HIST 420. Dante’s Comedy. 3 Hours.
The complete Divine Comedy will be read in English translation, with equal stress on each of its three parts: the Inferno, the Purgatory, and the Paradise. No prerequisite. (Same as HWC 410.) LEC.

HIST 421. Economic and Social History of Later Medieval Europe, 1000-1500. 3 Hours.
An introductory study of European economic and social history from the Tenth Century Crisis to the 1490s. This course investigates the causes of economic development and the interactions among market, nonmarket, and social institutions such as the family. Topics covered include trade, labor, technologies, consumerism, social unrest and the rise of social and economic thought. LEC.

HIST 424. Venice and Florence in the Renaissance. 3 Hours.
Comparative urban study of Florence and Venice from the thirteenth through the sixteenth centuries. Principal subjects are the distinctive economies of the city-states, political developments, Renaissance humanism, patronage of the arts, family life, and foreign policy. LEC.

HIST 425. History of the Mediterranean World, 1099-1571. 3 Hours.
This course examines Mediterranean civilizations from the First Crusade to the Battle of Lepanto. Topics include the commercial revolution, medieval colonization, the Byzantine and Ottoman states, shipping and navigation, and the Atlantic. Equal coverage of the eastern and western Mediterranean. LEC.

HIST 440. War and United States Society. 3 Hours.
A survey of the American experience in military conflict, both foreign and domestic, from the colonial period to the present. In addition to the strategic and tactical aspects of war, the course will treat the political, economic, and social effects in their national and global contexts. Extensive use will be made of audio-visual materials. LEC.

HIST 444. Frozen in Time: Politics and Culture in the Cold War, 1945-75. 3 Hours.
This course deals with the interactions between Cold War culture and domestic and international politics chiefly from the American and to some degree comparative perspective. It focuses on the period 1945-1975, and makes use of films, television, music, works of science fiction and related genres, and other cultural manifestations to examine such themes as programs of domestic and international repression, consensus politics, cultural imperialism, gender roles, and class, status, and racial dynamics in the context of what was perceived as bipolar rivalry. LEC.

HIST 450. Study Abroad Topics in: ______. 1-5 Hours.
This course is designed for the study of special topics in History at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

HIST 451. Suburbia. 1.5 Hour.
A history of the growth of suburban enclaves, from their emergence during the electric streetcar era to their dominance in the late 20th century. This short course features the analysis of class dynamics, racial exclusions, commuting, social conformity and the alienation of the young within a U.S. context, but some attention is given to comparisons with other parts of the world. LEC.

HIST 452. Chicago. 1.5 Hour.
A history of the Midwestern metropolis from its origins as a swamp to an industrial port city. Topics covered in this short course may include the meat-packing industry, political corruption and reform, immigration and migration, the rise and demise of neighborhoods, transportation systems, working-class social movements, modern architecture and urban popular culture. LEC.

HIST 453. Anarchism: A Global History. 1.5 Hour.
This short course examines the key theorists and organizers of the anarchist movement, beginning with its emergence in the 19th century and extending into its reappearance in the 21st century. It traces developments in Europe, South America, Asia and the United States. Topics may include the Paris Commune, credit unions, propaganda by the deed, wage slavery, resistance to authority, and the general strike. LEC.

HIST 454. Work. 1.5 Hour.
This short course traces the evolution of work from pre-industrial times to the computerized workplace. Issues such as the meaning of work, dignity and respect, time efficiency and exploitation, unionization and strikes, workplace democracy, collectives and worker-owned businesses, laziness as a form of resistance to authority, leisure, the culture of commuting, and hierarchy and status are explored. The evolution of work in non-U.S. societies is analyzed comparatively. LEC.

HIST 455. Havana. 1.5 Hour.
This short course examines the history of the Cuban port city from the era of Spanish colonialism to the "special period" of shortages and deprivations during the 1990s. Topics covered may include popular culture, Caribbean pirates, cigar factories and labor, urban slavery, Chinatown, social revolution, restructuring of urban public space, suburban expansion, modernist architecture, tourism, gambling and vice, historical preservation and the changing conditions of streetlife. LEC.

HIST 460. Topics in: ______. 1.5 Hour.
An eight-week course devoted to a specific historical topic. May be repeated for credit as topics change. LEC.

HIST 461. The Asia-Pacific War, 1937-1945. 3 Hours.
This course introduces students to the Asia-Pacific War, which began with the outbreak of fighting between Japan and China in July 1937 and ended with the unconditional surrender of the Japanese Empire to Allied forces in August 1945. The course revolves around three themes, which are explored through lecture, discussion, and extensive use of film and visual materials: the geopolitical and colonial origins of the conflict; the concept of total war and the political and social transformations it unleashed on all belligerent nations; and the ideologies on the home front justifying the mass slaughter of soldiers and civilians. There is also discussion about how people in Japan, the United States, China, Korea, and other countries remember the war in the postwar period. LEC.
HIST 470. Popular Culture in Latin America and Africa. 3 Hours. NW / H.
This course offers a comparative assessment of the origins and practice of various forms of popular culture in the 20th Century in these two regions. Theories that explain the links between modernism and popular culture are discussed. Topics investigated may include the impact of spectacle on the urban environment, the legacies of colonialism in the sphere of culture, and the intersection of public space and popular culture. Forms such as music, cinema, street theater, and sports are explored.

LEC.

HIST 471. Social History of South America. 3 Hours. H/W.
The various republics of South America have experienced radical social change since the late 19th century. Compressed industrialization has propelled the accelerated growth of global megacities, mass immigration from Europe and Asia, and the rise of populist and socialist politics that address the needs of the working class. This course follows a thematic approach by examining collective violence, endemic poverty, shifting gender relations, labor conflict, public health, revolutionary movements, and dictatorships. LEC.

LEC.

HIST 480. Traveler's Tales of the Middle East. 3 Hours. H.
This reading-intensive seminar examines the multiple visions of "the Orient" that appeared in the letters, memoirs, and novels of Western travelers to the Middle East in the nineteenth and twentieth centuries. We examine the rise of tourism and travel-writing within the Middle East and their links to European imperialism. Working closely with primary source documents, we question what these highly personal and often misinformed types of writing can tell us about the politics and culture of everyday life in the Middle East. LEC.

LEC.

HIST 481. From Harem to the Streets: Gender in the Middle East, 1900-Present. 3 Hours. H.
This reading-intensive seminar examines shifts in gender roles and expectations in the Middle East during the twentieth and twenty-first centuries. The course begins with the importance of harem within Middle Eastern society, and traces Middle Eastern women's increasingly public presence in national movements, feminist activism, and peace protests as well as the impact of Western standards of marriage, child-rearing, beauty, and sexuality on gender roles. The course uses primary and secondary sources to analyze how gender identity is informed by religion and culture and grounded in specific historical moments. LEC.

LEC.

HIST 490. Honors Course in History. 1-3 Hours. AE61 / H.
May be taken more than once; total credit not to exceed six hours. Prerequisite: Approval of the Coordinator of the Honors Program of the Department of History. IND.

LEC.

HIST 492. Readings in History. 1-4 Hours. AE61 / H.
Investigation of a subject selected by the student with the advice and direction of an instructor. Individual reports and conferences. Two (2) Readings in History courses may be applied to the major and no more than one (1) may be applied to the minor. Prerequisite: Ten hours of college history including at least two upper-class courses and a "B" average in history. Consent of instructor. IND.

LEC.

HIST 493. History Research Internship. 1-3 Hours. H.
The course allows students to work with a faculty mentor and learn firsthand the tasks that historians undertake to research and present their findings. Potential student assignments include database entry and retrieval, translation, fact checking, and compiling sources. Graded on a satisfactory/unsatisfactory basis. Prerequisite: At least one 300-level history course; declared major in history; and permission of the instructor. LEC.

LEC.

HIST 494. Service Learning in History. 1-3 Hours. AE61 / H.
This course is designed to give students the opportunity to apply historical knowledge and ideas gained through course work to real-life situations in volunteer service agencies and community centers. Open to History majors and others with significant History backgrounds. Permission of instructor is required. LEC.

LEC.

HIST 498. Undergraduate History Honors Seminar. 3 Hours. AE61 / H.
Required for students in the History major honors program, normally in the second semester of their honors projects. Prerequisite: Approval of the Coordinator of the Honors Program of the Department of History. Another seminar experience may be substituted, with the approval of the Honors Coordinator. LEC.

LEC.

HIST 500. History of the Book. 3 Hours. H.
Brief history of writing materials and handwritten books; history of printed books from the 15th century as part of cultural history; technical progress and aesthetic change. Offered every second year. (Same as ENGL 520.) LEC.

LEC.

HIST 502. Development of Ancient Greece, ca. 1000-300 B.C.E.. 3 Hours. H/W.
Emphasis on the ancient sources and texts, developments in political institutions and society, the changing definitions of personal, cultural, and national identities, and the cultural tensions between Greece and the cultures to the west and east, especially Italy and Persia. No knowledge of the ancient languages is required. (Same as CLSX 502). LEC.

LEC.

HIST 503. The Ancient History of the Near East. 3 Hours. H.
History of the rise of civilizations in the ancient Near East from the earliest time to the Muslim conquest of the early seventh century, including the areas of Mesopotamia, Egypt, Syria, Palestine and Asia Minor. An archaeological approach is used in focusing attention on the cultural phenomena and achievements of the peoples of these areas, including the Babylonians, Assyrians, Persians, ancient Israelites, Greeks and Romans. LEC.

LEC.

HIST 506. Roman Republic. 3 Hours. H.
An investigation of the history of Rome from its origins to the end of the Republic in 31 B.C.E., emphasizing political, social and economic aspects of the development of Rome from a minor city to a world power. LEC.

LEC.

HIST 507. Early Roman Empire. 3 Hours. H.
A political, social, and economic investigation of the early Roman Empire from Augustus to Diocletian emphasizing how Rome held together a world-empire until economic and military problems forced a complete reorganization of the imperial system. LEC.

LEC.

HIST 508. Late Roman Empire (284-527). 3 Hours. H.
An investigation and analysis of the later Roman Empire from Diocletian to Justinian, emphasizing the Christianization of the empire, its division into Western and Eastern/Byzantine Empires, and the barbarian invasions. LEC.

LEC.

HIST 509. Multinational Corporations: The Role of Money and Power. 3 Hours. H.
This course explores the origins, historical evolution, and global expansion of multinational corporations since the 1880s. Particular attention is devoted to U.S.-directed multinational businesses with both market-oriented and supply-oriented direct investments abroad and the competitive advantages gained by American capital, management, and marketing expertise vis-a-vis foreign firms operating in Canada, Europe, Asia, Latin America, and Africa. An objective of the course is to assist the student of international business in understanding, analyzing, and addressing various complex, interrelated and interdependent trends and issues in the world community that have had a critical impact on business performance in the international marketplace. LEC.
HIST 510. Topics in: _____. 2-3 Hours. H.
A study of a specialized theme or topic in History. May be repeated for credit when topic varies. LEC.

HIST 511. Foodways: Native North America. 3 Hours. H.
This course surveys the traditional foodways of the indigenous peoples of North America. We survey hunting, gathering and fishing methods, meal preparation, medicinal plants and the cultivation of crops according to tribal seasons. Because modern indigenous peoples are suffering from unprecedented health problems, such as diabetes, obesity, high blood pressure and related maladies, the course traces through history the reasons why tribal peoples have become unhealthy and why some have lost the traditional knowledge necessary to plant, cultivate, and save seeds. The course also addresses the destruction of flora and fauna from environmental degradation. (Same as HWC 551 and ISP 551.) Prerequisite: Upper division course on indigenous / American Indian history, or permission of the instructor. LEC.

HIST 512. Foodways: Latin American. 3 Hours. H.
This course explores the traditional foods, ways of eating, and cultural significance of food among peoples of Latin America. The course surveys the vast array of flora in Central and South America and the Caribbean, and focuses on issues of environmental protection, bioethics, food security, and the growth of farming and ranching. The class studies the impact that foods such as maize, potatoes and cacao have had globally, and includes African, Asian, and European influences on Latin cuisine, as well as health problems associated with dietary changes. (Same as HWC 552, ISP 552, and LAA 552.) Prerequisite: Upper division course on Latin American History, or permission of the instructor. LEC.

HIST 513. Early Medieval Culture. 3 Hours. H/W.
The formation of a new civilization in Western Europe between the decline of the Roman Empire and the First Crusade is the central stress in this topical study of the institutions and ideas characteristic of the Latin West, 300-1100. LEC.

HIST 515. The Crusades in Cross-Cultural Perspective. 3 Hours. H.
This course examines the development and evolution of the crusade as well as the history of the crusading movement from the 11th to the 15th centuries. Through an analysis of documents from Christian, Jewish, and Muslim perspectives, this course aims to consider "the Crusades" in the broadest possible context. One of the key questions to be addressed in this course is: how did these expeditions to the Holy Land both reflect and influence cross-cultural relations in the medieval Mediterranean World? LEC.

HIST 516. Later Medieval Culture. 3 Hours. H.
The civilization of Medieval Europe at its height (1100-1350); its subsequent disintegration and transformation. LEC.

HIST 517. Roots of Human Trafficking: Modern Slavery and Africa. 3 Hours. H.
This reading-intensive seminar explores human trafficking in the modern world. It examines labor exploitation and commercialization in a historical perspective. The course aims to explore how imperialism led to the expansion of human trafficking and how women, men and children experienced labor exploitation in different ways. We examine how forced labor was/is behind the car and bicycle industries, sugar, coffee, and chocolate consumption. Today more than 27 million people are held, sold, and trafficked as slaves around the world. This course discusses similarities and differences between contemporary and historical slavery and analyzes why and how it persists nowadays. Readings include accounts of people held in bondage, case studies, and reports. Students develop familiarity with major historical concepts, themes, and subjects. Students also engage, investigate, and understand history as a process to explain how we make sense of the past and the present. Students carry on a research project throughout the semester about the historical roots of a modern case of slavery and/or human trafficking, producing original scholarship. (Same as AAAS 517.) Prerequisite: Successful completion of a history course numbered below 500, or permission of instructor. LEC.

HIST 519. European Intellectual History of the Seventeenth Century. 3 Hours. H/W.
This course will trace the development of the European intellectual tradition in the crucial period of the seventeenth century. Such topics as the changing views on religion, the decline of Humanism, and the rise of natural science form the center of the course and will be studied against the background of social and political change. Class sessions will consist of discussions of both primary and secondary sources. LEC.

HIST 520. The Age of the Renaissance. 3 Hours. H/W.
A survey of economic, political, social, and cultural developments in Italy in the 14th and 15th centuries, with special attention to those elements in the life of the age which look forward to the modern world. LEC.

HIST 521. The Age of the Reformation. 3 Hours. H/W.
The Protestant revolt of the 16th century. LEC.

HIST 522. The Age of Religious Wars, 1540-1648. 3 Hours. H/W.
The Catholic or Counter-Reformation and the wars of religion, including the Thirty Years War. LEC.

HIST 523. Europe between Absolutism and Revolution. 3 Hours. H/W.
An investigation of why the major states of Europe underwent a crisis at the end of the 1700s that culminated in a wave of democratic revolutions, reforms, and the wars of Napoleon. LEC.

HIST 524. The French Revolution. 3 Hours. H/W.
A study of the origins, development, and impact of the French Revolution, beginning with a description of France in the 18th century and ending with a look at France under Napoleon. LEC.

HIST 525. Modern France: From Napoleon to de Gaulle. 3 Hours. H/W.
A survey of the history of modern France. Beginning with an exploration of the impact of the Revolutionary and Napoleonic era on French institutions, politics, and society, this course examines the search for a viable political system, the acquisition of a colonial empire, the church-state controversy, and the rise of socialism in the nineteenth century, and considers the impact of two world wars on French society, the rapid modernization of countryside and cities, and French political leadership from Clemenceau to Blum to de Gaulle in the twentieth century. LEC.

HIST 527. Recent European History, 1870 to the Present. 3 Hours. H/W.
A study of the issues and themes that have shaped the contemporary European world, exploring European politics, economy, and society from the zenith of Europe's power and influence at the turn of the century through two world wars and into the contemporary era. This survey begins with the period of consolidation of a system of major national states in western Europe and ends with the search for alternatives to that system in the break-up of empires and movements for European unity in the post-World War II era. The course also considers the emergence of the states of central and eastern Europe and examines the impact of the Russian Revolution and the Soviet state on European affairs. Not open to those who have credit in either HIST 435 or HIST 436. LEC.

HIST 528. Economic History of Europe. 3 Hours. S/W.
An introductory study of European economic history from the Middle Ages to the 1800s. Investigates the sources of economic growth, and the interaction between economic forces and social institutions. Topics covered will include the rise of commerce, the agricultural and industrial
revolutions, imperialism, the Great Depression, and European recovery after World War II. (Same as ECON 535.) Prerequisite: ECON 104 or ECON 142 and ECON 144. LEC.

HIST 529. Intellectual History of 19th Century Europe. 3 Hours. H/W. A survey of significant currents of thought during this period. Attention to the problem of the relationship between ideas and the historical situation. LEC.

HIST 530. History of American Women--Colonial Times to 1870. 3 Hours. AE41 / H. A survey of women's history in the United States that will consider women's roles as housewives, mothers, consumers, workers, and citizens in preindustrial, commercial, and early industrial America. (Same as AMS 510 and WGSS 510.) LEC.

HIST 531. History of American Women--1870 to Present. 3 Hours. AE41 / H. A survey of women's history in the United States that will include radical and reform movements, the impact of war and depression, professionalization, immigration, women's work, and the biographies of leading figures in women's history. (Same as AMS 511 and WGSS 511.) LEC.

HIST 532. History of Women and Work in Comparative Perspective. 3 Hours. H. This course explores the connection between historical changes in the labor process and the occupational choices available to women in different countries. Through discussion and analyses of texts, students will evaluate the construction of a gendered division of work as shaped over time by economic, cultural, and political forces. The chronological and geographical focus may vary depending on the instructor. (Same as AMS 512 and WGSS 512.) LEC.

HIST 533. The History of Women and the Family in Europe, from 1500 to the Present. 3 Hours. H/W. This course examines how women's roles and the family have changed in Europe from the early modern period to the present. It will consider the relation of women and the family to such cultural, social, and political changes as the Reformation, the French Revolution, middle class culture, industrialization, and the mass movements of the 19th and 20th centuries. LEC.

HIST 534. Captivity in America, 1492-1800. 3 Hours. H. Captivity, threatened and actual, shaped the lives of the people of North America. It profoundly influenced the ways in which individuals and communities thought about themselves and the people around them. Colonists feared captivity among Native Americans; centuries later, Americans in the early republic rallied to the cause of their countrymen captured by Barbary pirates. This course examines the impacts, cultural, social, religious, and otherwise, of a variety of forms of captivity in colonial British, Spanish, and French North America. Topics in this course may include the captivity of European explorers and settlers by Native American groups; the enslavement of peoples from Africa to European and Native American masters; prisoners of war; naval impressment; and the displacement and captivity of Native American individuals and communities. Prerequisite: Successful completion of prior history course numbered below 500. LEC.

HIST 537. France from the Renaissance to the French Revolution. 3 Hours. H. A study of the major political developments of early modern France, including absolutism, corporate institutions, and popular revolts, as well as an examination of the everyday life and beliefs of ordinary people. LEC.

HIST 538. European Intellectual History of the Eighteenth Century. 3 Hours. H. An examination of the writing, ideas, and language of the major thinkers of the Enlightenment, including Diderot, Hume, Kant, Lessing, Rousseau, and Voltaire. LEC.

HIST 541. British History, 1500-1660. 3 Hours. H. An introduction to the impact on the British Isles of the Reformation and Renaissance; the development of the Tudor state; Parliament; the Stuart monarchy; the Anglican counter-reformation; civil war; the Cromwellian experiment. LEC.

HIST 543. Modern Iran. 3 Hours. NW / H. A history of Iran from the sixteenth century to the present with an emphasis on religious, political, and cultural history. Topics will include the establishment of Shi'ism as the state religion in the sixteenth century, the evolution of religio-political thought among the Shi'i clerical establishment, great power politics in the nineteenth century, European cultural and intellectual influence, nation-building and nationalism in the twentieth century, the Islamic revolution of 1979, and Iranian politics since the revolution. Prerequisite: HIST 327 and HIST 328. LEC.

HIST 544. Britain and Ireland from 1200 to 1500. 3 Hours. H. Survey of social, cultural, political, and economic developments with particular emphasis on interaction between Anglo-Norman/English and Celtic societies. LEC.

HIST 545. British History, 1660-1832. 3 Hours. H. A study of Britain's recovery from civil war; state formation and national identity; ideological conflict; the Revolution of 1688; religion and secularization; social stability and commercial expansion; reform; threats to the state, and the American revolution; Britain's survival of the French Revolution; the breakdown of the ancient regime in 1828-32. LEC.

HIST 546. History of Cartography. 3 Hours. H. A history of mapmaking worldwide from its origins to the present day. Emphasis on maps as historical records of evolving civilizations and cultural landscapes and methods of study early maps. (Same as GEOG 519.) LEC.

HIST 547. The Intellectual History of Europe in the Twentieth Century. 3 Hours. H. This course will examine in depth the leading developments in European thought from the 1920's to the present. Topics will include: existentialism, philosophic hermeneutics, and postmodernism. LEC.

HIST 548. British History, 1832 to the Present.. 3 Hours. H. A study of the rise of modern Britain from the 1832 Reform Act, a major step on the path from aristocratic government to mass democratic politics. It covers the politics and society of the Victorian era, the extension of British influence overseas, the origins and social impact of two world wars, the creation of the Welfare State, the loss of Empire, and Britain's entry into Europe. LEC.

HIST 551. Spain and its Empire, 1450-1700. 3 Hours. H. This course will examine the society and culture of Spain in the period known as "the Golden Age." Subjects that will receive attention include: rural and urban society, economic and political organization of the Spanish and American peoples in the early years of the conquest, the place of women in society, the social basis for "Golden Age" culture, and the debate over the "decline of Spain. LEC.

HIST 555. Aspects of British Political Thought. 3 Hours. H. This course will offer an introduction to a number of classic works in British political thought, placed against their historical background. Close reading of selected texts will be combined with contextual analysis. LEC.
HIST 556. Aspects of British Political Thought, Honors. 3 Hours. H. 
Similar in content to HIST 543. This course will offer an introduction to a 
number of classic works in British political thought, placed against their 
historical background. Close reading of selected texts will be combined 
with contextual analysis. Open only to students in the University Honors Program or by permission of the instructor. LEC.

HIST 557. Nationalism and Communism in East Central Europe from 
1772 to the Present. 3 Hours. H/W. 
The peoples of East Central Europe under Hapsburg, Romanov, and 
German rule; the dissolution of the empires, independence and the role 
of the new states in the European balance of power; World War II, Soviet 
domination, and the recent role of East Central Europe in the Communist 
World. LEC.

HIST 558. Religion in Britain Since the Reformation: A Survey. 3 
Hours. H. 
This course will deal analytically and synoptically with religion in Britain 
from the Reformation to the present with special reference to the Church 
of England, and focuses on the theses of ecclesiology, ecclesiastical polity, and political theology. It is essentially an examination of religious history from a perspective of the history of ideas. (Same as REL 558.) LEC.

HIST 559. Religion in Britain Since the Reformation: A Survey, 
Honors. 3 Hours. H. 
This course deals analytically and synoptically with religion in Britain from 
the Reformation to the present with special reference to the Church 
of England, and focuses on the theses of ecclesiology, ecclesiastical polity, and political theology. It is essentially an examination of religious history from the perspective of the history of ideas. Open only to students in the University Honors Program or by permission of instructor. (Same as REL 559.) LEC.

HIST 560. The Value of Freedom. 4 Hours. H. 
This course explores multiple definitions of freedom: its value, limitations, 
and evolving meaning. The course specifically focuses on four major 
contexts in which human beings have faced existential questions about 
freedom’s value: politics, religion, work, and gender relations. The goals 
are to explore the ways in which other societies and epochs have valued freedom and balanced it against competing social goods and thus to 
attract students to the particularities of today’s definitions and celebrations of freedom. LEC.

HIST 561. Liberation in Southern Africa. 3 Hours. NW AE42 / H. 
This course examines struggles for freedom in southern Africa and the 
consequences of political, economic, and social changes in the region. 
The end of colonial rule, the demise of white-settler domination, and 
the fall of the apartheid regime is discussed. As a major political event 
of the twentieth century, the liberation of southern Africa had both local 
and global consequences. The course analyzes transnational issues of 
liberation and resistance to consider broader regional and international 
perspectives. Course themes pay particular attention to gender and 
ethnicity and include a focus on democratization and contemporary 
meanings of liberation. Prior coursework in African Studies is strongly 
recommended, but not required. (Same as AAAS 561 and POLS 561.) LEC.

HIST 562. United States Environmental History in the 20th Century. 3 
Hours. H. 
Americans dramatically changed the natural world between 1900 and 
2000. This course asks how transformed environments shaped the 
American experience during a century of technological innovation, 
democratic renewal, economic expansion, global conflict, and cultural 
pluralism. Topics include food and markets, energy and transportation, 
law and politics, protest and resistance, suburbanization, and 
environmentalism’s fate in a global information era. (Same as EVRN 562.) 
LEC.

HIST 563. U.S. Environmental Thought in the 20th Century. 3 Hours. 
H. 
Explores both leading and dissident ideas that Americans have had about 
the natural world since 1900. Broad chronological periods are explored 
in some depth, including the Progressive Era, New Deal, Cold War, the 
Sixties, and the Reagan Eighties. The course uses articles and books, 
as well as visual and aural forms of communication. Commercial speech, 
as well as scholarly and literary works, are considered. (Same as EVRN 563.) Prerequisite: EVRN 148 or HIST 129, or permission of instructor. 
LEC.

HIST 564. Medieval Russia. 3 Hours. H. 
Political, economic, social, cultural, and religious developments of Russia 
from the beginnings of the Russian state in the 9th Century through the 
17th Century. LEC.

HIST 565. Imperial Russia. 3 Hours. H/W. 
The history of Imperial Russia from Peter the Great’s reinvention of the 
empire in the eighteenth century to its demise in the revolutions of 1917. 
Placing Russia in a global context, the course examines change and 
continuity in politics, society, economy, and culture and looks at Russia as 
a diverse empire between Europe and Asia. Readings include historical 
scholarship and some of the classics of Russian literature. LEC.

HIST 566. Rise and Fall of the Soviet Union. 3 Hours. H/W. 
An exploration of the Soviet Union’s creation, evolution, collapse, and 
legacy in contemporary Russia and Eurasia. Drawing on historical 
scholarship, literature, music, and film, the course examines the major 
trends and developments in Soviet politics, ideology, society, economy, 
and culture. Special attention is paid to how the multithetic Soviet state’s 
rise and fall reflected broader changes in the world during the *Soviet 
century. LEC.

HIST 567. The Middle East After World War II. 3 Hours. NW AE42 / H/ 
W. 
An intensive study of developments and changes in the Middle East since 
World War II. Topics and themes will vary, but may include the long-
lasting effects of European imperialism, Big Oil and the energy crisis, 
the Arab-Israeli conflict and peace process, American intervention in the 
Middle East, minority communities, and the revival of Islamic and popular 
protest movements. LEC.

HIST 568. Latin America in the 19th Century. 3 Hours. H/W. 
The course will analyze the social, political, and economic problems 
of the Latin American nations from their independence to the Mexican 
Revolution (1910). Emphasis will be on the emergence and shaping of the 
new countries; their transition to modern industrializing societies; and the 
impact of this transition on Latin American society. LEC.

HIST 574. Slavery in the New World. 3 Hours. H/W. 
Slavery, slave culture, and the slave trade in the U.S., Latin America, and 
the Caribbean will be examined comparatively. Attention will also be given 
to African cultures, the effects of the slave trade on Africa, and the effects 
of African cultures on institutions in the New World. (Same as AAAS 574.) 
LEC.

HIST 575. History of Mexico. 3 Hours. H/W. 
Mexican history from preconquest days to the contemporary period. LEC.

HIST 576. History of the Caribbean and Central America. 3 Hours. H/ 
W. 
A comparative examination of Central America and the Caribbean. 
Emphasis is on understanding the complex social, cultural, and political 
development of this broad region from the pre-Columbian period until
the modern era. Topics include: conquest, colonization, racial and ethnic diversity, economic development, political conflict, and globalization. Prerequisite: HIST 120, HIST 121, or HIST 370. LEC.

HIST 579. The History of Brazil. 3 Hours. H/W.
The history of Brazil from European discovery to the present with emphasis on social and economic change. Topics discussed will include the Indian, African, and European backgrounds, slave society, the frontier in Brazilian development, cycles of economic growth and regionalism, the role of foreign capital, industrial development, labor, urban problems, the military in government, and human rights. LEC.

HIST 580. Economic History of Latin America. 3 Hours. H/W.
A study of the changing economic conditions in Latin America from Colonial times through the Twentieth Century and the effect of these conditions on Latin American society. Emphasis will be on the major theoretical issues of development economics, patterns of growth, and suggested strategies for economic development. Analysis will center on changes in agriculture, industry, labor, finance, transportation and technology, urbanization, immigration, role of women, export and commerce, and foreign involvement. LEC.

HIST 581. The Japanese Empire. 3 Hours. H.
Although the history of modern Japan was for a long time conventionally understood within the parameters of the nation-state, in fact modern Japanese identity coalesced around empire. This reading-intensive course explores the Japanese empire from its origins in the late nineteenth century to its collapse at the end of World War II in 1945, as well as the empires post-1945 legacies in Asia. Particular attention is paid to different forms of Japanese colonial domination practiced in Hokkaido, Okinawa, Taiwan, Korea, the South Seas Islands, Manchuria, occupied China, and Southeast Asia. We also study the ways in which the empire and colonial subjects, in turn, transformed Japanese state and society. Furthermore, we examine transnational themes the Japanese empire shared with other modern empires in areas such as colonial violence, gender, migration, settlements, war mobilization, and historical memories of the colonial experience. Prerequisite: Successful completion of an East Asian history or culture course numbered below 500; or a history course numbered below 500; or permission of the instructor. LEC.

HIST 582. Ancient Japan. 3 Hours. NW / H.
Course covers the history of Japan from the prehistoric era through the ancient period (approximately 10,000 BC to 1200 AD). Topics examined include the rise of Japanese Civilization, state formation, early capitals, belief systems, courtly culture in the Heian period (794-1185), and daily life. Writing assignments provide students with opportunities to gain familiarity with historical methods for analysis and to strengthen their written expressions. Not open to students who have taken HIST/EALC 586. LEC.

HIST 583. Imperial China. 3 Hours. NW / H/W.
An intensive survey of China's traditional civilization and its history, with emphasis on the last centuries of imperial rule under the Sung, Yuan, Ming, and Ch'ing dynasties (to 1850). (Same as EALC 583.) LEC.

HIST 584. Modern China. 3 Hours. NW AE42 / H/W.
An intensive survey of China's history from the early 19th century to the present. Key topics include the decline of the traditional system, the rise of communism, the Maoist era, and the tensions of change and control in the 1980s and 1990s. (Same as EALC 584.) LEC.

HIST 585. Beer, Sake, Tea-Beverages in Japan History. 3 Hours. H.
Sake and tea are synonymous with Japan today, but the history of beverages from water to whiskey illuminates key developments in Japanese civilization. This course makes a thematic survey of Japanese beverages introducing the place of drinks in global history before examining their distinct context in Japan. Topics include the ritual consumption of beverages as in the tea ceremony; the place of alcohol in Japanese culture; locales for consuming beverages such as bars, teahouses and coffee shops; and the Westernization of taste preferences as characterized by the introduction of beer and wine. By taking this course, students gain insight into ways that beverages contribute to Japanese culture and help shape personal and national identity. Prerequisite: Successful completion of an East Asian history or culture course number below 500 or permission of the instructor. LEC.

HIST 587. Early Modern Japan. 3 Hours. NW AE42 / H/W.
Early modern Japan (16th to 19th century) examines the history, culture, and patterns of life during an era of rigid social control but artistic brilliance. After an historical overview of the period, students will explore topics including the social structure, travel, religion, thought, and the formation of traditional cultural forms such as Kabuki theater. (Same as EALC 587.) LEC.

HIST 588. Japan, 1853-1945. 3 Hours. NW / H/W.
This course provides an intensive survey of Japanese history from the arrival of Commodore Perry through the Pacific War. Social, economic, and political themes will be emphasized. Among the topics covered will be the Meiji Restoration, industrialization, Japanese imperialism, Taisho democracy, and wartime mobilization. (Same as EALC 588.) LEC.

HIST 589. Japan Since 1945. 3 Hours. NW / H/W.
This course provides an overview of Japanese history from the end of World War II to the present day. Among the topics covered will be the Allied Occupation, postwar politics and social change, the economic “miracle,” popular culture, women and the family, crime and punishment, the educational system, and Japan's place in the world. (Same as EALC 589.) LEC.

HIST 590. Cultural History of Korea. 3 Hours. H.
This course examines the cultural history of Korea in periods prior to the 19th Century. Special attention is given to varying constructions of cultural value, heritage, and identity, together with the historically specific factors that engendered them. (Same as EALC 563.) LEC.

HIST 591. Food in History: West and East. 3 Hours. H/W.
A survey of scholarship on food in the West and in East Asia, choosing works primarily by historians, but also by sociologists, geographers, and anthropologists. We consider how scholars have approached issues concerning food productions and consumption, what habits of eating reveal about daily life, and how and when food is embedded with historiography related to these topics, keeping in mind the famous maxim of the noted French gastronome Brillat-Savarin (d. 1826): "Tell me what you eat; I will tell you what you are." LEC.

HIST 593. Modern Korea. 3 Hours. NW / H/W.
This course will examine selected topics in Modern Korean history in the 19th and 20th centuries, with special emphasis on Korea's connections to China and Japan. (Same as EALC 593.) Prerequisite: A college-level course in East Asian history or culture, or consent of instructor. LEC.

HIST 594. Law and Society in Traditional China. 3 Hours. S/W.
The course begins with a series of lectures on the main principles underlying Chinese social structure. The course then examines the application of those principles in legal cases. Students read legal cases in translation and argue them in class. (Same as EALC 594.) Prerequisite: A course in Chinese history. LEC.

HIST 596. Defining Japan: Marginalized Groups and the Construction of National Identity. 3 Hours. NW / H/W.
This course investigates the construction of national identity in modern Japan by examining the historical experiences of groups marginalized by mainstream society. We will explore the pressures of conformity, the
pervasiveness of social ostracism and the surprising diversity in Japanese society. Among the groups discussed will be indigenous peoples (the Ainu, Okinawans), the Korean minority, the outcast class (burakumin), the sick and disabled, the yakuza, and political activists. (Same as EALC 596.) LEC.

HIST 597. Japanese Theater History. 3 Hours. NW / H/W.
This course examines the historical development and characteristics of Japanese theater, with special attention to traditional theater and the genres of noh, kyogen, and kabuki in particular, tracing their origins in the pre-modern era and their continued performance today. To gain an understanding of the historical and artistic setting of these arts, lectures and readings will consider broader issues such as performance and ritual in religion and daily life, gender and representation, and folk theater. A portion of this class will include practical studies of theatrical forms including noh dance and kabuki music (shamisen). (Same as EALC 597.) LEC.

HIST 598. Sexuality and Gender in African History. 3 Hours. NW AE42 / H.
An examination of the history of sexuality and gender in Africa with a focus on the 19th and 20th centuries. Major issues and methods in the historical scholarship on gender and sexuality will be covered. Topics of historical analysis include life histories, rites of passage, courtship, marriage, reproduction, education, masculinities, homosexuality, colonial control, and changing gender relations. Prior course work in African history is suggested. Graduate students will complete an additional project in consultation with the instructor. (Same as AAAS 598.) LEC.

HIST 599. The Rise and Fall of Apartheid. 3 Hours. H.
This course will deal with the last fifty years of South African history during which apartheid came to be formulated, supported, and perpetuated, and the forces that were responsible for its disintegration by 1990. Reference will also be made to the transformation process since April 1994. (Same as AAAS 599.) LEC.

HIST 600. West African History. 3 Hours. NW / H/W.
A study of the political, social, and economic development of West Africa until the colonial era. Major focus will be on the role of state formation, trade, ecology, and urbanization in the formation of centralized politics from the 11th to the 16th centuries and the impact of the process of Islamization and Muslim revolution on political and socioeconomic change in selected West African societies in the 19th century. LEC.

HIST 601. Oral History. 3 Hours. H.
This course explores the emergence of oral history as a methodology and focuses on the guidelines and ways to effectively use oral history in historical, journalistic, and social science research. The skills of collecting and sorting information gathered through eyewitness accounts, oral traditions, genealogies, investigative reporting procedures, and questionnaires are developed. The nature of the interview in relation to personal and public documents, ordinary conversation, and other related data sources will be considered in this course. LEC.

HIST 602. Religion in Britain 1785-1925. 3 Hours. H.
This course offers an examination of religious thought and practice during the transition from a pre-industrial, unitary order to a modern urban, industrial, and secular society. It will stress the close study of a range of selected texts, including works by such authors and works as Paley, Horsley, Wilberforce, Thomas Arnold, Newman Maurice, essays and reviews, Jowett, Lux Mundi, Gore, and Temple. It will attend to continental European influences on British thought and set theological debate in the wider context of the intellectual history of the period. LEC.

HIST 603. History of Tibet. 3 Hours. NW AE42 / H.
This course surveys the cultural and political history of Tibet from the eighth to the twentieth century. Through readings, lectures, and discussions, students gain familiarity with the dominant features of Tibetan civilization. Topics include the relationship between Tibet and the civilizations of India and China, Tibetan Buddhism, and the tensions between the struggle for Tibetan independence versus claims of Chinese sovereignty. The course also considers the Tibetan diaspora and the reception of knowledge about Tibetan civilization in the West. LEC.

HIST 604. Contemporary Greater China. 3 Hours. NW AE42 / H.
This course considers contemporary China, Taiwan, and Hong Kong in comparative perspective. It begins in the early twentieth century so as to set up a comparison between Nationalist, Communist and Colonial China. It focuses on the evolution from the 1940s to the present studying the political, economic and social systems of the three regions that constitute what we now call ‘Greater China’ and considers, in particular, important points of difference and similarity between them. LEC.

HIST 605. Medieval Japan. 3 Hours. NW AE42 / H.
Course examines the history of Japan from the end of the ancient period (c. 1200 AD) through the medieval era (approximately 1573). Issues covered include the formation and destruction of the Kamakura and Muromachi warrior governments, medieval religious life and culture. Writing assignments provide students with opportunities to gain familiarity with historical methods for analysis and to strengthen their written expression. Not open to students who have taken HIST/EALC 586. LEC.

HIST 608. History of Sexuality. 3 Hours. H.
This survey course traces the changing conceptions of human sexuality from early civilizations to the present. It will include, but not be limited to, such topics as attitudes and beliefs, laws, sciences and medicine, cultural differences, and the impact of economic change on sexual definition and experience. LEC.

HIST 609. History of Women and Reform in the United States. 3 Hours. AE41 / H.
This survey course will outline the history of women's involvement in reform movements in the United States from 1600 to the present. It will include, but not be limited to, such topics as labor movements, utopian communities, religious revivals, moral reform, women's rights, civil rights. LEC.

HIST 610. American Colonial History. 3 Hours. H.
Examines colonial American history from the age of Columbus to the mid-1760s. The course seeks to place colonial American history into the larger historical context, particularly the expansion of the British Empire in the early modern period. Emphasis in the course will be on migration, social and economic conditions, and inter-racial relations. LEC.

HIST 611. Early American Indian History. 3 Hours. H.
This course will focus on the history of American Indians, especially those of the eastern woodlands, from precontact times to the 1830's. Particular emphasis will be on the response of Indians to demographic catastrophe, the development of trade between Indians and colonists, and Indian responses to European colonization in British America and New France. The role of Indians in the American Revolution and the changes caused by Removal will also be treated. LEC.

HIST 612. History of Federal Indian Law and Policy. 3 Hours. H.
This course offers a comprehensive examination of federal legislation and court decisions in the United States that have affected American Indians. The history of law and policy will be traced from the colonial period, but the major emphasis will be on the struggle of American Indians to preserve sovereignty in the 19th and 20th centuries. LEC.
HIST 613. Slavery and Freedom in the Age of Jackson. 3 Hours. H.
This course focuses on the growing importance of the issues of slavery and freedom in the United States between 1815-1848. Recently, scholars have demonstrated that the period was one of disorienting, dramatic, and unprecedented change as politics, economics, racial and gender roles, and key institutions were permanently transformed. The course will examine these changes and how they, in turn, remade the values and identities of all Americans. LEC.

HIST 615. Rise of Modern America: Politics, Culture, and Society, 1900-1950. 3 Hours. H.
The history of the United States in the First Half of the Twentieth Century.

HIST 616. Contemporary America, 1941-Present. 3 Hours. H.
A history of the United States from its entry into World War II to the present. A study of such selected topics as women's history and feminism, race relations and the Afro-American civil rights movement, power, poverty, the military-industrial complex, McCarthyism, and presidential administrations.

HIST 617. America in the 1960's. 3 Hours. H.
The people of the United States experienced significant social political, and cultural change during the 1960's. This course studies the history of these changes, focusing on the American people, the institutions that shaped their lives, and the social and political movements, for and against change, that surfaced during this decade. Specific topics include: the struggle for racial equality, the Kennedy, Johnson, and Nixon administrations; the Vietnam War, the antiwar movement, New Left, and counterculture; feminism's rebirth; the white backlash; and the resurgence of political and cultural conservatism. Course requirements include readings, discussion, and original historical research and writing.

HIST 618. History of the American West to 1900. 3 Hours. H.
A survey of Western history with emphasis on such topics as Native Americans and Indian-white relations, environment and resource use, exploration and discovery, expansionism and Manifest Destiny, economic development, urban, rural, and alternative communities, ethnic and racial experience, women and violence. Consideration will also be given to topics such as fur trade, mining, the cattle business, and agriculture.

HIST 619. History of the American Indian. 3 Hours. NW / H/W.
A study of Indians in the United States from colonial times to the present. Consideration will be given to the political, social, and cultural history of selected Indian tribes and to Indian-white relations with particular attention to the Indian point of view. Other topics will include a comparative study of Indian policy of nations colonizing in America, cultural intermingling and cultural conflict, and current Indian problems. Slides, films, and guest speakers (including American Indians) will be used in the course.

HIST 620. History of Kansas. 3 Hours. H.
A survey of the history of culture and society from prehistory to the present. Topics include Native American life, Euro-American resettlement, Bleeding Kansas and the Civil War, agricultural settlement, urbanization and industrialization, depression and recovery, and modern Kansas in transition.

HIST 621. The American West in the 20th Century. 3 Hours.
A study of the post-frontier era and the struggle to create a regional identity, drawn from legends of the heroic past, varieties of racial and ethnic experience, political culture, and the possibilities of the land.

HIST 622. History of the Plains Indians. 3 Hours. NW / H/W.
A history of the Plains Indians from the sixteenth century to the present. Consideration will be given to tribal culture and society, to the impact of the fur trade and international rivalries on tribes, and to Indian-white relations.

HIST 625. Body, Self and Society. 3 Hours. H.
An intensive examination of the role of the human body in the creation of personal and social identities in the Western world. Students become acquainted with contemporary theories of embodiment and senses as they are applied to a variety of historical themes, and develop research projects on a topic negotiated with the instructor. Prerequisite: An upper-division course in History, Humanities and Western Civilization, or Women Gender and Sexuality Studies; or permission of instructor.

HIST 626. Men and Masculinities. 3 Hours. H.
An intensive examination of the history and theory of masculinities in the Western world. Students become acquainted with some of the key theories of men and masculinities, and develop research projects on a topic negotiated with the instructor. Prerequisite: An upper-division course in History, Humanities and Western Civilization, or Women Gender and Sexuality Studies; or permission of instructor.

HIST 628. American Economic Development. 3 Hours. H.
An introductory study of the development of the American economy from colonial times to the present. Investigates long-term trends in output, population, and output per capita, as well as short period fluctuations, and the variables and institutions that determined these fluctuations and trends. Prerequisite: ECON 530.

HIST 629. The United States and the World to 1890. 3 Hours. H.
The origins of American diplomacy from the wars of the 18th century and the Revolution to 1901. The foreign relations of the American government and the reactions of the American people to international problems.

HIST 630. The United States and the World, 1890-2003. 3 Hours. H.
An examination of the history of United States foreign relations over the course of the twentieth century. Treats America's emergence as a world power before World War I, imperialism and interventionism, involvement in World War I and World War II, internationalism, the Cold War and America's anti-communist crusade, third world nationalism, responses to a global economy, and the obligations of a military superpower in a chaotic world.

HIST 631. The Contemporary Afro-American Experience. 3 Hours. H.
A history of Afro-America from the end of the Civil War to the present. Consideration will be given to such topics as America's capitulation to racism, blacks in agriculture, blacks and the labor movement, Booker T. Washington and W.E.B. DuBois, civil rights protest, migration and urbanization, Marcus Garvey and black nationalism, the Harlem Renaissance, blacks during the New Deal, blacks in recent politics, the modern civil rights movement, ghetto uprisings, and the changing relationships among race, caste, and class.

HIST 636. Agriculture in World History. 3 Hours. H.
A survey of the development of agriculture from prehistory through the present. The major themes of the course will be how various methods of farming have spread around the world, how new techniques have transformed agriculture, and how peasants and farmers have interacted with cities and governments.

HIST 640. Entrepreneurship in East Asia. 3 Hours. NW / H.
An intensive examination of the history and current status of entrepreneurship in China, Japan, and other nations in East Asia. This course investigates the role of entrepreneurs in Asian economic development from the nineteenth century to the present, as well as the relation between entrepreneurship and Asian cultural traditions.
opportunities and challenges of entrepreneurship in East Asia today are also considered. (Same as EALC 520.) LEC.

HIST 646. Witches in European History and Historiography. 3 Hours. H.
This course examines witches, witchcraft, and magic in Europe in the late medieval and early modern period (approximately 1200-1700 C.E.). Particular emphasis will be on the variety of historical and anthropological approaches that have been used to study the subject and their meaning in the context of gender politics and gender theory. (Same as WGS 549.) LEC.

HIST 649. History of Feminist Theory. 3 Hours. H.
This discussion course will cover the development of feminist theories from the late Middle Ages to the present. Reading will include Pisan, Wollstonecraft, Mill, Freud, Woolf, Beauvoir, Friedan, Daly, Kristeva, and others. (Same as WGS 646.) LEC.

HIST 653. American Constitutional History to 1887. 3 Hours. H.
A historical study of the colonial origins, revolutionary development, creation of, struggle over and preservation of the American constitutional system from 1763 to 1887. LEC.

HIST 654. American Constitutional History Since 1887. 3 Hours. H.
A historical study of the evolution of thought and practice of the constitutional system from the conflict over government regulation of business, through the expansion of executive and legislative power, to the evolution of protections of Bill of Rights guarantees by the Supreme Court and the reaction against that evolution. LEC.

HIST 660. Biography of a City: ____. 3 Hours. AE42 / H.
These interdisciplinary, team-taught courses survey the artistic, intellectual, and historical development of the great cities of the world. London, Paris, and Rome have been offered in recent semesters, and other cities will be studied in the future. LEC.

HIST 661. Palestine and Antiquity. 3 Hours. H.
A survey of the history of Palestine from biblical origins to the Muslim conquest, with emphasis on such topics as social and religious institutions, cultural and communal diversity, and relations between foreign powers and local authorities. The course further explores the roots of the present conflictual situation in this part of the Middle East. LEC.

HIST 666. Contemporary America, 1941-Present, Honors. 3 Hours. H.
A survey of the economic, social, political, and cultural history of the United States from its entry into World War II to the present. Students with credit in HIST 614 or HIST 616 should not enroll in HIST 666. LEC.

HIST 670. Comparative Diasporas. 3 Hours. H.
This course examines history from the point of view of diasporas, groups who move across established borders but maintain an identity linked to an original homeland. This course examines commonalities and differences in the diaspora experience by looking comparatively at a range of prominent cases, including the Jewish, African, Armenian, Greek, Turkish, German, Irish, Italian, South Asian, and Chinese diasporas, the "Gypsies," and the internal diasporas of multiethnic states like Russia. The course also gives students the opportunity to pursue research on a diaspora of their own choosing. LEC.

HIST 696. Seminar in: ____. 3 Hours. AE61 / H.
A seminar designed to introduce students to the theory and practice of historical inquiry. A research paper will be required. May not be repeated for credit. Prerequisite: Twelve hours of upper-class courses in history and completion of HIST 501 or consent of instructor. LEC.

HIST 699. Philosophy of History. 3 Hours. H.
Topics will include: The nature of historical knowledge; the problems of historical inquiry; a critique of philosophies of history; and a study of history and related disciplines. (Same as PHIL 696.) Prerequisite: A distribution course in philosophy. LEC.

HIST 705. Globalization in History. 3 Hours.
A study of the increasing interaction among world societies since 1500 and an investigation of the long-term developments behind current world problems. Major topics include western expansion since 1500, the spread of state sovereignty, the formation of a world economy, and spread of international institutions. The current world problems investigated will vary, but may include issues such as environmental crises, human rights, migration, free trade and the spread of consumer culture, ethnicity and nationalism, and international intervention within states. (Same as INTL 705.) LEC.

HIST 719. Colloquium in Medieval Latin. 3 Hours.
An introduction to Medieval Latin for students pursuing medieval studies. The material covered will include selections from various literary works, the Vulgate, law codes, legal documents, and other sources from the period 300-1500. May not be retaken for credit. Prerequisite: Four semesters of college Latin or the equivalent, and/or consent of instructor of Ancient-Medieval graduate advisor. LEC.

HIST 720. The Nature of Museums. 3 Hours.
The purpose of this course is to provide an overview of the kinds of museums, their various missions, and their characteristics and potentials as research, education, and public service institutions responsible for collections of natural and cultural objects. (Same as AMS 720, BIOL 788, GEOL 782, and MUSE 702.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

HIST 721. Introduction to Museum Public Education. 3 Hours.
Consideration of the goals of an institution's public education services, developing programs, identifying potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as AMS 797, BIOL 784, GEOL 784, and MUSE 705.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

HIST 722. Conservation Principles and Practices. 3 Hours.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects will also be considered. (Same as AMS 714, BIOL 700, GEOL 780, and MUSE 706.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

HIST 723. Introduction to Museum Exhibits. 3 Hours.
This course will consider the role of exhibits as an integrated part of museum collection management, research, and public service. Lecture and discussion will focus on issues involved in planning and producing museum exhibits. Laboratory exercises will provide first hand experience with basic preparation techniques. Emphasis will be placed on the management of an exhibit program in both large and small museums in the major disciplines. (Same as AMS 700, BIOL 787, GEOL 781, and MUSE 703.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

HIST 725. Principles and Practices of Museum Collection Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museum collections, their associated data, and their use in scholarly research; cataloging, storage, fumigation, automated information management and
related topics will be presented for museums of art, history, natural history and anthropology. (Same as AMS 730, BIOL 798, GEOL 785, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

HIST 727. Practical Archival Principles. 3 Hours.
Study of the principles and practices applicable to the preservation, care, and administration of archives and manuscripts. Practical experience will be an integral part of this course. (Same as MUSE 707.) LEC.

HIST 728. Museum Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as AMS 731, BIOL 785, GEOL 783, and MUSE 701.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

HIST 740. Topics in History for Educators: ______. 1-3 Hours.
Reading and discussion of selected historical topics, designed specifically for K-12 educators. Pedagogical methods and resources for the study of history will be addressed. Prerequisite: Approval of the instructor. LEC.

HIST 747. East Asian History and Culture for Teachers. 2 Hours.
An advanced survey of the history, culture, and contemporary affairs of, China, Japan and Korea, specifically designed for K-12 educators who wish to incorporate East Asian topics into their classroom teaching. Pedagogical methods and resources for the study of East Asia will be emphasized. Topics covered will address relevant benchmarks in the state curricular standards in social studies, themes from the Advanced Placement world history examination, and the national standards in world history. (Same as EALC 747.) Prerequisite: Approval of the instructor. LEC.

HIST 748. East Asian Historical Materials: ______. 3 Hours.
The aim of the course is to provide students with the linguistic tools needed for archival research in East Asian history by assisting them in gaining experience reading primary and secondary language materials in Japanese and/or Chinese including texts in classical forms of these languages. After studying the rules of classical grammar and the particulars of historical materials as needed, students will read primary documents in conjunction with secondary readings in Japanese and/or Chinese. Fundamental aspects of paleography may also be introduced in this course depending on student need. Prerequisite: Capability of reading Japanese or Chinese and permission of the instructor. LEC.

HIST 799. Museum Studies Apprenticeship. 1-6 Hours.
Provides directed, practical experience in the collection, care, use, and/or management of historical materials. (Same as AMS 799, ANTH 799, BIOL 799, GEOL 723, and MUSE 799.) Prerequisite: Consent of instructor. FLD.

HIST 800. Readings in: ______. 1-8 Hours.
Prerequisite: Consent of instructor. RSH.

HIST 801. Colloquium in: ______. 1-6 Hours.
Reading and discussion of selected topics. LEC.

HIST 802. Seminar in: ______. 3 Hours.
Research Seminar on selected topics. SEM.

HIST 805. The Nature of History. 3 Hours.
Analysis of what historians do and how the profession of history has developed in terms of training, concepts, and practices in both research and teaching. Consideration also of the major controversies that have developed over historical method and historical interpretation, giving greatest emphasis to American and European historiography by providing a relationship to the leading concepts of world history. LEC.

HIST 806. Studies in: ______. 3 Hours.
The core course for each thematic major field in the graduate program in History. The course, offered in a colloquium style format, will serve as an introduction to the principal standard literature in the field, and will consider the full range of methodologies or approaches appropriate to the field. LEC.

HIST 807. Professional Development Colloquium in Pedagogy. 3 Hours.
This course will help train future professional historians to teach. It will focus on a variety of pedagogical topics for future college history faculty, including: developing students' critical and analytical thinking; teaching research skills; promoting student involvement/participation; determining course goals; use of multi-media technology. In addition to attending class meetings of History 807, students will attend as observers throughout the semester one 500/600-level course in an area relevant to their future teaching and complete the readings assigned to the class. They will produce a course portfolio for an undergraduate course, including: a syllabus designed by the student; a set of assignments that will be part of that course, such as examinations and papers; sample lesson plans; an annotated bibliography of materials relevant to the subject-matter of the course. LEC.

HIST 808. Colloquium in Comparative History: ______. 3 Hours.
A readings-oriented course which explores themes in two or more geographic and/or chronological fields of history. The benefits and disadvantages of comparative methodologies will be analyzed. Topics will vary each term but may include the examination of such subjects as the history of urbanization, labor, colonialism, immigration, the family, political thought, or industrialization. Prerequisite: Varies with area of subtopic. LEC.

HIST 820. Colloquium on Popular Culture in Latin America. 3 Hours.
This course examines the history and theory of popular culture in 19th and 20th century Latin America from a cross-disciplinary perspective. Some of the topics covered could include: the historical development of urban popular culture from broadsides and newspapers to radio and telenovelas; the politics of music from the tango to the new song movement; folk art vs. High art in the definition of national identity; cultural imperialism; sports and public rituals as spectacles for the working class; relationship between mass culture and the novel; gender roles and social order as revealed in forms of popular culture; and the politics of the New Latin American Cinema. Discussions will be in English. No prerequisites. LEC.

HIST 822. Colloquium in the Urban History of Latin America. 3 Hours.
Explores the growth of the city and urban culture from the Spanish conquest to the present. Focus on such topics as crime, public health, leisure activities, artisans, unionization, residential patterns and transportation. LEC.

HIST 823. Colloquium on Colonial Latin America. 3 Hours.
Explores the historiography and major themes and problems of the history of colonial Latin America. Ordinarily this will involve reading and discussion of historiographical articles, major works in the field and works involving new approaches and perspectives. A long historiographical paper will be required. LEC.

HIST 824. Seminar on Labor in Latin America. 3 Hours.
Major problems in class conflict resulting from industrialization of peripheral economies. Focus on such topics as labor movements, worker-inspired revolutions, women in the workforce, the ideology of work, labor migration, occupational culture and worker's relationship to the state. LEC.
HIST 825. Seminar in Latin American Foreign Relations. 3 Hours.
This seminar examines the history of Latin American attitudes and policies toward other parts of the world as well as among the Latin American nations themselves. Examples of topics of interest are anti-imperialism, Pan-Americanism, foreign cultural influences, non-intervention, international cooperation and conflict, dependency, transnational corporations, regional integration, international law and doctrine and national security. LEC.

HIST 826. Seminar in Twentieth Century South America. 3 Hours.
Research seminar which examines major topics in the recent history of the Andean and Southern Cone countries. Topics such as the history of poverty, the dirty wars and the rise of military regimes, the social collapse of Colombia, Argentina and Peru, and the persistence of traditional cultures in the face of capitalist transformations will be thoroughly explored. LEC.

HIST 827. Colloquium in the Social History of Latin America. 3 Hours.
Explores the historiography, methods and themes of Latin American social history from the conquest to the present. Sessions will focus on specific groups including the history of indigenous groups, peasants, slaves, women, families, workers, and the poor. A long historiographical paper will be required. LEC.

HIST 830. Colloquium in Eighteenth and Nineteenth-Century Britain. 3 Hours.
This course examines the varied elite and popular responses to the creation of a capitalist economy (agrarian and industrial) in Britain between 1750 and 1890. LEC.

HIST 831. Colloquium in Twentieth-Century Britain. 3 Hours.
This course examines the main developments in the political, social, and cultural history of Britain since 1890. The aim is to trace the relationship between political movements and socio-cultural attitudes and institutions. LEC.

HIST 833. Colloquium in British History, 1500-1660. 3 Hours.
This course will engage with recent scholarship on the Renaissance and Reformation, the Civil War and the English Republic. LEC.

HIST 834. Colloquium in the History of the British Empire. 3 Hours.
The course will deal selectively with themes in the political and cultural interaction of the peoples of the British Isles with peoples overseas, the expansion and contraction of empire, and the rationales for these processes. LEC.

HIST 836. Colloquium in British Political Thought. 3 Hours.
This course provides an introduction to the rich tradition of British writings on politics through a close reading of a number of classic texts, interpreted in their historical settings. LEC.

HIST 837. Colloquium in British Religious History. 3 Hours.
This course will deal analytically and synoptically with religion in Britain from the reformation to the present with special reference to the Church of England, and will focus on the themes of ecclesiology, ecclesiastical polity, and political theology. LEC.

HIST 844. Colloquium on East Central Europe, 1772-1914. 3 Hours.
The colloquium covers the period beginning with the decline and partitions with Poland and ends with the outbreak of World War I. The major areas of study are the development of modern national consciousness among Poles, Czechs, Slovaks, Magyars, and Ukrainians, and the status of the Jews in these areas; economic, social, and educational development; and the rise of modern political parties. Prerequisite: HIST 557. LEC.

HIST 845. Eastern Europe, 19th and 20th Centuries. 3 Hours.
The course considers the challenges of modernity in Eastern Europe, with a focus on the lands of the former Habsburg Empire. The course is designed to introduce students to major issues in modern Eastern European history and historiography, with an emphasis on recent scholarship. Topics include: nationalism, identity formation, anti-Semitism, modernization and urbanization, World War I, interwar nation-states, World War II, Communist takeovers, everyday life under Communism, dissidence, Solidarity, the collapse of Communism, and post-socialist transitions. LEC.

HIST 847. Colloquium in Russian History. 3 Hours.
A group readings course that begins with Russia in the medieval period and continues through the end of the twentieth century. Topics may vary each term, but may include such subjects as political, social, religious, gender, or intellectual history. The course will focus around significant interpretive issues and the historiography that address them. Basic familiarity with the chronology and the main problems of Russian history is assumed. LEC.

HIST 848. Colloquium in 20th Century Russia. 3 Hours.
The focus will be on reading and discussion of historical literature on the end of Imperial Russia, the Russian revolutions, and the Soviet Union and its aftermath. LEC.

This graduate seminar will focus on interactions between the so-called Old and New Worlds in the three centuries following Columbus’ voyages. The course will pay particular attention to the changes in the lives of Europeans, Africans, and the peoples of the Americas as a result of the emergence of transatlantic economies, empires, and cultural systems. LEC.

HIST 856. Colloquium in Modern European History I - Renaissance to the French Revolution. 3 Hours.
This course will concentrate upon a number of selected topics in the history of Europe between the Renaissance and the French Revolution. Emphasis will be placed upon certain problems within this period and the recent historiography that deals with them. The first in a sequence of colloquia in Modern European History. Required for European history graduate students and students majoring in other fields whose secondary fields correspond to this time frame. LEC.

HIST 857. Colloquium in Modern European History II - Major Themes in the Social History of Europe. 3 Hours.
This course will concentrate upon a number of selected topics in early modern European history. Emphasis will be placed upon certain problems within this period and the recent historiography that deals with them. The second in a sequence of colloquia in Modern European History. Required for European history graduate students and students majoring in other fields whose secondary fields correspond to this time frame. LEC.

HIST 858. Colloquium in Modern European History III - French Revolution to the Present. 3 Hours.
From the French Revolution into the contemporary era. The third in a sequence of colloquia in Modern European History. Required for European history graduate students and students majoring in other fields whose secondary fields correspond to this time frame. LEC.

HIST 859. Colloquium in Modern European History IV - Major Themes in Modern History. 3 Hours.
This course will concentrate upon a number of selected topics in modern European history. Emphasis will be placed upon certain problems within this period and the recent historiography that deals with them. The fourth in a sequence of colloquia in Modern European History. Required for European history graduate students and students majoring in other fields whose secondary fields correspond to this time frame. LEC.
HIST 879. Colloquium on North American Environmental History. 3 Hours.
Intensive survey of significant works in the field from colonial times to the present, with attention to bibliography, research methods and needs, and leading issues in interpretation. LEC.

HIST 880. Colloquium in Iberian World History. 3 Hours.
A graduate colloquium focused on a historical topic that examines from a transregional perspective the historical foundations, development, and colonial heritage of regions and societies touched by Iberian expansionism. LEC.

HIST 881. Slavery in the Atlantic World. 3 Hours.
A graduate colloquium examining the historical roots, processes, experiences, and legacies of human slavery from local, regional, comparative, and global perspectives. LEC.

HIST 882. Gender, Sexuality, and Family in Iberian. 3 Hours.
A graduate colloquium that develops theoretical approaches and examines historical case studies focused on the social and cultural construction of gender roles, sexual identities, family structures, and living strategies for peoples and places touched by Iberian expansionism. LEC.

HIST 883. Ethnohistory of the Americas. 3 Hours.
A graduate colloquium that develops methodologies and examines historical case studies for the study of ethnicity, interethnic relations, and cultural hybridity from a hemispheric perspective, not only for indigenous peoples, but also for African-, Asian-, European-, or Pacific-derived groups, as well as new ethnic groupings and identities that emerged from their interaction. LEC.

HIST 890. Colloquium in American History 1492-1800. 3 Hours.
Study of the leading interpretations of major issues in the history of Colonial and Revolutionary America, including appropriate attention to new approaches and techniques in research. The first course in the sequence of colloquia in United States history. Required of all U.S. history graduate students. LEC.

HIST 891. Colloquium in 19th Century U.S. History. 3 Hours.
Study of the leading interpretations of major issues in the history of the United States in the 19th century. The third course in the sequence of colloquia in United States history. LEC.

HIST 892. Colloquium in 20th Century U.S. History. 3 Hours.
Study of the leading interpretations of major issues in the history of the United States in the 20th century. The third course in the sequence of colloquia in United States history. LEC.

HIST 895. Colloquium in the History of Gender. 3 Hours.
This colloquium will cover theoretical and topical readings on the history of manhood, womanhood, and gender systems. (Same as AMS 835 and WGSS 835.) LEC.

HIST 896. Colloquium in United States Women’s History. 3 Hours.
This colloquium will cover theoretical and topical readings on the history of women in the United States from the pre-contact period to the present. It is designed to familiarize students with the most important and current historiography in the field. (Same as AMS 836 and WGSS 836.) LEC.

HIST 897. Comparative Colloquium in Women’s History. 3 Hours.
This colloquium will approach the history of women from a comparative perspective through theoretical and topical readings on women in at least two different cultures. (Same as AMS 837 and WGSS 837.) LEC.

HIST 898. Colloquium in Material Culture and History. 3 Hours.
This course provides an overview of theories and methods used in material culture studies and their application to historical research, writing, and presentation. Topics may vary from semester to semester, but could include vernacular architecture, museum studies, anthropology, cultural geography, historical archeology, and perceptual theory. The course will consist of intensive reading, discussion, and written work. While it is not limited to a particular geographical or chronological area, or discipline, given the state of the field most topics will be drawn from U.S. history. LEC.

HIST 900. Independent Research Seminar: _____. 3 Hours.
Design and completion of an independent project, culminating in the production of a professional-quality paper based on original, primary source research. Prerequisite: Consent of the instructor. LEC.

HIST 901. Research Seminar in Global History. 3 Hours.
A research seminar oriented around cross-regional, comparative, and transnational aspects of history, culminating in production of a professional-quality paper based on original, primary source research. SEM.

HIST 910. Seminar in Roman History: _____. 3 Hours.
A research seminar in specialized aspects of Roman history. May be repeated for credit. LEC.

HIST 913. Numismatics as a Basis for Study of Roman Noble Families of the Late Republic. 3 Hours.
A seminar involving the study of the importance and influence of the noble families of Rome on Roman history (200-27 B.C.) with special emphasis on the literary and numismatic evidence. Reading knowledge of Latin will be essential for this course. LEC.

HIST 914. The Major Roman Historians. 3 Hours.
An analysis and criticism of the works of the most significant Roman historians from Sallust to Ammianus Marcellinus, including a comparison and contrast between the Latin and Greek historians who wrote during the Graeco-Roman period (150 B.C.-378 A.D.). LEC.

HIST 918. Elements of Latin Paleography. 3 Hours.
Introduction to the techniques of reading, dating, and localizing medieval Latin manuscripts. LEC.

HIST 919. Seminar in Medieval Europe. 2-6 Hours.
LEC.

HIST 929. Seminar in Modern European History: _______. 2-5 Hours.
A study of sources in some restricted fields and the presentation of research results. A reading knowledge of French or German or some other modern language is desirable. LEC.

HIST 930. Seminar in British History. 3 Hours.
A research seminar focusing on new, actively-investigated and controversial themes in British history, chiefly c. 1660-1832. LEC.

HIST 932. Order and Disorder in Britain and America, c. 1750-1920. 3 Hours.
The study of the history of crime and protest in their relationship with the wider social and political theory of Britain and America. Specific topics may include the impact of industrialization, the notion of the ‘moral economy,’ the legal and ideological nature of the death penalty, the crowd in history, and the administrative and intellectual developments in policing, prisons, and asylums. LEC.

HIST 934. Seminar in Modern European History. 1-12 Hours.
A research and thesis seminar offered by several members of the Standing Field Committee in Modern European History. Students seeking advanced degrees in European history from the Renaissance to the present will enroll each semester for work on their theses and dissertations. May be repeated. LEC.
HIST 946. Seminar in the Middle East. 3 Hours.
A research seminar in Middle East history, with emphasis on the 19th and 20th centuries. The European impact on and relationships with the Middle East are stressed. LEC.

HIST 949. Seminar in Modern Russian History. 3 Hours.
A focus on major problems of historical interpretation and research investigation from Peter the Great to the present. LEC.

HIST 950. Seminar in Latin American History. 3 Hours.
A research seminar focused on a major theme or problem in Latin American history. LEC.

HIST 951. Seminar in Latin American Revolutions. 3 Hours.
This seminar focuses on sweeping socio-political upheavals such as occurred in Mexico in 1910, Guatemala in 1944, Bolivia in 1952, Cuba in 1959, and Nicaragua in 1979. After considering various sociological and political theories of revolution the seminar searches for an understanding of the basic reasons for revolutions in the countries mentioned (and failure of revolutionary efforts elsewhere) and possible common characteristics of the Latin American revolutionary process. LEC.

HIST 952. Seminar in Ideology, Violence and Social Change in Latin America. 3 Hours.
Research seminar focusing on the role of ideas and ideologies, values and cultural norms in the history of Latin America. Political action, including rebellions, movements and strikes by the masses and efforts toward social control by elites will also be a major theme. Finally the course will examine the meaning of "social change" for Latin America and when it can be said that "social change" actually occurs. LEC.

HIST 955. Seminar in East Asian History. 3 Hours.
A research seminar in East Asian history. Prerequisite: Open only to graduate students having a reading knowledge of at least one East Asian language. LEC.

HIST 962. Seminar in American History. 1-12 Hours.
A research and thesis seminar offered by several members of the Standing Field Committee in United States History. Students seeking advanced degrees in United States history will enroll in the seminar for theses and dissertation credit. May be repeated. LEC.

HIST 964. Seminar in American Colonial History. 3 Hours.
An intensive, research-oriented study of American history from the 1580s to the 1760s. The course will cover both British America and New France. May be repeated. LEC.

HIST 965. The American Revolutionary Experience. 3 Hours.
An intensive, research-oriented study of American history from 1760 to 1800. May be repeated. LEC.

HIST 971. Recent American History, 1920 to the Present. 3 Hours.
LEC.

HIST 973. Seminar in United States Women’s History. 3 Hours.
This research seminar will focus on the history of women in the United States from the pre-contact period to the present. Students will research and write a paper using primary sources, and present those papers to the seminar for evaluation. (Same as AMS 973 and WGSS 873.) LEC.

HIST 974. Seminar in American History: _____ . 3 Hours.
A research course focusing on selected topics in history. LEC.

HIST 975. Seminar in the History of United States Foreign Relations. 3 Hours.
An intensive study of United States foreign policy during a selected period. LEC.

HIST 980. Seminar in the Trans-Mississippi West. 1-5 Hours.
LEC.

HIST 981. Seminar in Environment and History. 3 Hours.
An inquiry into major issues and methods in environmental history, viewed from both an American and modern world perspective. LEC.

HIST 982. Colloquium in the History of the American West. 3 Hours.
Study of issues and interpretations in the history of the American West from prehistory to the present, including attention to new approaches and techniques in research. LEC.

HIST 986. Seminar in Historiography of Science. 3 Hours.
Examines the various patterns of interpretation influencing current historiography of science: the substance and impact of "internalist" history, which deals with the evolution of scientific ideas; the diversity of "externalist" history, which stresses interaction between the scientist's activity and social environment. Readings and discussions will assess intellectual, chronological, socio-economic, theological, philosophical, national, institutional and literary aesthetic influences on the history of science. LEC.

HIST 998. Portfolio Preparation. 1-6 Hours.
Writing and editing of materials in the student's professional portfolio. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Permission of the instructor. RSH.

HIST 999. Doctoral Dissertation. 1-12 Hours.
An inquiry into the source material upon a specific subject. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Consent of instructor. THE.

Honors Program Courses

HNRS 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Honors. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

HNRS 190. Freshman Honors Seminar. 1 Hour. U.
This seminar serves as an introduction to the Honors Program, to the research opportunities and other academic resources available at the University of Kansas and to specific disciplinary perspectives on an overarching theme. While closely examining a topic germane to the instructor, students develop skills in research, reading, writing and in-depth discussion. The instructor of the student's seminar also serves as the academic honors advisor for the enrolled students. Required of all freshman Honors students; open only to freshmen in the University Honors Program. LEC.

HNRS 195. Transfer Honors Seminar. 1 Hour. U.
This seminar serves as an introduction to the Honors Program, and to the research opportunities and other academic resources available at the University of Kansas. This seminar fosters the transfer students' oral and written communication and the critical assessment of their academic and pre-professional goals. The instructor of the student's seminar also serves as the academic honors advisor for the enrolled students. Open only to transfer students in the University Honors Program. LEC.

HNRS 250. Citizen Philanthropy: An Introduction to the Nonprofit World. 3 Hours. U.
This interdisciplinary course explores the historical and economic roots of citizen generosity and the role of the nonprofit/philanthropic sector. This service learning course combines volunteer experiences and public service internships with research and exploration of the missions and ethical orientations of nonprofit organizations. The course is designed to explore the social and the ethical contexts of the nonprofit sector with opportunities to demonstrate social and civic responsibility. LEC.
HNRS 300. Honors Commons Course. 3 Hours. H.
An opportunity to investigate a broad topic across various subjects and disciplines. In alliance with the University Commons at Spooner Hall, this course examines a problem or topic from perspectives of several disciplines across the arts, sciences, social sciences and humanities. The course is complemented by a dedicated annual university lecture series germane to the course’s topic. Prerequisite: Membership in the University Honors Program. LEC.

HNRS 310. University Scholars Seminar. 3 Hours. U.
An interdisciplinary survey to acquaint students with some of the main ideas, methods, and outstanding problems in various areas of scholarship. The organization of human knowledge inside and outside the university, as well as the implications of this organization for scholarship and society, are emphasized. Ideas and methods in various disciplines are contrasted and compared. Required of and open only to newly admitted students in the University Scholars Program. LEC.

HNRS 320. Global Scholars Seminar. 3 Hours. H.
The Global Scholars Seminar is designed to foster academically talented and motivated undergraduate students’ interest in global studies. Through interdisciplinary coursework, mentorship and research experience in global studies, the seminar provides cohorts of students with opportunities to develop their intellectual capabilities and interests to the fullest and better prepares them for careers, further study, and leadership roles in today’s complex international arena. Required of and open only to newly admitted students in the Global Scholars Program. LEC.

HNRS 370. Personal Writing Seminar. 1 Hour. U.
This seminar helps students develop their personal writing abilities. Students analyze language and rhetorical choices in the genre of the personal essay. Students demonstrate rhetorical flexibility within the genre, considering audience, purpose, and application of the material. Prerequisite: Permission of the University Honors Program. LEC.

HNRS 380. Critical Thinking and Advocacy Seminar. 1 Hour. U.
The focus of this class is on honing the two basic skills of critical thinking and advocacy. In this seminar, students develop a basic system for critical analysis that can be applied generally; test that critical analysis system in a series of practicums to develop the skills necessary to apply it; and develop a basic system for designing effective and ethical persuasive messages. Prerequisite: Permission of the University Honors Program. LEC.

HNRS 430. Honors Interdisciplinary Seminar. 3 Hours. U.
An opportunity to synthesize topic across various subjects and disciplines. This course examines a problem or topic from the perspectives of several disciplines. Open to qualified sophomores, juniors, and seniors in the University Honors Program. LEC.

HNRS 497. Honors Freshman Seminar Assistantship. 0 Hours.
Open to all Honors students selected to be Honors Freshman Seminar Assistants, regardless of major field. These students assist Seminar instructors in the teaching of an Honors seminar in various ways, including but not limited to: leading group discussion; engaging students in the learning process; developing classroom material; encouraging and guiding students to solve problems themselves and helping students prepare for their advising assignments. Offered fall semester only. May be repeated. LEC.

HNRS 520. University Scholars Junior/Senior Seminar. 2-3 Hours. U.
An interdisciplinary seminar course designed for advanced-level students in the University Scholars Program. Faculty mentors are invited to attend. Will count toward completion of the University Honors Program. Prerequisite: HNRS 310 or concurrently. LEC.

Humanities Western Civ Courses

HWC 110. Introduction to Humanities. 3 Hours. HL GE21/GE3H / H.
An introduction to the humanities as a division of learning and interdisciplinarity in the humanities. Topics include the history and role of the humanities in a liberal education, perspectives and methods in the humanities, the humanities and human diversity, and interdisciplinary approaches to understanding and interpreting texts. LEC.

HWC 111. Introduction to Humanities, Honors. 3 Hours. HL GE21/GE3H / H.
An introduction to the humanities as a division of learning and interdisciplinary study in the humanities. Topics include the history and role of the humanities in a liberal education; perspectives and methods in the humanities; the humanities and human diversity; and interdisciplinary approaches to understanding and interpreting texts. Prerequisite: Membership in the University Honors Program. LEC.

HWC 114. Western Civilization I Honors. 3 Hours. AE42/GE11/GE21 / H.
A program of study using readings and writing to explore and understand the record of Western Civilization from the ancient world through the early modern period. This is a writing intensive and writing instructive course designed to expand critical thinking and global awareness through the medium of composition practice. Prerequisite: Membership in the University Honors Program or permission of the department. LEC.

HWC 115. Western Civilization II Honors. 3 Hours. AE42/GE11 / H.
A program of study emphasizing the reading and discussion of some of the influential writings and ideas that have shaped the intellectual and cultural heritage of the Western world. Western Civilization II includes readings from the modern period. Prerequisite: Membership in the University Honors Program or permission of department. LEC.

HWC 177. First Year Seminar: _____, 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Humanities and Western Civilization. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.
HWC 204. Western Civilization I. 3 Hours. AE42/GE11/GE21 / H.
A program of study using readings and writing to explore and understand the record of Western Civilization from the ancient world through the early modern period. This is a writing intensive and writing instructive course designed to expand critical thinking and global awareness through the medium of composition practice. LEC.

HWC 205. Western Civilization II. 3 Hours. AE42/GE11 / H.
A program of study emphasizing the reading and discussion of some of the influential writings and ideas that have shaped the intellectual and cultural heritage of the Western world. Western Civilization II includes readings from the modern period. LEC.

HWC 206. Contemporary Western Civilization. 3 Hours. HL GE11/GE3H / H.
A sequel to the two Western Civilization courses which offers the opportunity to examine influential works of literature, philosophy, history, and political thought written since the end of World War II. In keeping with the decline of colonialism and the growth of global and multicultural civilization since 1945, the readings of the course are selected from both Western and non-Western writers. LEC.

HWC 240. Introduction to World Literature. 3 Hours. H.
This course provides an introduction to the field of world literature as an approach to critical reading and writing about literary works in a global context. Topics may include: what constitutes literature; challenges to reading works across time or within different cultural traditions; reading works in translation; history of writing technologies and canon formation; literature and market forces; and the literature of global encounters and exchanges. This is a writing intensive and writing instructive course designed to expand critical thinking and global awareness through the medium of composition practice. LEC.

HWC 250. Civilizations and the Individual. 3 Hours. HL GE3H / H.
Introduction to perennial themes that define human experience through reading and discussion of primary texts. Topics may include the nature of humanity; nature and the supernatural; the individual and the state. LEC.

HWC 251. Civilizations and Individual, Honors. 3 Hours. HL GE3H / H.
Honors version of HWC 250. Introduction to perennial themes that define human experience through reading and discussion of primary texts. Topics may include the nature of humanity; nature and the supernatural; the individual and the state. Prerequisite: Membership in the University Honors Program, or permission of instructor. LEC.

HWC 300. Studies In: ____. 3 Hours. H.
An interdisciplinary course, focusing on different topics and drawing on diverse media, cultures, and historical periods. Humanities-based, this course, depending on its topic, may include the arts, the social sciences, and the natural sciences. May be repeated for credit with different topics. LEC.

HWC 302. European Culture and Society 1945 to Present. 3 Hours. HT AE42 / H.
The course provides historical, cultural, and political overviews of Europe since 1945 with particular emphasis on the contribution of French and Italian culture and society. The course emphasizes Europe's contribution to Western intellectual thought, social movements, arts and literature, and global society. (Same as EARS 302.) LEC.

HWC 304. World Literature I. 3 Hours. HL GE3H / H.
The study of great books in English translation from antiquity through the fifteenth century from two or more national literatures. LEC.

HWC 308. World Literature II. 3 Hours. HL GE3H / H.
The study of great books in English translation from the sixteenth, seventeenth, eighteenth, and early nineteenth centuries from two or more national literatures. LEC.

HWC 312. World Literature III. 3 Hours. HL GE3H / H.
The study of great books in English translation in the modern period (late nineteenth and twentieth centuries) from two or more national literatures. LEC.

HWC 317. Greek and Roman Art. 3 Hours. H/W.
A survey of the art of ancient Greece and Rome (ca. 1000 B.C.E. - 500 C.E.). Emphasis on major sites, architecture, sculpture, and painting. Illustrated lectures and discussion; use of the Wilcox Classical Museum. No knowledge of Greek or Latin is required. Not open to students who have taken both CLSX 526/HA526 and CLSX 527/HA 537, except with permission of the instructor. (Same as CLSX 317, HA 317.) LEC.

HWC 320. Being Human in the Workplace. 3 Hours. H.
A study of what it means to be human and humane in the workplace. Topics include the concepts of work, the worker, and the workplace; workers' rights; issues of discrimination; business ethics; privacy and confidentiality; bullying; whistle blowing; workplace environment. LEC.

HWC 324. Undergraduate Writing & Research Methods. 1 Hour. H.
Preparation for senior thesis project required of HWC majors. Introduction to writing strategies, library research, and time management skills. Open to HWC majors and others engaged in research and writing at the undergraduate level. Class will proceed by discussion of skills, methods, and examples, and will culminate in a written proposal from each student. LEC.

HWC 325. Theory and Method in Interdisciplinary Studies in the Humanities. 3 Hours. H.
An introduction to recent cultural theory and interdisciplinary methods used across the humanities and qualitative social sciences. Includes examination of traditional views of the humanities and its implicit cultures along with discussion of new methodologies of cultural analysis. LEC.

HWC 328. Law and the Legal Profession. 3 Hours. H.
An overview of Western Legal education, both in historical and modern contexts. Legal subjects such as constitutional law, contracts, property, the courts and ethics are also studied. Students gain perspective on law as a profession, and the legal environments in which we live. Note: this course does not guarantee admission to law school or constitute entry into the legal profession as a career. It is intended to provide information and help students identify interests in the field of legal study. LEC.

HWC 335. Introduction to Indigenous Studies. 3 Hours. NW / H.
This course is an introduction to the study of modern and historic indigenous peoples. It surveys the concepts, methods and content relevant to Indigenous Studies, using case studies drawn from the diverse indigenous cultures. Special attention is paid to the various ways in which standard academic disciplines --history, anthropology, literature, law, political science, among others -- contribute to the study of Indigenous cultures and current issues. The course illustrates that the social, political, religious, and economic aspects of indigenous life are interconnected and tribal histories and cultures cannot be understood without an awareness of these fields. (Same as ISP 335.) LEC.

HWC 345. Indian Territory. 3 Hours. H.
This course examines the cultural, social, economic, environmental, and political background of Indian territory in what is now the state of Oklahoma. It surveys the diverse geographical regions, tribal cultures, the impact of the Indian Removal Act, assimilation, acculturation, westward expansion, the Civil War, boarding schools, the Dawes Act, the Curtis Act, and land runs on Territory residents. The course also treats post-Civil War
violence, outlaws, and the role of tribal courts along with controversies over removals, Land Run celebrations, allotment scandals, and Osage oil murders. (Same as HIST 318 and ISP 345.) LEC.

HWC 348. American Indian and White Relations to 1865. 3 Hours. H.
This course provides an intensive survey of the Indians of North America from Prehistory to 1865, and focuses on ancient indigenous cultures, early European-Indian relations and the impact of European culture upon the indigenous peoples of North America. (Same as HIST 351, ISP 348.) LEC.

HWC 350. American Indians Since 1865. 3 Hours. H.
This course examines American Indian/White relations from reconstruction to the present. It surveys the impact of westward expansion and cultural changes brought about by the Civil War, forced education, intermarriage, the Dawes Act, the New Deal, the World Wars, termination, relocation and stereotypical literature and movies. The class also addresses the Red Power and AIM movements, as well as indigenous efforts to decolonize and to recover and retain indigenous knowledge. After learning about the past from both Native and non-Native source materials, students will multiple perspectives about historical events and gain understandings of diverse world views, values, and responses to adversity. (Same as HIST 352 and ISP 350.) LEC.

HWC 370. The Twentieth Century. 3 Hours. H.
An integrated study of several disciplines such as history, philosophy, art, music, and literature as they relate to the twentieth century in one country, or one historical or aesthetic movement occurring during this time. LEC.

HWC 374. Gender and Sexuality, Ancient and Modern. 3 Hours. H.
Classical Greek and Roman attitudes to gender and sexuality compared and contrasted with modern nations and behaviors. Attention is paid to literature (dramatic, philosophical, medical, and legal texts) and archaeological evidence (vase painting, sculpture, and domestic architecture). The course may include the following topics: age divisions and rites of passage from childhood to maturity; marriage; conception, birth, and infanticide; the family; love; homoeroticism; property and economics; and sexuality and the law, politics, and religion. No knowledge of Greek or Latin is required. (Same as CLSX 374.) LEC.

HWC 380. Modern Themes, Ancient Models: _____. 3 Hours. H.
The study of the evolution of a cultural or literary tradition from the Graeco-Roman world into modern times. The theme of the course will normally vary from semester to semester; topics such as these may be examined: the analysis of a literary genre (e.g. drama, satire, lyric), the transformation of the ancient mythical heritage, the reception of ancient astronomy. Students should consult the Schedule of Classes for the theme of the course in a given semester. With departmental permission, may be repeated for credit as topic varies. (Same as CLSX 350.) LEC.

HWC 390. Comparative Literary Theory. 3 Hours. H.
A study of selected works in literary theory and of selected problems in literary interpretation and comparative literary methodology, designed to examine and apply systematically basic critical principles and approaches. Study of approaches such as feminism, Marxism, deconstruction, psychoanalysis, and cultural studies are carried out through discussion and writing. Prerequisite: Completion of the freshman-sophomore English requirement or its equivalent. LEC.

HWC 410. Dante’s Comedy. 3 Hours. H.
The complete Divine Comedy will be read in English translation, with equal stress on each of its three parts—the Inferno, the Purgatory, and the Paradise. The poem will be explained for the general reader by specialists having a variety of perspectives. (Same as HIST 420.) LEC.

HWC 420. The Interrelations of the Humanities and the Arts. 3 Hours. H.
An interdisciplinary seminar on the relations of several of the humanities and the arts. Topics will vary, but the interrelation of the humanities and arts will be the central focus. Not open to freshmen and sophomores; recommended in the junior year. Required of students majoring in humanities. LEC.

HWC 424. Senior Seminar in Humanities. 3 Hours. AE61 / H.
A seminar to result in the student’s integration of knowledge within the Humanities major. Students undertake a project that reflects and utilizes the interdisciplinary perspectives of the humanities. Options for the final project include a portfolio, web page, or significant writing project. Not open to freshmen and sophomores; recommended in the senior year. Prerequisite: Completion of at least 9 hours of upper division courses in the major. IND.

HWC 430. European Civilization in World Context: _____. 3 Hours. HL AE42/GE3H / H.
An introduction to the literature of encounters between European and non-European civilizations, drawing on both Western and non-Western sources. The course may include European interactions with areas such as the Mediterranean Basin, Sub-saharan Africa, South and East Asia, and the Americas. World areas and historical periods chosen for study will vary from semester to semester according to the interest and field of the instructor. Not open to freshmen. (Same as EURS 430.) Prerequisite: HWC 114 or HWC 204 and HWC 115 or HWC 205. LEC.

HWC 435. Islam in Europe. 3 Hours. AE42 / H.
Investigation of Muslim migration into Europe and day-to-day interactions of Muslims with other European populations. This is an integrated study of historical, political, religious and economic influences that determine Muslim experience in contemporary European culture. (Same as EURS 435.) LEC.

HWC 436. Islam in Europe, Honors. 3 Hours. H.
Investigation of Muslim migration into Europe and day-to-day interactions of Muslims with other European populations. This is an integrated study of historical, political, religious and economic influences that determine Muslim experience in contemporary European culture. Prerequisite: Membership in the University Honors Program or permission of department. Not open to students who have completed EURS/HWC 435 LEC.

HWC 460. Animals in Art and Literature. 3 Hours. H.
A study of the role of animals (especially mammals), both wild and domesticated, in defining the nature of human beings and human culture through the disciplines of religious studies, philosophy, history, art and literature. Both western and non-western courses are examined. LEC.

HWC 464. Visions in Art and Literature. 3 Hours. H.
A study of the phenomenon of visions, their expression in various media, and theories of visionary experience from the humanities and social sciences, with a particular emphasis on critically evaluating the relationship between the visionary experience and its expression. (Same as REL 464). LEC.

HWC 468. Illness in Art and Literature. 3 Hours. H.
An examination of how illness and health have been conceptualized, expressed, and explored in Western literature and art, as well as a consideration of issues and health from the perspectives of philosophy and religious studies. (Same as REL 468). LEC.

HWC 470. American Health Care: From Origins to Modern Models. 3 Hours. H.
An interdisciplinary analysis of the historical origins and present currents within American medicine. This is an integrated study of basic historical,
political, economic and professional influences that underlie the character and practice of health care in our century. LEC.

HWC 477. Gender and Religion. 3 Hours. H.
Examination of the symbols, images, scriptures, rites and teachings that define gender in various religious traditions. (Same as REL 477.) LEC.

HWC 490. Roots of Federal Indian Policy. 3 Hours. H.
This course introduces students to the basic concepts and ideologies of US Federal Indian policy. It surveys European intellectual trends that were influential in creating policies applied to colonized native peoples. The course explores the origins of such policies, including removals, "civilization programs," the reservation period, the Dawes (Allotment) Act, the New deal, termination, relocation, NAGPRA and tribal rights, in addition to issues surrounding American Indian identity, tribal membership and demographics. This course serves as a foundation for more in-depth study of Federal Indian Law pertinent to the Indigenous peoples of the United States. (Same as ISP 490.) LEC.

HWC 494. Humanities Directed Study: ____. 1-3 Hours. AE61 / H.
Investigation of a subject in fields or on topics not covered in regularly scheduled courses. May be repeated for a total of 6 hours. Does not replace or satisfy specific course requirements for the HWC major. May be counted as part of the total junior-senior credit hours required. LEC.

HWC 500. Studies in: ____. 3 Hours. H.
A study of significant themes, topics, or problems in the humanities. May also relate an issue in the humanities to the social sciences or natural sciences. May be repeated for credit when the topic varies. LEC.

HWC 505. Europe Today. 3 Hours. AE42 / H.
An exploration of major social, political and economic developments post World War II including the rise of the European Union, the integration of Eastern and Western Europe, the growing role of Islam, attitudes towards the United States, and Europe's role in the world economy. Topics may vary based on current events. LEC.

HWC 508. Special Topics in World Literature: ____. 3 Hours. H.
An examination of selected theoretical texts and literary works relevant to the emerging field of "world literature studies" that seeks to account for the ways that global relationships structure literary production, circulation, and reception. Topics and texts vary. May be taken more than once if content differs sufficiently. LEC.

HWC 510. Science, Technology, and Society. 2-3 Hours. H.
The objective of this course is to provide members of the university community with information that enables them to judge the humanistic, moral, and ethical implications of scientific and technological developments. Formal presentations by guest lecturers, followed by question-and-answer periods, will alternate with panel discussions, symposia, etc., prepared by faculty members drawn from the various departments, schools, and organizational units of K.U. LEC.

HWC 514. Totalitarianism and Literature in Central Europe. 3 Hours. H.
This course asks how fiction written in Central Europe engaged and grappled with the totalitarian experience imposed by Nazi and Soviet forms of government. The course focuses on the works by 20th-century Polish, Czech, and Hungarian writers that deal with totalitarianism. (Same as SLAV 514.) LEC.

HWC 520. Literature in Translation: ____. 3 Hours. H.
Studies in one or more national literatures. Discussion and frequent critical papers. Prerequisite: Completion of one junior-senior level course in a language and literature department. LEC.

HWC 524. Chinese Thought. 3 Hours. NW / H/W.
A survey of the principal modes of Chinese thought from their origins through the imperial period. Not open to students with credit in EALC 132. (Same as EALC 642 and PHIL 506.) Prerequisite: Eastern civilization course or a course in Asian history or a distribution course in philosophy. LEC.

HWC 530. Study of a Culture: ____. 3 Hours. H/W.
An interdisciplinary study of elements that have contributed to the development of a particular civilization, such as Irish, Scottish, or Scandinavian. LEC.

HWC 538. Pompeii and Herculaneum. 3 Hours. H.
An interdisciplinary treatment of the art and archaeology of the ancient Roman cities of Pompeii and Herculaneum in Italy. Emphasis on the structures and decorations of major public spaces and houses and on aspects of cultural, social, political, commercial and religious life from the period of the second century B.C.E. to 79 C.E., when Pompeii and Herculaneum were buried by the eruption of Mt. Vesuvius. Slide lectures and discussion. (Same as CLSX 538, HA 538) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, History of Art, or permission of the instructor. LEC.

HWC 540. Translation. 3 Hours. H.
Students will undertake substantial work in the translation of non-technical writing, e.g., poems, short stories, novels, essays, from any foreign language to English, and examine the practical and theoretical problems encountered in or raised by translation. Prerequisite: Satisfactory completion of at least third-year foreign language work. LEC.

HWC 551. Foodways: Native North America. 3 Hours. H.
This course surveys the traditional foodways of the indigenous peoples of North America. We survey hunting, gathering and fishing methods, meal preparation, medicinal plants and the cultivation of crops according to tribal seasons. Because modern indigenous peoples are suffering from unprecedented health problems, such as diabetes, obesity, high blood pressure and related maladies, the course traces through history the reasons why tribal peoples have become unhealthy and why some have lost the traditional knowledge necessary to plant, cultivate and save seeds. The course also addresses the destruction of flora and fauna from environmental degradation. (Same as HIST 511 and ISP 551.) Prerequisite: Upper division course on indigenous/ American Indian history, or permission of the instructor. LEC.

HWC 552. Foodways: Latin America. 3 Hours. H.
This course explores the traditional foods, ways of eating, and cultural significance of food among peoples of Latin America. The course surveys the vast array of flora in Central and South America and the Caribbean, and focuses on issues of environmental protection, bioethics, food security, and the growth of farming and ranching. The class studies the impact that foods such as maize, potatoes and cacao have had globally, and includes African, Asian, and European influences on Latin cuisine, as well as health problems associated with dietary changes. (Same as HIST 512, ISP 552, and LAA 552.) Prerequisite: Upper division course on Latin America, or permission of the instructor. LEC.

HWC 556. The Devil in Russian Literature. 3 Hours. H.
This course traces the various manifestations of the Devil through Russian and European folklore, myth, theology, culture, and literature. Although the focus is on Russian literature, classic European works are discussed, as they had a powerful impact on the modern Russian conception of the Evil One. Readings in English. (Same as SLAV 566.) LEC.
HWC 570. Men and Masculinities. 3 Hours. H.
An intensive examination of the history and theory of masculinities in the Western world. Students become acquainted with some of the key theories of men and masculinities, and develop research projects on a topic negotiated with the instructor. (Same as HIST 625, WGSS 575.) Prerequisite: An upper-division course in History, Humanities and Western Civilization, or Women Gender and Sexuality Studies; or permission of instructor. LEC.

HWC 575. The Body, Self and Society. 3 Hours. H.
An intensive examination of the role of the human body in the creation of personal and social identities in the Western world. Students become acquainted with contemporary theories of embodiment and senses as they are applied to a variety of historical themes, and develop research projects on a topic negotiated with the instructor. (Same as HIST 625, WGSS 575.) Prerequisite: An upper-division course in History, Humanities and Western Civilization, or Women Gender and Sexuality Studies; or permission of instructor. LEC.

HWC 600. Biography of a City: _____ . 3 Hours. AE42 / H/W.
Examination in depth of the historical, social, and artistic growth and development of one major urban center. LEC.

HWC 620. Study of a Culture: _____ . 3 Hours. H/W.
An interdisciplinary study of elements that have contributed to the development of a particular civilization, such as Irish, Scottish, or Scandinavian. LEC.

HWC 770. Research in Men and Masculinities. 3 Hours.
An intensive examination of the history and theory of masculinities in the Western World since the sixteenth century. Students will become acquainted with some of the key theories of men and masculinities, examine in depth the interplay between manhood and modernity, and develop research projects on a topic negotiated with the instructor. May be repeated if content varies sufficiently. LEC.

HWC 775. Advanced Study in the Body and Senses. 3 Hours.
An intensive examination of the role of the human body in the creation of personal and social identities in the West since the sixteenth century. Emphasis is on understanding how contemporary theories of embodiment are applied to concrete historical or contemporary problems. May be repeated if course content varies sufficiently. LEC.

PCS 150. Study Abroad in Topics in Peace and Conflict Studies: _____ . 1-5 Hours. H.
This course is designed for the study of special topics in Peace Conflict Studies at the 100-200 level (Freshman/Sophomore level). Coursework must be arranged through the KU Office of Study Abroad and approved by a faculty advisor in Peace Conflict Studies. May be repeated for credit if content varies. LEC.

PCS 220. Introduction to Peace and Conflict Studies. 3 Hours. HT GE11/GE3H / H.
An introduction to the content and methods of peace studies. Peace studies is a multidisciplinary and interdisciplinary approach to the study of war and peace. Building on and integrating the work of various fields of study, the course examines the causes of structural and direct violence within and among societies and the diverse ways in which humans have sought peace, from conquest and balance of power to international organizations and nonviolent strategies. LEC.

PCS 221. Introduction to Peace and Conflict Studies, Honors. 3 Hours. H.
Honors version of PCS 220. An introduction to the content and methods of peace studies. Peace studies is a multidisciplinary and interdisciplinary approach to the study of war and peace. Building on and integrating the work of various fields of study, the course examines the causes of structural and direct violence within and among societies and the diverse ways in which humans have sought peace, from conquest and balance of power to international organizations and nonviolent strategies. LEC.

PCS 329. History of War and Peace. 3 Hours. HL / H.
A study of the changing nature of warfare and the struggle to bring about peace. Topics include pacifism, the "military revolution" that created the first professional armies; the development of diplomatic immunity, truces, and international law; the peace settlements of Westphalia, Utrecht, Vienna, Versailles, San Francisco; the creation of peace movements and peace prizes; the evolution of total war, civil war; and guerrilla warfare involving civilians in the twentieth century; the history of the League of Nations and United Nations; and the rise of intergovernmental and non-governmental organizations. (Same as HIST 329 and EURS 329.) LEC.

PCS 350. Study Abroad in Topics in Peace and Conflict Studies: _____ . 1-5 Hours. H.
This course is designed for the study of special topics in Peace Conflict Studies at the Junior/Senior level. Coursework must be arranged through the KU Office of Study Abroad and approved by a faculty advisor in Peace Conflict Studies. May be repeated for credit if content varies. LEC.

PCS 550. Classics of Peace Literature. 3 Hours. HL AE51/AE61 / H.
A study of influential proposals for world peace from Erasmus' The Complaint of Peace (1515) to the 1995 Hague Appeal for World Peace. Selected writings by such authors as Erasmus, Hugo Grotius, Jean-Jacques Rousseau, Immanuel Kant, Henri Thoreau, Henri Dunant, Berthe von Suttner, Woodrow Wilson, Mahatma Gandhi, and Martin Luther King, Jr., are considered. (Same as EURS 550.) Prerequisite: HWC 204 or HWC 205. LEC.

PCS 555. Topics in Peace and Conflict Studies: _____ . 3 Hours. H.
This course offers specialized or interdisciplinary perspectives on historical, political, social, and religious movements, institutions, societies, agencies, or texts dealing with conflict resolution. May be repeated for credit with different topics. LEC.

PCS 556. Education for Peace and Non-Violence. 3 Hours. H.
This course reviews the history, aims and methodology of peace education. Topics include examination of the roots and causes of social violence; educational initiatives that seek to reduce structural and direct violence; and teaching methodologies in the field of multicultural education and pedagogy. LEC.

PCS 560. Directed Study in Peace and Conflict Studies. 1-3 Hours. AE61 / H.
Practicum or research under the supervision of a faculty member and with the approval of the Peace and Conflict Studies Minor. Individual conferences, reports, and papers, and, in the case of practicum, supervised experience with an approved organization or agency. Prerequisite: Completion of three core courses in the minor. IND.

PCS 565. The Literature of Human Rights. 3 Hours. H.
Examines in literature, art, and film from about 1800 to the present, both sides of the ongoing debate surrounding the idea that all human persons possess inalienable rights because all persons possess intrinsic value as persons, value independent of race, gender, caste or class, wealth, age, sexual preference, etc. Anti- and pro-rights proponents are paired and studied with equal care. (Same as EURS 565.) LEC.

PCS 650. Senior Seminar in Peace and Conflict Studies. 3 Hours. AE61 / H.
This capstone seminar provides a sustained and in-depth study of a particular topic in Peace and Conflict Studies, to be chosen by the instructor. Each student is required to carry out a substantive research
project to produce a term paper or comparable work. Required for completion of minor. Prerequisite: Students must have completed at least nine hours in the minor before enrolling. LEC.

PCS 760. Investigation and Conference in Peace and Conflict Studies. 3 Hours.
Research under the supervision of a faculty member and approved for the Peace and Conflict Studies program. Individual conferences, reports, and papers; may be combined with classwork. Open only to graduate students. LEC.

PCS 801. Peace and Conflict Studies: Texts and Methods. 3 Hours.
An interdisciplinary study of the historic literature on human conflict and peacemaking and the methods used to analyze and interpret the literature. Peace literature encompasses a range of genres that include religious teachings, philosophical essays, political proposals, treaties and conventions, fiction, poetry, and drama. Approaches to solutions to human conflict cover a spectrum including political revolution, diplomacy and treaties, international law and organizations, and world government. Students produce a substantial graduate-level research project. PCS 801 is required for the Graduate Certificate in Peace Conflict Studies, and to be taken as early as possible in the students program of study. Open only to graduate students. LEC.

PCS 850. Peace and Conflict Studies Research Seminar. 3 Hours.
The capstone of the Graduate Certificate program, providing a sustained and in-depth study of a particular topic in Peace Conflict Studies, to be chosen by the instructor. The members of the seminar have the option of doing a research project or supervised practicum resulting in a substantial paper that integrates their work in the program. Required for the Graduate Certificate and open only to graduate students. Prerequisite: At least six hours of course work toward the Graduate Certificate including PCS 801. SEM.

Indigenous Studies Courses

ISP 101. Introduction to Indigenous Nations Studies. 3 Hours. NW / S.
An introduction to the study of Indigenous peoples. It surveys the concepts, methods, and content relevant to Applied Indigenous Studies, using case studies drawn from diverse cultures. The course illustrates that the social, political, religious, and economic aspects of American Indian life are interconnected and that tribal histories cannot be understood without an awareness of these fields. Students are introduced to controversies over how to research, write, and interpret American Indians, and will address the foundations of Indigenous Studies, and that is Indigenous concepts of decolonization, empowerment and Nation-building. The course explores how the lives of Indigenous people have been affected by colonization, while exploring the varying definitions of "colonialism", "colonizer" and the "colonized. LEC.

ISP 305. World Indigenous Literatures. 3 Hours. NW AE42 / H.
A survey of contemporary world indigenous literatures that includes those from North America, Australia, New Zealand, the South Pacific, the Arctic, and Latin America. Texts are in English (original or translation). Genres studied include the novel, poetry, and drama, supplemented by works from the oral tradition, the visual arts, and film. (Same as ENGL 305.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ISP 330. Native American Religions. 3 Hours. NW AE41 / H.
A survey of religious traditions among selected Native American peoples. Topics include religious freedom, ritual activity, cultural narrative ("myth"), kinship, healing practices, ecology, government relations, impact of colonization, impact of missionization, contact between cultures, and secularization. Not open to students who have completed GINS 331. (Same as REL 330.) LEC.

ISP 331. Native American Religions, Honors. 3 Hours. NW AE41 / H.
A survey of religious traditions among selected Native American peoples. Topics include religious freedom, ritual activity, cultural narrative ("myth"), kinship, healing practices, ecology, government relations, impact of colonization, impact of missionization, contact between cultures, and secularization. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have completed ISP 330. (Same as REL 331.) LEC.

ISP 335. Introduction to Indigenous Studies. 3 Hours. NW / H.
This course is an introduction to the study of modern and historic indigenous peoples. It surveys the concepts, methods, and content relevant to Indigenous Studies, using case studies drawn from the diverse indigenous cultures. Special attention is paid to the various ways in which standard academic disciplines--history, anthropology, literature, law, political science, among others--contribute to the study of Indigenous cultures and current issues. The course illustrates that the social, political, religious, and economic aspects of indigenous life are interconnected and tribal histories and cultures cannot be understood without an awareness of these fields. (Same as HWC 335.) LEC.

ISP 345. Indian Territory. 3 Hours. H.
This course examines the cultural, social, economic, environmental, and political background of Indian Territory in what is now the state of Oklahoma. It surveys the diverse geographical regions, tribal cultures, the impact of the Indian Removal Act, assimilation, acculturation, westward expansion, the Civil war, boarding schools, the Dawes Act, the Curtis Act, and land runs on Territory residents. The course also treats post-Civil War violence, outlaws, and the role of tribal courts along with controversies over removals, Land Run celebrations, allotment scandals, and Osage oil murders. (Same as HIST 318 and HWC 345.) LEC.

ISP 348. American Indian and White Relations to 1865. 3 Hours. H.
This course provides an intensive survey of the Indians of North America from Prehistory to 1865, and focuses on ancient indigenous cultures, early European-Indian relations and the impact of European culture upon the indigenous peoples of North America. (Same as HIST 351, HWC 348.) LEC.

ISP 350. American Indians Since 1865. 3 Hours. H.
This course examines American Indian/White relations from reconstruction to the present. It surveys the impact of westward expansion and cultural changes brought about by the Civil War, forced education, intermarriage, the Dawes Act, the New Deal, the World Wars, termination, relocation and stereotypical literature and movies. The class also addresses the Red Power and AIM movements, as well as indigenous efforts to decolonize and to recover and retain indigenous knowledge. After learning about the past from both Native and non-Native source materials, students will multiple perspectives about historical events and gain understandings of diverse world views, values, and responses to adversity. (Same as HIST 352 and HWC 350.) LEC.

ISP 490. Roots of Federal Indian Policy. 3 Hours. H.
This course introduces students to the basic concepts and ideologies surrounding modern United States Federal Indian policy. It will survey the European intellectual trends that were influential in creating policies that were (and still are) applied to the colonized Native peoples. The course will explore the roots of US Indian policy, including removals, "civilization programs," the reservation period, the Dawes (Allotment) Act, the New Deal, termination, relocation, NAGPRA and tribal rights, in addition to the issues surrounding American Indian identity, tribal membership and demographics. This course serves as the foundation for more in-depth study into the complicated and ever-changing field of Federal Indian Law.
as it pertains to the Indigenous peoples of the United States. (Same as HWC 490.) LEC.

ISP 504. Topics in Indigenous Nations Studies: ______. 3 Hours. NW / S.
This course concentrates on selected problems in the interdisciplinary field of Indigenous Nations Studies. Courses in this field utilize methods developed in various disciplines in order to examine issues related to the survival, self-sufficiency, mutual support, empowerment, and decolonization of Indigenous Peoples throughout the world. May be repeated for credit when the topic differs. Recommended for juniors or seniors, or for students who have completed ISP 101/GINS 101/INS 101. LEC.

ISP 510. Indigenous Women and Activism. 3 Hours. NW / S.
Examines the roles of activist Indigenous women in politics, social work, academia, business, environmental and health issues. Compares and contrasts the ideology of the predominantly white feminist movement with the goals and concerns of the “Red Power” movement and emphasizes Indigenous socio-cultural values and concerns. Profiles prominent Indigenous female activists, tribal leaders and writers, in addition to topics of serious concern to Indigenous women: violence, racism, loss of culture and language, education, health care and other manifestations of continued colonization. LEC.

ISP 530. Indigenous Food and Health. 3 Hours. NW / U.
This course investigates the historic diets of Indigenous peoples, including cultivation of crops, hunting and fishing methods, food preparation and seed preservation. The class traces through history the colonial policies and ideologies that caused the cultures to alter their ways of eating, resulting in unprecedented modern health problems and offers traditional cultural strategies for health recovery. LEC.

ISP 551. Foodways: Native North America. 3 Hours. H.
This course surveys the traditional foodways of the indigenous peoples of North America. We survey hunting, gathering and fishing methods, meal preparation, medicinal plants and the cultivation of crops according to tribal seasons. Because modern indigenous peoples are suffering from unprecedented health problems, such as diabetes, obesity, high blood pressure and related maladies, the course traces through history the reasons why tribal peoples have become unhealthy and why some have lost the traditional knowledge necessary to plant, cultivate, and save seeds. The course also addresses the destruction of flora and fauna from environmental degradation. (Same as HIST 511 and HWC 551.) Prerequisite: Upper division course on indigenous / American Indian history, or permission of the instructor. LEC.

ISP 552. Foodways: Latin America. 3 Hours. H.
This course explores the traditional foods, ways of eating, and cultural significance of food among peoples of Latin America. The course surveys the vast array of flora in Central and South America and the Caribbean, and focuses on issues of environmental protection, bioethics, food security, and the growth of farming and ranching. The class studies the impact that foods such as maize, potatoes and cacao have had globally, and includes African, Asian, and European influences on Latin cuisine, as well as health problems associated with dietary changes. (Same as HIST 512, HWC 552 and LAAS 552.) Prerequisite: Upper division course on Latin America, or permission of the instructor. LEC.

ISP 600. Research Methods and Indigenous Peoples. 1-3 Hours. NW / U.
An introduction to the social science methods of investigation and analysis that are used in Indigenous Nations Studies as a discipline. The nature of Indigenous Nations Studies data sources and methods of data collection, the logic of social scientific inquiry, and key methods of data analysis are emphasized. In addition, the social and educational implications of the results are examined. Prerequisite: Permission of instructor. LEC.

ISP 601. Indigenous Peoples of the World. 3 Hours. NW / U.
A survey of the varied responses of global Indigenous peoples as a result of the imposition of external economic and political systems. An overview of diverse, thematic issues such as land rights, economic development, resources and cultural patrimony, languages, knowledge systems, and women’s rights from the perspectives of Indigenous societies around the world. Detailed studies of Indigenous peoples seeking recognition and protection under international law are used. (Same as GEOG 601.) Prerequisite: Permission of instructor. LEC.

ISP 602. Indigenous Decolonization and Empowerment. 3 Hours. NW / U.
An Indigenous focus of the foundation and impact of colonization, decolonization, empowerment and nation-building. Prerequisite: Permission of instructor. LEC.

ISP 603. Introduction to Indigenous Nations Graduate Studies. 3 Hours. NW / U.
The goal of this course is two-fold: to introduce students to the academic discipline of Indigenous Nations Studies, its debates and contours, history, methods, and resources; and to develop the skills necessary to proceed successfully through the program. Key words and terms, critical thinking/reading/writing skills, and research skills are emphasized. Guest lectures from ISP faculty members, librarian, and members of the Writing Center serve to complement and broaden assignments and discussions. Prerequisite: Permission of instructor. LEC.

ISP 611. Applied Indigenous Leadership. 3 Hours. NW / U.
Trains students in the skills of grant writing, leadership, conflict resolution, public presentation, organization and program development as applicable to Indigenous peoples. Prerequisite: Permission of Instructor. LEC.

ISP 612. Native American Oppression, Resistance, and Liberation. 3 Hours. NW / U.
An interdisciplinary examination of the effects of historical and contemporary forms of colonialism and postcolonial strategies of resistance practiced by Indigenous peoples within and beyond the borders of the United States. Prerequisite: Permission of instructor. LEC.

ISP 613. Issues Facing Indigenous Peoples. 3 Hours. NW / U.
Explores the theories and methods of selected cultural, environmental, legal, political, and socio-economical issues confronting Indigenous societies throughout the world. Prerequisite: Permission of instructor. LEC.

ISP 614. Decolonizing Narratives. 3 Hours. NW / U.
With the decolonizing potential of Indigenous literary and cultural productions, this course seeks to both answer and explore such questions as: How can literary and cultural texts such as novels, poetry, music, and film from world Indigenous communities function as decolonizing tools? Can decolonizing methodologies be applied to such texts? How do such texts contribute to and strengthen Indigenous political, intellectual, cultural, visual and rhetorical sovereignty? Includes an overview of Indigenous literature, films and documentaries from North America, the Pacific, Australia, and New Zealand. Prerequisite: Permission of instructor. LEC.

ISP 670. Indigenous Peoples' Health Status, Beliefs, and Behaviors. 3 Hours. NW / U.
Explores the health status, beliefs, and behaviors of particular Indigenous cultures. Examines the role of internal and external influences on health, various mainstream and Indigenous models of health behavior, perceptions of illness and curing, health status, and healing practices. Focuses on the groups of the Maori of New Zealand, First Nations in
ISP 673. Environmental Justice. 3 Hours. NW / U.
An examination of the impact of environmental justice and security in Indigenous communities throughout the world with a focus on tactics and strategies that incorporate Indigenous perspectives in responses and mitigation schemes. A survey of mining, dumping, and storage of toxic and radioactive waste activities as related to Indigenous peoples. Case study analyses of economic, military and mining interests contrasted with perspectives emerging from cultural traditions and beliefs of Indigenous peoples and communities. Prerequisite: Permission of instructor. LEC.

ISP 800. Indigenous Issues in the United States. 3 Hours.
This course will focus on contemporary issues relating to Indigenous peoples and nations within the United States, with particular emphasis on such issues as sovereignty, indigeneity, colonialism and decolonization. The course will address varied disciplinary approaches to this range of issues and will consider how this discourse bears upon scholarly conversations regarding broader themes in other selected fields of study. LEC.

ISP 801. Indigenous Peoples of the World. 3 Hours.
A survey of the varied responses of global Indigenous peoples as a result of the imposition of externally-dominated economic and political systems. An overview of diverse, thematic issues such as land rights, economic development, resources and cultural patrimony, languages, knowledge systems, and women’s rights from the perspectives of Indigenous societies around the world. Detailed studies of Indigenous peoples seeking recognition and protection under international law will be used. The course is offered at the 600 and 800 levels, with additional assignments at the 800 level. (Same as GEOG 801.) LEC.

ISP 802. Indigenous Decolonization and Empowerment. 3 Hours.
An Indigenous focus of the foundation and impact of colonization, decolonization, empowerment and nation-building. LEC.

ISP 803. Introduction to Indigenous Nations Graduate Studies. 3 Hours.
The goal of this course is two-fold: to introduce students to the academic discipline of Indigenous Nations Studies, its debates and contours, history, methods, and resources; and to develop the skills necessary to proceed successfully through the program. Unpacking key words and terms, critical thinking/reading/and writing skills, and research skills will be emphasized. Guest lectures will serve to complement and broaden assignments and discussions LEC.

ISP 804. Special Topics: _____, 1-3 Hours.
Designed to fulfill program needs of the Indigenous Nations Studies master’s program, this course may meet with appropriate professional or graduate courses. Can be repeated for credit when topic differs. LEC.

ISP 805. American Indian Leadership. 3 Hours.
Students will analyze the qualities of American Indian leadership and will examine circumstances and backgrounds of Indian leaders as heroes and role models paying particular attention to how they responded as individuals, leaders, and as community members of their tribes. Besides surveying noted Indian leaders in treaty negotiations, allotment, removal, war, etc., the course will examine leaders in medicine, education, and recent American Indian history including attention to women leaders. Students will learn about the leaders’ tribes and cultures in addition to understanding the ethnohistory of Indian-white relations. LEC.

ISP 806. Directed Readings. 1-3 Hours.
An individual readings course with a qualified instructor on a topic in Indigenous Nations Studies. LEC.

ISP 807. Internship in Indigenous Nations Studies. 1-6 Hours.
Internships provide students the opportunity to obtain training and perform professional duties for academic credit at pre-approved Indigenous-related agencies, organizations, and communities. Students are required to demonstrate a minimum of 60 contact hours for each one credit hour. To enroll, students must obtain the consent of an ISP faculty member and the Program’s Curriculum Committee. May be repeated for credit. Prerequisite: permission from instructor. FLD.

ISP 809. Indigenous Women: Gender and Sexuality. 3 Hours.
This course examines gender and sexuality among Indigenous communities in the world. Ethnographies about indigenous women are used to explore a variety of gender and sexual identities. Gendered and sexualized identities are analyzed within broader societal contexts such as the division of labor, kinship, marriage household, and the control of resources. Power relationships are examined between sub-altern women and the larger society, nation and globalizing world in which they play a part. LEC.

ISP 810. Indigenous Women and Activism. 3 Hours.
An examination of the roles and ideologies of prominent Indigenous female activists, tribal leaders and writers. LEC.

ISP 811. Applied Indigenous Leadership. 3 Hours.
A preparation to train students in the skills of grant writing, leadership, conflict resolution, public presentation, organization and program development as applicable to Indigenous peoples. LEC.

ISP 812. Native American Oppression, Resistance, and Liberation. 3 Hours.
An interdisciplinary examination of the effects of historical and contemporary forms of colonialism and post-colonial strategies of resistance practiced by Indigenous peoples within and beyond the borders of the United States. LEC.

ISP 813. Issues Facing Indigenous Peoples. 3 Hours.
This course explores the theories and methods of selected cultural, environmental, legal, political, and socio-economical issues confronting Indigenous societies throughout the world. LEC.

ISP 814. Decolonizing Narratives. 3 Hours.
With the decolonizing potential of Indigenous literary and cultural productions, this course seeks to both answer and explore such questions as: How can literary and cultural texts such as novels, poetry, music, and film from world Indigenous communities function as decolonizing tools? Can decolonizing methodologies be applied to such texts? How do such texts contribute to and strengthen Indigenous political, intellectual, cultural, visual and rhetorical sovereignty? An overview will be presented from Indigenous literature, films and documentaries from North America, the Pacific, Australia, and New Zealand. LEC.

ISP 824. Federal Indian Law. 2.5-3 Hours.
Addresses the law and policy of the United States regarding Indian nations and their members. Issues include the origins and contours of federal plenary power over Indian affairs, the scope of inherent tribal sovereignty, the limits of state power in Indian country, civil and criminal jurisdiction, and gaming. (Same as LAW 914) Prerequisite: Permission from instructor. LEC.

ISP 830. Indigenous Food and Health. 3 Hours.
Investigates the historic diets of Indigenous peoples, including cultivation of crops, hunting and fishing methods, food preparation and seed preservation. Traces through history the colonial policies and ideologies that caused the cultures to alter their ways of eating, resulting in unprecedented modern health problems. Will offer traditional cultural strategies for health recovery. LEC.
ISP 862. Indigenous Archives. 3 Hours.
A discussion of what constitutes an archive, including the theory and methodology of archival collections, and an introduction to archiving as a profession. Includes a discussion of records management, with an emphasis on tribal archives collections and tribal records. Includes instruction on arrangement and description of tribal archival collections, funding, environmentally controlled storage, and disaster recovery planning. The class will specifically address the needs of tribal archives: tribal records, oral history interviews, photographs, litigation records, grant writing, and culturally sensitive materials. Students will learn about primary and secondary sources, different formats of writing professional research papers, and will produce a research paper at the end of the semester. LEC.

ISP 863. Oral History. 3 Hours.
A discussion of the importance of the oral tradition in Indigenous nations and the difference between oral tradition and oral histories and myth. The class will concentrate on the methodologies of tribal oral history projects, from organizational aspects to personnel issues, equipment needed, sources of grant funding, interview methodology, as well as documentation and preservation of the interviews. The course will discuss how to share and make available these interviews and when access to them needs to be restricted. The students will conduct videotaped oral histories as part of the class exercises and get hands-on experience with the preservation, organization, and transcription of oral history projects. LEC.

ISP 864. Exhibiting Culture. 3 Hours.
A discussion of how museums and exhibits can be a vehicle for Indigenous community empowerment and the importance of Indigenous cultures to interpret their stories themselves. The class will also look at how different nations view the display and handling of their belongings and what kinds of belongings can or should be handled and displayed. LEC.

ISP 865. Grant Writing and Fundraising. 3 Hours.
A discussion of how to develop a grant writing and fundraising plan for a tribal project. Includes how to develop an idea or project and how to prepare a funding campaign. The students will produce a fundraising event and work on the various parts of an actual grant as the final class activity that will be designed to bring in funding to support KU Global Indigenous Nations Studies Program. LEC.

ISP 866. Indigenous Museum Management. 3 Hours.
A discussion of the community models of museum management, including museum administration, professional positions within a museum, museum exhibits, public education programs, security, and disaster planning. The course will compare and contrast museum management in European/ American museums and tribal museums and how these management styles affect collection policies, exhibit policies, traditional care of collections, sacred and ceremonial item handling and display, NAGPRA and repatriation, and oral histories. LEC.

ISP 867. Indigenous Records Management. 3 Hours.
A discussion of what constitutes a record and how to manage records at the business or government level. Train students in hands-on records management techniques, policies, developing a records retention schedule, and how to plan and design a records management program for records pertaining to Indigenous nations. LEC.

ISP 868. Indigenous Records Management II. 3 Hours.
A discussion of what constitutes a record and how to manage records at the business or government level. This is a second level of records management leading to preparation for taking the certification examination. LEC.

ISP 869. Traditional Care of Collections. 3 Hours.
A discussion of on traditional care issues of handling and preserving of Indigenous belongings. The class will compare the methods of traditional care at tribal museums vs. conservation of Native items in mainstream museums. LEC.

ISP 870. Indigenous Peoples’ Health Status, Beliefs, and Behaviors. 3 Hours.
This course is designed to explore the health status, beliefs, and behaviors of particular Indigenous cultures. The course examines the role of internal and external influences on health, various mainstream and Indigenous models of health behavior, perceptions of illness and curing, health status, and healing practices. The course will focus on the groups of the Maori of New Zealand, First Nations in Canada, Palestinian peoples in the Middle East, American Indians, and Indigenous Australians. LEC.

ISP 871. Community Health and Development. 3 Hours.
This course extends knowledge and skills for addressing issues in community health and development (e.g., substance abuse, adolescent pregnancy, child and youth development, prevention of violence). Students learn core competencies such as analyzing community problems and goals, strategic planning, intervention, and evaluation, and then apply these skills to issues that matter to them and to the communities they serve. (Same as ABSC 710.) LEC.

ISP 873. Environmental Justice. 3 Hours.
An examination of the impact of environmental justice and security in Indigenous communities throughout the world with a focus on tactics and strategies that incorporate Indigenous perspectives in responses and mitigation schemes. A survey of mining, dumping and storage of toxic and radioactive waste activities as related to Indigenous peoples. Case study analyses of economic, military and mining interests contrasted with perspectives emerging from cultural traditions and beliefs of Indigenous peoples and communities. LEC.

ISP 874. Natural Resource Management: Indigenous Perspectives. 3 Hours.
An examination of resource management issues in Indigenous communities throughout the world with a focus on tactics and strategies that incorporate Indigenous perspectives in the management schemes. Case study analyses of management techniques derived from European-based science with Indigenous traditions and beliefs. LEC.

ISP 875. Native and Western Views of Nature. 3 Hours.
A comparison of the attitudes and perspectives towards the natural world developed by different cultural traditions. A review of western attitudes and also the traditional ecological knowledge of Indigenous peoples toward management of natural resources, non-human animals, and the natural world. LEC.

ISP 876. Comparative Law. 2.5-3 Hours.
A general introduction to and comparison of major legal systems of the world, with special emphasis given to how those systems reflect differing cultural values in addressing common legal questions. A major goal of the course is to deepen the students' understanding of law and practice in the United States and to broaden their perspective of law beyond the boundaries of the common law systems. (Same as LAW 879.) Prerequisite: Permission from instructor. LEC.

ISP 877. Public Lands and Natural Resources. 2.5-3 Hours.
Devoted to the law and legal systems that govern the classification and use of one-third of America's land mass. Includes a survey of the acquisition and disposition of the public domain; general federal statutes and doctrines that affect public land law; and different forms of federal lands classifications, including national parks, scenic rivers, and grazing lands. (Same as LAW 975.) Prerequisite: Permission from instructor. LEC.
Latin American Caribbean Std Courses

KICH 110. Elementary Quichua I. 3 Hours. U.
An orientation to Ecuadorian Quichua language and culture for beginning students. Includes elements of grammar, conversation, and composition. Quichua (a.k.a. Quechua, Kechua, Kichwa, Khetchua, or Runa Ximi) in its various forms is an indigenous language spoken by over six million people in Ecuador, Peru and Bolivia combined. LEC.

KICH 114. Elementary Quichua II. 3 Hours. U.
Continuation of KICH 110. Prerequisite: KICH 110 or equivalent LEC.

KICH 230. Intermediate Quichua I. 3 Hours. U.
Continuation of KICH 114. Prerequisite: KICH 114 or equivalent. LEC.

KICH 234. Intermediate Quichua II. 3 Hours. U.
Continuation of KICH 230. Prerequisite: KICH 230 or equivalent. LEC.

KQKL 110. Elementary Kaqchikel Maya I. 3 Hours. U.
An orientation to Kaqchikel Maya language and culture for beginning students. Includes elements of grammar, conversation, and composition. Kaqchikel is the first language of approximately 500,000 people of highland Guatemala and one of roughly 30 Mayan languages. LEC.

KQKL 114. Elementary Kaqchikel Maya II. 3 Hours. U.
Continuation of KQKL 110. Prerequisite: Completion of KQKL 110 or equivalent. LEC.

KQKL 230. Intermediate Kaqchikel Maya I. 3 Hours. U.
Continuation of KQKL 114. Prerequisite: Completion of KQKL 114 or equivalent. LEC.

KQKL 234. Intermediate Kaqchikel Maya II. 3 Hours. U.
Continuation of KQKL 230. Prerequisite: Completion of KQKL 230 or equivalent LEC.

LAA 100. Latin American Culture and Society. 3 Hours. SC AE42 / S.
An introduction to the interdisciplinary study of Latin America, as manifest in the arts and literature, history, and in environmental, political, economic, and social realities. Explores and critiques the principal themes and methodologies of Latin American Studies, with an aim towards synthesizing contributions from several different disciplines. Emphasizes the unique insights and perspectives made possible by interdisciplinary collaboration and provides students with a basic knowledge base for understanding Latin America today. (Same as HIST 124.) LEC.

LAA 102. Orientation Seminar in Latin American and Caribbean Studies. 1 Hour. U.
LAA 102 is an online orientation seminar designed to introduce students to the Latin American and Caribbean Studies major at KU and help students place the major in the context of their overall undergraduate experience and career plans. The course provides students with introductory information about Latin America and the Caribbean and the nature of interdisciplinary inquiry, and an interdisciplinary major, and about resources available at KU and beyond for research and study related to the region. During the course, students also learn about typical careers pursued by Latin American and Caribbean Studies majors, reflect on their own educational and career goals, and determine whether the major matches those goals. Finally, the course provides students with information about requirements for the major, along with information about when required courses are offered and when they should be taken. LEC.

LAA 177. First Year Seminar: _______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Latin Area and Caribbean Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.
LAA 300. Interdisciplinary Themes in Latin American Studies. 3 Hours. AE51 / U.
This course offers an in-depth examination of several key themes in Latin American Studies. Emphasis is placed on exploring the utility of interdisciplinary methods and on becoming familiar with the theoretical framework that underpins the field. Prior completion of LAA 100 recommended. LEC.

LAA 302. Topics in Latin American Area Studies: _______. 3 Hours. U.
Investigation of special topics on Latin America at the undergraduate level. LEC.

LAA 322. Language and Society in Latin America. 3 Hours. NW AE42 / S.
This course will examine the cultural and social significance of Amerindian languages in Latin America. Spanish and Portuguese will be related in language situations to Amerindian languages, such as Quechua, Aymara, the Mayan languages, Nahua, and Guarani. Some African-substratum Creole languages will be used to illustrate the multifaceted relations between language and ethnic group, sex, nation, geography, social class, context, and social interaction. LEC.

LAA 332. Language and Society in Latin America, Honors. 3 Hours. NW AE42 / S.
This course will examine the cultural and social significance of Amerindian languages in Latin America. Spanish and Portuguese will be related in language situations to Amerindian languages, such as Quechua, Aymara, the Mayan languages, Nahua, and Guarani. Some African-substratum Creole languages will be used to illustrate the multifaceted relations between language and ethnic group, sex, nation, geography, social class, context, and social interaction. Prerequisite: Membership in the University Honors Program. LEC.

LAA 333. Language and Society in Latin America, Honors. 3 Hours. NW AE42 / S/W.
A survey of the major indigenous traditions of Mesoamerica, the Andes, and lowland tropical Latin America. Coverage emphasizes how indigenous cultural traditions and societies have both continued and changed since the European Invasion and addresses such current issues as language rights, territorial rights, sovereignty, and state violence. Students enrolled in the 600-level section will be required to complete additional research and class leadership tasks. Not open to students who have taken LAA 634. (Same as ANTH 379.) LEC.

LAA 335. The Politics of Language in Latin America. 3 Hours. NW / S.
Although approximately 600 indigenous languages are spoken by 30 million people in Latin America, public life is conducted in Spanish. The class provides a comprehensive survey of language issues in Latin America by analyzing the situation of minority language groups, language rights, language policies, and language planning, as well as by considering the questions that arise regarding bilingual education, literacy, and the role of minority languages in educational systems. LEC.

LAA 402. Topics in Latin American Area Studies. 3 Hours. U.
Investigation of special topics on Latin America at the undergraduate level. LEC.

LAA 450. Capstone Course in Latin American Studies. 3 Hours. AE61 / U.
The interdisciplinary focus of this class allows students to connect what they have learned about major issues in the field of Latin American Studies with a thematic focus of the professor's choosing. By the end of the class and culminating their study of the field at KU, they will be able to discuss these issues from a variety of theoretical, methodological, and disciplinary perspectives as demonstrated in the portfolio of written work maintained throughout the semester. Prerequisite: Completion of 3 courses at the 300 level and above with Latin American content in the Humanities and 3 at the 300 level and above in the Social Sciences (that is, at least 18 credits toward the major); or permission of instructor. LEC.

LAA 499. Honors Course in Latin American Studies. 3 Hours. AE61 / H.
Intensive study and research under faculty direction. Open to students wishing to graduate with honors in Latin American Studies and having a grade point average of at least 3.5 in Latin American Studies and at least 3.25 overall. Requires an interdisciplinary project concerning a specific topic involving at least two disciplines. Must be directed by a faculty member in Latin American Studies, approved by the Center Associate Director, and defended before a committee of at least three faculty members. To earn departmental honors, a student must take the course for two semesters (with a minimum grade of B the first semester, and an A the second). LEC.

LAA 500. Directed Study in Latin American Area Studies. 1-3 Hours. AE61 / U.
Independent study and directed reading on special topics. IND.

LAA 501. Multilingualism and Multiculturalism in Latin America. 3 Hours. H.
Examines the sociolinguistic issues of multilingual countries in Latin America from an interdisciplinary perspective. Topics include but are not limited to linguistic inequality, the language of politics, language and education, urban and rural linguistic interaction, and indigenous and creole languages. Prerequisite: A liberal arts course with Latin American content. LEC.

LAA 503. Race, Gender, Ethnicity, and Nationalism in Latin America. 3 Hours. NW AE42 / H.
The development of cultural identity in Latin America is traced through the study of major narrative trends including Amerindian languages and the analysis of "indigenista" literature. The African substratum of Latin American culture and its relation to concepts such as "marvelous realism" is explored. The importance of "race," "gender," and "ethnicity" are investigated as tools to define national identity in Latin America. The influence of modernization, industrialization, and nationalist and populist thought on their emergence of distinctive writing and themes is also assessed. LEC.

LAA 504. Politics of Culture in Modern Latin America. 3 Hours. H.
This course explores the relationship between political development and cultural phenomena of Latin America from 1800 to the present, with special emphasis on gender, popular culture, and ideology. The influences of 20th-century ideologies and technology on cultural development in Latin America will also be examined. LEC.

LAA 505. U.S. Latino and Latin American Film and Literature. 3 Hours. H.
This course follows the development of U.S. Latino and Latin American cinema from its origins to the present and its relationship with literary discourse. U.S. Latino/Latin American cinema can be seen as a specific practice that cannot be reduced in all its manifestations to the institutional mode of production of the dominant Hollywood model. The course examines the creation of a national cinema that seems to be more dependent on a literary canon. Knowledge of Spanish is not required. LEC.

LAA 506. Race, Gender, Ethnicity, and Nationalism in Latin America, Honors. 3 Hours. NW AE42 / H.
The development of cultural identity in Latin America is traced through the study of major literary works of the nineteenth and twentieth centuries. The importance of "race," "gender," and "ethnicity" are explored as tools to define national identity in Latin America. The impact of modernization,
LEC. Anthropology and/or Women's Studies and/or Latin American Studies. as ANTH 665 and WGSS 665.) Prerequisite: 6 hours coursework in being, access to health care, and changing roles for women as healers. This seminar uses a life-cycle approach to examine women's health and focuses on issues of environmental protection, bioethics, food security, and the growth of farming and ranching. The class studies the impact that foods such as maize, potatoes and cacao have had globally, and includes African, Asian, and European influences on Latin cuisine, as well as health problems associated with dietary changes. (Same as HIST 512, HWC 552, and ISP 552.) Prerequisite: Upper division course on Latin America or permission of the instructor. LEC.

LAA 561. Indigenous Development in Latin America. 3 Hours. AE42 / S.
Surveys the history of the development enterprise since WWII, examines the marginalization and impoverishment of Latin America's indigenous peoples, and provides training to carry out projects for and with them to enhance their quality of life. Development is understood as not merely technological or economic, but also social, emotional, and educational. Students work in teams to design their own mock development project. A 3-credit non-obligatory companion course, Applied Anthropological Field School among the Ch'orti' Maya, will follow in the intersession after each version of this course. (Same as ANTH 561.) Prerequisite: ANTH 100, ANTH 108, ANTH 160 or LAA 100; or consent of instructor. LEC.

LAA 587. Multidisciplinary Field School in Partnership with the Chorti Maya. 3 Hours. S.
Teams of interdisciplinary students partner with the Chorti Maya of Guatemala and Honduras to share information and experiences. One third of the course consists of readings and 4-5 orientation sessions on campus, and two thirds entails two weeks in Central America. Examples of activities might include historical research, water testing and improvement, photography, art, music, tourism consultation, marketing of crafts, human rights advocacy, web design, computer training, and museum work, among others. There are no prerequisites, but students with a working knowledge of Spanish will receive preference for admission. (Same as ANTH 587.) LEC.

LAA 602. Topics in Latin American Studies: ____. 3 Hours. U.
Investigation of special topics on Latin America. LEC.

LAA 634. Indigenous Traditions of Latin America. 3 Hours. NW AE42 / S/W.
A survey of the major indigenous traditions of Mesoamerica, the Andes, and lowland tropical Latin America. Coverage emphasizes how indigenous cultural traditions and societies have both continued and changed since the European Invasion and addresses such current issues as language rights, territorial rights, sovereignty, and state violence. Students enrolled in the 600-level section will be required to complete additional research and class leadership tasks. Not open to students who have taken ANTH 379 or LAA 334. LEC.

LAA 665. Women, Health, and Healing in Latin America. 3 Hours. S.
This seminar uses a life-cycle approach to examine women's health (physical, mental, and spiritual) and their roles as healers. Special consideration is given to the effects of development programs on well-being, access to health care, and changing roles for women as healers. Cases will be drawn from a variety of Latin American contexts. (Same as ANTH 665 and WGSS 665.) Prerequisite: 6 hours coursework in Anthropology and/or Women's Studies and/or Latin American Studies. LEC.

LAA 700. Introduction to Latin American Library Resources. 3 Hours.
A survey of bibliographic and reference sources for research on Latin America in the humanities and social sciences. Designed to prepare students for library research at the seminar, thesis, or dissertation level. Prerequisite: Junior standing, reading knowledge of Spanish or Portuguese. LEC.

LAA 701. Interdisciplinary Seminar in Latin American Culture and Problems. 3 Hours.
An interdisciplinary seminar incorporating significant and pertinent materials from the fields of anthropology, economics, geography, history, political science, sociology, and Spanish and Portuguese literature. Required of all graduate students enrolled in the Master of Arts program in Latin American Area Studies. Prerequisite: LAA 700 (may be taken simultaneously with LAA 701 if both courses offered during same semester). LEC.

LAA 703. Research Colloquium on Brazil. 3 Hours.
An interdisciplinary research seminar on historical and contemporary issues in Brazil, incorporating information and analysis from such fields as anthropology, economics, geography, history, political science, sociology, and Spanish and Portuguese literature and culture. Required for the Brazilian Graduate Certificate. Prerequisite: Recommended reading proficiency in Portuguese. LEC.

LAA 704. Research Colloquium on Central America and Mexico. 3 Hours.
An interdisciplinary research seminar on historical and contemporary issues in Central America and Mexico, incorporating information and analysis from such fields as anthropology, economics, geography, history, political science, sociology, and Spanish and Portuguese literature and culture. Required for the Central America Mexico Graduate Certificate. Prerequisite: Recommended reading proficiency in Spanish. LEC.

LAA 800. Investigation and Conference. 1-2 Hours.
Investigation and research of interdisciplinary topics in Latin American Studies. RSH.

LAA 899. Thesis/Non-Thesis. 1-6 Hours.
Prerequisite: Consent of instructor. THE.

Liberal Arts Sciences Courses

L&S 101. Learning Communities Seminar in: ____. 1-2 Hours. U.
This course is designed to expand student's knowledge of the University community by exploring an academic theme and the connections between courses. Through the study of different topics students explore the inherent relationships among fields of study. Designed especially for freshmen and sophomores. Enrollment is limited to students participating in designated learning community. Concurrent enrollment in specified learning community courses is required. May be repeated for credit up to 4 hours if topic varies. SEM.

L&S 110. Cherokee Language I. 5 Hours. U.
Emphasizes the vocabulary of and fundamentals of reading and writing the Cherokee language. Students will have an opportunity to learn the language, beliefs, and religious practices of the Cherokee. Taught at Haskell Indian Nations University. LEC.

L&S 120. Cherokee Language II. 5 Hours. U.
Continuation of Cherokee Language I. Includes an intermediate level of vocabulary skill with increased emphasis on reading and writing. Taught at Haskell Indian Nations University. Prerequisite: L&S 110. LEC.

L&S 150. Academic Success Seminar. 1 Hour. U.
This course provides students with the skills and resources necessary to improve their approach to their academic career. It is designed to
help enhance students' time management and study skills as well as facilitate a connection with student success resources. Students and instructors work together in an interactive learning environment to create an academic foundation for success. Additional topics covered include: test preparation and anxiety; reading comprehension; procrastination; and memory and concentration. Recommended for students with less than a 2.5 GPA. LEC.

LA&S 160. Dean's Scholars Program Seminar. 0.5-3 Hours. U.
An enhancement of communication, time management, and leadership skills. The students will explore resources and determine goals pertinent to their objectives regarding graduate school. Restricted to students in the Dean's Scholars Program. LEC.

LA&S 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in liberal arts and sciences. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

LA&S 200. Topics at HINU: ______. 1-6 Hours. U.
Special topics at the undergraduate level. Taught at Haskell Indian Nations University. Special permission from the Provost's Office required. LEC.

LA&S 202. History of North American Indian Tribes. 3 Hours. NW / H.
Introductory survey of the origin, evolution, and distribution of Indians throughout North America, location of tribes in historic times, their relationships to one another, and their responses to white penetration of the continent. Emphasis on American Indian leadership and major contributions of American Indian people to American society. Taught at Haskell Indian Nations University. LEC.

LA&S 204. Contemporary Issues of the American Indian. 3 Hours. H.
An overview of current and historical issues which have resulted in policies and regulations affecting American Indians and Alaska Natives. The issues include: education, treaties, sovereignty and self-determination, religions, natural resources, legislation, jurisdiction, reservation and/or urban status, federal trust relationship, tribal economics and enterprises, American Indian policy, federal recognition, and current issues both regional and local. Taught at Haskell Indian Nations University. LEC.

LA&S 206. Indian Law and Legislation. 3 Hours. S.
An introduction and general overview of federal Indian law and processes and its relationship to tribal governments. Focus will be on sovereignty and its relationship to the internal and domestic laws of the United States government, tribal governments, and the international community. Taught at Haskell Indian Nations University. LEC.

LA&S 208. Tribal/Federal Government Relations. 3 Hours. S.
An introductory study of the special relationship that exists between the federal government and tribal governments. Included will be a general overview of specific programs, laws, and court decisions that address the unique relationship that exists between two sovereign nations; the United States Government and tribal governments. Taught at Haskell Indian Nations University. LEC.

LA&S 210. Tribal Resources and Economic Development. 3 Hours. S.
Inventory and identify the resources currently available to tribal governments to include natural and human resources and those financial resources available to tribal governments from federal, state, and private resources. Included will be an economic analysis on how to best optimize available resources while recognizing the economic concept of constrained maximization. Taught at Haskell Indian Nations University. LEC.

LA&S 212. Chemical Dependency and the Native American. 3 Hours. S.
Examines the continuum of chemical abuse and dependency and the emotional, physical, intellectual, and spiritual effects of addictions on individuals, families, and communities. In addition, treatment approaches and relapse prevention efforts are discussed. Special emphasis is placed on integrating Native American understandings and responses to chemical addictions. Taught at Haskell Indian Nations University. LEC.

LA&S 230. Cherokee Language III. 5 Hours. U.
Continuation of Cherokee language II. Taught at Haskell Indian Nations University. Prerequisite: LAS 120. LEC.

LA&S 240. Cherokee Language IV. 5 Hours. U.
This course is a continuation of LAS 230, Cherokee Language III, and includes the study of grammar, with particular attention to speaking fluency and continued practice in reading and writing. Taught at Haskell Indian Nations University. Prerequisite: LAS 230. LEC.

LA&S 250. Western Civilization I. 3 Hours. H.
The beliefs and values of Western civilization from the eighth century BC to the close of the eighteenth century are compared with the ideas central to American Indian cultural traditions. Fulfills the Western Civilization I requirement for CLAS. Taught at Haskell Indian Nations University. LEC.

LA&S 252. Western Civilization II. 3 Hours. H.
The beliefs and values of Western Civilization since the close of the eighteenth century are compared with the ideas central to American Indian cultural traditions. Fulfills the Western Civilization II requirement for CLAS. Taught at Haskell Indian Nations University. LEC.

LA&S 290. Approaches to Teaching Science and Mathematics I. 1 Hour. U.
Science and Mathematics students explore teaching as a career by teaching lessons in elementary classrooms in order to obtain first hand experience planning and implementing inquiry-based curriculum. This course is open to any student who has completed or is concurrently enrolled in a science or mathematics course at KU. LEC.

LA&S 291. Approaches to Teaching Science and Mathematics II. 1 Hour. U.
Science and Mathematics students continue to explore secondary teaching as a possible career choice by teaching several lessons in a middle school classroom. The students build upon and practice lesson design skills that were developed in LAS 290, in which they taught in elementary classrooms. Prerequisite: LAS 290. LEC.

LA&S 292. Topics and Problems on: ______. 1-6 Hours. U.
An interdisciplinary study of different topics. Designed especially for freshmen and sophomores. LEC.

LA&S 301. Learning Communities Seminar in: ______. 1-2 Hours. U.
This course is designed to expand student's knowledge of the University community by exploring an academic theme and the connections between courses. Through the study of different topics students will explore the inherent interdisciplinarity of fields of study. Designed especially for juniors and seniors. Enrollment is limited to students participating in designated learning community. Concurrent enrollment in specified learning community courses is required. May be repeated for credit up to 4 hours. LEC.

LA&S 340. Computers for the Classroom. 1-3 Hours. U.
"The Art and Science of Computer Presentation." An inter-disciplinary course designed to explore current technology in "Computer Presentations" (various equipment and programs), research the field of information processing, and develop applications for interactive multi-
LA&S 400. Teaching and Tutoring Writing. 3 Hours. U.

Students explore theories and strategies of teaching and tutoring writing across academic disciplines. They learn more about themselves as writers as they build a repertoire of writing techniques useful in their studies, in the workplace, and in their personal lives. By observing and consulting in the writing center, they understand how reflection leads to responsible/responsive and engaged practice. (Same as ENGL 400.) LEC.

LA&S 414. Ethnobiology. 5 Hours. N.

Integrates Native American traditional knowledge of ecology and biology with modern, western science. One purpose of the course is to preserve the unique knowledge and varied cultural traditions relating to the life sciences that are possessed by indigenous people. Taught at Haskell Indian Nations University. Prerequisite: BIOL 100 or BIOL 150. LEC.

LA&S 450. Topics at Haskell Indian Nations University: ____. 1-6 Hours.

Special topics at the junior/senior undergraduate level. Taught at Haskell Indian Nations University. Special permission from the Provost's office required. LEC.

LA&S 470. Job Search Skills for Liberal Arts and Sciences Majors. 1 Hour. U.

This course is designed to introduce students to the fundamentals of planning and organizing job search strategies. Emphasis is placed on practical application of employment search tools for post-graduation employment or graduate school admission, stressing the value of the arts and sciences degree in the labor market. LEC.

LA&S 475. Professional Career Management. 3 Hours. U.

When envisioning the future, many students consider immediate post-graduation needs but may fail to consider future professional career management, life and career transitions, and career progression. This advanced career development course studies the theories of career development, organizational and industrial psychology, and human resources. Students learn theories from these areas and understand how to apply them to their own professional career, future career transitions, and lifelong career progression. LEC.

LA&S 480. Preparing for International Careers. 2 Hours. U.

This course, delivered through an 8-week seminar and week-long study abroad experience, teaches the fundamentals of executing an international job search. The course is open only to participants admitted to the Preparing for International Careers study abroad program. Students must complete a study abroad application and be approved before enrolling in the course. LEC.

LA&S 485. Global Career Management. 3 Hours. U.

This global career development course studies the theories of cross-cultural communication and analyzes the global economy to help students apply these concepts to their own lifelong career management. Furthermore, the course builds upon the international experiences students are having at KU and also allows any student to gain lifelong knowledge and skills to be successful in a global job search or career transition, by assisting them to articulate their skills and value through a cross-cultural perspective to potential employers. LEC.

LA&S 490. Internship Exploration. 1-5 Hours. AE61 / U.

This course provides credit for supervised practical experiences in an occupational area of interest. In addition to the work-related activity, students complete reading and writing assignments, participate in an online discussion and create a final portfolio of internship accomplishments. Hours of credit recorded (1-5) are based on number of hours at internship site and agreement of instructor. Credit hours will be assigned a letter grade. Repeatable for up to 5 credit hours, provided the internship experiences are different. Prerequisite: Consent of Instructor. LEC.

LA&S 492. Topics and Problems on: ____. 1-6 Hours. U.

An interdisciplinary study of different topics. Topics include Sanskrit. Designed especially for Juniors and Seniors. LEC.

LA&S 494. Senior Seminar in Liberal Arts and Sciences. 3 Hours. H.

This course is a seminar to result in the student's integration of knowledge within the liberal arts and sciences. Through lecture and discussion, students explore a series of issues or themes that integrate several disciplines in the humanities, arts, social sciences, and mathematics and natural sciences. A final project (options include a portfolio, web page, paper, presentation) demonstrates the students' knowledge of the concepts, theories, and methods of several disciplines, and their ability to integrate that knowledge across disciplines. Not open to freshmen and sophomores; recommended in the senior year. Prerequisite: Completion of at least 30 junior/senior hours. LEC.

LA&S 700. Writing Center Theory and Administration. 3 Hours.

This course explores theories motivating writing center administration and practice. Students will investigate the multiple functions of writing centers, from writing labs associated with college composition instruction, to decentralized resources for writing faculty teaching writing across the disciplines, to elementary, secondary, and community support centers for writers, to online consultation services. Students will choose a special interest or problem, and, from an administrative perspective, design a research study and propose actions such as creating policy, developing curricula, designing materials, or conducting assessments. (Same as ENGL 885.) Prerequisite: LAS 400, ENGL 400, or consent of instructor. LEC.

LA&S 710. Computer Assisted Language Learning. 1 Hour.

An introduction to the use of computer-based technologies in language learning and teaching. A project-based approach will combine discussions of current research with hands-on technical training. Prerequisite: Consent of instructor LEC.

LA&S 740. Computers for the Classroom. 1-3 Hours.

"The Art and Science of Computer Presentation." An inter-disciplinary course designed to explore current technology in "Computer Presentations" (various equipment and programs), research the field of information processing, and develop applications for interactive multimedia communications. Not open to students who have received credit for LAS 340. Prerequisite: Consent of instructor LEC.

LA&S 792. Topics in: ____. 1-3 Hours.

An interdisciplinary study of a variety of topics from the Liberal Arts and Sciences. Usually intended for graduate students, but may also be taken by qualified upper level undergraduates. May be repeated for credit when topic differs. LEC.

Linguistics Courses

LING 106. Introductory Linguistics. 3 Hours. SC AE42/GE11/GE3S / S.

Introduction to the fundamentals of linguistics, with emphasis on the description of the sound system, grammatical structure and semantic structure of languages. The course will include a survey of language in culture and society, language change, computational linguistics and psycholinguistics, and will introduce students to techniques of linguistic analysis in a variety of languages including English. (Same as ANTH 106). LEC.
LING 107. Introductory Linguistics, Honors. 3 Hours. SC AE42/GE11/GE3S / S.
Introduction to the fundamentals of linguistics, with emphasis on the description of the sound system, grammatical structure, and semantic structure of languages. The course includes a survey of language in culture and society, language change, computational linguistics and psycholinguistics, and introduces students to techniques of linguistic analysis in a variety of languages including English. Open only to students admitted to the University Honors Program or by consent of instructor. (Same as ANTH 107.) LEC.

LING 110. Language and Mind. 3 Hours. SI AE41/GE11/GE3S / S.
A study of the relation between language and the human mind, focusing on language as a fundamental aspect of human cognition. Topics include what is innate and what is learned during first and second language acquisition, how we process language, and whether there are areas of the brain specialized for language. LEC.

LING 111. Language and Mind, Honors. 3 Hours. SI AE41/GE11/GE3S / S.
A study of the relation between language and the human mind, focusing on language as a fundamental aspect of human cognition. Topics include what is innate and what is learned during first and second language acquisition, how we process language, and whether there are areas of the brain specialized for language. Open only to students admitted to the University Honors Program, or by consent of instructor. LEC.

LING 120. The Physics of Speech. 4 Hours. N.
An introduction to the acoustic structure of speech intended for nonscience majors. Emphasis will be placed on the methods and standards by which scientists measure and evaluate the physical characteristics of speech. Topics will include: simple harmonic motion, the propagation of sound waves, aerodynamic aspects of vocal fold vibration, resonance, digital speech processing, frequency analysis, and speech synthesis. Three class hours and one laboratory per week. (Same as SPLH 120.) Prerequisite: MATH 101 or 104 or equivalent. LEC.

LING 177. First Year Seminar: ____. 3 Hours. SC GE11.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in linguistics. May not contribute to major requirements in linguistics. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

LING 180. Study Abroad Topics in Linguistics: ____. 1-3 Hours. U.
This course is designed for the study of special topics in Linguistics. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

LING 300. Empirical Approaches to Languages. 3 Hours. S.
This course provides students with a current overview of experimental data and up-to-date theories addressing empirical approaches to the study of language. A hands-on approach is used to facilitate understanding variation in language comprehension and production, the biological bases of language, and the acquisition of first and second languages. LEC.

LING 305. Phonetics I. 3 Hours. S.
This course provides a basic introduction to the study of human speech sounds. Topics to be covered include anatomy and physiology of the speech production apparatus, transcription and production of the world's sounds, basic acoustics, computerized methods for speech analysis, acoustic characteristics of speech sounds, stress, and intonation. A hands on laboratory project is part of the course. Prerequisite: An introductory course in Linguistics. LEC.

LING 307. Phonetics II. 3 Hours. AE61 / S.
This course is a continuation of Phonetics I (LING 305/705) and provides a more detailed survey of acoustic and auditory phonetics. Topics to be covered include vocal tract acoustics, quantal theory, speaker normalization, theories of speech perception, prosody, the phonetics of second language acquisition, and the production and perception of cues to gender, talker, region, and socio-economic status. In addition, a number of laboratory projects are required. Prerequisite: LING 305. LEC.

LING 308. Linguistic Analysis. 3 Hours. GE11 / H.
Practice in applying the techniques of phonological, grammatical, and syntactic analysis learned in introductory linguistics to data taken from a variety of languages of different structural types. Prerequisite: LING 106. LEC.

LING 312. Introduction to Phonology. 3 Hours. S.
This is an introductory course in phonology. It focuses on crucial phonological concepts such as the underlying and surface representations, phoneme and allophone, contrast, alternation, neutralization, distinctive features, and the syllable. It provides the basic skill set for phonological analysis, including how to discover phonological patterns, select underlying representations, and write phonological rules to capture the patterns. Common phonological universals in the world's languages will also be discussed. Prerequisite: LING 305. LEC.

LING 314. Phonological Theory I. 3 Hours. AE61 / S.
This is a survey course on modern phonological theory. It starts with the discussion of the conspiracy and duplication problems in rule-based phonology and works its way to Optimality Theory (OT). Topics in OT include its conceptual and empirical advantages over rule-based phonology, its potential problems and their possible remedies, the relevance of phonetics in OT constraints, correspondence theory, and how OT can be applied to prosodic phenomena such as stress and tone. It also focuses on theory-building in phonology, with discussions on the external motivations for phonological grammar, how to lay out the predictions of a theoretical proposal, and how phonological predictions can be empirically tested. Prerequisite: LING 312 or instructor consent. LEC.

LING 320. Language in Culture and Society. 3 Hours. SC AE41/AE61 / S.
Language is an integral part of culture and an essential means by which people carry out their social interactions with the members of their society. The course explores the role of language in everyday life of peoples in various parts of the world and the nature of the relationship between language and culture. Topics include world-view as reflected in language, formal vs. informal language, word taboo, and ethnography of speaking. (Same as ANTH 320.) LEC.

LING 321. Language in Culture and Society, Honors. 3 Hours. SC AE41/AE61 / S.
An honors section of LING 320 for students with superior academic records. Not open to students who have had ANTH 320 or LING 320. (Same as ANTH 321.) Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

LING 325. Syntax I. 3 Hours. H.
An introduction to generative syntax with special attention to theory and method. The course covers such topics as phrase structure, the lexicon, transformations and derivation. Prerequisite: LING 106. LEC.

LING 326. Syntax II. 3 Hours. AE61 / S.
An advanced course covering one or more current theories of syntax. The course provides in-depth reading and discussion on the major areas of syntactic theory including universal grammar, phrase structure theory; lexicon and argument structure; binding, control, locality conditions;
causes languages to be different from one another in different degrees. Human language may be characterized as possessing flexibility, which leads to language variation in different social contexts. LEC.

This course explores the relationship between language use and gender. LING 345. Language and Gender. 3 Hours. S.

A study of meaning in natural language usage. Emphasis on referential semantics. Set theory, propositional and first-order logic, and intensional and modal logic as they relate to natural language sentences in a formalized language. Prerequisite: A course in syntax. LEC.

LING 338. Languages of the Jews. 3 Hours. H.
From the beginning, Jewish history and culture is closely tied to language, from Hebrew and Aramaic to the languages of diaspora such as Yiddish and Ladino. Focusing on issues of language in society, this course will survey the languages spoken by the Jews throughout their long history in diverse communities around the world. We will learn about Hebrew as a spoken and a sacred language, examine how Jewish languages are born and die, and discuss the resurrection of Modern Hebrew in the state of Israel. All readings are in English. No prior knowledge of languages or linguistics is required. (Same as JWSH 338.) LEC.

LING 339. Languages of the Jews, Honors. 3 Hours. H.
Honors version of LING 338 or JWSH 338, Languages of the Jews. (Same as JWSH 339.) Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

LING 340. Sociolinguistics. 3 Hours. S.
The formal features of language reflect a broad range of social factors, including age, context, culture, occupation, sex and social class. This course will introduce students to the ways social variables affect the forms of spoken and written language. Prerequisite: An introductory linguistics course or consent of instructor. LEC.

LING 343. Bilingualism. 3 Hours. S.
This course provides an introduction to bilingualism and bilingual education exploring the linguistic, sociolinguistic, and psycholinguistic aspects of bilingualism. We read about and discuss bilingualism in the world and in the U.S.; language maintenance and language loss; effects of languages in contact; bilingual acquisition; the cognitive advantages of bilingualism; and the processing of language in the multilingual mind. Students are guided in conducting a small research project on one of these areas, learning how to read scientific studies about bilingualism and developing an understanding of the relationship between primary research sources and the popular press. LEC.

LING 345. Language and Gender. 3 Hours. S.
This course explores the relationship between language use and gender. The course will specifically focus on how gender affects the ways we use spoken language as well as how we interpret the speech of others. Topics to be discussed will include the function of language in social relationships and language variation in different social contexts. LEC.

LING 350. Comparative and Historical Linguistics. 3 Hours. S.
Human language may be characterized as possessing flexibility, which causes languages to be different from one another in different degrees. This course explores the way languages undergo change in time (historical linguistics), and the ways two or more languages are similar or different (comparative linguistics). The course teaches students how to establish whether languages are genetically related or belong to totally different language families. Prerequisite: An introductory course in linguistics. LEC.

LING 370. Introduction to the Languages of Africa. 3 Hours. NW AE42/GE3H / H/W.
A survey of the indigenous languages of Africa from a linguistic perspective, covering the main language families and their geographic distribution, and focusing on the features and structure of the more widely spoken and representative languages in each family (e.g. Fula, Hausa, Maninka, Swahili, Yoruba). (Same as AAAS 370.) LEC.

LING 415. Second Language Acquisition. 3 Hours. H.
Introduction to the study of second language acquisition: The application of theoretical linguistics to the description of the language that a learner acquires, and to the process of acquisition. Prerequisite: An introductory course in linguistics. LEC.

LING 416. Second Language Acquisition II. 3 Hours. AE61 / S.
This advanced course provides in-depth reading and discussion of current topics including second language acquisition within a generative framework, processing approaches to second language acquisition, and the role of input and learnability principles in second language acquisition. Both theoretical and methodological issues are discussed. Prerequisite: LING 415 and LING 325; or permission of instructor. LEC.

LING 418. Introduction to Cognitive Science. 3 Hours. S.
Examines the data and methodologies of the disciplines that comprise Cognitive Science, an interdisciplinary approach to studying the mind and brain. Topics may include: consciousness, artificial intelligence, linguistics, education and instruction, neural networks, philosophy, psychology, anthropology, evolutionary theory, cognitive neuroscience, human-computer interaction, and robotics. (Same as PHIL 418, PSYC 418, and SPLH 418.) Prerequisite: Consent of instructor. LEC.

LING 420. Capstone: Research in Language Science. 3 Hours. AE61 / S.
This course provides a foundation for designing, conducting, and critically evaluating quantitative and qualitative research in the language sciences. Topics include formulating a research hypothesis, participant selection, ethical considerations, the scientific method, dependent and independent variables, data collection, descriptive and inferential statistics. Students apply their knowledge of linguistics to formulate a research hypothesis and design an experiment to evaluate this hypothesis. Prerequisite: LING 305, LING 312, LING 325, and either LING 415, LING 425, LING 435, or LING 438. LEC.

LING 421. Capstone: Typology-Unity and Diversity of Human Language. 3 Hours. H.
This course explores the similarities and differences among the worlds’ languages. Students apply their knowledge of phonetics, phonology, morphology, and syntax in describing and analyzing phenomena from a number of languages. The typological perspective that students develop is applied to topics such as word order, morphological typology, case, lexical categories, and valency. In addition to lecture style instruction, students get hands on practice in collecting, transcribing, and analyzing data from different languages through face to face elicitation with native speakers. Prerequisite: LING 305, LING 312, and LING 325. LEC.

LING 425. First Language Acquisition. 3 Hours. S.
An introductory course in the acquisition of child language. The course will cover relevant historical studies of child language but will focus primarily on recent psycholinguistic approaches toward the
description of the process by which a child acquires his native language. Phonological, syntactic, semantic, cognitive, pragmatic, sociolinguistic, and anthropological aspects of the acquisition process are covered. Prerequisite: An introductory course in linguistics. LEC.

LING 430. Linguistics in Anthropology. 3 Hours. S.
The study of language as a symbolic system. Exploration into the interrelatedness of linguistic systems, of nonlinguistic communicative systems, and of other cultural systems. (Same as ANTH 430.) LEC.

LING 435. Psycholinguistics. 3 Hours. S.
A detailed examination of issues in the processing of language. The course provides a survey of research and theory in psycholinguistics, reflecting the influence of linguistic theory and experimental psychology. Spoken and written language comprehension and language production processes are examined. Prerequisite: An introductory course in linguistics or permission of instructor. LEC.

LING 437. Topics in Psycholinguistics. 3 Hours. AE61 / S.
An in-depth examination of selected topics in psycholinguistics. Topics may include spoken language processing, written language processing, neurolinguistics, prosody, and syntactic processing. Prerequisite: LING 435 or consent of instructor. LEC.

LING 438. Neurolinguistics I. 3 Hours. S.
The course explores how language is represented and processed in the human brain. This includes a critical survey of the foundations and the current research in the cognitive neuroscience of language, focusing on the techniques of functional brain imaging (fMRI, PET, EEG, MEG, and related methods), and research on aphasia and other language disorders. This course also includes a component providing laboratory experience with brain imaging research on language. Prerequisite: At least one course in linguistics or permission of the instructor. LEC.

LING 440. Linguistic Data Processing. 3 Hours. H.
This course introduces the tools and techniques necessary to analyze fieldwork data, including research design, recording and elicitation techniques, computational data processing and analysis, and field ethics. The course also covers field recording and data analysis technology, along with methods of phonetic transcription, grammatical annotation and analysis of language context. Practice of techniques is provided via short studies of at least one language. Prerequisite: LING 305 or permission of instructor. LEC.

LING 441. Field Methods in Linguistic Description. 3 Hours. AE61 / H.
The elicitation and analysis of phonological, grammatical, and discourse data from a language consultant. In-depth research on one language. Techniques of research design, methods of phonetic transcription, grammatical annotation, and analysis of language context. Prerequisite: LING 305, LING 312, and LING 325 or permission of instructor. LEC.

LING 442. Neurolinguistics II. 3 Hours. S.
An in-depth discussion of the representation and processing of language from a cognitive neuroscience perspective. This course includes critical discussion of selected topics of current research interest in neurolinguistics. The course also includes a significant hands-on component, in which students receive training in research on the cognitive neuroscience of language by developing and implementing a new EEG study on an aspect of language, as well by completing a series of mini-labs introducing neuroimaging methods and analyses. Prerequisite: LING 438 or permission of the instructor. LEC.

LING 447. North American Indian Languages. 3 Hours. AE41 / S.
This course introduces students to the indigenous languages of North America. Students critically examine the structures and status of these languages, which have greatly expanded our knowledge of human language and linguistic theory. Topics include the history and future of North American languages and indigenous speech communities, the history of the field of Americanist linguistics, as well as important linguistic questions raised by phenomena from American languages in phonology, morphology, syntax, semantics, and historical linguistics. Prerequisite: An introductory course in linguistics. Not open to students enrolled in 747 LEC.

LING 451. Topics in Research in Acquisition and Processing: _____. 3 Hours. H.
This course is primarily intended for students actively engaged in linguistic research on language acquisition, language processing, and neurolinguistics. Students in this course present and discuss study design, methods, data analysis and interpretation of results for their research projects. Professional development topics such as CV development, applications for fellowships, grants and jobs, and the dissemination of research findings are also discussed. May be repeated. Prerequisite: Permission of instructor. LEC.

LING 470. Language and Society in Africa. 3 Hours. NW AE42/GE3H / H/W.
Examines issues and problems associated with language use in sub-Saharan Africa from a sociological perspective. Topics covered include an overview of the types of languages spoken on the continent: indigenous languages, colonial languages, pidgins and creoles, and Arabic as a religious language; problems associated with the politics of literacy and language planning; writing and standardization of indigenous languages; and the cultural and ideological dilemmas of language choice. (Same as AAAS 470.) Prerequisite: AAAS 103, AAAS 305, or LING 106; or consent of instructor. LEC.

LING 483. Computational Linguistics. 3 Hours. S.
A survey of computer-based approaches to the study of morphology and syntax. In addition to its relevance for basic linguistic research, computer-based syntactic analysis in the form of parsers and syntactic/ string generators, provide model testes for the linguistic and analytical tools for the computer scientist concerned with language applications. When taught with LING 783, students at the 700 level will have different course requirements. Prerequisite: An introductory course in linguistics. LEC.

LING 490. Independent Study. 1-3 Hours. AE61 / U.
A special research project or directed readings in an area of linguistics not covered in other courses. No more than 3 hours of LING 490 may be applied toward the requirements for the major. Prerequisite: Consent of instructor. IND.

LING 491. Topics in Linguistics: _____. 1-3 Hours. H.
The content, prerequisites, and credits of this course will vary. May be repeated. IND.

LING 492. Topics in Linguistics: _____. 1-3 Hours. S.
The content, prerequisites, and credits of this course will vary. May be repeated. (Distribution credit given for two or three hours only.) Prerequisite: Consent of instructor. IND.

LING 496. Honors Essay in Linguistics. 1-3 Hours. AE61 / H.
Individual directed research and preparation of an essay on a linguistic topic. Prerequisite: A grade-point average of 3.5 in linguistics and 3.25 in all courses, and consent of the major adviser. IND.

LING 539. First Language Acquisition II. 3 Hours.
A second semester course in child language that explores the acquisition of morphology, syntax, and the ways in which morphology and syntax interact in linguistic theory and language development. Topics covered in the course include agreement, case, null subjects, question formation, pronoun binding, quantification, and control. Prerequisite: LING 325 or LING 425 or consent of instructor. LEC.
LING 543. Language and Culture in Arabic-Speaking Communities. 3 Hours. NW AE42/GE3H / H.
The course examines the links between structure, patterns of use, language choice, and language attitudes in the diglossic and bi-lingual Arabic-speaking communities. It also explores language as a reflector and creator of Arab culture (e.g. linguistic encoding of politeness, the Quranic text as the spoken and written word, the role of tropes in Arabic rhetoric). The topics for discussion range from the micro-level language choice to the macro-level issues of national language policies and planning within the domain of government and education across the Arab world. (Same as AAAS 543) LEC.

LING 556. Native Mesoamerican Writing. 3 Hours. H.
An introduction to the Indigenous writing of Mesoamerica, primarily Epi-Olmec and Mayan hieroglyphic writing. The course will survey the languages of the cultures that originated writing in the New World, and demonstrate the methods being used to decipher Mesoamerican hieroglyphic writing. The connections between language, culture, and writing will be highlighted. Prerequisite: An introductory linguistics course. LEC.

LING 570. The Structure of Japanese. 3 Hours. H.
A detailed study of the phonological and grammatical structure of Japanese and the use of the language in social/cultural contexts. Primarily for students who want a linguistic knowledge of the language rather than a practical command of it. (Same as EALC 570.) LEC.

LING 572. The Structure of Chinese. 3 Hours. H.
A detailed study of the phonological and grammatical structure of Chinese and the interactions between language and culture. Depending on student interests, a unit on the pedagogy of teaching Chinese as a foreign language may also be included. Primarily for students who want a linguistic knowledge of the language rather than a practical command of it. (Same as EALC 572.) LEC.

LING 575. The Structure of _____. 3 Hours. S.
A detailed study of a language, including its phonological, morphological, syntactic and semantic characteristics. The course provides students with a linguistic knowledge of the language rather than a practical command of it. Prerequisite: A course in linguistics. LEC.

LING 700. Introduction to Linguistic Science. 3 Hours.
An introduction to the theory and techniques of linguistic science for majors and others intending to do advanced work in linguistics and linguistic anthropology. Emphasis on the sound system, grammatical structure, and semantic structure of languages. Lectures and laboratory sessions. (Same as ANTH 725.) Not open to students who have taken ANTH/LING 106 or ANTH/LING 107. Prerequisite: Graduate standing. LEC.

LING 705. Phonetics I. 3 Hours.
This course provides a basic introduction to the study of human speech sounds. Topics to be covered include anatomy and physiology of the speech production apparatus, transcription and production of the world's sounds, basic acoustics, computerized methods for speech analysis, acoustic characteristics of speech sounds, stress, and intonation. A 'hands on' laboratory project is part of the course. Prerequisite: LING 700 or equivalent course. LEC.

LING 706. Current Linguistic Anthropology. 3 Hours.
The fundamental issues, methods, and theories in contemporary linguistic anthropology. (Same as ANTH 706.) Prerequisite: Graduate standing or consent of the instructor. LEC.

LING 707. Phonetics II. 3 Hours.
This course is a continuation of Phonetics I (LING 705) and provides a more detailed survey of acoustic and auditory phonetics. Topics to be covered include vocal tract acoustics, quantal theory, speaker normalization, theories of speech perception, prosody, the phonetics of second language acquisition, and the production and perception of cues to gender, talker, region, and socio-economic status. In addition, a number of laboratory projects will be required. Prerequisite: LING 705. LEC.

LING 708. Linguistic Analysis. 3 Hours.
Practice in applying the techniques of phonological, grammatical, and syntactic analysis learned in introductory linguistics to data taken from a variety of languages of different structural type. (Same as ANTH 736.) Prerequisite: An introductory course in linguistics. Not open to students who have taken LING 308. LEC.

LING 709. First Language Acquisition. 3 Hours.
Introduction to the study of language acquisition: the significant findings, the basic methodological procedures, and some of the more recent theoretical accounts. Not open to students who have taken LING 425. Prerequisite: LING 700 or equivalent course. LEC.

LING 712. Phonological Theory I. 3 Hours.
This is an advanced course on modern phonological theory. It starts with the discussion of the conspiracy and duplication problems in rule-based phonology and works its way to Optimality Theory (OT). Topics in OT include its conceptual and empirical advantages over rule-based phonology, its potential problems and their possible remedies, the relevance of phonetics in OT constraints, correspondence theory, and how OT can be applied to prosodic phenomena such as stress and tone. It also focuses on theory-building in phonology, with discussions on the external motivations for phonological grammar, how to lay out the predictions of a theoretical proposal, and how phonological predictions can be empirically tested. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. Prerequisite: LING 705. LEC.

LING 714. Phonological Theory II. 3 Hours.
This is an advanced course on modern phonological theory. It discusses phonology as an interdisciplinary and experimental discipline and presents current development in both experimental techniques that shed light on speakers' phonological knowledge and the formal modeling of speakers' phonological grammar. Issues of learnability and how phonological acquisition can be modeled will also be touched upon. Prerequisite: LING 712. LEC.

LING 715. Linguistics and Second Language Acquisition. 3 Hours.
Introduction to the study of second language acquisition: The application of theoretical linguistics to the description of the language a learner acquires, and to the process of acquisition. Prerequisite: LING 700 or equivalent course. LEC.

LING 716. Second Language Acquisition II. 3 Hours.
This advanced course will provide in-depth reading and discussion of several current topics including second language acquisition within a generative framework, processing approaches to second language acquisition, and the role of input and learnability principles in second language acquisition. Both theoretical and methodological issues will be discussed. Prerequisite: LING 715; LING 725, which may be taken concurrently, or permission of instructor. LEC.

LING 720. Research Methods in Linguistics. 3 Hours.
This course provides a foundation for designing, conducting, and critically evaluating quantitative and qualitative research in the language sciences. Topics include formulating a research hypothesis, participant selection, ethical considerations, the scientific method, validity, reliability, data
collection, dependent and independent variables, descriptive and inferential statistics. This course will serve students who are interested in the basics of research design and statistics for the study of language. Prerequisite: LING 700 or equivalent course. LEC.

LING 722. Linguistic Typology. 3 Hours. H.
Different languages use different linguistic mechanisms to encode meanings. This course surveys grammatical concepts and categories found in the world's languages including tense, aspect, mood, voice, person, and number as well as case relations such as nominative, accusative, ergative, and absolutive. Basic word order typology and discourse functions such as topic, focus, and cohesion are introduced. Examples will be drawn from a wide variety of languages to illustrate how the same concept may be encoded differently, i.e., morphologically, syntactically, or lexically, in different languages. Prerequisite: LING 700 or equivalent course. LEC.

LING 725. Syntax I. 3 Hours.
The basics of theoretical syntax, examining the principles of universal grammar. Topics include phrase structure, relations among syntactic constituents, and the nature of syntactic rules and lexical categories. Prerequisite: LING 700 or equivalent course. LEC.

LING 726. Syntax II. 3 Hours.
An advanced course covering one or more current theories of syntax. The course will provide in-depth reading and discussion on the major areas of syntactic theory including universal grammar, phrase structure theory, lexical projections of argument structure, binding, control, locality condition, constraints on representation, and the relation between syntax and the semantic module. Prerequisite: LING 725. LEC.

LING 727. Morphology. 3 Hours.
An exploration of several topics in word structure and formation. Covers three broad areas: traditional morphology, morpho-phonology, and morpho-syntax. Traditional morphology includes a survey of several kinds of word formation processes, the internal structure of words, morpheme types, inflection, paradigms, derivation, and compounding. Morpho-phonology deals with phonological constraints on morphological processes and prosodic morphology. Morpho syntax concentrates on the syntactic properties of morphological phenomena and interaction of syntactic processes and morphology. The course has a strong emphasis on cross-linguistic comparative morphology. Prerequisite: LING 725, LING 725, or permission of instructor. LEC.

LING 730. Linguistics in Anthropology. 3 Hours.
The study of language as it concerns anthropology. Language systems in relation to culture, language taxonomy, semantics, linguistic analysis as an ethnographic tool. (Same as ANTH 730.) LEC.

LING 731. Semantics. 3 Hours.
A study of meaning in natural language usage. Emphasis on referential semantics. Set theory, propositional and first-order logic, and intensional and modal logic as they relate to nature. Questions that arise in representing the meanings of natural language sentences in a formalized language. Prerequisite: LING 725. LEC.

LING 732. Discourse Analysis. 3 Hours.
This course focuses on linguistic frameworks for the analysis of discourse. Discourse is a linguistic system larger than the sentence (utterance), which connects and contextualizes speech and written text. This course focuses on current issues and theoretical frameworks in the analysis of discourse. Using oral and written data, students will examine how contexts influence and shape linguistic form. Topics covered include transcription systems, the structure and organization of different genres of language, and the performance of social actions, including stance-taking, framing, and the construction of identity. Students will also have an opportunity to perform discourse analytic research on the data of their choice. (Same as ANTH 732.) Prerequisite: ANTH 706 or permission of the instructor. LEC.

LING 733. Language, Gender, and Sexuality. 3 Hours.
This course focuses on the complex relationship between language use and the social construction of gender and sexuality i.e. how language is used in the construction of gender and sexuality, and how gender and sexuality are performed and enacted through language. Examines theoretical notions of language, gender, and sexuality from linguistic, linguistic anthropology, and sociology. Among the topics covered are cross-cultural definitions of masculinity and femininity, construction of gendered and sexual identities through language use, language and power, ideologies, style, and performativity. The course will consider research on language, gender, and sexuality from a variety of cultures within the last 50 years. (Same as ANTH 733.) Prerequisite: ANTH 706 or permission of the instructor. LEC.

LING 734. Language Evolution. 3 Hours.
Human language demonstrates a level of complexity not found in the communicative systems of other species. This course focuses on the development of human language, so as to obtain a better understanding of the origin and development of human language. Questions addressed include: what features of language are distinct from other communicative system, when did human language originate, in what stages did human language evolve, and how does language relate to properties of the human brain and mind? Data from a variety of disciplines will be considered, including primatology, human development, cognition, evolutionary biology, archaeology, and linguistics. (Same as ANTH 734.) Prerequisite: ANTH 106 or LING 106 or ANTH 107 or LING 107 or ANTH 736 or LING 708 or ANTH 725. LEC.

LING 735. Psycholinguistics I. 3 Hours.
A detailed examination of issues in the processing of language. The course will provide a survey of research and theory in psycholinguistics, reflecting the influence of linguistic theory and experimental psychology. Spoken and written language comprehension and language production processes will be examined. (Same as PSYC 735.) LEC.

LING 737. Psycholinguistics II. 3 Hours.
An in-depth examination of selected topics in psycholinguistics. Topics may include spoken language processing, written language processing, neurolinguistics, prosody, and syntactic processing. (Same as PSYC 737.) Prerequisite: PSYC 735/LING 735 or consent of instructor. LEC.

LING 738. Neurolinguistics I. 3 Hours.
We will explore how language is represented and processed in the human brain. This will include a critical survey of the foundations and the newest state-of-the-art research in the cognitive neuroscience of language, focusing on the techniques of functional brain imaging (fMRI, PET, EEG, MEG, and related methods), and research on aphasia and other language disorders. This course will also include a laboratory component providing hands-on experience with brain imaging research on language. Prerequisite: LING 700 or equivalent course. LEC.

LING 739. First Language Acquisition II. 3 Hours.
A second semester course in child language which explores the acquisition of morphology, syntax and the ways in which morphology and syntax interact in linguistic theory and language development. Topics covered in the course include agreement, Case, null subjects, question formation, pronoun binding, quantification, and control. Prerequisite: LING 709 and LING 725 or permission of the instructor. LEC.

LING 740. Linguistic Data Processing. 3 Hours.
The tools and techniques necessary to analyze linguistic fieldwork data, including research design, recording and elicitation techniques,
computational data processing and analysis, and field ethics. Techniques of research, field recording, and data analysis technology. Methods of phonetic transcription, grammatical annotation, and analysis of language context. Practice of techniques via short studies of at least one language. (Same as ANTH 740.) Prerequisite: LING 700 or permission of instructor. LEC.

LING 741. Field Methods in Linguistic Description. 3 Hours.
The elicitation and analysis of phonological, grammatical, and discourse data from a language consultant. In-depth research on one language. Techniques of research design, methods of phonetic transcription, grammatical annotation, and analysis of language context. (Same as ANTH 741.) Prerequisite: LING 705 or permission of instructor. LEC.

LING 742. Neurolinguistics II. 3 Hours.
An in-depth discussion of the representation and processing of language from a cognitive neuroscience perspective. This course involves critical discussion of selected topics of current research interest in neurolinguistics. The course also includes a significant hands-on component, in which students receive training in research on the cognitive neuroscience of language by developing and implementing a new EEG study on an aspect of language, as well by completing as a series of mini-labs introducing neuroimaging methods and analyses. Prerequisite: LING 738 or permission of the instructor. SEM.

LING 747. North American Indian Languages. 3 Hours.
This course introduces student to the indigenous languages of North America. Students will critically examine the structures and status of these languages, which have greatly expanded our knowledge of human language and linguistic theory. Topics include the history and future of North American languages and indigenous speech communities, the history of the field of Americanist linguistics, as well as important linguistic questions raised by phenomena from American languages in phonology, morphology, syntax, semantics, and historical linguistics. Prerequisite: An introductory course in linguistics. LEC.

LING 748. Language Contact. 3 Hours.
Theories and case studies of languages in contact. Areal and genetic linguistics, genesis of pidgins and creoles, multilingualism. Social, political, economic, and geographic factors in language change. (Same as ANTH 748.) Prerequisite: A course in Linguistics. LEC.

LING 749. Linguistics and Ethnolinguistics of China and Central Asia: _____. 3 Hours.
Selected topics in Linguistics and Linguistic Anthropology, focusing on dominant and/or minority languages of China, Central Asia, or a particular region of Central and Eastern Eurasia. Topics may include any subfield of linguistics, including language contact, typology, dialectology, and sociolinguistics. Topic for semester to be announced. (Same as ANTH 749.) Prerequisite: A course in Linguistics. LEC.

LING 782. Research Methods in Child Language. 3 Hours.
A survey of methods for studying phonological, morphological, syntactic, and semantic change during language development. Methods include: diary interpretation, language sample analysis, probe elicitation tasks, and clinical assessment. (Same as PSYC 782.) LEC.

LING 783. Computational Linguistics. 3 Hours.
A survey of computer-based approaches to the study of phonology, morphology, and syntax. In addition to its relevance for basic linguistic research, computer-based work on phonology is central to current research in speech analysis, speech synthesis, and the major artificial intelligence effort described as speech understanding. Computer-based morphological analysis is of theoretical interest to the linguist as well as a major component in content analysis, information retrieval, and other related application areas. Computer-based parsers and syntactic/string generators provide model testers for the linguist and analytical tools for the computer scientist concerned with language applications. Prerequisite: An introductory linguistics course. LEC.

LING 791. Topics in Linguistics: _____. 1-3 Hours.
The content and prerequisites of this course will vary. May be repeated. Prerequisite: Consent of instructor. LEC.

LING 794. Proseminar. 3 Hours.
Introduction to the field of linguistics. Topics include research literature and research methods, thesis and grant writing, and ethics in linguistic research. Required for all first-year graduate students in linguistics. Graded on satisfactory/unsatisfactory basis. LEC.

LING 799. Proseminar in Child Language. 2 Hours.
A review and discussion of current issues in children's language acquisition. May be repeated for credit. Students are graded S/F. (Same as ABSC 797, PSYC 799 and SPLH 799.) (Formerly HDFL 797.) LEC.

LING 810. Seminar in Ethnolinguistics: _____. 2-3 Hours.
An advanced study of the relations between language and culture. Subject will vary each semester. Students may repeat the course more than once. (Same as ANTH 810.) LEC.

LING 822. Seminar on Acquisition of Language. 3 Hours.
An analysis of recent theoretical issues and research problems in the study of children's acquisition of language. Prerequisite: LING 709 or consent of instructor. LEC.

LING 850. Topics in Research in Experimental Linguistics: _____. 3 Hours.
This course is primarily for students actively engaged in experimental linguistic research. The course provides students with the opportunity to focus on their current research projects and involves critical analysis, presentation, and discussion of research design, methods, statistical analysis, and data interpretation. May be repeated. Prerequisite: An advanced course in Linguistics or permission of instructor. SEM.

LING 851. Research in Language Acquisition and Processing. 3 Hours.
This course is primarily for students actively engaged in experimental research on language acquisition, language processing, and neurolinguistics. Students in this course present and discuss study design, methods, data analysis and interpretation of results for their research projects. Professional development topics such as CV development, applications for fellowships, grants and jobs, and the dissemination of research findings are also discussed. May be repeated. Prerequisite: Permission of instructor. SEM.

LING 852. Research in Field Linguistics. 3 Hours.
This course is intended for students who are conducting field work on syntax or morphology, typically of an understudied language. The course is structured around a set of topics (variable by semester) which each student will investigate in a particular language. The focus of the course is on data collection and analysis and students will present and discuss the results of their research projects. May be repeated. Prerequisite: Permission of instructor. SEM.

LING 860. Seminar in Second Language Acquisition. 3 Hours.
Analysis of recent theoretical and methodological issues in the study of second language acquisition. Prerequisite: LING 716 or permission of instructor. LEC.

LING 889. Master's Research Project. 1-3 Hours.
A course for students working on their M.A. Research Project. Normally to be taken during the semester in which the student is submitting the M.A. Research Project. Students must enroll for at least one credit hour. Up to
three credits will count toward the minimum number of credits required for the M.A. degree in linguistics. RSH.

LING 910. Linguistic Seminar: ____. 1-3 Hours.
The content and prerequisites of this course will vary. May be repeated. LEC.

LING 947. Seminar in Amerindian Linguistics. 1-3 Hours.
The aim of the seminar is to provide opportunity for interaction among faculty and students sharing an interest in North American Native languages and linguistics. Activities include reading, discussion, and criticism of literature on Amerindian languages and linguistics, and reports on current research of the participants. May be repeated. Prerequisite: LING 747. LEC.

LING 980. Linguistics Field Work. 3-6 Hours.
Independent field work with an informant on a language not normally offered at the University of Kansas, or on a non-standard dialect of one of the more accessible languages. Student must show evidence (file slips for grammatical and phonological analysis, dictionary slips, etc.) of having done the required amount of work without necessarily being able to turn in a completed analysis. Normally for three credits; six credits would be available under certain circumstances such as intensive summer work on location away from the university. Graded on satisfactory/unsatisfactory basis. Prerequisite: LING 712 and LING 725. FLD.

LING 997. Ph.D. Examinations. 1-12 Hours.
A course for students writing answers to the preliminary Ph.D. examination and/or preparing to take the Oral Comprehensive Examination. Normally to be taken during the semester in which the student is submitting answers to the written preliminary examination. May be taken for a maximum of two semesters or twelve credits, whichever comes first. Does not count toward the minimum number of credits required for a graduate degree in linguistics. Graded satisfactory/unsatisfactory on the results of the examination. RSH.

LING 998. Independent Study. 1-12 Hours.
Prerequisite: Written consent of instructor. RSH.

LING 999. Doctoral Dissertation. 1-12 Hours.
THE.

Mathematics Courses

MATH 2. Intermediate Mathematics. 3 Hours. U.
Mathematics (primarily algebra) preparatory to MATH 101. Qualification: Two years of high school college preparatory mathematics, algebra and geometry, and a score of 16 or more on ACT mathematics; or a qualifying score on the mathematics placement test. MATH 002 is the lowest level mathematics course offered at the University of Kansas. Students not prepared for MATH 101 will be permitted to enroll in MATH 002. However, before enrolling in MATH 002, such students are encouraged to prepare by self-study or by completing a beginning algebra course in high school, community college, or correspondence course. LEC.

MATH 101. College Algebra. 3 Hours. GE12 / U.
Coordinate systems, functions and their graphs; linear, quadratic, general polynomial, rational, exponential, and logarithmic functions; equations and inequalities; linear and non-linear systems and matrices. Not open to students with credit in MATH 104. Prerequisite: MATH 002, or two years of high school algebra and a score of 22 or higher on ACT mathematics, or a qualifying score on the mathematics placement test. LEC.

MATH 103. Trigonometry. 2 Hours. U.
The circular functions and their applications. Not open to students with credit in MATH 104. May not be used to fulfill the College mathematics requirement. Prerequisite: MATH 101, or two years of high school algebra and a score of 26 or higher on enhanced ACT mathematics, or a qualifying score on the mathematics placement test. LEC.

MATH 104. Precalculus Mathematics. 5 Hours. GE12 / U.
An introduction to the elementary functions (polynomial, rational, exponential, logarithmic, and trigonometric) and their properties. Intended primarily for students intending to enroll in MATH 121. Open for only two hours credit for students with credit in MATH 101. Not open to students with credit in MATH 103. Prerequisite: MATH 002, or two years of high school algebra and a score of 22 or higher on ACT mathematics, or a qualifying score on the mathematics placement test. LEC.

MATH 105. Introduction to Topics in Mathematics. 3 Hours. GE12 / N.
This course has two purposes. First, to provide the student with some experience and insight into several areas of mathematics not normally covered in elementary courses. Typical topics which may be covered are number theory, geometries, introductory calculus, introductory probability and statistics. Second, to provide the student with some skill in handling abstract mathematical concepts. The material will develop dually the intuitive and axiomatic approach. A high degree of manipulative skill is not required for this course. Prerequisite: MATH 101 or MATH 104, or two years of high school algebra and a score of 26 or higher on ACT mathematics, or a qualifying score on the mathematics placement test. LEC.

MATH 109. Mathematics for Elementary School Teachers I. 3 Hours. U.
This course is designed to give the prospective elementary school teacher an overview of several components of the elementary school mathematics curriculum, including number systems, estimation, inequalities and order, sequences and patterns, sets, and relations and functions. The class meets each week for three one-hour instruction sessions and one two-hour laboratory session. This course may not be used to satisfy the College mathematics requirement. Prerequisite: MATH 101 or equivalent placement. LEC.

MATH 110. Mathematics for Elementary School Teachers II. 3 Hours. U.
Continuation of MATH 109, including geometry (including transformations) and elementary probability and statistics. Class meets each week for three one-hour instruction sessions and one two-hour laboratory session. This course does not serve as a prerequisite for any mathematics course. It may not be used to satisfy the College mathematics requirement. Prerequisite: MATH 109. LEC.

MATH 111. Matrix Algebra, Probability, and Statistics. 3 Hours. N.
Introduction to topics in matrix algebra, probability, and statistics. Topics will include matrix operations, the use of matrices to solve systems of linear equations, elementary data analysis, elementary statistical procedures, sample spaces and probability measures, random variables, probability models, links between probability and statistics, and applications. Prerequisite: MATH 101 or MATH 104, or two years of high school algebra and a score of 26 or higher on the ACT mathematics, or a qualifying score on the mathematics placement test. LEC.

MATH 115. Calculus I. 3 Hours. GE12 / N.
Elementary differential and integral calculus, with applications in management and the biological sciences. Not open to students with credit in MATH 121. Prerequisite: MATH 101 or MATH 104, or two years of high school algebra and a score of 26 or higher on ACT mathematics, or a qualifying score on the mathematics placement test. LEC.

MATH 116. Calculus II. 3 Hours. NM / N.
Continuation of MATH 115 including exponential, logarithmic, and trigonometric functions, techniques of integration, and the calculus of functions of several variables. Not open to students with credit in MATH
122 or MATH 118. Prerequisite: MATH 115, plus a course in trigonometry, or MATH 121. MATH 103 may be taken concurrently. LEC.

**MATH 118. Trigonometry and Calculus. 3-5 Hours. N.**
A course combining the material of MATH 103 and MATH 116. Open for only three hours credit to students with credit in MATH 103 or MATH 104, or five hours credit for students who do not have credit in MATH 103 or MATH 104. Not open for credit for students with credit in MATH 116. Prerequisite: MATH 115. LEC.

**MATH 119. Differential Calculus. 4 Hours. GE21 / N.**
Study of limits and derivatives of algebraic, trigonometric, exponential and logarithmic functions. Curve sketching, optimization and other applications of the derivative. Antiderivatives, Riemann sums, the definite integral, and the fundamental theorem of calculus. Intended to facilitate appropriate transfer credit and course placement. Open for only 1 hour credit to students with credit in MATH 115. Not open for credit to students with credit in MATH 116 or 121. Prerequisite: MATH 103 or MATH 104, or 3 years of college preparatory mathematics including trigonometry, with a score of 28 or higher on the enhanced ACT Mathematics exam. LEC.

**MATH 120. Integration Techniques and Applications. 1 Hour. U.**
A study of techniques and applications of integration. Techniques include integration by parts, integration by trigonometric substitution, integration by partial fractions and improper integrals. Applications of integration include area, volume, arc length, average value, and physical applications such as work and hydrostatic force. Not open for credit to students with credit in MATH 116 or MATH 121. Prerequisite: MATH 119. LEC.

**MATH 121. Calculus I. 5 Hours. GE12 / N.**
Differentiation and integration of algebraic and trigonometric functions. Applications to physical sciences and engineering. Open for only two hours credit to students with credit in MATH 115. Prerequisite: MATH 104; or MATH 103; or three years of college preparatory mathematics including trigonometry and a score of 28 or higher on ACT mathematics; or a qualifying score on the mathematics placement test. LEC.

**MATH 122. Calculus II. 5 Hours. NM / N.**
Sequences and series. Calculus of functions in polar and spherical coordinates. Three-dimensional vector geometry and vector-valued functions. Multivariable calculus: partial derivatives and multiple integration. Open only for three hours credit to students with credit in both MATH 121 and MATH 116. Prerequisite: MATH 121, MATH 141, MATH 116, or MATH 120. LEC.

**MATH 125. Calculus I. 4 Hours. N.**
Limits, continuity and derivatives of algebraic, trigonometric, exponential and logarithmic functions. Curve sketching, optimization and other applications of the derivative. Antiderivatives, Riemann sums, the definite integral, and the fundamental theorem of calculus. Open for only 1 hour credit to students with credit in MATH 115. Not open for credit to students with credit in MATH 116, MATH 121, MATH 141, or MATH 145. Prerequisite: MATH 103 or MATH 104, with a grade of C- or higher; or 3 years of college preparatory mathematics including trigonometry, with a score of 28 or higher on the ACT Mathematics exam. LEC.

**MATH 126. Calculus II. 4 Hours. N.**
Multivariable functions, partial derivatives and their applications, multiple integrals and their applications. Vector-valued functions, line and surface integrals, Green, Gauss and Stokes Theorems. Open for only 2 hours credit to students with credit in MATH 122 or MATH 142. Not open for credit to students with credit in MATH 147, MATH 223 or MATH 243. Prerequisite: MATH 126 or MATH 146, with a grade of C- or higher. LEC.

**MATH 141. Calculus I: Honors. 5 Hours. GE12 / N.**
Differential and integral calculus and applications. Prerequisite: Three years of college preparatory mathematics including trigonometry, plus either (1) a score of 34 or more on ACT mathematics and a cumulative high school grade-point average of at least 3.5, or (2) a score of 32 or more on ACT mathematics and a cumulative high school grade-point average of at least 3.7. LEC.

**MATH 142. Calculus II: Honors. 5 Hours. NM / N.**
Transcendental functions, methods of integration, parametric equations, vector algebra and its applications to analytic geometry. Introduction to partial derivatives and multiple integration. Prerequisite: MATH 121, or equivalent, and invitation of the Department of Mathematics. LEC.

**MATH 145. Calculus I, Honors. 4 Hours. N.**
Limits, continuity and derivatives of algebraic, trigonometric, exponential and logarithmic functions. Curve sketching, optimization and other applications of the derivative. Antiderivatives, Riemann sums, the definite integral, and the fundamental theorem of calculus. Not open for credit to students with credit in MATH 116, MATH 121, MATH 125 or MATH 141. Prerequisite: An ACT Math score of 34 or higher, or membership in the University Honors Program and an ACT Math score of 32 or higher. LEC.

**MATH 146. Calculus II, Honors. 4 Hours. N.**
Techniques of integration, including integration by parts. Applications of integration, including volume, arc length, work and average value. Infinite sequences and series and Taylor series. Polar coordinates, vectors and the geometry of space. Open for only 2 hours credit to students with credit in MATH 116. Not open for credit to students with credit in MATH 122, MATH 126 or MATH 142. Prerequisite: MATH 121, MATH 125, MATH 141 or MATH 145, with a grade of C- or higher; and invitation of the Department of Mathematics. LEC.

**MATH 147. Calculus III, Honors. 4 Hours. N.**
Multivariable functions, partial derivatives and their applications, multiple integrals and their applications. Vector-valued functions, line and surface integrals, Green, Gauss and Stokes Theorems. Open for only 2 hours credit to students with credit in MATH 122 or MATH 142. Not open for credit to students with credit in MATH 127, MATH 223 or MATH 243. Prerequisite: MATH 126 or MATH 146, with a grade of C- or higher; and invitation of the Department of Mathematics. LEC.

**MATH 177. First Year Seminar: ____. 3 Hours. NM GE11.**
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in math. May not contribute to major requirements in math. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

**MATH 197. Mathematical Workshops: _____. 1-3 Hours. U.**
Offered to provide opportunities for deeper understanding of freshman-sophomore mathematics through interactive learning. Topics will vary. May be repeated for additional credit. Prerequisite: Variable. LAB.

**MATH 220. Applied Differential Equations. 3 Hours. N.**
Linear ordinary differential equations, Laplace transforms, systems of equations, and applications. Not open to those who have taken MATH 320. Prerequisite: MATH 122 or MATH 142, or MATH 126 or MATH 146 with grade of C- or higher; previous or concurrent enrollment in MATH 290 or MATH 291 recommended. LEC.
MATH 221. Applied Differential Equations, Honors. 3 Hours. N.
Linear Ordinary Differential Equations, Laplace Transforms, Systems of Equations, Enrichment Applications. Prerequisite: Linear Ordinary Differential Equations, Laplace Transforms, Systems of Equations, Enrichment Applications. Prerequisite: MATH 122 or MATH 142, or MATH 126 or MATH 146 with grade of C- or higher, and invitation from the Department of Mathematics; previous or concurrent enrollment in MATH 290 or MATH 291 recommended. Not open to students with credit in MATH 320. LEC.

MATH 223. Vector Calculus. 3 Hours. N.
Multivariable calculus, multiple integration, and vector calculus. Prerequisite: MATH 122 or MATH 142 or equivalent. LEC.

MATH 243. Vector Calculus, Honors. 3 Hours. N.
Multivariable Calculus, Multiple Integration, Vector Calculus, Enrichment Applications. Prerequisite: MATH 122 or MATH 142 or equivalent, and invitation from the Department of Mathematics. LEC.

MATH 290. Elementary Linear Algebra. 2 Hours. N.
Systems of linear equations, matrices, vector spaces, linear transformations, and applications. Not open to those who have taken MATH 590. Prerequisite: MATH 122 or MATH 142, or MATH 126 or MATH 146 with grade of C- or higher. LEC.

MATH 291. Elementary Linear Algebra, Honors. 2 Hours. N.
Systems of Linear Equations, Matrices, Vector Spaces, Linear Transformations, Enrichment Applications. Prerequisite: MATH 122 or MATH 142, or MATH 126 or MATH 146 with a grade of C- or higher, and invitation from the Department of Mathematics. Not open to students who have taken MATH 590. LEC.

MATH 296. Special Topics: ______. 1-3 Hours. N.
Designed for the study of special topics in mathematics at the freshman/sophomore level. May be repeated for additional credit; does not count toward the major or minor in mathematics. Prerequisite: Variable. LEC.

MATH 299. Directed Reading. 1-5 Hours. N.
Directed reading on a topic chosen by the student with the advice of an instructor. May be repeated for additional credit. Consent of the department required for enrollment. IND.

MATH 320. Elementary Differential Equations. 3 Hours. N.
Linear ordinary differential equations, series solutions. Laplace transforms. Systems of equations. Not open to those who have taken MATH 220. Prerequisite: MATH 223 or MATH 243, or MATH 127 or MATH 147 with a grade of C- or higher, and MATH 290 or MATH 291. LEC.

MATH 365. Elementary Statistics. 3 Hours. GE12 / N.
Elementary descriptive statistics of a sample of measurements; probability; the binomial, Poisson, and normal distributions, populations and sampling from populations; simple problems of statistical inference. May not be counted for junior-senior credit toward a major in mathematics. Not open to students with credit in DSCI 202, BIOL 570, MATH 465, MATH 526, or MATH 628. Prerequisite: MATH 101, MATH 104, or two years of high school algebra and a score of 26 or higher on ACT mathematics, or a qualifying score on the mathematics placement test. LEC.

MATH 409. Topics in Geometry for Secondary and Middle School Teachers. 2 Hours. N.
Study of selected topics from Euclidean, non-Euclidean, and transformation geometry chosen to give breadth to the mathematical background of secondary and middle school teachers. May not be counted for junior-senior credit towards a major in mathematics. Prerequisite: MATH 122 or MATH 126 or MATH 142 or MATH 146. Students enrolled in MATH 409 must concurrently enroll in MATH 410. LEC.

MATH 410. Topics in History of Mathematics for Secondary and Middle School Teachers. 1 Hour. N.
Study of selected topics from mathematical history chosen to provide students with knowledge of major historical developments in mathematics including individual contributions and contributions from different cultures. These topics will include a historical development of Euclidean and non-Euclidean geometry. May not be counted for junior-senior credit towards a major in mathematics. Prerequisite: MATH 122 or MATH 126 or MATH 142 or MATH 146. Students enrolled in MATH 410 must concurrently enroll in MATH 409. LEC.

MATH 450. Discrete Mathematics. 3 Hours. N.
Basic topics in discrete mathematics including sets, logic, relations and functions, graphs and combinatorics. Advanced topics chosen from partially ordered sets and lattices, Boolean algebras, automata, game theory, coding theory, cryptography, optimization and enumeration. Prerequisite: MATH 290. LEC.

MATH 470. Problem Solving. 1-3 Hours. N.
An introduction to the general methods of solving mathematical problems. Particular techniques such as specialization, generalization, contradiction, and induction will be presented. Topics presented may vary from semester to semester. Prerequisite: MATH 122 or equivalent or concurrent enrollment in MATH 122 or MATH 127 or MATH 142 or MATH 147 or concurrent enrollment in MATH 127 or MATH 147. LEC.

MATH 500. Intermediate Analysis. 3 Hours. N.
A careful formulation of convergence and limits of sequences and functions; continuity and properties of continuous functions; differentiation; the Riemann integral; mean-value theorems and the fundamental theorem of calculus. Not open to students with credit in MATH 765. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 290 or MATH 291. LEC.

MATH 510. Introduction to the Theory of Computing. 3 Hours. N.
Finite state automata and regular expressions. Context-free grammars and push-down automata. Turing machines. Models of computable functions and undecidable problems. The course emphasis is on the theory of computability, especially on showing limits of computation. (Same as EECS 510.) Prerequisite: EECS 210 and upper-level EECS eligibility. LEC.

MATH 526. Applied Mathematical Statistics I. 3 Hours. NM / N.
A first course in statistics for students with the techniques of calculus at their disposal. The following topics are studied with illustrations and problems drawn from various fields of applications: basic notions of probability and probability distributions; classical estimation and testing procedures for one and two sample problems; chi-square test. Not open to those with credit in MATH 628 or DSCI 301. Prerequisite: MATH 122 or MATH 127 or MATH 142 or MATH 147 or MATH 116 (MATH 127 or MATH 147 recommended). LEC.

MATH 530. Mathematical Models. 3 Hours. N.
An introduction to mathematical models useful in a large variety of scientific and technical endeavors. Topics include: model construction, Markov chain models, models for linear optimization, graphs as models, and game theory. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 290 or MATH 291. LEC.

MATH 540. Elementary Number Theory. 3 Hours. N.
Divisibility, primes and their distribution, the Euclidean algorithm, perfect numbers, Fermat’s theorem, Diophantine equations, applications to cryptography. Prerequisite: MATH 122 or MATH 127 or MATH 142 or MATH 147. LEC.
MATH 542. Vector Analysis. 2 Hours. N.
Vector algebra; vector and scalar fields; line and surface integrals; theorems of Gauss, Green, and Stokes. Curvilinear coordinates. Applications. Introduction to tensor analysis. Not open to those with credit in MATH 143. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 290 or MATH 291. LEC.

MATH 558. Introductory Modern Algebra. 3 Hours. N.
Development of the number systems. Polynomials. Introduction to abstract number systems such as groups and fields. Not open to students with credit in MATH 791. Prerequisite: MATH 290 or MATH 291. LEC.

MATH 559. Modern Geometries. 3 Hours. N.
Selected topics in Euclidean geometry. Synthetic and analytic projective geometry; duality. Desargues' theorem, perspectives, conics. Non-Euclidean and metric projective geometries. Prerequisite: MATH 122 or MATH 127 or MATH 142 or MATH 147. LEC.

MATH 581. Numerical Methods. 3 Hours. N.
An introduction to numerical methods and their application to engineering and science problems. Applied treatment of elementary algorithms selected from the subject areas: finding roots of a single nonlinear equation, numerical differentiation and integration, numerical solution of ordinary differential equations. Emphasis on implementing numerical algorithms using the computer. Not open to students with credit in MATH 781 or MATH 782. Prerequisite: MATH 220 and MATH 290, or MATH 320. LEC.

MATH 590. Linear Algebra. 3 Hours. N.
Vector spaces, linear transformations, and matrices. Canonical forms. Determinants. Hermitian, unitary and normal transformations. Not open to students with credit in MATH 792. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 290 or MATH 291. LEC.

MATH 591. Applied Numerical Linear Algebra. 3 Hours. N.
An introduction to numerical linear algebra. Possible topics include: applied canonical forms, matrix factorizations, perturbation theory, systems of linear equations, linear least squares, singular value decomposition, algebraic eigenvalue problems, matrix functions, and the use of computational software. Not open to students with credit in MATH 780 or MATH 782. Prerequisite: MATH 290 or MATH 291. EECS 138 or equivalent recommended. LEC.

MATH 596. Special Topics: ____. 1-3 Hours. N.
Arranged as needed to present appropriate material to groups of students. May be repeated for additional credit. Prerequisite: Variable. LEC.

MATH 597. Special Topics, Honors: ____. 3 Hours. AE61 / N.
A study of a specialized topic in mathematics. May be repeated for credit when the topic varies. Prerequisite: A previous Honors course in Mathematics or permission of instructor. Other prerequisites depending on topic possible. LEC.

MATH 601. Algebraic Coding Theory. 3 Hours. N.
An introduction to error correcting codes. Included are: linear codes, cyclic codes, BCH codes, and convolutional codes. Prerequisite: MATH 290 or MATH 291. LEC.

MATH 605. Applied Regression Analysis. 3 Hours. N.
The matrix approach to regression. Weighted least squares, transformations, examination of residuals, model selection, and analysis of variance. Prerequisite: MATH 290 or MATH 291, and MATH 526 or MATH 628. LEC.

MATH 611. Time Series Analysis. 3 Hours. N.
An introduction to the theory and computational techniques in time series analysis. Descriptive techniques: trends, seasonality, autocorrelations. Time series models: autoregressive, moving average, ARIMA models; model specification and fitting, estimation, testing, residual analysis, forecasting. Stationary processes in the frequency domain: Fourier methods and the spectral density, periodograms, smoothing, spectral window. Prerequisite: MATH 122 and a calculus based statistics course. LEC.

MATH 624. Discrete Probability. 3 Hours. N.
Theory and applications of discrete probability models. Elementary combinatorial analysis, random walks, urn models, occupancy problems, and the binomial and Poisson distributions. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 290 or MATH 291. LEC.

MATH 627. Probability. 3 Hours. N.
Introduction to mathematical probability; combinatorial analysis; the binomial, Poisson, and normal distributions; limit theorems; laws of large numbers. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 290 or MATH 291. LEC.

MATH 628. Mathematical Theory of Statistics. 3 Hours. N.
An introduction to sampling theory and statistical inference; special distributions; and other topics. Prerequisite: MATH 627. LEC.

MATH 630. Actuarial Mathematics. 3 Hours. N.
This course is an introduction to some of the notions and computations in actuarial mathematics. Many computations are associated with compound interest with applications to bank accounts, mortgages, pensions, bonds, and annuities. Life contingencies are considered for annuities and insurance. Some introduction to option pricing is given, particularly the Black-Scholes formula. This course provides the background material needed for some of the initial examinations given by the societies for actuaries, including the Financial Mathematics Exam. Prerequisite: MATH 526 or MATH 627 or a comparable course in probability. LEC.

MATH 646. Complex Variable and Applications. 3 Hours. N.
Analytic functions of a complex variable, infinite series in the complex plane, theory of residues, conformal mapping and applications. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243. LEC.

MATH 647. Applied Partial Differential Equations. 3 Hours. N.
Boundary value problems; topics on partial differentiation; theory of characteristic curves; partial differential equations of mathematical physics. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 220 or MATH 221 or MATH 320. LEC.

MATH 648. Calculus of Variations and Integral Equations. 3 Hours. N.
Topics in the calculus of variations, integral equations, and applications. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 220 or MATH 221 or MATH 320. LEC.

MATH 650. Nonlinear Dynamical Systems. 3 Hours. N.
This course provides an introduction to nonlinear ordinary differential equations and dynamical systems theory with an emphasis on applications. Topics covered include the existence and uniqueness of solutions to initial value problems, as well as the qualitative behavior of solutions, including existence of equilibria, periodic and connecting orbits and their stability. Additional topics include an introduction to bifurcation theory and chaos. Prerequisite: MATH 122 or MATH 127 or MATH 142 or MATH 147, and MATH 220 or MATH 221 or MATH 320, and MATH 290 or MATH 291. LEC.

MATH 660. Geometry I. 3 Hours. N.
An introduction to modern geometry. Differential geometry of curves and surfaces, the topological classification of closed surfaces, dynamical systems, and knots and their polynomials. Other topics as time permits.
MATH 661. Geometry II. 3 Hours. N.
Continuation of Math 660. Prerequisite: MATH 660 or permission of instructor. LEC.

MATH 699. Directed Reading. 1-3 Hours. AE61 / N.
Directed reading on a topic chosen by the student with the advice of an instructor. May be repeated for additional credit. Consent of the department required for enrollment. IND.

MATH 701. Topics in Mathematics for Teachers: _____ 1-6 Hours.
Material, including both mathematical content and teaching methodology, related to classroom use at various levels, elementary through secondary. Topics may vary. May not be counted for junior-senior credit towards a major in mathematics, nor for graduate credit towards a graduate degree in mathematics. Prerequisite: Permission of instructor. RSH.

MATH 715. Sampling Techniques. 3 Hours.
Statistical methodology of survey sampling. Data analysis and estimation methods for various experimental designs; fixed or random sample sizes, pre-and/or post-stratified samples, and multistage sampling. Estimates of totals, means, ratios and proportions with methods of estimating variances of such estimates. Prerequisite: A post-calculus probability or statistics course. LEC.

MATH 722. Mathematical Logic. 3 Hours.
Propositional calculus. First order theories and model theory. Elementary arithmetic and Godel's incompleteness theorems. (Same as EECS 722.) Prerequisite: MATH 665 or MATH 691, or equivalent evidence of mathematical maturity. LEC.

MATH 724. Combinatorial Mathematics. 3 Hours.
Counting problems, with an introduction to Polya's theory; Mobius functions; transversal theory; Ramsey's theorem; Sperner's theorem and related results. Prerequisite: MATH 290 and a math course numbered 450 or higher. LEC.

MATH 725. Graph Theory. 3 Hours.
Graphs; trees; connectivity; Menger's theorem; eulerian and hamiltonian graphs; planarity; coloring of graphs; factorization of graphs; matching theory; alternating chain methods; introduction to matroids with applications to graph theory. Prerequisite: MATH 290 and a math course numbered 450 or higher. LEC.

MATH 727. Probability Theory. 3 Hours.
A mathematical introduction to premeasure-theoretic probability. Topics include probability spaces, conditional probabilities and independent events, random variables and probability distributions, special discrete and continuous distributions with emphasis on parametric families used in applications, the distribution problem for functions of random variables, sequences of independent random variables, laws of large numbers, and the central limit theorem. Prerequisite: MATH 223 and MATH 290, or equivalent. LEC.

MATH 728. Statistical Theory. 3 Hours. N.
Theory of point estimation and hypothesis testing with applications. Confidence region methodologies and relations to estimation and testing. Prerequisite: MATH 727 or equivalent. LEC.

MATH 735. Optimal Control Theory. 3 Hours.
An examination of the mathematical methods of deterministic control theory given by considering some specific examples and the general theory. The methods include dynamic programming, the calculus of variations, and Pontryagin's maximum principle. Various problems of linear control systems, e.g., the linear regulator problem, are solved. Prerequisite: MATH 320 or equivalent. LEC.

MATH 740. Number Theory. 3 Hours.
Divisibility, the theory of congruences, primitive roots and indices, the quadratic reciprocity law, arithmetical functions and miscellaneous additional topics. Prerequisite: MATH 223 and MATH 290, or equivalent. LEC.

MATH 750. Stochastic Adaptive Control. 3 Hours.
Stochastic adaptive control methods. Stochastic processes such as Markov chains and Brownian motion, stochastic integral, differential rule, stochastic differential equations, martingales and estimation techniques. Identification and control of discrete and continuous time linear stochastic systems. Specific applications and simulation results of stochastic adaptive control theory. Prerequisite: MATH 627 and some knowledge of control. LEC.

MATH 755. Mathematical Analysis I. 3 Hours.
MATH 765 and MATH 766 are theoretical courses on the fundamental concepts of analysis and the methods of proof. These two courses include the concept of a real number; limits, continuity, and uniform convergence; derivatives and integrals of functions of one and of several real variables. Prerequisite: MATH 223 and MATH 290, or equivalent. LEC.

MATH 766. Mathematical Analysis II. 3 Hours.
A continuation of MATH 765. Prerequisite: MATH 765. LEC.

MATH 780. Numerical Analysis of Linear Systems. 3 Hours.
Computational aspects of linear algebra, linear equations and matrices, direct and indirect methods, eigenvalues and eigenvectors of matrices, error analysis. Prerequisite: MATH 590 and MATH 781. LEC.

MATH 781. Numerical Analysis I. 3 Hours.
Finite and divided differences. Interpolation, numerical differentiation, and integration. Gaussian quadrature. Numerical integration of ordinary differential equations. Curve fitting. (Same as EECS 781.) Prerequisite: MATH 320 and knowledge of a programming language. LEC.

MATH 782. Numerical Analysis II. 3 Hours.
Direct and iterative methods for solving systems of linear equations. Numerical solution of partial differential equations. Numerical determination of eigenvectors and eigenvalues. Solution of nonlinear equations. (Same as EECS 782.) Prerequisite: MATH 781. LEC.

MATH 783. Applied Numerical Methods for Partial Differential Equations. 3 Hours.
Finite difference methods applied to particular initial-value problems (both parabolic and hyperbolic), to illustrate the concepts of convergence and stability and to provide a background for treating more complicated problems arising in engineering and physics. Finite difference methods for elliptic boundary-value problems, with a discussion of convergence and methods for solving the resulting algebraic system. Variational methods for elliptic problems. Prerequisite: MATH 647 or equivalent. LEC.

MATH 790. Linear Algebra II. 3 Hours.
A theoretical course on the fundamental concepts and theorems of linear algebra. Topics covered are: vector space, basis, dimension, subspace,
norm, inner product, Banach space, Hilbert space, orthonormal basis, positive definite matrix, minimal polynomial, diagonalization and other canonical forms, Cayley-Hamilton, spectral radius, dual space, quotient space. Prerequisite: MATH 590. LEC.

MATH 791. Modern Algebra. 3 Hours.
This course includes the following topics: multiplicative properties of the integers and introductions to group theory, ring theory and field theory. Prerequisite: MATH 223 and MATH 290, or equivalent. LEC.

MATH 796. Special Topics: _____. 1-3 Hours.
Arranged as needed to present appropriate material for groups of students. May be repeated for credit. Prerequisite: Variable. LEC.

MATH 799. Directed Readings. 1-3 Hours.
Directed readings on a topic chosen by the student with the advice of an instructor. May be repeated for additional credit. Consent of the department required for enrollment. RSH.

MATH 800. Complex Analysis I. 3 Hours.
Cauchy’s theorem and contour integration; the argument principle; maximum modulus principle; Schwarz symmetry principle; analytic continuation; monodromy theorem; applications to the gamma function and Riemann’s zeta function; entire and meromorphic functions; conformal mapping; Riemann mapping theorem; univalent functions. Prerequisite: MATH 766 or concurrently with MATH 766. LEC.

MATH 801. Complex Analysis II. 3 Hours.
Continuation of MATH 800. Prerequisite: MATH 800. LEC.

MATH 802. Set Theory. 3 Hours.
Axiomatic set theory; transfinite induction; regularity and choice; ordinal and cardinal arithmetic; miscellaneous additional topics (e.g., extra axioms such as GCH or MA; infinite combinatorics; large cardinals). Prerequisite: MATH 765 or MATH 791, or concurrent enrollment in MATH 765 or MATH 791, or equivalent evidence of mathematical maturity. LEC.

MATH 810. Real Analysis and Measure Theory I. 3 Hours.

MATH 811. Real Analysis and Measure Theory II. 3 Hours.
Continuation of MATH 810. Prerequisite: MATH 810. LEC.

MATH 820. Introduction to Topology. 3 Hours.
General topology. Set theory; topological spaces; connected sets; continuous functions; generalized convergence; product and quotient spaces; embedding in cubes; metric spaces and metrization; compact spaces; function spaces. Prerequisite: MATH 765. LEC.

MATH 821. Algebraic Topology I. 3 Hours.
The fundamental group and covering spaces (including classification); compact surfaces; homology theory, computations (including homotopy invariance) and applications (including Brouwer fixed point theorem); introduction to cohomology theory. Prerequisite: MATH 790 and MATH 791 and MATH 820, or permission of instructor. LEC.

MATH 822. Algebraic Topology II. 3 Hours.
Review of simplicial homology; Lefschetz fixed point theorem and degree theory; singular, cellular, and axiomatic homology; Jordan Brouwer separation theorems; universal coefficient theorems, products in cohomology, homotopy groups, and the Hurewicz Theorem. Prerequisite: MATH 821. LEC.

MATH 824. Algebraic Combinatorics. 3 Hours.
An introduction to the fundamental structures and methods of modern algebraic combinatorics. Topics include partially ordered sets and lattices, matroids, simplicial complexes, polytopes, hyperplane arrangements, partitions and tableaux, and symmetric functions. Prerequisite: MATH 724 and MATH 791, or permission of the instructor. LEC.

MATH 830. Abstract Algebra. 3 Hours.
A study of some structures, theorems, and techniques in algebra whose use has become common in many branches of mathematics. Prerequisite: MATH 790 and MATH 791. LEC.

MATH 831. Abstract Algebra. 3 Hours.
Continuation of MATH 830. Prerequisite: MATH 830. LEC.

MATH 840. Differentiable Manifolds. 3 Hours.
Multilinear algebra of finite dimensional vector spaces over fields; differentiable structures and tangent and tensor bundles; differentiable mappings and differentials; exterior differential forms; curves and surfaces as differentiable manifolds; affine connections and covariant differentiation; Riemannian manifolds. Prerequisite: MATH 765 and MATH 790. LEC.

MATH 850. Differential Equations and Dynamical Systems. 3 Hours.
N. Discrete and differentiable dynamical systems with an emphasis on the qualitative theory. Topics to be covered include review of linear systems, existence and uniqueness theorems, flows and discrete dynamical systems, linearization (Hartman-Grobman theorem), stable and unstable manifolds, Poincare sections, normal forms, Hamiltonian systems, and an introduction to bifurcation theory and chaos. Prerequisite: MATH 320 and MATH 766, or permission of instructor. LEC.

MATH 851. Topics in Dynamical Systems. 3 Hours. N.
Topics to be covered include complex dynamical systems, perturbation theory, nonlinear analysis of time series, chaotic dynamical systems, and numerical methods as dynamical systems. This course may be repeated for credit. Prerequisite: MATH 850 or permission of instructor. LEC.

MATH 865. Stochastic Processes I. 3 Hours.
Markov chains; Markov processes; diffusion processes; stationary processes. Emphasis is placed on applications: random walks; branching theory; Brownian motion; Poisson process; birth and death processes. Prerequisite: MATH 627 and MATH 765. LEC.

MATH 866. Stochastic Processes II. 3 Hours.
This is a second course in stochastic processes, focused on stochastic calculus with respect to a large class of semi-martingales and its applications to topics selected from classical analysis (linear PDE), finance, engineering, and statistics. The course will start with basic properties of martingales and random walks and then develop into the core program on Ito’s stochastic calculus and stochastic differential equations. These techniques provide useful and important tools and models in many pure and applied areas. Prerequisite: MATH 727 and MATH 865. LEC.

MATH 870. The Analysis of Variance. 3 Hours.
The general linear hypothesis with fixed effects; the Gauss-Markov theorem, confidence ellipsoids, and tests under normal theory; multiple comparisons and the effect of departures from the underlying assumptions; analysis of variance for various experimental designs and analysis of covariance. Prerequisite: MATH 628 or MATH 728, and either MATH 590 or MATH 790. LEC.

MATH 872. Multivariate Statistical Analysis. 3 Hours.
The multivariate normal distribution; tests of hypotheses on means and covariance matrices; estimation; correlation; multivariate analysis of variance; principal components; canonical correlation. Prerequisite: MATH 628 or MATH 728, and either MATH 590 or MATH 790. LEC.
MATH 874. Statistical Decision Theory. 3 Hours.
Game theory, admissible decision functions and complete class theorems; Bayes and minimax solutions; sufficiency; invariance; multiple decision problems; sequential decision problems. Prerequisite: MATH 628 and MATH 766. LEC.

MATH 881. Advanced Numerical Linear Algebra. 3 Hours. N.
Advanced topics in numerical linear algebra including pseudo-spectra, rounding error analysis and perturbation theory, numerical methods for problems with special structure, and numerical methods for large scale problems. Prerequisite: Math 781, 782, 790, or permission of the instructor. LEC.

MATH 882. Advanced Numerical Differential Equations. 3 Hours. N.
Advanced course in the numerical solution of ordinary and partial differential equations including modern numerical methods and the associated analysis. Prerequisite: MATH 781, 782, 783, or permission of the instructor. LEC.

MATH 890. Fourier Analysis. 3 Hours.
Introduction to modern techniques in Fourier Analysis in the Euclidean setting with emphasis in the study of functions spaces and operators acting on them. Topics may vary from year to year and include, among others, distribution theory, Sobolev spaces, estimates for fractional integrals and fractional derivatives, wavelets, and some elements of Calderón-Zygmund theory. Applications in other areas of mathematics, in particular partial differential equations and signal analysis, will be presented based on the instructor’s and the students’ interests. Prerequisite: Math 810 and Math 800, or instructor’s permission. LEC.

MATH 896. Master’s Research Component. 1-6 Hours.
RSH.

MATH 899. Master’s Thesis. 1-10 Hours.
The.

MATH 905. Several Complex Variables. 3 Hours.
Holomorphic functions in several complex variables, Cauchy’s integral for poly-discs, multivariable Taylor series, maximum modulus theorem. Further topics may include: removable singularities, extension theorems, Cauchy-Riemann operator, domains of holomorphy, special domains and algebraic properties of rings of analytic functions. Prerequisite: MATH 800. LEC.

MATH 910. Algebraic Curves. 3 Hours.
Algebraic sets, varieties, plane curves, morphisms and rational maps, resolution of singularities, Reimann-Roch theorem. Prerequisite: MATH 790 and MATH 791. LEC.

MATH 915. Homological Algebra. 3 Hours.
Injective and projective resolutions, homological dimension, chain complexes and derived functors (including Tor and Ext). Prerequisite: MATH 830 and MATH 831, or consent of instructor. LEC.

MATH 920. Lie Groups and Lie Algebras. 3 Hours.
General properties of Lie groups, closed subgroups, one-parameter subgroups, homogeneous spaces, Lie bracket, Lie algebras, exponential map, structure of semi-simple Lie algebras, invariant forms, Maurer-Cartan equation, covering groups, spinor groups. Prerequisite: MATH 766 and MATH 790 and MATH 791. LEC.

MATH 930. Topics in General Topology. 3 Hours.
Paracompact spaces, uniform spaces, topology of continua, Peano spaces, Hahn-Mazurkiewicz theorem, dimension theory, and theory of retracts. Prerequisite: MATH 820. LEC.

MATH 940. Advanced Probability. 3 Hours.
Probability measures, random variables, distribution functions, characteristic functions, types of convergence, central limit theorem. Laws of large numbers and other limit theorems. Conditional probability, Markov processes, and other topics in the theory of stochastic processes. Prerequisite: MATH 811. LEC.

MATH 950. Partial Differential Equations. 3 Hours.
Introduction; equations of mathematical physics; classification of linear equations and systems. Existence and uniqueness problems for elliptic, parabolic, and hyperbolic equations. Eigenvalue problems for elliptic operators; numerical methods. Prerequisite: MATH 766. LEC.

MATH 951. Advanced Partial Differential Equations II. 3 Hours.
The course uses functional analytic techniques to further develop various aspects of the modern framework of linear and nonlinear partial differential equations. Sobolev spaces, distributions and operator theory are used in the treatment of linear second-order elliptic, parabolic, and hyperbolic equations. In particular we discuss the kind of potential, diffusion and wave equations that arise in inhomogeneous media, with an emphasis on the solvability of equations with different initial/boundary conditions. Then, we will survey the theory of semigroup of operators, which is one of the main tools in the study of the long-time behavior of solutions to nonlinear PDE. The theories and applications encountered in this course will create a strong foundation for studying nonlinear equations and nonlinear science in general. Prerequisite: MATH 950 or permission of the instructor. LEC.

MATH 960. Functional Analysis. 3 Hours.
Topological vector spaces, Banach spaces, basic principles of functional analysis. Weak and weak-topologies, operators and adjoints. Hilbert spaces, elements of spectral theory. Locally convex spaces. Duality and related topics. Applications. Prerequisite: MATH 810 and MATH 820 or concurrent with MATH 820. LEC.

MATH 961. Functional Analysis. 3 Hours.
Continuation of MATH 960. LEC.

MATH 963. C*-Algebras. 3 Hours.
The basics of C*-algebras, approximately finite dimensional C*-algebras, irrational rotation algebras, C*-algebras of isometries, group C*-algebras, crossed products C*-algebras, extensions of C*-algebras and the BDF theory. Prerequisite: MATH 811 or MATH 960, or consent of instructor. LEC.

MATH 970. Analytic K-Theory. 3 Hours.
K0 for rings, spectral theory in Banach algebras, K1 for Banach algebras, Bott periodicity and six-term cyclic exact sequence. Prerequisite: MATH 790 and MATH 791 and MATH 960. LEC.

MATH 990. Seminar: ____. 1-10 Hours.
LEC.

MATH 993. Readings in Mathematics. 1-10 Hours.
RSH.

MATH 996. Special Topics: ____. 3 Hours.
Advanced courses on special topics; given as need arises. Prerequisite: Variable. LEC.

MATH 999. Doctoral Dissertation. 1-10 Hours.
The.

MUSE 701. Museum Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as AMS 731, BIOL 785, GEOL 783, and HIST 728.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.
MUSE 702. The Nature of Museums. 3 Hours.
The purpose of this course is to provide an overview of the kinds of museums, their various missions, and their characteristics and potentials as research, education, and public service institutions responsible for collections of natural and cultural objects. (Same as AMS 720, BIOL 788, GEOL 782, and HIST 720.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

MUSE 703. Introduction to Museum Exhibits. 3 Hours.
Presentation of principles and practices of exhibit management, design, and production. Topics will include developing a master plan for museum exhibits; concept development; design, installation, and maintenance of exhibits; design theory; design process; label writing and editing; selection of materials architectural requirements and building codes; cost estimating; publicity; security; and exhibit evaluation. Consideration will be given to exhibition problems in public and private museums in the areas of anthropology, art, history, natural history, and technology. (Same as AMS 700, BIOL 787, GEOL 781, and HIST 723.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

MUSE 704. Principles and Practices of Museum Collection Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museum collections, their associated data, and their use in scholarly research; cataloging, storage, fumigation, automated information management and related topics will be presented for museums of art, history, natural history and anthropology. (Same as AMS 730, BIOL 798, GEOL 785, and HIST 725.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

MUSE 705. Introduction to Museum Public Education. 3 Hours.
Consideration of the goals of an institution’s public education services, developing programs, identifying potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as AMS 797, BIOL 784, GEOL 784, and HIST 721.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

MUSE 706. Conservation Principles and Practices. 3 Hours.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration and natural history and anthropology. (Same as AMS 730, BIOL 798, GEOL 785, and HIST 725.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

MUSE 707. Practical Archival Principles. 3 Hours.
Study of the principles and practices applicable to the preservation, care, and administration of archives and manuscripts. Practical experience will be an integral part of this course. (Same as HIST 727.) LEC.

MUSE 710. Current Trends in Curation and Collection Management. 2 Hours.
Seminar course to provide students with a working knowledge of the primary issues and current trends in building, administration, and care of scientific collections. Topics include permits, collecting, accessioning, cataloging, preservation, preventive conservation, and access to collections and data. The course format consists of readings, lectures, guest speakers, discussions, and visits to scientific collections on campus. (Same as BIOL 706.) LEC.

MUSE 780. Special Topics: ______. 1-3 Hours.
Advanced courses on special topics in museum studies, given as need arises. Lectures, discussions of readings, and guest speakers. Topic for semester to be announced. Prerequisite: Graduate standing in Museum Studies Program or permission of instructor. LEC.

MUSE 782. Seminar in Current Museum Topics: ______. 1-3 Hours.
In-depth examination of specific topics currently of concern to museums and museum professionals. Topic for semester to be announced. Prerequisite: Graduate standing in Museum Studies Program, or permission of instructor. LEC.

MUSE 790. Advanced Study. 1-3 Hours.
Individual research in a specialized topic not ordinarily treated in a Museum Studies core course for which there is a member of the graduate faculty competent and willing to direct a research project. Prerequisite: Consent of instructor. IND.

MUSE 792. Directed Readings. 1-3 Hours.
Directed reading in an area of Museum Studies in which there is no particular course in the Museum Studies program or in cooperating departments but in which there is a member of the graduate faculty competent and willing to direct a program study. Prerequisite: Consent of instructor. RSH.

MUSE 799. Museum Apprenticeship. 1-6 Hours.
Provides directed, practical experience in research, collection, care, and management, public education, and exhibits with emphasis to suit the particular requirements of each student. (Same as AMS 799, ANTH 799, BIOL 799, GEOL 723, and HIST 799.) FLD.

MUSE 910. Materials Conservation. 3 Hours.
Preservation and collection conservation theory and principles, including condition reporting, conservation of furniture and wooden objects, inorganic-based materials, metal objects, organic-based materials, paintings, photographic materials, textiles, three-dimensional objects, and works on paper. LEC.

MUSE 930. Preventive Conservation. 3 Hours.
Theory and principles of preventive conservation, with emphasis on its application to storage environment quality, archival supports and housings, basic bookbinding, composite objects, integrated pest management, light and lighting, paper evaluation and mending, temperature, and relative humidity. LEC.

MUSE 940. Conservation Assessment. 3 Hours.
Understanding the conservator-curator relationship; principles of conservation assessment, documentation, conservation research, environmental monitoring, handling objects, photographic documentation, and development of a publishable preservation research project. LEC.

MUSE 980. Advanced Conservation. 3 Hours.
Application of conservation theory and practice to exhibition development, planning, and preparation; conservation bookbinding; health and safety in conservation; integrated pest management; ethics of conservation; parameters of professional conservation practice. LEC.

Philosophy Courses
PHIL 140. Introduction to Philosophy. 3 Hours. HR GE11/GE3H / H.
An introductory examination, based primarily on writings of major philosophers, of such central philosophical problems as religious belief, the mind and its place in nature, freedom and determinism, morality, and the nature and kinds of human knowledge. LEC.
PHIL 141. Introduction to Philosophy Honors. 3 Hours. HR GE11/GE3H / H.
An introductory examination, based primarily on writings of major philosophers, of such central philosophical problems as religious belief, the mind and its place in nature, freedom and determinism, morality, and the nature and kinds of human knowledge. Prerequisite: Open only to students in the University Honors Program or by consent of department. LEC.

PHIL 148. Reason and Argument. 3 Hours. GE11/GE3H / H.
An introduction to the theory and practice of logical analysis. Special emphasis is placed upon the logical appraisal of everyday arguments. LEC.

PHIL 150. Philosophical Communication. 3 Hours. GE22 / S.
This course provides an introduction to philosophy, with a focus on the traditional philosophical practice of oral communication and argument. Through exploration of perennial philosophical questions (e.g., Are there different ways of knowing? What makes for a good life? Could computers have minds? Are we obligated to obey the law? What makes you the same person over time?), students develop their ability to participate in various forms of philosophical communication. In this course, students have the opportunity to teach course material to peers, engage in class debates over philosophical issues, and craft short presentations exploring a facet of the course topic. LEC.

PHIL 160. Introduction to Ethics. 3 Hours. HR AE51/GE11/GE3H / H.
An introductory study of the nature of morality and of philosophical bases for the assessment of actions, agents, and institutions. Special emphasis will be placed upon the views of such important philosophers as Aristotle, Hume, Kant, and Mill. Some attention will be paid to applications of moral theory to practice. LEC.

PHIL 161. Introduction to Ethics Honors. 3 Hours. HR AE51/GE11/GE3H / H.
An introductory study of the nature of morality and of philosophical bases for the assessment of actions, agents, and institutions. Special emphasis will be placed upon the views of such important philosophers as Aristotle, Hume, Kant, and Mill. Some attention will be paid to applications of moral theory to practice. Prerequisite: Open only to students in the University Honors Program or by consent of department. LEC.

PHIL 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Philosophy. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LAB.

PHIL 180. Introduction to Social and Political Philosophy. 3 Hours. HR AE51/GE3H / H.
An introductory study, based primarily on classic philosophical texts, of such central issues as the justification of governmental authority, the social sources of power, the nature of a just distribution of social resources, competing conceptions of human nature, and the proper limits of governmental interference with individual liberty. LEC.

PHIL 181. Introduction to Social and Political Philosophy, Honors. 3 Hours. HR AE51/GE3H / H.
An introductory study, based primarily on classic philosophical texts, of such central issues as the justification of governmental authority, the social sources of power, the nature of a just distribution of social resources, competing conceptions of human nature, and the proper limits of governmental interference with individual liberty. Prerequisite: Open only to students in the University Honors Program or by consent of department. LEC.

PHIL 200. Study Abroad Topics in Philosophy: ____. 1-6 Hours. H.
This course is designed for the study of special topics in Philosophy. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

PHIL 310. Introduction to Symbolic Logic. 3 Hours. GE11/GE3H / H.
An introduction to the theory and practice of elementary symbolic logic. Special emphasis will be placed upon the logical analysis of mathematical proof and upon a proof of the consistency of elementary logic. LEC.

PHIL 320. Philosophical Issues in the Life Sciences. 3 Hours. HR AE51/GE3H / H.
A philosophical analysis of theoretical and ethical issues that arise in the practice of the life sciences. Discusses the conceptual foundation of the life sciences—evolutionary theory and genetics. Critically explores the use of statistical and non-human-animal models. Examines ethical issues including problems that arise in human and other animal experimentation, obligations to the environment, proper use of patents, and conflicts in professional duties. LEC.

PHIL 350. Philosophical Issues in Religion. 3 Hours. GE3H / H.
This course will consider, from a philosophical perspective, some of the problems in religion which arise in the development of "Natural Theology" broadly conceived. (Same as REL 380.) LEC.

PHIL 360. Moral Issues in Business. 3 Hours. AE51 / H.
After a brief survey of techniques of moral argument and analysis, particular moral issues related to business will be discussed. These will include such topics as advertising, conflict of interest, personal and corporate responsibility, codes of conduct, private property, strikes, just wage, and the tension between moral ideals and business pressures. LEC.

PHIL 365. Moral Issues in the Professions. 3 Hours. H.
An analysis of the nature and justification of standards of professional conduct. Issues of professional behavior that concern more than one profession such as fidelity to a client's interests, candor, confidentiality, obligations to human research subjects, obligations to uphold professional standards, professional strikes, and affirmative action will be discussed. LEC.

PHIL 366. Moral Issues in Sports. 3 Hours. H.
This course is a philosophical investigation of the nature and value of sports. Provides students with an overview of ethical theory and considers principled answers to questions about the values of sports and about how those values can be sustained or demeaned. Students debate a variety of live controversies in sports today such as drugs, cheating, sexism, racism, the role of sports in educational institutions, Title IX, commercialization, and violence. LEC.

PHIL 370. Moral Issues in Medicine. 3 Hours. H.
After a brief survey of techniques of moral argument and analysis, particular moral issues related to medicine will be discussed. The justification and limits of some rules of professional conduct that deal with such matters as confidentiality, truth-telling, and protection of medical research subjects will be considered. Issues relating to death and dying in medicine such as abortion, euthanasia, and the refusal of life-saving medical therapy also will be discussed. LEC.

PHIL 375. Moral Issues in Computer Technology. 3 Hours. AE51 / H.
After surveying the nature of ethics and morality and learning some standard techniques of moral argumentation, we shall examine such topics as: property and ownership rights in computer programs and software; privacy in computer entry and records; responsibility for computer use and failure; the "big brother" syndrome made possible by extensive personal data banks; censorship and the world-wide web;
PHIL 380. Environmental Ethics. 3 Hours. AE51 / H.
After a brief survey of techniques of moral argument and analysis, particular moral issues related to the environment will be discussed. These will include such topics (one of which may be dealt with in depth) as animal rights, rights of future generations, wilderness preservation, population control, endangered species, and economics and public policy. Prerequisite: EVRN 148 or consent of instructor. LEC.

PHIL 381. Feminism and Philosophy. 3 Hours. AE41/GE3H / H.
An examination of topics of philosophical interest that are important in the feminist movement such as the nature of sexism, the concept of sexual equality, the ethics of sexual behavior, the nature of love, feminist analyses of the value of marriage and family, the ethics of abortion, and justifications for preferential treatment of women. (Same as WGSS 381.) LEC.

PHIL 384. Ancient Philosophy. 3 Hours. HR GE3H / H.
A survey of the thought of the principal philosophers of ancient Greece, with emphasis on the pre-Socratics, Plato, and Aristotle. LEC.

PHIL 386. Modern Philosophy from Descartes to Kant. 3 Hours. HR GE3H / H.
A survey of the writings of such principal philosophers of the modern period as Descartes, Spinoza, Leibniz, Hobbes, Locke, Berkeley, Hume, and Kant. LEC.

PHIL 388. Analytic Philosophy: Frege to Quine. 3 Hours. H.
An introduction to the principal figures in the philosophical tradition that forms the background to contemporary investigations in analytic philosophy of language. Particular attention will be paid to Frege, Russell, Wittgenstein, and Quine. Prerequisite: PHIL 310 or equivalent, or PHIL 310 may be taken concurrently. LEC.

PHIL 418. Introduction to Cognitive Science. 3 Hours. S.
Examines the data and methodologies of the disciplines that comprise Cognitive Science, an inter-disciplinary approach to studying the mind and brain. Topics may include: consciousness, artificial intelligence, linguistics, education and instruction, neural networks, philosophy, psychology, anthropology, evolutionary theory, cognitive neuroscience, human-computer interaction, and robotics. (Same as LING 418, PSYC 418, and SPLH 418.) Prerequisite: Consent of instructor. LEC.

PHIL 499. Senior Essay. 3 Hours. AE61 / H.
This course is required, in addition to regular major requirements, of those students wishing to work for departmental honors in Philosophy. Students wishing to enroll should first speak with the departmental adviser for majors. Prerequisite: Open to senior majors in Philosophy by consent of instructor. IND.

PHIL 500. Studies in Philosophy: _____. 1-6 Hours. H.
(Topic, instructor, and specific prerequisite to be announced in Schedule of Classes.) A study of particular philosophical problems or thinkers not covered by other courses. The course may be offered concurrently by different instructors under different subtitles, and may, with the consent of the chair, be taken more than once if content varies. LEC.

PHIL 504. Philosophy of Sex and Love. 3 Hours. H.
A discussion of philosophical issues such as the relation between love, autonomy, and friendship; heterosexual and homosexual relationships; marriage and adultery; rape and sexual harassment; prostitution; and pornography. LEC.

PHIL 506. Chinese Thought. 3 Hours. NW AE42/GE3H / H/W.
A survey of the principal modes of Chinese thought from their origins through the imperial period. Not open to students with credit in EALC 132. (Same as EALC 642 and HWC 524.) Prerequisite: Eastern Civilization course, or a course in Asian history, or a distribution course in Philosophy. LEC.

PHIL 508. Early Greek Philosophy. 3 Hours. H/W.
A study of the doctrines of Greek philosophy before Plato. Emphasis on the Pre-Socratic philosophers, with some attention paid to the Sophists and the Hippocratic corpus. (Same as GRK 508.) Prerequisite: PHIL 384, or GRK 301, or GRK 302, or GRK 303, or GRK 310, or GRK 312, or permission of instructor. LEC.

PHIL 555. Justice and Economic Systems. 3 Hours. H.
An examination of important representative theories of the justness of an economic system, with particular attention paid to such institutions as private property, a market economy, means and relationships of production, and principles of distribution to individuals. The theorists under consideration include Locke, Adam Smith, Marx and Engels, contemporary utilitarians, Rawls, and Nozick. Prerequisite: A course in ethics or an introductory course in economics or in business. LEC.

PHIL 557. Kant. 3 Hours. H.
A survey of the major works of Immanuel Kant, with attention to his critical method and its application to issues in theoretical philosophy, practical philosophy, aesthetics, or the philosophy of history. Prerequisite: PHIL 386. LEC.

PHIL 560. Nineteenth Century Philosophy. 3 Hours. H.
The development of philosophy in the 19th century. Special attention will be paid to such major figures as Hegel, Kierkegaard, Marx, Nietzsche, and Mill. Prerequisite: PHIL 386. LEC.

PHIL 562. Kierkegaard. 3 Hours. H.
A study of the thought of Soren Kierkegaard through examination of some of his major writings. Some attention is given to his influence on the development of existentialist philosophies. Prerequisite: PHIL 384 or PHIL 386. LEC.

PHIL 570. Nietzsche. 3 Hours. H.
A study of Nietzsche's major writings and ideas, with some attention to his philosophical influence. Prerequisite: PHIL 384 or PHIL 386 or permission of instructor. LEC.

PHIL 580. Marxism. 3 Hours. H/W.
A philosophical study of the classical texts of Marxism and of their contemporary development. Prerequisite: A course in philosophy or a course in political science. LEC.

PHIL 582. Existentialism. 3 Hours. H/W.
A study of the main themes and leading philosophers of the existentialist movement. Prerequisite: Two courses in philosophy. LEC.

PHIL 590. Phenomenology. 3 Hours. H.
A study of the main themes and leading philosophers of the phenomenological movement. Prerequisite: PHIL 386. LEC.

PHIL 592. Contemporary Continental Philosophy. 3 Hours. H.
A study of selected topics in 20th century European philosophy, such as hermeneutics, critical theory, and poststructuralism. Figures to be studied could include Heidegger, Gadamer, Adorno, Habermas, and Foucault. Prerequisite: PHIL 386. LEC.

PHIL 600. Readings in Philosophy: _____. 1-6 Hours. H.
Individual reading on topics not covered in course work. Prerequisite: Consent of instructor. IND.

PHIL 605. The Philosophy of Plato. 3 Hours. H.
A survey of the major works of Plato, with attention both to Plato's distinctive arguments and positions in the major areas of philosophy...
and to the distinctive literary form in which Plato presents his thinking. Prerequisite: PHIL 384. LEC.

PHIL 607. The Philosophy of Aristotle. 3 Hours. H.
A survey of the major works of Aristotle, with the aim of understanding Aristotle's distinctive formulations of central philosophical questions, the arguments he presents for his answers to those questions, and the systematic interconnections between his positions in the different areas of philosophy. Prerequisite: PHIL 384. LEC.

PHIL 608. Hellenistic Philosophy. 3 Hours. H.
Survey of Stoicism, Epicureanism, and Scepticism from their beginnings through the second century AD. Prerequisite: PHIL 384 and another course in philosophy. LEC.

PHIL 610. Symbolic Logic. 3 Hours. H.
Propositional calculus, predicate calculus, consistency, decidability of formal systems, the paradoxes and number concept will be covered. LEC.

PHIL 611. Topics in Symbolic Logic: ______. 1-3 Hours. H.
This course is a workshop in any of a variety of topics in symbolic logic of special importance to contemporary analytic philosophy, such as modal logic, tense logic, axiomatic set theory, Goedel's theorems, model theory, etc. May be repeated for credit as topics vary. Prerequisite: PHIL 310 or PHIL 610, or permission of instructor. LEC.

PHIL 620. Philosophy of Natural Science. 3 Hours. H.
An examination of conceptual and foundational issues in the natural sciences. Topics may include the methodology of science (the nature and status of laws, the precise way in which experiment contributes to theory) and puzzles concerning the content of science (the status of space and time, the problematic nature of quantum mechanics). Prerequisite: PHIL 310 or PHIL 610, or permission of instructor. LEC.

PHIL 622. Philosophy of Social Science. 3 Hours. H.
A critical examination of the methods, concepts, and practices of the social sciences. Topics to be considered may include: theories of explanation, methodological individualism vs. holism, objectivity, the role of rationality, myth and the unconscious in the explanation of behavior, and the value neutrality of science. Prerequisite: One previous course in philosophy, or permission of instructor. LEC.

PHIL 628. Philosophy of Logic. 3 Hours. H.
A systematic treatment of logical theory. Different types of logic will be studied along with their philosophical assumptions, motivations, implications, and uses. Prerequisite: PHIL 310 or PHIL 610. LEC.

PHIL 630. Philosophy of Mathematics. 3 Hours. H.
An examination of varying conceptions of the role and status of mathematical arguments. Topics may include realism/anti-realism, the consequences of Goedel's Incompleteness Theorems, the role of mathematics in the sciences, and an examination of such historical thinkers as Plato, Frege, Russell, Wittgenstein, Goedel, and Hilbert. Prerequisite: PHIL 310 or PHIL 610, or permission of instructor. LEC.

PHIL 638. Philosophy of Language. 3 Hours. AE61 / H.
An examination of the nature of language using the methods of analytic philosophy. Topics may include meaning, truth, reference, language and thought, and the nature of linguistic rules. Prerequisite: PHIL 388 or permission of instructor. LEC.

PHIL 648. Theory of Knowledge. 3 Hours. AE61 / H.
An examination of the nature of knowledge. Topics may include the concept of knowledge, knowledge of the external world, induction, theories of justification, and scientific knowledge. Prerequisite: PHIL 384 and PHIL 386, PHIL 388 (which may be taken concurrently), or permission of instructor. LEC.

PHIL 650. Metaphysics. 3 Hours. AE61 / H.
An examination of some of the central issues in metaphysics. Topics may include causation, the mind-body problem, free will and determinism, modality, natural kinds, the nature of properties, and personal identity. Prerequisite: PHIL 384 and PHIL 386, PHIL 388 (which may be taken concurrently), or permission of instructor. LEC.

PHIL 654. Philosophy of Mind. 3 Hours. AE61 / H.
An examination of the nature of mind using the methods of analytic philosophy. Topics may include consciousness, perception, propositional attitudes, thought and language, action and intention, mind and body, the prospects for scientific psychology, and personal identity. Prerequisite: PHIL 388 or permission of instructor. LEC.

PHIL 662. Aesthetics. 3 Hours. H.
A study of some of the central themes and problems in aesthetics, such as the beautiful and the sublime in nature and the arts. Prerequisite: Two courses in philosophy or graduate standing. LEC.

PHIL 666. Rational Choice Theory. 3 Hours. H.
This course is an introduction to the philosophical issues surrounding individual decision theory, game theory, and social choice theory. This includes issues of scientific theory selection, the nature of preference, the uses of games to model social interaction, and the ethical and political implications of Arrow's impossibility theorem. Formal techniques of modeling and proof, akin to those used in logic and mathematics, will be used in much of the course. Prerequisite: Two courses in economics, a philosophy course numbered 500 or above, or consent of instructor. LEC.

PHIL 668. Political Philosophy. 3 Hours. H.
A systematic analysis of the concepts of politics, with reference to representative political theories. Prerequisite: A course in philosophy and a course in political science. LEC.

PHIL 670. Contemporary Ethical Theory. 3 Hours. AE51 / H.
An examination of some major moral philosophers and some important issues in ethical theory since the beginning of the twentieth century. Topics covered typically include intuitionism, emotivism, utilitarianism, virtue ethics, and the relationship between morality and rationality. Prerequisite: PHIL 160 or PHIL 161 or two courses in philosophy. LEC.

PHIL 671. Feminist Theories in Ethics. 3 Hours. H.
This course addresses the role (if any) that gender plays in constructing ethical theories. Topics include the impact of culture, affect, and the body on our understanding of gender differences and the importance of these differences for ethics. Prerequisite: PHIL 160 or PHIL 161, or two previous philosophy courses. LEC.

PHIL 672. History of Ethics. 3 Hours. AE51 / H.
An interpretive and critical examination of central texts in the history of moral philosophy, which may include works by Aristotle, Hume, Kant, and J.S. Mill. Prerequisite: PHIL 160 or PHIL 161 or two previous philosophy courses. LEC.

PHIL 674. Philosophy of Law. 3 Hours. H.
An examination of the concept of law and of legal reasoning. In addition, the course may consider such topics as natural law, legal excuses, the relations between law and morality, civil disobedience, civil liberties, the concept of property. Prerequisite: Two courses in philosophy or one course in philosophy and one course in law or consent of instructor. LEC.

PHIL 676. Medical Ethics: Life and Death Issues. 3 Hours. AE51 / H.
After a brief survey of techniques of moral argument and analysis especially as they pertain to the moral impermissibility of murder, particular moral and conceptual issues relating to death and dying in medical contexts will be addressed. Topics such as abortion, infanticide, suicide, euthanasia, the definition of death, and the right to refuse life-
sparing medical therapy will be included. Prerequisite: Two courses in biology or consent of instructor. LEC.

PHIL 677. Medical Ethics: Professional Responsibilities. 3 Hours. H.
After a brief survey of techniques of moral argument and analysis, particular moral issues related to the obligations of health care professionals and the rights of patients will be discussed. These will include such matters as confidentiality, truth-telling, informed consent, the ethics of research on human subjects, psychosurgery, the rights of the mentally ill, and the rights of the mentally retarded. Prerequisite: Two courses in biology or consent of instructor. LEC.

PHIL 684. Main Currents of Russian Thought I. 3 Hours. H/W.
A study of philosophical, theological and literary monuments designed to acquaint the student with the main cultural forces that have shaped Russian thought and manners. From the origins to Napoleonic times. (Same as SLAV 684.) LEC.

PHIL 686. Main Currents of Russian Thought II. 3 Hours. H/W.
A continuation of SLAV 684 from the age of Pushkin to the present. (Same as SLAV 686.) LEC.

PHIL 800. Tutorial. 3 Hours.
Intensive supervised training in and application of the techniques of research. Required of every graduate student seeking an advanced degree in the first or second semester of enrollment. Passing this tutorial constitutes partial fulfillment of the Ph.D. RSRS requirements. Consent of instructor required for repeating the course. Prerequisite: Graduate standing. RSH.

PHIL 805. Plato. 3 Hours.
Prerequisite: PHIL 508 or PHIL 605 or PHIL 607 or PHIL 608 or permission of instructor. LEC.

PHIL 807. Aristotle. 3 Hours.
Prerequisite: PHIL 508 or PHIL 605 or PHIL 607 or PHIL 608 or permission of instructor. LEC.

PHIL 820. Topics in the History of Philosophy: _____. 3 Hours.
This course may be offered by different instructors under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic, instructor, and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: 500-600 level course as specified or permission of instructor. LEC.

PHIL 824. Hume. 3 Hours.
Prerequisite: PHIL 648 or PHIL 650 or PHIL 654 or permission of instructor. LEC.

PHIL 828. Kant. 3 Hours.
Prerequisite: PHIL 648 or PHIL 650 or PHIL 654 or permission of instructor. LEC.

PHIL 831. Hegel. 3 Hours.
Prerequisite: PHIL 560 or 500-600 level course as specified or permission of instructor. LEC.

PHIL 833. Nietzsche. 3 Hours.
A study of the philosophy of Friedrich Nietzsche. Prerequisite: PHIL 560 or PHIL 570 or permission of instructor. LEC.

PHIL 835. Frege. 3 Hours.
Gottlob Frege was the founder of the analytic movement in philosophy, having done seminal work in logic, the philosophy of language, and the philosophy of mathematics. This course will focus on his primary texts as well as his influence on present-day studies. Prerequisite: PHIL 628 or PHIL 630 or PHIL 638 or permission of instructor. LEC.

PHIL 843. Heidegger. 3 Hours.
Prerequisite: PHIL 560 or PHIL 562 or PHIL 570 or PHIL 582 or PHIL 590 or PHIL 592 or permission of instructor. LEC.

PHIL 848. Wittgenstein. 3 Hours.
Prerequisite: PHIL 638 or PHIL 650 or PHIL 654 or permission of instructor. LEC.

PHIL 850. Topics in Recent Philosophy: _____. 3 Hours.
This course may be offered by different instructors under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic, instructor, and specific prerequisite to be announced in Schedule of Classes. Prerequisite: 500-600 level as specified or permission of instructor. LEC.

PHIL 852. Quine. 3 Hours.
A systematic study of the major work of W. V. Quine and its influence on subsequent analytic philosophy. Topics will include Quine's theory of meaning, philosophical logic, and philosophy of science. Prerequisite: PHIL 638 or PHIL 648 or PHIL 650 or PHIL 654 or permission of instructor. LEC.

PHIL 855. Davidson. 3 Hours.
An examination of Donald Davidson's seminal work in philosophy of language and philosophy of mind. Among the topics to be considered will be meaning, truth, interpretation, action, and propositional attitudes. Prerequisite: PHIL 638 or PHIL 654 or permission of instructor. LEC.

PHIL 860. Topics in Philosophy of Science: _____. 3 Hours.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 620 or PHIL 622 or PHIL 648 or PHIL 650 or permission of instructor. LEC.

PHIL 862. Topics in Logic: _____. 3 Hours.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 610 or PHIL 628 or PHIL 630 or permission of instructor. LEC.

PHIL 868. Topics in Philosophy of Language: _____. 3 Hours.
This course may be offered under different subtitles and may be taken more than once if the subject matter varies sufficiently. Prerequisite: PHIL 638 or permission of instructor. LEC.

PHIL 870. Topics in Metaphysics: _____. 3 Hours.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 650 or permission of instructor. LEC.

PHIL 872. Topics in Theory of Knowledge: _____. 3 Hours.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 648 or permission of instructor. LEC.

PHIL 877. Topics in Philosophy of Mind: _____. 3 Hours.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 654 or permission of instructor. LEC.

PHIL 880. Topics in Ethics: _____. 3 Hours.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of
PHIL 989. Master’s Thesis. 1-6 Hours.
Six hours of credit will be awarded upon completion of the master’s thesis, but no more than six hours of credit may be obtained in this course altogether. Graded on a satisfactory/unsatisfactory basis. THE.

PHIL 900. Research in Philosophy: _____. 1-3 Hours.
Intensive research in philosophy. This course may be taken through individual arrangement, or in connection with small research seminars which are offered occasionally. Students may only enroll for three hours in any given semester. May be repeated if content varies significantly. Prerequisite: Twelve hours of graduate work. RSH.

PHIL 901. Ph.D. Tutorial. 3 Hours.
Independent research on any topic that a graduate student and a faculty member shall agree on. It shall result in a tightly focused 20-30 page paper. The student’s written work will be repeatedly evaluated over the semester by the director, and the final product must be defended in an oral examination conducted by a three-member faculty committee (including the director). Prerequisite: Students must be admitted to the Ph.D. program and have successfully completed the Ph.D. core courses requirement. RSH.

PHIL 999. Dissertation. 1-12 Hours.
This course may be taken more than once, but not for more than twelve hours of credit in any one semester. Graded on a satisfactory/unsatisfactory basis. THE.

Physics Astronomy Courses

ASTR 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Astronomy. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

ASTR 190. Astronomy and Civilization. 3 Hours. N.
A survey course that describes the interplay between the science of astronomy and cultural beliefs. It uses, among others, examples of how religious and philosophical tenets have enhanced or conflicted with scientific principles. Not for astronomy majors. LEC.

ASTR 191. Contemporary Astronomy. 3 Hours. NP GE3N / N.
The structure and evolution of the universe, from nearby planets to distant quasars, are examined. Topics include recent discoveries concerning planets, stars, pulsars and black holes as well as their evolution, the structure of the universe today and how it will be in the future. The emphasis is descriptive rather than mathematical. Prerequisite: Eligibility for MATH 101. LEC.

ASTR 293. Astronomy Bizarre. 3 Hours. GE3N / N.
An exploration of physical phenomena found in astrophysical extremes. Topics may include the following: the most violent explosions in the Universe (supernovae and gamma ray bursts; the biggest collisions in nature (galaxy interactions; the densest and most bizarre forms of matter (white dwarfs, neutron stars); the strongest magnetic fields (magnetars, pulsars); the amazing range of exo-planetary properties; and the mysteries of black holes. Prerequisite: Eligibility for MATH 101. LEC.

ASTR 390. Undergraduate Problems. 1-3 Hours. AE61 / N.
Undergraduate observational or theoretical problems in astronomy. Maximum credit, six hours. Prerequisite: Permission of department. IND.

ASTR 391. Physical Astronomy, Honors. 3 Hours. NP GE12/GE3N / N.
An honors, calculus-based introduction to astronomy and astrophysics, required for astronomy majors. Components of the Universe - from planetary systems, stellar systems, large scale structure and cosmology - are examined to illuminate the physics principles which govern their evolution. Prerequisite: MATH 125, and either permission of instructor, or participation in the University Honors Program. LEC.

ASTR 394. The Quest for Extraterrestrial Life. 3 Hours. NP GE11 / N.
An introduction to the search for planets around other stars and for life in the universe beyond the earth. A discussion of the astronomical conditions under which life might form and the biological conditions of life formation and evolution. Methods of searching for extraterrestrial life. Prerequisite: An introductory course in biology, astronomy or geology. LEC.

ASTR 400. Topics in Astronomy: _____. 1-3 Hours. N.
A course on special topics in astronomy. Course may be repeated for different topics. Each section may have additional prerequisites to be determined by the instructor. LEC.

ASTR 503. Undergraduate Research. 1-4 Hours. AE61 / N.
This course is for students seeking to fulfill the undergraduate research requirement. Students are expected to participate in some area of ongoing research in the department, chosen with the help of their advisor. At the end of the term, students will present their results in a seminar
to other students and faculty. (Same as EPHX 503 and PHSX 503.)

Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics, or permission of instructor. IND.

ASTR 591. Stellar Astronomy. 3 Hours. N.
Fundamentals of stellar astronomy including astronomical optics and techniques, coordinate and time systems, stellar spectroscopy, properties of normal, binary and variable stars. Prerequisite: PHSX 212 and PHSX 236. An introductory astronomy course is desirable. LEC.

ASTR 592. Galactic and Extragalactic Astronomy. 3 Hours. N.
A study of stellar groups, the interstellar medium, galactic structure and dynamics, galaxies, and cosmology. Prerequisite: ASTR 591 or consent of instructor. LEC.

ASTR 596. Observational Astrophysics. 2 Hours. AE61 / N.
Students acquire practical experience with astronomical equipment and data reduction techniques used in research and educational contexts. ASTR 596, combined with an independent research experience, provides a pathway for students to demonstrate creativity and integration of background knowledge. Prerequisite or corequisite: ASTR 591. LEC.

ASTR 597. Analysis in Astrophysics. 1-3 Hours. AE61 / N.
Individual students work on specialized research problems in the field of observational or theoretical astrophysics. Maximum credit, six hours. Prerequisite: ASTR 592. IND.

ASTR 691. Astrophysics I. 3 Hours. N.
An introduction to radiation processes, thermal processes, and radiative transfer in stellar atmospheres and the interstellar medium. (Same as EPHX 691 and PHSX 691.) Prerequisite: PHSX 313 or consent of instructor. LEC.

ASTR 692. Astrophysics II. 3 Hours. N.
The formation and evolution of stars, nucleosynthesis of the elements, and the physical processes of high energy physics. Prerequisite: ASTR 691 or consent of instructor. LEC.

ASTR 791. Seminar in Astrophysics. 1-3 Hours.
Seminar designed to cover current topics in the physics of the Universe beyond the solar system. Content will vary. Graduate students engaged in or preparing for research may repeat enrollments in this course. Open to undergraduates with twelve hours of physics/astronomy courses numbered 500 or above, or consent of instructor. LEC.

ASTR 792. Topics in Advanced Astrophysics. 3 Hours.
This course will address one or more of the following advanced topics in astrophysics: high energy astrophysics, nuclear astrophysics, galactic and extragalactic astrophysics, space physics, cosmology, astrobiophysics, and the interstellar and intergalactic media (ISM/IGM.) This course may be repeated for credit if topical content differs. (Same as PHSX 792.) Prerequisite: ASTR 692 or permission of instructor. LEC.

ASTR 795. Space Plasma Physics. 3 Hours.
The physics of fully ionized gases in magnetic fields and their application to interplanetary processes, planetary radiation belts, and the surface of the sun. The motion of charged particles in magnetic fields, magnetohydrodynamic waves, the solar wind and the magnetosphere. (Same as PHSX 795.) Prerequisite: PHSX 621. Corequisite: PHSX 631. LEC.

ASTR 815. Computational Physics and Astronomy. 3 Hours.
Advanced computer applications in physics and astronomy. General discussion and illustration of problem organization and solution by numerical and other methods with examples from plasma, space, solid state, elementary particle, and nuclear physics and astronomy. Students will design, write, validate, and document a computer program to solve a physical problem. (Same as PHSX 815 and CHEM 914.) Prerequisite: six hours of computer science courses numbered 300 or above, and six hours of physics and/or astronomy courses numbered 300 or above. LEC.

ASTR 897. Seminar in Plasma and Space Physics. 1-3 Hours.
Graduate students engaged in or preparing for research may repeat enrollments in this course. The content will vary. (Same as PHSX 897.) LEC.

PHSX 111. Introductory Physics. 3 Hours. NP GE11/GE3N / N.
A one-semester survey of classical and modern physics, designed primarily for liberal arts students. Typical subjects include the laws of motion, gravity, electricity and magnetism, sound, light, quantum mechanics, atomic and subatomic physics. Subjects are treated mainly conceptually with some use of basic data. Prerequisite: Eligibility for MATH 104. LEC.

PHSX 112. Concepts in Physics, Honors. 3 Hours. NP GE3N / N.
A discussion of important concepts in physics. While basic concepts such as force, energy, and mass will be introduced as needed, the emphasis will be on an understanding and appreciation of contemporary science. Prerequisite: Eligibility for MATH 104 and participation in the University Honors Program or permission of instructor. LEC.

PHSX 114. College Physics I. 1-4 Hours. NP GE11/GE12/GE3N / N.
Principles and applications of mechanics, fluids, heat, thermodynamics, and sound waves. Three class hours and one laboratory per week. This course emphasizes the development of quantitative concepts and problem solving skills for students needing a broad background in physics as part of their preparation in other major programs, and for those who wish to meet the laboratory science requirement of the College. In special circumstances, permission to enroll in less than four hours may be obtained from the department. Not open to students with credit in PHSX 211 or PHSX 216 or PHSX 212 or PHSX 236. Prerequisite: MATH 104, or three and one-half years of college-preparatory mathematics including trigonometry and a score of 25 or higher on ACT mathematics. LEC.

PHSX 115. College Physics II. 1-4 Hours. N.
A continuation of PHSX 114. Principles and applications of electricity, magnetism, light, atomic physics, and nuclear physics. Three class hours and one laboratory per week. In special circumstances, permission to enroll in less than four hours may be obtained from the department. Not open to students with credit in PHSX 212 or PHSX 236. Prerequisite: PHSX 114. LEC.

PHSX 116. Introductory Physics Laboratory. 1 Hour. U.
A laboratory exploring classical and modern physics, designed primarily for liberal arts students. Experiments in motion gravity, electricity and magnetism, sound, light, atomic and subatomic physics are designed to teach physics concepts and basic laboratory techniques. One two-hour lab period per week. Counts as a laboratory science when preceded or accompanied by PHSX 111. Prerequisite: Eligibility for MATH 104. Corequisite: PHSX 111. LAB.

PHSX 150. Seminar in Physics, Astronomy and Engineering Physics. 0.5 Hours. N.
This course is intended for all students in physics, astronomy and engineering physics. Course content includes topics of current interest in all fields of physics and astronomy. LEC.

PHSX 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Physics. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.
PHSX 201. Transition to General Physics. 1 Hour. N.
Classical mechanics and thermodynamics with calculus for students who have had a prior algebra-based course. Prerequisite: PHSX 114, either MATH 116 or 125; co-requisite MATH 126; and permission of the department. LEC.

PHSX 202. Calculus Supplement to College Physics II. 1 Hour. N.
A calculus-based course in electricity and magnetism for students who have had an algebra-based course in electricity and magnetism. This course, combined with PHSX 115, covers the content of PHSX 212. Prerequisite: PHSX 115 and permission of the department. Corequisite: MATH 126. LEC.

PHSX 210. General Physics I for Engineers. 3 Hours. GE11 / N.
Introduction to classical mechanics and thermodynamics designed for students in the School of Engineering. Students not admitted to the School of Engineering must receive permission from instructor. PHSX 210 and PHSX 211 cannot both be taken for credit. Students with credit in PHSX 114 can obtain only one hour of credit. Prerequisite: MATH 121 with a grade of C or better; courses in high school physics and/or chemistry recommended. LEC.

PHSX 211. General Physics I. 1-4 Hours. NP GE11/GE12/GE3N / N.
Introduction to classical mechanics and thermodynamics. Designed for students in engineering and physical science majors. In special circumstances, permission to enroll for fewer than four hours credit may be obtained from the department. Students with credit in PHSX 114 can obtain only one hour of credit. Prerequisite: MATH 116 or MATH 125; co-requisite MATH 126; courses in high school physics and/or chemistry are recommended. LEC.

PHSX 212. General Physics II. 1-3 Hours. GE3N / N.
Study of electricity and magnetism, waves and sound. In special circumstances, permission to enroll for fewer than three hours credit may be obtained from the department. Students with credit in PHSX 115 can obtain only one hour of credit. Prerequisite: PHSX 211, PHSX 210 or PHSX 213. MATH 116 or MATH 125; co-requisite: MATH 126; courses in high school physics and/or chemistry are recommended. LEC.

PHSX 213. General Physics I Honors. 1-5 Hours. NP GE11/GE12/GE3N / N.
An honors section of PHSX 211 and PHSX 216. Credit for fewer than five hours requires permission of the department. Recommended for students with a strong math background who are either in the University Honors Program or intending to major in a physical science. Courses in high school physics and chemistry are strongly recommended. Prerequisite: MATH 125; co-requisite MATH 126; and permission of instructor. LEC.

PHSX 214. General Physics II Honors. 1-4 Hours. N.
An honors section of PHSX 212 and PHSX 236. Credit for fewer than four hours requires permission of the department. Recommended for students with a strong math background who are either in the University Honors Program or intending to major in a physical science. Prerequisite: PHSX 216 together with either PHSX 211 or PHSX 210; or PHSX 213, and permission of instructor. Co-requisite: MATH 127. LEC.

PHSX 216. General Physics I Laboratory. 1 Hour. N.
Experiments in classical mechanics and thermodynamics. Counts as a laboratory science when accompanied by PHSX 210 or PHSX 211. Pre-or Corequisite: PHSX 210 or PHSX 211. LAB.

PHSX 236. General Physics II Laboratory. 1 Hour. N.
Experiments in electricity and magnetism, waves and sound. Pre-or Corequisite: PHSX 212. LAB.

PHSX 313. General Physics III. 3 Hours. GE3N / N.
Introduction to modern physics. Topics include special relativity, optics, and introductions to quantum mechanics and solid state physics. Prerequisite: PHSX 212 and PHSX 236 or PHSX 214 or EECS 220. Corequisite: MATH 320 or MATH 220. LEC.

PHSX 316. Intermediate Physics Laboratory I. 1 Hour. U.
Experiments in optics and modern physics. Development of experimental skills, data reduction, error analysis, and technical writing. One lab meeting per week and one lecture per week on topics including error analysis and experimental design. Pre-or corequisite: PHSX 313. LAB.

PHSX 400. Topics in Physics and Astronomy: ____. 1-3 Hours. N.
A course on special topics in physics and astronomy, given as the need arises. Course may be repeated for different topics. Each section may have prerequisites to be determined by the instructor. LEC.

PHSX 500. Special Problems. 1-5 Hours. AE61 / N.
Work in some area of physics beyond the topics or material covered in other courses. For some problems, continued enrollment in consecutive semesters may be appropriate. Prerequisite: One junior-senior course in science in an area related to the problem and consent of instructor. IND.

PHSX 501. Honors Research. 1-4 Hours. AE61 / N.
This course is to enable students seeking departmental Honors in Astronomy, Engineering Physics, or Physics to fulfill the undergraduate research requirement. At the completion of the required 4 hours of total enrollment, a written and oral report of the research is required. (Same as EPHX 501.) Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics, or permission of instructor. IND.

PHSX 502. Seminar in Physics and Astronomy Instruction. 1-3 Hours. N.
One meeting per week to plan and report progress on projects which may include tutoring of students in personalized modes of study; developing, administering, and scoring test items; designing and improving demonstration and laboratory experiments. Amount of credit depends on projects contracted for and completed. (Distribution credit given for two-three hours only.) Prerequisite: Evidence of prior academic experience relevant to the student's proposed activities in the seminar and permission of instructor. LEC.

PHSX 503. Undergraduate Research. 1-4 Hours. AE61 / N.
This course is for students seeking to fulfill the undergraduate research requirement. Students are expected to participate in some area of ongoing research in the department, chosen with the help of their advisor. At the end of the term, students will present their results in a seminar to other students and faculty. (Same as ASTR 503 and EPHX 503.) Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics, or permission of instructor. IND.

PHSX 511. Introductory Quantum Mechanics. 3 Hours. N.
An introduction to quantum mechanics, emphasizing a physical overview. Topics should include the formalisms of non-relativistic quantum mechanics, the 3-dimensional Schrödinger equation with applications to the hydrogen atom; spin and angular momentum; multi-particle systems of Fermi-Dirac and Bose-Einstein particles; time-independent perturbation theory. (Same as EPHX 511.) Prerequisite: PHSX 313 and MATH 290. LEC.

PHSX 516. Physical Measurements. 4 Hours. N.
A laboratory course emphasizing experimental techniques and data analysis, as well as scientific writing and presentation skills. Experiments will explore a range of classical and modern physics topics. (Same as EPHX 516.) Prerequisite: PHSX 313, PHSX 316 and PHSX 521. (PHSX 521 may be taken concurrently.) LAB.

PHSX 518. Mathematical Physics. 3 Hours. N.
Applications of modern mathematical methods to problems in mechanics and modern physics. Techniques include application of partial
differential equations and complex variables to classical field problems in continuous mechanics, unstable and chaotic systems, electrodynamics, hydrodynamics, and heat flow. Applications of elementary transformation theory and group theory, probability and statistics, and nonlinear analysis to selected problems in modern physics as well as to graphical representation of experimental data. Prerequisite: PHSX 313 and MATH 320 or permission of instructor. (Same as EPHX 518.) LEC.

PHSX 521. Mechanics I. 3 Hours. N.
Newton's laws of motion. Motions of a particle in one, two, and three dimensions. Motion of a system of particles. Moving coordinate systems. (Same as EPHX 521.) Prerequisite: PHSX 211 and PHSX 216, or PHSX 213; MATH 223; MATH 290; and MATH 220 or MATH 320. LEC.

PHSX 528. Geodynamics and Plate Tectonics. 3 Hours. N.
Study of physical processes in the solid Earth and of geophysical approaches to studying Earth systems at regional and global scales. Topics include global potential fields, thermal regime, rheology and Earth deformation, earthquakes and seismic structure, plate motions and global tectonics. (Same as GEOL 573) Prerequisite: An introductory course in geology; MATH 116 or MATH 122; and PHSX 115, PHSX 214, or PHSX 212 and PHSX 236. LEC.

PHSX 531. Electricity and Magnetism. 3 Hours. N.
The properties of electric and magnetic fields, including electrostatics, Gauss' Law, boundary value methods, electric fields in matter, electromagnetic induction, magnetic fields in matter, the properties of electric and magnetic dipoles, and of dielectric and magnetic materials. (Same as EPHX 531.) Prerequisite: PHSX 214, or PHSX 212 and PHSX 236; PHSX 521 or special permission; MATH 223; MATH 290; and MATH 220 or MATH 320. LEC.

PHSX 536. Electronic Circuit Measurement and Design. 4 Hours. N.
A laboratory course that explores the theory and experimental techniques of analog and digital electronic circuit design and measurements. Topics include transient response, transmission lines, transistors, operational amplifiers, and digital logic. (Same as EPHX 536.) Prerequisite: PHSX 214 or PHSX 212 and PHSX 236; PHSX 521 or special permission; MATH 223; MATH 290; and MATH 220 or MATH 320. LEC.

PHSX 557. Topics in Mechanics, Properties of Materials, Thermodynamics. 1-3 Hours.
This course covers the principles and applications of classical mechanics, fluids, heat, thermodynamics and sound. Teaching of these topics is strongly emphasized. Some laboratory work is included. This course is intended for students accepted to the BS Education major in Physics. This course does not count towards Physics or Astronomy major requirements in the College of Liberal Arts and Sciences. Prerequisite: Math 115 and 116, and either PHSX 114 or PHSX 211. LEC.

PHSX 558. Topics in Electricity and Magnetism and Optics. 1-3 Hours.
This course covers the principles and applications of electricity, magnetism and optics. Teaching of these topics is strongly emphasized. Some laboratory work is included. This course is intended for students accepted to the BS Education major in physics. This course does not count towards Physics or Astronomy major requirements in the College of Liberal Arts and Sciences. Prerequisite: MATH 115 and 116, and either PHSX 115 or PHSX 313. LEC.

PHSX 559. Topics in Modern Physics. 1-3 Hours.
This course covers the principles and applications of quantum mechanics, atomic and nuclear physics. Teaching of these topics is strongly emphasized. Some laboratory work is included. This course is intended for students accepted to the BS Education major in physics. This course does not count towards Physics or Astronomy major requirements in the College of Liberal Arts and Sciences. Prerequisite: MATH 115 and 116, and either PHSX 115 or PHSX 313. LEC.

PHSX 594. Cosmology and Culture. 3 Hours. AE42 / N.
A survey of modern physical cosmology, its recent historical roots, and creation myths from many world cultures. An examination of the effects of these stories on their parent cultures. LEC.

PHSX 600. Special Topics in Physics and Astrophysics: ______. 3 Hours. N.
Different topics will be covered as needed. This course will address topics in physics and astrophysics not covered in regularly offered courses. May be repeated if topic differs. (Same as EPHX 600.) Prerequisite: Permission of instructor. LEC.

PHSX 601. Design of Physical and Electronic Systems. 4 Hours. AE61 / N.
A laboratory course emphasizing the application of physical principles to the design of systems for research, monitoring, or control. Topics include the use of microcomputers as controllers, interfacing microcomputers with measurement devices, and use of approximations and/or computer simulation to optimize design parameters, linear control systems, and noise. (Same as EPHX 601.) Prerequisite: Twelve hours of junior-senior credit in physics or engineering, including one laboratory course. LAB.

PHSX 605. Numerical and Computational Methods in Physics. 3 Hours. N.
An introduction to the use of numerical methods in the solution of problems in physics for which simplifications allowing closed-form solutions are not applicable. Examples are drawn from mechanics, electricity, magnetism, thermodynamics, and optics. (Same as EPHX 615.) Prerequisite: PHSX 313, MATH 320 or equivalent, and ECECS 138 or equivalent. LEC.

PHSX 621. Mechanics II. 3 Hours. N.
Continuation of PHSX 521. Lagrange's equations and generalized coordinates. Mechanics of continuous media. Tensor algebra and rotation of a rigid body. Special relativity and relativistic dynamics. (Same as EPHX 621.) Prerequisite: PHSX 521. LEC.

PHSX 623. Physics of Fluids. 3 Hours. N.
An introduction to basic fluid mechanics in which fundamental concepts and equations are covered. Topics include hydrostatics, hydrodynamics, wave propagation in fluids, and applications in the areas such as astrophysics, atmospheric physics, and geophysics. (Same as EPHX 623.) Prerequisite: MATH 223; MATH 290; PHSX 212 and PHSX 236 (or PHSX 214 can replace PHSX 212 and PHSX 236.) LEC.

PHSX 631. Electromagnetic Theory. 3 Hours. N.
Maxwell's equations, wave propagation, optics and waveguides, radiation, relativistic transformations of fields and sources, use of covariance and invariance in relativity. Normally a continuation of PHSX 531. (Same as EPHX 631.) Prerequisite: PHSX 531. LEC.

PHSX 641. Introduction to Nuclear Physics. 3 Hours. N.
Experimental methods and elementary concepts in nuclear physics, including nuclear forces, alpha and beta decay, gamma radiation, nuclear structure, and reaction systematics. (Same as EPHX 641.) Prerequisite: PHSX 313 and PHSX 511. LEC.

PHSX 655. Optics. 3 Hours. N.
Geometric optics. Wave properties of light: interference, diffraction, coherence. Propagation of light through matter. Selected topics in modern optics, e.g., lasers, fibers. (Same as EPHX 655.) Prerequisite: PHSX 313 and PHSX 316. LEC.
PHSX 661. Introduction to Elementary Particle Physics. 3 Hours. N.
Properties and interactions of quarks, leptons, and other elementary particles; symmetry principles and conservation laws; broken symmetry; gauge bosons; the fundamental interactions, grand unified theories of strong, electromagnetic, and weak interactions; the cosmological implications of elementary particle physics. (Same as EPHX 661.) Prerequisite: PHSX 313 and MATH 320. LEC.

PHSX 671. Thermal Physics. 3 Hours. N.
Development of thermodynamics from statistical considerations. Techniques of calculating thermodynamic properties of systems. Application to classical problems of thermodynamics. Elementary kinetic theory of transport processes. Fermi-Dirac and Bose-Einstein systems. (Same as EPHX 671.) Prerequisite: PHSX 313 and PHSX 511. LEC.

PHSX 681. Concepts in Solids. 3 Hours. N.
Properties of common types of crystals and amorphous solids. Lattice vibrations and thermal properties of solids. Electrons and holes in energy bands of metals, semi-conductors, superconductors, and insulators. (Same as EPHX 681.) Prerequisite: PHSX 313 and PHSX 511. LEC.

PHSX 691. Astrophysics I. 3 Hours. N.
An introduction to radiation processes, thermal processes, and radiative transfer in stellar atmospheres and the interstellar medium. (Same as ASTR 691 and EPHX 691.) Prerequisite: PHSX 313 or consent of instructor. LEC.

PHSX 693. Gravitation and Cosmology. 3 Hours. N.
An overview of topics relevant to gravitation and modern cosmology: special relativity, tensor notation, the equivalence principle, the Schwarzschild solution, black holes, and Friedmann models. Cosmic black body radiation, dark matter, and the formation of large-scale structure. The idea of quantum gravity and an introduction to the current literature in cosmology. (Same as EPHX 693.) Prerequisite: PHSX 313 and MATH 320. LEC.

PHSX 700. Colloquium. 1 Hour.
Topics of current interest in physics, astronomy, and atmospheric science. Repeated enrollments are permitted. LEC.

PHSX 701. Major Experiments and Observations in Classical and Contemporary Physics. 1-3 Hours.
Critique, discussions, and interpretation of the most important discoveries and observations in physics. LEC.

PHSX 702. Introductory Physics Pedagogy. 1 Hour.
This course will address basic elements of pedagogy in specific relation to the teaching of physics and astronomy labs. It contains such elements as: peer and instructor evaluations of teaching, reading and discussion of pedagogical materials, development of online course material, and discussion of teaching methods. This course may be repeated for credit. Prerequisite: Permission of instructor. LEC.

PHSX 711. Quantum Mechanics I. 3 Hours.

PHSX 717. Graduate Seminar. 1 Hour.
First year graduate students meet to survey research opportunities in the department and develop skills in giving oral presentations in physics and related areas. Students will also learn about topics in responsible scholarship that may include: the origin of ideas and the allocation of credit, the treatment of data, scientific misconduct, intellectual property and entrepreneurship, the researcher in society, collaborative research, mentor/trainee responsibilities, and safe practices. LEC.

PHSX 718. Mathematical Methods in Physical Sciences. 3 Hours.
Review of complex variable theory; introduction to the partial differential equations of physical systems; Fourier analysis; special functions of mathematical physics; and chemistry. (Same as CHEM 718.) Prerequisite: Two semesters of junior-senior mathematics. LEC.

PHSX 721. Chaotic Dynamics. 3 Hours.
Topics covered may include the following: dynamical systems, attractors, sensitive dependence on initial conditions, chaos, one-dimensional maps, strange attractors and fractal dimensions, fat fractals, the horseshoe map, symbolic dynamics, linear stability of periodic orbits, stable and unstable manifolds, Lyapunov exponents, topological entropy, quasiperiodicity, strange nonchaotic attractors, nonattracting chaotic sets, fractal basin boundaries, renormalization group analysis, intermittency, crisis and chaotic transients. Prerequisite: Mechanics (PHSX 521, or its equivalent), ordinary differential equations (MATH 320, or its equivalent), and some computer programming knowledge. LEC.

PHSX 722. Geophysical Data Analysis. 3 Hours.
Fourier analysis, sampling theory, prediction and interpolation of geophysical data, filtering theory, correlation techniques, deconvolution. Examples will be chosen from various fields of geophysics. (Same as GEOL 772.) Prerequisite: MATH 250/250/ARCE 250/CE 250/CPE 250/EECS 250/EPHX 250/ME 250 and either GEOL 572 or GEOL 573 or PHSX 528. LEC.

PHSX 723. Seismology. 3 Hours.
General theory of seismic waves, wave field extrapolation (migration) by finite difference methods, construction of travel-time curves, reflection and attenuation coefficients, earthquake source mechanism, distribution and forecasting of earthquakes. (Same as GEOL 773.) Prerequisite: MATH 250/250/ARCE 250/CE 250/CPE 250/EECS 250/EPHX 250/ME 250 and either GEOL 572 or GEOL 573 or PHSX 528. LEC.

PHSX 724. Potential Fields in Geophysics. 3 Hours.
Reduction and interpretation of gravity and magnetic data with emphasis on exploration techniques. Spectral, analytical and modeling methods of analysis of gravity and magnetic anomalies are emphasized. Prerequisite: MATH 250/250/ARCE 250/CE 250/CPE 250/EECS 250/EPHX 250/ME 250 and either GEOL 572 or GEOL 573 or PHSX 528 or consent of instructor. LEC.

PHSX 727. Advanced Geophysics: _______. 1-3 Hours.
Topics to vary with demand and include heat flow, wave propagation, synthetic seismograms, groundwater exploration, geothermal exploration, electrical methods in exploration, rock mechanics-tectonophysics, rock magnetism, geomagnetism, paleomagnetism, geophysical inverse theory, and others upon sufficient demand. May be repeated for different topics. (Same as GEOL 771.) Prerequisite: GEOL 572 or GEOL 573/PHSX 528 or consent of instructor. LEC.

PHSX 731. Molecular Biophysics. 3 Hours.
Methods and concepts in contemporary molecular biophysics are discussed. Particular emphasis is placed on the thermodynamics of macromolecular interactions and quantitative methods of data analysis. Basic enzymology and biophysical spectroscopy will also be reviewed. Prerequisite: PHSX 212, MATH 122, and CHEM 188. LEC.

PHSX 741. Nuclear Physics I. 3 Hours.
Experimental methods in nuclear physics, elementary concepts and simple considerations about nuclear forces, alpha and beta decay, gamma radiation, nuclear structure, and reaction systematics. Prerequisite: PHSX 511. LEC.
PHSX 761. Elementary Particles I. 3 Hours.
Particle accelerators and detectors; quarks and leptons; invariance principles and conservation laws; strong, electromagnetic, and weak interactions of elementary particles; unification of electroweak and other interactions. Prerequisite: PHSX 711. LEC.

PHSX 781. Solid State Physics I. 3 Hours.
Classification of solids, structure and symmetry of crystals; lattice vibrations and thermal properties of solids; electric and magnetic properties; electron theory of metals and semiconductors; electronic and atomic transport processes; theory of ionic crystals. Prerequisite: PHSX 511 (or CHEM 648) and PHSX 671 (or CHEM 646). LEC.

PHSX 791. Seminar in Astrophysics. 1-3 Hours.
Seminar designed to cover current topics in the physics of the Universe beyond the solar system. Content will vary. Graduate students engaged in or preparing for research may repeat enrollments in this course. Open to undergraduates with twelve hours of physics/astronomy courses numbered 500 or above, or consent of instructor. LEC.

PHSX 792. Topics in Advanced Astrophysics. 3 Hours.
This course will address one or more of the following advanced topics in astrophysics: high energy astrophysics, nuclear astrophysics, galactic and extragalactic astrophysics, space physics, cosmology, astrophysics, and the interstellar and intergalactic media (ISM/IGM). This course may be repeated for credit if topical content differs. (Same as ASTR 792.) Prerequisite: ASTR 592 or permission of instructor. LEC.

PHSX 793. Physical Cosmology. 3 Hours.
Discussion of how fundamental laws of physics govern the evolution of the universe as a whole along with its structure. Survey of cosmogenic clues in the observable universe, including observed structures, cosmic background radiation and evidence for dark matter. Development of the universe, including theories of initial conditions; cosmological phase transitions; generation of possible relics and dark matter; symmetry breaking; baryon asymmetry; nucleosynthesis; recombination, gravitational instability and the formation of structure; current experimental techniques. Prerequisite: PHSX 718. Recommended: PHSX 593. LEC.

PHSX 795. Space Plasma Physics. 3 Hours.
The physics of fully ionized gases in magnetic fields and their application to interplanetary processes, planetary radiation belts, and the sun. The motion of charged particles in magnetic fields, magnetohydrodynamic waves, the solar wind, the ionosphere, and the magnetosphere. (Same as ASTR 795.) Prerequisite: PHSX 621. Corequisite: PHSX 631. LEC.

PHSX 800. Graduate Problems. 1-5 Hours.
Advanced laboratory problems, special research problems, or library reading problems. Repeated enrollments are permitted. RSH.

PHSX 801. Advanced Topics. 1-3 Hours.
Lectures on advanced material not covered by regular courses. The topics are not limited but generally address recent experimental or theoretical developments in subjects such as superconductivity, nuclear physics, elementary particle physics, quantum field theory, gauge and unified theories, nonlinear or chaotic systems, space plasma physics, and astrophysics and cosmology. Repeated enrollments are permitted. LEC.

PHSX 811. Quantum Mechanics II. 3 Hours.
Time dependent perturbation theory. Gauge invariance and electromagnetic interactions. Quantization of the electromagnetic field and applications. The Dirac equation, its transformation properties and applications to relativistic problems. Scattering theory, elementary applications, and formal properties. Prerequisite: PHSX 711. LEC.

PHSX 815. Computational Methods in Physical Sciences. 3 Hours.
Advanced computer applications in physical science. General discussion and illustration of problem organization and solution by numerical and other methods with examples from physics, astronomy, and other physical sciences. Students will design, write, validate, and document a computer program to solve a physical problem. (Same as ASTR 815 and CHEM 914.) Prerequisite: Six hours of computer science courses numbered 300 or above, and six hours of physics and/or astronomy courses numbered 300 or above. LEC.

PHSX 817. Graduate Seminar. 1 Hour.
First year graduate students meet to survey research opportunities in the department and develop skills in giving oral presentations in physics and related areas. Prerequisite: Only one hour of 817 can count toward required hours for degree. LEC.

PHSX 821. Classical Mechanics. 3 Hours.
Vector and tensor notation; review of Newtonian mechanics; Lagrangian mechanics; linear vector spaces and matrix theory with applications to the theory of small oscillations; rigid bodies; Hamiltonian formalism. Special relativity. Prerequisite: Twelve hours of junior-senior courses in physics. LEC.

PHSX 831. Electrodynamics I. 3 Hours.
Electrostatics and magnetostatics; Maxwell's equations; plane waves; waveguides. Prerequisite: PHSX 718 and PHSX 821. LEC.

PHSX 841. Nuclear Physics II. 3 Hours.
Nuclear forces and the two-body problem; nuclear models; phenomenological treatment of nuclear reactions and decay processes. Prerequisite: PHSX 741 and PHSX 811. LEC.

PHSX 861. Elementary Particles II. 3 Hours.
Theoretical analysis of the standard model of strong and electroweak interactions. Applications to decay and scattering processes with comparison to experiments. Selected topics in non-perturbative physics. Examples of tests to probe beyond the standard model. Prerequisite: PHSX 761. Corequisite: PHSX 911. LEC.

PHSX 871. Statistical Physics I. 3 Hours.
Review of and advanced topics in thermodynamics; the Maxwell relations; the third law; phase transitions. Kinetic theory: the Boltzmann equation; transport phenomena. Statistical mechanics: ideal Maxwell-Boltzmann, Fermi-Dirac and Bose-Einstein gases; ensemble theory; derivation of the laws of thermodynamics. Prerequisite: PHSX 711 and PHSX 821. PHSX 671 is recommended. LEC.

PHSX 881. Solid State Physics II. 3 Hours.
More advanced topics in solid state physics that may include: diamagnetism, paramagnetism, ferromagnetism, and antiferromagnetism; electron and nuclear spin magnetic resonance; dielectric properties and ferroelectricity; photoconductivity and luminescence. Prerequisite: PHSX 631 and PHSX 711 (or CHEM 915). LEC.

PHSX 895. Plasma Physics. 3 Hours.
Magnetohydrodynamics, including discussion of shocks, waves, and stability theory; statistical mechanical foundations; kinetic theory; microstability; non-linear phenomena. Prerequisite: PHSX 795. LEC.

PHSX 897. Seminar in Plasma and Space Physics. 1-3 Hours.
Graduate students engaged in or preparing for research may repeat enrollments in this course. The content will vary. (Same as ASTR 897.) LEC.

PHSX 899. Master's Research/Thesis. 1-10 Hours.
Research work (either experimental or theoretical) in physics for students working toward the master's degree. Repeated enrollments are permitted. THE.
**PHSX 911. Quantum Mechanics III. 3 Hours.**
Path integral formulation of quantum mechanics. Introduction to quantum field theory using the canonical approach and using the path integral approach. Application of perturbation theory in quantum electrodynamics. Selected applications in condensed matter, nuclear, and particle physics. Prerequisite: PHSX 811. LEC.

**PHSX 912. Quantum Field Theory. 3 Hours.**
Survey of problems in quantum field theory. Functional methods. Renormalization and renormalization group. Role of symmetries. Gauge field theories. Symmetry breaking. Prerequisite: PHSX 911. LEC.

**PHSX 915. Relativity. 3 Hours.**
Reviews of special relativity, manifolds, tensors, and geometry. General coordinate covariance and general relativity. Applications to classical theory of gravitation: weak field tests, isotropic, homogeneous cosmology, Schwarzschild solution. Selected advanced topics. Prerequisite: A total of 10 hours of junior/senior work in physics and mathematics, including at least concurrent enrollment in MATH 646. LEC.

**PHSX 917. Seminar in Theoretical Physics. 1-3 Hours.**
Graduate students engaged in or preparing for research may repeat enrollments in this course. Content will vary. LEC.

**PHSX 931. Electrodynamics II. 3 Hours.**
Inhomogenous Maxwell's equations and multipole radiation fields; special theory of relativity; radiation from accelerated charges: scattering and dispersion. Prerequisite: PHSX 831. LEC.

**PHSX 947. Seminar in Nuclear Physics. 1-3 Hours.**
Graduate students engaged in or preparing for research may repeat enrollments in this course. The content will vary. LEC.

**PHSX 967. Seminar in Particle Physics. 1-3 Hours.**
Graduate students engaged in or preparing for research may repeat enrollments in this course. The content will vary. LEC.

**PHSX 971. Advanced Statistical Mechanics. 3 Hours.**
Advanced equilibrium statistical mechanics and introduction to nonequilibrium statistical mechanics. Topics include: the theory of liquids, critical phenomena, linear response theory and time correlation functions, Langevin dynamics, and molecular hydrodynamics. (Same as CHEM 950.) Prerequisite: PHSX 871 or CHEM 917. LEC.

**PHSX 987. Seminar in Solid State Physics. 1-3 Hours.**
Graduate students engaged in or preparing for research may repeat enrollments in this course. The content will vary. LEC.

**PHSX 999. Ph.D. Dissertation Research. 1-10 Hours.**
Research work (either experimental or theoretical) in physics for students working toward the Ph.D. degree. Repeated enrollments are permitted. THE.

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**Political Science Courses**

**POLS 102. Introduction to Political Science as a Career. 1 Hour. S.**
Provides an overview of the discipline of political science; emphasizes developing an understanding of opportunities in political science at the University of Kansas and careers within a political science degree. Major sub-fields within the discipline are discussed as well as the benefits of particular tracks within the departmental coursework. The course helps students plan their goals for their education and match those goals to career goals. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Enrollment by permission of the instructor only. LEC.

**POLS 110. Introduction to U.S. Politics. 3 Hours. SF GE3S / S.**
An introduction to basic American governmental institutions, political processes, and policy. LEC.

**POLS 111. Introduction to U.S. Politics Honors. 3 Hours. SF GE3S / S.**
Open only to students in the College Honors Program or by consent of instructor. LEC.

**POLS 150. Introduction to Comparative Politics. 3 Hours. SF AE42/GE3S / S.**
An introduction to the comparative study of political systems emphasizing governmental structures, parties, electoral techniques, and recent trends in the field. The course also considers major differences between (1) representative and autocratic systems and (2) developed and underdeveloped nations. LEC.

**POLS 151. Introduction to Comparative Politics Honors. 3 Hours. SF AE42/GE3S / S.**
Open only to students in the College Honors Program or by consent of instructor. LEC.

**POLS 170. Introduction to International Politics. 3 Hours. SF AE42/GE3S / S.**
A study of the nation-state system including the role of nationalism, sovereignty, and power. Patterns of state action including neutrality, collective security, war, and cooperation through international organizations are stressed. Specific examples of contemporary international problems are also analyzed and discussed. LEC.

**POLS 171. Introduction to International Politics Honors. 3 Hours. SF AE42/GE3S / S.**
Open only to students in the College Honors Program or by consent of instructor. LEC.

**POLS 177. First Year Seminar: ____. 3 Hours. GE11 / U.**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Political Science. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

**POLS 249. Study Abroad Topics in Political Science: ____. 1-6 Hours. S.**
This course is designed for the study of special topics in Political Science at the freshman/sophomore level. Course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

**POLS 301. Introduction to Political Theory. 3 Hours. GE3S / S.**
An examination of the perennial issues and major concepts in political philosophy. Ideas such as community, liberty, equality, justice, and democracy will be examined in order to understand the various meanings given to these concepts in political discourse and to understand the role these ideas in various political theories. Prerequisite: Either POLS 110 or POLS 150 or POLS 170, or their honors equivalents. LEC.

**POLS 302. Introduction to Political Theory, Honors. 3 Hours. S.**
Prerequisite: Either POLS 110, POLS 150, or POLS 170, or their honors equivalents and open only to students in the College Honors Program, or by consent of instructor. LEC.

**POLS 306. Political Science Methods of Inquiry. 3 Hours. GE12 / S.**
An introduction to the social science methods of investigation and analysis that are used in political science as a discipline and, in many cases, in public and private sector analytical work as well. The nature of political science data sources and methods of data collection, the logic of social scientific inquiry, and key methods of data analysis are emphasized. Prerequisite: POLS 110 and POLS 150 and POLS 170 (or their Honors equivalents), or consent of instructor. LEC.
POLS 310. Contemporary Issues in U.S. Politics. 3 Hours. S.
An examination of issues and problems concerning government and politics in American society. This course is intended primarily for non-majors, and does not meet the junior/senior level course field distribution requirement. LEC.

POLS 320. Introduction to Public Policy. 3 Hours. GE3S / S.
Offers an introduction to the policy-making process covering policy formulation, adoption, and implementation. Overview of major theories of the policy-making process, the actors involved in the process, and the constraints and enhancements offered by the broader political environment. The theoretical frameworks are applied to several substantive policy areas. Prerequisite: POLS 110. LEC.

POLS 330. Introduction to Public Administration. 3 Hours. S.
Introduction to administration, public policy and policy makings is the study of government workers, the organizations in which they work, how they are financed, and how government engages citizens to help form and maintain community. In various ways, the class sessions explore the three important issues of public administration: discretion, authority, and accountability. (Same as PUAD 330.) Prerequisite: POLS 110. LEC.

POLS 331. Introduction to Public Administration, Honors. 3 Hours. S.
Introduction to administration, public policy and policy making, for honors students, is the study of government workers, the organizations in which they work, how they are financed, and how government engages citizens to help form and maintain community. In various ways, the class sessions explore the three important issues of public administration: discretion, authority, and accountability. (Same as PUAD 331.) Prerequisite: POLS 110. LEC.

POLS 350. Contemporary Issues in Comparative Politics. 3 Hours.
This course will survey selected current political issues around the globe. The focus of the course will be on understanding and analyzing the wide diversity of political phenomena that mark countries around the world. Topics may include such things as elections and electoral politics; political parties; government stability; democratization; ethnic, racial, caste, or religious conflict; protest and revolutionary movements; social movements (environmental, feminist, and others); and the politics of economic reform. This course is intended primarily for non-majors, and does not meet the junior/senior level course field distribution requirement. LEC.

POLS 370. Contemporary Issues in International Politics. 3 Hours. S.
A survey of selected issues in current international relations. Topics include global economic interdependence, regional conflicts and nationalism, United States military and economic policy in the post-Cold War era, the role of international organizations such as the United Nations and the European community, global environmental problems and the contemporary role of international law. This course is intended primarily for non-majors and does not meet the junior/senior level course field distribution requirement. LEC.

POLS 492. Field Work in Politics and Policy-Making. 3-6 Hours. AE61 / S.
This offering provides course credit for field work in politics and policy-making that takes place outside the department's Spring Semester internship programs in Washington, D.C. and Topeka. Consent of Instructor is required prior to enrollment. FLD.

POLS 493. Directed Readings. 1-3 Hours. AE61 / U.
Individual and supervised readings in selected areas of political science. Course is repeatable for different areas; however, only 3 hours of directed readings can be applied to the major. Prerequisite: Six hours of political science, 2.5 overall grade-point average, and prior consent of department. IND.

POLS 494. Washington Semester Intern Seminar. 3 Hours. AE61 / S.
Intern seminar in Washington, D.C. Students meet weekly during Washington Semester program, in speaker/seminar format. Participation is expected, and a term paper is a requirement. Prerequisite: Consent of instructor. FLD.

POLS 495. Topeka Semester Intern Seminar. 3 Hours. AE61 / S.
Intern seminar at statehouse in Topeka. Students meet weekly during this program, in speaker/seminar format. Participation is expected, and a term paper is a requirement. Prerequisite: Consent of instructor. FLD.

POLS 496. Washington Semester Field Work. 3-6 Hours. AE61 / S.
Supervised internships in public and private agency offices in the Washington, D.C. area. This course is open only to students who are participating in the department's organized, supervised, semester-long Washington internship program. In order to be eligible for the program, students must have junior or senior standing, an overall grade-point average of 2.75, must have completed POLS 110 and have a 3.0 grade point average in all political science courses. Course will be graded satisfactory/unsatisfactory. Prerequisite: Consent of instructor is required prior to enrollment. FLD.

POLS 497. Topeka Semester Field Work. 3-6 Hours. AE61 / S.
Supervised internships in public and private agency offices in the Topeka area. This course is open only to students who are participating in the department's organized, supervised, semester-long Topeka internship program. In order to be eligible for the program, students must have junior or senior standing, an overall grade point average of 2.75, must have completed POLS 110 and have a 3.0 grade-point average in all political science courses. Course will be graded satisfactory/unsatisfactory. Prerequisite: Consent of instructor is required prior to enrollment. FLD.

POLS 498. Honors Thesis. 3-6 Hours. AE61 / S.
Political science majors who in their senior year who wish to become candidates for graduation with honors in political science must enroll in and successfully complete six hours of honors thesis work. Consent of the department is required and candidate must have minimum grade point averages of 3.5 in political science courses and 3.25 in all courses, in both in-residence and combined work. IND.

POLS 501. Contemporary Political Thought. 3 Hours. S.
An examination of the major theoretical questions concerning citizenship and government in modern society. Major ideologies and important contemporary philosophers are examined to determine how they address such issues as the meaning of the public interest, the just distribution of power and privilege, the proper role of government in society, and legitimate methods for making collective decisions. Prerequisite: POLS 301, or (for non-majors) completion of the Western Civilization requirement, or consent of instructor. LEC.

POLS 502. History of Political Thought. 3 Hours. S.
A survey of major concepts and theories in political philosophy from Plato to Marx. The emphasis is on understanding major classics in western political thought. Prerequisite: POLS 301, or (for non-majors) completion of the Western Civilization requirement, or consent of instructor. LEC.

POLS 503. Politics in Literature. 3 Hours. S.
An examination and analysis of the portrayal of politics and political problems in literature. Classical and modern texts will be considered, including dramas, poems, and novels. Prerequisite: POLS 301, or (for non-majors) completion of the Western Civilization requirement, or consent of instructor. LEC.

POLS 504. Millenarian Movements. 3 Hours. S.
A historical survey of millenarian movements (the belief in imminent, total, ultimate, this-worldly, collective salvation), with particular attention to their psychological, sociological, and political dimensions. (Same as REL 504.)
Prerequisite: POLS 301 or honors equivalent or for non-majors completion of Western Civilization requirement, or consent of instructor. LEC.

POLS 506. Honors Seminar in Political Research. 3 Hours. S.
Students will be exposed to a variety of topics related to the conduct of political science research. Emphasis will be on how one discerns what is known and what remains to be discovered about a research topic, the development of theories and the hypotheses about the unknown, and the collection of information for testing theories. Students will be expected to begin independent research on a topic that might eventually culminate in an honors thesis. This seminar is intended for political science majors who are in the honors or deans programs, who hold departmental scholarships, and/or who intend to write honors theses. Prerequisite: POLS 306. IND.

POLS 511. The Judicial Process. 3 Hours. S.
Covers judicial functions, organizations, personnel, and processes. Examines the goals of the law and the operations of the legal system in meeting these objectives. Focuses on norm enforcement, conflict resolution, and judicial policy-making. Prerequisite: POLS 110. LEC.

POLS 512. Latino Politics. 3 Hours. S.
An overview of the political position of Latinas/os in the United States. The focus is on the three largest Latino groups in the U.S.: Mexican-Americans, Cuban-Americans, and Puerto Ricans; as well as an examination of other South American and Central American populations in the U.S. The main topics include identity formation, the political circumstances of Latinos, relationship to the electoral process, political behavior, and the policy process. LEC.

POLS 515. American Political Parties. 3 Hours. S.
Survey of the development of the American political party system, stressing party organization, nominating systems, campaigns, elections, role of mass media, and party finances. Prerequisite: POLS 110. LEC.

POLS 516. Public Opinion and American Democracy. 3 Hours. S.
This course examines the construction, administration, and interpretation of public opinion polls. The course will also examine the role of public opinion in the democratic process and the formation of public opinion. LEC.

POLS 520. Political Communication. 3 Hours. H.
This course will focus on contemporary political communication theory and illustrate how such theories are exemplified in modern political contexts: political arguments and developing consensus, constitutional issues and hearings, the rhetorical presidency, the dissemination of political information, and political uses of definition. (Same as COMS 607.) Prerequisite: COMS 130 or COMS 150. LEC.

POLS 521. Rhetoric, Politics and the Mass Media. 3 Hours. H.
This course investigates the ways in which rhetorical strategies (persuasive and linguistic usage) permeate the relationship between politics and politicians and the mass media. We will analyze media coverage of political debates, the presidential use of radio, television and press conferences, and the network evening news coverage of political events to see how political decisions are influenced by and influence the media. (Same as COMS 335.) Prerequisite: COMS 130 or COMS 150. LEC.

POLS 528. Environmental Justice and Public Policy. 3 Hours. S.
This course provides an overview of environmental justice, both as a social movement and as a public policy initiative. Environmental justice examines the distribution of environmental externalities across different socio-economic and racial groups. We will discuss several different public policy areas that have been impacted by the environmental justice movement: hazardous waste facility siting, urban redevelopment and Brownfields, transportation policy, and Native American sovereignty. We will also touch upon international environmental policy in an environmental justice context. Throughout the course we will evaluate empirical issues in studying environmental justice. (Same as EVRN 528.) Prerequisite: POLS 306 or a statistics class or consent of instructor. LEC.

POLS 553. Comparative Environmental Politics. 3 Hours. S.
This course compares environmental politics and policies across a number of countries, including those in North America, Western Europe, East Asia, and Latin America. (Same as EVRN 553.) LEC.

POLS 561. Liberation in Southern Africa. 3 Hours. NW AE42 / S.
This course examines struggles for freedom in southern Africa and the consequences of political, economic, and social changes in the region. The end of colonial rule, the demise of white-settler domination, and the fall of the apartheid regime is discussed. As a major political event of the twentieth century, the liberation of southern Africa had both local and global consequences. The course analyzes transnational issues of liberation and resistance to consider broader regional and international perspectives. Course themes pay particular attention to gender and ethnicity and include a focus on democratization and contemporary meanings of liberation. Prior coursework in African Studies is strongly recommended, but not required. (Same as AAAS 561 and HIST 561.) LEC.

POLS 562. Women and Politics. 3 Hours. S.
This course exposes students to contemporary research on women and politics by surveying the sub-fields of political science. Topics include women's representation in the U.S., women and U.S. public policy, gender and legal theory, international women's movements, women and revolution, and women as political elites. We will examine the ways in which feminist theory and women's activism have challenged the narrow focus of the discipline as well as redefined women's place in society. (Same as WGSS 562.) Prerequisite: A 100-level POLS course or WGSS 201 or permission of instructor. LEC.

POLS 563. Comparative Political Economy. 3 Hours. S.
This course studies fiscal, monetarist, and trade policies to assess the usefulness and problems posed by these policy instruments across countries. This includes examining exchange rates, interest rates, budget deficit, trade deficit, and debt, to understand their composition and relevance to domestic economy, employment, investment, development, and international trade, the problems they pose, and how these may be overcome. We then examine when, how, and why government enacts these instruments across countries and regions. Prerequisite: POLS 150 or POLS 151. LEC.

POLS 564. Elections and Political Parties Around the World. 3 Hours. S.
An examination of the diverse forms of election rules and their consequences for political parties, politicians, and voters. The course will survey election rules in theory and practice; the design and re-design of election rules in new and established democracies; and how elections affect party strategies or governance and representation, and the types of party systems that emerge. The course will also incorporate intensive studies of election campaigns occurring during the semester that the course meets. Prerequisite: POLS 150. LEC.

POLS 565. Political Change in Asia. 3 Hours. S.
This course focuses on three periods of major political changes in Asia since 1945: independence from colonization; adoption of governance; and steps toward democratization. The focus on political change is to help students see that a) many countries initiate political reforms domestically; b) the ability to implement changes is correlated to ability to win support; c) the constitutional process may favor some groups over others; d) the ability to mediate political stability depends on (a), (b), and (c). Prerequisite: POLS 150 or equivalent. LEC.
POLS 566. Social Welfare, Taxation, and the Citizen. 3 Hours. S.
Most developed countries provide for the basic needs of their citizens. Many provide health care, free education, and even retirement funding in exchange for taxes. The U.S. is an exception. The course presents taxation systems in most developed countries, then explores the dimensions of social welfare, and the differential roles of citizens in each country. The final section of the course outlines legislative and legal possibilities for U.S. citizens. Prerequisite: POLS 150. LEC.

POLS 600. Contemporary Feminist Political Theory. 3 Hours. S.
A detailed introduction to feminist thought post-1960. Examines feminism in relation to the categories of political theory: liberal feminism, socialist feminism, radical feminism, and postmodern feminism. Within these categories and separately, we will also consider feminism as it is influenced by women traditionally excluded from mainstream feminist thought, namely U.S. woman of color and women of post-colonial societies. (Same as WGSS 600.) Prerequisite: WGSS 201 or a 100-level POLS course or permission of instructor. LEC.

POLS 601. Political Ideologies. 3 Hours. S.
A systematic survey of the major political ideologies of the 19th and 20th centuries such as anarchism, socialism, liberalism, fascism, communism, and participatory democracy. Prerequisite: POLS 301, or (for non-majors) completion of the Western Civilization requirement, or consent of instructor. LEC.

POLS 602. American Political Ideas. 3 Hours. S.
A study of political movements and thinkers from the Puritan period to the present that have influenced the development of contemporary political ideas. Prerequisite: POLS 301, or (for non-majors) completion of the Western Civilization requirement, or consent of instructor. LEC.

POLS 603. Democratic Theory. 3 Hours. S.
Detailed study of the typical and perennial dilemmas that arise in theories of democratic governance with an emphasis on contemporary analytical investigations of democratic systems. Prerequisite: POLS 301, or (for non-majors) completion of the Western Civilization requirement, or consent of instructor. LEC.

POLS 604. Religion and Political Theory. 3 Hours. S.
An examination of the relationship between religious faith and politics in Western political thought and theory. The approach will be both historical and philosophical, beginning with Moses on the one hand, and the Greeks on the other. Texts will include biblical, Greek philosophical, Jewish and Christian philosophical and theological writings. (Same as REL 604.) Prerequisite: POLS 301, or for non-majors completion of Western Civilization requirement, or consent of instructor. LEC.

POLS 605. A Study of Political Thought in Antiquity. 3 Hours. S.
Possible authors for examination may include Homer, Hesiod, Plato, Aristotle, Cicero, and Augustine, among others. Central topics will include the problems of truth and knowledge, justice, power, human rule, and the relationship of the individual to the community. Prerequisite: POLS 301, or (for non-majors) completion of Western Civilization requirement, or consent of instructor. LEC.

POLS 607. Modern Political Theory. 3 Hours. S.
An analysis of works by various authors, with the intention of exploring the political ideas that emerge in conjunction with the appearance of modern science, the Enlightenment, the Industrial Revolution, and Romanticism. Topics will include the modern conceptions of the nature of being, truth, justice, and the relationship of the individual to the community. Prerequisite: POLS 301, or (for non-majors) completion of Western Civilization requirement, or consent of instructor. LEC.

POLS 608. Social Choice and Game Theory. 3 Hours. S.
A survey of the political economic approach to individual and collective choice behavior called "rational choice." The course focuses on models of voting systems and other political institutions as seen from a game theoretic perspective. Prerequisite: Nine hours of political science and completion of the College of Liberal Arts and Sciences mathematics requirement for the B.A. degree. LEC.

POLS 609. Topics in Political Theory: ___. 3 Hours. S.
A study of selected theorists in relation to a topic in political theory. Sample topics include: revolution; authority and community; elements of political power; political elites: ideology, human nature in politics, political conflict, etc. Theorists will range from ancient to contemporary. Course is repeatable for different topics. Prerequisite: POLS 301, or (for non-majors) completion of Western Civilization requirement, or consent of instructor. LEC.

POLS 610. Constitutional Law: Governmental Powers. 3 Hours. S.
The Supreme Court viewed as a political branch of our government. Special emphasis on the Court's role in determining powers of government and their relationships. Prerequisite: POLS 110. LEC.

POLS 611. Constitutional Law: Civil Liberties. 3 Hours. S.
The constitutional limits on governmental powers are studied with special emphasis on constitutional guarantees of individuals freedom. Prerequisite: POLS 110. POLS 610 is recommended. LEC.

POLS 612. Psychology in Politics. 3 Hours. S.
An examination of psychological perspectives on political phenomena. Topics include political personality, foreign policy decision making, international conflict and cooperation, voting behavior, and political participation and socialization. Prerequisite: Nine hours of political science, including POLS 110 and POLS 170. LEC.

POLS 613. Comparative U.S. State Politics. 3 Hours. S.
A systematic comparative analysis of structures, functions, and policies of state political systems. Prerequisite: POLS 110 or consent of instructor. LEC.

POLS 614. Urban Politics. 3 Hours. S.
A survey of the social, cultural, economic, and structural differences among cities and an investigation into how these factors affect urban politics and policies. Specific topics include leadership, governmental reform, citizen participation, inter-ethnic conflict, and economic development. Prerequisite: POLS 110. LEC.

POLS 615. Campaigns and Elections. 3 Hours. S.
This course examines the behavior of candidates, campaigns, and voters in the electoral process. Topics will include the role of media, the impact of money, the operations of political campaigns and the effect of campaign laws. LEC.

POLS 616. Interest Group Politics. 3 Hours. S.
Study of internal group organization and the politics of interests within the U.S. policy-making process. Prerequisite: POLS 110. LEC.

POLS 617. The Congress. 3 Hours. S.
Descriptive and comparative analysis of legislative institutions and processes in the United States, covering Congress and state legislatures. Prerequisite: POLS 110. LEC.

POLS 618. The Presidency. 3 Hours. S.
The office of the President of the United States, its place in the constitutional and political system. Emphasis is given to modern experience and current problems. Prerequisite: POLS 110. LEC.
POLS 619. Topics in American Politics: ______. 1-3 Hours. S.
A study of selected contemporary problems of policy or politics in the United States. Course is repeatable for different topics. Prerequisite: POLS 110. LEC.

POLS 620. Formulation of Public Policy. 3 Hours. S.
Analysis and evaluation of the structures and processes involved in the formulation of public policy at all levels of government. Prerequisite: POLS 110. LEC.

POLS 621. Public Policy Analysis. 3 Hours. S.
An introduction to the study and analysis of public policy with emphasis on the concepts and techniques of policy thinking. The methods of policy description, explanation, evaluation, and choice will be applied to a variety of policy topics, e.g., health care, defense, environmental protection, education, etc. Prerequisite: POLS 110. LEC.

POLS 622. Government and the Economy. 3 Hours. S.
An examination of the formulation and execution of government policies in the economy and the business sector; the impact of the economy and business on government policies and the impact of government policies on the economy and business. Prerequisite: POLS 110 or consent of instructor. LEC.

POLS 623. The Politics of Social Policy. 3 Hours. S.
An examination of the formulation and execution of key social policies in the United States, such as welfare policy, crime and drug control policy, disability rights policy, education policy, and social regulatory policy concerning controversial social issues such as abortion and gun control. Prerequisite: POLS 110. LEC.

POLS 624. Environmental Politics and Policy. 3 Hours. S.
Analysis of environmental politics and the formulation and implementation of environmental policy. Examines the history and development of environmental politics as well as current trends. Themes include interest groups, business interests, political institutions, and specific environmental policy issues. (Same as EVRN 620.) LEC.

POLS 625. Extremist Groups and Government Response. 3 Hours. S.
Examines left- and right-wing extremist political groups in America and how the government has developed policies and respond to these groups. Special attention will be given to the process of policy adoption and implementation and how the government might respond to extremist groups in the future. Issues and themes will include groups such as the left-wing terrorists of the 1960s and 1970s, right-wing anticommu nitist groups of the 1950s and 1960s, International terrorists acting in the U.S., hate crime, ecoterrorism, citizen militia groups, and pro- and anti-abortion extremist groups. Prerequisite: POLS 110. LEC.

POLS 626. Introduction to Survey Research. 3 Hours. S.
This course introduces the theory and methods used in survey research. The topics include types of surveys, type of sampling methods, questionnaire and codebook construction and analysis. Prerequisite: POLS 306. LEC.

POLS 627. Advanced Issues in Survey Research. 3 Hours. S.
This course focuses on the problems encountered while implementing surveys in specific populations (in the United States and Europe) and in developing countries. The course identifies problem areas such as in sampling and questionnaire design; and addresses how researchers overcome these problems. Prerequisite: POLS 306 and POLS 626. LEC.

POLS 628. The Politics of Public Health. 3 Hours. S.
This course examines the social, institutional and political context of public health policy in the United States. We will examine factors that shape the nation's public health, explore the role of government in reducing risk and promoting well being, and analyze the major institutions responsible for monitoring, protecting and promoting general public health. Themes include the social determinants of health, health disparities, emerging infectious diseases, food safety, transportation, and environmental health. (Same as EVRN 628.) Prerequisite: POLS 110 and POLS 306 are recommended. LEC.

POLS 629. Topics in Public Policy: ______. 1-3 Hours. S.
Examination of the U.S. political system and policy formulation and administration through intensive analysis of selected current public policy problems. Sample topics include the environment, education, and economic well-being. Course is repeatable for different topics. Prerequisite: POLS 110. LEC.

POLS 630. Politics of Identity. 3 Hours. AE41 / S.
This seminar explores the nature of identity and how identity is relevant to politics and policy with a focus on political attitudes and behavior, institutions, and public policy. Topics include individual and group identity, identities such as gender, racial, sexual orientation, and partisan, and the enduring importance of identity for understanding politics as well as the policy process. The approach is multidisciplinary but political science perspectives are relied on more heavily. (Same as WGSS 630.) Prerequisite: POLS 110 and POLS 306 are recommended. LEC.

POLS 634. Bureaucratic Politics. 3 Hours. S.
Examination of U.S. governmental agencies with special attention to their development and role in the American political system. Prerequisite: POLS 330. LEC.

POLS 640. Politics of Reproductive Policy. 3 Hours. S.
Reproductive policy has historically been a highly politicized policy arena, which has elicited attention from the political community as well as the public. This course moves beyond the popular rhetoric associated with reproductive issues, by critically investigating the history, development, implementation and the relative success of various reproductive policies in the United States. These policies are compared to, and assessed against, policies governing similar topics in various countries. (Same as WGSS 640.) Prerequisite: POLS 110 or consent of instructor. LEC.

POLS 644. Justice and Public Policy in Democratic Societies. 3 Hours. S.
Examines the ethical and philosophical choices that inform public policy in democratic societies. The guiding idea of the course is that public policies reflect underlying decisions about the nature of state authority and the just use of that authority. The theoretical focus is on modern European and American liberal democratic thought; the empirical focus is global. Among the policy issues examined in the course are public education, immigration, gender equality, same-sex marriage, and drugs. Prerequisite: POLS 150 or POLS 301. LEC.

POLS 645. Corruption, Crisis and Scandal. 3 Hours. S.
This course investigates political events and decisions that are considered illegal or illegitimate. Cases from the U.S. and around the world are considered. Issues discussed include the misuse of governmental power and funds, electoral fraud, and bribery. Conditions under which problems arise and reforms that address them are considered. Prerequisite: POLS 110 and POLS 150. LEC.

POLS 650. Palestinians and Israelis. 3 Hours. S.
Examines the international relations, political institutions, and social policies of these two ethno-national communities in relation to each other. Specific topics include the historical evolution of the Israeli-Palestinian conflict, prospects for conflict resolution, electoral systems and political parties in the two nations, state-society relations, social movements, and roles of gender and religion. Prerequisite: Nine hours of Political Science, including POLS 150/POLS 151 or POLS 170/POLS 171, or permission of instructor. LEC.
POLS 651. Women and Politics in Latin America. 3 Hours. S.
This course examines the ways in which Latin American women have engaged in politics in the past two decades. Cases will draw from a variety of countries in Latin America. Students are expected to develop insights, through comparative analysis, into why women "do politics" in certain ways, the role of the State in women's politics, the (dis)advantages of various political strategies, and the ways in which political, economic, and social changes over time have affected women's political opportunities and interests. (Same as WGSS 651.) Prerequisite: Six hours of course work in Political Science and/or Women's Studies and/or Latin American Studies. LEC.

POLS 652. Politics in Europe. 3 Hours. S.
The study of the politics and government of Europe. Major countries are covered in depth, while smaller democracies are grouped according to political concepts. Prerequisite: POLS 150. LEC.

POLS 653. Gender, War, and Peace. 3 Hours. S.
This course explores ways in which militarization and warfare are gendered processes. We ask, what does war tell us about gender, and what does gender tell us about war? Though the majority of fighters are men, women are essential to war efforts. They also represent a high proportion of the casualties of war. Yet women are rarely examined in relation to war; thus we work to uncover women's experiences of war. We also look to women's contributions to the peace movement in terms of both theory and practice, asking: Is peace a feminist issue? Should feminists support women's access to combat positions or oppose the military? What if women ruled the world--would that end wars? Does militarized masculinity harm men more than benefit them? How do states mobilize citizens to war and how is the process gendered? (Same as WGSS 653.) Prerequisite: One of the following: POLS 150, POLS 151, POLS 170, POLS 171, WGSS 201, WGSS 202. LEC.

POLS 654. Politics and Government of Russia and the Central Eurasian States. 3 Hours. S/W.
The collapse of the Soviet system and the problems of transforming a central planned authoritarian state into a free market democracy. The roles of ethnic and national tensions, economic decay, and cultural factors. Prerequisite: Eight hours in the social sciences and/or history, including POLS 150, or consent of instructor. LEC.

POLS 655. Politics of East-Central Europe. 3 Hours. S/W.
This course analyzes Communist political theory in its application to the countries of East-Central Europe with consideration of their traditional backgrounds and their patterns of political, social, and economic developments. It constructs a theoretical model of the communist state and discusses its variations by description and comparison of the governments and political processes of Albania, Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, Rumania, and Yugoslavia. Prerequisite: POLS 150 and three hours in the social sciences or East European history, or consent of instructor. LEC.

POLS 656. Governments and Politics of East Asia. 3 Hours. NW AE42 / S/W.
A comparative examination of the contemporary political institutions, processes and ideas of China, Japan, and Korea. (Same as EALC 656.) Prerequisite: POLS 150 or a course in East Asian studies. LEC.

POLS 657. Government and Politics of Southeast Asia. 3 Hours. NW AE42 / S/W.
An evaluation of the traditional and contemporary political institutions, behavior and ideas of the countries of Southeast Asia. Prerequisite: POLS 150 or a course in Asian history or Southeast Asian history. LEC.

POLS 658. Theories of Politics in Latin America. 3 Hours. S/W.
This course examines how political science can be used to explain the political dynamics of Latin America. The course will be devoted to understanding different theories about politics -- many of which have been devised by political scientists whose primary focus of study is not Latin America -- and examining their uses and limitations in understanding Latin America. Among the themes we will be examining are the relationships between economic growth, political culture, and democracy, the role of the military in politics, the political impact of new social movements (such as the women's movement and religious movements), theories of revolution, and understanding the prevalence of political corruption in the region. Along the way, we will analyze how political scientists attempt to develop hypotheses, gather data, and test theories. Prerequisite: POLS 150 or a social science course in Latin American topics. LEC.

POLS 659. Political Dynamics of Latin America. 3 Hours. S/W.
Study of the institutions, processes, and special problems of selected Latin American countries. Prerequisite: POLS 150 or a course concerning Latin America in the social sciences or history. LEC.

POLS 660. The Politics and Problems of Developing Countries. 3 Hours. NW AE42 / S/W.
A focus on topics pertinent to all of the underdeveloped areas such as the role of the military, styles of political leadership, land tenure systems, the role of the middle sectors, the nature of bureaucracy, the activity of the students, and foreign policy attitudes. Prerequisite: One of the following: POLS 652, POLS 653, POLS 654, POLS 655, POLS 656, POLS 657, POLS 658, POLS 659. LEC.

POLS 661. Politics of the Middle East. 3 Hours. NW AE42 / S/W.
Survey of domestic and international political developments in the Middle East. Topics include: emergence of the modern nation-state, the role of Islam, leadership patterns, competing political ideologies, prospects for democratization, foreign policy relations, and regional conflicts. Prerequisite: Nine hours in political science, including POLS 150 and POLS 170 or their honors equivalents, or permission of instructor. LEC.

POLS 663. Protest and Revolution. 3 Hours. S.
An exploration of what happens when protesters challenge a state. The course focuses on the interactions and outcomes of dissonant and state conflict. Topics include the relation between coercion and protest, strategy, violence, terrorism as adaption, civil war and regime transition. Prerequisite: POLS 150. LEC.

POLS 664. Middle East Politics, Honors. 3 Hours. S.
Honors Version of POLS 661. Survey of domestic and international political developments in the Arab countries, Iran, Turkey, and Israel. Topics include state-society relations (e.g., forms of political organization, electoral politics, opposition movements, human rights, political Islam, gender), regional and international foreign relations, and the Arab-Israeli conflict. Prerequisite: Nine hours of Political Science, including POLS 150/151 and POLS 170/171, and membership in the University Honors Program; or by permission of instructor. LEC.

POLS 665. Politics in Africa. 3 Hours. NW AE42 / S.
A survey of politics in Africa, focused on the countries of sub-Saharan or Black Africa. The course includes a historical discussion of precolonial Africa, colonization and the creation of contemporary states, and the politics of independence, before examining contemporary political systems and the forces influencing patterns of politics on the continent. (Same as AAAS 660.) Prerequisite: POLS 150 or AAAS 105 or AAAS 305 or consent of instructor. LEC.

POLS 666. Political Economy of East Asia. 3 Hours. S.
This course provides basic understanding of fiscal, monetarist, and trade politics; how governments in East Asia use them to pursue growth;
the extent to which these governments follow or controvert economics to pursue growth; and how the performances of economies in East Asia relate to the U.S. and global economies. (Same as EALC 666.) Prerequisite: POLS 150. LEC.

POLS 667. Islam and Politics. 3 Hours. NW AE42/AE51 / S.
This course gives students a basic understanding of Islamic and Islamic movements, explores the economic, social, political, and cultural context in which these movements take place, and examines the impact of Islam on politics in select countries. Issues such as compatibility of political Islam and democratic politics, political economy in Muslim societies, fundamentalism in Islam, gender relations, identity politics and questions on clash of civilizations are explored. (Same as SOC 640.) Prerequisite: A principal course in sociology, POLS 150, or consent of instructor. LEC.

POLS 668. Reform in Contemporary China. 3 Hours. NW AE42 / H/W.
Examines the epochal changes that have occurred in China from Deng Xiaoping’s rise to power in 1978 to the present. Includes a focus on the historical background of the revolutionary period before examining the political and economic changes that spawned the 1989 "prodemocracy" movement at Tiananmen. The course includes an analysis of the events of the 1990s focusing on U.S.-China political and economic relations and the destabilizing effects of inflation, infrastructural reform, political and economic decentralization, and leadership succession. A previous course on China is helpful, but not mandatory. (Same as EALC 585.) LEC.

POLS 669. Topics in Comparative Politics: , 2-3 Hours. S.
A study of selected contemporary problems of policy or politics affecting several countries. Course is repeatable for different topics. Prerequisite: POLS 150. LEC.

POLS 670. United States Foreign Policy. 3 Hours. S.
An evaluation of the formulation of United States foreign policy in the post-World War II period. Economic, military, and diplomatic dimensions of policy; internal and external influences on policy; theories of foreign policy decision-making. Prerequisite: Nine hours of political science, including POLS 170. LEC.

POLS 671. International Cooperation. 3 Hours. S.
An examination of the gains possible from international cooperation and the barriers to achieving cooperation. Theoretical perspectives on international cooperation will be explored along with cases such as trade, the environment, arms control, and the European community. Prerequisite: POLS 170 or consent of instructor. LEC.

POLS 672. International Political Economy. 3 Hours. S.
Structural theories of the international political economy provide the framework for a consideration of the nature of hegemony, the management problem of multinational corporations, the role of international regimes and organizations, development, and dependency. Prerequisite: Nine hours of political science, including POLS 170. LEC.

POLS 673. International Organization. 3 Hours. S.
International organizations are examined with special emphasis devoted to the United Nations. A central theme of the course rests upon the question of whether strengthened international organization offers the only alternative to further world wars. Prerequisite: POLS 170 and three additional hours of political science. LEC.

POLS 674. International Ethics. 3 Hours. H.
This course reviews how philosophical perspectives elucidate the role ethics plays in foreign policy. It covers human rights doctrines, issues of economic and political justice, just war theory (jus ad bellum) and just conduct of war (jus en bello) and humanitarian intervention. Prerequisite: POLS 170 or POLS 171. LEC.

POLS 675. Russian Foreign Policy. 3 Hours. S/W.
Examination of the history of Soviet and Russian foreign policy and current issues of foreign policy in the Post-Soviet era. Analysis of foreign policy making in Russia and the other Post-Soviet states. Emphasis on the changed nature of international security problems after the cold war and on the role of foreign policy in economic development. Prerequisite: Eight hours in the social sciences or history, including either POLS 170 or a course in Russian history. LEC.

POLS 676. International Relations of Asia. 3 Hours. S/W.
An intensive study of the problems of ideological conflict, diplomatic relations, strategic arrangements, economic cooperation, and cultural exchange in East and Southeast Asia with special emphasis upon the roles of major world powers. (Same as EALC 676.) Prerequisite: POLS 170 or a course in East Asian studies. LEC.

POLS 677. U.S. National Security Policy. 3 Hours. S.
An investigation into (1) how security policy is made; (2) the evolution of changing assumptions, strategies and goals since 1945; and (3) the present policy and its alternatives. Prerequisite: Six hours of political science, including POLS 170. LEC.

POLS 678. Chinese Foreign Policy. 3 Hours. S/W.
In-depth examination of China’s changing policies toward other countries with special emphasis on policy-making process, negotiating behavior, military strategy, economic relations, and cultural diplomacy. (Same as EALC 678.) Prerequisite: POLS 170 or a course in East Asian studies. LEC.

POLS 679. International Conflict. 3 Hours. S.
Examination of the historical and theoretical issues surrounding the sources and control of international conflict. Topics will include political and anthropological theories of conflict, the role of force in the international system, international law and just war approaches, nuclear conflict, arms control, and nonviolent alternatives to conflict. Prerequisite: Nine hours of political science, including POLS 170; POLS 306 is recommended. LEC.

POLS 680. International Relations in Political Philosophy. 3 Hours. S.
A consideration of classical and modern theories of the international system, such as the writing of Thucydides, Machiavelli, eighteenth-century realists, and others. Topics include, theories of the state, the role of ethics and normative judgments in the world order, the nature and use of power, the relationship between domestic and international politics. Prerequisite: POLS 301, or (for non-majors) completion of the Western Civilization requirement, or consent of instructor. LEC.

POLS 681. Comparative Foreign Policy. 3 Hours. S.
An examination of theories that seek to explain the foreign policy behavior and decision making processes of states in international relations and a survey of past and present foreign policies of several states in Latin America, Western and Eastern Europe, Africa, the Middle East, and the Far East. Prerequisite: Nine hours of political science, including POLS 150 and POLS 170. LEC.

POLS 683. International Mediation, Honors. 3 Hours. S.
This seminar examines the theories about, research on, and the practice of international mediation and other forms of non-militarized third party intervention used to address interstate, intrastate, and nonstate disputes. Specific topics include how mediation differs from other forms of non-militarized peace-building and conflict resolution; the conditions for mediation success (and how ‘success’ is defined; third party involvement after protracted civil conflict; the role of third parties in the implementation of peace agreements; the relationship between mediation, peace-building, and international law; and proactive conflict management. Prerequisite:
Nine hours of political science, including POLS 170/171 and membership in the University Honors Program, or by permission of instructor. LEC.

**POLS 684. International Law: The State and the Individual. 3 Hours. S.**

International law has assumed an increasingly significant role in international life. This course will examine major law including (but not limited to): the changing status and role of the state; rights of minorities and self-determination; the environment; and human rights. The course will examine the central questions and the relevant international legal principles associated with each issue. Prerequisite: Six hours of Political Science, including POLS 170. LEC.

**POLS 685. International Law: Laws of Armed Conflicts. 3 Hours. S.**

This course examines the principles, roles, and functions of international law in the conduct of war. As the course reviews the development and application of the basic rules of armed conflict, several current issues and conflicts are addressed including: the legitimate use of force; the proper definitions of combatants and civilians; actions that constitute war crimes, the legality of new weapons technology, and, if the laws of armed conflict apply to the current "war on terrorism." Prerequisite: Six hours of Political Science, including POLS 170. LEC.

**POLS 689. Topics in International Relations:. 2-3 Hours.**

A study of selected problems in international relations. Course is repeatable for different topics. Prerequisite: POLS 170. LEC.

**POLS 701. Political Theory. 3 Hours. S.**

This course is intended to introduce graduate and advanced undergraduate students to the kinds of activities engaged in by political theorists. Thus the course focuses on several approaches to doing political theory, such as interpreting the work of great political philosophers, clarifying political concepts, organizing and integrating political ideas, evaluating political practices, and creating new political perspectives. The course focuses on historical and contemporary treatments of both epistemological issues (the possibility and grounds for political knowledge) and selected substantive issues (e.g., the legitimacy of the state, the merits and limitations of democracy, the requirements of justice, and the nature and importance of ideologies). LEC.

**POLS 703. Social Choice and Game Theory. 3 Hours.**

A survey of the political economic approach to individual and collective choice behavior called "rational choice." The course focuses on models of voting systems and other political institutions as seen from a game theoretic perspective. Prerequisite: Nine hours of political science or admission into the M.A. or Ph.D. LEC.

**POLS 704. Quantitative Methods Primer in Political Science. 1 Hour.**

Provides an introduction of basic quantitative methods in political science to prepare graduate students for the quantitative methods sequence in the Ph.D. program; basic statistics, statistical analysis techniques, and probability are explored. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Permission of the Instructor. LEC.

**POLS 705. Research Design for Political Science. 3 Hours.**

Introduction to the discipline of political science, the philosophy of science, research design, and data acquisition. Prerequisite: Graduate standing or consent of instructor. LEC.

**POLS 706. Research Methods I. 3 Hours.**

An introduction to quantitative research methods, including probability theory, hypothesis-tests, and multiple regression. Includes regression diagnostics, the treatment of numeric and categorical predictors, interaction effects and elementary nonlinear models. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and lab sessions where computing applications are taught. LEC.

**POLS 707. Research Methods II. 3 Hours.**

This course covers basic techniques for multivariate analysis, focusing on multiple regression. Topics include interpretation of regression statistics, diagnostics for common problems, dummy variables, instrumental variables, basic time series methods including adjustment for autocorrelated error, logistic models, and nonlinear modeling; additional techniques may be covered at the discretion of the instructor. Prerequisite: POLS 706. LEC.

**POLS 708. Advanced Qualitative Research Methods. 3 Hours.**

An examination of qualitative research approaches frequently employed within political science. Topics may include the use of case studies, archival and documentary research, content analysis, interviewing and focus group techniques, ethnographic fieldwork, narrative and discourse analysis, and others. The course will examine the strengths and limitations of these methods in relation to major research traditions such as culturalist approaches, historical institutionalism, rational choice, and constructivism. Prerequisite: POLS 705 and either graduate standing or consent of instructor. LEC.

**POLS 709. Topics in Political Theory:. 3 Hours.**

At the discretion of the instructor, this course will select one or more important areas of political theory for in-depth analysis. Prerequisite: Six hours in Political Theory. LEC.

**POLS 710. American Public Philosophies. 3 Hours.**

Surveys scholarly attempts to describe and analyze critically the changing public philosophies that have dominated American society and politics. Liberalism, republicanism, ascritivism, and pluralism are examples of such public philosophies. Also considered are some philosophies that are important but have not dominated American politics. Transcendentalism, populism, communitarianism, racial nationalism, and religious fundamentalism are examples of such philosophies. Prerequisite: Graduate standing or consent of the instructor. SEM.

**POLS 711. The Psychological Base of Political Behavior. 3 Hours.**

Examination of the relations between psychological mechanisms and social milieu factors and individual political behavior. Particular attention is devoted to understanding the development of politically relevant psychological traits and dispositions, and to the methodology employed in studying the socio-psychological factors which underlie individual political behavior. Prerequisite: Twelve hours of political science and consent of instructor. LEC.

**POLS 712. The Electoral Process. 3 Hours.**

A study of the characteristics of voting behavior and the influences upon such behavior in the United States. Emphasis is placed upon relevant research findings concerning partisanship and participation in politics, and on the methodology employed in the study of political behavior. Prerequisite: Twelve hours of political science and consent of instructor. LEC.

**POLS 713. Law and Society. 3 Hours.**

A study of the province and function of law in the context of relevant social, economic, and political factors. The impact of these factors on the law will be illustrated through readings and discussions of selected case histories. Emphasis will be placed upon law as a social phenomenon rather than upon its technical aspects. Prerequisite: Twelve hours of political science and permission of instructor for undergraduates. LEC.

**POLS 716. Political Behavior. 3 Hours.**

A seminar for students interested in understanding the public opinion, voting, and other forms of political participation. This course will include a discussion of the formation, measurement of political attitudes as well as an examination of protest and other forms of extra-legal participation. Prerequisite: Graduate standing or consent of instructor. LEC.
POLS 719. Topics in the American Political Institutions: ______. 3 Hours.
A seminar to be offered as occasion demands, dealing with, but not limited to special topics in the presidency, congress, and judicial processes. Prerequisite: Graduate standing or consent of instructor. LEC.

POLS 720. The Scope of Public Policy. 3 Hours.
Introductory graduate course in the examination of public policy making. Considers institutions, basic theoretical frameworks, and standard methods, and places policy making within a broad political context. Emphasizes American examples, but relevant comparative material is employed. Prerequisite: Twelve hours of political science. LEC.

POLS 722. Intergovernmental Relations. 3 Hours.
A survey of characteristic legal, political, and administrative relationships among different units of American government, with particular emphasis upon the role of state agencies. Prerequisite: Nine hours of political science. LEC.

POLS 726. Public Policy in Comparative Perspective. 3 Hours.
This seminar examines the application of policy theory in regional and comparative contexts. Much of the research examined focuses on comparative public policy, but select weeks focus on specific regions of the world. A key goal is to help students understand which theories of policy may be best suited for universal application. LEC.

POLS 754. Politics and Government of Russia and the Central Eurasian States. 3 Hours.
The collapse of the Soviet system and the problems of transforming a central planned authoritarian state into a free market democracy. The roles of ethnic and national tensions, economic decay, and cultural factors. Prerequisite: Eight hours in the social sciences and/or history, including POLS 150, or consent of instructor. LEC.

POLS 758. Revolutionary Politics of Latin America. 3 Hours.
Primarily a comparative analysis of the Mexican, Bolivian, and Cuban revolutions within a framework of theories of revolutions. Some attention also to revolutionary political groupings and conditions in other Latin American countries. Prerequisite: POLS 150 or a course concerning Latin America in the social sciences or history. LEC.

POLS 774. International Law. 3 Hours.
Study of topics in international law, relating these closely to the dynamics of international relations. Special emphasis will be given to regulating force, resolving disputes, the law of the sea, human rights, and emerging problem areas such as the environment, outer space, the oceanic seabed, and genocide. Prerequisite: Six hours of courses in international relations including POLS 170 and/or relevant courses in the social sciences and modern history. LEC.

POLS 789. Topics in International Relations: ______. 2-3 Hours.
A study of selected problems in international relations. Prerequisite: Consent of instructor. RSH.

POLS 810. American Politics. 3 Hours.
A survey and critical examination of recent theoretical developments and research focusing on national institutions, electoral behavior, and policy-making processes. Emphasis is given to conceptualizing and analyzing the changing nature of the American political system. LEC.

POLS 812. Political Psychology. 3 Hours.
A critical examination of the principal areas in current literature in political psychology, including psychological perspectives on mass political behavior, elite decision making, and international relations. Attention will be given to articulating and evaluating theories, constructing research questions and programs, and comparing methodologies. LEC.

POLS 820. Policy Formulation and Adoption. 3 Hours.
Survey of the literature on the institutional, socioeconomic, and political forces influencing the formulation and adoption of public policy, as well as policy change, at all levels of government. Topics include problem definition, agenda setting, and the methods of decision-making. This is a research seminar so students will be required to conduct an original research project. LEC.

POLS 821. Policy Implementation and Analysis. 3 Hours.
An overview of the policy implementation process and the analysis of public policy. The course covers a variety of theories and methods related to the study of the implementation process, policy evaluation, policy analysis, and policy change and learning. Substantive policy areas covered include environmental regulation, education, criminal justice, public safety, and health care. LEC.

POLS 825. Urban Policy and Administration. 3 Hours.
This course explores the development, implementation and evaluation of public policy in the local government context. It examines a variety of policy tools used to address urban problems and applies theories of the policy process, intergovernmental relations, and institutions to municipal governance. (Same as PUAD 825.) LEC.

POLS 830. Advanced Research Methods for Public Policy. 3 Hours.
Research seminar organized around advanced quantitative and qualitative method skills for research on American and comparative politics and public policy. The course will combine advanced statistical estimation procedures (e.g., hazard analysis, event history analysis, hierarchical "contextual effects" models) with methods for the collection and integration of data. This course is intended to facilitate research efforts of students in the fields of American politics, comparative politics, and public policy. The course is open to Ph.D. students from other departments who have completed a course in intermediate regression analysis. Prerequisite: POLS 707 or similar graduate level course. LEC.

POLS 849. Law, Courts, and Public Policy. 3 Hours.
This course provides an overview of the role of law, litigation, and courts in the public policy process, with an emphasis on bureaucratic institutions. The course covers the main theories and empirical research on the policy effects of litigation and intervention, with a particular focus on civil rights in the areas of employment, policing, welfare, prisons, and environmental policy. (Same as PUAD 849.) Prerequisite: Graduate standing or consent of instructor. LEC.

POLS 850. Introduction to Comparative Politics. 3 Hours.
This course provides a graduate level introduction to the field of Comparative Politics. Among topics it will survey are: the history and development of the field; classic works and major founding concerns of the field; methodological and epistemological debates; competing paradigms which had characterized Comparative Politics (structural-functionalism, culturalists, state-centricists, institutionalists, rational choice, and other); theory building and the role of area studies. LEC.

POLS 851. Comparative Institutions and Government. 3 Hours.
This course provides a survey of the subfield of political institutions within Comparative Politics. Among the topics it will cover are: identifying regime types (democracy vs. non-democracy); comparative electoral systems; party systems; presidential vs. parliamentary systems; comparative legislatures; constitutional engineering and democratic transitions, and others. Prerequisite: POLS 850. LEC.

POLS 852. Comparative Political Economy. 3 Hours.
This course provides a survey of some of the major works, research traditions, and current debates in the subfield of comparative political economy. This includes such topics as: The political economy of development and underdevelopment; dependency and world systems.
theory; the relationship between economic development and democracy; capitalist development and democracy; the political economy of dual transitions; the political economy of privatization and structural adjustment; comparative welfare states; and comparative labor-business-government relations. Prerequisite: POLS 850. LEC.

POLS 853. Comparative Social Politics. 3 Hours.
This course provides a survey of some major research traditions and current debates in the subfield of political sociology. This includes such topic as: culture and politics; elites, social structures, and politics; the politics of cultural pluralism and ethnogenesis; social movements and protest; gender and politics; state-society relation; and religion and politics. Prerequisite: POLS 850. LEC.

POLS 870. International Relations. 3 Hours.
Critical evaluation of the major approaches to international relations and their application to conflict and conflict resolution, foreign policy, and international political economy. LEC.

POLS 878. Conducting and Analyzing Fieldwork in Developing Countries. 3 Hours.
An introduction to fieldwork and surveys conducted in developing and non-democratic countries. The course covers the challenges of conducting interviews and surveys in these countries. The intent is to develop the research skills necessary for data collection and fieldwork as well as evaluating an analyzing survey data collected by other researchers in developing countries. Prerequisite: POLS 705 or equivalent or consent of the instructor. SEM.

POLS 888. Contemporary China Studies. 3 Hours.
This course will review and analyze the current literature on China's social and political development, including a wide range of topics within political science. There is a rich body of literature within each topic such as civil society in China, legal reform, political culture, nationalism, gender issues, ethnicity, political behavior, elections, economic development, and inequality. This course will introduce key literature within each topic focusing on the debates among Chinese scholars as well as how these debates fit in the general field of political science. (Same as EALC 888 and POLS 888.) Prerequisite: POLS 668 or permission of the instructor. LEC.

POLS 889. Non-Thesis Research. 1 Hour.
Research course used to fulfill continuous enrollment requirement for master's degree students. Hours cannot count toward degree. Must be graded Satisfactory/Unsatisfactory. RSH.

POLS 899. Thesis. 1-6 Hours.
Enrollment for writing thesis for master's degrees. THE.

POLS 904. Statistical Computing Foundations. 3 Hours.
This is an interdisciplinary course for social science researchers who need to develop routines to estimate and evaluate statistical models. It introduces tools for software development, primarily with the statistical programming language R (and related languages like C). Topics include code organization and optimization, concurrent version management, LaTeX document preparation, and high-performance computing on the KU Linux cluster. Examples from various fields are considered. Prerequisite: Two courses in graduate level statistics and familiarity with R. LEC.

POLS 905. Complex Adaptive Systems, Agent-Based Modeling and Computer Simulation. 3 Hours.
This seminar addresses the rapidly growing science of complex systems. Topics addressed include political, economic, ecological, and biological systems. Includes a survey of the theory of complexity and computer models that are used to study complex adaptive systems. The main focus is on agent-based models, but attention is also given to traditional cellular automata. Methods of designing, programming, and interpreting results of agent-based models are addressed. Students who have no formal training in computer programming are welcome in the course, but they should expect to do some extra work on fundamentals of programming. A preparatory course in Java, C++, Objective-C, or another object-oriented language would significantly facilitate the student's research effort. SEM.

POLS 906. Advanced Regression. 3 Hours.
Covers topics appropriate for a second course in regression analysis. The content will vary according to the interest of the instructor and students, but will generally include such topics as multiple imputation of missing data, the generalized linear model (GLM), and specialized models for longitudinal data. The course will include a review of the principles of maximum likelihood estimation and applications of matrix algebra and differential calculus in statistical applications. LEC.

POLS 907. Research Methods in International Studies. 3 Hours.
This course focuses on quantitative methods of research relevant to international relations and comparative politics. Topics will vary with the instructor and student interests, but may include time series analysis, classification algorithms, computer programming and computational modeling, simulation, event data and content analysis, and dynamic models. Prerequisite: POLS 707. LEC.

POLS 908. Individual and Collective Choice. 3 Hours.
This course surveys rational choice theories of politics as they are applied to decisions by individuals and groups. Models of individual behavior are drawn primarily from economics and decision theory. The primary approaches to collective choice are social choice theory and game theory. Prerequisite: POLS 707. LEC.

POLS 909. Topics in Methodology: __________. 3 Hours.
An intensive seminar in a method (or a variety of relevant methods) of theoretical or empirical research designed for Ph.D. students only. Emphasis is on deepening the understanding and ability to use advanced methods of analysis. Prerequisite: Admission to the Ph.D. program or consent of instructor. RSH.

POLS 910. Research Seminar in American Government. 2-3 Hours.
A faculty and advanced graduate student collegial research experience focusing on American politics, policy-making and administration, with faculty and students engaged in the production of scholarly research articles, books and conference papers. Topics will be chosen by individual students with consent of the seminar professor. LEC.

POLS 911. The U.S. Congress. 3 Hours.
This seminar employs various theoretical and methodological perspectives to explore the burgeoning post-1960 literature on Congress. Traditional subjects such as committees, parties, and elections are examined through applications of formal models, behavioral analyses, and participant observation. LEC.

POLS 912. Elections and Voting Behavior. 3 Hours.
A research seminar for students interested in theoretical and empirical approaches to the behavior of candidates, voters and contributors in campaigns and elections. The impact of campaign laws and other institutional influences will also be examined. LEC.

POLS 913. State and Local Politics. 3 Hours.
Research seminar on various aspects of state and local government, such as reformed institutions, fiscal stress, citizen participation, and various policy problems. LEC.

POLS 914. Political Behavior. 3 Hours.
Survey of various approaches to the analysis of political behavior, including an evaluation of each approach in terms of its utility in building
empirically-based political theory. Examples of the application of the various approaches will focus upon the American political process. LEC.

**POLS 915. American Political Parties. 3 Hours.**
A survey of the theories and research findings dealing with political parties in American politics, including third and minor parties. Topics to be covered include the development and evolution of the party system, the nature of party organization and the recruitment of party activists, the role of parties in the electoral process, the impact of parties upon public policy, and party reform. LEC.

**POLS 916. Group Politics. 3 Hours.**
The focus of this course is upon the theories and research findings dealing with political groups in American politics, including protest groups, movements, as well as conventional interest groups. Topics to be covered include group mobilization and maintenance, group involvement in the political party and electoral processes, methods and strengths of group influence, and the impact of political groups on the policy process. LEC.

**POLS 917. The Presidency. 3 Hours.**
An advanced research seminar for students interested in theoretical and empirical approaches to the American presidency. This seminar will examine the powers and organizations of the White House through a study of the literature. LEC.

**POLS 919. Topics in U.S. Government and Politics: _____. 2-3 Hours.**
A seminar to be offered as occasion demands, dealing with, but not limited to, bureaucracy, legislative policy, federalism, and special problems in U.S. politics. LEC.

**POLS 920. Policy Analysis Research Seminar. 3 Hours.**
Research seminar designed to apply public policy theory and policy analysis methods to evaluate the impact of public policies. Students will be required to design and conduct an original research project with the intention of presenting the work at a professional conference or publishing the work in a professional journal. LEC.

**POLS 921. Public Law. 3 Hours.**
This seminar is designed to initiate the advanced graduate student to research in judicial and jury behavior. Requirements include mastery of literature on the psychological foundations of legal judgment and research designed to test propositions derived from this literature. LEC.

**POLS 929. Topics in Public Policy: _____. 1-3 Hours.**
Study of selected topics in public policy. LEC.

**POLS 940. Teaching Political Science. 1 Hour.**
A discussion of teaching methods and approaches. Students are expected to develop a personal teaching portfolio that describes their outlook on teaching political science and provides sample teaching materials. This course must be taken by all graduate teaching assistants and assistant instructors during the first year of their appointment. Grades are issued on a pass/fail basis. LEC.

**POLS 950. Research Seminar in International Studies. 2-3 Hours.**
A faculty and advanced graduate student collegial research experience, focusing on comparative politics, area studies, and international relations, with faculty and students engaged in the production of scholarly research articles, books, and conference papers. Topics will be chosen by individual students with consent of the seminar professor. RSH.

**POLS 951. Mobilization. 3 Hours.**
A study of how politicians, interest group leaders, and dissident leaders exert citizens to act in or preclude them from acting in politics. LEC.

**POLS 952. Comparative Electoral and Party Systems. 3 Hours.**
This research seminar addresses the major theoretical and empirical issues in the study of electoral and party systems. In addition to evaluating the classic works of Arrow, Duverger, Lipset and Rokkan, Rae, and Taagepera and Shugart, students will assess contemporary work on electoral and party systems that has evolved from this source material. The course will address the design and reform of electoral systems, institutional rules and the strategic environment they create for political actors, the role of institutional and social factors in the development of political party systems, and the role of election administration. Students will develop and present original research papers related to these topics. Prerequisite: POLS 850. LEC.

**POLS 953. Comparative Legislatures. 3 Hours.**
This research seminar addresses the major theoretical and empirical issues in the study of legislatures. Students will discuss the design of institutions, government formation, accountability, legislative process and role of committees, agenda setting, elections and parties, and representation. The course will familiarize students with the core debates in legislative studies, extend knowledge of regional variation in the design and function of representative institutions, develop skills in the analysis of legislative records, and enhance professional socialization. Prerequisite: POLS 810, POLS 850, or consent of instructor. SEM.

**POLS 954. Politics in Post-Soviet States. 3 Hours.**
In-depth study of the politics of Russia, Ukraine, and the other Post-Soviet states. Focus on the problems of transforming a centrally planned authoritarian system to a free market democracy. LEC.

**POLS 955. Politics of Advanced Industrial Societies. 3 Hours.**
Theory and research on the patterns of behavior that characterize the politics of North America, Europe, and developed regions of Asia. Topics include corporatism and alternative forms of interest intermediation, economic theories of socialization and electoral choice, and the role of the state; its finances, adaptation, and the problem of power and legitimacy. Prerequisite: POLS 850 or permission of instructor. LEC.

**POLS 956. The Governments and Politics of Asia. 2-3 Hours.**
A research seminar on selected subjects and issues in the governments and politics of selected Asian countries. The particular focus each year will depend upon the instructor. LEC.

**POLS 957. Comparative Political Behavior. 3 Hours.**
The course introduces students to the vast literature on comparative elections and comparative political parties. It pursues a twofold goal. First, the course surveys the large comparative electoral behavior literature. The themes covered in the first half include a discussion of why voters participate in elections, how voters form preferences, how psychological processes affect mass views, and how these, in turn, influence party preferences. Second, the course introduces students to the supply-side of politics and the role of political parties. This second part of the course, therefore, examines why parties form in the first place, what motives they have, what choices they offer in short, how and why parties compete. Together, the way voters form preferences and the logic of party formation illuminate a central element of the democratic process. LEC.

**POLS 959. Topics in Comparative Politics: _____. 1-3 Hours.**
Study of selective topics in comparative politics. LEC.

**POLS 960. Politics of Developing Countries. 2-3 Hours.**
LEC.

**POLS 961. The Politics of Culturally Plural Societies. 3 Hours.**
This is an advanced graduate seminar on the comparative study of politics in countries characterized by sub-cultural cleavages, including ethnicity, language, religion and race. The course will first survey and critique competing theoretical explanations for different patterns of conflict or peaceful cohabitation among such groups in a variety of world regions. Students will then examine the utility of these theories in individual in-depth research papers which will be presented in class and critiqued by seminar participants. LEC.
POLS 970. Foreign Policy Analysis. 3 Hours.
Designed to acquaint students with the principal theories, approaches and types of empirical analysis generally employed to explain and interpret the creation and implementation of foreign policy. Topics include rational actor models, collective and bureaucratic processes, societal influences, cognitive and psychological factors, and comparative foreign policy. Prerequisite: POLS 870. An undergraduate United States foreign policy class is recommended. LEC.

POLS 972. Theories of International Conflict. 3 Hours.
An in-depth survey of theories and research on international conflict. Topics will range from anthropological studies of conflict in primitive societies to contemporary theories of nuclear conflict. The course will also cover current empirical research methodology and results of research on international conflict, as well as models of conflict processes. Prerequisite: POLS 870. LEC.

POLS 973. International Political Economy. 3 Hours.
Provides an eclectic survey of major developments in the field. Topics include the intellectual origins of IPE; the historical evolution of the international system; North-South and Western trade, investment, and monetary relations; foreign aid, debt technology transfer, development, international economic institutions (e.g., IMF, IBRD, MNCs, etc.). (Same as SOC 873.) Prerequisite: POLS 870 or consent of instructor. LEC.

POLS 974. International Mediation and Conflict Resolution. 3 Hours.
The course examines the theory and practice of international mediation and other forms of third party intervention used to resolve interstate and nonstate disputes. Topics include explanations of mediation success and failure, conditions of conflict escalation where mediation is likely to be counterproductive or resisted by recalcitrant disputants, the ethics of intervention, citizen diplomacy, and the role of international organizations such as the United Nations. Prerequisite: POLS 870. LEC.

POLS 977. Ethics in International Relations Theory. 3 Hours.
This course examines how issues of International Ethics have been treated in International Relations theory. This course begins by reviewing several theoretical perspectives of International Relations and how these perspectives have historically understood the role ethics plays in international politics. By the end of the semester, students should have a firm understanding of (1) the salient issues of international ethics in world politics and (2) whether and how IR scholars have (theoretically and methodologically) placed those issues in their research paradigms. The course area the course will cover include, but are not limited to, human rights doctrines, issues of economic and political justice, just war theory (jus ad bellum) and just conduct of war (jus en bello), and humanitarian intervention. The course will assess the role international law has played in stemming and/or punishing human rights abuses. Students will review several historical cases of genocide, as well as several cases of truth and reconciliation commissions. LEC.

POLS 978. Advanced Topics in International Relations Theory. 3 Hours.
Intensive examination of key theoretical debates in international relations. Topics covered will include Classical Realism and Liberalism, Neorealist/Neoliberal debate, and post-structural critiques of mainstream international relations theory. Prerequisite: POLS 870. LEC.

POLS 979. Topics in International Relations: ______. 3 Hours.
To be offered periodically when topics of special interest arise. LEC.

POLS 980. International Organizations. 3 Hours.
Considers theoretical and empirical work on international governmental and non-governmental organizations (IOs). Specifically highlights the evolving scholarly debates regarding the function, design, and delegation of authority to IOs as well as their behavior and change.

Explores these questions in depth through a wide range of cases, including comprehensive coverage of the United Nations, Bretton Woods Institutions, and the European Union, and their activities in issue areas concerning international security, trade, finance, development, humanitarian aid, and the environment. LEC.

POLS 981. Global Development. 3 Hours.
Considers the nature and problems of development and underdevelopment from a cross-regional and interdisciplinary perspective. Deals with the historical origins of the enormous disparities in wealth that exist today, both between and within countries. Considers the explanations for those differences, prescriptions for how to narrow them, and specific cases (both successes and failures) from various regions of the globe. LEC.

POLS 993. Directed Readings. 1-5 Hours.
Designed to meet the needs of graduate students whose study in political science cannot be met with present course. Prerequisite: Consent of instructor. RSH.

POLS 995. Directed Research. 2 Hours.
Designed for advanced graduate students who are concurrently enrolled or who will be enrolled in a subsequent semester in one of the Research Seminars in American Government or International Studies. Students enrolling in this course should have the prior approval of the faculty member with whom they wish to conduct the research. RSH.

POLS 997. Preparation for the Comprehensive Examination. 1-6 Hours.
An independent reading course for students preparing to take the Ph.D. comprehensive examination. May be taken for two semesters or six credits, whichever comes first. Graded on A, B, C, D, or F depending on the results of the comprehensive examination. RSH.

POLS 999. Doctoral Dissertation. 1-15 Hours.
Enrollment for writing doctoral dissertations. THE.

Psychology Courses

PSYC 102. Orientation Seminar in Psychology. 1 Hour. S.
Provides an overview of the discipline of psychology. Emphasizes developing an understanding of opportunities in psychology at the University of Kansas, exploring service-learning options related to the major, and helping students plan goals for their education through an understanding of their personal values and options within and outside the discipline. Open to KU-degree-seeking students only. Contact the Psychology Department to enroll in the course. Non-degree-seeking and non-KU students may enroll in the course by signing up with KU Continuing Education. Graded on a satisfactory/unsatisfactory basis. LEC.

PSYC 104. General Psychology. 3 Hours. SI GE3S / S.
A basic introduction to the science of psychology. LEC.

PSYC 105. General Psychology, Honors. 3 Hours. SI GE3S / S.
Open to students in College or Departmental Honors programs or by permission of instructor. LEC.

PSYC 120. Personality. 3 Hours. SI GE3S / S.
An introductory survey of personality theories, development, assessment and current research. LEC.

PSYC 121. Personality, Honors. 3 Hours. SI GE3S / S.
Open to students in College or Departmental Honors programs or by permission of instructor. LEC.

PSYC 177. First Year Seminar: ______. 3 Hours. SI GE11.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in psychology. May not contribute to major requirements in psychology. First year seminar topics are coordinated and
approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

**PSYC 200. Research Methods in Psychology. 3 Hours. S.**
An examination of the scientific “ways of knowing” employed by psychologists to discover the laws governing human behavior across a wide domain. The focus of the course is upon these methods and the statistical techniques that support them. Prerequisite: PSYC 104 and MATH 101 or equivalent placement. LEC.

**PSYC 201. Research Methods in Psychology, Honors. 3 Hours. S.**
An examination of the scientific “ways of knowing” employed by psychologists to discover the laws governing human behavior across a wide domain. The focus of the course is upon these methods and the statistical techniques that support them. Open to students in University and Departmental Honors programs or by permission of instructor. Not open to students taking PSYC 200. Prerequisite: PSYC 104 and MATH 101. LEC.

**PSYC 202. Study Abroad Topics in: ______. 1-4 Hours. S.**
This course is designed for the study of special topics in Psychology. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

**PSYC 210. Statistics in Psychological Research. 3 Hours. S.**
An introduction to statistical concepts and methods as they relate to analysis and interpretation of psychological data. Prerequisite: PSYC 104 and MATH 101 or equivalent placement. LEC.

**PSYC 211. Statistics in Psychological Research, Honors. 3 Hours. S.**
An introduction to statistical concepts and methods as they relate to analysis and interpretation of psychological data. Open only to students in University and Departmental Honors programs or by permission of instructor. Not open to students who have taken PSYC 210. Prerequisite: PSYC 104 and MATH 101 or equivalent placement. LEC.

**PSYC 318. Cognitive Psychology. 3 Hours. S.**
An introduction to contemporary research and theory in human learning and memory, relevant perceptual processes, and higher functions such as language. Prerequisite: PSYC 104 and one of the following: PSYC 200, PSYC 201, PSYC 210, PSYC 211, MATH 101, MATH 104 or equivalent placement. LEC.

**PSYC 319. Cognitive Psychology, Honors. 3 Hours. S.**
Open to students in University or Departmental Honors programs or by permission of instructor. Prerequisite: PSYC 104 and one of the following: PSYC 200, PSYC 201, PSYC 210, PSYC 211, MATH 101, MATH 104 or exemption based on ACT or SAT score. LEC.

**PSYC 333. Child Development. 3 Hours. S.**
A survey course on the science and application of child and adolescent development; including physical, motoric, social, emotional, and cognitive changes from conception through adolescence. The course covers methods and theory, genetics, and may incorporate content on aggression, morality, parenting, media, and peers. Prerequisite: PSYC 104 and one of the following: PSYC 200, PSYC 210, PSYC 211, MATH 101, MATH 104 or exemption based on ACT or SAT score. LEC.

**PSYC 334. Child Development, Honors. 3 Hours. S.**
A survey course on the science and application of child and adolescent development; including physical, motoric, social, emotional, and cognitive changes from conception through adolescence. The course covers methods and theory, genetics, and may incorporate content on aggression, morality, parenting, media, and peers. Open to students in University or Departmental Honors Programs or by permission of instructor. Prerequisite: PSYC 104 and one of the following: PSYC 200, PSYC 210, PSYC 211, MATH 101, MATH 104 or exemption based on ACT or SAT score. LEC.

**PSYC 350. Abnormal Psychology. 3 Hours. S.**
An examination of psychopathology including anxiety disorders, psychophysiological disorders, affective disorders, and schizophrenic disorders. Disorders are considered from psychodynamic, behavioral, cognitive, and biological perspectives. Prerequisite: PSYC 104. LEC.

**PSYC 351. Abnormal Psychology, Honors. 3 Hours. S.**
Open to students in College or Departmental Honors programs or by permission of instructor. Prerequisite: PSYC 104. LEC.

**PSYC 360. Social Psychology. 3 Hours. S.**
An introduction to the psychology of social behavior. Systematic consideration of such concepts as social influence, conformity and deviation, social attitudes and prejudice, socialization and personality, communication and propaganda, morale, and leadership. Prerequisite: PSYC 104 and one of the following: PSYC 200, PSYC 201, PSYC 210, PSYC 211, MATH 101, MATH 104 or exemption based on ACT or SAT score. LEC.

**PSYC 361. Social Psychology, Honors. 3 Hours. S.**
An introduction to the psychology of social behavior. Systematic consideration of such concepts as social influence, conformity and deviation, social attitudes and prejudice, socialization and personality, communication and propaganda, morale, and leadership. Open to students in University or Departmental Honors programs or by permission of instructor. Prerequisite: PSYC 104 and one of the following: PSYC 200, PSYC 201, PSYC 210, PSYC 211, MATH 101, MATH 104 or exemption based on ACT or SAT score. LEC.

**PSYC 370. Behavioral Neuroscience. 3 Hours. N.**
A survey of topics related to the biological processes underlying behavior in humans and in animals, including the physiology of neuronal and synaptic transmission, neurochemistry, and neuropharmacology. Selected topics within the area of behavioral neuroscience are also covered, such as motivation, appetite, reward, homeostasis, biological rhythms, addiction, aggression, stress, emotion, and sleep. Prerequisite: An introductory course in Psychology; an introductory course in Biology; and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211. LEC.

**PSYC 371. Behavior Neuroscience, Honors. 3 Hours. N.**
A survey of basic topics related to the biological processes underlying behavior in humans and in animals, including the physiology of neuronal and synaptic transmission, neurochemistry, and neuropharmacology. Selected topics within the area of behavioral neuroscience are also covered, such as motivation, appetite, reward, homeostasis, biological rhythms, addiction, aggression, stress, emotion, and sleep. Open to students in University or Departmental Honors programs or by permission of instructor. Prerequisite: An introductory course in Psychology, an introductory course in Biology and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211. LEC.

**PSYC 375. Cognitive Neuroscience. 3 Hours. N.**
A survey of topics related to the biological processes underlying cognition in humans and in animals, including the physiology of neuronal and synaptic transmission, neurochemistry, and functional neuroanatomy. Selected topics within the area of cognitive neuroscience also covered, such as sensory processing, hearing, vision, learning and memory, attention, motor control, language, hemispheric asymmetry, executive function, and neuroplasticity. Prerequisite: An introductory course in Psychology; an introductory course in Biology; and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211. LEC.
PSYC 380. Clinical Neuroscience. 3 Hours. N.
The organization and function of the nervous system as it relates to topics of interest to psychologists, including pain, anxiety, stress, sleep, depression, schizophrenia, akinetic and dyskinetic movement disorders, and senile dementia. Prerequisite: An introductory course in Psychology, an introductory course in Biology, and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211. LEC.

PSYC 381. Clinical Neuroscience, Honors. 3 Hours. N.
The organization and function of the nervous system as it relates to topics of interest to psychologists, including pain, anxiety, stress, sleep, depression, schizophrenia, akinetic and dyskinetic movement disorders, and senile dementia. Open to students in University or Departmental Honors programs or by permission of instructor. Prerequisite: An introductory course in Psychology, an introductory course in Biology, and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211. LEC.

PSYC 402. Study Abroad Topics In:,. 1-4 Hours. S.
This course is designed for the study of special topics in Psychology equivalent to courses at the 300 to 600 level at KU. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

PSYC 405. Children and Media. 3 Hours. H.
The applied study of child development theories and research methods on the influences and effects of television and related visual media on childhood in the contexts of families, schools, and society. (Same as ABSC 405 and THR 405.) LEC.

PSYC 406. Individual Differences. 3 Hours. S.
A survey of the nature and sources of differences in human behavior and a consideration of the consequences of these differences for society. Prerequisite: PSYC 104. LEC.

PSYC 410. Intimate Relationships. 3 Hours. S.
A social psychological perspective on adult intimate relationships, examining friendship, dating, committed relationships, and the dissolution of committed relationships. Topics include romance, jealousy, self-disclosure, power, loneliness, and social support. Discussion of heterosexual and homosexual relationships, traditional forms (e.g., marriage) of relationships as well as alternative lifestyles (e.g., cohabitation) and gender-linked differences in relationships. Prerequisite: PSYC 104. LEC.

PSYC 415. Social and Cultural Sources of Self. 3 Hours. S.
An interdisciplinary exploration of the social and cultural sources of self-experience. The first part of the course emphasizes a general process: how the development and experience of self, though it might seem essentially personal, is shaped by social interaction. The second part of the course highlights particular cases: how self-experience may be constructed differently depending on the particular social and cultural settings a person inhabits. Cases include influences of gender, socioeconomic status, and age group on the construction of self-experience within societies from around the world, and ethnic-identity groups within the USA. Prerequisite: PSYC 104. LEC.

PSYC 418. Introduction to Cognitive Science. 3 Hours. S.
Examines the data and methodologies of the disciplines that comprise Cognitive Science, an inter-disciplinary approach to studying the mind and brain. Topics may include: consciousness, artificial intelligence, linguistics, education and instruction, neural networks, philosophy, psychology, anthropology, evolutionary theory, cognitive neuroscience, human-computer interaction, and robotics. (Same as LING 418, PHIL 418, and SPLH 418.) Prerequisite: Consent of instructor. LEC.

PSYC 420. Fundamentals of Personality. 3 Hours. S.
Clinical application of personality theories; personality development and assessment research. Prerequisite: PSYC 104. LEC.

PSYC 430. Cognitive Development. 3 Hours. S.
A basic survey course in the development of thinking and understanding in normal children. The course will cover Piaget's theory and information processing theories at the advanced undergraduate level. Topics include perception, attention, learning, memory, language, problem solving, and individual differences from birth to the mid-teens. Prerequisite: PSYC 104 or ABSC/HDFL 160. LEC.

PSYC 432. Human Behavioral Genetics. 3 Hours. S.
A survey of human behavioral genetics for upper division undergraduates. Emphasis is on how the methods and theories of quantitative, population, medical, and molecular genetics can be applied to individual and group differences in humans. Both normal and abnormal behaviors are covered, including intelligence, mental retardation, language and language disorders, communication, learning, personality, and psychopathology. (Same as ANTH 447, BIOL 432, SPLH 432.) Prerequisite: Introductory courses in biology/genetics or biological anthropology and psychology are recommended. LEC.

PSYC 435. Social and Personality Development. 3 Hours. S.
An introduction to social and personality development with consideration of both classic and contemporary theoretical viewpoints. The role of social contexts is considered (e.g., family, peers, communities), as well as biological influences (e.g., behavioral genetics). Topics include parent-infant attachment, peer relationships, aggression, etc. Prerequisite: PSYC 104. LEC.

PSYC 449. Laboratory/Field Work in Human Biology. 1-3 Hours. AE61 / N.
Faculty supervised laboratory or field research for Human Biology majors. Students design and complete a research project in collaboration with a Human Biology faculty member. (Same as ANTH 449, BIOL 449, and SPLH 449.) Prerequisite: Consent of instructor and Human Biology major. FLD.

PSYC 453. Psychological Foundations of Musical Behavior. 3 Hours. S.
Study of human musical behavior, including basic psychoacoustic phenomena, musical taste, functional music, musical ability, cultural organization of musical sounds, and the affective response. Prerequisite: General Psychology, MEMT 370, or consent of instructor. LEC.

PSYC 460. Honors in Psychology. 1-2 Hours. AE61 / S.
A seminar for juniors and seniors in the Honors Program in Psychology. Students who have been admitted to the Honors Program in Psychology may enroll for one credit for one or both semesters of their junior year and are required to enroll for two credits for both semesters in their senior year. IND.

PSYC 465. Stereotyping and Prejudice Across Cultures. 3 Hours. S.
This course covers a variety of theoretical views concerning the origins of stereotypes and the factors that maintain them, as well as how and when the revision of such beliefs take place. Analysis of various stereotypes (including gender and race) and the experience of prejudice across a variety of cultural contexts is examined. Many difficult social issues are discussed in depth. Prerequisite: PSYC 360 or PSYC 361; or consent of instructor. LEC.

PSYC 468. Psychology of Women. 3 Hours. S.
A survey of the psychological theories about women; similarities and differences in behavior of women and men; the effects of biological and social factors on the behavior of women and men; and issues of concern
to women of different races, sexual orientations, ages, and so forth. (Same as WGSS 468.) Prerequisite: PSYC 104 or WGSS 201. LEC.

**PSYC 470. Introduction to Contemporary Psychotherapies. 3 Hours. S.**
Review of current psychotherapies with special references to their underlying philosophies, theories of personality, techniques, and effectiveness. Issues concerning the use of drugs in the treatment of mental disorders are also reviewed. Prerequisite: PSYC 104. LEC.

**PSYC 472. Psychology of Sleep and Dreaming. 3 Hours. S.**
This course reviews recent evidence on the roles of dreaming and dreamless sleep. Psychological, developmental, personality, and social psychological aspects are considered. Prerequisite: PSYC 104. LEC.

**PSYC 475. Cognitive Neuroscience. 3 Hours. S.**
The neurobiology of higher mental processes such as perception, attention, learning, memory, thinking, and language, as studied by techniques such as recording from individual neurons, electrical brain stimulation, brain damage, and brain scans and measurements of regional cerebral blood flow in conscious people. Emphasis will be placed on in-class analysis of original research articles. Prerequisite: One of the following courses - PSYC 318, 319, 370, 371, 380, or 381; or consent of instructor. LEC.

**PSYC 480. Independent Study. 1-5 Hours. U.**
Investigation of a special research problem or directed reading in an area not covered in regular courses. No more than 3 hours of PSYC 480 may be counted toward the minimum hours required for the major. Prerequisite: Consent of instructor. IND.

**PSYC 481. Research Practicum. 1-5 Hours. U.**
Guided participation in ongoing research programs to augment quantitative skills through direct practicum experience. No more than 3 hours of PSYC 481 may be counted toward the Psychology minor or the Psychology, Developmental Psychology, and Behavioral Neuroscience major requirements. Prerequisite: PSYC 200 or PSYC 201 or PSYC 210 or PSYC 211 or consent of instructor. RSH.

**PSYC 482. Sensation and Perception. 3 Hours. S.**
Introduction to human sensory and perceptual capabilities. Topics include: sensory systems, perceptual development, and perceiving color, objects, space, movement, sound, speech, touch, smell, and taste as well as various perceptual illusions. Prerequisite: PSYC 104. LEC.

**PSYC 483. Undergraduate Internship in Psychology. 1-3 Hours. U.**
Students conduct psychology focused fieldwork in an organization related to their professional/career goals. Credit hours are determined on the basis of 120 clock hours for 3 credit hours, 80 clock hours for 2 credit hours, and 40 clock hours for 1 credit hour. An internship plan (contract) is developed by the student in conjunction with the student's academic adviser and signed off by the academic adviser and an authorized agent of the internship site. At the conclusion of the internship experience, the authorized agent of the internship site writes the academic adviser indicating that the student has met the goals of the internship plan and the hours required. No more than 3 hours of PSYC 483 may be counted toward the minimum hours required for the major. Prerequisite: Admission to the Psychology major. FLD.

**PSYC 490. Theories and Concepts of Child Development. 3 Hours. S.**
An advanced course in the theories and basic concepts of child development. Coverage includes: (a) analyses of the general logic, assumptions, and principles of the five major approaches: normative-maturation, psychoanalytic, social learning theory, cognitive-developmental, and behavior analysis; (b) historical background of developmental theory; (c) social-cultural influences on theory construction; and (d) some cross-cultural perspectives. Not open to students previously enrolled in HDFL 290. Prerequisite: PSYC 104, or HDFL 160, HDFL 161, HDFL 432, or consent of instructor. LEC.

**PSYC 492. Psychology and Social Issues. 3 Hours. S.**
A study of psychological aspects of selected social issues in contemporary American society. Race relations and the civil rights movement. Political extremism. Public opinion and social change. Social psychological approaches to a variety of social problems. Prerequisite: PSYC 360 or 361, or consent of instructor. LEC.

**PSYC 499. Conceptual Issues in Psychology. 3 Hours. S.**
This course examines classic issues in psychology--free-will and determinism, nature and nurture, the mind-body problem, approaches to human action, cultural influences on psychological theories, the evolution of intellectual paradigms, and inductive and deductive approaches to social scientific research--from multiple perspectives within psychology and related social sciences. Prerequisite: PSYC 104 or equivalent. LEC.

**PSYC 500. Intermediate Statistics in Psychological Research. 3 Hours. U.**
A second course in statistics with emphasis on applications. Analysis of variance, regression, analysis, analysis of contingency tables; possibly selected further topics. Prerequisite: Grade of B- or better in PSYC 210 or PSYC 211. LEC.

**PSYC 502. Human Sexuality. 3 Hours. S.**
An introduction to the field of human sexuality. Topics to be covered include sexual anatomy and physiology, fertilization, pregnancy, birth and lactation, contraception, human sexual response, sexuality across the life cycle, love, marriage, alternatives to marriage, sexual orientation, sex differences in behavior, parenthood, sexually transmitted diseases, sex and the law, and sex education. Prerequisite: PSYC 104. LEC.

**PSYC 511. Laboratory Research in Infant Behavior. 3 Hours. S.**
Optional course for students currently enrolled in PSYC 510 or may be taken after completion of PSYC 510. Will offer students practical experience in an infant research laboratory. Students must spend a minimum of nine hours a week (on three different half days) in laboratory. They will learn to observe and record infant behavior, to handle data from experiments and participate in the planning and discussion of laboratory research. Acquaintance with and involvement in the issues of obtaining informed consent and ethical aspects of infant research will be included. Prerequisite: Current enrollment or previous enrollment in PSYC 510 and consent of instructor. LAB.

**PSYC 518. Human Memory. 3 Hours. S.**
In-depth coverage of human memory phenomena, including phenomena concerning acquisition, storage and retrieval, unconscious forms of memory, memory monitoring and control, and practical aspects of memory such as autobiographical memory, mnemonic techniques and eyewitness memory. Prerequisite: PSYC 104. LEC.

**PSYC 520. Memory and Eyewitness Testimony in Children. 3 Hours. S.**
A review of the literature on the development of memory in young children, and the implications of this research for understanding children's eyewitness testimony. The course will present current research on children's long-term memory abilities, the impact of stress on recall performance, the effectiveness of various types of interviewing techniques, and the suggestibility of children's recollections. Policy issues and potential guidelines for the elicitation and evaluation of children's memory reports in both clinical and legal arenas will be discussed. Prerequisite: PSYC 104 or ABSC/HDFL 160, or consent of instructor. LEC.
PSYC 521. Women and Violence. 3 Hours. S.
An examination of research on women and violence, including rape, domestic violence, sexual harassment, stalking, and child sexual abuse. The nature, prevalence, causes, and consequences of violence against women are discussed. (Same as WGSS 521.) Prerequisite: PSYC 104. LEC.

PSYC 531. Language Development. 3 Hours. S.
Introduction to the study of language development; emphasis on the psychological processes underlying syntactic, semantic, and pragmatic aspects of language development in children. Prerequisite: One of the following courses - PSYC 318, 319, 333, or 334; or consent of instructor. LEC.

PSYC 535. Developmental Psychopathology. 3 Hours. S.
A review of the literature on contemporary psychological and developmental disorders of children and youth. Course will present current models of psychopathology, classification systems, assessment methods, and treatment approaches designed for the individual, the family, and the community. Specific attention will be given to age, gender, and cultural differences and similarities. Topics include: anxiety disorders, oppositional behavior disorders, physical/sexual abuse, learning disabilities, and autism. (Same as ABSC 535.) Prerequisite: ABSC 160, PSYC 333, or consent of instructor. LEC.

PSYC 536. The Psychology of Language. 3 Hours. S.
A survey of recent research on psycholinguistics covering the perception, production, and comprehension of language. Topics include: the biological basis for language, the nature of comprehension processes, and memory for the syntactic, semantic, and pragmatic components of language. Prerequisite: One of the following courses - PSYC 318, 319, 333, or 334; or consent of instructor. LEC.

PSYC 545. Culture and Psychology. 3 Hours. S.
The course considers the relationship between culture and psyche. One theme throughout the course involves revealing the cultural grounding of psychological functioning. The second and complementary theme involves identifying the psychological processes involved in the phenomenon of culture. Prerequisite: PSYC 333, 334, 360 or 361 or consent of instructor. LEC.

PSYC 555. Evolutionary Psychology. 3 Hours. S.
A review of evolutionary theory and its application to human personality, cognition, interpersonal relationships, family dynamics, and development. Prerequisite: PSYC 104 and at least 3 additional hours in Psychology, or consent of instructor. LEC.

PSYC 556. Applied Developmental Psychology. 3 Hours. S.
An advanced study of the application of theories and concepts of developmental and behavioral psychology to a range of specific issues and problems of childhood and adolescence. This course will rely heavily upon the empirical research literature. Topics include contemporary social issues and child development, research in applied settings, assessment, intervention, and prevention, as well as program evaluation. (Same as ABSC 556.) Prerequisite: ABSC 160 or PSYC 333, and ABSC/PSYC 535. LEC.

PSYC 566. Psychology and the Law. 3 Hours. S.
An application of psychological processes and concepts to the American legal system. Among the topics covered are the socialization of legal attitudes, opinions about the purposes of the criminal justice system and especially of prisons, the concept of "dangerousness," the nature of jury decision making, and the rights of prisoners, patients, and children. LEC.

PSYC 570. Group Dynamics. 3 Hours. S.
A study of the processes underlying the dynamics of the group, including the observation of group phenomena and a consideration of their relation to research findings. Prerequisite: PSYC 360 or 361, or consent of instructor. LEC.

PSYC 572. Psychology and International Conflict. 3 Hours. S.
A study of psychological approaches to analysis and intervention in the field of international conflict and peace-making. Focus on major contributions and important paradigms for explanation and action. Prerequisite: PSYC 360 or consent of instructor. Background study in international relations or recent world history desirable. LEC.

PSYC 578. Social Attitudes. 3 Hours. S.
An introduction to the study of attitudes focusing on problems of measurement and on empirical findings and theories of attitude acquisition and change. Prerequisite: PSYC 360, 361, or consent of instructor. LEC.

PSYC 580. Research Lab. 1-5 Hours. S.
Supervised research under the guidance of a faculty member in the Department of Psychology. Students will be part of a collaborative laboratory environment, and will be involved in research design, data collection, and data analysis, and will take part in regularly scheduled laboratory meetings. Prerequisite: Permission of instructor. LEC.

PSYC 581. Psychology of Religion. 3 Hours. S.
Consideration of the psychological antecedents of religious experience, the nature of religious experience, and the behavioral consequences of religion. Focus will be on psychological theory and research relevant to religious thought, feeling, belief, and behavior. (Same as REL 581.) Prerequisite: PSYC 104. LEC.

PSYC 589. Nonverbal Communication. 3 Hours. S.
Examination of non-linguistic behavior in human communication, including proxemics (spacing), kinesics (movement and expression), and paralinguistics (voice quality). Includes phylogenetic and developmental perspectives, methods of analysis, applications to interpersonal problems. (Same as COMS 590.) Prerequisite: COMS 356 or PSYC 210 or PSYC 211. LEC.

PSYC 592. Psychological Significance of Physical Illness and Disability. 3 Hours. S.
A lecture course to help students become more aware of and responsive to the psychological needs of persons with physical illnesses or disabilities. Emphasis is upon the meanings of such conditions in individuals' lives and the effects of treatment and rehabilitation settings on psychological adaptation. Prerequisite: PSYC 104. LEC.

PSYC 598. Positive Psychology. 3 Hours. S.
An introduction to the core assumptions and research findings associated with human strengths and positive emotions. Also an exploration of interventions and applications informed by positive psychology in counseling and psychotherapy, and its application to school, work, family and other close relationships. (Same as EPSY 580.) Prerequisite: PSYC 104 or consent of instructor. LEC.

PSYC 602. Basis and Nature of Individuality. 3 Hours. S.
Individuality in cognitive and personality attributes is surveyed, and analyzed by current psychological theory. The course includes topics on the structure of intellect and personality, cognitive theory, brain research and behavior genetics as relevant to the understanding of individuality. Prerequisite: An introductory course in psychology. LEC.

PSYC 605. Health Psychology. 3 Hours. S.
Review of research and theory concerning the role of psychological factors in the development of physical illness and the contribution of psychologists to the treatment and prevention of physical illness. Prerequisite: PSYC 104. LEC.
PSYC 608. Sex Role Development. 3 Hours. S.
An examination of the theory and literature on sex role development in childhood, adolescence, and adulthood. Particular attention is given to approaches stressing androgyny and variations on traditional roles. Processes of socialization into both traditional and non-traditional roles are stressed. Literature on females is emphasized, but male sex role development is also covered. Prerequisite: PSYC 104 or HDFL 160. LEC.

PSYC 610. Advanced Personality. 3 Hours. S.
A survey of selected topics in the area of personality (e.g., defense mechanisms, aggression, interpersonal relations). Prerequisite: PSYC 120 or PSYC 420 or consent of instructor. LEC.

PSYC 613. History and Systems in Psychology. 3 Hours. S.
A survey of the historical development of modern theoretical systems in psychology. Prerequisite: PSYC 104, plus twelve hours in psychology. LEC.

PSYC 616. Foundations of Learning. 3 Hours. S.
A consideration of experimental findings and theories concerning classical and instrumental conditioning. Prerequisite: PSYC 104. LEC.

PSYC 618. Experimental Psychology: Human Learning. 6 Hours. AE61 / S.
Lectures and laboratory research on human information processing as related to theories of word recognition, reading, and language comprehension. Major emphasis on experimental design, data analysis, interpretation, and scientific writing. Prerequisite: PSYC 104 and PSYC 210 or PSYC 211 or consent of instructor. LEC.

PSYC 620. Experimental Psychology: Sensation, Perception, and Cognition. 6 Hours. AE61 / S.
Lectures and laboratory work on human sensory processes and how they result in perceptions of the environment. Experience is provided in designing and implementing research as well as in the skills necessary for statistical analysis, interpretation of data, and scientific writing. Prerequisite: PSYC 104 and PSYC 210 or PSYC 211 or consent of instructor. LEC.

PSYC 622. Experimental Psychology: Social Behavior. 6 Hours. AE61 / S.
Lectures, laboratory and field work on various issues in research in social psychology (e.g., conformity, attitude change, social processes). Two two-hour periods a week and appointment for research. Prerequisite: PSYC 104, PSYC 360, and PSYC 210 or PSYC 211 or consent of instructor. LEC.

PSYC 624. Experimental Psychology: Clinical Psychology. 6 Hours. AE61 / S.
Lectures and laboratory research on contemporary issues in clinical psychology. Emphasis on experimental design, data analysis, interpretation of data, and scientific writing. Prerequisite: PSYC 104 and PSYC 210 or PSYC 211 or consent of instructor. LEC.

PSYC 625. Experimental Psychology: Methods in Neuropsychology and Psychophysiology. 6 Hours. AE61 / S.
Lectures and laboratory work on psychophysiology and neuropsychology research methods. Overview of psychophysiological tools to measure the central and peripheral nervous systems. Experience designing and implementing neuropsychology and psychophysiology research. Prerequisite: PSYC 104 and PSYC 210 or PSYC 211 or consent of instructor. LEC.

PSYC 626. Psychology of Adolescence. 3 Hours. S.
Impact of factors of social environment and physical growth upon psychological development from puberty to young adulthood. (Same as ABSC 626.) Prerequisite: PSYC 104, PSYC 333, or HDFL/ABSC 160. LEC.

PSYC 630. Clinical Psychology. 3 Hours. S.
The historical and empirical foundations of clinical psychology. Significant trends in theory, research, and social organization which have shaped clinical practice. A review of clinical practice. Prerequisite: PSYC 104. LEC.

PSYC 632. Advanced Child Behavior and Development. 3 Hours. S.
An advanced course in child development that includes a survey of the field's principles and theoretical approaches, and current issues in research and practice. Topics will include: prenatal development, cognition and language, social-emotional development, socialization influences in childhood, developmental psychopathology, and social policies. (Same as ABSC 632.) Prerequisite: ABSC/HDFL 160, PSYC 333, or instructor permission, and senior or graduate status. LEC.

PSYC 642. The Psychology of Families. 3 Hours. S.
Study of the family as a psychosocial system. Emphasis is placed on factors affecting contemporary families including family structures, development, communication patterns, disorders, and treatment approaches. Theory, empirical evidence, and practical principles that may lead to maximizing individual growth in the family unit are discussed. Prerequisite: PSYC 104. LEC.

PSYC 644. Behavioral Pharmacology. 3 Hours. S.
Addresses psychological and behavioral effects of drugs, including psychotropic medications. A central theme is that effects of drugs frequently cannot be characterized solely from a pharmacological perspective. Thus, emphasis is placed on examining the interaction of pharmacological and behavioral variables. For example, how do psychological factors moderate responses to drugs? The nature of this area assumes some knowledge of general psychology, research methods, biology, chemistry, neuropsychology, and the nervous system. Prerequisite: PSYC 104 or consent of instructor. LEC.

PSYC 646. Mental Health and Aging. 3 Hours. S.
Reviews recent research and application in the field of mental health and aging. Theoretical perspectives appropriate for understanding mental health issues with increased age are discussed. The epidemiology, assessment, diagnosis, and treatment methods associated with a variety of mental health conditions are surveyed. The community mental health resources available for older adults are discussed as well as practically-related issues such as evaluations of functional independence and competency among older adults. Prerequisite: PSYC 104 or consent of instructor. LEC.

PSYC 650. Statistical Methods in Behavioral and Social Science Research I. 4 Hours. S.
Elementary distribution theory; t-test; simple regression and correlation; multiple regression and multiple correlation; curvilinear regression; logistic regression; general linear model. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 790 will have different course requirements. Prerequisite: A grade of B- or better in a beginning course in statistics (e.g., PSYC 210 or PSYC 211, MATH 365, POLS 306, COMS 356, SOC 510, or equivalent) is recommended, or consent of instructor. LEC.

PSYC 651. Anova and Other Factorial Designs. 4 Hours. S.
Course covers one-way analysis of variance, linear trends, contrasts, post hoc tests; multi-way analysis of variance for crossed, blocked, nested, and incomplete designs; analysis of covariance; repeated measures analysis of variance; general linear model. Applications across the social,
educational, and behavior sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 791 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor. LEC.

PSYC 652. Behavior Therapy. 3 Hours. S.
A review of the principal techniques of behavior therapy, exclusive of operant-based therapies. Emphasis upon systematic desensitization, implosion, assertion training, and modeling techniques. Special attention given to outcome research relevant to the effectiveness of these techniques. Recommended: A course in abnormal psychology. Prerequisite: PSYC 104. LEC.

PSYC 678. Drugs and Behavior. 3 Hours. S.
A survey of the methods used to study the effects of drugs on behavior, and of the effect of selected drugs on behavior, particularly the narcotics, hallucinogens, and drugs used in the treatment of mental illness. Prerequisite: PSYC 104. LEC.

PSYC 679. Applied Nonparametric Statistical Methods. 4 Hours. S.
This course covers nonparametric statistical methods for testing hypotheses. Topics include a review of parametric statistics, sampling distributions, hypothesis testing, and motivations for using nonparametric techniques. In-depth coverage is given to distribution-free procedures, goodness-of-fit tests, resampling methods, and theory underlying nonparametric methods. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 679 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor. LEC.

PSYC 685. Human Factors Psychology. 3 Hours. S.
Research techniques and methods useful in quantifying parameters of human performance that affect system functioning. Special emphasis is placed on modeling visual, auditory, and orienting systems and on human information processing. Prerequisite: PSYC 210 or PSYC 211 or consent of instructor. LEC.

PSYC 687. Factor Analysis. 4 Hours. S.
This course covers the theory behind, and application of, exploratory factor analysis. Topics include a review of multiple linear regression and matrix algebra. In-depth coverage is devoted to diagrams, model specification, goodness of fit, model selection, parameter estimation, rotation methods, scale development, and sample size and power issues. Extensions to confirmatory settings are elaborated. Both the theory underlying factor analytic techniques and hands-on application using software are emphasized. Applications across the social and behavioral sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 687 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor. LEC.

PSYC 689. Conceptual Issues in Human Sexuality. 3 Hours. S.
An examination of the social construction of sexuality and research methods and issues relevant to sexuality. These concepts are applied to various topics, such as defining and conceptualizing sex and gender, sexual dysfunction, sexual orientation, the social control of sexuality, sexual coercion and abuse, and abstinence-only sex education. The course does not cover anatomical or physiological aspects of sexuality. (Same as WGSS 689.) Prerequisite: PSYC 104 or WGSS 201. LEC.

PSYC 690. Seminar: _____. 1-5 Hours. U.
Discussion of current problems in psychological theory and research. Prerequisite: PSYC 104 and sophomore status. LEC.

PSYC 691. The Psychology of Aging. 3 Hours. S.
Social, psychological, and economic adjustments required by aging; changes in cognition, role and personality necessitated by advancing age. Prerequisite: PSYC 210 or PSYC 211 and one of the following: PSYC 318, PSYC 319, PSYC 350, PSYC 351, PSYC 360, PSYC 361, PSYC 370, PSYC 371, PSYC 380, or PSYC 381; or graduate standing; or consent of instructor. LEC.

PSYC 692. Test Theory. 4 Hours. S.
This course begins with recommendations for how to write a test, covers basics of classical test theory, and then emphasizes modern statistical methods for analyzing item data. Methods include factor analysis of categorical responses, methods for identifying measurement invariance (differential item functioning), and item response theory. Approximately one-half of the meetings are labs (primarily consisting of data analysis). The course is offered at the 600 and 800 levels with additional assignments at the 800 level. Prerequisite: PSYC 790/650 or equivalent, or consent of the instructor. LEC.

PSYC 693. Multivariate Analysis. 4 Hours. S.
Introduction to the central methods used in the analysis of multivariate data. Includes linear transformations, multivariate analysis of variance, multivariate multiple regression, discriminant analysis, canonical correlation, factor analysis, and an introduction to methods for clustering and classification. Applications across the behavior and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 693 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor. LEC.

PSYC 694. Multilevel Modeling I. 4 Hours. S.
Introduction to statistical methods for modeling multilevel (hierarchically structured) data. Topics include a review of ordinary least squares regression analysis, random effects ANOVA, intraclass correlation, multilevel regression, testing and probing interactions, maximum likelihood estimation, model assumptions, model evaluation, and the analysis of longitudinal data. Emphasis will be on the theory underlying multilevel modeling techniques and hands-on application using software. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 694 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor. LEC.

PSYC 695. Categorical Data Analysis. 4 Hours. S.
Introduction to multivariate analyses of count data, including error models, statistical inference, loglinear models, logit models, logistic regression, homogeneity, symmetry, and selected other topics. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 695 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor. LEC.

PSYC 696. Structural Equation Modeling I. 4 Hours. S.
Introduction to statistical methods for modeling latent variables. Topics include a review of latent variables, covariance structures analysis, mean structures analysis, confirmatory factor analysis (CFA), structural equation modeling (SEM), multiple group CFA, longitudinal CFA, longitudinal SEM, and hierarchical CFA. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 696 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor. LEC.
PSYC 697. Longitudinal Data Analysis. 3 Hours. S.
Reviews and contrasts various statistical models for the analysis of change. Course focuses on techniques to analyze longitudinal (repeated measures) data beyond the repeated-measures ANOVA framework. Applications across the behavioral and social sciences are emphasized. Students taking this course as PSYC 991 will have different course requirements. Prerequisite: PSYC 696 or equivalent, or consent of instructor. LEC.

PSYC 704. Research Practicum in Clinical Child Psychology. 3 Hours.
This course provides students in the Clinical Child Psychology Program with the opportunity to enhance and consolidate their research activities by fulfilling one of the elective cluster course requirements. This practicum involves a contract with a research advisor and the program director. The contract includes definable products and dates for completion to prepare research for submission for publication, develop a grant proposal, or conduct additional research project independent of other requirements in the program. The course is not to be taken as an overload, but is to be part of a full-time course schedule. May be repeated. (Same as ABSC 704, formerly HDFL 704.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. LEC.

PSYC 706. Special Topics in Clinical Child Psychology: _____. 3 Hours.
A course offering detailed discussion of the literature and research methods of a special topic within clinical child and pediatric psychology. Topic and instructor may change by semester and will be announced in the Schedule of Classes. May be repeated. (Same as ABSC 706, formerly HDFL 706.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. LEC.

PSYC 710. Feminist Issues in Psychology. 3 Hours.
Detailed examination and discussion of psychological theory and research from a feminist perspective. Specific topics will vary. The goal of the course is to facilitate students' ability to develop feminist critiques of existing research and theory as well as to generate nonexistent alternative approaches. Open to advanced undergraduates with consent of instructor. Prerequisite: Some familiarity with research methods in the social sciences. LEC.

PSYC 723. Advanced Cognitive Psychology. 3 Hours.
Advanced cognitive psychology reviewing theories of pattern recognition, attention, working memory, language comprehension and problem solving. Emphasis will be placed upon the application of these theories to real-life situations. Prerequisite: PSYC 104 and six additional credit hours in psychology, or permission of the instructor. LEC.

PSYC 725. Cognitive Neuroscience. 3 Hours.
A survey of the critical issues within cognitive and behavioral neuroscience. The course will provide information about neuronal physiology, functional neuroanatomy, and psychophysiological research methods. Human cognition and the neurophysiology that subserves the primary cognitive functions will be discussed. LEC.

PSYC 735. Psycholinguistics I. 3 Hours.
A detailed examination of issues in the processing of language. The course will provide a survey of research and theory in psycholinguistics, reflecting the influence of linguistic theory and experimental psychology. Spoken and written language comprehension and language production processing will be examined. (Same as LING 735.) LEC.

PSYC 737. Psycholinguistics II. 3 Hours.
An in-depth examination of selected topics in psycholinguistics. Topics may include spoken language processing, written language processing, neolinguistics, prosody, and syntactic processing. (Same as LING 737.) Prerequisite: PSYC 735/LING 735 or consent of instructor. LEC.

PSYC 750. Advanced Seminar in Gender Identity and Sexual Orientation. 3 Hours.
Design and execution of research on the causes and consequences of variations in gender identity, sexual orientation or affectional preference, sex roles, and sex-linked behaviors. Prerequisite: Consent of instructor. LEC.

PSYC 757. Theories of Perception. 3 Hours.
A consideration of the facts and theories of human perception. The emphasis will be on vision, although hearing, smell, pain, and other senses will also be discussed. Of particular concern is the question of perceptual modifiability and the response of the human observer to unusual sensory environments. Prerequisite: PSYC 104. LEC.

PSYC 774. Advanced Social Psychology I. 3 Hours.
First semester of a two-semester course. Designed to provide a thorough background in social psychology and to motivate a continuing exploration of theoretical problems and issues in the field. Combines examination of historical development of theories and methods in social psychology with analysis of theoretical and methodological approaches to a variety of contemporary topics. LEC.

PSYC 775. Advanced Social Psychology II. 3 Hours.
A continuation of PSYC 774. LEC.

PSYC 777. Social Psychology: Theory, Research, and Clinical Applications. 3 Hours.
Basic theories in social psychology, as well as their applications to the process of coping with life events. The focus is on the nature of each theory, including the history and more recent developments; however, where clinical applications have been made of a particular theory, these will be discussed. LEC.

PSYC 780. Research Lab. 1-5 Hours. S.
Supervised research under the guidance of a faculty member in the Department of Psychology. Students will be part of a collaborative laboratory environment, and will be involved in research design, data collection, and data analysis, and will take part in regularly scheduled laboratory meetings. Prerequisite: Permission of instructor. LEC.

PSYC 782. Research Methods in Child Language. 3 Hours.
A survey of methods for studying phonological, morphological, syntactic, and semantic change during language development. Methods include: diary interpretation, language sample analysis, probe elicitation tasks, and clinical assessment. (Same as LING 782.) LEC.

PSYC 784. Proseminar in Communication and Aging. 1 Hour.
A weekly forum for students and faculty to discuss professional issues and interdisciplinary research in communication and aging. May be repeated for credit. (Same as COMS 784.) (Same as SPLH 784.) Prerequisite: Consent of instructor. LEC.

PSYC 787. Gerontology Proseminar. 3 Hours.
A proseminar coordinated by the Gerontology Center. The proseminar explores essential areas of gerontology for researchers and practitioners, providing a multidisciplinary (psychology, biology, sociology, and communication) perspective on aging. The proseminar surveys contemporary basic and applied research, service programs, and policy and management issues in gerontology. (Same as ABSC 787, AMS 767, COMS 787, and SOC 787.) (Formerly HDFL 787.) LEC.

A course emphasizing the practical application of inferential statistics to a variety of research designs and outcome variables. Topics will include...
both parametric and nonparametric statistical procedures, and various applications of both ANOVA and multiple regressions. Prerequisite: Graduate standing in the Department of Psychology or consent of instructor. LEC.

PSYC 790. Statistical Methods in Psychology I. 4 Hours.
Elementary distribution theory; t-test; simple regression and correlation; multiple regression and multiple correlation; curvilinear regression; logistic regression; general linear model. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: A beginning course in statistics and graduate standing, or consent of instructor. LEC.

PSYC 791. Statistical Methods in Psychology II. 4 Hours.
Continuation of PSYC 790. One-way analysis of variance, linear trends, contrasts, post hoc tests; multi-way analysis of variance for crossed, blocked, nested, and incomplete designs; analysis of covariance; repeated measures analysis of variance; general linear model. Applications across the social, educational, and behavior sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor. LEC.

PSYC 795. Computing and Psychology. 3 Hours.
Introduction to the use of personal computers to facilitate and standardize administration of research protocols and to automate data collection. Lectures and projects emphasize direct application to research in the behavioral sciences. Prerequisite: Graduate standing in the Department of Psychology and consent of instructor. LEC.

PSYC 796. Computer Models of Brain and Behavior. 3 Hours.
An introduction to the techniques of computing modeling with applications in the study of brain-behavioral mechanisms. Early and contemporary efforts to simulate the neuron, neural networks, and neural processes which regulate behavior, are reviewed. Application of modeling techniques in sample brain-behavior problem areas are used to illustrate the operation of thresholds, feedback, dynamic equilibrium, redundancy, plasticity, network structure, and similar constructs. Programming skill in a high-level language available on personal computers or mainframe is required. Prerequisite: EECS 128 or EECS 138 or PSYC 795, and PSYC 370, or equivalent courses or experience. LEC.

PSYC 798. Introduction to Mathematical Methods in Psychology. 3 Hours.
A first course in scaling and modeling psychological processes. Substantive areas treated selected from sensation, perception, learning, memory, preference, choice and decision processes, problem solving, games, social interaction, and individual differences. May be repeated with permission. Prerequisite: Previous course work beyond the introductory level in psychology or a closely related area, a course in statistics, and a course in calculus. LEC.

PSYC 799. Proseminar in Child Language. 2 Hours.
A review and discussion of current issues in children's language acquisition. May be repeated for credit. Students are graded S/F. (Same as ABSC 797, LING 799, and SPLH 799.) Formerly HDFL 797.) LEC.

PSYC 800. Experimental Psychology: _____ . 3 Hours.
An advanced survey of theory and research in a selected area of experimental psychology. Continual enrollment for four semesters is required of entering graduate students in experimental psychology. Open to other students with graduate standing in psychology or a closely related field. May be repeated with permission. LEC.

PSYC 802. Social-Psychological Aspects of Health, Disability, and Associated Life Stress. 3 Hours.
Disabling myths; perception of causes and effects of disease and disability; attitudes and interpersonal relations; hoping, coping, and reality issues; values; professional-client relations; public media and societal rehabilitation. A departmental core course for graduate students. LEC.

PSYC 803. Fundamentals of Psychological Assessment and Intervention with Children. 3 Hours.
Lecture and supervised experience covering the theoretical and empirical literature on assessment and intervention methods for children, adolescents, and families. Students will learn and demonstrate evidence-based clinical interviewing skills, behavioral observation techniques, risk assessment techniques, therapeutic communication approaches, strategies for providing assessment feedback to families, and ethical principles related to the provision of assessment and psychotherapy (including client file and resource management.) The course requires interaction with clinical populations and communication with referral sources. (Same as ABSC 803.) Prerequisite: Graduate student in clinical child psychology program. LEC.

PSYC 805. History of Psychology. 3 Hours.
A historical survey of basic concepts and theories in psychology with emphasis on their relationship to contemporary problems in theory. LEC.

PSYC 809. Professional Issues: Clinical Child Psychology. 1 Hour.
Consideration of special problems confronting the child and family oriented scientist-practitioner, and in the development of a professional identity. Topics include critical issues including ethical, legal, cultural, empirical, and clinical aspects of research and practice. May be repeated. (Same as ABSC 809, formerly HDFL 809.) Prerequisite: Graduate standing in clinical child psychology. LEC.

PSYC 811. Achievement and Intellectual Assessment in Clinical Child Psychology. 3 Hours.
Course covers the basic theory, research, administration, and reporting of psychological assessment of development, intelligence, and achievement for children, adolescents, and adults within cultural and developmental contexts. The range of psychological instruments examined includes, for example, WIAT, K-ABC, W-J, S-B, WISC, WAIS, and WPPSI. (Same as ABSC 811.) Prerequisite: Graduate student in clinical child psychology. LEC.

PSYC 812. Behavioral and Personality Assessment of Children. 3 Hours.
Lecture, laboratory, field work, and supervision appointment. Theory and applications in the psychological evaluation of children with standardized assessment techniques. The administration, scoring, interpretation, and reporting of behavioral and personality functioning in children. (Same as ABSC 812, formerly HDFL 812.) Prerequisite: Graduate standing in clinical child psychology. LEC.

PSYC 814. Advanced Child and Family Assessment. 3 Hours.
Lecture, laboratory, field work, and supervision appointment. Supervised experience in specialized psychological assessment approaches for children and families. Emphasis on interviewing, observation, psychometric scales, and consultation. Rationale, administration, analysis, and reporting of mental health functioning of children and families. Experience with clinical populations, and communication with referral sources. (Same as ABSC 814, formerly HDFL 814.) Prerequisite: Graduate student in clinical child psychology. LEC.

PSYC 815. Design and Analysis for Developmental Research. 3 Hours.
Coverage of the philosophy and basic principles of group-design research, with a special emphasis on designs that are appropriate
for developmental studies. Designs for both experimental and quasi-experimental research are covered, and appropriate statistical procedures are presented concomitantly with the designs. Individual-difference analyses and statistical control issues are also addressed. LEC.

PSYC 816. Design and Analysis for Neuroimaging Research. 3 Hours.
Course covers research design and analysis issues for event-related potential (ERP) and functional magnetic resonance imaging (fMRI) studies. Repeated measures, statistical parametric mapping, principal components analysis, and independent components analysis techniques are covered. Both practical and theoretical aspects of these statistical techniques will be explored in Matlab environment. Matrix algebra recommended but not required. Prerequisite: PSYC 790 and 791 or equivalent are required. LEC.

PSYC 818. Experimental Research Methods in Social Psychology. 3 Hours.
Systematic discussion of the techniques of research in social psychology, with practice in the utilization of selected methods. Prerequisite: One course in social psychology in addition to introductory social psychology. LEC.

Basic principles and practices of field methods in basic and applied research in social psychology and related fields; relationships between field and laboratory studies; special emphasis on survey and evaluation research methods and study designs; client and respondent relationships; research and public policy. LEC.

PSYC 820. Advanced Child Development. 3 Hours.
A survey of the basic empirical research in the field of child development, covering intelligence, cognition, perception, attention, personality, social behavior, and socialization processes. These literatures are integrated and their implications for social application are addressed. (Same as ABSC 820, formerly HDFL 820.) Prerequisite: A course in child development or equivalent. LEC.

PSYC 821. Women and Violence. 3 Hours.
An examination of research on women and violence, including rape, domestic violence, sexual harassment, stalking, and child sexual abuse. Research on the nature, prevalence, causes, and consequences of violence against women is discussed. (Same as WGSS 821.) Prerequisite: Six hours in WGSS and/or PSYC, or permission of instructor. LEC.

PSYC 825. Social Development. 3 Hours.
A lecture and discussion course in social development. It includes such topics as theoretical approaches to the study of social development, as well as the literature on family processes, peer relations, aggression and prosocial behavior, child abuse and neglect, family violence, child care, and the media. (Formerly PSYC 880.) (Same as ABSC 825.) Prerequisite: A course in child psychology or development. LEC.

PSYC 831. Advanced Human Learning and Memory. 3 Hours.
An in-depth analysis of current research and theory. Focus will be on experimental methodology in these areas. LEC.

PSYC 832. Clinical Health Psychology I: Health Promotion and Disease Prevention. 3 Hours.
An overview of the field of health psychology as applied to health promotion and disease prevention. Content areas include history and current research regarding behavioral and psychosocial risk factors for disease, as well as empirically supported assessment and therapeutic techniques for risk factor reduction and health promotion. Prerequisite: Graduate student in psychology or health-related fields, or permission of instructor. LEC.

PSYC 833. Clinical Health Psychology II: Acute and Chronic Illness. 3 Hours.
An overview of the field of health psychology as applied to acute and chronic illness in adult, adolescent, and child populations. Content areas include psychosocial aspects of acute and chronic illness, including relevant empirically supported assessment and intervention strategies, adherence to medical regimens, pain, and enhancement of the psychologist's role in medical settings. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor. LEC.

PSYC 834. Clinical Health Psychology III: Physical Aspects of Health and Disease. 3 Hours.
An overview of physical manifestations of health and disease. Content areas include overview of anatomy and physiology of each body system, description of how deviations form normal anatomical development and physiological function result in common disorders, methods for distinguishing psychological from organic etiologies, indications of side effects of medications for common disorders, and description of roles of key members of health care team members. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor. LEC.

PSYC 835. Clinical Practicum IV: Health. 3 Hours.
Supervised assessment and treatment of individuals and families within a medical setting, as well as multidisciplinary consultation. Inpatient and outpatient clinical health psychology rotations may include pediatrics, oncology, pain, rehabilitation, and other health psychology related fields. Emphasis in selection of and training in psychological intervention strategies is on the use of empirically supported treatments where possible. Grading on Satisfactory/Fail basis. Prerequisite: PSYC 970 and graduate student in clinical health psychology specialty. FLD.

PSYC 836. Clinical Practicum V: Health. 3 Hours.
Continuation of PSYC 835. Prerequisite: Graduate student in clinical health psychology specialty. FLD.

PSYC 838. Pain and Its Management. 3 Hours.
Focuses on biological, cognitive/affective, and social causes and effects of pain. Emphasis on basic research methods in pain, origins of pain, and how the experience of pain alters many aspects of the individual's life. Topics include anatomy and physiology of pain, impact of pain on a variety of aspects of individuals' lives, treatments for pain, and the role of various health care professionals in treating pain. Discussions also will include basic research methods in pain, tools for assessing pain, barriers to adequate pain management, and ethical/legal/public policy issues in working with pain patients. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor. LEC.

PSYC 839. Palliative Care in Health Psychology. 3 Hours.
Based on the biopsychosocial model, this course focuses on the current practice of palliative care in community and hospital settings by health care professionals. Classes will be discussion based, centered on current issues and controversies in care of the chronically ill and dying. Recent research will be highlighted, as will cultural perspectives on death. Students will be expected to identify applicable literature for presentation and class discussion, along with assigned readings. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor. LEC.

PSYC 840. Psychology of Women's Health. 3 Hours.
A seminar devoted to examination of psychosocial and behavioral factors in women's health. Content areas include women and the health care system, social roles and health, gender differences, and similarities in
morbidly and mortality, gynecologic health, chronic diseases, and health-related behaviors. Prerequisite: Graduate student in psychology or health-related field, or by permission of instructor. LEC.

PSYC 841. Stress and Coping. 3 Hours.
Theories and research on conceptualization, assessment, and effects of stress. Focus on coping processes and other determinants of adjustment to stressful conditions. Discussion of psychological interventions for managing stress and trauma. Prerequisite: Graduate student in psychology or related fields. LEC.

PSYC 842. Specialized Health Psychology Practicum. 1-3 Hours.
Specialized advanced practicum in clinical health psychology, with an area of emphasis mutually defined by student and instructor. Prerequisite: Consent of instructor. FLD.

PSYC 843. Behavioral Pharmacology. 3 Hours.
Addresses psychological and behavioral effects of drugs, including psychotropic medications. A central theme is that effects of drugs frequently cannot be characterized solely from a pharmacological perspective. Thus, emphasis will be placed on examining the interaction of pharmacological and behavioral variables. For example, how do psychological factors moderate responses to drugs? The nature of this area assumes some knowledge of general psychology, research methods, biology, chemistry, neurophysiology, and the nervous system. Specific course structure will be modified to suit student interests. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor. LEC.

PSYC 844. Mental Health and Aging. 3 Hours.
Reviews recent research and application in the field of mental health and aging. Theoretical perspectives appropriate for understanding mental health issues with increased age are discussed. The epidemiology, assessment, diagnosis, and treatment methods associated with a variety of mental health conditions are surveyed. The community mental health resources available for older adults are discussed as well as practically-related issues such as evaluations of functional independence and competency among older adults. Prerequisite: Graduate student in psychology or related health field, or permission of instructor. LEC.

PSYC 845. Impression Formation and Interpersonal Behavior. 3 Hours.
Intensive investigations of the processes involved in impression formation and of the effects of established impressions upon interpersonal communications. (Same as COMS 835.) Prerequisite: PSYC 670 or COMS 535. LEC.

PSYC 846. Practicum in Clinical Child Psychology I. 1-3 Hours.
Introductory practicum experience for the Clinical Child Psychology Program. Orientation to psychological evaluation and treatment of children, adolescents, and their families and initial development of professional self-assessment skills. Students acquire specific clinical competencies through shadowing cases, assisting with interpretation of test of intelligence and academic achievement, conducting behavioral observations in field settings, and performing co-therapy of cases presenting to the KU Child and Family Services Clinic. Students develop ability to identify specific treatment goals and select therapeutic interventions that are conceptually congruent with clients’ presenting problems and are based on sound empirical evidence. Students also develop the ability to integrate and synthesize test results, interview material, and behavioral observations into coherent case conceptualizations. May be taken in more than one semester. (Same as ABSC 847.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

PSYC 850. Assessment I: Foundations of Psychological Assessment. 3 Hours.
Introduction to the history, methods and theory underlying psychological assessment techniques and methods. Students learn to administer, score, and interpret mental status exams and intelligence tests for children, adolescents and adults. Structured diagnostic assessments are introduced and practiced. Psychological report writing is introduced and practiced. The psychometric theory underlying the construction and validation of personality assessment instruments is reviewed. Prerequisite: Graduate student in clinical psychology or consent of instructor. FLD.

PSYC 853. Advanced Acoustical and Psychological Aspects of Musical Behavior. 3 Hours.
Study and experimental investigation of acoustic, psychoacoustic, and psychological phenomena as they influence music. Attention will be given to physical parameters; perception of pitch, loudness, and timbre; magnitude estimation; theories of consonance; experimental aesthetics; and measurement and prediction of musical ability. Each student will be expected to complete an experiment or quasi-experiment related to human musical behavior. (Same as MENT 953.) Prerequisite: PSYC 453 or equivalent; or consent of instructor. LEC.

PSYC 855. Assessment II: Integrative Psychological Assessment. 3 Hours.
Lecture, laboratory and field work. Students learn to administer, score and interpret various personality assessment instruments. Students apply skills acquired in previous coursework to write integrated psychological assessment reports based on anamnesis, structured interview data, intelligence tests, and both objective and projective personality assessment instruments. Prerequisite: PSYC 850 or consent of instructor. FLD.

PSYC 863. Clinical Neuropsychology Across the Lifespan. 3 Hours.
Reviews neural development and the brain-behavior relationships in intact, injured, and diseased brain systems. Details basic issues in clinical assessment and reporting of cognitive impairment resulting from developmental disorders, stroke, traumatic brain injury, and brain-disease. Selected topics include perception, speech, memory/dementia, judgment, and attention. Prerequisite: Graduate status and PSYC 961 or consent of instructor. LEC.

PSYC 864. Clinical Neuropsychology. 3 Hours.
Brain-behavior relationships in humans; structure and function of the brain; evaluation of function; the interpretation of neuropsychological data. Lecture and laboratory. LEC.

PSYC 865. Advanced Psychological Assessment: Interview Based Techniques. 3 Hours.
Lecture and fieldwork. Advanced clinical interviewing. Structured diagnostic interviewing. Coverage of specialized areas of clinical interviewing (e.g., motivational interviewing). Report writing focused on documentation of clinical and structured interviewing. Prerequisite: PSYC 855 or consent of instructor. FLD.
PSYC 870. Cognitive Development. 3 Hours.
A lecture/discussion course in cognitive development. The course will contrast the theory and research of Jean Piaget and his followers, with an information processing or cognitive psychology approach to issues. Topics include development of perception, attention and information getting; memory and metamemory; problem solving; discrimination learning and concept formation; and individual differences in cognitive styles and strategies. Prerequisite: A course in child psychology or development, a course in cognitive psychology, or consent of instructor. LEC.

PSYC 872. Attention, Perception, and Learning in Infancy. 3 Hours.
Coverage of the basic literatures on perceptual-cognitive behavior during the first three years of life, as assessed by measures of attention, perception, learning, and memory. Course material is approached from an information-processing framework. LEC.

PSYC 875. Advanced Assessment: Integration of Assessment Techniques. 3 Hours.
Lecture and fieldwork on selection, administration, scoring and interpretation and integration of data from personality and abilities tests. Focus on assessments includes history, theory and application in psychological assessment batteries. Emphasis on advanced training in objective personality assessment, projective personality assessment, psychometric theory and integrated report writing. Prerequisite: PSYC 855 or consent of instructor. LEC.

PSYC 879. Applied Nonparametric Statistical Methods. 4 Hours.
This course covers nonparametric statistical methods for testing hypotheses when the assumptions of ordinary parametric statistics are not met. Topics include a review of parametric statistics, sampling distributions, the logic of hypothesis testing, and motivations for using nonparametric techniques. In-depth coverage will be given to distribution-free procedures, sign tests, contingency tables, median tests, chi-square and other goodness-of-fit tests, rank correlations, randomness tests, Monte Carlo methods, resampling methods, tests of independence, 1-sample, 2-sample, and k-sample methods, permutation tests, and function smoothing and splines. There will be an emphasis on the theory underlying nonparametric methods. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 and 791 or equivalent, or consent of instructor. LEC.

PSYC 881. Proseminar in Quantitative Behavioral and Social Sciences. 1 Hour.
This course is an open forum discussion of issues, topics, and presentations in quantitative behavioral and social sciences. The course can be repeated for credit and is open to any graduate student in any discipline across the behavioral and social sciences. SEM.

PSYC 882. Theory and Method for Research of Human Environments. 3 Hours.
Conceptual and technical methods for analysis of behavioral environments; theory and research utilization of behavior settings and other ecobehavioral units. Prerequisite: Nine hours of social science including at least one course dealing with research methods and consent of instructor. LEC.

PSYC 885. Altruism and Helping Behavior. 3 Hours.
Review of contemporary research of prosocial behavior. Topics to be covered include the existence of altruism, why people do and do not help others, and the effect of institutional roles on the behavior of service professionals such as therapists, counselors, and social workers. LEC.

PSYC 886. Item Response Theory. 4 Hours.
This course covers the basic concepts and methods of item response models. Focal topics include the theory underlying IRT models and their general properties. Also covered are methods for checking model assumptions and interpreting IRT estimates. The course uses examples from the social and behavioral sciences to demonstrate how IRT methods can be used to inform and refine survey development, to assess measurement equivalence, link survey scores, and build item banks for short forms or computer-adaptive testing (CAT). Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 and 791 or equivalent, or consent of instructor. LEC.

PSYC 887. Factor Analysis. 4 Hours.
This course covers the theory behind, and application of, exploratory factor analysis. Topics include a review of multiple linear regression and matrix algebra. In-depth coverage is devoted to diagrams, model specification, goodness of fit, model selection, parameter estimation, rotation methods, scale development, and sample size and power issues. Extensions to confirmatory settings are elaborated. Both the theory underlying factor analytic techniques and hands-on application using software are emphasized. Applications across the social and behavioral sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor. LEC.

PSYC 888. Diversity Issues in Clinical Psychology. 3 Hours.
Review of individual differences pertaining to culture, ethnicity, race, gender, sexual orientation, age, etc., as these have an impact upon theory, research, assessment, and treatment issues in clinical psychology. (Same as ABSC 888.) Prerequisite: Graduate status in clinical psychology, or instructor permission. LEC.

PSYC 889. Conceptual Issues in Human Sexuality. 3 Hours.
An examination of the social construction of sexuality and research methods and issues relevant to sexuality. These concepts are applied to various topics, such as defining and conceptualizing sex and gender, sexual dysfunction, sexual orientation, the social control of sexuality, sexual coercion and abuse, and abstinence-only sex education. The course does not cover anatomical or physiological aspects of sexuality. (Same as WGSS 889.) Prerequisite: Six hours in WGSS and/or PSYC, or permission of instructor. LEC.

PSYC 891. Intelligence and Cognition. 3 Hours.
This course concerns the nature of intelligence. Theory and research on cognitive abilities, reasoning, and complex problem solving are surveyed. Special emphasis is given to contemporary cognitive ability research that applies both experimental and correlation methods to understand the nature of intelligence. LEC.

PSYC 892. Test Theory. 4 Hours.
This course begins with recommendations for how to write a test (with or without correct answers, for assessing a wide variety of constructs of interest in social and behavioral sciences), covers basics of classical test theory, and then emphasizes modern statistical methods for analyzing item data. Methods include factor analysis of categorical responses, methods for identifying measurement invariance (differential item functioning), and item response theory. Lectures and Laboratory. This course is offered at the 600 and 800 levels, with additional assignments at the 800 level. Prerequisite: PSYC 790/650 or equivalent, or consent of instructor. LEC.

PSYC 893. Multivariate Analysis. 4 Hours.
Introduction to the central methods used in the analysis of multivariate data. Includes linear transformations, multivariate analysis of variance, multivariate multiple regression, discriminant analysis, canonical
correlation, factor analysis, and an introduction to methods for clustering and classification. Applications across the behavior and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor. LEC.

PSYC 894. Multilevel Modeling. 4 Hours.
Statistical methods for modeling multilevel (hierarchically structured) data. Topics include a review of ordinary least squares regression analysis, random effects ANOVA, intraclass correlation, multilevel regression, testing and probing interactions, maximum likelihood estimation, model assumptions, model evaluation, and the analysis of longitudinal data. There will be a heavy emphasis on the theory underlying multilevel modeling techniques and hands-on application using software. Applications across the social, educational, and behavior sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor. LEC.

PSYC 895. Categorical Data Analysis. 4 Hours.
Multivariate analyses of count data. Error models, statistical inference, loglinear models, logit models, logistic regression. Homogeneity, symmetry, and selected other topics. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor. LEC.

PSYC 896. Structural Equation Modeling I. 4 Hours.
Introduction to statistical methods for modeling latent variables. Topics include a review of latent variables, covariance structures analysis, mean structures analysis, confirmatory factor analysis (CFA); structural equation modeling (SEM), multiple group CFA, longitudinal CFA, longitudinal SEM, Hierarchical CFA, and Multi-trait Multi-Method SEM. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor. LEC.

PSYC 897. Master’s Thesis in Clinical Child Psychology. 1-10 Hours.
Supervised research experience completing thesis leading to master’s degree. (Same as ABSC 897.) RSH.

PSYC 898. Proseminar: Professional Issues in Clinical and Health Psychology. 1 Hour.
Discussion of current theoretical, empirical, and applied issues in clinical and clinical health psychology involving students, faculty, guest speakers. Prerequisite: Graduate student in clinical psychology. RSH.

PSYC 899. Thesis. 1-10 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

PSYC 902. Proseminar in Experimental Psychology. 1 Hour.
Seminar in experimental psychology to be conducted in rotation by the experimental psychologists on the staff and a monthly visiting experimental psychologist. LEC.

PSYC 903. Proseminar in Social Psychology. 1 Hour.
A series of research talks on topics relevant to social and personality psychology featuring different weekly speakers from inside and outside the university. SEM.

PSYC 905. Psychopathology in Children. 3 Hours.
Diagnosis and treatment of psychological problems in childhood and adolescence. (Same as ABSC 905.) Preference given to graduate students in child clinical psychology, school psychology, and counseling psychology. Prerequisite: Fifteen hours of graduate credit in psychology or consent of instructor. LEC.

PSYC 921. Seminar in Early Development. 3 Hours.
A seminar devoted to factors affecting early human development with some attention to theoretical formulations and the relevant animal literature. LEC.

PSYC 923. History and Systems of Developmental Psychology: Developmental Theory. 3 Hours.
An intensive study of traditional and recent developmental theories with an emphasis upon the role of heredity, early stimulation, reinforcement, and modification as each affects the course of the development of children. LEC.

PSYC 927. Seminar in Psychobiology. 3 Hours.
A detailed study of a specific research area dealing with the biological foundations of behavior. Each week articles will be assigned from the journal literature. LEC.

PSYC 930. Research Seminar on Intimate Relationships. 3 Hours.
Consideration of current psychological theory and research on adult intimate relationships: friendship, dating, committed relationships, dissolution of committed relationships. Students will be expected to be involved in on-going empirical research in the area. Prerequisite: Graduate level courses in research design and statistics. LEC.

PSYC 933. Seminar: The Measurement of Attitudes. 3 Hours.
An examination of the concept of attitude and the methods developed to assess the various aspects of attitudes. Prerequisite: PSYC 578 or consent of instructor. LEC.

PSYC 935. Seminar in Group Dynamics. 3 Hours.
Intensive examination of selected problems in the functioning of small groups. May be taken for two semesters. LEC.

PSYC 936. Group Therapeutic Techniques. 3 Hours.
LEC.

PSYC 943. Advanced Practicum in Clinical Child Psychology III. 1-3 Hours.
Advanced practicum experience for the Clinical Child Psychology Program. Development of advanced competencies in assessment and intervention with children, adolescents, and their families through didactics, field experience, and supervision. Students acquire advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum (i.e., formal case presentation), and modeling of clinical competencies for junior students. Students will demonstrate the ability to implement empirically derived therapeutic interventions in consideration of individual differences, cultural values, and individual preferences. Students in external practicum sites will demonstrate an understanding of evidence-based models of consultation and provision of consultation to care providers in professional contexts. May be taken in more than one semester. (Same as ABSC 943.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

PSYC 944. Advanced Practicum in Clinical Child Psychology IV. 1-3 Hours.
Advanced practicum experience for the Clinical Child Psychology Program. Demonstration of advanced competencies in assessment, intervention, and consultation with children, adolescents, and their families through didactics, field experience, and supervision in the semester(s) prior to required clinical internship. Students demonstrate advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family...
Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum (i.e., integrated case presentation), and modeling of clinical competencies for junior students. Course requirements include the development of portfolios for demonstration of clinical competencies and application to clinical internships. May be taken in more than one semester. (Same as ABSC 944.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

PSYC 946. Theories and Methods of Psychotherapy. 3 Hours.
Comparative examination and analysis of major theories and approaches to psychotherapeutic interventions, core principles of therapeutic change, scientific approaches to establishing treatment efficacy, current intervention issues. Prerequisite: Nine hours in graduate clinical psychology or consent of instructor. LEC.

PSYC 947. Advanced Practicum in Clinical Child Psychology V. 1-5 Hours.
Specialized practicum experience for the Clinical Child Psychology Program. Demonstration of advanced competencies related to supervision and consultation in clinical psychology. With faculty supervision, students will develop and demonstrate the ability to provide effective supervision to less advanced students in the program in selected cases appropriate to the service setting. Further development of advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum, and modeling of clinical competencies for junior students. May be taken in more than one semester. (Same as ABSC 947.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

PSYC 949. Empirically Supported Treatment. 3 Hours.
This course provides an overview of theoretical and applied issues germane to the contemporary empirically supported treatments movement in clinical psychology. The course will include an in-depth examination of several psychotherapy protocols (e.g., cognitive therapy for depression) which have been identified as “empirically supported,” with considerable attention accorded to implementation of the characteristic techniques of such interventions. LEC.

PSYC 950. Clinical Supervision and Consultation: Theory & Research. 1 Hour.
Lecture, readings, and discussion of theory and research related to the practices of clinical supervision and consultation. Developmental and competency based approaches to supervision with exposure to other approaches. Professional issues, ethics, and multicultural aspects of supervision and consultation. Prerequisite: Previous or concurrent enrollment in PSYC 969 or consent of instructor. LEC.

PSYC 951. Clinical Supervision Practicum. 1-3 Hours.
Fieldwork in supervision under direction of instructor. Practice in supervision of clinical work, assessment, psychotherapy, and documentation. Prerequisite: Previous or concurrent enrollment in PSYC 950 and PSYC 969, or consent of instructor. FLD.

PSYC 955. Close Relationships and Adult Attachment: Theory, Research, and Current Controversies. 3 Hours.
Review of attachment theory literature and the research it has generated in clinical developmental, personality, and social psychology. The course will allow discussion of a wide range of issues including the evolution of behavioral systems that underlie close human relationships, the developmental roots of relational styles and affect-regulation processes, the role of mental representations in interpersonal behavior, and some of the attachment and close relationship processes involved in good and poor mental health. Prerequisite: Graduate standing or consent of instructor. LEC.

PSYC 956. Social Neuroscience. 3 Hours.
Acquaint students with the Social Neuroscience approach as well as recent findings using this approach. The course will focus on particular social phenomena and (a) evaluate the utility of current social neuroscience research examining these phenomena and (b) consider future experimental designs using the Social Neuroscience approach to further inform our understanding of each phenomenon. After being acquainted with foundational concepts, students will analyze findings in a number of core content domains (including emotions, emotion regulation, self, stereotyping, attitudes and beliefs, social decision making, cooperation, close relationships), focusing on neuroscience’s contribution beyond traditional methods. Prerequisite: Graduate standing or consent of instructor. LEC.

PSYC 960. Advanced Psychopathology. 3 Hours.
Review of current nosology of adult psychopathological syndromes emphasizing development of diagnostic skills. Critical survey of recent research and theory related to the etiology, course, prognosis, and treatment of adult psychopathological conditions. Prerequisite: Graduate student status in clinical psychology, clinical child psychology, or counseling psychology. LEC.

PSYC 961. Biological Foundations of Psychopathology. 3 Hours.
A review of fundamental topics in the neurosciences and their relevance to selected psychopathological disorders. The fundamental topics are taken from genetics, neuroanatomy, neurophysiology, and neurochemistry. The disorders include schizophrenia, depression, anxiety disorders, Alzheimer’s disease, Parkinson’s disease, and Huntington’s disease. Prerequisite: Graduate student in clinical psychology or consent of instructor. LEC.

PSYC 962. Advanced Personality. 3 Hours.
A survey of selected advanced topics in the area of personality. Includes review of theoretical and research issues in the area of personality. Prerequisite: Consent of instructor. LEC.

PSYC 963. Clinical Child Psychology Internship. 1 Hour.
Three consecutive enrollments, covering a minimum of eleven months of experience in an approved clinical psychology field setting; supervision by qualified clinical child psychology faculty and field staff clinicians. Required of all clinical child psychology program students. An intensive guided experience in application of clinical child psychology theory, methods, and practices. Integrates scientific and clinical aspects of field. (Same as ABSC 963, formerly HDFL 963.) Prerequisite: Completion of Ph.D. comprehensive examinations and permission of clinical child psychology faculty. FLD.

PSYC 964. Clinical Practicum I. 3 Hours.
Lecture, laboratory and field work, and supervision appointment. Psychological evaluation and treatment of individuals, couples, families, and groups; supervised, progressive experience in psychological treatment and in the clinical evaluation of intellectual, personality, and social functioning. Emphasis in selection of and training in psychological intervention strategies is on the use of empirically supported treatments where possible. Grading on Satisfactory/Fail basis. Prerequisite: Graduate student in clinical psychology program. FLD.

PSYC 965. Clinical Practicum II. 3 Hours.
A continuation of PSYC 964. Grading on Satisfactory/Fail basis. Prerequisite: PSYC 964 or permission of instructor. FLD.

PSYC 966. Clinical Practicum III. 3 Hours.
A continuation of PSYC 964. Grading on Satisfactory/Fail basis. Prerequisite: PSYC 964 or permission of instructor. FLD.
PSYC 967. Psychotherapy with Families. 3 Hours.
Clinical approaches to marriage and family therapy. Intensive consideration of the theoretical positions, research findings, clinical methods, and technical problems in marriage and family therapy. Prerequisite: PSYC 946. LEC.

PSYC 968. Research Methods in Clinical Psychology. 3 Hours.
Systematic consideration of research methods in clinical psychology including identification of a research problem, selection of the research design and assessment strategies, and methods of evaluating the results. The principles, pitfalls, artifacts, biases, and sources of controversy in research in this area are also covered. Prerequisite: Graduate standing in clinical or counseling psychology. LEC.

PSYC 969. Clinical Practicum IV. 3 Hours.
Lecture, laboratory, field work, and supervision appointment. Advanced psychological treatment of the individual, couple, family, and group client; supervised, progressive experience in the clinical application of psychotherapeutic treatment methods with emphasis on the use of empirically supported interventions where possible. Grading on Satisfactory/Fail basis. Prerequisite: PSYC 966 or consent of instructor. FLD.

PSYC 970. Clinical Practicum V. 3 Hours.
A continuation of PSYC 969. Grading on Satisfactory/Fail basis. Prerequisite: PSYC 969 or consent of instructor. FLD.

PSYC 974. Clinical Psychology Internship. 1-3 Hours.
Three consecutive enrollments, covering a minimum of eleven months of experience in an approved clinical psychology field setting; supervision by clinical psychology faculty and field staff clinical psychologists. Required of all clinical psychology program students. An intensive guided experience in the application of clinical psychology theory, methods, and practices. An emphasis upon the relationships between scientific and clinical functions. Integrations between research and clinical practice. Prerequisite: Completion of Ph.D. comprehensive examinations and consent of clinical psychology faculty. FLD.

PSYC 975. Professional and Ethical Problems in Clinical Psychology. 3 Hours.
Interprofessional relationships, case security, legal aspects, ethical code of practice, clinic administration, and problems in the clinical practice of psychology. Issues involving ethics in research will also be explored. Prerequisite: Consent of instructor. LEC.

PSYC 976. Therapeutic Interventions with Children. 3-5 Hours.
Clinical approaches to the therapeutic treatment of children with special emphasis on research findings and laboratory (practicum) experience. A survey of relationship therapies, operant strategies, system approaches, parent education and play therapy by the right therapist for a specific child with a particular problem. (Same as ABSC 976.) Prerequisite: Instructor permission. FLD.

PSYC 977. Specialized Clinical Practicum. 1-4 Hours.
Lecture; laboratory and field work, and supervision appointment. Specialized psychological services for the evaluation and/or treatment of the individual client or the group or the institution. Investigation of and experience in a special practicum area not covered in regular courses. Prerequisite: Students must consult with members of the clinical faculty and propose an acceptable project in advance of enrollment. FLD.

PSYC 980. Special Problems in Psychology. 1-5 Hours.
Investigation of a special research problem or directed reading in an area not covered in regular courses. Prerequisite: Consent of instructor. RSH.
PSYC 993. Seminar: ______ 1-5 Hours.
LEC.

PSYC 996. Structural Equation Modeling Ii. 3 Hours.
Continuation of PSYC 996. Advanced applications of modern methods for testing hypotheses on multivariate correlational data in the behavioral and social sciences. Topics include advanced confirmatory factor analysis, mediation and moderation among latent variables, latent growth curve modeling, and other latent variable mean and covariance structures analysis techniques. Applications across the behavioral and social sciences are emphasized. Prerequisite: PSYC 896 or equivalent, or consent of instructor. LEC.

PSYC 998. Doctoral Dissertation in Clinical Child Psychology. 1-10 Hours.
Research experience making original contribution to literature in clinical child psychology. (Same as ABSC 998, formerly HDFL 998.) THE.

PSYC 999. Dissertation. 1-12 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

Public Affairs Adm, School Courses
PUAD 177. First Year Seminar: ______ 3 Hours. SF GE11.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in public administration. May not contribute to major requirements in public administration. First-year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

PUAD 330. Introduction to Public Administration. 3 Hours. S.
Introduction to administration, public policy and policy makings is the study of government workers, the organizations in which they work, how they are financed, and how government engages citizens to help form and maintain community. In various ways, the class sessions explore the three important issues of public administration: discretion, authority, and accountability. (Same as POLS 330.) Prerequisite: POLS 110. LEC.

PUAD 331. Introduction to Public Administration, Honors. 3 Hours. S.
Introduction to administration, public policy, and policy making, for honors students is the study of government workers, the organizations in which they work, how they are financed, and how government engages citizens to help form and maintain community. In various ways, the class sessions explore the three important issues of public administration: discretion, authority, and accountability. (Same as POLS 331.) Prerequisite: POLS 110. LEC.

PUAD 332. Quantitative Methods for Public Administration. 3 Hours. S.
Focuses on building the quantitative analysis skills of students in public administration. Students learn basic and intermediate statistics, and methods of data analysis and interpretation. Students gain exposure to the uses of data in public organizational settings. Prerequisite: Math 101 or equivalent placement. LEC.

PUAD 333. Hard Choices in Public Administration: ______ 3 Hours.
GE3S / S.
Focuses on some of America’s most vexing public policy challenges and emphasizes the political context of difficult choices. Course examines models of decision-making and the process of policy analysis. Students learn how to apply the tools of policy analysis to make policy judgments. Prerequisite: PUAD 330 or PUAD 331. LEC.

PUAD 431. Bureaucracy, Public Administration, and the Private Sector. 3 Hours. S.
Examines the problems posed by behaviors within and by bureaucracies. Provides students with a set of conceptual tools for understanding the organizational environment in which policy analysts ply their profession and the role of a manager within such organizations. Offers strategies for the policy professional seeking to navigate large bureaucracies. Readings and class discussions integrate theoretical analyses of organizations with detailed case studies. Prerequisite: PUAD 330 or PUAD 331. LEC.

PUAD 432. Conducting the People’s Business Ethically. 3 Hours. AE51 / S.
Addresses the moral challenges facing leaders in the public and nonprofit sectors. Examines the values and virtues important to sustained ethical leadership, as well as strategies to build strong institutional cultures and support ethical practices in institutions. Considers moral and political theory by focusing on contemporary cases and issues. Students learn how to identify moral issues in public life and public management. There is a special focus on the integration of moral concerns into public discussion in a manner that contributes to good policy and does not polarize issues. This course considers moral and political theory by focusing on contemporary cases and issues. Prerequisite: PUAD 330 or PUAD 331. LEC.

PUAD 433. Metropolitics and Macroproblems: The American City in Local and Global Context. 3 Hours. S.
An interdisciplinary study of American cities, focusing on the rapidly changing demographic, physical, political, social, and economic changes. Sunbelt cities, edge cities, the rustbelt cities, planned and unplanned suburban communities, as well as declining center cities and newly revitalized downtowns are considered. The role of immigration and migration in reshaping the urban environment, and the effects of globalization are also examined. Prerequisite: PUAD 330 or PUAD 331. LEC.

PUAD 435. Generating, Allocating and Managing Public Resources. 3 Hours. U.
This course is devoted to topics in public budgeting, finance and financial management. These activities play a central role in public management. The intent of this course is to understand the role these activities play in local, state, and federal governments and to see how policy and management are shaped and influenced by budgets, financial reports, and tax policy. Prerequisite: PUAD 330 or PUAD 331. LEC.

PUAD 436. Managing People in Public Organizations. 3 Hours. U.
Effective human resources management is one of the key goals of organizations in both the public and private sectors. This course focuses on human resources management in a public sector context with particular emphasis placed upon past, current, and future challenges in the field. The course covers topics such as the recruitment, selection, and compensation of public sector employees, as well as more contemporary issues such as diversity management and public sector personnel reform. Prerequisite: PUAD 330 or PUAD 331. LEC.

PUAD 494. Topics in Public in Administration: ______ 3 Hours. S.
An introductory study of selected topics in public affairs and administration. Course may be repeated for credit if content varies. Course may be offered in lecture or online format. Prerequisite: PUAD 330 or PUAD 331. LEC.

PUAD 601. Crime and Punishment. 3 Hours. AE41 / S.
Examines the administration of justice and focuses on differential and discriminatory treatment in policing, criminal prosecutions, trials, sentencing, or imprisonment. Also considered are the basis and impact of racial profiling, harassment, arbitrary detention, and abusive treatment of members of racial and ethnic groups, immigrants, and/or other vulnerable groups by law enforcement, and disparate treatment by prosecutors and the courts. Prerequisite: PUAD 330 or PUAD 331. LEC.
PUAD 602. Diversity in Public Administration. 3 Hours. AE41 / S.
Analyzes diversity and leadership in public and private institutions along ethnic, racial, and gender lines and the challenges of the facilitation of open dialogue on diversity. Examines the political, historical, social, and economic reasons why Americans of different ethnic, racial, and gender groups hold divergent views about major public policy areas, as well as fundamental views about democratic participation. Prerequisite: PUAD 330 or PUAD 331. LEC.

PUAD 603. Foundations of the Nonprofit Sector. 3 Hours. H/S.
This course provides an overview of the U.S. nonprofit sector, its history, scope, diversity and its positioning among and between the private and public sectors of the U.S. economy. The course explores the legal framework under which nonprofit organizations operate and are regulated. Economic, political, social, organizational and giving theories of the sector are reviewed in order to understand the sectors existence, roles and activities with particular attention to philanthropy and voluntarism. Distinct contributions to society as well as contemporary challenges faced by the sector are examined. Prerequisite: PUAD 330, or POLS 110, or MGMT 305, or a PUAD master's core course, or consent of instructor. Junior status or above is also required. LEC.

PUAD 604. Resource Development and Management in Nonprofit Organizations. 3 Hours. H.
This course provides an overview of the broad range of activities relevant to acquisition, management and utilization of resources in nonprofit organizations. The course identifies the primary strategies through which resources are generated with emphases on grantwriting, fundraising, social entrepreneurship, and public/private partnerships. Development of organizational identity and management of public relations is examined in relation to resource and relationship development. Strategies for management of resources to ensure long-term benefit and sustainability are explored. Prerequisite: PUAD 603. LEC.

PUAD 605. Managing Nonprofit Relationships. 3 Hours. H.
This course considers the set of relationships that nonprofit leaders must balance within the organization and beyond organizational boundaries. Both internal relationships (with staff, volunteers, and board members) and external relationships (with stakeholders, other organizations, and the community at large) are critical to mission accomplishment. This course provides students with the resources necessary to understand the challenges and opportunities related to building and LEC.

PUAD 606. Nonprofit Accountability: Public Needs and Public Values. 3 Hours. H.
This course examines the role of the nonprofit sector in society by posing broad questions about why nonprofit organizations are held accountable, to whom they are accountable, and detailing how organizations can satisfy accountability demands. The course investigates the public role of the nonprofit sector in society, identifies the stakeholders that are integral to an organization's mission, and describes and critiques the financial and evaluation tools that nonprofits can use to ensure their social viability. Prerequisite: PUAD 603. LEC.

PUAD 607. Introduction to Project Management. 3 Hours. H.
An exploration of the technical aspects of project management and the human aspects of project leadership. The course integrates conceptual approaches with practical applications of knowledge and skill sets. The course addresses the Project Management Body of Knowledge (PMBOK--as created by the Project Management Institute) and project leadership competencies including leading, communicating, negotiating, problem solving, and influencing. Prerequisite: Junior standing. LEC.

PUAD 608. Collaboration in Public Administration. 3 Hours. S.
Managers must work effectively across organizational and sector boundaries to solve problems and produce public value. This course considers the forces contributing to the need for collaborative governance, changing management tasks and competencies, and how to address key collaborative challenges. Prerequisite: PUAD 330 or POLS 330, or permission of the instructor. LEC.

PUAD 639. Concepts of Civil Society. 3 Hours. U.
Concepts of community, social capital, and civil capacity building, and their relations to effective community functioning, democratic politics, and administrative expertise. LEC.

PUAD 641. Public Service Leadership. 3 Hours. U.
Concepts of leadership in community, political, and administrative settings. These settings include government and all non-business organizations (e.g. certain for-profit organizations). LEC.

PUAD 660. Organizations and Management I. 3 Hours. U.
An exploration of management in the context of public organizations. Management is explored at the individual, group and organizational level including conflict resolution, problem-solving, planning and legal aspects of organizations. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Permission of instructor. LEC.

PUAD 661. Organizations and Management II. 3 Hours. U.
A continuation of PUAD 660. The context for leading public organizations is explored through knowledge management, collaboration, innovation, process improvement and leadership succession. Graded on a satisfactory/unsatisfactory basis. Prerequisite: PUAD 660, and permission of instructor. LEC.

PUAD 691. Internship in Public Service. 1-6 Hours. AE61 / U.
Designed to provide public administration students an applied learning experience in either a public or nonprofit organization. Open to majors in Public Administration only. Prerequisite: One of the following: PUAD 330, 331, PUAD 332, PUAD 333, and consent of instructor required. FLD.

PUAD 692. Research Experience in Public Administration. 1-6 Hours. U.
Designed for advanced public administration students. Students learn research skills by working one-on-one with a faculty member to assist in his/her program of research. Open to majors in Public Administration only. Students are required to complete a final project or presentation, through advising and consultation with the designated faculty member. Prerequisite: One of the following: PUAD 330, 331, PUAD 332, PUAD 333 and consent of instructor required. LEC.

PUAD 693. Directed Readings. 1-3 Hours. U.
For advanced undergraduate students who wish to study a specific topic of interest that is not covered in the curriculum. Each student must complete a proposal outlining his or her topic request and submit to the Undergraduate Advisor. Intended for students majoring in Public Administration. Prerequisite: One of the following: PUAD 330, 331, PUAD 332, PUAD 333, and consent of instructor. IND.

PUAD 694. Topics in Public Administration. 3 Hours. U.
Study of selected topics in public administration. Course may be repeated for credit if content varies. Course may be offered in lecture or online format. Prerequisite: PUAD 330 or PUAD 331. LEC.

PUAD 824. Public Policy and Administration. 3 Hours.
An exploration of the ways in which public policy is made in the United States, focusing on the role of the administrator at each stage of the policy process: formulation, implementation, and evaluation. Various theories of policy-making with application to specific areas of public policy will be examined. LEC.

PUAD 825. Urban Policy and Administration. 3 Hours.
This course explores the development, implementation and evaluation of public policy in the local government context. It examines a variety of
An examination of political and administrative aspects of state government focusing on legislative and executive branches of government. LEC.

**PUAD 826. Public Policy and Administration of State Government. 3 Hours.**

An examination of political and administrative aspects of state government focusing on legislative and executive branches of government. LEC.

**PUAD 827. Health Care Policy and Administration. 3 Hours.**

A seminar designed to explore the development of public health policy in the United States. Particular attention will be given to (1) the development of public institutions and policy goals; (2) current policy problems such as expenditure-cost controls, prospective reimbursement, utilization review, access, and public and private investment planning; and (3) administrative problems in the current health care system. (Same as HPM 837.) LEC.

**PUAD 828. Nonprofit Management and Policy. 3 Hours.**

This course focuses on the economic, social, and legal foundations of the nonprofit sector. Nonprofits are examined in the context of a three-sector economy, with emphasis on the ways in which nonprofits compensate for market failures and government failures. The course examines government-nonprofit relations in the modern welfare and offers an in-depth examination of the health, education, and welfare functions as performed by nonprofits. This course also provides exposure to selected topics in nonprofit management such as grant writing, board relations, advocacy, fundraising and volunteer management. LEC.

**PUAD 830. Administrative Ethics. 3 Hours.**

A survey of ethical issues faced by public administrators. Special attention will be given to ethical problems arising within hierarchical organizations and to the ethical implications of particular public policies. LEC.

**PUAD 831. Public Administration Practicum. 1 Hour.**

Exposes students to day-to-day operational facets of public management through workshops, speakers, exercises. LEC.

**PUAD 832. Organizational Theory. 3 Hours.**

An introductory theory course designed to develop an understanding about organizations, their environments, and the political subsystems in which they exist. LEC.

**PUAD 833. Administrative Behavior. 3 Hours.**

An examination of individual and group behavior within organizations, focusing on motivation, leadership, conflict and conflict resolution, group dynamics and communication. LEC.

**PUAD 834. Human Resource Management. 3 Hours.**

This course presents the context and practice of effective human resource management, with emphasis on the political, legal, historical, and ethical dimensions of public employment. This course considers the functions of workforce management, including: 1) planning of work and the allocation of labor to that work, 2) acquisition of employees and their competencies, knowledge, skills, and abilities, 3) development of employees to channel, improve and create new knowledge, skills, and abilities, and 4) maintaining the working relationship between employee and employer. Students will apply workforce management theories and techniques to contemporary organizational challenges and investigate the tensions inherent to balancing competing values (such as: responsiveness/neutralty and efficiency/equity) and meeting conflicting demands of organizational stakeholders and society. LEC.

**PUAD 835. State and Local Public Finance. 3 Hours.**

Focuses on the tax, spending, and debt practices of state and local governments. Drawing on the tools of positive and normative economic analysis, the course explores the implications of these activities on broader economic outcomes, including private allocation of resources and the distribution of wealth. LEC.

**PUAD 836. Introduction to Quantitative Methods. 4 Hours.**

Introduces quantitative approaches to examine public management and public policy decisions. Concepts of research design, probability, and inferential statistics are covered. LEC.

**PUAD 837. Budgeting and Resource Allocation. 3 Hours.**

Examines the practices and the political, economic, and organizational contexts of public and nonprofit budgeting, tools of financial analysis, and ethics of financial management. LEC.

**PUAD 838. Urban Service Delivery. 3 Hours.**

Focuses on organizational arrangements for the provision of basic urban services and the character of service delivery politics. Methods for evaluating the efficiency and responsiveness of alternative organizational arrangements are treated. LEC.

**PUAD 839. Topics in Public Administration: _____ . 3 Hours.**

Study of selected topics in public administration. LEC.

**PUAD 840. Theory of Public Administration. 3 Hours.**

Survey of the development of ideas about public administration among public officials and research investigators. Emphasis on basic concepts, research reports, and theoretical treatises on the nature of public administration. LEC.

**PUAD 841. The Role, Context, and Ethics of Public Administration in American Society. 3 Hours.**

Provides students with an overview of the social context of public administration with an emphasis on political issues, intellectual history, ethics, and the tensions between democracy and bureaucracy. LEC.

**PUAD 842. Law and Public Management. 3 Hours.**

Course investigates major concepts that make up the legal environment of public administration. The accepted uses and procedures of the field, relationships among courts, agencies, the legislature, and basic legal research are examined. LEC.

**PUAD 843. Constitutional Foundations of Public Administration. 3 Hours.**

This course provides a grounding in the constitutional premises of public administration including executive, legislative, and judicial powers, and federalism, and those issues associated with the development of economic institutions and processes such as taxation, employment regulation, and commerce controls. LEC.

**PUAD 844. Advanced Seminar in State and Local Budgeting. 3 Hours.**

This course studies the theories behind selected topics in public budgeting and compares the theories with the actual practice of budgeting in the State of Kansas and its communities. LEC.

**PUAD 845. Organizational Analysis and Public Management. 3 Hours.**

Explores concepts and practices in organization behavior and management theory as they apply to public organizations. Emphasis is placed on understanding the dynamics of individuals, groups, and teams within organizations, dynamics associated with organizational structures, accountability, and culture and dynamics of risk in leadership, collaboration, and contracting. LEC.

**PUAD 846. Kansas and Its Government. 3 Hours.**

This course is designed to offer students the opportunity to obtain a comprehensive overview of the culture, history, economy, and geography of Kansas along with the review of state and local government infrastructure. The review of governments will include the financing of governments in Kansas. LEC.
PUAD 847. Legislative Process. 3 Hours.
This course is designed to acquaint students with the workings of the policy process at the level of state government. Its focus will give students an understanding of the political process to enable them to function more effectively in state policy development and implementation. Prerequisite: PUAD 824, PUAD 825, PUAD 826 or PUAD 827. LEC.

PUAD 848. Advanced Management Practices in State Government. 3 Hours.
This course offers the student an opportunity to enhance skills developed in PUAD 826 in an experiential learning environment that simulates actual management practice. Complex cases will be rank ordered and resolved on a work schedule developed by each work group. Groups will work simultaneously on two or more cases at all times. Prerequisite: PUAD 826. LEC.

PUAD 849. Law, Courts, and Public Policy. 3 Hours.
This course provides an overview of the role of law, litigation, and courts in the public policy process, with an emphasis on bureaucratic institutions. The course covers the main theories and empirical research on the policy effects of litigation and intervention, with a particular focus on civil rights in the areas of employment, policing, welfare, prisons, and environmental policy. (Same as POLS 849.) Prerequisite: Graduate standing or consent of instructor. LEC.

PUAD 850. Intergovernmental Relations. 3 Hours.
This course focuses on the fiscal and administrative relationships among the three levels of government - federal, state, and local - in the United States. A number of topics will be examined, including a history of intergovernmental relations, the political, constitutional, and legal foundations of the intergovernmental system, and intergovernmental fiscal policy. The impact of the intergovernmental system will be assessed from the perspective of specific areas and intergovernmental programs. LEC.

PUAD 851. Infra-Structure Management. 3 Hours.
A survey of land-use, infra-structure, and technology issues in municipalities. LEC.

PUAD 852. Comparative Public Policy and Administration. 3 Hours.
This seminar examines the application of theories in public administration, public management, and public policy in international and comparative contexts. Particular attention is given to how governments and publics are connected by way of intergovernmental strategies, governance, and differing political and administrative arrangements. LEC.

PUAD 853. Policy Analysis and Evaluation. 3 Hours.
This course will introduce students to the conceptual foundations and applied techniques associated with identifying, describing, and seeking solutions to public policy problems (policy analysis) and evaluating the performance of public programs and organizations (program evaluation). Basic microeconomic theory is introduced. LEC.

PUAD 854. Innovation and Organizational Change. 3 Hours.
This course will examine theories of innovation and organizational change as applied to public organizations. Particular emphasis will be placed on the concepts of innovation in bureaucratic organizations, on the process of successful change in organizations, and on leadership and employees’ roles. LEC.

PUAD 855. Financial Management for Public and Not-for-Profit Organizations. 3 Hours.
Financial management focuses on the use of financial information for decision making and evaluation. This course will rely on fundamental accounting concepts as they relate to the basic financial statements of government and not-for-profit organizations. Time will also be spent on financial management practices (e.g. cash management, debt management, etc.) and financial condition analysis. Material presented in this course expands on the foundational material covered in PUAD 837. Prerequisite: PUAD 837 or permission from the instructor. LEC.

PUAD 856. Management and Information Technology. 3 Hours.
An introduction to the concepts of information policy and management of technology within governmental organizations. The course covers the effects of technology on government and society as well as information policy (privacy, security and access) and their importance to democracy. The course also includes a leadership perspective on planning, funding, and implementation of technology systems in governmental organizations as well as the role of Chief Information Officer. LEC.

PUAD 857. Performance Management and Governance. 3 Hours.
This course examines the practice and governance challenges of performance management and budgeting in the public sector. Topics covered in this course include: a) the governance context of performance measurement and management; b) the historical and theoretical foundation of performance measurement and management; c) the global trend of performance-oriented reforms; d) the practice and politics of performance measurement and management; and e) governance and ethical issues in managing for results. LEC.

PUAD 858. Performance Audit. 3 Hours.
This course examines the practice of performance audit at the national, state, and local levels. Topics covered in the course include: a) the concept of performance audit and the roles of auditors in performance management; b) performance audit systems and standards at the national, state and local levels; c) performance audit methodologies and techniques; d) the establishment of audit criteria; e) the concept and practice of risk and vulnerability analysis; f) the reporting and communication of performance audit results. LEC.

PUAD 859. Service Management. 3 Hours.
This course provides an introduction to service management in the public sector and will focus on providing students with the conceptual understanding and skills to design, promote, manage, and deliver public services. The course will integrate concepts of service management with quality assurance, business process analysis, and project management. Through this course, students will develop a better understanding of methods for improving responsiveness and accountability to organizational goals and mission. LEC.

PUAD 892. Public Administration Internship. 3 Hours.
A part-time supervised professional work experience designed to provide students the knowledge, background, and practical experience in public service. A written summary of the experience including a job description, projects the student, and a reflective statement on integrating the internship with theoretical issues regarding public administration. This course brings theory and practice together. Graded on a satisfactory/unsatisfactory basis. FLD.

PUAD 893. Directed Readings. 1-3 Hours.
Designed to meet the needs of advanced students whose study in public administration cannot be met with current course work. RSH.

PUAD 894. Professional Development Seminar I. 3 Hours.
Open only to precareer students with internships, this intensive seminar is designed around issues interns confront in their working relationships. Emphasis is placed on the transition of the student from an academic environment to a professional work relationship. Class sessions deal with issues like employee socialization, power and trust, and administrative change. Graded on a satisfactory/unsatisfactory basis. FLD.

PUAD 895. Professional Development Seminar II. 3 Hours.
Continuation of PUAD 894. Graded on a satisfactory/unsatisfactory basis. FLD.
PUAD 897. Public Administration Contemporary Issues and Competency Assessment. 3 Hours.
This course exposes students to the contemporary issues in public management and analysis of competencies for public management in four theme areas. Students will participate in discussions of issues and in three assessments of their preparation to lead public organizations. Students will complete the MPA Final Essay which focuses on integration of course and work experience in relation to the values theme of the MPA program. Graded on a satisfactory/unsatisfactory basis. LAB.

PUAD 898. Leadership, Professionalism, and Citizen Engagement. 3 Hours.
This course explores connections between facilitative political and administrative leadership, professional expertise, and citizen engagement. It will explore politics and the political arena; administrative/technical expertise and the relationship between the arenas of politics and administration. It will present the concept of citizen engagement and adaptive work, complicating as well as enriching public policy making and implementation. LEC.

PUAD 930. Research Seminar in Public Administration and Democracy. 3 Hours.
This course focuses on the democratic context of public administration. Topics could include how democracy shapes the practice of public administration; the functioning of public administration in a constitutional democracy; issues relating to control and discretion of public administrators; citizenship and representative bureaucracy; theories of bureaucratic values such as equity, justice and efficiency, ethics and accountability; theories of institutions. SEM.

PUAD 931. Research Seminar in Public Management. 3 Hours.
This course, on the topic which is increasingly is approached as an interdisciplinary field, focuses on the management of public and nonprofit agencies. Topics could include: the nature of public agencies and the roles of public executives, managers, and professionals; distinctions between public, private, and nonprofit agencies in America and internationally; creating and managing organizational networks; leadership; work motivation; and the ethics of decision-making. SEM.

PUAD 932. Seminar in the Intellectual History of Public Administration. 3 Hours.
This course will analyze the intellectual currents that undergird the theories and concepts in public administration. There are three primary perspectives crosscutting the topics. They are historical, cultural and analytical.

PUAD 934. Research Methods in Public Administration. 3 Hours.
The course examines issues of research and epistemology with an emphasis on connecting theory and research and doing research in field settings. RSH.

PUAD 935. Advanced Quantitative Methods for Public Administration. 3 Hours.
This seminar will assist students to develop a thorough competence in both theory and application of multivariate statistical models of the types that are commonly used to study questions of organization and policy in the public sector. These will include inference for the general linear regression model under a wide variety of specifications, as well as a consideration of path models and systems of simultaneous equations. The principal goal of this course is to strengthen the ability of doctoral students in public administration to work methodologically as independent scholars using relatively advanced designs and technique in their work. SEM.

PUAD 936. Policy Analysis and Program Evaluation. 3 Hours.
This course examines the theoretical foundations and analytical components of policy analysis and program evaluation, common tools for assessing alternative courses of public action and program effectiveness. This examination will include a review and critique of common quantitative and qualitative approaches, including cost-benefit analysis, cost-effectiveness analysis, and quasi-experimental design. LEC.

PUAD 937. Qualitative Methods in Public Administration. 3 Hours.
This course examines the concepts and practices of qualitative research. The focus will be on field research and the collection of "textual data" through observation, interviewing, and documents. The course will also examine the interpretation and analysis of qualitative data and how to present qualitative findings. RSH.

PUAD 939. Topics in Public Administration: ______. 1-3 Hours.
A study of selective topics in public administration. Course may be taken more than once. LEC.

PUAD 943. Constitutional Foundations of Public Administration. 3 Hours.
This course provides grounding in the constitutional premises of public administration including executive, legislative, and judicial powers, and federalism, and those issues associated with the development of economic institutions and processes such as taxation, employment regulation, and commerce controls. LEC.

PUAD 949. Law, Courts, and Public Policy. 3 Hours.
This course provides an in-depth analysis of the role of law, litigation, and courts in the public policy process, with an emphasis on bureaucratic institutions. The course covers the main theories and empirical research on the policy effects of litigation and intervention, with a particular focus on civil rights in the areas of employment, policing, welfare, prisons, and environmental policy. As part of the course requirements, students will conduct original empirical research. LEC.

PUAD 990. Research Practicum in Public Policy and Administration. 3 Hours.
This course will provide students with an opportunity to conduct applied research in a field setting with faculty guidance. May be pursued as an independent study or as a regularly scheduled class with a group of students. Prerequisite: PUAD 934 and PUAD 935. RSH.

PUAD 998. Directed Reading on Public Administration. 1-6 Hours.
Designed to meet the needs of graduate students whose study in public administration cannot be met with present course. Prerequisite: consent of instructor. RSH.

PUAD 999. Dissertation. 1-15 Hours.
Enrollment for writing doctoral dissertations. Graded on a satisfactory/unsatisfactory basis. THE.

Religious Studies Courses

REL 104. Introduction to Religious Studies. 3 Hours. HR AE42/GE3H / H.
This course introduces students to the academic study of religions. It acquaints students with key methods and issues in religious studies, and provides an introductory survey of selected religions. Not open to students who have taken REL 105. LEC.

REL 105. Introduction to Religious Studies, Honors. 3 Hours. HR AE42/GE3H / H.
This course introduces students to the academic study of religions. It acquaints students with key methods and issues in religious studies, and provides an introductory survey of selected religions. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken REL 104. LEC.
REL 106. Living Religions of the East. 3 Hours. HR/NW AE42/GE3H / H/W.
A basic introduction to religion in India, China, and Japan with emphasis upon religions that affect the modern period. Not open to students who have taken REL 108/EALC 108. (Same as EALC 105.) LEC.

REL 107. Living Religions of the West. 3 Hours. HR GE3H / H.
A basic introduction to the major religious traditions of the Near East, Europe, and the Americas, with an emphasis on their development through the modern period and their expressions in contemporary life. Not open to students who have taken REL 109. (Same as JWSH 107.) LEC.

REL 108. Living Religions of the East, Honors. 3 Hours. HR/NW AE42/GE3H / H.
A basic introduction to the major religious traditions in the Near East, Europe, and the Americas, with an emphasis on their development through the modern period and their expressions in contemporary life. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken REL 106/EALC 105. (Same as EALC 108.) LEC.

REL 109. Living Religions of the West, Honors. 3 Hours. HR AE42/GE3H / H.
A basic introduction to the major religious traditions in the Near East, Europe, and the Americas, with an emphasis on their development through the modern period and their expressions in contemporary life. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken REL 107. LEC.

REL 124. Understanding the Bible. 3 Hours. HR AE42/GE3H / H.
An introduction to the literature of the Bible, exploring the relationships among the various types of literature present and the function of each type in the history and religious life of the people who produced and used them. Cannot be taken concurrently with REL 311 or JWSH 321 or REL 315. Not open to students who have taken REL 125 or JWSH 125. (Same as JWSH 124.) LEC.

REL 125. Understanding the Bible, Honors. 3 Hours. HR AE42/GE3H / H.
An introduction to the literature of the Bible, exploring the relationships among the various types of literature present and the function of each type in history and religious life of the people who produced and used them. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken REL 124 or JWSH 124. (Same as JWSH 124.) LEC.

REL 130. Myth, Legend, and Folk Belief in East Asia. 3 Hours. NW / H/W.
A survey of the commonly held ideas about the beginning of the world, the role of gods and spirits in daily life, and the celebrations and rituals proper to each season of the year. The purpose of the course is to present the world view of the ordinary peoples of East Asia. (Same as ANTH 293, EALC 130.) LEC.

REL 171. Religion in American Society. 3 Hours. HR AE41/GE3H / H.
A broad introduction to religion in American culture. This class emphasizes the well-established religions with large followings (viz. Judaism, Catholicism, Eastern Orthodoxy, and Protestantism). Some attention is also given to other religions active in America. Other topics covered include the relationship of church and state, religion in ethnic and racial minority groups, and women and religion. Not open to students who have taken REL 172. (Same as AMS 290.) LEC.

REL 172. Religion in American Society, Honors. 3 Hours. HR AE41/GE3H / H.
Honors version of REL 171. A broad introduction to religion in American culture. This class emphasizes the well-established religions with large followings (viz. Judaism, Catholicism, Eastern Orthodoxy, and Protestantism). Some attention is also given to other religions active in America. Other topics covered include the relationship of church and state, religion in ethnic and racial minority groups, and women and religion. Not open to students who have taken AMS 290. Open only to students in the University Honors Program or by permission of instructor.

REL 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Religious Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

REL 200. Study Abroad Introductions to: _____. 1-4 Hours. H.
This course is designed for the study of special topics in Religious Studies. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

REL 311. Religion of Ancient Israel. 3 Hours. H/W.
A study of the development of the Hebrew Bible from its earliest stages of oral tradition to its canonization with an emphasis on the relationship of the historical, intellectual, and cultural contexts shaping that development. (Same as JWSH 321.) Prerequisite: REL 124 or JWSH 124 or permission of instructor. LEC.

REL 315. History and Literature of Early Christianity. 3 Hours. H/W.
An examination of the literature produced by early Christians. In addition to New Testament texts, the course includes a broad range of diverse texts produced by early Christians, Jews, and others. Prerequisite: REL 124 or permission of instructor. LEC.

REL 325. Introduction to Judaism. 3 Hours. H.
Analyzes a selection of the core texts, teachings, and practices of Jewish religious traditions in terms of classical and contemporary understanding. (Same as JWSH 325.) LEC.

This course demystifies the Talmud, arguably the most central yet also the most mysterious text of rabbinic Judaism. Students are introduced to the scope, substance, styles, and major figures of the Talmud, and also learn how the text came into being over the course of several centuries. (Same as JWSH 326.) Prerequisite: REL 104, REL 107, or REL 124 or REL 125, or permission of the instructor. LEC.

REL 330. Native American Religions. 3 Hours. NW AE41 / H.
A survey of religious traditions among selected Native American peoples. Topics include religious freedom, ritual activity, cultural narrative (myth) kinship, healing practices, ecology, government relations, impact of colonization, impact of missionization, contact between cultures, and secularization. Not open to students who have completed REL 331. (Same as ISP 330.) LEC.

REL 331. Native American Religions, Honors. 3 Hours. NW AE41 / H.
A survey of religious traditions among selected Native American peoples. Topics include religious freedom, ritual activity, cultural narrative (myth) kinship, healing practices, ecology, government relations, impact of colonization, impact of missionization, contact between cultures, and secularization. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have completed REL 330. (Same as ISP 331.) LEC.

REL 339. History of Religion in America. 3 Hours. H.
Survey of the development of religious institutions and ideas in America from colonial times to the present. Emphasis is given to the mainstream religious traditions (Protestant, Catholic, Jewish), but attention is also paid to other phenomena, including nonwestern and native American religions. LEC.
REL 341. Mysticism. 3 Hours. H.
The nature of mystical experience and reflection as expressed in selected mystical literature of the world's religions. LEC.

REL 342. Religion and Literature. 3 Hours. H.
An examination of contemporary writings to explore the authors' presuppositions concerning the nature of God, the nature of human beings, the meaning of good and evil, the significance of human existence, and the means of attaining fulfillment or salvation. LEC.

REL 345. Christianity. 3 Hours. H.
An introductory examination of the history, doctrines, and practices of Christianity. Selected readings from the creeds, papal decrees, and major Christian theologians. LEC.

REL 350. Islam. 3 Hours. NW AE42/GE3H / H/W.
Origins of Islam; the Prophet Muhammad; the Holy Koran; religious symbols and moral mandates; historical developments. (Same as AAAS 349.) LEC.

REL 355. Muslim Societies. 3 Hours. H.
In this class we study Muslim societies throughout the world. We examine variation between regions by looking at Muslim history and culture in different countries, such as Pakistan, Indonesia, Mali, Bosnia, Egypt, Yemen, and others. LEC.

REL 360. The Buddhist Tradition in Asia. 3 Hours. NW AE42/GE3H / H.
A historical and geographical survey of the Buddhist tradition from its origins in India to modern day developments in the three major regional Buddhist cultures of Southeast Asia, Tibet, and East Asia (China, Korea, and Japan). Prerequisite: Prior coursework in Asian studies or permission of instructor. LEC.

REL 365. Hinduism. 3 Hours. H.
An introduction to the diversity and richness of Hinduism from the Vedic period to the present; explores Hindu practices, beliefs, and communities using primary texts and extensive audio-visual resources. LEC.

REL 371. Religion and Society in Tension. 3 Hours. H.
Specific issues of conflict between the values of certain religious groups and those of the larger society. Includes problems of church and state, birth control and abortion, civil disobedience and dissent, education, war and peace, and "civil religion. LEC.

REL 373. The Supreme Court and Religious Issues in the United States. 3 Hours. H.
Historical study of the interpretation of the religion clauses of the First Amendment with special reference to the questions of establishment, the free exercise of religion, freedom of religious belief, worship, and action, and religion and the public schools. Not open to freshmen. (Same as HIST 373.) LEC.

REL 374. Religious Perspectives on Selfhood and Sexuality. 3 Hours. H.
The nature of the self in its individual and social dimensions. Self experienced and expressed in sexuality. Survey of viewpoints in religious literature. LEC.

REL 375. The Supreme Court and Religious Issues in the United States, Honors. 3 Hours. H.
Historical study of the interpretation of the religion clauses of the First Amendment with special reference to the questions of establishment, the free exercise of religion, freedom of religious belief, worship, and action, and religion and the public schools. Open only to students in the University Honors Program or by permission of the instructor. (Same as HIST 375.) LEC.

REL 376. American Judaism: Life and Thought. 3 Hours. H.
A study of the conflicts between secularists and religiousists, between Zionists and synagogue representatives, and the patterns of compromise in American Jewish life. Questions of Americanism and Jewish survival, support for the State of Israel, and the bureaucratic structure of rabbinical training and philanthropy in America will be raised. LEC.

REL 377. Religious Ethics and Moral Decisions. 3 Hours. AE51 / H.
When faced with ethical dilemmas how do we decide what is the right course of action? In what ways are our decisions affected by religious ideas about morality? In this class we examine the ethical problems we encounter every day in light of the solutions offered from various religious traditions. Cases to be examined include issues of life and death, war and peace, sexual morals, torture, the treatment of animals and the environment. LEC.

REL 378. Religion and Moral Decisions, Honors. 3 Hours. H.
Honors version of REL 377. Introduction to religious viewpoints on individual and social ethics. Influence of religious thought on the making of moral decisions, and on value development. Examined in relation to specific moral issues. Open only to students who have been admitted to the University Honors Program or by permission of instructor. LEC.

REL 380. Philosophical Issues in Religion. 3 Hours. GE3H / H.
This course will consider, from a philosophical perspective, some of the problems in religion which arise in the development of "Natural Theology" broadly conceived. (Same as PHIL 350.) LEC.

REL 400. Study Abroad Special Topics: _____. 1-4 Hours. H.
This course is designed for the study of special topics in Religious Studies equivalent to courses at the 300 to 600 level at KU. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

REL 404. Undergraduate Seminar in Religion: _____. 1-3 Hours. H.
Topic, instructor, prerequisite and hours of credit to be announced in Schedule of Classes. Particular subject matter any given semester responding to student interest and taking advantage of special faculty competence. Class discussion, readings, and individual projects. LEC.

REL 405. Directed Study in Religion. 1-4 Hours. AE61 / H.
Investigation of a special topic or project selected by the student with advice, approval, and supervision of an instructor. Such study may take the form of directed reading or special research. Individual reports and conferences. May be repeated, with maximum cumulative credit of four hours. Course taken for one hour of credit may not be used to fulfill College distribution requirement. Prerequisite: One previous course in religious studies at the University of Kansas and permission of instructor. IND.

REL 406. Reading Asian Religious Classics. 3 Hours. H.
A close reading of classic texts of Asian religions in English translation, with emphasis on their construction and reception as sacred "scripture" in both their indigenous Asian contexts and in the post-colonial West. No prior knowledge of Asia is required, although some background is desirable. LEC.

REL 425. Religion and Film. 3 Hours. H.
An examination of the treatment of religious themes through the medium of film and an examination of the attitudes of religious organizations toward films and film production. Selected films will be viewed and analyzed from the perspectives taken within religious studies. LEC.

REL 447. Islamic Law in the Digital Age. 3 Hours. H.
In this class we trace how Islamic law has changed in the modern era, beginning with an overview of shari'a and its traditional function in Muslim society, and then examine how the practice of Islamic law
was altered by colonialism and the rise of the nation state. We mark these transformations by studying how Islamic law is used in the online environment today. LEC.

REL 450. Popular Culture in the Muslim World. 3 Hours. NW / H. A study of pop songs, television, comics, and other idioms of popular culture from different parts of the Muslim world, with attention to Muslims’ sense of humor, tragedy, aesthetics, and pertinent issues of the day. (Same as AAAS 450.) LEC.

REL 464. Visions in Art and Literature. 3 Hours. H. A study of the phenomenon of visions, their expression in various media, and theories of visionary experience from the humanities and social sciences, with a particular emphasis on critically evaluating the relationship between the visionary experience and its expression. (Same as HWC 464). LEC.

REL 468. Illness in Art and Literature. 3 Hours. H. An examination of how illness and health have been conceptualized, expressed, and explored in Western literature and art, as well as a consideration of issues of illness and health from the perspectives of philosophy and religious studies. (Same as HWC 468). LEC.

REL 475. Loving Relationships. 3 Hours. H. Theories and elements of love in a variety of types of relationships, with attention to religious ethical traditions and social and behavioral sciences. Includes small group discussions and application to personal experience. Prerequisite: Junior standing or above. LEC.

REL 477. Gender and Religion. 3 Hours. H. Examination of symbols, images, scriptures, rites and teachings that define gender in various religious traditions. (Same as HWC 477.) LEC.

REL 478. Women and Religion, Honors. 3 Hours. Examination of symbols, images, scriptures, rites, and teachings defining women's roles in various religious traditions. Prerequisite: Open only to students in the University Honors Program, or by permission of instructor. LEC.

REL 490. Senior Seminar in Theories and Methods. 3 Hours. AE61 / H. A capstone course for religious studies majors to survey methods and theories in religious studies. Prerequisite: Religious Studies major or permission of the instructor. LEC.

REL 499. Undergraduate Honors Research. 1-3 Hours. AE61 / H. Required for Departmental Honors. May be taken more than once; total credit not to exceed 6 hours. Prerequisite: Open only to candidates for degree with departmental honors and with consent of the student's research supervisor. IND.

REL 500. Readings in Non-English Religious Texts. 1-4 Hours. This course provides directed readings for students in either primary or secondary texts related to religious studies utilizing material in languages other than English. IND.

REL 502. Special Topics in Religion: ______. 1-4 Hours. H. Topic and instructor to be announced in Schedule of Classes. Enables qualified students to participate in current research interests of faculty and/or pursue specific current topics. May be offered by different instructors under different subtitles, and may be taken more than once if subject matter varies sufficiently. Prerequisite: Consent of instructor. LEC.

REL 504. Millenarian Movements. 3 Hours. S. A historical survey of millenarian movements (the belief in imminent, total, ultimate, this-worldly, collective salvation), with particular attention to their psychological, sociological, and political dimensions. (Same as POLS 504.) Prerequisite: POLS 301 or honors equivalent or for non-majors completion of Western Civilization requirement, or consent of instructor. LEC.

REL 507. Religion in India. 3 Hours. NW AE42/GE3H / H/W. Survey of religious thought and practice in India from the Vedic period to the present. LEC.

REL 508. Religion in China. 3 Hours. NW AE42/GE3H / H/W. Survey of religious thought and practice in China from the Shang to the People's Republic. (Same as EALC 508.) LEC.

REL 509. Religion in Japan. 3 Hours. NW AE42/GE3H / H/W. Survey of religious thought and practice in Japan from the Jomon period to the present. (Same as EALC 509.) LEC.

REL 510. Religion in Korea. 3 Hours. NW AE42/GE3H / H. Survey of religious thought and practice in Korea from the Three Kingdoms period to the present. Prerequisite: REL 106/EALC 105; EALC 104; or permission of instructor. LEC.

REL 511. Buddhist Art of Korea. 3 Hours. H. Introduction to the history of Buddhist architecture, painting, sculpture and illuminated scriptures in Korea from the 4th through the 19th centuries, with particular emphasis on their stylistic, geographical, social, devotional and literary contexts. Not open to students who have taken HA 361 or HA 561. Work requirements will be greater for graduate students. (Same as HA 561.) Prerequisite: A college level introduction to Asian art history, or consent of instructor. LEC.

REL 515. Studies in Early Christian Literature and History. 3 Hours. H. Contemporary research in the history and literature of earliest Christianity including most of the following: (1) the use of critical method, (2) philosophical and theological contexts, (3) sociological analyses, (4) interpretation of archaeological data (5) papyrus and the medieval manuscript tradition, (6) relations between Christians and the Roman government, (7) relations between Christians and Jews, (8) development of diverse literary genres, and (9) the origins of gnostic and Christian gnosticism. Prerequisite: REL 124 or permission of instructor. LEC.

REL 523. The Dead Sea Scrolls. 3 Hours. H. A study of the archeological evidence and texts from the Dead Sea area that provide primary evidence for Jewish religious belief and practice in the Greek and Roman periods (ca. 250 B.C.E. - 135 C.E.). (Same as JWSH 523.) Prerequisite: REL 124 or JWSH 124 or consent of instructor LEC.

REL 524. Studies in Ancient Egyptian Culture and Religion. 3 Hours. H. A study of the basic features of Egyptian history, culture, and religion from the beginning of the Pharaonic period (ca. 3500 B.C.E.) to the rise of Greek rule in Egypt (ca. 350 B.C.E.). Prerequisite: A principal course in Religious Studies or consent of instructor. LEC.

REL 525. Jews and Christians. 3 Hours. H/W. This course examines the ways Jews and Christians have interacted with and characterized one another at various points in their histories. Special emphasis is placed on the gradual separation of the two religious traditions in the 1st-4th centuries. (Same as JWSH 325.) Prerequisite: A previous course in Religious Studies or Jewish Studies; or consent of instructor. LEC.

REL 526. Jewish History and Literature in the Greek and Roman Periods. 3 Hours. H/W. The history and literature of the Jewish people from the hellenistic period (late fourth century B.C.E. to the codification of the Mishnah 210 C.E.). Select texts from the Hebrew Bible, the so-called apocrypha and pseudepigrapha, the Qumran scrolls, Philo, Josephus, related early
Christian texts, and Rabbinic texts will be studied. (Same as JWSH 526.) Prerequisite: REL 124 or JWSH 124 or permission of instructor. LEC.

REL 527. Ancient Mesopotamian Culture and Religion. 3 Hours. H. A study of the basic features of Mesopotamian history, culture and religion from the origins of writing (ca. 3500 B.C.E.) to the rise of Greek rule in the region (ca. 350 B.C.E.). Prerequisite: A principal course in religious studies or consent of instructor. LEC.

REL 528. The Apostle Paul and Early Christian Paulinism. 3 Hours. H. Biographical issues related to the Apostle Paul, his teachings in relation to Greek and Jewish thought as exemplified in his letters, and his reception by later diverse Paulinists. Prerequisite: REL124/125, or REL 315. LEC.

REL 530. Christian Origins: from the Beginnings to Augustine. 3 Hours. H/W. This course covers the major political, literary, and theological developments in Christianity from the first century through Augustine in the early fifth century, including: (1) the development and significance of the New Testament canon, (2) relations between Christians, Jews, and the Roman government, (3) the nature of orthodoxy and heresy, and the rise of the major gnostic systems, (4) the growth of the orthodox network, (5) theological debates and councils, and (6) the biography and theology of Augustine and his influence on the medieval church. Prerequisite: Junior standing or above. LEC.

REL 531. Studies in Christianity. 3 Hours. H. Study of religious thought, practice, and institutions of Christianity with an emphasis on the examination of primary documents. LEC.

REL 532. Studies in Islam. 3 Hours. H. Study of religious thought, practice, and institutions of Islam with an emphasis on the examination of primary documents. (Same as AAAS 532.) LEC.

REL 534. Studies in Ritual: ______. 3 Hours. H. A study of ritual theory and a comparative study of ritual activity among selected religious traditions. May be taken more than once if content differs sufficiently. LEC.

REL 535. The History of Islam in Africa. 3 Hours. H/W. A study of the history and institutions of Islam in Africa. Emphasis will be placed on the impact of Islam on African traditional religions and African civilization in general; the historiographical traditions of Islam in Africa. (Same as AAAS 542.) LEC.

REL 541. Gods and Goddesses of South Asia. 3 Hours. H. This course explores the dynamic diversity of gods and goddesses in South Asian religious life through examination of their basic iconography, religious narratives and devotional poetry, temple images and architecture, ritual practices, performance traditions, and film. Prerequisite: An introductory course in religious studies or consent of instructor. LEC.

REL 543. Hindu Epics, Past and Present. 3 Hours. H. This interdisciplinary course considers the roles that the two great Indian epics, the Mahabharata and the Ramayana, have played in the history of religion, literature, art, and politics in South Asia (and beyond). Prerequisite: An introductory course in religious studies or consent of instructor. LEC.

REL 545. Yoga in Theory, Practice, and History. 3 Hours. H. Historical and thematic investigation into Yoga, including classical formulations, esoteric practices, and contemporary developments and debates. LEC.

REL 550. Gender Issues in Islam. 3 Hours. H. Focusing on issues of gender, this course follows major religious developments in the Islamic tradition. Also examines how Muslim women have impacted those developments. LEC.

REL 551. Shari‘a, Democracy, and Society. 3 Hours. H. In this class we examine the question of whether or not democracy and shari‘a can coexist. Is there a necessary opposition between democratic visions of society and the institutionalization of Islamic law? As a case study we look at changes in the modern Egyptian political system and the role religious ideals have played in these changes, especially the push for democracy. Prerequisite: An introductory course in religious studies or consent of instructor. LEC.

REL 552. Classical Islamic Literature. 3 Hours. NW / H. An examination of major developments in classical Islamic literature in the Middle East and beyond, with attention to the poetic and prose works (in translation) that emerged from them. (Same as AAAS 552.) LEC.

REL 555. Buddhists and Buddhism in China. 3 Hours. NW AE42 / H. A reading and media-rich survey of institutional, ritual, literary, educational, and exegetical practices that have shaped the lives of Buddhists in China, past and present. Alterities within the Buddhist tradition, and interactions with other religious options, are considered. (Same as EALC 555.) LEC.

REL 557. Modern Islamic Reform Movements. 3 Hours. H. This course examines movements of renewal and reform in the Islamic world today. Also studies the conditions that gave rise to calls for reform throughout the Muslim majority world, as well as the impact reform movements have had on the practices and beliefs of Muslims today. LEC.

REL 558. Religion in Britain Since the Reformation: A Survey. 3 Hours. H. This course deals analytically and synoptically with religion in Britain from the Reformation to the present with special reference to the Church of England, and focuses on the themes of ecclesiology, ecclesiastical polity, and political theology. It is essentially an examination of religious history from a perspective of history of ideas. (Same as HIST 558.) LEC.

REL 559. Religion in Britain Since the Reformation: A Survey, Honors. 3 Hours. H. This course deals analytically and synoptically with religion in Britain from the Reformation to the present with special reference to the Church of England, and focuses on the themes of ecclesiology, ecclesiastical polity, and political theology. It is essentially an examination of religious history from a perspective of the history of ideas. Open only to students in the University Honors Program or by permission of instructor. (Same as HIST 559.) LEC.

REL 560. Classical and Contemporary Jewish Thought. 3 Hours. H. An introduction to individual Jewish thinkers and collective projects from Philo to the present, including The Talmud and Midrash, Middle Age and Early Modern Jewish philosophical and Talmudic rationalism and mysticism. Considers such thinkers as Spinoza, Cohen, Soloveitchik, Rosenzweig, and Levinas. (Same as JWSH 560.) Prerequisite: A previous course in Religious Studies or Jewish Studies; or consent of instructor. LEC.

REL 570. Studies in Judaism. 3 Hours. H. A study of the major intellectual sources of the Jewish tradition from the Mishna, Talmud, Midrash, prayerbook, philosophers, the Zohar, and the Shulchan Aruch. (Same as JWSH 570.) Prerequisite: A course in Religious Studies or Jewish Studies numbered 300 or above. LEC.
REL 571. Religion in Kansas. 3 Hours. H.
A survey of religions active in Kansas in the past or present. The course has a strong fieldwork component in which students, after receiving training in fieldwork methods, conduct interviews and gather information to contribute to a public archive of religion in Kansas. FLD.

REL 580. Religious Perspectives on Illness, Health, and Healing. 3 Hours. H.
An examination of the perspectives of selected religious traditions on the meaning of illness and health, methods of diagnosis and treatment, and the place of these themes and experiences within each tradition. LEC.

REL 581. Psychology of Religion. 3 Hours. S.
Consideration of the psychological antecedents of religious experience, the nature of religious experience, and the behavioral consequences of religion. Focus will be on psychological theory and research relevant to religious thought, feeling, belief, and behavior. (Same as PSYC 581.) Prerequisite: PSYC 104. LEC.

REL 585. New Religious Movements (Western). 3 Hours. H.
A survey of the beliefs, practices, and social impact of religious minorities in the United States, both contemporary and historical, rooted primarily in Christianity and Judaism. LEC.

A survey of the beliefs, practices, and social impact of religious minorities in the United States, both contemporary and historical, which have developed primarily from sources other than Christianity and Judaism. LEC.

REL 601. Approaches to the Study of Religion. 3 Hours. H.
An introduction to the various methods by which social scientists, historians, philosophers, and theologians study the meaning, influence, and significance of religion as an integral part of society and its cultural heritage. Prerequisite: REL 104 required for undergraduate students. No prerequisite for graduate students. LEC.

REL 604. Religion and Political Theory. 3 Hours. S.
An examination of the relationship between religious faith and politics in Western political thought and theory. The approach will be both historical and philosophical, beginning with Moses on the one hand, and the Greeks on the other. Texts will include biblical, Greek philosophical, Jewish and Christian philosophical and theological writings. (Same as POLS 604.) Prerequisite: POLS 201, or for non-POLS majors completion of Western Civilization requirements, or consent of instructor. LEC.

REL 650. Sufism. 3 Hours. NW / H.
A survey of developments in Sufi (Islamic Mystical) thought, poetry, and ritual throughout Muslim history and across the Muslim world. (Same as AAAS 650.) Prerequisite: AAAS 349/REL 350 or permission of instructor. LEC.

REL 657. Gender in Islam and Society. 3 Hours. NW / H.
An investigation of the relationship between Islam, and gender roles and status in religious texts (Quran and Hadith) and in societies across the Muslim world, past and present. (Same as AAAS 657.) Prerequisite: AAAS349/REL 350 or permission of instructor. LEC.

REL 665. Religious Ethics. 3 Hours. H.
Main themes and traditions in ethical thought. Religious thought as basis of systems of ethics. Contemporary approaches to methods of value organization and moral choices. Prerequisite: A basic course in religious studies. LEC.

REL 667. Religious Perspectives on War and Peace. 3 Hours. H.
Views of war and peace in various faith traditions throughout the world. Examination of teachings and action of religious groups and selected individuals, including use of war rhetoric and differing theological and social understandings of peace. Lecture, seminar discussion, and research assignment require preparation and participation by students. Prerequisite: Junior standing or above. LEC.

REL 669. Human Conflict and Peace. 3 Hours. H.
Study of religious, cultural, and social traditions toward understanding the nature and purposes of human conflict. Analysis of various meanings of peace, with emphasis on study of nonviolent approaches to management of conflict. Class discussion, readings, and individual research projects. (Same as COMS 669.) Prerequisite: Junior standing or above. LEC.

REL 671. American Communes. 3 Hours. H.
An examination of utopian communities in North America from the seventeenth century to the present. The course will survey the history, literature, and social dynamics of representative communal societies and movements including the Shakers, the Hutterites, the Oneida Community, Catholic religious communities, egalitarian communities, and other religious and secular communities. LEC.

REL 677. Women in Christianity. 3 Hours. H.
An examination of the roles, images, and status of women in Christianity from its origin to the contemporary period and in its missionary expansion from the ancient Near East through Europe, North and South America, Africa, and Asia. LEC.

REL 704. Russian Orthodoxy in Historical Perspective. 3 Hours.
This course examines Russian Orthodoxy as a religious system and the institution of the Russian Orthodox Church from its first appearance in Russia to the present. It focuses on beliefs and practices of the clergy and the laity; institutional structures; the relationships between Church and State; interaction with non-Orthodox religious communities; responses to Soviet atheist policies; Orthodox influences on political theory, philosophy, literature, and the fine arts. (Same as REES 704.) LEC.

REL 727. Seminar in Religion, Text and Textuality. 3 Hours.
This seminar explores issues surrounding the production and use of authoritative religious texts (sacred texts) in religious traditions, including such topics as scripturality and canon, scriptural hermeneutics, and material and ritual dimensions of scriptural practice. Specific case studies and content to be selected by the instructor. SEM.

REL 732. Seminar in Western Religious Texts: _____ . 3 Hours.
An analysis of selected religious text or texts from Judaism, Islam, or Christianity in translation. May be taken more than once if subject matter varies sufficiently. Prerequisite: REL 512, REL 515, REL 526, REL 530, REL 532, REL 539, or REL 570 or permission of the instructor. LEC.

REL 733. Seminar in Eastern Religious Texts: _____ . 3 Hours.
Analysis of a selected religious text or texts from India, China, or Japan, in translation. May be taken more than once if subject matter varies sufficiently. (Same as EALC 733.) Prerequisite: REL 507, REL 508, REL 509, or permission of instructor. LEC.

REL 737. Seminar in Religion, Media and Performance. 3 Hours.
This seminar explores aspects of performance and the media of performance in lived religion, which might include such topics as ritual, the body, mass media and the internet, and visual and material culture. Specific case studies and content to be selected by the instructor. SEM.

REL 747. Seminar in Religion, Society and Social Change. 3 Hours.
This seminar explores issues regarding the social dimensions of religiosity/lived religion, ranging from aspects of religious institutionalization, authority, and normativity to alternative religiosities and alterity. Specific case studies and content to be selected by the instructor. SEM.
REL 757. Seminar in Religious Subjectivity, Experience, and Narrative. 3 Hours.
This seminar explores issues regarding the subjective and experiential dimension of lived religiosity, including such things as religious experience and mysticism, modes of personal religious expression and embodiment, and dynamics of personal and collective religious narrative and identity. Specific case studies and content to be selected by the instructor. SEM.

REL 761. Seminar in Western Religious Thought: ______. 3 Hours.
An analysis of the thought of selected thinkers of the Christian, Jewish, and/or Islamic traditions. May be taken more than once if subject matter varies sufficiently. Prerequisite: REL 512, REL 515, REL 526, REL 530, REL 532, REL 539, or REL 570 or permission of the instructor. LEC.

REL 762. Seminar in Eastern Religious Thought: ______. 3 Hours.
Analysis of the religious thought of selected thinkers of India, China, and/or Japan, traditional and modern. May be taken more than once if subject matter varies sufficiently. (Same as EALC 732.) Prerequisite: REL 507, REL 508, REL 509, or permission of the instructor. LEC.

REL 767. Seminar in Theory, Method, and History in Religious Studies. 3 Hours.
This seminar explores theoretical, methodological, and historical issues that are instrumental to our notions of religion as an analytic category and foundational to the study of religion as a field of academic enquiry. Specific case studies and content to be selected by the instructor. SEM.

REL 771. Seminar in Religious Movements and Social Change: ______. 3 Hours.
Relationship of religious groups to movements for social change: influence of religious groups on social change, and the impact of efforts toward social change in religious groups. Prerequisite: REL 171, REL 371, REL 377, or equivalent. LEC.

REL 772. Seminar in Religion and Modern Social Criticism: ______. 3 Hours.
Seminar focusing on religious issues in some important texts of modern social criticism from the French Revolution to the present day. Prerequisite: An introductory course in religion. LEC.

REL 773. Seminar in Religion and National Identity: ______. 3 Hours.
Analysis of selected issues wherein religion and the formation and definition of a selected nation or nations intersect. LEC.

REL 775. Seminar in Religion and Society in the West: ______. 3 Hours.
Analysis of selected Western religions and their relationships to selected Western societies. May be taken more than once if subject matter varies sufficiently. Prerequisite: REL 512, REL 515, REL 526, REL 530, REL 532, REL 539, or REL 570 or permission of instructor. LEC.

REL 776. Seminar in Religion and Society in Asia: ______. 3 Hours.
Analysis of selected Asian religions and their relationship to selected Asian societies. May be taken more than once if subject matter varies sufficiently. (Same as EALC 776.) Prerequisite: REL 507, REL 508, REL 509, or permission of the instructor. LEC.

REL 777. Seminar in Religion and Gender. 3 Hours.
Examination of symbols, images, scriptures, rites, teachings and scholarship regarding gender definitions and performance in various religious traditions. LEC.

REL 787. Seminar in Ethical Issues in Health Care: ______. 3 Hours.
Interdisciplinary seminar, drawing on the literature of social, medical, and professional ethics, with special attention to religious perspectives on meanings of health and the delivery of health care. Of particular interest to health-related professions. Prerequisite: Permission of instructor. LEC.

REL 800. Readings. 1-4 Hours.
RSH.

REL 839. Topics in the History and Literature of Religion: ______. 3 Hours.
Selected studies, as announced in Schedule of Classes, in the history and religious literature of Judaism, Christianity, religion in America, Islam, and Asian religions. Course may be taken more than once if the subject matter varies sufficiently. Prerequisite: Permission of instructor. LEC.

REL 864. Topics in Religious Thought and Symbol: ______. 3 Hours.
Selected studies, as announced in Schedule of Classes, in Asian, Middle Eastern, and Western religious thought, mysticism, and religious ethics. Course may be taken more than once if subject matter varies sufficiently. Prerequisite: Permission of instructor. LEC.

REL 875. Topics in Religion and Society: ______. 3 Hours.
Special topics to be announced in Schedule of Classes, according to research interests of faculty and students. A particular aspect of the study of religion and culture will be emphasized. Course may be taken more than once if the subject matter varies. Prerequisite: Permission of instructor. LEC.

REL 877. Topics in Women and Religion: ______. 3 Hours.
Selected studies, as announced in Schedule of Classes, in the history and analysis of symbols, images, scriptures, rites, and teachings defining women's roles in various religious traditions. Course may be taken more than once if the subject matter varies sufficiently. Prerequisite: Permission of instructor. LEC.

REL 899. Thesis. 1-3 Hours.
THE.

Russian East European St Courses

REES 110. Understanding Russia and Eastern Europe. 3 Hours. SC AE42 / S.
A multidisciplinary introduction to the former communist states of Russia, the western Newly Independent States, Central Europe, and the Balkans. The course addresses the geography and history of the region, as well as the cultures of its peoples, as presented in literature, film, and music. Special attention is devoted to the current political, economic, and social situations, as they are reflected by the transition from communism and the rise of nationalism. LEC.

REES 111. Understanding Russia and Eastern Europe, Honors. 3 Hours. SC AE42 / S.
A multidisciplinary introduction to the former communist states of Russia, the western Newly Independent States, Central Europe, and the Balkans. The course addresses the geography and history of the region, as well as the cultures of its peoples, as presented in literature, film, and music. Special attention is devoted to the current political, economic, and social situations, as they are affected by the transition from communism and the rise of nationalism. Prerequisite: Open only to students in the University Honors Program, or by permission of instructor. LEC.

REES 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Russian, East European, and Eurasian Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

REES 220. Societies and Cultures of Eurasia. 3 Hours. NW AE42 / S.
A broad, survey-type course that examines all the former Soviet republics- Ukraine, Belarus, Moldova, Lithuania, Latvia, Estonia, Georgia, Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and
Uzbekistan—with additional coverage of neighboring regions. The course addresses the history of the region, literature, culture, geography, religion, and the building of post-Soviet states and societies. LEC.

REES 221. Societies and Cultures of Eurasia, Honors. 3 Hours. NW AE42 / S.
Examines the unique cultures and societies of the Eurasian region (Georgia, Azerbaijan, Armenia, Kazakhstan, Uzbekistan, Kyrgyzstan, Turkmenistan, Tajikistan and to a lesser degree, Russia, Mongolia and Afghanistan). For the better part of the 20th Century, this distinct region of the world was hidden beneath the communist veneer of the Soviet Union. With the collapse of the USSR, the countries of this region are returning to their historic roots, and this course introduces students to the history, politics, economics, literature and general culture of these countries. Open only to students admitted to the University Honors Program or by permission of instructor. LEC.

REES 480. Topics in Russian and East European Studies: ______. 1-3 Hours. H.
Interdisciplinary examination of topics involving two or more disciplines in Russian, East European, and Eurasian studies. LEC.

REES 485. War and Peace in Russian Culture. 3 Hours. H/W.
Lectures, readings, oral discussion, and written analyses of selected major works of Russian writing and other modes of creative expression and discourse that treat the subject of war and peace, such as imaginative literature, works of history, memoirs, cinema, music, and painting. Reading examples are The Song of Igor's Campaign, Alexander Pushkin's The Captain's Daughter and A History of Pugachev, Leo Tolstoy's War and Peace, Nadezhda Durova's The Notes of a Girl-Cavalryman, Boris Pasternak's Doctor Zhivago, and George Kennan's Russia Leaves the War. Not open to students who have taken REES 685. LEC.

REES 492. Research Methods in Russian, East European, and Eurasian Studies. 3 Hours. AE61 / H.
Development of interdisciplinary research skills and familiarity with resources and issues in the study of Russian, East European, and Eurasian Studies. Preparation for REES 496. LEC.

REES 496. Capstone Research Seminar in Russian, East European, and Eurasian Studies. 3 Hours. AE61 / H.
Interdisciplinary original research conducted using at least one REES language and resulting in a research paper. Prerequisite: REES 492. LEC.

REES 498. Directed Readings. 1-3 Hours. H.
Individual and supervised readings in selected areas of Russian, East European, and Eurasian Studies. Prerequisite: Prior permission of instructor and either CREES director or associate director. LEC.

REES 499. Capstone Research Seminar in Russian, East European, and Eurasian Studies, Honors. 3 Hours. AE61 / H.
Research and writing of a substantial paper, involving interdisciplinary original research and use of sources in at least one REES language, and presentation of this paper to an Honors committee of three REES faculty members. This thesis must be substantially different from any other Honors thesis. Prerequisite: REES 492. LEC.

REES 510. Understanding Central Asia. 3 Hours. NW AE42 / S/W.
An intensive, multidisciplinary survey of Central Asia, focusing on the former Soviet republics-Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan—with additional coverage of neighboring regions (the Caucasus and the Caspian basin, Afghanistan, and western China). The course addresses the history of the region (from the Silk Road to Soviet rule), geography, religion, and the building of post-Soviet states and societies. (Same as GEOG 590.) LEC.

REES 512. Siberia: Yesterday and Today. 3 Hours. NW AE42 / H/W.
An interdisciplinary course examining the development of Siberia from its beginnings to the present day. Topics to be covered are selected from the following list: topography and natural resources; conquest and exploitation by Russian and other European settlers; Siberia's role as a place of imprisonment and exile; the development of towns and transportation systems; Siberian historiography; Siberian Russian literature; and Siberia's place in Russia's economy and national defense. LEC.

REES 513. Siberia: Russia's Eastern Frontier. 3 Hours. NW AE42 / H/W.
An interdisciplinary course examining the terrain, peoples, and cultures of the vast expanse in northern Asia known as Siberia. Areas of inquiry include geology, archeology, ethnography, religions, folk culture, the arts, science and education, politics, and environmental problems. With an emphasis on the natural and social sciences, and exploration of the relationship between Siberia and its neighbors in all directions, including the United States (Alaska, "Russian America"), this course can be taken without duplication by students who have already taken REES 512 (or SLAV 512) Siberia Yesterday and Today. LEC.

REES 532. Russian Strategy and Military Power. 3 Hours. H.
Examines the central role the Russian military has played in its country's politics, society, and culture in the modern period. Treats Russia's victories and defeats in war, the course highlights the continuities in Russian strategic practices and illuminates the current and future strategic policies and military developments of the contemporary Russian state. LEC.

REES 573. Borderland Between Russia & Europe. 3 Hours. H/W.
Examines the history of relations between the governments, emerging national elites, and populations of Russia, Ukraine, Poland, and other East European countries, and the different regional perceptions and stereotypes, including the new post-Soviet states and their European neighbors. LEC.

REES 574. Ethnicity and Nationalism in Eastern Europe. 3 Hours. AE42 / H/W.
Examines the emergence and evolution of regional ethno-cultural and national identities in Eastern Europe. Discusses the theories and definitions of ethnicity, nationality, and nationalism, and offers a practical approach to understanding nationalism's and nationalist movements in Eastern Europe. LEC.

REES 646. Translation in Theory and Practice. 3 Hours. H.
Students undertake substantial work in the translation of non-technical writing, (e.g. poems, short stories, novels, essays, works of history, scientific treatises), from any REES language into English, and examine the practical and theoretical problems encountered in translation from the source to the target language. Prerequisite: BCRS 508, PLSH 508, RUSS 508, or permission of instructor. LEC.

REES 685. War and Peace in Russian Culture (in Russian). 3 Hours. H/W.
This course is taught in Russian. Lectures, readings, oral discussion, and written analyses of selected major works of Russian writing and other modes of creative expression and discourse that treat the subject of war and peace, such as imaginative literature, works of history, memoirs, cinema, music, and painting. Reading examples are Slovo o polku Igoreve, Pushkin's Kapitanskaia dochka and Istoriia Pugacheva, Tolstoy's Voina i mir, Evgenii Tarle's Napoleon, Pasternak's Doktor Zhivago and Andrei Petukhov's Pamiat' o sluzhbe. Not open to students who have taken REES 485. Prerequisite: 3 years of Russian at the college level. LEC.
REES 687. Biography of a City: St. Petersburg. 3 Hours. AE42 / U. Examination in depth of the historical, social, intellectual, and artistic development of St. Petersburg as a major urban center. LEC.

REES 704. Russian Orthodoxy in Historical Perspective. 3 Hours. This course examines Russian Orthodoxy as a religious system and the institution of the Russian Orthodox Church from its first appearance in Russia to the present. It focuses on beliefs and practices of the clergy and laity; institutional structures; the relationships between Church and State; interactions with non-Orthodox religious communities; responses to Soviet atheist policies; Orthodox influences on political theory, philosophy, literature, and the fine arts. (Same as REL 704.) LEC.

REES 715. Seminar in the History of Russian Thought. 3 Hours. Topics in the development of social radicalism and of philosophical positivism and materialism from Radishchev through the Russian Marxists. A reading knowledge of Russian is desirable but not required. Prerequisite: REES 723 or PHIL 580. LEC.

REES 799. Directed Readings in Russian and East European Studies. 1-5 Hours. RSH.

REES 895. Special Problems in Area Studies: _____, 3 Hours. Interdisciplinary examination of topics involving two or more of the cooperating disciplines in Russian and East European studies. LEC.

REES 897. Research. 1 Hour. Enrollment to fulfill Masters continuous enrollment rule. Prerequisite: Completion of all degree requirements except submission of seminar paper or comprehensive examination. RSH.

REES 898. Seminar in Russian and East European Studies. 3 Hours. Mastery of interdisciplinary research skills, and knowledge of resources and scholarship on the study of Russian, east European, and Eurasian Studies. LEC.

REES 899. Capstone Research Seminar in Russian, East European, and Eurasian Studies. 3 Hours. Research, write, and present a professional-quality paper, involving interdisciplinary original research, consultation with REES faculty, and substantial use of sources in at least one REES language. Prerequisite: REES 898. SEM.

Slavic Languages Literatures Courses

BCRS 104. Elementary Bosnian/Croatian/Serbian I. 5 Hours. U. First Semester. Five hours of recitation and drill in the spoken language per week. Essentials of grammar, practice in reading, writing and speaking Bosnian/Croatian/Serbian. LEC.

BCRS 105. Elementary Bosnian/Croatian/Serbian II, Honors. 5 Hours. U. Similar to BCRS 104 but with additional work aimed at accelerating the student's progress to proficiency and widening understanding of cultural context. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

BCRS 108. Elementary Bosnian/Croatian/Serbian II. 5 Hours. U. Second Semester. A continuation of BCRS 104. Prerequisite: BCRS 104. LEC.

BCRS 109. Elementary Bosnian/Croatian/Serbian II, Honors. 5 Hours. U. Continues BCRS 105. Similar to BCRS 108 but with additional work aimed at accelerating the student's progress to proficiency and widening understanding of cultural context. Prerequisite: BCRS 104 or 105. Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

BCRS 177. First Year Seminar: ____. 3 Hours. GE11 / U. A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Bosnian/Croatian/Serbian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

BCRS 204. Intermediate Bosnian/Croatian/Serbian I. 3 Hours. U. Second-year language course. Further development of communicative and cultural competencies with a content-based, interactive approach. Students develop the ability to understand and produce short written and spoken texts in BCS through engagement with a variety of authentic materials representative of cultural diversity of the studied area. They contrast and compare features of individual BCS-speaking countries and their cultures as well as differing aspects of B/C/S and American life, culture, and values. Prerequisite: BCRS 108 or permission of the instructor. LEC.

BCRS 205. Intermediate Bosnian/Croatian/Serbian I, Honors. 3 Hours. U. Similar to BCRS 204 but with additional work aimed at accelerating the student's progress to proficiency and widening understanding of cultural context. Prerequisite: Open only to students who have received an A in BCRS 108 or an A or B in BCRS 109, and who are admitted to the University Honors Program, or by permission of instructor. LEC.

BCRS 208. Intermediate Bosnian/Croatian/Serbian II. 3 Hours. AE42 / U. A continuation of BCRS 204. Prerequisite: BCRS 204. LEC.

BCRS 209. Intermediate Bosnian/Croatian/Serbian II, Honors. 3 Hours. AE42 / U. Similar to BCRS 208 but with additional work aimed at accelerating the student's progress to proficiency and widening understanding of cultural context. Prerequisite: BCRS 204 or 205. Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

BCRS 380. Intensive Croatian. 6 Hours. U. This program consists of a six-week intensive language course in intermediate and advanced Croatian phonetics, conversation, and grammar, and is offered each summer in Croatia. In addition to the practical language work, there is a program of lectures on modern Croatian history, literature, and other cultural topics. Various excursions and tours bring the students into first-hand contact with the people, natural beauty and culture of Croatia. This program is a cooperative effort between the University of Kansas and faculty of the University of Zadar. LEC.

BCRS 504. Advanced Bosnian/Croatian/Serbian I. 3 Hours. H/W. A practical Bosnian/Croatian/Serbian course involving the advanced study of the grammar, reading of texts on a variety of subjects, conversation and composition. Taught in Bosnian/Croatian/Serbian. Designed for students who have had two or more years of Bosnian/Croatian/Serbian language. Prerequisite: BCRS 208, or equivalent. LEC.

BCRS 508. Advanced Bosnian/Croatian/Serbian II. 3 Hours. H/W. A practical Bosnian/Croatian/Serbian course involving the advanced study of the grammar, reading of texts on a variety of subjects, conversation and composition. Taught in Bosnian/Croatian/Serbian. Designed for students who have had two and one-half or more years of Bosnian/Croatian/Serbian language. Prerequisite: BCRS 504, or equivalent. LEC.

BCRS 675. Readings in Bosnian/Croatian/Serbian. 1-6 Hours. H/W. Individually tailored readings and independent work in Bosnian/Croatian/ Serbian language and culture. Prerequisite: Two years of Bosnian/ Croatian/Serbian, and consent of instructor. IND.
CZCH 104. Elementary Czech I. 5 Hours. U.
First semester. Essentials of grammar, practice in speaking and writing Czech. Simple readings from selected texts. LEC.

CZCH 105. Elementary Czech II. 5 Hours. U.
Second semester. A continuation of CZCH 104. Prerequisite: CZCH 104. LEC.

CZCH 177. First Year Seminar: _____, 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Czech. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

CZCH 204. Intermediate Czech I. 3 Hours. U.
Second-year course in the language with emphasis on reading, composition, and conversation. Prerequisite: CZCH 108. LEC.

CZCH 208. Intermediate Czech II. 3 Hours. U.
A continuation of CZCH 204. Prerequisite: CZCH 204. LEC.

CZCH 675. Readings in Czech. 1-6 Hours. H/W.
Prerequisite: Reading knowledge of Czech language, and consent of instructor. IND.

PLSH 104. Elementary Polish I. 5 Hours. U.
First Semester. Essentials of grammar, practice in reading, writing, and speaking Polish. LEC.

PLSH 105. Elementary Polish, Honors. 5 Hours. U.
Honors version of PLSH 104, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

PLSH 108. Elementary Polish II. 5 Hours. U.
Second semester. A continuation of PLSH 104. Prerequisite: PLSH 104. LEC.

PLSH 109. Elementary Polish II. 5 Hours. U.
A continuation of PLSH 105. Honors version of PLSH 108, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: PLSH 104 or PLSH 105. Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

PLSH 177. First Year Seminar: _____, 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Polish. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

PLSH 204. Intermediate Polish I. 3 Hours. U.
Second-year course in the language with emphasis on reading, composition, and conversation. Prerequisite: PLSH 108. LEC.

PLSH 205. Intermediate Polish I, Honors. 3 Hours. U.
Honors version of PLSH 204, with additional work aimed at accelerating students' progress to proficiency and expanding their cultural competence. Prerequisite: Open only to students who have received an A in PLSH 108 or an A or B in PLSH 109, and who are admitted to the University Honors Program; or by permission of instructor. LEC.

PLSH 208. Intermediate Polish II. 3 Hours. U.
A continuation of PLSH 204. Prerequisite: PLSH 204. LEC.

PLSH 209. Intermediate Polish II, Honors. 3 Hours. U.
Honors version of PLSH 208, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence.

Prerequisite: PLSH 204 or PLSH 205. Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

PLSH 312. Polish Language and Civilization in Poland: Summer Program. 8 Hours. H/W.
Polish grammar, conversation, and composition with select aspects of Polish civilization. Available only to participants in Polonicum, Warsaw University. LEC.

PLSH 504. Advanced Polish I. 3 Hours. H/W.
A practical Polish language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Polish. Designed for students who have had two or more years of Polish language. Prerequisite: PLSH 208 or equivalent. LEC.

PLSH 508. Advanced Polish II. 3 Hours. H/W.
A practical Polish language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Polish. Designed for students who have had two and one-half or more years of Polish. Prerequisite: PLSH 504 or equivalent. LEC.

PLSH 675. Readings in Polish Language and Literature. 1-6 Hours. H/W.
Directed individual readings on various topics concerning Polish literature and/or language. Prerequisite: Two years or four semesters of Polish, and consent of instructor. IND.

RUSS 100. Russian Reading Course I. 3 Hours. U.
A special reading course for candidates for advanced degrees, faculty members, and graduate or undergraduate students from other schools or departments, designed to aid them in obtaining a reading knowledge for purposes of research. An intensive study of the fundamentals of grammar proceeding to the reading of material of medium difficulty. The course does not satisfy any part of the undergraduate language requirement. Presupposes no previous study of Russian. LEC.

RUSS 101. Russian Reading Course II. 3 Hours. U.
A continuation of RUSS 100. Completion and review of the fundamentals of grammar, with emphasis on reading and translation of learned, scientific, or technical writing and other material of an advanced nature. Each student will also have special assignments in his or her particular field. This course does not satisfy any part of the undergraduate language requirement. Prerequisite: RUSS 100. LEC.

RUSS 104. Elementary Russian I. 5 Hours. U.
First semester. Five hours of basic language acquisition and oral practice per week. Essentials of grammar, practice in comprehending, speaking, reading, and writing Russian. LEC.

RUSS 105. Elementary Russian I, Honors. 5 Hours. U.
Honors version of RUSS 104, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

RUSS 108. Elementary Russian II. 5 Hours. U.
Second semester. Five hours of basic language acquisition and oral practice per week. Essentials of grammar, practice in comprehending, speaking, reading, and writing Russian. A continuation of RUSS 104. Prerequisite: RUSS 104. LEC.

RUSS 109. Elementary Russian II, Honors. 5 Hours. U.
A continuation of RUSS 105. Honors version of RUSS 108, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: RUSS 104 or RUSS
RUSS 105. Introduction to Russian Language. 10 Hours. U.
Intensive course in elementary Russian providing the student with a complete survey of Russian grammar, and proficiency in understanding, reading, and speaking basic Russian. Twenty contact hours per week. Same content as RUSS 104 and RUSS 108 combined. LEC.

RUSS 110. Intensive Elementary Russian. 10 Hours. U.
Intensive course in elementary Russian providing the student with a complete survey of Russian grammar, and proficiency in understanding, reading, and speaking basic Russian. Twenty contact hours per week. Same content as RUSS 104 and RUSS 108 combined. LEC.

RUSS 150. Beginning Russian I. 3 Hours. U.
Fundamentals of Russian grammar, reading, speaking, and writing. Course designed to accommodate the needs of students regardless of age, educational background, or occupation. No previous knowledge of Russian or other foreign languages required. LEC.

RUSS 152. Beginning Russian II. 3 Hours. U.
Continuation of RUSS 150. Does not fulfill BA foreign language requirement. Prerequisite: RUSS 150 or equivalent. LEC.

RUSS 177. First Year Seminar. 3 Hours. GE11 / U.
A limited-enrollment seminar course for first-time freshmen, addressing current issues in Russian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

RUSS 204. Intermediate Russian I. 5 Hours. U.
This course is designed to develop speaking, reading, and listening proficiency within the context of a review of grammar. Prerequisite: RUSS 108, RUSS 110, or equivalent. LEC.

RUSS 205. Intermediate Russian II, Honors. 5 Hours. U.
Honors version of RUSS 204 with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: Open only to students who have received an A in RUSS 108 or an A or B in RUSS 109, and who are admitted to the University Honors Program, or by permission of instructor. LEC.

RUSS 208. Intermediate Russian II. 5 Hours. U.
Continuation of RUSS 204. Completes the undergraduate foreign language requirement. The course is designed to develop speaking, reading, and listening proficiency within the context of detailed grammatical review. Prerequisite: RUSS 204 or equivalent. LEC.

RUSS 209. Intermediate Russian II, Honors. 5 Hours. U.
Honors version of RUSS 208, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: RUSS 204 or 205. Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

RUSS 250. Continuing Russian I. 3 Hours. U.
Fundamentals of Russian grammar, reading, speaking, and writing. Course designed to accommodate the needs of students regardless of age, educational background, or occupation. Does not count towards the fulfillment of the undergraduate language requirement. Does not count towards the undergraduate major in Slavic. Prerequisite: RUSS 152 or equivalent. LEC.

RUSS 252. Continuing Russian II. 3 Hours. U.
A continuation of RUSS 250. Does not count towards the fulfillment of the undergraduate language requirement. Does not count towards the undergraduate major in Slavic. Prerequisite: RUSS 250 or equivalent. LEC.

RUSS 504. Advanced Russian I. 3 Hours. H/W.
A practical Russian language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Russian. Designed for students who have had four semesters of Russian. Prerequisite: RUSS 208 or RUSS 216. LEC.

RUSS 508. Advanced Russian II. 3 Hours. H/W.
A practical Russian language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Russian. Designed for students who have had two and one-half or more years of Russian language. Prerequisite: RUSS 504. LEC.

RUSS 512.Russian for the Professions I. 3 Hours. U.
This course focuses on the active mastery of language structures and vocabulary needed for people using Russian in professional capacities, particularly such as business and journalism. Materials will be drawn from the current Russian press and electronic media. Designed for students who have had basic language training and want to develop specialized language skills. Prerequisite: RUSS 208 or RUSS 216. LEC.

RUSS 516. Russian for the Professions II. 3 Hours. U.
A continuation of RUSS 512. Prerequisite: RUSS 504, RUSS 512, or RUSS 522. LEC.

RUSS 522. Problems in Translating Russian into English I. 3 Hours. H/W.
Preparation of hitherto untranslated works, possibly with the intention of submitting for publication. Training and practice in the skills of oral interpretation. Prerequisite: Two years minimum of Russian language courses. LEC.

RUSS 526. Problems in Translating Russian into English II. 3 Hours. H/W.
A continuation of RUSS 522. LEC.

RUSS 550. Advanced Conversation, Composition, and Grammar in Russia: Summer Program. 6 Hours. H/W.
Held in Russia. Twenty-four hours of class work weekly, plus lectures and excursions, for six weeks at St. Petersburg University. Prerequisite: RUSS 208 or the equivalent of twenty-two hours of Russian language courses. LEC.

RUSS 552. Advanced Russian Language at Saint Petersburg University: Semester Program. 14 Hours. H/W.
Sixteen weeks of intensive Russian language and literature classes held at Saint Petersburg University, Russia. Classes in advanced phonetics, conversation, and grammar as well as lectures on literary and other cultural topics. Prerequisite: Minimum of five semesters of Russian language study at the college level or its equivalent. LEC.

RUSS 600. Classics of Russian Culture. 3 Hours. H.
This advanced Russian language class explores the monuments of Russian culture (1700-1980) in the context of the country’s history, customs, artistic traditions and literary trends. It is designed to develop reading, writing, and speaking skills of advanced language students and includes the preparation of written and oral reports in Russian. Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent. LEC.

RUSS 604. Contemporary Russian Culture. 3 Hours. H/W.
This advanced Russian language class explores issues in contemporary Russian culture (literature and the arts, societal trends and issues, politics, and national life) based on Russian film, television, and print materials. It is designed to develop reading, writing, and speaking skills of advanced language students who wish to develop high levels of fluency, accuracy, and idiomatic expressiveness. Includes the preparation of both written and oral reports. Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent. LEC.

RUSS 608. Russian Phonetics and Grammar. 3 Hours. H/W.
A survey of fundamental issues in Russian phonetics, morphology, and syntax. The course will develop reading, writing, and speaking skills
necessary for discussing and analyzing the major linguistic categories of Russian. Includes the preparation of both written and oral reports. Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent. LEC.

RUSS 612. Introduction to Russian Literature. 3 Hours. H/W.
Readings for this advanced Russian language class will be drawn from representative prose, poetry, and drama of 19th or 20th century authors. The course will develop reading, writing, and speaking skills necessary for discussing and analyzing the major texts and literary trends of the Russian tradition. Includes the preparation of both written and oral reports. Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent. LEC.

RUSS 616. Stylistics. 3 Hours. H/W.
Practical examination of the features of stylistic registers available in contemporary Russian, ranging from slang to colloquial speech to educated journalistic, scientific, and literary styles. The course will develop reading, writing, and speaking skills necessary for discussing and analyzing stylistic registers. Includes the preparation of both written and oral reports. Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent. LEC.

RUSS 675. Readings in Russian. 1-6 Hours. H/W.
Prerequisite: Two years of Russian, and consent of instructor. IND.

SLAV 104. Elementary Slavic Language I: ___. 5 Hours. U.
First semester. Essentials of grammar, practice in speaking and writing a Slavic language. Simple readings from selected texts. Course may be used to teach the fundamentals of any Slavic language, for example, Slovenian, Macedonian, Slovak, etc. LEC.

SLAV 108. Elementary Slavic Language II: ___. 5 Hours. U.
Second semester. Essentials of grammar, practice in speaking and writing a Slavic language. A continuation of SLAV 104 in those languages whose fundamentals were being taught in SLAV 104. Prerequisite: SLAV 104 or equivalent (in same language). LEC.

SLAV 110. Introduction to the Peoples and Cultures of Kazakhstan Through Russian. 1 Hour. U.
This 8-week course prepares students of all majors with little or no knowledge of Russian to function effectively in the experiential internship program in Almaty, Kazakhstan, with appropriate cultural sensitivity and survival Russian-language skills. The focus is basic grammar and key vocabulary terms of Russian (e.g., reading signs, menus; understanding key conversational phrases). Weekly readings treat the history, business culture, and language politics of Kazakhstan. LEC.

SLAV 140. Introduction to Russian Culture. 3 Hours. HT AE42/GE3H / H/W.
An introduction to the principal achievements of Russian cultural history, with particular emphasis on literature, folklore, spirituality, and the visual arts. LEC.

SLAV 141. Introduction to Russian Culture, Honors. 3 Hours. HT AE42/GE3H / H/W.
An introduction to the principal achievements of Russian cultural history, with particular emphasis on literature, folklore, spirituality, and the visual arts. LEC.

SLAV 144. Survey of Russian Literature in Translation. 3 Hours. HL AE42/GE3H / H/W.
A survey of the principal works of Russian literature including such authors as Pushkin, Gogol, Dostoevsky, Tolstoy, Chekhov, Pasternak, Solzhenitsyn, and others. LEC.

SLAV 145. Survey of Russian Literature in Translation, Honors. 3 Hours. HL AE42/GE3H / H/W.
A survey of the principal works of Russian literature including such authors as Pushkin, Gogol, Dostoevsky, Tolstoy, Chekhov, Pasternak, Solzhenitsyn, and others. LEC.

SLAV 148. Introduction to Slavic Folklore. 3 Hours. HL AE42/GE3H / H/W.
An introduction to the various forms of folklore among the Slavic peoples, with particular emphasis on the folk literature, customs, and artifacts of Russia, Poland, and the South Slavic countries. LEC.

SLAV 149. Introduction to Slavic Folklore, Honors. 3 Hours. HL AE42/GE3H / H/W.
An introduction to the various forms of folklore among the Slavic peoples, with particular emphasis on the folk literature, customs, and artifacts of Russia, Poland, and the South Slavic countries. LEC.

SLAV 177. First Year Seminar: ___. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Slavic. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

SLAV 204. Intermediate Slavic Language I: ___. 3 Hours. U.
Second-year level course in a Slavic language, for example, Slovenian, Macedonian, Slovak, with emphasis on reading, composition, and conversation. Prerequisite: SLAV 108 (in same language). LEC.

SLAV 208. Intermediate Slavic Language II: ___. 3 Hours. U.
Second-year level course in a Slavic language, for example, Slovenian, Macedonian, Slovak, with emphasis on reading, composition, and conversation. Prerequisite: SLAV 204 or equivalent (in same language). LEC.

SLAV 316. The Peoples and Cultures of Southeastern Europe Through Film. 3 Hours. HL AE42/GE3H / H.
This course presents an introduction to the study of the culture of the South Slavs and other peoples of Southeastern Europe, combining background modules in geography, linguistic culture, history, folklore and contemporary cultural criticism with critical viewings of artistic films. The course serves as an introduction to humanistic inquiry about the peoples and cultures of Southeastern Europe. LEC.

SLAV 317. The Peoples and Cultures of Southeastern Europe Through Film, Honors. 3 Hours. HL AE42/GE3H / H.
This course is similar in content to SLAV 316, but with an additional honors project. Prerequisite: Eligibility for or admission to the university Honors Program. LEC.

SLAV 318. Jews and Slavs in Eastern Europe. 3 Hours. H.
Jews and Slavs have shared territory from the Middle Ages to the present day. The contact between these culturally and linguistically distinct groups has shaped many centuries of Eastern European history - from the extreme violence of the pogroms to long periods of peaceful coexistence and cooperation. "Jews and Slavs" examines the history and cultural geography of Slavic-Jewish contact from the perspectives of both groups. Through literature, film, journalism, and folklore, students learn about the profound influence Jews and Slavs have had on each other, the uneasy feelings that accompanied their interactions, and the creative and fascinating impact their interaction had on both cultures. (Same as JWSH 318.) LEC.
SLAV 340. Introduction to the Languages and Peoples of Russia and East-Central Europe. 3 Hours. HT AE42/GE3H / H.
An overview of the languages and peoples of Russia and East-Central Europe, including the Slavic and Baltic languages, Romanian, and Albanian. Topics addressed include language prehistory, writing systems, and the relationship between language and national identity. Emphasis on language issues as a background to current events in order to impart an appreciation of the area, its uniqueness and complexity. LEC.

SLAV 341. Introduction to the Languages and Peoples of Russia and East-Central Europe, Honors. 3 Hours. HT AE42/GE3H / H.
An overview of the languages and peoples of Russia and East-Central Europe, including the Slavic and Baltic languages, Romanian, and Albanian. Topics addressed include language prehistory, writing systems, and the relationship between language and national identity. Emphasis on language issues as a background to current events in order to impart an appreciation of the area, its uniqueness and complexity. Prerequisite: Membership in the College Honors Program or consent of instructor. LEC.

SLAV 370. War and Violence Russian Literature and Film. 3 Hours. S.
This course focuses on artistic representations of violence resulting from historical events such as World War II, Soviet collectivization, the Gulag, and political purges. We consider Soviet literature and film, including works by Isaac Babel, Andrei Platonov, Anna Akhmatova, and Alexander Solzhenitsyn. Readings in English. The course is offered at the 300 and 500 levels, with additional assignments at the 500 level. LEC.

SLAV 379. Topics in: ______. 1-3 Hours. H.
Exploration of Slavic cultural forms such as literature, film, linguistics, arts, and press. Topics vary, and course may address topics across a narrow or broad time frame. May be repeated if content varies. LEC.

SLAV 390. Slavic Folk Culture: ______. 3 Hours. H/W.
A broad exposure, both theoretical and practical, to various aspects of the traditional native culture of a particular Slavic country or ethnic group, including folk dance, song and musicianship, as well as forms of the material culture such as folk architecture, costumes and art in everyday life. Taught in the pertinent Slavic country in conjunction with the appropriate language course. LEC.

SLAV 495. Senior Capstone Seminar. 3 Hours. AE61 / H.
The Senior Capstone Seminar offers undergraduate majors an opportunity to define, design and execute a substantial research/creative project under the mentorship of a faculty member. The project integrates the knowledge and skills gained in the coursework for the major and across the undergraduate curriculum, and demonstrates the students' competence in the field of Slavic studies. Prerequisite: Slavic major status, senior standing. LEC.

SLAV 499. Honors Thesis. 3 Hours. H/W.
Independent study and preparation of honors thesis. Required of all students working for a degree with honors in Slavic languages and literatures. IND.

SLAV 500. Russia Today. 3 Hours. H/W.
Study and discussion of contemporary problems in Russia and the former Soviet Union; readings in Russian, based on articles in newspapers, journals, etc. Conducted in Russian. Prerequisite: RUSS 208 or equivalent. LEC.

SLAV 502. Introduction to Russian Culture and Society: ______. 3 Hours. H/W.
An interdisciplinary course introducing the student to the principal features of Russian cultural and societal development in the modern era. Readings in English, no prerequisite for non-Russian majors. Majors and graduate students in Slavic languages and literatures will be required to do readings in Russian. LEC.

SLAV 503. Post-Soviet Communication. 3 Hours. H.
The course is designed to acquaint students with the shifting manner of public discourse in Post-Soviet Russia and help them to explore in some depth cross-cultural communication between America and Russia. In addition to contemporary and historical background on Russian communicative practices, students examine discourse in business development, mass media, marketing, and advertising. All readings in English. (Same as COMS 503). LEC.

SLAV 504. Introduction to East-Central European Culture and Society: ______. 3 Hours. H/W.
An interdisciplinary course introducing the student to the principal features of East-Central European cultural and societal development in the modern era. Countries that may be considered are: Poland, the Czech Republic, Slovakia, Hungary, Romania, Bulgaria, the South Slavic countries, Latvia, Lithuania, Estonia, Belorussia, and Ukraine. LEC.

SLAV 505. Introduction to Czech Culture. 3 Hours. H.
This study-abroad trip offers a survey of Czech art, architecture, literature, theater, and film from the medieval period to the present with emphasis on the late 19th and 20th centuries. Combines 18 hours of lectures on campus and a ten-day trip to Prague. LEC.

SLAV 506. West Slavic Literature and Civilization (Polish and Czech). 3 Hours. H/W.
A survey of West Slavic Literature and Civilization (Polish and Czech) from its beginnings to the present with emphasis on the most important trends: Renaissance, Romanticism, Positivism/Realism, Modernism and Avant-guard; Socialist realism, and Post-modernism. The course combines lecture, discussion and small group activities. Movie clips, recordings, and slides are used to reflect various cultural dimensions of West Slavic Civilization. No knowledge of Polish or Czech is required. LEC.

SLAV 508. South Slavic Literature and Civilization. 3 Hours. NW AE42 / H/W.
An introductory survey of the literature and culture of the South Slavic peoples: the Slovenes, Croats, Bosnians, Serbs, Montenegrins, Macedonians and Bulgarians. No language required. LEC.

SLAV 510. The Russian Literary Genius. 3 Hours. H/W.
Topics and problems in Russian cultural history as treated in the masterworks of Russian literature. Readings selected from the works of Pushkin, Tolstoy, Dostoevsky, Pasternak, Bulgakov, Solzhenitsyn, and other great Russian writers. Readings in English, no prerequisite for non-Russian majors. Russian majors will do some of the readings in Russian. LEC.

SLAV 514. Totalitarianism and Literature in Central Europe. 3 Hours. H.
This course asks how fiction written in Central Europe engaged and grappled with the totalitarian experience imposed by Nazi and Soviet forms of government. The course focuses on the works by 20th-century Polish, Czech, and Hungarian writers that deal with totalitarianism. (Same as HWC 514.) LEC.

SLAV 516. Film Adaptations of Polish and Czech Literature. 3 Hours. H/W.
A comparative study of several most representative and best works of 19th- and 20th-century Polish and Czech fiction and drama and their film adaptations. By providing a broad cultural and historical background of the works, the course offers a thorough introduction to modern culture of Poland and the Czech Republic. Readings and discussions are in English, and no knowledge of Polish or Czech is required. LEC.
SLAV 520. Russian Phonetics, Phonology, and Inflectional Morphology. 3 Hours. H/W.
An analysis of the phonological and morphological systems of contemporary standard Russian, including normative and dialectal pronunciation of speech sounds, phonemics, morphophonemic alterations, and nominal and verbal inflections. Graduate students enrolled in this course will be held to a more stringent curriculum and grading system. Prerequisite: Two years of Russian language study or the equivalent. LEC.

SLAV 522. The Grammatical Categories of Russian: Linguistic Units, Functions and Meanings. 3 Hours. H/W.
This course covers the main grammatical categories of Russian, including word formation, case, animacy, voice and reflexive verbs, imperatives, aspect, and word order. It is intended not only for linguists but anyone seeking a better understanding of the grammatical systems of Russian. Designed as a continuation of SLAV 520. Prerequisite: Two years of Russian language study or the equivalent. LEC.

SLAV 524. Russian Since the Revolution. 3 Hours. H/W.
An examination of changes in the Russian language during the course of this century. Topics covered include changes in pronunciation, morphological and syntactic variation, and the impact of foreign borrowings, particularly from English. Graduate students enrolled in this course will be held to a more stringent curriculum and grading system. Prerequisite: Two years of Russian language study or the equivalent. LEC.

SLAV 528. Comparative Study of Slavic Literatures. 3 Hours. H/W.
The course is intended as an introduction to the most significant writers and works in Slavic literatures. The emphasis will be on some of the themes and ideological concepts that have shaped the literatures of the Slavic world. Representative works of Turgenev, Dostoevsky, Mrozek, Rozewicz, Capek, Hasek, Djilas, Havel, Ivo Andric and others, will be studied. The diversity of expression and, at the same time, homogeneity of spirit in the works of these writers will be stressed. No knowledge of Slavic languages is required. LEC.

SLAV 530. Introduction to Russian Poetry. 3 Hours. H/W.
An introduction to the principles of Russian versification and to masterpieces of Russian poetry selected from the 18th, 19th, and 20th centuries. Students will learn to read, translate, and analyze poems in terms of rhyme, meter, euphony, metaphor, and other prosodic features. Emphasis will be placed upon preparing students for independent study and appreciation of Russian poetry in the original. Prerequisite: Language proficiency. LEC.

SLAV 532. Dostoevsky. 3 Hours. H/W.
A study of the life and works of Fyodor Dostoevsky. In translation. No prerequisite. LEC.

SLAV 534. Tolstoy. 3 Hours. H/W.
A study of the life and works of Leo Tolstoy. In translation. LEC.

SLAV 536. Turgenev. 3 Hours. H/W.
A study of the life and works of Ivan Turgenev. In translation; however, note that Russian majors will be required to read selected works in Russian. LEC.

SLAV 538. The Modern Polish Short Story. 3 Hours. H/W.
A study of the development of the Polish short story from Positivism to the present. Readings of major Polish writers including Prus, Sienkiewicz, Schulz, Borowski, Andrzejeczowski, and others. Emphasis on trends in the Polish short story within the context of West European literatures. No prerequisites. Readings in English. Students with knowledge of Polish will read some works in Polish. LEC.

SLAV 540. Language and Identity in East-Central Europe and the Former Soviet Union. 3 Hours. H.
The course treats the formation of modern nation states as defined by language, where the history of the linguistic community played a central, if mythic role. Focus is on sociolinguistic case studies of the connection between language and identity in the former USSR and Yugoslavia, as well as transnational groups defined by common language and culture. The impact of global English, EU membership, and migration on language and identity issues are also discussed. LEC.

SLAV 558. Readings in Slovene. 1-6 Hours. H.
Individually tailored coursework in Slovene, from beginning to advanced level. Can include development of all four skills depending on the needs of the student. Prerequisite: Consent of instructor. IND.

SLAV 560. Introduction to Slavic Language: ____. 3 Hours. H/W.
Basic introduction to the language, with emphasis on grammar and reading skills. Prerequisite: Two years of a different Slavic language at the college level. LEC.

SLAV 561. Readings in Slavic Language: ____. 1-6 Hours. H/W.
A course of readings and discussion of grammar in a Slavic language as a continuation of SLAV 560, for example, in Bulgarian, Macedonian, etc. Prerequisite: SLAV 560 or the equivalent. LEC.

SLAV 562. Russian Theatre and Drama from Stanislavski and Chekhov to the Present. 3 Hours. H/W.
A study of the development of Russian theatre and dramatic literature from 1898 to the present. Lectures and readings in English. (Same as THR 725.) LEC.

SLAV 564. The "Woman Question" in Nineteenth-Century Russian Literature. 3 Hours. H.
An exploration of the "woman question" in nineteenth-century Russia as treated in literary texts. Authors to be included are: Tolstoy, Turgenev, Dostoevsky, Chekhov, as well as women writers such as Karolina Pavlova and Evgeniia Tur, and prominent literary and social critics. Readings in English. LEC.

SLAV 566. The Devil in Russian Literature. 3 Hours. H.
This course traces the various manifestations of the Devil through Russian and European folklore, myth, theology, culture, and literature. Although the focus is on Russian literature, classic European works are discussed, as they had a powerful impact on the modern Russian Conception of the Evil One. Readings in English. (Same as HWC 566.) LEC.

SLAV 568. Biblical Themes in Modern Russian Literature. 3 Hours. H.
An exploration of the creative process of modern Russian literature (1700 to present) through the ways in which Russian writers have responded to the Bible, the cornerstone of both Western and Eastern Christianity. LEC.

SLAV 570. War and Violence Russian Literature and Film. 3 Hours. S.
This course focuses on artistic representations of violence resulting from historical events such as World War II, Soviet collectivization, the Gulag, and political purges. We consider Soviet literature and film, including works by Isaac Babel, Andrei Platonov, Anna Akhmatova, and Alexander Solzhenitsyn. Readings in English. The course is offered at the 300 and 500 levels, with additional assignments at the 500 level. LEC.

SLAV 600. Biography of a City: ____. 3 Hours. H/W.
Examination in depth of the historical, social, intellectual, and artistic development of one or more major Slavic urban centers. LEC.
SLAV 612. Introduction to Russian Literature of the Nineteenth Century. 3 Hours. H/W.
Pushkin, Dostoevsky, Tolstoy, and others with an introduction to Russian culture. Lectures and readings in Russian. Prerequisite: Three years of Russian language study or its equivalent. LEC.

SLAV 614. Russian Literature in Translation: _____. 3 Hours. H/W.
A survey of the principal Russian authors and literary works of the 19th and/or 20th century. Readings in English, no prerequisites for non-Russian majors. Students with a sound knowledge of Russian will be expected to do some of the readings in Russian. LEC.

SLAV 616. Introduction to Russian Literature of the Twentieth Century. 3 Hours. H/W.
A survey of recent Russian and Soviet literature. Lectures and readings in Russian. Prerequisite: Three years of Russian language study or its equivalent. LEC.

SLAV 626. The Cultural Impact of Ottoman Empire on the South Slavs. 3 Hours. H.
An examination of the cultural development of the South Slavs in the context of the Ottoman invasions and subsequent rule (14th-19th century), focusing on the frontier aspects of the Balkans, military culture, religion, economics, and banditry, as well as other aspects of material and folk culture. No language requirement. Prerequisite: SLAV 316 or SLAV 508; or consent of instructor. LEC.

SLAV 630. Slavic Folklore. 3 Hours. H/W.
Introduction to the phenomena and problems of Slavic folklore. Prerequisite: Two years of Russian on the college level. LEC.

SLAV 635. Language, Culture and Ethnicity in Prehistoric Eastern Europe. 3 Hours. S.
The course is for students who wish to understand the prehistory of Eastern Europe with special attention to the Slavs. The interdisciplinary course examines East European prehistory from the perspectives of archaeology and linguistics, considering also how ideologies have influenced the interpretation of results. No language prerequisite. (Same as ANTH 696) LEC.

SLAV 642. Pushkin and Evgenij Onegin. 3 Hours. H/W.
Lectures, reading, and analysis of Pushkin's "novel in verse." Prerequisite: Three years of Russian language courses or the equivalent. LEC.

SLAV 650. The Russian Short Story. 3 Hours. H/W.
Readings from the short stories of major Russian writers of the 19th and/or 20th centuries, e.g., Pushkin, Gogol, Dostoevsky, Turgenev, Tolstoy, Chekhov; readings and discussion in English for non-Russian majors, Russian majors will be expected to read most stories in Russian. Prerequisite: None for non-majors in the department; two years of college-level Russian for majors. LEC.

SLAV 656. Russian Literature of the Eighteenth Century. 3 Hours. H/W.
Readings from Kantemir, Trediakovskiy, Lomonosov, Derzhavin, Karamzin, and others in their literary and intellectual contexts. Readings in Russian. Prerequisite: Three years of Russian language study or its equivalent. LEC.

SLAV 660. Nineteenth Century Russian Prose and Fiction. 3 Hours. H/W.
Readings from the prose works of Pushkin, Lermontov, Gogol, Turgenev, Goncharov, Dostoevsky, and Tolstoy. In translation. No prerequisite for non-Russian majors. Russian majors will be required to have achieved senior standing and will read most works in Russian. LEC.

SLAV 662. Russian Literary Modernism: 1880-1930. 3 Hours. H/W.
Readings from late Tolstoy through the period of the 1920's. In translation; no prerequisites for non-Russian majors. Russian majors will be required to have achieved senior standing and will read most works in Russian. LEC.

SLAV 664. Soviet Russian Literature: 1930-1990. 3 Hours. H/W.
Readings in the period, in all genres. In translation; no prerequisite for non-Russian majors. Russian majors are required to have senior standing and read most works in Russian. LEC.

SLAV 667. Post-Soviet Literature. 3 Hours. H.
A survey of post-Soviet literary art, from approximately 1985 to the present, dealing with a range of subjects including the emergence of literature from the strictures of socialist realism and its relationship to concepts of postmodernism and postcolonialism. LEC.

SLAV 668. Nabokov. 3 Hours. H/W.
A study of the life and works of Vladimir Nabokov. In translation. No prerequisite. LEC.

SLAV 675. Readings in Slavic Studies (English). 1-3 Hours. H.
Directed readings on Slavic culture in English. For non-majors. Prerequisite: Instructor permission. LEC.

SLAV 678. Readings in Slavic Linguistics. 1-6 Hours. H/W.
Directed individual readings on various topics concerning Slavic linguistics. Prerequisite: Proficiency in at least one Slavic language, and consent of instructor. IND.

SLAV 679. Topics in: ____. 1-6 Hours. H.
Intensive study of a selected topic from Slavic languages, literatures, linguistics, or pedagogy. IND.

SLAV 684. Main Currents of Russian Thought I. 3 Hours. H/W.
A study of philosophical, theological, and literary monuments designed to acquaint the student with main cultural forces that have shaped Russian thought and manners. From the origins to Peter the Great. (Same as PHIL 684.) LEC.

SLAV 686. Main Currents of Russian Thought II. 3 Hours. H/W.
A continuation of SLAV 684. From the age of Peter the Great to revolutions of 1917. (Same as PHIL 686.) LEC.

SLAV 710. Introduction to Slavic Languages and Linguistics. 3 Hours.
The Slavic languages and peoples, including briefly: their origin, prehistory, and early culture. Basic linguistic methodology as applied to Slavic material from the beginnings of Slavic linguistics to the present. LEC.

SLAV 711. Russian Poetry: Nineteenth Century. 3 Hours.
Readings from the works of the major poets, in Russian. Prerequisite: Three years of Russian language study or the equivalent. LEC.

SLAV 712. Russian Poetry: Twentieth Century. 3 Hours.
Readings from the works of the major poets, in Russian. Prerequisite: Language proficiency. LEC.

SLAV 714. Russian Theatre and Drama to 1900. 3 Hours.
A study of the development of Russian theatre and dramatic literature from their beginnings to 1900. Readings in English. Students with knowledge of Russian will read some works in Russian. LEC.

SLAV 715. Russian Drama and Theatre 1953 to the Present. 3 Hours.
A study of the development of Russian theatre and dramatic literature from 1953 to the present. Readings in English. Students with knowledge of Russian will read some works in Russian. LEC.
SLAV 716. History of Russian Literary Criticism: Late Eighteenth and Nineteenth Century. 3 Hours.
A study of the various literary periods, such as sentimentalism, romanticism, naturalism, realism, with particular reference to individual literary critics and critical journals. LEC.

SLAV 719. Philosophical and Aesthetic Thought of the Russian Silver Age. 3 Hours.
A survey of the works of Solovyov, Florensky, Berdyaev, Merezhkovsky, Ivanov, and others, and their relation to the literature and culture of the Silver Age. LEC.

SLAV 721. Pushkin. 3 Hours.
A study of the life and works of Alexander Pushkin. Readings in Russian, open to senior Russian majors and graduate students. Prerequisite: Three years of Russian or the equivalent. LEC.

SLAV 726. Chekhov. 3 Hours.
A study of the life and works of Anton Chekhov. Open to senior Russian majors and graduate students. Readings in Russian. Prerequisite: Three years of Russian or the equivalent. LEC.

SLAV 727. Bely and Blok. 3 Hours.
A study of the life and works of the Symbolist writers, Andrei Bely and Aleksandr Blok. Readings in Russian. LEC.

SLAV 728. 19th Century Russian Prose. 3 Hours.
Readings from the works of Turgenev, Chekhov, Leskov, Saltykov, and others. Readings and discussion in English. Russian majors will be expected to read some works in Russian. No prerequisite. LEC.

SLAV 730. Russian Emigre Literature. 3 Hours.
A study of representative works in all genres, by Russian emigre writers. Readings in English. LEC.

SLAV 740. Introduction to Graduate Studies in Slavic Languages and Literatures. 3 Hours.
This course is an introduction to the skills required of students doing graduate degrees in Slavic languages and literatures; areas covered include 1) introduction to literary theory and criticism, 2) bibliography and research methods, including database management software, 3) preparation and presentations of a research/conference paper, 4) technology training, including web design, on-line portfolio, and digital humanities, and 5) professional ethics and awareness of the academic market and alternative careers. We will also be working on practical, professionally useful goals, such as how to (better) make use of technology, how to create a CV and modify it for different positions, how to write an abstract, and how to produce a conference paper. Course requirements will include a variety of smaller assignments and two larger projects, a web-based professional portfolio and an 8 to 10-page conference paper. LEC.

SLAV 748. Old Church Slavic. 3 Hours.
A course in the first written language of the Slavs (9-12th centuries AD), with discussion of Indo-European, Baltic and Common Slavic background. Prerequisite: Two years of Russian or the study of another ancient Indo-European language. LEC.

SLAV 750. Introduction to Russian Historical Grammar. 3 Hours.
The linguistic history of Russian from the emergence of East Slavic dialects of Common Slavic to the modern period, with emphasis on fundamental structural changes and the introduction of skills necessary for the reading and analysis of Old and Middle Russian texts. Prerequisite: Three years of Russian or the equivalent. LEC.

SLAV 752. Old Russian Grammar and Texts. 3 Hours.
An examination of the Russian language from its beginnings to the 17th century through close reading of Old and Middle Russian texts and reading and discussion of the literature on issues in Russian historical linguistics. Prerequisite: SLAV 748, SLAV 750, or equivalent. LEC.

SLAV 754. Seminar in Slavic Verbal Aspect. 3 Hours.
A detailed examination of the morphology and usage of verbal aspect in Russian and other Slavic languages, which is a particularly troublesome area for foreign learners of Russian. Prerequisite: SLAV 522. SEM.

SLAV 756. Structure of Russian: . 3 Hours.
Synchronic study of the contemporary Russian language with special emphasis on problems of functional morphology and syntax. Prerequisite: Three years of Russian language study or its equivalent. LEC.

SLAV 799. M.A. Seminar in Slavic Linguistics. 3 Hours.
Topics in Slavic linguistics. Content will vary. May be repeated. LEC.

SLAV 802. Thesis. 1-6 Hours.
THE.

SLAV 804. Comparative Slavic Linguistics. 3 Hours.
An examination of the development of the Slavic languages from the Common Slavic period to the present, proceeding from Indo-European. Prerequisite: Graduate standing in Russian. LEC.

SLAV 806. East Slavic Linguistics. 3 Hours.
An examination of the linguistic phenomena and historical development of the East Slavic languages (Russian, Belorussian, and Ukrainian). Prerequisite: Graduate standing in Russian. LEC.

SLAV 808. West Slavic Linguistics. 3 Hours.
An examination of linguistic phenomena and historical development of the West Slavic languages (Polish, Czech, Slovak, and Upper and Lower Sorbian). LEC.

SLAV 810. South Slavic Linguistics. 3 Hours.
An examination of linguistic phenomena and historical development of Bulgarian, Macedonian, Croatian-Serbian, Slovene. LEC.

SLAV 820. Old Russian Literature: Beginnings to 1700. 3 Hours.
Readings of selected texts in Russian. Prerequisite: SLAV 752. LEC.

SLAV 822. Seminar in Russian Literature: Eighteenth Century. 3 Hours.
An investigation of specific themes or authors in the literature, culture, and thought of the 18th century. All readings in Russian. Prerequisite: Graduate standing and advanced Russian language. SEM.

SLAV 824. Proseminar in Methods of Teaching Slavic Languages I. 1-3 Hours.
Required for all teaching assistants, assistant instructors engaged in the teaching of Slavic languages and persons planning for careers in teaching Slavic languages. Combines discussion of theoretical teaching concepts with practical solution of problems arising concurrently in Slavic language courses. Students enrolled for two or three hours will study advanced Slavic grammar topics and stylistics as they apply to the teaching of Slavic languages. LEC.

SLAV 825. Investigation and Conference. 1-3 Hours.
Individual work in language or literature of the teaching of Slavic languages by qualified students under direction of members of the department. RSH.

SLAV 826. Proseminar in Methods of Teaching Slavic Languages II. 1-3 Hours.
Required for all teaching assistants, assistant instructors engaged in the teaching of Slavic languages and persons planning for careers in teaching Slavic languages. Combines discussion of theoretical teaching concepts with practical solution of problems arising currently in Slavic language courses. Students enrolled for two or three hours will study advanced
Slavic grammar topics and stylistics as they apply to the teaching of Slavic languages. LEC.

SLAV 850. Seminar in Russian Literature: Nineteenth Century: ______. 3 Hours.
A regular seminar for graduate students, devoted to special problems in Russian literature. (Ancient Russian literature, Classicism, Romanticism, Realism, Symbolism, etc.) Designed to introduce the student to the more advanced methods in criticism, literary analysis, and research. Prerequisite: Graduate standing in Slavic Languages and Literatures, or permission of instructor. LEC.

SLAV 852. Seminar in Russian Literature: Twentieth Century. 3 Hours.
Various topics including pre- and post-Revolutionary poetry, the prose of the 1920s, the development of Socialist Realism, individual authors, etc. LEC.

SLAV 899. Ph.D. Seminar Slavic Linguistics. 3 Hours.
Topics in Slavic linguistics. Content will vary. May be repeated. Prerequisite: Ph.D. student in Slavic Languages and Literatures. LEC.

SLAV 912. Seminar: Topics in Contemporary Slavic Linguistics. 3 Hours.
Synchronic examination of specific topics, i.e., phonology, morphology, syntax, and lexicology of several Slavic languages. LEC.

SLAV 914. Seminar: Topics in Historical Slavic Linguistics. 3 Hours.
Diachronic examination of selected topics, i.e., phonology, morphology, syntax, or lexicology, of one or more Slavic languages. LEC.

SLAV 917. Seminar in Russian Culture and Society. 3 Hours.
Examination of selected topics in Russian cultural history, especially as treated in the works of Russian literature and intellectual history. Prerequisite: At least one course in Russian history, or one of the following courses—SLAV 502, SLAV 510, SLAV 684, SLAV 686, plus graduate standing. LEC.

SLAV 932. Seminar: Topics in Slavic Folklore. 3 Hours.
Investigation and concentrated study of one or more themes (e.g., mythology, demonology, life rituals, folklore and literature), figures (e.g., Baba Yaga), or genres (e.g., magic tales, byliny, riddles) of Slavic folklore. All readings in Russian. Prerequisite: SLAV 630, SEM.

SLAV 940. Seminar: Topics in Comparative Slavic Literature. 3 Hours.
Prerequisite: Graduate standing in Slavic Languages and Literatures. LEC.

SLAV 999. Dissertation. 1-6 Hours.
THE.

TURK 104. Elementary Turkish I. 5 Hours. U.
Basic language acquisition, including essentials of grammar, speaking, and writing standard (Osmanli) Turkish. LEC.

TURK 108. Elementary Turkish II. 5 Hours. U.
Continuation of TURK 104. Prerequisite: TURK 104. LEC.

TURK 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Turkish. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

TURK 204. Intermediate Turkish I. 3 Hours. U.
Second-year course in Turkish language with emphasis on reading, composition, and conversation. Prerequisite: TURK 108. LEC.

TURK 208. Intermediate Turkish II. 3 Hours. U.
Continuation of TURK 204. Prerequisite: TURK 204. LEC.

TURK 314. Turkish Culture Through Film and Literature. 3 Hours. H.
This course introduces the student to Turkish culture, with a focus on the 20th and 21st centuries, mainly through films and literature. Among the topics are Turkey's geography, politics, history, religion, feminism, poetry, music and cuisine. This interdisciplinary course does not require any previous knowledge of Turkey or the Turkish Language; it is open to both undergraduate and graduate students. Representative works of major authors and film directors will be discussed and analyzed in their historical, political and theoretical contexts. The course is offered at the 300 and 500 levels, with additional assignments at the 500-level. LEC.

TURK 514. Turkish Culture Through Film and Literature. 3 Hours. H.
This course introduces the student to Turkish culture, with a focus on the 20th and 21st centuries, mainly through films and literature. Among the topics are Turkey's geography, politics, history, religion, feminism, poetry, music and cuisine. This interdisciplinary course does not require any previous knowledge of Turkey or the Turkish Language; it is open to both undergraduate and graduate students. Representative works of major authors and film directors will be discussed and analyzed in their historical, political and theoretical contexts. The course is offered at the 300 and 500 levels, with additional assignments at the 500-level. Prerequisite: REES 550 or permission of instructor. LEC.

TURK 675. Readings in Turkish: ______. 3 Hours. U.
Prerequisite: Two years of college-level Turkish and consent of instructor. May be repeated for credit if content varies. IND.

UKRA 104. Elementary Ukrainian I. 5 Hours. U.
First semester. Five hours per week of recitation and drill in the spoken language. Essentials of grammar, practice reading, writing and speaking Ukrainian. LEC.

UKRA 108. Elementary Ukrainian II. 5 Hours. U.
Second semester. Continuation of UKRA 104. Prerequisite: UKRA 104. LEC.

UKRA 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Ukrainian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

UKRA 204. Intermediate Ukrainian I. 3 Hours. U.
Second year course in Ukrainian language with emphasis on reading, composition, and conversation. Prerequisite: UKRA 108. LEC.

UKRA 208. Intermediate Ukrainian II. 3 Hours. U.
Second semester. Continuation of UKRA 204. Prerequisite: UKRA 204. LEC.

UKRA 512. Intensive Ukrainian Language and Culture I. 3 Hours. U.
A practical Ukrainian language course involving advanced study of the grammar, conversation, composition. Reading of texts on a variety of subjects (culture, literature, history, folklore etc.), taught in Ukrainian. Prerequisite: Three years of a Slavic language or permission of instructor. LEC.

UKRA 516. Intensive Ukrainian Language and Culture II. 3 Hours. U.
A practical Ukrainian language course involving advanced study of the grammar, conversation, composition. Reading of texts on a variety of subjects (culture, literature, history, folklore etc.), taught in Ukrainian. Prerequisite: Three years of a Slavic language or permission of instructor. LEC.
SOC 112. American Identities, Honors. 3 Hours. SC AE41/GE3S / S.
An interdisciplinary introduction to individual and group identities over time. Students explore theories and methods relating to identity from various perspectives, such as race, class, gender, sexuality, age, religion, and region. Not open to students who have taken AMS 110 or SOC 110. (Same as AMS 112.) Prerequisite: Membership in the University Honors Program or approval by the American Studies Program. LEC.

SOC 130. Comparative Societies. 3 Hours. NW AE42 / S/W.
Description and analysis of the culture, structure, and development of societies that are historically unrelated to the traditions of Western civilization. LEC.

SOC 131. Comparative Societies, Honors. 3 Hours. NW AE42 / S.
Description and analysis of the culture, structure, and development of societies that are historically unrelated to the traditions of Western Civilization. Open only to students enrolled in the University Honors Program or by consent of instructor. May not be taken by students who have credit in SOC 130. LEC.

SOC 132. American Society, Honors. 3 Hours. SC / S.
The social structure and organization of American society with special reference to long-term and recent social changes. Not open to students who have credit for AMS 330 or SOC 330. Open to College honors students, students on the dean's honor roll, and by permission of the department. LEC.

SOC 150. Self and Society. 3 Hours. SI AE51/GE11 / S.
Discusses the way our identities, values, and behavior have been and continue to be shaped by social and situational factors. Attention is paid to the influence of factors like language, culture, social roles, specific social institutions, and broad structures of inequality and power on how we see ourselves and others. May not be taken by anyone who has completed SOC 305 or its equivalent. LEC.

SOC 151. Self and Society, Honors. 3 Hours. SI / S.
Discusses the way our identities, values, and behavior have been and continue to be shaped by social and situational factors. Attention will be paid to the influence of factors like language and culture, social roles, specific social institutions, and broad structures of inequality and power on how we see ourselves and others. This course may not be taken for credit by those who have taken SOC 305. Open only to students admitted to the University Honors Program or by consent of instructor. LEC.

SOC 160. Social Problems and American Values. 3 Hours. SF AE41/ AE51/GE11 / S.
This course is designed to explore competing explanations for the causes of, and cures for, the enduring problems of American society. The course critically analyzes dominant definitions of social problems, the political and economic roots of these problems, and the public policies aimed at reducing them. May not be taken by anyone who has already completed SOC 306 or its equivalent. LEC.

SOC 161. Social Problems and American Values, Honors. 3 Hours. SF / S.
Explores competing explanations for the causes of, and cures for, the enduring problems of American society. Critically analyzes dominant definitions of social problems, the political and economic roots of these problems, and the public policies aimed at reducing them. This course may not be taken for credit by those who have taken SOC 160 or SOC 306. Open only to students admitted to the University Honors Program or by consent of instructor. LEC.

SOC 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Sociology. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics
are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

SOC 220. Sociology of Families. 3 Hours. SC AE41/GE3S / S.
Analysis of the family as a social institution primarily in the U.S. context. Topics considered are: current and historical changes in how the family is constituted, contrasting sociological theories of family relationships, sexuality in relation to family life, the coexistence of love and hate in families, family dissolution and reformation, and the care of children. A key theme is diversity: social class, gender, race/ethnicity, and age. May not be taken by anyone who has already taken SOC 308 or its equivalent. LEC.

SOC 230. Introduction to Social Inequality in the U.S.. 3 Hours. S.
By the end of this course, students will be able to describe the major dimensions of inequality in the U.S. (including race, class, and gender), understand the structural basis of inequality, critically assess how inequality exists in major social institutions, and understand how inequalities in race, class, and gender shape social interaction. LEC.

SOC 260. America's Latinos/Latinas. 3 Hours. U.
An introduction to the Latino/a population (Mexican-Americans, Puerto Ricans, Cuban-Americans, Dominican-Americans, and Central and South Americans) in the US. Students discuss how US and Latin American societies have shaped Latino incorporation into the United States. We also discuss contemporary political, cultural and social issues that pertain to Latinos/as in the US. (Same as AMS 260) LEC.

SOC 273. Women in Society. 3 Hours. S.
A sociological exploration of the image and status of women in society, including family, work, and politics. Socialization, education, and the women's movement are also analyzed. Includes an introduction to feminist theories in sociology. LEC.

SOC 295. Study Abroad Topics in: _____, 1-6 Hours. S.
This course is designed for the study of special topics in Sociology at the freshman/sophomore level. Course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. No more than 6 hours of SOC 295 or SOC 495 may count towards the Sociology major or minor. LEC.

SOC 304. Principles of Sociology. 3 Hours. SC AE41/GE11/GE3S / S.
An introduction to sociological concepts, methods, and substantive findings more intensive than that provided in SOC 104. Students may take this course in lieu of SOC 104 to satisfy requirements for the major and the minor. This course may not be taken for credit by those who have taken SOC 104. LEC.

SOC 305. Principles of Self and Society. 3 Hours. SI GE11 / S.
Discusses the way our identities, values, and behavior have been and continue to be shaped by social and situational factors. Attention is paid to the influence of factors like language, culture, social roles, specific social institutions, and broad structures of inequality and power on how we see ourselves and others. This course provides a more intensive coverage of the subject matter than that provided in SOC 150. May not be taken by anyone who has already taken SOC 150 or its equivalent. LEC.

SOC 306. Principles of Social Problems. 3 Hours. SF / S.
This course is designed to explore competing explanations for the causes of, and cures for, the enduring problems of American society. The course critically analyzes dominant definitions of social problems, the political and economic roots of these problems, and the public policies aimed at reducing them. This course provides a more intensive coverage of the subject matter than that provided in SOC 160. May not be taken by anyone who has already completed SOC 160 or its equivalent. LEC.

SOC 308. Principles of Family Sociology. 3 Hours. SC / S.
Analysis of the family as a social institution primarily in the U.S. context. Topics considered are: current and historical changes in how the family is constituted, contrasting sociological theories of family relationships, sexuality in relation to family life, the coexistence of love and hate in families, family dissolution and reformation, and the care of children. A key theme is diversity: social class, gender, race/ethnicity, and age. This course provides a more intensive coverage of the subject matter than that provided in SOC 220. May not be taken by anyone who has already taken SOC 220 or its equivalent. LEC.

SOC 310. Introduction to Social Research. 3 Hours. S.
An introduction to the nature and methods of social research. Topics may include: hypothesis formulation and testing; how to design a research project, collect and analyze data; elementary statistical procedures; and ethical issues. Prerequisite: Six hours of Sociology credit, including Sociology 104. A minimum GPA of 2.3 in all SOC courses is strongly recommended for students planning to enroll in this course. LEC.

SOC 312. Population and Society. 3 Hours. AE41 / S.
An examination of the causes and consequences of population change in the United States and around the world with special focus on the impact of changes in populations on social institutions. We use social demographic perspectives to explore patterns of birth, illness, death, population concentration, population migration and immigration, and changes in these over time. Prerequisite: One of the following: SOC 104, SOC 110, SOC 150, SOC 160, or SOC 220. LEC.

SOC 320. Organizations in Society. 3 Hours. S.
An analysis of complex organizations in modern societies. Attention is given to the rise of bureaucracy in business and government; the way organizations influence and respond to their social cultural environments; and the various roles that individuals play in organizations. Prerequisite: A principal course in sociology. LEC.

SOC 326. Health, Gender, and Society. 3 Hours. S.
Comparative examination of the health status of men and women in relation to key elements of contemporary societies, including not only medicine and health care services, but also systems of social inequality and stratification, cultural constructions of gender, and social policies. Emphasis will be placed on the U.S.; however, the course also will provide international comparisons and an overall global context. LEC.

SOC 330. American Society. 3 Hours. AE41 / S.
The social structure and organization of American society with special reference to long-term and recent social changes. (Same as AMS 330.) Not open to students with credit for SOC 132. Prerequisite: A principal course in sociology. LEC.

SOC 332. The United States in Global Context. 3 Hours. AE42 / S.
Examines the influence abroad of US culture, policies and practices and the impact of other countries on US culture, society, and politics. Among the topics that may be examined are race, ethnicity, colonialism, imperialism, migration, technology, communications and media, popular culture, language, health, domestic and transnational organizations, as well as economic, political, religious, military and educational institutions. (Same as AMS 332). LEC.

SOC 340. The Community. 3 Hours. S.
Structures, functions, and processes of change in local communities; interrelations of towns and small cities with rural areas and metropolitan centers with their hinterlands. Prerequisite: A principal course in sociology or ANTH 108 or ANTH 308. LEC.

SOC 341. Urban Sociology. 3 Hours. S.
Examination of the process of urbanization in modern societies, including the size, growth, functions, and ecology of cities and systems of cities;
such urban social institutions as the economy, politics, and the family; and major contemporary urban policies and problems. Each topic will be analyzed from several sociological perspectives. Prerequisite: A principal course in sociology. LEC.

SOC 342. Sociology of Immigration. 3 Hours. S.
International migration reshapes politics, economics, social relations, and racial/ethnic identities. Using the United States and other countries as case studies, we explore the variations among immigrant groups and their experiences in social institutions such as the family, religion, education, labor market, and government. We consider the influence of national origin, gender, class, and culture on immigration and reception experiences, as well as issues of assimilation, transnationalism and identity. Prerequisite: SOC 104. LEC.

SOC 351. Africa Today. 3 Hours. U.
An examination of Africa's social dynamics. Topics considered include: the origins of modern African societies, nations, and states; family structures and values; ethnicity, gender relations and patriarchy; social, political, economic and cultural institutions; African exceptionalism; contemporary African social dynamics; transnational migration; HIV/AIDS; political transitions; and Africa's place in the emerging global order. Prerequisite: SOC 104. LEC.

SOC 352. Sociology of Sex Roles. 3 Hours. S.
An examination of sex roles, sex stereotypes, and major issues involved in sex-role research. Emphasizes explanations of inequality between American males and females in the family and at work. The course is designed around lectures, panels, workshops, and films. LEC.

SOC 360. Sociology of Social Control. 3 Hours. S.
This course examines changing methods of social control in society. Social control can be formal (e.g., law and criminal justice system) or informal (e.g., families, peer groups). This course examines the ways that we, as a society, attempt to respond to matters such as deviance, illness, crime, and poverty. This course will survey the many varieties of formal and informal social control faced by individuals in society, and the ways in which individuals resist and conform to various disciplinary and control regimes. Prerequisite: a principal course in Sociology. LEC.

SOC 364. Society, Popular Culture, and the Media. 3 Hours. S.
An overview of sociological theory and research on culture created and distributed through the mass media and its role in shaping our common sense interpretations of our daily lives. Topics include the social organization of the media, the relation between popular culture and the media, themes communicated in various elements of popular culture, and how various groups interpret cultural messages and incorporate them in their lives. LEC.

SOC 365. Society, Popular Culture, and the Media, Honors. 3 Hours. S.
Similar in content to SOC 364. An overview of sociological theory and research on culture created and distributed through the mass media and its role in shaping our common sense interpretations of our daily lives. Topics include the social organization of the media, the relation between popular culture and the media, themes communicated in various elements of popular culture, and how various groups interpret cultural messages and incorporate them in their lives. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

SOC 370. Conflict Resolution. 3 Hours. S.
This course is an introduction to the field of conflict resolution. Collaborative approaches to dealing with conflict will be examined from the micro, interpersonal group level to the macro, organizational level. The causes and consequences of conflict will be presented as well as problem solving techniques for the resolution of conflict in social groups. LEC.

SOC 371. Marginal Groups and Subcultures. 3 Hours. S.
The sociological study of groups that differ from the mainstream practices of their societies and of conditions affecting their careers. The primary objectives are to introduce and analytically apply sociological conceptualizations of groups, group careers, group mainstream interactions, and participant orientations. The principal cases examined are the Hutterites, the Shakers, and the Oneida Community, supplemented by brief analyses of a variety of other groups. Questions concerning the formation, organization, processes, participants, and transformations of groups are emphasized. LEC.

SOC 385. Environmental Sociology. 3 Hours. S.
This course invites students to study society and its impact on the environment. Environmental problems are social problems. This course will address such items as social paradigms, theories, inequalities, movements, and research. (Same as EVRN 385.) LEC.

SOC 410. Sociology of Death and Dying. 3 Hours. S.
This course covers theoretical, practical, cross-cultural and historical aspects of death and dying. Social, psychological, biomedical, economic and legal issues surrounding death and dying are explored. Students examine their own ideas, feelings, and attitudes towards death and dying, and reflect on the origins and significance of those beliefs. Prerequisite: Junior or Senior Standing. LEC.

SOC 420. Armed Forces and Society. 3 Hours. U.
Examines the military as a social institution. Students analyze both the internal organization and practices of the armed forces and the relationships between the military and other social institutions. It considers the historical forces that have shaped the present. Thus, past events and policies as well as current ones are covered in the course. The primary focus of this course is on the American military and its relationship to American society, but considers the armed forces of other societies. Prerequisite: SOC 104 or permission of instructor. LEC.

SOC 424. Sociology of Health and Medicine. 3 Hours. S.
This introductory course in medical sociology examines how social factors influence health and the organization of medical services. Students explore the distribution and experiences of illnesses across key social categories (e.g., gender, social class, etc.) The course also addresses contemporary issues in health and medicine, such as how health care systems vary cross-nationally, the training of health care workers, patient-physician relationships, and the use of medical technologies. LEC.

SOC 427. School and Society. 3 Hours. S.
This course examines education as a social institution and the reciprocal relationship between schools and society. It focuses particularly on the relationship between education and inequality and on education in the U.S., but also includes international comparisons. LEC.

SOC 450. Gender and Society. 3 Hours. AE41 / S.
An overview of sociological theory and research on the social practices constructing men and women as "opposites" and creating systematic inequality between them in class-, race-, and nation-specific ways. We consider arguments and evidence that gender is something we are, something we do, a part of every social institution, and a major aspect of how we are organized as a society. LEC.

SOC 454. Women and Work. 3 Hours. S.
Sociological investigation of women's changing relationship to paid and unpaid labor in the economy and the family. Several theories are compared in these contexts: Characteristics of employed women, including occupational distribution and pay; women's experiences in "traditional" and "nontraditional" occupations, including professions and management; socialization and education for employment; integration
of marriage, housework, and child care; anti-discriminatory laws and policies. Prerequisite: A principal course in Sociology. LEC.

**SOC 490. Internship in Sociology. 3 Hours. AE61 / S.**

The purpose of this course is to encourage students to think sociologically about social issues by working as volunteer interns for non-profit community or campus organizations. Enrollment must be approved by a faculty mentor and the departmental Undergraduate Studies Committee. For additional information go to the Sociology department website. Prerequisite: 21 credits in sociology with a 3.0 GPA and permission of the instructor. FLD.

**SOC 495. Study Abroad Advanced Topics in: ____. 1-6 Hours. S.**

This course is designed for the study of special topics in Sociology at the junior/senior level. Course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. No more than 6 hours of SOC 295 or SOC 495 may count towards the Sociology major or minor. LEC.

**SOC 499. Honors Course. 3-6 Hours. AE61 / S.**

Intensive study and research under faculty direction including the writing of a thesis. Enrollment may be split between two semesters, but no grade will be given until completion of the thesis. Admission to honors candidacy is open only to majors who have shown a marked capability for independent study and have completed either SOC 310 or SOC 500. IND.

**SOC 500. Sociological Theory. 3 Hours. S.**

An introduction to the principal texts in sociological theory and the ideas that made them important. Primary materials are emphasized, ranging from medieval to the current age. The goal of the course is to show continuity and change in the theoretical tradition of sociology, and to demonstrate the continued importance of classical ideas. Prerequisite: SOC 104 or permission of instructor. LEC.

**SOC 510. Elementary Statistics and Data Analysis. 3 Hours. S.**

An introduction to social scientific data analysis, with an emphasis on descriptive and inferential statistics. Specific topics include sampling, measures of association and correlation, significance testing, the logic of causal inference, the use of computer programs for data analysis, multivariate analysis, and the critical evaluation of social science research findings. Prerequisite: SOC 310 and MATH 101, or instructor permission. LEC.

**SOC 519. Sociology of Global Food. 5 Hours. U.**

The Sociology of Global Food offers a critical examination of the global food system since the Industrial Revolution. Topics include the industrialization of agriculture, sustainable agriculture, and the role of food and agriculture in organizing society. This course discusses the emergence of current debates around food and agriculture including food activism, technological developments, human/environment relationships, and labor issues. There is a lab component to this course. (Same as EVRN 519.) Prerequisite: Junior standing. LEC.

**SOC 520. Groups and Associations. 3 Hours. S.**

A comparative study of groups, associations, and institutions as types of social systems with special attention to structural characteristics and organizational processes; the nature of membership and leadership, including recruitment, selection and training; the social position, relationship, and function of these groups in communities and societies. Prerequisite: A principal course in sociology. LEC.

**SOC 521. Wealth, Power, and Inequality. 3 Hours. AE41 / S.**

This class focuses on economic inequality and the political and social forces that create and sustain it in the United States and internationally. The variables of race, ethnicity, status, and gender are analyzed as they relate to the differences in the distribution of wealth and power, and attention is paid to how these multiple variables shape opportunities. LEC.

**SOC 522. American Racial and Ethnic Relations. 3 Hours. AE41 / S.**

Analysis of the basic sociological concepts that apply to majority/minority relations; with special emphasis on racial and ethnic interaction in the United States. (Same as AMS 522.) Prerequisite: A principal course in sociology. LEC.

**SOC 523. Sociology of Aging and the Life Course. 3 Hours. AE41 / S.**

An advanced survey of theory and research in social gerontology, giving primary attention to aging and the aged as affected by social organization, including such social institutions as familial, economic, political, and health care; organizational processes such as social stratification; and living environments including community and housing. In these contexts, certain demographic, cross-cultural, social-psychological, and physiological aspects of aging will also be considered. Prerequisite: A principal course in sociology. LEC.

**SOC 524. Sociology of the Economy. 3 Hours. S.**

An analysis of the social organization of production with attention being given to such topics as: world economic crises and their social bases, capitalist and socialist economies, primitive and advanced economic systems, multinational corporations, the nature of housework, and the transformation of economic systems. Prerequisite: A principal course in sociology. LEC.

**SOC 525. Sociology of Work. 3 Hours. S.**

A consideration of problems in the conceptual and empirical definition of occupations and professions. It will involve the examination of the process of professionalization, the differentiation and integration of labor, career patterns, the work situation, the study of leisure, and the social consequences of changes in occupations and professions. Prerequisite: A principal course in sociology. LEC.

**SOC 529. Globalization. 3 Hours. S.**

Addresses sociological aspects of the growth of transnational economic, cultural, institutional, and political interconnections, the freer and faster movement of goods, images, ideas, people, and institutional forms across national borders, and the consequences and problems of these processes. The focus is on recent (later 20th century to the present) global restructuring in the context of historical shifts in capitalist development. Prerequisite: SOC 104. LEC.

**SOC 530. Industrial Revolution and Capitalist Development. 3 Hours. S.**

Focuses on the social forces that generated industrial capitalism. Emphasis will be on comparative social structures and their meaning for the nature and quality of life. The transformation from medieval to mercantilist to industrial capitalism will be analyzed in detail. Possibilities of post-industrial society will be discussed. This course will consider exclusively Western development. Prerequisite: A principal course in sociology. LEC.

**SOC 531. Global Social Change. 3 Hours. S.**

Comparative study of social, economic, political, and ideological factors influencing global social change, and analysis of different theoretical orientations related to social change in various societies. Prerequisite: A principal course in Sociology. LEC.

**SOC 532. Sociology of the Middle East. 3 Hours. NW AE42/AE61 / S.**

The sociological analysis of social, historical, and contemporary issues pertaining to the Middle East and to relations between the Middle East and other regions of the world. We use sociological theoretical perspectives to address such topics as nationalism and identity; religion, race and ethnicity; gender, socioeconomic development, and sociopolitical and economic relations with the United States. Prerequisite: One of the following: SOC 104, SOC 110, SOC 150, SOC 160, or SOC 220. LEC.
SOC 533. Industrialization in Developing Nations. 3 Hours. S.
Comparative study of problems associated with industrialization in
developing nations, including population problems, unemployment,
social and welfare problems, and various political issues. Prerequisite: A
principal course in sociology. LEC.

SOC 534. Global Ethnic and Racial Relations. 3 Hours. NW AE42 / S.
An examination of constructions of race and ethnicity around the world.
Emphasis is on the social, political, historical, cultural and economic
factors that lead to the creation of ethnic and racial identities, ethnic
conflict and accommodation, ethnic movements, and ethnic political
organization. Racial and ethnic relations in the U.S. are compared with
other countries. Major focus is placed on ethnicity in Africa, Asia, Latin
America, the Caribbean and/or the Middle East. (Same as AAAS 510 and
AMS 534.) LEC.

SOC 535. Gender in the Global Context. 3 Hours. S.
This course examines gender roles and identity in the global context
and focuses specifically on historical comparative analysis of women's
participation in--and impact on--social, political, economic, and cultural
aspects of their communities and nations. Major emphasis will be
placed on women in Africa, Asia, Latin America, and the Middle East.
Prerequisite: A principal course in Sociology. LEC.

SOC 536. Ethnicity in the United States: _____ 3 Hours. AE41 / S.
An examination of the history, sociology, and culture of U.S. ethnic
categories (e.g., American Indians, Latinos, Asian Americans, Jewish
Americans, Irish Americans). The specific group studied varies from
semester to semester. Course may be repeated for credit. (Same as AMS
536.) Prerequisite: A principal course in American Studies, Sociology, or
Anthropology, or permission of instructor. LEC.

SOC 560. Law and Criminal Justice. 3 Hours. S.
An analysis of the sources and procedures of development of the criminal
law and analysis of the practices of law enforcement, prosecution, and
judicial action, principally in the United States. Prerequisite: A principal
course in sociology. LEC.

SOC 561. Sociology of Deviance. 3 Hours. S.
General analysis of the ways in which individuals and actions come to be
declared as deviant in a society, including the political, economic, social,
and cultural processes of labeling, rulemaking, and rule breaking: Why
are some acts and groups considered deviant at some points in time
and in some places, but not in others? Prerequisite: A principal course in
sociology. LEC.

SOC 562. Sociology of Law. 3 Hours. S.
A survey of the effects of social structure, societal values, and social
change upon the creation and alteration of law. Various perspectives from
the social sciences will be employed in the introductory examination of
the general place of law in societies. The emphasis of the course will be on
the sociological analysis of law in Western history as well as the present.
Prerequisite: A principal course in sociology. LEC.

SOC 570. Social Conflict. 3 Hours. S.
The nature of social conflict, with special emphasis on the more persistent
conflict areas of modern social life such as industrial, racial, religious, and
national conflicts. Prerequisite: A principal course in sociology. LEC.

SOC 571. Collective Behavior. 3 Hours. S.
An analysis of such collective phenomena as crowd behavior, social
epidemics, fads, fashions, popular crazes, and mass movements; the
nature of the public; functional analysis of public opinion; the problems
of democracy as viewed from the standpoint of organizing collective action.
Prerequisite: A principal course in sociology. LEC.

SOC 572. Dispute Settlement. 3 Hours. S.
Processes of negotiation and mediation in settling disputes in
communities and organizations over controversial issues, policies, and
decisions. Knowledge of skills are developed through studying theories
and research findings, and by case analysis, role playing, and simulation.
LEC.

SOC 573. Sociology of Violence. 3 Hours. S.
This course will examine violence in social and political life. The causes
and consequences of various types of violence will be examined in a
variety of social settings. Examples include violence in the family, schools,
the workplace, violence in cities, and violence as a part of the political
process: assassination, revolution, coups, terrorism, and government
repression. Prerequisite: A principal course in sociology. LEC.

SOC 580. Sociology in the Community. 3 Hours. S.
The purpose of this course is to encourage students to develop their
understanding of the relationship between individual biography and social
organization while they contribute to their community by working as
volunteers in non-profit community or campus organizations. Not open to
students who have completed SOC 490. Prerequisite: SOC 310 and SOC
510. LEC.

SOC 598. Practicum in Crime and Delinquency Studies. 3-6 Hours. S.
A one- or two-semester course in which students are provided the
opportunity, as interns, to gain practical experience working in the criminal
justice system agency. A report in the format of a research paper is
required at the conclusion of the practicum. Open only to Crime and
Delinquency Studies majors. Prerequisite: Consent of the instructor. FLD.

SOC 600. Sociological Perspectives: _____. 3 Hours. S.
Analysis of various sociological perspectives and/or the application of
various perspectives to a given social phenomenon. May be repeated as
topics vary. Prerequisite: A principal course in sociology. LEC.

SOC 601. Introduction to Feminist Social Theory. 3 Hours. S.
Feminist theories accord a central role to gender and the oppression
of women in developing an analysis of social life. This course will
explore and evaluate accounts of social structure, social processes, and
consciousness developed from a feminist perspective. A broad range of
theoretical models will be presented, drawing on liberal, historical
materialist, psychoanalytical, cultural, and Black feminist theories.
Prerequisite: A principal course in Sociology and at least junior standing.
LEC.

SOC 610. Survey Research. 3 Hours. S.
Methods and techniques of collecting and analyzing social data obtained
by interviewing a sample of the population. Practice through field work
and laboratory analysis. LEC.

SOC 615. Techniques of Demographic Analysis. 4 Hours. U.
Examines concepts of demographic measurement and analysis
for the study of changes in size, composition and distribution of
populations. Students learn to measure and analyze basic population
components such as fertility, mortality, migration and health using rates,
standardization, decomposition of differences and life tables. Provides
an opportunity to develop quantitative skills in the context of human
life course processes that might be extended to include the study of
employment, incarceration, education and other phenomena. Involves
some reliance on calculus, substantial use of statistical software and an
extended research project. Course includes a laboratory component.
Prerequisite: SOC 510 or equivalent, or permission of instructor. LEC.

SOC 617. Women and Health Care. 3 Hours. S.
Critical analysis of the current health status and health needs of women,
exploring how lay, medical, and research assumptions have influenced
both the clinical/scientific literature and the organization of health services.
The course includes a focus on historical patterns in women's health issues and social change actions. (Same as HPM 620.) LEC.

**SOC 619. Political Sociology. 3 Hours. S.**
The study of politics and society in the United States and abroad, including power and authority—who has them, how are they acquired, when are they challenged; state formation, the expansion of central governments, and patterns of political domination; political and nationalist movements; the politics of gender, class, race, and ethnicity; political culture and ideology; ethnic and nationalist conflict; revolution and political change. Prerequisite: A principal course in sociology or consent of instructor. LEC.

**SOC 620. Social Organization. 3 Hours. S.**
Comparative analysis of social organization in simple and complex societies. Consideration of the process of differentiation, specialization, institutionalization, and change, with special attention given to the emergence of intergroup and interorganizational forms of social organization typical of complex societies. Prerequisite: A principal course in sociology. LEC.

**SOC 621. Cross-Cultural Sociology. 3 Hours. NW AE42/GE3H/GE3S / S.**
A systematic introduction to cross-cultural issues from the standpoint of sociology, designed to acquaint students with the full range of substantive and methodological issues that arise in comparative sociological inquiry, with a primary focus on non-western societies. Specific topics to be addressed may include war and peace, stratification and inequality, race and ethnicity, and political authority and power, all viewed in the light of cross-cultural research and theory. Prerequisite: A previous Sociology course or consent of instructor. LEC.

**SOC 622. Sociology of Science. 3 Hours. S.**
The social roles of science in relation to other institutions, to technology, and to social change; and, within the scientific community, enculturation, information-flow, creativity, decision-making, administration, and leadership. Prerequisite: A principal course in sociology. LEC.

**SOC 625. Work Roles in Health and Medicine. 3 Hours. S.**
A sociological examination of medical and health-care occupations and professions. The selection of careers, socialization processes, and the development of professional identities. Interactions among practitioners, health-care teams, consumers, and professional and community power structures. Control and coordination of work. The impact of increasing specialization and changes in the demographic makeup of client and professional populations. Coping with medical failure and other problems inherent in medical and health-care work. LEC.

**SOC 626. Religion and Society. 3 Hours. S.**
A comparative study of the nature of religion in human societies both primitive and civilized; the functioning of religion for the community and the individual; the analysis of belief, myths, rituals, sacred attitudes, cults, religious movements, and church organization. Prerequisite: A principal course in sociology or ANTH 108 or ANTH 308. LEC.

**SOC 628. Families and Social Inequalities. 3 Hours. S.**
This course examines families in the context of social inequalities based on race-ethnicity, social class, gender, and sexuality. It analyzes the link between family diversity and social inequalities in the U.S. and elsewhere and theorizes families using a critical lens that focuses on social policies and power relations that perpetuate social inequalities. We also explore the growing complexities of families and how they affect and are affected by other social institutions, especially the labor market. Prerequisite: SOC 220 or consent of instructor. LEC.

**SOC 629. Sociology of Sport. 3 Hours. S.**
Examination of organized sport as a social institution and its relation to other social institutions (e.g., political, economic, educational, and religious), with special emphasis on American society. Analysis of the social correlates of sports participation and a consideration of the role of sport in social change. (Same as AMS 629.) Prerequisite: A principal course in sociology. LEC.

**SOC 630. Latin American Society. 3 Hours. S/W.**
Aspects of the social organization of main Latin American nations, including, e.g., race/ethnicity, social class, gender, urbanization, socioeconomic development, revolution, and relations with the U.S. Emphasis on sociological theories of Latin American development. Prerequisite: A principal course in Sociology or ANTH 108 or ANTH 308, plus junior-senior or graduate standing. LEC.

**SOC 634. The Sociology of Culture. 3 Hours. S.**
An introduction to a branch of sociology, mainly European in origin, that considers the relation between social structure and "high" and "mass" culture. Specific theories of these relations will be applied to works of literature, the fine arts, or music. Some preliminary acquaintance with these subjects is desirable but not mandatory for admission to the course. LEC.

**SOC 640. Political Islam. 3 Hours. NW AE42/AE51 / S.**
This course gives students a basic understanding of Islam and Islamic movements, explores the economic, social, political, and cultural context in which these movements take place, and examines the impact of Islam on politics in select countries. Issues such as compatibility of political Islam and democratic politics, political economy in Muslim societies, fundamentalism in Islam, gender relations, identity politics and questions on clash of civilizations are explored. (Same as POLS 667). Prerequisite: A principal course in sociology, POLS 150, or consent of instructor. LEC.

**SOC 650. Transnational Migration. 3 Hours. S.**
A historically-conscious, sociological exploration of political, cultural and health issues involved in transnational migration, this course invites the student to situate current transnational migration within specific historical social processes within both postcolonial Africa and the postcolonial West. The course examines parallels from the experience of migration in other parts of the world, specifically Asia and Latin America. The aim is an understanding and appreciation of both the interconnectedness of the world's peoples and, crucially, of the world's histories. Prerequisite: SOC 104, LEC.

**SOC 660. Sociology of Mental Illness. 3 Hours. S.**
The sociology of mental illness concerns itself with the study of mental disorders as social phenomena. The course will be concerned with (1) the social factors and social processes that contribute to mental disorders, (2) the social definitions of mental disorders as forms of social deviance, (3) the social facets in the treatment and care of disordered persons, and (4) the social aspects of the prevention of mental disorders. Prerequisite: A principal course in sociology. LEC.

**SOC 661. Causation of Crime and Delinquency. 3 Hours. S.**
The individual and social processes that produce violation of legal norms, dealing with society's responses to these violations only insofar as the responses influence the violators. Prerequisite: A principal course in sociology. LEC.

**SOC 662. Corrections. 3 Hours. S.**
Legal systems for handling offenders and the development of the laws creating these systems. Emphasis on the various parts (police, courts, probation, penal institutions, and parole) of the system will vary. Prerequisite: A principal course in sociology. LEC.
SOC 671. Social Movements. 3 Hours. S.
Social movements as collective action to establish forms of social organization; consideration of reform, revolutionary, sectarian and fashion movements; ideology, esprit de corps, morale and leadership as factors in development and organization. Prerequisite: A principal course in sociology. LEC.

SOC 672. Sociology of War and Peace. 3 Hours. S.
Descriptive and analytic account of cold and hot wars. The concept of enemy. Types of war. Emphasis on personal and collective action in warlike situations. War and international politics. The ideologies of war from the classics to the present. Prerequisite: A principal course in sociology. LEC.

SOC 698. Individual Undergraduate Research. 1-12 Hours. AE61 / S.
Library or field research either as part of an ongoing project or as an independent study project. One to twelve hours. May be taken from one or more faculty during one or more semesters, the total hours not to exceed 12. No more than 3 credits may be applied to satisfy requirements for the sociology major. Prerequisite: Two courses in sociology and consent of instructor. IND.

SOC 699. Capstone in Sociology. 3 Hours. AE61 / S.
In this capstone course, students synthesize the knowledge gained in their substantive courses and use the skills developed in their methodology courses to design and conduct a research project on a current social issue or meeting the research needs of a local community group. The outcome will be a professional quality research report. Prerequisite: SOC 510. LEC.

SOC 707. Seminar in Historical Sociology. 1-4 Hours.
Each seminar will explore problems at the intersection of sociology and history. Topic, instructors, and hours of credit will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics and students may take more than one topic. No prerequisite. LEC.

SOC 722. Sociology of Gender. 3 Hours.
This course will offer a range of sociological perspectives on the role of gender in society. The particular substantive focus will vary each semester to allow flexibility for in-depth analysis of gender relationships in such areas as politics, health and aging, and work. LEC.

SOC 760. Social Inequality. 3 Hours.
A comprehensive review of the major theoretical and empirical approaches used in the study of institutionalized social inequality. Reference to the origins, forms, cultural and structural variations and their changes over time, consequences and ideologies of social inequality. Prerequisite: A distribution course in sociology. LEC.

SOC 762. Seminar in Social Deviation and Control: _____, 3 Hours.
Advanced study of theory and practice relating to deviation. May be repeated as topics vary. Prerequisite: SOC 662 or SOC 661. LEC.

SOC 767. Gerontology Proseminar. 3 Hours.
A proseminar coordinated by the Gerontology Center. The proseminar explores essential areas of gerontology for researchers and practitioners, providing a multidisciplinary (psychology, biology, sociology, and communication) perspective on aging. The proseminar surveys contemporary basic and applied research, service programs, and policy and management issues in gerontology. (Same as ABSC 787, AMS 767, COMS 787, and PSYC 787.) (Formerly HDFL 787.) LEC.

SOC 770. Social Systems and Social Change in the United States. 3 Hours.
Analysis of approaches to the study of sociocultural change in America, with special emphasis on a systems perspective. Seniors by consent of instructor. LEC.

SOC 771. Intergroup Relations and Conflict in American Society. 3 Hours.
Analysis of the dynamics of intergroup relations (e.g., class, religious, ethnic, racial, political) in America with special emphasis on the examination of major theoretical and empirical approaches employed in the study of societal conflict and consensus. LEC.

SOC 780. Advanced Topics in Sociology: _____, 3 Hours.
Topics will vary from semester to semester and instructor to instructor to allow flexibility for in-depth analysis of particular topics. LEC.

SOC 790. Proseminar. 3 Hours.
Introduction to major disciplinary issues, departmental research specialties, faculty research interests, interdisciplinary connections, funding sources, and professional writing. Required of M.A. students entering the graduate program in sociology. May not be taken by those who have credit for SOC 990. Graded on satisfactory/unsatisfactory basis. LEC.

SOC 801. The Rise of Social Theory. 3 Hours.
This is less a survey of intellectual history than an effort to trace the "preclassical" roots of sociological theory. We explore the rise of paradigmatic concerns in the writings of such key figures as Aristotle, Marsilius of Padua, Martin Luther, Etienne de la Boetie, Michel de Montaigne, Charles de Montesquieu, Jean-Jacques Rousseau, Immanuel Kant, G.W.F. Hegel, Flora Tristan, and Ludwig Feuerbach, among others. LEC.

SOC 802. Modern Social Theory. 3 Hours.
This seminar will focus on the later 19th and early 20th century "theories of society," addressing the origins and developmental tendencies of Western modernity and their relation to premodern social orders. Primary texts of the major theorists (eg. Marx, Durkheim, Nietzsche, Weber, Simmel, and Mead) will be studied in historical context. The tradition's analytical and critical resources and problematic features will also be explored. Finally, the connections between this tradition and contemporary sociological approaches will be explored. LEC.

SOC 803. Issues in Contemporary Theory: _____, 3 Hours.
A critical examination of recent trends and debates in sociological theory. This is a thematically oriented course in which classical as well as contemporary views will be explored. Attention will be directed to theoretical issues under discussion in fields such as symbolic interactionism, semiology, ethnmethodology, critical theory, macrosociology, and others. LEC.

SOC 804. Sociology of Knowledge. 3 Hours.
This course reviews the major sociological approaches to the study of the relationship between thought and the social context within which it arises. A central concern is an examination of the relationship between ideology and social structures, particularly as expressed in the construction of official knowledge. LEC.

SOC 808. Feminist Theories. 3 Hours.
This course will explore and evaluate accounts of social structure, social processes, and consciousness developed in the feminist literature. We will review a range of theoretical arguments, including liberal, historical, materialist, psychoanalytic, cultural, and Black feminist theories. Some of the readings will focus on limitations and distortions within mainstream social theory; others will center on the development of alternative social theory using the standpoint of women as a point of departure. LEC.
SOC 810. Sociological Inquiry. 3 Hours.
The goals of this course are to understand the characteristics of sociologically interesting and rigorous research and to design a research proposal that shares those characteristics. The focus of students' proposals will be the M.A. thesis project for students at the M.A. level and the dissertation project for students at the Ph.D. level. Students will read books and articles representing a variety of research approaches (ethnographies, surveys, interviews, document analyses, historical studies, comparative research, etc.), and will analyze those approaches in order to understand their theoretical and methodological significance. Students will also distribute their proposals to the other students in the course for comment and critique. Assignments will include a completed M.A. thesis proposal for students at the M.A. level and a completed dissertation proposal for students at the Ph.D. level. Course may be repeated for credit toward graduate degree. Prerequisite: The course is open only to students enrolled in the Sociology graduate program. LEC.

SOC 811. Sociological Research. 3 Hours.
The use of the scientific method to study social phenomena including: the formulation and testing of hypotheses; techniques for collecting data; measuring social variables; interpreting research findings; the relationship of theory and facts. Course may be repeated for credit toward graduate degree. Prerequisite: The course is open only to students enrolled in the Sociology graduate program. LEC.

SOC 812. Analytic Methods in Sociology. 3 Hours.
Consideration of quantitative methods of analysis including both parametric and non-parametric techniques. Prerequisite: A course in statistics. LEC.

SOC 813. Field Methods and Participant Observation. 3-5 Hours.
Will acquaint the student both theoretically and empirically with the procedures and logics of the research techniques employed by individuals or small research teams conducting qualitative fieldwork. Prerequisite: A distribution course in sociology. FLD.

SOC 814. Health Services Research: Epidemiology, Evaluation, and Survey Methods. 3 Hours.
Students learn the logic, assumptions, designs, and procedures involved in conducting the major types of research found in the health services field. Students develop an informed basis for critically evaluating the methodological adequacy of research studies in the areas of descriptive and analytic epidemiology, program evaluation, and health-related survey research as well as working knowledge of the research process itself. Emphasis is placed on examining basic health services issues such as measuring quality of care, understanding the role of social factors in the etiology of disease, determining the health status and health needs of populations, and incorporating health services research into organizational policy and decision-making. LEC.

SOC 820. Political Sociology. 3 Hours.
This course offers an overview of the different perspectives and key arguments comprising the field of political sociology, including both classical and contemporary readings. The issues studied in this field include the nature of power and the nature of the state, relations between state and society, and social movements, political organization and civic participation, political culture, voting behavior, comparative political systems, warfare, democracy and economic development, citizenship, nationalism, revolutions, and globalization. LEC.

SOC 824. Health and Social Behavior. 3 Hours.
This course provides students with an analytic understanding of the organization, professional, and interpersonal behavior that characterizes contemporary health and health care. Emphasis is placed on examination and integration of conceptual frameworks theories, and research findings bearing on basic behavioral/managerial issues such as authority relations in health care settings, models of illness behavior and health services utilization, the impact of organizational structure on employee and client attitudes and behavior, and the culture of professional medicine in relation to patient care. LEC.

SOC 830. Latin American Society. 3 Hours.
Aspects of the social organization of main Latin American nations, including, e.g., race/ethnicity, social class, gender, urbanization, socioeconomic development, revolution, and relations with the U.S. Emphasis on sociological theories of Latin American development. Prerequisite: A principal course in sociology or ANTH 108 or ANTH 308, plus junior-senior or graduate student standing. LEC.

SOC 873. International Political Economy. 3 Hours.
Provides a broad survey of major developments in the field. Topics include the intellectual origins of international political economy; the historical evolution of the international system; North-South and Western trade, investment, and monetary relations; foreign aid, debt technology transfer, development, international economic institutions (e.g., International Monetary Funds, World Bank. Multinational Corporations, etc.). (Same as POLS 973.) LEC.

SOC 875. The Political Economy of Globalization. 3 Hours.
The course will acquaint students with recent developments in the global economy, including its impact on politics and society. Topics include theories of globalization, the role of the nation-state and international agencies in socioeconomic development, inequality from a global perspective, immigration and citizenship, globalization and democracy, and the rise of transnational social movements. LEC.

SOC 891. Individual Master's Readings. 1-6 Hours.
Individual study of special topics or problems by students working on a master's degree. RSH.

SOC 892. Teaching Seminar. 1-3 Hours.
Seminar on sociology course design and development. Topics covered include syllabus design, exam strategies and design, course design, content of and approaches to teaching introductory and other sociology courses, student grading and evaluation. Required of all teaching assistants assigned to courses in sociology. May not be repeated for credit toward graduate degree. LEC.

SOC 899. Thesis. 1-8 Hours.
TUE.

SOC 900. Seminar on Special Topics in Theory: ___. 1-4 Hours.
Each seminar will explore problems of theory in sociology. Topic, instructor, and hours of credit will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics, and a student may take more than one topic. LEC.

SOC 910. Seminar on Special Topics in Methods: ___. 1-4 Hours.
Each seminar will explore problems of methods in sociology. Topic, instructor, and hours of credit will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics, and a student may take more than one topic. LEC.

SOC 920. Seminar on Special Topics in Social Organizations: ___. 1-4 Hours.
Each seminar will explore problems of social organization in sociology. Topic, instructor, and hours of credit will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics, and a student may take more than one topic. LEC.
SOC 930. Seminar on Special Topics in Comparative Studies: ____. 1-4 Hours.
Each seminar will explore problems of comparative studies in sociology. Topic, instructor, and hours of credit will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics, and a student may take more than one topic. LEC.

SOC 940. Seminar on Topics in Demography, Ecology, and Community: ____. 1-4 Hours.
Each seminar will explore problems of demography, ecology, and community in sociology. Topic, instructor, and credit hours will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics, and a student may take more than one topic. LEC.

SOC 950. Seminar on Special Topics in Social Psychology: ____. 1-4 Hours.
Each seminar will explore problems of social psychology in sociology. Topic, instructor, and hours of credit will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics, and a student may take more than one topic. LEC.

SOC 960. Seminar on Special Topics in Deviance and Social Problems: ____. 1-4 Hours.
Each seminar will explore problems of deviance and social problems in sociology. Topic, instructor, and hours of credit will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics, and a student may take more than one topic. LEC.

SOC 970. Seminar on Special Topics in Social Conflict and Change: ____. 1-4 Hours.
Each seminar will explore problems of social conflict and change in sociology. Topic, instructor, and hours of credit will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics, and a student may take more than one topic. LEC.

SOC 980. Special Topics in Sociology: ____, 1-3 Hours.
Topics will vary by semester and instructor to allow flexibility for in-depth analysis of particular topics that do not fit into one of the other 900 level seminars. LEC.

SOC 991. Individual Doctoral Readings. 1-6 Hours.
Individual study of special topics or problems by students working on a doctorate. RSH.

SOC 999. Dissertation. 1-12 Hours.
THE.

Spanish Portuguese Courses
PORT 104. Elementary Brazilian Portuguese I. 5 Hours. U.
Five hours of class per week, plus supplementary work in language laboratory. Essentials of grammar, elementary syntax and composition, easy reading. Emphasis on conversation. LEC.

PORT 106. Elementary Brazilian Portuguese, Accelerated I. 3 Hours. U.
Three meetings weekly, plus supplementary work in language laboratory. Designed for students proficient in Spanish (or with previous work in Portuguese) to acquire proficiency in Portuguese more rapidly. Covers the same material as PORT 104. Prerequisite: SPAN 216 or equivalent. LEC.

PORT 108. Elementary Brazilian Portuguese II. 5 Hours. U.
Five hours of class per week plus supplementary work in language laboratory. A continuation of PORT 104. Prerequisite: PORT 104. LEC.

PORT 110. Elementary Brazilian Portuguese, Accelerated II. 3 Hours. U.
A continuation of PORT 106. Prerequisite: PORT 106. LEC.

PORT 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Portuguese. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

PORT 212. Intermediate Brazilian Portuguese I. 3 Hours. U.
A review of Brazilian Portuguese grammar, with practice in reading, composition, and conversation through the study and discussion of Brazilian prose selections. Prerequisite: PORT 108 or PORT 110. LEC.

PORT 216. Intermediate Brazilian Portuguese II. 3 Hours. U.
A continuation of PORT 212. Prerequisite: PORT 212. LEC.

PORT 220. Intensive Intermediate Brazilian Portuguese. 3-6 Hours. U.
Five hours of class and an additional hour in the language laboratory. The course is designed for students who began the study of Portuguese in PORT 106 and PORT 110, and for superior students in PORT 104 and PORT 108. The material covered is the same as in PORT 212 and PORT 216. Prerequisite: PORT 110, PORT 108 with a grade of A or B, or consent of instructor. Open only to members of the Summer Language Institute in Vitoria-Vila Velha, Brazil. LEC.

PORT 300. Brazilian Culture. 3 Hours. HT AE42 / H.
Prehistoric and colonial Portuguese origins of Brazil and its independent development in the nineteenth and twentieth centuries. Key aspects of economic, political, and social factors; special attention to intellectual history. Readings in English. LEC.

PORT 320. Introduction to Portuguese and Brazilian Literatures. 3 Hours. H/W.
A more advanced reading course serving as an introduction to the study of Luso-Brazilian literature, with discussion in Portuguese of the material read. Prerequisite: A fourth semester course in Portuguese or consent of instructor. LEC.

PORT 340. Textual Analysis and Critical Reading. 3 Hours. HL / H.
Introduction to Brazilian cultural and literary studies. Critical readings and interpretation of Brazilian cultural expressions with emphasis on acquiring the skills and vocabulary for discussing and writing critical analyses. Conducted in Portuguese. Not open to students who have taken PORT 540. Prerequisite: Grade of A or B in PORT 216 or consent of instructor. LEC.

PORT 347. Brazilian Studies: ____. 3 Hours. H.
A topics course dedicated to the study of special historical moments, topics, authors, or themes in literary and cultural history. The course may cover multiple genres and periods. Course conducted in Portuguese and may be repeated for credit as the topic varies. Not open to students who have taken PORT 547. Prerequisite: PORT 216 or consent of instructor. LEC.

PORT 348. Portuguese Language and Brazilian Culture for Business. 3 Hours. H.
Cultural studies approach to contemporary Brazilian society for students interested in business. Explores how Brazilians negotiate their place in a global cultural context and how they perceive business (negocios). Readings include selections from literature, history, journalism, social analysis, and popular culture. Exercises help English speakers develop analytical skills as well as vocabulary and communication skills related to business and professional life in Brazil. Conducted in Portuguese. Not open to students who have taken PORT 548. Prerequisite: PORT 216 or consent of instructor. LEC.
PORT 365. Studies in Brazilian Film: _____. 3 Hours. H.
A theoretical and historical approach to Brazilian film with particular attention to thematic concerns, such as cultural and national identity, and of literary discourse. Given in Portuguese or English. May be repeated for credit as topic varies. Students will be expected to attend film screenings in addition to regular class meetings. Not open to students who have taken PORT 565. Prerequisite: Consent of instructor. LEC.

PORT 388. Intermediate Brazilian Portuguese Conversation. 1 Hour. U.
Two recitations weekly. Prerequisite: PORT 104 or PORT 106. LEC.

PORT 394. Special Readings in Brazilian Studies. 1-3 Hours. H.
Direct readings in (a) fields not covered by student's course work, and/or (b) field of student's special interest approved by the department. May be repeated for credit if content varies. Prerequisite: PORT 216 and three-hours upper-division credit in Portuguese, or consent of instructor. LEC.

PORT 471. Studies in Brazilian Culture and Civilization: _____. 1-3 Hours. H.
A study of Brazilian culture with emphasis on one or more of the following aspects: history, politics, ethnicity, anthropology, religious and secular traditions, issues of cultural identity, music, art, architecture, and popular culture. Available only to study-abroad participants. May be repeated for credit if content varies. LEC.

PORT 475. Studies in Brazilian Literature: _____. 1-3 Hours. H.
A study of the literature of a particular author, group of authors, period, genre, region, or theme. Available only to study-abroad participants. May be repeated for credit if content varies. LEC.

PORT 488. Advanced Brazilian Portuguese Conversation. 1 Hour. U.
Two recitations weekly. More advanced than PORT 388. Prerequisite: PORT 108, PORT 110, or PORT 388. LEC.

PORT 490. Intensive Advanced Portuguese. 3-6 Hours. H/W.
Advanced composition, conversation, and stylistics, plus an introduction to Brazilian culture. Offered only during the Summer Language Institute in Brazil. Prerequisite: Four semesters of Portuguese, or consent of instructor. Open only to members of the Summer Language Institute in Vitoria-Vila Velha, Brazil. LEC.

PORT 509. Portuguese Phonetics and Phonology. 3 Hours. H/W.
A study of the phonology of the carioca (Rio de Janeiro) dialect of Brazilian Portuguese, and an introduction to other major Brazilian and Portuguese dialects. Prerequisite: Nine hours of Portuguese, or consent of instructor. LEC.

PORT 540. Textual Analysis and Critical Reading. 3 Hours. HL / H.
A more intensive treatment of the content of PORT 340. Not open to students who have taken PORT 340. Prerequisite: Consent of instructor. LEC.

PORT 547. Brazilian Studies: _____. 3 Hours. H.
A more intensive treatment of the content of PORT 347. Not open to students who have taken PORT 347. Prerequisite: PORT 216 or consent of instructor. LEC.

PORT 548. Portuguese Language and Brazilian Culture for Business. 3 Hours. H.
A more intensive treatment of the content of PORT 348. Not open to students who have taken PORT 348. Prerequisite: Consent of instructor. LEC.

PORT 560. Survey of Portuguese Literature. 3 Hours. H/W.
Emphasis on Gil Vicente, Camoes, Eca de Queiroz, and Fernando Pessoa. Prerequisite: A fourth semester course in Portuguese or consent of instructor. LEC.

PORT 565. Studies in Brazilian Film: _____. 3 Hours. H.
A more intensive treatment of the content of PORT 365. Not open to students who have taken PORT 365. Prerequisite: Consent of instructor. LEC.

PORT 611. Accelerated Basic Portuguese for Spanish Speakers. 3 Hours. U.
Contrastive phonological and morphological analysis of standard Spanish and the major dialect of Brazilian Portuguese, followed by a presentation of major grammatical and phonological stumbling blocks for Spanish speakers. Drills on grammar, syntax, and pronunciation emphasize those areas in which Brazilian Portuguese differs most significantly from Spanish. Prerequisite: Graduate student status in Spanish. Undergraduates in Spanish may be admitted with consent of instructor. LEC.

PORT 612. Accelerated Basic Portuguese for Spanish Speakers II. 3 Hours. U.
A continuation of PORT 611, with special emphasis on reading and writing skills. Prerequisite: PORT 611. LEC.

PORT 740. Survey of Brazilian Literature. 3 Hours.
A survey of Brazilian literature from 1500 to present. Emphasis on modernists and post-modernists. Prerequisite: A fourth semester course in Portuguese or consent of instructor. LEC.

PORT 742. The Brazilian Novel. 3 Hours.
The development of the novel in Brazil and analysis of representative works of the nineteenth and twentieth centuries. Prerequisite: A fourth semester course in Portuguese or consent of instructor. LEC.

PORT 746. The Brazilian Short Story. 3 Hours.
The development of the short story in Brazil and analysis of representative works of the nineteenth and twentieth centuries. Prerequisite: A fourth semester course in Portuguese or consent of instructor. LEC.

PORT 750. Brazilian Poetry. 3 Hours.
A study of the principal movements and an analysis of representative works from the colonial period to the present. Emphasis on modernists and post-modernists. Prerequisite: A fourth semester course in Portuguese or consent of instructor. LEC.

PORT 760. Contemporary Brazilian Literature. 3 Hours.
A survey of Brazilian cultural expressions and literature in the Twentieth Century. Conducted in Portuguese. Prerequisite: PORT 216 or consent of instructor. LEC.

PORT 785. Special Topics in Brazilian Cultural and Literary Studies: _____. 1-3 Hours.
Topics vary by semester. The course may be taken more than once, with total credit not to exceed five hours. Directed private readings with conferences with instructor. Prerequisite: Consent of department. RSH.

PORT 786. Special Readings in Brazilian Literary Studies. 1-3 Hours.
May be taken more than once; total credit not to exceed five hours. Conducted in Portuguese. Prerequisite: Consent of department. RSH.

PORT 830. Seminar in Portuguese Literature: _____. 3 Hours. LEC.

PORT 930. Seminar in Portuguese Literature: _____. 3 Hours.
LEC.

PORT 970. Seminar in Brazilian Literature: _____. 3 Hours.
LEC.

SPAN 100. Spanish Reading Course. 3 Hours. U.
A special course for candidates for advanced degrees designed to aid them in obtaining a reading knowledge of Spanish. Intensive study of the fundamentals of grammar, proceeding to the reading of material of medium difficulty. Open to graduate students and to seniors who
are applying for entrance to a graduate school. The course does not satisfy any part of the undergraduate language requirement. This course is primarily for graduate students who are fulfilling their language requirement(s) for advanced degrees. LEC.

SPAN 101. Orientation Seminar in Spanish and Portuguese. 1 Hour. H.
Provides an overview of the field of Hispanic Studies. Emphasizes developing an understanding of opportunities in Spanish and Portuguese at KU and the Spanish and Portuguese program curricula, exploring service-learning and other extracurricular options available at KU and beyond, and helping students plan goals for their education through an understanding of their personal values and aspirations as they relate to the field. Graded on a satisfactory/unsatisfactory basis. LEC.

SPAN 104. Elementary Spanish I. 5 Hours. U.
For beginning students of Spanish. Not open to students who have had any previous study of Spanish. Active preparation and participation required. Classes conducted in Spanish. Not open to native speakers of Spanish. Offered in fall semester. LEC.

SPAN 107. Elementary Spanish Conversation. 1-4 Hours. U.
Activities to improve elementary level conversation skills. Does not fulfill any portion of the College of Liberal Arts and Sciences foreign language requirement. Available only to study abroad participants. LEC.

SPAN 108. Elementary Spanish II. 5 Hours. U.
Only for students who have completed SPAN 104 at the University of Kansas. This course prepares students for Intermediate level study of Spanish. Active preparation and participation is required. Classes conducted in Spanish. Not open to native speakers of Spanish. Offered in spring semester. Prerequisite: SPAN 104. LEC.

SPAN 109. Intensive Elementary Spanish. 5 Hours. AE41 / U.
For students who have had some previous study of Spanish, but who do not place into the Intermediate level. This course prepares students for Intermediate level study of Spanish. Active preparation and participation is required. Classes conducted in Spanish. Not open to native speakers of Spanish. Prerequisite: At least one previous high school or college course in Spanish. LEC.

SPAN 110. Intermediate Spanish I. 3 Hours. AE42 / U.
A continuation of SPAN 109. For students in their first year of language study or the equivalent. An intensive orientation to the culture of Spanish-speaking countries. Includes elements of grammar, conversation, and composition. Available only to study abroad participants. Will not count toward the Spanish major nor the language requirement. May be repeated for credit if content varies. LEC.

SPAN 111. Intensive Elementary Spanish. 5 Hours. AE41 / U.
For students who have had some previous study of Spanish, but who do not place into the Intermediate level. This course prepares students for Intermediate level study of Spanish. Active preparation and participation is required. Classes conducted in Spanish. Not open to native speakers of Spanish. Prerequisite: At least one previous high school or college course in Spanish. LEC.

SPAN 112. Intermediate Spanish I. 3 Hours. AE42 / U.
A fully integrated content-based and form-focused approach to intermediate-level Spanish. Students process and practice a wide range of vocabulary and grammatical structures in order to complete tasks that promote critical exploration of the Spanish-speaking world and the development of listening, reading, speaking, writing, and intercultural competencies. Classes conducted in Spanish. Not open to native speakers of Spanish. Prerequisite: SPAN 108 or SPAN 111 with grade of A, or permission of the department LEC.

SPAN 113. Honors Intermediate Spanish I. 3 Hours. AE42 / U.
Not open to native speakers of Spanish. Prerequisite: SPAN 108 or SPAN 111 with a grade of A or B. LEC.

SPAN 114. Intermediate Spanish II. 3 Hours. AE42 / U.
A continuation of SPAN 113. A fully integrated content-based and form-focused approach to intermediate-level Spanish. Students process and practice a wide range of vocabulary and grammatical structures in order to complete tasks that promote critical exploration of the Spanish-speaking world and the development of listening, reading, speaking, writing, and intercultural competencies. Emphasis on process writing. Classes conducted in Spanish. Not open to native speakers of Spanish. Prerequisite: SPAN 113 or placement. LEC.

SPAN 115. Honors Intermediate Spanish II. 3 Hours. AE42 / U.
Not open to native speakers of Spanish. Prerequisite: SPAN 113 or SPAN 213 with a grade of A, or permission of the department LEC.

SPAN 210. Hispanic Language, Culture and Civilization I-A: ____. 1-3 Hours. U.
For students in their second year of language study or the equivalent. An intensive orientation to the culture of Spanish-speaking countries. Includes elements of grammar, conversation, and composition. Available only to study abroad participants. Will not count toward the Spanish major nor the language requirement. May be repeated for credit if content varies. LEC.

SPAN 211. Hispanic Language, Culture and Civilization I-B: ____. 1-3 Hours. U.
A continuation of SPAN 210. For students in their first year of language study or the equivalent. An intensive orientation of the culture of Spanish-speaking countries. Includes elements of grammar, conversation, and composition. Available only to study abroad participants. Will not count toward the Spanish major nor the language requirement. May be repeated for credit if content varies. LEC.

SPAN 212. Intermediate Spanish I. 3 Hours. AE42 / U.
A fully integrated content-based and form-focused approach to intermediate-level Spanish. Students process and practice a wide range of vocabulary and grammatical structures in order to complete tasks that promote critical exploration of the Spanish-speaking world and the development of listening, reading, speaking, writing, and intercultural competencies. Classes conducted in Spanish. Not open to native speakers of Spanish. Prerequisite: SPAN 108 or SPAN 111 or placement. See departmental guidelines. LEC.

SPAN 213. Honors Intermediate Spanish I. 3 Hours. AE42 / U.
Not open to native speakers of Spanish. Prerequisite: SPAN 108 or SPAN 111 with grade of A, or permission of the department LEC.

SPAN 216. Intermediate Spanish II. 3 Hours. AE42 / U.
A continuation of SPAN 212. A fully integrated content-based and form-focused approach to intermediate-level Spanish. Students process and practice a wide range of vocabulary and grammatical structures in order to complete tasks that promote critical exploration of the Spanish-speaking world and the development of listening, reading, speaking, writing, and intercultural competencies. Emphasis on process writing. Classes conducted in Spanish. Not open to native speakers of Spanish. Prerequisite: SPAN 212 or placement. LEC.

SPAN 217. Honors Intermediate Spanish II. 3 Hours. AE42 / U.
Not open to native speakers of Spanish. Prerequisite: SPAN 212 or SPAN 213 with a grade of A, or permission of the department LEC.

SPAN 220. Intensive Intermediate Spanish. 6 Hours. U.
This course is designed for students who would like to acquire proficiency in Spanish more rapidly. The material covered in the course is the same as in SPAN 212 and 216. Not open to native speakers of Spanish. Available only to study abroad participants in KU's Summer Language Institute in Barcelona, Spain. Prerequisite: SPAN 108 or SPAN 111, with a grade of A or B. LEC.

SPAN 270. Hispanic Language, Culture and Civilization II-A: ____. 1-3 Hours. U.
For students in their second year of language study or the equivalent. An intensive orientation to the culture of Spanish-speaking countries. Includes elements of grammar, conversation, and composition. Available only to study abroad participants. Will not count toward the Spanish major nor the language requirement. May be repeated for credit if content varies. LEC.

SPAN 271. Hispanic Language, Culture and Civilization II-B: ____. 1-3 Hours. U.
A continuation of SPAN 270. For students in their second year of language study or the equivalent. An intensive orientation to the culture of Spanish-speaking countries. Includes elements of grammar, conversation, and composition. Available only to study abroad participants. Will not count toward the Spanish major nor the language requirement. May be repeated for credit if content varies. LEC.

SPAN 300. Developments in Hispanic Cultures. 3 Hours. HL AE42 / H.
The development of social and cultural patterns in the Spanish-speaking world, including the intersection of those patterns with issues related to politics, economics and/or personal values. Assigned readings may be in English or in Spanish. Does not count toward the Spanish major. Prerequisite: SPAN 108, SPAN 109, or SPAN 111; or two years of high school Spanish. LEC.

SPAN 302. The Spanish Inquisition. 3 Hours. H.
A broad historical study of the Spanish Inquisition from 1478 to its afterlife in modern culture, including its use in political debates and its depiction in popular culture. Topics include anti-Semitism, the nature of the inquisitorial investigation, the use of torture, censorship and the
relationship between the Inquisition, the Spanish monarchy and other religious and lay authorities. Taught in English. Will not count toward the Spanish major. (Same as HIST 325 and JWSH 315.) LEC.

SPAN 322. Spanish Grammar: Form and Meaning in Context. 3 Hours. U.
Analysis of the most important morphological and syntactic phenomena with an emphasis on their form and function through a review of salient grammatical points in preparation for advanced work in Spanish. Recommended for students who have completed SPAN 216, 217, or 220 with a grade of C or higher, or placement through examination. Course does not count toward the Major. Prerequisite: Four semesters of college-level Spanish or the equivalent. Students who have taken Spanish 324 may take this course with the permission of instructor. LEC.

SPAN 323. Spanish Composition and Cultural Analysis. 3 Hours. U.
Systematic review of writing in Spanish, intensive study of vocabulary and stylistics for formal written communication, and development of essential writing and analytical skills for advanced courses in Spanish. Prerequisite: SPAN 216, or SPAN 217, or SPAN 220, or consent of instructor. LEC.

SPAN 324. Grammar and Composition. 3 Hours. U.
Systematic grammar review and development of essential writing skills for advanced courses in Spanish. Concurrent enrollment in SPAN 328 required. Recommended for students with a grade of B or better in SPAN 216, SPAN 217, or SPAN 220. Prerequisite: SPAN 216 or SPAN 217 with a grade of "C" or higher, or SPAN 220, or SPAN 322, or consent of instructor. LEC.

SPAN 326. Spanish for Health Care Workers. 3 Hours.
This course is designed to provide students with the linguistic and cultural competencies necessary to communicate with and help treat Spanish speaking patients with limited English proficiency. Includes a general review of pertinent grammar, specific vocabulary groups relating to assessment and care of patients, vocabulary to establish rapport, and discussions leading to cultural competencies. Not open to students who have completed SPAN 424 or above. Prerequisite: Completion of Spanish 216 with a grade of C or better. LEC.

SPAN 328. Intermediate Spanish Conversation. 2 Hours. U.
Conversational reinforcement of topics presented in SPAN 324 with an emphasis on oral communication skills in a cultural context. Concurrent enrollment in SPAN 324 required. Two class meetings per week. Not available to study abroad participants. Prerequisite: SPAN 216 or SPAN 217 with a grade of C or higher; or SPAN 220; or SPAN 322; or consent of instructor. LEC.

SPAN 329. Intermediate Spanish Conversation II. 1 Hour. U.
Two class meetings per week. Continuation of SPAN 328. Not open to native speakers of Spanish. Prerequisite: SPAN 328 or consent of instructor. LEC.

SPAN 330. Service Learning Internship Spanish I. 3 Hours. U.
An opportunity for students to utilize and improve their Spanish language skills in an internship or volunteer work in business, schools, government, hospitals, churches, and various types of service organizations. Students must have approval of instructor to register and must provide written confirmation of acceptance for volunteer work in an agency that provides service to a Spanish-speaking public before the course begins. Periodic supervisor evaluations and a reflection journal in Spanish are required, in addition to other materials requested by the instructor. Class format may be an independent internship taken for variable credit under instructor supervision. Will not count toward Spanish major. Prerequisite: Students must have completed a minimum of 12 hours of Spanish in courses at the 200-level or above, and completion of SPAN 324 with a grade of B or better. LEC.

SPAN 340. Textual Analysis and Critical Reading. 3 Hours. HL GE3H / H/W.
Critical readings and interpretation of Hispanic literatures, with emphasis on acquiring the skills and vocabulary necessary for discussing and writing literary analyses. Prerequisite: SPAN 324 and SPAN 328 with a grade of B- or higher, or consent of instructor. LEC.

SPAN 346. Transatlantic Hispanic Cultures. 3 Hours. H.
This course offers an introductory overview of Hispanic cultures, focusing on the political, economic, social, linguistic, and artistic development that shaped the historical and cultural bonds between Latin America and Spain. Enhances the cultural competence acquired in previous Spanish classes and prepare students for upper-level work in the major. Taught in Spanish. Prerequisite: SPAN 324. A grade of "C" or better in SPAN 324 is strongly recommended for students enrolling in this course. Not open to students who have already taken SPAN 370, SPAN 371, SPAN 446, SPAN 447, SPAN 470, or SPAN 471. LEC.

SPAN 347. Hispanic Language, Culture and Civilization III-A: _____.
1-3 Hours. U.
An intensive orientation to the culture of Spanish-speaking countries. Also includes elements of grammar, conversation, and composition. Available only to study-abroad participants. Will not count toward the Spanish major. May be repeated for credit if content varies. LEC.

SPAN 348. Hispanic Language, Culture and Civilization III-B: _____.
1-3 Hours. U.
A continuation of SPAN 347. An intensive orientation to the culture of Spanish-speaking countries. Also includes elements of grammar, conversation, and composition. Available only to study abroad participants. Will not count toward the Spanish major. May be repeated for credit if content varies. LEC.

SPAN 390. Interpretation of Hispanic Literature. 3 Hours. H.
A study of selected works in literary theory that are pertinent to the field of Hispanicism and of selected problems in literary interpretation and comparative literature methodology, designed to examine and apply systematically basic critical principles and approaches to the field of Hispanic literature. Discussion of these approaches is related to the previous study of literature and deepened through individual papers written by participants and presented to the group. Does not count toward the major in Spanish. Prerequisite: Completion of one junior-senior course in a language and literature department. LEC.

SPAN 424. Advanced Spanish Composition and Grammar. 3 Hours. H/W.
Extensive practice in writing, with attention to vocabulary, grammar usage, and discourse structure. Thorough review of syntax and grammar. Conducted in Spanish. Concurrent enrollment in SPAN 428 is strongly recommended. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 428. Advanced Spanish Conversation. 2 Hours. U.
Emphasis on developing fluid expression of opinions, ideas, and points of view through discussion of selected texts and cultural materials. Two class meetings per week. Concurrent enrollment in SPAN 424 recommended. Prerequisite: SPAN 340 or consent of instructor. A grade of C or higher in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 429. Spanish Phonetics. 3 Hours. H/W.
An analytical and practical study of contemporary Spanish phonetics. Prerequisite: SPAN 424 and SPAN 428, or consent of instructor. LEC.
SPAN 440. Hispanic Studies: ______. 3 Hours. H/W.
A topics course dedicated to the study of special historical moments, topics, authors, or themes in literary and cultural history. Readings may include selections from both Spain and the countries of Spanish America. The course may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of “C” or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 441. Special Topics in Spanish Literature and Culture: ______. 1-3 Hours. H.
A topics course dedicated to the study of special historical moments, topics, authors, or themes in Spanish literary and cultural history. The course may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and may be repeated for credit as the topic varies. This course may be used to partially or fully fulfill 400-level peninsular Spanish literature requirement. Prerequisite: SPAN 340. LEC.

SPAN 442. Special Topics Latin American Literature and Cultures: ______. 1-3 Hours. H.
A topics course dedicated to the study of special historical moments, topics, authors, or themes in Latin American literary and cultural history. The course may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and may be repeated for credit as the topic varies. This course may be used to partially or fully fulfill 400-level peninsular Latin American literature requirement. Prerequisite: SPAN 340. LEC.

SPAN 446. Spanish Culture. 3 Hours. H/W.
A study of the development of Spanish culture with particular emphasis on history, customs and traditions, and literary trends and artistic tendencies that constitute Spain’s specific contribution to Western civilization. Conducted in Spanish. Prerequisite: SPAN 340 or consent of instructor. A grade of “C” or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 447. Latin American Cultures: ______. 3 Hours. H/W.
The description and interpretation of Latin American cultures, with particular attention to history, ethnology, folklore, and the arts. The course may focus on particular countries or geographical areas. Conducted in Spanish. May be repeated for credit as topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of “C” or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 448. Spanish Language and Culture for Business. 3 Hours. H.
Cultural studies approach to contemporary Spanish American societies for students with an interest in business. Explores how individuals from Spanish American countries negotiate their place in a new cultural context, and how different groups in Spanish America perceive business (negocios). Readings include selections from literature, history, journalism, social analysis, and popular culture. Exercises help non-native speakers develop analytical skills as well as vocabulary and communication skills related to international business and professional life. Conducted in Spanish. Prerequisite: SPAN 323 or SPAN 324, or consent of instructor. LEC.

SPAN 450. Medieval Spanish Studies: ______. 3 Hours. H.
Reading and analysis of Spanish literature and culture to 1500. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of “C” or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 451. Early Modern Spanish Studies: ______. 3 Hours. H.
Reading and analysis of Spanish literature and culture from 1500 to 1800. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of “C” or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 452. Nineteenth Century Spanish Studies: ______. 3 Hours. H.
Reading and analysis of the literature and culture of Spain from the 1800s. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of “C” or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 453. Twentieth Century Spanish Studies: ______. 3 Hours. H.
Reading and analysis of the literature and culture of Spain from 1900 to the present. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of “C” or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 454. Colonial Spanish-American Studies: ______. 3 Hours. H.
Reading and analysis of Spanish-American literature and culture from the Conquest to Independence, organized by topic. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of “C” or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 455. Nineteenth Century Spanish-American Studies: ______. 3 Hours. H.
Reading and analysis of Spanish-American literature and culture from 1800 to 1900, organized by topic. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of “C” or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 456. Twentieth Century Spanish-American Studies: ______. 3 Hours. H.
Reading and analysis of Spanish-American literature and culture from 1900 to the present, organized by topic. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of “C” or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 457. National Traditions in Spanish America: ______. 3 Hours. H.
Reading and analysis of Spanish-American literature and cultural history from the perspective of a selected nation or nations. The course explores the role of literature and cultural expression in constructing the modern nation and local traditions. Readings may cover selections from multiple genres, authors, and periods. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of “C” or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 458. Reading and Analysis of U.S. Latino/a Literatures: ______. 3 Hours. H.
The course covers multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of C or
better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 470. Studies in Spanish Culture and Civilization: ______. 1-3 Hours. H.
A study of Spanish culture with emphasis on one or more of the following aspects: history, politics, ethnology, anthropology, religious and secular traditions, issues of cultural identity, music, art, architecture, and popular culture. Available only to study-abroad participants. Maybe repeated for credit if content varies. LEC.

SPAN 471. Studies in Spanish-American Culture and Civilization: ______. 1-3 Hours. H.
A study of Spanish American national or regional culture with emphasis on one or more of the following aspects: history, politics, ethnology, anthropology, religious and secular traditions, issues of cultural identity, music, art, architecture, and popular culture. Available only to study-abroad participants. May be repeated for credit if content varies. LEC.

SPAN 474. Studies in Spanish Literature and Culture: ______. 1-3 Hours. H.
A study of the literature and cultural production of a particular author, group of authors, period, genre, region, or theme. Available only to study-abroad participants. May be repeated for credit if content varies. LEC.

SPAN 475. Studies in Latin-American Literature and Culture: ______. 1-3 Hours. H.
A study of the literature and cultural production of a particular author, group of authors, period, genre, country, region, or theme. Available only to study-abroad participants. May be repeated for credit if content varies. LEC.

SPAN 494. Special Readings in Spanish. 1-3 Hours. H/W.
Directed reading in (a) fields not covered by student's course work, and/or (b) field of student's special interest approved by the department. Conferences. May be repeated for credit if content varies. Prerequisite: Twenty-five hours of Spanish. IND.

SPAN 496. Honors in Spanish. 3 Hours. AE61 / H/W.
Honors seminar. May be repeated for credit. Required of all students working for a degree with honors in Spanish. IND.

SPAN 500. Hispanic Literature in Translation: ______. 3 Hours. H.
A study of the literature in English translation of a particular author, period, genre, country, region, or theme. Discussion in English and frequent critical papers. All course readings and writing assignments are also in English. May be repeated for credit as the topic varies. Will not count toward the Spanish major. Prerequisite: Completion of one junior-senior level literature course in any language. LEC.

SPAN 501. Studies in Hispanic Literature: ______. 3 Hours. H.
A study of the literature of a particular author, period, genre, country, region, or theme. Discussion in English and frequent critical papers. May be repeated for credit as the topic varies. May be taken for elective credit in the Spanish major. All course readings and writing assignments are in Spanish. Will not count toward the Latin American literature requirement in the Spanish major. Prerequisite: SPAN 340, plus completion of one junior-senior level literature course in any language. LEC.

SPAN 520. Structure of Spanish. 3 Hours. H/W.
A study of the Spanish language as it is spoken today, from perspectives of contemporary linguistics. Reading and analysis of recent publications in the field. Prerequisite: SPAN 424 and SPAN 428, or consent of the instructor. LEC.

SPAN 522. Advanced Studies in Spanish Language: ______. 3 Hours. H/W.
Extensive language analysis and practice on one topic such as stylistics, translation, conversation/spoken discourse, or creative writing. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 424 and SPAN 428, or consent of the instructor. LEC.

SPAN 540. Colloquium on Hispanic Studies: ______. 3 Hours. AE61 / H.
An advanced course dedicated to the critical study of special historical moments, topics, authors or themes in literary and cultural history. This course is designed to provide sophistication, focus, and analytical depth in literary and cultural study through exploration of secondary sources as well as theoretical material. Reading may include selections from both Spain and the countries of Spanish America and may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 424 and six hours of 400-level Spanish literature courses. LEC.

SPAN 550. Colloquium on Spanish Film. 3 Hours. AE61 / H.
A theoretical and historical exploration of Spanish cinema with particular attention devoted to the films of Berlanga, Bunuel, Gutiérrez Aragon, Saura, Erice, and Almodovar. Students will be expected to attend film screenings in addition to regular class meetings. Prerequisite: SPAN 424 and six hours of 400-level Spanish literature courses. LEC.

SPAN 560. Colloquium on Latin American Film. 3 Hours. AE61 / H.
An overview of Latin American cinema from its origins to the present with particular attention to thematic concerns, such as cultural and national identity, and of literary discourse. Students will be expected to attend film screenings in addition to regular class meetings. Prerequisite: SPAN 424 and six hours of 400-level Spanish literature courses. LEC.

SPAN 566. Latin American Folklore. 3 Hours. H.
An examination of Latin American folk traditions, the ways they are used to give meaning to life and to define local and national identity. Folk literature, songs, music, dance, foods, fiestas, and material culture are looked at in the light of current folklore theory. Lectures and discussion are in English, some readings may be in Spanish. Prerequisite: SPAN 424 and six hours of 400-level Spanish courses. LEC.

SPAN 568. Spanish Ballads. 3 Hours. H/W.
A study of the various types of ballads; traditional, artistic, and popular. Prerequisite: A survey of Spanish literature through the Golden Age. LEC.

SPAN 570. Studies in Hispanic Linguistics: ______. 3 Hours. U.
Theoretical and applied analysis of one or more of the following components of the Spanish language: phonology/phonetics, morphology, syntax, semantics, pragmatics. May be repeated for credit if content varies. Prerequisite: SPAN 424 and SPAN 428. LEC.

SPAN 681. Language Teaching for Oral Proficiency. 1 Hour. U.
A summer course designed principally for secondary school language teachers. Provides an orientation to proficiency-based models in foreign language instruction, national standards in the rating of foreign language proficiency, and curriculum development sessions which address issues of articulation in foreign language curricula. (Not applicable toward a major or graduate degree in Spanish.) (Same as FREN 681 and GERM 681.) LEC.

SPAN 717. History of the Spanish Language. 3 Hours.
The phonological and lexical development of the Spanish language from spoken Latin to the present; major dialectal features. Prerequisite: A course in Spanish phonetics. LEC.
SPAN 720. Syntax and Composition. 3 Hours.
Syntactical analysis of modern Spanish usage; principles of expository writing. Prerequisite: A course in advanced composition or structure, or graduate standing. LEC.

SPAN 722. Special Topics in Spanish Literature: ______. 2-3 Hours.
The content of this course will vary, and the course may be taken more than once with full credit, provided there is no duplication in the material studied. Prerequisite: A survey course in Spanish peninsular literature taught in Spanish. LEC.

SPAN 730. Topics in the Literature of 13th- and 14th-Century Iberia: ______. 3 Hours.
A theoretically informed study of representative works from 13th- and 14th-century Iberia. Course may be repeated for credit provided that the topic changes. LEC.

SPAN 733. Print Culture in Early Modern Spain. 3 Hours.
A study of the literature produced during the period of early printed books with emphasis on the diffusion of new literary forms during the late 15th- and early 16th-centuries. LEC.

SPAN 735. Poetry and Sentimental Romance in Fifteenth-Century Castile. 3 Hours.
Survey of the poetry and prose of the fifteenth century with particular attention to the literature produced during the reign of Isabel de Castilla. LEC.

SPAN 739. Topics in Early Modern Spanish Drama: ______. 3 Hours.
Selected plays of such authors as Lope de Vega, Tirso de Molina, Calderón, and Maria de Zayas. Course may be repeated for credit provided that the topic changes. LEC.

SPAN 742. Topics in the Early Modern Spanish Prose: ______. 3 Hours.
From the Celestina to the middle of the seventeenth century. Course may be repeated for credit provided that the topic changes. LEC.

SPAN 744. Topics in Early Modern Spanish Poetry: ______. 3 Hours.
A theoretically informed study of selected works of poetry in Spanish from the 15th through 17th centuries. Course may be repeated for credit provided that the topic changes LEC.

SPAN 745. Don Quixote. 3 Hours.
Linguistic and literary study. Examination of traditional interpretations. The life and thought of Cervantes. Theoretical readings. LEC.

SPAN 752. Spanish Literature of the 18th Century. 3 Hours.
The neo-classic movement; the traditionalist reaction; the beginnings of Romanticism. Prerequisite: A survey course in Spanish literature from the 18th century to the present. LEC.

SPAN 754. Romanticism. 3 Hours.
The development of the Romantic movement in Spain. Prerequisite: A survey course in Spanish literature from the 18th century to the present. LEC.

SPAN 755. 19th Century Spanish Novel. 3 Hours.
The rise and development of realism. Prerequisite: A survey course in Spanish literature from the 18th century to the present. LEC.

SPAN 760. 19th Century Spanish Drama. 3 Hours.
A survey of the main currents and aesthetics in the nineteenth-century Spanish theatre: NeoClassicism, Romanticism, Costumbrismo, Realismo (Alta Comedia), NeoRomanticism, and the innovations of Galdos and Benavente. Prerequisite: A survey course in Spanish literature from the 18th century to the present. LEC.

SPAN 761. 20th Century Spanish Drama. 3 Hours.
A survey of major plays and playwrights of 20th century Spain with reference to critical theory of text as literature and performance. LEC.

SPAN 762. The Spanish Novel Since the Civil War. 3 Hours.
A study of the major works and movements occurring since the Spanish Civil War. LEC.

SPAN 764. Modern Spanish Poetry. 3 Hours.
Modern poetry of Spain, beginning with Becquer and ending with the "Generation of the 1920's." Close study of the works of the major poets; readings in poetic theory. Prerequisite: A general survey course of the literature of Spain of the 18th, 19th, and 20th centuries. LEC.

SPAN 765. Contemporary Spanish Poetry. 3 Hours.
Contemporary poetry of Spain, beginning with the "Generation of the 1920's" and including the post-Civil War period. Close study of the work of several poets; readings in poetic theory. Prerequisite: A general survey course in the literature of Spain since the Golden Age. LEC.

SPAN 770. Spanish-American Drama. 3 Hours.
Study of several exceptional plays of 20th century Spanish America in light of critical methodologies, national theatre movements, and performance aspects. LEC.

SPAN 771. Spanish-American Literature: ______. 3 Hours.
A survey by region or country (Mexican literature, Cuban literature, Argentine literature, Caribbean literature, etc.) of Spanish American literature from the beginning to the present, with emphasis on the 19th and 20th centuries. Course title will vary by country or region. Prerequisite: A survey course in Spanish American literature. LEC.

SPAN 772. The Modern Spanish-American Novel, 1900-1950. 3 Hours.
A study of selected novels in Spanish America from the 1900 to 1950. Topics may vary. Prerequisite: A survey course in Spanish American literature. LEC.

SPAN 773. The Modern Spanish-American Novel Since 1950. 3 Hours.
A study of selected novels in Spanish America since 1950. Topics may vary. Prerequisite: A survey course in Spanish American literature. LEC.

SPAN 774. Spanish-American Poetry. 3 Hours.
A study of the twentieth century poetic tradition in Spanish America, including major movements and a range of poets who represent the variety of writing in the genre until the 21st century. LEC.

SPAN 777. Spanish-American Short Story. 3 Hours.
A study of aspects of the short story tradition in Spanish America from its origins to the present. Topics may vary. Prerequisite: A survey course in Spanish American literature. LEC.

SPAN 781. Colonial Identities. 3 Hours.
This course centers on the dynamics of identity of Creoles, Amerindians, Blacks and members of the castes in colonial Spanish America. It concentrates on how members of these racial and ethnic groups relate to coloniality, space, place and gender. LEC.

SPAN 782. Spanish-American Prose Fiction: ______. 3 Hours.
A survey by region or country (Mexican Prose Fiction, Cuban Prose Fiction, Argentine Prose Fiction, Caribbean Prose Fiction, etc.) of Spanish American Prose Fiction from the beginning to the present, with emphasis
on the 19th and 20th centuries. Course title will vary by country or region. Prerequisite: A survey course in Spanish American literature. LEC.

SPAN 784. Spanish-American Modernism and Vanguard. 3 Hours. A study of the poetry and/or prose of modernismo and the vanguards in Spanish America. Prerequisite: One course in Spanish American literature or permission of instructor. LEC.

SPAN 785. Special Topics in Spanish-American Literature: _____ 2-3 Hours. The content of this course will vary, and the course may be taken more than once, with full credit provided there is no duplication in the material covered. Prerequisite: A survey course in Spanish American literature. LEC.

SPAN 790. Spanish Linguistics: Theory and Application to Teaching. 3 Hours. An introduction to linguistics and applied linguistics focused on the phonology, morphology, and syntax of Spanish, including work in tagmemics and transformational grammar. Part of the course deals with problems of language instruction, testing, and use of the language laboratory. LEC.

SPAN 792. Topics in the Picaresque Novel: _____ 3 Hours. A theoretically informed study of the picaresque mode in Spanish and Spanish-American literature. Course may be repeated for credit provided that the topic changes. LEC.

SPAN 795. Literary Theory and Criticism. 3 Hours. Systematic study of the development of theories of literature. Emphasis usually placed on twentieth century although scope may vary. Prerequisite: 700-level course in Spanish or concurrent enrollment. LEC.

SPAN 801. Teaching Spanish in Institutions of Higher Learning. 3 Hours. Required of all teaching assistants who teach beginning Spanish at the University of Kansas for the first time. Instruction in classroom procedures for first year Spanish, demonstration of teaching techniques, and survey of current methodology. FLD.

SPAN 802. Colloquium in Methods of Teaching Spanish Language. 1-3 Hours. Combines discussion of theoretical teaching concepts and development of pedagogical materials with practical solutions arising concurrently in Spanish languages courses. LEC.

SPAN 817. Spanish Historical Grammar. 3 Hours. A diachronic study of the syntax and morphology of Spanish from the thirteenth century to the present; sound change and orthography; evolution of literary styles. Prerequisite: A course in Spanish phonetics. LEC.

SPAN 898. Investigation and Conference. 1-10 Hours. Individually directed work to fill the student’s needs not met by available organized courses. One to three hours of credit in any semester. Maximum total credit for the M.A. degree is three hours. May be taken with full credit as often as recommended by department. THE.

SPAN 922. Seminar in Spanish Literature and Culture: _____ 3 Hours. An intensive investigation of a particular topic in Spanish Literature and Culture; content will vary in terms of topics, genres, and time periods covered. The course may be taken more than once, with full credit provided there is no duplication. Prerequisite: Graduate standing. LEC.

SPAN 940. Seminar in Trans-Atlantic Literatures and Cultures: _____ 3 Hours. An intensive investigation of a particular topic in Spanish and Latin American Literatures and Cultures; content will vary in terms of topics, genres, and time periods covered. The course may be taken more than once, with full credit provided there is no duplication. Prerequisite: Graduate standing. SEM.

SPAN 950. Seminar: Spanish Drama: _____ 3 Hours. LEC.

SPAN 952. Seminar: Spanish Novel: _____ 3 Hours. LEC.

SPAN 954. Seminar: Spanish Poetry: _____ 3 Hours. LEC.

SPAN 956. Seminar: Spanish Short Story: _____ 3 Hours. LEC.

SPAN 958. Seminar: Spanish Essay: _____ 3 Hours. LEC.

SPAN 961. Seminar: Medieval Literature: _____ 3 Hours. LEC.

SPAN 962. Seminar: Cervantes: _____ 3 Hours. LEC.

SPAN 972. Seminar: Spanish American Novel: _____ 3 Hours. LEC.

SPAN 974. Seminar: Spanish American Poetry: _____ 3 Hours. LEC.

SPAN 976. Seminar: Spanish American Short Story: _____ 3 Hours. LEC.

SPAN 978. Seminar: Spanish American Essay: _____ 3 Hours. LEC.

SPAN 985. Seminar in Spanish American Literature and Culture: _____ 3 Hours. An intensive investigation of a particular topic in Spanish American Literatures and Cultures; content will vary in terms of topics, genres, and time periods covered. The course may be taken more than once, with full credit provided there is no duplication. Prerequisite: Graduate standing. SEM.

SPAN 999. Dissertation. 1-12 Hours. THE.

Speech-Language-Hearing Courses

SPLH 120. The Physics of Speech. 4 Hours. N. An introduction to the acoustic structure of speech intended for nonscience majors. Emphasis will be placed on the methods and standards by which scientists measure and evaluate the physical characteristics of speech. Topics will include: simple harmonic motion, the propagation of sound waves, aerodynamic aspects of vocal fold vibration, resonance, digital speech processing, frequency analysis, and speech synthesis. Three class hours and one laboratory per week. (Same as LING 120.) Prerequisite: MATH 101 or 104 or equivalent. LEC.

SPLH 177. First Year Seminar: _____ 3 Hours. GE11 / U. A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Speech-Language and Hearing. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

SPLH 250. Study Abroad Topics in: _____ 1-5 Hours. S. A course designed to enhance international experience in topic areas related to speech-language-hearing at the freshman/sophomore level.
Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission. LEC.

**SPLH 261. Survey of Communication Disorders. 3 Hours. SI GE3S / S.**

Provides a general understanding of normal and deviant speech, language, and hearing in adults and children. This course considers the normal development of communication behavior, the nature of communication disorders, and the interaction of speech pathology and audiology with allied fields (e.g., education, medicine, psychology, special education). LEC.

**SPLH 320. The Communicating Brain: The Ultimate Personal Computer. 3 Hours. U.**

This course introduces the study of human neuroscience with a particular focus on human communication. The course provides an overview of the relevant anatomical structures and function along with an introduction to the basic methods used to investigate central nervous system function. Students are introduced to the study of perceptual, motor, and language function in the nervous system through a series of examples drawn from normal function and clinical cases. The examples are selected to highlight how these systems develop and are influenced by experience, implantable devices developed to interface with the nervous system, and how computers and animals are used as models to learn about nervous system function. LEC.

**SPLH 418. Introduction to Cognitive Science. 3 Hours. S.**

Examines the data and methodologies of the disciplines that comprise Cognitive Science, an inter-disciplinary approach to studying the mind and brain. Topics may include: consciousness, artificial intelligence, linguistics, education and instruction, neural networks, philosophy, psychology, anthropology, evolutionary theory, cognitive neuroscience, human-computer interaction, and robotics. (Same as LING 418, PHIL 418, and PSYC 418.) Prerequisite: Consent of instructor. LEC.

**SPLH 432. Human Behavioral Genetics. 3 Hours. S.**

A survey of human behavioral genetics for upper division undergraduates. Emphasis is on how the methods and theories of quantitative, population, medical, and molecular genetics can be applied to individual and group differences in humans. Both normal and abnormal behaviors are covered, including intelligence, mental retardation, language and language disorders, communication, learning, personality, and psychopathology. (Same as ANTH 447, BIOL 432, PSYC 432.) Prerequisite: Introductory courses in biology/genetics or biological anthropology and psychology are recommended. LEC.

**SPLH 449. Laboratory/Field Work in Human Biology. 1-3 Hours. AE61 / N.**

Faculty supervised laboratory or field research for Human Biology majors. Students design and complete a research project in collaboration with a Human Biology faculty member. (Same as ANTH 449, BIOL 449, and PSYC 449.) Prerequisite: Consent of instructor and Human Biology major. FLD.

**SPLH 450. Study Abroad Topics in: ______. 1-5 Hours. S.**

A course designed to enhance international experience in topic areas related to speech-language-hearing at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission. LEC.

**SPLH 451. Directed Study Abroad in Speech-Language-Hearing. 1-3 Hours. S.**

An independent study designed to enhance international experience in topic areas related to speech-language hearing. Investigation of special topic or project selected by the student with advice, approval, and supervision by a KU SPLH instructor and an authorized agent of the study abroad site. Experience must be arranged through the Office of KU Study Abroad. Such study may take the form of directed reading and/or directed research/clinical observation. A daily journal and final report is required. A maximum of six hours of credit may be counted, with no more than three in a single area of study. Prerequisite: Consent of instructor IND.

**SPLH 462. Principles of Speech Science. 3 Hours. N.**

Survey of the physiology of speech production, and the physics of sound. Emphasis upon methodologies in the laboratory study of normal speech. Prerequisite: SPLH 120, or concurrent enrollment in SPLH 120 or consent of instructor. LEC.

**SPLH 463. Principles of Hearing Science. 3 Hours. N.**

This class discusses the concepts and principles relevant to normal hearing processing: anatomy, psychophysical methods, and basic subjective correlates of the auditory system. Prerequisite: SPLH 120, or concurrent enrollment in SPLH 120, or consent of instructor. LEC.

**SPLH 464. Undergraduate Seminar in: ______. 1-3 Hours. S.**

Course organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. (Distribution credit given for two-three hours only.) LEC.

**SPLH 465. Fundamentals of Clinical Phonetics. 1 Hour. S.**

Introduction to classification of American English speech sounds based on articulatory phonetics. Practice in phonetic transcription and analysis of normal and abnormal speech. Laboratory exercises to give students hands-on experience with selected topics from lecture. Prerequisite or Corequisite: SPLH 120. LEC.

**SPLH 466. Language Science. 3 Hours. S.**

Introduction to structure/function of human languages as it relates to language development and disorders; processes involved in the expression and reception of language and the methodologies employed to study these processes. LEC.

**SPLH 497. Mentored Research Experience. 2-8 Hours. AE61 / S.**

Study may be directed toward either reading for integration of knowledge and insight in Speech-Language-Hearing, or original research in the field. Student creates a plan of activities at the beginning of each semester under the mentor's guidance. Student and mentor review this plan at the end of each semester to evaluate progress. In the final semester of enrollment, student must complete a written report or a public oral presentation detailing the purpose, methods, results, and impact of the research. This final product partially meets the requirements for Research Experience Certification. (Eight hours maximum credit, which may be distributed through 4 semesters. No student may enroll for less than two hours credit or more than 4 hours of credit in a given semester). Prerequisite: Consent of Departmental Research Experience Coordinator. IND.

**SPLH 498. Departmental Honors Research. 2-8 Hours. AE61 / S.**

Study may be directed toward either reading for integration of knowledge and insight in Speech-Language-Hearing, or original research in the field. Student creates a plan of activities at the beginning of each semester under the mentor's guidance. Student and mentor review this plan at the end of each semester to evaluate progress. In the final semester of enrollment, student must complete a written report or a public oral presentation detailing the purpose, methods, results, and impact of the research. This final product partially fulfills the requirements for Departmental Honors. (Eight hours maximum credit, which may be distributed through 4 semesters. No student may enroll for less than
two hours credit or more than 4 hours of credit in a given semester). Prerequisite: Consent of Departmental Honors Coordinator. IND.

SPLH 499. Directed Study in Speech-Language-Hearing. 1-3 Hours. AE61 / S.
Investigation of special topic or project selected by the student with advice, approval, and supervision of an instructor. Such study may take the form of directed reading and/or directed research/clinical observation. Individual reports and conferences. (Distribution credit given for two-three hours only.) A maximum of six hours of credit may be counted, with not more than four in a single area of study.) Prerequisite: Consent of instructor. IND.

SPLH 565. Language Sample Analysis Lab. 1 Hour. S.
The study of the analysis of language produced by children with respect to its phonological, lexical, morphological, syntactic, and pragmatic characteristics. Prerequisite or corequisite: SPLH 566. LAB.

SPLH 566. Language Development. 3 Hours. SI GE3S / S.
Study of language acquisition in children, including phonologic, morphologic, syntactic, and semantic components. Methods of language measurement, the role of comprehension, and pragmatic aspects of language use are included. May be taught in lecture or online format. LEC.

SPLH 568. Introduction to Audiological Assessment and Rehabilitation. 4 Hours. U.
Introduction to methods for assessing and treating hearing disorders in adults and children, as well as conditions that result in hearing loss. Course includes clinical observation and extensive hands-on experience with clinical techniques. Prerequisite: SPLH 663. LEC.

SPLH 571. Introduction to Speech-Language Pathology. 4 Hours. U.
This course provides training in clinical management of communicative disorders in children and adults. Principles of evaluation, application of diagnostic information, intervention planning, intervention process, data collection and application, report writing, and interactions with parents and other professionals are examined. Participation in observation and laboratory activities is required. LEC.

Research Methods is about the methods used to conduct, describe and evaluate science in communication disorders. Goals for learner outcomes include: 1) evaluation of research including adequacy of research to address scientific and clinical problems, 2) reading, summarizing and describing research through a literature review, 3) describing a hypothetical research study that addresses a specific question or hypothesis identified by the student, and 4) providing constructive peer reviews of research paper drafts. Prerequisite: 9 credits of SPLH course work; English 101 and ENGL 102 (or course meeting core skill in written communication); or consent of instructor. IND.

SPLH 670. Beginning Clinical Practice in Audiology. 1-3 Hours. N.
Testing of hearing using pure tone air and bone conduction tests with both normal and hearing-impaired individuals. Prerequisite: Completion of or concurrent enrollment in SPLH 668. FLD.

SPLH 672. Clinical Practice in Speech-Language Pathology. 3 Hours. S.
Clinical practice with children and adults. Group and individual conferences with staff required. Repeatable once for credit. Prerequisite: SPLH 671 and overall GPA of 3.0. FLD.

SPLH 699. Speech-Language Pathology. 3 Hours. S.
Concepts and principles relevant to the perception of speech with emphasis on the auditory system; acoustics, psychophysical methods, and basic subjective correlates of speech perception. Prerequisite: SPLH 662 and SPLH 663, or consent of instructor. LEC.

SPLH 761. Aural Rehabilitation. 3 Hours.
Study of the communication problems associated with hearing loss. Introduction to aural habilitative intervention related to speech, language, and academic achievement in children with early hearing loss, as well as, communication strategies training for adults with acquired hearing loss. Prerequisite: SPLH 669 or equivalent. LEC.

SPLH 764. Seminar in: ____. 1-3 Hours.
The subject matter of this seminar will be special topics from speech pathology and audiology. Special prerequisite may be established for a given topic. LEC.

SPLH 784. Proseminar in Communication and Aging. 1 Hour.
A weekly forum for students and faculty to discuss professional issues and interdisciplinary research in communication and aging. May be repeated for credit. (Same as COMS 784.) (Same as PSYC 784.) Prerequisite: Consent of instructor. LEC.

SPLH 799. Proseminar in Child Language. 2 Hours.
A review and discussion of current issues in children's language acquisition. May be repeated for credit. Students are graded S/F. (Same as ABSC 797, LING 799 and PSYC 799.) (Formerly HDFL 797.) LEC.

SPLH 816. Language Development. 3 Hours.
Study of language acquisition in children, including the morphologic, syntactic, and semantic components. Methods of language measurement, the role of comprehension, and pragmatic aspects of language use will be included. Not open to students who have credit for SPLH 566. Laboratory by appointment. LEC.

SPLH 820. Developmental Phonological Disorders. 2 Hours.
Focuses on speech and non-speech characteristics of children with developmental phonological disorders. Emphasis placed on collection and phonetic transcription of speech samples, phonological analysis of transcribed data, and decision-making processes in assessment and intervention. LEC.

SPLH 822. Dysarthria/Apraxia. 2 Hours.
This course describes the neuroanatomic bases of motor-speech processes, the diagnosis, classification, assessment, prognosis, and treatment of dysarthria(s) and apraxia(s). LEC.

SPLH 824. Fluency Disorders. 2 Hours.
The nature of stuttering in children and adults is discussed. Theories regarding etiology, development, and maintenance of the disorder are presented. Emphasis is placed on various clinical approaches to assessment, measurement, and treatment. LEC.

SPLH 826. Phonatory Disorders. 2 Hours.
This course reviews the function of the laryngeal and respiratory mechanisms including the parameters and processes of phonation. Primary content addresses diagnosis, description, and treatment of organic and non-organic disorders of phonation. LEC.

SPLH 828. Speech Disorders in Special Populations. 2 Hours.
This course reviews anatomy and physiology of the velopharyngeal mechanism. Diagnosis and management of velopharyngeal dysfunction and associated problems considered. Anatomy, physiology, and rehabilitation associated with certain oral, pharyngeal, and laryngeal abnormalities discussed. Emphasis is on the speech problems of adults following medical management. Populations include individuals with laryngectomies, glossectomies, and tracheotomies. LEC.
SPLH 832. Dysphagia. 2 Hours.
This course covers normal and disordered swallowing. Evaluation and treatment of swallowing disorders, the dysphagia team, and dysphagia in special populations are considered. LEC.

SPLH 836. Genetics of Communication and Learning Disorders. 2 Hours.
This course focuses on the description, assessment, and treatment of communication problems associated with particular genetic syndromes (e.g., Down's, Turner's syndromes). Also covered are current data about the genetic factors involved in nonsyndromic communication and learning problems, such as those commonly seen in the schools. Ethical and practical issues in these areas are discussed. LEC.

SPLH 840. Language Disorders of Children: Infants and Toddlers. 2 Hours.
This course examines factors relating to language disorders in the birth to three population. At-risk populations, as well as those with known etiologies, are considered. Information on assessment, intervention, and service delivery models is addressed. Issues relating to Public Law 99-457 are also examined. LEC.

SPLH 842. Language Disorders of Children: Preschool. 2 Hours.
This course examines language disorders of preschool-age children in the late preschool years. The course includes information on incidence, characteristics, assessment, and intervention. Theoretical issues and their implications for language intervention are also examined. LEC.

SPLH 844. Language Disorders of Children: School Age. 2 Hours.
This course examines language development during the school years and how problems in this development interact with school performance. Emphasis is placed on the role of the speech-language pathologist in the early identification, assessment, and remediation of language-learning problems. LEC.

SPLH 846. Language Disorders of Adults. 2 Hours.
Neurological aspects of language processes, classification of aphasia, and assessment of language deficits are discussed. Management approaches including intervention strategies and rehabilitation are also considered. LEC.

SPLH 848. Language Disorders of Special Populations. 2 Hours.
This course focuses on the unique language impairments of individuals with mental retardation, autism, cerebral palsy, hearing impairments, dual sensory impairments, and other communication disorders (e.g., ADD). Language characteristics as well as assessment and intervention strategies are studied. LEC.

SPLH 850. Language Disorders Secondary to Closed Head Injury and Dementia. 2 Hours.
Neuroanatomy and physiology relevant to diffuse brain injury are discussed. Characteristics and intervention strategies relating to traumatic brain injury and dementia are studied. LEC.

SPLH 852. Augmentative and Alternative Communication. 2 Hours.
This course describes augmentative and alternative communication (AAC) assessment and intervention issues as they apply to children and adults with both congenital and acquired speech and/or language disabilities. Areas of study include AAC systems, assessment strategies and procedures, intervention strategies, and AAC information resources. LEC.

SPLH 854. Reading Disorders. 2 Hours.
This course addresses the perceptual, linguistic, and cognitive processes utilized in written communication. Acquired and developmental disorders of written language are examined in relation to issues concerning characteristics, etiology, early identification, assessment, and remediation. LEC.

SPLH 860. Evaluation of Speech and Language. 2 Hours.
Provides a general framework for speech and language evaluations. Issues related to initiation and termination of treatment are discussed. Practice is provided in evaluating norm- and criterion-referenced information used in diagnostic, referral, and treatment decisions. LEC.

SPLH 861. Seminar in Research Methodology in Speech Pathology and Audiology: ______. 3 Hours.
This seminar is concerned with the design, instrumentation, execution, and reporting of research in audiology and speech pathology. SPLH 760 or its equivalent and some statistics are recommended before entering this seminar. LEC.

SPLH 862. Clinical Processes. 1 Hour.
Orients student to clinical procedures, policies, requirements, and expectations of program. Therapy models, planning, and philosophies are discussed along with implementation and evaluation of therapy procedures. Professional issues are also considered. May be repeated for credit. LEC.

SPLH 864. Advanced Clinical Practice in Speech-Language Pathology. 1-6 Hours.
Students conduct supervised clinical work in a variety of settings. May be repeated for credit. Prerequisite: Department approval. Group and individual conferences with staff required. FLD.

SPLH 866. Field Study in Speech-Language Pathology. 5-12 Hours.
The field study provides work experiences in clinical and/or research activities. The student takes this course near the end of the degree program. Assignments include supervised work in a variety of approved settings. May be repeated for credit. Prerequisite: Advisor's consent. FLD.

SPLH 868. Professional Seminar. 1 Hour.
Forum for the presentation and discussion of scientific and professional issues by faculty and advanced graduate students. May be repeated for credit. LEC.

SPLH 874. Research Practicum. 1-3 Hours.
Application of research methodology in a laboratory situation. Emphasis is on direct participation in designing and conducting an experimental investigation in speech, language, or hearing. May be repeated for up to a maximum of 3 credits. Prerequisite: SPLH 660 or equivalent research methods course. RSH.

Investigation of special topics by individual master's level students. Paper required. Prerequisite: Consent of instructor. RSH.

SPLH 880. Seminar in Speech-Language Pathology: ______. 1-3 Hours.
May be repeated for credit. LEC.

SPLH 898. Investigation and Conference (For Master's Candidates). 1-8 Hours.
(Limited to eight hours credit toward the M.A. degree.) Directed research and experimentation for M.A. students in some phase of speech science. RSH.

SPLH 899. Master's Thesis. 1-6 Hours.
The.
SPLH 900. Proseminar in Communicative Disorders. 1 Hour.
A weekly forum for students and faculty to discuss professional issues and interdisciplinary research in communicative disorders and related fields. May be repeated for credit. Limited to two hours credit counted
toward an MA or AuD degree. Limited to four hours credit counted toward the PhD degree. Graded on satisfactory/unsatisfactory basis. SEM.

**SPLH 961. Experimental Phonetics I.** 3 Hours.
This course will provide a description of the acoustic properties of the major classes of speech sounds, and will describe how these properties are utilized perceptually. It will also provide an understanding of the acoustic theory of speech production, and will discuss the implications of that theory relative to the modification of impaired speech. LEC.

**SPLH 962. Experimental Phonetics II.** 3 Hours.
This course will examine the current methodologies utilized in speech physiology research, and will review the findings of recent research into the movement patterns of individual speech articulators. The course will emphasize the interpretation of individual research results in terms of an overall theory of speech motor timing and control. LEC.

**SPLH 963. Seminar in Hearing Science.** 3 Hours.
Considers more advanced research problems in hearing science including psychoacoustics, speech perception, physiology. Prerequisite: Consent of instructor. LEC.

**SPLH 964. Seminar in: _____.** 1-3 Hours.
The subject matter of this seminar will be special topics from speech pathology and audiology, including those related to research methodology and research or academic careers. Special prerequisites may be established for a given topic. LEC.

**SPLH 966. Seminar in Language Development.** 3 Hours.
The course pertains to relevant research regarding infant speech development, vocabulary development, linguistic development, articulation development, and language retardation. (Same as ABSC 920, formerly HDFL 920.) LEC.

**SPLH 967. Seminar in Articulation.** 3 Hours.
Research and important clinical procedures pertaining to discrimination, structural, and physiological considerations, causal factors in defective articulation, and principal therapeutic approaches are carefully examined. LEC.

**SPLH 968. Seminar in Communication Disorders.** 3 Hours.
Study in depth of the communication behavior associated with brain injury and/or oral anomalies. LEC.

**SPLH 969. Laboratory Instrumentation for Speech and Hearing Research.** 3 Hours.
Instruments for speech and hearing research, their design and application. Experimental projects using laboratory equipment. Designing equipment for special purposes. Prerequisite: SPLH 962, FLD.

**SPLH 970. Independent Study in Problems of Speech and Hearing.** 1-6 Hours.
Investigation of special topics by individual students. Paper required. RSH.

**SPLH 972. Extensions of Clinical Management.** 3 Hours.
This course is designed to provide didactic and practical experience in methods of obtaining diagnostic information and generalization of speech and language responses away from the clinical setting. Models for effecting behavioral change and data collection will be discussed and utilized. FLD.

**SPLH 974. Research Practicum.** 1-6 Hours.
Application of research methodology in a laboratory situation. Emphasis is on direct participation in designing and conducting an experimental investigation in speech or hearing. FLD.

**SPLH 975. Directed Teaching: Speech Pathology and Audiology.** 1-3 Hours.
Provides experiences in classroom and laboratory instruction under supervision of graduate faculty. Variable credit to reflect amount of instructional responsibility assumed. May be repeated up to a maximum of six semester hours. FLD.

**SPLH 976. Independent Study in Grant Writing.** 1-3 Hours.
Students will identify a funding agency appropriate for their research, learn the application procedures for that agency, and draft a grant application following the identified agency’s format. The faculty mentor will arrange for a review of the grant application following the agency’s review criteria and format. May be repeated up to a maximum of three credits. IND.

**SPLH 982. Issues in Scientific Conduct.** 3 Hours.
Lectures and discussion on issues in the conduct of a scientific career, with emphasis on practical topics of special importance in behavioral science. Topics will include the academic and scientific roles of behavioral scientists, establishing a research lab, communicating research findings, tenure processes, gender equity, ethical conduct, and good scientific citizenship. Discussions will highlight important case studies. (Same as PSYC 982.) LEC.

**SPLH 998. Investigation and Conference (For Doctoral Candidates).** 1-8 Hours.
(Limited to eight hours credit towards the Ph.D. degree.) Directed research and experimentation for Ph.D. students in some phase of speech science. RSH.

**SPLH 999. Doctoral Dissertation.** 1-12 Hours.
THE.

### System Analysis and Design Courses

**SA&D 401. Introduction to Systems Analysis and Design.** 3 Hours. U.
An introduction to the Systems Development Life Cycle (SDLC) and alternatives to SDLC uses in information studies projects and applications. Case studies will be used to illustrate methods of successful analysis of entire projects, including problem definition and analysis, design processes, testing, and implementation. Prerequisite: One year of programming experience or classes. Restricted to students admitted to the Systems Analysis and Design Certificate program. LEC.

**SA&D 402. Introduction to Project Management.** 3 Hours. U.
An introduction to the Project Management Body of Knowledge (PMBOK) including the need for project management, phases of the project life cycle, tools and techniques for planning (PERT, CPM), and the role of team work and communication. Not open to students with credit for BBA 410 Project Management. LEC.

**SA&D 404. Software Development Methods.** 3 Hours. U.
This course will focus on the specifications through implementation phase of the Systems Development Life Cycle (SDLC) at an advanced level including technical design, coding and testing, problem management, systems testing, implementation and post-implementation. Prerequisite: SA&D 401. Restricted to students admitted to the Systems Analysis and Design Certificate program. LEC.

**SA&D 405. Object Oriented Analysis and Design.** 3 Hours. U.
Introduces the student to the basic Object Oriented (OO) terminology and how OO differs from a procedural approach. It details the deliverables that are created in the analysis and design phase using the Unified Modeling Language (UML). Students will also learn to use a CASE tool to document the analysis and design deliverables. Prerequisite: SA&D 401. Restricted to students admitted to the Systems Analysis and Design Certificate program. LEC.
SA&D 406. Systems Architecture. 3 Hours. U.
Survey of elements of systems architecture including types of architecture, quality attributes, design patterns and frameworks, deployment issues, and developing architecture plans. Prerequisite: SAD 401. Restricted to students admitted to the Systems Analysis and Design Certificate program. LEC.

Women, Gender, Sexuality Std Courses

WGSS 101. Introduction to Women, Gender, and Sexuality Studies. 3 Hours. SC AE41/GE3S / S.
This course examines the extensive role of gender in human life and examines the ways that gender structures power relations among individuals and within economic, political, educational and other social structures, with special attention paid to women's issues and movements in the United States and globally. Through readings drawn from the fields of women's studies, gender studies, and sexuality studies, this course examines and explores alternatives to traditional and/or normative constructions of gender and sexuality, and also considers other markers of difference, such as disability, race, class, and religion, which intersect with gender identity and sexual identity. LEC.

WGSS 102. Introduction to Women, Gender, and Sexuality Studies, Honors. 3 Hours. SC AE41/GE3S / S.
This course examines the extensive role of gender in human life and examines the ways that gender structures power relations among individuals and within economic, political, educational and other social structures, with special attention paid to women's issues and movements in the United States and globally. Through readings drawn from the fields of women's studies, gender studies, and sexuality studies, this course examines and explores alternatives to traditional and/or normative constructions of gender and sexuality, and also considers other markers of difference, such as disability, race, class, and religion, which intersect with gender identity and sexual identity. Similar in content to WGSS 201. Open only to students in the University Honors Program or by consent of the instructor. LEC.

WGSS 177. First Year Seminar: _____ . 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Women, Gender and Sexuality Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

WGSS 196. Study Abroad Topics in: _____ . 1-6 Hours. S.
This course is designed for the study of special topics in Women's Studies. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

WGSS 301. Research Methods in Women, Gender and Sexuality Studies. 3 Hours. S.
This course explores feminist epistemologies and research methods. It focuses on research design, feminist critiques of dominant theories of knowledge, and the major methodologies employed in the social sciences and humanities. Prerequisite: WGSS 101. LEC.

WGSS 317. African American Women: Colonial Era to the Present. 3 Hours. H.
This interdisciplinary course covers the history of African American women, beginning in West and Central Africa, extending across the Middle Passage into the Americas, and stretching through enslavement and freedom into the 21st century. The readings cover their experiences through secondary and tertiary source materials, as well as autobiographies and letters, plays and music, and poems, novels, and speeches. (Same as AAAS 317, AMS 317, and HIST 317.) LEC.

WGSS 320. From Goddesses to Witches: Women in Premodern Europe. 3 Hours. HT GE11/GE3H / H.
This course examines the social, cultural, and political contexts of women's spirituality and their relations to gender relations in Europe from about 30,000 B.C.E. to the 16th century Protestant Reformation. Lectures move both chronologically and topically, covering such subjects as goddess-worshipping cultures, women's roles in Christian and Jewish societies, symbols of women, and male attitudes toward women. Students will be able to participate in weekly discussions of primary and secondary source readings about women. (Same as HIST 320.) LEC.

WGSS 321. From Mystics to Feminists: Women's History in Europe 1600 to the Present. 3 Hours. HT AE42/GE11/GE3H / H.
This survey of women's history in Europe looks at changing patterns of women's economic roles and family structures in preindustrial and industrial society, the importance of women in religious life, cultural assumptions underlying gender roles, and the relationship of women to political movements, including the rise of feminism. (Same as HIST 321.) LEC.

WGSS 324. History of Women and the Body. 3 Hours. H.
This course examines different notions about women and their bodies from a historical perspective. It discusses the arguments and circumstances that have shaped women's lives in relation to their bodies, and women's responses to those arguments and circumstances. This course covers a wide geographical and chronological spectrum, from Ancient societies to the present, from Latin America and the Middle East, to North America and Western Europe. (Same as HIST 324.) LEC.

WGSS 327. Perspectives in Lesbian, Gay, Bisexual, and Transgender Studies. 3 Hours. AE41 / S.
An exploration of the experiences and histories of people who identify as lesbian, gay, bisexual, and/or transgender (LGBT); of the influences on these experiences by individuals, the state, and artistic, legal and medical discourses; and of the intersections between sexual orientation, sexuality, ethnicity, class, and religion. LEC.

WGSS 330. Women in Contemporary African Literature. 3 Hours. NW AE42/GE3H / H.
A critical study of issues and questions raised about women in contemporary African literature and implications for the larger society through the analysis of theme, language, characterization, roles and functions of women in selected works. (Same as AAAS 340.) LEC.

WGSS 333. The Politics of Physical Appearance. 3 Hours. AE41/GE11 / S.
An interdisciplinary analysis of standards of physical attractiveness and cultural conceptions of women's bodies. Includes analysis of how these standards change across time and cultural groups, and of the impact of these standards on women as individuals and on social and political outcomes. LEC.

WGSS 335. History of Jewish Women. 3 Hours. H.
This course explores the history of Jewish women from antiquity to the twentieth century. It examines the historical constructions of women's gender roles and identities in Jewish law and custom as well as the social and cultural impact of those constructions in the context of the realities of women's lives in both Jewish and non-Jewish society. There are no prerequisites for this course. (Same as HIST 335, JWSH 335.) LEC.

WGSS 345. Popular Culture in Africa: Spiritual Thrills, Romance and Sexualities. 3 Hours. H.
This course examines how the different constituents of popular culture mobilize, construct and structure gender, and spiritual and sexual identities in select contemporary African countries. Discussions also focus on how popular culture mediates the contesting spaces of
indigenous local constructs and the push and pull of global forces to create geographic and contemporary specificities. (Same as AAAS 345.) LEC.

WGSS 351. Women and Leadership: The Legislative Process. 3 Hours. S.
Examines current and historical roles and impacts of women involved in legislatures. Explores what difference women make when they are public officials. Students meet with local women legislators, lobbyists and political officials. Students learn how to analyze issues, access power, lobby, and organize at the grassroots. The course is designed to prepare students for an optional legislative internship during the subsequent semester. LEC.

WGSS 363. Gendered Modernity in East Asia. 3 Hours. S.
This course explores rapidly changing gender relationships and the sense of being “modern” in East Asia by examining marriage and family systems, work, education, consumer culture, and geopolitics. The class seeks to understand how uneven state control over men and women shapes desires, practices, and norms and how men and women act upon such forces. Avoiding biological or social determinism, this course treats gender as an analytical category and examines how modern nation-states and global geopolitics are constituted and operated. (Same as ANTH 363 and EALC 363.) LEC.

WGSS 381. Feminism and Philosophy. 3 Hours. AE41/GE3H / H.
An examination of topics of philosophical interest that are important in the feminist movement such as the nature of sexism, the concept of sexual equality, the ethics of sexual behavior, the nature of love, feminist analyses of the value of marriage and family, the ethics of abortion and justifications for preferential treatment of women. (Same as PHIL 381.) LEC.

WGSS 389. The Anthropology of Gender: Female, Male, and Beyond. 3 Hours. NW AE42/GE21/GE3H/GE3S / S.
This course will introduce students to cultural constructions and performances of masculinity, femininity, and alternative genders across time and space. Topics and cases will be drawn from primarily non-Western cultures, ranging from Japanese markets to Pacific Rim gardens, and from Haitian voudou to Maya royal politics. This course uses research by archeologists, linguists, biological anthropologists, and sociocultural anthropologists. (Same as ANTH 389.) LEC.

WGSS 396. Studies in: _____. 3 Hours. H.
The interdisciplinary study of selected and different aspects of women's studies in different semesters. LEC.

WGSS 397. Study Abroad Topic in: _____. 1-6 Hours.
This course is designed for the study of special topics in Women's Studies at the junior/senior level. Course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

WGSS 430. Skin, Sex, and Disease. 3 Hours. H.
This course explores the complex historical relationships between gender, race, health, sickness, and oppression over time. Students examine the impact race and gender have on structuring experiences of health, sickness and health care; and examine the political activism surrounding definitions and concepts of health. LEC.

WGSS 440. Communication and Gender. 3 Hours. AE41 / S.
Focuses attention on the relationship between communication and gender, including both physical and psychological dimensions. Topics include: sex role orientations and stereotypes; perceived and actual differences in verbal and nonverbal communication behaviors; the influence of gender on communication in a variety of contexts. (Same as COMS 440.) Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

WGSS 468. Psychology of Women. 3 Hours. S.
A survey of the psychological theories about women; similarities and differences in the behavior of women and men; the effects of biological and social factors on the behavior of women and men; and issues of concern to women of different races, sexual orientations, ages, and so forth. (Same as PSYC 468.) Prerequisite: PSYC 104 or WGSS 201. LEC.

WGSS 498. Independent Study. 1-3 Hours. S.
Intensive reading or research under faculty supervision culminating in the writing of a paper or research report. IND.

WGSS 499. Honors in Women, Gender and Sexuality Studies. 3 Hours. S.
An individual research project under the direction of a specialist in the area of the student's interest. May be counted towards the total hours required for the major. Prerequisite: Majors only, with approval of the project adviser and the Women, Gender and Sexuality Studies honors coordinator. IND.

WGSS 510. History of American Women: Colonial Times to 1870. 3 Hours. H.
A survey of women's history in the United States, which will consider women's roles as housewives, mothers, consumers, workers, and citizens in pre-industrial, commercial and early industrial America. (Same as AMS 510 and HIST 530.) LEC.

WGSS 511. History of American Women: 1870 to Present. 3 Hours. AE41 / H.
A survey of women's history in the United States, which includes radical and reform movements, the impact of war and depression, professionalization, immigration, women's work, and the biographies of leading figures in women's history. (Same as AMS 511 and HIST 531.) LEC.

WGSS 512. History of Women and Work in Comparative Perspective. 3 Hours. H.
This course explores the connection between historical changes in the labor process and the occupational choices available to women in different countries. Through discussion and analyses of texts, students will evaluate the construction of a gendered division of work as shaped over time by economic, cultural, and political forces. The chronological and geographical focus may vary depending on the instructor. (Same as AMS 512 and HIST 532.) LEC.

WGSS 513. Modern American Women in Film and Literature. 3 Hours. H.
Exploration of the images both real and ideal found in twentieth century popular culture. By using popular culture as social history, it examines the connections between these images and the life experiences of women in the family, at work, in war, and in economic depression. LEC.

WGSS 515. Gender and Sexuality in Greek Culture. 3 Hours. H.
This course explores various approaches to the study of gender and sexuality in Greek antiquity. Contents will vary, and the course may focus on methodology and case studies, or on particular themes, historical periods, or artistic or literary genres. No knowledge of Greek or Latin is required. (Same as CLSX 515.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, or Women, Gender and Sexuality Studies; or permission of instructor. LEC.

WGSS 516. Gender and Sexuality in Roman Culture. 3 Hours. H.
This course explores various approaches to the study of gender and sexuality in Roman antiquity. Contents vary, and the course may focus on methodology and case studies, or on particular themes, historical periods, or artistic or literary genres. No knowledge of Greek or Latin is required. (Same as CLSX 516.) Prerequisite: Graduate status, or 6 credit hours
in Classics, Greek, Latin, or Women, Gender and "Sexuality Studies; or permission of instructor. LEC.

WGSS 521. Women and Violence. 3 Hours. S.
An examination of research on women and violence, including rape, domestic violence, sexual harassment, stalking, and child sexual abuse. The nature, prevalence, causes, and consequences of violence against women are discussed. (Same as PSYC 521.) Prerequisite: PSYC 104. LEC.

WGSS 530. Sex and Gender in New Media. 3 Hours. S.
This course examines the construction of sexuality and gender in new media platforms. Students will explore how contemporary media platforms are used to convey dominant representations, and produce new or alternative expressions of identity, culture or political engagement. LEC.

WGSS 549. History of Feminist Theory. 3 Hours. H.
This discussion course will cover the development of feminist theories from the late Middle Ages to the 1970s. Reading will include Pisan, Wollstonecraft, Mill, Freud, Woolf, Beauvoir, Friedan, Daly, Kristeva, and others. (Same as HIST 649.) LEC.

WGSS 560. Race, Gender, and Post-Colonial Discourses. 3 Hours. H.
An examination of the ways in which the concept of race, gender, and post-colonialism frame African literatures from the Caribbean, North America, and the continent itself. The course will focus on these discourses grounding them in critical frameworks within which they can be contextually analyzed and evaluated, at the same time examining their impact in literary praxis and theory. (Same as AAAS 560.) LEC.

WGSS 562. Women and Politics. 3 Hours. S.
This course exposes students to contemporary research on women and politics by surveying the sub-fields of political science. Topics include women's representation in the U.S., women and U.S. public policy, gender and legal theory, international women's movements, women and revolution, and women as political elites. We will examine the ways in which feminist theory and women's activism have challenged the narrow focus of the discipline as well as redefined women's place in society. (Same as POLS 562.) Prerequisite: A 100-level POLS course or WGSS 201 or permission of instructor. LEC.

WGSS 563. Gender, Sexuality and the Law. 3 Hours. AE41/GE11 / H.
This course provides a broad introduction to Western legal systems (especially the American legal system) and then focuses on how sex, gender, and sexuality operate in and are understood by those systems and how the law is a site of social and political struggle. Topics may include intimate relations, First Amendment law, sexual harassment and employment discrimination; reproduction policies and governance; rape and sexual assault; gender identity discrimination; and the legal understandings and constructions of equal protection and due process. No prior knowledge of legal concepts is necessary. LEC.

WGSS 565. Gender, Culture, and Migration. 3 Hours. H.
This course brings a human face to the 21st century manifestation of globalization by focusing on the issues of culture, gender and migration. How do these three aspects create the "global village" amongst both the host and donor peoples? When people move from one place to another, what do they leave behind, what do they take with them? What is gained, or lost by the host community? What is the impact of migration on a specific group's and individual's sense of identity? How has migration affected the people's construction, understanding, and practice of gender? Given their primary roles in the home and within the culture, these questions and more are posed with particular attention to women. Migration theories, interviews and personal testimonies as well as literary and dramatic works are critical to our analyses of the issues raised and enable us to hold conversations with, and listen to the stories of the ordinary people who make globalization happen and sustain it. (Same as AAAS 565 and AMS 565.) LEC.

WGSS 570. Men and Masculinities. 3 Hours. H.
An intensive examination of the history and theory of masculinities in the Western world. Students become acquainted with some of the key theories of men and masculinities, and develop research projects on a topic negotiated with the instructor. (Same as HIST 626, HWC 570.) Prerequisite: An upper-division course in HIST, HWC, or WGSS; or permission of instructor. LEC.

WGSS 575. Body, Self and Society. 3 Hours. H.
An intensive examination of the role of the human body in the creation of personal and social identities in the Western world. Students become acquainted with contemporary theories of embodiment and the senses as they are applied to a variety of historical themes, and develop research projects on a topic negotiated with the instructor. (Same as HIST 625, HWC 575.) Prerequisite: An upper-division course in HIST, HWC, or WGSS; or permission of instructor. LEC.

WGSS 580. Feminism and Anthropology. 3 Hours. S.
This seminar will introduce students to feminism in anthropology, including feminist theories, methodologies, ethnographic styles, and the history of women in the discipline since the late 1800s. Emphasis is on the social contexts for feminist theory-building since the 1960s and changing ideas about gender and power. (Same as ANTH 580.) Prerequisite: One of the following: ANTH 389, ANTH 460, WGSS 201; or permission of instructor. LEC.

WGSS 583. Love, Sex, and Globalization. 3 Hours. S.
Escalating transnational flows of information, commodities, and people have created innumerable kinds of “intimate” contacts on a global scale, such as mail order brides, child adoption, sex tourism, commodified romance, and emotional labor. Exploring the ways that cultural artifacts of intimacy are rendered, fetishized, and reified in a free market economy, this course examines how discourses on love and sex encounter, confront, and negotiate the logics of the capitalist market, the discrepant narratives of (colonial) modernity, and the ethics of pleasure. In so doing, this course navigates the treacherous interplay among emotions-specifically love, sex, and money, seeking the potential and limits of cultural politics of emotions. (Same as ANTH 583.) LEC.

WGSS 600. Contemporary Feminist Political Theory. 3 Hours. S.
A detailed introduction to feminist thought post-1960. Examines feminism in relation to the categories of political theory: liberal feminism, socialist feminism, radical feminism, and postmodern feminism. Within these categories and separately, we will also consider feminism as it is influenced by women traditionally excluded from mainstream feminist thought, namely U.S. women of color and women of post-colonial societies. (Same as POLS 600.) Prerequisite: WGSS 201 or a 100-level POLS course or permission of instructor. LEC.

WGSS 601. Seminar in Women, Gender and Sexuality Studies. 3 Hours. AE61 / S.
Investigation of a topic related to women, gender or sexuality from an interdisciplinary perspective. Open only to women’s studies majors and human sexuality majors. Suggested for the senior year. LEC.

WGSS 630. Politics of Identity. 3 Hours. S.
This seminar explores the nature of identity and how identity is relevant to politics and policy with a focus on political attitudes and behavior, institutions, and public policy. Topics include individual and group identity, identities such as gender, racial, sexual orientation, and partisan, and the enduring importance of identity for understanding politics as well as the policy process. The approach is multidisciplinary but political
We also look to women's contributions to the peace movement in terms of war; thus we work to uncover women's experiences of war. Yet women are rarely examined in men, women are essential to war efforts. They also represent a high proportion of the casualties of war. What does gender tell us about war? Though the majority of fighters are gendered processes. We ask, what does war tell us about gender, and what does feminism mean to feminism support women's access to combat positions or oppose the military? What if women ruled the world—would that end wars? Does militarized masculinity harm men more than benefit them? How do states mobilize citizens to war and how is the process gendered? (Same as POLS 653.) Prerequisite: One of the following: POLS 150, POLS 151, POLS 170, POLS 171, WGSS 201, WGSS 202. LEC.

WGG 660. Human Reproduction: Culture, Power, and Politics. 3 Hours. S.
This seminar analyzes and critiques the socially constructed nature of reproductive practices and their articulation with relations of power. Topics range from conception to menopause, infertility to population. Cases are drawn from a wide variety of cultural contexts. This course is the second part of a two-semester sequence (beginning with ANTH 650) that examines in detail biological and cultural determinants of human reproduction. (Same as ANTH 660.) Prerequisite: ANTH 650, or 6 hours in Women's Studies, or permission of instructor. LEC.

WGG 662. Gender and Politics in Africa. 3 Hours. S.
This course is designed to explore the field of gender and African politics. We begin by paying particular attention to African women's political roles during the pre-colonial and colonial society. Next, we examine the factors, methods, and path of liberation struggles and how gender roles were shaped, shifted, and changed during these struggles. The majority of the class focuses on current issues in African politics, including gender and development; HIV/AIDS and women's health; gender and militarism. We also explore women's roles in political institutions; civil society organizations; trade and labor unions; and transnational movements. We also examine contemporary constructions of masculinity and femininity in African states and explore how these constructions affect social policy and national political agendas. (Same as AAAS 662.) LEC.

WGG 665. Women, Health, and Healing in Latin America. 3 Hours. S.
This seminar uses a life-cycle approach to examine women's health (physical, mental, and spiritual) and their roles as healers. Special consideration is given to the effects of development programs on well-being, access to health care, and changing roles for women as healers. Cases will be drawn from a variety of Latin American contexts. (Same as ANTH 660 and LAA 665.) Prerequisite: 6 hours coursework in Anthropology and/or Women's Studies and/or Latin American Studies. LEC.

WGG 666. Men, Women, and Politics in Latin America. 3 Hours. S.
This course examines women's roles in political institutions; civil society organizations; trade and labor unions; and transnational movements. We also examine contemporary constructions of masculinity and femininity in African states and explore how these constructions affect social policy and national political agendas. (Same as AAAS 662.) LEC.

WGG 669. Conceptual Issues in Human Sexuality. 3 Hours. S.
An examination of the social construction of sexuality and research methods and issues relevant to sexuality. These concepts are applied to various topics, such as defining and conceptualizing sex and gender, sexual dysfunction, sexual orientation, the social control of sexuality, sexual coercion and abuse, and abstinence-only sex education. The course does not cover anatomical or physiological aspects of sexuality. (Same as PSYC 689.) Prerequisite: PSYC 104 or WGG 201. LEC.

WGG 696. Studies in: _____. 3 Hours. S.
Interdisciplinary study of different aspects of women's studies in different semesters. LEC.

WGG 701. Seminar in: _____. 3 Hours.
A research seminar in women's studies. Instructor and topic will vary. LEC.

WGG 789. Anthropology of Gender: Advanced Seminar in the Four Fields. 3 Hours.
This seminar is intended primarily for graduate students in anthropology or other disciplines who share an interest in any of the subdisciplines of anthropology (archaeology, linguistics, biological anthropology, and sociocultural anthropology) and/or anthropological theories and

science perspectives are relied on more heavily. (Same as POLS 630.) Prerequisite: POLS 110 and POLS 306 are recommended. LEC.

WGG 640. Politics of Reproductive Policy. 3 Hours. S.
Reproductive policy has historically been a highly politicized policy arena, which has elicited attention from the political community as well as the public. This course moves beyond the popular rhetoric associated with reproductive issues, by critically investigating the history, development, implementation and the relative success of various reproductive policies in the United States. These policies are compared to, and assessed against, policies governing similar topics in various countries. (Same as POLS 640.) Prerequisite: POLS 110 or consent of instructor. LEC.

WGG 646. Witches in European History and Historiography. 3 Hours. H.
This course examines witches, witchcraft, and magic in Europe in the late medieval and early modern period (approximately 1200-1700 C.E.). Particular emphasis will be on the variety of historical and anthropological approaches that have been used to study the subject and their meaning in the context of gender politics and gender theory. (Same as HIST 646.) LEC.

WGG 650. Service Learning in Women's Studies. 3 Hours. S.
This course, to be taken in the senior year, is designed to give students the opportunity to apply women's studies knowledge and ideas gained through course work to real-life situations in various agencies and women's centers. Open to Women's Studies majors and others with significant Women's Studies backgrounds. Permission of instructor is required. FLD.

WGG 651. Women and Politics in Latin America. 3 Hours. S.
This course examines the ways in which Latin American women have engaged in politics in the past two decades. Cases will draw from a variety of countries in Latin America. Students are expected to develop insights, through comparative analysis, into why women "do politics" in certain ways, the role of the State in women's politics, the (dis)advantages of various political strategies, and the ways in which political, economic, and social changes over time have affected women's political opportunities and interests. (Same as POLS 651.) Prerequisite: Six hours of course work in Political Science and/or Women's Studies and/or Latin American Studies. LEC.

WGG 652. Jazz and American Culture. 3 Hours. H.
This course considers cultural and social histories of jazz, from the 1920s through the present day, as sites for exploring ideological struggles over such fields as race, class, gender, sexuality, democracy, capitalism, freedom, community, Americaness, and globalization in the U.S. The course will explore such questions as the following: What music was called jazz at what times and places? What did it mean to whom? Who played it? Who wrote about it? Who listened to it? Who danced to it? Who policed it? Who produced it? Who used it to rebel? Who used it to survive? What did all of these practices mean to participants? The course will examine struggles over social meanings in the U.S. through a study of jazz performance, labor, representation, marketing, consumption, censorship, and historiography. Prerequisite: A course in American studies, American history, or consent of instructor. (Same as AMS 650.) LEC.

WGG 653. Gender, War, and Peace. 3 Hours. S.
This course explores ways in which militarization and warfare are gendered processes. We ask, what does war tell us about gender, and what does gender tell us about war? Though the majority of fighters are men, women are essential to war efforts. They also represent a high proportion of the casualties of war. Yet women are rarely examined in relation to war; thus we work to uncover women's experiences of war. We also look to women's contributions to the peace movement in terms of both theory and practice, asking: Is peace a feminist issue? Should feminists support women's access to combat positions or oppose the military? What if women ruled the world—would that end wars? Does militarized masculinity harm men more than benefit them? How do states mobilize citizens to war and how is the process gendered? (Same as POLS 653.) Prerequisite: One of the following: POLS 150, POLS 151, POLS 170, POLS 171, WGSS 201, WGSS 202. LEC.
methods. Undergraduates pursuing Honors or other major research projects are also encouraged to participate. Students will receive training in the contemporary theories, research, and pedagogies informing the anthropology of gender. Class participants will explore how these materials intersect with their current thesis or research projects and develop syllabi specific to their subdiscipline. (Same as ANTH 789.) Prerequisite: Permission of instructor. LEC.

WGSS 797. Directed Readings. 1-3 Hours.
Directed reading in an area of women's studies in which there is no appropriate course in the offerings of the Women's Studies Program, but in which there is a member of the cooperating graduate faculty competent and willing to direct the program of study. RSH.

WGSS 800. History of Women, Gender and Sexuality Studies. 3 Hours.
An introduction to the field of women, gender, and sexuality studies, paying particular attention to its development, its reception by and influence on academic disciplines, and its institutionalization. Prerequisite: Graduate standing and consent of the instructor. SEM.

WGSS 801. Feminist Theory. 3 Hours.
A survey of contemporary feminist theories produced within and across disciplines (including but not limited to, eco-feminism, and liberal, cultural, materialist, psychoanalytic, radical, and black feminist thought). Prerequisite: Graduate standing and consent of the instructor. LEC.

WGSS 802. Feminist Methodologies. 3 Hours.
An introduction to the methods used in feminist research in the humanities, social sciences, and natural sciences (e.g., quantitative and qualitative research methods, archival research, and oral histories). We will consider examples of applications of each method, the strengths and limitations of each method, and how each method relates to feminist theories and principles. Prerequisite: Graduate standing and consent of the instructor. SEM.

WGSS 803. Topics in Feminist Pedagogy: ____. 0.5 Hours.
The goal of the course is to teach students to teach. By reading core texts of feminist pedagogy, understanding critical theories, and attending seminars at the Center for Teaching Excellence selected by instructor and student, students will learn how to present knowledge and stimulate learning in the classroom, as well as such practical skills as leading discussion sections, preparing and presenting class sessions, developing syllabi, devising fair grading and helpful advising, and solving pedagogical problems like maintaining civility in the classroom and coping with academic misconduct. Must be repeated twice for a total of 1 credit hour while actively teaching. Prerequisite: Must be Women, Gender, and Sexuality Studies graduate students. SEM.

WGSS 804. Topics in Professional Development: ____. 1 Hour.
The goal of this course is to train students in the skills essential to becoming effective scholars and educators, and successful members of the profession. The material to be covered by these three iterations includes 1) the ethics and practice of feminist research (e.g., protection of human subjects, conflicts of interest, confidentiality, legal strictures); 2) the practical aspects of producing knowledge (e.g., writing research papers, proper citation methods, conference presenting, responding to peer reviews); and 3) acquiring and securing a place in the work force (e.g., CV preparation, job interviews, grant writing, getting promotion [and, in the academy, tenure]). Must be repeated three times for a total of 3 credit hours. Prerequisite: Must be Women, Gender, and Sexuality Studies graduate students. SEM.

WGSS 810. Comparative Sexualities. 3 Hours.
Employing an interdisciplinary and comparative perspective, this course introduces the study of human sexuality in various disciplines. Students will also gain an understanding of the historical development and cross-cultural analysis of sexuality research, including the methodological, theoretical, and ethical issues involved in investigating sexual behavior and meanings. Prerequisite: Graduate standing and consent of the instructor. SEM.

WGSS 821. Woman and Violence. 3 Hours.
An examination of research on women and violence, including rape, domestic violence, sexual harassment, stalking, and child sexual abuse. Research on the nature, prevalence, causes, and consequences of violence against women is discussed. (Same as PSYC 821.) Prerequisite: Six hours in WGSS and/or PSYC, or permission of instructor. LEC.

WGSS 833. Colloquium in the History of Gender. 3 Hours.
This colloquium will cover theoretical and topical readings on the history of manhood, womanhood, and gender systems. (Same as AMS 835 and HIST 895.) LEC.

WGSS 836. Colloquium in United States Women's History. 3 Hours.
This colloquium will cover theoretical and topical readings on the history of women in the United States from the pre-contact period to the present. It is designed to familiarize students with the most important and current historiography in the field. (Same as AMS 836 and HIST 896.) LEC.

WGSS 837. Comparative Colloquium in Women's History. 3 Hours.
This colloquium will approach the history of women from a comparative perspective through theoretical and topical readings on women in at least two different cultures. (Same as AMS 837 and HIST 897.) LEC.

WGSS 838. Seminar in United States Women's History. 3 Hours.
This research seminar will focus on the history of women in the United States from the pre-contact period to the present. Students will research and write a paper using primary sources, and present those papers to the seminar for evaluation. (Same as HIST 973 and AMS 973.) LEC.

WGSS 880. Advanced Feminist Anthropology: ____. 3-6 Hours.
Intensive consideration of special problems in feminist anthropology. Topics for the semester to be announced. May be repeated for a total of six hours credit. (Same as ANTH 880.) Prerequisite: Permission of instructor. LEC.

WGSS 889. Conceptual Issues in Human Sexuality. 3 Hours.
An examination of the social construction of sexuality and research methods and issues relevant to sexuality. These concepts are applied to various topics, such as defining and conceptualizing sex and gender, sexual dysfunction, sexual orientation, the social control of sexuality, sexual coercion and abuse, and abstinence-only sex education. The course does not cover anatomical or physiological aspects of sexuality. (Same as PSYC 889.) Prerequisite: Six hours in WGSS and/or PSYC, or permission of instructor. LEC.

WGSS 898. Research Colloquium. 3 Hours.
This course is the "capstone" to the Women's Studies Graduate Certificate program. Members of the seminar will produce a major paper and will share their research. During the first part of the term a small number of visitors (professors at KU and/or visiting speakers from other universities) will be invited to assign readings and subsequently present their work on women and gender. Students will be expected to attend the Gender Seminar of the Hall Center for the Humanities. Prerequisite: WGSS 801 and at least 3 hours of other graduate work in the Women’s Studies graduate certificate program, or by special permission. LEC.

WGSS 999. Doctoral Dissertation. 1-12 Hours.
Original research that is to be incorporated into a PhD dissertation. THE.
Minor in Anthropology

Why study anthropology?
Because anthropology explains the diversity of humanity.

Requirements for the Minor
Students pursuing an anthropology minor must complete one of the following options:

Option I
Students selecting this option must complete 2 of the following:

Biological Anthropology (9-10)
Satisfied by:
Select one of the following fundamentals courses:

- ANTH 104Fundamentals of Physical Anthropology
- ANTH 105Fundamentals of Physical Anthropology, Honors
- ANTH 304Fundamentals of Physical Anthropology

Two courses from ANTH 340-ANTH 359, ANTH 440-ANTH 459, ANTH 503, ANTH 540-ANTH 559, ANTH 640-ANTH 659

Linguistics (9)
Satisfied by:
Select one of the following introduction courses:

- ANTH 106Introductory Linguistics
- ANTH 107Introductory Linguistics, Honors
- ANTH 320Language in Culture and Society
- ANTH 321Language in Culture and Society, Honors

Two courses from ANTH 322-ANTH 339, ANTH 502, ANTH 420-ANTH 439, ANTH 527-ANTH 539, ANTH 620-ANTH 639

Sociocultural Anthropology (9-10)
Satisfied by:
Select one of the following:

- ANTH 108Introduction to Cultural Anthropology
- ANTH 109Introduction to Cultural Anthropology, Honors
- ANTH 160The Varieties of Human Experience
- ANTH 162The Varieties of Human Experience, Honors
- ANTH 308Introduction to Cultural Anthropology
- ANTH 360The Varieties of Human Experience

Two courses from ANTH 361-ANTH 395, ANTH 501, ANTH 460-ANTH 495, ANTH 560-ANTH 595, ANTH 660-ANTH 695.

Archaeology (9-10)
Satisfied by:
Select one of the following introductory courses:

- ANTH 110Introduction to Archaeology
- ANTH 111Introduction to Archaeology, Honors
- ANTH 310Introduction to Archaeology

Two courses from ANTH 311-ANTH 319, ANTH 500, ANTH 406-ANTH 419, ANTH 504-ANTH 526, ANTH 604-ANTH 619

Option II
Students selecting this option must complete two of the following areas:

General Anthropology (3)
Satisfied by the following:

ANTH 100  General Anthropology
or ANTH 300  General Anthropology

Anthropology Required Electives (15)
Satisfied by at least four courses numbered from ANTH 313 to ANTH 695, excluding ANTH 360

One of the five may be any one of the following:

- ANTH 104  Fundamentals of Physical Anthropology
- ANTH 105  Fundamentals of Physical Anthropology, Honors
- ANTH 106  Introductory Linguistics
- ANTH 108  Introduction to Cultural Anthropology
- ANTH 109  Introduction to Cultural Anthropology, Honors
- ANTH 110  Introduction to Archaeology
- ANTH 111  Introduction to Archaeology, Honors
- ANTH 160  The Varieties of Human Experience
- ANTH 162  The Varieties of Human Experience, Honors
- ANTH 304  Fundamentals of Physical Anthropology
- ANTH 308  Introduction to Cultural Anthropology
- ANTH 310  Introduction to Archaeology
- ANTH 360  The Varieties of Human Experience

Minor Hours & GPA
While completing all required courses, majors must also meet each of the following hour and grade point average minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 hours of junior/senior (300+) hours of KU resident credit in the minor.

Minor Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

Minor Graduation GPA
Satisfied by a minimum of a 2.0 GPA in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including Fs and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Master of Arts in Anthropology

Why study anthropology?
Because anthropology explains the diversity of humanity.

Admission to Graduate Studies
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to
Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission to the Anthropology Program**

The Anthropology graduate program only admits 'degree-seeking' applicants. The Graduate Record Examination is recommended but not required for admission; however, to be considered for university fellowships (GTA appointment), GRE scores are required. The graduate program begins at an advanced level. Preparation for the program through completion of an undergraduate major in anthropology is encouraged but not required. Some undergraduate preparation in fields closely related to anthropology, such as biology, sociology, psychology, linguistics, economics, geography, or geology, is strongly recommended. Undergraduate courses in such subjects as biology, philosophy, genetics, computer science, and history are of considerable value to the graduate student in anthropology. Proficiency in a modern foreign language and in statistics is of special importance to candidates for graduate work in anthropology and should be acquired during the undergraduate years. All students entering the program with a bachelor's degree must enroll in the M.A. program. Admission to the Ph.D. program is ordinarily contingent upon completion of the master's degree in anthropology. A student with a master's degree in anthropology from another institution may apply directly to the Ph.D. program.

Submit your graduate application online (http://www.graduate.ku.edu).

**M.A. Degree Requirements**

The M.A. program is a general curriculum for students who wish to enter the Ph.D. program in anthropology or who plan to pursue graduate studies only to the M.A. level. Formal requirements for the M.A. include:

1. Completion of 30 credit hours of graduate work in anthropology and related disciplines including
   - Select three of the following: 9
     - ANTH 701 History of Anthropology
     - ANTH 702 Current Archaeology
     - ANTH 703 Current Biological Anthropology
     - ANTH 704 Current Cultural Anthropology
     - ANTH 706 Current Linguistic Anthropology

2. Completion of the subdiscipline requirements;
3. Completion of the M.A. thesis, non-thesis (research paper accepted for publication or an internship report), or M.A. non-thesis coursework equivalent; and
4. Passing the final M.A. examination.

**Doctor of Philosophy in Anthropology**

**Why study anthropology?**

Because anthropology explains the diversity of humanity.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission to the Anthropology Program**

The Graduate Record Examination is recommended but not required for admission; however, to be considered for university fellowships (GTA appointment), GRE scores are required. The graduate program begins at an advanced level. Preparation for the program through completion of an undergraduate major in anthropology is encouraged but not required. Some undergraduate preparation in fields closely related to anthropology, such as biology, sociology, psychology, linguistics, economics, geography, or geology, is strongly recommended. Undergraduate courses in such subjects as biology, philosophy, genetics, computer science, and history are of considerable value to the graduate student in anthropology. Graduate courses in Anthropology are reserved for students who are admitted to a graduate program in the Department of Anthropology.

Proficiency in a modern foreign language and in statistics is of special importance to candidates for graduate work in anthropology and should be acquired during the undergraduate years. All students entering the program with a bachelor’s degree must enroll in the M.A. program. Admission to the Ph.D. program is ordinarily contingent upon completion of the master’s degree in anthropology. A student with a master’s degree in anthropology from another institution may apply directly to the Ph.D. program.

Submit your graduate application online (http://www.graduate.ku.edu).

**Ph.D. Degree Requirements**

The Ph.D. in anthropology is awarded to candidates who have demonstrated specialized competence in one or more of the general fields and who have contributed to the body of knowledge and theory in the specialized field through independent, original research.
Research Skills & Responsible Scholarship Requirement (RSRS)

The Graduate Studies' policy on Research Skills and Responsible Scholarship also requires the following:

1. Every doctoral student is required to have training in responsible scholarship pertinent to the field of research.
2. Every doctoral student is required to obtain research skills pertinent to the doctoral level of research in their field(s).

Languages or other research skills used to satisfy the RSRS requirement must be approved by the student's committee. Since these are research skills, students are advised to master them early in the program, so they may be utilized in further course work, independent study, and research. The aspirant must satisfy 1 of the following options before taking the comprehensive exams:

- Demonstrate a comprehensive reading and speaking knowledge of one foreign language relevant to the student's research interests, in which there exists a significant research literature in anthropology. Foreign students may use their native language to fulfill this option only if the language is considered to be an adequate research tool for their program.
- Demonstrate proficiency in the reading of 2 foreign languages relevant to the student's research interests, in which there exists significant research literature in anthropology.
- Demonstrate proficiency in the reading of 1 foreign language relevant to the student's research interests, in which there exists significant research literature in anthropology, and competence in another research skill relevant to the student's special research requirements in anthropology. This latter requirement may be satisfied by knowledge of a language in which there is no written research literature, but which the student will employ in fieldwork.
- Demonstrate competence in 2 research skills relevant to the student's special research requirements in anthropology.

This policy is effective for all doctoral students admitted fall 2011 or later.

Doctoral students in anthropology must pass the following course. Master's students are encouraged to take it as well.

ANTH 707 Responsible Research & Scholarship in Anthropology (3). This course examines a range of issues critical to responsible research, scholarship, and practice in anthropology. Topics include: anthropological codes of ethics; protection of human subjects, informed consent, and confidentiality; appropriate conduct in field and laboratory research; data management, curation, and dissemination; proper protocols for authorship, submission of publications, and peer review; classified and proprietary research; mentor-student relationships; professional collaborations. Prerequisite: Graduate standing in anthropology or consent of instructor. Required for all doctoral students in anthropology.

Upon completion of a RSRS requirement, the student and advisor must notify the graduate coordinator, who will enter it in the student's permanent record and notify the College Office of Graduate Affairs.

Residence Requirement

2 semesters, normally consecutive, or 1 semester and 1 summer session must be spent in resident study at KU.

Field Statements

Students must become thoroughly familiar with the literature pertinent to their specializations and doctoral research problems. The student who submits field statements is asserting that he or she has achieved competence in limited areas defined by the subdiscipline, as demonstrated by bibliographies and written treatments of the research problems in those areas. The comprehensive examinations are based on the areas specified in the field statements.

Written and Oral Comprehensive Examinations

The student's doctoral committee devides and judges the written comprehensive examinations, which may be taken either together or at different times. If the committee is satisfied with the caliber of the student's field statements and written examinations, they may schedule the oral comprehensive examination, providing all other requirements have been fulfilled.

Dissertation Proposal

From the beginning of doctoral study, the student should plan to conduct a doctoral dissertation project. This is an independent piece of research, usually requiring fieldwork, and leading to a dissertation that contributes to anthropological knowledge.

Defense of the Dissertation

When the dissertation is accepted by the dissertation committee, a final oral examination is held.

Handbook for Graduate Students

Detailed information, application deadlines, and general information may be found in the Graduate Student Handbook, available on the Anthropology Graduate website (http://anthropology.ku.edu/helpful-links-graduate-students).

Department of Applied Behavioral Science

Why study applied behavioral science?

Because a science can solve relevant problems — individual and societal, local and global.

Affiliated Research and Training Programs

For information about the Schiefelbusch Institute for Life Span Studies, Juniper Gardens Children’s Project, the Research and Training Center for Independent Living, the KU Work Group for Health Promotion and Community Development, and the Kansas Intellectual and Developmental Disabilities Research Center, visit the KU Life Span Institute (http://www.lsi.ku.edu). For information about Clinical Child Psychology, visit the program's website (http://chl.child.ku.edu).

For information about the Center for Applied Behavioral Economics, Edna A. Hill Child Development Center, and the Performance Management Laboratory, visit the ABS department website (http://www.abs.c.ku.edu/graduate/research-groups.shtml).
Undergraduate Programs

The department teaches undergraduates to understand behavior and solve societal problems through evidence-based practice and critical thinking in applied behavioral science. Areas of application include early childhood education and intervention, developmental disabilities, delinquency and juvenile justice, independent living and rehabilitation, physical disabilities, health promotion and community development, organizational behavior management, and basic research and conceptual foundations.

Introductory and core courses provide a sequence of instruction in
1. The basic principles of behavior;
2. Applications of these principles for solving problems of individual and societal importance;
3. Rules of evidence for data-based decision-making in solving these problems; and
4. The conceptual, comparative, and historical foundations of modern behavioral science. Specialty courses instruct students further about the contexts of application at the individual, family, and community levels.

Recommended courses in other departments and schools provide students with an even broader appreciation for the diversity of society’s problems and an interdisciplinary perspective on their solutions (e.g., biology, psychology, sociology, political science, social welfare, special education). A practicum in the senior year integrates course requirements with supervised training or research experience.

All 100-level ABSC courses are open to nonmajors. Each fulfills a College principal course distribution requirement in the social sciences for either individual behavior or public affairs; ABSC 310/ABSC 311 also fulfills the public affairs requirement. Courses numbered from 200 to 674 are open to nonmajors who have the prerequisites. Practicum courses numbered ABSC 675 and higher are restricted to majors unless students have the instructor’s permission.

Graduate Programs

The department’s graduate programs train scientist-practitioners and researchers in the discovery and production, translation and application, and communication of knowledge in the behavioral sciences for understanding and solving problems of individual and social importance, locally and globally. For this, the department offers a Master of Arts degree in applied behavioral science and a Doctor of Philosophy degree in behavioral psychology. In both degree programs, the department requires a sequence of courses that integrates the basic principles of behavior, experimental methods and research design, and conceptual foundations with training in basic, applied and intervention, and prevention research. Among the areas of application are adolescence, autism, community health and development, developmental disabilities, early childhood, family enhancement, organizational behavior management, and independent living. Other areas are described in the graduate application materials available from the department and on the website (http://www.absc.ku.edu).

Founded in 1964, the department has played a leading role in developing and advancing applications of behavioral science. In 1968, it founded the Journal of Applied Behavior Analysis. In 2000, it received the award for Enduring Programmatic Contributions to Behavior Analysis from the Society for the Advancement of Behavior Analysis. Our graduate programs are accredited by the Association for Behavior Analysis International, and our graduate curriculum is approved by the Behavior Analysis Certification Board (http://www.bacb.com).

Courses

ABSC 100. Introduction to Applied Behavioral Science. 3 Hours. SI GE11/GE3 / S.
An introduction to the principles of behavioral science and their application to problems facing contemporary societies (e.g., autism, public health, education, juvenile delinquency, substance abuse). Students will learn how behavioral scientists analyze human behavior and how these analyses are used to inform interventions. Students will also learn about careers in the behavioral sciences and how to pursue them. Course may be offered in lecture or online format. LEC.

ABSC 101. Introduction to Applied Behavioral Science, Honors. 3 Hours. SI / S.
This course introduces students to the principles of scientific inquiry in applied behavioral science: objectivity, definitions, observation, reliability, validity, correlation and its limitations, causation, experimental design and analysis, and the interpretation of data. These principles are presented in the context of solving individual and societal problems across the lifespan, for example, in early childhood education, public health, developmental disabilities (e.g., autism), delinquency, independent living for people with disabilities, educational systems, and gerontology. Open only to students in the University Honors Program. LEC.

ABSC 150. Community Leadership. 3 Hours. SF AE51 / S.
An introduction to analysis, intervention, evaluation, and leadership in contemporary problems facing local communities. Readings, lectures, and service-learning activities enable students to understand community problems and how citizens and professionals can address them. (Formerly HDFL 150.) LEC.

ABSC 151. Community Leadership, Honors. 3 Hours. SF AE51 / S.
An introduction to analysis, intervention, evaluation, and leadership in contemporary problems facing local communities. Readings, lectures, and service-learning activities enable students to understand community problems and how citizens and professionals can address them. Open only to students in the University Honors Program. (Formerly HDFL 151.) LEC.

ABSC 160. Introduction to Child Behavior and Development. 3 Hours. SI GE3 / S.
An introduction to child behavior and development with an emphasis on the normal developmental range of growth, intelligence, cognition, emotion, language, and social skills from birth to adolescence. (Formerly HDFL 160.) LEC.

ABSC 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Applied Behavioral Science. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

ABSC 268. Introduction to Marriage and Family Relations. 3 Hours. S.
This course focuses on the family unit and the factors that affect its development. Topics include dating and cohabitation; family and lifestyle diversity; parental roles and child development; divorce and stepfamilies. The course emphasizes research related to these issues. (Formerly HDFL 288.) LEC.

ABSC 279. Study Abroad Topics in: ______. 1-5 Hours. S.
A course designed to enhance international experience in topic areas related to applied behavioral science at the freshman/sophomore level.
Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission. LEC.

ABSC 304. The Principles and Procedures of Behavior Modification and Therapy. 3 Hours. GE3S / S.
An advanced examination of the principles of applied behavior analysis as used to address problems in developmental disabilities, childhood autism, language development, early childhood education, with adolescent and family life, and in normal everyday adult behavior. Issues in measurement, design, and evaluation of the effects of applied behavior analysis procedures and ethical implications of the use of these procedures are examined. Procedures used to teach and maintain appropriate behaviors, eliminate inappropriate behaviors, and develop comprehensive behavioral intervention programs are described. Prerequisite: ABSC 100 or ABSC 101. LEC.

ABSC 308. Research Methods and Application. 4 Hours. GE11 / S.
Examines research methods used to identify, describe, understand, and intervene on socially important problems occurring across the life span (e.g., early childhood, adolescence, elders) and in varied settings (homes, classrooms, group-care facilities, and communities). Discusses research methods and concepts (e.g., prediction, experimental control, reliability, validity) within scientific, psychological, and behavior-analytic frameworks. Presents strategies and tactics regarding descriptive and experimental methods, direct and indirect measurement, graphical and statistical analysis, and single-subject and group experimental designs. Examines ethics and social responsibility in research. Provides opportunities to read primary and secondary sources, develop research questions, write and present research proposals, and assist in the conduct of research projects. Prerequisite: ABSC 304. LEC.

ABSC 310. Building Healthy Communities. 3 Hours. SF AE51 / S.
This course teaches knowledge and skills for addressing issues in community health and development (e.g., substance abuse, adolescent pregnancy, child and youth development, prevention of violence). Students learn core competencies such as analyzing community problems and.anlyzing community problems and goals, strategic planning, intervention, and evaluation. In a service-learning component, students apply these skills to issues that matter to them and to the communities they serve. (Formerly HDFL 310.) LEC.

ABSC 311. Building Healthy Communities, Honors. 3 Hours. SF AE51 / S.
This course teaches knowledge and skills for addressing issues in community health and development (e.g., substance abuse, adolescent pregnancy, child and youth development, prevention of violence). Students learn core competencies such as analyzing community problems and goals, strategic planning, intervention, and evaluation. In a service-learning component, students apply these skills to issues that matter to them and to the communities they serve. (Formerly HDFL 311.) Prerequisite: Open only to students in the University Honors Program. LEC.

ABSC 342. Adult Development and Aging. 3 Hours. S.
An overview of environmental, cultural, and biological influences of adult development and aging. Course material is organized in terms of topics, rather than presenting a chronological account. (Formerly HDFL 342.) Prerequisite: ABSC 100 or ABSC 101, ABSC 150 or ABSC 151, or ABSC 160. LEC.

ABSC 350. The Behavioral Treatment of Children with Autism. 3 Hours. S.
Students learn about methods of teaching children with autism and about evaluating those methods. Topics include: basic methods of teaching as applied to imitation, productive and receptive language, self-help skills, and engagement in community activities, as well as observation and measurement of behavior in community settings and evaluating consumer satisfaction. The course consists of classroom lectures, discussions, demonstrations, examinations, and completion of laboratory and observation assignments. Enrollment priority is given to majors who intend to do practicum work with children with autism. (Formerly HDFL 350.) Prerequisite: ABSC/HDFL 304 or instructor permission. LEC.

ABSC 356. Foundations of Early Childhood Education. 3 Hours. S.
This course introduces students to the field of early childhood education. Contemporary perspectives and professional practices are examined through an analysis of historical and philosophical ideologies. (Formerly HDFL 356.) Prerequisite: ABSC/ HDFL 160 or instructor permission. LEC.

ABSC 360. Drugs, Addiction, and Behavior. 3 Hours. S.
This course offers an overview of the basic and applied research in behavioral pharmacology and addictions, as well as interventions. Among the topics it covers are a history of drugs, addiction, and behavior; basic principles of drug action (e.g., pharmacodynamics); behavioral pharmacology testing paradigms (e.g., self-administration); drug action and effects (e.g., alcohol, nicotine, designer drugs, anti-depressants); behavioral deficits associated with addictions (e.g., memory); addiction treatment and recovery (e.g., maturing out, contingency management); and drugs and society. Prerequisite: ABSC 100. PSYC 104 is also recommended. LEC.

ABSC 405. Children and Media. 3 Hours. H.
The applied study of child development theories and research methods on the influences and effects of television and related visual media on childhood in the contexts of families, schools, and society. (Same as PSYC 405 and THR 405) (Formerly HDFL 405.) LEC.

ABSC 410. Behavioral Approaches in Working with Adolescents. 3 Hours. S.
Addresses some of the basic behavioral techniques used with juveniles who have problems in school, at home, or in the community: readings and role-playing sessions covering assessment of problems, relationship development, observing and defining behavior, teaching and contracting techniques, and counseling. Prerequisite: ABSC 304 highly recommended. LEC.

ABSC 425. Teaching Apprenticeship in Applied Behavioral Science. 3 Hours. S.
Students read new materials, become more fluent with ABSC 100 content, and acquire tutoring skills. Course may not be repeated. Prerequisite: ABSC 100 and consent of the instructor and department chair. LEC.

ABSC 433. Analysis of Cultural, Ethnic, and Gender Roles in Childhood and Adolescence. 3 Hours. S.
This course examines aspects of different cultures and ethnic groups, and the definitions of gender role behavior found in them. The research literature in these areas is reviewed and the implications for early childhood education settings are studied. The course examines this literature in order to provide an increased understanding of effective approaches to educational practices directly related to the structure of society in the United States. (Formerly HDFL 433.) Prerequisite: ABSC/ HDFL 160 or instructor permission. LEC.

ABSC 437. Independent Living and People with Disabilities. 3 Hours. S.
A multi-disciplinary seminar exploring theory, method, research, and practice in independent living. The course reviews personal and environmental factors as they relate to everyday problems affecting people with varying disabilities. It also contains service-learning activities in which students apply skills and knowledge gained in the classroom.
ABSC 441. Ethical, Legal and Professional Issues in Applied Behavioral Science. 3 Hours. S.
The course covers ethical and legal issues in the responsible conduct of basic, applied, intervention and prevention research (e.g., informed consent and assent with typical and atypical populations); inclusion of underrepresented groups, participatory action research; bias, fraud, and plagiarism, conflict of interest; reporting misconduct; authorship conflict). It also covers professional issues in behavioral consultation and training, review of the Behavior Analysis Certification Board task list on basic behavior-analytic skills, client-centered responsibilities, and foundational knowledge. This course satisfies the Behavior Analysis Certification Board requirement for 15 classroom contact hours of coursework related to Ethical Considerations in Behavior Analysis needed to take the BACB examination. This course is taught at the 400 and 800 levels, with additional assignments at the 800-level. Prerequisite ABSC 308. LEC.

ABSC 444. Curriculum Development for Young Children. 3 Hours. S.
A survey of educational materials and activities appropriate for young children. Students explore several components of effective curriculum development (e.g., objectives, methods of activity presentation, teaching strategies) and learn to integrate them to construct curricula for a range of content and skill areas. By focusing on functional components of a curriculum, students learn to construct, critically evaluate, and modify curricula for typically and atypically developing children. Prerequisite: ABSC 304 or instructor permission. LEC.

ABSC 455. Health, Safety, and Nutrition in Early Childhood Development. 3 Hours. S.
This course addresses children's health, safety, and nutritional needs and contemporary approaches to achieving wellness. Students develop analytical skills through reading, discussion, and application of theoretical and empirical concepts. Current research results are emphasized and applied to course problem sets and projects. (Formerly HDFL 455.) Prerequisite: ABSC/HDFL 160 or equivalent knowledge. LEC.

ABSC 469. Special Topics in: ____. 1-3 Hours. S.
A course designed for the study of special topics in applied behavioral science. Course content addresses major topics and specialized issues in the field. May be repeated for credit if the content differs. Prerequisite: Instructor permission. LEC.

ABSC 470. Organizational Behavior Management. 3 Hours. S.
This course offers detailed discussion of the organizational behavior management (OBM) literature including performance management, behavioral systems analysis, and behavior-based safety. This course also addresses empirically supported staff training procedures and research in implementation science. Students assist with OBM-relevant research and develop skills in both translational and applied OBM research. Prerequisite: ABSC 100. LEC.

ABSC 479. Study Abroad Topics in: ____. 1-5 Hours. S.
A course designed to enhance international experience in topic areas related to topics in applied behavioral science at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission. LEC.

ABSC 486. Issues in Parenting. 3 Hours. S.
Theoretical approaches to the study of parenting and parent-child relationships, techniques for analyzing common parenting problems, designing appropriate interventions, fostering effective communication skills, understanding issues of diversity, and promoting parent education programs. Professional collaboration and support of families and children are emphasized throughout. Students develop analytical skills through reading, discussion, and application of theoretical and empirical concepts. (Formerly HDFL 486.) Prerequisite: ABSC/HDFL 160 or equivalent knowledge of child development or child psychology. LEC.

ABSC 489. Directed Readings in: ____. 1-3 Hours. S.
A course designed for directed readings in applied behavioral science. Readings address major topics and specialized issues in the field. May be repeated for credit if the content differs. (Formerly HDFL 484.) Prerequisite: Instructor permission. IND.

ABSC 499. Directed Research in: ____. 1-3 Hours. AE61 / S.
Basic and applied research experience. The course provides training in research methods, measures, and designs, and the conduct of research, in the behavioral sciences. May be repeated for credit if the content differs. Prerequisite: Instructor permission. RSH.

ABSC 509. Contemporary Behavioral Science: Historical, Conceptual, and Comparative Foundations. 3 Hours. AE61 / S.
This course provides a survey of modern behavioral science and its applications. It reviews the field's history; integrates its sub-disciplines; situates it within the natural sciences, social sciences, and humanities; and compares and contrasts it with other perspectives. It covers recent advances in research, their implications for understanding human behavior, and their application to solving societal problems. And, it addresses the ethical implications of applied behavioral science. Prerequisite: ABSC 100 or ABSC 101 and ABSC 304, or instructor permission. LEC.

ABSC 535. Developmental Psychopathology. 3 Hours. S.
A review of contemporary psychological and developmental disorders of children and youth. Course presents current models of psychopathology, classification systems, assessment methods, and treatment approaches designed for the individual, the family, and the community. Specific attention is given to age, gender, and cultural differences and similarities. Topics include: anxiety disorders, oppositional behavior disorders, physical/sexual abuse, learning disabilities, depression, chronic physical illness, and autism. (Same as PSYC 535.) (Formerly HDFL 535.) Prerequisite: ABSC/HDFL 160 or PSYC 333, or instructor permission. LEC.

ABSC 542. Applied Gerontology. 3 Hours. S.
This course will provide an overview of social and behavioral problems faced by older adults, people who provide for elders, and human service programs for elders. It also surveys empirically-derived intervention strategies designed to maintain abilities and reduce or eliminate problem behaviors experienced by elders or their caregivers. (Formerly HDFL 542.) Prerequisite: ABSC/HDFL 304 and ABSC/HDFL 308, or instructor permission. LEC.

ABSC 555. Issues in Administering Early Childhood Services. 2 Hours. S.
This course provides an overview of professional, social, legal, and economic issues associated with the administration of early childhood services and programs. Emphasis is placed on theoretical principles, empirical research, and professional responsibilities inherent in the provision of quality service, including needs assessment, organizational skills, delivery systems, human resource management, communication skills, grant writing, legal and ethical considerations, and advocacy. (Formerly HDFL 555.) Prerequisite: Senior standing in the early childhood specialty area or instructor permission. LEC.

ABSC 560. The Juvenile Justice System: A Behavioral and Legal Perspective. 3 Hours. S.
An overview of the juvenile justice system, including the history, development, and current controversy over children's rights in the legal
system examined in light of relevant principles of behavioral science and behavioral systems of rehabilitation. Topics include delinquency, miscreancy, status offenses, dependent-neglected children, child abuse, and juvenile court procedures and personnel (e.g., probation officers), and rehabilitative programs. (Formerly HDFL 560.) Prerequisite: ABSC 100. LEC.

**ABSC 562. Behavioral Community Psychology. 3 Hours. S.**

A seminar that provides an overview of the history and origin of behavioral community psychology. The course examines the development and future of behavioral community psychology as an integration of two sub-disciplines, applied behavior analysis and community psychology. Provides an integrated review of empirically-based behavioral interventions applied in community-based settings. Prerequisite: ABSC 100, or ABSC 150, or ABSC 310 or instructor permission. Course is offered at the 500 and 800 levels with additional assignments at the 800-level. LEC.

**ABSC 565. Applied Developmental Psychology. 3 Hours. S.**

An advanced study of the application of theories and concepts of developmental and behavioral psychology to a range of specific issues and problems of childhood and adolescence. This course relies heavily on the empirical research literature. Topics include contemporary social issues and child development, research in applied settings, assessment, intervention, and prevention, as well as program evaluation. (Same as PSYC 565.) (Formerly HDFL 565.) Prerequisite: ABSC/HDFL 160 or PSYC 333, and ABSC/HDFL/ PSYC 535. LEC.

**ABSC 599. Honors and Thesis in Applied Behavioral Science. 1-5 Hours. AE61 / S.**

A two-semester course combining small group discussions of selected, advanced topics in applied behavioral science with honors thesis supervision on a project of the student's own design. Students normally enroll for one or two hours in fall semester and three to five hours in spring semester. (Formerly HDFL 496.) Prerequisite: ABSC 304, ABSC/HDFL 308, and instructor permission. IND.

**ABSC 606. Special Projects in the Community. 1-10 Hours. S.**

Structured opportunities to develop and apply knowledge and skills (e.g., analyzing programs, strategic planning, intervention, evaluation) in a project that addresses a community problem or goal. (Formerly HDFL 606.) Prerequisite: Instructor permission. IND.

**ABSC 620. Drug Abuse: From Basic Research to Public Policy. 3 Hours. S.**

This course reviews basic and applied research in the social, behavioral, and neural sciences on how environmental variables, brain mechanisms, individual history, and cultural constraints interact and maintain drug abuse. Topics include the mechanisms of drug action; the safety, toxicity, stimulus properties, and functional impairments related to commonly abused drugs; common models of treatment and prevention; and historical and current legislative and judicial approach to drug abuse. (Formerly HDFL 620.) Prerequisite: A course in biology and a course in either applied behavioral science or psychology. LEC.

**ABSC 626. Psychology of Adolescence. 3 Hours. S.**

Impact of factors of social environment and physical growth upon psychological development from puberty to young adulthood. (Same as PSYC 626.) Prerequisite: PSYC 104, PSYC 333, or HDFL/ABSC 160. LEC.

**ABSC 632. Advanced Child Behavior and Development. 3 Hours. S.**

An advanced course in child development that includes a survey of the field's principles and theoretical approaches, and current issues in research and practice. Topics will include: prenatal development, cognition and language, social-emotional development, socialization influences in childhood, developmental psychopathology, and social policies. (Formerly HDFL 632.) (Same as PSYC 632.) Prerequisite: ABSC/HDFL 160, PSYC 333, or instructor permission, and senior or graduate status. LEC.

**ABSC 671. Applied Behavior Analysis. 3 Hours. S.**

This advanced course extends knowledge and skills in analyzing behavioral problems, designing interventions, and planning applied research projects. Topics include the selection of problems and target populations, analysis of problems/goals, designing measurement systems, developing interventions, and disseminating products from applied behavioral research. (Formerly HDFL 671) Prerequisite: ABSC/HDFL 304 or instructor permission. LEC.

**ABSC 672. Applied Behavior Analysis, Honors. 3 Hours. S.**

This advanced course extends knowledge and skills in analyzing behavioral problems, designing interventions, and planning applied research projects. Topics include the selection of problems and target populations, analysis of problems/goals, designing measurement systems, developing interventions, and disseminating products from applied behavioral research. Students design an intervention research project. Prerequisite: Open only to students in the University Honors Program; ABSC/HDFL 304 or instructor permission. LEC.

**ABSC 675. Practicum in Infant-Toddler Care and Early Intervention I. 3-5 Hours. AE61 / S.**

Experience in a classroom-based early intervention and child-care program serving children younger than 3 years. Students gain practical experience with care-giving and teaching practices appropriate for typically and atypically developing children. Students learn to develop and implement individualized curricula based on assessments of children's skills. (Formerly HDFL 558.) Prerequisite: ABSC/HDFL 444 (or concurrent enrollment) and instructor permission. FLD.

**ABSC 676. Practicum in Infant-Toddler Care and Early Intervention II. 3-5 Hours. AE61 / S.**

An advanced practicum providing experience in classroom-based early-intervention and child-care program serving children younger than 3 years. Students gain practical experience with care-giving and teaching practices appropriate for typically and atypically developing children. Students learn to develop and implement individualized curricula based on assessments of children's skills. (Formerly HDFL 559.) Prerequisite: ABSC/HDFL 444, HDFL 558 or ABSC 675, and instructor permission. FLD.

**ABSC 677. Practicum in Preschool Education and Intervention I. 3-5 Hours. AE61 / S.**

A one-semester practicum providing opportunities for students to assume responsibility for the education and guidance of young children in an early childhood program. Regularly scheduled individual and staff conferences enable students to evaluate personal growth and progress as teachers of young children. (Formerly HDFL 492.) Prerequisite: ABSC/HDFL 444 (or concurrent enrollment) and instructor permission. Must also meet special state requirements for child care employees and volunteers. FLD.

**ABSC 678. Practicum in Preschool Education and Intervention II. 3-5 Hours. AE61 / S.**

A one-semester advanced practicum providing opportunities for students to assume responsibility for the education and guidance of young children in an early childhood program. Regularly scheduled individual and staff conferences enable students to evaluate personal growth and progress as teachers of young children. (Formerly HDFL 493.) Prerequisite: ABSC/HDFL 444, HDFL 492 or ABSC 677, and instructor permission. Must also meet special state requirements for child care employees and volunteers. FLD.
ABSC 679. Practicum in Behavior Analysis Research in Early Childhood Education. 1-6 Hours. AE61 / S.
A two-semester practicum providing opportunities for supervised training in one of several ongoing research projects in the field of behavior analysis, either basic or applied. Students assist in conducting research and participate in individual and group meetings to discuss and evaluate research and related methodological issues. (Formerly HDFL 688.) Prerequisite: ABSC/HDFL 308 and instructor permission. FLD.

ABSC 680. Practicum in Advanced Laboratory in the Development of Behavioral Treatments for Children with Autism. 1-6 Hours. AE61 / S.
Students participate in an intensive behavioral treatment program teaching language, social skills, self-help skills, and academic skills to young children with autism. Students learn: to develop and implement treatment programs; design and use of a system of data collection and analysis; and apply the principles and philosophy of community and school mainstreaming. (Formerly HDFL 550.) Prerequisite: ABSC/HDFL 350 and instructor permission. LAB.

ABSC 682. Organizational Behavior Management Practicum. 1-5 Hours. AE61 / S.
This practicum course is designed to provide training and support practice in addressing socially significant problems and goals of community-based organizations using behavior analysis to guide assessment and intervention. Additionally, this course promotes community-university partnerships to support change and improvement in organizations through service learning. All practicum students are required to have previously completed ABSC 100 and selected applied behavioral science as a major or minor. FLD.

ABSC 685. Practicum in Community-based Residential or Day Treatment Programs for Disabled Adults. 3-6 Hours. AE61 / S.
A one or two-semester practicum in which students are provided with the opportunity to work directly with developmentally disabled adults in either community-based residential or day treatment programs. Students are required to read relevant literature, carry out treatment programs, and participate in weekly meetings to discuss treatment goals and progress. (Formerly HDFL 696.) Prerequisite: ABSC/HDFL 304, ABSC/HDFL 410, and instructor permission. FLD.

ABSC 687. Practicum in Behavioral Gerontology. 1-6 Hours. AE61 / S.
A one or two-semester practicum providing opportunities for supervised training in behavioral gerontology. Students: (a) read literature in the area of their specific practicum setting such as adult day care, senior centers, nursing homes; (b) assist in collecting information relevant to evaluating the program effectiveness of their efforts on behalf of the elderly; and (c) participate in discussions and planning meetings relevant to maintenance and improvement of operation of the practicum. (Formerly HDFL 644.) Prerequisite: ABSC/HDFL 342 or ABSC/HDFL 542 and instructor permission. FLD.

ABSC 690. Practicum in Community Health and Development. 1-6 Hours. AE61 / U.
A two-semester practicum in which students engage in structured opportunities to practice core competencies related to the work of promoting community health and development (e.g., strategic planning, intervention, evaluation). In weekly group meetings, students prepare for their individual working field settings (e.g., health and human service agencies, research and advocacy organizations, community organizations). (Formerly HDFL 690). Prerequisite: ABSC/HDFL 150, ABSC/HDFL 310, and instructor permission. FLD.

ABSC 691. Practicum in Community Health and Development, Honors. 1-6 Hours. AE61 / U.
A two-semester practicum in which students engage in structured opportunities to practice core competencies related to the work of promoting community health and development (e.g., strategic planning, intervention, evaluation). In weekly group meetings, students prepare for their individual working field settings (e.g., health and human service agencies, research and advocacy organizations, community organizations). (Formerly HDFL 692). Prerequisite: Open only to students in the University Honors Program; ABSC/HDFL 151, ABSC/HDFL 311 and instructor permission. FLD.

ABSC 692. Practicum in Basic Research. 3 Hours. AE61 / S.
Practical supervised training in the laboratory study of human and/or animal behavior. Students assist in conducting basic research, read and discuss research articles, attend lab meetings, and acquire data analysis and presentation skills. Prerequisite: ABSC 308 (or concurrent enrollment) and permission of the instructor. RSH.

ABSC 693. Practicum in Historical and Conceptual Foundations. 3-6 Hours. AE61 / S.
Practical supervised training in the historical and conceptual foundations of applied behavioral science (e.g., behavior analysis). Students research and read primary source literatures and write papers that advances our understanding of the field's foundations (e.g., empirical, theoretical). Prerequisite: ABSC 100/101, ABSC 304, ABSC 308, and ABSC 509 (or concurrent enrollment), and permission of instructor. IND.

ABSC 694. Practicum in Juvenile Problems. 3-6 Hours. AE61 / S.
A one-semester practicum providing opportunities for students to aid professionals in the development and implementation of behavioral treatment plans with adolescents. Regularly scheduled individual and group meetings enable the evaluation of the practicum students' progress while working in the rehabilitative process for juveniles who have problems that can bring them into contact with the juvenile justice system. (Formerly HDFL 694.) Prerequisite: ABSC/HDFL 410, ABSC/HDFL 560, and instructor permission. FLD.

ABSC 695. Special Practicum in: ____. 3-6 Hours. S.
A one or two-semester practicum providing opportunities for supervised, hands-on training outside the existing specialty areas or their options. This practicum must be arranged with the prior approval of a faculty advisor and the department's Undergraduate Curriculum Committee. Students should see an advisor about this practicum early in their junior year. Prerequisite: Instructor permission. FLD.

ABSC 696. Special Practicum in, Honors: ____. 3-6 Hours. S.
A one or two-semester practicum providing opportunities for supervised, hands-on training outside the existing specialty areas or their options. This practicum must be arranged with the prior approval of a faculty advisor and the department's Undergraduate Curriculum Committee. Students should see an advisor about this practicum early in their junior year. Prerequisite: Open only to students in the University Honors Program and instructor permission. FLD.

ABSC 698. Special Research Practicum in: ____. 3-6 Hours. S.
A one or two-semester research practicum providing opportunities for supervised, hands-on research training outside the existing specialty areas or their options. This practicum must be arranged with the prior approval of a faculty advisor and the department's Undergraduate Curriculum Committee. Students should see an advisor about this practicum early in their junior year. Prerequisite: Instructor permission. FLD.
ABSC 699. Special Research Practicum in, Honors: _____. 3-6 Hours.
A one or two-semester research practicum providing opportunities for supervised, hands-on research training outside of the existing specialty areas or their options. This practicum must be arranged with the prior approval of a faculty advisor and the department's Undergraduate Curriculum Committee. Students should see an advisor early in their junior year about the practicum and its prerequisites and requirements. Prerequisite: Open only to students in the University Honors Program and instructor permission. FLD.

ABSC 701. Parenting in Modern Society. 3 Hours.
The theoretical study of parenting and parent-child relationships, techniques for analyzing common parenting problems, designing appropriate interventions, fostering effective communication skills, understanding issues of diversity, and promoting parent education programs are some of the issues addressed in this course. Professional collaboration and support of families and children are emphasized throughout. Students develop analytical skills through reading, discussion, and application of theoretical and empirical research. (Formerly HDFL 701.) Prerequisite: ABSC/HDFL 160 or equivalent knowledge of child development or child psychology. LEC.

ABSC 702. Curriculum Development for Young Children. 3 Hours.
A survey of educational materials and activities that are appropriate for young children (birth to age 8). Students explore several components of effective curriculum (e.g., objectives, effective methods of activity presentation, teaching strategies) and learn to combine them to construct curriculums for a range of content and skill areas. By focusing on the functional components of curriculums, students learn to construct, critically evaluate, and modify them for both typically developing children and children with special needs. A BACB® pre-approved course. (Formerly HDFL 702.) LEC.

ABSC 703. Leadership in Early Education Programs: Theory and Research. 3 Hours.
Effective leadership skills and professional roles associated with the administration of early childhood services and programs are examined in this course. Theoretical principles, empirical research, and professional responsibilities inherent in the provision of quality service, including needs assessment, organizational skills, delivery systems, human resource management, communication skills, grant writing, legal and ethical considerations, conflict resolution, and advocacy are explored through readings, discussion, and assigned projects. Not open to students who have completed ABSC 555. (Formerly HDFL 677.) Prerequisite: ABSC/HDFL 160 or equivalent knowledge of child development or child psychology. LEC.

ABSC 704. Research Practicum in Clinical Child Psychology. 3 Hours.
This course provides students in the Clinical Child Psychology Program with the opportunity to enhance and consolidate their research activities by fulfilling one of the elective cluster course requirements. This practicum involves a contract with a research advisor and the program director. The contract includes definable products and dates for completion to prepare research for submission for publication, develop a grant proposal, or conduct additional research project independent of other requirements in the program. The course is not to be taken as an overload, but is to be part of a full-time course schedule. May be repeated. (Same as PSYC 704.) (Formerly HDFL 704.) Prerequisites: Graduate standing in clinical child psychology and instructor permission. LEC.

ABSC 705. Pediatric Psychology. 3 Hours.
Discussion of behavior problems commonly encountered in the pediatric population, including reviews of data-based methodologies for remediation. Topics include general child rearing skills, bedtime problems, enuresis, encopresis, toilet training, self-injurious behavior, temper tantrums, behavior in community settings, child abuse, psychotropic drugs for children, adolescent behavior problems and selection of children's play materials. (Formerly HDFL 705.) Prerequisite: ABSC/HDFL 160, ABSC/HDFL 632, or PSYC 602. LEC.

ABSC 706. Special Topics in Clinical Child Psychology: _____. 3 Hours.
A course offering detailed discussion of the literature and research methods of a special topic within clinical child and pediatric psychology. Topic and instructor may change by semester and will be announced in the Schedule of Classes. May be repeated. (Same as PSYC 706.) (Formerly HDFL 706.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. LEC.

ABSC 709. Biology and Behavior. 3 Hours.
A course on the role of physiology and anatomy in behavior, with an emphasis on their participation in the basic behavioral processes and in typical and atypical behavioral development. The course also addresses issues in measurement and current research. (Formerly HDFL 709.) Prerequisite: ABSC/HDFL 796; ABSC/HDFL 798 recommended. LEC.

ABSC 710. Community Health and Development. 3 Hours.
This course extends knowledge and skills for addressing issues in community health and development (e.g., substance abuse, adolescent pregnancy, child and youth development, prevention of violence). Students learn core competencies such as analyzing community problems and goals, strategic planning, intervention, and evaluation, and then apply these skills to issues that matter to them and to the communities they serve. (Formerly HDFL 710.) (Same as ISP 871.) LEC.

ABSC 716. Experimental Problems in Community Settings. 1-5 Hours.
Research in the experimental design and analysis of community settings. No more than 10 hours total. (Formerly HDFL 716.) Prerequisite: Instructor permission. RSH.

ABSC 719. Experimental Field Work in Community Settings. 1-5 Hours.
Instruction in the methods and techniques of the experimental design and analysis of community settings through supervised participation in established research programs. Emphasizes the techniques of gathering original experimental data. No more than 10 hours total. (Formerly HDFL 719.) Prerequisite: Instructor permission. RSH.

ABSC 721. Biological Bases of Mental Retardation. 4 Hours.
This course deals with the biological substrates of mental retardation. Retardation is classified as a medical syndrome, rather than by behavioral patterns, but behavioral peculiarities are addressed where relevant. Attention is directed to both genetic causes such as the chromosomal anomalies (e.g., Mongolism) and molecular and metabolic errors (e.g., phenylketonuria), as well as to the environmentally produced retardation by nutritional deficiency, prenatal rubella, and brain trauma. (Formerly HDFL 721.) Prerequisite: One course in biology or equivalent. LEC.

ABSC 723. Adolescent Adjustment. 3 Hours.
An overview of adolescence with primary emphasis on various adjustment difficulties and respective therapeutic approaches. Content to provide perspectives on relevant practice, research, theory, and contemporary social forces. (Formerly HDFL 723.) Prerequisite: Instructor permission. LEC.

ABSC 725. Research Methods and Application. 3 Hours.
Surveys research methods used to identify, describe, understand, and intervene on socially important problems occurring across the life span (e.g., early childhood, adolescence, elders) and in varied settings (homes,
classrooms, group-care facilities, and communities). Discusses research methods and concepts (e.g., prediction, control, reliability, validity) within scientific, psychological, and behavior-analytic frameworks. Presents strategies and tactics regarding descriptive and experimental methods, direct and indirect measurement, graphic and statistical analysis, and single-subject and group experimental designs. Examines ethics and social responsibility in research. Provides opportunities to read secondary and primary sources, develop research questions, write and present research proposals. (Formerly HDFL 725.) Prerequisite: Instructor permission. RSH.

**ABSC 730. Developmental Neurobiology. 3 Hours.**
This course consists of lectures and discussion sessions on topics that describe the structural and functional maturation of the nervous system. The areas covered deal with the morphological, physiological, and biochemical changes in the developing central nervous system of vertebrates (including human infants), and with the interaction of the external environment with some of these maturational processes. Prerequisite: Introductory human development, psychology, or biology course. LEC.

**ABSC 735. Within Subjects Research Methodology and Direct Observation. 3 Hours.**
A graduate level introduction to the logic of experimentation, direct observation strategies, and research conducted using individual (e.g., single subject) and time series experimental designs. An ABA-accredited and BACB® pre-approved course. (Formerly HDFL 735.) Prerequisite: Graduate standing in applied behavioral science or instructor permission. LEC.

**ABSC 741. Readings in Gerontology. 3-5 Hours.**
Supervised readings in topical areas of gerontology. A program of study, conferences, and reports are developed by the instructor and student. (Formerly HDFL 741.) Prerequisite: Instructor permission. RSH.

**ABSC 742. Research in Gerontology. 1-10 Hours.**
Original investigations of some unsolved problems relating to adult development and aging. (Formerly HDFL 742.) Prerequisite: Graduate standing or instructor permission. RSH.

**ABSC 756. Philosophical Bases of Early Childhood Education. 3 Hours.**
Historical influences and current theoretical models of early childhood education are addressed through a survey and analysis of the literature. Not open to students who have completed ABSC 356. (Formerly HDFL 756.) Prerequisite: ABSC/HDFL 160 or equivalent knowledge of child development or child psychology. LEC.

**ABSC 765. Evaluating and Disseminating Scientific Material I. 1-3 Hours.**
Intensive training in the evaluation and production of scientific critiques and reviews of current issues in the analysis of behavior, as disseminated through the media. May be repeated. (Formerly HDFL 765.) Prerequisite: Instructor permission. LEC.

**ABSC 787. Gerontology Proseminar. 3 Hours.**
A proseminar coordinated by the Gerontology Center. The proseminar explores essential areas of gerontology for researchers and practitioners, providing a multidisciplinary (e.g., psychology, biology, sociology, communication) perspective on aging. The proseminar surveys contemporary basic and applied research, service programs, and policy and management issues in gerontology. (Same as AMS 767, COMS 787, PSYC 787, and SOC 767.) (Formerly HDFL 787.) LEC.

**ABSC 788. Designing Early Education Environments. 3 Hours.**
This course reviews empirically-supported strategies for designing effective and socially valid care and education environments for young children with and without disabilities. Topics will include: early educational theory, individualized curricula and goal selection strategies, various instructional typologies (e.g., direct instruction, embedded teaching), specific teaching tactics (e.g., prompting, time delay, differential reinforcement), preventive and assessment-based behavioral management strategies, current best practice recommendations for design of the social and physical environment, and methods for assessing children's, caregivers', and teachers' programmatic preferences. Prerequisite: ABSC 796. LEC.

**ABSC 796. Laboratory in Behavioral Development and Modification: The Analysis of Behavior I. 3 Hours.**
An introductory graduate laboratory course on the basic principles of behavior, and related procedures for producing behavioral change, with nonhuman subjects. The principles and procedures have special relevance to analogous processes in child development, both normal and deviant. An ABA-accredited and BACB® pre-approved course. (Formerly HDFL 796.) Prerequisite: Instructor permission. LAB.

**ABSC 797. Proseminar in Child Language. 2 Hours.**
A review and discussion of current issues in children's language acquisition. May be repeated for credit. Students are graded S/F. (Same as LING 799, PSYC 799 and SPLH 799.) (Formerly HDFL 797.) LEC.

**ABSC 799. Experimental Analysis of Behavior. 3 Hours.**
This course provides an in-depth description of the basic principles of operant and respondent conditioning in the context of basic non-human and human subjects research. Students will learn various theoretical approaches to understanding effects of reinforcement and punishment. Special attention will be provided to the role of verbal processes in the learning of verbally competent individuals. Students will gain substantive experience with identifying laboratory derived principles present in the literature that are relevant to application through assigned projects. Prerequisite: ABSC 796 or equivalent. SEM.

**ABSC 800. Conceptual Foundations of Applied Behavioral Science. 3 Hours.**
A master's-level graduate seminar on the field's conceptual foundations, with special emphasis on behavior analysis and its application - applied behavior analysis. The course addresses the field's history, philosophy of science, and disciplinary purview; its advanced behavioral principles and processes; its analyses of various content domains in the behavioral, social, and cognitive sciences (e.g., emotion, language, cognition, culture); and its relation to other disciplines (e.g., biology, psychology, anthropology). It also considers professional issues in, for example, the ethical conduct of research and practice. An ABA-accredited and BACB® pre-approved course. Prerequisite: ABSC 799. SEM.

**ABSC 801. Design and Analysis of Community Development Methods. 1-6 Hours.**
An examination of principles and practices of community development and evaluation of methods used to promote community improvement. May be repeated if the content differs. (Formerly HDFL 801.) Prerequisite: Instructor permission. RSH.

**ABSC 802. Behavior Analysis in Developmental Disabilities. 3 Hours.**
A graduate seminar that includes an overview of the behavioral characteristics of various developmental disabilities and examination of empirically-supported behavioral approaches to the study and treatment of developmental disabilities. Topics will include classification and etiology, motivation, methods for developing appropriate skills, assessment and treatment of behavior disorders, staff training, and legal and ethical issues related to treatment. Prerequisite: ABSC 796 and instructor permission. LEC.
ABSC 803. Fundamentals of Psychological Assessment and Intervention with Children. 3 Hours.
Lecture and supervised experience covering the theoretical and empirical literature on assessment and intervention methods for children, adolescents, and families. Students will learn and demonstrate evidence-based clinical interviewing skills, behavioral observation techniques, risk assessment techniques, therapeutic communication approaches, strategies for providing assessment feedback to families, and ethical principles related to the provision of assessment and psychotherapy (including client file and resource management). The course requires interaction with clinical populations and communication with referral sources. (Same as PSYC 803.) Prerequisite: Graduate student in clinical child psychology program. LEC.

ABSC 804. Research in Community Health Promotion. 1-6 Hours.
Supervised, original investigations of problems relevant to community health, such as the prevention of substance abuse or promotion of child outcomes. As appropriate, the course is focused on any combination of: literature research, research planning, and preparation conducting research, analyzing data, writing research reports, or preparing oral reports of completed research. (Formerly HDFL 804.) Prerequisite: Instructor permission. RSH.

ABSC 805. Functional Behavioral Assessment. 3 Hours.
The strategies, tactics, and ethics of functional assessment are presented in the larger context of behavioral assessment (e.g., nomothetic and idiographic approaches). Research articles relevant to indirect, descriptive, and experimental functional assessment approaches and assessment-based interventions are carefully reviewed to determine the appropriate conditions for each type of assessment and intervention. (Formerly HDFL 805.) Prerequisite: ABSC 796 and instructor permission. LEC.

ABSC 806. Functional Behavioral Assessment Practicum. 1-6 Hours.
This course provides supervised experience in the use of functional behavioral assessment in home, clinic, or educational environments with young children presenting problem behaviors. (Formerly HDFL 806.) Prerequisite: ABSC 805 and instructor permission. FLD.

ABSC 807. Design and Evaluation of Community Health Promotion Methods. 1-6 Hours.
An examination of the methods used to develop and evaluate community health promotion programs. The course addresses topics of interest to participants, such as substance abuse, adolescent pregnancy, or child outcomes. May be repeated for credit if the content differs. (Formerly HDFL 807.) Prerequisite: Instructor permission. RSH.

ABSC 809. Professional Issues: Clinical Child Psychology. 1 Hour.
Consideration of special problems confronting the child and family oriented scientist-practitioner, and in the development of a professional identity. Topics include critical issues, including ethical, legal, cultural, empirical, and clinical aspects of research and practice. May be repeated. (Formerly HDFL 809.) (Same as PSYC 809.) Prerequisite: Graduate standing in clinical child psychology. LEC.

ABSC 810. Introduction to Developmental Assessment. 3 Hours.
A course covering the general principles of developmental assessment from birth through adulthood, with special emphasis on the history and nature of assessment instruments and the criteria for acceptance, reliability, and stability of results. Selected assessment techniques for infants, preschool children, elementary school children, adolescents, and adults are reviewed and evaluated for their utility, limitations, and applications. A critical analysis of assessment in general and particular assessment tools is made. (Formerly HDFL 810.) LEC.

ABSC 811. Achievement and Intellectual Assessment in Clinical Child Psychology. 3 Hours.
Course covers the basic theory, research, administration, and reporting of psychological assessment of development, intelligence, and achievement for children, adolescents, and adults within cultural and developmental contexts. The range of psychological instruments examined includes, for example, WIAT, K-ABC, W-J, S-B, WISC, WAI5, and WPPSI. (Same as PSYC 811.) Prerequisite: Graduate student in clinical child psychology. LEC.

ABSC 812. Behavioral and Personality Assessment of Children. 3 Hours.
Lecture, laboratory, field work, and supervision. Theory and applications in the psychological evaluation of children with standardized assessment techniques. The administration, scoring, interpretation, and reporting of behavioral and personality functioning in children. (Formerly HDFL 812.) (Same as PSYC 812.) Prerequisite: Graduate standing in clinical child psychology. LEC.

ABSC 813. Behavioral Science Research Proseminar. 1-3 Hours.
A master’s level professional seminar in which faculty and students present research proposals; offer formal presentations of completed empirical research, reviews of the literature, and other areas of scholarship; and engage discussion about contemporary empirical, conceptual, and professional issues in applied behavioral science. May be repeated for a total of six credits. (Formerly HDFL 813.) Prerequisite: Graduate standing in applied behavioral science or instructor permission. LEC.

ABSC 814. Advanced Child and Family Assessment. 3 Hours.
Lecture, laboratory, field work, and supervision. Supervised experience in specialized psychological assessment approaches for children and families. Emphasis on interviewing, observation, psychometric scales, consultation, rationale, administration, analysis, and reporting of mental health functioning of children and families. Experience with clinical populations, and communication with referral sources. (Formerly HDFL 814.) (Same as PSYC 814.) Prerequisite: Graduate student in clinical child psychology. LEC.

ABSC 820. Advanced Child Development. 3 Hours.
A survey of the basic empirical research in the field of child development, covering intelligence, cognition, perception, attention, personality, social behavior, and socialization processes. These literatures are integrated and their implications for social application are addressed. (Formerly HDFL 820.) (Same as PSYC 820.) Prerequisite: A course in child development or equivalent. LEC.

ABSC 821. Behavior Analysis of Child Development. 3 Hours.
An advanced graduate seminar on the behavior-analytic approach to child development. Students examine the behavior-analytic view of child development and compare and contrast this approach with other systems for understanding development. Students also review and critically evaluate current and seminal literature related to several different developmental domains (e.g., motor, emotional, social, cognitive development) and explore implications for the application of current knowledge. An ABA-accredited and BACB® pre-approved course. (Formerly HDFL 821.) Prerequisite: ABSC 798 and consent of instructor. LEC.

ABSC 822. Children and Public Policy. 3 Hours.
This course examines how public policies affect the development of children. Includes examination of child and family policy in the United States and other countries, policy-related research on children, major policy issues affecting children, and child advocacy. (Formerly HDFL 822.) Prerequisite: Instructor permission. LEC.
ABSC 824. Treatment of Severe Learning Problems. 3 Hours.
The course reviews new approaches to working with persons with retardation and autism; theoretical orientations and how they affect implementation of procedures; and current research outcomes in various developmental areas of persons with retardation. It covers approaches used with persons through the life span, from childhood through adulthood, that are based on ecological and stimulus control variables. Ethical and practical implications are the focus of class lectures and discussions. (Formerly HDFL 824.) LEC.

ABSC 825. Social Development. 3 Hours.
A lecture and discussion course in social development. It includes such topics as theoretical approaches to the study of social development, as well as the literature on family processes, peer relations, aggression and prosocial behavior, child abuse and neglect, family violence, child care, and the media. (Same as PSYC 825.) (Formerly HDFL 880.) Prerequisite: A course in child psychology or development. LEC.

ABSC 828. Research in Early Intervention with Children. 3 Hours.
A seminar on current issues in assessment and intervention for young children who are at risk for or who have special needs. Provides foundation for evaluating and understanding research in early intervention. Includes historical, conceptual and legislative underpinnings of early intervention, risk factors affecting development, methodological issues in early intervention research, best practice standards, and applications to social, language, and pre-academic domains. (Formerly HDFL 828.) LEC.

ABSC 831. Science of Human Behavior. 3 Hours.
A graduate seminar on the analysis of human behavior, grounded in basic behavioral principles. The focus is on the process and products of human development, among them motivation/emotion, social behavior, personality, sensation/perception, language, cognition, creativity, attitudes/beliefs, consciousness/unconsciousness, purpose/will, and values. The course is pre-approved by the Behavior Analysis Certification Board® for its BCBA® certification requirements. Prerequisite: ABSC 800 and Master's degree in Applied Behavioral Science or instructor permission. SEM.

ABSC 834. Directed Readings in Community Health Promotion. 1-5 Hours.
Supervised readings in topical areas of community health promotion, such as the prevention of substance abuse and promotion of child outcomes. A program of study, conferences, and reports is developed by the instructor and student. (Formerly HDFL 834.) RSH.

ABSC 837. Advanced Study of People with Disabilities. 3 Hours.
This course reviews major approaches in identifying disability pathogenesis and explores the biological bases of selected congenital physical disabilities, and etiologies of selected acquired physical disabilities. Rehabilitation approaches and the role of scientist-practitioners in working with people with disabilities are also discussed. This course primarily covers adults with physical disabilities. (Formerly HDFL 837.) Prerequisite: Graduate standing or instructor permission. LEC.

ABSC 840. Theoretical Concepts of Human Development and Child Care Practice. 3 Hours.
Basic introduction to treatment concepts and procedures related to child development and child-care programs. The major goal is to provide a theoretical framework that is effective in dealing with various types of child deviancy. (Formerly HDFL 840.) Prerequisite: Graduate standing or instructor permission. LEC.

ABSC 841. Ethical, Legal, and Professional Issues in Applied Behavioral Science. 3 Hours.
The course covers ethical and legal issues in (a) the responsible conduct of basic, applied, and intervention research (e.g., informed consent and assent with typical and atypical populations; inclusion of underrepresented groups; bias, fraud, and plagiarism in data collection and reporting; conflict of interest; reporting misconduct; authorship) and (b) professional issues in teaching, research, and service (e.g., written and presented scientific communication; grant preparation; the journal review process; cultural competence; teaching; vita preparation). The course will also include instruction in the preparation of editorial reviews for manuscripts submitted for publication to in peer-reviewed journals, in partial fulfillment of the department's doctoral requirement for preparing editorial reviews. A BACB pre-approved course. Prerequisite: Graduate standing in applied behavioral science. LEC.

ABSC 846. Practicum in Clinical Child Psychology I. 1-3 Hours.
Introductory practicum experience for the Clinical Child Psychology Program. Orientation to psychological evaluation and treatment of children, adolescents, and their families and initial development of professional self-assessment skills. Students acquire specific clinical competencies through shadowing cases, assisting with interpretation of test of intelligence and academic achievement, conducting behavioral observations in field settings, and performing co-therapy of cases presenting to the KU Child and Family Services Clinic. May be taken in more than one semester. (Same as PSYC 846.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

ABSC 847. Practicum in Clinical Child Psychology II. 1-3 Hours.
Intermediate practicum experience for the Clinical Child Psychology Program. Development of specific competencies in assessment and intervention with children, adolescents, and their families through didactics, field experience, and supervision. Students acquire specific clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic. Students develop ability to identify specific treatment goals and select therapeutic interventions that are conceptually congruent with clients' presenting problems and are based on sound empirical evidence. Students also develop the ability to integrate and synthesize test results, interview material, and behavioral observations into coherent case conceptualizations. May be taken in more than one semester. (Same as PSYC 847.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

ABSC 848. Applied Gerontology: Practice and Intervention. 3 Hours.
A survey of intervention research in gerontology. Program evaluations designed to determine the effectiveness of community-based interventions, current social service delivery practice, and contemporary social policies are examined. An ABA-accredited and BACB® pre-approved course. (Formerly HDFL 848.) LEC.

ABSC 856. An Interdisciplinary Approach to Intervention with the Handicapped. 3 Hours.
This course surveys knowledge from various disciplines that address developmental disabilities across the life span. Its focus is on designing strategies for individual intervention and treatment programs by an interdisciplinary team. Designed for students in social work, speech pathology, psychology, nutrition, audiology, special education, physical therapy, nursing, child development, behavior analysis, and related fields. (Formerly HDFL 707.) Prerequisite: A basic course in child development or instructor permission. LEC.

ABSC 861. Applied Behavior Analysis. 3 Hours.
This advanced course extends knowledge and skill in analyzing behavioral problems, designing interventions, and planning applied
ABSC 862. Behavioral Community Psychology. 3 Hours.
A seminar that provides an overview of the history and origin of behavioral community psychology. The course will examine the development and future of behavioral community psychology as an integration of two sub-disciplines, applied behavior analysis and community psychology. The course will provide an integrated review of empirically-based behavioral interventions applied in community-based settings. The course is offered at the 500 and 800 levels with additional assignments required at the 800-level. Prerequisite: ABSC 796, or ABSC 710, or instructor permission. LEC.

ABSC 865. Applied Behavior Analysis in Complex Organizations. 3 Hours.
An examination of the theory, principles, and methods of behavior analysis and their applications to problems of human behavior in complex organizations such as businesses, industries, human service organizations, and governments. (Formerly HDFL 888.) Prerequisite: Graduate standing or instructor permission. LEC.

ABSC 866. Service System and Consumer Issues in Developmental Disabilities. 3 Hours.
This course provides a service-system perspective on developmental disabilities. Students learn (a) how service systems have developed for people with developmental disabilities; (b) about service systems from the perspective of agency administrators, program evaluation, and public and private payment systems (e.g., health insurance, Medicaid, Medicare, CHIPS, Title V); and (c) from consumers, themselves, about the barriers they face in obtaining needed services. Finally, students learn about advocating for service-system change at a consumer, program, and policy level. Prerequisite: Graduate standing or instructor permission. LEC.

ABSC 870. Practicum I in Behavioral Psychology. 1-6 Hours.
Instruction and supervised laboratory or field work for master's students. Practica are offered by different instructors on different topics; may be repeated for credit if the content differs. Topics and instructors are announced in the Schedule of Classes. Prerequisite: Graduate standing in applied behavioral science or instructor permission. FLD.

ABSC 871. Practicum I in Behavior Analysis: ______. 1-6 Hours.
Instruction and supervised laboratory or field work for master's students. Practica are offered by different faculty members on different topics; may be repeated for credit if the content differs. Topics and instructors are announced in the Schedule of Classes. (Formerly HDFL 873.) Prerequisite: Graduate standing in applied behavioral science or instructor permission. FLD.

ABSC 872. Practicum I in: ______. 1-6 Hours.
Instruction and supervised laboratory or field work for master's students. Practica are offered by different faculty members on different topics; may be repeated for credit if the content is different. Topics and instructors are announced in the Schedule of Classes. Prerequisite: Graduate standing in applied behavioral science or instructor permission. FLD.

ABSC 873. Practicum in Educational Psychological/Rehabilitative Services: ______. 3-6 Hours.
This course is for students who wish to complete practicum experiences in services related to persons with retardation, autism, or physical disabilities in programs in various settings, such as the Ann Sullivan Center in Lima, Peru and the Algeria School in Paraguay. The course is designed to give interested students opportunities to work with professionals in these programs on a semester or summer basis. The course consists of participation in professional activities associated with the practicum program and a report of these activities to the instructor. (Formerly HDFL 789.) Prerequisite: Instructor permission. FLD.

ABSC 874. Practicum in Consumer Evaluation of Behavior Programs. 3-6 Hours.
A practicum course designed to provide students with the knowledge, background, and practical experience in the conduct of consumer evaluations for behavioral treatment programs. (Formerly HDFL 855.) Prerequisite: Instructor permission. FLD.

ABSC 875. Practicum in Community Health Promotion. 1-6 Hours.
A practicum course designed to provide students with knowledge, background, and practical experience in the implementation of community health promotion projects and their evaluation. May be repeated for credit if the content differs. (Formerly HDFL 808.) Prerequisite: Instructor permission. FLD.

ABSC 876. Practicum in Community Development. 1-6 Hours.
A practicum course designed to provide students with knowledge, background, and practical experience in the implementation of community improvement projects and their evaluation. May be repeated for credit if the content differs. (Formerly HDFL 802.) Prerequisite: Instructor permission. FLD.

ABSC 877. Advanced Practicum in Gerontology. 1-6 Hours.
Supervised practical experience in working with elders in home, community, or institutional settings. Regular individual conferences with faculty are used to evaluate student progress. (Formerly HDFL 849.) Prerequisite: Graduate standing or instructor permission. FLD.

ABSC 880. Early Childhood Practicum for Allied Professionals. 1-6 Hours.
Professionals in fields such as journalism, social welfare, and psychology may have career interests that include work with or on behalf of young children. This practicum provides students with individualized opportunities to work with young children in a group setting in order to extend their professional skills. (Formerly HDFL 790.) Prerequisite: Instructor permission. FLD.

ABSC 881. Early Childhood Care and Intervention Practicum I. 1-6 Hours.
A course covering the specification of learning goals and the implementation and evaluation of curriculum design management of groups of young children. May be repeated for no more than a total of six credit hours. (Formerly HDFL 791.) Prerequisite: Instructor permission. FLD.

ABSC 882. Early Childhood Care and Intervention Practicum II. 1-6 Hours.
A course to assess and teach skills in diagnosis and evaluation of particular problems in the developmental process of young children (1-5 years of age), and to design and implement interventions. May be repeated for no more than a total of six credit hours. (Formerly HDFL 792.) Prerequisite: ABSC 791 and instructor permission. FLD.

ABSC 883. Early Childhood Administration Practicum. 1-6 Hours.
Experiences in understanding and developing parent satisfaction with care arrangements for their child(ren), providing services to personnel responsible for care and development of young children, and/or maximizing use of available services for young children on their behalf. May be repeated for no more than a total of six credit hours. (Formerly HDFL 793.) Prerequisite: ABSC 791 and instructor permission. FLD.
ABSC 884. Early Childhood Early Intervention Practicum. 1-6 Hours. Laboratory teaching in an early childhood classroom that includes children who are developmentally delayed, demonstrate behavioral or learning difficulties, or have other developmental disabilities. Experience includes individualized programming for children with special needs, as well as group management and group curriculum planning. May be repeated for no more than a total of six credit hours. (Formerly HDFL 794.) Prerequisite: ABSC 791 and instructor permission. FLD.

ABSC 885. Early Childhood Teacher Training Practicum. 1-6 Hours. Experience in supervising staff who work in programs for young children. Supervision includes orienting, monitoring, and evaluating staff performance; opportunities for interaction with other professionals; experience in facilitating staff communication; and consulting on research projects. (Formerly HDFL 795.) Prerequisite: ABSC 791 and instructor permission. FLD.

ABSC 886. Developmental Assessment Practicum: ______. 1-6 Hours. This course provides direct experience in the developmental assessment of a selected age group, such as infants, preschool and elementary children, adolescents, or adults. It may be repeated providing the age group specification is not repeated. (Formerly HDFL 811.) Prerequisite: HDFL 810 or an equivalent course. FLD.

ABSC 887. Clinical Practicum in Pediatric Psychology. 1-6 Hours. Supervised experience with pediatric patients referred for behavior problems, including, for example, temper tantrums, enuresis, encopresis, and hyperactivity. Also includes evaluation and treatment of children with commonly encountered behavior problems. In addition, students observe pediatric staff performing appropriate physical exams and observe the interaction between the medical staff and the pediatric psychologist. (Formerly HDFL 823.) Prerequisite: ABSC 705 and instructor permission. FLD.

ABSC 888. Diversity Issues in Clinical Psychology. 3 Hours. Review of individual differences pertaining to culture, ethnicity, race, gender, sexual orientation, age, etc., as these have an impact upon theory, research, assessment, and treatment issues in clinical psychology. (Same as PSYC 888.) Prerequisite: Graduate status in clinical psychology, or consent of instructor. LEC.

ABSC 890. Seminar in: ______. 3 Hours. A seminar for master's level students. It examines basic and applied research literatures in specialized fields of applied behavioral science. May be repeated for credit if the content differs. (Formerly HDFL 701.) Prerequisite: Graduate standing in applied behavioral science or instructor permission. LEC.

ABSC 891. Research in: ______. 1-6 Hours. Supervised research investigations in basic or applied behavioral science for master's students. The course introduces observational measurement, research methods and designs, and the conduct of research in the behavioral sciences. May be repeated for credit if the content is different. (Formerly HDFL 800.) Prerequisite: Graduate standing or instructor permission. RSH.

ABSC 892. Readings in: ______. 1-3 Hours. An individual, supervised study of recent research and scholarship for master's students. The course emphasizes current scholarship in selected areas of basic and applied behavioral science and its conceptual foundations. Designed for students whose needs cannot be met in other courses. May be repeated for credit if the content differs. (Formerly HDFL 833.) Prerequisite: Graduate standing or instructor permission. RSH.

ABSC 893. Special Topics in: ______. 1-3 Hours. A research and readings course for master's students. It allows them to concentrate their studies on selected basic and applied problems in behavioral science and carry out independent research. May be repeated for credit if the content differs. (Formerly HDFL 722, HDFL 724, HDFL 725, HDFL 799.) Prerequisite: Graduate standing or instructor permission. LEC.

ABSC 894. Study Abroad Topics in: ______. 1-3 Hours. A course designed to enhance international experience in topic areas related to behavioral science for master's students. May be repeated for credit if the content differs. Prerequisite: Graduate standing or instructor permission. LEC.

ABSC 897. Master's Thesis in Clinical Child Psychology. 1-10 Hours. Supervised research experience for completing the thesis leading to master's degree. Graded on a satisfactory/unsatisfactory basis. (Formerly HDFL 897.) (Same as PSYC 897.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. RSH.

ABSC 899. Master's Thesis in Applied Behavioral Science. 1-9 Hours. Supervised research experience for the thesis leading to a master's degree in applied behavioral science. May be repeated. Graded on a satisfactory/unsatisfactory basis. (Formerly HDFL 899.) Prerequisite: Graduate standing in applied behavioral science or instructor permission. THE.

ABSC 900. Self-Control, Impulsivity, and Human Addictive Disorders. 3 Hours. This course examines basic research designed to explore variables affecting animal and human decision making; particularly decisions classified as demonstrating impulsivity and self-control. The evidence for genetic and learning contributions to patterns of impulsive decision making will be explored, as will the relation between impulsivity and a range of addictive disorders. LEC.

ABSC 905. Psychopathology in Children. 3 Hours. Diagnosis and treatment of psychological problems in childhood and adolescence. Preference given to graduate students in child clinical psychology, school psychology, and counseling psychology. (Same as PSYC 905.) Prerequisite: Fifteen hours of graduate credit in psychology or consent of instructor. LEC.

ABSC 908. Psychotropic Drugs: Effects Through the Life Span. 3 Hours. This course covers basic pharmacological concepts, neuropharmacological principles, and the therapeutics of drug effects on behavior. Special attention is given to age and history as influences in psychopharmacological outcomes. (Formerly HDFL 908.) LEC.

ABSC 913. Behavioral Science Research Proseminar. 1-3 Hours. A doctoral level professional seminar in which faculty and students present research proposals; offer formal presentations of completed empirical research, reviews of the literature, and other areas of scholarship; and engage discussion about contemporary empirical, conceptual, and professional issues in applied behavioral science. May be repeated for a total of eight credits. (Formerly HDFL 913.) Prerequisite: Graduate standing in behavioral psychology or instructor permission. LEC.

ABSC 920. Seminar in Language Development. 3 Hours. The course pertains to relevant research regarding infant speech development, vocabulary development, linguistic development, articulation development, and language retardation. (Same as SPLH 966.) (Formerly HDFL 920.) LEC.

ABSC 921. The History and Systems of Psychology. 3 Hours. An advanced graduate seminar on the history of psychology and its systems, and their relations to contemporary psychology. Pertinent issues in the history and philosophy of science are addressed (e.g., scientific
ABSC 931. Verbal Behavior. 3 Hours.
An advanced graduate seminar on the analysis of the verbal behavior of the proficient speaker and the biological, environmental, and motivational factors affecting it. Structural and developmental issues, as well as implications for language training and remediation are integrated throughout. Critiques and rebuttals are examined, along with current empirical and conceptual advances in research and theory. An ABA-accredited and BACB® pre-approved course. (Formerly HDFL 831.) Prerequisite: ABSC 800, advanced coursework in psycholinguistics or linguistics, or instructor permission. SEM.

ABSC 934. Directed Readings in Clinical Child Psychology. 3-5 Hours.
Designed to meet the needs of advanced students whose study in clinical child psychology cannot be met with present courses or for whom advanced work is desired in a specialized area of study. (Formerly HDFL 934.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. RSH.

ABSC 935. Experimental Foundations of Applied Behavior Analysis. 3 Hours.
A graduate level introduction to basic behavioral research. This course surveys seminal and current research in the experimental analysis of behavior and relates this work to research and practice in applied behavior analysis. Topics include respondent conditioning, complex schedule performance, avoidance, stimulus control, and choice. Prerequisite: ABSC 798 and consent of instructor. LEC.

ABSC 936. Quantitative Analysis of Behavior. 3 Hours.
Advanced experimental course (doctoral-level) that demonstrates the operations of principles of behavior, and the quantitative models that describe them, in the context of basic research. Specific review of the methods to obtain the data necessary to permit a quantitative analysis of behavior, along with the quantitative analyses themselves, will be discussed. Students will learn the advantages and disadvantages of quantitative analyses in the behavioral sciences, along with a behavioral perspective on quantitative models of behavior. Students will obtain hands-on experience selecting data for a quantitative analysis, reviewing whether the data and proposed model meet the requisite assumptions of EAB research on quantitative models, and analyzing behavioral data using quantitative models. Prerequisite: ABSC 799. SEM.

ABSC 940. Measurement and Experimental Design for Applied Research. 3 Hours.
This is an advanced course on research methods helpful in the development, evaluation, and dissemination of effective and sustainable behavior-analytic programs. The practices examined involve (a) selecting non-reactive measures of staff implementation behaviors; (b) selecting effective and sustainable components of a staff management program; and (c) experimentally analyzing the effectiveness and sustainability of the staff management program. Particular emphasis is placed on the analysis of the principles of behavior that determine the maintenance of staff interventions and, therefore, the survival of behavioral programs in their post-research phase. Students read and discuss the literature on factors that promote or impede program survival. Students design an intervention program using the practices examined in the course, simulate an experimental analysis of the program, and write a JABA-style manuscript describing the program and their simulated data. An ABA-accredited and BACB® pre-approved course. (Formerly HDFL 940.) Prerequisite: ABSC/HDFL 735 or HDFL 803, ABSC/HDFL 796, and ABSC/HDFL 871 or instructor permission. LEC.

ABSC 941. Teaching and Conference. 3-6 Hours.
This course is used by graduate students fulfilling the doctoral program teaching requirement. Students assist in class preparation and organization, teaching, grading, and office hours or serve as discussion section leaders or laboratory course supervisors. They meet regularly with the faculty members they are assisting. Students enroll for 3 hours for the equivalent of a 25% assistantship and 6 hours for a 50% equivalent. (Formerly HDFL 941.) Prerequisite: Instructor permission. FLD.

ABSC 942. Techniques of Data Analysis for Applied Research. 3 Hours.
This course examines data analysis procedures commonly used with both large group and single subject experimental designs. In addition to presenting specific data analysis techniques, the strengths and weaknesses inherent in the various techniques are carefully reviewed and evaluated. (Formerly HDFL 942.) Prerequisite: ABSC/HDFL 735 or HDFL 803 and an intermediate statistics course. LEC.

ABSC 943. Advanced Practicum in Clinical Child Psychology III. 1-3 Hours.
Development of advanced competencies in assessment and intervention with children, adolescents, and their families through didactics, field experience, and supervision. Students acquire advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum (i.e., formal case presentation), and modeling of clinical competencies for junior students. Students will demonstrate the ability to implement empirically derived therapeutic interventions in consideration of individual differences, cultural values, and individual preferences. Students in external practicum sites will demonstrate an understanding of evidence-based models of consultation and provision of consultation to care providers in professional contexts. May be taken in more than one semester. (Same as PSYC 943.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

ABSC 944. Advanced Practicum in Clinical Child Psychology IV. 1-3 Hours.
Demonstration of advanced competencies in assessment, intervention, and consultation with children, adolescents, and their families through didactics, field experience, and supervision in the semester(s) prior to required clinical internship. Students demonstrate advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum (i.e., integrated case presentation), and modeling of clinical competencies for junior students. Course requirements include the development of portfolios for demonstration of clinical competencies and application to clinical internships. May be taken in more than one semester. (Same as PSYC 944.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

ABSC 947. Advanced Practicum in Clinical Child Psychology V. 1-5 Hours.
Specialized practicum experience for the Clinical Child Psychology Program. Demonstration of advanced competencies related to supervision and consultation in clinical psychology. With faculty supervision, students will develop and demonstrate the ability to provide effective supervision to less advanced students in the program in selected cases appropriate to the service setting. Further development of advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum, and modeling of clinical competencies for junior
students. May be taken in more than one semester. (Same as PSYC 947.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

**ABSC 951. The Analysis of Cognition. 3 Hours.**
A graduate seminar on the behavior analysis of cognition. Topics include consciousness, attention, perception, memory, language, rule-governed behavior, problem-solving, decision-making, generativity, creativity, and beliefs and attitudes. Comparisons and contrasts are drawn among different theoretical orientations (information-processing, parallel-processing, nonmediational theories). Prerequisite: ABSC 800, advanced coursework in cognitive psychology, or instructor permission. SEM.

**ABSC 961. Advanced Seminar in Applied Behavior Analysis: _____ 3 Hours.**
An advanced seminar examining the literature and research methods in specialized areas of applied behavior analysis (e.g., developmental disabilities, community health, organizational development). May be repeated for credit if the content differs. An ABA-accredited and BACB® pre-approved course. (Formerly HDFL 971.) LEC.

**ABSC 963. Clinical Child Psychology Internship. 1 Hour.**
Three consecutive enrollments, covering a minimum of eleven months of experience in an approved clinical psychology field setting; supervision by qualified clinical child psychology faculty and field staff clinicians. Required of all clinical child psychology program students. An intensive guided experience in application of clinical child psychology theory, methods, and practices. Integrates scientific and clinical aspects of field. (Formerly HDFL 963.) (Same as PSYC 963.) Prerequisite: Completion of Ph.D. comprehensive examinations, graduate standing in clinical child psychology, and permission of clinical child psychology faculty. FLD.

**ABSC 965. Evaluating and Disseminating Scientific Material II. 1-3 Hours.**
Intensive training in the evaluation and production of scientific critiques and reviews on current issues in the analysis of behavior, as disseminated through the media. May be repeated. (Formerly HDFL 965.) Prerequisite: Instructor permission. LEC.

**ABSC 970. Practicum II in Behavioral Psychology. 1-6 Hours.**
Advanced instruction and supervised laboratory or field work for doctoral students beyond ABSC 870. May be repeated for credit if the content differs. Prerequisite: Graduate standing in behavioral psychology or instructor permission. FLD.

**ABSC 971. Practicum II in Behavior Analysis: _____ 1-6 Hours.**
Advanced instruction and supervised laboratory or field work for doctoral students beyond ABSC 871. May be repeated for credit if the content differs. Prerequisite: Graduate standing in behavioral psychology or instructor permission. FLD.

**ABSC 972. Practicum II in: _____ 1-6 Hours.**
Advanced instruction and supervised laboratory or field work for doctoral students beyond ABSC 872. May be repeated for credit if the content differs. Topic and instructor are announced in the Schedule of Classes. Prerequisite: Graduate standing in applied behavioral science or instructor permission. FLD.

**ABSC 976. Therapeutic Interventions with Children. 3-5 Hours.**
Clinical approaches to the therapeutic treatment of children with special emphasis on research findings and laboratory (practicum) experience. A survey of relationship therapies, operant strategies, system approaches, parent education and play therapy by the right therapist for a specific child with a particular problem. (Same as PSYC 976.) Prerequisite: Instructor permission. FLD.

**ABSC 981. History of Behavior Analysis. 3 Hours.**
An advanced graduate seminar on the long past, short history, recent origins, and modern history of applied behavioral science. This includes the field's history, internally: its conceptual system, sciences and discipline, profession, and institutions. It also includes the field's history, externally, for instance, the history of Western philosophy, science, American culture, and the behavioral and social sciences. Historiographic issues are addressed throughout. Prerequisite: ABSC 800 and Master's degree in ABSC or Instructor permission. SEM.

**ABSC 989. Methods of Obtaining External Research Funding. 1-3 Hours.**
The objective of this course is to demystify this process and prepare participants to submit their first independent research grant application. Participants learn about the characteristics of different funding mechanisms and agencies, the characteristics of successful and unsuccessful application strategies, how to turn an initial research idea into a competitive application, ethical issues that influence each stage of the development and submission process, and the nuts and bolts of grant development and management. Specific activities include critiquing an actual NIH grant application, participating in a mock review panel, and developing an actual grant application. LEC.

**ABSC 990. Advanced Seminar in: _____ 3 Hours.**
An advanced seminar for doctoral students. It examines basic and applied research literatures in specialized fields of applied behavioral science. May be repeated for credit if the content differs. (Formerly HDFL 930.) Prerequisite: Graduate standing in behavioral psychology or instructor permission. LEC.

**ABSC 991. Advanced Research in: _____ 1-9 Hours.**
Advanced, supervised research in basic or applied behavioral science for doctoral students. The course may focus on any combination of a literature review, research planning and preparation, conducting research, analyzing data, writing research reports, and preparing oral reports of completed research. May be repeated for credit if the content differs. (Formerly HDFL 900.) Prerequisite: Graduate standing in behavioral psychology or instructor permission. RSH.

**ABSC 992. Advanced Readings in: _____ 1-6 Hours.**
An advanced individual, supervised study of recent research and scholarship for doctoral students. The course emphasizes current scholarship in selected areas of basic and applied behavioral science and its conceptual foundations. Designed for students whose needs cannot be met in other courses. May be repeated for credit if the content differs. (Formerly HDFL 933.) Prerequisite: Graduate standing in behavioral psychology or instructor permission. RSH.

**ABSC 993. Advanced Special Topics in: _____ 1-3 Hours.**
An advanced research and readings course for doctoral students. It allows them to concentrate their studies on selected basic and applied problems in behavioral science and carry out independent research. May be repeated for credit if the content differs. (Formerly HDFL 931.) Prerequisite: Graduate standing in behavioral psychology or instructor permission. RSH.

**ABSC 994. Advanced Study Abroad Topics in: _____ 1-6 Hours.**
An advanced course designed to enhance international experience in topic areas related to behavioral science for doctoral level students. May be repeated for credit if the content differs. Prerequisite: Graduate standing in behavioral psychology or instructor permission. LEC.
ABSC 998. Doctoral Dissertation in Clinical Child Psychology. 1-10 Hours. Research experience making an original contribution to literature in clinical child psychology. Graded on a satisfactory/unsatisfactory basis. (Same as PSYC 998.) (Formerly HDFL 998.) RSH.

ABSC 999. Doctoral Dissertation in Behavioral Psychology. 1-9 Hours. Advanced supervised research that makes an original, empirical contribution to the literature in applied behavioral science leading to a doctoral degree in behavioral psychology. May be repeated. Graded on a satisfactory/unsatisfactory basis. (Formerly HDFL 999.) Prerequisite: Graduate standing in behavioral psychology or instructor permission. THE.

Bachelor of Arts and Bachelor of General Studies in Applied Behavioral Science

Career Opportunities

The department prepares students for careers in their specialties, as well as for graduate school and professional training. Careers include work in such fields and settings as early childhood education; early childhood intervention programs; community programs for children, youth, and adults with developmental disabilities; programs for individuals with physical disabilities; delinquency, juvenile justice, and law enforcement; public health and health care; community-based and nongovernmental organizations; and behavioral consulting, management, human services, and business. Students enter graduate and professional schools in such areas as applied behavior analysis, applied developmental psychology, behavior analysis, clinical and counseling psychology, community development, gerontology, law, medicine, organizational behavior management, public health, social welfare, and special education.

Behavior Analysis Certification

The department offers a program of study that qualifies students to become Board Certified Assistant Behavior Analysts™. Students must pass ABSC 100, ABSC 304, and ABSC 308; obtain requisite supervised or mentored experience; complete the major; complete the KU degree; and pass a national examination. The Behavior Analysis Certification Board (http://www.bacb.com)® has pre-approved ABSC 100, ABSC 304, and ABSC 308 for admission to the national examination. Students should meet with a BACB® advisor early in the junior year.

Preparation and Advising

To graduate with the major in 4 years, prospective majors should enroll in Introduction to Applied Behavioral Science (ABSC 100 or ABSC 101) and Principles and Procedures of Behavior Modification and Therapy (ABSC 304) during the first 2 years. The content of these 2 courses will give students a basic understanding of the field of Applied Behavioral Science and help students decide whether they would like to apply to be admitted to the major. The requirements and procedures for applying to be admitted to the major are listed below. Major application forms are available in the Department’s main office or in the College Student Academic Services office. By the end of the second year, they should have consulted with a faculty advisor about degree requirements, specialty areas, and career opportunities. By the end of the third year, they should have taken the prerequisite courses for the fourth-year practicum. This information may also be found in the department’s Undergraduate Handbook. By the beginning of the junior year, majors should complete the College’s Major Declaration form. They should list either ABSC-A or ABSC-BGS as the major code for a Bachelor of Arts or Bachelor of General Studies degree, respectively.

Admission to the Major

Admission Requirements

Required Courses

Introduction to Applied Behavioral Science (3)
Satisfied by the following:
ABSC 100 Introduction to Applied Behavioral Science 3
or ABSC 101 Introduction to Applied Behavioral Science, Honors

Principles Procedures of Behavioral Modification and Theory (3)
Satisfied by the following:
ABSC 304 The Principles and Procedures of Behavior Modification and Therapy 3

Admission GPA

A minimum 2.3 GPA is required in the admission courses designated above. All core courses completed at the time of application will be calculated into the admission GPA. University Course Repeat Policy will apply.

Application Term

Semester in which major admission criteria will be completed, normally no later than 60 hours, or for transfer students, during the initial term at KU. Application to this major after completion of 60 hours, or the initial KU term for transfer students, will likely delay graduation.

If a student does not meet the admission criteria or neglects to apply for admission in the term above, the student must petition the department for permission for late application.

Requirements for the B.A. or B.G.S. Major

All majors must complete the introductory and core course work as well choose from 1 of the following specialty area options.

Applied Behavioral Sciences Introductory Knowledge (0)
Introduction to Applied Behavioral Science (3)
ABSC 100 Introduction to Applied Behavioral Science 3
or ABSC 101 Introduction to Applied Behavioral Science, Honors

Applied Behavioral Sciences Core Knowledge and Skills (10)
Majors must complete a course in each of the following areas:
Principles and Procedures of Behavior Modification and Therapy. Satisfied by the following:
ABSC 304 The Principles and Procedures of Behavior Modification and Therapy 3

Research Methods and Application. Satisfied by the following:
ABSC 308 Research Methods and Application 4

Contemporary Behavioral Science: Historical, Conceptual & Comparative Foundation. Satisfied by the following:
ABSC 509 Contemporary Behavioral Science: Historical, Conceptual, and Comparative Foundations 3
Early Childhood Education & Intervention Specialty

This option is for students interested in understanding typical and atypical child development and learning to promote healthy development in young children (ages 0-6 years). Students who choose this option are required to participate in practica in classrooms that serve toddlers and preschool children. Faculty: Professors Claudia Dozier (practicum supervisor), Pam Neidert (practicum supervisor), Lynn Marotz, and Jan Sheldon.

Required Specialty Area Core Knowledge and Skills (6)

Satisfied by the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 160</td>
<td>Introduction to Child Behavior and Development (Students may substitute PYSC 333 Child Psychology for ABSC 160. The credit hours for PYSC 333, however, do not count toward the 33 required ABSC major hours or toward the 15 required junior/senior ABSC hours.)</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 444</td>
<td>Curriculum Development for Young Children</td>
<td>3</td>
</tr>
</tbody>
</table>

Specialty Area Electives (8)

Satisfied by completing any junior/senior-level ABSC courses except those already required as introductory, core knowledge, and required specialty courses, which include ABSC 304, ABSC 308, ABSC 444, ABSC 509. Additionally, practicum courses (ABSC 675-ABSC 699) do not count toward specialty area elective hours. Please see specialty area advisors for recommendations. (at least 8 hours)

Practicum 1 (6-10)

Two semesters are required. The courses are offered for 5 credit hours during the fall and spring semesters, and for 3 hours during the summer session. Students must select at least one of the courses listed below. For their other required semester, students may also select from ABSC 679 or ABSC 680 (in addition to those listed below)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 675</td>
<td>Practicum in Infant-Toddler Care and Early Intervention I (for students new to the Toddler Care Practicum)</td>
<td></td>
</tr>
<tr>
<td>ABSC 676</td>
<td>Practicum in Infant-Toddler Care and Early Intervention II (for students who completed ABSC 675)</td>
<td></td>
</tr>
<tr>
<td>ABSC 677</td>
<td>Practicum in Preschool Education and Intervention I (for students new to the Preschool Education Practicum)</td>
<td></td>
</tr>
<tr>
<td>ABSC 678</td>
<td>Practicum in Preschool Education and Intervention II (for students who completed ABSC 677)</td>
<td></td>
</tr>
</tbody>
</table>

BCABA Certification Examination Eligibility (0)

Satisfied by selecting one of the following additional practicum courses (not previously taken). By completing three consecutive semesters of ABSC practicum courses, a student is eligible to sit for BCABA Certification Examination. The additional credit hours do not count toward the ABSC major hour requirements.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 675</td>
<td>Practicum in Infant-Toddler Care and Early Intervention I</td>
<td></td>
</tr>
<tr>
<td>ABSC 676</td>
<td>Practicum in Infant-Toddler Care and Early Intervention II</td>
<td></td>
</tr>
<tr>
<td>ABSC 677</td>
<td>Practicum in Preschool Education and Intervention I</td>
<td></td>
</tr>
<tr>
<td>ABSC 678</td>
<td>Practicum in Preschool Education and Intervention II</td>
<td></td>
</tr>
<tr>
<td>ABSC 679</td>
<td>Practicum in Behavior Analysis Research in Early Childhood Education</td>
<td></td>
</tr>
</tbody>
</table>

Early Childhood Autism Intervention Specialty

This option is for students interested in conducting intervention procedures to address language and social skill deficits of children with autism in home and school settings. Students who choose this option are required to take a preparatory course and practica focusing on children with autism. Faculty: Professors Claudia Dozier (practicum supervisor), Pam Neidert (practicum supervisor), Florence D. DiGennaro Reed, Jan Sheldon, Jim Sherman (practicum supervisor).

Required Specialty Area Core Knowledge and Skills (9)

Satisfied by the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 160</td>
<td>Introduction to Child Behavior and Development (Students may substitute PYSC 333 Child Psychology for ABSC 160. The credit hours for PYSC 333, however, do not count toward the 33 required ABSC major hours or toward the 15 required junior/senior ABSC hours.)</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 350</td>
<td>The Behavioral Treatment of Children with Autism</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 444</td>
<td>Curriculum Development for Young Children</td>
<td>3</td>
</tr>
</tbody>
</table>

Specialty Area Electives (5)

Satisfied by completing any junior/senior-level courses, except those already required as introductory, core knowledge, and required specialty area courses (which include ABSC 304, ABSC 308, ABSC 350, ABSC 444, and ABSC 509. Additionally, practicum courses (ABSC 675-ABSC 699) do not count toward specialty area elective hours. Please see specialty area advisors for recommendations. (at least 5 hours)

Practicum 1 (6)

Two semesters are required. The courses are offered for 5 credit hours during the fall and spring semesters, and for 3 hours during the summer session. Note: ABSC 350 must be taken prior to, or concurrently with, enrollment in the above practicum courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 680</td>
<td>Practicum in Advanced Laboratory in the Development of Behavioral Treatments for Children with Autism</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 675</td>
<td>Practicum in Infant-Toddler Care and Early Intervention I</td>
<td></td>
</tr>
<tr>
<td>ABSC 676</td>
<td>Practicum in Infant-Toddler Care and Early Intervention II</td>
<td></td>
</tr>
<tr>
<td>ABSC 677</td>
<td>Practicum in Preschool Education and Intervention I</td>
<td></td>
</tr>
<tr>
<td>ABSC 678</td>
<td>Practicum in Preschool Education and Intervention II</td>
<td></td>
</tr>
<tr>
<td>ABSC 679</td>
<td>Practicum in Behavior Analysis Research in Early Childhood Education</td>
<td></td>
</tr>
</tbody>
</table>

BCABA Certification Examination Eligibility (0)
Satisfied by selecting one of the following additional practicum courses (not previously taken). By completing three consecutive semesters of ABSC practicum courses, a student is eligible to sit for BCABA Certification Examination. The additional credit hours do not count toward the ABSC major hour requirements.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 675</td>
<td>Practicum in Infant-Toddler Care and Early Intervention I</td>
</tr>
<tr>
<td>ABSC 676</td>
<td>Practicum in Infant-Toddler Care and Early Intervention II</td>
</tr>
<tr>
<td>ABSC 677</td>
<td>Practicum in Preschool Education and Intervention I</td>
</tr>
<tr>
<td>ABSC 678</td>
<td>Practicum in Preschool Education and Intervention II</td>
</tr>
<tr>
<td>ABSC 679</td>
<td>Practicum in Behavior Analysis Research in Early Childhood Education</td>
</tr>
<tr>
<td>ABSC 680</td>
<td>Practicum in Advanced Laboratory in the Development of Behavioral Treatments for Children with Autism</td>
</tr>
</tbody>
</table>

**ABSC Early Childhood Research Specialty**

This option is for students interested in gaining research experience in early childhood possibly as preparation for graduate school or employment in educational and clinical research centers. Students who choose this option will enroll in research-oriented practica. Interested students would consult with Professor Claudia Dozier. Faculty: Professors Claudia Dozier (practicum supervisor), Pam Neidert (practicum supervisor).

**Required Specialty Area Core Knowledge and Skills (3)**

Satisfied by the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 160</td>
<td>Introduction to Child Behavior and Development</td>
</tr>
</tbody>
</table>

(Students may substitute PYSC 333 Child Psychology for ABSC 160. The credit hours for PYSC 333, however, do not count toward the 33 required ABSC major hours or toward the 15 required junior/senior ABSC hours.)

**Specialty Area Electives (11)**

Satisfied by completing 11 hours of any junior/senior-level courses approved by the advisor. The following are recommended:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 350</td>
<td>The Behavioral Treatment of Children with Autism</td>
</tr>
<tr>
<td>ABSC 444</td>
<td>Curriculum Development for Young Children</td>
</tr>
<tr>
<td>ABSC 405</td>
<td>Children and Media</td>
</tr>
<tr>
<td>ABSC 455</td>
<td>Health, Safety, and Nutrition in Early Childhood Development</td>
</tr>
<tr>
<td>ABSC 486</td>
<td>Issues in Parenting</td>
</tr>
<tr>
<td>ABSC 535</td>
<td>Developmental Psychopathology</td>
</tr>
<tr>
<td>ABSC 565</td>
<td>Applied Developmental Psychology</td>
</tr>
<tr>
<td>ABSC 871</td>
<td>Practicum I in Behavior Analysis: _____</td>
</tr>
</tbody>
</table>

**Practicum (6)**

Two semesters are required. The courses are offered for 3-5 credit hours during the fall and spring semesters, and for 3 hours during the summer session. Note: ABSC 308 must be taken prior to, or concurrently with, enrollment in the above practicum courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 679</td>
<td>Practicum in Behavior Analysis Research in Early Childhood Education (Students must complete at least 1 semester)</td>
</tr>
</tbody>
</table>

For the students’ other required semester, students may select from the following:

<table>
<thead>
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<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 675</td>
<td>Practicum in Infant-Toddler Care and Early Intervention I</td>
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<td>ABSC 676</td>
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<td>ABSC 677</td>
<td>Practicum in Preschool Education and Intervention I</td>
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<tr>
<td>ABSC 679</td>
<td>Practicum in Behavior Analysis Research in Early Childhood Education</td>
</tr>
<tr>
<td>ABSC 680</td>
<td>Practicum in Advanced Laboratory in the Development of Behavioral Treatments for Children with Autism</td>
</tr>
</tbody>
</table>

**BCABA Certification Examination Eligibility (0)**

Satisfied by selecting one of the following additional practicum courses (not previously taken). By completing three consecutive semesters of ABSC practicum courses, a student is eligible to sit for BCABA Certification Examination. The additional credit hours do not count toward the ABSC major hour requirements.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
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<tbody>
<tr>
<td>ABSC 675</td>
<td>Practicum in Infant-Toddler Care and Early Intervention I</td>
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<td>ABSC 676</td>
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<tr>
<td>ABSC 677</td>
<td>Practicum in Preschool Education and Intervention I</td>
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<tr>
<td>ABSC 678</td>
<td>Practicum in Preschool Education and Intervention II</td>
</tr>
<tr>
<td>ABSC 679</td>
<td>Practicum in Behavior Analysis Research in Early Childhood Education</td>
</tr>
<tr>
<td>ABSC 680</td>
<td>Practicum in Advanced Laboratory in the Development of Behavioral Treatments for Children with Autism</td>
</tr>
</tbody>
</table>

**Youth Development & Juvenile Justice Specialty**

This specialty area is for students who want to work with children and adolescents who may be involved formally or informally with the juvenile justice system. It includes courses addressing issues such as juvenile law, developing relationships, counseling and problem-solving, behavioral contracting, and other techniques used when working with school-aged children and adolescents. The course sequence culminates in a yearlong practicum during which students work with children and adolescents in the Truancy Prevention and Diversion Program. The practicum is in collaboration with the school district, Social and Rehabilitation Services, the district attorney’s office, and the juvenile court.

Graduates with this specialty are excellent candidates for positions as probation officers, counselors in mental health programs, intake and assessment officers, truancy prevention specialists, and treatment personnel in intervention and treatment programs for children and adolescents. Many students also pursue graduate study in social work, law, counseling, and psychology. Faculty: Professors Yo Jackson, Jan Sheldon (practicum supervisor), Ric Steele, and Eric Vernberg.
Required Specialty Area Core Courses (6)

Satisfied by the following. Students should plan their program with a department advisor.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 410</td>
<td>Behavioral Approaches in Working with Adolescents (ABSC 410 must be taken prior to enrolling in the practicum. It is offered only in the spring semester.)</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 560</td>
<td>The Juvenile Justice System: A Behavioral and Legal Perspective</td>
<td>3</td>
</tr>
</tbody>
</table>

Specialty Area Electives (9)

Select 9 hours of the following. Note: Although ABSC 160 is not required for this specialty area, it is a required prerequisite for some of the specialty area electives.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 310</td>
<td>Building Healthy Communities</td>
</tr>
<tr>
<td>ABSC 360</td>
<td>Drugs, Addiction, and Behavior</td>
</tr>
<tr>
<td>ABSC 405</td>
<td>Children and Media</td>
</tr>
<tr>
<td>ABSC 470</td>
<td>Organizational Behavior Management</td>
</tr>
<tr>
<td>ABSC 486</td>
<td>Issues in Parenting</td>
</tr>
<tr>
<td>ABSC 535</td>
<td>Developmental Psychopathology</td>
</tr>
<tr>
<td>ABSC 562</td>
<td>Behavioral Community Psychology</td>
</tr>
<tr>
<td>ABSC 565</td>
<td>Applied Developmental Psychology</td>
</tr>
<tr>
<td>ABSC 626</td>
<td>Psychology of Adolescence</td>
</tr>
</tbody>
</table>

Practicum (10)

This practicum requires a two-semester commitment (enrollment in ABSC 694), beginning in the fall semester and continuing in the spring semester. Space may be limited and enrollment may depend on the date of indication of interest and performance in ABSC 410.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 694</td>
<td>Practicum in Juvenile Problems</td>
</tr>
</tbody>
</table>

Adults with Disabilities Specialty

This specialty area is for students interested in working with people with developmental disabilities and in the development of supportive teaching programs in the community for people with developmental disabilities. The courses teach observing and defining behavior, increasing appropriate and decreasing inappropriate behavior, developing relationships, counseling, legal and ethical issues, and experimental design. The course sequence culminates in practicum work in a community-based residential service agency or day treatment program for adults with developmental disabilities.

Graduates of this specialty are excellent candidates for positions in residential treatment programs, community human service agencies, and vocational and pre-vocational teaching programs for people with disabilities. Many students also pursue graduate studies in applied behavioral analysis, special education, and psychology. Faculty: Professors Jan Sheldon and Jim Sherman (practicum supervisor).

Required Specialty Area Course (3)

Satisfied by the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 350</td>
<td>The Behavioral Treatment of Children with Autism</td>
<td>3</td>
</tr>
</tbody>
</table>

Specialty Area Electives (11)

Satisfied by completing 11 hours of any junior/senior-level courses to meet the 33 hour major requirement. The following are recommended:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 410</td>
<td>Behavioral Approaches in Working with Adolescents</td>
</tr>
<tr>
<td>ABSC 437</td>
<td>Independent Living and People with Disabilities</td>
</tr>
</tbody>
</table>

Required Specialty Area Course (6)

Satisfied by the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 150</td>
<td>Community Leadership</td>
<td>3</td>
</tr>
<tr>
<td>or ABSC 151</td>
<td>Community Leadership, Honors</td>
<td></td>
</tr>
<tr>
<td>ABSC 310</td>
<td>Building Healthy Communities</td>
<td>3</td>
</tr>
<tr>
<td>or ABSC 311</td>
<td>Building Healthy Communities, Honors</td>
<td></td>
</tr>
</tbody>
</table>

Specialty Area Electives (8)

Satisfied by completing any junior/senior-level ABSC courses, except those already required as introductory, core knowledge, and required specialty area courses (including ABSC 304, ABSC 308, ABSC 310/311, ABSC 509. Additionally, practicum courses (ABSC 675-ABSC 699) do not count as specialty area elective hours. Please see specialty area advisors for recommendations. (at least 8 hours)

Practicum (6)

Two semesters of practicum (ABSC 690/ABSC 691) are required (3 hours in both fall and spring semesters). Note: ABSC 310/ABSC 311 must be taken prior to, or concurrently with, enrollment in the above practicum courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 690</td>
<td>Practicum in Community Health and Development</td>
</tr>
<tr>
<td>or ABSC 691</td>
<td>Practicum in Community Health and Development, Honors</td>
</tr>
</tbody>
</table>
Basic Research

Students pursuing the basic research option learn about behavioral processes and research methods, and acquire skills in the experimental analysis of behavior. Students completing this option complete a 2-semester hands-on practicum in which they assist in the conduct of research on human or nonhuman behavioral processes. Students are involved in all aspects of the research endeavor, from conceptualization of problems to data collection, analysis, and presentation. Students pursuing this option are required to complete an introductory course in statistics. Faculty: Professors Derek Reed (practicum supervisor), Florence D. DiGennaro Reed (practicum supervisor), and Edward K. Morris (practicum supervisor).

Specialty Area Electives (11)
Satisfied by completing any junior/senior-level ABSC courses, except those already required as introductory and core knowledge courses (ABSC 304, ABSC 308, ABSC 509). Additionally, practicum courses (ABSC 675-ABSC 699) do not count toward specialty area elective hours. Please see a specialty area advisor for recommendations.

Statistics in Psychological Research (3)
PSYC 210 Statistics in Psychological Research 3
or PSYC 211 Statistics in Psychological Research, Honors

Practicum (6)
Two semesters of practicum (ABSC 692) are required. Practicum courses are offered for 3-6 credit hours during the fall and spring semesters, and 3 hours during the summer session. However, no more than 6 hours total apply to the major. The prerequisite is the permission of the supervisor, as space permits.

ABSC 692 Practicum in Basic Research 3

Conceptual Foundations

Students pursuing the conceptual foundations option learn about contemporary conceptual issues in behavior analysis, its history and philosophy, and its relations with the behavioral, social, and cognitive sciences in general. As a result, they acquire skills in critical thinking about behavior and the behavior of scientists. Students who complete this option complete a 2-semester practicum in which they read and research a relevant literature and write a paper that advances their understanding of the field. Faculty: Professors Derek Reed (practicum supervisor), Florence D. DiGennaro Reed (practicum supervisor), and Edward K. Morris (practicum supervisor).

Required Specialty Area Course (3)
ABSC 800 Conceptual Foundations of Applied Behavioral Science 3

Specialty Area Electives (8)
Satisfied by completing any junior/senior-level ABSC courses, except those already required as introductory and core knowledge courses (including ABSC 304, ABSC 308, ABSC 509, ABSC 798). Additionally, practicum courses (ABSC 675-ABSC 699) do not count toward specialty area elective hours. Please see a specialty area advisor for more specific recommendations. (at least 8 hours)

Practicum (6-10)
6-10
Satisfied by the following:

ABSC 693 Practicum in Historical and Conceptual Foundations (Practicum courses are offered for 3-6 credit hours during the fall and spring semesters, and 3 hours during the summer session. No more than 6 hours total apply to the major.)

Organizational Behavior Management Research & Practice

This specialty area is for students interested in studying the application of behavioral principles to people and groups in business, industry, government, and human service settings. This specialty area includes courses in behavior analysis, research methods, and organizational behavior management with a focus on its three sub-disciplines including performance management, systems analysis, and behavior-based safety. The program culminates in practica that provide students with direct experiences improving employee behavior, work safety, or organizational systems within businesses in the community. Students completing this program will gain knowledge and experience in the areas of behavior analysis, management, staff training, and systems-level interventions. Careers: This area is relevant for students interested in behavioral consulting, management, human services, and business.

Introductory Course (3)
ABSC 100 Introduction to Applied Behavioral Science 3
or ABSC 101 Introduction to Applied Behavioral Science, Honors

Core Courses (10)
ABSC 304 The Principles and Procedures of Behavior Modification and Therapy 3
ABSC 308 Research Methods and Application 4
ABSC 509 Contemporary Behavioral Science: Historical, Conceptual, and Comparative Foundations 3

Required Area Electives (6)
ABSC 150 Community Leadership 3
ABSC 470 Organizational Behavior Management 3

Specialty Area Electives (8)
Satisfied by completing any junior/senior level ABSC courses, except those already required as introductory, core knowledge, and required specialty area courses (including ABSC 304, ABSC 308, ABSC 470, ABSC 509). Additionally, practicum courses (ABSC 675-ABSC 699) do not count toward specialty area elective hours. Please see specialty area advisors for recommendations.

Practicum (6-10)
6-10
This practicum requires a 2-semester commitment (enrollment in ABSC 682), beginning in the fall semester and continuing in the spring semester. Space may be limited and enrollment may depend on the date of indication of interest. No more than 6 hours of practicum apply to the major.

ABSC 682 Organizational Behavior Management Practicum

BCABA Certification Examination Eligibility (optional)
By completing three consecutive semesters of ABSC practicum courses, a student is eligible to sit for BCABA Certification Examination. The additional credit hours do not count toward the ABSC major hour requirements.
Applied Behavioral Science Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade point average minimum standards:

**Major Hours**
Satisfied by 33 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior (300+) Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior (300+) Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

**Double Majors**
The department encourages double majors and minors in other departments. Double majors are especially appropriate for students planning to attend graduate school or enter professional programs (e.g., psychology, law, medicine). Any of the College's other majors may be appropriate, but among the more common are psychology, human biology, sociology, political science, and speech-language-hearing.

Sample 4-year plans for the BA degree in Applied Behavioral Science with the following concentrations can be found here: Adults with Disabilities (p. 1448), Basic Research (p. 1449), Community Health & Development (p. 1450), Conceptual Foundations (p. 1451), Early Childhood Autism Intervention (p. 1452), Early Childhood Education & Intervention (p. 1453), Early Childhood Research (p. 1453), Youth Development & Juvenile Justice (p. 1454), Organizational Behavior Management & Research Practice (p. 1455), or by using the left-side navigation.

Sample 4-year plans for the BGS degree in Applied Behavioral Science will be coming soon.

**Departmental Honors**
The department’s honors program is suited for undergraduates planning to attend graduate school. Students are expected to enroll in two semesters of ABSC 599 for a total of 4 to 8 credit hours. The course combines small-group discussions on advanced topics in applied behavioral science, along with honors thesis supervision of a project of the student’s design. Honors students are invited to attend the ABS graduate proseminar or department colloquium series. Students should meet with the department’s honors advisor by the middle of the junior year to identify a faculty member with whom to complete the project. Prerequisite: Completion of at least 60 hours in the College with a grade-point average of 3.25 and an average of 3.5 in the department.

**Study Abroad**
The department offers students opportunities to obtain international experience in a program offered jointly with the Office of Study Abroad (http://www.studyabroad.ku.edu) (ABSC 279, ABSC 479) and research experience with faculty members who teach research courses or a research practicum:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 499</td>
<td>Directed Research in: _____</td>
<td>1-3</td>
<td></td>
</tr>
<tr>
<td>ABSC 599</td>
<td>Honors and Thesis in Applied Behavioral Science</td>
<td>1-5</td>
<td></td>
</tr>
<tr>
<td>ABSC 679</td>
<td>Practicum in Behavior Analysis Research in Early Childhood Education</td>
<td>1-6</td>
<td></td>
</tr>
<tr>
<td>ABSC 692</td>
<td>Practicum in Basic Research</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ABSC 693</td>
<td>Practicum in Historical and Conceptual Foundations</td>
<td>3-6</td>
<td></td>
</tr>
<tr>
<td>ABSC 698</td>
<td>Special Research Practicum in: _____</td>
<td>3-6</td>
<td></td>
</tr>
<tr>
<td>ABSC 699</td>
<td>Special Research Practicum in, Honors: _____</td>
<td>3-6</td>
<td></td>
</tr>
</tbody>
</table>

Research experience is recommended for students planning to attend graduate school. The department also offers some courses that include a service-learning component. Many of these programs, research experiences, and service-learning courses meet university requirements in these areas.

**BA in Applied Behavioral Science with concentration in Adults with Disabilities**

Below is a sample 4-year plan for students pursuing the BA in Applied Behavioral Science with a concentration in Adults with Disabilities. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

**Freshman**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Goal 2.1 (2 crs req), BA Writing I)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MATH 101</td>
<td>Goal 1.2, BA Quantitative Reasoning</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5 2nd Semester Language (BA Second Language)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>ABSC 160</td>
<td>Goal 3 Social Science, Major Requirement</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective or possible minor course (Total Hours)</td>
<td>3 Goal 2.2 Communication</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

| Hours | 3-5 | 17 |

**Sophomore**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3 4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
<td>3-5</td>
<td></td>
</tr>
<tr>
<td>Goal 3 Humanities</td>
<td>3 Goal 3 Natural Science</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3 Lab Science (BA Lab Requirement)</td>
<td>1-2</td>
<td></td>
</tr>
<tr>
<td>ABSC 304 (Major Requirement)</td>
<td>3 ABSC 308 (Major Requirement)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Elective or possible minor course (Total Hours)</td>
<td>3 ABSC Specialty Area Elective (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

| Hours | 14-17 | 15 |
BA in Applied Behavioral Science with concentration in Basic Research

Below is a sample 4-year plan for students pursuing the BA in Applied Behavioral Science with a concentration in Basic Research. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 (2 crs req), BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101 (Goal 1.2 Quantitative Reasoning)</td>
<td>3</td>
<td>(Goal 1.2, BA Quantitative Reasoning)</td>
<td>3</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
</tr>
<tr>
<td>ABSC 160 (Goal 3 Social Science, Major Requirement)</td>
<td>3</td>
<td>ABSC 100 (Goal 1.1 Critical Thinking, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Elective or possible minor course (Total Hours)</td>
<td>3 Goal 2.2 Communication</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours: 15**

### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
<td>3-5</td>
</tr>
<tr>
<td>ABSC 304 (Major Requirement)</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 210 (Major Requirement)</td>
<td>3 Lab Requirement (BA Lab Science)</td>
<td>1-2</td>
<td></td>
</tr>
<tr>
<td>Goal 3 Humanities</td>
<td>3</td>
<td>ABSC 308 (Major Requirement)</td>
<td>4</td>
</tr>
<tr>
<td>Elective or possible minor course (Total Hours)</td>
<td>3 ABSC Specialty Area Elective (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours: 17**

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 509 (Major Requirement)</td>
<td>3</td>
<td>ABSC Specialty Area Elective (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ABSC Specialty Area Elective (Major Requirement)</td>
<td>3</td>
<td>ABSC Specialty Area Elective (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3 Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3 Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours: 14-17**

### Note:

- The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

- Visit this website (http://college.ku.edu/undergrad/curriculum/ba_QR) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

- 11 hours of ABSC Specialty Area elective courses are required. Visit the degree requirements (http://catalog.ku.edu/liberal-arts-sciences/applied-behavioral-science/ba-bgs/#requirementstext) tab for a list of approved courses.

- 6 hours of ABSC 685 Practicum is required.

- All students in the College of Liberal Arts and Sciences are required to completed 120 total hours of which 45 hours must be at the Jr/Sr (300+) level, and 100 hours must be from within the College of Liberal Arts and Sciences.

- The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level, and 100 hours must be from within the College of Liberal Arts and Sciences.

The course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/minors.

### BA in Applied Behavioral Science with concentration in Community Health & Development

Below is a sample 4-year plan for students pursuing the BA in Applied Behavioral Science with a concentration in Community Health & Development. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).
Elective or possible minor course 300+ (Total Hours) & 3 Elective or possible minor course 300+ (Total Hours) & 3 Elective or possible minor course 300+ (Total Hours) 

<table>
<thead>
<tr>
<th>Total Hours: 120-123</th>
</tr>
</thead>
</table>

1 The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2 Visit this website (http://college.ku.edu/undergrad/curriculum/ba_QR) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

3 Satisfied by completing any junior/senior-level ABSC courses, except those already required as introductory, core knowledge, and required specialty courses (including ABSC 304, ABSC 308, ABSC 310/311, ABSC 509. Additionally, practicum courses (ABSC 675-ABSC 699) do not count as specialty area electives. Please see specialty area advisors for recommendations. (at least 8 hours)

4 Two semesters of practicum (ABSC 690/ABSC 691) are required (3 hours in both fall and spring semesters). Note: ABSC 310/ABSC 311 must be taken prior to, or concurrently with, enrollment in the above practicum courses.

Please note:

All students in the College of Liberal Arts and Sciences are required to completed 120 total hours of which 45 hours must be at the Jr/Sr (300+) level, and 100 hours must be from within the College of Liberal Arts and Sciences.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**BA in Applied Behavioral Science with concentration in Conceptual Foundations**

Below is a sample 4-year plan for students pursuing the BA in Applied Behavioral Science with a concentration in Conceptual Foundations. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Hours</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 (2 crs req), BA Writing II)</td>
<td>2</td>
<td>3 ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101 (Goal 1.2 Quantitative Reasoning)</td>
<td>3</td>
<td>3 Quantitative Reasoning (Goal 1.2, BA Quantitative Reasoning)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>ABSC 160 (Goal 3 Social Science, Major Requirement) &amp; 3</td>
<td>3 ABSC 100 (Goal 1.1 Critical Thinking, Major Requirement)</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sophomore</th>
<th>Hours</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Elective or possible minor course (Total Hours)</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Senior</th>
<th>Hours</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td>ABSC 693 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
<td>3-6</td>
</tr>
<tr>
<td>3</td>
<td>ABSC 693 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
<td>3</td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>ABSC Specialty Area Elective (Major Requirement)</td>
<td>3</td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Hours: 120-126</th>
</tr>
</thead>
</table>

1 The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2 Visit this website (http://college.ku.edu/undergrad/curriculum/ba_QR) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
### BA in Applied Behavioral Science with concentration in Early Childhood Autism Intervention

Below is a sample 4-year plan for students pursuing the BA in Applied Behavioral Science with a concentration in Early Childhood Autism Intervention. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

#### Freshman

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours Spring</th>
<th>Hours</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>ENGL 101</td>
<td>Goal 2.1 (2 crs req), BA Writing I</td>
<td>3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MATH 101</td>
<td>Goal 1.2 Quantitative Reasoning</td>
<td>3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ABSC 160</td>
<td>Goal 3 Social Science, Major Requirement</td>
<td>3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective or possible minor course (Total Hours)</td>
<td>3</td>
<td>17</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>17</td>
<td></td>
<td></td>
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<td>17</td>
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</tbody>
</table>

#### Sophomore

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours Spring</th>
<th>Hours</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>3rd Semester Language (BA Second Language)</td>
<td>3 4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
<td>3-5</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Goal 3 Humanities</td>
<td>3 Goal 3 Natural Science</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ABSC 304 (Major Requirement)</td>
<td>3 Lab Science (BA Lab Requirement)</td>
<td>1-2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective or possible minor course (Total Hours)</td>
<td>3 Goal 4.1 US Diversity</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Total Hours: 120-123

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Visit this website (http://college.ku.edu/undergrad/curriculum/ ba_QR) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
3. Satisfied by completing any junior/senior-level courses, except those already required as introductory, core knowledge, and required specialty area courses (which include ABSC 304, ABSC 308, ABSC 350, ABSC 444, and ABSC 509). Additionally, practicum courses (ABSC 675-ABSC 699) do not count toward specialty area elective hours. Please see specialty area advisors for recommendations. (at least 5 hours)
4. Two semesters are required: ABSC 680 and ABSC 675-680. The courses are offered for 5 credit hours during the fall and spring semesters, and for 3 hours during the summer session. Note: ABSC 350 must be taken prior to, or concurrently with, enrollment in the above practicum courses.

Please note:

All students in the College of Liberal Arts and Sciences are required to completed 120 total hours of which 45 hours must be at the Jr/Sr (300+) level, and 100 hours must be from within the College of Liberal Arts and Sciences.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BA in Applied Behavioral Science with concentration in Early Childhood Autism Intervention

Below is a sample 4-year plan for students pursuing the BA in Applied Behavioral Science with a concentration in Early Childhood Autism Intervention. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours Spring</th>
<th>Hours</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Goal 2.1 (2 crs req), BA Writing I</td>
<td>3 Goal 3 Natural Science</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Goal 1.2 Quantitative Reasoning</td>
<td>3 ABSC 308 (Major Requirement)</td>
<td>4</td>
<td>15</td>
<td>14-17</td>
</tr>
</tbody>
</table>

#### Junior

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours Spring</th>
<th>Hours</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Goal 4.2 Global Awareness</td>
<td>3 Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ABSC 444 (Major Requirement)</td>
<td>3 ABSC 509 (Major Requirement)</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ABSC 350 (Major Requirement)</td>
<td>3 ABSC 499 (Recommended, or ABSC Specialty Area Elective)</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

#### Senior

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours Spring</th>
<th>Hours</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>ABSC 680 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
<td>3 Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ABSC Specialty Area Elective (Major Requirement)</td>
<td>3 Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Please note:

3. Satisfied by completing any junior/senior-level ABSC courses, except those already required as introductory and core knowledge courses (including ABSC 304, ABSC 308, ABSC 509, ABSC 798). Additionally, practicum courses (ABSC 675-ABSC 699) do not count toward specialty area elective hours. Please see a specialty area advisor for more specific recommendations. (at least 8 hours)
4. ABSC 693 Practicum in Historical and Conceptual Foundations (Practicum courses are offered for 3-6 credit hours during the fall and spring semesters, and 3 hours during the summer session. No more than 6 hours total apply to the major.)
All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level, and 100 hours must be from within the College of Liberal Arts and Sciences.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**BA in Applied Behavioral Science with concentration in Early Childhood Education & Intervention**

Below is a sample 4-year plan for students pursuing the BA in Applied Behavioral Science with a concentration in Early Childhood Education & Intervention. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

### Freshman

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 (2 crs req), BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)</td>
</tr>
<tr>
<td>MATH 101 (Goal 1.2 Quantitative Reasoning)</td>
<td>3</td>
<td>Quantitative Reasoning (Goal 1.2, BA Quantitative Reasoning)</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
</tr>
<tr>
<td>ABSC 160 (Goal 3 Social Science, Major Requirement)</td>
<td>3</td>
<td>ABSC 100 (Goal 1.1 Critical Thinking, Major Requirement)</td>
</tr>
<tr>
<td>Elective or possible minor course (Total Hours)</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
</tr>
<tr>
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### Sophomore

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
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<td></td>
</tr>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
</tr>
<tr>
<td>Goal 3 Humanities</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>Lab Science (BA Lab Requirement)</td>
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<tr>
<td>ABSC 304 (Major Requirement)</td>
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<td>ABSC 308 (Major Requirement)</td>
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<td>Elective or possible minor course 300+ (Total Hours)</td>
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<td>Elective or possible minor course (Total Hours)</td>
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### Junior

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<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal 4.2 Global Awareness</td>
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<td>Goal 5 Social Responsibility &amp; Ethics</td>
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<tr>
<td>ABSC 509 (Major Requirement)</td>
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<td>ABSC 499 (Specialty Area Elective Requirement, Recommended)</td>
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### Senior

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<thead>
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<tr>
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<td>ABSC Specialty Area Elective (Major Requirement)</td>
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<td>Elective or possible minor course 300+ (Total Hours)</td>
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<tr>
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</table>

### Total Hours: 120-123

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Visit this website (http://college.ku.edu/undergrad/curriculum/ba_QR) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
3. Satisfied by completing 8 hours of specialty area electives. See a major advisor for help choosing these courses.
4. Two semesters of practicum are required, totaling 10 hours. The courses are offered for 5 credit hours during the fall and spring semesters, and for 3 hours during the summer session. Students must select at least one of the courses listed below. For their other required semester, students may also select from ABSC 679 or ABSC 680 (in addition to those listed below).

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level, and 100 hours must be from within the College of Liberal Arts and Sciences.

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**BA in Applied Behavioral Science with concentration in Early Childhood Research**

Below is a sample 4-year plan for students pursuing the BA in Applied Behavioral Science with a concentration in Early Childhood Research. To
view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

### Freshman

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>ENGL 101 (Goal 2.1 (2 crs req), BA Writing I)</td>
<td>3 ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)</td>
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<tr>
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<td>MATH 101 (Goal 1.2 Quantitative Reasoning)</td>
<td>3 Quantitative Reasoning (Goal 1.2, BA Quantitative Reasoning)</td>
</tr>
<tr>
<td></td>
<td>1st Semester Language (BA Second Language)</td>
<td>5 2nd Semester Language (BA Second Language)</td>
</tr>
<tr>
<td></td>
<td>ABSC 160 (Goal 3 Social Science, Major Requirement)</td>
<td>3 ABSC 100 (Goal 1.1 Critical Thinking, Major Requirement)</td>
</tr>
<tr>
<td></td>
<td>Elective or possible minor course (Total Hours)</td>
<td>3 Goal 2.2 Communication</td>
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<table>
<thead>
<tr>
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<tr>
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<td>Goal 3 Humanities</td>
<td>3 Goal 3 Natural Science</td>
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<tr>
<td></td>
<td>ABSC 304 (Major Requirement)</td>
<td>3 Lab Science (BA Lab Requirement)</td>
</tr>
<tr>
<td></td>
<td>Elective or possible minor course (Total Hours)</td>
<td>3 ABSC 308 (Major Requirement)</td>
</tr>
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<td></td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
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<tr>
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<th>Hours Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Junior</td>
<td>Goal 4.1 US Diversity</td>
<td>3 Goal 5 Social Responsibility &amp; Ethics</td>
</tr>
<tr>
<td></td>
<td>ABSC 509 (Major Requirement)</td>
<td>3 ABSC Specialty Area Elective (Major Requirement)</td>
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<td>ABSC Specialty Area Elective (Major Requirement)</td>
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<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3 Elective or possible minor course 300+ (Total Hours)</td>
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### Senior

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours Spring</th>
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<tbody>
<tr>
<td>Fall</td>
<td>Goal 4.2 Global Awareness</td>
<td>3 ABSC Practicum: Second Semester (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
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<tr>
<td></td>
<td>ENGL 101 (Goal 2.1 (2 crs req), BA Writing I)</td>
<td>3 ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)</td>
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<td>MATH 101 (Goal 1.2 Quantitative Reasoning)</td>
<td>3 Quantitative Reasoning (Goal 1.2, BA Quantitative Reasoning)</td>
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<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ABSC 160 (Goal 3 Social Science, Major Requirement)</td>
<td>3 ABSC 100 (Goal 1.1 Critical Thinking, Major Requirement)</td>
</tr>
<tr>
<td></td>
<td>Elective or possible minor course (Total Hours)</td>
<td>3 Goal 2.2 Communication</td>
</tr>
</tbody>
</table>

**Total Hours: 120-123**

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Visit this website (http://college.ku.edu/undergrad/curriculum/ba_QR) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
3. 11 hours of ABSC specialty area electives are required. Visit the degree requirements (http://catalog.ku.edu/liberal-arts-sciences/applied-behavioral-science/ba-bgs/#requirementstext) tab for a list of suggested courses, or consult with a major advisor.
4. Two semesters are required: ABSC 679 and ABSC 675-680. The courses are offered for 3-5 credit hours during the fall and spring semesters, and for 3 hours during the summer session. Note: ABSC 308 must be taken prior to, or concurrently with, enrollment in the above practicum courses.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level, and 100 hours must be from within the College of Liberal Arts and Sciences.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BA in Applied Behavioral Science with concentration in Youth Development & Juvenile Justice

Below is a sample 4-year plan for students pursuing the BA in Applied Behavioral Science with a concentration in Youth Development & Juvenile Justice. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).
<table>
<thead>
<tr>
<th>1st Semester Language (BA Second Language)</th>
<th>5 2nd Semester Language (BA Second Language)</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>ABSC 160 (Goal 3 Social Science, Major Requirement)</td>
<td>3 ABSC 100 (Goal 1.1 Critical Thinking, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Elective or possible minor course (Total Hours)</td>
<td>3 Goal 2.2 Communication</td>
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**Sophomore**

<table>
<thead>
<tr>
<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

**Fall**

| Goal 3 Humanities | 3 Goal 3 Natural Science | 3 |
| Goal 4.1 US Diversity | 3 Lab Science (BA Lab Requirement) | 1-2 |
| ABSC 304 (Major Requirement) | 3 ABSC 308 (Major Requirement) | 4 |
| Elective or possible minor course 300+ (Total Hours) | 3 ABSC Specialty Area Elective (Major Requirement) | 3 |

**Junior**

<table>
<thead>
<tr>
<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>14-17</td>
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</table>

**Fall**

| Goal 4.2 Global Awareness | 3 Goal 5 Social Responsibility & Ethics | 3 |
| ABSC 410 (Major Requirement) | 3 ABSC 560 (Major Requirement) | 3 |
| ABSC 509 (Major Requirement) | 3 ABSC Specialty Area Elective (Major Requirement) | 3 |
| Elective or possible minor course 300+ (Total Hours) | 3 Elective or possible minor course 300+ (Total Hours) | 3 |
| Elective or possible minor course 300+ (Total Hours) | 3 Elective or possible minor course 300+ (Total Hours) | 3 |

**Senior**

<table>
<thead>
<tr>
<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
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**Fall**

| ABSC Specialty Area Elective (Major Requirement) | 3 ABSC 694 (Major Requirement) | 5 |
| ABSC 694 (Goal 6 Integration & Creativity, Major Requirement) | 3 Elective or possible minor course 300+ (Total Hours) | 3 |
| Elective or possible minor course 300+ (Total Hours) | 3 Elective or possible minor course 300+ (Total Hours) | 3 |
| Elective or possible minor course 300+ (Total Hours) | 3 Elective or possible minor course 300+ (Total Hours) | 3 |

**Sophomore**

<table>
<thead>
<tr>
<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>14</td>
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</tr>
</tbody>
</table>

**Fall**

| 3rd Semester Language (BA Second Language) | 3 4th Semester Language, or 1st semester of Another Language (BA Second Language) | 3-5 |

---

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2. Visit this website [http://college.ku.edu/undergrad/curriculum/ba_QR](http://college.ku.edu/undergrad/curriculum/ba_QR) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

3. 9 hours (3 courses) of Specialty Area electives are required. Visit the degree requirements [http://catalog.ku.edu/liberal-arts-sciences/apply-behavioral-science/ba-bgs/#requirementstext](http://catalog.ku.edu/liberal-arts-sciences/apply-behavioral-science/ba-bgs/#requirementstext) tab for list of approved courses.

4. 10 hours of ABSC 694 Practicum are required.

**Please note:**

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The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**BA in Applied Behavioral Science, concentration in Organizational Behavior Mgmt. Research & Practice**

Below is a sample 4-year plan for students pursuing the BA in Applied Behavioral Science with a concentration in Organizational Behavior Management Research. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website [http://kucore.ku.edu/courses](http://kucore.ku.edu/courses).

**Freshman**

<table>
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<tr>
<th>Hours</th>
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<tbody>
<tr>
<td>3 ENGL 101 (Goal 2.1 (2 crs req), BA Writing I)</td>
<td>3 ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)</td>
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</tr>
<tr>
<td>MATH 101 (Goal 1.2 Quantitative Reasoning)</td>
<td>3 Quantitative Reasoning (Goal 1.2, BA Quantitative Reasoning)</td>
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</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5 2nd Semester Language (BA Second Language)</td>
<td>5</td>
</tr>
<tr>
<td>ABSC 160 (Goal 3 Social Science, Major Requirement)</td>
<td>3 ABSC 100 (Goal 1.1 Critical Thinking)</td>
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</tr>
<tr>
<td>Elective or possible minor course (Total Hours)</td>
<td>3 Goal 2.2 Communication</td>
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</table>

**Sophomore**

<table>
<thead>
<tr>
<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

| 3rd Semester Language (BA Second Language) | 3 4th Semester Language, or 1st semester of Another Language (BA Second Language) | 3-5 |
Goal 3 Humanities
ABSC 150 (Goal 5 Social Responsibility & Ethics, Major Requirement)
ABSC 304 (Major Requirement)
Elective or possible minor course (Total Hours)

15

14-17

Hours
Goal 4.1 US Diversity
ABSC 470 (Major Requirement)
ABSC 509 (Major Requirement)
Elective or possible minor course 300+ (Total Hours)

Fall
Spring
Hours
Goal 4.2 Global Awareness
ABSC Specialty Area Elective (Major Requirement)
ABSC Specialty Area Elective (Major Requirement)
Elective or possible minor course 300+ (Total Hours)

Fall
Spring

15

15

Hours
ABSC 682 (Goal 6 Integration & Creativity, Major Requirement)
ABSC Specialty Area Elective (Major Requirement)
Elective or possible minor course 300+ (Total Hours)

Fall
Spring
Hours
ABSC 682 (Goal 6 Integration & Creativity, Major Requirement)
ABSC Specialty Area Elective (Major Requirement)
Elective or possible minor course 300+ (Total Hours)

Fall
Spring

15

12

Total Hours: 120-123

1 The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2 Visit this website (http://college.ku.edu/undergrad/curriculum/ba_QR) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

3 Satisfied by completing any junior-senior level ABSC courses, except those already required as introductory, core knowledge, and required specialty area courses (including ABSC 304, ABSC 308, ABSC 470, ABSC 509). Additionally, practicum courses (ABSC 675-ABSC 699) do not count toward specialty area elective hours. Please see specialty area advisors for recommendations.

4 This practicum requires a 2-semester commitment (enrollment in ABSC 682), beginning in the fall semester and continuing in the spring semester. Space may be limited and enrollment may depend on the date of indication of interest. No more than 6 hours of practicum apply to the major.

Please note:
All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level, and 100 hours must be from within the College of Liberal Arts and Sciences.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

Minor in Applied Behavioral Science

Why study applied behavioral science?

Because a science can solve relevant problems — individual and societal, local and global.

Requirements for the Minor

Students selecting a minor in Applied Behavioral Science are required to complete ABSC 100 and at least 15 credit hours of coursework in ABS, 12 of which must be at the junior/senior level (courses numbered 300 or above). No more than 3 credit hours in practicum courses and no more than 3 credit hours in research, special topics, and study abroad courses may count toward the general ABS minor.

We recommend that students who are interested in an ABS minor see an ABS advisor and consider completing a course sequence that focus on one of the following specialty areas: Early Childhood Education and Intervention; Early Childhood Autism Intervention, Early Childhood Research, Youth Development and Juvenile Justice, Adults with Disabilities, Community Health and Development, Basic Research in Behavioral Science, Organizational Behavior Management Research and Practice, and Historical and Conceptual Foundations of Behavioral Science. Specialty area course sequences are described below.

Early Childhood Autism Intervention

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 100</td>
<td>Introduction to Applied Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 160</td>
<td>Introduction to Child Behavior and Development</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 304</td>
<td>The Principles and Procedures of Behavior Modification and Therapy</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 350</td>
<td>The Behavioral Treatment of Children with Autism</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 444</td>
<td>Curriculum Development for Young Children</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 680</td>
<td>Practicum in Advanced Laboratory in the Development of Advanced Behavioral Treatments for Children with Autism</td>
<td>3</td>
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</table>

1 Indicates practicum course. Admission to practicum courses for students completing a minor in ABS is subject to limitations on practicum openings.
### Early Childhood Research

<table>
<thead>
<tr>
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<th>Title</th>
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<tbody>
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<td>ABSC 100</td>
<td>Introduction to Applied Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 160</td>
<td>Introduction to Child Behavior and Development</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 304</td>
<td>The Principles and Procedures of Behavior Modification and Therapy</td>
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<td>ABSC 308</td>
<td>Research Methods and Application</td>
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<td>Select one of the following:</td>
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<tr>
<td>ABSC 350</td>
<td>The Behavioral Treatment of Children with Autism</td>
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</tr>
<tr>
<td>ABSC 444</td>
<td>Curriculum Development for Young Children</td>
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<tr>
<td>ABSC 509</td>
<td>Contemporary Behavioral Science: Historical, Conceptual, and Comparative Foundations</td>
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<tr>
<td>ABSC 679</td>
<td>Practicum in Behavior Analysis Research in Early Childhood Education</td>
<td>3</td>
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</tbody>
</table>

1 Indicates practicum course. Admission to practicum courses for students completing a minor in ABS is subject to limitations on practicum openings.

### Early Childhood Education & Intervention

<table>
<thead>
<tr>
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<tbody>
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<td>ABSC 100</td>
<td>Introduction to Applied Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 160</td>
<td>Introduction to Child Behavior and Development</td>
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</tr>
<tr>
<td>ABSC 304</td>
<td>The Principles and Procedures of Behavior Modification and Therapy</td>
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</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>ABSC 350</td>
<td>The Behavioral Treatment of Children with Autism</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 455</td>
<td>Health, Safety, and Nutrition in Early Childhood Development</td>
<td></td>
</tr>
<tr>
<td>ABSC 486</td>
<td>Issues in Parenting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
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</tr>
<tr>
<td>ABSC 675</td>
<td>Practicum in Infant-Toddler Care and Early Intervention I</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 676</td>
<td>and Practicum in Infant-Toddler Care and Early Intervention II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and Practicum in Preschool Education and Intervention I</td>
<td></td>
</tr>
<tr>
<td>ABSC 677</td>
<td>and Practicum in Preschool Education and Intervention II</td>
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</tbody>
</table>

1 Indicates practicum course. Admission to practicum courses for students completing a minor in ABS is subject to limitations on practicum openings.

### Youth Development and Juvenile Justice

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 100</td>
<td>Introduction to Applied Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 304</td>
<td>The Principles and Procedures of Behavior Modification and Therapy</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 410</td>
<td>Behavioral Approaches in Working with Adolescents</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 560</td>
<td>The Juvenile Justice System: A Behavioral and Legal Perspective</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 694</td>
<td>Practicum in Juvenile Problems</td>
<td>3</td>
</tr>
</tbody>
</table>

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### Adults with Disabilities

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 100</td>
<td>Introduction to Applied Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 304</td>
<td>The Principles and Procedures of Behavior Modification and Therapy</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 350</td>
<td>The Behavioral Treatment of Children with Autism</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 410</td>
<td>Behavioral Approaches in Working with Adolescents</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
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<tr>
<td>ABSC 535</td>
<td>Developmental Psychopathology</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 437</td>
<td>Independent Living and People with Disabilities</td>
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</tr>
<tr>
<td>ABSC 565</td>
<td>Applied Developmental Psychology</td>
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</tr>
<tr>
<td>ABSC 685</td>
<td>Practicum in Community-based Residential or Day Treatment Programs for Disabled Adults</td>
<td>3</td>
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</tbody>
</table>

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### Community Health and Development

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ABSC 100</td>
<td>Introduction to Applied Behavioral Science</td>
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</tr>
<tr>
<td>ABSC 150</td>
<td>Community Leadership</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 310</td>
<td>Building Healthy Communities</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select three of the following:</td>
<td>9</td>
</tr>
<tr>
<td>ABSC 410</td>
<td>Behavioral Approaches in Working with Adolescents</td>
<td></td>
</tr>
<tr>
<td>ABSC 437</td>
<td>Independent Living and People with Disabilities</td>
<td></td>
</tr>
<tr>
<td>ABSC 455</td>
<td>Health, Safety, and Nutrition in Early Childhood Development</td>
<td></td>
</tr>
<tr>
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<td>Issues in Parenting</td>
<td></td>
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<tr>
<td>ABSC 535</td>
<td>Developmental Psychopathology</td>
<td></td>
</tr>
<tr>
<td>ABSC 562</td>
<td>Behavioral Community Psychology</td>
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<tr>
<td>ABSC 565</td>
<td>Applied Developmental Psychology</td>
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<tr>
<td>ABSC 626</td>
<td>Psychology of Adolescence</td>
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<tr>
<td>ABSC 671</td>
<td>Applied Behavior Analysis</td>
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</table>

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### Basic Research in Behavioral Science

<table>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ABSC 100</td>
<td>Introduction to Applied Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 308</td>
<td>Research Methods and Application</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 210</td>
<td>Statistics in Psychological Research</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 425</td>
<td>Teaching Apprenticeship in Applied Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 509</td>
<td>Contemporary Behavioral Science: Historical, Conceptual, and Comparative Foundations</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 692</td>
<td>Practicum in Basic Research</td>
<td>3</td>
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</table>

1 Indicates practicum course. Admission to practicum courses for students completing a minor in ABS is subject to limitations on practicum openings.
Organizational Behavior Management Research & Practice

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 100</td>
<td>Introduction to Applied Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 304</td>
<td>The Principles and Procedures of Behavior Modification and Therapy</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 308</td>
<td>Research Methods and Application</td>
<td>4</td>
</tr>
<tr>
<td>ABSC 425</td>
<td>Teaching Apprenticeship in Applied Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 509</td>
<td>Contemporary Behavioral Science: Historical, Conceptual, and Comparative Foundations</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 682</td>
<td>Organizational Behavior Management Practicum</td>
<td>3</td>
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</table>

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Conceptual Foundations of Behavioral Science

<table>
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<tbody>
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<td>Research Methods and Application</td>
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</tr>
<tr>
<td>ABSC 425</td>
<td>Teaching Apprenticeship in Applied Behavioral Science</td>
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<td>ABSC 509</td>
<td>Contemporary Behavioral Science: Historical, Conceptual, and Comparative Foundations</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 693</td>
<td>Practicum in Historical and Conceptual Foundations</td>
<td>3</td>
</tr>
</tbody>
</table>

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Applied Behavioral Science Minor Hours & GPA

While completing all required courses, majors must also meet each of the following hour and grade point average minimum standards:

**Minor Hours**
Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**
Satisfied by a minimum of 9 hours of junior/senior (300+) hours of KU resident credit in the minor.

**Minor Junior/Senior (300+) Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**
Satisfied by a minimum of a 2.0 GPA in all departmental courses in the Minor. GPA calculations include all departmental courses in the field of study including Fs and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Master of Arts in Applied Behavioral Science

**Why study applied behavioral science?**
Because a science can solve relevant problems — individual and societal, local and global.

**Admission to Graduate Studies**
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**

Applicants seeking admission to the master’s or doctoral program should apply online (http://www.graduate.ku.edu). Detailed instructions are provided at that website. Applications are submitted to the university’s Graduate Application Processing Center (http://www.graduate.ku.edu), which records and forwards them to the department. Applicants submit a completed application form and 1 official transcript of all undergraduate and any graduate course work. They may also submit copies of relevant scholarly or professional work, published or unpublished. Reports of Graduate Record Examination scores are encouraged but not required.

Applicants also must obtain letters of recommendation from 3 professionals familiar with their academic or professional records. These are also submitted online by the applicant’s reference.

Among the department’s application materials is a list of the faculty members and descriptions of their research, scholarly, and professional interests. Applicants select at least 3 faculty members whose interests match their interests. These faculty members constitute the applicant’s admissions committee; only they review the application and its supporting materials. An applicant is accepted when one of the faculty members consents to admit the student. This faculty member becomes the advisor of record.

For admission with full graduate standing, the department recommends that applicants complete 12 credit hours of undergraduate or graduate course work in behavior analysis, behavioral science, psychology, education, or related fields, and 6 hours in experimental methods, research design, or statistics.

Many faculty advisors offer research and teaching assistantships. Information about graduate scholarships outside of the department is available online (http://www.graduate.ku.edu/funding-opportunities). Applicants should inform their prospective advisors if they apply for a scholarship.

For admission in the fall semester, the application and supporting materials should be received by **December 15** of the previous year. Later applications receive consideration in the order of their receipt.
Students may be admitted for the spring semester through the application procedures above, but there is no filing deadline.

**M.A. in Applied Behavioral Science Degree Requirements**

The master's program trains highly competent scientist-practitioners in applied behavioral science. It requires course work on the basic principles and conceptual foundations of behavioral science and its research methods but emphasizes course work and training in applied and intervention research (e.g., assessment, analysis, intervention, evaluation). Its objective is to advance empirically based solutions to problems of individual and societal importance, both local and global.

The master's program follows a junior-colleague model. Students work closely with their advisors and join them in many aspects of professional development. This includes designing and conducting research, preparing manuscripts for presentation and publication, presenting and publishing those manuscripts, and engaging in all facets of the responsible conduct of research. Students typically work with one advisor, but may work with other faculty members or have co-advisors. If a student’s or advisor’s interests change, students are free to change advisors.

The M.A. degree requires 33 credit hours: 18 hours in 6 content areas, 3 hours in a practicum, and research and elective courses. Students also must conduct, write up, and orally defend an empirically based thesis. Course work is required in each of the following areas:

1. *Ethical, Legal, and Professional Issues* (3). Instruction in ethical principles in the conduct of research (e.g., informed consent, data analysis), legal issues in professional conduct (e.g., plagiarism, copyright), and professional skills (e.g., journal reviewing, professional communication). Ethical, Legal, and Professional Issues in Applied Behavioral Science (ABSC 841)

2. *Principles of Behavior I* (3). The science of behavior (e.g., observation, experimentation), laboratory methods, basic behavioral principles (e.g., reinforcement, stimulus control), and their applications (e.g., early childhood, disabilities). ABSC 796

3. *Research Methods I* (3). Strategies and tactics of scientific research (e.g., objectivity, empiricism), the logic of experimentation (e.g., validity, reliability), measurement and direct observation, and experimental designs for single-subject and time-series analyses. ABSC 735

4. *Conceptual Foundations I* (3). The history and philosophy of behavioral science, contemporary advances in basic research for application, the analysis of everyday behavior (e.g., cognition, emotion), and current issues in the discipline and the profession (e.g., relations between basic and applied research). ABSC 800

5. *Applied Behavior Analysis I* (3). The characteristics of applied behavioral research (assessment, analysis, intervention, evaluation), intervention research (clinical, community), applied procedures and programs, social validity, and ethical issues. ABSC 861

6. Experimental Analysis of Behavior (ABSC 799)

7. *Research or Intervention Practicum* (3). A supervised practicum course in
   a. basic or applied research or
   b. behavioral interventions.

This course work also satisfies 6 of the course requirements and the thesis requirement in the doctoral program.

Master’s students are required to present the results of their research at a department professional seminar meeting. The presentation is comparable to what would be presented at a professional conference. Students answer questions from their peers and the faculty in attendance.

**Doctor of Philosophy in Behavioral Psychology**

**Psychology Licensure**

The department’s doctoral program in behavioral psychology does not satisfy requirements for licensure in psychology. Students wishing to meet these requirements should, with their advisors, consult the Association of State and Provincial Psychology Boards (http://www.asppb.org) for state and province requirements. In developing a curriculum that fulfills these requirements, students should consider carefully whether the required courses, clinical experiences, and internships for state and province licensure that are offered by the department and university are open to them.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

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For admission in the fall semester, the application and supporting materials should be received by December 15 of the previous year. Later applications receive consideration in the order of their receipt. Students may be admitted for the spring semester through the application procedures above, but there is no filing deadline.

Ph.D. in Behavioral Psychology Degree Requirements

The doctoral program trains highly competent researchers in applied behavioral science (e.g., applied behavior analysis, applied psychology). Students are taught to discover and produce, translate and apply, and communicate knowledge in the behavioral sciences for understanding and solving problems of individual and societal importance, both local and global. The curriculum requires a sequence of instruction that integrates courses in the basic principles of behavior, experimental methods and research design, and conceptual foundations, but emphasizes course work and training in applied and intervention research (e.g., assessment, analysis, intervention, evaluation). Its objective is to discover and advance empirically based solutions to problems of individual and societal importance, both local and global.

The doctoral program follows a junior-colleague model. Students work closely with their advisors and join them in every aspect of professional development. This includes designing and conducting research, preparing manuscripts for presentation and publication, presenting and publishing those manuscripts, preparing editorial reviews of manuscripts, and engaging in all facets of the responsible conduct of research. Students typically work with 1 advisor, but may work with other faculty members or have co-advisors. If a student's or advisor's interests change, students are free to change advisors.

Course Requirements

The doctoral degree program requires students to take 1 course in 9 areas, along with 2 practicum courses. The areas and the practicum courses are:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ABSC 796</td>
<td>Laboratory in Behavioral Development and</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Modification: The Analysis of Behavior I</td>
<td></td>
</tr>
<tr>
<td>ABSC 735</td>
<td>Within Subjects Research Methodology and Direct</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Observation</td>
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<tr>
<td>ABSC 800</td>
<td>Conceptual Foundations of Applied Behavioral</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Science</td>
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</tr>
<tr>
<td>ABSC 841</td>
<td>Ethical, Legal, and Professional Issues in Applied</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Behavioral Science</td>
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</tr>
<tr>
<td>ABSC 861</td>
<td>Applied Behavior Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 799</td>
<td>Experimental Analysis of Behavior</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 831</td>
<td>Science of Human Behavior</td>
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</tr>
<tr>
<td>ABSC 862</td>
<td>Behavioral Community Psychology</td>
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</tr>
<tr>
<td>ABSC 931</td>
<td>Verbal Behavior</td>
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Conceptual Foundations II

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ABSC 701</td>
<td>Advanced Seminar in Applied Behavior Analysis:</td>
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Research Methods II

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<tbody>
<tr>
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<td>Community Health and Development</td>
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<tr>
<td>ABSC 805</td>
<td>Functional Behavioral Assessment</td>
</tr>
<tr>
<td>ABSC 940</td>
<td>Measurement and Experimental Design for Applied</td>
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Applied Behavior Analysis II

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ABSC 788</td>
<td>Designing Early Education Environments</td>
</tr>
<tr>
<td>ABSC 802</td>
<td>Behavior Analysis in Developmental Disabilities</td>
</tr>
<tr>
<td>ABSC 865</td>
<td>Applied Behavior Analysis in Complex Organizations</td>
</tr>
<tr>
<td>ABSC 890</td>
<td>Seminar in: ___________________________</td>
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<tr>
<td>ABSC 961</td>
<td>Advanced Seminar in Applied Behavior Analysis:</td>
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</table>

Electives

Any course that provides students the opportunity to develop competence in specialized areas of behavioral investigation. Course numbers may vary (e.g., ABSC 702, ABSC 893, or others)

Also required is Research or Intervention Practicum I and II (6). 2 supervised practicum courses in (a) basic or applied research or (b) behavioral interventions.

Master's Thesis

Students complete an empirically based master's thesis and pass an oral examination on it. With their advisor's approval, empirically based theses from other programs may meet this requirement.

Research Skill

The Office of Graduate Studies requires students to have training in responsible scholarship and research skills pertinent to the field of research. This will be met by:

- Satisfactory completion of ABSC 735 plus 1 graduate-level methods course (students in the joint PhD-MPH program must complete the “plus 1” course through the MPH program)
- Satisfactory completion of ABSC 841
- 1 of the following:
  - At least 1 first-author publication in peer-reviewed journals, or
  - At least 2 first-author scholarly presentations at regional, state, or national professional meetings, no more than 1 of which may be a poster (the work presented must have been entirely completed while at KU)
- Successful passing of the Written and Oral Comprehensive Exam

Teaching Requirement

Graduate students receive training in the teaching and supervision of undergraduates. The requirement may be met in 1 of 2 ways. In the first, students serve as a paid half-time teaching assistant for 1 semester or as a quarter-time assistant for 2 semesters, assuming proportionate responsibility for class organization, lecturing, grading, and office hours.
under a faculty member’s supervision. In the second, students take LA&S 792 or ABSC 941, attend 3 brown bag lectures at the Center for Teaching Excellence, and present a guest lecture to the department. In both cases, students must also write a statement of teaching philosophy and obtain numeric evaluations of their teaching in their guest lectures.

**Pro-seminar I Requirement**

Graduate students are expected to attend pro-seminar sessions when they are scheduled throughout the Fall and Spring semesters. These are usually scheduled for Friday afternoons at 3:30. Pro-seminars are typically presentations given by graduate students (see next paragraph), faculty members, and visiting scholars.

As part of your master’s degree requirements, you are required to present the results of your research (basic, applied, or conceptual) at a weekly pro-seminar meeting. The presentation must be comparable to that which would be given at a professional conference (not a panel discussion). You should be ready to field questions from your peers and the faculty in attendance.

**Professional Seminar II Requirement**

Doctoral students are required to present the results of their research at a department professional seminar meeting. The presentation is comparable to what would be presented at a professional conference. Students answer questions from their peers and the faculty in attendance.

**Editorial Critiques**

Students write 3 editorial reviews of published or unpublished journal articles, all of them empirical. The articles cover a range of topics and experimental designs. The first 2 are graded pass-fail by the student’s advisor; the third must be passed by 2 other faculty members.

**Comprehensive Examination**

The examination has 2 components:

1. **Written Examination.** In preparation for the oral comprehensive examination, students write a research proposal that includes a critical and comprehensive review of the research literature relevant to the proposed research. The topic is chosen by students with the guidance of their advisors. Students may complete this requirement with a document formatted according to the 2010 APA Publication Manual or a federal grant proposal.

2. **Oral Examination.** In preparation for the oral examination, students provide their comprehensive examination committee members with a copy of their research review and proposal at least 2 weeks before the date of the defense. During the examination, committee members ask students questions about the review and proposal, as well as on topics covered in the required doctoral curriculum. The defense is successful if a majority of the committee members vote to pass it.

**Dissertation**

In consultation with their advisors, students conduct an empirically based dissertation, typically based on the comprehensive examination proposal, and pass an oral examination on it. The defense is successful if a majority of the committee members vote to pass it. Any interested member of the College’s Graduate Faculty may attend.

**Joint Degree: Ph.D. in Behavioral Psychology and Master of Public Health**

The department offers a joint Ph.D./M.P.H. degree in collaboration with the Master of Public Health (p. 2162) program in the Department of Preventive Medicine and Public Health at KU Medical Center. The degree incorporates efficiencies in the elective and research requirements of both departments. This is the first degree in the nation to combine an M.P.H. with the strengths of advanced study in applied behavioral science. Faculty and student research teams address issues in community health and development, child and youth health and development, disabilities and independent living, and healthy aging. Separate admission is required to both the Ph.D. program of the Department of Applied Behavioral Science (http:www.absc.ku.edu) and M.P.H. program of the Department of Preventive Medicine and Public Health (http://ph.kumc.edu).

**Graduate Certificate in Community Health and Development**

**Why study applied behavioral science?**

Because a science can solve relevant problems — individual and societal, local and global.

**Certificate Program in Community Health and Development**

The Department of Applied Behavioral Science has established a 1-year certificate program in Community Health and Development. The program offers advanced training and university-based certification in building healthy communities. The focus is on training in core aspects of community work: community assessment, strategic planning, intervention, evaluation, and sustainability. Students admitted to the certificate program must be either regular KU graduate students or admitted as non-degree seeking students. For eligibility and admission criteria, see Certificates (p. 2368) in the Graduate Studies section of the online catalog or the subsection on Eligibility and Admission Criteria of the ABS Graduate Handbook (http://www.absc.ku.edu).

**Atmospheric Science Programs**

**Why study atmospheric science?**

The study of atmospheric processes enables us to understand human interactions with the environment.

**Undergraduate Programs**

Atmospheric science programs are offered through the Department of Geography. The program offers undergraduates a fundamental knowledge of the atmosphere and the weather it generates. Interactions between weather phenomena and human decisions and activities give the subject important applications. Several tracks lead to a Bachelor of Science degree.
Graduate Programs

The purpose of the program is to expand the student’s knowledge of fundamental atmospheric processes and how the atmosphere interacts with other parts of the environment. Students become familiar with quantitative research methods and how these various approaches can be used to address different problems in atmospheric science. Students gain an in-depth ability to learn specific skills and apply them toward thesis work. These skills consist of, for example, statistical analysis techniques, numerical modeling, or work with atmospheric instrumentation. The breadth of the program and the diverse research topics explored by the faculty are able to accommodate students with a variety of interests.

Atmospheric science programs are offered through the Department of Geography. Details of the regulations on graduate study in atmospheric science are included in the department's Policies for Graduate Study in Atmospheric Science, available on the department's website (http://www.geog.ku.edu).

Courses

ATMO 105. Introductory Meteorology. 5 Hours. NE GE3N / N.
A lecture and laboratory course introducing students to the atmosphere, weather and climate phenomena, and their controlling physical processes. Topics covered include: the structure of the atmosphere, energy and energy budgets, climate and climate change, air pollution, clouds and precipitation, pressure and wind systems, severe weather, and weather forecasting. LEC.

ATMO 106. Introductory Meteorology, Honors. 5 Hours. NE GE3N / N.
Honors version of ATMO 105. A lecture and laboratory course introducing students to the atmosphere, weather and climate phenomena, and their controlling physical processes. Topics covered include: the structure of the atmosphere, energy and energy budgets, climate and climate change, air pollution, clouds and precipitation, pressure and wind systems, severe weather, and weather forecasting. Prerequisite: Membership in University Honors Program or by permission of instructor. LEC.

ATMO 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Atmospheric Science. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

ATMO 220. Unusual Weather. 3 Hours. NE GE11/GE3N / N.
An introductory lecture course which surveys the general principles and techniques of atmospheric science and illustrates their application through discussions of natural but unusual weather phenomena such as blizzards, hurricanes, tornados, and chinooks, of the effects of air pollution on weather, and of intentional human alteration of the atmosphere. LEC.

ATMO 310. Aviation Meteorology. 3 Hours. N.
This course introduces students to meteorological events that affect aircraft operations. Aviation applications of meteorological observations including satellite and radar observations are discussed. Students learn about graphical displays of meteorological information. Numerical forecasting models and how their output is applied for aviation is also considered. Forecasting of weather events of particular interest to aviation such as ceiling, visibility, icing and turbulence is emphasized. Prerequisite: ATMO 105 or AE 245 or equivalent. LEC.

ATMO 321. Climate and Climate Change. 3 Hours. N.
This course is designed to introduce students to the nature of the Earth's physical climate. It introduces the basic scientific concepts underlying our understanding of our climate system. Particular emphasis is placed on energy and water balances and their roles in evaluating climate change. The course also evaluates the impact of climate on living organisms and the human environment. Finally, past climates are discussed and potential future climate change and its impact on humans is evaluated. (Same as GEOG 321.) Prerequisite: ATMO 105 or GEOG 104. LEC.

ATMO 499. Honors Course in Atmospheric Science. 2-3 Hours. AE61 / N.
Open to students with nine hours of upper level credit in Atmospheric Science, an average of at least 3.5 in all Atmospheric Science courses, and an overall average of at least 3.25. Includes the preparation of an honors paper and its defense before a committee of at least two regular faculty members. LEC.

ATMO 505. Weather Forecasting. 3 Hours. N.
A first course in synoptic meteorology designed to introduce students to weather analysis and forecasting through the application of hydrodynamic and thermodynamic principles to operational analysis and forecasting. Topics include analysis and interpretation of surface and upper-air observations and data from satellites, radars, and wind profilers; chart and sounding analysis; and three-dimensional, conceptual models of weather systems. The course includes student-led weather briefings and analysis exercises. Prerequisite: ATMO 105 and MATH 121 or MATH 115. LEC.

ATMO 506. Forecasting Models and Methods. 3 Hours. N.
Introduction to basic numerical weather prediction methods. Computer programs are used to apply numerical methods to weather data and to evaluate dynamical processes on numerical grids. Meteorological graphics packages are used to analyze current weather data and numerical model output. Current operational numerical models and output products are discussed. Prerequisite: ATMO 505, MATH 122, and EECS 138 or EECS 168. LEC.

ATMO 515. Energy and Water Balance. 3 Hours. N.
A study of the distribution and circulation of water in the air-earth system as influenced by atmospheric processes and surface conditions. The solar and terrestrial radiation budget and the water balance at the earth's surface will be applied to agricultural and urban energy and water problems. Prerequisite: ATMO 105 or EECS 138. LEC.

ATMO 521. Microclimatology. 3 Hours. N.
A study of climatic environment near the earth-atmosphere interface. Consideration of rural climates in relation to agriculture and urban climates as influenced by air pollution and other factors. Emphasis is on physical processes in the lower atmosphere, distribution of atmospheric variables, the surface energy budget and water balance. (Same as GEOG 521.) Prerequisite: ATMO 105 and MATH 121. LEC.

ATMO 525. Air Pollution Meteorology. 3 Hours. N.
A study of background levels and concentrated sources of atmospheric pollution together with considerations of pollution buildup in urban areas as related to particular weather conditions. Inadvertent weather modifications and effects of atmospheric pollution on particular weather events and general climate will be discussed. Prerequisite: ATMO 105, MATH 121, and EECS 138. LEC.

ATMO 531. Topics in Atmospheric Science: ______. 1-3 Hours. N.
An investigation of special topics in atmospheric science. May include topics in dynamic, physical or synoptic meteorology or climatology as well as related topics in earth and physical sciences. May be repeated if topic differs. LEC.

ATMO 605. Operational Forecasting. 2 Hours. N.
Students enhance their forecasting expertise by preparing forecasts for presentation to the public through a variety of media. Classroom activities include weekly map discussions and analysis of current weather situations. Forecasting topics such as forecast verification, aviation
forecast products, severe weather, flash floods and watches and warnings are examined. Credit for ATMO 605, ATMO 606, and ATMO 607 is limited to a total of eight hours, six of which may be counted toward a degree in atmospheric science. Prerequisite: ATMO 505. FLD.

ATMO 606. Forecasting Practicum - Private Industry. 2 Hours. AE61 / N.
Practical experience in private industry working with current and/or archived meteorological data. Possibilities include the preparation of forecasts for TV stations and meteorological consulting firms, and working with environmental consulting firms to assess air pollution hazards. May be repeated two times for credit. Credit for ATMO 605, ATMO 606, and ATMO 607 is limited to a total of eight hours, six of which may be counted toward a degree in atmospheric science. Prerequisite: ATMO 605. FLD.

ATMO 607. Forecasting Intern - National Weather Service. 2 Hours. AE52/AE61 / N.
Practical experience working in a National Weather Service forecasting center in analyzing weather data and preparing weather forecasts. May be repeated two times for credit. Credit for ATMO 605, ATMO 606, and ATMO 607 is limited to a total of eight hours, six of which may be counted toward a degree in atmospheric science. Prerequisite: ATMO 605. FLD.

ATMO 630. Synoptic Meteorology. 3 Hours. N.
Interpretation, development, and analysis of synoptic charts. Prerequisite: ATMO 505 and ATMO 640. LEC.

ATMO 634. Physical Climatology. 3 Hours. N.
Atmospheric processes are described and discussed in relation to the climate of the earth's surface. Such topics as the greenhouse effect, ozone depletion, and the effect of solar irradiance on climatic change will be included. The physical processes and relationships between various climatic features will be studied. Prerequisite: ATMO 505 and DSCI 301 or MATH 526. LEC.

ATMO 640. Dynamic Meteorology. 3 Hours. N.
This course introduces the student to the fundamentals of fluid dynamics necessary for understanding large scale atmospheric motions. Fundamental physical laws of conservation of mass, momentum and energy are examined and applied to atmospheric flows. Rotation in the atmosphere is examined quantitatively in terms of both circulation and vorticity. Prerequisite: MATH 223 and PHSX 214 or PHSX 212 and PHSX 236. LEC.

ATMO 642. Remote Sensing. 3 Hours.
This course is designed to prepare students to effectively use remotely sensed data in operational or research settings for further work in this field. Topics include radiation and radiation transfer applied to active and remote sensing; radiative properties of space, sun, earth and atmosphere; instrument design considerations and operational characteristics; inversion methods for temperature or concentration profiling; surface temperature measurement; cloud top height determination; rain rate and wind velocity measurement; severe weather detection; satellite photograph interpretation. Prerequisite: ATMO 680, MATH 581. LEC.

ATMO 650. Advanced Synoptic Meteorology. 3 Hours. N.
Analysis and interpretation of synoptic weather charts including treatment of numerical weather forecasting. Prerequisite: ATMO 630 and ATMO 660. LEC.

ATMO 660. Advanced Dynamic Meteorology. 3 Hours. N.
Advanced study of the atmosphere including treatment of the vorticity equation. Prerequisite: ATMO 640 and MATH 220 or MATH 320. LEC.

ATMO 680. Physical Meteorology. 3 Hours. N.
This course is designed to enhance the student’s understanding of atmospheric processes through the study of these processes at molecular through micro scales. Topics include the properties and behavior of gases; transfer processes; phase change; solar and earth radiation; cloud drop, ice crystal and precipitation formation; atmospheric electricity; stratospheric chemistry. Prerequisite: MATH 223; PHSX 214, or PHSX 212 and PHSX 236. LEC.

ATMO 690. Special Problems in Meteorology. 1-3 Hours. N.
Prerequisite: Nine hours in meteorology. IND.

ATMO 697. Seminar for Seniors. 1 Hour. AE61 / N.
Current research in atmospheric science will be discussed. May be repeated for a total of two credit hours. Prerequisite: Senior level in atmospheric science. LEC.

ATMO 699. Undergraduate Research. 2 Hours. AE61 / U.
Work on a research project under the supervision of a faculty member. Prerequisite: Nine credit hours in atmospheric science. May be taken up to three times for credit. IND.

ATMO 710. Atmospheric Dynamics. 3 Hours.
Presentation of contemporary approaches to the study of atmospheric dynamics. May include methodologies that provide insight into global, synoptic, mesoscale or microscale motions. Prerequisite: ATMO 660 or equivalent. LEC.

ATMO 720. Atmospheric Modeling. 3 Hours.
Illustration and application of contemporary approaches to mathematical and statistical description of atmospheric phenomena. Prerequisite: MATH 122, ATMO 640, ATMO 680, and a course in statistics, or consent of instructor. LEC.

ATMO 727. Atmospheric Storms. 3 Hours.
The physical processes and operating principles involved in the development and life cycles of extreme or unusual weather events including tornades, blizzards, lightning displays, and tropical storms. Prerequisite: EECS 138, MATH 121, and ATMO 320. LEC.

ATMO 731. Advanced Topics in Atmospheric Science: ______. 1-3 Hours.
Advanced investigation of special topics in atmospheric science. May include topics in dynamic, physical or synoptic meteorology or climatology as well as related topics in earth and physical sciences. May be repeated if topic differs. LEC.

ATMO 750. Numerical Weather Prediction. 3 Hours.
An exploration of the mathematical methods used to describe the current state of the atmosphere and to predict future states. Current operational numerical weather prediction techniques will be included. Prerequisite: ATMO 660. LEC.

ATMO 825. Seminar in Climatology. 2-3 Hours.
LEC.

ATMO 827. Seminar in Atmospheric Science. 1-3 Hours.
LEC.

ATMO 899. Master's Thesis. 1-10 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

GEOG 100. World Regional Geography. 3 Hours. SC AE42 / S.
An introductory survey of the environmental setting, historically formative periods, and present-day issues that distinguish the major culture areas of the world. LEC.

GEOG 101. World Regional Geography, Honors. 3 Hours. SC AE42 / S.
An introductory survey of the environmental setting, historically formative periods, and present-day issues that distinguish the major culture areas of the world. Open only to students in the College Honors Program, or by consent of instructor. LEC.
GEOG 102. Principles of Human Geography. 3 Hours. SC AE42/GE3S / S.
An examination of the relationships between humans and their environments. The course introduces students to basic concepts in human geography relating to economic activities, landscapes, languages, migrations, nations, regions, and religions. Serves as the basis for further course work in cultural, economic, political, population, and urban geography. LEC.

GEOG 103. Principles of Human Geography, Honors. 3 Hours. SC AE42/GE3S / S.
An introduction to how human societies organize space and modify the world about them. Resultant patterns on the landscape are interpreted through principles of space perception, cultural ecology, diffusion, land use, and location theory. Comparisons are made between urban and rural areas and between subsistence and commercial societies. Open to students who have been accepted into the College Honors Program. LEC.

GEOG 104. Principles of Physical Geography. 3 Hours. NE GE3N / N.
The components of the physical environment are discussed in order to familiarize the student with their distributions and dynamic nature. Major topics include the atmosphere, landforms, soils, and vegetation together with their interrelationships and their relevance to human activity. This course and GEOG 105 together satisfy the laboratory science requirement. Both courses are required for geography majors. LEC.

GEOG 105. Introductory Laboratory in Physical Geography. 2 Hours. U.
A laboratory course designed to complement GEOG 104 in satisfying the laboratory science requirement. It is required for geography majors. Laboratory exercises include a wide variety of analyses using data on the atmosphere, hydrosphere, biosphere, and lithosphere. Prerequisite: GEOG 104, which may be taken concurrently. LAB.

GEOG 107. Principles of Physical Geography, Honors. 3 Hours. NE GE3N / N.
Interactive processes among the systems of the earth are studied and discussed. Major topics include vegetation, soils, landforms, water, the atmosphere, and cycles of matter between these portions of the earth. The course includes lectures and critical discussions to address study problems in physical geography. Open only to students in the University Honors Program or by consent of the instructor. LEC.

GEOG 110. Geopolitics in the News. 3 Hours. S.
This course examines leading contemporary geopolitical events and processes through the lens of geography. It focuses on major political conflicts and struggles as they play out unevenly over space, contextualizing them within broader themes of neocolonialism, globalization, and the international system of nation-states. Emphasis is put on making issues commonly found in the media understandable to students by providing a relevant historical background and drawing comparisons among events. LEC.

GEOG 111. Maps and Mapping. 4 Hours. H.
How do people find their way from here to there or just around? Simple--they use maps. Maybe not maps on pieces of paper but maps in their heads: mental maps. Different people have different maps, even of the same place. Mapping is an ancient form of communication and maps have created ideas and opinions, promoted understanding and confusion. A non-technical approach to the transformation of space onto maps, to their content and structure, and their role and impact in human activity, past and present. Neither background in geography nor artistic skills are required. LEC.

GEOG 140. Global Environment I: The Discovery of Environmental Change. 5 Hours. GE3S / U.
This interdisciplinary course and laboratory sections survey the foundations of environmental understanding and the process of scientific discovery from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the history of environmental systems and life on earth, the discovery of biotic evolution, ecological change, and climate change. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as EVRN 140 and HIST 140.) LEC.

GEOG 142. Global Environment II: The Ecology of Human Civilization. 5 Hours. GE3S / U.
This interdisciplinary course and laboratory sections survey the history of human's relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the ecology of colonialism and industrial civilization, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to the humanity's engagement with the global environment using historical and present-day examples. (Same as EVRN 142 and HIST 142.) LEC.

GEOG 144. Global Environment I: The Discovery of Environmental Change, Honors. 5 Hours. U.
This interdisciplinary course surveys the foundations of environmental understanding and the process of scientific discovery from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the history of environmental systems and life on earth, the discovery of biotic evolution, ecological change, and climate change. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as EVRN 144 and HIST 144.) Open only to students admitted to the University Honors Program or by permission of instructor. LEC.

GEOG 145. Global Environment II: The Ecology of Human Civilization, Honors. 5 Hours. U.
This interdisciplinary course and its laboratory sections survey the history of humanity's relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the ecology of colonialism and industrial civilization, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to the humanity's engagement with the global environment using historical and present-day examples. (Same as EVRN 145 and HIST 145.) Open only to students admitted to the University Honors Program or by permission of instructor. LEC.

GEOG 148. Scientific Principles of Environmental Studies. 3 Hours. NB / N.
This course presents an overview of our understanding of environmental processes and issues. Topics include scientific principles, resource issues, pollution and global change, among others. This course gives
students a rigorous understanding of interactions between humans and their environment and provides students with a scientific basis for making informed environmental decisions. (Same as EVRN 148.) LEC.

GEOG 149. Scientific Principles of Environmental Studies, Honors. 3 Hours. NB / N.
This course presents an overview of our understanding of environmental processes and issues. Topics include scientific principles, resource issues, pollution and global change, among others. This course gives students a rigorous understanding of interactions between humans and their environment and provides students with a scientific basis for making informed environmental decisions. An honors section of GEOG 148 designed for superior students. (Same as EVRN 149.) Prerequisite: Membership in the University Honors Program or approval of instructor required. LEC.

GEOG 150. Environment, Culture and Society. 3 Hours. SC / S.
An introduction to geographic approaches to the study of the environment, emphasizing societal and cultural factors that influence human interaction with the biosphere, hydrosphere, lithosphere, and atmosphere. The course involves analysis of a broad range of contemporary environmental issues from the local to global scales. (Same as EVRN 150.) LEC.

GEOG 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Geography. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

GEOG 210. Computers, Maps, and Geographical Analysis. 3 Hours. N.
This course will introduce students to a number of different methods for the visualization, representation, and analysis of geographical phenomena. Both field and computer-based techniques will be employed to demonstrate the concept of experimental design and the collection, processing, and analysis of geographical data. Topics include: 1) the unique nature of geographic data; 2) mapping techniques and technologies; 3) geographical information systems; 4) remote sensing (aerial photography and satellite imagery); and 5) methods of geographical analysis (e.g., statistic and spatial modeling). LEC.

GEOG 304. Environmental Conservation. 3 Hours. NE GE3N / N.
A survey of current methods of describing and modeling the function, structure, and productivity of natural and anthropogenically modified earth resource systems, along with a discussion of contemporary views of what constitutes a natural landscape. Fundamental natural science principles about the interplay among lithospheric, atmospheric, hydrospheric, and biospheric components of earth systems are emphasized. Uses of natural resources, including fossil fuels, minerals, and water are described with attention to the earth's total energy budget. Human activities that affect preservation, conservation, and multiple uses of earth regions receive attention. Systems under stress through population and other contemporary forces serve as examples. (Same as EVRN 304.) LEC.

GEOG 311. Map Conception and Development. 4 Hours. N.
An examination of the map process with emphasis on two areas: 1) the mental map formed during interaction with the environment and 2) the map as a physical object which emerges from mapping activity. A local area will serve as the laboratory/environment for the mapping activity including production and use. LEC.

GEOG 316. Methods of Analyzing Geographical Data. 4 Hours. N.
Introduces the benefits and limitations of using quantitative methods to analyze geographical problems. Covers traditional descriptive (e.g., measures of central tendency) and inferential statistics (e.g., hypothesis testing) but also inherently geographical approaches such as shape and point pattern analysis, and spatial autocorrelation. Laboratory emphasizes using the computer to explore and analyze geographical problems. LEC.

GEOG 319. Topics in Techniques: ____. 1-3 Hours. N.
An investigation of special topics in Techniques. May include coursework in cartography, GIS, or remote sensing. May be repeated if topic differs. LEC.

GEOG 321. Climate and Climate Change. 3 Hours. N.
This course is designed to introduce students to the nature of the Earth's physical climate. It introduces the basic scientific concepts underlying our understanding of our climate system. Particular emphasis is placed on energy and water balances and their roles in evaluating climate change. The course also evaluates the impact of climate on living organisms and the human environment. Finally, past climates are discussed and potential future climate change and its impact on humans is evaluated. (Same as ATMO 321.) Prerequisite: ATMO 105 or GEOG 104. LEC.

GEOG 331. Regional Geomorphology of the United States. 3 Hours. N.
This course examines forces and processes affecting the earth's surface, and furthermore identifies and describes the physiographic regions that are the result of these processes. Special efforts are made to explore various photographic resources, satellite imagery, and internet sources or geomorphic data from a regional perspective since there is no wholly satisfactory text available for the course. A research paper is required. Prerequisite: An introductory earth science course or consent of instructor. LEC.

GEOG 332. Glaciers and Landscape. 3 Hours. N.
Elements from glaciology, geology, and climatology are merged to examine the interactions between glaciers and their natural environments, including the processes involved in glacier formation, the relationship between glaciers and climate, the mechanisms of glacier flow, and interpretation of the Earth's glacial record. Emphasis is placed on an interdisciplinary approach to study environmental change and paleoclimatic reconstruction. Prerequisite: GEOG 104 or GEOL 101, or consent of instructor. LEC.

GEOG 335. Introduction to Soil Geography. 4 Hours. N.
This course focuses on the properties and processes of soils as they occur in their environment. The student is introduced to the nature of soil as it functions as a body: genesis of soils; properties of soil solids, especially colloids; soil chemical composition, properties, and reactions; interaction between solid, liquid, and gaseous components in soils; plant-soil-water relationships; biological interactions with soil; classification of soils; and the distribution of soils on the landscape. Not open to students who have taken EVRN 535 or GEOG 535. (Same as EVRN 335.) Prerequisite: GEOG 104 or GEOL 101 or consent of instructor; BIOL 100 and CHEM 130 or CHEM 190 recommended. LEC.

GEOG 338. Introduction to River Systems. 3 Hours. N.
A course of fluvial geomorphology. Topics include the drainage basin, fluvial processes, river channel adjustment and forms, human disturbance and geomorphic response, and research methods in fluvial geomorphology. Field trip. Prerequisite: GEOG 104. LEC.

GEOG 339. Topics in Physical Geography: ____. 1-3 Hours. N.
An investigation of special topics in Physical Geography. May include coursework under headings of soils, vegetation, climate, or geomorphology. May be repeated if topic differs. LEC.

GEOG 350. Physical Geography of Africa. 3 Hours. N.
This course is a survey of the basic physical features of the African continent including structure and relief, rivers and lakes, soils and mineral resources. It includes characteristics and processes of African
climates, and the ecology of Africa's four major biomes: tropical rain forest, savanna, steppe, and desert. Climatic and environmental variations of the past, emergence of humankind, and development of pastoral and farming systems are discussed. Contemporary environmental concerns also include deforestation and desertification, the impacts of drought, methods for monitoring African environments, and Africa's prospects in a 21st century suffering from global warming. (Same as AAAS 350.) LEC.

GEOG 351. Africa's Human Geographies. 3 Hours. NW AE42/GE3H/GE3S / S/W.
An introduction to historical, cultural, social, political, and economic issues in Africa from a geographic perspective. The course begins with the historical geography of humanity in Africa, from ancient times through to the present. Other topics include cultural dynamics, demography, health, rural development, urbanization, gender issues, and political geography. Case studies from Eastern and Southern Africa will be used to illustrate major themes. (Same as AAAS 351.) LEC.

GEOG 352. Economic Geography. 3 Hours. S.
This course offers an overview of contemporary economic geography with an underlying theme of uneven regional development. Topics examined include: the historical context in which capitalism emerged; the major theoretical approaches used to understand the temporal and spatial dynamics of capitalist society; a series of case studies of different economic sectors; and the global economy, including its development with respect to colonialism, neocolonialism, international trade, third world development, and population growth. LEC.

GEOG 354. Globalization. 3 Hours. S.
This course is designed to provide a broad overview of some major facets of the historical, economic, political, cultural, and geographical dimensions of contemporary globalization, the process by which individual regions and nations have become progressively linked to, and structured by, the world-system of states and markets, and the cultural contradictions associated with this process. LEC.

GEOG 357. History and Philosophy of Geographic Information Science. 3 Hours. N.
An examination of the development of geographic information science (GISc) from its roots in traditional geography, cartography, and remote sensing to modern geographic information systems (GIS). GIS is explored as a new scientific instrument, a "macroscope" for representing and analyzing complex earth processes, both physical and cultural. The societal benefits and risks of GIS are demonstrated and discussed. LEC.

GEOG 358. Principles of Geographic Information Systems. 4 Hours. N.
An introduction to computer-based analysis of spatial data. Covers basic principles of collecting, storing, analyzing, and displaying spatial data. Emphasis is on problem-solving activities using common spatial analytical techniques (e.g., map overlay). The student will gain extensive hands-on experience with state-of-the-art GIS software. LEC.

GEOG 370. Introduction to Cultural Geography. 3 Hours. GE3S / H.
Charts some of the major lines of research in cultural geography, including critical theory, political economy, poststructuralist thought, feminism, and global consumption. Through fieldwork, diverse research methods are applied to issues such as community development, cultural patterns on the landscape and global impacts on local economies. Prerequisite: GEOG 100, GEOG 101, GEOG 102 or GEOG 103; or consent of instructor. LEC.

GEOG 371. Environmental Geopolitics. 3 Hours. S.
This course examines how human relationships with the biophysical world are politicized. Examines key contributions to debates surrounding environmental security, resource conflicts, and related issues, as well as geopolitical assumptions on which these debates build. (Same as EVRN 371.) LEC.

GEOG 372. Environmental Policy. 3 Hours. N.
An historical and analytical study of the formulation, implementation, and consequences of environmental policy in the United States. Attention is directed at relevant interest groups, issues specific to both rural and urban populations, relationships between national policies and international organizations concerned with environmental problems. Prerequisite: GEOG 148 or EVRN 148; and either EVRN 103 or HIST 103, EVRN 347 or HIST 347, or GEOG150 or EVRN 150. LEC.

GEOG 373. Political Geography. 3 Hours. S.
Political Geography is concerned with spatial dynamics of power. It concerns issues such as territory, boundaries, and identity as well as feminist, post-colonial, geopolitical, and environmental perspectives. This class will consider the development of this subfield, the role it has played in imperial expansion, and ways in which more recent critiques have shaped political geography to be a means of understanding different forms of power and its relationship to people and places. Prerequisite: GEOG 100 or GEOG 102 or equivalent or consent of instructor. LEC.

GEOG 375. Intermediate Human Geography. 3 Hours. S.
An examination of processes of cultural-economic interaction and patterns of human activity on a global scale. The topics cover the whole spectrum of human geography, with focus on urban-economic development, innovation and diffusion, and trade. Each week the third hour will be devoted to discussion of topics dealt with in lectures presented during the first two hours. Prerequisite: Introductory course in Geography or consent of the instructor. LEC.

GEOG 377. Urban Geography. 3 Hours. S.
This course explores the city from the multiple perspectives of its inhabitants. The cultural viewpoints of place, gender, age, and ethnicity are stressed. Traditional topics such as urban hierarchy, functions of the city, suburbanization, and ongoing changes in core and peripheral areas also receive attention. The distinctive landscapes of individual North American cities are emphasized, but examples also are drawn from throughout the world. LEC.

GEOG 379. Topics in Cultural Geography; ___. 1-3 Hours. S.
An investigation of special topics in Cultural Geography. May include coursework under headings of culture theory, material culture, language, foodways, or religion. May be repeated if topic differs. LEC.

GEOG 390. Geography of the United States and Canada. 3 Hours. S.
A study of the different physical, economic, and cultural settings in the United States and Canada which form the basis for the various forms of livelihood. Emphasis on the United States. (Same as AMS 390.) Prerequisite: An introductory geography course or background in the United States or Canadian history, social science, or culture or consent of instructor. LEC.

GEOG 395. Environmental Issues of: ___. 3 Hours. S.
This regional geography course examines contemporary environmental issues of a particular region of the world based on the expertise of the professor. Course emphasis is on the interaction of natural, socio-economic, and cultural factors of development that give rise to environmental problems. Students learn how local, national, and international government and non-governmental stakeholders address environmental problems. Course may be repeated with different professors. LEC.

GEOG 396. East Asia. 3 Hours. NW AE42/GE3H/GE3S / S/W.
This course is an introduction to the contemporary politics, economy, and culture of Korea, China, and Japan in the context of globalization. In addition to the discussion of individual countries, the course examines the
cross-cutting themes such as international relations, cultural exchange, and economic development in the region of East Asia. LEC.

GEOG 397. Geography of Kansas and the Plains. 3 Hours. S.
A study of the different physical, economic, and cultural settings in Kansas and the Plains that form the basis for various kinds of livelihood. LEC.

GEOG 399. Topics in Regional Studies: _____ 1-3 Hours. S.
An investigation of special topics in Regional Studies. May include coursework related to a specific country or region. May be repeated if topic differs. LEC.

GEOG 410. Human Biogeography, Honors. 3 Hours. N.
Principles of evolution and earth change are used to examine distributions of human populations, wealth, and resources. Readings from the current literature will be included. Lecture and discussion. (Same as BIOL 410.) Prerequisite: BIOL 152 or 153 or GEOG 107 and membership in the University Honors Program or consent of instructor. LEC.

GEOG 418. Workshop in Production Cartography. 1-3 Hours. AE61 / N.
Theory and practice of map production and other related graphics using the latest graphic and GIS software. Projects vary but include the processes of design and production, editing and quality control, and a final printed or operational product. Involves a weekly consultation session and laboratory time in KU Cartographic GIS Services. Prerequisite: Completion of GEOG 311 and consent of instructor. IND.

GEOG 433. Biogeography Field and Laboratory Techniques. 3 Hours. N.
This course provides undergraduate students with practical experience in field data collection techniques and laboratory data analysis methods. During the first half of the semester, students work in the field using a variety of methods to measure such vegetation characteristics as: cover, density, biomass, leaf area, and canopy architecture. Students gain experience in the use of field instruments including a spectroradiometer, and techniques for quantifying biophysical attributes of vegetation. During the later part of the course, students learn to summarize their field data and examine relationships between the vegetation attributes and measurements made using remote sensing instruments. Recommended: GEOG 316 or an introductory statistics equivalent. (Same as EVRN 433.) FLD.

GEOG 458. Geographical Information Systems: _____ 1-6 Hours. N.
An introduction to the organization and components of geographic information systems and their software. Fundamental concepts and their implementation with applications to physical and human systems. LEC.

GEOG 490. Geographic Internship 1-6 Hours. AE61 / N.
Supervised practical experience. The student submits a proposal describing the internship prior to enrollment. Upon acceptance, regularly scheduled meetings with the advisor provide assistance, guidance and evaluation of progress in the professional experience. A written summary of the experience or outcomes of the research project are prepared independently by the student, a representative of the host agency, and the advisor. Total credit not to exceed six hours. Prerequisite: Fifteen hours of geography and permission of instructor. FLD.

GEOG 498. Special Topics in Geography: _____ 1-5 Hours. U.
Prerequisite: Fifteen hours of geography. IND.

GEOG 499. Honors Course in Geography. 2-3 Hours. AE61 / U.
Open to students with nine hours of upper level credit in geography, an average of at least 3.5 in all geography courses, and an overall average of at least 3.25. Includes the preparation of an honors paper and its defense before a committee of at least two regular faculty members. IND.

GEOG 500. Senior Capstone in Geography. 3 Hours. AE61 / N.
The capstone project provides students with a broad-based, interdisciplinary educational experience and allows them to integrate and synthesize the knowledge they have gained in their studies. The course is designed to achieve several objectives: provide an overview of geography as a unified, coherent discipline with multiple perspectives, emphasize writing and analytical skills, introduce students to a major research project that integrates elements of physical and human geography, and cultivate knowledge of future professional development. Graduate students may take this course by permission only. Prerequisite: Nine hours in Geography and status as a senior major in the department; or permission of instructor. LEC.

GEOG 510. Human Factors 4 Hours. N.
An introduction to the concepts and theories underlying the study of human-technological systems. Human-machine interfaces and system properties and the environment are considered. Lecture-discussion sessions are supplemented by computer-supported laboratory and research activities. LEC.

GEOG 511. Intermediate Cartography: _____ 1-6 Hours. N.
An investigation of special topics in cartography. Can be repeated for different topics. Prerequisite: A course in cartography and consent of instructor. LEC.

GEOG 513. Cartographic Design. 3 Hours. S.
A study of graphic elements and their role in the physical and perceptual structure of the map image. Concepts and principles of design are stressed with particular emphasis on the figure-ground relationships, color and lettering. Prerequisite: GEOG 311. LEC.

GEOG 514. Visualizing Spatial Data. 4 Hours. N.
Students use Visual Basic or other currently prominent programming language to visualize spatial data. Early projects cover basic principles such as color manipulation and spatial transformations. Later projects involve developing more sophisticated software for data presentation, data exploration, and map animation. Prerequisite: Some experience with Visual Basic or other programming language. LAB.

GEOG 516. Applied Multivariate Analysis in Geography. 3 Hours. N.
An introduction to the application of multivariate statistical analysis in geography. Techniques covered include univariate and multivariate analysis of variance, multiple regression, logistic regression, principle components analysis, and spatial regression. Practical applications of the techniques in a geographical research context are emphasized. Students will learn how to use statistical packages such as SPSS. Prerequisite: GEOG 316 or equivalent. LEC.

GEOG 517. Data Handling and Map Symbolization. 3 Hours. N.
An analysis of methods for manipulating and symbolizing spatial data. Techniques studied include dot, choropleth, proportional symbols, and isarithmic (contour) mapping. Topics covered include data classification, the use of color, and automated methods of interpolation (triangulation, inverse distance, and kriging). Emphasis is on developing maps that can be presented to the general public, although some consideration is given to visualization software that can be utilized by individuals to explore spatial data. Prerequisite: GEOG 111 or GEOG 210 or GEOG 311. LEC.

GEOG 519. History of Cartography. 3 Hours. H.
A history of mapmaking worldwide from its origins to the present day. Emphasis on maps as historical records of evolving civilizations and cultural landscapes and methods of studying early maps. (Same as HIST 546.) LEC.

GEOG 521. Microclimatology. 3 Hours. N.
A study of climatic environments near the earth-atmosphere interface. Consideration of rural climates in relation to agriculture and urban
climates as influenced by air pollution and other factors. Emphasis is on physical processes in the lower atmosphere, distribution of atmospheric variables, the surface energy budget, and water balance. (Same as ATMO 521.) Prerequisite: ATMO 105 and MATH 121. LEC.

GEOG 526. Remote Sensing of Environment I. 4 Hours. N.
Introduction to study of the environment through air photos and satellite imagery, including principles of remote sensing, interactions of electromagnetic energy with the atmosphere and earth's surface, aerial photography, satellite systems, and sensors (electro-optical, thermal, and radar). Emphasis in the latter part of the course is on such applications as global monitoring, land cover mapping, forestry, agriculture, and oceanography. Laboratory emphasizes visual interpretation of aerial photography and satellite imagery and an introduction to digital image processing in the department's NASA Earth Science Remote Sensing Laboratory. (Same as EVRN 526.) Prerequisite: MATH 101 or equivalent. GEOG 358 recommended. LEC.

GEOG 531. Topics in Physical Geography: ______. 1-3 Hours. N.
An investigation of special topics in physical geography. May include specific course work under the headings of geomorphology, climatology, soils, vegetation, quaternary, paleoenvironments, hydrology, etc. May be repeated, if topic differs. LEC.

GEOG 532. Geomorphology. 3 Hours. N.
Application of the concepts and methods of the geosciences to interpretation of the archaological record. The course will focus primarily on the field aspects of geomorphology (e.g., stratigraphy, site formational processes, and landscape reconstruction), and to a lesser extent on the array of laboratory approaches available. (Same as ANTH 517.) Prerequisite: GEOG 104 or GEOG 101 or consent of the instructor; BIO 104 or CHEM 130 or 190 recommended. LEC.

GEOG 535. Soil Geography. 4 Hours. N.
A broad study of the principles and properties of soils and their distribution on the landscape. Topics covered include: pedology, clay mineralogy, soil physics, soil chemistry, management of soils, soil biology, taxonomy, and soil geomorphology. Laboratory section and a field project are required. Not open to students who have taken GEOG 335 or EVRN 335. (Same as EVRN 535.) Prerequisite: GEOG 104 or GEOG 101 or consent of the instructor; BIOL 104 and CHEM 130 or 190 recommended. LEC.

GEOG 537. Elements of Plant Geography. 3 Hours. N.
An introduction to spatial and temporal variation in natural plant populations and communities. Included is an introduction to methods of analysis, and an overview of structure and process in the earth's major biomes. Prerequisite: GEOG 331; or an introductory biology/botany course and GEOG 104; or consent of instructor. LEC.

GEOG 538. Soil Chemistry. 3 Hours. N.
This course examines the chemical properties and processes of soils and methods of evaluation. Topics include soil and solution speciation, mineral solubility, soil colloidal behavior, ion exchange, surface complexation, soil salinity and sodicity, soil acidity, oxidation-reduction reactions, and kinetics of soil chemical processes. (Same as EVRN 538.) Prerequisite: GEOG 335 or GEOG 535 or EVRN 335 or EVRN 535, CHEM 135 or CHEM 195, MATH 121, PHSX 114, or consent of the instructor. LEC.

GEOG 541. Geomorphology. 4 Hours. N.
A critical study of land forms in relation to tectonics, climatic environment, and geologic processes. The use of geomorphic methods in the interpretation of Cenozoic history is emphasized. Laboratory exercises in analysis of field observations, maps, and photographs. Required field trip and fee. (Same as GEOL 541.) Prerequisite: GEOL 101 and GEOL 103, GEOG 104 and GEOG 105, or GEOL 103 and GEOL 304. LEC.

GEOG 550. Environmental Issues in Africa. 3 Hours. S.
Acquaints students with the complexities of debates on environmental problems in Sub-Saharan Africa. Topics addressed may include deforestation, desert expansion, wildlife conservation, soil erosion, climate change, coral reef destruction, water resources development, mangrove preservation, the environmental effects of war, industrialization, and urbanization. Class presentations and projects synthesize the perspectives of both human and physical geography. (Same as AAAS 551.) Prerequisite: GEOG 104 or permission of instructor. LEC.

GEOG 552. Topics in Urban/Economic Geography: ______. 1-3 Hours. S.
An investigation of special topics in urban/economic geography. May include specific course work under the headings of energy, economic development, international trade, environmental perception, housing, transportation, and migration. May be repeated. LEC.

GEOG 553. Geography of African Development. 3 Hours. NW AE42/GE3H/GE3S / S.
Acquaints students with the values of social parameters of African agricultural and pastoral practice. Topics include customary land rights, African perspectives on the natural world, gender issues in African agriculture, and the urbanization of African cultures. The course also contrasts African views with those of Western development practitioners and donor agencies. Case studies from different countries are used to highlight the continent's regional differences. (Same as AAAS 553.) LEC.

GEOG 556. Geography of the Energy Crisis. 3 Hours. S.
A discussion and analysis of the basic facts and causes of energy problems on a national and world scale. Examines current production, consumption, efficiency, reserves, conservation, and other energy policy options, including adjustments that will affect consumer use, national politics, and strategic issues. Prerequisite: GEOG 102 or GEOG 375. LEC.

GEOG 557. Cities and Development. 3 Hours. S.
An intermediate level course in urban geography, with an emphasis on cities in the developing world. Example cities in Latin America and the Caribbean, Sub-Saharan Africa, the Middle East, South Asia, and/or Southeast Asia may be examined. The main focus is on the intersection between urbanization and economic development, but social, political, and cultural aspects of development in cities are considered. Other topics include the geographic impacts of European colonialism, urbanization and industrialization, rural-to-urban migration, urban structure and spatial dynamics, urban planning, and environmental sustainability. (Same as AAAS 557.) LEC.

GEOG 558. Intermediate Geographical Information Systems. 4 Hours. N.
An intermediate level course in geographic information science designed for advanced undergraduate and graduate level students who already have an introductory understanding of GIS. Emphasis will be placed on the application of spatial analytical techniques to geographical problem-solving. Topics include spatial data structures, interpolation techniques, terrain analysis, cost surfaces, and database management technique. Students will apply knowledge gained in lecture and reading to natural resource, urban, and scientific applications using state-of-the-art GIS software. Prerequisite: GEOG 358 or consent of instructor. LEC.

GEOG 560. GIS Application Programming. 3 Hours. N.
This course teaches programming within Geographic Information Systems. Students learn how to customize GIS applications to automate data processing and spatial analysis through programming languages. GIS programming concepts and methods are introduced from the aspects of spatial data management and analysis covering both the
vector and raster data models. Prerequisite: GEOG 558 and a course in programming languages. LEC.

GEOG 570. Geography of American Indians. 3 Hours. NW AE42/GE3H/GE3S / S.
A survey of the culture and history of selected indigenous peoples of the Americas. Emphasis is placed on the environmental setting, the settlement and subsistence patterns, and the impact of European colonization. Discussion includes present-day ethnic and resource issues. LEC.

GEOG 571. Topics in Cultural Geography: _____. 1-3 Hours. S.
An investigation of special topics in cultural geography. May include specific course work under the headings of cultural theory and methodology, material culture, foodways, religion, and similar topics. May be repeated, if topic differs. LEC.

GEOG 574. Exploring Oceania. 3 Hours. S.
Acquaints students with the culture and history of Oceania including its settlement and the impacts of European and American colonialism on Australasia, Melanesia, Micronesia and Polynesia. Emphasis is placed on applying broad geographical concepts to this vast Oceanic region through the lenses of development, media and migration studies. Prerequisite: GEOG 102 or GEOG 103; or consent of instructor. LEC.

GEOG 576. Cultural Geography of the United States. 3 Hours. S.
Distributions of major culture elements including folk architecture, religion, dialect, foodways, and political behavior are systematically studied from a predominately historical perspective. These discussions are followed by a survey of the major culture regions in America. Although not absolutely necessary, familiarity with concepts treated in any of the following courses would be helpful: AMS 100, AMS 110, ANTH 108, ANTH 308, GEOG 102, or GEOG 390. (Same as AMS 576.) LEC.

GEOG 579. Geography of American Foodways. 3 Hours.
An interdisciplinary approach to food that explores the diversity of eating habits across the United States and the role of food as in indicator of cultural identity and change. Current regional and ethnic food consumption patterns are stressed. Topics include multiculturalism and regional identity, the symbiotic relationship between restaurant food and home cooking, the recent interest in farmers' markets and organic foods, and the importance of the food industry and the popular press in setting trends. (Same as AMS 579.) LEC.

GEOG 590. Understanding Central Asia. 3 Hours. NW / S/W.
An intensive, multidisciplinary survey of Central Asia, focusing on the former Soviet republics-Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan-with additional coverage of neighboring regions (the Caucasus and the Caspian basin, Afghanistan, and western China). The course addresses the history of the region (from the Silk Road to Soviet rule), geography, religion, and the building of post-Soviet states and societies. (Same as REES 510.) LEC.

GEOG 591. Geography of Latin America. 3 Hours. SC AE42/GE3S / S/W.
A study of the different physical, economic, and cultural settings in Latin America which form the basis for the various forms of livelihood. LEC.

GEOG 592. Middle American Geography. 3 Hours. S.
This regional study of the natural environments and cultural-historical backgrounds of Mexico, Central America, and the Caribbean details the physical and historical processes that have shaped the cultural landscape. LEC.

GEOG 593. Central American Peoples and Lands. 3 Hours. S.
This is a study of the natural and cultural history of the region's lands and peoples that focuses on the cultural geography of the surviving indigenous populations, including their culture area, culture history, cultural landscape, and cultural ecology. LEC.

GEOG 594. Geography of the Former Soviet Union. 3 Hours. S/W.
An analysis of the spatial organization of the successor states to the USSR. A study of the diverse human and natural resources, demographic, cultural, and economic conditions. Prerequisite: An introductory geography course or background in Russian-East European history, social science, or culture, or consent of instructor. LEC.

GEOG 595. Geography of Eastern Europe. 3 Hours. S/W.
A study of nations and regions of Eastern Europe, excluding Russia. Prerequisite: An introductory geography course or background in Slavic-East European history, social science, or culture or consent of instructor. LEC.

GEOG 597. Geography of Brazil. 3 Hours. S.
Study of geographic factors, physical and cultural, that are basic to understanding the historical development of Portuguese South America and the contemporary and cultural geography of Brazil. Course also includes a survey of Brazil's South American neighbors. LEC.

GEOG 601. Indigenous Peoples of the World. 3 Hours. S.
A survey of the varied responses of global Indigenous peoples as a result of the imposition of external economic and political systems. An overview of diverse, thematic issues such as land rights, economic development, resources and cultural patrimony, languages, knowledge systems, and women's rights from the perspectives of Indigenous societies around the world. Detailed studies of Indigenous peoples seeking recognition and protection under international law are used. (Same as ISP 601.) Prerequisite: Permission of instructor. LEC.

GEOG 635. Soil Physics. 3 Hours. N.
Provides theoretical and practical foundations for understanding physical properties and processes of variably-saturated porous media. Focus is on the transport, retention, and transformation of water, heat, gas, and solutes through the soil. We examine modern vadose zone measurement methods, analytical tools, and numerical models for data collection and interpretation. (Same as EVRN 635.) Prerequisite: GEOG 335 or EVRN 335, or GEOG 535 or EVRN 535, and MATH 121, PHSX 114; or consent of instructor. LEC.

GEOG 658. Topics in Geographic Information Science: _____. 1-6 Hours.
An investigation of special topics in geographic information science. May include specific coursework under the headings of methodology, basic research, thematic or regional applications, geographic information systems (GIS), Global Positioning System (GPS), and geostatistics. May be repeated if topic differs. LEC.

GEOG 670. Cultural Ecology. 3 Hours. S.
Investigation of the interrelations between socio-cultural systems and the natural environment, including a survey of major theories and descriptive studies. (Same as ANTH 695.) Prerequisite: An introductory course in geography or anthropology. LEC.

GEOG 710. Information Design. 3 Hours.
Concepts and principles for the organization of verbal, numerical, and graphic/spatial data and their application to the production of information displays and instruments. Examination of the evolution of the information design process from the traditional (communication system) perspective to interactive user-centered design approaches. The nature of human information processing in handling information for both visualization and analysis, with particular emphasis on decision-making and usability. Prerequisite: GEOG 510, INDD 510, PSYC 318, PSYC 685, or equivalent, or consent of instructor. LEC.
GEOG 711. Advanced Cartography: _____. 3 Hours.
An investigation of special topics in cartography. Can be repeated for different topics. Prerequisite: Consent of instructor. LEC.

GEOG 713. Practicum in Cartography. 1-6 Hours.
Experience in the organization and presentation of cartographic material in lecture, discussion, and laboratory formats. May be repeated to a total of six credits. Prerequisite: Consent of instructor. FLD.

GEOG 714. Field Experience. 3 Hours. AE61.
Working in a new environment presents problems unlike those encountered in a classroom situation. Data collection techniques and exercises discussed in this off-campus course are intended to provide experience in dealing with an unfamiliar situation. Course location is dictated by the interests and composition of the student group; offered in the first three weeks of August. Geography majors are encouraged to attend. This course is required for graduate students. Fee required. Prerequisite: Junior-senior standing and fifteen hours of geography or consent of instructor. FLD.

GEOG 716. Advanced Geostatistics. 3 Hours.
An introduction to the practical application of advanced geospatial statistical techniques. Potential topics include: spatial regression, interpolation, clustering, and advanced nonparametric statistics. Knowledge of a statistical package and GIS is assumed. Prerequisite: GEOG 516 or equivalent and GEOG 358 or equivalent. LEC.

GEOG 719. Development of Geographic Thought. 2-3 Hours.
Critical analysis of the growth of geographic thought from antiquity to the present: emphasis on structure of modern geography. Prerequisite: Twenty hours of geography or consent of instructor. LEC.

GEOG 726. Remote Sensing of Environment II. 4 Hours.
An overview of techniques for computer analysis of digital data from earth orbiting satellites for environmental applications. Topics covered include: data formats, image enhancements and analysis, classification, thematic mapping, and environmental change detection. The laboratory exercises provide hands-on experience in computer digital image processing in the department's NASA Earth Science Remote Sensing Laboratory. Prerequisite: Introductory statistics and GEOG 526 or equivalent. LEC.

GEOG 731. Topics in Physical Geography: _____. 1-3 Hours.
An investigation of special topics in physical geography. May include specific course work under the headings of geomorphology, climatology, soils, vegetation, quaternary, paleoenvironments, hydrology, etc. May be repeated. RSH.

GEOG 733. Advanced Biogeography Field and Laboratory Techniques. 3 Hours.
This course provides graduate students with practical experience in field data collection techniques and laboratory data analysis methods. During the first half of the semester, students will work in the field using a variety of methods to measure such vegetation characteristics as: cover, density, biomass, leaf area, and canopy architecture. Students will gain experience in the use of field instruments including a spectroradiometer, and techniques for quantifying vegetation biophysical attributes. The laboratory analyses component will include: data summary, data entry, correlation, regression, MANOVA, cluster analysis, and data display, and reporting. Recommended: GEOG 516 or multivariate statistics equivalent. LEC.

GEOG 735. Soil Geomorphology. 3 Hours.
Examines the interaction of pedogenic and geomorphic processes during the Quaternary with an emphasis on strategies and methodologies employed in soil-geomorphic studies. Group research projects incorporating field data collection and analyses are required. Prerequisite: GEOG 335 or GEOG 535 or consent of the instructor. LEC.

GEOG 741. Advanced Geomorphology. 1-3 Hours.
Detailed discussions of processes and landforms characteristic of specific environments. Considered during separate semesters will be general methodology, and fluvial, arid regions, glacial, and shoreline geomorphology. Course may be taken more than once. (Same as GEOL 741.) Prerequisite: GEOG 541. LEC.

GEOG 749. Topics in Stable Isotopes in the Natural Sciences:. 2-3 Hours.
Isotopic compositions of substances provide powerful insights into many topics in the natural sciences. Applications of isotopic analyses of carbon, hydrogen, oxygen, and nitrogen to selected research topics such as plant resource use, food web analysis, paleoecology, paleodiet reconstruction, hydrology, and soils genesis will be examined. Knowledge of isotope chemistry is not required. (Concepts necessary to understand pertinent articles will be taught during the first class meetings.) May be repeated. (Same as BIOL 749.) LEC.

GEOG 751. Analysis of Regional Development. 3 Hours.
An analytical approach to spatial organization of economic activities and aspects of growth and development. Location theory and the geography of trade and migration. A research paper is required. Prerequisite: GEOG 551, or a course in economics, or consent of instructor. LEC.

GEOG 752. Topics in Urban/Economic Geography: _____. 1-3 Hours.
An investigation of special topics in urban/economic geography. May include specific coursework under the headings of energy, economic development, international trade, environmental perception, housing, transportation, and migration. May be repeated. LEC.

GEOG 756. Energy Problems and the Economic-Physical Environment. 2-3 Hours.
This course investigates the economic, social, political, and environmental conditions of energy production, transport, and use: total energy consumption and mix, relations to the level and structure of the economy, substitutability of fuel and energy sources, resource endowment in an international setting. Prerequisite: GEOG 551 or a course in economics or consent of instructor. LEC.

GEOG 758. Geographic Information Science. 4 Hours.
This course integrates topics in geographical information science (GISc) with spatial analytical techniques to solve spatial problems. Focuses on the most current research in GISc and its relevance to the environmental sciences, natural resource management, and spatial decision-making. Students are expected to apply the concepts and techniques learned in this class to their own research projects. Prerequisite: GEOG 316 and GEOG 558, or consent of instructor. LEC.

GEOG 771. Topics in Cultural Geography: _____. 1-3 Hours.
An investigation of special topics in cultural geography. May include specific course methodology, material culture, foodways, religion, and similar topics. May be repeated. LEC.

GEOG 772. Problems in Political Geography. 3 Hours.
Case studies of regional and national power settings with particular emphasis upon the geographical analysis of political developments in unstable areas of the world. Prerequisite: GEOG 102 or GEOG 375. LEC.

GEOG 773. Humanistic Geography. 3 Hours.
A discussion and project-oriented course focused on ways of studying the character and meaning of places. Concepts examined include place image and image makers, landscapes as text, sense of place, vernacular regions, and alternate representations of space. Prerequisite: Graduate standing or fifteen hours of geography or consent of instructor. LEC.
GEOG 775. Proseminar in Population Geography. 3 Hours.
Evaluation of problem formulation data gathering, research methods, and substantive knowledge in the geography of human populations. Concurrent auditing of GEOG 575 plus an additional meeting each week is required. Prerequisite: GEOG 575 and GEOG 516, and SOC 514. LEC.

GEOG 790. North American Regions: _____ 3 Hours.
A detailed description and analysis of selected regions of North America. Prerequisite: An introductory geography course or background in United States or Canadian history, social science, or culture or consent of instructor. LEC.

GEOG 791. Latin American Regions: _____ 3 Hours.
A description and analysis of the principal sources of geographic information pertaining to portions or all of Latin America. Prerequisite: GEOG 591 or concurrent auditing of GEOG 591, or consent of instructor. LEC.

GEOG 794. Regions of the Former USSR. 3 Hours.
A description and analysis of geographic data pertaining to the successor states to the USSR. Prerequisite: Fifteen hours of Geography courses or background in Russian, East European or Middle East studies, or consent of instructor. LEC.

GEOG 795. European Regions: _____ 3 Hours.
Prerequisite: Fifteen hours of geography, background in specified area, or consent of instructor. LEC.

GEOG 796. Asian Regions: _____ 2-3 Hours.
Prerequisite: Fifteen hours in geography courses or background in Asia, or consent of instructor. LEC.

GEOG 801. Indigenous Peoples of the World. 3 Hours.
A survey of the varied responses of global Indigenous peoples as a result of the imposition of externally-dominated economic and political systems. An overview of diverse, thematic issues such as land rights, economic development, resources and cultural patrimony, languages, knowledge systems, and women's rights from the perspectives of Indigenous societies around the world. Detailed studies of Indigenous peoples seeking recognition and protection under international law will be used. The course is offered at the 600 and 800 levels, with additional assignments at the 800 level. (Same as ISP 801.) LEC.

GEOG 802. Urban Geographic Information Systems. 3 Hours.
An advanced survey of urban GIS/LIS focusing on: (1) history; (2) the wide range of applications from Automated Mapping/Facilities Management (AM/FM) to topologically related GIS; (3) generic analytical functions in both raster and vector modalities; and (4) software employed, hardware platforms, and institutional settings. A limited experience in the use of GIS is provided from exercises employing ARC/INFO software. Prerequisite: Some experience with DOS based computing. LEC.

GEOG 805. History of Geographic Thought. 2 Hours.
A course to familiarize students with the history and philosophy of geography as a science and humanity. The course summarizes, reviews, and explores the ongoing relevance of 2,500 years of theoretical and methodological advancements in human and physical geography. LEC.

GEOG 806. Basic Seminar. 2 Hours.
The second of two courses required of M.A. students designed to provide experience in the development of research proposals and exposure to methodologies in geography. This course deals with approaches to geographic problems, and involves individual examination of special topics which require preparation, presentation, and critical evaluation of research proposals. LEC.

GEOG 818. Problems in Production Cartography. 1-3 Hours.
Advanced instruction in the theory and practice of producing maps and other related graphics for classroom instruction and research projects. Emphasis will be on current photo-mechanical and automated techniques. Prerequisite: By appointment. Consent of instructor. LEC.

GEOG 835. Practicum in Soil Mapping and Soil Erosion. 3 Hours.
This course is designed to give graduate students field experience in soil mapping and in the evaluation of soils for loss through processes of erosion. Prerequisite: GEOG 535 or equivalent or consent of instructor.

GEOG 858. Environmental Geographic Information Systems. 4 Hours.
An introduction to the use of GIS for environmental inventory, monitoring, and modeling. This course integrates the principles of landscape ecology with the analytical tools of GIS, remote sensing, and spatial analysis. Students will be taught GIS methodologies used to address real world problems and the use of GIS spatial analysis techniques to characterize landscapes and monitor their change. Prerequisite: GEOG 316 and GEOG 558 or equivalents, multivariate analysis recommended. LEC.

GEOG 890. Geographic Internship. 1-6 Hours.
Supervised professional experience. The student submits to the program committee a proposal describing the internship prior to enrollment. Upon acceptance, regularly scheduled meetings with the advisor provide assistance, guidance and evaluation of progress in the professional experience. A written summary of the experience or outcomes of the research project are prepared independently by the student, a representative of the host agency, and the advisor. Total credit not to exceed six hours. Prerequisite: Twelve hours of graduate level geography courses and consent of program committee. FLR.

GEOG 898. Readings in Geography. 1-4 Hours.
LEC.

GEOG 899. Master's Thesis. 1-10 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

GEOG 911. Seminar in Cartography: _____ 1-4 Hours.
Study of selected topics in cartography. Can be repeated for different topics. Prerequisite: GEOG 513 or consent of instructor. LEC.

GEOG 912. Seminar in Quantitative Methods. 2-3 Hours.
LEC.

GEOG 926. Seminar in Remote Sensing. 2-4 Hours.
Study of selected topics in remote sensing theory and application. May include independent or group research and/or development work. Topic will be specified in advance. Prerequisite: GEOG 726 or consent of instructor. LEC.

GEOG 935. Seminar in Soil Geography. 2-3 Hours.
Subject matter varies but focuses on modern concepts and trends in soil geography. Sample topics include classification, paleopedology, and soil genesis. Field trip and fee may be required. Prerequisite: GEOG 735 or consent of instructor. LEC.

GEOG 937. Seminar in Vegetation Geography. 1-3 Hours.
(Same as BIOL 968.) LEC.

GEOG 939. Seminar in Fluvial Systems. 2-3 Hours.
Study of selected topics in theory and method of fluvial systems. Samples include hydraulic geometry, the nature of alluvial sediments, and basin case studies. Topic will be specified in advance. LEC.

GEOG 957. Seminar in Urban and Economic Geography. 2-3 Hours.
LEC.
GEOG 958. Seminar in Geographic Information Systems. 2-4 Hours.
Study of selected topics in analysis of digital geographic data. May include research and/or developmental work. Prerequisite: GEOG 758 or equivalent, or consent of instructor. LEC.

GEOG 970. Seminar in Cultural Geography: _____ 2-3 Hours.
Study of selected topics in the theory and method of cultural geography. Samples include religious patterns, folk architecture, and place-defining novels. Topic will be specified in advance. LEC.

GEOG 972. Seminar in Political Geography. 2-3 Hours.
Study of selected topics in the theory and method of political geography. Samples include insurgent states, electoral patterns, and political ecology. Topic will be specified in advance. Prerequisite: GEOG 772 or consent of instructor. LEC.

GEOG 975. Seminar in Population Geography. 2-3 Hours.
Study of selected geographic topics and problems dealing with the distribution of human populations. Prerequisite: GEOG 775 or consent of instructor. LEC.

GEOG 980. Seminar in Geography: _____ 1-3 Hours.
LEC.

GEOG 990. Seminar in Regional Geography: _____ 1-3 Hours.
(Selected areas to be specified.) LEC.

GEOG 998. Research in Geography. 1-5 Hours.
RSH.

GEOG 999. Doctoral Dissertation. 1-10 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

Bachelor of Science in Atmospheric Science

The Bachelor of Science in Atmospheric Science (B.S.) is designed to meet the recommendations of the American Meteorological Society for a bachelor’s degree in meteorology/atmospheric science. There are four options, each of which meet these recommendations.

1. General Option

This option is for students who want a broad background in atmospheric science. It is also the most suitable option for those who are aiming at a career in weather forecasting. It includes a third semester of synoptic meteorology as well as an air pollution course.

1. Air Pollution Option

Students prepare for a career emphasizing environmental aspects of meteorology. This option includes an additional semester of chemistry as well as environmental studies.

1. Hydrometeorology Option

Students prepare for a career involving the interface between meteorology and hydrology. These studies have important applications to flash floods, droughts and water supply. This option includes additional courses on fluid flow and hydrology from the School of Engineering.

1. News Media Option

This option is for students who wish to enter careers whose main function is to provide information to the general public. It requires additional courses from the School of Journalism.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Advising

Students who may decide to major in atmospheric science should confer early with a departmental representative about the selection of courses.

Requirements for the B.S. Degree in Atmospheric Science

4 specialized options are available for students who plan professional careers in meteorology or atmospheric science. The general meteorology option satisfies all the traditional professional meteorology requirements for employment with the National Weather Service, airlines, or other agencies. The air pollution meteorology option meets the need for trained specialists. The hydrometeorology option may lead to a career as a meteorologist in one of the many water-related activities in private and governmental agencies. The news media forecasting option can lead to a career forecasting the weather on television or radio. The B.S. degree with any of these specialties also prepares students to begin graduate programs in meteorology or atmospheric science.

Written Communication - Core Skill and Critical Inquiry

Composition (0)

Satisfied by one of the following: ¹

<table>
<thead>
<tr>
<th>ENGL 101</th>
<th>Composition</th>
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<tbody>
<tr>
<td>ACT English score of 27 or above or SAT English score of 600 or above</td>
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</tr>
<tr>
<td>AP English Literature &amp; Composition score of 3 or above</td>
<td></td>
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<tr>
<td>Equivalent transfer course</td>
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</tbody>
</table>

Critical Reading and Writing (0)

Satisfied by one of the following: ²

<table>
<thead>
<tr>
<th>ENGL 102</th>
<th>Critical Reading and Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 105</td>
<td>Freshman Honors English</td>
</tr>
</tbody>
</table>
AP English Literature & Composition score of 4 or above

Equivalent transfer course

Sophomore Reading and Writing II (0)
Satisfied by one of the following:

- ENGL 203 Topics in Reading and Writing: _____
- ENGL 205 Freshman-Sophomore Honors Proseminar: _____
- ENGL 209 Introduction to Fiction
- ENGL 210 Introduction to Poetry
- ENGL 211 Introduction to the Drama
- ENGL 362 Foundations of Technical Writing (recommended)

AP English Literature & Composition score of 5 or above

Equivalent

1 Requirement must be completed during initial term of admission at KU.

2 Requirement must be completed within the first academic year at KU.

Communication - Core Skills and Critical Inquiry. Satisfied by the following:

Select one of the following:

- COMS 130 Speaker-Audience Communication
- COMS 131 Speaker-Audience Communication, Honors
  or COMS 150 Personal Communication

Humanities - Understanding the Human Condition. Satisfied by completing 1 course with requirement code H. Approved courses may be searched for availability through the Kyou portal.

Social and Behavioral Sciences - Understanding Society and Behavior. Satisfied by completing one course with requirement code S. Approved courses may be searched for availability through the Kyou portal.

Atmospheric Science Prerequisite or Co-requisite Knowledge (32-50)
Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.

Computing and Programming. Satisfied by the following:

- EECS 138 Introduction to Computing: _____ (Fortran preferred; C++ and Matlab accepted)

Scientific Principles of Environmental Studies. Satisfied by the following:

- EVRN 148 Scientific Principles of Environmental Studies

Calculus I. Satisfied by one of the following:

- MATH 125 Calculus I
  or MATH 145 Calculus I, Honors

Equivalent

Calculus II. Satisfied by one of the following:

- MATH 126 Calculus II
  or MATH 146 Calculus II, Honors

Equivalent

General Physics I. Satisfied by one of the following:

- PHSX 211 General Physics I
  & PHSX 216 and General Physics I Laboratory

PHSX 114 College Physics I
& PHSX 201 and Transition to General Physics
& PHSX 216 and General Physics I Laboratory

PHSX 213 General Physics I Honors

General Physics II. Satisfied by one of the following:

- PHSX 212 General Physics II
  & PHSX 236 and General Physics II Laboratory

PHSX 115 College Physics II
& PHSX 202 and Calculus Supplement to College Physics II
& PHSX 236 and General Physics II Laboratory

PHSX 214 General Physics II Honors

Foundations of Chemistry I. Satisfied by the following:

- CHEM 130 General Chemistry I
  or CHEM 190 Foundations of Chemistry I, Honors

Vector Calculus. Satisfied by the following:

- MATH 223 Vector Calculus
  or MATH 243 Vector Calculus, Honors

Elementary Linear Algebra. Satisfied by the following:

- MATH 290 Elementary Linear Algebra
  or MATH 291 Elementary Linear Algebra, Honors

Applied Differential Equation. Satisfied by the following:

- MATH 320 Elementary Differential Equations
  or MATH 220 Applied Differential Equations

Statistics. Satisfied by the following:

- MATH 526 Applied Mathematical Statistics I
  or DSCI 202 Statistics

Numerical Methods. Satisfied by the following:

- MATH 581 Numerical Methods

Atmospheric Science Core Knowledge and Skills (30)
Majors must complete all of the following:

Introductory Meteorology. Satisfied by:

- ATMO 105 Introductory Meteorology

Climate and Climate Change. Satisfied by:

- ATMO/GEOG 321 Climate and Climate Change

Weather Forecasting. Satisfied by:

- ATMO 505 Weather Forecasting

Microclimatology. Satisfied by:

- ATMO/GEOG 521 Microclimatology

Synoptic Meteorology. Satisfied by:

- ATMO 630 Synoptic Meteorology

Dynamic Meteorology. Satisfied by:

- ATMO 640 Dynamic Meteorology

Remote Sensing. Satisfied by:

- ATMO 642 Remote Sensing

Advanced Dynamic Meteorology. Satisfied by:

- ATMO 660 Advanced Dynamic Meteorology

Physical Meteorology. Satisfied by:

- ATMO 680 Physical Meteorology

Seminar for Seniors. Satisfied by:

- ATMO 690 Seminar for Seniors
Bachelor of Science in Atmospheric Science

| Total Hours | 62-80 |

**Meteorology Option**

Students selecting this major must select one of the following options:

### General Meteorology Option

This option satisfies all the traditional professional meteorology requirements for employment with the National Weather Service, airlines, or other agencies.

- **Air Pollution Meteorology**
  - Satisfied by:
  - ATMO 525 Air Pollution Meteorology 3

- **Operational Forecasting**
  - Satisfied by:
  - ATMO 605 Operational Forecasting 2

- **Advanced Synoptic Meteorology**
  - Satisfied by:
  - ATMO 650 Advanced Synoptic Meteorology 3

### Air Pollution Meteorology Option

This option meets the need for trained specialists.

- **Air Pollution Meteorology**
  - Satisfied by:
  - ATMO 525 Air Pollution Meteorology 3

- **Foundations of Chemistry II**
  - Satisfied by:
  - CHEM 135 General Chemistry II 5

- **Introduction to Environmental Engineering and Science**
  - Satisfied by:
  - CE 477 Introduction to Environmental Engineering and Science 3

### Hydrometeorology Option

This option may lead to a career as a meteorologist in one of the many water-related activities in private and governmental agencies.

- **Air Pollution Meteorology**
  - Satisfied by:
  - ATMO 525 Air Pollution Meteorology 3

- **Statics and Dynamics**
  - Satisfied by:
  - CE 301 Statics and Dynamics 5

- **Fluid Mechanics**
  - Satisfied by:
  - CE 330 Fluid Mechanics 4

- **Hydrology**
  - Satisfied by:
  - CE 455 Hydrology 3

### News Media Forecasting Option

This option can lead to a career forecasting the weather on television or radio.

- **Operational Forecasting**
  - Satisfied by:
  - ATMO 605 Operational Forecasting 2

- **Advanced Synoptic Meteorology**
  - Satisfied by:
  - ATMO 650 Advanced Synoptic Meteorology 3

- **Infomania: Information Management**
  - Satisfied by:
  - JOUR 302 Infomania: Information Management 3

- **Writing for Media**
  - Satisfied by:
  - JOUR 304 Media Writing 3

- **Multimedia Reporting**
  - Satisfied by:
  - JOUR 415 Multimedia Reporting 3

### Concentration in Business

An undergraduate student may graduate from the School of Business with a concentration in atmospheric science.

**Atmospheric Science Prerequisite or Co-requisite Knowledge (17-21)**

Student selecting this minor must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.

- **Computing and Programming**
  - Satisfied by:
  - EECS 138 Introduction to Computing: _____ 3

- **Calculus I**
  - Satisfied by one of the following:
  - MATH 125 Calculus I 4
  - or MATH 145 Calculus I, Honors Equivalent

- **Calculus II**
  - Satisfied by one of the following:
  - MATH 126 Calculus II 4
  - or MATH 146 Calculus II, Honors Equivalent

- **General Physics I**
  - Satisfied by one of the following:
  - PHSX 211 General Physics I 1-5
  - & PHSX 216 and General Physics I Laboratory
  - PHSX 114 College Physics I & PHSX 201 and Transition to General Physics & PHSX 216 and General Physics I Laboratory
  - PHSX 213 General Physics I Honors

- **Introductory Meteorology**
  - Satisfied by:
  - ATMO 105 Introductory Meteorology 5

**Atmospheric Science Required Courses (18)**

Students selecting this minor must complete all of the following:

- **Climate and Climate Change**
  - Satisfied by:
  - ATMO/GEOG Climate and Climate Change 321 3

- **Weather Forecasting**
  - Satisfied by:
  - ATMO 505 Weather Forecasting 3

- **Microclimatology**
  - Satisfied by:
  - ATMO/GEOG Microclimatology 521 3

- **Air Pollution Meteorology**
  - Satisfied by:
  - ATMO 525 Air Pollution Meteorology 3

- **Dynamic Meteorology**
  - Satisfied by:
  - ATMO 640 Dynamic Meteorology 3

- **Physical Meteorology**
  - Satisfied by:
  - ATMO 680 Physical Meteorology 3

### Major Hours & Major GPA

While completing all required courses (above), majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 33 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior (300+) Hours**
Satisfied by a minimum of 30 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior (300+) Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

**Departmental Honors in Atmospheric Science**
To be accepted as a candidate for honors, an undergraduate major must have completed at least 9 hours of upper-division credit in atmospheric science with a grade-point average of 3.5 in all atmospheric science courses and an overall average of at least 3.25. In addition, the program requires ATMO 499, an independent study course consisting of the creation of an honors paper. The student presents the results of this paper in an oral examination to a committee of a minimum of 2 faculty members, normally from the geography department, and chaired by the ATMO 499 supervisor. To graduate with honors, the student must complete the paper and the examination and maintain the 3.5 and 3.25 grade-point averages.

**Minor in Atmospheric Science**

**Why study atmospheric science?**
The study of atmospheric processes enables us to understand human interactions with the environment.

**Requirements for the Minor in Atmospheric Science**

**Atmospheric Science Prerequisite or Co-requisite Knowledge (0)**
Calculus I. Satisfied by the following:
- MATH 121 Calculus I
- MATH 141 Calculus I: Honors

Calculus II. Satisfied by the following:
- MATH 122 Calculus II
- MATH 142 Calculus II: Honors

General Physics I. Satisfied by the following:
- PHSX 211 General Physics I
- PHSX 216 General Physics I Laboratory
- PHSX 213 General Physics I Honors

**Atmospheric Science Minor Course Requirements (11)**
Introductory Meteorology. Satisfied by the following:
- ATMO 105 Introductory Meteorology 5

Climate and Climate Change. Satisfied by the following:
- ATMO/GEOG 321 Climate and Climate Change 3

Weather forecasting. Satisfied by the following:
- ATMO 505 Weather Forecasting 3

**Atmospheric Science Required Electives (9)**
Select three of the following:
- ATMO 521 Microclimatology
- ATMO 525 Air Pollution Meteorology
- ATMO 630 Synoptic Meteorology
- ATMO 640 Dynamic Meteorology
- ATMO 642 Remote Sensing
- ATMO 680 Physical Meteorology

**Minor Hours & Minor GPA**
While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

**Minor Hours**
Satisfied by 20 hours of minor courses.

**Minor Hours in Residence**
Satisfied by a minimum of 9 hours of KU resident credit in the minor.

**Minor Junior/Senior (300+) Hours**
Satisfied by a minimum of 15 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

**Master of Science in Atmospheric Science**

**Why study atmospheric science?**
The study of atmospheric processes enables us to understand human interactions with the environment.

**Admission to Graduate Studies**
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**
Entering students are expected to have completed an undergraduate degree in a physical science (e.g., physics, chemistry, atmospheric science, oceanography), mathematics, or engineering and studied mathematics, including vector calculus and ordinary differential equations. Courses taken to remedy deficiencies may not count toward graduate degrees. Graduate Record Examination scores (verbal, quantitative, and analytical) are required of all applicants.
Atmospheric Science M.S. Degree Requirements

The purpose of the program is to expand the student’s knowledge of fundamental atmospheric processes and how the atmosphere interacts with other parts of the environment. Students become familiar with quantitative research methods and how these various approaches can be used to address different problems in atmospheric science. Students gain an in-depth ability to learn specific skills and apply them toward his/her thesis work. These skills consist of, for example, statistical analysis techniques, numerical modeling, or work with atmospheric instrumentation. The breadth of the program and the diverse research topics explored by the faculty are able to accommodate students with a variety of interests.

Required credit hours:
30 credits 500 level or above.

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ATMO 710</td>
<td>Atmospheric Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>ATMO 720</td>
<td>Atmospheric Modeling</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 716</td>
<td>Advanced Geostatistics</td>
<td>3</td>
</tr>
<tr>
<td>Select 3</td>
<td>credit hours of electives in</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>atmospheric science electives at</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the 700 level or above</td>
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</tr>
<tr>
<td>Select 6</td>
<td>credit hours of electives at the</td>
<td>6</td>
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<tr>
<td></td>
<td>500 level or above outside the</td>
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<td></td>
<td>geography department</td>
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<tr>
<td>A maximum of</td>
<td>6 hours of 500- and 600-level</td>
<td>6</td>
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<tr>
<td></td>
<td>atmospheric science courses</td>
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<tr>
<td></td>
<td>may be included in the program,</td>
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<tr>
<td></td>
<td>excluding ATMO 505</td>
<td></td>
</tr>
<tr>
<td>ATMO 899</td>
<td>Master's Thesis</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td><strong>30</strong></td>
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</tbody>
</table>

Thesis

A master’s thesis is a demonstration of a student’s ability to formulate an atmospheric science research problem, collect and analyze relevant data, synthesize appropriate literature, arrive at logical conclusions, and present the entire exercise in a public academic forum. The thesis should address an original problem of scientific importance, though at the M.S. level, the research will to a significant degree be guided by the faculty advisor.

**Thesis proposal**

During the second semester in the program, the student must submit to his committee a thesis research plan. All M.S thesis proposals are expected to contain three basic elements:

1. A statement of the research problem or questions to be investigated.
2. A survey of relevant literature and how it relates to the student’s research problem
3. An outline of the general methodology, if not specific techniques, to be utilized in addressing the research problem or answering the basic research questions.

**Thesis seminar and defense**

Students are required to make a formal presentation to the faculty and fellow students in the form of a research seminar, and subsequently defend orally to their committee the results of their thesis research. Ideally, the final examination takes place immediately following the research seminar, but if necessary the two can be scheduled at separate times.

As part of their research training, graduate students are expected to attend departmental colloquia and seminars.

Details of the regulations on graduate study are included in the department’s Policies for Graduate Study in Atmospheric Science, available on the department's website (http://geog.ku.edu/ms-atmospheric-science). Please also see the Graduate Studies section of the online catalog.

Biology Undergraduate Program

Why study biology?

Study biology because undergraduates should have the opportunity to explore the breadth of biology that allows them to succeed in their chosen paths beyond the university.

Advising and Career Counseling

Undergraduate majors are encouraged to consult a faculty member as soon as possible to discuss degree options and course choices. Opportunities for independent study, research, field experience, student hourly employment, undergraduate teaching assistantships, and participation in student organizations are available. Students may consult faculty members in their areas of interest.

Undergraduate Biology Program staff can direct students to faculty members who can advise students are available on the UBP website (http://kuub.ku.edu). Information about curricula, careers, and opportunities in the biological and health-related sciences are available on the UBP website (http://kuub.ku.edu). in the UBP office in 2045 Haworth, and the Biology Teaching Resource Center in 1004 Haworth. See the KU career resource website (http://career.ku.edu) for help with career choices and job searches.

Undergraduate Programs

The KU Undergraduate Biology Program (UBP) administers the

- B.A. and B.S. in biochemistry,
- B.A. in biology,
- B.S. in biology (ecology, evolution, and organismal biology),
- B.S. in biology (molecular, cellular, and developmental biology),
- B.S. in biology (teaching biology),
- B.A.S. in biotechnology (KU Edwards Campus),
- B.A. in human biology (anthropology),
- B.A. in human biology (applied behavioral science),
- B.A. in human biology (biology),
- B.A. in human biology (psychology),
- B.A. in human biology (speech-language-hearing science),
- B.A. and B.S. in microbiology, and
- B.S. in molecular biosciences (KU Edwards Campus).
Courses for Nonmajors

BIOL 100 Principles of Biology, BIOL 116 Introduction to Evolutionary Biology, and BIOL 120 Insects in Your World offer undergraduate nonmajors an introduction to biology and biological facts or concepts. A laboratory, BIOL 102, supplements BIOL 100. Honors sections (BIOL 101/Biol 103) are offered for students with superior academic records. Except when specifically listed in the major requirements, these courses do not count toward a biology major.

Double Majors

Students may earn degrees in a biological science and an area outside biology by meeting the requirements of both degree programs and taking at least 15 hours of courses unique to each major.

Undergraduate Research Opportunities

The Undergraduate Biology Program encourages independent study and participation in faculty research programs. Consult an advisor or the UBP website (http://www.kuub.ku.edu) to find a faculty sponsor for research or independent study. After receiving permission, the student may enroll in that faculty member’s section of BIOL 424 Independent Study for the number of hours specified by the faculty member. Depending upon the specific major, three to five independent study hours can be applied to elective requirements in the major. Independent study is required for graduation with departmental honors. By special arrangement with a faculty member, students may earn independent study credit by participating in research programs offered by other units (e.g., faculty members in the School of Medicine).

Student Organizations

Biology clubs (http://kuub.ku.edu/students) allow students to interact with faculty and other students while expanding their interest in biology. The biology majors advisory committee—part of the KU biology club—advises the UBP director on all undergraduate issues and provides a forum for concerns and suggestions.

Biology Courses by Topics

For a list of biology courses by topics, see Degrees. (http://kuub.ku.edu/degrees)

Related Biology Courses

A biological course from departments outside the Undergraduate Biology Program may count toward a B.A. degree (up to 4 hours of credit). Check with a biology faculty advisor to determine whether nonbiology courses are acceptable to satisfy biology degree requirements.

Ecology and Evolutionary Biology

The Department of Ecology and Evolutionary Biology (http://www2.ku.edu/~eeb) offers M.A. and Ph.D. degrees in ecology and evolutionary biology, botany, and entomology. In addition, students may concentrate in ecology and evolutionary biology by seeking a B.S. in biology.

Molecular Biosciences

The Department of Molecular Biosciences (http://www.molecularbiosciences.ku.edu) offers Ph.D. degrees in biochemistry and biophysics; microbiology; and molecular, cellular, and developmental biology.

Courses

BIOL 100. Principles of Biology. 3 Hours. NB GE3N / N. Intended for non-science majors. The basic concepts of biology at the cellular, organisal, and population levels of organization and their applications to humans and modern society. An honors section, BIOL 101, is offered for students with superior academic records. BIOL 100 and BIOL 102 (or BIOL 101 and BIOL 103, honors) satisfy the College natural science with laboratory requirement. Concurrent enrollment in BIOL 102 is recommended. LEC.

BIOL 101. Principles of Biology, Honors. 3 Hours. NB GE3N / N. Intended for non-science majors with superior academic records. The basic concepts of biology at the cellular, organisal, and population levels of organization and their applications to humans and modern society. Concurrent enrollment in BIOL 102 or BIOL 103 is recommended. BIOL 101 and either BIOL 102 or BIOL 103 satisfy the College natural science with laboratory requirement. Prerequisite: Membership in the College Honors Program or consent of instructor. LEC.

BIOL 102. Principles of Biology Laboratory. 1 Hour. U. Intended for non-science majors. Exercises are designed to give the student hands-on experience with selected topics from the associated lecture course (BIOL 100). An honors laboratory (BIOL 103) is offered for students with superior academic records. Prerequisite: Concurrent enrollment in BIOL 100 is recommended. LAB.

BIOL 103. Principles of Biology Laboratory, Honors. 1 Hour. U. Intended for non-science majors with superior academic records. Exercises are designed to give the students hands-on experience with selected topics from the associated lecture course (BIOL 101). Prerequisite: Membership in the College Honors Program or consent of instructor. Concurrent enrollment in BIOL 101 is recommended. LAB.

BIOL 105. Biology Orientation Seminar. 1 Hour. N. Introduces interested students to information about majoring in the biological sciences at the University of Kansas. Students learn about degree requirements, academic advising, research opportunities, and career options, as well as how to align academic and professional goals. Graded on a satisfactory/unsatisfactory basis. LEC.

BIOL 110. Microorganisms in Your World. 3 Hours. NB / N. A course for students who are not science majors. Designed to acquaint students with some microbial activities which affect their lives. Includes the historical development of microbiology, the basic principles of growth, disinfection, antibiotics, infection, and immunity; and some commercial, agricultural, and industrial uses of microorganisms. Emphasis is on infectious diseases. Not open to students with any credit in microbiology. May not be counted as a prerequisite for any other microbiology course. LEC.

BIOL 116. Introduction to Evolutionary Biology. 3 Hours. N. An account of evolutionary thinking from classical to contemporary time. The emphasis is on mainstream developments (Darwinism, Mendelism, the Modern Synthesis, Cultural Ecology), but certain social issues will be examined (social Darwinism, creationism). LEC.

BIOL 120. Insects in Your World. 3 Hours. NB GE3N / N. Students will learn about the global impact of insects on human concerns, both positive (pollination and decomposition) and negative (competition with humans for food, fiber, and shelter, and disease transmission) while developing an appreciation for the ways in which scientists work with real problems involving insects. The course will cover the overwhelming abundance and diversity of insects, and their life history, ecology,
behavior, and physiology. This course is intended for both nonbiology and biology majors. Format: two lectures and one discussion section per week. LEC.

BIOL 150. Principles of Molecular and Cellular Biology. 4 Hours. NB GE3N / N.
An integrated lecture and laboratory course for biology majors and students planning to take additional courses in biology. This course covers basic biochemistry, cell structure and function, molecular biology, genetics, physiology, and development of plants and animals. Three hours of lecture and three hours of laboratory per week. An honors section (BIOL 151) is offered for students with superior academic records. Prerequisite: Concurrent or prior enrollment in CHEM 130, CHEM 190, CHEM 150, or CHEM 170, or consent of instructor. LEC.

BIOL 151. Principles of Molecular and Cellular Biology, Honors. 4 Hours. NB GE3N / N.
An integrated lecture and laboratory course for students with superior academic records who are biology majors or who plan to take additional courses in biology. This course covers basic biochemistry, cell structure and function, molecular biology, genetics, physiology, and development of plants and animals. Three hours of lecture and three hours of laboratory per week. Prerequisite: Membership in the University Honors Program and concurrent or prior enrollment in CHEM 130, CHEM 190, CHEM 150, or CHEM 170, or consent of instructor. LEC.

BIOL 152. Principles of Organismal Biology, 4 Hours. NB GE3N / N.
An integrated lecture and laboratory course for biology majors and students who plan to take additional courses in biology. This course covers basic elements of plant and animal morphology and physiology, principles of evolution, organismal diversity and phylogeny, population biology, population genetics, ecology, and behavior. Three hours of lecture and three hours of laboratory per week. An honors section (BIOL 153) is offered for students with superior academic records. Prerequisite: BIOL 150 or BIOL 151. LEC.

BIOL 153. Principles of Organismal Biology, Honors. 4 Hours. NB GE3N / N.
An integrated lecture and laboratory course for students with superior academic records who are biology majors or planning to take additional courses in biology. This course covers basic elements of plant and animal morphology and physiology, principles of evolution, organismal diversity and phylogeny, population biology, population genetics, ecology, and behavior. Three hours of lecture and three hours of laboratory per week. Prerequisite: BIOL 150 or BIOL 151 and membership in the University Honors Program or consent of instructor. LEC.

BIOL 155. Principle Lab in: ______. 1-3 Hours. U.
This introductory laboratory exposes the students to basic principles in biology and modern experimental techniques through an open-ended authentic research experience directed by a faculty member. Prerequisite: Consent of instructor. LEC.

BIOL 177. First Year Seminar: ______. 3 Hours. NB GE11.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in biology. Does not contribute to major requirements in biology. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

BIOL 200. Basic Microbiology. 3 Hours. NB GE3N / N.
Introduction to bacteria and viruses. Topics include historical development of microbiology, bacterial structure and growth, enzymes and energy production, disinfection, antibacterial drugs, gene transfer, viral replication, infection and immunity, with emphasis on infectious diseases. Can be substituted for BIOL 201 as a prerequisite for other microbiology courses by consent of department. Not open to those with credit in BIOL 110, BIOL 201, BIOL 400, or BIOL 401. Prerequisite: A course in high school biology and a course in high school chemistry. This course is not recommended for first semester freshmen. LEC.

BIOL 203. Introductory Microbiology Laboratory. 2 Hours. U.
Laboratory exercises to complement BIOL 200. Prerequisite: BIOL 200. May be taken concurrently. LAB.

BIOL 210. Introduction to Clinical Laboratory Sciences. 1 Hour. U.
An introductory overview of medical technology as a profession including types of analyses performed, specialties, interrelationships in the health care system and a visit to a clinical laboratory. This course will enable those considering a major in medical technology to have a clear definition of the profession. This course does not meet any degree requirements in biology. No prerequisite. (Same as CLS 210.) LEC.

BIOL 215. Plants Through Time. 3 Hours. NB / N.
Examines the evolution of plants and their environments from the origin of life to the present, including the historical development of the biosphere, mass extinctions (past and present), and social implications of future climate changes and deforestation. Not recommended for students with credit in GEOL 121. LEC.

BIOL 225. Evolution and the History of Life. 3 Hours. GE3N / N.
This introductory course for non-majors focuses on the significance of the history of life and the fossil record for our understanding of evolution. Key events in the history of life are considered, including the origins of life, the eukaryotic cell, and humans, and also various mass extinctions. The focus is on general scientific and evolutionary principles and mechanisms that can be extracted from the study of the fossil record. It also uses the lessons of the fossil record to consider the prospects for our own species. LEC.

BIOL 240. Fundamentals of Human Anatomy. 3 Hours. N.
Introduction to the gross anatomy of the human body. Covers the spatial arrangement and appearance of structures throughout the body, including visual identification of these structures. Musculoskeletal relationships, and the anatomy of major organ systems, are emphasized. Not intended for biology majors. Prerequisite: BIOL 100, or equivalent. LEC.

BIOL 241. Human Anatomy Observation Laboratory. 2 Hours. U.
One of the two laboratories in gross anatomy designed to complement BIOL 240. Emphasizes the three-dimensional appearance and spatial relationships of anatomical structures through supervised observations of pre-dissected human cadavers. Limited to students enrolled in, or seeking admission to, programs that require a human anatomy observation laboratory. Prerequisite: Concurrent or prior enrollment in BIOL 240 is required. LAB.

BIOL 242. Human Anatomy Dissection Laboratory. 3 Hours. U.
One of the two laboratories in gross anatomy designed to complement BIOL 240. Provides an opportunity to develop a comprehensive three-dimensional understanding of anatomical structures and spatial relationships while gaining substantial dissecting experience. Student perform supervised dissection of human cadavers. Limited to students enrolled in, or seeking admission to, programs that require a human anatomy laboratory. Concurrent or prior enrollment in BIOL 240 is required. LAB.

BIOL 246. Principles of Human Physiology. 3 Hours. N.
An introduction to the physiological and biochemical processes and general physiological principles necessary to sustain life. Organ and organ system processes are emphasized. Intended for students majoring in allied health or sports related curricula who require a course in human physiology. Not intended for biology majors. Prerequisite: BIOL 100 or equivalent. LEC.
BIOL 247. Principles of Human Physiology Laboratory. 2 Hours. U.
Designed to complement BIOL 246. Uses experiments and simulations to demonstrate laboratory techniques and representative processes in areas of human physiology. Concurrent or prior enrollment in BIOL 246 required. LAB.

BIOL 350. Principles of Genetics. 4 Hours. N.
Why are related individuals more similar than unrelated individuals and what is the basis for heritable traits? From Mendel's discoveries of the patterns of genetic inheritance, to the study of transmissible hereditary factors, genetics is central to understanding the biological sciences. Topics include molecular genetics and genetic engineering; Mendelian genetics and mapping; control of gene expression; cytogenetics; epigenetics and non-Mendelian genetics; and population and quantitative genetics. Examples are taken from a wide variety of organisms, including viruses, bacteria, plants, fungi, insects, and humans. Prerequisite: Two semesters of college-level chemistry and BIOL 150 or BIOL 152; or consent of the instructor. LEC.

BIOL 409. Physiology of Organisms, Laboratory. 2 Hours. U.
The laboratory exposes the students to the structure and function of the major groups of animals and plants. Students use basic techniques of biological observation, such as microscopy and dissection, and experimental techniques to analyze plant and animal function. Prerequisite: Concurrent or prior enrollment in BIOL 408, or consent of the instructor. LAB.

BIOL 410. Human Biogeography, Honors. 3 Hours. N.
Principles of evolution and earth change are used to examine distributions of human populations, wealth, and resources. Readings from the current literature will be included. Lecture and discussion. (Same as GEOG 410.) Prerequisite: BIOL 152 or BIOL 153 or GEOG 107 and membership in the University Honors Program or consent of the instructor. LEC.

BIOL 412. Evolutionary Biology. 4 Hours. N.
Introduction to the patterns and processes of organic evolution. Considered are the history of evolutionary thought, molecular evolution, genetics and microevolution, selection and adaptation, and speciation and macroevolution. Emphasis will be placed on how scientists study and document change over time in natural populations, methods for testing hypotheses about events in evolutionary history, and how discovering evolutionary mechanisms at one level of organization can help to explicate general processes in the natural world. Prerequisite: BIOL 152 and BIOL 350, or consent of the instructor. LEC.

BIOL 413. History and Diversity of Organisms. 3 Hours. N.
An integrated lecture and laboratory course presenting an overview of the variety and ancestry of life on earth. Using representatives from prokaryotes, protists, plants, fungi, and animals, principles of phylogenetic reconstruction are illustrated and evolutionary trends in the life history features, functional morphology, and structural complexity of extant and extinct organisms are presented. Two hours of lecture and three hours of laboratory per week. Prerequisite: BIOL 152 or BIOL 153, or consent of the instructor. LEC.

BIOL 414. Principles of Ecology. 3 Hours. N.
Study of the principles underlying species population density changes, community structure and dynamics, biogeochemical cycles, and energy flow and nutrient cycling in ecosystems. Prerequisite: BIOL 152 or BIOL 153, or consent of the instructor. LEC.

BIOL 415. Field and Laboratory Methods in Ecology. 2 Hours. N.
This course complements BIOL 414 with field trips and laboratory exercises that illustrate the basic concepts of ecology. Topics covered include methodologies for quantitative sampling of terrestrial and aquatic systems, design of field studies, computer simulation and digital data analysis techniques, and scientific writing. Prerequisite: Concurrent or prior enrollment in BIOL 414. A statistics course is recommended. FLD.

BIOL 416. Cell Structure and Function. 3 Hours. N.
Lecture survey of molecular cell biology with emphasis on experimental approaches to understanding cell function; topics include biological membranes and transmembrane transport, vesicular trafficking (secretion and endocytosis), cell signaling, cell motility and the cytoskeleton, and the regulation of the cell division cycle. Prerequisite: BIOL 150 or BIOL 151; BIOL 350 or BIOL 360; CHEM 130 or CHEM 190 or CHEM 170; and CHEM 135 or CHEM 195 or CHEM 175, or consent of the instructor. LEC.

BIOL 417. Biology of Development. 3 Hours. N.
A general course designed to introduce students to the developmental biology of animals. Emphasis is placed on understanding how a single-celled fertilized egg develops into a complex multicellular organism by the processes of cell division, differentiation, growth, and morphogenesis. Lectures stress experimental approaches to investigating
development, including classic embryology and modern molecular genetics. Prerequisite: BIOL 350 or consent of the instructor. LEC.

BIOL 418. Laboratory in: ______. 1-3 Hours. U.
A varied program of laboratory and fieldwork designed to introduce students to investigative approaches in the study of the basic concepts of biological science. Students may enroll in more than one section. Prerequisite: BIOL 100, BIOL 101, BIOL 150, BIOL 151, or exemption. Each section may have additional prerequisites to be determined by instructor. LAB.

BIOL 419. Topics in: ______. 1-3 Hours. N.
Courses on special topics in biology, given as need arises. May be lectures, discussions, readings, laboratory, or fieldwork. Students may select sections according to their special needs. IND.

BIOL 420. Seminar: ______. 1-3 Hours. N.
The preparation and presentation of oral reports on selected topics from the recent research literature. Students may choose one interest group each semester, but may enroll in a given interest group only once. Enrollment in each interest group limited to twenty students. Prerequisite: Course work varying with the topic of the seminar, or consent of instructor. LEC.

BIOL 421. Topics in Molecular Biosciences: ______. 3 Hours. N.
Lecture instruction and the preparation and presentation of oral and written reports on selected topics from the recent research literature in molecular biosciences. Students may enroll in a given topic only once. Prerequisite: Course work varying with the topic of the seminar; or consent of instructor. LEC.

BIOL 422. Non-laboratory Independent Study. 1-9 Hours. AE61 / N.
Original study in discussion or preparation of review papers on selected topics of current interest. May be undertaken only with the consent of the major advisor and of the faculty member who will guide the research. Prerequisite: Consent of instructor. IND.

BIOL 423. Independent Study. 1-9 Hours. AE61 / N.
Original study in laboratory or field in selected topics of current research interest. May be undertaken only with the consent of the major advisor and of the faculty member who will guide the research. Prerequisite: Consent of instructor. IND.

BIOL 425. Teaching Apprenticeship in Biology. 1-9 Hours. N.
Involvement as teaching assistant for a course in Biology. Credit hours shall not exceed the credits offered for the course being taught. May be undertaken only with the consent of the Director of Undergraduate Biology and of the faculty member who will teach the course. Prerequisite: Consent of instructor and Director of Undergraduate Biology. FLD.

BIOL 426. Laboratory in Cell Biology. 3 Hours. U.
Laboratory exercises will examine the function, organization, and composition of eukaryotic cells. Prerequisite: BIOL 150 or BIOL 151, CHEM 130 or CHEM 190 or CHEM 170; concurrent or prior enrollment in BIOL 416 or BIOL 536; or consent of the instructor. BIOL 350 or BIOL 360 is highly recommended. LAB.

BIOL 428. Introduction to Systematics. 3 Hours. N.
Basic elements of systematic theory and practice; phylogenetic reconstruction using morphological and molecular data; interpretation of phylogenetic hypotheses; principles of nomenclature and classification; evolutionary processes and patterns of species diversity; discussion of the aims and needs of taxonomy; species and speciation; construction of keys; significance of biological collections. Prerequisite: BIOL 152 or BIOL 153. Not intended for students with advanced systematics background. LEC.

BIOL 430. Laboratory in Molecular Biology. 3 Hours. U.
Practical experience in recombinant DNA technology and molecular cloning. Prerequisite: BIOL 416 or a course in biochemistry or microbiology. LAB.

BIOL 432. Human Behavioral Genetics. 3 Hours. S.
A survey of human behavioral genetics for upper division undergraduates. Emphasis is on how the methods and theories of quantitative, population, medical, and molecular genetics can be applied to individual and group differences in humans. Both normal and abnormal behaviors are covered, including intelligence, mental retardation, language and language disorders, communication, learning, personality, and psychopathology. (Same as ANTH 447, PSYC 432, SPLH 432.) Prerequisite: Introductory courses in biology/genetics or biological anthropology and psychology are recommended. LEC.

BIOL 435. Introduction to Neurobiology. 3 Hours. N.
Basic principles of neurobiology. The focus will be on the nature of communication among nerve cells and their targets. Topics will include the development, structure and function of nerve cells, chemistry of neurotransmission, processing and integration including the cellular and molecular basis of higher functions and neurological disorders. Prerequisite: BIOL 150 or BIOL 151. LEC.

BIOL 440. Advanced Human Anatomy. 6 Hours. N.
Integrated lecture and laboratory course designed to provide students with a detailed understanding of the structure of the human body. Cadaver dissection will reinforce three-dimensional relationships discussed in lecture and each of the main organ systems will be considered using a regional approach to the body. Prerequisite: BIOL 152 or equivalent; BIOL 240, BIOL 241, or BIOL 242; and instructor consent. LEC.

BIOL 448. Kansas Plants. 3 Hours. N.
A study of common and important non-cultivated Kansas plants, with special emphasis on the ecology of the state; paleoclimatic and paleobotanical background of the central plains and plains; present climate, physiography and vegetation; poisonous, edible, and medicinal plants; identification by means of simplified keys. Prerequisite: BIOL 100, BIOL 101, BIOL 150, or BIOL 151 and BIOL 152 or BIOL 153. LEC.

BIOL 449. Laboratory/Field Work in Human Biology. 1-3 Hours. AE61 / N.
Faculty supervised laboratory or field research for Human Biology majors. Students design and complete a research project in collaboration with a Human Biology faculty member. (Same as ANTH 449, PSYC 449, and SPLH 449.) Prerequisite: Consent of instructor and Human Biology major. FLD.

BIOL 454. Brain Diseases and Neurological Disorders. 3 Hours. N.
Major brain diseases and neurological disorders such as stroke, Alzheimer’s Disease, Parkinson’s Disease, Huntington’s Disease, Multiple Sclerosis, Epilepsy, Schizophrenia, etc., will be discussed in terms of the etiology, molecular, and cellular basis of potential therapeutic interventions. Graduate students are required to present original research paper assigned by the instructor to the class in addition to other assignments for all the students enrolled. Prerequisite: BIOL 150, or consent of instructor. LEC.

BIOL 461. Biodiversity of the Rainforest. 3 Hours. N.
An introduction to birds, bats, and plants of the rainforest, with emphasis on general characteristics of each of the taxa and their relationship to the tropical ecosystem, as well as their particular anatomy, ecology, behavior, and diversity. Field work focuses on identification of birds and bats (at species level), plants (at family level), and on capturing and preservation techniques. Taught in Golfito, Costa Rica. Contact Undergraduate Biology, or the Office of Study Abroad. Prerequisite: BIOL 150 or BIOL
151 and BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses are taught in Spanish; therefore, four semesters of Spanish are required. Summer courses are taught in English. LEC.

BIOL 463. Introduction to Ornithology of the Tropics. 4 Hours. N.
A theory and practice course on birds. Course covers morphology, reproduction, evolution, ecology, and behavior, as well as systematics of Costa Rican birds. Course includes field work on bird identification. Taught in Golfito, Costa Rica. Contact Undergraduate Biology, or the Office of Study Abroad. Prerequisite: BIOL 150 or BIOL 151 and BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses are taught in Spanish; therefore, four semesters of Spanish are required. Summer courses are taught in English. LEC.

BIOL 465. Marine Biology. 4 Hours. N.
A theory and practice course on biotic relations, the role of organisms and marine biodiversity. It covers basic marine principles and physico-chemical processes (temperature, salinity, dissolved oxygen, nutrients, and pH in the water) and their effect on the abundance, and horizontal and vertical distribution of marine organisms. Course includes field work on data collection. Taught in Golfito, Costa Rica. Contact Undergraduate Biology, or the Office of Study Abroad. Prerequisite: BIOL 150 or BIOL 151 and BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses are taught in Spanish; therefore, four semesters of Spanish are required. Summer courses are taught in English. LEC.

BIOL 467. Marine Resources Management. 3 Hours. N.
A theory and practice course which focuses on the techniques used for monitoring the growth of fish, shrimp, and mollusks, with the purpose of understanding the variables that could produce the best yields. The course covers ecology (population growth, competition, predators, ecosystem dynamics), and fishery biology (growth, fish yield, capture efficiency) applicable in the field experiments. Taught in Golfito, Costa Rica. Contact Undergraduate Biology, or the Office of Study Abroad. Prerequisite: BIOL 150 or BIOL 151 and BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses are taught in Spanish; therefore, four semesters of Spanish are required. Summer courses are taught in English. LEC.

BIOL 468. Fresh Water Ecology. 4 Hours. N.
A theory and practice class on the study of rivers and lagoons. It includes systematics of rivers, lagoons, and reservoirs. Course includes theory and field work to monitor physical (stream topography, flow, edge vegetation), chemical (nutrients, temperature, pH levels, dissolved oxygen), and biological (collecting and identification of aquatic insects) conditions in rivers. Taught in Golfito, Costa Rica. Contact Undergraduate Biology, or the Office of Study Abroad. Prerequisite: BIOL 150 or BIOL 151 and BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses are taught in Spanish; therefore, four semesters of Spanish are required. Summer courses are taught in English. LEC.

BIOL 477. Ecology and Global Change. 3 Hours. N.
Humans influence both natural and managed ecosystems. This course studies the effects of climate change, land-use change, and reductions in biodiversity on ecosystems. Emphasis is placed on how biological and physical processes may be perturbed by human influences. Topics include the greenhouse effect, species extinctions, human disease expansion, and the effects of global change on agricultural productivity. A combination of lectures and discussion address issues from a scientific basis and link these ecological issues to our everyday lives and society as a whole. Prerequisite: BIOL 152, BIOL 153, or equivalent, or permission of instructor. LEC.

BIOL 480. Biology and Diversity of Parasites. 3 Hours. N.
Introductory lecture course to the field of Parasitology. Provides basic knowledge about the morphology and biology of parasitic animals. Coverage includes a diversity of protozoan and metazoan groups parasitizing animals, including humans (e.g., malaria, amoebas, hookworms, tapeworms). Some emphasis is given to groups of parasites of particular medical and/or economic importance. Selected principles of parasitism are introduced. Prerequisite: BIOL 152 or BIOL 153, or permission of instructor. LEC.

BIOL 481. Parasitology Laboratory. 1 Hour. U.
Laboratory course in the study of protozoan and metazoan parasites of animal, including humans, emphasizing their diversity, classification, morphology, and identification. One three-hour laboratory each week. Prerequisite: Concurrent or prior enrollment in BIOL 480. LAB.

BIOL 494. Introduction to Mammalogy. 3 Hours.
A study of mammals, with emphasis on evolution, biogeography, systematics, and natural history. Lectures, laboratory, and field study. Prerequisite: BIOL 152 or 153 or permission of instructor. LEC.

BIOL 499. Introduction to Honors Research. 2 Hours. N.
Intended for sophomores planning to enroll in the Biology Honors Program. Students interested in pursing Biology Honors discuss with Biology faculty members the rationale, methods, and interpretations of research being carried out in individual faculty labs to learn how scientific research is conducted. Prerequisite: At least 17 credit hours of college level natural sciences coursework or consent of instructor. LEC.

BIOL 500. Biology of Insects. 3 Hours. N.
Lectures and demonstrations providing an introduction to the study of insects, including general classification, structure, phylogeny, identification, development, physiology, behavior, ecology, and relations to human affairs. Prerequisite: BIOL 152, 153, or equivalent, or permission of instructor. LEC.

BIOL 502. Laboratory in Insect Biology and Diversity. 2 Hours. U.
Laboratory and field studies of insects, emphasizing their diversity, classification, ecological relationships, morphology, and behavior. Course provides practical application of principles covered in BIOL 500. Prerequisite: Concurrent or prior enrollment in BIOL 500 or the equivalent. LAB.

BIOL 503. Immunology. 3 Hours. N.
Lectures on the nature and mechanisms of natural and acquired resistance including humoral and cellular immunity. Characteristics of antigens and antibodies and of their interaction; ontogeny and cellular basis of immune responsiveness, hypersensitivity; specific immunologic tolerance. Not open to those with credit in BIOL 524. Prerequisite: BIOL 400 or BIOL 401, or consent of instructor. LEC.

BIOL 504. Immunology Laboratory. 2 Hours. U.
Laboratory designed to complement BIOL 503. Prerequisite: BIOL 503, or BIOL 500 concurrently. LAB.

BIOL 505. Social Insects. 3 Hours. N.
Lectures and laboratory demonstrations on presocial and social insects, specifically termites, ants, wasps, and bees. Emphasis will be placed on evolution of social behavior and the place of social insects in sociobiology. Prerequisite: BIOL 152, BIOL 153, or equivalent. LEC.

BIOL 506. Pathogenic Microbiology. 3 Hours. N.
Lectures. Characteristics and mechanisms of pathogenic microorganisms and disease processes. Elements of host-parasite interactions. Not open to freshmen or sophomores. Prerequisite: BIOL 503, or consent of instructor. LEC.

BIOL 507. Pathogenic Microbiology Laboratory. 2 Hours. U.
Laboratory to complement BIOL 506. Cultivation of pathogenic microorganisms, diagnostic procedures, and experiments to demonstrate various aspects of microbial pathogenicity and host responses.
BIOL 509. Biology of Spiders. 3 Hours. N.
An introduction to the evolution, anatomy, physiology, behavior, and ecology of spiders and other arachnids. Special topics include the action of spider venoms; the composition and uses of silk; courtship and mating; predation; social behavior; and the role of spiders in natural and agricultural ecosystems. Concurrent enrollment in BIOL 511 is encouraged. Prerequisite: BIOL 152, BIOL 153 or permission of instructor. LEC.

BIOL 510. Comparative Anatomy. 5 Hours. N.
Structure, function, and evolution of the vertebrates. Lectures and laboratory study. A course designed for zoologists. Prerequisite: BIOL 100, BIOL 101, BIOL 150, or BIOL 151 and BIOL 152 or BIOL 153. LEC.

BIOL 511. Biology of Spiders Laboratory. 1 Hour. U.
Topics will include comparative biology of arachnid orders (spiders, scorpions, harvestmen, mites, and others), external and internal anatomy of spiders, identification of common spider families and genera, and spider behavior. Students will be required to make a small collection (collect, preserve, and identify specimens). Prerequisite: BIOL 509; concurrent enrollment is preferred. LAB.

BIOL 512. General Virology. 3 Hours. N.
Lectures and discussions covering the basic nature and characteristics of viruses from a general biological point of view: viruses of bacteria, animals and plants, physical-chemical properties; host cell-viral interactions; mode of replication of DNA and RNA viruses, tumor viruses. Prerequisite: BIOL 400, BIOL 401 or consent of instructor. LEC.

BIOL 513. Virology Laboratory. 2 Hours. U.
Experiments involving cultivation, quantitation, and identification of animal viruses, continuous cell culture and primary chicken embryo culture techniques. Molecular biology techniques are used to demonstrate the steps in virus replication. The value of viruses as tools to understand normal cellular processes is emphasized in experiments which demonstrate the relative simplicity of viruses and the relative complexity of eukaryotic cells. Demonstrations include transformation of cells by tumor viruses and electron microscopy of virus particles. Prerequisite: BIOL 402 and BIOL 512, or consent of instructor. LAB.

BIOL 514. Principles of Ecology, Honors. 3 Hours. N.
Honors section of BIOL 414 for students with superior academic records. Course covers core concepts on the ecology of individuals, populations, communities, and ecosystems. Relative to BIOL 414, topics are presented in greater depth with increased student participation and stronger emphasis on the primary scientific literature. Prerequisite: BIOL 100, BIOL 101, BIOL 150, or BIOL 151 and BIOL 152 or BIOL 153. Open only to students admitted to the University Honors Program or by consent of instructor. LEC.

BIOL 516. Microbial Physiology. 3 Hours. N.
Elements of microbial physiology. Carbohydrate metabolism; enzymes and coenzymes; microbial nutrition; quantitative problems in microbial physiology; a survey of microbial metabolic types. Prerequisite: BIOL 400 or BIOL 612 and BIOL 402, and five hours of organic chemistry. LEC.

BIOL 517. Microbial Physiology Laboratory. 2 Hours. U.
Laboratory designed to complement BIOL 516. Prerequisite: BIOL 516, or BIOL 516 concurrently. LAB.

BIOL 518. Microbial Genetics. 3 Hours. N.
Bacteria and viruses as models of genetic systems. Mutagenesis and repair. Transformation, transductions, and recombination. Molecular biology of gene expression. Prerequisite: An introductory microbiology course. LEC.

BIOL 519. Microbial Genetics Laboratory. 2 Hours. U.
Laboratory designed to complement BIOL 518. Prerequisite: BIOL 402, BIOL 518, or BIOL 518 concurrently. LAB.

BIOL 520. Marine Biology. 3 Hours. N.
This introductory course covers biological, physical, and chemical ocean sciences, with an emphasis on ecological aspects. In addition to this Lawrence campus course, students may enroll for a supplementary 1 credit field trip class to a Caribbean coral reef island offered in December or January. Prerequisite: BIOL 414 or permission of the instructor. LEC.

BIOL 521. Insect Systematics. 4 Hours. N.
A study of the diversity of insects, including the classification of all living and fossil orders and the more common families primarily on the basis of external morphology. The biology, ecology, phylogeny, and geological history of each order is covered. Includes both lectures and laboratory exercises. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 500, BIOL 502 or equivalent, or permission of instructor. LEC.

BIOL 525. Aquatic Entomology. 4 Hours. N.
Designed to enable students to develop skill in the area of identification of aquatic insects and to gain a detailed comprehension of their community structure and dynamics. The external morphology of all aquatic orders is covered, followed by consideration of specific physiological and behavioral adaptations that facilitate an aquatic existence. Includes both lectures and laboratory exercises. Requirements include making a collection of aquatic insects. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 414 or BIOL 500. LEC.

BIOL 526. Insect Physiology and Internal Morphology. 3 Hours. N.
Mechanisms and integration of the internal life-supporting systems of insects, emphasizing the interdependence of structure and function. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 408 and BIOL 500, or permission of instructor. LEC.

BIOL 528. External Morphology of Insects. 4 Hours. N.
A study of external structure common to all insect orders, with detailed comparative laboratory studies of representative species. Includes both lectures and laboratory exercises. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 500, BIOL 502 or equivalent, or permission of instructor. LEC.

BIOL 529. Immature Insects. 3 Hours. N.
The classification, structure, and ecological distribution of immature insects, especially larvae of Holometabola. Includes both lectures and laboratory exercises. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 502 or permission of instructor. LEC.

BIOL 533. Biology of Fungi. 4 Hours. N.
A study of the major groups of fungi from slime molds to mushrooms. Emphasis on their activities in natural substrates, isolation techniques, parasitic and mutualistic relationships with other organisms, uses in research, industrial applications, production of mycotoxins and poisons, and physiological, genetic and reproductive behavior. Lectures, laboratory, and field trips. Prerequisite: BIOL 100, BIOL 101, BIOL 150, or BIOL 151 and BIOL 152 or BIOL 153. LEC.

BIOL 536. Cell Structure and Function (Honors). 3 Hours. N.
BIOL 536 is the honors version of BIOL 416. Completion of this class will satisfy the BIOL 416 requirement. Open to students in the Honors
BIOL 540. General Invertebrate Zoology. 4 Hours. N.
Phylogeny, physiology, and embryology; evolutionary processes; characteristics of major ecological groupings. Laboratory will consider major taxonomic categories with emphasis on functional morphology and its evolutionary modifications. Prerequisite: BIOL 152 or BIOL 153. LEC.

BIOL 545. Evolution of Development. 5 Hours. N.
An advanced course designed to expose students to evolutionary change in the developmental patterning of plant and animal form. This course includes a lecture component and a laboratory component to integrate multiple biological disciplines including comparative morphology, molecular evolution, developmental genetics and experimental development, to explore biodiversity at a mechanistic level. Lectures are designed to give students background on topics ranging from homology assessment to empirical examples of how changes in gene expression or function may have shaped morphological diversity. The laboratory complements these topics through observations of normal development in a diversity of plant and animal model organisms, and through conducting independent research experiments. Prerequisite: BIOL 350 or equivalent. LEC.

BIOL 555. General Plant Physiology. 3 Hours. N.
The principal physiological processes of higher plants including photosynthesis, respiration, water relations, mineral nutrition, and factors associated with morphogenesis. Prerequisite: BIOL 408 or consent of instructor. LEC.

BIOL 560. Histology. 3 Hours. N.
Study of detailed microscopic anatomy of cells, tissues, and organs of mammals. Examples are drawn from normal and abnormal tissue, histochimistry, and electron microscopy. Lecture and demonstrations. A course in anatomy and physiology is highly recommended. Prerequisite: BIOL 152 or BIOL 153. LEC.

BIOL 570. Introduction to Biostatistics. 3 Hours. N.
Statistical concepts related to biological problems. Topics include the scientific method, data representation, descriptive statistics, elementary probability distributions, estimation and hypothesis testing, emphasizing the analysis of variation. Prerequisite: College algebra and ten hours of natural science. LEC.

BIOL 571. Introduction to Biostatistics Laboratory. 2 Hours. U.
Introductory statistical analyses on microcomputers. Data entry and export; simple graphs and exploratory data analysis; descriptive statistics; sampling; point and interval estimation; one and two sample t-tests; Chi-square; regression and correlation; analysis of variance; and nonparametric methods. Prerequisite: BIOL 570 or equivalent (may be taken concurrently). LAB.

BIOL 582. Principles of Biogeography. 3 Hours. N.
An introduction to the study of the distribution of life on earth. Covers geographical patterns of species diversity and the processes that give rise to those patterns: speciation, extinction, dispersal, vicariance, continental drift, ecological interactions, and phylogeny. Topics are presented within the framework of evolutionary history and include discussion of the biology of species on islands, terrestrial biomes, altitudinal zonation of species, latitudinal species gradients, historical factors governing species distributions, macroevolutionary trends in the fossil record, and application of modern molecular techniques for testing biogeographical hypotheses. Prerequisite: BIOL 152 or 153 and past or concurrent enrollment in BIOL 412, 413, 414, or 550; or permission of Instructor. LEC.

BIOL 583. Herpetology. 3 Hours. N.
A study of amphibians and reptiles. This lecture course will explore the taxonomic diversity of amphibians and reptiles, and current areas of active research in herpetology. Topics will be considered within a phylogenetic framework, and include discussion on systematics, biogeography, tetrapod origins, skeletal systems, growth, circulatory system, locomotion, thermal and water regulation, hibernation, ecology, sexual behavior, parental care, and mimicry. LEC.

BIOL 592. Ichthyology. 4 Hours. N.
A study of fishes. Lecture topics include the structure and adaptations of fishes to the aquatic environment and a survey of major fish groups with emphasis on their evolution and biogeography. Laboratory topics include a survey of fish diversity using specimens and the use of keys to identify fishes, with emphasis on the Kansas fish fauna. This course meets with BIOL 792. Students taking this course at the 700 level will have additional work required of them. Prerequisite: BIOL 152 and/or BIOL 413. LEC.

BIOL 593. Ornithology. 3 Hours. N.
A lecture and laboratory course on the biology, evolution, and diversity of birds. Prerequisite: BIOL 412 (or BIOL 413), or permission of instructor. LEC.

BIOL 594. Forest Ecosystems. 3 Hours.
Students learn basic concepts of forest productivity, forest water relations, forest hydrology, nutrient cycling, through soils and vegetation, nutrient uptake, carbon cycling, decomposition, linkages to aquatic ecosystems, and agents of disturbance to these cycles. The class spends a significant part of the semester exploring forest soil profiles and the challenges they present to different forest ecosystems. We discuss the function of forested ecosystems in a global context and identify and understand smaller-scale processes that drive forest function. Prerequisite: CHEM 195 or CHEM 175, and BIOL 414. LEC.

BIOL 595. Human Genetics. 3 Hours. N.
A lecture course providing balanced coverage of Mendelian and molecular genetics of humans; includes discussions and presentations on current issues in human and medical genetics. Prerequisite: BIOL 350. LEC.

BIOL 598. Research Methods. 3 Hours. N.
An introduction for pre-service teachers to the tools used by scientists to solve scientific problems. Topics include design of experiments and interpretation of their results, use of statistics, mathematical modeling, laboratory safety, ethical treatment of human subjects, writing scientific papers, giving oral presentations, and obtaining data from the scientific literature. Open only to students in the UKanTeach program. LEC.

BIOL 599. Senior Seminar: ______. 1 Hour. AE61 / N.
A synthesis and discussion of current trends in a discipline or disciplines related to one of the degrees offered in the biological sciences. Emphasis is placed on providing seniors with an appreciation of the discipline’s state-of-the-art and on developing skills for success in the next stage of a career in the biological sciences. Topics depend on the associated degree program. Prerequisite: Must be taken in the final year of a degree and students must have completed most of the course work required for one of the degrees in the biological sciences. LEC.

BIOL 600. Introductory Biochemistry, Lectures. 3 Hours. N.
Designed to offer the essentials of the chemistry of the constituents of living organisms and the changes these constituents undergo (during life processes) in the human body and other living forms. Prerequisite: BIOL 150 or BIOL 151 and one semester of organic chemistry. LEC.

BIOL 601. Principles of Biochemistry Laboratory. 2 Hours.
Theory and methods in the development of protein separation and purification, enzymatic structure/function, and enzyme kinetics derived from
primary literature searches and readings. Prerequisite or Co-requisite: BIOL 600; or consent of instructor. LAB.

BIOL 620. Plant Ecology. 3 Hours. N.
Introduction to basic concepts, focused at community and species level. Architectural ecomorphology of plants and their physiological responses to physical factors: solar radiation, climate, and soils. Plant succession as an interaction among species differing in ecomorphology and life style. Classification and ordination of plant communities: practice and theory. Other topics include: species diversity and lognormal distribution as to abundance classes; species/area relations and theory of island biogeography; allelochemic defenses; genecology; paleoecology. Prerequisite: BIOL 414 or consent of instructor. Concurrent enrollment in parallel laboratory, BIOL 607, recommended. LEC.

BIOL 603. Systematic Botany. 3 Hours. N.
A lecture/laboratory course providing hands-on experience with plant identification, a history of plant classification, the principles of nomenclature and character analysis, the basics of systematics theory, and a phylogenically-oriented introduction to vascular plant diversity. Prerequisite: BIOL 413 or equivalent. LEC.

BIOL 606. Ecological Plant Physiology. 3 Hours. N.
Physiological responses of higher plants to environmental factors are discussed. Major topics are: water relations, heat transfer, resistance to water and temperature stress, dormancy, phenology, photosynthesis and respiration under natural conditions, and effects of environmental pollution. Prerequisite: BIOL 408 or consent of instructor. LEC.

BIOL 607. Field and Laboratory Exercises in Plant Ecology. 2 Hours. U.
Introduction to quantitative analysis of plant communities and correlated environmental parameters; field and/or laboratory measurements of ecophysiological traits and comparative ecomorphology of principal species. Prerequisite: BIOL 414. Concurrent enrollment in parallel lecture, BIOL 602, recommended, but not required. LAB.

BIOL 609. Current Progress in Microbiology. 1 Hour. U.
A seminar course which will focus on current research in microbiology. A term paper will be required of each student. May be repeated for credit. Required of all majors in the senior year. Prerequisite: Two courses in microbiology. LEC.

BIOL 611. Molecular Systematics and Evolution. 4 Hours. N.
An introduction to the use of molecular data in systematics and population biology. Topics include: evolution of genes and proteins; properties of mitochondrial DNA, chloroplast DNA, ribosomal RNA genes, protein-coding genes, and repetitive DNAs; laboratory methods for data collection; and data analysis. Prerequisite: BIOL 350. BIOL 550 or equivalent is recommended. LEC.

BIOL 612. Fundamentals of Microbiology. 3 Hours. NB / N.
Lectures. Fundamental principles of microbiology with emphasis in physical and chemical properties of the bacterial cell; microbial metabolism, cultivation, growth and death of bacteria; microbial genetics; pathogenesis and immunity, industrially important microorganisms. Meets with BIOL 400, but students will be given additional and more advanced assignments, and will carry higher expectations. Prerequisite: BIOL 150 or BIOL 151 and two semesters of college chemistry, or consent of instructor. LEC.

BIOL 613. Biology of Honeybees. 3 Hours. N.
Social organization, evolution, behavior, morphology, communication, pollination biology, and ecology of honeybees. Experience will be gained with colony dynamics and behavior while working with bees in the field. Prerequisite: BIOL 152, BIOL 153, or consent of instructor. LEC.

BIOL 616. Medical Entomology. 3 Hours. N.
A study of the major human diseases transmitted by arthropods with emphasis on the biology and ecology of vectors, vector feeding mechanisms as related to disease transmission, epidemiology of arthropod-borne diseases, and the impact of arthropod-borne diseases on humans. Laboratory work on recognition of vector species, information sources, and use of taxonomic keys. Prerequisite: BIOL 152 or BIOL 153 and a course in microbiology or consent of instructor. LEC.

BIOL 622. Paleontology. 3 Hours. N.
A study of the structure and evolution of ancient life; the nature and diversity of life through time; the interactions of ancient organisms with their environments and the information that the study of fossils provides about ancient environments; the use of fossils to determine the ages of rocks and the timing of past events in earth history; and the patterns of extinction through time. (Same as GEOL 521.) Prerequisite: BIOL 100, BIOL 101, BIOL 152, BIOL 153, GEOL 105, or GEOL 304. LEC.

BIOL 623. Paleontology Laboratory. 1 Hour. U.
Laboratory course in the study of fossils with emphasis on the practice of paleontology and the morphology of ancient organisms. (Same as GEOL 523.) LAB.

BIOL 625. Behavioral Ecology and Sociobiology. 3 Hours. N.
The role of natural selection in animal behavior, and the influence of behavior on population biology and social dynamics of animal species. Topics include: game theory and optimization as applied to animal behavior; altruism, cooperation and competition; kin recognition and interactions; group formation and dynamics, dominance, aggression, and territoriality; feeding strategies; reproductive behavior including mate choice, parental care, and mating systems. Prerequisite: BIOL 152; either BIOL 350, BIOL 412 or BIOL 414 recommended; or consent of instructor. LEC.

BIOL 630. Conservation and Wildlife Biology. 3 Hours. N.
Examination of the concepts and processes involved in conservation of plant and animal populations and communities. Topics to be covered include conservation of endangered species, problems with invasions of exotic species and habitat fragmentation, wildlife management, and design of nature reserves. Prerequisite: BIOL 414, BIOL 412 strongly recommended. LEC.

BIOL 636. Biochemistry I. 3 Hours. N.
First semester of a two-semester lecture course in introductory biochemistry. Emphasis upon the physical structure of macromolecules and membranes, enzyme structure/function, and enzyme kinetics. Prerequisite: CHEM 335 or consent of instructor. LEC.

BIOL 637. Introductory Biochemistry Laboratory. 2 Hours. U.
The laboratory portion of BIOL 600 or 636. Experiments have been selected to introduce the student to cell constituents and biochemical reactions. One four-hour laboratory and one-hour lecture each week. Prerequisite: BIOL 600 or BIOL 636, or concurrent enrollment. LAB.

BIOL 638. Biochemistry II. 3 Hours. N.
Second semester of a two-semester lecture course in introductory biochemistry. Emphasis upon the metabolism of carbohydrates, lipids, amino acids, proteins, and nucleic acids. Prerequisite: BIOL 636. LEC.

BIOL 639. Advanced Biochemistry Laboratory. 2 Hours. U.
The laboratory portion of BIOL 638. One four-hour laboratory and a one-hour lecture each week. Experiments have been selected to familiarize students with experimental biochemical techniques using state-of-the-art methodology. Prerequisite: BIOL 637 and 638 (BIOL 638 may be taken concurrently). LAB.
BIOL 640. The Biology and Evolution of Fossil Plants. 3 Hours. N.
A lecture course in which fossil plants, protists and fungi are examined throughout geologic time. Emphasis will be directed at paleoecology, biogeography and the stratigraphic distribution and composition of ancient floras. (Same as GEOL 528.) Prerequisite: BIOL 413 or permission of instructor. LEC.

BIOL 641. Laboratory in Paleobotany. 1 Hour. U.
An examination of selected fossil plants throughout geological time and the techniques used to study them; laboratory will include identification and the use of plant fossils in biostratigraphy. (Same as GEOL 529.) Prerequisite: BIOL 413 or permission of instructor. Must be taken concurrently with BIOL 640. LAB.

BIOL 644. Comparative Animal Physiology. 3 Hours. N.
Lecture and discussion of the basic mechanism of organic maintenance and integration; a comparative treatment of the uniformities and diversity of animal function; emphasis on environmental adaptations and evolutionary relationships. Prerequisite: BIOL 152 or BIOL 153, and a course in organic chemistry, or consent of instructor. A college physics course is recommended but not required. LEC.

BIOL 646. Mammalian Physiology. 4 Hours. N.
Lectures and demonstrations. An intermediate course in the functions, mechanisms and interactions of mammalian organ systems. Discussions span topics from molecular to whole animal functions. Required for pharmacy students and strongly recommended for students planning advanced work in any area of physiology. The student is assumed to have the knowledge and ability to utilize their math and science background. Prerequisite: Five hours of organic chemistry, a course of college physics. LEC.

BIOL 647. Mammalian Physiology Laboratory. 2 Hours. U.
Laboratory experiments in representative areas of mammalian physiology designed to complement BIOL 646. Not open to students with credit in BIOL 247. Prerequisite or Co-requisite: BIOL 646. LAB.

BIOL 648. Systematics and Macroevolution. 3 Hours. N.
An introduction to the theory of macroevolution and the fundamental principles of systematics. Intended for students planning to pursue advanced studies in organismal biology, evolution, and/or systematics. Topics in macroevolution will include hierarchy theory, species concepts, speciation and species selection. Methods of phylogenetic estimation will be discussed and include parsimony, Maximum likelihood and Bayesian inference. Evolutionary studies utilizing phylogenies including tests of homology, studies of character evolution, and biogeography will be discussed. An overview of classification and nomenclature will also be provided. Prerequisite: BIOL 412 or equivalent. LEC.

BIOL 650. Advanced Neurobiology. 3 Hours. N.
The course builds an in depth knowledge about basic mechanisms of synaptic communication among nerve cells and their targets, and the structure and function of nervous systems. Topics include nervous system development and synapse formation, structure and function of neurons, physiological and molecular basis of synaptic communication between neurons, mechanisms of synaptic plasticity involved in learning and memory, sensory systems (vision, auditory, vestibular, motor reflexes and pain), processing of neural information at cellular and system levels, synapse regeneration and diseases of the nervous system. Prerequisite: BIOL 435 (Introduction to Neurobiology), or consent of instructor. LEC.

BIOL 652. Comparative Animal Behavior. 3 Hours. N.
A comparative analysis of behavior as an adaptive mechanism; emphasis on ontogenetic and evolutionary aspects of behavior. Prerequisite: BIOL 152 or BIOL 153; and BIOL 412. Alternatively, BIOL 412 may be taken as a corequisite. LEC.

BIOL 654. Comparative Animal Behavior, Laboratory. 1 Hour. U.
Laboratory and field phase of BIOL 652. Students may elect sections according to their special interests. Prerequisite: Prior or concurrent enrollment in BIOL 652. LAB.

BIOL 655. Behavioral Genetics. 3 Hours. N.
A survey of behavioral genetics in animals and humans. Emphasis is on how the methods and theories of quantitative, population and molecular genetics can be applied to individual and group differences in animals. Behaviors covered may include circadian rhythms, foraging, courtship, learning and memory, anxiety, social structures and human behaviors. Prerequisite: BIOL 350 or consent of instructor. LEC.

BIOL 656. Ecosystem Ecology. 3 Hours. N.
An introduction to the patterns and processes that affect terrestrial ecosystems. Emphasis is placed on understanding nutrient cycles (e.g., carbon nitrogen phosphorous), hydrologic cycles, and patterns of net primary productivity. The role of both natural and anthropogenic disturbances in structuring terrestrial ecosystems is examined in the context of global land-use patterns. Discussion of current research literature will be expected. (Same as EVRN 656.) Prerequisite: BIOL 414 and CHEM 130. LEC.

BIOL 661. Ecology of Rivers and Lakes. 3 Hours. N.
Study of the ecology and structure of creeks, rivers, ponds, lakes, and wetlands as well as some of the major human impacts. Prerequisite: One year of biology or permission of the instructor. BIOL 414 recommended. LEC.

BIOL 662. Aquatic Ecology Laboratory. 2 Hours. U.
A field and laboratory course introducing biological, physical, and chemical characteristics of lentic (ponds and lakes) and lotic (creoks and rivers) habitats. Students learn sampling and monitoring techniques and how to classify aquatic biota at higher taxonomic levels. Co- or prerequisite: CHEM 130 or CHEM 190 or CHEM 170, and BIOL 661. LAB.

BIOL 664. Vertebrate Biology. 3 Hours. N.
A laboratory course emphasizing principles of systematics and identification and the behavioral ecology of local vertebrate animals. Prerequisite: BIOL 152, BIOL 153 or consent of instructor. LAB.

BIOL 667. Chemical Communication in Sex, Feeding, and Fighting. 3 Hours. N.
The course focuses on the role of chemical information molecules in the interrelationships among organisms, with particular attention to interactions (a) within and between animal species, (b) within and between plant species, (c) between animals and plants, (d) between predators and prey, and (e) between parasites and hosts. Prerequisite: BIOL 100 or BIOL 101 or BIOL 152 or BIOL 153 or consent of instructor. LEC.

BIOL 668. Evolutionary Ecology. 3 Hours. N.
Emphasis will be on the themes that interface ecology and evolutionary studies. Topics will include selection theory; reproductive, foraging, and sex allocation problems; coevolution; patterns or morphological and behavioral adaptations; competition, predation, and population regulation. Special attention will be given to the philosophy and practice of resolving unanswered questions in evolutionary ecology. Prerequisite: BIOL 412 or permission of instructor. LEC.

BIOL 669. Biology of Freshwater Invertebrates. 3 Hours. N.
A lecture, field, and laboratory course examining the classification, biological characteristics, and ecology of invertebrates in lotic and lentic habitats. Major groups of benthic and planktonic invertebrates will be studied, including aquatic insects, crustaceans, molluscs, and others. Prerequisite: BIOL 540, BIOL 660, BIOL 661, or BIOL 663, or permission of instructor. LEC.
BIOL 672. Gene Expression. 3 Hours. N.
A study of the structure and expression of genes in prokaryotes and eukaryotes. Emphasis on the mechanisms of DNA, RNA, and protein biosynthesis. Prerequisite: A course in biochemistry or consent of instructor. LEC.

BIOL 673. Cellular and Molecular Neurobiology. 3 Hours.
Mechanisms of neural function and development will be considered at the cellular and molecular levels. Synaptic mechanisms of learning and memory, modulation of transmitter release, and the molecular basis of neurodegenerative disorders will also be discussed. Prerequisite: BIOL 435, BIOL 646, or permission of instructor. LEC.

BIOL 676. Mammalian Neuroanatomy. 3 Hours. N.
Lectures, video tape demonstrations, and laboratory dissection of mammalian nervous system with some attention to human material. Major emphasis on nervous system structure as it relates to function. For neurobiology and pre-health science majors. Prerequisite or Corequisite: A course in neurobiology (BIOL 435, BIOL 650), or permission of the instructor. LAB.

BIOL 688. The Molecular Biology of Cancer. 3 Hours. N.
The basic concepts of molecular biology are examined and used to probe the process by which a normal cell becomes a cancer cell. The course investigates DNA damage and repair, chemical carcinogenesis, gene cloning and manipulation, the control of gene expression in eukaryotes, tumor viruses, the roles of oncogenes and tumor suppressor genes in carcinogenesis, and cancer therapy. Prerequisite: BIOL 350 and BIOL 416; or BIOL 536; or consent of instructor. LEC.

BIOL 694. The Art of Becoming a Professional Scientist. 3 Hours. N.
Discusses aspects of graduate education that are directed at students entering graduate school and that focus on how to be successful in the post PhD phases of a career, but that must be initiated early in the graduate student program of study. One three hour discussion per week. Senior standing and planning on entering graduate school. LEC.

BIOL 695. Animal Communication and Sensory Ecology. 3 Hours. N.
Lectures and discussion sessions. A study of the propagation and perception of olfactory, acoustic, and visual signals produced by animals in the context of communication. Both physiological and evolutionary perspectives will be treated. Prerequisite: A course in behavior or consent of instructor. LEC.

BIOL 699. Biology Honors Research Colloquium. 1 Hour. AE61 / U.
Students pursuing Honors in Biology will meet weekly to discuss, both formally and informally, their honors research. Background information and experimental approaches of the research will be examined and critiqued. Prerequisite: Enrollment in Biology Honors program and consent of instructor. LEC.

BIOL 700. Conservation Principles and Practices. 3 Hours.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects will also be considered. (Same as AMS 714, GEOL 780, HIST 722 and MUSE 706.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 701. Topics in:_____. 1-3 Hours.
Advanced courses on special topics in biology, given as need arises. Lectures, discussions, readings, laboratory, or field work. Students may select sections according to their special interests. LEC.

BIOL 702. Laboratory Practice: Radiation Safety Procedures. 0.75 Hour.
An introduction to the basic properties of radioisotopes, and the fundamental safety practices needed for the safe use of low levels of radioactive materials. Risks associated with radiation exposures and applicable state and federal regulations are discussed. (Normally the content of the first ten hours of BIOL 703.) Prerequisite: Senior standing in one of the sciences. LAB.

BIOL 703. Radioisotopes and Radiation Safety in Research. 1.25 Hour.
An introduction to the properties of radioactive materials, radiations, and their interaction with matter, methods of radiation detection and measurement, protective measures, applicable state and federal regulations, design and implementation of safety management systems in the research laboratory, design of tracer experiments, and the risks associated with radiation exposure. Prerequisite: BIOL 702 or concurrent enrollment in BIOL 702, algebra and two semesters of either physics or chemistry. LEC.

BIOL 704. Research Animal Methods. 3 Hours.
Lectures, discussions, and laboratory sessions. Selection of proper animal models for specific research studies. Various external influences that alter research data. Routine techniques including restraint, sample collection, injection, anesthesia and euthanasia. Prevention and handling of common research animal problems or diseases. Proper and humane animal care as defined by the Federal Animal Welfare Act. Prerequisite: Senior or graduate standing in one of the biological sciences or permission of instructor. LEC.

BIOL 706. Current Trends in Curation and Collection Management. 2 Hours.
Seminars to provide students with a working knowledge of the primary issues and current trends in building, administration, and care of scientific collections. Topics include permits, collecting, accessioning, cataloging, preservation, preventive conservation, and access to collections and data. The course format consists of readings, lectures, guest speakers, discussions, and visits to scientific collections on campus. (Same as MUSE 710.) LEC.

BIOL 708. External Morphology of Insects. 4 Hours.
A study of external structure common to all insect orders, with detailed comparative laboratory studies of representative species. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 500, BIOL 502 or equivalent, or permission of instructor. LEC.

BIOL 709. Immature Insects. 3 Hours.
The classification, structure, and ecological distribution of immature insects, especially larvae of Holometabola. Includes both lectures and laboratories. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 502 or consent of instructor. LEC.

BIOL 710. Insect Development. 3 Hours.
A study of the embryonic and postembryonic development of insects. Emphasis is placed on developmental physiology of the early embryonic stages, the morphogenesis of organ systems, and the action of hormones in postembryonic development. Laboratory includes demonstrations and histological and experimental work. Prerequisite: Consent of instructor or BIOL 500. LEC.

BIOL 711. Insect Systematics. 4 Hours. N.
A study of the diversity of insects, including the classification of all living and fossil orders and the more common families primarily on the basis of external morphology. The biology, ecology, phylogeny, and
geological history of each order will be covered. Includes both lectures and laboratory exercises. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 500 and BIOL 502 or equivalent, or permission of instructor. LEC.

BIOL 712. Evolutionary Biology - Graduate. 3 Hours.
A thorough survey of evolutionary biology. Topics include: the history of evolutionary thought, genetics and the nature of variation, adaptation, speciation, coevolution, macroevolution, the comparative method, and the history of life. Prerequisite: BIOL 350 or equivalent or consent of instructor. LEC.

BIOL 714. Community and Ecosystem Ecology. 3 Hours.
Study of factors determining distribution of organisms, community structures, energy flow in ecosystems, and functional analysis of ecosystems. Discussion periods will include reading from current scientific literature. Prerequisite: Intended for graduate students in biology who did not have an undergraduate course in community ecology. Consent of instructor. LEC.

BIOL 716. Insect Physiology and Internal Morphology. 3 Hours.
Mechanisms and integration of the internal life-supporting systems of insects, emphasizing the interdependence of structure and function. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 408 and BIOL 500, or permission of instructor. LEC.

BIOL 717. Insect Ecology and Behavior. 3 Hours.
Lectures and laboratory demonstrations. A study of insect population dynamics, life history strategies, co-evolutionary interactions, foraging, and reproductive and social behaviors. Approaches from basic population biology and behavioral ecology are emphasized. Prerequisite: A course in ecology or behavior, or consent of instructor. LEC.

BIOL 718. Laboratory in Molecular Biology. 3 Hours.
Practical experience in recombinant DNA technology and molecular cloning. Given concurrent with BIOL 418. Prerequisite: BIOL 418 or course in biochemistry or microbiology. Training in radiation safety preferred. LAB.

BIOL 719. Light and Electron Microscopy. 3 Hours.
A lecture and laboratory class emphasizing the theoretical and practical use of light microscopes and scanning and transmission electron microscopes. A variety of approaches using light microscopy will be employed, including brightfield, phase, fluorescence, DIC, polarization, and darkfield optics. A variety of techniques will be used to prepare specimens and view them using scanning and transmission electron microscopy. Video and computer-aided analysis of images as well as conventional photographic techniques will be included. Prerequisite: Permission of instructor. LEC.

BIOL 720. Scientific Illustration. 3 Hours.
Lectures, demonstrations, and studio participation. Instruction in the preparation of illustrations for scientific publications, theses, and oral and poster presentations. Emphasis on basic drafting and layout skills, and pen and ink and tone renderings intended for publication. Attention given to preparation of photographs for publication and oral presentations. Instruction provided in use of specialized optical equipment for drawing. Prerequisite: Upper division or graduate standing and permission of instructor. LEC.

BIOL 721. Microbial Genetics. 3 Hours.
Bacteria and viruses as models of genetic systems. Mutagenesis and repair, Transformation, transductions, and recombination. Molecular biology of gene expression. This course is the graduate-level section of BIOL 518 and MCRB 510. Graduate students will be assigned additional and more advanced studies. Prerequisite: An introductory microbiology course or permission of instructor. LEC.

BIOL 725. Aquatic Entomology. 4 Hours.
Identification of aquatic insects and detailed study of their community structure and dynamics. The external morphology of all aquatic orders will be covered, followed by consideration of specific physiological and behavioral adaptations that facilitate an aquatic existence. Includes both lectures and laboratory exercises. Requirements include making a collection of aquatic insects. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 414 or BIOL 500 or permission of instructor. LEC.

BIOL 742. Plant Population Biology. 3 Hours.
A survey of the major areas of plant population ecology and genetics including competition, demography, pollination ecology, gene flow, natural selection and mating systems. Each topic is introduced by a lecture and is further explored by discussion of the current literature. Prerequisite: BIOL 412 or equivalent. LEC.

BIOL 743. Population Genetics. 3 Hours.
Description and discussion of genetic variation in natural populations. The effects and interaction of selection, migration, mutation, mating systems, and finite population size on the maintenance of genetic variation. Discussion of the interface with evolution and population ecology. Prerequisite: BIOL 350 and BIOL 412 or equivalent. LEC.

BIOL 744. Principles of Systematics. 4 Hours.
A series of seven laboratory modules emphasizing quantitative methods and experimental analysis. Each module requires data collection analysis, and written interpretation. Modern instrumentation, including use of microcomputers, is emphasized. Topics include ecological modeling, ecological genetics, physiological ecology, community structure, mating and reproduction and precipitation and soil chemistry. Prerequisite: BIOL 412 or BIOL 414. LAB.

BIOL 745. Laboratory in Experimental Ecology. 3 Hours.
Discussion of the interface with evolution and population ecology. Prerequisite: BIOL 350 and BIOL 412 or equivalent. LEC.

BIOL 746. Quantitative Genetics. 3 Hours.
A discussion of genetic traits for which individual gene differences do not separate a population into qualitatively distinct groups. Includes the estimation of heritability, genetic determination, and number of loci, and a study of selection theory. Prerequisite: BIOL 404 or BIOL 412 or equivalent and a course in statistics. LEC.

BIOL 747. Topics in Stable Isotopes in the Natural Sciences. 2-3 Hours.
Isotopic compositions of substances provide powerful insights into many topics in the natural sciences. Applications of isotopic analyses of carbon, hydrogen, oxygen, and nitrogen to selected research topics such as plant resource use, food web analysis, paleoecology, paleodiet reconstruction, hydrology, and soils genesis will be examined. Knowledge of isotope
chemistry is not required. (Concepts necessary to understand pertinent articles will be taught during the first class meetings.) May be repeated. (Same as GEOG 749.) LEC.

**Biol 750. Advanced Biochemistry. 3 Hours.**
The structures and dynamics of proteins and nucleic acids will be developed in terms of well-understood examples which will also be used to discuss the function of major classes of proteins. The application of structural and dynamical principles to biological membranes and their function will also be discussed. Prerequisite: BIOL 807 and BIOL 808, a general biochemistry course, or permission of instructor. LEC.

**Biol 751. Plant Communities of North America. 3 Hours.**
Physiognomic and floristic analysis of the vegetation, with emphasis on the Southwest; distribution of communities in relation to climate, substratum, and disturbance; recognition of dominant elements of vegetation through study of specimens and illustrative material. Prerequisite: BIOL 602. LEC.

**Biol 752. Cell Biology. 3 Hours.**
A lecture course emphasizing biochemical, developmental, and molecular aspects of cell structure and function. Prerequisite: BIOL 807 and BIOL 808, or BIOL 416 or BIOL 536, or permission of instructor. LEC.

**Biol 753. Advanced Genetics. 3 Hours.**
An advanced course in modern genetic analysis of eukaryotes. Course material will consist mainly of primary literature in the field of genetics. Topics covered include: genomic structure and genome projects; nature of mutations; mutant analysis; genetic recombination and mapping; analysis of gene function; genetic buffering; RNAi and epigenetics; and the genetics of model organisms. This course is meant for graduate students in the Molecular Biosciences and Genetics programs. Prerequisite: BIOL 807 and BIOL 808, or a course in genetics and a course in biochemistry, or permission of the instructor. LEC.

**Biol 754. Brain Diseases and Neurological Disorders. 3 Hours.**
Major brain diseases and neurological disorders such as stroke, Alzheimer's Disease, Parkinson's Disease, Huntington's Disease, Multiple Sclerosis, Epilepsy, Schizophrenia, etc., will be discussed in terms of the etiology, molecular, and cellular basis of potential therapeutic interventions. Graduate students are required to present original research paper assigned by the instructor to the class in addition to the other assignments for all the students enrolled. Prerequisite: BIOL 150, or consent of instructor. LEC.

**Biol 755. Mechanisms of Development. 3 Hours.**
Molecular aspects of differential gene function, signal transduction, and cell polarity in the regulation of morphogenesis. Prerequisite: BIOL 807 and BIOL 808 for graduate students; BIOL 417 or equivalent for undergraduate students; or permission of instructor. LEC.

**Biol 756. Cell and Tissue Culture Laboratory. 3 Hours.**
An introduction to current laboratory methods of cell and tissue culture, intended to provide an understanding of and substantial experience in several aspects of animal cell growth, cell synchrony, cell nutrition, the production and selection of mutant cell lines, the production and use of heterokaryons and interspecific hybrids, cell transformation in vitro, the cultivation and characterization of differentiated cells in culture, enzyme induction, and cell karyotyping. LAB.

**Biol 757. Carcinogenesis and Cancer Biology. 3 Hours.**
This course surveys the field of cancer research. The major goal is to introduce the breadth of cancer research while, at the same time, providing sufficient depth to allow the student to recognize problems in cancer and to design experiments which study cancer biology. Toward that end, the student should (at the conclusion of the course) be able to: define cancer, identify and discuss its causes; identify and discuss the genetic basis for cancer development and progression; discuss the theoretical basis for cancer therapy design and efficacy testing; discuss the biochemical, molecular and cellular events involved in the natural history of major human neoplasms. Prerequisite: Permission of instructor. LEC.

**Biol 757. The Vegetation of the Earth. 3 Hours.**
A discussion of the world's vegetation in its natural condition and as affected by man. Included are aspects of its economic and cultural usefulness and the problem of its preservation. Prerequisite: BIOL 634. LEC.

**Biol 758. Plant Molecular Biology. 3 Hours.**
Gene expression in chloroplasts, mitochondria, and plant nuclei, and regulatory interactions among these genomes. Special topics include the molecular biology of the photosynthetic apparatus, nitrogen fixation, stress and development, viruses and viroids, transposable genetic elements and gene evolution, and gene transfer and plant genetic engineering. Prerequisite: A course in biochemistry, cell or molecular biology, or permission of instructor. LEC.

**Biol 770. Plant Biochemistry. 3 Hours.**
A detailed study of plant biochemistry with emphasis on metabolic and regulatory processes particularly characteristic or unique in plants. Prerequisite: BIOL 600 or equivalent. LEC.

**Biol 772. Gene Expression. 3 Hours.**
A study of the structure and expression of genes in prokaryotes and eukaryotes. Emphasis on the mechanisms of DNA, RNA, and protein biosynthesis. This course meets concurrently with BIOL 672 and is open to graduate students seeking a more rigorous treatment of techniques in molecular biology that students receive in BIOL 672. Prerequisite: A course in biochemistry or consent of instructor. LEC.

**Biol 775. Chemistry of the Nervous System. 3 Hours.**
A detailed study of the molecular aspects of nerve transmission will be covered with special emphasis on the uptake, storage, release, biosynthesis and metabolism of specific neurotransmitters. Drugs affecting these processes and current research on receptor isolation and receptor mechanisms will be discussed from a chemical viewpoint. (Same as CHEM 775, MDCM 775, NURO 775, PTX 775, and PHCH 775.) Prerequisite: BIOL 600 or equivalent or consent of instructor. LEC.

**Biol 777. Integrative and Developmental Neurobiology. 3 Hours.**
Cellular processing of neural information both at the local level and in long distance integration. Local computing functions, and integration of these functions among the various areas to produce coherent movement and perceptions will be discussed. A description of forces guiding the development of the nervous system to form a coherent working system in both invertebrate and vertebrate animals will be presented, as well as determinants of brain sexual dimorphism. Prerequisite: An upper level course in physiology or BIOL 520. LEC.

**Biol 780. Fisheries. 2 Hours.**
Philosophy and practice of conservation as it applies to major world fisheries. Species principally utilized, factors affecting production, methods for appraisal and management of stocks. Historical and prospective roles of the fisheries in relation to human food supplies and recreational needs. Prerequisite: BIOL 412. LEC.

**Biol 781. Fisheries, Laboratory. 2 Hours.**
Training in field and laboratory techniques for fishery research and management. Prerequisite: Concurrent or prior enrollment in BIOL 780. LAB.
BIOL 782. Principles of Biogeography. 3 Hours.
A synthesis of historical and ecological biogeography of plants and animals, treating vicariance, dispersal, and community patterns; lectures, readings, discussions. A course in systematics and a course in ecology are recommended. LEC.

BIOL 783. Herpetology. 3 Hours.
A study of amphibians and reptiles. This lecture course will explore the taxonomic diversity of amphibians and reptiles, and current areas of active research in herpetology. Topics will be considered within a phylogenetic framework, and include discussion on systematics, biogeography, tetrapod origins, skeletal systems, growth, circulatory system, locomotion, thermal and water regulation, hibernation, ecology, sexual behavior, parental care, and mimicry. Students taking the course at the 700 level will have additional work required of them. Prerequisite: BIOL 152 Principles of Organismal Biology, and/or BIOL 413 History and Diversity of Organisms. LEC.

BIOL 784. Introduction to Museum Public Education. 3 Hours.
Consideration of the goals of an institution's public education services, developing programs, identifying potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as AMS 797, GEOL 784, HIST 721, and MUSE 705.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 785. Museum Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as AMS 731, GEOL 783, HIST 728, and MUSE 701.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 786. Fundamentals of Tropical Biology. 1-8 Hours.
The tropical environment and biota; ecological relations, communities and evolution in the tropics. Primarily a field course, taught in Costa Rica; two sessions per year, February-March, July-August. FLD.

BIOL 787. Introduction to Museum Exhibits. 3 Hours.
This course will consider the role of exhibits as an integrated part of museum collection management, research, and public service. Lecture and discussion will focus on issues involved in planning and producing museum exhibits. Laboratory exercises will provide first hand experience with basic preparation techniques. Emphasis will be placed on the management of an exhibit program in both large and small museums in the major disciplines. (Same as AMS 700, GEOL 781, HIST 723, and MUSE 703.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 788. The Nature of Museums. 3 Hours.
The purpose of this course is to provide an overview of the kinds of museums, their various missions, and their characteristics and potentials as research, education, and public service institutions responsible for collections of natural and cultural objects. (Same as AMS 720, GEOL 782, HIST 720, and MUSE 702.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 789. Field Course in Entomology. 1-6 Hours.
Field experiences in various habitats, with an emphasis in ecology, systematics, behavior, and collection techniques. FLD.

BIOL 790. Paleontology of Lower Vertebrates. 3 Hours.
General account of the osteology, geological distribution, and evolution of the principal groups of fishes, amphibians, reptiles, and birds. Lectures and laboratory. (Same as GEOL 725.) LEC.

BIOL 791. Paleontology of Higher Vertebrates. 3 Hours.
Evolution of mammals, and anatomical modifications involved in the process as ascertained from the fossil record. Lectures and laboratory. (Same as GEOL 726.) LEC.

BIOL 792. Ichthyology. 4 Hours.
A study of fishes. Lecture topics include the structure and function of fishes; the adaptations of fishes to the aquatic environment; and a survey of major fish groups with emphasis on evolutionary relationships and biogeography. Laboratory topics include a survey of fishes using specimens, and the use of keys to identify fishes with emphasis on the Kansas fish fauna. A research paper using primary scientific literature is required. Prerequisite: Graduate standing or permission of the instructor. LEC.

BIOL 794. Mammalogy. 3 Hours.
A study of mammals, with emphasis on systematics, biogeography, and natural history. Lectures, laboratory, and field study. Prerequisite: BIOL 100 or BIOL 413. LEC.

BIOL 795. Biology of Amphibians. 3 Hours.
Evolutionary biology of amphibians with emphasis on systematics, morphology, development, reproductive strategies, and distribution; lectures and laboratory. Prerequisite: BIOL 664 or permission of instructor. LEC.

BIOL 796. Biology of Reptiles. 3 Hours.
Evolutionary biology of reptiles with emphasis on systematics, morphology, reproductive strategies, and distribution; lectures and laboratory. Prerequisite: BIOL 664 or permission of instructor. LEC.

BIOL 797. Field Course in Vertebrate Paleontology. 3-6 Hours.
Training in the techniques of collecting vertebrate fossils, description and interpretation of the stratigraphy of fossiliferous sediments, and interpretation of the adequacy and bias of samples. FLD.

BIOL 798. Principles and Practices of Museum Collection Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museum collections, their associated data, and their use in scholarly research; cataloging, storage, fumigation, automated information management and related topics will be presented for museums of art, history, natural history and anthropology. (Same as AMS 730, GEOL 785, HIST 725, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 799. Natural History Museum Apprenticeship. 1-6 Hours.
Provides directed, practical experience in collection care and management, public education, exhibits and administration with emphases to suit the particular requirements of each student. Full time for one semester or half time for two semesters. (Same as AMS 799, ANTH 799, GEOL 723, HIST 799, and MUSE 799.) FLD.

BIOL 801. Topics in: . 1-3 Hours.
Advanced courses on special topics in biology, given as need arises. Lectures, discussing readings, laboratory or field work. Students may select sections according to their special interests. LEC.

BIOL 802. The Art of Becoming a Professional Scientist. 3 Hours.
Discusses aspects of graduate education that are directed at the post PhD phases of a career, but that must be initiated early in the graduate student program of study. One 3-hour discussion per week. LEC.

BIOL 804. Scientific Integrity: Molecular Biosciences. 1 Hour.
This course introduces aspects and issues associated with being an ethical, responsible, and professional research scientist. Included topics are professional practices, regulations, and rules that define the responsible and ethical conduct of research. Graduate students
will become familiar with and prepare to navigate through challenges that occur during a career in research science. The format of individual classes is expected to incorporate both instruction and discussion. Prerequisite: Admission to the graduate program in Molecular Biosciences, or consent of instructor. LEC.

BIOL 806. Major Patterns in Insect Evolution. 3 Hours.
Extensive reading and discussion of the primary literature on topics relating to major patterns in the evolutionary history of insects, including the fossil history of insects, the monophyly of arthropods, the origin of wings, the changing role of insects in ecological communities, the origins of social behavior, modes and mechanisms of speciation, and patterns of species diversity. Assigned readings require a solid background in evolutionary theory and insect biology, especially morphology, development, and classification. Prerequisite: Permission of instructor. LEC.

BIOL 807. Graduate Molecular Biosciences. 6 Hours.
An introduction to the advanced study of biochemistry, microbiology, genetics, cell and developmental biology, and neurobiology for all Molecular Biosciences graduate students. Topics can include macromolecular structure, metabolism, genetics and thermodynamics, bioinformatics, prokaryotic and eukaryotic mechanisms, cell structure and function, signal transduction, basic and pathogenic bacteriology, microbiology, virology, membrane potentials, synaptic transmission, and sensory neurophysiology. Prerequisite: Admission to the graduate program in Molecular Biosciences, or consent of instructor. LEC.

BIOL 809. Graduate Molecular Biosciences for Medicinal Chemists. 4 Hours.
An introduction to the advanced study of biochemistry, microbiology, and neurobiology for graduate students in Medicinal Chemistry. Prerequisite: Admission to the graduate program in Medicinal Chemistry and consent of instructor. LEC.

BIOL 810. Seminar in Biochemistry. 1 Hour.
Presentation and discussion of specific areas of recent research in biochemistry. This course may be taken more than once. LEC.

BIOL 811. Advanced Molecular and Cellular Immunology. 2 Hours.
Covers recent advances in immunochemistry and immunobiology. Topics include structure and function of antibodies, hybridoma systems, idiotypes, induction and regulation of the immune response through cell interactions and cytokine action, and the role of immune activity in disease states such as hypersensitivity, autoimmunity, and cancer. Prerequisite: BIOL 807 and BIOL 808, or an introductory course in immunology, or consent of instructor. LEC.

BIOL 812. Mechanisms of Host-Parasite Relationships. 2 Hours.
Emphasis is on virulence factors of microorganisms and the host response to infection. Topics will include pathogenesis of intracellular and extracellular parasites, bacterial adhesins, and toxins, and the role of innate and acquired immunity in host resistance and the response to infection. Prerequisite: BIOL 807 and BIOL 808, or a course in biochemistry, or consent of instructor. LEC.

BIOL 813. Advanced Bacterial Physiology. 2 Hours.
The intermediary reactions catalyzed by the bacterial cell during energy-requiring processes. Thermodynamic considerations of these processes are discussed. Knowledge of calculus is recommended. Prerequisite: BIOL 807 and BIOL 808, or a course in microbiology and a course in biochemistry, or consent of instructor. LEC.

BIOL 814. Advanced Molecular Virology. 2 Hours.
The course concentrates on evaluation of current literature concerning all aspects of molecular biology, biochemical characterization, and pathogenic mechanisms involved in host-virus interactions. Students will be expected to present articles and participate in discussions. Prerequisite: BIOL 807 and BIOL 808, or a course in microbial genetics and a course in virology, or consent of instructor. LEC.

BIOL 815. Advanced Molecular Genetics. 2 Hours.
A literature-based course that covers recent advances in microbial molecular genetics. Topics include transcription, translation, mutagenesis and repair, genetic exchange mechanisms, and regulation of gene expression. Prerequisite: BIOL 807 and BIOL 808, or a course in microbial genetics, or consent of instructor. LEC.

BIOL 816. Careers in Chemical Biology. 1 Hour.
Advanced course examining current research topics in chemical biology. An emphasis will be placed on career options open to PhD scientists in Chemical Biology, and preparation for the different career paths. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. This course will be graded satisfactory/unsatisfactory. (Same as CHEM 816, MDCM 816 and PHCH 816.) Prerequisite: Permission of instructor. SEM.

BIOL 818. Techniques in Molecular Biosciences. 2 Hours.
This course provides an introduction to common techniques used for research strategies in molecular biosciences. The course will cover common techniques in cell biology, biochemistry, microbiology, and neurobiology. Information will be presented in lectures and through practical demonstrations. This course is primarily intended for first year graduate students in the Department of Molecular Biosciences. Prerequisite: Enrollment in the Molecular Biosciences Graduate Program or consent of instructor. LAB.

BIOL 840. Scientific Communication. 2 Hours. N.
Principles of English communication skills for the professional scientist. The course explores the form, function, and practice (including ethics) of scientific communication, emphasizing elements of writing and speech that are important to clarity and precision. The course covers written and verbal communication of primary research results as well as composing correspondence, a curriculum vitae, reviews, etc. Prerequisite: Graduate standing. LEC.

BIOL 841. Biometry I. 5 Hours.
The application of statistical methods to data from various fields of biological research. Special emphasis is placed on practical computational procedures. Prerequisite: College algebra. LEC.

BIOL 842. Biometry II. 3 Hours.
This course is primarily devoted to special advanced topics in analysis of variance, analysis of covariance and regression analysis. Polynomial regression and multiple linear regression will be presented as well as the general linear model. Elementary matrix algebra will be developed as needed. Prerequisite: BIOL 841. LEC.

BIOL 847. Phylogenetics. 3 Hours.
An introduction to the theory and practice of phylogenetic systematics. Includes principles of character analysis including determination of homology and determination of character polarity, testing alternate phylogenetic trees, and reconstructing trees using computer techniques. Also includes principles of constructing phylogenetic classifications and the nature of taxa in the phylogenetic system. Other topics, such as the nature of species and principles of biogeography are included. Prerequisite: Twenty hours natural history. LEC.

BIOL 848. Phylogenetic Methods. 4 Hours.
A survey of methods for inferring phylogenetic trees from character data and using phylogenies to address evolutionary questions. Lectures will present the relevant theory and algorithmic description of methods.
BIOL 860. Principles and Practice of Chemical Biology. 3 Hours.
A survey of topics investigated by chemical biology methods including: transcription and translation, cell signaling, genetic and genomics, biochemical pathways, macromolecular structure, and the biosynthesis of peptides, carbohydrates, natural products, and nucleic acids. Concepts of thermodynamics and kinetics, bioconjugations and bioorthogonal chemistry will also be presented. (Same as CHEM 860, MDCM 860 and PHCH 860.) Prerequisite: Permission of instructor. LEC.

BIOL 872. Gene Expression II. 3 Hours.
Second semester of a two-semester lecture course on gene expression. Emphasis on control of gene expression at the transcriptional and post-transcriptional levels. Prerequisite: BIOL 772 or consent of instructor. LEC.

BIOL 888. Topics in Evolutionary Morphology: ____. 2 Hours.
Presentation and discussion by graduate students and faculty of selected topics centering on observed changes in structure and function of organisms from a phylogenetic point of view. Presentation will include results of original research when possible and appropriate, and otherwise, will be based on syntheses of recent literature. RSH.

BIOL 890. Advanced Study in Microbiology. 1-10 Hours.
Original investigation by students at the master's degree level. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Ten or more hours of microbiology and consent of department. RSH.

BIOL 895. Human Genetics. 3 Hours.
A lecture course providing balanced coverage of Mendelian and molecular genetics of humans; includes discussions and presentations on current issues in human and medical genetics. Prerequisite: A course in genetics. LEC.

BIOL 899. Master's Thesis. 1-10 Hours.
Research which is to be incorporated into an M.A. thesis. Not more than ten hours may be earned. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Ten or more hours of research. THE.

BIOL 901. Graduate Seminar in Biochemistry and Biophysics. 1 Hour.
Advanced course examining current research topics in biochemistry and biophysics. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Prerequisite: Enrollment in graduate school, and departmental admission. LEC.

BIOL 902. Graduate Seminar in Molecular, Cellular, and Developmental Biology. 1 Hour.
Advanced course examining current research topics in molecular, cellular, and developmental biology. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Prerequisite: Enrollment in graduate school, and departmental permission. SEM.

BIOL 903. Graduate Seminar in Neurobiology. 1 Hour.
Advanced course examining current research topics in neurobiology. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Prerequisite: Enrollment in graduate school, and departmental permission. LEC.

BIOL 904. Graduate Seminar in Microbiology. 1 Hour.
Advanced course examining current research topics in microbiology. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Enrollment in graduate school, and departmental permission. RSH.

BIOL 905. Advanced Molecular Genetics. 1-3 Hours.
A review of current literature in molecular genetics. RSH.

BIOL 906. Advanced Genetics. 1-3 Hours.
May be repeated for credit up to six hours. Review of current literature and genetic theory of selected topics such as population, molecular, quantitative, and physiological genetics. RSH.

BIOL 911. Research Topics in Plant Physiology and Biochemistry. 1-6 Hours.
Directed research on selected topics. Prerequisite: BIOL 770 or equivalent. RSH.

BIOL 918. Modern Biochemical and Biophysical Methods. 4 Hours.
This course emphasizes the use of techniques for solving problems of structure and function of biological macromolecules. Students will complete several modules that consist of lectures relating to theory and practical aspects of each methodological approach, and apply these techniques to solving a specific problem. Students will submit a paper describing the resulting data and conclusions. Prerequisite: BIOL 807, BIOL 808, and BIOL 818, or permission of instructor. LEC.

BIOL 925. Research Grant Proposal Preparation. 3 Hours.
This course introduces the basics of preparing a successful scientific grant application. Topics to be covered include how to develop a novel, fundable project, scientific writing and grantsmanship, and what criteria reviewers consider in evaluating grants. The course will be a mix of instruction and class discussion. Prerequisite: Admission to the graduate program in Molecular Biosciences, or consent of instructor. LEC.

BIOL 930. Ultrastructure and Cellular Mechanisms. 3 Hours.
Two lectures and one seminar-recitation. A detailed consideration of electron microscopic analyses of cell structure as related to cell function. Prerequisite: BIOL 416. LEC.

BIOL 943. Multivariate Data Analysis. 3 Hours.
Matrix formulation of multivariate models and data. Specific methods covered include Principal Components Analysis, Factor Analysis, Multiple Group Discriminant Analysis and Canonical Analysis, and Canonical Correlation Analysis. Prerequisite: BIOL 842 or knowledge of elementary matrix algebra. LEC.

BIOL 944. Topics in Quantitative Ecology: ____. 1-3 Hours.
Presentation and discussion by instructor and students of mathematical and statistical concepts in ecology. Topics are selected from texts or sets of readings. LEC.

BIOL 950. Evolutionary Mechanisms. 3 Hours.
Reading and discussions of evolutionary mechanisms from the genetic, ecologic, and systematic viewpoints. Prerequisite: BIOL 412. LEC.

BIOL 952. Introduction to Molecular Modeling. 3 Hours.
Introduction to theory and practice of contemporary molecular modeling, including molecular mechanics, molecular dynamics, computer graphics, data analysis, use of structure and sequence databases, docking, and homology modeling. Weekly computer laboratory section aimed at allowing participants to pursue independent research projects that incorporate modeling aspects. Lectures, laboratory manuals, program descriptions, and technical notes are presented on course web page. (Same as MDCM 952.) Prerequisite: Graduate standing or consent of instructor. LEC.
BIOL 968. Seminar in Vegetation Geography. 2-3 Hours. (Same as GEOG 937.) LEC.

BIOL 985. Advanced Study. 1-10 Hours. Individual investigations; laboratory, field or museum; or reading assignments in specialized topics not ordinarily treated in other courses. Graded on a satisfactory/unsatisfactory basis. RSH.

BIOL 999. Doctoral Dissertation. 1-12 Hours. Original research that is to be incorporated into a Ph.D. dissertation. Graded on a satisfactory/unsatisfactory basis. THE.

BTEC 300. Introduction to Biotechnology. 3 Hours. N. Review of techniques used in food, agricultural, pharmaceutical, industrial, and environmental biotechnology. Role of regulatory agencies during the discovery, development, and manufacture of new medical devices, biotechnology, biomedical, and pharmaceutical products. Guest presentations in biotechnology. Prerequisite: BIOL 416. LEC.

BTEC 330. Biotechnology Regulation and Documentation Processes. 3 Hours. N. Current good manufacturing practices (GMP) as they apply in the biotechnology workplace. History, rationale, purpose, and GMP requirements applicable to the manufacturing, packaging, labeling, testing, and control of pharmaceutical products, and consequences of inaction. Prerequisite: BTEC 300. LEC.

BTEC 340. Biotechnology Research Methods and Applications. 3 Hours. N. Introduction to fermentation and protein chemistry. Theory behind laboratory techniques and overview of industrial scale expression systems. Bacterial cell culture techniques, principles of fermenter operation and purification, documentation procedures, important tasks for clean room operations, including sanitization, sterilization, cleaning procedures, calibration, and environmental monitoring. Prerequisite: BTEC 300; BIOL 600. LEC.

BTEC 341. Principles of Bioprocessing Laboratory I. 1 Hour. N. Laboratory sessions involve use of microbial expression vectors, fermentation systems, and large-scale purification of recombinant protein. Includes bacterial cell culture techniques, principles of bioreactor/fermentation operations and purification techniques, and calibration. Primary goal of this course is to provide students with an advanced background in bacterial upstream and downstream biotechnology. Prerequisite: BTEC 300; BTEC 340 or concurrent enrollment in BTEC 340. LAB.

BTEC 340. Biotechnology Research Methods and Applications. 3 Hours. N. Course work varies with the topic of the seminar. The preparation and presentation of oral reports on selected topics from recent translational research literature. Students may choose one interest group each semester, but may enroll in a given interest group only once. May be repeated for credit when topics vary. Prerequisite: BTEC 300 and approval of instructor. LEC.

BTEC 342. Independent Study in Biotechnology. 1-3 Hours. N. Independent project at a related bioscience industry partner or faculty in selected topics of current translational research interest. May be undertaken only with the consent of the major advisor who will guide the research after determining objectives with the interested industry partner or faculty. Prerequisite: Consent of instructor. IND.

BTEC 340. Biotechnology Research Methods and Applications II. 3 Hours. N. Theory and practicum behind laboratory techniques and overview of industrial scale expression systems of insect or mammalian protein chemistry. Cell culture techniques, principles of bioreactor operation and purification, documentation procedures, important tasks for clean room operations, including sanitization, sterilization, cleaning procedures, calibration, and environmental monitoring are evaluated. Prerequisite: BTEC 340; BTEC 341. LEC.

BTEC 441. Principles of Bioprocessing Laboratory II. 1 Hour. N. Mammalian cell culture techniques, principles of bioreactor operations and purification techniques, and calibration. The primary goal of this course is to provide students with an advanced background in mammalian upstream and downstream biotechnology. Prerequisite: BTEC 341; BTEC 440 or concurrent enrollment in BTEC 440. LAB.

BTEC 450. Applied Bioinformatics. 3 Hours. N. Overview of the fields of bioinformatics and genomics. Topics, tools, issues and current trends in these and related fields are discussed. Principles and practical application of bioinformatics tools in molecular biology and genetics are evaluated. The haploid human genome occupies a total of just over 3 billion DNA base pairs. This information is not contained in books, but stored in electronic databases. Computational biology utilizes infer function by comparative analysis. This course is designed for life scientists from all fields to introduce them to the power of bioinformatics and enable them to access and utilize biological information in databases for their own research. Prerequisite: BTEC 300; BIOL 570 or MATH 365 or PSYC 210. LEC.

BTEC 460. Introduction to Quality Control/Quality Assurance in Biotechnology. 3 Hours. N. Quality control techniques, assurance issues, and management methods. Quality in design and planning, in the constructed project, and in production of goods and services. Prerequisite: BTEC 330. LEC.

BTEC 475. Bioseparations Laboratory. 2 Hours. N. Develop novel and effective strategies for extraction and purification of recombinant and native biomolecules by understanding constraints posed by the biological system and the products. Research projects are geared toward developing cost-effective processes for recovery of industrial and biopharmaceutical products derived from a variety of native and/or transgenic sources. Prerequisite: BTEC 405; BTEC 441. LAB.

BTEC 494. Selected Topics in Biotechnology. 1 Hour. N. Course work varies with the topic of the seminar. The preparation and presentation of oral reports on selected topics from recent translational research literature. Students may choose one interest group each semester, but may enroll in a given interest group only once. May be repeated for credit when topics vary. Prerequisite: BTEC 300 and approval of instructor. LEC.

BTEC 501. Ethical Issues in Biotechnology. 1 Hour. N. Student investigations and discussions of current controversial issues in biotechnology. This course emphasizes thinking about new technologies in a rational and thoughtful way. Prerequisite: BTEC 300. LEC.

BTEC 541. Gene Expression Analysis: Microarrays. 2 Hours. N. This course reviews current theory, techniques, instrumentation, troubleshooting, analysis tools, and advanced protocols for microarray analysis. Students have the opportunity to utilize skills learned during lecture in a laboratory environment. At the conclusion of this course, students understand microarray experimental design, its tools, and analysis of generated data. Prerequisites: BTEC 300. LAB.
**BTEC 542. Protein Expression in Insect Cells. 2 Hours. N.**
Introduction to the insect cells expression system, and its advantages and disadvantages. Introduction to expression of recombinant proteins with baculovirus. Outline of antibody and antibody fragments as well as other complex proteins. Basic techniques used for growth and maintenance of insect cell cultures. The lab portion of the course provides students with practical experience in protein expression techniques in the insect cells expression system. Prerequisite: BTEC 300. LAB.

**BTEC 545. RNA Interference and Model Organisms. 2 Hours. N.**
Introduction and history of RNA interference technology. Principles, mechanism, and applications of RNA interference in model organisms. Laboratory sessions include RNA interference-mediated silencing of genes in plants, C. elegans, and mammalian cell culture. Prerequisite: BTEC 300. LAB.

**BTEC 547. Bioanalytical Lab. 2 Hours. N.**
Analytical methods used for testing biotherapeutics are examined. Emphasis is placed on assessing protein concentration, purity, identity and activity. The importance of sample processing, throughput and level of validation are explored as samples from upstream processing, downstream processing and final bulk are interrogated. Students also learn key concepts used to validate the performance of analytical methods. Prerequisite: BTEC 300. LAB.

**BTEC 599. Biotechnology Capstone Experience. 3 Hours. N.**
Supervised internship at a biotech company; or an independent thesis; or honors thesis with Honors Program. Prerequisite: BTEC 441 and approval of instructor. FLD.

**Bachelor of Arts in Biochemistry**

**Why study biology?**

Study biology because undergraduates should have the opportunity to explore the breadth of biology that allows them to succeed in their chosen paths beyond the university.

**Undergraduate Admission**

**Admission to KU**

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

**Admission to the College of Liberal Arts and Sciences**

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements.

See individual department/program sections for departmental admission requirements.

**First- and Second-Year Preparation**

Because biology study requires preparation in other sciences, students should begin meeting major requirements in the first year. It is particularly important to take CHEM 130 and CHEM 135 in the first year and, for several majors, to take CHEM 330, CHEM 331, CHEM 335, and CHEM 336 in the second year. Ideally, most majors should also take BIOL 150 and BIOL 152 during the first year, as well as BIOL 105. Students who have taken BIOL 100 and BIOL 102, have earned an A or B in both courses, and have decided to major in a biological science should consult a UBP advisor to request permission to substitute BIOL 100 and BIOL 102 for BIOL 150.

**Admission to the Major**

**Admission Requirements**

**Course Requirements**

**Admission course requirements for Biochemistry, Biology, and Human Biology (18)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Satisfied by</th>
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<tbody>
<tr>
<td>BIOL 105</td>
<td>Biology Orientation Seminar</td>
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<tr>
<td></td>
<td>Principles of Molecular and Cellular Biology</td>
<td>Satisfied by one of the following:</td>
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<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
<td>4</td>
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<tr>
<td>or BIOL 151</td>
<td>Principles of Molecular and Cellular Biology, Honors</td>
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<td></td>
<td>Principles of Organismal Biology</td>
<td>Satisfied by one of the following:</td>
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<tr>
<td>BIOL 152</td>
<td>Principles of Organismal Biology</td>
<td>4</td>
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<tr>
<td>or BIOL 153</td>
<td>Principles of Organismal Biology, Honors</td>
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<td></td>
<td>Chemistry II</td>
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<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
<td>5</td>
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<tr>
<td>or CHEM 175</td>
<td>Chemistry for the Chemical Sciences II</td>
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<tr>
<td>or CHEM 195</td>
<td>Foundations of Chemistry II, Honors</td>
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<td></td>
<td>Principles of Genetics</td>
<td>Satisfied by one of the following:</td>
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<td>BIOL 350</td>
<td>Principles of Genetics</td>
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<tr>
<td>or BIOL 360</td>
<td>Principles of Genetics, Honors</td>
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**Admission course requirements for Microbiology (14)**

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<tr>
<td>BIOL 105</td>
<td>Biology Orientation Seminar</td>
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<td></td>
<td>Principles of Molecular and Cellular Biology</td>
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<tr>
<td>or BIOL 151</td>
<td>Principles of Molecular and Cellular Biology, Honors</td>
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<td></td>
<td>Chemistry II</td>
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<tr>
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<td>or CHEM 175</td>
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<td>or CHEM 195</td>
<td>Foundations of Chemistry II, Honors</td>
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<tr>
<td></td>
<td>Principles of Genetics</td>
<td>Satisfied by one of the following:</td>
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<td>BIOL 350</td>
<td>Principles of Genetics</td>
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<tr>
<td>or BIOL 360</td>
<td>Principles of Genetics, Honors</td>
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**Admission course requirements for Molecular Biosciences (Edwards campus) (17)**

<table>
<thead>
<tr>
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<tbody>
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<td>BIOL 105</td>
<td>Biology Orientation Seminar</td>
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<td></td>
<td>Principles of Molecular and Cellular Biology</td>
<td>Satisfied by one of the following:</td>
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<td>BIOL 150</td>
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<tr>
<td>or BIOL 151</td>
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<td></td>
<td>Principles of Genetics</td>
<td>Satisfied by one of the following:</td>
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<td>BIOL 350</td>
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<tr>
<td>or BIOL 360</td>
<td>Principles of Genetics, Honors</td>
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</table>

**Principles of Molecular and Cellular Biology, Satisfied by one of the following:**

- BIOL 105: Biology Orientation Seminar
- BIOL 150: Principles of Molecular and Cellular Biology
- BIOL 151: Principles of Molecular and Cellular Biology, Honors
- CHEM 135: General Chemistry II
- CHEM 136: Chemistry for the Chemical Sciences II
- CHEM 195: Foundations of Chemistry II, Honors
- BIOL 350: Principles of Genetics
- BIOL 360: Principles of Genetics, Honors
Biochemistry, Biology, Human Biology, and Molecular Biosciences Admission GPA

Must have a grade-point average of at least 2.2 based on grades in BIOL 150, BIOL 152, CHEM 135, and BIOL 350 (or equivalents). KU's course repeat policy applies to grade-point average calculation.

Microbiology Admission GPA

Must have a grade-point average of at least 2.2 based on grades in BIOL 150, CHEM 135, and BIOL 350 (or equivalents). Microbiology admission requirements differ from those for Biochemistry, Biology, Human Biology, and Molecular Biosciences, because BIOL 152 is not required for the B.A. and B.S. degrees in microbiology. KU's course repeat policy applies to grade-point average calculation.

Application Term

Application to the major should occur in the term in which admission requirements will be completed. If the student does not meet established admission grade-point average criteria or neglects to apply for admission in this term, she or he must petition the Undergraduate Biology Program for permission for late application. The Undergraduate Biology Program, as part of an approved petition, determines late admission requirements (including grade-point average and course requirements) and the final deadline for admission.

Majors and Concentrations

Bachelor's degree requirements in biology are modified as necessary. Current requirements are available in the UBP office and online (http://www.kuub.ku.edu). Major programs are offered in biochemistry, biology, human biology, and microbiology. Students may choose to concentrate in a range of specialties in the biological sciences, such as botany, cellular biology, developmental biology, environmental biology, ecology, entomology, genetics, marine biology, molecular biology, neurobiology, paleontology, physiology, systematics, or zoology (invertebrate or vertebrate).

Requirements for the B.A. Major in Biochemistry

Major Course Requirements

General Science Requirements (33-36)

Majors must complete the following general science requirements that 33-36 serve as foundational courses for this major.

- Biology Orientation Seminar. Satisfied by:
  - BIOL 105  Biology Orientation Seminar

Biochemistry Requirements (29)

- Principles of Molecular & Cellular Biology. Satisfied by one of the following:
  - BIOL 150  Principles of Molecular and Cellular Biology
  - BIOL 151  Principles of Molecular and Cellular Biology, Honors

- Principles of Organismal Biology. Satisfied by one of the following:
  - BIOL 152  Principles of Organismal Biology
  - BIOL 153  Principles of Organismal Biology, Honors

- Principles of Genetics. Satisfied by one of the following:
  - BIOL 350  Principles of Genetics
  - BIOL 360  Principles of Genetics, Honors

- Chemistry I. Satisfied by one of the following:
  - CHEM 170  Chemistry for the Chemical Sciences I
  - CHEM 130  General Chemistry I
  - CHEM 190  Foundations of Chemistry I, Honors

- Chemistry II. Satisfied by one of the following:
  - CHEM 175  Chemistry for the Chemical Sciences II
  - CHEM 135  General Chemistry II
  - CHEM 195  Foundations of Chemistry II, Honors

- Organic Chemistry I. Satisfied by one of the following:
  - CHEM 330  Organic Chemistry I
  - CHEM 380  Organic Chemistry I, Honors

- Organic Chemistry I Laboratory. Satisfied by:
  - CHEM 331  Organic Chemistry I Laboratory

- Organic Chemistry II. Satisfied by:
  - CHEM 335  Organic Chemistry II

- Calculus I and II. Students who plan to attend graduate school should enroll in MATH 125 and MATH 126. Satisfied by one of the following:
  - MATH 115  Calculus I
  - & MATH 116  and Calculus II
  - MATH 125  Calculus I
  - & MATH 126  and Calculus II

- Physics. Satisfied by one of the following options:
  - Option 1: General Physics I & II
    - PHSX 211  General Physics I
    - & PHSX 216  and General Physics I Laboratory
  - Option 2: College Physics I & II
    - PHSX 114  College Physics I
    - & PHSX 115  and College Physics II

- Introductory Biochemistry Laboratory. Satisfied by:
  - BIOL 636  Biochemistry I

- Advanced Biochemistry Laboratory. Satisfied by:
  - BIOL 639  Advanced Biochemistry Laboratory

- Gene Expression. Satisfied by:
  - BIOL 672  Gene Expression

Senior Seminar in Biochemistry. Satisfied by:
BIOL 599 Senior Seminar: _____ (Must be taken in senior year.) 1

Biological Physical Chemistry. Satisfied by:
CHEM 510 Biological Physical Chemistry 3

Biochemistry Electives (6)
Satisfied by completing at least 6 hours of biology courses numbered 6 400 or higher. These courses must be selected in consultation with a biochemistry advisor. Some suggested courses are BIOL 400 or BIOL 401, BIOL 408, BIOL 416 or BIOL 536, BIOL 417, BIOL 424, or BIOL 646. No more than 3 hours of BIOL 423 Non-Lab Independent Study and/or BIOL 424 Independent Study (combined) can be applied towards the elective requirement.

<table>
<thead>
<tr>
<th>Major Hours &amp; Major GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied by 35 hours of major courses.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major Hours in Residence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied by a minimum of 15 hours of KU resident credit in the major.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major Junior/Senior Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major Junior/Senior Graduation GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied by a minimum of 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (<a href="http://clas.ku.edu/undergrad/tools/gpa">http://clas.ku.edu/undergrad/tools/gpa</a>).</td>
</tr>
</tbody>
</table>

Below is a sample 4-year plan for students pursuing the BA in Biochemistry. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104, or equivalent prior to the freshman year, fall semester.

<table>
<thead>
<tr>
<th>Freshman</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
</tr>
<tr>
<td>Fall Hours Spring Hours</td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 (2 hrs req), BA Writing I) 1</td>
</tr>
<tr>
<td>Goal 1.1 Critical Thinking</td>
</tr>
<tr>
<td>CHEM 170 or 130 (General Science Requirement) 2</td>
</tr>
<tr>
<td>BIOL 150 or 151 (Goal 3 Natural Science, BA Lab, Major Requirement) 3</td>
</tr>
<tr>
<td>BIOL 105 (Major Requirement) 3</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sophomore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
</tr>
<tr>
<td>Fall Hours Spring Hours</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
</tr>
</tbody>
</table>

| MATH 116 or 126 (General Science Requirement) 4 | 3-4 Goal 2.2 Communication 3 |
| CHEM 330 (General Science Requirement) | 3 Goal 3 Social Science 3 |
| CHEM 331 (General Science Requirement) | 2 CHEM 335 (General Science Requirement) 5, 6 |
| BIOL 350 or 360 (Major Requirement) | 4 Elective or possible minor course (Total Hours) 3 |
| | | 17-18 |

<table>
<thead>
<tr>
<th>Junior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
</tr>
<tr>
<td>Hours Spring Hours</td>
</tr>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity (300+ suggested)</td>
</tr>
<tr>
<td>BIOL 636 (Major Requirement) 5</td>
</tr>
<tr>
<td>BIOL 637 (Major Requirement) 5</td>
</tr>
<tr>
<td>PHSX 114 (or PHSX 211 and PHSX 216 (General Science Requirement))</td>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Senior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
</tr>
<tr>
<td>Hours Spring Hours</td>
</tr>
<tr>
<td>Goal 3 Humanities (300+ suggested)</td>
</tr>
<tr>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
</tr>
<tr>
<td>BIOL Elective 400+ (Major Requirement) 7</td>
</tr>
<tr>
<td>BIOL 599 (Major Requirement, Goal 6) 8</td>
</tr>
<tr>
<td>CHEM 510 (Major Requirement) 5</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Hours: 120-124</th>
</tr>
</thead>
</table>

1 The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2 CHEM 170/130 and BIOL 150 require a Math ACT score of 26+, a comparable SAT or KU Math Placement Exam score, or credit for a MATH 101 or MATH 104 equivalent course.
3 Concurrent or prior enrollment in CHEM 170/CHEM 130 is required.
4 MATH 125 and MATH 126 are recommended for students who plan to attend graduate school. MATH 125 requires MATH 103 or MATH 104, with a grade of C- or higher; or 3 years of college preparatory mathematics including trigonometry, with a score of 28 or higher on the ACT Mathematics exam.
5 MATH 102 is required before MATH 116 or MATH 126.
6 MATH 125 or MATH 126 requires MATH 103 or MATH 104, with a grade of C- or higher; or 3 years of college preparatory mathematics including trigonometry, with a score of 28 or higher on the ACT Mathematics exam.
7 CHEM 170/130 or BIOL 150 require a Math ACT score of 26+, a comparable SAT or KU Math Placement Exam score, or credit for a MATH 101 or MATH 104 equivalent course.
8 MATH 125 and MATH 126 are recommended for students who plan to attend graduate school. MATH 125 requires MATH 103 or MATH 104, with a grade of C- or higher; or 3 years of college preparatory mathematics including trigonometry, with a score of 28 or higher on the ACT Mathematics exam.
Bachelor of Arts in Biology

Why study biology?

Study biology because undergraduates should have the opportunity to explore the breadth of biology that allows them to succeed in their chosen paths beyond the university.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

First- and Second-Year Preparation

Because biology study requires preparation in other sciences, students should begin meeting major requirements in the first year. It is particularly important to take CHEM 130 and CHEM 135 in the first year and, for several majors, to take CHEM 330, CHEM 331, CHEM 335, and CHEM 336 in the second year. Ideally, most majors should also take BIOL 150 and BIOL 152 during the first year, as well as BIOL 105. Students who have taken BIOL 100 and BIOL 102, have earned an A or B in both courses, and have decided to major in a biological science should consult a UBP advisor to request permission to substitute BIOL 100 and BIOL 102 for BIOL 150.

Admission to the Major

Admission Requirements

Course Requirements

Admission course requirements for Biochemistry, Biology, and Human Biology (18)

<table>
<thead>
<tr>
<th>Course Requirement</th>
<th>Satisfied by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology Orientation Seminar</td>
<td>BIOL 105, Biology Orientation Seminar</td>
</tr>
<tr>
<td>Principles of Molecular and Cellular Biology</td>
<td>BIOL 150, Principles of Molecular and Cellular Biology</td>
</tr>
<tr>
<td>or BIOL 151</td>
<td>Principles of Molecular and Cellular Biology, Honors</td>
</tr>
</tbody>
</table>
Principles of Organismal Biology. Satisfied by one of the following:
BIOL 152  Principles of Organismal Biology  4
or BIOL 153  Principles of Organismal Biology, Honors
Chemistry II. Satisfied by one of the following:
CHEM 135  General Chemistry II  5
or CHEM 175  Chemistry for the Chemical Sciences II
or CHEM 195  Foundations of Chemistry II, Honors
Principles of Genetics. Satisfied by one of the following:
BIOL 350  Principles of Genetics  4
or BIOL 360  Principles of Genetics, Honors

**Admission course requirements for Microbiology (14)**

Biology Orientation Seminar. Satisfied by:
BIOL 105  Biology Orientation Seminar  1
Principles of Molecular and Cellular Biology. Satisfied by one of the following:
BIOL 150  Principles of Molecular and Cellular Biology  4
or BIOL 151  Principles of Molecular and Cellular Biology, Honors
Chemistry II. Satisfied by one of the following:
CHEM 135  General Chemistry II  5
or CHEM 175  Chemistry for the Chemical Sciences II
or CHEM 195  Foundations of Chemistry II, Honors
Principles of Genetics. Satisfied by one of the following:
BIOL 350  Principles of Genetics  4
or BIOL 360  Principles of Genetics, Honors

**Admission course requirements for Molecular Biosciences (Edwards campus) (17)**

Principles of Molecular and Cellular Biology. Satisfied by one of the following:
BIOL 150  Principles of Molecular and Cellular Biology  4
or BIOL 151  Principles of Molecular and Cellular Biology, Honors
Principles of Organismal Biology. Satisfied by one of the following:
BIOL 152  Principles of Organismal Biology  4
or BIOL 153  Principles of Organismal Biology, Honors
Chemistry II. Satisfied by one of the following:
CHEM 135  General Chemistry II  5
or CHEM 175  Chemistry for the Chemical Sciences II
or CHEM 195  Foundations of Chemistry II, Honors
Principles of Genetics. Satisfied by one of the following:
BIOL 350  Principles of Genetics  4
or BIOL 360  Principles of Genetics, Honors

**Biochemistry, Biology, Human Biology, and Molecular Biosciences Admission GPA**

Must have a grade-point average of at least 2.2 based on grades in BIOL 150, BIOL 152, CHEM 135, and BIOL 350 (or equivalents). KU’s course repeat policy applies to grade-point average calculation.

**Microbiology Admission GPA**

Must have a grade-point average of at least 2.2 based on grades in BIOL 150, CHEM 135, and BIOL 350 (or equivalents). Microbiology admission requirements differ from those for Biochemistry, Biology, Human Biology, and Molecular Biosciences, because BIOL 152 is not required for the B.A. and B.S. degrees in microbiology. KU’s course repeat policy applies to grade-point average calculation.

**Application Term**

Application to the major should occur in the term in which admission requirements will be completed. If the student does not meet established admission grade-point average criteria or neglects to apply for admission in this term, she or he must petition the Undergraduate Biology Program for permission for late application. The Undergraduate Biology Program, as part of an approved petition, determines late admission requirements (including grade-point average and course requirements) and the final deadline for admission.

**Majors and Concentrations**

Bachelor’s degree requirements in biology are modified as necessary. Current requirements are available in the UBP office and online (http://www.kuub.ku.edu). Major programs are offered in biochemistry, biology, human biology, and microbiology. Students may choose to concentrate in a range of specialties in the biological sciences, such as botany, cellular biology, developmental biology, environmental biology, ecology, entomology, genetics, marine biology, molecular biology, neurobiology, paleontology, physiology, systematics, or zoology (invertebrate or vertebrate).

**Requirements for the B.A. Major in Biology**

**Major Course Requirements**

**General Science Requirements (28-31)**

Biology Orientation Seminar. Satisfied by:
BIOL 105  Biology Orientation Seminar  1
Chemistry I. Satisfied by one of the following:
CHEM 130  General Chemistry I  5
CHEM 195  Foundations of Chemistry II, Honors
Chemistry II. Satisfied by one of the following:
CHEM 135  General Chemistry II  5
CHEM 195  Foundations of Chemistry II, Honors
Organic Chemistry I. Satisfied by one of the following:
CHEM 310  Fundamentals of Organic Chemistry  3
CHEM 330  Organic Chemistry I  5
Organic Chemistry I Laboratory. Satisfied by:
CHEM 331  Organic Chemistry I Laboratory  2
Calculus. Satisfied by one of the following:
MATH 115  Calculus I  4
& MATH 116  and Calculus II
MATH 125  Calculus I  5
MATH 145  Calculus I, Honors
Physics I. Satisfied by one of the following:
PHSX 114  College Physics I  4-5
PHSX 211  General Physics I  5
& PHSX 216  and General Physics I Laboratory
Physics II. Satisfied by one of the following:
PHSX 115  College Physics II  4
PHSX 212  General Physics II  5
& PHSX 236  and General Physics II Laboratory

**Biology Core Requirements (26)**

Principles of Molecular & Cellular Biology. Satisfied by one of the following:
Bachelor of Arts in Biology

Major Junior/Senior Hours

Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Hours in Residence

Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours

Satisfied by 36 hours of major courses.

Major Hours in Residence

Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Below is a sample 4-year plan for students pursuing the BA Biology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104, or equivalent prior to the freshman year, fall semester.

Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 (2 crs req), BA Writing I)(^1)</td>
<td>3 ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.1 Critical Thinking</td>
<td>3 MATH 115 (General Science Requirement)(^2)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 130 (General Science Requirement)(^2)</td>
<td>5 CHEM 135 (General Science Requirement)(^4)</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 150 or 151 (Goal 3 Natural Science, BA Lab Science, Major Requirement)(^3)</td>
<td>4 BIOL 152 or 153 (Major Requirement)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 105 (Major Requirement)(^5)</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

16 15

Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5 2nd Semester Language (BA Second Language)</td>
<td>5</td>
</tr>
<tr>
<td>MATH 116 (General Science Requirement)</td>
<td>3 Goal 3 Humanities</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 310 or 330 (General Science Requirement)(^5)</td>
<td>3 BIOL 412 (Major Science Requirement)(^4)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 331 (General Science Requirement)</td>
<td>2 Elective or possible minor course (Total Hours)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 350 or 360 (Major Requirement)</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

17 15

Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3 4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
<td>3-5</td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3 Goal 2.2 Communication</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 114 (or PHSX 211 &amp; PHSX 216) General Science Requirement</td>
<td>4 PHSX 115 (or PHSX 212 &amp; PHSX 236), General Science Requirement</td>
<td>4</td>
</tr>
<tr>
<td>BIOL Selective 400+ (Major Requirement)(^6)</td>
<td>3 BIOL Selective 400+ (Major Requirement)(^6)</td>
<td>3</td>
</tr>
</tbody>
</table>

3 3
### Elective or possible minor course 300+ (Total Hours)

<p>| | | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td>Fall</td>
<td>Spring</td>
</tr>
<tr>
<td>Goal 4.2 Global Awareness (300+ suggested)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL Selective 400+ (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL Elective 400+ (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL Lab Elective 400+ (Major Requirement)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>BIOL Elective 400+ (Major Requirement)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

#### Total Hours: 120-122

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2. Requires a Math ACT Score of 26+, a comparable SAT or KU Math Placement Exam score, or credit for MATH 101 or 104 equivalent course. MATH 121/MATH125 can be taken instead of MATH 115 and MATH 116 to fulfill the math requirement.

3. Concurrent or prior enrollment in CHEM 130 is required.

4. CHEM 135 and BIOL 412 are offered only in the spring.

5. Most medical schools require the full CHEM 330, CHEM 331, CHEM 335 and CHEM 336 sequence.

6. Biology major selectives: choose from BIOL 413, 414, and 428 AND choose two from BIOL 400, 408, 417, and 600.

7. 10 credit hours of BIOL 400+ level courses, including at least 4 hours of lab credit. See the degree requirements page in the catalog for limits on using BIOL 423 and/or BIOL 424 for this requirement.

8. A total of 3 credit hours in Goal 6 approved courses is needed to fulfill Goal 6. This goal can also be fulfilled by completion of an approved educational experience, or an approved integration of courses and/or experiences. See your advisor for more information.

* BIOL 105: Biology Orientation Seminar (1 hour online course) is required for admission to the major. It can be taken the summer prior to your freshman year.

#### Departmental Honors

Undergraduate majors are eligible to graduate with honors in biology if they fulfill the following requirements:

1. Complete all course work required for the appropriate degree in biology.

2. Achieve a minimum grade-point average of 3.25 overall and 3.5 in the major.

3. Complete BIOL 499 Introduction to Honors Research with a grade of B or higher.

4. Complete BIOL 699 Biology Honors Research Colloquium with a grade of B or higher.

5. Complete an independent research project under the supervision of a faculty member in an area appropriate to the degree sought.

6. Submit an honors thesis to the honors committee once the research is complete and present the results of the completed research at the honors research symposium.

Students majoring in Human Biology with Anthropology, Applied Behavioral Science, Psychology, or Speech-Language-Hearing concentrations will follow the honors requirements for their respective concentration department.

Specific guidelines and intent forms are available in the Undergraduate Biology Program office and online (http://www.kuub.ku.edu). Candidates must declare their intent to graduate with honors at least 2 semesters before graduation.

#### Study Abroad

Consult an advisor at least 4 months before undertaking study abroad. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu), 108 Lippincott Hall, for information about study in one of the many countries (e.g., Scotland, Australia, Switzerland) with special arrangements with KU.

#### Bachelor of Arts in Human Biology

**Why study biology?**

Study biology because undergraduates should have the opportunity to explore the breadth of biology that allows them to succeed in their chosen paths beyond the university.

#### Undergraduate Admission

**Admission to KU**

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.
Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

**Admission to the College of Liberal Arts and Sciences**

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

**First- and Second-Year Preparation**

Because biology study requires preparation in other sciences, students should begin meeting major requirements in the first year. It is particularly important to take CHEM 130 and CHEM 135 in the first year and, for several majors, to take CHEM 330, CHEM 331, CHEM 335, and CHEM 336 in the second year. Ideally, most majors should also take BIOL 150 and BIOL 152 during the first year, as well as BIOL 105. Students who have taken BIOL 100 and BIOL 102, have earned an A or B in both courses, and have decided to major in a biological science should consult a UBP advisor to request permission to substitute BIOL 100 and BIOL 102 for BIOL 150.

**Admission to the Major**

**Admission Requirements**

**Course Requirements**

**Admission course requirements for Biochemistry, Biology, and Human Biology (18)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology Orientation Seminar</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 105 Principles of Molecular and Cellular Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 150 Principles of Molecular and Cellular Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 151 Principles of Molecular and Cellular Biology, Honors</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 152 Principles of Organismal Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 153 Principles of Organismal Biology, Honors</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 135 General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>or CHEM 175 Chemistry for the Chemical Sciences II</td>
<td>5</td>
</tr>
<tr>
<td>or CHEM 195 Foundations of Chemistry II, Honors</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 350 Principles of Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 360 Principles of Genetics, Honors</td>
<td>4</td>
</tr>
</tbody>
</table>

**Admission course requirements for Microbiology (14)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology Orientation Seminar</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 105 Principles of Molecular and Cellular Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 150 Principles of Molecular and Cellular Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 151 Principles of Molecular and Cellular Biology, Honors</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 135 General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>or CHEM 175 Chemistry for the Chemical Sciences II</td>
<td>5</td>
</tr>
<tr>
<td>or CHEM 195 Foundations of Chemistry II, Honors</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 350 Principles of Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 360 Principles of Genetics, Honors</td>
<td>4</td>
</tr>
</tbody>
</table>

**Admission course requirements for Molecular Biosciences (Edwards campus) (17)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 150 Principles of Molecular and Cellular Biology</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 151 Principles of Molecular and Cellular Biology, Honors</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 152 Principles of Organismal Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 153 Principles of Organismal Biology, Honors</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 135 General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>or CHEM 175 Chemistry for the Chemical Sciences II</td>
<td>5</td>
</tr>
<tr>
<td>or CHEM 195 Foundations of Chemistry II, Honors</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 350 Principles of Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 360 Principles of Genetics, Honors</td>
<td>4</td>
</tr>
</tbody>
</table>

**Biochemistry, Biology, Human Biology, and Molecular Biosciences Admission GPA**

Must have a grade-point average of at least 2.2 based on grades in BIOL 150, BIOL 152, CHEM 135, and BIOL 350 (or equivalents). KU's course repeat policy applies to grade-point average calculation.

**Microbiology Admission GPA**

Must have a grade-point average of at least 2.2 based on grades in BIOL 150, CHEM 135, and BIOL 350 (or equivalents). Microbiology admission requirements differ from those for Biochemistry, Biology, Human Biology, and Molecular Biosciences, because BIOL 152 is not required for the B.A. and B.S. degrees in microbiology. KU's course repeat policy applies to grade-point average calculation.

**Application Term**

Application to the major should occur in the term in which admission requirements will be completed. If the student does not meet established admission grade-point average criteria or neglects to apply for admission in this term, she or he must petition the Undergraduate Biology Program for permission for late application. The Undergraduate Biology Program, as part of an approved petition, determines late admission requirements (including grade-point average and course requirements) and the final deadline for admission.

**Majors and Concentrations**

Bachelor’s degree requirements in biology are modified as necessary. Current requirements are available in the UBP office and online (http://www.kuub.ku.edu). Major programs are offered in biochemistry, biology, human biology, and microbiology. Students may choose to concentrate in a range of specialties in the biological sciences, such as botany, cellular biology, developmental biology, environmental biology, ecology, entomology, genetics, marine biology, molecular biology, neurobiology, paleontology, physiology, systematics, or zoology (invertebrate or vertebrate).
Requirements for the B.A. Major in Human Biology

The curriculum builds from a broad background of general science courses and adds depth in a set of 5 specialized disciplines. Courses in the disciplines emphasize topics related to humans and provide a solid understanding of each field of knowledge.

For general requirements for the B.A. degree, see CLAS General Education Degree Requirements (p. 774) on the College of Liberal Arts and Sciences Degree Requirements page.

Students must choose 1 concentration from the 5 areas:

• Anthropology
• Applied behavioral science
• Biology
• Psychology
• Speech-language-hearing

General Science Requirements (33)

Majors must complete the following 33-hour minimum of general science requirements that serve as foundational courses for this major.

Fundamentals of Physical Anthropology. Satisfied by:
- ANTH 304 Fundamentals of Physical Anthropology

Biology Orientation Seminar. Satisfied by:
- BIOL 105 Biology Orientation Seminar

Principles of Molecular & Cellular Biology. Satisfied by one of the following:
- BIOL 150 Principles of Molecular and Cellular Biology
- BIOL 151 Principles of Molecular and Cellular Biology, Honors

Principles of Organismal Biology. Satisfied by one of the following:
- BIOL 152 Principles of Organismal Biology
- BIOL 153 Principles of Organismal Biology, Honors

Calculus. Satisfied by one of the following:
- MATH 115 Calculus I
- MATH 116 and Calculus II
- MATH 125 Calculus I
- MATH 145 Calculus I, Honors

Chemistry I. Satisfied by one of the following:
- CHEM 130 General Chemistry I
- CHEM 190 Foundations of Chemistry I, Honors

Chemistry II. Satisfied by one of the following:
- CHEM 135 General Chemistry II
- CHEM 195 Foundations of Chemistry II, Honors

Physics I. Satisfied by one of the following:
- PHSX 114 College Physics I
- PHSX 211 General Physics I
- PHSX 216 and General Physics I Laboratory

Statistics. Satisfied by one of the following:
- BIOL 570 Introduction to Biostatistics (Recommended for the Anthropology and Biology Concentrations)
- PSYC 210 Statistics in Psychological Research (Recommended for Psychological Research)
- MATH 365 Elementary Statistics

Anthropology

Anthropology Concentration (13)

Majors must complete the following 31 hours. These additional science courses are included in the Human Biology-Anthropology major hours and GPA calculations.

Organic Chemistry I. Satisfied by one of the following:
- CHEM 310 Fundamentals of Organic Chemistry
- CHEM 330 Organic Chemistry I

Organic Chemistry I Laboratory. Satisfied by:
- CHEM 331 Organic Chemistry I Laboratory

Cell Structure & Function. Satisfied by one of the following:
- BIOL 416 Cell Structure and Function
- BIOL 536 Cell Structure and Function (Honors)

Principles of Genetics. Satisfied by one of the following:
- BIOL 350 Principles of Genetics
- BIOL 360 Principles of Genetics, Honors

Senior Seminar in Human Biology. Satisfied by:
- BIOL 599 Senior Seminar: _____ (Must be taken in senior year)

Anthropology Concentration Categories (18-21)

Satisfied by completing 2 of the following 4 categories (18-21 hours required):

Category 1: Human Anatomy and Physiology
- Biology of Development. Satisfied by:
- BIOL 417 Biology of Development

Anatomy and Physiology. Satisfied by completing 9 hours from the following:
- ANTH 542 Biology of Human Nutrition
- ANTH 648 Human Osteology
- ANTH 650 Human Reproduction: Biology and Behavior
- BIOL 426 Laboratory in Cell Biology
- BIOL 440 Advanced Human Anatomy
- BIOL 600 Introductory Biochemistry, Lectures
- BIOL 637 Introductory Biochemistry Laboratory
- BIOL 646 Mammalian Physiology
- BIOL 647 Mammalian Physiology Laboratory

Category 2: Human Population Biology

Satisfied by completing 9 hours from the following:
- ANTH 340 Human Variation and Evolution
- ANTH 442 Anthropological Genetics
- ANTH 544 Origins of Native Americans
- ANTH 545 Contemporary Health Issues in Africa
- ANTH 652 Population Dynamics

Category 3: Human Adaptation and Evolution

Satisfied by completing 9 hours from the following:
- ANTH 350 Human Adaptation
- ANTH 352 Controversies on the Living and the Dead
- ANTH 503 Topics in Biological Anthropology: _____
- ANTH 555 Evolution of Human Diseases
ANTH 549  Human Paleontology: Fossil Apes to Australopithecus
ANTH 550  Human Paleontology: Homo Erectus to Homo Sapiens
Category 4: Human Biology and Behavior
Satisfied by completing 9 hours from the following:
ANTH 359  Anthropology of Sex
ANTH 447  Human Behavioral Genetics
ANTH 461  Introduction to Medical Anthropology
ANTH 754  Biological Bases of Human Behavior
PSYC 370  Behavioral Neuroscience
PSYC 536  The Psychology of Language

Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 31 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Applied Behavioral Science

Applied Behavioral Science Concentration (15)
Majors must complete the following 33 hours. These additional science courses are included in the Human Biology-Applied Behavioral Science major hours and GPA calculations.

Principles of Genetics. Satisfied by one of the following:
- BIOL 350 Principles of Genetics
- BIOL 360 Principles of Genetics, Honors

Introduction to Applied Behavioral Science. Satisfied by:
- ABSC 100 Introduction to Applied Behavioral Science

Development. Satisfied by one of the following:
- ABSC 160 Introduction to Child Behavior and Development
- PSYC 333 Child Development

Research Methods & Application. Satisfied by:
- ABSC 308 Research Methods and Application
- BIOL 599 Senior Seminar in Human Biology. Satisfied by:

Applied Behavioral Science Concentration Categories (18-19)
Satisfied by completing 2 of the following 4 categories (18-19 hours required):

Category 1: Applied Behavioral Science
Principles and Procedures of Behavior Modification and Therapy. Satisfied by:

ABSC 304  The Principles and Procedures of Behavior Modification and Therapy
ABSC 150  Community Leadership
ABSC 310  Building Healthy Communities
or ABSC 311  Building Healthy Communities, Honors
ABSC 350  The Behavioral Treatment of Children with Autism
ABSC 410  Behavioral Approaches in Working with Adolescents
ABSC 437  Independent Living and People with Disabilities

Category 2: Development: Typical and Atypical
Child Behavior and Development. Satisfied by:
- ABSC 632  Advanced Child Behavior and Development

Development: Typical and Atypical. Satisfied by completing 6 hours selected from the following:
- ABSC 535  Developmental Psychopathology
- ABSC 565  Applied Developmental Psychology
- BIOL 417  Biology of Development

Category 3: Biology of Behavior
Physiology of Organisms. Satisfied by:
- BIOL 408  Physiology of Organisms

Biology of Behavior. Satisfied by completing 6 hours selected from the following:
- ANTH 542  Biology of Human Nutrition
- BIOL 435  Introduction to Neurobiology
- BIOL 440  Advanced Human Anatomy
- BIOL 454  Brain Diseases and Neurological Disorders
- BIOL 646  Mammalian Physiology
- BIOL 647  Mammalian Physiology Laboratory
- BIOL 655  Behavioral Genetics
- PSYC 370  Behavioral Neuroscience
- PSYC 380  Clinical Neuroscience

Category 4: Evolution, Culture, and Behavior
Evolutionary Biology. Satisfied by:
- BIOL 412  Evolutionary Biology

Evolution, Culture, and Behavior. Satisfied by completing 6 hours selected from the following:
- ANTH 341  Human Evolution
- ANTH 415  The Rise of Civilization
- ANTH 650  Human Reproduction: Biology and Behavior
- ANTH 661  Cultural Dynamics
- BIOL/GEOG 410  Human Biogeography, Honors
- BIOL 428  Introduction to Systematics
- BIOL 625  Behavioral Ecology and Sociobiology
- BIOL 652  Comparative Animal Behavior

Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 33 hours of major courses.
Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Biology

Biology Concentration (14)
Majors must complete the following 32 hours. These additional science courses are included in the Human Biology-Biology major hours and GPA calculations.

<table>
<thead>
<tr>
<th>Organic Chemistry I. Satisfied by one of the following:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 310 Fundamentals of Organic Chemistry</td>
<td></td>
</tr>
<tr>
<td>CHEM 330 Organic Chemistry I</td>
<td></td>
</tr>
<tr>
<td>Organic Chemistry I Laboratory. Satisfied by:</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 331 Organic Chemistry I Laboratory</td>
<td></td>
</tr>
<tr>
<td>Physics II. Satisfied by one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>PHSX 115 College Physics II</td>
<td></td>
</tr>
<tr>
<td>PHSX 212 General Physics II &amp; PHSX 236 General Physics II Laboratory</td>
<td></td>
</tr>
<tr>
<td>Principles of Genetics. Satisfied by one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 350 Principles of Genetics</td>
<td></td>
</tr>
<tr>
<td>BIOL 360 Principles of Genetics, Honors</td>
<td></td>
</tr>
<tr>
<td>Senior Seminar in Human Biology. Satisfied by:</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 599 Senior Seminar: ______ (Must be taken in senior year.)</td>
<td></td>
</tr>
<tr>
<td>Biology Laboratory Electives. Course selections from the following categories must include at least 3 hours of laboratory credit, 400 level or above.</td>
<td></td>
</tr>
</tbody>
</table>

Biology Concentration Categories (18-20)
Satisfied by completing 2 of the following 4 categories listed below. 18-20 (18-20 hours required) (Course selections must include at least 3 hours of laboratory credit, 400 level or above.)

<table>
<thead>
<tr>
<th>Category 1: Development and Genetics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology of Development. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>BIOL 417 Biology of Development</td>
<td></td>
</tr>
<tr>
<td>Development and Genetics. Satisfied by completing 6 hours from the following:</td>
<td></td>
</tr>
<tr>
<td>ABSC/PSYC 535 Developmental Psychopathology</td>
<td></td>
</tr>
<tr>
<td>ANTH 762 Human Growth and Development</td>
<td></td>
</tr>
<tr>
<td>BIOL 405 Laboratory in Genetics</td>
<td></td>
</tr>
<tr>
<td>BIOL 416 Cell Structure and Function</td>
<td></td>
</tr>
<tr>
<td>or BIOL 536 Cell Structure and Function (Honors)</td>
<td></td>
</tr>
<tr>
<td>BIOL 595 Human Genetics</td>
<td></td>
</tr>
<tr>
<td>BIOL 655 Behavioral Genetics</td>
<td></td>
</tr>
<tr>
<td>BIOL 688 The Molecular Biology of Cancer</td>
<td></td>
</tr>
<tr>
<td>PSYC 333 Child Development</td>
<td></td>
</tr>
<tr>
<td>PSYC 430 Cognitive Development</td>
<td></td>
</tr>
<tr>
<td>PSYC 531 Language Development</td>
<td></td>
</tr>
<tr>
<td>SPLH 566 Language Development</td>
<td></td>
</tr>
<tr>
<td>Anatomy and Physiology</td>
<td></td>
</tr>
<tr>
<td>Mammalian Physiology. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>BIOL 646 Mammalian Physiology</td>
<td></td>
</tr>
<tr>
<td>Anatomy &amp; Physiology. Satisfied by completing 6 hours from the following:</td>
<td></td>
</tr>
<tr>
<td>ANTH 542 Biology of Human Nutrition</td>
<td></td>
</tr>
<tr>
<td>ANTH 648 Human Osteology</td>
<td></td>
</tr>
<tr>
<td>BIOL 435 Introduction to Neurobiology</td>
<td></td>
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<tr>
<td>BIOL 440 Advanced Human Anatomy</td>
<td></td>
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<tr>
<td>BIOL 600 Introductory Biochemistry, Lectures</td>
<td></td>
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<tr>
<td>BIOL 637 Introductory Biochemistry Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 647 Mammalian Physiology Laboratory</td>
<td></td>
</tr>
<tr>
<td>PSYC 370 Behavioral Neuroscience</td>
<td></td>
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<tr>
<td>PSYC 375 Cognitive Neuroscience</td>
<td></td>
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<tr>
<td>PSYC 380 Clinical Neuroscience</td>
<td></td>
</tr>
</tbody>
</table>

Category 3: Evolution, Ecology, and Adaptation
Evolutionary Biology. Satisfied by:

<table>
<thead>
<tr>
<th>Evolution, Ecology, and Adaptation. Satisfied by completing 6 hours selected from the following:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 340 Human Variation and Evolution</td>
<td></td>
</tr>
<tr>
<td>ANTH 341 Human Evolution</td>
<td></td>
</tr>
<tr>
<td>ANTH 350 Human Adaptation</td>
<td></td>
</tr>
<tr>
<td>ANTH 652 Population Dynamics</td>
<td></td>
</tr>
<tr>
<td>BIOL 410 Human Biogeography, Honors</td>
<td></td>
</tr>
<tr>
<td>BIOL 414 Principles of Ecology</td>
<td></td>
</tr>
<tr>
<td>BIOL 668 Evolutionary Ecology</td>
<td></td>
</tr>
<tr>
<td>PSYC 555 Evolutionary Psychology</td>
<td></td>
</tr>
</tbody>
</table>

Category 4: Human Disease
Fundamentals of Microbiology. Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Human Disease. Satisfied by completing 6 hours selected from the following:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 555 Evolution of Human Diseases</td>
<td></td>
</tr>
<tr>
<td>BIOL 402 Fundamentals of Microbiology Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 503 Immunology</td>
<td></td>
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<tr>
<td>BIOL 504 Immunology Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 506 Pathogenic Microbiology</td>
<td></td>
</tr>
<tr>
<td>BIOL 507 Pathogenic Microbiology Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 512 General Virology</td>
<td></td>
</tr>
<tr>
<td>BIOL 513 Virology Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 518 Microbial Genetics</td>
<td></td>
</tr>
<tr>
<td>BIOL 519 Microbial Genetics Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 595 Human Genetics</td>
<td></td>
</tr>
<tr>
<td>BIOL 616 Medical Entomology</td>
<td></td>
</tr>
<tr>
<td>BIOL 688 The Molecular Biology of Cancer</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 32-34
Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 32 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

### Psychology

**Psychology Concentration (13)**

Majors must complete the following 31 hours. These additional science courses are included in the Human Biology-Psychology major hours and GPA calculations.

- **Organic Chemistry I.** Satisfied by one of the following: 3
  - CHEM 310 Fundamentals of Organic Chemistry
  - CHEM 330 Organic Chemistry I

- **Organic Chemistry I Laboratory.** Satisfied by: 2
  - CHEM 331 Organic Chemistry I Laboratory

- **Principles of Genetics.** Satisfied by one of the following: 4
  - BIOL 350 Principles of Genetics
  - BIOL 360 Principles of Genetics, Honors

- **Research Methods.** Satisfied by:
  - PSYC 200 Research Methods in Psychology 3
  - BIOL 599 Senior Seminar in Human Biology 1

**Psychology Concentration Categories (18)**

Satisfied by completing 2 of the following 4 categories listed below. (18 hours required)

- **Category 1: Evolution, Adaptation and Health**
  - PSYC 555 Evolutionary Psychology
  - PSYC 605 Health Psychology
  - ANTH 340 Human Variation and Evolution
  - ANTH 341 Human Evolution
  - ANTH 350 Human Adaptation
  - ANTH 442 Anthropological Genetics
  - ANTH 447 Human Behavioral Genetics
  - ANTH 542 Biology of Human Nutrition
  - ANTH 555 Evolution of Human Diseases
  - BIOL 412 Evolutionary Biology
  - BIOL 595 Human Genetics

- **Category 2: Human Development**
  - Child Development. Satisfied by:
    - PSYC 333 Child Development
    - PSYC 334 Child Development, Honors

- **Human Development.** Satisfied by completing 6 hours selected from the following:
  - PSYC 430 Cognitive Development
  - PSYC/ABSC 535 Developmental Psychopathology
  - PSYC/ABSC 632 Advanced Child Behavior and Development
  - BIOL 417 Biology of Development

- **Category 3: Human Cognition and Language**

- **Cognitive Psychology.** Satisfied by:
  - PSYC 318 Cognitive Psychology
  - PSYC 418 Introduction to Cognitive Science
  - PSYC 482 Sensation and Perception
  - PSYC 518 Human Memory
  - PSYC 531 Language Development
  - PSYC 536 The Psychology of Language
  - SPLH 466 Language Science
  - SPLH 566 Language Development

- **Category 4: Neuroscience**

  - Satisfied by completing 9 hours selected from the following:
    - PSYC 370 Behavioral Neuroscience
    - PSYC 375 Cognitive Neuroscience
    - PSYC 380 Clinical Neuroscience
    - ANTH 650 Human Reproduction: Biology and Behavior
    - BIOL 435 Introduction to Neurobiology
    - BIOL 454 Brain Diseases and Neurological Disorders
    - BIOL 655 Behavioral Genetics
    - SPLH 320 The Communicating Brain: The Ultimate Personal Computer

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 31 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).
Speech-Language-Hearing

Speech-Language-Hearing Concentration (12)
Majors must complete the following 30 hours. These additional science courses are included in the Human Biology-Speech-Language-Hearing major hours and GPA calculations.

Physics. Satisfied by one of the following: 4
- SPLH 120 The Physics of Speech
- PHSX 115 College Physics II

Research Methods. Satisfied by:
- SPLH 660 Research Methods in Speech-Language-Hearing 3
- BIOL 350 Principles of Genetics
- BIOL 360 Principles of Genetics, Honors

Senior Seminar in Human Biology. Satisfied by:
- BIOL 599 Senior Seminar: _____ (Must be taken in senior year.) 1

Speech-Language-Hearing Concentration Categories (18-19)
Satisfied by completing 2 of the following 4 categories (18-19 hours required).

Category 1: Development and Genetics
- BIOL 417 Biology of Development
- ANTH 762 Human Growth and Development
- BIOL 405 Laboratory in Genetics
- BIOL 416 Cell Structure and Function
- BIOL 536 Cell Structure and Function (Honors)
- BIOL 595 Human Genetics
- BIOL 655 Behavioral Genetics
- PSYC 333 Child Development
- PSYC 430 Cognitive Development
- SPLH 464 Undergraduate Seminar in: _____
- or SPLH 764 Seminar in: _____
- SPLH 466 Language Science
- SPLH 566 Language Development

Category 2: Anatomy and Physiology
- BIOL 646 Mammalian Physiology
- ANATOMY 440 Advanced Human Anatomy
- BIOL 647 Mammalian Physiology Laboratory
- SPLH 462 Principles of Speech Science
- SPLH 463 Principles of Hearing Science

Category 3: Neuroscience
- BIOL 408 Physiology of Organisms
- PSYC 335 Introduction to Neurobiology
- PSYC 370 Behavioral Neuroscience
- PSYC 375 Cognitive Neuroscience

Category 4: Research Practicum
Satisfied by completing 9 hours selected from the following courses:
- SPLH 464 Undergraduate Seminar in: _____ (Circuit Theory & Bioinstrumentation)
- SPLH 449 Laboratory/Field Work in Human Biology (various topics)
- SPLH 499 Directed Study in Speech-Language-Hearing

Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 30 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Sample 4-year plans for the BA degree in Human Biology with concentrations in the following can be found here: Anthropology (p. 1506), Applied Behavioral Science (p. 1507), Biology (p. 1508), Psychology (p. 1509), and Speech-Language-Hearing (p. 1510), or by using the left-side navigation.

Departmental Honors
Undergraduate majors are eligible to graduate with honors in biology if they fulfill the following requirements:

1. Complete all course work required for the appropriate degree in biology.
2. Achieve a minimum grade-point average of 3.25 overall and 3.5 in the major.
3. Complete BIOL 499 Introduction to Honors Research with a grade of B or higher.
4. Complete BIOL 699 Biology Honors Research Colloquium with a grade of B or higher.
5. Complete an independent research project under the supervision of a faculty member in an area appropriate to the degree sought.
6. Submit an honors thesis to the honors committee once the research is complete and present the results of the completed research at the honors research symposium.
Students majoring in Human Biology with Anthropology, Applied Behavioral Science, Psychology, or Speech-Language-Hearing concentrations will follow the honors requirements for their respective concentration department.

Specific guidelines and intent forms are available in the Undergraduate Biology Program office and online (http://www.kuub.ku.edu). Candidates must declare their intent to graduate with honors at least 2 semesters before graduation.

**Study Abroad**

Consult an advisor at least 4 months before undertaking study abroad. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu), 108 Lippincott Hall, for information about study in one of the many countries (e.g., Scotland, Australia, Switzerland) with special arrangements with KU.

### BA in Human Biology with concentration in Anthropology

Below is a sample 4-year plan for students pursuing the BA in Human Biology with a concentration in Anthropology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104, or equivalent prior to the freshman year, fall semester.

#### Freshman

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1)</td>
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<td></td>
</tr>
<tr>
<td>CHEM 130 (General Science Requirement, BA Lab Req)</td>
<td>5</td>
<td>MATH 115 (Goal 1.2 General Science Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 150 or 151 (Goal 3 Natural Science, General Science Requirement)</td>
<td>4</td>
<td>CHEM 135 (General Science Requirement)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>BIOL 105 (Major Requirement)</td>
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<td>BIOL 152 or 153 (General Science Requirement)</td>
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</table>

**Total Hours:** 16

#### Sophomore

<table>
<thead>
<tr>
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<th>Fall</th>
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<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>1st Semester Language (BA Second Language)</td>
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<td>2nd Semester Language (BA Second Language)</td>
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<td></td>
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<td>MATH 116 (General Science Requirement)</td>
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<td>ANTH 304 (General Science Requirement)</td>
<td>3-4</td>
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<td>CHEM 310 or 330 (Major Requirement)</td>
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<tr>
<td>CHEM 331 (Major Requirement)</td>
<td>2</td>
<td>Elective or possible minor course (Total Hours)</td>
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<tr>
<td>BIOL 350 or 360 (Major Requirement)</td>
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**Total Hours:** 17

#### Junior

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<tr>
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<td>4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
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<td></td>
</tr>
<tr>
<td>PHSX 114 (or PHSX 211 &amp; 216) (Goal 1.1 Critical Thinking, General Science Requirement)</td>
<td>4</td>
<td>PHSX 115 (or PHSX 212 &amp; 236) (General Science Requirement)</td>
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<tr>
<td>BIOL 416 (Major Requirement)</td>
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<td>Major Category Course (Major Requirement)</td>
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<td></td>
</tr>
<tr>
<td>Goal 2.2 Communication</td>
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<td>Major Category Course (Major Requirement)</td>
<td>3</td>
<td></td>
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<tr>
<td>Elective or possible minor course (Total Hours)</td>
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**Total Hours:** 16

#### Senior

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BIOL 570, MATH 365, or PSYC 210 (General Science Requirement)</td>
<td>3</td>
<td>BIOL 599 (Major Requirement, Goal 6)</td>
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<tr>
<td>Major Category Course (Major Requirement)</td>
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<td>Major Category Course (Major Requirement)</td>
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</tr>
<tr>
<td>Major Category Course (Major Requirement)</td>
<td>3</td>
<td>Major Category Course (Major Requirement) if needed</td>
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</tr>
<tr>
<td>Goal 3 Humanities (300+ recommended)</td>
<td>3</td>
<td>Goal 4.1 US Diversity (300+ recommended)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
<td>Goal 4.2 Global Awareness (300+ Recommended)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>LA&amp;S 492 (Job Search Strategies (or elective))</td>
<td>1</td>
<td></td>
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</table>

**Total Hours:** 15

**Total Hours: 120-123**

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Requires a Math ACT score of 26+, a comparable SAT or KU Math Placement Exam score, or credit for a MATH 101 or 104 equivalent course. MATH 121/MATH 125 can be taken instead of MATH 115 and MATH 116 to fulfill the Math requirement.
3. Concurrent or prior enrollment in CHEM 130 is required.
4. CHEM 135 offered only in spring; BIOL 416, BIOL 570, and CHEM 310 are only in fall.
5. Most medical schools require the full CHEM 330, 331, 335, and 336 sequence and PHSX 114/PHSX 211&216 and PHSX 115/PHSX 212&236.
6. Refer to the degree requirements in the catalog, the departmental website (http://humanbio.ku.edu/overview-HBIO-ANTH), the Degree Progress Report (DPR), or your advisor for a list of applicable courses. Completion of 2 of 4 major categories is required.
A total of 3 credit hours in Goal 6 approved courses is needed to fulfill Goal 6. This goal can also be fulfilled by completion of an approved educational experience, or an approved integration of courses and/or experiences. See your advisor for more information.

* BIOL 105: Biology Orientation Seminar (1 hour online course) is required for admission to the major. It can be taken the summer prior to your freshman year.

Please note:

All students in the College of Liberal Arts and Sciences are required to completed 120 total hours of which 45 hours must be at the Jr/Sr (300+) level, and 100 hours must be from within the College of Liberal Arts and Sciences.

The same course cannot be used to fulfill more than one KU Core Goal.

BA in Human Biology with concentration in Applied Behavioral Science

Below is a sample 4-year plan for students pursuing the BA in Human Biology with a concentration in Applied Behavioral Science. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104, or equivalent prior to the freshman year, fall semester.

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 (2 crs req), BA Writing I)¹</td>
<td>3 ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)</td>
<td>3</td>
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</tr>
<tr>
<td>MATH 115 (Goal 1.2, General Science, BA Quantitative Req)²</td>
<td>3 CHEM 135 (General Science)⁴</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>CHEM 130 (Goal 3 Natural Science, General Science)²</td>
<td>5 BIOL 152 or 153 (General Science)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 150 or 151 (General Science, BA Lab)³</td>
<td>4 ABSC 100 (Goal 1.1 Critical Thinking, Major Requirement)</td>
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</tr>
<tr>
<td>BIOL 105 (Major Requirement)⁵</td>
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<td></td>
</tr>
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</table>

| 16 | 15 |

### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5 2nd Semester Language (BA Second Language)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>MATH 116 (General Science Requirement)</td>
<td>3 Goal 2.2 Communication</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ABSC 160 or PSYC 333 (Major Requirement)</td>
<td>3 ANTH 304 (General Science Requirement)</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>BIOL 350 or 360 (Major Requirement)</td>
<td>4 PHSX 114 (or PHSX 211 &amp; 216, General Science Requirement)⁵</td>
<td>4</td>
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</tr>
</tbody>
</table>

| 13 | 12-13 |

### Total Hours: 120-124

¹ The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

² Requires a Math ACT score of 26+, a comparable SAT or KU Math Placement Exam score, or credit for a MATH 101 or 104 equivalent course. MATH 121/MATH 125 can be taken instead of MATH 115 and MATH 116 to fulfill the Math requirement.

³ Concurrent or prior enrollment in CHEM 130 is required.

⁴ CHEM 135 is offered only in the spring; BIOL 570 only in the fall.

⁵ Most medical schools require the full CHEM 330, 331, 335, and 336 sequence and PHSX 114/211&216 and PHSX 115/212&236.

⁶ Refer to the degree requirements in the catalog, the departmental website (http://humanbio.ku.edu/overview-HBIO-ABSC), the Degree Progress Report (DPR), or your advisor for a list of applicable courses. Completion of 2 of 4 major categories is required.

⁷ A total of 3 credit hours in Goal 6 approved courses is needed to fulfill Goal 6. This goal can also be fulfilled by completion of an approved educational experience, or an approved integration of courses and/or experiences. See your advisor for more information.
BIOL 105: Biology Orientation Seminar (1 hour online course) is required for admission to the major. It can be taken the summer prior to your freshman year.

Please note:

All students in the College of Liberal Arts and Sciences are required to completed 120 total hours of which 45 hours must be at the Jr/Sr (300+) level, and 100 hours must be from within the College of Liberal Arts and Sciences.

The same course cannot be used to fulfill more than one KU Core Goal.

BA in Human Biology with concentration in Biology

Below is a sample 4-year plan for students pursuing the BA in Human Biology with a concentration in Biology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104, or equivalent prior to the freshman year, fall semester.

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 (2 crs req), BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)</td>
<td>3</td>
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<tr>
<td>Goal 1.1 Critical Thinking</td>
<td>3</td>
<td>MATH 115 (General Science Requirement)</td>
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<tr>
<td>CHEM 130 (General Science Requirement, BA Lab)</td>
<td>5</td>
<td>CHEM 135 (General Science Requirement)</td>
<td>5</td>
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<tr>
<td>BIOL 150 or 151 (Goal 3 Natural Science, General Science Requirement)</td>
<td>4</td>
<td>BIOL 152 or 153 (General Science Requirement)</td>
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<tr>
<td>BIOL 105 (Major Requirement)</td>
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<tr>
<td><strong>Total Hours:</strong></td>
<td><strong>16</strong></td>
<td><strong>15</strong></td>
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<table>
<thead>
<tr>
<th>Sophomore</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
</tr>
<tr>
<td>MATH 116 (General Science Requirement)</td>
<td>3</td>
<td>PSYC 104 (Goal 3 Social Science, Recommended)</td>
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<tr>
<td>CHEM 310 or 330 (Major Requirement)</td>
<td>3</td>
<td>ANTH 304 (General Science Requirement)</td>
<td>3-4</td>
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<td>CHEM 331 (Major Requirement)</td>
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<td>Major Category Course (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 350 or 360 (Major Requirement)</td>
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<td>Elective or possible minor course (Total Hours)</td>
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<tr>
<td><strong>Total Hours:</strong></td>
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<td><strong>17-18</strong></td>
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<table>
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<th>Junior</th>
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<th>Hours</th>
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<td>3rd Semester Language (BA Second Language)</td>
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<td>4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
<td>3-5</td>
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<tr>
<td>Goal 3 Humanities</td>
<td>3</td>
<td>PHSX 115 (or PHSX 212 &amp; 236, General Science Requirement)</td>
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</tr>
<tr>
<td>COMS 130 (Goal 2.2 Communication)</td>
<td>3</td>
<td>Major Category Course (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 114 (or PHSX 211 &amp; 216, General Science Requirement)</td>
<td>4</td>
<td>Major Category Course (Major Requirement)</td>
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</tr>
<tr>
<td>Major Category Course (Major Requirement)</td>
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<td><strong>Total Hours:</strong></td>
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<td><strong>13-15</strong></td>
<td><strong>12</strong></td>
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<table>
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<tr>
<th>Senior</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Goal 4.1 US Diversity (300+ Recommended)</td>
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<td>Goal 4.2 Global Awareness (300+ Recommended)</td>
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<tr>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
<td>BIOL 599 (Major Requirement, Goal 6)</td>
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<tr>
<td>BIOL 570, MATH 365, or PSYC 210 (General Science Requirement)</td>
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<td>Major Category Course (Major Requirement)</td>
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<td>Major Category Course (Major Requirement)</td>
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<td>Major Category Lab Course (Major Requirement)</td>
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<td>Elective or possible minor course (Total Hours)</td>
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<td><strong>12</strong></td>
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</table>

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2. Requires a Math ACT score of 26+, a comparable SAT or KU Math Placement Exam score, or credit for a MATH 101 or 104 equivalent course. MATH 121/MATH 125 can be taken instead of MATH 115 and MATH 116 to fulfill the Math requirement.

3. Concurrent or prior enrollment in CHEM 130 is required.

4. CHEM 135 is offered in the spring only; CHEM 310 is offered in the fall only; BIOL 570 is only in fall and is recommended for the Biology concentration.

5. Most medical schools require the full CHEM 330, 331, 335, and 336 sequence and PHSX 114/211&216 and PHSX 115/212&236.

6. Refer to the degree requirements in the catalog, the departmental website (http://humanbio.ku.edu/overview-HBIO-BIOL), the Degree Progress Report (DPR), or your advisor for a list of applicable courses. Completion of 2 of 4 major categories is required, and at least 3 hours of lab credit, 400-level of above, must be completed. These lab credit hours may come from within the two major categories being completed or from other categories.
A total of 3 credit hours in Goal 6 approved courses is needed to fulfill Goal 6. This goal can also be fulfilled by completion of an approved educational experience, or an approved integration of courses and/or experiences. See your advisor for more information.

* BIOL 105: Biology Orientation Seminar (1 hour online course) is required for admission to the major. It can be taken the summer prior to your freshman year.

Please note:

All students in the College of Liberal Arts and Sciences are required to completed 120 total hours of which 45 hours must be at the Jr/Sr (300+) level, and 100 hours must be from within the College of Liberal Arts and Sciences.

The same course cannot be used to fulfill more than one KU Core Goal.

## BA in Human Biology with concentration in Psychology

Below is a sample 4-year plan for students pursuing the BA in Human Biology with a concentration in Psychology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104, or equivalent prior to the freshman year, fall semester.

### Freshman

<table>
<thead>
<tr>
<th>Semester</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 (2 crs req), BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)</td>
<td>3</td>
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<tr>
<td>PSYC 104 or 105 (Goal 3 Social Science)</td>
<td>3</td>
<td>MATH 115 (General Science Requirement)</td>
<td>3</td>
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</tr>
<tr>
<td>CHEM 130 (General Science Requirement, BA Lab)</td>
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<td>CHEM 135 (General Science Requirement)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>BIOL 150 or 151 (Goal 3 Natural Science, General Science Requirement)</td>
<td>4</td>
<td>BIOL 152 or 153 (General Science Requirement)</td>
<td>4</td>
<td></td>
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<tr>
<td>BIOL 105 (Major Requirement)</td>
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<td><strong>Total</strong></td>
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<td><strong>15</strong></td>
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### Sophomore

<table>
<thead>
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<th>Semester</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>MATH 116 (General Science Requirement)</td>
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### Junior

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<tr>
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### Senior

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<th>Hours</th>
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<tr>
<td>Goal 4.1 US Diversity (300+ Recommended)</td>
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<td>Goal 4.2 Global Awareness (300+ Recommended)</td>
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<td>Goal 5 Social Responsibility &amp; Ethics</td>
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<td>BIOL 599 (Major Requirement, Goal 6)</td>
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### Total Hours: 120-123

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Requires a Math ACT score of 26+, a comparable SAT or KU Math Placement Exam score, or credit for a MATH 101 or 104 equivalent course. MATH 121/MATH 125 can be taken instead of MATH 115 and MATH 116 to fulfill the Math requirement.
3. Concurrent or prior enrollment in CHEM 130 is required.
4. CHEM 135 is offered only in spring; BIOL 570 and CHEM 310 are only in fall.
5. Most medical schools require the full CHEM 330, 331, 335, and 336 sequence and PHSX 114/211&216 and PHSX 115/212&236.
6. Refer to the degree requirements in the catalog, the departmental website (http://humanbio.ku.edu/overview-HBIO-PSYC), the Degree Progress Report (DPR), or your advisor for a list of applicable courses. Completion of 2 of 4 major categories is required.
7. PSYC 210 recommended for the statistics requirement.
8. A total of 3 credit hours in Goal 6 approved courses is needed to fulfill Goal 6. This goal can also be fulfilled by completion of an approved educational experience, or an approved integration of courses and/or experiences. See your advisor for more information.
or MATH 104, or equivalent prior to the freshman year, fall semester.

This degree plan assumes students will have the equivalent of MATH 101

Please note:

All students in the College of Liberal Arts and Sciences are required to completed 120 total hours of which 45 hours must be at the Jr/Sr (300+) level, and 100 hours must be from within the College of Liberal Arts and Sciences.

The same course cannot be used to fulfill more than one KU Core Goal.

BA in Human Biology with concentration in Speech-Language-Hearing

Below is a sample 4-year plan for students pursuing the BA in Human Biology with a concentration in Speech-Language-Hearing. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104, or equivalent prior to the freshman year, fall semester.

**Freshman**

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<th>Spring</th>
<th>Hours</th>
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**Sophomore**

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**Junior**

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<tbody>
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<td>3rd Semester Language (BA Second Language)</td>
<td>3 4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
<td>3-5</td>
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</tr>
<tr>
<td>Goal 1.1 Critical Thinking</td>
<td>3 Goal 3 Humanities (300+ Recommended)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COMS 130 (Goal 2.2 Communication)</td>
<td>3 Goal 5 Social Responsibility &amp; Ethics</td>
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<td>Major Category Course (Major Requirement)</td>
<td>3 SPLH 660 (Major Requirement)</td>
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<td>3 Major Category Course (Major Requirement)</td>
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**Senior**

<table>
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<tr>
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<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Category Course (Major Requirement)</td>
<td>3 Goal 4.2 Global Awareness (300+ Recommended)</td>
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<td></td>
</tr>
<tr>
<td>Major Category Course (Major Requirement)</td>
<td>3 Major Category Course (Major Requirement)</td>
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<tr>
<td>BIOL 570, MATH 365, or PSYC 210 (General Science Requirement)</td>
<td>3 Major Category Course (Major Requirement)</td>
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<tr>
<td>Goal 4.1 US Diversity (300+ Recommended)</td>
<td>3 BIOL 599 (Major Requirement, Goal 6)</td>
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<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3 Elective or possible minor course 300+ (Total Hours)</td>
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<table>
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<th>Total</th>
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<tr>
<td></td>
<td>15</td>
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<td></td>
<td>13</td>
</tr>
</tbody>
</table>

**Total Hours: 120-123**

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Requires a Math ACT score of 26+, a comparable SAT or KU Math Placement Exam score, or credit for a MATH 101 or 104 equivalent course. MATH 121/MATH 125 can be taken instead of MATH 115 and MATH 116 to fulfill the Math requirement.
3. Concurrent or prior enrollment in CHEM 130 is required.
4. CHEM 135 is offered only in spring; BIOL 570 is only in the fall.
5. Most medical schools require the full CHEM 330, 331, 335, and 336 sequence and PHSX 114/211&216 and PHSX 115/212&236.
6. Refer to the departmental requirements in the catalog, the departmental website (http://humanbio.ku.edu/overview-HB-SPLH), the Degree Progress Report (DPR), or your advisor for a list of applicable courses. Completion of 2 of 4 major categories is required.
7. Requires completion of at least 9 credits of SPLH course work; English 101 and ENGL 102 (or course meeting core skill in written communication); or consent of instructor.
8. A total of 3 credit hours in Goal 6 approved courses is needed to fulfill Goal 6. This goal can also be fulfilled by completion of an approved educational experience, or an approved integration of courses and/or experiences. See your advisor for more information.
* BIOL 105: Biology Orientation Seminar (1 hour online course) is required for admission to the major. It can be taken the summer prior to your freshman year.

Please note:

All students in the College of Liberal Arts and Sciences are required to completed 120 total hours of which 45 hours must be at the Jr/Sr (300+) level, and 100 hours must be from within the College of Liberal Arts and Sciences.

The same course cannot be used to fulfill more than one KU Core Goal.

Bachelor of Arts in Microbiology

Why study biology?

Study biology because undergraduates should have the opportunity to explore the breadth of biology that allows them to succeed in their chosen paths beyond the university.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

First- and Second-Year Preparation

Because biology study requires preparation in other sciences, students should begin meeting major requirements in the first year. It is particularly important to take CHEM 130 and CHEM 135 in the first year and, for several majors, to take CHEM 330, CHEM 331, CHEM 335, and CHEM 336 in the second year. Ideally, most majors should also take BIOL 150 and BIOL 152 during the first year, as well as BIOL 105. Students who have taken BIOL 100 and BIOL 102, have earned an A or B in both courses, and have decided to major in a biological science should consult a UBP advisor to request permission to substitute BIOL 100 and BIOL 102 for BIOL 150.

Admission to the Major

Admission Requirements

Course Requirements

Admission course requirements for Biochemistry, Biology, and Human Biology (18)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Hours</th>
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<tr>
<td>BIOL 105</td>
<td>Biology Orientation Seminar</td>
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<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 151</td>
<td>Principles of Molecular and Cellular Biology, Honors</td>
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<tr>
<td>BIOL 152</td>
<td>Principles of Organismal Biology</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 153</td>
<td>Principles of Organismal Biology, Honors</td>
<td></td>
</tr>
<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
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<tr>
<td>or CHEM 175</td>
<td>Chemistry for the Chemical Sciences II</td>
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<tr>
<td>or CHEM 195</td>
<td>Foundations of Chemistry II, Honors</td>
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</tr>
<tr>
<td>Principles of Genetics</td>
<td>Satisfied by one of the following:</td>
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<tr>
<td>BIOL 350</td>
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<tr>
<td>or BIOL 360</td>
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Admission course requirements for Microbiology (14)

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<td>BIOL 105</td>
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<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
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<td>or BIOL 151</td>
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<td>Chemistry II</td>
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<tr>
<td>CHEM 135</td>
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<tr>
<td>or CHEM 175</td>
<td>Chemistry for the Chemical Sciences II</td>
<td></td>
</tr>
<tr>
<td>or CHEM 195</td>
<td>Foundations of Chemistry II, Honors</td>
<td></td>
</tr>
<tr>
<td>Principles of Genetics</td>
<td>Satisfied by one of the following:</td>
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</tr>
<tr>
<td>BIOL 350</td>
<td>Principles of Genetics</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 360</td>
<td>Principles of Genetics, Honors</td>
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Admission course requirements for Molecular Biosciences (Edwards campus) (17)

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<th>Course</th>
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<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
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<tr>
<td>or BIOL 151</td>
<td>Principles of Molecular and Cellular Biology, Honors</td>
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<tr>
<td>BIOL 152</td>
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<td>or BIOL 153</td>
<td>Principles of Organismal Biology, Honors</td>
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<td>Chemistry II</td>
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<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
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<tr>
<td>or CHEM 175</td>
<td>Chemistry for the Chemical Sciences II</td>
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</tr>
<tr>
<td>or CHEM 195</td>
<td>Foundations of Chemistry II, Honors</td>
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<tr>
<td>Principles of Genetics</td>
<td>Satisfied by one of the following:</td>
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<tr>
<td>BIOL 350</td>
<td>Principles of Genetics</td>
<td>4</td>
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<tr>
<td>or BIOL 360</td>
<td>Principles of Genetics, Honors</td>
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</table>
Biochemistry, Biology, Human Biology, and Molecular Biosciences Admission GPA

Must have a grade-point average of at least 2.2 based on grades in BIOL 150, BIOL 152, CHEM 135, and BIOL 350 (or equivalents). KU's course repeat policy applies to grade-point average calculation.

Microbiology Admission GPA

Must have a grade-point average of at least 2.2 based on grades in BIOL 150, CHEM 135, and BIOL 350 (or equivalents). Microbiology admission requirements differ from those for Biochemistry, Biology, Human Biology, and Molecular Biosciences, because BIOL 152 is not required for the B.A. and B.S. degrees in microbiology. KU's course repeat policy applies to grade-point average calculation.

Application Term

Application to the major should occur in the term in which admission requirements will be completed. If the student does not meet established admission grade-point average criteria or neglects to apply for admission in this term, she or he must petition the Undergraduate Biology Program for permission for late application. The Undergraduate Biology Program, as part of an approved petition, determines late admission requirements (including grade-point average and course requirements) and the final deadline for admission.

Majors and Concentrations

Bachelor's degree requirements in biology are modified as necessary. Current requirements are available in the UBP office and online (http://www.kuub.ku.edu). Major programs are offered in biochemistry, biology, human biology, and microbiology. Students may choose to concentrate in a range of specialties in the biological sciences, such as botany, cellular biology, developmental biology, environmental biology, ecology, entomology, genetics, marine biology, molecular biology, neurobiology, paleontology, physiology, systematics, or zoology (invertebrate or vertebrate).

Requirements for the B.A. Major in Microbiology

Course work allows students to study microbiology as part of their general education and provides a background for teachers. It also prepares students for work in medical, public health, research, and industrial laboratories; for graduate, medical, or dental school; or for the clinical laboratory sciences program.

For general requirements for the B.A. degree, see CLAS General Education Degree Requirements on the College of Liberal Arts and Sciences Degree Requirements (p. 774) page.

General Science Requirements

Microbiology General Science Requirements (39-42)

<table>
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<tr>
<th>Course</th>
<th>Credits</th>
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Principles of Genetics. Satisfied by one of the following:

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Introductory Biochemistry. Satisfied by:

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<td>CHEM 130 General Chemistry I</td>
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<td>CHEM 190 Foundations of Chemistry I, Honors</td>
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<td>Chemistry II. Satisfied by one of the following:</td>
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<td>CHEM 135 General Chemistry II</td>
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<td>CHEM 195 Foundations of Chemistry II, Honors</td>
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<td>CHEM 310 Fundamentals of Organic Chemistry</td>
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Biological Chemistry I Laboratory. Satisfied by:

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Calculus. Satisfied by one of the following: 4-6

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<td>&amp; MATH 116 Calculus II</td>
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<td>MATH 125 Calculus I</td>
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<td>MATH 145 Calculus I, Honors</td>
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Physics I. Satisfied by one of the following: 4-5

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<tr>
<td>PHSX 211 General Physics I &amp; PHSX 216 General Physics I Laboratory</td>
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<tr>
<td>PHSX 213 General Physics I Honors</td>
<td></td>
</tr>
<tr>
<td>Physics II. Satisfied by one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>PHSX 115 College Physics II</td>
<td></td>
</tr>
<tr>
<td>PHSX 212 General Physics II &amp; PHSX 236 General Physics II Laboratory</td>
<td></td>
</tr>
<tr>
<td>PHSX 214 General Physics II Honors</td>
<td></td>
</tr>
</tbody>
</table>

Microbiology Core Knowledge & Skills (6)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamentals of Microbiology. Satisfied by one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 400 Fundamentals of Microbiology</td>
<td></td>
</tr>
<tr>
<td>BIOL 401 Fundamentals of Microbiology, Honors</td>
<td></td>
</tr>
</tbody>
</table>

Fundamentals of Microbiology Laboratory. Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 402 Fundamentals of Microbiology Laboratory</td>
<td>2</td>
</tr>
</tbody>
</table>

Senior Seminar: Current Progress in Microbiology. Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 599 Senior Seminar: ______. (Current Progress in Microbiology. Must be taken in senior year.)</td>
<td>1</td>
</tr>
</tbody>
</table>

Microbiology Electives and Laboratory Requirements (15)

Satisfied by completing 15 hours of microbiology courses, including 3 15 lecture-lab pairings, selected from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 503 Immunology</td>
<td></td>
</tr>
<tr>
<td>BIOL 504 Immunology Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 506 Pathogenic Microbiology</td>
<td></td>
</tr>
<tr>
<td>BIOL 507 Pathogenic Microbiology Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 512 General Virollogy</td>
<td></td>
</tr>
<tr>
<td>BIOL 513 Virollogy Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 518 Microbial Genetics</td>
<td></td>
</tr>
<tr>
<td>BIOL 519 Microbial Genetics Laboratory</td>
<td></td>
</tr>
</tbody>
</table>

Microbiology Elective (3)
Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 24 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of 2.0 KU GPA in junior/senior courses (300+) in the major.

Satisfied by 24 hours of major courses.

**Major Hours & Major GPA**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 331 (General Science Requirement)</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 600 (Major Requirement)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHSX 115 (or PHSX 212 &amp; 236)</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microbiology Elective 400+ (Major Requirement)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microbiology Lab Elective 400+ (Major Requirement)</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Junior**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
<td>3-5</td>
<td></td>
</tr>
<tr>
<td>BIOL 600 (Major Requirement)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHSX 115 (or PHSX 212 &amp; 236)</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microbiology Elective 400+ (Major Requirement)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microbiology Lab Elective 400+ (Major Requirement)</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

**Senior**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microbiology Elective 400+ (Major Requirement)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microbiology Lab Elective 400+ (Major Requirement)</td>
<td>2</td>
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<td>3</td>
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</tbody>
</table>

**Total Hours: 120-122**

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2. Requires a Math ACT score of 26+, a comparable SAT or KU Math Placement Exam score, or credit for a MATH 101 or 104 equivalent course. MATH 121/MATH 125 can be taken instead of MATH 115 and MATH 116 to fulfill the Math requirement.

3. MATH 115 eligibility is required for enrollment.

4. Concurrent or prior enrollment in CHEM 130 is required.

5. CHEM 135 and BIOL 506, 507, 512, and BIOL 513 are offered only in the spring.

6. BIOL 400/401, 402, 503, 504, 518, 519, and 600 are offered only in the fall.

7. Most medical schools require the full CHEM 330, 331, 335, and 336 sequence.

8. 15 hours of Microbiology courses, including 3 lecture-lab pairings, selected from BIOL 503, 504, 506, 507, 512, 513, 518, and 519.
Bachelor of Science in Biochemistry

Why study biology?

Study biology because undergraduates should have the opportunity to explore the breadth of biology that allows them to succeed in their chosen paths beyond the university.

Undergraduate Admission

Admission to KU

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Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

First- and Second-Year Preparation

Because biology study requires preparation in other sciences, students should begin meeting major requirements in the first year. It is particularly important to take CHEM 130 and CHEM 135 in the first year and, for several majors, to take CHEM 330, CHEM 331, CHEM 335, and CHEM 336 in the second year. Ideally, most majors should also take BIOL 150 and BIOL 152 during the first year, as well as BIOL 105. Students who have taken BIOL 100 and BIOL 102, have earned an A or B in both courses, and have decided to major in a biological science should consult a UBP advisor to request permission to substitute BIOL 100 and BIOL 102 for BIOL 150.

Admission to the Major

Admission Requirements

Course Requirements

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<tr>
<th>Admission course requirements for Biochemistry, Biology, and Human Biology (18)</th>
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<tbody>
<tr>
<td>Biology Orientation Seminar. Satisfied by:</td>
</tr>
<tr>
<td>BIOL 105 Biology Orientation Seminar</td>
</tr>
<tr>
<td>Principles of Molecular and Cellular Biology. Satisfied by one of the following:</td>
</tr>
<tr>
<td>BIOL 150 Principles of Molecular and Cellular Biology</td>
</tr>
</tbody>
</table>

Study Abroad

Consult an advisor at least 4 months before undertaking study abroad. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu), 108 Lippincott Hall, for information about study in one of the many countries (e.g., Scotland, Australia, Switzerland) with special arrangements with KU.
or BIOL 151 Principles of Molecular and Cellular Biology, Honors
Principles of Organismal Biology. Satisfied by one of the following:
BIOL 152 Principles of Organismal Biology
4
or BIOL 153 Principles of Organismal Biology, Honors
Chemistry II. Satisfied by one of the following:
CHEM 135 General Chemistry II
5
or CHEM 175 Chemistry for the Chemical Sciences II
or CHEM 195 Foundations of Chemistry II, Honors
Principles of Genetics. Satisfied by one of the following:
BIOL 350 Principles of Genetics
4
or BIOL 360 Principles of Genetics, Honors

**Admission course requirements for Microbiology (14)**

**Biography Orientation Seminar.** Satisfied by:

BIOL 105 Biology Orientation Seminar 1

Principles of Molecular and Cellular Biology. Satisfied by one of the following:

BIOL 150 Principles of Molecular and Cellular Biology
4
or BIOL 151 Principles of Molecular and Cellular Biology, Honors

Chemistry II. Satisfied by one of the following:

CHEM 135 General Chemistry II
5
or CHEM 175 Chemistry for the Chemical Sciences II
or CHEM 195 Foundations of Chemistry II, Honors

Principles of Genetics. Satisfied by one of the following:

BIOL 350 Principles of Genetics
4
or BIOL 360 Principles of Genetics, Honors

**Admission course requirements for Molecular Biosciences (Edwards campus) (17)**

Principles of Molecular and Cellular Biology. Satisfied by one of the following:

BIOL 150 Principles of Molecular and Cellular Biology
4
or BIOL 151 Principles of Molecular and Cellular Biology, Honors

Principles of Organismal Biology. Satisfied by one of the following:

BIOL 152 Principles of Organismal Biology
4
or BIOL 153 Principles of Organismal Biology, Honors

Chemistry II. Satisfied by one of the following:

CHEM 135 General Chemistry II
5
or CHEM 175 Chemistry for the Chemical Sciences II
or CHEM 195 Foundations of Chemistry II, Honors

Principles of Genetics. Satisfied by one of the following:

BIOL 350 Principles of Genetics
4
or BIOL 360 Principles of Genetics, Honors

**Biochemistry, Biology, Human Biology, and Molecular Biosciences Admission GPA**

Must have a grade-point average of at least 2.2 based on grades in BIOL 150, BIOL 152, CHEM 135, and BIOL 350 (or equivalents). KU’s course repeat policy applies to grade-point average calculation.

**Microbiology Admission GPA**

Must have a grade-point average of at least 2.2 based on grades in BIOL 150, CHEM 135, and BIOL 350 (or equivalents). Microbiology admission requirements differ from those for Biochemistry, Biology, Human Biology, and Molecular Biosciences, because BIOL 152 is not required for the B.A. and B.S. degrees in microbiology. KU’s course repeat policy applies to grade-point average calculation.

**Application Term**

Application to the major should occur in the term in which admission requirements will be completed. If the student does not meet established admission grade-point average criteria or neglects to apply for admission in this term, she or he must petition the Undergraduate Biology Program for permission for late application. The Undergraduate Biology Program, as part of an approved petition, determines late admission requirements (including grade-point average and course requirements) and the final deadline for admission.

**Majors and Concentrations**

Bachelor’s degree requirements in biology are modified as necessary. Current requirements are available in the UBP office and online (http://www.kuub.ku.edu). Major programs are offered in biochemistry, biology, human biology, and microbiology. Students may choose to concentrate in a range of specialties in the biological sciences, such as botany, cellular biology, developmental biology, environmental biology, ecology, entomology, genetics, marine biology, molecular biology, neurobiology, paleontology, physiology, systematics, or zoology (invertebrate or vertebrate).

**Requirements for the B.S. Degree in Biochemistry**

**General Education Requirements**

In addition to degree and major requirements, all students must complete the KU Core.

**General Science Requirements (37-38)**

Majors must complete the following general science requirements that serve as foundational courses for this major.

**Biochemistry Orientation Seminar.** Satisfied by:

BIOL 105 Biology Orientation Seminar 1

Chemistry I. Satisfied by one of the following:

CHEM 170 Chemistry for the Chemical Sciences I
5

CHEM 130 General Chemistry I

CHEM 190 Foundations of Chemistry I, Honors

Chemistry II. Satisfied by one of the following:

CHEM 175 Chemistry for the Chemical Sciences II
5

CHEM 135 General Chemistry II

CHEM 195 Foundations of Chemistry II, Honors

Organic Chemistry I. Satisfied by one of the following:

CHEM 330 Organic Chemistry I
3

CHEM 380 Organic Chemistry I, Honors

Organic Chemistry I Laboratory. Satisfied by:

CHEM 331 Organic Chemistry I Laboratory
2

Organic Chemistry II. Satisfied by one of the following:

CHEM 335 Organic Chemistry II
3

CHEM 385 Organic Chemistry II, Honors

Organic Chemistry II Laboratory. Satisfied by:

CHEM 336 Organic Chemistry II Laboratory
2

Calculus I & II. Satisfied by:

MATH 125 Calculus I
8

& MATH 126 and Calculus II
 Bachelor of Science in Biochemistry

Physics. Satisfied by one of the following options:

**Option 1: General Physics I & II**
- PHSX 211  General Physics I
- & PHSX 216  and General Physics I Laboratory
- PHSX 212  General Physics II
- & PHSX 236  and General Physics II Laboratory

**Option 2: College Physics I & II**
- PHSX 114  College Physics I
- & PHSX 115  and College Physics II

**Biochemistry Course Requirements (34)**
Satisfied by completing 34 hours from courses below.

**Principles of Molecular and Cellular Biology. Satisfied by one of the following:**
- BIOL 150  Principles of Molecular and Cellular Biology
- BIOL 151  Principles of Molecular and Cellular Biology, Honors

**Principles of Organismal Biology. Satisfied by one of the following:**
- BIOL 152  Principles of Organismal Biology
- BIOL 153  Principles of Organismal Biology, Honors

**Principles of Genetics. Satisfied by one of the following:**
- BIOL 350  Principles of Genetics
- BIOL 360  Principles of Genetics, Honors

**Biochemistry I. Satisfied by:**
- BIOL 636  Biochemistry I

**Introductory Biochemistry Laboratory. Satisfied by:**
- BIOL 637  Introductory Biochemistry Laboratory

**Biochemistry II. Satisfied by:**
- BIOL 638  Biochemistry II

**Advanced Biochemistry Laboratory. Satisfied by:**
- BIOL 639  Advanced Biochemistry Laboratory

**Gene Expression. Satisfied by:**
- BIOL 672  Gene Expression

**Senior Seminar in Biochemistry. Satisfied by:**
- BIOL 599  Senior Seminar: _____ (Must be taken in senior year)

**Analytical Chemistry. Satisfied by:**
- CHEM 620  Analytical Chemistry

**Analytical Chemistry Laboratory. Satisfied by:**
- CHEM 621  Analytical Chemistry Laboratory

**Physical Chemistry. Satisfied by one of the following:**
- CHEM 510  Biological Physical Chemistry
- CHEM 530  Physical Chemistry I

**Biochemistry Required Electives (12)**
Satisfied by completing 12 hours of BIOL courses numbered 400 or higher, which must be selected in consultation with a Biochemistry advisor. Some suggested courses include BIOL 400/BIOL 401, BIOL 408, BIOL 416, BIOL 424, BIOL 430, BIOL 518, BIOL 688, or BIOL courses having a biochemistry course as prerequisite. No more than 3 hours of BIOL 423 Non-Lab Independent Study and/or BIOL 424 Independent Study (combined) can be applied towards the elective requirement.

**Major Hours & Major GPA**
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 46 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

**Departmental Honors**
Undergraduate majors are eligible to graduate with honors in biology if they fulfill the following requirements:

1. Complete all course work required for the appropriate degree in biology.
2. Achieve a minimum grade-point average of 3.25 overall and 3.5 in the major.
3. Complete BIOL 499 Introduction to Honors Research with a grade of B or higher.
4. Complete BIOL 699 Biology Honors Research Colloquium with a grade of B or higher.
5. Complete an independent research project under the supervision of a faculty member in an area appropriate to the degree sought.
6. Submit an honors thesis to the honors committee once the research is complete and present the results of the completed research at the honors research symposium.

Students majoring in Human Biology with Anthropology, Applied Behavioral Science, Psychology, or Speech-Language-Hearing concentrations will follow the honors requirements for their respective concentration department.

Specific guidelines and intent forms are available in the Undergraduate Biology Program office and online (http://www.kuub.ku.edu). Candidates must declare their intent to graduate with honors at least 2 semesters before graduation.

**Study Abroad**
Consult an advisor at least 4 months before undertaking study abroad. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu), 108 Lippincott Hall, for information about study in one of the many countries (e.g., Scotland, Australia, Switzerland) with special arrangements with KU.
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Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences
Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

First- and Second-Year Preparation
Because biology study requires preparation in other sciences, students should begin meeting major requirements in the first year. It is particularly important to take CHEM 130 and CHEM 135 in the first year and, for several majors, to take CHEM 330, CHEM 331, CHEM 335, and CHEM 336 in the second year. Ideally, most majors should also take BIOL 150 and BIOL 152 during the first year, as well as BIOL 105. Students who have taken BIOL 100 and BIOL 102, have earned an A or B in both courses, and have decided to major in a biological science should consult a UBP advisor to request permission to substitute BIOL 100 and BIOL 102 for BIOL 150.

Admission to the Major

Admission Requirements
Course Requirements
Admission course requirements for Biochemistry, Biology, and Human Biology (18)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 105</td>
<td>Biology Orientation Seminar</td>
</tr>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
</tr>
</tbody>
</table>

Principles of Organismal Biology. Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 152</td>
<td>Principles of Organismal Biology</td>
</tr>
<tr>
<td>BIOL 153</td>
<td>Principles of Organismal Biology, Honors</td>
</tr>
</tbody>
</table>

Chemistry II. Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>CHEM 175</td>
<td>Chemistry for the Chemical Sciences II</td>
</tr>
<tr>
<td>CHEM 195</td>
<td>Foundations of Chemistry II, Honors</td>
</tr>
</tbody>
</table>

Principles of Genetics. Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course</th>
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</tr>
</thead>
<tbody>
<tr>
<td>BIOL 350</td>
<td>Principles of Genetics</td>
</tr>
<tr>
<td>BIOL 360</td>
<td>Principles of Genetics, Honors</td>
</tr>
</tbody>
</table>

Admission course requirements for Microbiology (14)

Biology Orientation Seminar. Satisfied by:

<table>
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<tr>
<th>Course</th>
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Principles of Molecular and Cellular Biology. Satisfied by one of the following:

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<tr>
<td>BIOL 150</td>
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Admission course requirements for Molecular Biosciences (Edwards campus) (17)

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<tbody>
<tr>
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Principles of Organismal Biology. Satisfied by one of the following:

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</table>

Biochemistry, Biology, Human Biology, and Molecular Biosciences Admission GPA
Must have a grade-point average of at least 2.2 based on grades in BIOL 150, BIOL 152, CHEM 135, and BIOL 350 (or equivalents). KU’s course repeat policy applies to grade-point average calculation.

Microbiology Admission GPA
Must have a grade-point average of at least 2.2 based on grades in BIOL 150, CHEM 135, and BIOL 350 (or equivalents). Microbiology admission requirements differ from those for Biochemistry, Biology, Human Biology, and Molecular Biosciences, because BIOL 152 is not required for the B.A. and B.S. degrees in microbiology. KU’s course repeat policy applies to grade-point average calculation.
Application Term

Application to the major should occur in the term in which admission requirements will be completed. If the student does not meet established admission grade-point average criteria or neglects to apply for admission in this term, she or he must petition the Undergraduate Biology Program for permission for late application. The Undergraduate Biology Program, as part of an approved petition, determines late admission requirements (including grade-point average and course requirements) and the final deadline for admission.

Majors and Concentrations

Bachelor's degree requirements in biology are modified as necessary. Current requirements are available in the UBP office and online (http://www.kuub.ku.edu). Major programs are offered in biochemistry, biology, human biology, and microbiology. Students may choose to concentrate in a range of specialties in the biological sciences, such as botany, cellular biology, developmental biology, environmental biology, ecology, entomology, genetics, marine biology, molecular biology, neurobiology, paleontology, physiology, systematics, or zoology (invertebrate or vertebrate).

Requirements for the B.S. Degree in Biology

General Education Requirements

In addition to degree and major requirements for all plans and subplans, all students must complete the KU Core.

Ecology, Evolution, and Organismal Biology

General Science Requirements (29-32)

Majors must complete the following general science requirements that serve as foundational courses for this major.

Biology Orientation Seminar. Satisfied by:

| BIOL 105 | Biology Orientation Seminar | 1 |
| Chem 105 | Chemistry I. Satisfied by one of the following: | 5 |
| CHEM 130 | General Chemistry I | 5 |
| CHEM 190 | Foundations of Chemistry I, Honors | 5 |
| Chemistry II. Satisfied by one of the following: | 5 |
| CHEM 135 | General Chemistry II | 5 |
| CHEM 195 | Foundations of Chemistry II, Honors | 5 |
| Organic Chemistry I. Satisfied by one of the following: | 3 |
| CHEM 310 | Fundamentals of Organic Chemistry | 3 |
| CHEM 330 | Organic Chemistry I | 3 |
| CHEM 380 | Organic Chemistry I, Honors | 3 |
| Introductory Biochemistry. Satisfied by: | 3 |
| BIOL 600 | Introductory Biochemistry, Lectures | 3 |
| Calculus. Satisfied by one of the following: | 4-6 |
| MATH 115 | Calculus I | 4-6 |
| & MATH 116 | and Calculus II | 4-6 |
| MATH 125 | Calculus I | 4-6 |
| MATH 145 | Calculus I, Honors | 4-6 |
| Physics I. Satisfied by one of the following: | 4-5 |
| PHSX 114 | College Physics I | 4-5 |

Ecology, Evolution, and Organismal Biology Requirements (29)

Satisfied by completing 29 hours from courses below. These additional science courses are included in the Ecology, Evolution, and Organismal Biology major hours and GPA calculations.

Principles of Molecular & Cellular Biology. Satisfied by one of the following:

| BIOL 150 | Principles of Molecular and Cellular Biology | 4 |
| BIOL 151 | Principles of Molecular and Cellular Biology, Honors | 4 |

Principles of Organismal Biology. Satisfied by one of the following:

| BIOL 152 | Principles of Organismal Biology | 4 |
| BIOL 153 | Principles of Organismal Biology, Honors | 4 |

Principles of Genetics. Satisfied by one of the following:

| BIOL 350 | Principles of Genetics | 4 |
| BIOL 360 | Principles of Genetics, Honors | 4 |

Physiology of Organisms. Satisfied by:

| BIOL 408 | Physiology of Organisms | 3 |

Evolutionary Biology. Satisfied by:

| BIOL 412 | Evolutionary Biology | 4 |

Principles of Ecology. Satisfied by:

| BIOL 413 | Principles of Ecology | 3 |
| or BIOL 514 | Principles of Ecology, Honors | 3 |

History & Diversity of Organisms / Systematics. Satisfied by one of the following:

| BIOL 414 | History and Diversity of Organisms | 3 |
| or BIOL 514 | History and Diversity of Organisms, Honors | 3 |

Introduction to Biostatistics. Satisfied by:

| BIOL 570 | Introduction to Biostatistics | 3 |

Senior Seminar in EEOB. Satisfied by:

| BIOL 599 | Senior Seminar: _____ (in EEOB. Must be taken in senior year.) | 1 |

Ecology, Evolution, and Organismal Biology Required Electives, Laboratory, and Seminar (18)

Satisfied by completing 18 hours of BIOL courses numbered 400 or higher, including at least 4 hrs of lab credit and 2 hrs of seminar/topics course (BIOL 419, BIOL 420, BIOL 499, BIOL 701). No more than 5 hrs of BIOL 423 Non-Lab Independent Study and/or BIOL 424 Independent Study (combined) can be applied to the elective requirement, with no more than 2 hrs of BIOL 424 being applied to the laboratory requirement. The Undergraduate Biology Program must approve exceptions to these elective requirements.

Laboratory. Satisfied by completing at least 4 hrs of laboratory courses. No more than 2 hrs of BIOL 424 can count toward lab requirement.

Seminar. Satisfied by completing at least 2 hrs of the following seminar or topics course:

| BIOL 419 | Topics in: _____ | 2 |
Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 47 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

### Molecular, Cellular, and Developmental Biology

**General Science Requirements (34-37)**

Majors must complete the following general science requirements that serve as foundational courses for this major.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>BIOL 105</td>
<td>Biology Orientation Seminar</td>
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<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 190</td>
<td>Foundations of Chemistry I, Honors</td>
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<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
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<tr>
<td>CHEM 195</td>
<td>Foundations of Chemistry II, Honors</td>
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<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 380</td>
<td>Organic Chemistry I, Honors</td>
<td></td>
</tr>
<tr>
<td>MATH 115</td>
<td>Calculus I</td>
<td>2-3</td>
</tr>
<tr>
<td>MATH 116</td>
<td>and Calculus II</td>
<td></td>
</tr>
<tr>
<td>MATH 125</td>
<td>Calculus I</td>
<td></td>
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<tr>
<td>MATH 145</td>
<td>Calculus I, Honors</td>
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</tr>
<tr>
<td>BIOL 570</td>
<td>Introduction to Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 365</td>
<td>Elementary Statistics</td>
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<tr>
<td>PSYC 210</td>
<td>Statistics in Psychological Research</td>
<td></td>
</tr>
<tr>
<td>PHSX 114</td>
<td>College Physics I</td>
<td>4-5</td>
</tr>
</tbody>
</table>

**Molecular, Cellular, and Development Biology Requirements (34-35)**

Satisfied by completing courses below. These additional science courses are included in the MCDB major hours and GPA calculations.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
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</tr>
<tr>
<td>BIOL 151</td>
<td>Principles of Molecular and Cellular Biology, Honors</td>
<td></td>
</tr>
<tr>
<td>BIOL 152</td>
<td>Principles of Organismal Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 153</td>
<td>Principles of Organismal Biology, Honors</td>
<td></td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Principles of Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 360</td>
<td>Principles of Genetics, Honors</td>
<td></td>
</tr>
<tr>
<td>BIOL 412</td>
<td>Evolutionary Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 405</td>
<td>Laboratory in Genetics</td>
<td>2-3</td>
</tr>
<tr>
<td>BIOL 426</td>
<td>Laboratory in Cell Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 416</td>
<td>Cell Structure and Function</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 599</td>
<td>Senior Seminar: _____ (in MCDB. Must be taken in senior year.)</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 417</td>
<td>Biology of Development</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 436</td>
<td>Introduction to Neurobiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 599</td>
<td>Senior Seminar: _____ (in MCDB. Must be taken in senior year.)</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 600</td>
<td>Introductory Biochemistry, Lectures</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 650</td>
<td>Advanced Neurobiology / Gene Expression / Molec. Biology Cancer</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 672</td>
<td>Gene Expression</td>
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</tr>
<tr>
<td>BIOL 688</td>
<td>The Molecular Biology of Cancer</td>
<td></td>
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</tbody>
</table>

**Molecular, Cellular, and Development Biology Required Electives (12)**

Satisfied by 12 hrs of any BIOL courses numbered 400 or higher; no more than 3 hrs of BIOL 423 Non-Lab Independent Study and/or BIOL 424 Independent Study (combined) can be used to fulfill the elective requirement.
Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 46 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of the major.


Teaching Biology

**General Science Requirements (28-31)**
Majors must complete the following general science requirements that serve as foundational courses for this major.

**Biology Orientation Seminar.** Satisfied by:
- BIOL 105 Biology Orientation Seminar 1

**Chemistry I.** Satisfied by one of the following:
- CHEM 130 General Chemistry I 5
- CHEM 190 Foundations of Chemistry I, Honors

**Chemistry II.** Satisfied by one of the following:
- CHEM 135 General Chemistry II 5
- CHEM 195 Foundations of Chemistry II, Honors

**Organic Chemistry I.** Satisfied by one of the following:
- CHEM 310 Fundamentals of Organic Chemistry 3
- CHEM 330 Organic Chemistry I
- CHEM 380 Organic Chemistry I, Honors

**Organic Chemistry I Laboratory.** Satisfied by:
- CHEM 331 Organic Chemistry I Laboratory 2

**Calculus.** Satisfied by one of the following:
- MATH 115 Calculus I 4
- MATH 116 and Calculus II
- MATH 125 Calculus I

**Physics I.** Satisfied by one of the following:
- PHSX 114 College Physics I 4
- PHSX 211 General Physics I & PHSX 216 and General Physics I Laboratory
- PHSX 213 General Physics I Honors

**Physics II.** Satisfied by one of the following:
- PHSX 115 College Physics II 4
- PHSX 212 General Physics II & PHSX 236 and General Physics II Laboratory
- PHSX 214 General Physics II Honors

**Teaching Biology Course Requirements (32)**
Satisfied by completing 32 hours of course work below.

- Principles of Molecular & Cellular Biology. Satisfied by one of the following:
  - BIOL 150 Principles of Molecular and Cellular Biology 4
  - BIOL 151 Principles of Molecular and Cellular Biology, Honors

- Principles of Organismal Biology. Satisfied by one of the following:
  - BIOL 152 Principles of Organismal Biology 4
  - BIOL 153 Principles of Organismal Biology, Honors

- Principles of Genetics. Satisfied by one of the following:
  - BIOL 350 Principles of Genetics 4
  - BIOL 360 Principles of Genetics, Honors

- Evolutionary Biology. Satisfied by:
  - BIOL 412 Evolutionary Biology 4

- Principles of Ecology. Satisfied by:
  - BIOL 414 Principles of Ecology 3

- Cell Structure & Function. Satisfied by one of the following:
  - BIOL 416 Cell Structure and Function 3
  - BIOL 536 Cell Structure and Function (Honors)

*Research Methods.** Satisfied by:
- BIOL 598 Research Methods 3

- **Senior Seminar.** Satisfied by:
  - BIOL 599 Senior Seminar: _____ (must be taken in senior year) 1

- **Choose 1 Course.** Satisfied by one of the following:
  - BIOL 413 History and Diversity of Organisms 3
  - BIOL 428 Introduction to Systematics

- **Choose 1 Course.** Satisfied by one of the following:
  - BIOL 400 Fundamentals of Microbiology
  - BIOL 401 Fundamentals of Microbiology, Honors
  - BIOL 408 Physiology of Organisms
  - BIOL 600 Introductory Biochemistry, Lectures

**Teaching Biology Required Electives and Laboratory (7)**
Satisfied by 7 hours of BIOL courses numbered 400 or higher which include at least 4 hours of laboratory credit. Courses listed above which have not been used to fulfill the above requirements may be used as electives. No more than 3 hours of BIOL 423 Non-Lab Independent Study and/or BIOL 424 Independent Study (combined) can be applied towards the elective requirement with no more than 2 hours of BIOL 424 being applied towards the laboratory requirement.

- Laboratory. Satisfied by completing a minimum of 4 hours of biology laboratory courses numbered 400 or higher. Some course limits apply, including no more than 2 hours of BIOL 423/BIO 424 allowed toward Lab requirement.

- **Teaching Biology Elective.** Satisfied by completing a minimum of 3 hours of BIOL courses numbered 400 or higher. No more than 3 hours of BIOL 423/BIO 424 allowed toward Elective requirement.

**Teaching Biology Education Requirements (16-25)**
Students who are seeking classroom certification must complete the following requirements through the School of Education.

- **Approaches to Teaching Science and Mathematics I.** Satisfied by:
  - LA&S 290 Approaches to Teaching Science and Mathematics 1

- **Approaches to Teaching Science and Mathematics II.** Satisfied by:
  - LA&S 291 Approaches to Teaching Science and Mathematics 1

- **Knowing and Learning in Mathematics & Science.** Satisfied by:
C&T 360  Knowing and Learning in Mathematics and Science  3
Classroom Interactions in Mathematics and Science. Satisfied by:

C&T 366  Classroom Interactions in Mathematics and Science  3
Reading and Writing Across the Curriculum. Satisfied by:

C&T 448  Reading and Writing Across the Curriculum  3
Project-Based Instruction in Mathematics & Science. Satisfied by:

C&T 460  Project Based Instruction in Mathematics and Science  3
Student Teaching. Satisfied by:

C&T 500  Student Teaching in: _____  1-6
Special Topics Seminar. Satisfied by:

C&T 598  Special Course: _____  1-5

Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by a minimum of 39 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Departmental Honors
Undergraduate majors are eligible to graduate with honors in biology if they fulfill the following requirements:

1. Complete all course work required for the appropriate degree in biology.
2. Achieve a minimum grade-point average of 3.25 overall and 3.5 in the major.
3. Complete BIOL 499 Introduction to Honors Research with a grade of B or higher.
4. Complete BIOL 699 Biology Honors Research Colloquium with a grade of B or higher.
5. Complete an independent research project under the supervision of a faculty member in an area appropriate to the degree sought.
6. Submit an honors thesis to the honors committee once the research is complete and present the results of the completed research at the honors research symposium.

Students majoring in Human Biology with Anthropology, Applied Behavioral Science, Psychology, or Speech-Language-Hearing concentrations will follow the honors requirements for their respective concentration department.

Specific guidelines and intent forms are available in the Undergraduate Biology Program office and online (http://www.kuub.ku.edu). Candidates must declare their intent to graduate with honors at least 2 semesters before graduation.

Study Abroad
Consult an advisor at least 4 months before undertaking study abroad. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu), 108 Lippincott Hall, for information about study in one of the many countries (e.g., Scotland, Australia, Switzerland) with special arrangements with KU.

Bachelor of Science in Microbiology
Why study biology?
Study biology because undergraduates should have the opportunity to explore the breadth of biology that allows them to succeed in their chosen paths beyond the university.

Undergraduate Admission
Admission to KU
All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences
Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

First- and Second-Year Preparation
Because biology study requires preparation in other sciences, students should begin meeting major requirements in the first year. It is particularly important to take CHEM 130 and CHEM 135 in the first year and, for several majors, to take CHEM 330, CHEM 331, CHEM 335, and CHEM 336 in the second year. Ideally, most majors should also take BIOL 150 and BIOL 152 during the first year, as well as BIOL 105. Students who have taken BIOL 100 and BIOL 102, have earned an A or B in both courses, and have decided to major in a biological science should consult a UBP advisor to request permission to substitute BIOL 100 and BIOL 102 for BIOL 150.
Admission to the Major
Admission Requirements
Course Requirements

Admission course requirements for Biochemistry, Biology, and Human Biology (18)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>Biology Orientation Seminar</td>
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</tr>
<tr>
<td>BIOL 105 Biology Orientation Seminar</td>
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<tr>
<td>Principles of Molecular and Cellular Biology</td>
<td>4</td>
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<tr>
<td>BIOL 150 Principles of Molecular and Cellular Biology, Honors</td>
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<tr>
<td>Principles of Organismal Biology</td>
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<td>BIOL 152 Principles of Organismal Biology, Honors</td>
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<tr>
<td>Chemistry II</td>
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<td>CHEM 135 General Chemistry II</td>
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<td>or CHEM 175 Chemistry for the Chemical Sciences II</td>
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<td>or CHEM 195 Foundations of Chemistry II, Honors</td>
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<tr>
<td>Principles of Genetics</td>
<td>4</td>
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<tr>
<td>BIOL 350 Principles of Genetics</td>
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<tr>
<td>or BIOL 360 Principles of Genetics, Honors</td>
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Admission course requirements for Microbiology (14)

<table>
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<tr>
<th>Course</th>
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<tr>
<td>BIOL 105 Biology Orientation Seminar</td>
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<td>Principles of Molecular and Cellular Biology</td>
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<td>BIOL 150 Principles of Molecular and Cellular Biology, Honors</td>
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<td>Chemistry II</td>
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<td>CHEM 135 General Chemistry II</td>
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<td>or CHEM 175 Chemistry for the Chemical Sciences II</td>
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<td>or CHEM 195 Foundations of Chemistry II, Honors</td>
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<tr>
<td>Principles of Genetics</td>
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<td>BIOL 350 Principles of Genetics</td>
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<td>or BIOL 360 Principles of Genetics, Honors</td>
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Admission course requirements for Molecular Biosciences (Edwards campus) (17)

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<tr>
<td>BIOL 150 Principles of Molecular and Cellular Biology, Honors</td>
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<tr>
<td>Principles of Organismal Biology</td>
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<tr>
<td>BIOL 152 Principles of Organismal Biology, Honors</td>
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<tr>
<td>Chemistry II</td>
<td>5</td>
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<tr>
<td>CHEM 135 General Chemistry II</td>
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<td>or CHEM 175 Chemistry for the Chemical Sciences II</td>
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<td>or CHEM 195 Foundations of Chemistry II, Honors</td>
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<td>Principles of Genetics</td>
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<td>BIOL 350 Principles of Genetics</td>
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<tr>
<td>or BIOL 360 Principles of Genetics, Honors</td>
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</tbody>
</table>

Biochemistry, Biology, Human Biology, and Molecular Biosciences Admission GPA

Must have a grade-point average of at least 2.2 based on grades in BIOL 150, BIOL 152, CHEM 135, and BIOL 350 (or equivalents). KU’s course repeat policy applies to grade-point average calculation.

Microbiology Admission GPA

Must have a grade-point average of at least 2.2 based on grades in BIOL 150, CHEM 135, and BIOL 350 (or equivalents). Microbiology admission requirements differ from those for Biochemistry, Biology, Human Biology, and Molecular Biosciences, because BIOL 152 is not required for the B.A. and B.S. degrees in microbiology. KU’s course repeat policy applies to grade-point average calculation.

Application Term

Application to the major should occur in the term in which admission requirements will be completed. If the student does not meet established admission grade-point average criteria or neglects to apply for admission in this term, she or he must petition the Undergraduate Biology Program for permission for late application. The Undergraduate Biology Program, as part of an approved petition, determines late admission requirements (including grade-point average and course requirements) and the final deadline for admission.

Majors and Concentrations

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Requirements for the B.S. Degree in Microbiology

General Education Requirements

In addition to degree and major requirements, all students must complete the KU Core.

Microbiology Course Requirements

General Science Requirements (50-53)

Majors must complete 50-53 hours of the following general science requirements that serve as foundational courses for this major.

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<tr>
<td>BIOL 105 Biology Orientation Seminar</td>
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<td>Molecular &amp; Cellular Biology</td>
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<td>BIOL 150 Principles of Molecular and Cellular Biology</td>
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<tr>
<td>or BIOL 151 Principles of Molecular and Cellular Biology, Honors</td>
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<tr>
<td>Principles of Genetics</td>
<td>4</td>
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<tr>
<td>BIOL 350 Principles of Genetics</td>
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<tr>
<td>or BIOL 360 Principles of Genetics, Honors</td>
<td></td>
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<tr>
<td>Statistics</td>
<td>3</td>
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<tr>
<td>BIOL 570 Introduction to Biostatistics</td>
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</table>
MATH 365  Elementary Statistics
PSYC 210  Statistics in Psychological Research

Biochemistry I. Satisfied by:
BIOL 636  Biochemistry I  3

Biochemistry II. Satisfied by:
BIOL 638  Biochemistry II  3

Chemistry I. Satisfied by one of the following:
CHEM 130  General Chemistry I  5
CHEM 190  Foundations of Chemistry I, Honors

Chemistry II. Satisfied by one of the following:
CHEM 135  General Chemistry II  5
CHEM 195  Foundations of Chemistry II, Honors

Organic Chemistry I. Satisfied by one of the following:
CHEM 330  Organic Chemistry I
CHEM 380  Organic Chemistry I, Honors

Organic Chemistry I Laboratory. Satisfied by:
CHEM 331  Organic Chemistry I Laboratory  2

Organic Chemistry II. Satisfied by one of the following:
CHEM 335  Organic Chemistry II
CHEM 385  Organic Chemistry II, Honors

Organic Chemistry II Laboratory. Satisfied by:
CHEM 336  Organic Chemistry II Laboratory  2

Calculus. Satisfied by one of the following:
MATH 115  Calculus I
& MATH 116  and Calculus II
MATH 125  Calculus I  4-6

Physics. Satisfied by one of the following:
PHSX 114  College Physics I
& PHSX 115  and College Physics II  8-9

Option 1: College Physics
PHSX 211  General Physics I
& PHSX 216  and General Physics I Laboratory

Option 2: General Physics
PHSX 212  General Physics II
& PHSX 236  and General Physics II Laboratory

Microbiology Course Requirements (29)
Satisfied by completing 29 hours from the following courses:

Fundamentals of Microbiology. Satisfied by one of the following:
BIOL 400  Fundamentals of Microbiology

BIOL 401  Fundamentals of Microbiology, Honors

Fundamentals of Microbiology Laboratory. Satisfied by:
BIOL 402  Fundamentals of Microbiology Laboratory  2

Cell Structure & Function. Satisfied by one of the following:
BIOL 416  Cell Structure and Function  3
or BIOL 536  Cell Structure and Function (Honors)

Immunology. Satisfied by:
BIOL 503  Immunology  3

Immunology Laboratory. Satisfied by:
BIOL 504  Immunology Laboratory  2

Pathogenic Microbiology. Satisfied by:
BIOL 506  Pathogenic Microbiology  3

Pathogenic Microbiology Laboratory. Satisfied by:
BIOL 507  Pathogenic Microbiology Laboratory  2

General Virology. Satisfied by:
BIOL 512  General Virology  3

Virology Laboratory. Satisfied by:
BIOL 513  Virology Laboratory  2

Microbial Genetics. Satisfied by:
BIOL 518  Microbial Genetics  3

Microbial Genetics Laboratory. Satisfied by:
BIOL 519  Microbial Genetics Laboratory  2

Senior Seminar - Current Progress in Microbiology. Satisfied by:
BIOL 599  Senior Seminar: _____ (Must be taken in senior year)  1

Microbiology Required Electives (6)
Satisfied by completing 6 hours of BIOL courses numbered 400 or higher, which must be selected in consultation with a microbiology advisor.

Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 35 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Departmental Honors
Undergraduate majors are eligible to graduate with honors in biology if they fulfill the following requirements:

1. Complete all course work required for the appropriate degree in biology.
2. Achieve a minimum grade-point average of 3.25 overall and 3.5 in the major.
3. Complete BIOL 499 Introduction to Honors Research with a grade of B or higher.
4. Complete BIOL 699 Biology Honors Research Colloquium with a grade of B or higher.
5. Complete an independent research project under the supervision of a faculty member in an area appropriate to the degree sought.
6. Submit an honors thesis to the honors committee once the research is complete and present the results of the completed research at the honors research symposium.

Students majoring in Human Biology with Anthropology, Applied Behavioral Science, Psychology, or Speech-Language-Hearing concentrations will follow the honors requirements for their respective concentration department.
Specific guidelines and intent forms are available in the Undergraduate Biology Program office and online (http://www.kuub.ku.edu). Candidates must declare their intent to graduate with honors at least 2 semesters before graduation.

Study Abroad
Consult an advisor at least 4 months before undertaking study abroad. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu), 108 Lippincott Hall, for information about study in one of the many countries (e.g., Scotland, Australia, Switzerland) with special arrangements with KU.

Bachelor of Science in Molecular Biosciences

Why study biology?
Study biology because undergraduates should have the opportunity to explore the breadth of biology that allows them to succeed in their chosen paths beyond the university.

Undergraduate Admission

Admission to KU
All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences
Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

First- and Second-Year Preparation
Because biology study requires preparation in other sciences, students should begin meeting major requirements in the first year. It is particularly important to take CHEM 130 and CHEM 135 in the first year and, for several majors, to take CHEM 330, CHEM 331, CHEM 335, and CHEM 336 in the second year. Ideally, most majors should also take BIOL 150 and BIOL 152 during the first year, as well as BIOL 105. Students who have taken BIOL 100 and BIOL 102 have earned an A or B in both courses, and have decided to major in a biological science should consult a UBP advisor to request permission to substitute BIOL 100 and BIOL 102 for BIOL 150.

Admission to the Major

Admission Requirements

Course Requirements

Admission course requirements for Biochemistry, Biology, and Human Biology (18)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology Orientation Seminar. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>BIOL 105 Biology Orientation Seminar</td>
<td>1</td>
</tr>
<tr>
<td>Principles of Molecular and Cellular Biology. Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td>BIOL 150 Principles of Molecular and Cellular Biology</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 151 Principles of Molecular and Cellular Biology, Honors</td>
<td></td>
</tr>
<tr>
<td>Principles of Organismal Biology. Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td>BIOL 152 Principles of Organismal Biology</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 153 Principles of Organismal Biology, Honors</td>
<td></td>
</tr>
<tr>
<td>Chemistry II. Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td>CHEM 135 General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>or CHEM 175 Chemistry for the Chemical Sciences II</td>
<td></td>
</tr>
<tr>
<td>or CHEM 195 Foundations of Chemistry II, Honors</td>
<td></td>
</tr>
<tr>
<td>Principles of Genetics. Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td>BIOL 350 Principles of Genetics</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 360 Principles of Genetics, Honors</td>
<td></td>
</tr>
</tbody>
</table>

Admission course requirements for Microbiology (14)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology Orientation Seminar. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>BIOL 105 Biology Orientation Seminar</td>
<td>1</td>
</tr>
<tr>
<td>Principles of Molecular and Cellular Biology. Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td>BIOL 150 Principles of Molecular and Cellular Biology</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 151 Principles of Molecular and Cellular Biology, Honors</td>
<td></td>
</tr>
<tr>
<td>Chemistry II. Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td>CHEM 135 General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>or CHEM 175 Chemistry for the Chemical Sciences II</td>
<td></td>
</tr>
<tr>
<td>or CHEM 195 Foundations of Chemistry II, Honors</td>
<td></td>
</tr>
<tr>
<td>Principles of Genetics. Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td>BIOL 350 Principles of Genetics</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 360 Principles of Genetics, Honors</td>
<td></td>
</tr>
</tbody>
</table>

Admission course requirements for Molecular Biosciences (Edwards campus) (17)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Molecular and Cellular Biology. Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td>BIOL 150 Principles of Molecular and Cellular Biology</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 151 Principles of Molecular and Cellular Biology, Honors</td>
<td></td>
</tr>
<tr>
<td>Principles of Organismal Biology. Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td>BIOL 152 Principles of Organismal Biology</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 153 Principles of Organismal Biology, Honors</td>
<td></td>
</tr>
<tr>
<td>Chemistry II. Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td>CHEM 135 General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>or CHEM 175 Chemistry for the Chemical Sciences II</td>
<td></td>
</tr>
<tr>
<td>or CHEM 195 Foundations of Chemistry II, Honors</td>
<td></td>
</tr>
<tr>
<td>Principles of Genetics. Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td>BIOL 350 Principles of Genetics</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 360 Principles of Genetics, Honors</td>
<td></td>
</tr>
</tbody>
</table>
Biochemistry, Biology, Human Biology, and Molecular Biosciences Admission GPA

Must have a grade-point average of at least 2.2 based on grades in BIOL 150, BIOL 152, CHEM 135, and BIOL 350 (or equivalents). KU's course repeat policy applies to grade-point average calculation.

Microbiology Admission GPA

Must have a grade-point average of at least 2.2 based on grades in BIOL 150, CHEM 135, and BIOL 350 (or equivalents). Microbiology admission requirements differ from those for Biochemistry, Biology, Human Biology, and Molecular Biosciences, because BIOL 152 is not required for the B.A. and B.S. degrees in microbiology. KU's course repeat policy applies to grade-point average calculation.

Application Term

Application to the major should occur in the term in which admission requirements will be completed. If the student does not meet established admission grade-point average criteria or neglects to apply for admission in this term, she or he must petition the Undergraduate Biology Program for permission for late application. The Undergraduate Biology Program, as part of an approved petition, determines late admission requirements (including grade-point average and course requirements) and the final deadline for admission.

Molecular Biosciences

KU Edwards Campus

The undergraduate program in molecular biosciences is offered in its entirety only at the KU Edwards Campus (http://edwardscampus.ku.edu), 12600 Quivira Rd., Overland Park, KS 66213. This program is designed for students who have earned an associate's degree or equivalent hours and wish to complete the upper-level courses necessary for a bachelor's degree.

Requirements for the B.S. Degree in Molecular Biosciences

The program offers students a strong background in genetics, microbiology, cell biology, and biochemistry, as well as laboratory skills in genetics and microbiology. Graduates have entered medical school, graduate school, and dental school with high success rates. Contact the CLAS undergraduate advisor on the Edwards Campus, Dan Mueller, dmueller@ku.edu, 864-8659 (from Lawrence) or 913-897-8659 (outside of Lawrence) for more information.

General Education Requirements

In addition to degree and major requirements, all students must complete the KU Core.

General Science Requirements (33-36)

Majors must complete the following general science requirements that serve as foundational courses for this major.

Chemistry I. Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>CHEM 190</td>
<td>Foundations of Chemistry I, Honors</td>
</tr>
</tbody>
</table>

Chemistry II. Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>CHEM 195</td>
<td>Foundations of Chemistry II, Honors</td>
</tr>
</tbody>
</table>

Organic Chemistry I. Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>CHEM 380</td>
<td>Organic Chemistry I, Honors</td>
</tr>
</tbody>
</table>

Organic Chemistry I Laboratory. Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 331</td>
<td>Organic Chemistry I Laboratory</td>
</tr>
</tbody>
</table>

Organic Chemistry II. Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 335</td>
<td>Organic Chemistry II</td>
</tr>
<tr>
<td>CHEM 385</td>
<td>Organic Chemistry II, Honors</td>
</tr>
</tbody>
</table>

Calculus. Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 115</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 116 &amp; MATH 117</td>
<td>Calculus II</td>
</tr>
<tr>
<td>MATH 125</td>
<td>Calculus I (Calculus I)</td>
</tr>
</tbody>
</table>

Physics. Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 114</td>
<td>College Physics I</td>
</tr>
<tr>
<td>PHYS 115 &amp; PHYS 116</td>
<td>College Physics II</td>
</tr>
</tbody>
</table>

Option 2: General Physics

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 211</td>
<td>General Physics I</td>
</tr>
<tr>
<td>PHYS 212 &amp; PHYS 213</td>
<td>General Physics I Laboratory</td>
</tr>
<tr>
<td>PHYS 212 &amp; PHYS 216</td>
<td>General Physics II</td>
</tr>
<tr>
<td>PHYS 216 &amp; PHYS 217</td>
<td>General Physics II Laboratory</td>
</tr>
</tbody>
</table>

Statistics. Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 570</td>
<td>Introduction to Biostatistics</td>
</tr>
<tr>
<td>MATH 365</td>
<td>Elementary Statistics</td>
</tr>
<tr>
<td>PSYC 210</td>
<td>Statistics in Psychological Research</td>
</tr>
</tbody>
</table>

Molecular Biosciences Course Requirements (30)

Molecular & Cellular Biology. Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
</tr>
<tr>
<td>BIOL 151</td>
<td>Principles of Molecular and Cellular Biology, Honors</td>
</tr>
<tr>
<td>BIOL 152</td>
<td>Principles of Organism Biology</td>
</tr>
<tr>
<td>BIOL 153</td>
<td>Principles of Organismal Biology, Honors</td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Principles of Genetics</td>
</tr>
<tr>
<td>BIOL 360</td>
<td>Principles of Genetics, Honors</td>
</tr>
</tbody>
</table>

Fundamentals of Microbiology. Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 400</td>
<td>Fundamentals of Microbiology</td>
</tr>
<tr>
<td>BIOL 401</td>
<td>Fundamentals of Microbiology, Honors</td>
</tr>
<tr>
<td>BIOL 500</td>
<td>Fundamentals of Microbiology Laboratory</td>
</tr>
</tbody>
</table>

Laboratory in Genetics. Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 405</td>
<td>Laboratory in Genetics</td>
</tr>
<tr>
<td>BIOL 416</td>
<td>Cell Structure and Function</td>
</tr>
<tr>
<td>BIOL 536</td>
<td>Cell Structure and Function (Honors)</td>
</tr>
</tbody>
</table>

Molecular Biology Laboratory. Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 430</td>
<td>Laboratory in Molecular Biology</td>
</tr>
<tr>
<td>BIOL 600</td>
<td>Introductory Biochemistry, Lectures</td>
</tr>
</tbody>
</table>

Principles of Biochemistry Laboratory. Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 601</td>
<td>Principles of Biochemistry Laboratory</td>
</tr>
</tbody>
</table>

Senior Seminar in Molecular Biosciences (1)

Satisfied by:
Biotechnology

Molecular Bioscience Required Electives (12)
Satisfied by completing 12 hours of BIOL courses numbered 400 or higher, including at least 2 hours of a seminar/topics course (BIOL 419, BIOL 420, BIOL 421, BIOL 701). No more than 3 hours of BIOL 423 Non-Lab Independent Study and/or BIOL 424 Independent Study (combined) can be applied towards the elective requirement.

Seminar. Satisfied by completing at least 2 hours of the following seminar or topics courses:

- BIOL 419 Topics in: ______
- BIOL 421 Topics in Molecular Biosciences: ______
- BIOL 420 Seminar: ______
- BIOL 701 Topics in: ______

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 46 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

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2. Achieve a minimum grade-point average of 3.25 overall and 3.5 in the major.
3. Complete BIOL 499 Introduction to Honors Research with a grade of B or higher.
4. Complete BIOL 599 Biology Honors Research Colloquium with a grade of B or higher.
5. Complete an independent research project under the supervision of a faculty member in an area appropriate to the degree sought.
6. Submit an honors thesis to the honors committee once the research is complete and present the results of the completed research at the honors research symposium.

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Study Abroad

Consult an advisor at least 4 months before undertaking study abroad. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu), 108 Lippincott Hall, for information about study in one of the many countries (e.g., Scotland, Australia, Switzerland) with special arrangements with KU.

Biotechnology

Biotechnology Program

The biotechnology program bridges the gap between biology, biochemistry and clinical laboratory sciences, preparing graduates for the ever-evolving life-sciences field.

Bachelor of Applied Science in Biotechnology

Requirements for the Bachelor of Applied Science Degree in Biotechnology

General Education Requirements

In addition to degree and major requirements for all plans and subplans, all students must complete the KU Core.

General Science Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 130 &amp; CHEM 135</td>
<td>General Chemistry I and General Chemistry II</td>
<td>10</td>
</tr>
<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>or CHEM 310</td>
<td>Fundamentals of Organic Chemistry</td>
<td></td>
</tr>
<tr>
<td>CHEM 331</td>
<td>Organic Chemistry Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>PHSX 114</td>
<td>College Physics I</td>
<td>1-4</td>
</tr>
<tr>
<td>MATH 115</td>
<td>Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 125</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 151</td>
<td>Principles of Molecular and Cellular Biology, Honors</td>
<td></td>
</tr>
<tr>
<td>BIOL 152</td>
<td>Principles of Organismal Biology</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 153</td>
<td>Principles of Organismal Biology, Honors</td>
<td></td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Principles of Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Fundamentals of Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 416</td>
<td>Cell Structure and Function</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 600</td>
<td>Introductory Biochemistry, Lectures</td>
<td>3</td>
</tr>
</tbody>
</table>

Bachelor of Applied Science Core Curriculum

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 310</td>
<td>Introduction to Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>or COMS 330</td>
<td>Effective Business Communication</td>
<td></td>
</tr>
</tbody>
</table>
Because understanding the atomic and molecular nature of matter informs us about ourselves and our universe, and creating and finding applications for new and modified forms of matter helps to conserve and enhance our world.

Undergraduate Programs

Chemistry course work educates undergraduates to become professional chemists or to do graduate work in chemistry. It also provides the basic chemistry background for students entering such fields as biochemistry, biological sciences, dentistry, engineering, environmental science, geology, medicine, pharmacy, physics, and secondary-level science education. Courses in chemistry provide general knowledge and appreciation of chemistry and its impact on society.

Advanced Placement

Students who have taken the Advanced Placement Examination in chemistry should have the results forwarded to the Office of Admissions (http://admissions.ku.edu). Students who score 5 need not take CHEM 130 and CHEM 135 and receive 10 hours of credit. With departmental permission, those who score 3 or 4 receive credit for CHEM 130. Credit for CHEM 135 also may be given to those who pass a special examination. Students who score at least 50 on the College Level Examination Program general chemistry examination receive 5 hours of credit in CHEM 110.

Courses for Nonmajors

Undergraduates taking chemistry as preparatory study for another field should consult the courses listed for that field in this catalog. CHEM 100 and CHEM 110 are introductory courses for the nonscience major who wants to study the general principles, methods, role, and significance of chemistry in the modern world, for prenursing students, and for students who plan to take no additional courses in chemistry. Premedical students and chemistry or other science majors should not take CHEM 100 or CHEM 110. CHEM 100 is lecture only. CHEM 110 includes a laboratory. Engineering students who need only one semester of chemistry should take CHEM 150. CHEM 130 is an introductory course for students who plan to take more than one year of college chemistry, including chemical engineering, premedical, prepharmacy, and premedical and students in biological sciences who must take organic chemistry. Students should continue with CHEM 135 in the same academic year that they take CHEM 130.

Graduate Programs

The department’s graduate program, its Ph.D. program in particular, produces graduates with the basic knowledge, skills, and experimental training necessary to enter productive careers in academic, industrial, and government positions. Faculty and graduate students work collegially, not only in the search for new knowledge at the frontiers of chemistry, but also toward the solution of problems of fundamental societal concern.

Although the department believes it is essential to provide graduate students with a knowledge base spanning the traditional areas of analytical, inorganic, organic, and physical chemistry, it nurtures its particular strengths in several important research areas at the interface of chemistry and the biological/medical sciences. The Department of Chemistry at KU is a worldwide leader in graduate training and research in bioanalytical chemistry, and its additional interactions with the pharmaceutical and biological sciences have led to strong graduate research programs in diverse areas such as bio-inorganic, bio-organic, and biophysical chemistry.

The department also recognizes its central science role by maintaining strong research and Ph.D. programs in areas that interface closely with molecular biosciences, physics, chemical engineering, mathematics, and computer science, for example, in drug discovery, theoretical chemistry,
materials, molecular modeling, and laser spectroscopy. The entering Ph.D. student can be assured of finding vigorous programs spanning a full range of chemical studies, and the graduating Ph.D. student can be equally confident that his or her training and skills are marketable commodities.

The department’s M.S. program is a traditional companion to the Ph.D. program and shares the same goals. It is encouraged for students who prefer a program with less depth and a research (thesis) project that is manageable in 2 to 4 semesters. Although most entering graduate students choose the Ph.D.—the most desirable degree for those who wish to work as independent scientists in academic, industrial, or institutional settings—the M.S. serves a useful and essential role for students with other ambitions.

Research support facilities include the Instrumentation Design Laboratory, Mass Spectrometry Laboratory, Molecular Graphics and Modeling Laboratory, Nuclear Magnetic Resonance Laboratory, and X-ray Crystallography Laboratory. Anschutz Library contains more than 300,000 books and periodicals spanning the fields of chemistry, biochemistry, physics, geology, and pharmacy.

Courses

CHEM 100. Chemistry in Context: ______. 3 Hours. NP GE3N / N.
An introduction to chemistry that focuses on basic chemical principles, designed for students with no previous background in chemistry. This course promotes the development of chemical literacy within a context that encourages an appreciation for the role and significance of chemistry in the modern world. Not intended for students who need to fulfill a specific chemistry requirement as part of their degree program. LEC.

CHEM 110. Introductory Chemistry. 5 Hours. NP GE3N / N.
This integrated lecture and laboratory course provides an introduction to basic concepts related to general, organic, and biological chemistry. Suitable for students seeking an introductory course and for students who are majoring in health and allied health fields. Students whose majors require more than one semester of chemistry should enroll in CHEM 130, CHEM 170, or CHEM 190. CHEM 110 and CHEM 150 cannot both be taken for credit. LEC.

CHEM 130. General Chemistry I. 5 Hours. NP GE12/GE3N / N.
This course seeks to develop a working knowledge of the conceptual foundation and the quantitative chemical relationships on which subsequent chemistry courses are built. Atomic structure, chemical bonding, reaction stoichiometry, thermochemistry, and periodic trends are emphasized in this integrated lecture and laboratory course. Students pursuing or considering a major in one of the chemical sciences should strongly consider taking CHEM 170 or CHEM 190. Students with credit in CHEM 110 will have two hours added on to their total number of hours required for graduation. Prerequisite: Must be eligible for MATH 115. LEC.

CHEM 135. General Chemistry II. 5 Hours. GE12/GE3N / N.
This course, which is a continuation of CHEM 130, focuses on chemical kinetics, chemical equilibrium, acid-base chemistry, and thermodynamics. Additional topics, such as environmental chemistry, electrochemistry, coordination chemistry, nuclear chemistry, organic chemistry, and/or polymers, may also be introduced in this integrated lecture and laboratory course. Students pursuing or considering a major in one of the chemical sciences should strongly consider taking CHEM 175 or CHEM 195. Prerequisite: CHEM 130, CHEM 170 or CHEM 190. LEC.

CHEM 150. Chemistry for Engineers. 5 Hours. GE12/GE3N / N.
This one semester course is designed for students in the School of Engineering who are not required to take additional chemistry courses at the college level. Topics covered in this integrated lecture and laboratory course include quantum theory, atomic structure, chemical bonding, solids, liquids, gases, thermodynamics, equilibrium, acids and bases, kinetics, polymer chemistry, and materials science. The application of these concepts to engineering problems and practices is emphasized. Prerequisite: Must have completed a course in high school chemistry and be eligible for MATH 121 or MATH 125 (or have Departmental consent). Students not admitted to the School of Engineering must receive permission from instructor. CHEM 110 and CHEM 150 cannot both be taken for credit. LEC.

CHEM 170. Chemistry for the Chemical Sciences I. 5 Hours. NP GE12/GE3N / N.
The first course in a two-course sequence focused on the principles and applications of modern chemistry. This integrated lecture and laboratory course is designed for students pursuing or considering a major in one of the chemical sciences (such as chemistry, biochemistry, chemical engineering or petroleum engineering). The CHEM 170/175 course sequence covers the same general topics as CHEM 130/135, but with an increased emphasis on modern applications of chemistry. Students with credit in CHEM 110 will have two hours added on to their total number of hours required for graduation. Prerequisite: Eligibility for MATH 115. LEC.

CHEM 175. Chemistry for the Chemical Sciences II. 5 Hours. N.
An integrated lecture and laboratory course which is a continuation of CHEM 170. Prerequisite: CHEM 130, CHEM 170 or CHEM 190. LEC.

CHEM 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Chemistry. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

CHEM 180. Seminar I. 0.5 Hours. U.
Special topics for chemistry majors such as using the chemical literature, educational and professional perspectives, scientific ethics, and undergraduate research opportunities. It is recommended that students take this half-semester course in their freshman or sophomore year. Prerequisite: A declared major in chemistry or consent of instructor. LEC.

CHEM 190. Foundations of Chemistry I, Honors. 5 Hours. NP GE12/GE3N / N.
This integrated lecture and laboratory course, which is designed for qualified and motivated students having a strong interest in chemistry, provides a more thorough treatment of the concepts and topics covered in CHEM 130 and CHEM 170. It is anticipated that students in CHEM 190 plan to take more than one year of chemistry at the college level. Students with credit in CHEM 110 will have two hours added on to their total number of hours required for graduation. Prerequisite: high-school chemistry and calculus; at least one of the following: (a) acceptance into the KU Honors Program, (b) an AP exam score in chemistry of 3 or higher, (c) a mathematics ACT score of 28 or higher; or permission of instructor. LEC.

CHEM 195. Foundations of Chemistry II, Honors. 5 Hours. GE12/GE3N / N.
A course designed for qualified and motivated students with strong interest in chemistry to provide a more thorough treatment of the concepts and topics of advanced general chemistry. It is anticipated that the students in CHEM 195 have completed CHEM 190 or excelled in CHEM 130 or CHEM 170. Prerequisite: Membership in the University Honors Program, CHEM 130, CHEM 170 or CHEM 190, or consent of the department. LEC.
CHEM 201. Laboratory Safety in the Chemical Sciences. 1 Hour. U.
A course for undergraduate students focusing on chemical safety in modern laboratories. The course will feature practical instruction in lab safety, an introduction to safety resources, and group discussions centered around case studies. Required for all B.S. majors, and for all B.A. majors participating in undergraduate research. Students with credit in CHEM 201 may not take CHEM 701 for credit. Prerequisite: CHEM 135, CHEM 175, or CHEM 195. LEC.

CHEM 309. History of Chemistry. 3 Hours. H.
Birth of modern chemical science from roots in Greek natural philosophy, alchemy, Renaissance medicine and technology. The Chemical Revolution of Lavoisier and Dalton. Maturity of chemistry in the 19th and 20th centuries, along with an examination of growth of chemical institutions and the rise of chemical industry. Emphasis on developments from the 18th century to the present. (Same as HIST 309.) LEC.

CHEM 310. Fundamentals of Organic Chemistry. 3 Hours. GE3N / N.
A study of the structures and reactions of important classes of organic compounds. Along with the organic laboratory, CHEM 331, this course will fulfill the needs of students requiring a single semester of organic chemistry. Students requiring more than one semester of organic chemistry should enroll in CHEM 330. Prerequisite: CHEM 135, CHEM 175 or CHEM 195. LEC.

CHEM 330. Organic Chemistry I. 3 Hours. GE3N / N.
A study of the structure and reactivity of selected classes of organic compounds. CHEM 330 is the first course of a two-semester sequence. Students who require only one semester of organic chemistry should enroll in CHEM 310. Students with credit in CHEM 310 will have two hours added on to their total number of hours required for graduation. Prerequisite: CHEM 135, CHEM 175 or CHEM 195. LEC.

CHEM 331. Organic Chemistry I Laboratory. 2 Hours. U.
Emphasis on basic techniques for the preparation, separation, and purification of organic compounds. Required for a major in chemistry and by those departments and programs specifying a complete undergraduate organic chemistry course. Prerequisite or corequisite: CHEM 310 or CHEM 330 or CHEM 380. LAB.

CHEM 335. Organic Chemistry II. 3 Hours. N.
A continuation of CHEM 330, intended for students who want further training in organic chemistry. Prerequisite: CHEM 330 or CHEM 380. LEC.

CHEM 336. Organic Chemistry II Laboratory. 2 Hours. U.
More advanced organic laboratory techniques with emphasis on modern spectroscopic methods for determining the structure and purity of organic compounds. Prerequisite: CHEM 331. Prerequisite or corequisite: CHEM 335 or CHEM 385. LAB.

CHEM 380. Organic Chemistry I, Honors. 3 Hours. GE3N / N.
This is the first half of a two-semester sequence in organic chemistry for students with strong records in previous chemistry courses and who are planning or considering a major in chemistry-related field. The content is similar to that of CHEM 330 but with coverage in greater depth and more emphasis on developing problem-solving skills. Students requiring only one semester of organic chemistry should not enroll in this course but take CHEM 310. Students with credit in CHEM 310 who take and complete CHEM 380 will have two hours added to their total number of credit hours required for graduation. Prerequisite: CHEM 135, CHEM 175 or CHEM 195 and membership in the University Honors Program or consent of instructor. LEC.

CHEM 385. Organic Chemistry II, Honors. 3 Hours. N.
This is the second course in a two-semester sequence in organic chemistry for students with strong records in previous chemistry courses and who are planning or considering a major in chemistry or in a chemistry-related field. The content is similar to that of CHEM 335 but with coverage in greater depth and more emphasis on developing problem-solving skills. Prerequisite: CHEM 330 or CHEM 380 and membership in the University Honors Program, or consent of instructor. LEC.

CHEM 390. Topics in Chemistry, Honors: ______. 1-5 Hours. N.
A course on special topics in chemistry, given as the need arises. Course content applies and expands upon general chemistry concepts, such as chemical thermodynamics, kinetics, and bonding. In this course, students gain knowledge in a topic of contemporary interest in chemistry, are challenged to examine the experimental and theoretical basis of this knowledge, and consider the broader impacts of this knowledge outside the discipline. Course may be repeated for different topics. Prerequisite: CHEM 135, CHEM 175 or CHEM 195 and membership in the University Honors Program; or permission of instructor. Each section may have additional prerequisites to be determined by the instructor. LEC.

CHEM 450. Directed Readings/Laboratory in Chemistry. 1-3 Hours. N.
Individual and supervised study or laboratory work on special topics or problems in chemistry. Prerequisite: Ten hours of chemistry and a minimum overall grade-point average of 2.0 or consent of department. IND.

CHEM 510. Biological Physical Chemistry. 3 Hours. N.
A one semester course, designed particularly for biology, biochemistry, and premedical students, which surveys the fundamentals of physical chemistry. The basic principles of thermodynamics, chemical kinetics, quantum chemistry, and spectroscopy will be introduced, and their application to aqueous solutions and biochemical systems will be emphasized. Prerequisite: One semester of organic chemistry, two semesters of calculus, and two semesters of physics. LEC.

CHEM 511. Biological Physical Chemistry Laboratory. 2 Hours. AE61 / U.
A course particularly for biology, biochemistry, and premedical students. Experiments in physical chemistry illustrating the fundamental principles of quantum mechanics, spectroscopy, thermodynamics, and kinetics as applied to chemical systems. Prerequisite: CHEM 510. LAB.

CHEM 530. Physical Chemistry I. 3 Hours. N.
An introduction to the basic principles of quantum mechanics, atomic and molecular structure, molecular rotations and vibrations, group theory, spectroscopy, and statistical mechanics. Prerequisite: CHEM 135, CHEM 175 or CHEM 195; PHSX 212; MATH 127 and MATH 220 or MATH 320; and completion of, or concurrent enrollment in MATH 290 or consent of instructor. LEC.

CHEM 531. Physical Chemistry I Laboratory. 2 Hours. U.
Experiments in physical chemistry, with emphasis on the fundamental principles of quantum mechanics and spectroscopy as applied to chemical systems. Prerequisite: CHEM 530. LAB.

CHEM 535. Physical Chemistry II. 4 Hours. N.
Emphasizes the thermodynamics of molecular systems with application to the structure and properties of gases, liquids, solids, materials, statistical thermodynamics, chemical kinetics, and reaction dynamics. Prerequisite: CHEM 530 and MATH 290 or consent of instructor. LEC.

CHEM 536. Physical Chemistry II Laboratory. 2 Hours. U.
Experiments in physical chemistry, with emphasis on the fundamental principles of chemical thermodynamics and kinetics. Prerequisite: CHEM 535 or consent of instructor. LEC.

CHEM 598. Research Methods. 3 Hours. N.
An introduction for pre-service teachers to the tools used by scientists to solve scientific problems. Topics include design of experiments and
interpretation of their results, use of statistics, mathematical modeling, laboratory safety, ethical treatment of human subjects, writing scientific papers, giving oral presentations, and obtaining data from the scientific literature. Open only to students in the UKanTeach program. LEC.

CHEM 620. Analytical Chemistry. 3 Hours. N.
Principles of analytical chemistry with emphasis on the fundamental reactions used for chemical analysis. Topics include chemical equilibria in acid/base, complexation, separations, and redox systems, data analysis, potentiometry and spectrophotometry. Prerequisite: One semester of organic chemistry and organic chemistry laboratory, CHEM 535 or CHEM 510 (or concurrent enrollment in CHEM 510), or permission of instructor. Corequisite: CHEM 621. LEC.

CHEM 621. Analytical Chemistry Laboratory. 2 Hours. U.
Experiments illustrate fundamental principles of chemical analysis methods. The course serves as an introduction to advanced instrumental methods of analysis. Prerequisite: One semester of organic chemistry and organic chemistry laboratory, CHEM 535 or CHEM 510 (or concurrent enrollment in CHEM 510), or permission of instructor. Corequisite: CHEM 620. LAB.

CHEM 635. Instrumental Methods of Analysis. 2 Hours. U.
Theory and application of instrumental methods to modern analytical problems. Topics covered include atomic and molecular spectroscopy, electrochemistry, mass spectrometry, and separations. Prerequisite: CHEM 620 and CHEM 621 and one semester of physical chemistry laboratory, or permission of instructor. Corequisite: CHEM 636. LEC.

CHEM 636. Instrumental Methods of Analysis Laboratory. 2 Hours. AE61 / U.
Theory and application of instrumental methods to modern analysis problems. Experiments covered in this capstone laboratory course include atomic and molecular spectroscopy, electrochemistry, and separation methods. Prerequisite: CHEM 620 and CHEM 621, and one semester of physical chemistry laboratory; or permission of instructor. Corequisite: CHEM 635. LAB.

CHEM 660. Systematic Inorganic Chemistry. 3 Hours. N.
A systematic study of the elements and their compounds, emphasizing the relationship between properties of substances and their atomic and molecular structures and the positions of the elements in the periodic systems. Prerequisite: CHEM 510 or CHEM 530. LEC.

CHEM 661. Advanced Inorganic Laboratory. 2 Hours. U.
Experiments concerning the synthesis and characterization of inorganic compounds. Prerequisite: CHEM 660 or concurrent enrollment in CHEM 660. LAB.

CHEM 680. Topics in Chemistry: ___. 1-5 Hours. N.
Courses on special topics in chemistry, given as the need arises. Course may be repeated for different topics. Prerequisite: 20 hours of Chemistry. Each section may have additional prerequisites to be determined by the instructor. LEC.

CHEM 695. Seminar II. 0.5 Hours. U.
Special topics and presentations by students and faculty in areas of current interest such as recent advancements in chemistry, professional development, societal issues facing chemists, and reports of ongoing research. This half-semester course is recommended for seniors. Prerequisite: CHEM 180. LEC.

CHEM 698. Undergraduate Research Problems. 1-6 Hours. AE61 / N.
May be repeated to accumulate a maximum of 10 credit hours. An undergraduate research course, in any of the fields of chemistry, consisting of experimental or theoretical work, or the preparation of an extensive paper based on library investigation of a selected topic. A final report must be submitted to the instructor at the end of the semester. Prerequisite: CHEM 201, or CHEM 201 concurrently, or documentation of appropriate laboratory safety training. IND.

CHEM 699. Undergraduate Honors Research. 2-6 Hours. AE61 / N.
To be taken two semesters for a total of no more than 8 hours. An undergraduate research course, in any of the fields of chemistry. At the completion of the research, a written thesis, and an oral presentation will be required. Open to students in the Chemistry Honors Program. Prerequisite: CHEM 201, or CHEM 201 concurrently, or documentation of appropriate laboratory safety training. IND.

CHEM 700. Responsible Scholarship in the Chemical Sciences. 1 Hour.
A course for beginning graduate students with particular emphasis on scholarship issues relevant to the chemical sciences. Topics will include scientific ethics, codes of conduct, record keeping, authorship, and the responsibilities of a scientist. Group discussions, particularly centered around case studies, will be a significant component of the course. LEC.

CHEM 701. Laboratory Safety in the Chemical Sciences. 1 Hour.
A course for beginning graduate students focusing on chemical safety in modern laboratories. The course will feature practical instruction in lab safety, an introduction to safety resources, and group discussions centered around case studies. LEC.

CHEM 718. Mathematical Methods in Physical Sciences. 3 Hours.
Review of all complex variable theory; introduction to the partial differential equations of physics; Fourier analysis; and special functions of mathematical physics. (Same as PHSX 718.) Prerequisite: Two quarters of junior-senior mathematics. LEC.

CHEM 720. Fundamentals and Methods of Analytical Chemistry. 3 Hours.
An introductory graduate level course in analytical chemistry, in which the principles of electrochemistry, spectroscopy, and separation science are utilized to solve analytical problems in inorganic, organic and biochemical. Prerequisite: An undergraduate course in analytical chemistry, a year of organic chemistry, and a year of physical chemistry. LEC.

CHEM 730. Coordination and Organometallic Chemistry. 3 Hours.
An examination of the basic foundations of coordination chemistry and organometallic chemistry including symmetry methods, bonding, magnetism, and reaction mechanisms. Prerequisite: Two quarters of organic chemistry and one semester of physical chemistry in which quantum chemistry is introduced. The latter course may be taken concurrently with CHEM 730. LEC.

CHEM 740. Principles of Organic Reactions. 3 Hours.
A consideration of the structural features and driving forces that control the course of chemical reactions. Topics will include acid and base properties of functional groups; qualitative aspects of strain, steric, inductive, resonance, and solvent effects on reactivity; stereochemistry and conformations; an introduction to orbital symmetry control; basic thermodynamic and kinetic concepts; and an overview of some important classes of mechanisms. Prerequisite: Two semesters of undergraduate organic and one semester of physical chemistry or concurrent enrollment. LEC.

CHEM 742. Spectroscopic Identification of Organic Compounds. 3 Hours.
The use of techniques such as infrared, nuclear magnetic resonance, and ultraviolet spectroscopy, and mass spectrometry for elucidating the structure of organic molecules. A lecture and laboratory course. Prerequisite: CHEM 626 and CHEM 627. LEC.
CHEM 750. Introduction to Quantum Mechanics. 3 Hours.
An introduction to the basic principles of quantum theory relevant to atomic and molecular systems. Topics include operators and operator algebra, matrix theory, eigenvalue problems, postulates of quantum mechanics, the Schrödinger equation, angular momentum, electronic structure, molecular vibrations, approximation methods, group theory, and the foundations of spectroscopy. Prerequisite: Two semesters of physical chemistry. LEC.

CHEM 760. Introduction to Chemistry in Biology. 3 Hours.
A comprehensive introduction to the application of chemistry to address problems in biology at the molecular level. The fundamentals of biomolecules (nucleic acids, proteins, lipids and carbohydrates) and techniques of chemical biology research will be discussed. LEC.

CHEM 775. Chemistry of the Nervous System. 3 Hours.
A study of the overall concept of central nervous system functioning. A brief introduction to neuroanatomy and neurophysiological techniques as well as a relatively detailed discussion of the chemistry of neurotransmitters is included. (Same as BIOL 775, MDCM 775, NURO 775, PTX 775, and PHCH 775.) Prerequisite: One year of undergraduate organic chemistry. LEC.

CHEM 800. Research. 1-10 Hours.
Original investigation on the graduate level. RSH.

CHEM 810. Colloquium: ______. 1 Hour.
Colloquia on various topics of current interest are presented by students, faculty, and visiting scientists. LEC.

CHEM 812. Chemical Seminar. 1-3 Hours.
Individual studies of certain advanced phases of chemistry not covered in the regular graduate courses. IND.

CHEM 816. Careers in Chemical Biology. 1 Hour.
Advanced course examining current research topics in chemical biology. An emphasis will be placed on career options open to PhD scientists in Chemical Biology, and preparation for the different career paths. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. This course will be graded satisfactory/unsatisfactory. (Same as BIOL 816, MDCM 816 and PHCH 816.) Prerequisite: Permission of instructor. SEM.

CHEM 820. Analytical Separations. 3 Hours.
An advanced treatment of analytical separations techniques. The theory of separation science will be augmented with discussion of practical aspects of instrumentation and experiment design. Prerequisite: CHEM 720. LEC.

CHEM 822. Electrochemical Analysis. 3 Hours.
An advanced treatment of selected electroanalytical techniques and methodology. Prerequisite: CHEM 720. LEC.

CHEM 824. Spectrochemical Methods of Analysis. 3 Hours.
General concepts of encoding chemical information as electromagnetic radiation; major instrumental systems for decoding, interpretation, and presentation of the radiation signals; atomic emission, absorption, and fluorescence; ultraviolet, visible, infrared, and microwave absorption; molecular luminescence; scattering methods; mass spectrometry; magnetic resonance; automated spectrometric systems. Prerequisite: CHEM 720. LEC.

CHEM 826. Mass Spectrometry. 3 Hours.
An introduction to mass spectrometry. The various ionization techniques and mass analyzers will be discussed, and many examples of different mass spectrometric applications will be introduced. Prerequisite: CHEM 720. LEC.

CHEM 828. Bioanalysis. 3 Hours.
A course covering important aspects in modern chemical measurement with particular emphasis placed on bioanalysis. This course will survey the modern analytical challenges associated with the ongoing efforts in genomics and proteomics and discuss future trends in methods in instrumentation. Prerequisite: CHEM 720. LEC.

CHEM 830. Structure, Bonding and Spectroscopic Methods in Inorganic Chemistry. 3 Hours.
An introduction of quantum and group theories in relation to bonding and physicochemical properties of inorganic substances. Topics include vibrational and electronic spectroscopies, magnetism, and inorganic photochemistry. Prerequisite: CHEM 730. LEC.

CHEM 832. Inorganic Reaction Mechanisms and Catalysis. 3 Hours.
Mechanistic aspects of transition metal chemistry including substitution reactions, electron transfer reactions, rearrangement reactions, ligand reactions and inorganic photochemistry. Principles and applications of heterogeneous and homogeneous catalytic processes emphasizing catalysis at transition metal centers. Prerequisite: CHEM 730. LEC.

CHEM 840. Physical Organic Chemistry. 3 Hours.
An examination of the methods used to probe the mechanisms of organic reactions and of the chemistry of some important reactive intermediates. Topics will include isotope effects, kinetics, linear free energy relationships, solvent effects, a continuing discussion of orbital symmetry, rearrangements, carbocations, carbanions, carbenes, radicals, excited states, and strained molecules. Prerequisite: CHEM 740. LEC.

CHEM 842. Organic Synthesis I. 3 Hours.
A discussion of fundamental reactions for the formation of carbon-carbon bonds, oxidation, reduction, and functional group interchange. Prerequisite: CHEM 740. LEC.

CHEM 844. Problem Solving in Organic Chemistry. 1 Hour.
A course designed to develop a student's ability to apply fundamental concepts of mechanistic organic and organometallic chemistry, physical organic chemistry, bioorganic chemistry, synthetic organic reactions and techniques for structure elucidation. Students will propose solutions to practice problems mimicking challenges that arise in contemporary research in organic chemistry. The format includes interactive problem-solving discussions led by faculty and peers and monthly written examinations. May be repeated up to three times until the student has passed at least four of the written exams. Graded on a Satisfactory/Unsatisfactory basis. Prerequisite: CHEM 740 or permission of instructor. SEM.

CHEM 850. Advanced Quantum Mechanics. 3 Hours.
The advanced mathematical and physical principles of quantum mechanics relevant to atomic and molecular systems. Topics may include abstract vector spaces and representations, time-dependent quantum dynamics, electronic structure theory, density matrices, second-quantization, advanced group theory, path integrals, and scattering theory. Prerequisite: CHEM 750 or its equivalent. LEC.

CHEM 852. Statistical Thermodynamics. 3 Hours.
Thermodynamics and introduction to equilibrium statistical mechanics with emphasis on problems of chemical interest. The course consists of two roughly equal parts: 1) An advanced overview of the laws and concepts of thermodynamics with application to specific problems in phase and chemical equilibria and 2) An introduction to equilibrium statistical mechanics for both classical and quantum systems. Prerequisite: CHEM 750 or its equivalent. LEC.

CHEM 854. Chemical Kinetics and Dynamics. 3 Hours.
A study of the rates, mechanisms, and dynamics of chemical reactions in gases and liquids. Topics include an advanced overview of classical
CHEM 970. College Teaching Experience in Chemistry. 3 Hours.
A student will engage in a semester-long, planned instructional activity that shall include college classroom teaching under the supervision of a chemistry department faculty member. Prerequisite: Two semesters as a graduate teaching assistant. LEC.

CHEM 980. Advanced Topics in Chemistry: ______. 2-3 Hours.
A course covering special advanced topics in chemistry not included in other graduate courses. One or more topics will be covered in a given semester and an announcement of the course content and prerequisites will be made at the end of the previous semester. This course may be taken more than once when the topic varies. LEC.

CHEM 999. Doctoral Dissertation. 1-10 Hours.
Research work (either experimental or theoretical) in chemistry for students working toward the Ph.D. degree. Graded on a satisfactory/unsatisfactory basis. THE.

Bachelor of Arts in Chemistry

Why study chemistry?
Because understanding the atomic and molecular nature of matter informs us about ourselves and our universe, and creating and finding applications for new and modified forms of matter helps to conserve and enhance our world.

Undergraduate Admission

Admission to KU
All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Chemistry Programs

The B.A. degree is for the student who wants to understand the fundamental principles of chemistry and to study a number of other fields. The B.S. degree prepares students for graduate school and professional careers. Both are based on a high school background that includes at least 1½ years of algebra and 1 year of geometry. High school courses in chemistry and physics are desirable but are not required. Many chemistry majors are preparing for medical school or for graduate study in chemistry and related fields. For graduate school, the common body of knowledge in the B.A. program is the minimum prerequisite. For premedical students, much of the knowledge will be important in their careers. Even more important, however, is the training in logical thinking, drawing conclusions
from experimental observations, and digesting and understanding scientific information.

First- and Second-Year Preparation

Because study in chemistry requires preparation in mathematics and physics as well as a structured series of courses in chemistry, students should begin meeting major requirements in the first year. Students planning to major in chemistry should consult a chemistry department major advisor during their first semester to develop a 4-year plan for degree completion. It is particularly important to take CHEM 170 (or CHEM 130 or CHEM 190) and CHEM 175 (or CHEM 135 or CHEM 195) in the first year and CHEM 310 (or CHEM 330 or CHEM 380) and CHEM 331 in the second year. For those seeking a B.A. degree, it is also important to complete two semesters of calculus and two semesters of physics during the first two years. Minimum requirements in these subject areas for the B.A. degree are MATH 115, MATH 116, PHSX 114, PHSX 115.

Requirements for the B.A. Major

In addition to the common College requirements for the B.A., a minimum of 29 hours in chemistry (including 5 hours each of analytical, organic, and physical chemistry lecture and laboratory) and one year each of calculus and physics (prerequisites for physical chemistry) are required. These courses fulfill the requirements:

Chemistry Courses (29)

Select one of the following: 5

- CHEM 170 Chemistry for the Chemical Sciences I
- CHEM 130 General Chemistry I
- CHEM 190 Foundations of Chemistry I, Honors

Select one of the following: 5

- CHEM 175 Chemistry for the Chemical Sciences II
- CHEM 135 General Chemistry II
- CHEM 195 Foundations of Chemistry II, Honors

CHEM 180 Seminar I 0.5

Select one of the following: 3

- CHEM 310 Fundamentals of Organic Chemistry
- CHEM 330 Organic Chemistry I
- CHEM 380 Organic Chemistry I, Honors

CHEM 331 Organic Chemistry I Laboratory 2

Select one of the following: 5

- CHEM 510 Biological Physical Chemistry
- CHEM 511 and Biological Physical Chemistry Laboratory
- CHEM 530 Physical Chemistry I
- CHEM 531 and Physical Chemistry I Laboratory

CHEM 620 Analytical Chemistry 3

CHEM 621 Analytical Chemistry Laboratory 2

CHEM 695 Seminar II 0.5

Additional chemistry course 3

Mathematics and Physics (14-19)

MATH 115 Calculus I 3-5

or MATH 121 Calculus I

or MATH 125 Calculus I

MATH 116 Calculus II 3-5

or MATH 122 Calculus II

or MATH 126 Calculus II

PHSX 114 College Physics I 4-5

or PHSX 211 General Physics I

& PHSX 216 and General Physics I Laboratory

PHSX 115 College Physics II 4

or PHSX 212 General Physics II

& PHSX 236 and General Physics II Laboratory

Courses that fulfill the additional 3 hours for the major are CHEM 335 (or CHEM 385) Organic Chemistry II, CHEM 635 and CHEM 636 Instrumental Methods of Analysis and Laboratory, CHEM 535 Physical Chemistry II, or CHEM 660 Systematic Inorganic Chemistry. Note that CHEM 535 has CHEM 530, MATH 220, and MATH 290 as prerequisites. Students in premedical programs should be aware that a year of organic chemistry lecture and laboratory (CHEM 330 or CHEM 380, CHEM 331, CHEM 335 or CHEM 385, and CHEM 336) is required for admission to virtually all medical schools. Students who need only 1 semester of organic chemistry should substitute CHEM 310 (the 1-semester organic chemistry lecture course) for CHEM 330, when possible.

Environmental Chemistry Option

This option is available to students who plan to use their chemistry background in environmentally related areas. The additional courses required provide background in other environmental sciences as well as further exposure to important methods used in environmental laboratories.

In addition to all of the requirements for the regular B.A. major, the following courses are required:

CHEM 335 Organic Chemistry II 1 3

or CHEM 385 Organic Chemistry II, Honors

CHEM 336 Organic Chemistry II Laboratory 2

CHEM 635 Instrumental Methods of Analysis 2

CHEM 636 Instrumental Methods of Analysis Laboratory 2

Plus 2 electives (6) (In consultation with a faculty major advisor, choose two courses from those listed in Environmental Chemistry Option Group I or Environmental Chemistry Option Group II below.)

Environmental Chemistry Option Group I

Biol 100 Principles of Biology

or BIOL 150 Principles of Molecular and Cellular Biology

EVRN 148 Scientific Principles of Environmental Studies

GEOG 304 Environmental Conservation

GEOG 351 Africa’s Human Geographies

BIOL 400 Fundamentals of Microbiology

BIOL 414 Principles of Ecology

BIOL 600 Introductory Biochemistry, Lectures

ATMO 105 Introductory Meteorology

Environmental Chemistry Option Group II

BIOL 661 Ecology of Rivers and Lakes (with or without BIOL 662 Aquatic Ecology Laboratory)

CE 477 Introduction to Environmental Engineering and Science

GEOL 552 Introduction to Hydrogeology

ATMO 525 Air Pollution Meteorology

EVRN 611 Water Quality, Land Use, and Watershed Ecosystems

CHEM 698 Undergraduate Research Problems
Select this course as the additional chemistry course.

**Biological Chemistry Option**

This option is available to students interested in the biological applications of chemistry. The curriculum is compatible with many pre-health-professions programs and prepares the student for graduate study or career opportunities.

In addition to all of the requirements for the regular B.A. major, the following courses are required:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 335</td>
<td>Organic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>or CHEM 385</td>
<td>Organic Chemistry II, Honors</td>
<td></td>
</tr>
<tr>
<td>CHEM 336</td>
<td>Organic Chemistry II Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 636</td>
<td>Biochemistry I</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 638</td>
<td>Biochemistry II</td>
<td>3</td>
</tr>
<tr>
<td>Plus 1 elective (3)</td>
<td>(In consultation with a faculty major advisor, choose 1 course from those listed in the Biology Option Group in requirements for the B.S. degree in Chemistry: Biological Chemistry option.)</td>
<td></td>
</tr>
</tbody>
</table>

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 29 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 18.5 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator. ([http://clas.ku.edu/undergrad/tools/gpa](http://clas.ku.edu/undergrad/tools/gpa))

Sample 4-year plans for the BA degree with the following concentrations, can be found here: General Chemistry (p. 1534), Environmental Chemistry (p. 1535), Biological Chemistry (p. 1536), or by using the left-side navigation.

Sample 4-year plans for the BS degree in Chemistry will be coming soon.

**Departmental Honors**
Undergraduates may apply for admission to the departmental honors program after completion of an analytical, organic, and physical chemistry course but no sooner than the beginning of the junior year. Highly motivated and superior B.A. and B.S. students are admitted to the honors program. Honors in chemistry are awarded to students who have been admitted to the program and who have completed the following requirements with superior performance, including an overall KU GPA 3.25 and a major GPA of 3.5.

1. At least 2 semesters of CHEM 699 (4-8 hours total) resulting in a written thesis.
2. Evaluation and approval of the thesis by a faculty advisory committee.
3. Oral presentation of the thesis results at a special departmental seminar or other approved forum.

For an application form and further information, consult the department office.

**BA in Chemistry with concentration in General Chemistry**

Below is a sample 4-year plan for students pursuing the BA in Chemistry with a concentration in General Chemistry. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website ([http://kucore.ku.edu/courses](http://kucore.ku.edu/courses)).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104, prior to freshman year, fall semester.

**Freshman**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 (2 crs req), BA Writing I)</td>
<td>3 ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MATH 115, 121, or 125 (Goal 1.2 Quantitative Reasoning)</td>
<td>3-5 Goal 2.2 COMS 130 or other approved course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHEM 170, 130, or 190 (BA Quantitative Reasoning, Major Requirement)</td>
<td>5 MATH 116, 122, or 126 (Major Pre-requisite)</td>
<td>3-5</td>
<td></td>
</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3 CHEM 175, 135, or 195 (Major Requirement)</td>
<td>5</td>
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<tr>
<td>CHEM 180 (Major Requirement)</td>
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**Sophomore**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5 2nd Semester Language (BA Second Language)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>PHSX 114 (Major Pre-requisite), or</td>
<td>4 PHSX 115 (Major Pre-requisite), or</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PHSX 211 &amp; PHSX 216</td>
<td>PHSX 212 &amp; PHSX 236</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 201 (Recommended Major Course)</td>
<td>1 CHEM 335 (Recommended Major Course)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHEM 310, 330, or 380 (Major Requirement)</td>
<td>3 CHEM 336 (Recommended Major Course)</td>
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</tr>
<tr>
<td>CHEM 331 (Major Requirement)</td>
<td>2 Elective or possible minor course (Total Hours)</td>
<td>3</td>
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</table>

**BA in Chemistry with concentration in Environmental Chemistry**

Below is a sample 4-year plan for students pursuing the BA in Chemistry with a concentration in Environmental Chemistry. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website ([http://kucore.ku.edu/courses](http://kucore.ku.edu/courses)).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104, prior to freshman year, fall semester.

**Freshman**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 (2 crs req), BA Writing I)</td>
<td>3 ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MATH 115, 121, or 125 (Goal 1.2 Quantitative Reasoning)</td>
<td>3-5 Goal 2.2 COMS 130 or other approved course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHEM 170, 130, or 190 (BA Quantitative Reasoning, Major Requirement)</td>
<td>5 MATH 116, 122, or 126 (Major Pre-requisite)</td>
<td>3-5</td>
<td></td>
</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3 CHEM 175, 135, or 195 (Major Requirement)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>CHEM 180 (Major Requirement)</td>
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**Sophomore**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5 2nd Semester Language (BA Second Language)</td>
<td>5</td>
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</tr>
<tr>
<td>PHSX 114 (Major Pre-requisite), or</td>
<td>4 PHSX 115 (Major Pre-requisite), or</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PHSX 211 &amp; PHSX 216</td>
<td>PHSX 212 &amp; PHSX 236</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 201 (Recommended Major Course)</td>
<td>1 CHEM 335 (Recommended Major Course)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHEM 310, 330, or 380 (Major Requirement)</td>
<td>3 CHEM 336 (Recommended Major Course)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>CHEM 331 (Major Requirement)</td>
<td>2 Elective or possible minor course (Total Hours)</td>
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</table>
The University of Kansas 1535

Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
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<td>4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
<td>3</td>
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<td>Goal 3 Humanities</td>
<td>3</td>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 510 (Major Requirement), or ^5</td>
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<td>CHEM 511 (Major Requirement), or ^5</td>
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</tr>
<tr>
<td>CHEM 530</td>
<td>3</td>
<td>CHEM 531</td>
<td>3</td>
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<tr>
<td>Elective or possible minor course (Total Hours)</td>
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<td>Elective or possible minor course 300+ (Total Hours)</td>
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<table>
<thead>
<tr>
<th>Senior</th>
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<tbody>
<tr>
<td>CHEM 620 (Major Requirement)</td>
<td>3</td>
<td>CHEM 680 (Recommended Major Course)</td>
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<tr>
<td>CHEM 621 (Major Requirement) ^5</td>
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<td>CHEM 698 or 699 (Goal 6 Integration &amp; Creativity (Recommended))</td>
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<tr>
<td>CHEM 695 (Major Requirement) ^5</td>
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<td>Elective or possible minor course 300+ (Total Hours)</td>
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</tr>
<tr>
<td>Goal 4.2 Global Awareness</td>
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<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
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<td>Elective or possible minor course 300+ (Total Hours)</td>
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</table>

<table>
<thead>
<tr>
<th>Total Hours: 120-128</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. CHEM 170 requires eligibility for MATH 115 in order to enroll.
3. CHEM 201 is required for students who elect to take CHEM 698: Undergraduate Research Problems, which is recommended, but not required for students pursuing the BA in Chemistry.
4. The BA in General Chemistry requires 3 additional credit hours of Chemistry elective coursework. It is recommended that this elective be fulfilled by CHEM 335: Organic Chemistry II and the accompanying lab, CHEM 336: Organic Chemistry II Laboratory, or 3 hours of CHEM 680: Topics in Chemistry.
5. CHEM 180, CHEM 695, CHEM 510, CHEM 530, CHEM 620, CHEM 621 are Fall only courses. CHEM 511, CHEM 531 are Spring only courses.

Please note:

All students in the College of Liberal Arts and Sciences are required to completed 120 total hours of which 45 hours must be at the Jr/Sr (300+) level, and 100 hours must be from within the College of Liberal Arts and Sciences.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

BA in Chemistry with concentration in Environmental Chemistry

Below is a sample 4-year plan for students pursuing the BA in Chemistry with a concentration in Environmental Chemistry. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104, prior to freshman year, fall semester.

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 (2 crs req), BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 115, 121, or 125 (Goal 1.2 Quantitative Reasoning)</td>
<td>3-5</td>
<td>MATH 116, 122, or 126 (Major Pre-requisite)</td>
<td>3-5</td>
</tr>
<tr>
<td>CHEM 170, 130, or 190 (BA Quantitative Reasoning, Major Requirement) ^2</td>
<td>5</td>
<td>CHEM 175, 135, or 195 (Major Requirement) ^2</td>
<td>5</td>
</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3</td>
<td>Goal 2.2 COMS 130 or other approved course</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 180 (Major Requirement) ^4</td>
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<table>
<thead>
<tr>
<th>Sophomore</th>
<th>Hours</th>
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<th>14-16</th>
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<tbody>
<tr>
<td>1st Semester Language (BA Second Language)</td>
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<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
</tr>
<tr>
<td>PHSX 114 (Major Pre-requisite), or &amp; PHSX 211 &amp; PHSX 216</td>
<td>4</td>
<td>PHSX 115 (Major Pre-requisite), or &amp; PHSX 236</td>
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<tr>
<td>CHEM 201</td>
<td>1</td>
<td>PHSX 212 &amp; PHSX 236</td>
<td></td>
</tr>
<tr>
<td>CHEM 330, 310, or 380 (Major Requirement)</td>
<td>3</td>
<td>CHEM 335 or 385 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 331 (Major Requirement)</td>
<td>2</td>
<td>CHEM 336 (Major Requirement)</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Junior</th>
<th>Hours</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3-5</td>
<td>4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
<td>3-5</td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
</tr>
</tbody>
</table>
BA in Chemistry with concentration in Biological Chemistry

Below is a sample 4-year plan for students pursuing the BA in Chemistry with a concentration in Biological Chemistry. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104 prior to freshman year, fall semester.

### Freshman

#### Fall
- ENGL 101 (Goal 2.1 (2 crs req), BA Writing I) 1
- MATH 115, 121, or 125 (Goal 1.2 Quantitative Reasoning) 3-5
- CHEM 170, 130, or 190 (BA Quantitative Reasoning, Major Requirement) 2
- First Year Seminar (Goal 1.1 Critical Thinking) 3
- CHEM 180 (Major Requirement) 5

#### Spring
- ENGL 102 (Goal 2.1 (2 crs req), BA Writing II) 3
- PHSX 211 & PHSX 216
- CHEM 330 or 380 (Major Requirement) 3
- CHEM 331 (Major Requirement) 2

**Total Hours: 14.5-16.5**

### Sophomore

#### Fall
- 1st Semester Language (BA Second Language) 5
- PHSX 114 (Major Pre-requisite), or PHSX 211 & PHSX 216 4
- CHEM 201 1
- CHEM 330 or 380 (Major Requirement) 3
- CHEM 331 (Major Requirement) 2

#### Spring
- 2nd Semester Language (BA Second Language) 5
- Goal 2.2 COMS 130 or other approved course 4
- PHSX 115 (Major Pre-requisite), or PHSX 212 & PHSX 236 4
- CHEM 335 or 385 (Major Requirement) 3
- CHEM 336 (Major Requirement) 2

**Total Hours: 15-17**

### Junior

#### Fall
- 3rd Semester Language (BA Second Language) 3
- 4th Semester Language, or 1st semester of Another Language (BA Second Language) 3-5
- Goal 3 Social Science 3
- BIOL Elective 300+ (Major Requirement) 3
- CHEM 510 or 530 (Major Requirement) 3

#### Spring
- Goal 3 Humanities 3
- Goal 4.1 US Diversity 3
- Goal 5 Social Responsibility & Ethics 3

**Total Hours: 120-126**

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. CHEM 170 requires eligibility for MATH 115 in order to enroll.
3. The Environmental Chemistry concentration requires 6 hours of electives chosen from a list of courses from either Group I or Group II. See the degree requirements (http://catalog.ku.edu/liberal-arts-sciences/chemistry/ba/#requirements) for a list of courses for each group.
4. CHEM 180, CHEM 695, CHEM 510, CHEM 530, CHEM 620, CHEM 621 are Fall only courses. CHEM 511, CHEM 531, CHEM 635, CHEM 636 are Spring only courses.

Please note:

All students in the College of Liberal Arts and Sciences are required to completed 120 total hours of which 45 hours must be at the Jr/Sr (300+) level, and 100 hours must be from within the College of Liberal Arts and Sciences.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
Because understanding the atomic and molecular nature of matter informs us about ourselves and our universe, and creating and finding applications for new and modified forms of matter helps to conserve and enhance our world.

### Undergraduate Admission

#### Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

#### Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

#### Chemistry Programs

The B.S. degree prepares students for graduate school and professional careers. The B.A. degree is for the student who wants to understand the fundamental principles of chemistry and to study a number of other fields. Both are based on a high school background that includes at least 1½ years of algebra and 1 year of geometry. High school courses in chemistry and physics are desirable but are not required. Many chemistry majors are preparing for medical school or for graduate study in chemistry and related fields. For graduate school, the common body of knowledge in the B.A. program is the minimum prerequisite. For premedical students, much of the knowledge will be important in their careers. Even more important, however, is the training in logical thinking, drawing conclusions from experimental observations, and digesting and understanding scientific information.

#### First- and Second-Year Preparation

Because study in chemistry requires preparation in mathematics and physics as well as a structured series of courses in chemistry, students should begin meeting major requirements in the first year. Students planning to major in chemistry should consult a chemistry department major advisor during their first semester to develop a 4-year plan for degree completion. It is particularly important to take CHEM 170 (or CHEM 130 or CHEM 190) and CHEM 175 (or CHEM 135 or CHEM 195) in the first year and CHEM 201, CHEM 330 (or CHEM 380) and CHEM 331 in the second year. For those seeking a B.S. degree it is also important to complete CHEM 335 (or CHEM 385) and CHEM 336 in the second year as well as their mathematics preparation (MATH 121 or MATH 125; MATH 122 or MATH 126; MATH 220 or MATH 320, and MATH 290) and physics preparation (PHSX 211 & PHSX 216, and PHSX 212 & PHSX 236) in the first 2 years.

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<table>
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<tr>
<th>Course or Requirement</th>
<th>Credits</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BIOL 636</td>
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<td>14.5</td>
</tr>
<tr>
<td>CHEM 698 or 699</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>6 Integration &amp; Creativity, (Recommended)</td>
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<td>CHEM 621 (Major Requirement)</td>
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<td>15</td>
</tr>
<tr>
<td>CHEM 695 (Major Requirement)</td>
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<tr>
<td>BIOL 636 (Major Requirement)</td>
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</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
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<td></td>
</tr>
</tbody>
</table>

**Total Hours: 120-126**

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2. CHEM 170 requires eligibility for MATH 115 in order to enroll.

3. BIOL 150 or BIOL 151 is a pre-requisite for the elective courses needed to fulfill the Biological Chemistry concentration elective requirement.

4. Choose from a list of electives approved to count for the Biological Chemistry elective requirement. See the degree requirements (http://catalog.ku.edu/liberal-arts-scienceschemistry/ba#requirementstext) tab for a list of courses.

5. BIOL 636 is a fall only course. BIOL 638 is a spring only course. CHEM 180, CHEM 695, CHEM 510, CHEM 530, CHEM 620, CHEM 621 are fall only courses. CHEM 511, CHEM 531 are spring only courses.

6. A Goal 6 course is required to fulfill the KU Core. It is recommended that CHEM 698 or CHEM 699 is taken to fulfill the KU Core.

---

### Bachelor of Science in Chemistry

#### Why study chemistry?

Because understanding the atomic and molecular nature of matter informs us about ourselves and our universe, and creating and finding...
## Requirements for the B.S. Degree

### General Education Requirements

All students must complete the KU Core.

### Chemistry Prerequisite or Co-requisite Knowledge (29-32)

Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.

#### Calculus I. Satisfied by one of the following:
- MATH 121 Calculus I
- MATH 125 Calculus I
- MATH 145 Calculus I, Honors

#### Calculus II. Satisfied by one of the following:
- MATH 122 Calculus II
- MATH 126 Calculus II
- MATH 146 Calculus II, Honors

#### Calculus III. Satisfied by one of the following:
- MATH 127 Calculus III
- MATH 147 Calculus III, Honors

#### Differential Equations. Satisfied by one of the following:
- MATH 220 Applied Differential Equations
- MATH 320 Elementary Differential Equations

#### Elementary Linear Algebra. Satisfied by:
- MATH 290 Elementary Linear Algebra

#### General Physics I. Satisfied by one of the following:
- PHSX 211 and General Physics I Laboratory
- PHSX 213 General Physics I Honors

#### General Physics II. Satisfied by one of the following:
- PHSX 212 and General Physics II Laboratory
- PHSX 214 General Physics II Honors

#### Biochemistry. Satisfied by one of the following:
- BIOL 600 Introductory Biochemistry, Lectures
- BIOL 636 Biochemistry I

#### Chemistry Core Knowledge and Skills (50)

Majors must complete courses as indicated in the following areas:

##### Chemistry for the Chemical Sciences I. Satisfied by one of the following:
- CHEM 170 Chemistry for the Chemical Sciences I
- CHEM 130 General Chemistry I
- CHEM 190 Foundations of Chemistry I, Honors

##### Chemistry for the Chemical Sciences II. Satisfied by one of the following:
- CHEM 175 Chemistry for the Chemical Sciences II
- CHEM 135 General Chemistry II
- CHEM 195 Foundations of Chemistry II, Honors

##### Seminar I. Satisfied by:
- CHEM 180 Seminar I

##### Organic Chemistry I (Lecture and Lab). Satisfied by:
- CHEM 330 Organic Chemistry I
- CHEM 380 Organic Chemistry I, Honors

### Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

#### Major Hours

Satisfied by 50 hours of major courses.

#### Major Hours in Residence

Satisfied by a minimum of 15 hours of KU resident credit in the major.

#### Major Junior/Senior Hours

Satisfied by a minimum of 39.5 hours from junior/senior courses (300+) in the major.

#### Major Junior/Senior Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator. (http://clas.ku.edu/undergrad/tools/gpa)

### Environmental Chemistry Option

This option allows students to focus on environmental issues and to understand how chemistry may be applied to environmental problems. Students are prepared for graduate programs or employment.
General Education Requirements

All students must complete the KU Core.

Chemistry Prerequisite or Co-requisite Knowledge (26-28)

Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.

Calculus I. Satisfied by one of the following: 4-5
- MATH 121 Calculus I
- or MATH 125 Calculus I
- or MATH 145 Calculus I, Honors

Calculus II. Satisfied by one of the following: 4-5
- MATH 122 Calculus II
- or MATH 126 Calculus II
- or MATH 146 Calculus II, Honors

Calculus III. Satisfied by one of the following: 4
- MATH 127 Calculus III
- or MATH 147 Calculus III, Honors

Differential Equations. Satisfied by one of the following: 3
- MATH 220 Applied Differential Equations
- MATH 320 Elementary Differential Equations

Elementary Linear Algebra. Satisfied by:
- MATH 290 Elementary Linear Algebra 2

General Physics I. Satisfied by one of the following: 5
- PHSX 211 General Physics I
- & PHSX 216 and General Physics I Laboratory
- PHSX 213 General Physics I Honors

General Physics II. Satisfied by one of the following: 4
- PHSX 212 General Physics II
- & PHSX 236 and General Physics II Laboratory
- PHSX 214 General Physics II Honors

Chemistry Core Knowledge and Skills (45)

Majors must complete courses as indicated in the following areas:

Chemistry for the Chemical Sciences I. Satisfied by one of the following: 5
- CHEM 170 Chemistry for the Chemical Sciences I
- CHEM 130 General Chemistry I
- CHEM 190 Foundations of Chemistry I, Honors

Chemistry for the Chemical Sciences II. Satisfied by one of the following: 5
- CHEM 175 Chemistry for the Chemical Sciences II
- CHEM 135 General Chemistry II
- CHEM 195 Foundations of Chemistry II, Honors

Seminar I. Satisfied by:
- CHEM 180 Seminar I 0.5

Organic Chemistry I (Lecture and Lab). Satisfied by:
- CHEM 330 Organic Chemistry I
- or CHEM 380 Organic Chemistry I, Honors

Organic Chemistry II (Lecture and Lab). Satisfied by:
- CHEM 335 Organic Chemistry II
- or CHEM 385 Organic Chemistry II, Honors

CHEM 336 Organic Chemistry II Laboratory 2

Physical Chemistry I (Lecture and Lab). Satisfied by:
- CHEM 530 Physical Chemistry I
- & CHEM 531 and Physical Chemistry I Laboratory

Physical Chemistry II (Lecture and Lab). Satisfied by:
- CHEM 535 Physical Chemistry II
- & CHEM 536 and Physical Chemistry II Laboratory

Laboratory Safety in the Chemical Sciences. Satisfied by:
- CHEM 201 Laboratory Safety in the Chemical Sciences 1

Analytical Chemistry (Lecture and Lab). Satisfied by:
- CHEM 620 Analytical Chemistry
- & CHEM 621 and Analytical Chemistry Laboratory

Instrumental Methods of Analysis (Lecture and Lab). Satisfied by:
- CHEM 635 Instrumental Methods of Analysis
- & CHEM 636 and Instrumental Methods of Analysis Laboratory

Systematic Inorganic Chemistry. Satisfied by:
- CHEM 660 Systematic Inorganic Chemistry 3

Seminar II. Satisfied by:
- CHEM 695 Seminar II 0.5

Environmental Chemistry Core Knowledge and Skills (12)

Majors choosing this option should select 2 electives (6 hours) from each of the following groups:

Environmental Chemistry Option Group I
- BIOL 100 Principles of Biology
- or BIOL 150 Principles of Molecular and Cellular Biology
- EVRN 148 Scientific Principles of Environmental Studies
- GEOG 304 Environmental Conservation
- GEOL 351 Environmental Geology
- BIOL 400 Fundamentals of Microbiology
- BIOL 600 Introductory Biochemistry, Lectures
- BIOL 414 Principles of Ecology
- ATMO 105 Introductory Meteorology
- Environmental Chemistry Option Group II
- BIOL 661 Ecology of Rivers and Lakes (with or without BIOL 662 Aquatic Ecology Laboratory)
- CE 477 Introduction to Environmental Engineering and Science
- GEOL 552 Introduction to Hydrogeology
- ATMO 525 Air Pollution Meteorology
- EVRN 611 Water Quality, Land Use, and Watershed Ecosystems
- CHEM 698 Undergraduate Research Problems

All 4 courses chosen from Groups I and II may not be in the same department or division.

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 45 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Bachelor of Science in Chemistry

Satisfied by a minimum of 34.5 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Biological Chemistry Option
This option is available to students interested in the biological applications of chemistry. The curriculum is compatible with many pre-health-professions programs and prepares the student for graduate study or career opportunities.

General Education Requirements
All students must complete the KU Core.

Chemistry Prerequisite or Co-requisite Knowledge (26-28)
Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.

Calculus I. Satisfied by one of the following: 4-5
MATH 121 Calculus I
or MATH 125 Calculus I
or MATH 145 Calculus I, Honors

Calculus II. Satisfied by one of the following: 4-5
MATH 122 Calculus II
or MATH 126 Calculus II
or MATH 146 Calculus II, Honors

Calculus III. Satisfied by one of the following: 4
MATH 127 Calculus III
or MATH 147 Calculus III, Honors

Differential Equations. Satisfied by one of the following: 3
MATH 220 Applied Differential Equations
MATH 320 Elementary Differential Equations

Elementary Linear Algebra. Satisfied by:
MATH 290 Elementary Linear Algebra 2

General Physics I. Satisfied by one of the following: 5
PHSX 211 General Physics I
& PHSX 216 and General Physics I Laboratory
PHSX 213 General Physics I Honors

General Physics II. Satisfied by one of the following: 4
PHSX 212 General Physics II
& PHSX 236 and General Physics II Laboratory
PHSX 214 General Physics II Honors

Chemistry Core Knowledge and Skills (50)
Majors must complete courses as indicated in the following areas:

Chemistry for the Chemical Sciences I. Satisfied by one of the following: 5
CHEM 170 Chemistry for the Chemical Sciences I
CHEM 130 General Chemistry I
CHEM 190 Foundations of Chemistry I, Honors

Chemistry for the Chemical Sciences II. Satisfied by one of the following:
CHEM 175 Chemistry for the Chemical Sciences II
CHEM 135 General Chemistry II
CHEM 195 Foundations of Chemistry II, Honors

Seminar I. Satisfied by:
CHEM 180 Seminar I 0.5

Organic Chemistry I (Lecture and Lab). Satisfied by:
CHEM 330 Organic Chemistry I
or CHEM 380 Organic Chemistry I, Honors
CHEM 331 Organic Chemistry I Laboratory 2

Organic Chemistry II (Lecture and Lab). Satisfied by:
CHEM 335 Organic Chemistry II
or CHEM 385 Organic Chemistry II, Honors
CHEM 336 Organic Chemistry II Laboratory 2

Physical Chemistry I (Lecture and Lab). Satisfied by:
CHEM 530 Physical Chemistry I
& CHEM 531 and Physical Chemistry I Laboratory 5

Physical Chemistry II (Lecture and Lab). Satisfied by:
CHEM 535 Physical Chemistry II
& CHEM 536 and Physical Chemistry II Laboratory 6

Laboratory Safety in the Chemical Sciences. Satisfied by:
CHEM 201 Laboratory Safety in the Chemical Sciences 1

Analytical Chemistry (Lecture and Lab). Satisfied by:
CHEM 630 Analytical Chemistry
& CHEM 631 and Analytical Chemistry Laboratory 5

Instrumental Methods of Analysis (Lecture and Lab). Satisfied by:
CHEM 635 Instrumental Methods of Analysis
& CHEM 636 and Instrumental Methods of Analysis Laboratory 4

Systematic Inorganic Chemistry. Satisfied by:
CHEM 660 Systematic Inorganic Chemistry 3

Advanced Inorganic Laboratory. Satisfied by:
CHEM 661 Advanced Inorganic Laboratory 2

Seminar II. Satisfied by:
CHEM 695 Seminar II 0.5

Chemistry Required Elective
Satisfied by one of the following: 3
CHEM 698 Undergraduate Research Problems
CHEM 699 Undergraduate Honors Research

700-level course

Biological Chemistry Core Knowledge and Skills (15)
Principles of Molecular and Cellular Biology. Satisfied by:
BIOL 150 Principles of Molecular and Cellular Biology 4

Biochemistry. Satisfied by: 6
BIOL 636 Biochemistry I
BIOL 638 Biochemistry II

Biochemistry Laboratory. Satisfied by:
BIOL 637 Introductory Biochemistry Laboratory 2

Biological Chemistry Required Electives
Majors choosing this option should select 1 elective (3 hours) from the following:
BIOL 350 Principles of Genetics
### Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 50 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 39.5 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

### Chemical Physics Option

This option allows students to focus on the theoretical basis of chemistry. Students are prepared for graduate programs or employment.

### General Education Requirements

All students must complete the KU Core.

### Chemistry Prerequisite or Co-requisite Knowledge (29-32)

Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.

#### Calculus I
Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 121</td>
<td>Calculus I</td>
<td>4-5</td>
</tr>
<tr>
<td>or MATH 125</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>or MATH 145</td>
<td>Calculus I, Honors</td>
<td></td>
</tr>
</tbody>
</table>

#### Calculus II
Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 122</td>
<td>Calculus II</td>
<td></td>
</tr>
<tr>
<td>or MATH 126</td>
<td>Calculus II</td>
<td></td>
</tr>
<tr>
<td>or MATH 146</td>
<td>Calculus II, Honors</td>
<td></td>
</tr>
</tbody>
</table>

#### Calculus III
Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 127</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 147</td>
<td>Calculus III, Honors</td>
<td></td>
</tr>
</tbody>
</table>

#### Differential Equations
Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 220</td>
<td>Applied Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 320</td>
<td>Elementary Differential Equations</td>
<td></td>
</tr>
</tbody>
</table>

#### Elementary Linear Algebra
Satisfied by:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 290</td>
<td>Elementary Linear Algebra</td>
<td>2</td>
</tr>
</tbody>
</table>

#### General Physics I
Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 211</td>
<td>General Physics I</td>
<td>5</td>
</tr>
<tr>
<td>&amp; PHSX 216</td>
<td>and General Physics I Laboratory</td>
<td></td>
</tr>
<tr>
<td>PHSX 213</td>
<td>General Physics I Honors</td>
<td></td>
</tr>
</tbody>
</table>

#### General Physics II
Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 212</td>
<td>General Physics II</td>
<td></td>
</tr>
<tr>
<td>&amp; PHSX 236</td>
<td>and General Physics II Laboratory</td>
<td></td>
</tr>
<tr>
<td>PHSX 214</td>
<td>General Physics II Honors</td>
<td></td>
</tr>
<tr>
<td>BIO 500</td>
<td>Introductory Biochemistry, Lectures</td>
<td></td>
</tr>
<tr>
<td>BIO 536</td>
<td>Biochemistry I</td>
<td></td>
</tr>
</tbody>
</table>

### Chemistry Core Knowledge and Skills (47)

Majors must complete courses as indicated in the following areas:

#### Chemistry for the Chemical Sciences I
Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 110</td>
<td>Chemistry for the Chemical Sciences I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 120</td>
<td>General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 190</td>
<td>Foundations of Chemistry I, Honors</td>
<td></td>
</tr>
</tbody>
</table>

#### Chemistry for the Chemical Sciences II
Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 175</td>
<td>Chemistry for the Chemical Sciences II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
<td></td>
</tr>
<tr>
<td>CHEM 195</td>
<td>Foundations of Chemistry II, Honors</td>
<td></td>
</tr>
</tbody>
</table>

#### Seminar I
Satisfied by:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 180</td>
<td>Seminar I</td>
<td>0.5</td>
</tr>
</tbody>
</table>

#### Organic Chemistry I (Lecture and Lab)
Satisfied by:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 300</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>or CHEM 380</td>
<td>Organic Chemistry I, Honors</td>
<td></td>
</tr>
<tr>
<td>CHEM 331</td>
<td>Organic Chemistry I Laboratory</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Organic Chemistry II (Lecture and Lab)
Satisfied by:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 335</td>
<td>Organic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>or CHEM 385</td>
<td>Organic Chemistry II, Honors</td>
<td></td>
</tr>
<tr>
<td>CHEM 336</td>
<td>Organic Chemistry II Laboratory</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Physical Chemistry I (Lecture and Lab)
Satisfied by:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 530</td>
<td>Physical Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>&amp; CHEM 531</td>
<td>and Physical Chemistry I Laboratory</td>
<td></td>
</tr>
<tr>
<td>CHEM 532</td>
<td>Physical Chemistry II</td>
<td></td>
</tr>
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</table>

#### Laboratory Safety in the Chemical Sciences
Satisfied by:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 201</td>
<td>Laboratory Safety in the Chemical Sciences</td>
<td>1</td>
</tr>
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</table>

#### Analytical Chemistry (Lecture and Lab)
Satisfied by:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 620</td>
<td>Analytical Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>&amp; CHEM 621</td>
<td>and Analytical Chemistry Laboratory</td>
<td></td>
</tr>
<tr>
<td>CHEM 635</td>
<td>Instrumental Methods of Analysis (Lecture and Lab)</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 636</td>
<td>and Instrumental Methods of Analysis Laboratory</td>
<td></td>
</tr>
<tr>
<td>CHEM 660</td>
<td>Systematic Inorganic Chemistry</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Advanced Inorganic Laboratory
Satisfied by:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 661</td>
<td>Advanced Inorganic Laboratory</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Seminar II
Satisfied by:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 695</td>
<td>Seminar II</td>
<td>0.5</td>
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</tbody>
</table>

### Chemical Physics Core Knowledge and Skills (6)

Majors must complete 2 courses from each of the following groups:

#### Group I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 313</td>
<td>General Physics III</td>
<td></td>
</tr>
<tr>
<td>&amp; PHSX 316</td>
<td>and Intermediate Physics Laboratory I (PHSX 313 and PHSX 316 should be taken concurrently)</td>
<td>4</td>
</tr>
</tbody>
</table>
Minor in Chemistry

Why study chemistry?

Because understanding the atomic and molecular nature of matter informs us about ourselves and our universe, and creating and finding applications for new and modified forms of matter helps to conserve and enhance our world.

Requirements for the Minor

The minor allows students outside the department to obtain a strong, distributed background in the discipline. It is particularly useful for students anticipating careers in medicine, health professions, biological sciences, environmental sciences, chemical engineering, business, law, secondary education, or any career in which a basic understanding of the molecular sciences is helpful. A total of 23 credit hours is required, including 13 hours of upper-division work and at least 2 upper-division laboratories. Students should see a chemistry department advisor early in the junior year.

Chemistry Minor Course Requirements (27-32)

Students selecting this minor must complete the following:

Calculus I. Satisfied by one of the following: 3-5
- MATH 115 Calculus I
- or MATH 121 Calculus I
- or MATH 125 Calculus I
- or MATH 145 Calculus I, Honors

Calculus II. Satisfied by one of the following: 3-5
- MATH 116 Calculus II
- or MATH 122 Calculus II
- or MATH 126 Calculus II
- or MATH 146 Calculus II, Honors

General or College Physics I. Satisfied by one of the following: 4-5
- PHSX 114 College Physics I
- PHSX 211 General Physics I & PHSX 216 and General Physics I Laboratory
- PHSX 213 General Physics I Honors

General or College Physics II. Satisfied by one of the following: 4
- PHSX 115 College Physics II
- PHSX 212 General Physics II & PHSX 236 and General Physics II Laboratory
- PHSX 214 General Physics II Honors

Chemistry for the Chemical Sciences I. Satisfied by one of the following: 5
- CHEM 170 Chemistry for the Chemical Sciences I
- CHEM 130 General Chemistry I
- CHEM 190 Foundations of Chemistry I, Honors

Chemistry for the Chemical Sciences II. Satisfied by one of the following: 5
- CHEM 175 Chemistry for the Chemical Sciences II
- CHEM 135 General Chemistry II
- CHEM 195 Foundations of Chemistry II, Honors

Organic Chemistry I. Satisfied by one of the following: 3
- CHEM 310 Fundamentals of Organic Chemistry
- CHEM 330 Organic Chemistry I
- CHEM 380 Organic Chemistry I, Honors

Organic Chemistry Lab I. Satisfied by:
- CHEM 331 Organic Chemistry I Laboratory

Chemistry Required Elective Group I (5)

Students selecting this minor must complete one of the following:

Analytical Chemistry Lecture and Laboratory. Satisfied by:
**Graduate Admission**

**Prerequisites**

Before beginning graduate work, students should have completed a bachelor’s degree in chemistry or a related field.

**Application**

Applications for admission are accepted online through the Office of Graduate Studies. Applicants must include academic transcripts from all post-secondary schools attended, as well as recommendation letters from 3 individuals familiar with the applicant’s academic background and abilities. Additional materials that are strongly recommended include Graduate Record Examination scores (GRE), a resume/CV and a personal statement describing the applicant’s qualifications and reasons for pursuing a graduate degree in chemistry.

International applicants should also provide official scores from the Test of English as a Foreign Language (TOEFL).

Although the preferred submission deadline is January 15, applications must be received by April 15 to be considered for admission in the fall semester.

To apply, complete the online graduate application (http://www.graduate.ku.edu) and upload all requested documents.

**Procedure**

Completed applications are reviewed by a committee of faculty members from the Department of Chemistry. Offers of admission depend on favorable evaluation of the application materials and an expectation that the student will attain an undergraduate grade-point average of B or higher in chemistry and all other natural science and mathematics courses. Admission to the graduate program is contingent upon completion of a bachelor’s degree in chemistry (or a related field) and all other general admission requirements.

**M.S. Degree Requirements**

Each student must complete (with a B- or better) a distribution requirement consisting of two courses selected from the following list of introductory courses in the 4 major areas of study:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 720</td>
<td>Fundamentals and Methods of Analytical Chemistry</td>
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<td>CHEM 730</td>
<td>Coordination and Organometallic Chemistry</td>
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<td>CHEM 740</td>
<td>Principles of Organic Reactions</td>
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<td>CHEM 750</td>
<td>Introduction to Quantum Mechanics</td>
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<td>CHEM 760</td>
<td>Introduction to Chemistry in Biology</td>
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In addition, the student must also complete (with a B- or better) CHEM 701 (Laboratory Safety in the Chemical Sciences).

The minimum total credit hours required for the master’s degree is 30.

The candidate for the master’s degree must complete a thesis that does not exceed one-third of the credit hours and demands the solution of some research problem in chemistry. The remaining work may consist of additional specialized courses in chemistry or in related fields such as physics, mathematics, microbiology, biochemistry, or chemical engineering. Students completing a master’s thesis in chemical education must take EPSY 715 Understanding Research in Education and EPSY...
710 Introduction to Statistical Analysis. Courses from outside the
department cannot be from more than 2 departments.

At the time of the completion of the thesis, a candidate for the master’s
degree must pass an oral thesis defense (examination) administered by a
committee of three members of the department’s Graduate Faculty.

Doctor of Philosophy in
Chemistry

Why study chemistry?
Because understanding the atomic and molecular nature of matter
informs us about ourselves and our universe, and creating and finding
applications for new and modified forms of matter helps to conserve and
enhance our world.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be
admitted as either a degree-seeking or non-degree seeking student.
Policies and procedures of Graduate Studies govern the process of
Graduate admission. These may be found in the Graduate Studies
(p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the
online catalog for information regarding program-specific admissions
criteria and requirements. Special admissions requirements pertain to
Interdisciplinary Studies degrees, which may be found in the Graduate
Studies section of the online catalog.

Graduate Admission

Prerequisites

Before beginning graduate work, students should have completed a
bachelor’s degree in chemistry or a related field.

Application

Applications for admission are accepted online through the Office of
Graduate Studies. Applications must include academic transcripts from
all post-secondary schools attended, as well as recommendation letters
from three individuals familiar with the applicant’s academic background
and abilities. Additional materials that are strongly recommended
include Graduate Record Examination (GRE) scores, and a resume/ CV and personal statement describing the applicant’s qualifications
and reasons for pursuing a graduate degree in chemistry. International
applicants should also provide scores from the Test of English as a
Foreign Language (TOEFL). Although the preferred submission deadline
is January 15, applications must be received by April 15 to be considered
for admission in the fall semester.

To apply, complete the online graduate application form (http://
www.graduate.ku.edu) and upload all requested documents.

Procedure

Completed applications are reviewed by a committee of faculty members
from the Department of Chemistry. Offers of admission depend on
favorable evaluation of the application materials and an expectation
that the student will attain an undergraduate grade-point average of B
or higher in chemistry and all other natural science and mathematics
courses. Admission to the graduate program is contingent upon
completion of a bachelor’s degree in chemistry (or a related field) and all
other general admissions requirements.

Ph.D. Degree Requirements

Each Ph.D. aspirant must complete the following course requirements:

1. Distribution Requirement: Complete the same distribution requirement
   as for the Master of Science in chemistry.
2. Complete with a B– or higher 4 courses at the 700 level or above
   in chemistry or a related area. The list of courses to be completed
   must be agreed upon by the student and the student’s research
   advisor and approved by the Graduate Affairs Committee before the
   beginning of the student’s second semester in the program. (Changes
to the list can only be made with the approval of the student, the
   research advisor, and the graduate affairs committee.) Note: these 4
courses represent a minimal set and do not preclude the student, with
consultation of the research advisor, from taking additional courses in
support of the research effort.
3. Complete CHEM 700 (Responsible Scholarship in the Chemical
   Sciences) and CHEM 701 (Laboratory Safety in the Chemical
   Sciences) with a B– or better. CHEM 701 satisfies the university’s
   Responsible Scholarship requirement for the chemistry Ph.D.

These courses must be satisfactorily completed before a student takes
the comprehensive oral examination.

The aspirant also must fulfill the following requirements:

1. A comprehensive oral examination must be completed. The student
   must prepare a written, original research proposal before the
   examination is scheduled. The proposal must be presented and
defended orally at the examination; however, the examination
   is comprehensive in nature. The student must be prepared for
   questions on a range of topics in the discipline. It should be noted
   that requirements (1) and (2) must be completed before the
   comprehensive oral examination can be taken. Failure to pass the
   oral examination before the beginning of the fourth year of graduate
   study leads to ineligibility for support by departmental or research
   funds.
2. A dissertation based on original work of high quality in one of the
   principal fields of chemistry must be completed.
3. A final oral examination and defense of the dissertation must be
   completed.

For further details, see Doctoral Degree Requirements, Doctor of
Philosophy (p. 2372) in the Graduate Studies section of the online
catalog.

Child Language Doctoral Program

Child Language Doctoral Program

The doctoral program in Child Language offers the first specialized
degree in this new area of study. The program crosses traditional
academic boundaries to give students the theoretical, empirical, and
methodological competence necessary to study basic and applied issues
in language acquisition. This multidisciplinary program is a cooperative
endeavor of faculty members from the Departments of Applied Behavioral
Science, Clinical Child Psychology, Linguistics, Psychology, and Speech-
Language-Hearing: Sciences and Disorders.
Students study 4 areas:

1. Core theoretical and experimental work on language acquisition,
2. Relevant methods and theories in linguistics and psycholinguistics,
3. Theoretical perspectives on developmental psychology, and
4. The nature of disordered language development and methods and techniques for language intervention.

Each student is advised by a support committee of 3 faculty members. Enrollment in a proseminar in language acquisition is required of all students in addition to participation in research activities. Opportunities for individual research projects include the projects of participating faculty members and the research teams of the Schiefelbusch Institute for Life Span Studies, the Speech-Language-Hearing Clinic, and the clinical/research facilities of KU Medical Center.

Graduates are candidates for teaching and research positions, clinical positions providing service to communicatively disabled persons, and research work in business and governmental sectors.

The Child Language doctoral program reports to the College of Liberal Arts and Sciences in collaboration with participating departments. The 23-member faculty is drawn from the participating departments. The Institute for Life Span Studies provides additional instructional, research, and clinical experiences.

Doctor of Philosophy in Child Language

Child Language Doctoral Program

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Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2368) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Students must submit 3 letters of recommendation, 1 copy of all undergraduate and graduate transcripts, and scores from the Graduate Record Examination (verbal, quantitative, analytical). Applicants should have earned bachelor’s degrees that include course work in linguistics, psychology, speech pathology, and statistics with minimum grade-point averages of B. Preference is given to those with master’s degrees in linguistics, psychology, education, special education, or speech and hearing sciences or to applicants with relevant post-baccalaureate work experience. No one is admitted for a terminal M.A. degree. Admission materials are reviewed by a subcommittee of the advisory council. The admissions committee supervises the admission process and recommends applicants to the faculty committee.

Submit your graduate application online (http://www.graduate.ku.edu). Send all other requested application materials to the program:

The University of Kansas
Child Language Program
Dole Human Development Center
1000 Sunnyside Ave., Room 3031
Lawrence, KS 66045-7561

Ph.D. Degree Requirements

For the Ph.D. degree, the student must complete all general requirements. These include residence, research skills, comprehensive oral examination, preparation of a dissertation, and the final oral examination and defense of the dissertation. 3 options for fulfilling the research skills requirement are available:

1. Competence in the use of computers can be demonstrated by course work or by a successful demonstration of proficiency. Competence in both programming skills and computer applications is required.
2. Proficiency in a language other than English or reading knowledge of 2 languages other than English can be demonstrated.
3. A record of professional research experience or publication may be used to demonstrate research skills.

Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current policies on Doctoral Research Skills and Responsible Scholarship are listed in the KU Policy Library.
For students entering without the master's degree, the requirements for the M.A. are at least 8 credit hours of core courses in language acquisition; 9 hours of supplemental courses in linguistics, psycholinguistics, developmental psychology, or language intervention; 6 hours of statistics; and 6 hours of thesis. Continuous enrollment in the child language proseminar is required. Within 3 years of entering the program, students normally complete the required 30 graduate credit hours, prepare an M.A. thesis, and pass a final general examination and defense of the thesis.

Ph.D. post-master's requirements include a minimum of 47 additional graduate credit hours. These should include at least 8 hours of additional core courses, 18 hours of additional supplemental courses, 9 hours of additional statistical and methodological courses, and a minimum of 6 hours of dissertation. Continuous enrollment in the proseminar is required.

After completing the research skills requirement and the major portion of the course work, the doctoral student must pass a written preliminary examination and a comprehensive oral examination. The written examination covers 4 areas:

1. Language acquisition,
2. Psycholinguistics,
3. Developmental psychology,
4. Disordered language development or language intervention.

The comprehensive oral examination covers the major field, taking one of 5 forms:

1. A defense of the written preliminary examinations,
2. A defense of a completed research project,
3. A prospectus for a future research project,
4. A discussion of a major review paper, or
5. A review of a research grant proposal and a simulated site visit defense of the proposal.

All students are expected to be engaged continuously in research on child language. Research involvement is documented with appropriate enrollment in research, thesis, and dissertation credit hours, and in the proseminar in child language.

**Courses**

See course listings for the cooperating departments.

**Department of Classics**

**Why study classics?**

Because knowledge of Greek and Roman antiquity is fundamental to understanding the ancient and modern world.

**Undergraduate Scholarships and Awards**

The department offers several scholarships and awards, such as the Mildred Lord Greef award for best paper or essay, the Albert O. Greef award for literary translation, the Tenney Frank scholarships for undergraduate study, and the Tenney Frank awards for foreign study of the classics. For information, contact the department (http://classics.ku.edu).

All graduate students who wish to be considered for KU scholarships and financial aid must complete applications with Financial Aid and Scholarships.

**KU Financial Aid**

All undergraduates who wish to be considered for KU scholarships and financial aid must complete applications with Financial Aid and Scholarships (http://affordability.ku.edu/steps/index.shtml).

**Undergraduate Programs**

Classics is the integrated study of Greek and Roman civilization through its languages, its literature, and its artistic and archaeological remains. The Department of Classics offers 2 majors. Both provide students of diverse career goals a broad humane education and afford a solid foundation for those who wish to pursue graduate work in classics. The Classical Antiquity major provides inclusive, interdisciplinary training in ancient Greek and Roman cultures and prepares you for graduate study in Greek and Roman archaeology, art history, or history. The Classical Languages major trains you to read the great authors of classical antiquity (e.g., Homer, Plato, Vergil, Sappho, Saint Augustine) in the original language and prepares you for graduate study in classics and for teaching in some private schools. You might also combine your classical language interest with a degree in the School of Education. A degree in education with a Latin major allows you to teach Latin in public high schools.

**Language Proficiency**

The CLAS language requirement may be fulfilled by taking either Latin or Greek. To meet the language requirement in Latin, a student should complete LAT 104, LAT 108, and LAT 112 followed by LAT 200 (or their equivalents). To meet the language requirement in Greek, a student should complete GRK 104, GRK 108 or their equivalents, and 2 more courses (6 hours) at the GRK 300 level. The number of hours required may be reduced if a student has high school or transfer hours.

**Placement in Latin**

Students who wish to enroll in Latin after studying Latin in high school or elsewhere should seek advice from the classics faculty about appropriate placement in Latin courses at KU. Whenever possible, make an advising appointment in advance by calling the Department of Classics at 785-864-3153 or by contacting an advisor.

**Retroactive Credit in Latin**

In cooperation with the University Registrar, the Department of Classics awards retroactive university credit for work in Latin at the high school level. To qualify for retroactive credit, the student’s initial university-level enrollment in Latin must be in a KU course. The student qualifies for retroactive credit only after completing the KU Latin course with a grade of C or higher.

After completing such a course with a qualifying grade, the student must bring his or her ARTS form and high school transcript to the Department of Classics office for verification. The department then notifies the Office of the University Registrar of the number of credit hours to be awarded. The student’s transcript shows the number of hours awarded but no letter grade. The hours count toward graduation. Guidelines are as follows:

- **2 Years of High School Latin**: A student must enroll initially at KU in LAT 112 or LAT 113 and receive a grade of C or higher. 3 hours of retroactive credit will be awarded.
• 3 Years of High School Latin: A student who initially enrolls in LAT 200 or LAT 201 and receives a grade of C or higher will receive 6 hours of retroactive credit. A student who enrolls in LAT 112 or LAT 113 and receives a grade of C or higher will receive 3 hours of retroactive credit.

• 4 Years of High School Latin: A student who initially enrolls in a Latin course higher than LAT 200 or LAT 201 (e.g., any 300-level Latin course) and receives a grade of C or higher will receive 9 hours of retroactive credit. A student who enrolls in LAT 200 or LAT 201 and receives a grade of C or higher will receive 6 hours of retroactive credit.

Note: If a student initially enrolls in a course below the specified level (e.g., a student with 4 years of high school Latin enrolls in LAT 112 or LAT 113), he or she receives no retroactive credit. If a student initially enrolls in a course above the specified level (e.g., a student with 2 years of high school Latin enrolls in LAT 200 or LAT 201, or a student with 3 years of high school Latin enrolls in a Latin course higher than LAT 200 or LAT 201) and receives a grade of C or higher, he or she is eligible for the full retroactive credit allowed for that course.

Courses for Nonmajors

The department offers a range of courses in ancient art, archaeology, literature, and language, including 4 years of undergraduate Latin and 3½ years of ancient Greek. No knowledge of Latin or Greek is needed for courses labeled CLSX, such as the principal course CLSX 148 Greek and Roman Mythology.

Graduate Programs

The Department of Classics offers advanced course work in the ancient civilizations of Greece and Rome. Students are expected to study the classical languages (Greek and Latin) and literatures as well as the art and archaeological remains of the Greek and Roman worlds.

Graduate Teaching Assistantships

Financial support is available in the form of teaching assistantships in Latin, Greek, or mythology. Contact the department (http://classics.ku.edu) for information.

Visit the Graduate Studies website for information about funding opportunities (http://graduate.ku.edu/funding) for graduate students at KU.

Financial Aid and Scholarships (http://affordability.ku.edu/steps/index.shtml) administers grants, loans, and need-based financial aid.

Courses

CLSX 148. Greek and Roman Mythology. 3 Hours. HL GE3H / H/W. A systematic examination of the traditional cycles of Greek myth and their survival and metamorphosis in Latin literature. Some attention is given to the problems of comparative mythology and the related areas of archaeology and history. Slides and other illustrated materials. No knowledge of Latin or Greek is required. LEC.

CLSX 149. Greek and Roman Mythology Honors. 3 Hours. HL GE3H / H/W. The study of Greek and Roman mythology through extensive readings in primary classical texts and secondary authors. Prerequisite: Admission to the Honors Program or consent of instructor. LEC.

CLSX 151. Introduction to Classical Archaeology. 3 Hours. HT GE11/GE3H / H/W. An introduction to the history, methods, and excavation techniques of archaeology, with special emphasis on ancient Greece and Rome. Topics include stratigraphy, chronology, artifact analysis, the role of archaeology in our understanding of Greek and Roman society, and the treatment of archaeology in popular culture. Illustrated throughout with presentations of important archaeological sites of the ancient Mediterranean such as Athens and Pompeii, from the earliest times through late antiquity. LEC.

CLSX 177. First Year Seminar: ______. 3 Hours. GE11 / U. A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Classics. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

CLSX 178. Writing About Greek and Roman Culture. 3 Hours. GE21 / H. This course uses focused content from Greek and Roman mythology as a vehicle for learning, applying, and practicing essential skills of writing. The content varies from term to term but is always circumscribed, such as Helen of Sparta, nature myths, the wandering hero, or children in Greek tragedy. Students complete a variety of writing exercises that build upon each other and include revision. The course will be taught in English. LEC.

CLSX 210. Greek Rhetoric in Theory and Practice. 3 Hours. H. This course explores the theory and practice of ancient Greek rhetoric, with the aim of developing student¿s own rhetorical skills and habits. All readings are in translation; no knowledge of ancient Greek is required. Students study rhetoric in such authors as Homer, Demosthenes, Plato, and Lysias and discuss such topics as the role of public speaking in maintaining Greek democracy, the difference between rhetorical skill as a means and an end, the relationship between rhetorical style and civic identity, and the adaptability of rhetoric to various circumstances and audiences. Students practice delivery with ancient speeches; write and deliver speeches tailored to a variety of situations; and listen to and critique the speeches of their peers and others. LEC.

CLSX 220. Roman Oratory in Theory and Practice. 3 Hours. H. This course explores the theory and practice of ancient Roman rhetoric, with the aim of developing student¿s own rhetorical skills and habits. All readings are in translation; no knowledge of Latin is required. Students study rhetoric in such authors as Cicero, Quintilian, Caesar, and Seneca and discuss such topics as the role of rhetorical theory in Roman education; oratory as a hallmark of public service during the Republic, and its transition to a pastime in the Imperial age; the ways the Romans connected oratory with humor, the body, and gender identity; and the way given to speakers in constructing an argument. Students practice delivery with ancient speeches; write and deliver speeches tailored to a variety of situations; and listen to and critique the speeches of their peers and others. LEC.

CLSX 230. Greek Literature and Civilization. 3 Hours. HL GE3H / H. An introduction to ancient Greek literature and civilization. Studied against the historical and cultural background of their times will be writers of poetry and prose such as Homer, Sappho, the tragedians, Aristophanes, Plato, and topics arising from the texts such as religion, athletics, oral performance, sexuality, and the development of literary genres. No knowledge of Greek required and no prerequisite. LEC.

CLSX 232. Word Power: Greek and Latin Elements in English. 3 Hours. H/W. A study of English words drawn from Greek and Latin for all those interested in the sources of the English vocabulary. Enough Greek and
from the 20th and 21st centuries for which these sources are relevant. Greece and Rome through primary sources, and analyze several films Rome in film. Students in this course learn about the cultures of ancient This course explores the reception of the cultures of ancient Greece and Rome in film. Students in this course learn about the cultures of ancient Greece and Rome through primary sources, and analyze several films from the 20th and 21st centuries for which these sources are relevant.

Latin for essential purposes is also studied. No knowledge of Greek or Latin is required. A student may not receive credit for both CLSX 232 and CLSX 332. LEC.

CLSX 240. Roman Literature and Civilization. 3 Hours. HL GE3H / H. An introduction to ancient Roman literature and civilization. Studied against the historical and cultural background of their times will be authors such as Plautus, Vergil, Livy, Petronius, and topics arising from the texts such as religion, oratory, slavery, political propaganda, the Roman games, and the development of Roman literature. No knowledge of Latin required and no prerequisite. LEC.

CLSX 317. Greek and Roman Art. 3 Hours. H/W. A survey of the art of ancient Greece and Rome (ca. 1000 B.C.E.- 500 C.E.). Emphasis on major sites, architecture, sculpture, and painting. Illustrated lectures and discussion; use of the Wilcox Classical Museum. No knowledge of Greek or Latin is required. Not open to students who have taken both CLSX 526/HA 526 and CLSX 527/HA 537, except with permission of the instructor. (Same as HA 317, HWC 317.) LEC.

CLSX 330. Greek Literature and Civilization, Honors. 3 Hours. HL GE3H / H. Honors version of CLSX 230. An introduction to ancient Greek literature and civilization through extensive readings in primary Greek texts. No knowledge of Greek required. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

CLSX 332. Scientific Word Power: Greek and Latin Elements in the Vocabulary of Science. 3 Hours. H. A study of the terminology of science with reference to its debt to the Greek and Latin languages. While all the natural sciences will be treated, there will be some emphasis on the biological sciences. No knowledge of Greek or Latin is required. A student may not receive credit for both CLSX 232 and CLSX 332. LEC.

CLSX 340. Roman Literature and Civilization, Honors. 3 Hours. HL GE3H / H. Honors version of CLSX 240. An introduction to ancient Roman Literature and civilization through extensive readings in primary Roman texts. No knowledge of Latin required. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

CLSX 350. Modern Themes, Ancient Models: ____. 3 Hours. H. The study of the evolution of a cultural or literary tradition from the Graeco-Roman world into modern times. The theme of the course will normally vary from semester to semester; topics such as these may be examined: the analysis of a literary genre (e.g. drama, satire, lyric), the transformation of the ancient mythical heritage, the reception of ancient astronomy. Students should consult the Schedule of Classes for the theme of the course in a given semester. With departmental permission, may be repeated for credit as topic varies. (Same as HWC 380.) LEC.

CLSX 351. Introduction to Classical Archaeology, Honors. 3 Hours. HT GE11/GE3H / H/W. Honors version of CLSX 151, with the focus towards critical approaches and research. Special attention is paid to recent methodological, theoretical, and ethical debates within the profession of Classical archaeology. Assignments and activities may include position papers on contentious issues of the day, research assignments, and/or field trips to museums and related institutions. Prerequisite: Admission to the Honors Program or consent of instructor. LEC.

CLSX 355. Ancient Greece and Rome in Film. 3 Hours. H. This course explores the reception of the cultures of ancient Greece and Rome in film. Students in this course learn about the cultures of ancient Greece and Rome through primary sources, and analyze several films from the 20th and 21st centuries for which these sources are relevant.

The course considers the relationship between historical accuracy and artistic license in the films selected for the course, how each film reflects the concerns of the modern cultural context in which it was made, the common visual and thematic elements that link films set in ancient Greece or Rome, and the reuse of elements from Greek and Roman mythology and history in films set in the modern world. No knowledge of Latin or Greek required. LEC.

CLSX 374. Gender and Sexuality, Ancient and Modern. 3 Hours. AE42 / H. Classical Greek and Roman attitudes to gender and sexuality compared and contrasted with modern notions and behaviors. Attention is paid to literature (dramatic, philosophical, medical, and legal texts) and archaeological evidence (vase painting, sculpture, and domestic architecture). The course may include the following topics: age divisions and rites of passage from childhood to maturity; marriage; conception, birth, and infancy; the family; love; homoeroticism; property and economics; and sexuality and the law, politics, and religion. No knowledge of Greek or Latin is required: (Same as HWC 374.) LEC.

CLSX 375. Studies in: ____. 1-3 Hours. H/W. Selected readings in Greek and Roman antiquity and the classical tradition for students who desire special work on a flexible basis. No knowledge of Greek or Latin is required. May be repeated for credit, the maximum being twelve hours. Prerequisite: Consent of instructor. LEC.

CLSX 384. The Rise of Greek Tragedy. 3 Hours. H. Plays by Aeschylus, Sophocles, and Euripides will be read in translation. The criticism of the plays, and the role they play in Athenian (and Greek) culture of the 5th century. This course includes the Oresteia, Oedipus Tyrannus, Antigone, and Medea. No knowledge of Greek is required. LEC.

CLSX 388. Poetry and Politics in Fifth-Century Athens. 3 Hours. H. The later plays of Euripides and Sophocles, selected plays by the comic dramatist Aristophanes, and passages from the historian Thucydides. Criticism of the plays, and discussion of themes common to literature and history in this period. The dissolution of a high culture. CLSX 384 is NOT a prerequisite. No knowledge of Greek required. LEC.

CLSX 490. Comprehensive Examination of Classical Antiquity. 1 Hour. U. An examination covering the six areas of course work and reading for the Classical Antiquity major, to be taken by the student pursuing the major in the last semester of the senior year. Prerequisite: A declared major in Classical Antiquity and status as a graduating senior. IND.

CLSX 492. Independent Study for Classical Antiquity Majors. 3 Hours. U. Under the supervision of an advisor in Classics, the student will do extensive reading in the area of Classics generously defined, to result in two or more papers as agreed upon between faculty and student. IND.

CLSX 496. Honors Essay in Classical Antiquity. 3 Hours. AE61 / H/W. Individual directed research and preparation of an essay on a topic in Classical literature, culture, or language. Prerequisite: Eligibility for departmental honors and consent of essay advisor. IND.

CLSX 501. The History of the Latin Language. 3 Hours. H. The place of Latin among the Indo-European languages and the languages of Italy, its development as a literary medium, and how it changed in pronunciation, vocabulary, and grammar from its beginnings through the Medieval period. LEC.
For advanced undergraduates with backgrounds in the humanities and for graduate students (especially in Classics and History of Art). No knowledge of Greek or Latin is required. (Same as HA 529.) LEC.

CLSX 538. Pompeii and Herculaneum. 3 Hours. H.
An interdisciplinary treatment of the art and archaeology of the ancient Roman cities of Pompeii and Herculaneum in Italy. Emphasis on the structures and decorations of major public spaces and houses and on aspects of cultural, social, political, commercial, and religious life from the period of the second century B.C.E. to 79 C.E., when Pompeii and Herculaneum were buried by the eruption of Mt. Vesuvius. Slide lectures and discussion. (Same as HA 538, HWC 538.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, History of Art, or permission of the instructor. LEC.

CLSX 550. Capstone in Classics. 1-3 Hours. AE61 / H.
This capstone seminar synthesizes various aspects in the discipline of Classics by focusing on recent award-winning scholarship or creative work in the field. Specific assignments and additional readings vary from one semester to another and will be stated on the instructor's syllabus. Introductory knowledge of Greek or Latin is required. Prerequisite: 15 hours in CLSX/LAT/GRK at the 200 level or above, or status as a senior major in the department, or permission of the instructor. LEC.

CLSX 570. Study Abroad Topics in Greek and Roman Culture: _____.
1-3 Hours. H.
This course is designed for the study of special topics in Classics at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

CLSX 575. Readings in: _____.
1-3 Hours.
Selected readings in Greek and Roman antiquity and the classical tradition for students who desire special work on a flexible basis. No knowledge of Greek or Latin is required. May be repeated for credit if topic varies. Only six hours may count toward the major. Prerequisite: Consent of instructor. LEC.

CLSX 576. Topics in Greek and Roman Literature: _____.
3 Hours. H.
Lecture and discussion course focusing on a theme, genre, or period of literature from the ancient classical world. No knowledge of Greek or Latin is required. May be repeated for credit if topic varies. Only 6 hours may count toward the major. LEC.

CLSX 577. Topics in the Archaeology and Art of the Ancient Mediterranean: _____.
3 Hours. AE61 / H.
Lecture and discussion course focusing on a theme, medium, region, or period in the archaeology and art of the ancient Near Eastern and classical world. May be repeated for credit if topic varies. Only 6 hours may count toward the major. LEC.

CLSX 675. Studies in: _____.
1-3 Hours. H/W.
Selected readings in Greek and Roman antiquity and the classical tradition for students who desire special work on a flexible basis. No knowledge of Greek or Latin is required. May be repeated for credit, the maximum being twelve hours. Prerequisite: Consent of instructor. IND.

CLSX 717. Investigations in Greek Drama I. 3 Hours.
Attendance at CLSX 384 required, plus one seminar per week, discussing the scholarly background of the major lecture, as well as the problems and aims of teaching Greek drama in English to undergraduates. No knowledge of Greek is required. RSH.

CLSX 718. Investigations in Greek Drama II. 3 Hours.
A continuation of CLSX 717. Attendance at CLSX 388 plus one seminar per week. No knowledge of Greek is required. RSH.
CLSX 790. Practicum in the Teaching of Classics. 0.5 Hours.
Required of all assistant instructors and teaching assistants in the teaching of Classics courses. May be repeated up to three semester hours credit in total. FLD.

CLSX 899. Thesis. 1-6 Hours.
Thesis hours. THE.

GRK 104. Elementary Ancient Greek. 5 Hours. U.
The essentials of ancient Greek grammar, with readings. LEC.

GRK 105. Elementary Ancient Greek, Honors. 5 Hours. U.
The essentials of ancient Greek grammar, with readings. Prerequisite: Membership in the University Honors Program or permission of instructor. LEC.

GRK 108. Ancient Greek Readings and Grammar. 5 Hours. U.
A continuation of Greek 104, with extensive readings from one or more classical authors. Prerequisite: GRK 104 or GRK 105. LEC.

GRK 109. Ancient Greek Readings and Grammar, Honors. 5 Hours. U.
A continuation of GRK 105, with extensive readings from one or more classical authors. Prerequisite: GRK 104 or 105; and membership in the University Honors Program or permission of instructor. LEC.

GRK 112. Intermediate Ancient Greek. 3 Hours. U.
Systematic grammar review and selected texts from Plato and Euripides. Prerequisite: GRK 108 or GRK 109 or consent of instructor. LEC.

GRK 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Greek. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

GRK 301. Philosophy and Oratory. 3 Hours. H/W.
Systematic grammar review in conjunction with readings selected from Plato, Aristotle and the Attic orators, with attention to issues of interpretation and social and cultural history. Prerequisite: GRK 108 or GRK 109. LEC.

GRK 302. Drama and Lyric Poetry. 3 Hours. H/W.
Systematic grammar review in conjunction with readings selected from Aeschylus, Sophocles, Euripides, and the lyric poets, with attention to issues of literary interpretation and cultural history. Prerequisite: GRK 108 or GRK 109. LEC.

GRK 303. Greek Narrative Prose. 3 Hours. H/W.
Systematic grammar review in conjunction with readings selected from the historians Herodotus, Thucydides, and Xenophon, as well as from the Greek novels and the New Testament. Attention will be given to issues of interpretation and cultural history. Prerequisite: GRK 108 or GRK 109. LEC.

GRK 310. Homer's Odyssey. 3 Hours. H/W.
Selections from Homer's Odyssey, with attention to issues of literary translation and interpretation, performance, and social and cultural history. Prerequisite: GRK 301, or GRK 302, or GRK 303. LEC.

GRK 312. Homer's Iliad. 3 Hours. H/W.
Selections from Homer's Iliad, with attention to issues of literary translation and interpretation, performance, and social and cultural history. Prerequisite: GRK 301, or GRK 302, or GRK 303. LEC.

GRK 375. Readings in: ____. 1-3 Hours. H/W.
Readings in classical Greek texts. May be repeated for up to twelve hours. Prerequisite: GRK 108 or the equivalent. IND.

GRK 496. Honors Essay in Greek. 3 Hours. AE61 / H/W.
Individual directed research and preparation of an essay on a topic in Greek literature or language. Prerequisite: Eligibility for departmental honors and consent of essay advisor. IND.

GRK 508. Early Greek Philosophy. 3 Hours. H/W.
A study of the doctrines of Greek philosophy before Plato. Emphasis on the Pre-Socratic philosophers with some attention paid to the Sophists and the Hippocratic Corpus. (Same as PHIL 508.) Prerequisite: PHIL 384, or GRK 301, or GRK 302, or GRK 303, or GRK 310, or GRK 312, or permission of instructor. LEC.

GRK 701. Archaic Poetry. 3 Hours.
Close reading of texts from Homer, Hesiod, Pindar, the lyric poets. LEC.

GRK 702. Drama. 3 Hours.
Close reading of texts from Aeschylus, Sophocles, Euripides, Aristophanes. LEC.

GRK 703. History and Oratory. 3 Hours.
Close reading of texts from Herodotus, Thucydides, Xenophon, Attic orators. LEC.

GRK 704. Philosophy. 3 Hours.
Close reading of texts from Plato, Aristotle, the Pre-Socratics. LEC.

GRK 705. Readings in Classical Greek. 3 Hours.
Extensive reading in a variety of Greek authors. LEC.

GRK 790. Practicum in the Teaching of Greek. 0.5 Hours.
Required of all assistant instructors and teaching assistants in the teaching of Greek. May be repeated up to three semester hours credit in total. FLD.

GRK 798. Studies in: ____. 1-3 Hours.
Selected readings for qualified students who desire special work on a flexible basis. May be repeated for credit, the maximum being twelve hours. Prerequisite: Undergraduate proficiency in Greek or equivalent. RSH.

GRK 899. Thesis. 1-6 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

LAT 104. Elementary Latin I. 5 Hours. U.
An introduction to the Latin language. LEC.

LAT 105. Elementary Latin I, Honors. 5 Hours. U.
Integrates study of elementary Latin with study of Roman culture. Prerequisite: Admission to Honors Program or permission of department. LEC.

LAT 108. Elementary Latin II. 5 Hours. U.
Latin grammar concluded with selected readings. Prerequisite: LAT 104 or LAT 105, or permission of department. LEC.

LAT 109. Elementary Latin II, Honors. 5 Hours. U.
Latin grammar concluded with selected readings, integrated with study of Roman culture. Prerequisite: LAT 105 or permission of department. LEC.

LAT 112. Readings in Latin Literature. 3 Hours. U.
Systematic grammar review in conjunction with selected prose authors, such as Cicero or Caesar, with additional readings in Roman poetry. Attention to literary history and historical context. Prerequisite: LAT 108 or LAT 109, or permission of department. LEC.

LAT 113. Readings in Latin Literature, Honors. 3 Hours. U.
Systematic grammar review in conjunction with selected prose authors, such as Cicero or Caesar, with additional readings in Roman poetry. Exercises in literary analysis and/or prose composition. Prerequisite: LAT 109 or permission of department. LEC.
LAT 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Latin. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

LAT 200. Vergil's Aeneid. 3 Hours. H/W.
Selections from Vergil's Aeneid, with attention to literary interpretation and historical context. Prerequisite: LAT 112 or LAT 113 or permission of department. LEC.

LAT 201. Vergil's Aeneid, Honors. 3 Hours. H/W.
Selections from Vergil's Aeneid with attention to literary history. Exercises in literary interpretation and verse composition. Prerequisite: LAT 113 or permission of department. LEC.

LAT 300. Intermediate Latin Composition. 3 Hours. H/W.
Composition in Latin prose, stressing the basic principles of Latin syntax and style. Recommended for majors and minors. Prerequisite: LAT 200 or LAT 201. LEC.

LAT 301. Prose Fiction and Epistolography. 3 Hours. H/W.
Selected readings from such authors as Cicero, Seneca, Petronius, Pliny, and Apuleius, with attention to literary interpretation and historical context. Prerequisite: LAT 200 or LAT 201, or permission of department. LEC.

LAT 302. Hexameter Poetry. 3 Hours. H/W.
Selected readings from such authors as Lucretius, Vergil, Ovid, and the satirists, with attention to literary interpretation and historical context. Prerequisite: LAT 200 or LAT 201, or permission of department. LEC.

LAT 303. Roman Historians. 3 Hours. H/W.
Selected readings from such authors as Caesar, Livy, and Tacitus, with attention to issues in Roman history and historiography. Prerequisite: LAT 200 or LAT 201, or permission of department. LEC.

LAT 304. Lyric and Elegiac Poetry. 3 Hours. H/W.
Selected readings from such authors as Catullus, Horace, Tibullus, Propertius, Sulpicia, Ovid, and Martial, with attention to literary interpretation and historical context. Prerequisite: LAT 200 or LAT 201, or permission of department. LEC.

LAT 305. Roman Drama. 3 Hours. H/W.
Selected readings from such authors as Plautus, Terence, and Seneca, with attention to literary interpretation, theater history, and performance. Prerequisite: LAT 200 or LAT 201, or consent of instructor. LEC.

LAT 375. Readings in: _____. 1-3 Hours. H/W.
Readings in Latin literature, selected in consultation with the instructor. May be repeated for up to twelve hours. Prerequisite: LAT 200 or LAT 201, or consent of instructor. IND.

LAT 496. Honors Essay in Latin. 3 Hours. AE61 / H/W.
Individual directed research and preparation of an essay on a topic in Latin literature or language. Prerequisite: Eligibility for departmental honors and consent of essay advisor. IND.

LAT 700. Advanced Latin Prose Composition. 3 Hours.
An examination of the grammar, syntax, and style of the Latin language through exercises in composition. Prerequisite: Consent of instructor. LEC.

LAT 701. Hexameter Poetry. 3 Hours.
Close reading of texts from authors such as Lucretius, Vergil, Ovid, STATUS. Prerequisite: Consent of instructor. LEC.

LAT 702. Lyric and Elegy Poetry. 3 Hours.
Close reading of texts from authors such as Catullus, Horace, Propertius, Tibullus, Sulpicia, Ovid, Martial. Prerequisite: Consent of instructor. LEC.

LAT 703. History, Oratory, Philosophy. 3 Hours.
Close reading of texts from authors such as Cicero, Livy, Seneca, Tacitus, Augustine. Prerequisite: Consent of instructor. LEC.

LAT 704. Drama, Satire, and Novel. 3 Hours.
Close reading of texts from Plautus, Terence, Horace, Petronius, Seneca, Juvenal, Apuleius. LEC.

LAT 705. Readings in Classical Latin. 3 Hours.
Extensive reading in a variety of Latin authors. LEC.

LAT 790. Practicum in the Teaching of Latin. 0.5 Hours.
Required of all assistant instructors and teaching assistants in the teaching of Latin. May be repeated up to three semester hours credit in total. FLD.

LAT 791. Seminar in the Teaching of Latin. 3 Hours.
An introduction to teaching required of all assistant instructors and teaching assistants. Topics to include: pronunciation, etymology, Latin style, testing methods, and the selecting of texts. LEC.

LAT 798. Studies in: _____. 1-3 Hours.
Selected readings for qualified students who desire special work on a flexible basis. May be repeated for credit, the maximum being twelve hours. Prerequisite: Undergraduate proficiency in Latin or equivalent. RSH.

LAT 899. Thesis. 1-6 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

Bachelor of Arts and Bachelor of General Studies in Classical Antiquity

Why study classics?
Because knowledge of Greek and Roman antiquity is fundamental to understanding the ancient and modern world.

Undergraduate Admission

Admission to KU
All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences
Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements.
See individual department/program sections for departmental admission requirements.

**Classics Majors**

The Department of Classics offers 2 majors. Both provide students of diverse career goals a broad humane education and afford a solid foundation for those who wish to pursue graduate work in classics. The Classical Antiquity major provides inclusive, interdisciplinary training in ancient Greek and Roman cultures and prepares you for graduate study in ancient archaeology, art, or history. The Classical Languages major trains you to read the great authors of classical antiquity (e.g., Homer, Plato, Vergil, Sappho, Saint Augustine) in the original language and prepares you for graduate study in classics and for teaching in some private schools.

You might also combine your classical language interest with a degree in the School of Education. A degree in education with a Latin major allows you to teach Latin in public high schools.

**First- and Second-Year Preparation**

Potential classics majors should keep in mind that proficiency in Greek or Latin is required for either major; they need to enroll in GRK 104 or LAT 104 or their equivalents as early as possible. For students with no former training, proficiency takes 4 semesters; Classical Languages majors need additional language courses. Other courses to consider taking during the first or second year include CLSX 148, CLSX 151, CLSX 230, CLSX 240, CLSX 317, or the honors versions of those courses. As soon as the student decides that classics is a possible major, he or she should talk to an undergraduate advisor in classics.

**Requirements for the B.A. or B.G.S. Major: Classical Antiquity**

The Classical Antiquity major consists of 30 hours of work in Classics and related courses, in addition to the coursework in Latin and/or Greek required for the major. The major is designed to encourage interdisciplinary understanding of ancient Greek and Roman cultures while maximizing student flexibility.

Of the 30 hours that constitute the major, 15 must be in the Classics Department, i.e., CLSX, GRK, and LAT courses; and 15 must be junior/senior hours, i.e., at the 300 level or above. This major has two tracks: Classical Humanities, and Classical Art and Archaeology. Coursework in senior hours, i.e., at the 300 level or above. This major has two tracks: Department, i.e., CLSX, GRK, and LAT courses; and 15 must be junior/senior hours, i.e., at the 300 level or above. This major has two tracks: Classic

**Major Requirements**

**Track 1 - Classical Archaeology (30)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 hours from list A</td>
<td></td>
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<tr>
<td>6 hours from list B</td>
<td></td>
</tr>
<tr>
<td>9 hours from list C</td>
<td></td>
</tr>
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</table>

**Track 2 - Classical Humanities (30)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 hours from list B</td>
<td></td>
</tr>
<tr>
<td>6 hours from list A</td>
<td></td>
</tr>
<tr>
<td>9 hours from list C</td>
<td></td>
</tr>
</tbody>
</table>

**List A - Classical Archaeology (0)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLSX 151</td>
<td>Introduction to Classical Archaeology</td>
</tr>
</tbody>
</table>

**List B - Classical Humanities (0)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLSX 148</td>
<td>Greek and Roman Mythology</td>
</tr>
<tr>
<td>or CLSX 149</td>
<td>Greek and Roman Mythology Honors</td>
</tr>
<tr>
<td>CLSX 230</td>
<td>Greek Literature and Civilization</td>
</tr>
<tr>
<td>or CLSX 330</td>
<td>Greek Literature and Civilization, Honors</td>
</tr>
<tr>
<td>CLSX 240</td>
<td>Roman Literature and Civilization</td>
</tr>
<tr>
<td>or CLSX 340</td>
<td>Roman Literature and Civilization, Honors</td>
</tr>
<tr>
<td>CLSX 384</td>
<td>The Rise of Greek Tragedy</td>
</tr>
<tr>
<td>CLSX 388</td>
<td>Poetry and Politics in Fifth-Century Athens</td>
</tr>
<tr>
<td>CLSX 576</td>
<td>Topics in Greek and Roman Literature: _____</td>
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</tbody>
</table>

**List C - Electives (0)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLSX 210</td>
<td>Greek Rhetoric in Theory and Practice</td>
</tr>
<tr>
<td>CLSX 220</td>
<td>Roman Oratory in Theory and Practice</td>
</tr>
<tr>
<td>CLSX 232</td>
<td>Word Power: Greek and Latin Elements in English</td>
</tr>
<tr>
<td>or CLSX 332</td>
<td>Scientific Word Power: Greek and Latin Elements in the Vocabulary of Science</td>
</tr>
<tr>
<td>CLSX 350</td>
<td>Modern Themes, Ancient Models: _____</td>
</tr>
<tr>
<td>CLSX 374</td>
<td>Gender and Sexuality, Ancient and Modern</td>
</tr>
<tr>
<td>CLSX 375</td>
<td>Studies in: _____</td>
</tr>
<tr>
<td>CLSX 496</td>
<td>Honors Essay in Classical Antiquity</td>
</tr>
<tr>
<td>CLSX 502</td>
<td>Development of Ancient Greece, ca. 1000-300 B.C.</td>
</tr>
<tr>
<td>CLSX 515</td>
<td>Gender and Sexuality in Greek Culture</td>
</tr>
<tr>
<td>CLSX 516</td>
<td>Gender and Sexuality in Roman Culture</td>
</tr>
<tr>
<td>CLSX 550</td>
<td>Capstone in Classics</td>
</tr>
<tr>
<td>CLSX 570</td>
<td>Study Abroad Topics in Greek and Roman Culture: _____</td>
</tr>
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<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>CLSX 575</td>
<td>Readings in: _____</td>
</tr>
<tr>
<td>CLSX 675</td>
<td>Studies in: _____</td>
</tr>
<tr>
<td>ANTH 110</td>
<td>Introduction to Archaeology</td>
</tr>
<tr>
<td>ANTH 415</td>
<td>The Rise of Civilization</td>
</tr>
</tbody>
</table>
ANTH 520 Archaeological Ceramics
HIST 402 Roman Military History
HIST 506 Roman Republic
HIST 507 Early Roman Empire
HIST 508 Late Roman Empire (284-527)
LING 106 Introductory Linguistics
REL 525 Jews and Christians
REL 526 Jewish History and Literature in the Greek and Roman Periods
REL 527 Ancient Mesopotamian Culture and Religion
REL 530 Christian Origins: from the Beginnings to Augustine
Any course from List A or B beyond those used to fulfill the requirement.

1 Only 6 hours each of CLSX 575, CLSX 576, and CLSX 577 may count toward the major.

Students wishing to use their LAT or GRK to satisfy the university’s language requirement must do four semesters of the same language.

Classical Antiquity Major Hours & Major GPA

While completing all required courses (above), majors must also meet each of the following hour and grade point average minimum standards:

**Major Hours**
Satisfied by 30 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior (300+) Hours**
Satisfied by a minimum of 15 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior (300+) Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

A sample 4-year plan for the BA in Classical Antiquity can be found here: Classical Antiquity (http://catalog.ku.edu/liberal-arts-sciences/classics/ba-classical-antiquity/ba), or by using the left-side navigation.

A sample 4-year plan for the BGS in Classical Antiquity will be coming soon.

Departmental Honors

A candidate for honors must meet all the general requirements for graduation with honors established by the College. The independent research requirement is met by successful completion of Honors Essay: CLSX 496, GRK 496, or LAT 496. This is normally in the spring semester of the senior year. This enrollment substitutes for one of the optional major courses, whether central or peripheral.

Study Abroad

The department offers study abroad opportunities in Greece and Italy. All students may apply to attend these summer programs, and classics majors are especially encouraged to enroll. Courses offered vary from year to year; consult the Office of Study Abroad (http://www.studyabroad.ku.edu) or advisors in the Department of Classics.

For scholarships, students should apply to Study Abroad as well as to the department. The department also offers advice to students interested in non-KU programs or in summer internships at archaeological sites.

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You might also combine your classical language interest with a degree in the School of Education. A degree in education with a Latin major (p. 341) allows you to teach Latin in public high schools.
The department offers study abroad opportunities in Greece and Italy. All students may apply to attend these summer programs, and classics majors are especially encouraged to enroll.

First- and Second-Year Preparation
Potential classics majors should keep in mind that proficiency in Greek or Latin is required for either major; they need to enroll in GRK 104 or LAT 104 or their equivalents as early as possible. For students with no former training, proficiency takes 4 semesters; Classical Languages majors need additional language courses. Other courses to consider taking during the first or second year include CLSX 148, CLSX 151, CLSX 230, CLSX 240, or the honors versions of those courses. As soon as the student decides that classics is a possible major, he or she should talk to an undergraduate advisor in classics.

Requirements for the B.A. or B.G.S. Major: Classical Languages
The Classical Languages major consists of 27 hours of work in classics and related courses, beyond these 4 preliminary requirements: LAT 104, LAT 108, GRK 104, and GRK 108 or their equivalents. Students who have already taken the equivalents of those courses proceed to the next level. Study of both languages is required, but students with particular career plans may obtain written permission from the chair to substitute electives for one of the languages. This major requires at least 15 hours in language courses starting with LAT 112/LAT 113 or GRK 301, 3 hours in ancient art and archaeology, 3 hours in ancient history, and 6 hours in electives. Students aiming for graduate school in classics should take as many semesters of Latin and Greek as possible—at the least, 3 years of one ancient language and 2 years of the other. Future graduate students should also consider double majoring in Classical Antiquity and Classical Languages.

Elementary Knowledge in Greek or Latin (20)
Majors must complete courses as specified in each of the following areas. These hours do not contribute to the minimum number of hours required for the major. Equivalent courses and retroactive credit count toward this requirement. Study of both languages is required, but students with particular career plans may obtain written permission from the chair to substitute electives for one of the languages.

Elementary Latin I. Satisfied by:
LAT 104 Elementary Latin I 5
or LAT 105 Elementary Latin I, Honors

Elementary Latin II. Satisfied by:
LAT 108 Elementary Latin II 5
or LAT 109 Elementary Latin II, Honors

Elementary Ancient Greek. Satisfied by:
GRK 104 Elementary Ancient Greek 5
or GRK 105 Elementary Ancient Greek, Honors

Ancient Greek Readings and Grammar. Satisfied by:
GRK 108 Ancient Greek Readings and Grammar 5
or GRK 109 Ancient Greek Readings and Grammar, Honors

Classical Languages Major Core Language Knowledge and Skills (15)
Majors must complete at least 15 hours in language courses, beyond the elementary level, starting with LAT 112/LAT 113 or GRK 301 or the equivalent. Students aiming for graduate school in classics should take as many semesters of Latin and Greek as possible, at least 3 years of one ancient language and 2 years of the other.

Major Core Knowledge and Skills (6)

<table>
<thead>
<tr>
<th>History. Satisfied by one of the following:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLSX 230 Greek Literature and Civilization</td>
<td></td>
</tr>
<tr>
<td>or CLSX 330 Greek Literature and Civilization, Honors</td>
<td></td>
</tr>
<tr>
<td>CLSX 240 Roman Literature and Civilization</td>
<td></td>
</tr>
<tr>
<td>or CLSX 340 Roman Literature and Civilization, Honors</td>
<td></td>
</tr>
<tr>
<td>HIST 402 Roman Military History</td>
<td></td>
</tr>
<tr>
<td>CLSX/HIST 502 Development of Ancient Greece, ca. 1000-300 B.C.</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ancient Art &amp; Archaeology. Satisfied by one of the following:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLSX 151 Introduction to Classical Archaeology</td>
<td></td>
</tr>
<tr>
<td>CLSX 317 Greek and Roman Art</td>
<td></td>
</tr>
<tr>
<td>CLSX 525 Aegean Archaeology and Art</td>
<td></td>
</tr>
<tr>
<td>CLSX 526 Greek Archaeology and Art</td>
<td></td>
</tr>
<tr>
<td>CLSX 527 Roman Archaeology and Art</td>
<td></td>
</tr>
<tr>
<td>CLSX 529 Archaeology and Art of the Ancient Near East</td>
<td></td>
</tr>
<tr>
<td>CLSX 538 Pompeii and Herculaneum</td>
<td></td>
</tr>
<tr>
<td>CLSX 577 Topics in the Archaeology and Art of the Ancient Mediterranean:</td>
<td></td>
</tr>
<tr>
<td>HWC/HA 600 Biography of a City: _____ (any ancient Mediterranean city)</td>
<td></td>
</tr>
</tbody>
</table>

Classical Languages Major Required Electives (6)
Majors must complete 2 courses (6 hours) of electives. Elective courses may include any CLSX, Greek, or Latin courses and any course listed above (but not used to satisfy the requirement), and PHIL 384, PHIL 508, PHIL 605, PHIL 607, PHIL 608, HWC 304, HWC 390, ENGL 308 or other courses in allied fields as approved by the department chair.

Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and GPA minimum standards:

Major Hours
Satisfied by 27 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 15 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Major Junior/Senior Attempts
Summary includes Classical Languages junior/senior (300+) hours attempted, including F's and incompletes.
A sample 4-year plan for the BA in Classical Languages can be found here: Classical Languages (http://catalog.ku.edu/liberal-arts-sciences/classics/ba-bgs-classical-languages/ba), or by using the left-side navigation.

A sample 4-year plan for the BGS in Classical Languages will be coming soon.

**Departmental Honors**

A candidate for honors must meet all the general requirements for graduation with honors established by the College. The independent research requirement is met by successful completion of Honors Essay: CLSX 496, GRK 496, or LAT 496. This is normally completed in the spring semester of the senior year, though some students complete it in the fall semester. Students interested in honors in Classics should speak to an advisor in the junior year. This enrollment substitutes for one of the optional major courses, whether central or peripheral.

The department offers study abroad opportunities in Greece and Italy. All students may apply to attend these summer programs, and classics majors are especially encouraged to enroll. Courses offered vary from year to year; consult the Office of Study Abroad (http://www.studyabroad.ku.edu) or advisors in the Department of Classics.

For scholarships, students should apply to Study Abroad as well as to the department. The department also offers advice to students interested in non-KU programs or in summer internships at archaeological sites.

**Minor in Classics**

**Why study classics?**

Because knowledge of Greek and Roman antiquity is fundamental to understanding the ancient and modern world.

**Requirements for the Minor**

The minor requires 18 credit hours (12 hours at the junior/senior level) in courses in the Department of Classics (and other approved courses).

**Minor Hours & GPA**

While completing all required courses, majors must also meet each of the following hour and grade point average minimum standards:

**Minor Hours**

Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**

Satisfied by a minimum of 9 hours of junior/senior (300+) hours of KU resident credit in the minor.

**Minor Junior/Senior Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Minor Graduation GPA**

Satisfied by a minimum of a 2.0 GPS in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including Fs and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

**Greek**

- 18 hours in ancient Greek and related courses. At least 6 of those hours must be in ancient Greek at the 300 level or above.
- In addition to courses in Greek, students may include CLSX 317 or CLSX 526, any other CLSX courses at the 300 level or above (not including CLSX 340 or CLSX 501), and PHIL 608.

**Latin**

- 18 hours in Latin and/or related courses. At least 6 of those hours must be in Latin at the 300 level or above.
- In addition to Latin courses, students may include CLSX 317 or CLSX 527, any other CLSX courses at the 300 level or above (not including CLSX 330, CLSX 384, or CLSX 388), and PHIL 608.

**Classical Antiquity**

- 18 hours in classics and related courses. At least 12 hours must be in CLSX courses; 6 hours may be in Greek, Latin, ancient philosophy, or ancient history (excluding HIST 107).

**Classical Languages**

- 18 hours in Latin and/or Greek. At least 12 of those hours must be in ancient Greek or Latin at the 300 level or above.

**Master of Arts in Classics**

**Why study classics?**

Because knowledge of Greek and Roman antiquity is fundamental to understanding the ancient and modern world.

**Graduate Teaching Assistantships**

Financial support is available in the form of teaching assistantships in Latin, Greek, or mythology. Contact the department (http://classics.ku.edu) for information.

Visit the Graduate Studies website for information about funding opportunities (http://graduate.ku.edu/funding) for graduate students at KU.

Financial Aid and Scholarships (http://affordability.ku.edu/steps/index.shtml) administers grants, loans, and need-based financial aid.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**

The B.A. in classics or another field in the humanities is required. For admission to the graduate program, the entering student should have 15 junior/senior hours in Latin and/or Greek. Well-qualified candidates...
with fewer hours in ancient languages are considered for admission and may be offered positions as graduate teaching assistants in non-language courses. Financial support is available in the form of teaching assistantships in Latin, Greek, or mythology. The Graduate Record Examination is not required but is necessary if the applicant wishes to be considered for university-level scholarships.

Submit your graduate application online (http://www.graduate.ku.edu). Send all other requested application materials to the department:

The University of Kansas
Department of Classics
Graduate Advisor
Wescoe Hall
1445 Jayhawk Blvd., Room 1021
Lawrence, KS 66045-7594

Scholarships and Awards

The department offers several scholarships and awards, such as the Mildred Lord Greer award for best paper or essay, the Albert O. Greer award for literary translation, the Tenney Frank scholarships for undergraduate study, and the Tenney Frank awards for foreign study of the classics. For information, contact the department.

All graduate students who wish to be considered for KU scholarships and financial aid must complete applications with Financial Aid and Scholarships.

M.A. Degree Requirements

Course Requirements

1. The degree program consists of 30 hours, whether one chooses the thesis or non-thesis option.
2. The student may stress either Latin or Greek or a combination of both. Students who take only one of the ancient languages at the graduate level must present at least 10 hours of elementary course work in the other; this requirement may also be satisfied by passing a departmental examination.
3. Students may select their 30 hours from graduate courses in Greek, Latin, classics, and certain courses in philosophy, history, history of art, and linguistics. A maximum of 12 hours may be taken in non-language courses.
4. Students who elect to write an M.A. thesis must complete at least 24 hours on the graduate level, in addition to 6 hours of Thesis (LAT 899 or GRK 899 or CLSX 899). In consultation with the graduate advisor, each student selects a thesis committee of 3 members.
5. The student selecting the non-thesis option must complete 30 hours of courses on the graduate level. In 2 of these courses, students must prepare research papers that meet the approval of the appropriate instructors and the graduate advisor. These papers are placed on file in the department office.

Language Requirements

Incoming graduate students take a diagnostic reading examination in Greek or Latin or both if they plan to take graduate-level courses in both languages. Students who take only one of the ancient languages at the graduate level must demonstrate a basic knowledge of the other. By the end of graduate study, the student must also demonstrate a reading knowledge of German, Italian, or French by using the established university procedures for determining graduate language proficiency (as defined under Doctor of Philosophy, Research Skills in the Graduate Studies (p. 2369) section of the online catalog).

Examinations

A written general examination is required of all M.A. students. For further information, see the departmental handbook.

Combined B.A./M.A. in Classics

This track allows high-achieving undergraduate majors in Classical Languages at the University of Kansas to move directly into the Master's degree in Classics, completing it within one year of completing the B.A.

Students take the same courses (and the same number of courses) as those required for the two degrees under the normal sequence, but in a more flexible configuration. For especially well prepared students with superior grade-point averages, the M.A. requires 24 graduate hours rather than 30. Students enroll as an undergraduate in six hours of 500-700 level courses that count toward the B.A. but are beyond those required for the Classical Languages major. All other requirements for the M.A. are the same as for other tracks: the principal focus remains ancient Greek and/or Latin (concluding with a comprehensive exam in both languages), and there remains a thesis and non-thesis option and required reading knowledge of a modern research language. See department website (http://classics.ku.edu/masters-program-overview) for details.

Clinical Child Psychology Program

Clinical Child Psychology Graduate Program

The Clinical Child Psychology Program (CCPP) at the University of Kansas is a graduate program leading to the doctoral degree (Ph.D.) in Clinical Child Psychology. The CCPP is accredited by the American Psychological Association’s Commission on Accreditation as a clinical psychology doctoral training program with a special emphasis on children, adolescents, and families. The Program is affiliated with the Departments of Psychology and Applied Behavioral Science, and has strong ties with Department of Pediatrics at the University of Kansas School of Medicine (KUMC) and with Children’s Mercy Hospital. The program does not offer a terminal Masters degree. However, students admitted to the Doctoral program without a Masters degree will obtain a MA in Clinical Child Psychology en route to the Ph.D.

The mission of the CCPP is to develop leaders in the research, dissemination, and practice of clinical science for children, youths, and their families. As such, doctoral training in the CCPP develops clinical scientists capable of conducting innovative research and developing and delivering interventions for a range of human problems, particularly those involving children and families. In service of its mission, the CCPP is designed to promote professional competencies in four specific domain areas (Research, Clinical Practice, Professionalism, and Leadership/Professional Communications). This is accomplished through broad and general training across the substantive areas of the science of psychology (i.e., behavioral, social, cognitive, affective, and biological bases of psychology), specialized training in research methodology and statistical analytic methods, and specialized clinical training through basic and advanced practica. Subdomains of the professional competency and substantive knowledge areas are detailed in the CCPP Training Manual (http://www.ccpp.ku.edu/sites/ccpp.ku.edu/files/docs/Manual%20Revised
The field of psychological science is changing rapidly, with advances in our understanding, assessment, diagnosis, prevention, and treatment of a range of conditions. Our goal is to train the professionals who are at the forefront of these advances in research, dissemination, education, and service. The program’s didactic and practical experiences prepare graduates for the many roles open to clinical child psychologists. Graduates hold research/teaching positions in universities, medical schools, colleges, and internship programs, and direct service delivery positions in mental health centers, hospitals, and schools. A summary of graduate placements is available at www.ccpp.ku.edu/program-graduates.

In its fulfillment of the training model of clinical psychology known as the “scientist-practitioner model,” the CCPP utilizes report of the National Conference on Scientist-Practitioner Education and Training for the Professional Practice of Psychology. This conference defined the model as “an integrative approach to science and practice wherein each must continually inform the other” in which the scientific research base is related to clinical practice, and practice elements are inherently interrelated to research. The CCPP places an extremely high priority on the development of research skills and competencies.

Students can complete course work, practicum requirements, and research requirements for the doctoral degree in 4 years of full-time study followed by a 1-year pre-doctoral clinical internship at an approved site, although some students take longer. Students are expected to, and indeed want to, participate maximally in research and clinical experiences to ensure the breadth of their training. An empirically-based master’s thesis (if not obtained prior to admission), qualifying examination, and doctoral dissertation are formal milestones of research progress in addition to regular evaluation in courses, clinical practica, and annual faculty reviews.

The Director of the Program serves as the official Academic Advisor for all students in the program. As such, the Director bears responsibility for assisting the student in course selection, articulating career goals, assisting with program requirements (e.g., internship applications), and designing experiences consonant with career goals. Each student in the Clinical Child Psychology Program also selects a Research Advisor who provides individualized guidance with regard to course selection, developing and articulating career goals, and designing experiences consonant with career goals.

Doctor of Philosophy in Clinical Child Psychology

Clinical Child Psychology Graduate Program

The Clinical Child Psychology Program (CCPP) at the University of Kansas is a graduate program leading to the doctoral degree (Ph.D.) in Clinical Child Psychology. The CCPP is accredited by the American Psychological Association’s Commission on Accreditation as a clinical psychology doctoral training program with a special emphasis on children, adolescents, and families. The Program is affiliated with the Departments of Psychology and Applied Behavioral Science, and has strong ties with the Department of Pediatrics at the University of Kansas School of Medicine (KUMC) and with Children’s Mercy Hospital. The program does not offer a terminal Masters degree. However, students admitted to the Doctoral program without a Masters degree will obtain a MA in Clinical Child Psychology en route to the Ph.D.

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The field of psychological science is changing rapidly, with advances in our understanding, assessment, diagnosis, prevention, and treatment of a range of conditions. Our goal is to train the professionals who are at the forefront of these advances in research, dissemination, education, and service. The program’s didactic and practical experiences prepare graduates for the many roles open to clinical child psychologists. Graduates hold research/teaching positions in universities, medical schools, colleges, and internship programs, and direct service delivery positions in mental health centers, hospitals, and schools. A summary of graduate placements is available at www.ccpp.ku.edu/program-graduates.

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Students can complete course work, practicum requirements, and research requirements for the doctoral degree in 4 years of full-time study followed by a 1-year pre-doctoral clinical internship at an approved site, although some students take longer. Students are expected to, and indeed want to, participate maximally in research and clinical experiences to ensure the breadth of their training. An empirically-based master’s thesis (if not obtained prior to admission), qualifying examination, and doctoral dissertation are formal milestones of research progress in addition to regular evaluation in courses, clinical practica, and annual faculty reviews.

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developing and articulating career goals, and designing experiences consonant with career goals.

Admission to Graduate Studies

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Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Admission to the CCPP is highly competitive. All completed applications are reviewed and incoming students are selected by an admissions committee chaired by the Program Director and comprising core CCPP faculty members and a student representative. Essential requirements for admission include (a) a Bachelor's degree (BA, BS) from an accredited institution, (b) a record of scholarly achievement that shows strong promise of success in course work, research, and clinical work, and (c) at least 15 credit hours in psychology coursework, including statistics and research methodology. Preferred qualifications for admission include a strong record of research experience and evidence of research productivity (e.g., presentations, posters, honors theses).

The Admissions committee will use the following when determining suitability for admission: The applicant’s transcripts and grade point averages (GPAs) from previous educational institutions; scores from the Graduate Records Examination (verbal reasoning, quantitative reasoning, analytic writing, and, for students who did not major in Psychology, the Advanced Test in Psychology); a writing sample; a written statement of interests/goals provided by the candidate; the candidate’s résumé or CV; and 3 letters of recommendation from professionals who can address the candidate’s potential in a doctoral training program. Highly rated applicants will be invited to interview with CCPP faculty and students prior to admissions decisions. Financial aid is available. Please visit the program’s website (http://www.ccpp.ku.edu/student-admissions-data) for information regarding student admissions, outcomes, and other data.

Submit your graduate application online (http://www.graduate.ku.edu) (College of Liberal Arts and Sciences, Psychology — Clinical Child Psychology Program) as well as all supplemental materials.

Clinical Child Psychology Curriculum

The following curriculum meets criteria for APA accreditation and KU general requirements.

Psychology Core

1. Biological Aspects:
   PSYC 961 Biological Foundations of Psychopathology 3

2. Cognitive/Affective Aspects:
   PSYC 870 Cognitive Development 3

3. Social Aspects:
   ABSC/PSYC 825 Social Development 3

4. History of Psychology. Select one of the following:
   - PSYC 805 History of Psychology
   - ABSC 921 The History and Systems of Psychology
   - EPSY 882 History and Systems of Psychology

5. Cultural and Ethnic Diversity:
   - ABSC/PSYC 888 Diversity Issues in Clinical Psychology 3
   - or EPSY 875 Individual and Cultural Differences in Counseling Psychology

Clinical Child Psychology Specialty Skills

Psychopathology, Psychodiagnosis, and Psychological Assessment

Required:

- ABSC/PSYC 803 Fundamentals of Psychological Assessment and Intervention with Children 3
- ABSC/PSYC 811 Achievement and Intellectual Assessment in Clinical Child Psychology 3
- ABSC/PSYC 812 Behavioral and Personality Assessment of Children 3
- ABSC/PSYC 905 Psychopathology in Children 3

Intervention and Therapy Procedures

Required:

- ABSC/PSYC 976 Therapeutic Interventions with Children 3-5

Select one of the following:

- PSYC 967 Psychotherapy with Families 3
- EPSY 956 Theory of Couples and Family Counseling
- PSYC 946 Theories and Methods of Psychotherapy
- PSYC 949 Empirically Supported Treatment
- PSYC 936 Group Therapeutic Techniques

Clinical Practica

Required (17 credit hours, 275 contact hours):

- ABSC/PSYC 846 Practicum in Clinical Child Psychology I 1-3
- ABSC/PSYC 847 Practicum in Clinical Child Psychology II 1-3
- ABSC/PSYC 943 Advanced Practicum in Clinical Child Psychology III 1-3
- ABSC/PSYC 944 Advanced Practicum in Clinical Child Psychology IV 1-3
- ABSC/PSYC 947 Advanced Practicum in Clinical Child Psychology V 1-5

Ethics/Professional Standards

Required:

- PSYC 975 Professional and Ethical Problems in Clinical Psychology 3
- or EPSY 880 Ethical and Legal Issues in Professional Psychology
- ABSC/PSYC 809 Professional Issues: Clinical Child Psychology (one semester)

Clinical adult psychology workshop (offered every other year)

Students are expected to function within the code of professional ethics of the American Psychological Association (http://www.apa.org/ethics/code) in their behavior and personal demeanor. Adherence to these ethical
The principles is part of the regular evaluation of students for completion of the degree in clinical child psychology.

**Consultation and Supervision**

PSYC/ABSC 706  Special Topics in Clinical Child Psychology: _____  3  
or EPSY 945  Clinical Supervision and Consultation

**Research and Statistics Core Courses**

Required:

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td>PSYC 815</td>
<td>Design and Analysis for Developmental Research</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 968</td>
<td>Research Methods in Clinical Psychology</td>
<td></td>
</tr>
<tr>
<td>PSYC 790</td>
<td>Statistical Methods in Psychology I</td>
<td>4</td>
</tr>
<tr>
<td>or EPSY 811</td>
<td>Analysis of Variance</td>
<td></td>
</tr>
<tr>
<td>PSYC 791</td>
<td>Statistical Methods in Psychology II</td>
<td>4</td>
</tr>
<tr>
<td>or EPSY 810</td>
<td>Regression Analysis</td>
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Alternates to PSYC 791/EPSY 810 include the following:

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<tr>
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<tbody>
<tr>
<td>ABSC 735 &amp; ABSC 796</td>
<td>Within Subjects Research Methodology and Direct Observation and Laboratory in Behavioral Development and Modification: The Analysis of Behavior I</td>
</tr>
<tr>
<td>ABSC 940</td>
<td>Measurement and Experimental Design for Applied Research</td>
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**Research Skills and Responsible Scholarship**

**Responsible Scholarship Requirement**

Responsible Scholarship in the CCPP involves pertinent areas of protection of human subjects, collaborative research, conflicts of interest, authorship, publication, plagiarism, copyright, data management, professional practices, mentor/student responsibilities, maintenance of confidentiality, approach research conduct and research misconduct, HIPAA, and ethics of publishing clinical case material, among other related topics. This requirement must be met before taking the Comprehensive Oral Examination.

Students in the CCPP fulfill the Responsible Scholarship Requirement through

- Courses in the curriculum:
  - PSYC/ABSC 809  Professional Issues: Clinical Child Psychology  1
  - PSYC 975  Professional and Ethical Problems in Clinical Psychology  3  
  - or EPSY 880  Ethical and Legal Issues in Professional Psychology  
  - PSYC 815  Design and Analysis for Developmental Research  3
  - The Collaborative Institutional Training Initiative (CITI) Human Subjects Protection and HIPAA online tutorial

**Research Skills Training Requirement in CCPP**

The additional Research Skill requirement is fulfilled by 1 additional course above the 2 required courses in statistical or data analysis (quantitative, applied behavior analysis, qualitative). No course is specified, but must be approved by the student’s research advisor and the program director.

**Master’s Degree and Thesis**

The master’s degree requires a thesis consisting of empirical research and a minimum of 30 hours of course work (24 of which must be nonthesis credit hours). A minimum of 6 credit hours in ABSC 897/PSYC 897 Master’s Thesis in Clinical Child Psychology is required.

**Ph.D. Preliminary Examination: The Task**

The program uses the Task system for its preliminary examination in research methodology, teaching, or applied/clinical area. Details are available in the Clinical Child Psychology Program Training Manual, available on the program's website (http://clchild.ku.edu).

**Ph.D. Oral Comprehensive Examination**

Upon completion of all course requirements for the Ph.D. and of the Task, except for dissertation and internship, the student must pass the oral comprehensive examination. Details are available in the Clinical Child Psychology Program Training Manual, available on the program's website (http://clchild.ku.edu).

**Doctoral Dissertation**

The Ph.D. dissertation must be based on an original, empirical investigation. A minimum of 12 hours in dissertation in clinical child psychology is required.

**Predoctoral Internship**

An 11-month clinical internship at a setting accredited by the American Psychological Association is required. Students enroll in ABSC 963/PSYC 963 for a total of 3 credit hours.

**Courses**

See the course listings for the Departments of Applied Behavioral Science and Psychology.

**Department of Communication Studies**

**Why study communication studies?**

Because effective and ethical communication is at the core of family, of human organizations of all types, and of democratic decision making.

**Undergraduate Programs**

In our complex, mediated, global, and pluralistic world, we are awash in messages. Others seek to influence our ideas and our actions, and we seek to influence theirs. Studying human communication in its many forms and contexts enables students to be engaged civic participants, reflective audience analysts, effective communicators at work and in relationships, and reflective consumers of messages. Examining communication through historical and contemporary lenses demonstrates its power to move individuals, to enable the development of groups ranging from families to nations, and to inspire events. The communication studies curriculum prepares students to engage with the world they enter as thoughtful, critical communicators and as agents of community building in a global world.
Graduate Programs

The Department of Communication Studies offers the Master of Arts and Doctor of Philosophy degrees.

KU Edwards Campus M.A. Program

The M.A. also is offered on the KU Edwards Campus (http://edwards campus.ku.edu) in Overland Park. The requirements for the degree at the Edwards Campus are the same as for the program on the Lawrence campus. Edwards Campus classes are taught by the same faculty members who teach regularly in Lawrence. Courses are scheduled during the late afternoons and evenings to accommodate working professionals.

Dual-title Ph.D. in Communication Studies and Gerontology

This dual-title degree is an option available to students who have first been admitted to the doctoral program. The dual-title degree allows the pursuit of a single degree that incorporates study within a traditional discipline and training in an interdisciplinary field; the student is awarded one degree (Ph.D.) with both titles identified on the diploma (e.g., “Ph.D. in Communication Studies and Gerontology”).

This option is designed to appeal to students who are strong in a traditional discipline but also motivated to study across disciplinary lines. In the course of study, students can avail themselves of disciplinary depth and interdisciplinary breadth. At the post-doctoral stage, dual-title graduates will have enhanced career and employment opportunities, able to claim expertise in one or both titles of their degree when seeking positions in education and research.

More information about this option, its admissions requirements, and plan of study can be found on the department website or the website of the Gerontology program.

Courses

COMS 104. Introduction to Communication Studies. 3 Hours. H.
Survey of the major areas of the Communication Studies field. Provides an overview of communication theory and research methods, and introduces key topics, approaches, and applications in core areas such as rhetoric, organizational communication, interpersonal communication, intercultural communication, and communication technology. LEC.

COMS 130. Speaker-Audience Communication. 3 Hours. GE22 / U.
Study of rhetorical theory and its application to the preparation, presentation, and criticism of oral discourse in audience situations. Special consideration of listening behavior and of the ethical conduct of speech in a free society. This course fulfills the College argument and reason requirement. LEC.

COMS 131. Speaker-Audience Communication, Honors. 3 Hours. GE22 / U.
The study of rhetorical theory and its application to the preparation, presentation, and criticism of oral discourse in audience situations. Special consideration of listening behavior and of the ethical conduct of speech in a free society. This course fulfills the College argument and reason requirement. This is an honors section of COMS 130 open only to students in the Honors Program. LEC.

COMS 132. Speaker-Audience Communication for the Professional Schools. 3 Hours. GE22 / H.
This course focuses on the study of oral communication: the application, preparation, presentation and criticism of messages appropriate in the business or organizational setting. Special consideration is given to speaker confidence, working in teams, listening behaviors and application of communication theories to the audience and rhetorical situation. Not open to students with credit in COMS 150. Prerequisite: Open only to students in the professional schools. LEC.

COMS 133. Speaker-Audience Communication for the Professional Schools, Honors. 3 Hours. GE22 / H.
This course focuses on the study of oral communication the application, preparation, presentation and criticism of messages appropriate in the business or organizational setting. Special consideration is given to speaker confidence, working in teams, listening behaviors and application of communication theories to the audience and rhetorical situation. Not open to students with credit in COMS 150. Prerequisite: Open only to students in the professional schools who are members of the University Honors Program. LEC.

COMS 150. Personal Communication. 3 Hours. U.
This course is an introduction to communication theory, process, and skill. The course seeks to increase the student’s understanding of communication theory, both interpersonal and public, and of his or her own communicative behavior. Class projects and participation urge students to apply this theoretical knowledge to a variety of settings, including interpersonal and addressing groups and audiences. This course does not fulfill the College argument and reason requirement. Not open to those who have credit in COMS 130. LEC.

COMS 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Communication Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

COMS 201. Introduction to Leadership. 2 Hours. H.
This course introduces students to the study of the leadership process. The course covers theories and research on core themes of leadership, focusing on how course materials relate to students’ own leadership experiences. This course is taught online. Concurrent enrollment in COMS 202 is recommended. Students considering the Leadership Studies Minor must complete COMS 202. Not open to seniors. LEC.

COMS 202. Introduction to Leadership Applications. 1 Hour. AE51 / H.
This course focuses on the application of information learned in COMS 201. Activities and discussions emphasize application, analysis, and engagement with the process of leadership. Concurrent enrollment in COMS 201 is recommended. Students considering the Leadership Studies Minor must complete COMS 201 and COMS 202. Not open to seniors. Prerequisite/co-requisite: COMS 201. LEC.

COMS 210. Communication in Organizational and Professional Contexts. 3 Hours. S.
Introduces foundational concepts in organizational communication, focusing on topics such as superior-subordinate relationships, information- and feedback-seeking, relationships with stakeholders, and dealing with organizational change. The course emphasizes individual communication practices and responsibilities that contribute to organizational outcomes and personal success in organizations. LEC.

COMS 230. Fundamentals of Debate. 3 Hours. GE11 / U.
Introduction to the principles of debating. Emphasis on debating techniques, analysis of the question, methods of using evidence, refutation, and brief making. This course fulfills the College argument and reason requirement. LEC.
COMS 231. Practicum in Forensics. 1 Hour. U.
For students selected by faculty supervisor for work on university debate squad. Students to enroll at time of their selection. Recurring enrollments permitted. FLDP.

COMS 232. The Rhetorical Tradition. 3 Hours. HR / H.
Historical survey of theories of communication and persuasion, the people who produced them, and the philosophical assumptions upon which they rest. Beginning with the Greeks, especially Plato and Aristotle, and ending with selections from Kenneth Burke and other contemporary figures, the course focuses on changing concepts of rhetoric throughout a time span of some 2000 years. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 235. Introduction to Rhetoric and Social Influence. 3 Hours. HL GE11 / H.
This course examines in detail the texts of speeches and essays on controversial issues in order to illustrate the varied forms of rhetorical action and the diverse modes of analysis and evaluation that can be applied to them. Examples are drawn from the rhetorical literature of contemporary U.S. speakers and prose writers. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 238. Cases in Persuasion. 3 Hours. H.
An exploration of basic principles that explain the effect and effectiveness of the arts of persuasion currently practiced in American society. Class discussions of incidents leading to the discovery of principles and theories that explain them. Continuing emphasis on issues concerning the ethical character of persuasion in contemporary life. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 244. Introduction to Interpersonal Communication Theory. 3 Hours. SI GE3S / S.
Examines basic theoretical perspectives and research on verbal and nonverbal communication elements affecting communication between individuals in a variety of contexts. Topics include communication competence, developmental aspects of interpersonal communication, and interpersonal influence. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 246. Introduction to Intercultural Communication. 3 Hours. S.
This course attempts to provide an understanding of communication as it affects culture and as it is affected by culture. Special emphasis will be placed on the principle of similarity and differences as it relates to the roles of verbal and non-verbal symbols, codes, and cues, stereotypes, prejudices and value and thought patterning systems between and among cultures. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 307. Introduction to Political Communication. 3 Hours. S.
The primary goal of this course is to encourage critical engagement in politics and political campaigns. This course addresses various elements of political communication, with primary focus on the political campaign. By the end of the semester students are able to understand the relevant theories of political communication, evaluate and use critical thinking skills in consuming political messages, and grasp the complex structural and situational factors that influence political discourse. Prerequisite: COMS 130. LEC.

COMS 310. Introduction to Organizational Communication. 3 Hours. SC GE3S / S.
This course provides a foundation for the study of communication in organizational contexts. It introduces students to various organization theories including classical, human relations, systems, and cultural approaches and examines the role of communication in each. Information flow, communication climate, communication networks, work relationships and managerial communication are discussed as well as organizational symbolism, conflict resolution, rituals and ethics. The course is designed to heighten students' awareness of the role of communication in the organizing process and to develop their abilities to diagnose and prevent communication-related problems. Prerequisite: COMS 130 or COMS 150. LEC.

COMS 320. Communication on the Internet. 3 Hours. S.
This course introduces social and communication issues in the context of online interaction. Surveys a range of social internet technologies (e.g., newsgroups, chat, MUDs, etc.). Focus is on the interpersonal topics, including the establishment and maintenance of individual and cultural identities, personal relationships, the emergence of online communities, power and conflict in online groups, language use in online contexts, and how online groups are used to enhance or alter civic and global cultures. LEC.

COMS 330. Effective Business Communication. 3 Hours. S.
The purpose of this course is to develop effective written, spoken, and electronically mediated communication skills necessary for business. Students will write short technical reports, plan meetings and conferences, prepare and present briefings and persuasive proposals with visual aids, and examine the use of new communication technologies. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 331. Persuasive Speaking. 3 Hours. H.
Guided experiences in the preparation and presentation of discourse intended to influence outcomes of human interactions in various speaker-audience situations, including television. Special emphasis on speech styles in influencing thought, attitudes, and behavior. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 335. Rhetoric, Politics and the Mass Media. 3 Hours. H.
This course investigates the ways in which rhetorical strategies (persuasive and linguistic usage) permeate the relationship between politics and politicians and the mass media. We will analyze media coverage of political debates, the presidential use of radio, television and press conferences, and the network evening news coverage of political events to see how political decisions are influenced by and influence the media. (Same as POLS 521.) Prerequisite: COMS 130 or COMS 150. LEC.

COMS 342. Problem-Solving in Teams and Groups. 3 Hours. S.
This course introduces basic concepts important to leading and/or participating in problem-solving work teams. Problem identification and analysis and leadership are emphasized and practiced. Teamwork variables are discussed and promoted. Lecture, demonstrations, exercises in class are structure for students to analyze groups outside of class. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 344. Relational Communication. 3 Hours. S.
This course studies communication issues, theories, research and skills applicable to sustaining and enriching long-term relationships, such as families, friendships and close workplace collaborations. Emphasis is given to applying course concepts to students' own relationships and interaction in class. Prerequisite: COMS 244. LEC.

COMS 356. Introduction to Behavioral Research Methods in Communication. 3 Hours. GE12 / S.
An introduction to the nature of theory and theory building in the study of human communication. Research methods include experimentation, survey, content analysis, and field description. An introduction to statistics and statistical tests is included as well. Prerequisite: MATH 101 and admission to the Communication Studies major or consent of instructor. LEC.
COMS 410. Micro-Level Organizational Communication. 3 Hours. S.
An examination of dyadic level communication in organizations, with emphasis on contexts of superior-subordinate and peer communication. The course also addresses contexts of organizational entry and exit, perception and judgment, information seeking, feedback, and organizational attachment. Prerequisite: COMS 310. LEC.

COMS 411. Macro Level Organizational Communication. 3 Hours. S.
An exploration of the communication patterns and challenges between organizational groups and organizations as a whole. Key elements include networks, boundary spanning, inter-organizational collaboration, and the role of technology in linking large organizational components. Prerequisite: COMS 310 or instructor permission. LEC.

COMS 412. Communication in Distributed Organizations. 3 Hours. S.
Examination of the communication challenges faced by distributed organizations, especially those with a global presence. Topics include telework, virtual terms, and new processes required to support interaction among people located in several different places. Prerequisite: COMS 310 or permission of instructor. LEC.

COMS 420. Communication, Technology and Globalization. 3 Hours. H.
Examines the social, cultural, and economic challenges and opportunities advanced communication technologies and globalization pose to processes such as democratic deliberation, urban governance, and environmental sustainability. Prerequisite: COMS 130. LEC.

COMS 425. Communication and the American Presidency. 3 Hours. H.
Examination of the ways in which American presidents communicate with the American people and how such communication influences the public. Emphasis is on a number of approaches to better understanding presidential communication, including rhetorical, historical, and content analysis. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 431. Communication and Leadership. 3 Hours. H.
This course provides an overview of the role of communication in leadership in a variety of contexts, including: interpersonal, small group, intercultural, organizational, and public sphere. It will include theoretical and experiential approaches to effective leadership communication. Prerequisite: Admission to Leadership Minor or consent of instructor. LEC.

COMS 435. Forms and Styles of American Public Discourse. 3 Hours. H.
Changing styles of public discourse are examined from the beginning of the nation to contemporary times, and the generic forms of address that have emerged from our national dialogue, such as jeremiads, inaugurals and apologies, are studied from a formistic perspective. Prerequisite: COMS 235. LEC.

COMS 440. Communication and Gender. 3 Hours. AE41 / S.
Focuses attention on the relationship between communication and gender, including both physical and psychological dimensions. Topics include: sex role orientations and stereotypes; perceived and actual differences in verbal and nonverbal communication behaviors; the influence of gender on communication in a variety of contexts. (Same as WGS 440.) Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 441. Health Communication. 3 Hours. H.
This course is a survey of the many disciplines found in the field of health communication, including persuasion that targets health-related behavior, negotiation of treatment with health care providers, emotional support of patients, news media coverage of medical research, and health campaign principles. Prerequisite: COMS 130. LEC.

COMS 447. Intercultural Communication: The Afro-American. 3 Hours. AE41 / H/W.
An examination of the barriers to effective communication between black Americans and non-black Americans. (Same as AAAS 420.) Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 450. Ethical Issues in Political Communication. 3 Hours. H.
Application of ethical standards to the evaluation of political communication. Examination of value questions related to advocacy in modern society (propaganda, demagoguery, credibility). Analysis of First Amendment rights and other issues pertaining to censorship and freedom of speech (defamation, dissent, incitement, public morals, privacy). Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 453. Communication in Political Campaigns. 3 Hours. H.
This course examines political communication as it evolves throughout a political campaign and includes such topics as theories and strategies, stages in political campaigns, influence of the mass media, television advertising, candidate debates, polling, and the use of new technologies in delivering campaign communication. Selected examples from recent campaigns illustrate the strategies and effects of political communication as we examine how politicians persuade us to vote for them. Prerequisite: A course in communication studies. LEC.

COMS 458. Undergraduate Seminar in: _____. 1-3 Hours. H.
Course organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. (Distribution credit given for two or three hours only.) LEC.

COMS 460. Undergraduate Seminar in: _____. 1-3 Hours. S.
Course organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. (Distribution credit given for two or three hour enrollments only.) LEC.

COMS 485. Communication and Organizational Change. 3 Hours. S.
Examines communication processes that support or hinder implementation of organizational change. Topics include stakeholder analysis, individual responses to change, communicating about change, generating support for change, and managing resistance to change. LEC.

COMS 496. Capstone in: _____. 3 Hours. S.
In the capstone course students synthesize and apply knowledge and skills gained through the major. Capstone coursework requires students to integrate practices and theories learned in their areas of concentration. Topics within each concentration change as needs and resources develop. Prerequisite: Senior standing, COMS 130, and completion of COMS 235 and COMS 356 or concurrent enrollment. LEC.

COMS 497. Honors Seminar. 3 Hours. AE41 / H.
This course is intended for honor students who want to learn more about the history of communication studies, major areas of research, or more in-depth knowledge about special communication-related topics. Areas to be covered may change as needs and resources change. LEC.

COMS 498. Honors Thesis. 2-6 Hours. AE61 / H.
Six hours maximum credit, which may be distributed through two semesters. Study should include readings directed toward original research, i.e., an intensive investigation of a specific problem in this field. Prerequisite: Consent of the Department Honors Committee. IND.

COMS 499. Directed Study in Communication Studies. 1-3 Hours. H.
(A maximum of six hours of credit may be counted, with not more than four in a single area of study.) Investigation of a special topic or project
selected by the student with advice, approval, and supervision of an instructor. Such study may take the form of directed reading, or special research, individual reports and conferences. (Distribution credit given for two-three hours only.) Prerequisite: At least seven hours of credit in the department and consent of instructor. IND.

COMS 503. Post-Soviet Communication. 3 Hours. H.
This course is designed to acquaint students with the shifting manner of public discourse in Post-Soviet Russia and help them to explore in some depth cross-cultural communication between America and Russia. In addition to contemporary and historical background on Russian communicative practices, students examine discourse in business development, mass media, marketing, and advertising. All readings in English. (Same as SLAV 503). LEC.

COMS 530. Internship in Communication Studies. 1-3 Hours. AE61 / S.
Students do communication-centered fieldwork in an organization related to their career goals. Criteria for the organizations and work assignments suitable for internship credit are in an information brochure available at the COMS Department office and website. The internship plan is developed with field supervisor and internship faculty adviser. Reports and meetings are required. Prerequisite: Permission of instructor, admission to COMS major. LEC.

COMS 531. Seminar in Leadership Strategies and Applications. 3 Hours. H.
This seminar serves as the capstone course for the Leadership Studies minor. It includes advanced readings on leadership theory and practice, as well as major written and applied projects in which students integrate and demonstrate what they have learned in the program. Prerequisite: COMS 201, COMS 431, and admission to the Leadership Studies minor. LEC.

COMS 532. Leadership Studies Practicum. 1-3 Hours. AE61 / U.
Students engage in a variety of training programs and field experiences in which they learn about leadership, observe leaders in action, and involve themselves in leadership activities. Written assignments and group discussions are used to analyze their learning. Should be taken for a total of three credit hours, across more than one semester. Prerequisite: COMS 201 and admission to the Leadership Studies minor. FLD.

COMS 535. American Public Address, Puritans to 1900. 3 Hours. H.
A history of American public address from the Puritans to about 1900. Using the tools of rhetorical criticism, students describe, analyze, and evaluate select rhetoric from the period. Graduate students are assigned extra reading and a research paper. Prerequisite: COMS 235. LEC.

COMS 536. American Public Address, 1900-Present. 3 Hours. H.
A history of American public address from 1900 to the present. Using the tools of rhetorical criticism, students describe, analyze, and evaluate select rhetoric from the period. Graduate students are assigned extra reading and a research paper. Prerequisite: COMS 235. LEC.

COMS 537. Communication in Conflict Resolution. 3 Hours. S.
An examination of conflict situations and the manner in which communication can serve as a vehicle for their intensification or resolution. The focus is on the theory of games as it applies to conflict within interpersonal situations; implications will be drawn for larger social systems. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 538. Persuasion Theory and Research. 3 Hours. S.
This course focuses on the social scientific study of persuasion. Traditional theories of attitude change and persuasion research are studied along with techniques of measuring attitudes. Attention is also given to the attitude-behavior relationship and the production of compliance-gaining messages. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 539. Argumentation. 3 Hours. S.
Analysis of the theory and techniques of argumentation in historical and contemporary writings, with special emphasis on the works of Aristotle, John Stuart Mill, Richard Whateley, and Stephen Toulmin. Application of argumentation theory to political and legal discourse. Opportunity for student performances in the preparation and criticism of argument. Prerequisite: Four hours in the department. LEC.

COMS 543. Group Leadership Practicum. 1-3 Hours. S.
Theory and practice in leadership of small group interaction. Includes responsibility for conducting a semester-long series of group meetings in an educational context under the supervision of faculty, study and training in leadership skills, a weekly practicum seminar, and individual conferences with supervising instructor. May be taken more than once, but not for more than four hours total credit. (Distribution credit given for two-three hours only.) Prerequisite: COMS 344, COMS 455, and permission of instructor. FLD.

COMS 544. Advanced Interpersonal Communication: Theories and Research. 3 Hours. S.
Intensive exploration of contemporary theories and research in the field of interpersonal communication; emphasis on an array of theoretical models and research exemplars; comparative analysis of major theoretical and research paradigms. Prerequisite: COMS 244 or instructor consent. LEC.

COMS 546. Communication Across the Life-span. 3 Hours. S.
Examination of the ways in which communication changes across the life-span, and influences human development. Course will include topics such as barriers to communication among elderly populations; communication and mis-communication across generations; the role of language in constructing life-span development (e.g., the mid-life crisis); development of language and social interaction during childhood; peer relationships and communication in adolescence; uses and effects of mass communication across the life-span. Prerequisite: COMS 244 and COMS 356. LEC.

COMS 547. Communication and Culture. 3 Hours. S.
A study of the systematic relationship between communication and culture. Emphasis is on culture as a variable in communicative situations: cultural aspects of attitude and cognition, language interchange, cultural differences in extra-verbal behavior, interaction between oral traditions and mass media. Prerequisite: COMS 130, COMS 150, COMS 230, or an introduction course in anthropology. LEC.

COMS 548. Theories of the Interview. 3 Hours. S.
Comprehensive study of communication processes in dyadic, face-to-face situations commonly encountered in organizations and professional environments. Intensive analysis of simulated and real-life interviews. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 549. Communication in Service and Sales. 3 Hours. S.
This course will deal with communication between organizational personnel and their customers or clients. Case studies and research concerning communication behaviors of service providers and salespeople will be covered. Prerequisite: COMS 310. LEC.

COMS 551. The Rhetoric of Black Americans. 3 Hours. H/W.
A study of the rhetoric of black Americans, from their earliest protest efforts to the contemporary scene, with focus on the methods and themes employed to alter their status in American society. (Same as AAAS 534.) Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.
COMS 552. The Rhetoric of Women's Rights. 3 Hours. AE41 / H.
An analysis of the themes and rhetorical strategies of the women's rights movement in America. The course will view the struggle for women's rights from a historical perspective and will conclude with contemporary issues concerning the role of women in society. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 554. Rhetoric of Popular Culture. 3 Hours. H.
A study of the social and cultural importance of popular culture. Emphasis is on using rhetorical analysis and a number of important theoretical perspectives to help examine popular culture's often unnoticed influence. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 555. Family Communication. 3 Hours. S.
An examination of trends and theory related to the scientific study of the family, with a focus on issues related to family interaction, functioning, relationships, and communication. Research and theories from communication, sociological, and psychological perspectives are employed to examine topics such as family violence, mental health problems, marital satisfaction, divorce, courtship, and the impact of the family on its children (and vice versa). Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 557. East Asian Communication. 3 Hours. S.
Explores the major communication theories and research in the East Asian cultural contexts by focusing on the Chinese, Japanese, and Korean cultures. Examines, from a broader perspective, certain cultural values (e.g. harmony, hierarchy, conservatism, and modernism) upheld in East Asian cultures and their influences on people's communicative behaviors in an age of globalization. Students explore issues of history, identity, verbal and non-verbal symbols, stereotypes, prejudice, values and thought patterning systems in the East Asian cultural context from a communicative perspective. This course is designed as a bridge course and meets with a graduate level section of the same title. Prerequisite: COMS 246. LEC.

COMS 559. Seminar in: ____. 1-3 Hours. H.
Course organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. (Distribution credit given for two-three hours only.) LEC.

COMS 560. Seminar in: ____. 3 Hours. S.
Course organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. (May be repeated for credit if content varies). LEC.

COMS 590. Nonverbal Communication. 3 Hours. S.
Examination of non-linguistic behavior in human communication, including proxemics (spacing), kinesics (movement and expression), and paralinguistics (voice quality). Includes phylogenetic and developmental perspectives, methods of analysis, applications to interpersonal problems. (Same as PSYC 590.) Prerequisite: COMS 356 or PSYC 210 or PSYC 211. LEC.

COMS 603. Topics in Presidential Rhetoric: ____. 3 Hours. H.
This course involves an examination of presidential rhetoric, including a focus on the strategies present in presidential discourse, the function that this rhetoric serves, and the historical context in which it was presented. One or more important presidential rhetors will be covered each semester. This course can be repeated for credit if taken under a different topic. LEC.

COMS 605. Speech Writing. 3 Hours. H.
Emphasis is on actual practice in preparing speech manuscripts for oneself and others. Model speeches are examined to better understand language, evidence, and stylistic choices available to speech writers. The ethical dimensions of writing for others in corporate and political positions are stressed. Students are required to prepare a variety of speeches and analyses of others' speeches. Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

COMS 607. Political Communication. 3 Hours. H.
This course will focus on contemporary political communication theory and illustrate how such theories are exemplified in modern political contexts: political arguments and developing consensus, constitutional issues and hearings, the rhetorical presidency, the dissemination of political information, and political uses of definition. (Same as POLS 520.) Prerequisite: COMS 130 or COMS 150. LEC.

COMS 608. Communication, Media and Terrorism. 3 Hours. S.
The course considers the topics of media and terrorism from a macro public opinion and politics perspective. This course addresses the nature of terrorism, who terrorists are, and what are their grievances with the larger society in which they are embedded. Terrorism has unique links to communication and these will be explored in various ways: consideration of acts of terror, recruiting new terrorists, and issues in choosing effective and ineffective means of fighting terrorism. Additional topics include media portrayals of terrorism in news discourse and mediated communication such as motion pictures and televised dramatic portrayals. Prerequisite: COMS 130. LEC.

COMS 620. Communication and New Technology. 3 Hours. S.
This course explores the impact of new communication technology on individuals and groups in various contexts. Topics include: The development of computer-mediated communication, social and psychological impacts of new communication technology, the evolution of telework and advances in interactive telecommunications. LEC.

COMS 639. Legal Communication. 3 Hours. S.
An analysis of how communication principles and theories operate within the context of the legal system. Topics covered will include the lawyer/client interview, depositions and pre-trial discovery, settlement negotiation, jury selection, opening and closing statements, and witness testimony. Prerequisite: COMS 130 or COMS 150. LEC.

COMS 647. Issues in Intercultural Communication. 3 Hours. S.
Examination of the processes and factors affecting communication in an intercultural context, and of methods of training for intercultural communication roles. Prerequisite: COMS 547 and an introductory course in anthropology, or consent of instructor. LEC.

COMS 656. Mass Media: Social Science Applications. 3 Hours. S.
This course introduces students to the major theories of and prominent research in mass communication. The aim is to stimulate critical thinking about the content and effects of mass communication, develop critical consumption skills, and enhance awareness of public policy issues relating to the media. Students are required to read a variety of chapters and articles on mass communication, promoting independent investigation into specific areas of interest. This course is a bridge course and meets with a graduate level section of the same title. Prerequisite: COMS 356. LEC.

COMS 667. Interpersonal Communication in Multinational Organizations. 3 Hours.
A study of interpersonal communication in management and professional development in intercultural situations. Focus on preparation of the global manager or professional in the organizational environment. Special
attention to the problems and challenges of intercultural interactions in the context of multinational organizations. LEC.

COMS 669. Human Conflict and Peace. 3 Hours. H.
Study of religious, cultural, and social traditions toward understanding the nature and purposes of human conflict. Analysis of various meanings of peace, with emphasis on study of nonviolent approaches to management of conflict. Class discussion, readings, and individual research projects. (Same as REL 669.) Prerequisite: Junior standing or above. LEC.

COMS 710. Survey of Theory and Research in Organizational Communication. 3 Hours.
This course examines the theoretical and philosophical underpinnings of organizational communication research. Course topics cover variable analytic traditions and systems theory, as well as cultural, critical, and various interpretive approaches to understanding communication in organizational contexts. Prerequisite: COMS 310 and permission of the instructor. LEC.

COMS 730. Writing and Speaking for Decision Makers. 3 Hours.
Theory and application of communication strategies for corporate communication. This course presents rhetorical analysis of organizational situations and audiences, focusing on corporate decision-makers. Included are informative and persuasive communications such as board presentations, requests for proposal and responses to RFPs, grant proposals, and persuasive presentations for adoption, implementation, or evaluation of organizational programs. Course is limited to Regents Center students only. LEC.

COMS 741. Special Topics in Communication Studies: _____, 2-3 Hours.
Examination of special topics in Communication Studies. Prerequisite: Instructor consent. LEC.

COMS 784. Proseminar in Communication and Aging. 1 Hour.
A weekly forum for students and faculty to discuss professional issues and interdisciplinary research in communication and aging. May be repeated for credit. (Same as PSYC 784.) (Same as SPLH 784.) Prerequisite: Consent of instructor. LEC.

COMS 787. Gerontology Proseminar, 3 Hours.
A proseminar coordinated by the Gerontology Center. The proseminar explores essential areas of gerontology for researchers and practitioners, providing a multidisciplinary (psychology, biology, sociology, and communication) perspective on aging. The proseminar surveys contemporary basic and applied research, service programs, and policy and management issues in gerontology. (Same as ABSC 787, AMS 767, PSYC 787, and SOC 767.) (Formerly HDFL 787.) LEC.

COMS 807. Rhetoric, Politics and the Mass Media, 3 Hours.
This course investigates the ways in which rhetorical strategies (persuasive and linguistic usage) permeate the relationship between politics and politicians and the mass media. We will analyze media coverage of political debates, the presidential use of radio, television and press conferences, the network evening news coverage of political events, the influence of political advertising to see how political decisions are influenced by and influence the media. LEC.

COMS 810. Organizational Communication: Theory and Research. 3 Hours.
This course examines the theoretical and philosophical underpinnings of organizational communication research. Course topics cover variable analytic traditions and systems theory, as well as cultural, critical, and various interpretive approaches to understanding communication in organizational contexts. Prerequisite: COMS 310 and permission of instructor. LEC.

COMS 811. Applied Organization Communication. 3 Hours.
This survey course addresses key communication processes in organizations, including developing and sustaining workplace relationships, providing and receiving feedback, processes of effective teams and in leadership situations. Students will apply these concepts to appreciate the dynamics of organizational culture, power, and ethics at work and will identify strategies to enhance workplace success. SEM.

COMS 835. Impression Formation and Interpersonal Behavior. 3 Hours.
Intensive investigation of the processes involved in impression formation and of the effects of established impressions upon interpersonal communication. (Same as PSYC 845.) Prerequisite: COMS 535 or PSYC 670. LEC.

COMS 844. Seminar in Interpersonal Communication. 3 Hours.
This class will address current theory and research in interpersonal communication. Issues addressed may include verbal or nonverbal communication in families, close relationships, initial interactions, and the like. LEC.

COMS 846. Communication and Aging. 3 Hours.
Examination of the interrelationship between communication and the aging process. The course will include current research and theory on such topics as intergenerational communication, language and age identity, age-stereotyping and communication, mass media and aging, age and health communication, and others of current interest in the field. LEC.

COMS 848. Communication Audits in Organizations. 3 Hours.
The principal thrust of this course is a hands-on analysis of the communication in 1-2 organizations. Students work as a consulting group to analyze dimensions of communication, communication channels, job satisfaction, organizational commitment, and communication strategies. Experience is gained in organizational research methods, instrument development, organizational analysis, feedback, and organizational development. LEC.

COMS 850. Introduction to Research Methods. 3 Hours.
An introduction to methodological approaches to the study of communication. Approaches considered will include (a) humanistic message analysis and evaluation; (b) ethnographic and observational techniques; (c) survey construction and execution; and (d) experimental design and procedures. Special focus on issues of validity, reliability, and ethics. LEC.

COMS 851. Communication Research: Historical and Descriptive. 3 Hours.
An introduction to types of historical and descriptive research in human communication. Library resources and methods of research will be covered. Emphasis will be placed upon preparing a research prospectus and upon writing the research report. LEC.

COMS 852. Communication Research: Experimentation and Quantitative Analysis. 3 Hours.
An introduction to the process of research in communication studies, including consideration of basic principles in research design, methods of observation and measurement, and the application of appropriate statistical techniques. LEC.

COMS 855. Qualitative Research Methods in Communication Studies. 3 Hours.
Study of strategies for describing communication behavior in particular contexts, emphasizing ethnography and specific observational and interview data gathering and analysis methods. Prerequisite: COMS 755 or equivalent. LEC.
COMS 856. Communication Research: Quantitative Analysis. 3 Hours.
An intermediate overview of statistical techniques commonly used in communication research. Content will include a review of univariate statistical tests such as t-test, correlation, chi-square, and other nonparametric techniques of data analysis. Additionally, factorial analysis of variance, multiple regression, and factor analysis will be covered, along with the application of appropriate statistical techniques. Prerequisite: COMS 850 and an introductory course in statistics. LEC.

COMS 859. Proseminar in Communication Studies. 3 Hours.
An overview and integration of communication studies based upon an examination of selected basic writings in the discipline. LEC.

COMS 860. New Communication Technology and the Work Place. 3 Hours.
An examination of changes in the work place and for workers associated with new communication technologies such as e-mail, voice mail, teleconferencing, distributed computer processing, and computer-supported decision making. Emphasis is on changes in organizational communication patterns, participant responses to the technologies, and evaluation of the outcomes of implementing workplace communication technologies. To be taken by Regents Center students. LEC.

COMS 889. Investigation and Conference (For Master's Candidates). 1-8 Hours.
(Limited to eight hours credit toward the M.A. degree.) Directed research and experimentation for M.A. students in some phase of speech science or the teaching of speech and drama. RSH.

COMS 899. Master's Thesis. 1-6 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

COMS 907. Seminar in Political Communication. 3 Hours.
This course will focus on contemporary political communication theory and illustrate how such theories are exemplified in modern political contexts; political arguments and developing consensus, communication strategies in Congressional and bureaucratic decision-making, the rhetorical presidency, the dissemination of political information, political narrative, and political campaigns. LEC.

COMS 920. Introduction to Teaching Oral Communication. 3 Hours.
This seminar prepares new graduate teaching assistants for their first teaching experience. Students will develop course materials including lectures, discussion prompts, assignments, exams based on pedagogical best practices. Students will apply theoretical concepts related to teaching, learning and assessment, and apply those theories to their own classrooms. LEC.

COMS 930. Seminar in Speech: ______. 1-4 Hours.
Special problems in speech. Prerequisite: Twelve hours of credit in the department. LEC.

COMS 932. Theories of Rhetoric: Classical. 3 Hours.
An intensive study of the rhetorical theories of classical writers from 466 B.C. to the decline of Roman oratory. Principal emphasis will be on Isocrates, Plato, Aristotle, Quintilian, Cicero, and Longinus. LEC.

COMS 933. Theories of Rhetoric: Neo-Classical. 2-3 Hours.
A study of the development of rhetorical theory from 325 A.D. to the twentieth century. Notable departures from the classical tradition will be examined. Special concentration on the writings of Augustine and the tradition of medieval preaching. Alcuin, Ramus, Bacon, Campbell, Whately, Blair, John Quincy Adams, and the elocutionary movement. LEC.

COMS 936. Seminar in Language and Discourse. 3 Hours.
This seminar uses interdisciplinary readings to examine central theoretical questions regarding language and communication. The course moves from considering major theoretical positions to current research in communication on discourse. Methodological issues in the study of language and discourse are also addressed. LEC.

COMS 938. Seminar in Persuasion. 2-3 Hours.
Examination of selected topics in persuasion, with emphasis on the application of recent theories and experimental research to the analysis of persuasive discourse. Prerequisite: COMS 538 or equivalent. LEC.

COMS 939. Seminar in Argumentation. 2-3 Hours.
Examination of special problems in argumentation, with emphasis on the relationship of systems of argumentation to their philosophic presuppositions. Discussion of the writings of Toulmin, Natason, Johnstone, Perelman, Dewey. Prerequisite: COMS 539 or equivalent. LEC.

COMS 941. Seminar in Health Communications. 3 Hours.
This course is a survey of the many disciplines of study found in the field of health communication. Emphases include decision making regarding health-related behaviors, the influence of interpersonal messages, negotiating treatment with health care providers, coping with medical difficulties, the critical examination of medical research, news, and health campaigns, and the impacts of new technologies. SEM.

COMS 945. Seminar in Social Support. 3 Hours.
Conceptual and theoretical frameworks for exploring and understanding relations between individuals from different societal groups (e.g., cultural/ ethnic, gender, age). Focus on issues of identity, power relations as manifested in interpersonal, mass media, and organizational contexts. The course will include methodological and applied implications for studying different groups, both within the USA and around the world. LEC.

COMS 947. Communication in Cultural Innovation and National Development. 3 Hours.
An examination of the role of speech and other types of communication in the introduction of change within cultures and the diffusion of innovation between cultures. Specific communication problems concerning agriculture, education, international aid, military assistance, and public health will be discussed. LEC.

COMS 948. Seminar in Organizational Communication. 2-3 Hours.
Analysis of speech communication functions in the organizational structures of business, industry, labor, military, education, government, and professional agencies. Development of conceptual schemes for conducting research and training programs on speech systems which characterize the operation of organized groups. LEC.

COMS 950. Seminar in Public Address: ______. 3 Hours.
The study of public address by historical periods or by topics. LEC.

COMS 951. Seminar in Movement Theory and Genre Criticism. 3 Hours.
This course examines the theoretical and methodological underpinnings of approaches to rhetorical analysis focusing on social movements and rhetorical genres. It will review existing theory on these topics, develop a methodological approach to both forms of critical analysis, and test each
methodological approach via case studies. Prerequisite: COMS 755 or consent of instructor. LEC.

COMS 952. Seminar in Mythic and Narrative Approaches to Rhetorical Criticism. 3 Hours.
This course examines the theoretical and methodological underpinnings of approaches to rhetorical analysis focusing on narrative rhetoric, with a special emphasis on myth as a type of narrative. It will review existing theory on these topics, consider a number of alternative methodological approaches, and test each methodological approach via case studies. Prerequisite: COMS 755 or consent of instructor. LEC.

COMS 953. Seminar in Organizational Rhetoric. 3 Hours.
This course focuses on theoretical and methodological materials related to the use of rhetoric in an organizational setting. It will review existing theory and methodological development on this topic, paying special attention to the distinction between rhetoric used within an organization and rhetoric focused on audiences external to the organization. Multiple case-studies will be considered to illuminate the functioning of both internal and external organizational rhetoric. Prerequisite: COMS 755 or consent of instructor. LEC.

COMS 955. Seminar in Rhetorical Criticism. 3 Hours.
A study of contemporary and historical writings on rhetorical criticism. Emphasis is placed upon the development of critical methodology for future research and writing. Prerequisite: COMS 755. LEC.

COMS 958. Comparative Theories of Speech Communication. 3 Hours.
A descriptive and comparative analysis of theories of communication applicable to speech behavior. Prerequisite: COMS 859 or equivalent. LEC.

COMS 959. Theories of Rhetoric: Contemporary. 3 Hours.
A study of the writings on rhetorical theory in the twentieth century. Principal emphasis will be on the psychological treatment of rhetoric. I.A. Richards and Kenneth Burke, and the relationship in the twentieth century between rhetoric and dialectic, rhetoric and poetic. Prerequisite: COMS 859 or equivalent. LEC.

COMS 997. Research in: _____ 1-6 Hours.
Supervised research under the direction of a faculty member on a topic of mutual interest to the faculty and graduate student. RSH.

COMS 998. Investigation and Conference (For Doctoral Candidates). 1-8 Hours.
(Limited to eight hours credit towards the Ph.D. degree.) Directed research and experimentation for Ph.D. students in some phase of speech science or the teaching of speech and drama. RSH.

COMS 999. Doctoral Dissertation. 1-12 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

Bachelor of Arts and Bachelor of General Studies in Communication Studies

Career Opportunities
A major in communication studies is helpful for careers in business and industry, education, foreign service, health care, human resources, law, politics and government, public relations, religion, sales and marketing, social service agencies, and technology. All occupations and human concerns involve communication in some form.

Admission to the Major

Admission Criteria

Course Requirements

Admission to the major
1. Students must have completed COMS 130 or COMS 131, or have satisfied exemption requirements.
2. Students must have completed two of the following courses: COMS 210, COMS 232, COMS 238, COMS 244, COMS 246.
3. Students must have completed one of the following courses: COMS 230, COMS 235, COMS 330, COMS 331, COMS 342, COMS 307.

Grade-Point Average Requirements
Students must earn a minimum grade-point average of 2.75 or higher in COMS 130 and the courses designated for admission to the student’s selected track. Grades in other COMS courses are not considered for admission to the major. KU’s course repeat policy applies to grade-point average calculation.

Application Term
Students should apply to the major during the semester in which major admission criteria will be completed. This is normally no later than 60 hours, or for transferring students, normally during the initial term at KU. Application to this major after completion of 60 hours, or the initial KU term for transfer students, will likely delay graduation.

Requirements for the B.A. or B.G.S. Major

Prerequisite Knowledge (3)
Majors must complete a public speaking requirement as specified below. Note: COMS 130 and COMS 131 do not contribute to the minimum number of hours required for the major.

Speaker-Audience Communication. Satisfied by one of the following: 3
COMS 130 Speaker-Audience Communication
COMS 131 Speaker-Audience Communication, Honors
Exemption

Communication Studies Core Knowledge and Skills (0)
Majors select two concentrations of courses, one designated as primary and one as secondary. To complete the major, students must complete 33 credit hours, distributed as:

Breadth of discipline (6 hours). All students choose two introductory classes from the following list, one for their primary concentration and one for their secondary concentration: (Note: the secondary concentration courses must be chosen from the same concentration area for both the breadth and depth of discipline requirements) (6)
COMS 210 Communication in Organizational and Professional Contexts
COMS 232 The Rhetorical Tradition
COMS 238 Cases in Persuasion ((for the Political Communication/Social Influence concentration))
COMS 244 Introduction to Interpersonal Communication Theory ((for the Interpersonal/Intercultural concentration))
COMS 246 Introduction to Intercultural Communication

Skills classes (6 hours). Students choose two skills courses from their primary concentration. (6)
Students pursuing the Rhetoric Concentration take the following two courses:

- COMS 230 Fundamentals of Debate
- COMS 331 Persuasive Speaking

Students pursuing the Interpersonal/Intercultural concentration choose two courses from:

- COMS 246 Introduction to Intercultural Communication
- COMS 330 Effective Business Communication
- COMS 342 Problem-Solving in Teams and Groups

Students pursuing the Political Communication/Social Influence concentration choose two courses from:

- COMS 307 Introduction to Political Communication
- COMS 330 Effective Business Communication
- COMS 331 Persuasive Speaking

Students pursuing the Organizational Communication concentration choose two courses from:

- COMS 330 Effective Business Communication
- COMS 331 Persuasive Speaking
- COMS 342 Problem-Solving in Teams and Groups

Methods classes (6)

6

All students in all concentrations take the two methods courses:

- COMS 235 Introduction to Rhetoric and Social Influence
- COMS 356 Introduction to Behavioral Research Methods in Communication

Depth of discipline (12 hours). Coursework in upper-level electives emphasizes students’ primary concentration. Students may take as many as three courses (9 hours) of upper-level electives in their primary concentration. The fourth course should be taken in their secondary concentration. Note: the secondary concentration courses must be chosen from the same concentration area for both the breadth and depth of discipline requirements. (12)

Capstone experience (3)

3

Students take a capstone course in their primary or secondary concentration or meet this requirement with other approved elements.

COMS 496 Capstone in: _____

Upper-level elective options

Rhetoric Concentration: Understanding Messages
- COMS 335 Rhetoric, Politics & Mass Media
- COMS 435 Forms and Styles of American Public Discourse
- COMS 551 The Rhetoric of Black Americans
- COMS 552 The Rhetoric of Women’s Rights
- COMS 535 American Public Address I
- COMS 536 American Public Address II
- COMS 539 Argumentation
- COMS 554 The Rhetoric of Popular Culture
- COMS 560 Rhetoric of War
- COMS 603 Topics in Presidential Rhetoric
- COMS 605 Speech Writing

Interpersonal/Intercultural Concentration: Relating to Others
- COMS 440 Communication and Gender
- COMS 447 African-American Communication
- COMS 544 Advanced Interpersonal Communication
- COMS 546 Communication Across the Lifespan
- COMS 547 Communication and Culture
- COMS 555 Family Communication
- COMS 557 East-Asian Communication
- COMS 590 Nonverbal Communication
- COMS 654 Social Science Approaches to the Media

Political Communication/Social Influence Concentration: Influencing Others
- COMS 310 Introduction to Organizational Communication
- COMS 335 Rhetoric, Politics & Mass Media
- COMS 425 Communication and the American Presidency
- COMS 450 Ethics and Political Communication
- COMS 453 Political Campaigns
- COMS 457 Ethics and Political Communication
- COMS 537 Communication in Conflict Resolution
- COMS 538 Persuasion Theory and Research
- COMS 539 Argumentation
- COMS 607 Political Communication
- COMS 639 Legal Communication
- COMS 654 Social Science Approaches to Media
- COMS 560 Communication, Media and Terrorism
- Organizational Communication

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade point average minimum standards:
**Major Hours**
Satisfied by 33 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 18 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Sample 4-year plans for the BA degree in Communication Studies with the following concentrations, can be found here: Rhetoric (http://catalog.ku.edu/liberal-arts-sciences/communication-studies/ba-bgs/ba-rhetoric), Interpersonal/Intercultural Communication (http://catalog.ku.edu/liberal-arts-sciences/communication-studies/ba-bgs/ba-interpersonal-intercultural-communication), Political Communication/Social Influence (http://catalog.ku.edu/liberal-arts-sciences/communication-studies/ba-bgs/ba-political-communication-social-influence), and Organizational Communication (http://catalog.ku.edu/liberal-arts-sciences/communication-studies/ba-bgs/ba-organizational-communication), or by using the left-side navigation.

Sample 4-year plans for the BGS degree in Communication Studies will be coming soon.

**Departmental Honors**
Outstanding undergraduates may earn departmental honors if they meet the following criteria:

1. A grade-point average at the time of graduation of at least 3.25 overall and 3.5 in communication studies courses.
2. Completion of an honors thesis involving independent research — either a single comprehensive project or an integration of several related projects. Completion requires satisfactory defense of the thesis in an oral examination and submission of a satisfactory thesis manuscript to the department office by one month before graduation. Independent research for the thesis must be conducted under the direction of a faculty member. The student must be enrolled with that instructor in 2 to 6 hours of COMS 498, usually over two semesters.

**Minor in Communication Studies**

**Why study communication studies?**
Because effective and ethical communication is at the core of family, of human organizations of all types, and of democratic decision making.

**Requirements for the Minor**
Students selecting the communication studies minor must complete 6 COMS courses (18 hours).

**Prerequisite Knowledge.** Minors must complete a public speaking requirement. These hours do not contribute to the minimum number of hours required for the minor.

**Minor Hours & GPA**
While completing all required courses, majors must also meet each of the following hour and grade point average minimum standards:

<table>
<thead>
<tr>
<th>Minor Hours</th>
<th>Satisfied by 18 hours of minor courses.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor Hours in Residence</td>
<td>Satisfied by a minimum of 9 hours of junior/senior (300+) hours of KU resident credit in the minor.</td>
</tr>
<tr>
<td>Minor Junior/Senior Hours</td>
<td>Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.</td>
</tr>
<tr>
<td>Minor Graduation GPA</td>
<td>Satisfied by a minimum of a 2.0 GPA in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (<a href="http://clas.ku.edu/undergrad/tools/gpa">http://clas.ku.edu/undergrad/tools/gpa</a>).</td>
</tr>
</tbody>
</table>

**Minor in Leadership Studies**

**Why study leadership studies?**
The KU Leadership Studies Minor (LSM) believes that leadership is a process, not an outcome. Effective leadership starts with effective communication, and therefore students develop their learning around the adaptive leadership paradigm and develop core leadership competencies in order to mobilize others to tackle tough challenges and thrive.

**Requirements for the Minor**
Leadership studies is an 18-credit hour interdisciplinary minor offered through the communication studies department. The minor requires completion of COMS 201 and COMS 202 as prerequisites, and the additional 18-credit hours as identified below. Due to limited space capacity, top candidates will be given preferential permission to enroll in the subsequent COMS courses in the minor. Therefore, students may apply for admission to the minor while taking COMS 202 or upon completion of the course. Course work involves studying theory and research in leadership and applying it to the students' leadership experiences. Communication studies majors may earn a minor in leadership studies, but the COMS courses required for the minor cannot be used to fulfill communication studies major requirements.

**Introductory Coursework (0)**
Minors must complete introductory leadership coursework. These hours do not contribute to the minimum number of hours required for the minor.

<table>
<thead>
<tr>
<th>Satisfied by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 201 Introduction to Leadership</td>
</tr>
</tbody>
</table>
Introduction to Leadership Applications. Satisfied by:
COMS 202 Introduction to Leadership Applications

The minor requires 18 hours as follows:

Communication Studies Course Requirements (9)

Communication and Leadership. Satisfied by:
COMS 431 Communication and Leadership 3

Seminar in Leadership Strategies and Applications. Satisfied by:
COMS 531 Seminar in Leadership Strategies and Applications 3

Leadership Studies Practicum. Satisfied by:
COMS 532 Leadership Studies Practicum 3

1 course from each of the following categories:

Ethics (3)

COMS 450 Ethical Issues in Political Communication
PHIL 160 Introduction to Ethics
PHIL 360 Moral Issues in Business
PHIL 365 Moral Issues in the Professions
PHIL 370 Moral Issues in Medicine
PHIL 375 Moral Issues in Computer Technology
PHIL 380 Environmental Ethics
PHIL 677 Medical Ethics: Professional Responsibilities
SOC 160 Social Problems and American Values
SOC 161 Social Problems and American Values, Honors
REL 377 Religious Ethics and Moral Decisions
REL 665 Religious Ethics
HWC 510 Science, Technology, and Society
POLS 528 Environmental Justice and Public Policy
NURS 455 Legal/Ethical Foundation for Professional Nursing Practice

Community Development (3)

ABSC 150 Community Leadership
ABSC 151 Community Leadership, Honors
ABSC 310 Building Healthy Communities
SOC 320 Organizations in Society
SOC 340 The Community
SOC 341 Urban Sociology
SOC 620 Social Organization
SOC 671 Social Movements
SOC 370 Conflict Resolution
ECON 530 American Economic Development
EVRN 320 Environmental Policy Analysis
EVRN 332 Environmental Law
GEOG 377 Urban Geography
POLS 520 Political Communication
POLS 615 Campaigns and Elections
POLS 616 Interest Group Politics
PSYC 492 Psychology and Social Issues
NURS 440 Leadership and Management in Nursing
PHPR 619 Health Care Systems
SW 220 Social Work, Social Welfare and U.S. Society
SW 532 Community and Organizational Dynamics and Human Behavior

Leadership, Diversity, and Culture (3)

AAAS 306 The Black Experience in the U.S. Since Emancipation
AAAS 330/AMS 340 Black Leadership
AAAS 388 The Black Woman
AAAS 510/SOC 534 Global Ethnic and Racial Relations
AAAS 511 The Civil Rights Movement
AAAS 525 Social History of Black Aging in America
AMS/SOC 110 American Identities
AMS/SOC 522 American Racial and Ethnic Relations
ANTH 563 Cultural Diversity in the United States
COMS 246 Introduction to Intercultural Communication
COMS 440 Communication and Gender
COMS 447 Intercultural Communication: The Afro-American
COMS 547 Communication and Culture
AAAS 330/AMS 340 Black Leadership

MINOR HOURS & GPA

While completing all required courses, majors must also meet each of the following hour and grade point average minimum standards:

MINOR HOURS
Satisfied by 18 hours of minor courses and 3 hours of 201/202 as the pre-requisite to the minor.

**Minor Hours in Residence**
Satisfied by a minimum of 9 hours of junior/senior (300+) hours of KU resident credit in the minor.

**Minor Junior/Senior Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Minor Graduation GPA**
Satisfied by a minimum of a 2.0 GPA in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including Fs and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

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**Master of Arts in Communication Studies**

**Why study communication studies?**
Because effective and ethical communication is at the core of family, of human organizations of all types, and of democratic decision making.

**Admission to Graduate Studies**
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**
All domestic M.A. and Ph.D. applicants on the Lawrence or Edwards Campuses must submit the Graduate Record Examination. International students who apply to Lawrence must submit Test of English as a Foreign Language scores. International students who have earned a U.S. degree must submit GRE scores.

Submit your graduate application online (http://graduate.ku.edu/application-process). Send curriculum vitae or résumé, 3 letters of recommendation, and a 2- to 3-page personal statement to the department:

The University of Kansas  
Department of Communication Studies  
Robert C. Rowland, Graduate Director  
Bailey Hall  
1440 Jayhawk Blvd., Room 102  
Lawrence, KS 66045-7545

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**M.A. Degree Requirements**

**Concentration in Communication Studies**
For course work areas, see Ph.D. requirements.

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**Communication Studies**
Satisfactory completion of these required courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 851</td>
<td>Communication Research: Historical and Descriptive</td>
<td>3</td>
</tr>
<tr>
<td>or COMS 852</td>
<td>Communication Research: Experimentation and Quantitative Analysis</td>
<td></td>
</tr>
<tr>
<td>Select a second methodology course 1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>COMS 859</td>
<td>Proseminar in Communication Studies</td>
<td>3</td>
</tr>
<tr>
<td>COMS 899</td>
<td>Master’s Thesis</td>
<td>6</td>
</tr>
<tr>
<td>Select at least 6 hours in each of 2 areas of communication</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Select 3 additional credit hours from any communication studies courses or from outside the department</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Final oral examination</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

**Total Hours**
30

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<sup>1</sup> Appropriate for the student's area of study. A list of courses is provided following the requirements.

**Nonthesis Option**
A nonthesis option is available in communication studies. Requirements for this option include:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>COMS 859</td>
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</tr>
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<td>3</td>
</tr>
<tr>
<td>or COMS 852</td>
<td>Communication Research: Experimentation and Quantitative Analysis</td>
<td></td>
</tr>
<tr>
<td>Select at least 9 hours in each of 2 areas of communication</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Select 6 hours of electives</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>General examination structured as follows: 1</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>1 hour written over required courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 hours written over the first major area of communication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 hours written over the second major area of communication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 hour oral examination</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>1</sup> Each student must complete an examination over the 2 course work concentrations.

**KU Edwards Campus M.A. Program**
The M.A. also is offered on the KU Edwards Campus (http://edwardscampus.ku.edu) in Overland Park. The requirements for the degree at the Edwards Campus are the same as for the program on the Lawrence campus. Edwards Campus classes are taught by the same faculty members who teach regularly in Lawrence. Courses are scheduled during the late afternoons and evenings to accommodate working professionals.
Doctor of Philosophy in Communication Studies

Why study communication studies?
Because effective and ethical communication is at the core of family, of human organizations of all types, and of democratic decision making.

Admission to Graduate Studies
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The University of Kansas
Department of Communication Studies
Robert C. Rowland, Graduate Director
Bailey Hall
1440 Jayhawk Blvd., Room 102
Lawrence, KS 66045-7545

Ph.D. Degree Requirements
Concentration in Communication Studies
Requirements include:

Basic Communication Theory (9)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 859</td>
<td>Proseminar in Communication Studies (waived for students with the M.A. in communication)</td>
<td>3</td>
</tr>
<tr>
<td>COMS 958</td>
<td>Comparative Theories of Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMS 959</td>
<td>Theories of Rhetoric: Contemporary</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional subject matter courses (27)
A minimum of 27 hours of additional subject matter courses: 27
These courses must represent 2 emphases.
These areas are developed by the student in consultation with the advisor and the director of graduate study.

If a student holds a master’s degree in communication studies (or equivalent), appropriate course work from this degree may be used to fulfill the subject matter course requirements. However, the total number of hours from the M.A. program used to satisfy items 2c, 3, and 4 must not exceed 24 hours.

Electives (18)
Electives may be chosen from another department or any phase of the program. The 18 hours need not be all in the same department. They may be used to broaden or intensify the program, as long as they constitute a meaningful course of study. Only 6 hours may be in independent study. Students with master’s degrees from other universities satisfy this requirement with 18 hours from their master’s programs.

Research Methodology (15)  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 851</td>
<td>Communication Research: Historical and Descriptive</td>
<td>3</td>
</tr>
<tr>
<td>or COMS 852</td>
<td>Communication Research: Experimentation and Quantitative Analysis</td>
<td></td>
</tr>
</tbody>
</table>

Choose 12 additional hours appropriate to the student’s research/ dissertation interest. A list of approved courses is provided below.

Electives may be chosen from another department or any phase of the program. The 18 hours need not be all in the same department. They may be used to broaden or intensify the program, as long as they constitute a meaningful course of study. Only 6 hours may be in independent study. Students with master’s degrees from other universities satisfy this requirement with 18 hours from their master’s programs.

Research skills & responsible scholarship requirement:

- The university requires that every doctoral student have training in responsible scholarship and research skills pertinent to the field of research and appropriate to the doctoral level. This requirement must be met before taking the Comprehensive Oral Exam. Please contact your advisor or the director of Graduate Studies for specific requirements and also see the Graduate Studies section of the online catalog.

Ph.D. dissertation (18 or more hours).
Satisfactory completion of the oral and written comprehensive examination.
Final oral examination.

Approved Methodology Courses
The following lists identify methods courses taught in and outside of the department for the 3 areas of methods trainings: rhetorical, qualitative, and quantitative. The faculty of the Communication Studies Department agrees that these courses qualify as methods courses toward the course requirements for doctoral candidates.

Three caveats:
The University of Kansas

1. These lists are not comprehensive. Other courses may count as methods courses provided the student receives approval from the advisor.

2. The courses on these lists are not required. These are recommended courses for training in each methods type.

3. All methods courses should be chosen with the advisor's input.

Rhetorical methods courses include but are not limited to:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 851</td>
<td>Communication Research: Historical and Descriptive</td>
<td>3</td>
</tr>
<tr>
<td>COMS 930</td>
<td>Seminar in Speech: ______ (Postmodern Rhetorical Theories)</td>
<td>1-4</td>
</tr>
<tr>
<td>COMS 930</td>
<td>Seminar in Speech: ______ (Contemporary Theories in Public Address)</td>
<td>1-4</td>
</tr>
<tr>
<td>COMS 951</td>
<td>Seminar in Movement Theory and Genre Criticism</td>
<td>3</td>
</tr>
<tr>
<td>COMS 952</td>
<td>Seminar in Mythic and Narrative Approaches to Rhetorical Criticism</td>
<td>3</td>
</tr>
<tr>
<td>COMS 955</td>
<td>Seminar in Rhetorical Criticism</td>
<td>3</td>
</tr>
</tbody>
</table>

Please consult with your advisor and other relevant faculty members about courses that may meet the research methods requirement. Courses that may be used to meet a Methods requirement instead of Theory, because they involve systematic and explicit reflection on research methods including appropriate research questions, objects of study, and units of analysis include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 930</td>
<td>Seminar in Speech: ______ (Seminar on Burke)</td>
<td>1-4</td>
</tr>
<tr>
<td>COMS 933</td>
<td>Theories of Rhetoric: Neo-Classical</td>
<td>2-3</td>
</tr>
<tr>
<td>COMS 953</td>
<td>Seminar in Organizational Rhetoric</td>
<td>3</td>
</tr>
</tbody>
</table>

Courses outside of COMS may qualify as a rhetorical methods course subject to advisor approval.

In Department Qualitative Methods Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 855</td>
<td>Qualitative Research Methods in Communication Studies</td>
<td>3</td>
</tr>
<tr>
<td>COMS 930</td>
<td>Seminar in Speech: ______ (Analyzing Qualitative Data)</td>
<td>1-4</td>
</tr>
<tr>
<td>COMS 936</td>
<td>Seminar in Language and Discourse</td>
<td>3</td>
</tr>
</tbody>
</table>

It is recommended that graduate students complete COMS 855 prior to taking qualitative methods courses outside of Communication Studies

Qualitative Methods Graduate Courses at KU that are Not in Communication Studies:

Courses with an asterisk have been recommended by our graduate students or affiliate faculty. The others are listed in the graduate catalogue but may or may not be taught and/or really appropriate for our students.

American Studies:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 803</td>
<td>Research Methods in American Studies</td>
<td>3</td>
</tr>
<tr>
<td>AMS 998</td>
<td>Seminar in: ______ (special topics)</td>
<td>3</td>
</tr>
</tbody>
</table>

Anthropology:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 783</td>
<td>Doing Ethnography</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 786</td>
<td>Ethnographic Documentary Production</td>
<td>3</td>
</tr>
</tbody>
</table>

Journalism:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 829</td>
<td>Marketing Communications Research</td>
<td>3</td>
</tr>
</tbody>
</table>

Nursing:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRS 820</td>
<td>Methods for Qualitative Research (Taught online)</td>
<td>3</td>
</tr>
</tbody>
</table>

Political Science:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 708</td>
<td>Advanced Qualitative Research Methods</td>
<td>3</td>
</tr>
</tbody>
</table>

Public Administration:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUAD 937</td>
<td>Qualitative Methods in Public Administration</td>
<td>3</td>
</tr>
</tbody>
</table>

Sociology:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 813</td>
<td>Field Methods and Participant Observation</td>
<td>3-5</td>
</tr>
</tbody>
</table>

* Courses with an asterisk have been recommended by our graduate students or affiliate faculty.

In Department Quantitative Methods Course

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 856</td>
<td>Communication Research: Quantitative Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

It is recommended that graduate students complete COMS 856 prior to taking quantitative methods courses outside of Communication Studies

Introductory Outside COMS Quantitative Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 790</td>
<td>Statistical Methods in Psychology I</td>
<td>4</td>
</tr>
<tr>
<td>EPSY 810</td>
<td>Regression Analysis</td>
<td></td>
</tr>
<tr>
<td>PSYC 818</td>
<td>Experimental Research Methods in Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 811</td>
<td>Analysis of Variance</td>
<td>3</td>
</tr>
</tbody>
</table>

Advanced Outside COMS Quantitative Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 791</td>
<td>Statistical Methods in Psychology II</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 887</td>
<td>Factor Analysis</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 893</td>
<td>Multivariate Analysis</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 894</td>
<td>Multilevel Modeling</td>
<td>4</td>
</tr>
<tr>
<td>EPSY 940</td>
<td>Advanced Studies in Educational Psychology and Research</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 896</td>
<td>Structural Equation Modeling I</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 996</td>
<td>Structural Equation Modeling II</td>
<td>3</td>
</tr>
</tbody>
</table>

Descriptions of all quantitative psychology courses are available online (http://crmda.ku.edu).

Computational Biology Program

Computational Biology Graduate Program

Computational Biology is an interdisciplinary science at the interface of biology, chemistry, medicine, mathematics, and computer science. Its goal is development and application of computational approaches to studies of life processes and improvement of human health. The Computational Biology Graduate Program recruits students with bachelor's or master's degrees who made a choice to pursue a career in computational biology. The Ph.D. degree in Computational Biology requires successful completion of formal courses and demonstration of accomplishments in basic research, qualifying examinations, scientific writing, and formal presentations of research data.

Courses

**BINF 701. Bioinformatics I. 5 Hours.**
First semester of a two-semester course in bioinformatics and computational biology. Topics include basic concepts of bioinformatics
and molecular modeling, bioinformatics databases, computational tools and modeling methods, protein sequence and structure alignment, conformational analysis, secondary structure determination, tertiary structure modeling (homology, threading, ab initio, molecular dynamics and Monte Carlo simulations, protein folding and dynamics), as well as student presentations of material from current papers in the field of study and their own on-going research for discussion and critique. Prerequisite: College introductory biochemistry (no requirement for specific courses), math, and computer courses or concurrent enrollment in such courses and consent of instructor. LEC.

BINF 702. Bioinformatics II. 5 Hours.
Second semester of a two-semester course in bioinformatics and computational biology. Topics include protein quaternary structure modeling (protein-protein/DNA/small ligand docking, binding, computer-aided drug design), protein structure-function relationships, biological membranes (structure and function of integral membrane proteins, protein-membrane and protein-protein interactions in membranes), phylogenetic trees, modeling of genome-wide protein interaction networks based on structure, sequence, and data-mining, as well as student presentations of material from current papers in the field of study and their own on-going research for discussion and critique. Prerequisite: BINF 701. LEC.

BINF 703. Advanced Computational Biology I. 5 Hours.
This is the first semester of an intensive two-semester course in Computational Biology, aimed at second-year graduate students. Topics include graph theory, systems biology, mathematical and computational modeling of complex systems, synthetic biology and protein design. Students will gain a mastery of cutting-edge topics in Computational Biology through lectures, careful reading of current literature, and advanced individual research projects. Prerequisite: BINF 701 and BINF 702, or consent of instructor. LEC.

BINF 704. Advanced Computational Biology II. 5 Hours.
This is the second semester of an intensive two-semester course in Computational Biology, aimed at second-year graduate students. Topics include graph theory, systems biology, mathematical and computational modeling of complex systems, synthetic biology and protein design. Students will gain a mastery of cutting-edge topics in Computational Biology through lectures, careful reading of current literature, and advanced individual research projects. Prerequisite: BINF 703. LEC.

BINF 709. Topics in: ___. 1-3 Hours.
Advanced courses on special topics in Bioinformatics, given as need arises, including lectures, discussions, readings, or laboratory. Students may select sections according to their special interests. LEC.

BINF 999. Doctoral Dissertation. 1-12 Hours.
Original research that is to be incorporated into a PhD dissertation. THE.

Doctor of Philosophy in Computational Biology

Computational Biology Graduate Program

Computational biology is an interdisciplinary science at the interface of biology, chemistry, medicine, mathematics, and computer science. Its goal is development and application of computational approaches to studies of life processes and improvement of human health. The Computational Biology Graduate Program recruits students with bachelor’s or master’s degrees who made a choice to pursue a career in computational biology. The Ph.D. degree in Computational Biology requires successful completion of formal courses and demonstration of accomplishments in basic research, qualifying examinations, scientific writing, and formal presentations of research data.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Ph.D. Admission

Admission Requirements

Applicants must have a bachelor’s or master’s degree in natural sciences, mathematics, engineering, or another relevant field. Applications are accepted online (http://www.bioinformatics.ku.edu/education/PhD_prog_html).

Ph.D. Degree Requirements

Students must earn credit in each of the following courses or their equivalents:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BINF 701</td>
<td>Bioinformatics I</td>
<td>5</td>
</tr>
<tr>
<td>BINF 702</td>
<td>Bioinformatics II</td>
<td>5</td>
</tr>
<tr>
<td>BINF 709</td>
<td>Topics in: ____</td>
<td>1-3</td>
</tr>
<tr>
<td>BIOL 636</td>
<td>Biochemistry I</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 638</td>
<td>Biochemistry II</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 804</td>
<td>Scientific Integrity: Molecular Biosciences</td>
<td>1</td>
</tr>
<tr>
<td>Elective courses in biology/chemistry</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Elective courses in analysis/mathematics/statistics</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

By the end of the second year, the student should have completed the formal course work to fulfill requirements for the degree. The student completes and submits a research proposal for the comprehensive oral examination. The proposal must develop a research topic related to the general areas of computational biology. The topic of the research proposal is decided upon by the student in consultation with the thesis advisor. Upon completion of the comprehensive oral examination, the student aggressively carries out research in the laboratory of the thesis advisor. In addition, the student continues attending the weekly Computational Biology seminar series and participating in the Computational Biology student seminar series. A Ph.D. degree is awarded once the student has written a final dissertation and carried out a successful defense of it before a committee.

The Computational Biology Ph.D. includes training in research skills and responsible scholarship. The research skills training requirement is met through BINF 701/BINF 702 coursework, as well as through individual mentorship and collaborations in the Center for Computational Biology and student research presentations. The responsible scholarship training requirement is met through BIOL 804 coursework, as well as through individual mentorship during the conduct of research.
Department of East Asian Languages and Cultures

Why study East Asian languages and cultures?

The areas of East Asia covered - China, Japan, and Korea - represent three of the oldest continuous civilizations in the world. Japan and mainland China are the world's largest economies after the United States. South Korea and Taiwan are key U.S. trading partners. The economic and political relationship between the U.S. and East Asia will be among the most important for the U.S. in the 21st century. In-depth knowledge of East Asia is critical in the new global culture and marketplace.

Eastern Civilizations Courses

The Eastern Civilizations courses promote a broad understanding of the civilizations of China, Japan, and to a limited extent, Korea.

ECIV 104, ECIV 304, and ECIV 305 (Honors). Eastern Civilizations consist of readings from the major works of East Asian thought, religion, and literature. Those who are considering a major or minor in EALC are encouraged to enroll in ECIV 304 or ECIV 305 (Honors), rather than ECIV 104.

Undergraduate Programs

The department offers a full program of instruction in the languages, literatures, and cultures of China, Japan, and Korea.

With an EALC B.A., students can pursue a range of careers in business, government, education, nonprofit organizations, etc., or continue on to graduate study in East Asian languages and literatures. Some students choose an EALC B.A. to connect with their heritages or to fulfill personal interests.

Placement

If students have already learned Chinese, Japanese, or Korean to some degree, whether at home, in a classroom, or elsewhere, they must take a placement test before enrolling in a language class. For more information, contact the department administrator at 785-864-3100. There is no fee for a placement test. To be eligible for enrollment in intermediate Chinese, Japanese, or Korean, a student must have earned college credit for the first year or have earned 2 years of high school credit in that language or have permission from the department based on the results of the placement test.

Retroactive Credit

Students with no prior college or university Chinese, Japanese, or Korean course credit are eligible for retroactive credit according to this formula:

- Students with 2 or 3 years of high school study who enroll in second-semester Chinese, Japanese, or Korean (CHIN 108, JPN 108, KOR 108) and earn grades of C or higher may receive 2 hours of retroactive credit.
- Students with 3 or 4 years of high school study who enroll in third-semester Chinese, Japanese, or Korean (CHIN 204, JPN 204, KOR 204) and earn grades of C or higher may receive 5 hours of retroactive credit.
- Students with 4 years of high school study who enroll in fourth-semester Chinese, Japanese, or Korean (CHIN 208, JPN 208, KOR 208) and earn grades of C or higher may receive 7 hours of retroactive credit.

Courses for Non-majors

Courses available to non-language specialists are listed under East Asian Languages and Cultures Courses.

EALC also offers elementary and intermediate language courses in Tibetan (TIB 101, TIB 102, TIB 201, TIB 202) and Uyghur (UYGR 101, UYGR 102, UYGR 201, UYGR 202). Tibetan and Uyghur language studies can be used to fulfill the CLAS second language requirement necessary to complete the B.A. degree.

Graduate Program

M.A. in East Asian Languages & Cultures

The Department of East Asian Languages and Cultures (EALC) is the only department in Kansas offering a regular program of instruction in the languages, literatures, and cultures of East Asia.

The EALC Thesis M.A. program trains students who will devote themselves to becoming effective links between the Far East and the United States.

Students concentrate in Chinese, Japanese, or East Asian Cultures, usually entering the program with at least two years of college-level language. The program typically takes two years to complete, including the defense of a required Master's thesis.

Center for East Asian Studies

The Center for East Asian Studies (http://www.ceas.ku.edu) is a National Resource Center funded by the U.S. Department of Education. CEAS promotes East Asian language and area studies; coordinates interdisciplinary activities; works with the East Asian Library; advises students in East Asian studies; awards Foreign Language and Area Studies Fellowships in Chinese, Japanese, Korean, Uyghur, and Tibetan; and arranges special events related to East Asia on campus. CEAS also offers outreach to schools, businesses, and the community and serves as a regional resource for information about East Asia.

Courses

CHIN 100. Elementary Conversational Chinese I. 3 Hours. U.
Three hours of class per week plus outside use of recorded text materials. Basic spoken language instruction intended primarily for beginners planning travel or work in China and Taiwan. Introduction to basic written characters. Does not fulfill College of Liberal Arts and Sciences foreign language distribution requirements or department major and minor requirements. LEC.

CHIN 101. Elementary Conversational Chinese II. 3 Hours. U.
Continuation of CHIN 100. Prerequisite: CHIN 100 or equivalent. LEC.

CHIN 102. Beginning Chinese I. 4 Hours. U.
Taught mainly in the summer, this course covers about 75% of the material in CHIN 104, upon which this course is modeled. LEC.

CHIN 104. Elementary Chinese I. 5 Hours. U.
Three hours of lecture and three hours of spoken drill each week. An introduction to spoken and written modern standard Chinese (Mandarin). Not open to students with native ability in Mandarin or Chinese dialect. Students who have any previous knowledge of Chinese must take a placement exam before enrolling in Chinese classes at K.U. Consult Department of East Asian Languages and Cultures for details. LEC.
CHIN 106. Elementary Chinese for Advanced Beginners. 3 Hours. U.
This course is designed for students who have already acquired some
elementary Chinese language abilities (in high school or from family),
but cannot be placed in CHIN 108, Elementary Chinese II. The course
focuses on perfecting listening, speaking, reading and writing skills, and
prepares students for CHIN 108. For admission to the class, students
must take the EALC Chinese placement exam, be interviewed by
designated instructors, and approved. LEC.

CHIN 108. Elementary Chinese II. 5 Hours. U.
Continuation of CHIN 104. Prerequisite: CHIN 101, CHIN 104, or
equivalent. LEC.

CHIN 148. Intensive Elementary Chinese. 10-12 Hours. U.
An accelerated one semester course in elementary Chinese, covering
the material of CHIN 104 and CHIN 108. Classes meet for two hours of
lecture and one hour of drill daily. Emphasis on spoken language with
grammar and readings in selected texts. No prerequisite. LEC.

CHIN 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing
current issues in Chinese. Course is designed to meet the critical
thinking learning outcome of the KU Core. First-Year Seminar topics
are coordinated and approved by the Office of First-Year Experience.
Prerequisite: First-time freshman status. LEC.

CHIN 204. Intermediate Chinese I. 5 Hours. U.
Continuation of CHIN 108. Three hours of lecture and three hours of
spoken drill. Prerequisite: CHIN 108 or equivalent. LEC.

CHIN 206. Intermediate Chinese Conversation. 2 Hours. U.
Practice in speaking, presentation of prepared talks, and guided
discussions. This course is primarily used to award transfer credit and
does not fulfill any portion of the College of Liberal Arts and Sciences
foreign language requirement. Prerequisite: CHIN 204 or equivalent. FLD.

CHIN 208. Intermediate Chinese II. 5 Hours. U.
Continuation of CHIN 204. Prerequisite: CHIN 204. LEC.

CHIN 251. Reading and Writing Chinese I. 1-3 Hours. H.
Designed for those who speak modern standard (Mandarin) Chinese but
lack reading and writing skills. Focuses on acquiring knowledge of the
Chinese writing system and preparing students for possible entry into
advanced courses in Chinese, e.g. CHIN 504 (Advanced Modern Chinese
I), or, after appropriate testing, for possible exemption from the College of
Liberal Arts and Sciences foreign language requirement. Students should
take the online Chinese placement exam and consult with the Chinese
Language Program Coordinator. Enrollment by permission of the Chinese
Language Program Coordinator only. LEC.

CHIN 252. Reading and Writing Chinese II. 1-3 Hours. H.
Continuation of CHIN 251. Prerequisite: CHIN 251 or permission of the
instructor. LEC.

CHIN 290. Accelerated Chinese. 3 Hours. U.
Instruction in reading and writing Chinese for students who already
possess a degree of oral/aural proficiency. This course will prepare
students for enrollment in CHIN 504, Advanced Modern Chinese I. No
prerequisites. Consent of instructor required. LEC.

CHIN 342. Introduction to Classical Chinese. 3 Hours. H.
An introduction to Classical Chinese through detailed analysis of short
original passages from a variety of early Chinese texts. Students gain a
foundation in the grammar and vocabulary of Classical Chinese, preparing
them for CHIN 544. The course is offered at the 300 and 500 levels, with
additional requirements for students taking the 500 level. Prerequisite:
A basic knowledge of Chinese characters (e.g. from CHIN 108 or JPN
108) and consent of the instructor, or CHIN 208 or JPN 208. Not open to
students who have completed CHIN 542. LEC.

CHIN 366. Advanced Chinese Conversation. 2 Hours. U.
Guided discussions designed to increase fluency and further improve
pronunciation. Prerequisite: CHIN 504 or equivalent. LEC.

CHIN 498. Directed Readings in Chinese. 1-4 Hours. H/W.
Readings in Chinese on a subject selected by a student with the
advice and direction of the instructor. Individual meetings and reports.
Prerequisite: Consent of instructor. IND.

CHIN 504. Advanced Modern Chinese I. 5 Hours. H/W.
Five hours of class and two of drill. Readings in selected modern Chinese
literary texts and discussion in Chinese of recordings of stories and
dramas. Prerequisite: CHIN 208 or equivalent. LEC.

CHIN 508. Advanced Modern Chinese II. 5 Hours. H/W.
Continuation of CHIN 504. Prerequisite: CHIN 504 or equivalent. LEC.

CHIN 512. Advanced Chinese I. 2 Hours. H/W.
Readings in modern Chinese texts on a variety of subjects and discussion
in Chinese. Prerequisite: CHIN 218 or equivalent. LEC.

CHIN 513. Advanced Chinese II. 2 Hours. H/W.
Continuation of CHIN 512. Prerequisite: CHIN 512 or equivalent. LEC.

CHIN 542. Introduction to Classical Chinese. 3 Hours. H/W.
An introduction to Classical Chinese through detailed analysis of short
original passages from a variety of early Chinese texts. Students gain a
foundation in the grammar and vocabulary of Classical Chinese, preparing
them for CHIN 544. The course is offered at the 300 and 500 levels, with
additional requirements for students taking CHIN 542. Prerequisite: A
basic knowledge of Chinese characters (e.g. from CHIN 108 or JPN 108)
and consent of instructor, or CHIN 208 or JPN 208. Not open to students
who have completed CHIN 342. LEC.

CHIN 544. Readings in Classical Chinese: _____. 3 Hours. AE42/
AE61 / H/W.
Classical Chinese is the language of the most famous works of Chinese
philosophy and most Chinese literature before the twentieth century. The
course introduces readings from a specific philosophical school or literary
genre, for example: Confucian Philosophical Texts, Daoist Philosophical
Texts, Poetry, Ming/Qing fiction, etc. Prerequisite: CHIN 342 or CHIN 542
or consent of the instructor. May be repeated for credit if content varies.
LEC.

CHIN 562. Modern Chinese Texts I. 3 Hours. NW AE61 / H/W.
Readings and interpretation of varied modern Chinese texts. Continued
study of the language in the form of oral discussion and written reports.
Prerequisite: CHIN 504 or equivalent. LEC.

CHIN 564. Modern Chinese Texts II. 3 Hours. H/W.
A continuation of CHIN 562 with materials of increasing difficulty.
Prerequisite: CHIN 562. LEC.

CHIN 580. Introduction to Chinese Research Materials. 1 Hour. U.
An introduction to basic reference works in Chinese and Western
languages, including dictionaries, encyclopedias, concordances, and
bibliographies. Library organization and research methods will also be
discussed. (Five week course.) Prerequisite: CHIN 208 or equivalent.
LEC.

CHIN 598. Readings in: _____. 1-3 Hours. H/W.
Students will read selections from materials on a given topic or topics.
May be repeated for credit. Prerequisite: CHIN 564 or permission of
instructor. IND.

CHIN 690. Seminar in Chinese Texts. 1-3 Hours. H/W.
Varying topics with varying prerequisites. LEC.
CHIN 801. Directed Readings and Research in Chinese. 1-4 Hours.  
Advanced language training for the study of Chinese sources in the humanities or social science field of the student. Prerequisite: Consent of instructor. RSH.

CHIN 880. Advanced Chinese Research Materials. 2 Hours.  
A detailed examination of various Chinese language reference works and research materials. Emphasis will be placed on the use of different types of reference works to carry out research strategies. Prerequisite: CHIN 504 or equivalent and CHIN 580. LEC.

EALC 105. Living Religions of the East. 3 Hours. HR/NW AE42/GE3H / H/W.  
A basic introduction to religion in India, China, and Japan with emphasis upon religions that affect the modern period. Not open to students who have taken REL 108/EALC 108. (Same as REL 106.) LEC.

EALC 108. Living Religions of the East, Honors. 3 Hours. HR/NW AE42/GE3H / H.  
A basic introduction to religion in India, China, and Japan with emphasis upon religions that affect the modern period. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken REL 106/EALC 105. (Same as REL 108.) LEC.

EALC 121. Introduction to Contemporary China. 3 Hours. NW AE42 / H.  
An overview of contemporary Chinese culture and society since the economic reforms and opening up launched in 1978, through the study of changes in politics, the economy, society, culture and everyday life in China. The course is taught in English. No prior knowledge of Chinese language is required. LEC.

EALC 130. Myth, Legend, and Folk Beliefs in East Asia. 3 Hours. NW AE42 / H/W.  
A survey of the commonly held ideas about the beginning of the world, the role of gods and spirits in daily life, and the celebrations and rituals proper to each season of the year. The purpose of the course is to present the traditional world view of the peoples of East Asia. (Same as ANTH 293, REL 130.) LEC.

EALC 131. Myth, Legend, and Folk Beliefs in East Asia, Honors. 3 Hours. NW / H/W.  
A survey of the commonly held ideas about the beginning of the world, the role of gods and spirits in daily life, and the celebrations and rituals proper to each season of the year. The purpose of the course is to present the world view of the ordinary peoples of East Asia in contrast to their more sophisticated systems of philosophy that are better known to the Western world. Open only to students in the University Honors Program or by permission of instructor. LEC.

EALC 136. The Japanese Tradition. 3 Hours. NW / H/W.  
An examination of the cultural heritage of Japan from earliest times to Meiji Restoration. Emphasis will be placed upon Japan's literary tradition. Not open to students with credit in EALC 512. LEC.

EALC 177. First Year Seminar: _____, 3 Hours. GE11 / U.  
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in East Asian Languages and Cultures. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

EALC 198. Studies in: ____, 1-5 Hours. H.  
Special purpose subject in East Asia and contiguous regions. LEC.

EALC 231. Introduction to: ____, 1-3 Hours. NW / H/W.  
Topics are various aspects of Chinese and Japanese cultures. LEC.

EALC 298. Studies in: ____. 1-5 Hours. H.  
Special purpose subject in East Asia and contiguous regions. LEC.

EALC 301. Cultural Traditions of China, Inner Asia, and Tibet. 3 Hours. NW / H.  
This course acquaints the student with the broad outlines of the traditional cultures and literatures of China and the contiguous regions of Inner Asia and Tibet. Course materials include translations and discussions of oral tales, epics, poetry, novels, and biography, which explore the interaction between these regions and cultures as well as their continuities and disparities. The course is most appropriate for students with no background in Asian culture. LEC.

EALC 302. Cultural Traditions of Japan and Korea. 3 Hours. NW / H/ W.  
A wide-ranging examination of the similarities and difference between Japanese and Korean culture through folklore, literature, film, and other texts. Format: Lecture and discussion. Designed for students with no background in Asian culture. LEC.

EALC 310. The Chinese Novel. 3 Hours. H/W.  
Reading and analysis of the form and types of Chinese novel, its beginnings and development to the present day. LEC.

EALC 312. Traditional Japanese Literature in Translation. 3 Hours. H/ W.  
A general survey of representative literary works of major genres in traditional China. Lectures, assigned readings, and discussions in English. A knowledge of Chinese is not required. (Not open to students with credit in EALC 714.) LEC.

EALC 314. Traditional Chinese Literature in Translation. 3 Hours. H/ W.  
A survey of the major works of Japan's long literary heritage. Readings from such classics as the Tale of Genji, the world's first novel, No drama, and poetry will acquaint the student with one of the world's great literary traditions. (Not open to students with credit in EALC 712.) LEC.

EALC 315. Survey of Japanese Film. 3 Hours. NW AE42 / H.  
This course surveys the major developments in and critical approaches to twentieth-century Japanese film. Focusing mostly on narrative films, the course introduces students to basic methodological issues in Japanese film history, especially questions of narrative, genre, Stardom, and authorship. We examine Japanese cinema as an institution located within specific contexts focusing on the ways in which this institution shapes gender, race, class, ethnic and national identities. This course examines how patterns of distribution, exhibition, and reception have influenced film aesthetics and film style over the last century. Through secondary readings, lectures, and discussions students critically examine how Japanese cinema as an institution both responds to and intervenes in the social, cultural, and political history of twentieth century Japan. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. (Same as FMS 315.) LEC.

EALC 316. Modern Japanese Literature in Translation: 1868-1945. 3 Hours. AE42 / H/W.  
A survey of major literary works of Japan's modern era through the Pacific War. Topics include the social and spiritual challenges of modernization, urbanization, and the issues of race and national identity. Works by Soseki, Ogai, Akutagawa, Tanizaki, Kawabata, and others will be covered. This course is offered at the 300 and the 700 levels, with additional assignments at the 700 level. Not open to students who have completed EALC 716. LEC.
EALC 317. Contemporary Japanese Literature in Translation: 1945-Present. 3 Hours. AE42 / H/W.
A survey of major literary works of Japan's post-war and contemporary eras. Topics include life during and after the war, the experience of the atomic bomb, and the postmodern landscape. Works by Dazai, Mishima, Oe, Abe, Murakami, and others will be covered. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. Not open to students who have completed EALC 717. LEC.

EALC 318. Modern Chinese Fiction and Film. 2-3 Hours. AE42 / H/W.
A general survey of important Chinese fiction and film of the 20th century. Lectures, readings, and discussions in English. Knowledge of Chinese is not required. Not open to students with credit in EALC 518. This course is taught at the 300 and 500 levels with additional assignments at the 500-level. LEC.

EALC 319. Contemporary Chinese Fiction and Film. 3 Hours. AE42 / H.
A general survey of important Chinese fiction and film from the late 20th century to the present. Lectures, readings, and discussions in English. A knowledge of Chinese is not required. (Not open to students with credit in EALC 519.) LEC.

EALC 320. Modern East Asia: Multiple Perspectives. 3 Hours. NW / H.
A survey of the major political changes in China, Japan, Korea and Tibet in the 20th century. Students will learn about the changes that swept through East Asia as it rapidly modernized via documentary films and lectures and will study the impact of these changes on individuals by reading autobiographies. LEC.

EALC 328. The Body in Japan. 3 Hours. H.
The course examines historical and cultural concepts of the body in Japan and then focuses upon the pivotal events of the last half-century as experienced through the body. Students are introduced to a wide range of extreme bodily experiences: the regimented body of wartime, the body irradiated by the atomic bomb, the body of malnutrition and national humiliation, possessed bodies, licentious bodies, creating life through the body, the aged body, self-immolation of the body, nurturing the body, beautifying the body, and others. The primary sources of investigation and discussion are novels written after the war, films, anthropological writings, and popular culture. All readings are in English. LEC.

EALC 330. Chinese Literature and Culture: Premodern Times. 3 Hours. NW / H/W.
An examination of Chinese literature and culture from earliest times to the modern period. Not open to students who have taken EALC 530. This course is taught at the 300 and 500 levels with additional assignments at the 500-level. LEC.

EALC 331. Studies In: _____ . 1-3 Hours. H/W.
Topics in the Chinese and Japanese cultures. LEC.

EALC 332. Asian Literature in Translation: _____ . 3 Hours. NW / H/W.
Introduction to Asian culture and society through close reading and analysis of important works of Asian literature. Themes and issues to be focused upon will vary (e.g., traditional or modern literature of China, Japan, or Korea, and special topics of interest). Lecture and discussion format. Knowledge of Asian languages is not required. LEC.

EALC 333. Asian Literature in Translation, Honors: _____ . 3 Hours. NW / H/W.
Introduction to Asian culture and society through close reading and analysis of important works of Asian literature. Themes and issues to be focused upon will vary (e.g., traditional or modern literature of China, Japan, or Korea, and special topics of interest). Lecture and discussion format. Knowledge of Asian languages is not required. Open only to students in the University Honors Program or by permission of instructor. LEC.

EALC 340. Structure of Chinese. 3 Hours. H.
A detailed study of the phonological and grammatical structure of Chinese and the interactions between language and culture. Depending on student interest, a unit on the pedagogy of teaching Chinese as a foreign language may also be included. Primarily for students who want a linguistic knowledge of the language rather than a practical command of it. Students taking the course at the 500 level will have more work required of them. LEC.

EALC 345. Chinese Cinema. 3 Hours. H.
This course surveys representative Chinese films since the 1980s and their global reception. The most recent formalistic, industrial, and institutional developments of Chinese cinema are examined. Students view films, do secondary readings, and learn theories and methodologies of film studies. Lectures and class discussions also cover the socio-historical context of contemporary Chinese filmmaking. This course is taught at the 300 and 500-levels with additional assignments required at the 500-level. Prerequisite: Junior status, or permission of the instructor. Not open to students with credit in EALC 545. LEC.

EALC 350. Contemporary Japan. 3 Hours. NW / U.
An exploration of the Japanese way of life, self-concepts, and world view through lecture, discussion, reading, and field trips to businesses, community organizations, and cultural sites. Offered only during the Summer Institute in Hiratsuka, Japan. LEC.

EALC 361. Colonial Korea. 3 Hours. H.
This course examines the history, society, and culture of Korea from the end of Choson dynasty through the Colonial period (1910-1945) in its East Asian and global context. The course uses a multi-disciplinary approach, including history, anthropology, literature, and film. Not open to students with credit in EALC 561. LEC.

EALC 362. Post-Colonial Korea. 3 Hours. H.
This course examines the history, society, and culture of South Korea from the time of its liberation from Japan in 1945 to the present in its East Asian and global context. The course uses a multi-disciplinary approach, including history, anthropology, literature, and film. Prerequisite: EALC 361 or EALC 561, or permission of the instructor. Not open to student with credit in EALC 562. LEC.

EALC 363. Gendered Modernity in East Asia. 3 Hours. H.
This course explores rapidly changing gender relationships and the sense of being "modern" in East Asia by examining marriage and family systems, work, education, consumer culture, and geopolitics. The class seeks to understand how uneven state control over men and women shapes desires, practices, and norms and how men and women act upon such forces. Avoiding biological or social determinism, this course treats gender as an analytical category and examines how modern nation-states and global geopolitics are constituted and operated. (Same as ANTH 363 and WGSS 363.) LEC.

EALC 364. Peoples of Japan and Korea. 3 Hours. NW / S/W.
An analysis of the cultural diversity and unity of the peoples of Japan and Korea. Emphasis on historical and ethnological relationships, social structure, and ethics. (Same as ANTH 364.) LEC.

EALC 365. Japanese People through Films. 3 Hours. NW / S/W.
Japanese people's culture and society through an extensive examination of both documentary and feature films. Readings from social science fields and literature will be used--the former to supply a theoretical framework for the study of Japanese people and the latter to further the inquiry into the individual sentiment motivating actions. (Same as ANTH 365.) LEC.
EALC 366. The Life Cycle in Japanese Culture and Literature. 3 Hours. NW / H/W.
A study of the Japanese people from birth to death: what it means to be born in a Japanese family, to grow up Japanese, and to die Japanese. Anthropological works and selections from Japanese literature and film will be used to examine ways in which Japanese people live through the critical periods in their life cycle. (Same as ANTH 366.) LEC.

EALC 368. The Peoples of China. 3 Hours. NW / S/W.
An analysis of the cultural origin, diversity, and unity of the peoples of China. Emphasis on historical development, social structure, cultural continuity and change, and ethics. (Same as ANTH 368.) LEC.

EALC 370. Chinese Folk Belief. 3 Hours. H/W.
A survey of the beliefs of the ordinary Chinese people throughout the centuries with regard to myths, the other world, festivals, and the gods. Prerequisite: A course dealing with China. LEC.

EALC 380. Popular Cultures of East Asia. 3 Hours. NW / H.
This course examines the contemporary popular cultures of Korea, Japan, China, and Taiwan, with particular emphasis on relations between East Asia and North America. Students study the issue of globalization and how the transnational flow of commodities and culture affects local societies and individual identities. They learn to identify, describe, and analyze the cross-cultural content of popular cultural artifacts and modes of expression relating to East Asia. To this end, they explore in detail such subjects as: fashion, foodways, cinema, manga, soap operas, and punk rock. Not open to students who have taken EALC 580. LEC.

EALC 410. The Culture of Play in Japan. 3 Hours. NW AE42 / N/W.
This course examines the phenomenon and manifestations of play in Japanese culture. Topics include but are not confined to: the philosophy of play, the semiotics of play, the places of play, the role of laughter, play in Japanese religion, simulation and performance, and play and competition. LEC.

EALC 411. The Culture of Play in Japan, Honors. 3 Hours. NW AE42 / N/W.
This course examines the phenomenon and manifestations of play in Japanese culture. Topics include but are not confined to: the philosophy of play, the semiotics of play, the places of play, the role of laughter, play in Japanese religion, simulation and performance, and play and competition. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

EALC 412. Visual and Literary Culture in Modern Japan. 3 Hours. H.
This course examines the interconnections between the evolution of modern Japanese literature and vision technologies such as painting, panoramas, magic lanterns, stereoscopes, photography, motion pictures, television, and computers. The course provides an overview of modern Japanese literature from the perspectives of the visual culture in which that literature was conceived. The course considers such authors as Higuchi, Soseki, Ogai, Shimazaki, Akutagawa, Tanizaki, Yokomitsu, Kawabata, and Abe. Not open to students who have completed EALC 612. LEC.

EALC 413. Asian Media Studies. 3 Hours. H.
This course examines new and emerging media in East Asia and how the media industries of East Asia function. Using recent scholarship and industry data on contemporary cybertechnology, music studies, and television industries of East Asia we examine how such factors as globalization, post-colonialism, censorship, emerging technology, and national media legislation affect regional and transnational media industries in Japan, South Korea, and Mainland China/Taiwan/Hong Kong. (Same as FMS 413.) LEC.

EALC 415. Ancient China. 3 Hours. NW / H.
A survey of ancient Chinese culture to the Qin period. Major archaeological discoveries and the literary tradition are taken as the primary evidence through which a number of topics are introduced (for example: environment, food, writing, art, thought, ritual). A knowledge of Chinese is not required. The course is offered at the 400 and 600 levels, with additional assignments at the 600 level. Not open to students who have completed EALC 615. LEC.

EALC 418. Sexual Politics in Chinese Literature and Culture: Premodern Times. 3 Hours. NW / H.
This course uses myth, literature, history, biography, and other documents to discuss sexual politics in China from ca 1500 B.C.E. to the end of the last dynasty in 1911. Topics include: emperors, empresses, and consorts, polygamy, prostitution, love, yin and yang cosmology, the art of the bedchamber, women's literature, and erotic literature. Recommended: A course in East Asian studies. Not open to students who have taken EALC 618. This course is taught at the 400 and 600 levels with additional assignments at the 600-level. LEC.

EALC 420. Daily Life in China From the Opium War to the Present. 3 Hours. NW / H/W.
Daily life and issues of social and cultural interaction between China and Western nations from the Opium War to the present. Fiction, travel diary, historical sources, film, and personal accounts will make up course materials. LEC.

EALC 431. Studies in: _____ 1-3 Hours. H/W.
Topics in the Chinese and Japanese traditions. LEC.

EALC 488. Senior Seminar in East Asian Languages and Cultures. 3 Hours. AE61 / H/W.
Open to seniors majoring in East Asian Languages and Cultures or by consent of instructor. LEC.

EALC 498. Directed Readings in East Asian Languages and Cultures. 1-4 Hours. AE61 / H/W.
Readings in English on an East Asian subject, selected by a student with the advice and direction of the instructor. Individual meetings and reports. Prerequisite: ECIV 104 or ECIV 304 and consent of instructor. IND.

EALC 499. Honors Thesis. 3 Hours. AE61 / H/W.
Required of all students working for a degree with honors. May be repeated for a total of nine semester hours. IND.

EALC 508. Religion in China. 3 Hours. NW AE42/GE3H / H/W.
Survey of religious thought and practice in China from the Shang to the People's Republic. (Same as REL 508.) LEC.

EALC 509. Religion in Japan. 3 Hours. NW AE42/GE3H / H/W.
Survey of religious thought and practice in Japan from the Jomon period to the present. (Same as REL 509.) LEC.

EALC 510. Education in Japan. 3 Hours. NW / N/W.
An investigation of the relationship between education and Japanese national and cultural identity as expressed in conceptions of childhood: philosophical and political positions underlying curricular and administrative policies, teachers' training, and pedagogical styles; the interface between education, "work," and the economy in general; and the theme of "internationalization," (kokusaika). The course is taught in English. LEC.

EALC 518. Modern Chinese Fiction & Film. 3 Hours. AE42 / H.
A general survey of important Chinese fiction and film of the 20th century. Lectures, readings, and discussions in English. Knowledge of Chinese is not required. Not open to students with credit in EALC 318. This course is taught at the 300 and 500 levels with additional assignments at the 500-
level. Prerequisite: An introductory East Asian studies course such as ECIV 104 or ECIV 304 or EALC 105; or consent of instructor. LEC.

EALC 519. Contemporary Chinese Fiction and Film. 3 Hours. H.
A general survey of important Chinese fiction and film from the late 20th century to the present. Lectures, readings, and discussions in English. A knowledge of Chinese is not required. This course is taught at the 300 and 500 levels with additional assignments at the 500-level. Prerequisite: An introductory East Asian studies course such as ECIV 104 or ECIV 304 or EALC 105; or consent of instructor. (Not open to students with credit in EALC 319.) LEC.

EALC 520. Entrepreneurship in East Asia. 3 Hours. NW / H.
An intensive examination of the history and current status of entrepreneurship in China, Japan, and other nations in East Asia. This course investigates the role of entrepreneurs in Asian economic development from the nineteenth century to the present, as well as the relationship between entrepreneurship and Asian cultural traditions. The opportunities and challenges of entrepreneurship in East Asia today are also considered. (Same as HIST 640.) LEC.

EALC 527. Asian Theatre and Performance. 3 Hours. NW / H/W.
A survey of traditional and modern theatre and performance in Asia, with greatest attention given to India, China, and Japan. A study of plays, dramatic genres, history, conventions of play production, and acting styles and other performance forms. (Same as THR 527). LEC.

EALC 530. Chinese Literature and Culture: Premodern Times. 3 Hours. NW / H/W.
An examination of Chinese literature and culture from earliest times to the modern period. This course is taught at the 300 and 500 levels with additional assignments at the 500-level. Prerequisite: An introductory East Asian studies course, such as ECIV 104 or ECIV 304 or EALC 105; or consent of the instructor. Not open to students with credit in EALC 330. LEC.

EALC 536. Cultural Traditions of Japan. 3 Hours. NW / H/W.
An examination of the major intellectual and aesthetic trends in Japanese history. The course is designed to give teachers and professionals, as well as students with a general interest in Japan, an overview of its unique cultural tradition. Not open to students with credit in EALC 136. LEC.

EALC 541. Asian Film. 3 Hours. NW AE42 / H.
Seminar on various national film cultures of East and Southeast Asia. Representative films are studied from formal, stylistic, and socio-historic perspectives. Addresses the 12 impact of key cultural, economic, and political issues on each film industry. Class discussion, reports, and individual research papers. The course is offered at the 500 and 800 levels, with additional assignments at the 800 level. (Same as FMS 541.) Prerequisite: Junior status. LEC.

EALC 543. Contemporary Japanese Film. 3 Hours. NW AE42 / H.
Seminar on the major developments in the contemporary (1980-present) Japanese film industry examining how filmmaking practices and film criticism have been influenced by such issues as transnationalism, postcolonialism, critical race theory, postmodernism, and new media. We survey recent industrial and stylistic trends as well as key critical debates. Class discussion, reports, and individual research papers. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. (Same as FMS 543.) Prerequisite: Junior status. LEC.

EALC 545. Chinese Cinema. 3 Hours. H.
This course surveys representative Chinese films since the 1980s and their global reception. The most recent formalistic, industrial, and institutional developments of Chinese cinema are examined. Students view films, do secondary readings, and learn theories and methodologies of film studies. Lectures and class discussions also cover the socio-historical context of contemporary Chinese filmmaking. This course is taught at the 300 and 500-levels with additional assignments required at the 500-level. Prerequisite: Junior status, or permission of the instructor. Not open to students with credit in EALC 345. LEC.

EALC 555. Buddhists and Buddhism in China. 3 Hours. NW AE42 / H.
A reading and media-rich survey of institutional, ritual, literary, educational, and exegetical practices that have shaped the lives of Buddhists in China, past and present. Alterities within the Buddhist tradition, and interactions with other religious options, are considered. (Same as REL 555.) LEC.

EALC 561. Colonial Korea. 3 Hours. H.
This course examines the history, society, and culture of Korea from the end of the Choson dynasty through the colonial period (1920-1945) in its East Asian and global context. The course uses a multi-disciplinary approach, including history, anthropology, literature, and film. Prerequisite: An introductory East Asian studies course, such as ECIV 104 or ECIV 304, or EALC 105; or consent of instructor. There are additional readings and more extensive writing assignments than in EALC 361. Not open to students with credit in EALC 361. LEC.

EALC 562. Post-Colonial Korea. 3 Hours. H.
This course examines the history, society, and culture of South Korea from the time of its liberation from Japan in 1945 to the present in its East Asian and global context. The course uses a multi-disciplinary approach, including history, anthropology, literature, and film. Prerequisite: EALC 361 or EALC 561, or permission of the instructor. There are additional readings and more extensive writing assignments than in EALC 362. Not open to students with credit in EALC 362. LEC.

EALC 563. Cultural History of Korea. 3 Hours. H.
This course examines the cultural history of Korea in periods prior to the 19th Century. Special attention is given to varying constructions of cultural value, heritage, and identity, together with the historically specific factors that engendered them. (Same as HIST 590.) LEC.

EALC 564. Modern Korean Culture and Society. 3 Hours. H.
This course examines the history, society, values, and political economy of Korea in its East Asian and global context. The course uses multi-disciplinary approaches, including those of history, anthropology, literature and film. Prerequisite: An introductory course in East Asian studies, or permission of instructor. LEC.

EALC 565. Popular Images in Japanese Culture, Literatures, and Films. 3 Hours. NW / S/W.
The course examines recurring themes and images in Japanese culture through films, literary works, and anthropological and other social science literature. These themes and images are studied in the contexts of both modern and traditional cultures. Although the popular deviates from the orthodox, nevertheless, the energy and pervasiveness of these offspring may conform cultural values. As a result of exploration of both highways and backroads of cultural expression, a holistic picture of the Japanese ethos will emerge. (Same as ANTH 565.) LEC.

EALC 567. Japanese Ghosts and Demons. 3 Hours. NW / S/W.
An investigation of deeply rooted Japanese beliefs about intimate relationships among humans, animals, and nature - beliefs which help to explain the mysterious and to lend order to the world. Anthropological, literary, and more extensive writing assignments than in EALC 362. Not open to students with credit in EALC 362. LEC.

EALC 570. The Structure of Japanese. 3 Hours. H.
A detailed study of the phonological and grammatical structure of Japanese and the use of the language in social/cultural contexts. Primarily
for students who want a linguistic knowledge of the language rather than a practical command of it. (Same as LING 570.) LEC.

EALC 572. The Structure of Chinese. 3 Hours. AE42 / H.
A detailed study of the phonological and grammatical structure of Chinese and the interactions between language and culture. Depending on student interests, a unit on the pedagogy of teaching Chinese as a foreign language may also be included. Primarily for students who want a linguistic knowledge of the language rather than a practical command of it. (Same as LING 572.) LEC.

EALC 575. Love, Sexuality and Gender in Japanese Literature. 3 Hours. H.
An examination of Japanese attitudes toward love, sexuality, and gender differences as revealed in literature from the tenth century to the present. Discussion format. LEC.

EALC 578. Gender and Society in Modern China. 3 Hours. H.
This course examines gender politics and social institutions in modern China by examining important literary works and films from the Republican era (1911-1949), the Maoist era (1949-1976), and the post-Mao era (1976-present). Secondary readings are also supplied. All the readings are in English. No knowledge of Chinese is required. Prerequisite: An introductory East Asian studies course such as ECIV 104. ECIV 304, or EALC 105; or consent of the instructor. LEC.

EALC 580. Popular Cultures of East Asia. 3 Hours. NW / H.
This course examines the contemporary popular cultures of Korea, Japan, China, and Taiwan, with particular emphasis on relations between East Asia and North America. Students study the issue of globalization and how the transnational flow of commodities and culture affects local societies and individual identities. They learn to identify, describe, and analyze the cross-cultural content of popular cultural artifacts and modes of expression relating to East Asia. To this end, they explore in detail such subjects as: fashion, foodways, cinema, manga, soap operas, and punk rock. More extensive writing requirements than 380. Not open to students who have taken EALC 380. LEC.

EALC 583. Imperial China. 3 Hours. NW / H/W.
An intensive survey of China's traditional civilization and its history, with emphasis on the last centuries of imperial rule under the Sung, Yuan, Ming, and Ch'ing dynasties (to 1850). (Same as HIST 583.) LEC.

EALC 584. Modern China. 3 Hours. NW AE42 / H/W.
An intensive survey of China's history from the early 19th century to the present. Key topics include the decline of the traditional system, the rise of communism, the Maoist era, and the tensions of change and control in the 1980s and 1990s. (Same as HIST 584.) LEC.

EALC 585. Reform in Contemporary China. 3 Hours. NW AE42 / H/W.
Examines the epochal changes that have occurred in China from Deng Xiaoping's rise to power in 1978 to the present. Includes a focus on the historical background of the revolutionary period before examining the political and economic changes that spawned the 1989 "prodemocracy" movement at Tiananmen. The course includes an analysis of the events of the 1990s focusing on U.S.-China political and economic relations and the destabilizing effects of inflation, infrastructural reform, political and economic decentralization, and leadership succession. A previous course on China is helpful, but not mandatory. (Same as POLS 668.) LEC.

EALC 587. Early Modern Japan. 3 Hours. NW AE42 / H/W.
Early modern Japan (16th to 19th century) examines the history, culture, and patterns of life during an era of rigid social control but artistic brilliance. After an historical overview of the period, students will explore topics including the social structure, travel, religion, thought, and the formation of traditional cultural forms such as Kabuki theater. (Same as HIST 587.) LEC.

EALC 588. Japan, 1853-1945. 3 Hours. NW / H/W.
This course provides an intensive survey of Japanese history from the arrival of Commodore Perry through the Pacific War. Social, economic, and political themes will be emphasized. Among the topics covered will be the Meiji Restoration, industrialization, Japanese imperialism, Taisho democracy, and wartime mobilization. (Same as HIST 588.) LEC.

EALC 589. Japan Since 1945. 3 Hours. NW / H/W.
This course provides an overview of Japanese history from the end of World War II to the present day. Among the topics covered will be the Allied Occupation, postwar politics and social change, the economic "miracle," popular culture, women and the family, crime and punishment, the educational system, and Japan's place in the world. (Same as HIST 589.) LEC.

EALC 590. Topics in East Asian Languages and Cultures: ____. 1-9 Hours. NW / H/W.
Specific topical courses will be offered every year covering a number of disciplines. Credit, description, and prerequisites will vary. Note: May be repeated for credit up to the stated limit. LEC.

EALC 591. Topics in East Asian Languages and Cultures: ____. 1-9 Hours. S/W.
Specific topical courses will be offered every year covering a number of disciplines. Credit, descriptions, and prerequisites will vary. Note: May be repeated for credit up to the stated limit. LEC.

EALC 593. Modern Korea. 3 Hours. NW / H/W.
This course will examine selected topics in Modern Korean history in the 19th and 20th centuries, with special emphasis on Korea's connections to China and Japan. (Same as HIST 593.) Prerequisite: A college-level course in East Asian history or culture, or consent of instructor. LEC.

EALC 594. Law and Society in Traditional China. 3 Hours. H/W.
The course begins with a series of lectures on the main principles underlying Chinese social structure. The course then examines the application of those principles in legal cases. Students read legal cases in translation and argue them in class. (Same as HIST 594.) Prerequisite: A course in Chinese history. LEC.

EALC 596. Defining Japan: Marginalized Groups and the Construction of National Identity. 3 Hours. NW / H/W.
This course investigates the construction of national identity in modern Japan by examining the historical experiences of groups marginalized by mainstream society. We will explore the pressures of conformity, the pervasiveness of social ostracism and the surprising diversity in Japanese society. Among the groups discussed will be indigenous peoples (the Ainu, Okinawans), the Korean minority, the outcast class (burakumin), the sick and disabled, the Yakuza, and political activists. (Same as HIST 596.) LEC.

EALC 597. Japanese Theater History. 3 Hours. NW / H/W.
This course examines the historical development and characteristics of Japanese theater, with special attention to traditional theater and the genres of noh, kyogen, and kabuki in particular, tracing their origins in the pre-modern era and their continued performance today. To gain an understanding of the historical and artistic setting of these arts, lectures and readings will consider broader issues such as performance and ritual in religion and daily life, gender and representation, and folk theater. A portion of this class will include practical studies of theatrical forms including noh dance and kabuki music (shamisen). (Same as HIST 597.) LEC.
EALC 598. History and Structure of the Japanese Language. 3 Hours. H/W.
The historical development of Japanese. Study of Japanese phonology, morphology and syntax, using the techniques of descriptive linguistics and generative grammar. Prerequisite: An introductory course in linguistics or one year of Japanese. LEC.

EALC 600. Biography of a City: _____, 3 Hours. H/W.
This interdisciplinary, team-taught course surveys the artistic, intellectual, and historical development of some of the great cities of the world, such as Kyoto or Tokyo. LEC.

EALC 612. Visual and Literary Culture in Modern Japan. 3 Hours. H.
This course examines the interconnections between the evolution of modern Japanese literature and vision technologies such as painting, panoramas, magic lanterns, stereoscopes, photography, motion pictures, television, and computers. The course provides an overview of modern Japanese literature from the perspectives of the visual culture in which that literature was conceived. The course considers such authors as Higuchi, Soseki, Ogai, Shimazaki, Akutagawa, Tanizaki, Yokomitsu, Kawabata, and Abe. There will be additional assignments for students in 612. Not open to students who have completed EALC 412. LEC.

EALC 615. Ancient China. 3 Hours. NW / H/W.
A survey of ancient Chinese culture to the Qin period. Major archaeological discoveries and the literary tradition will be taken as the primary evidence through which a number of topics are introduced. Prerequisite: One year of Japanese. LEC.

EALC 618. Sexual Politics in Chinese Literature and Culture: Premodern Times. 3 Hours. NW / H.
This course uses myth, literature, history, biography, and other documents to discuss sexual politics in China from ca 1500 B.C.E. to the end of the last dynasty in 1911. Topics include: empresses, emperors, and consorts, polygamy, prostitution, love, yin and yang cosmology, the art of the bedchamber, women's literature, and erotic literature. Prerequisite: A course in East Asian studies. Not open to students who have completed EALC 418. This course is taught at the 400 and 600 levels, with additional assignments at the 600 level. Not open to students who have completed EALC 415. LEC.

EALC 620. Daily Life in China from the Opium War to the Present. 3 Hours. NW / H/W.
Daily life and issues of social and cultural interaction between China and Western nations from the Opium War to the present. Fiction, travel diary, historical sources, film, and personal accounts will make up course materials. LEC.

EALC 636. Women in Japanese Literature. 3 Hours. H/W.
An examination of women as subjects, readers, and writers of Japanese literature. Topics may include images and stereotypes of women in Japanese literature; feminist readings of this literature; female culture; and the psychodynamics of female creativity. LEC.

EALC 642. Chinese Thought. 3 Hours. NW AE42/GE3H / H/W.
A survey of the principal modes of Chinese thought from their origins through the imperial period. Not open to students with credit in EALC 132. (Same as HWC 524 and PHIL 506.) Prerequisite: Eastern civilizations course or a course in Asian history or a distribution course in philosophy. LEC.

EALC 646. Chinese Law. 3 Hours. H/W.
The history and development of civil and criminal law in China from its beginnings until the present. The course will be taught both by lectures and by discussion of cases. A section of the course will concern modern Chinese law. Prerequisite: A course on China, or general background in law or business. LEC.

EALC 649. Doing Business With China: Law and Policy. 3 Hours. NW / H/W.
A study of the issues involved in doing business with China. The current Chinese political and economic context will be examined, followed by a study of the Chinese legal system and Chinese economic law and regulation. Relevant U.S. law will also be considered. Prerequisite: A course on China, or general background in law or business. LEC.

EALC 655. Government and Politics of East Asia. 3 Hours. NW AE42 / S/W.
A comparative examination of the contemporary political institutions, processes and ideas of China, Japan, and Korea. (Same as POLS 656.) Prerequisite: A distribution course in political science or a course in East Asian studies. LEC.

EALC 666. Political Economy of East Asia. 3 Hours. S.
This course provides basic understanding of fiscal, monetarist, and trade policies; how governments in East Asia use them to pursue growth; the extent to which these governments follow or controvert economics to pursue growth; and how the performances of economies in East Asia relate to the US and global economies. (Same as POLS 666.) Prerequisite: POLS 170 or a course in East Asian studies. LEC.

EALC 676. International Relations of Asia. 3 Hours. S/W.
An intensive study of the problems of ideological conflict, diplomatic relations, strategic arrangements, economic cooperation, and cultural exchange in East and Southeast Asia with special emphasis upon the roles of major world powers. (Same as POLS 676.) Prerequisite: POLS 170 or a course in East Asian Studies. LEC.

EALC 678. Chinese Foreign Policy. 3 Hours. S/W.
In-depth examination of China's changing policies toward other countries with special emphasis on policy-making process, negotiating behavior, military strategy, economic relations, and cultural diplomacy. (Same as POLS 678.) LEC.

EALC 700. Introduction to East Asian Studies. 1 Hour.
Required of all M.A. students in the Department regardless of concentration. Introduction to resources in East Asian languages and literature. LEC.

EALC 701. Practicum in Teaching Chinese. 1 Hour.
This course is required every semester for graduate teaching assistants in the Chinese language program in EALC. The course will cover applicable second language acquisition theories and principles of foreign language pedagogy and focus on teaching methodologies, instructional techniques, and development of pedagogical materials specific to the Chinese classroom. This class will be conducted in a seminar format. Prerequisite: Teaching appointment in the East Asian Languages and Cultures department. SEM.

EALC 702. Practicum in Teaching Japanese. 1 Hour.
This course is required every semester for graduate teaching assistants in the Japanese language program in East Asian Languages and Cultures. The course will cover applicable second language acquisition theories and principles of foreign language pedagogy and focus on teaching methodologies, instructional techniques, and development of pedagogical materials specific to the Japanese language classroom. This class will be conducted in a seminar format. Prerequisite: Teaching appointment in the East Asian Languages and Cultures department. SEM.

EALC 703. Practicum in Teaching Korean. 1 Hour.
This course is required every semester for graduate teaching assistants in the Korean language program in East Asian Languages and Cultures.
The course will cover applicable second language acquisition theories and principles of foreign language pedagogy and focus on teaching methodologies, instructional techniques, and development of pedagogical materials specific to the Korean language classroom. This class will be conducted in a seminar format. Prerequisite: Teaching appointment in the East Asian Languages and Cultures department. SEM.

EALC 712. Readings in Traditional Japanese Literature. 3 Hours.
A survey of Japanese literature from earliest times to 1868. Students will study the major writers in each genre, with special emphasis on an individual research topic. A knowledge of Japanese is not required. (Not open to students with credit in EALC 312.) LEC.

EALC 714. Readings in Traditional Chinese Literature. 3 Hours.
A general survey of representative literary works of major genres in traditional China. Lectures, assigned readings, and discussions in English. A knowledge of Chinese is not required. (Not open to students with credit in EALC 314.) LEC.

EALC 715. Survey of Japanese Film. 3 Hours.
This course surveys the major developments in patterns of distribution, exhibition, and reception and their influence on film aesthetics in twentieth century Japanese film. Through secondary readings, lectures, and discussions students will examine how Japanese cinema as an institution responds to and intervenes in the social, cultural, and political history of twentieth century Japan. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. (Same as FMS 715.) LEC.

A survey of major literary works of Japan's modern era through the Pacific War. Topics include the social and spiritual challenges of modernization, urbanization, and the issues of race and national identity. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. An individual research project in an area of the student's special interest will be required. Not open to students who have completed EALC 316. LEC.

EALC 717. Contemporary Japanese Literature in Translation: 1945-Present. 3 Hours.
A survey of major literary works of Japan's post-war and contemporary eras. Topics include life during and after the war, the experience of the atomic bomb, and the postmodern landscape. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. An individual research project in an area of the student's special interest will be required. Not open to students who have completed EALC 317. LEC.

EALC 718. Readings in Modern Chinese Literature. 2-3 Hours.
A general survey of the important writers of the 20th century and their works. Lectures, readings, and discussions in English. A knowledge of Chinese is not required. (Not open to students with credit in EALC 318.) LEC.

EALC 732. Seminar in Eastern Religious Thought: _____ 3 Hours.
Analysis of the religious thought of selected thinkers of India, China, and/or Japan, traditional and modern. May be taken more than once if subject matter varies sufficiently. (Same as REL 762.) Prerequisite: REL 507, REL 508, REL 509, or permission of the instructor. LEC.

EALC 733. Seminar in Eastern Religious Texts: _____ 3 Hours.
Analysis of a selected religious text or texts from India, China, or Japan, in translation. May be taken more than once if subject matter varies sufficiently. (Same as REL 733.) Prerequisite: REL 507, REL 508, REL 509, or permission of the instructor. LEC.

EALC 743. Contemporary Japanese Film. 3 Hours.
Seminar on the major developments in the contemporary (1980-present) Japanese film industry examining how filmmaking practices and film criticism have been influenced by such issues as transnationalism, postcolonialism, critical race theory, postmodernism, and new media. We will survey recent industrial and stylistic trends as well as key critical debates. Class includes discussion, reports, and individual research papers. This course is offered at the 500 and 700 levels, with additional assignments at the 700 level. (Same as FMS 743.) SEM.

EALC 747. East Asian History and Culture for Teachers. 2 Hours.
An advanced survey of the history, culture, and contemporary affairs of China, Japan and Korea, specifically designed for K-12 educators who wish to incorporate East Asian topics into their classroom teaching. Pedagogical methods and resources for the study of East Asia will be emphasized. Topics covered will address relevant benchmarks in the state curricular standards in social studies, themes from the Advanced Placement world history examination, and the national standards in world history. (Same as HIST 747.) Prerequisite: Approval of the instructor. LEC.

EALC 762. Readings in Japanese Religion. 3 Hours.
A high-level introduction to the traditional religions of Japan, with special emphasis on Japanese Buddhism. Texts to be used will include translations of original documents as well as secondary studies. Those students who have competence in Japanese will be required to do some readings in that language, but a knowledge of the language is not a prerequisite. LEC.

EALC 764. Modern Korean Culture and Society. 3 Hours.
An examination of the history, society, values, and political economy of Korea in its East Asian and global context. The course will use a multi-disciplinary approach, including history, ethnography, fiction and film. LEC.

EALC 766. Japanese People: Their Culture and Literature. 3 Hours.
A study of Japanese people's life cycle through a combination of theoretical social scientific observations of Japanese as a cultural group and personal literary descriptions of them. An individual research paper is required. (Not open to students with credit in EALC 366.) LEC.

EALC 776. Seminar in Religion and Society in Asia: _____. 3 Hours.
Analysis of selected Asian religions and their relationships to selected Asian societies. May be taken more than once if subject matter varies sufficiently. (Same as REL 776.) Prerequisite: REL 507, REL 508, REL 509, or permission of the instructor. LEC.

EALC 790. Topics in East Asian Languages and Cultures: _____. 1-3 Hours.
Special topical courses covering a number of disciplines. Credit descriptions and prerequisites will vary. NOTE: May be repeated for up to 12 total credits. RSH.

EALC 801. Directed Readings. 1-5 Hours.
Designed to meet the needs of advanced students whose study in East Asian studies cannot be met with regular courses. Prerequisite: Consent of instructor. RSH.

EALC 841. Asian Film. 3 Hours.
Seminar on various national film cultures of East and Southeast Asia. Representative films are studied from formal, stylistic, and socio-historic perspectives. Addresses the impact of key cultural, economic and political issues on each film industry. Class includes discussion, reports, and individual research papers. This course is offered at the 500 and 800 levels, with additional assignments at the 800 level. (Same as FMS 841.) SEM.
EALC 888. Contemporary China Studies. 3 Hours.
This course will review and analyze the current literature on China's social and political development, including a wide range of topics within political science. There is a rich body of literature within each topic such as civil society in China, legal reform, political culture, nationalism, gender issues, ethnicity, political behavior, elections, economic development, and inequality. This course will introduce key literature within each topic focusing on the debates among China scholars as well as how these debates fit in the general field of political science. (Same as GIST 888 and POLS 888.) Prerequisite: POLS 668 or permission of the instructor. LEC.

EALC 899. Thesis. 1-6 Hours.
An inquiry into the source material upon a specific subject. THE.

ECIV 104. Eastern Civilizations. 3 Hours. HL/NW AE42 / H/W.
This course acquaints the student with the broad outlines of the traditional cultures and literatures of East Asia, and explores the interaction between these regions and cultures as well as their continuities and disparities. Course materials include translations and discussions of original sources. The course is most appropriate for students with no background in Asian culture. Does not complete major requirement. Not open to students with credit in ECIV 304. LEC.

ECIV 105. Eastern Civilizations Honors. 3 Hours. HL/NW AE42 / H/W.
An introductory course designed to acquaint the student with the broad outlines of the traditional cultures and literatures of East Asia. By reading translations of original source materials, the student is able to see the interaction among the various cultures as well as their essential continuity. The course is most appropriate for students without any background in Asian culture. Offered for students with superior academic records. Open only to students in the University Honors Program or by permission of instructor. LEC.

ECIV 177. First Year Seminar: ___. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Eastern Civilization. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

ECIV 304. Eastern Civilizations. 3 Hours. HL/NW AE42 / H/W.
This course acquaints the student with the broad outlines of the traditional cultures and literatures of East Asia, and explores the interaction between these regions and cultures as well as their continuities and disparities. Course materials include translations and discussions of original sources. The course is most appropriate for students with no background in Asian culture. Not open to students with credit in ECIV 104. If majoring in EALC and have completed ECIV 104, see major advisor about completing the ECIV 304 major requirement. LEC.

ECIV 305. Eastern Civilizations Honors. 3 Hours. HL/NW AE42 / H/W.
An introductory course designed to acquaint the student with the broad outlines of the traditional cultures and literatures of East Asia. By reading translations of original source materials, the student is able to see the interaction among the various cultures as well as their essential continuity. The course is most appropriate for students without any background in Asian culture. Similar to ECIV 304, but reading and writing assignments reflect the fact that this is an honors course. Open only to students in the University Honors Program or by permission of instructor. LEC.

JPN 100. Beginning Japanese I. 3 Hours. U.
An introduction to Japanese. Familiarity with the basic structural patterns of the language through conversation is stressed. The hiragana and katakana syllabaries are introduced and a few characters are learned. Usually offered as part of a Summer Study Abroad Program. LEC.

JPN 101. Beginning Japanese II. 3 Hours. U.
Continuation of JPN 100. Available to students who took JPN 100 as part of the Summer Study Abroad Program. Not available for credit for students who have previously completed JPN 104. Prerequisite: JPN 100 or equivalent. LEC.

JPN 104. Elementary Japanese I. 5 Hours. U.
Three hours of lecture, three hours of drill per week. Acquisition of basic language skills (listening, speaking, reading, writing). Not available for credit for students who have previously completed JPN 101. LEC.

JPN 108. Elementary Japanese II. 5 Hours. U.
Continuation of JPN 104. Prerequisite: JPN 101, JPN 104, or equivalent. LEC.

JPN 177. First Year Seminar: ___. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Japanese. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

JPN 204. Intermediate Japanese I. 5 Hours. U.
Three hours of lecture, three hours of drill. Prerequisite: JPN 108 or equivalent. LEC.

JPN 206. Intermediate Japanese Conversation. 2-4 Hours. U.
Enhancement of conversational ability at the intermediate level. Used primarily to accommodate transfer credits. Prerequisite: JPN 204 or equivalent. LEC.

JPN 208. Intermediate Japanese II. 5 Hours. U.
Continuation of JPN 204. Prerequisite: JPN 204. LEC.

JPN 226. Japanese in Context - Intermediate. 3 Hours. U.
Supervised and individualized study and practice of language skills through direct experience in interviews and guided practical applications in various public settings in Japan. Some conventional classroom instruction in grammar included. Offered only during the Summer Institute in Hiratsuka, Japan. Prerequisite: Two semesters or the equivalent of Japanese language study. LEC.

JPN 233. Special Skills in Japanese: ___. 1-4 Hours. U.
Instruction in special skills in Japanese, such as pronunciation, recognition of Chinese characters, comprehension of broadcast media, etc. at the freshman/sophomore level. Course work must be arranged through the office of KU Study Abroad and approved by the Department of East Asian Languages and Cultures. May be repeated for credit if content varies. LEC.

JPN 306. Advanced Japanese Conversation I. 2 Hours. H/W.
Intensive practice of communicative skills at the advanced level. Prerequisite: JPN 208 or equivalent. LEC.

JPN 310. Advanced Japanese Conversation II. 2 Hours. H/W.
Continuation of JPN 306. LEC.

JPN 326. Japanese in Context - Advanced. 3 Hours. U.
Supervised and individualized study and practice of language skills through direct experience in interviews and guided practical applications in various public settings in Japan. Some conventional classroom instruction in grammar and usage. Offered only during the Summer Institute in Hiratsuka, Japan. Prerequisite: Four semesters or the equivalent of Japanese language study. LEC.

JPN 333. Special Skills in Japanese: ___. 1-4 Hours. U.
Instruction in special skills in Japanese, such as pronunciation, recognition of Chinese characters, comprehension of broadcast media, etc. at the junior/senior level. Course work must be arranged through the
office of KU Study Abroad and approved by the Department of East Asian Languages and Cultures. May be repeated for credit if content varies. LEC.

**JPN 386. Advanced Japanese Conversation III. 1-3 Hours. U.**
Instruction in discussion in formal contexts and speech making. Prerequisite: JPN 504 or equivalent. LEC.

**JPN 498. Directed Readings in Japanese. 1-4 Hours. H/W.**
Readings in Japanese on a subject selected by a student with the advice and direction of the instructor. Individual meetings and reports. Prerequisite: Consent of instructor. IND.

**JPN 504. Advanced Modern Japanese I. 3 Hours. H/W.**
Readings in selected modern Japanese texts on various topics: history, education, language, society, business, and literature. Meets three hours per week. Prerequisite: JPN 208 or equivalent. LEC.

**JPN 508. Advanced Modern Japanese II. 3 Hours. H/W.**
Continuation of JPN 504. Prerequisite: JPN 504 or equivalent. LEC.

**JPN 509. Business Japanese. 3 Hours. U.**
Study of Japanese language especially appropriate to business situations. Although the course emphasizes developing conversational ability, the primary focus is on strengthening reading and writing in the specialized area. The course includes discussion of non-verbal aspects of Japanese business practices as well. Prerequisite: The first semester of third-year Japanese or the equivalent. LEC.

**JPN 542. Introduction to Classical Japanese I. 3 Hours. H/W.**
Introductory grammar and readings in classical Japanese texts. Prerequisite: JPN 508. LEC.

**JPN 544. Introduction to Classical Japanese II. 3 Hours. H.**
Continued readings of classical Japanese texts, on the intermediate and advanced level. Introduction to the elements of kambun (Sino-Japanese) and sorobun (epistolary) styles. Prerequisite: JPN 542 or equivalent. LEC.

**JPN 562. Modern Japanese Texts I. 3 Hours. AE61 / H/W.**
Readings and interpretation of modern Japanese texts from various fields. Continued study of the language in the form of oral discussion and written reports. Prerequisite: JPN 508. LEC.

**JPN 564. Modern Japanese Texts II. 3 Hours. H/W.**
A continuation of JPN 562. Prerequisite: JPN 562 or equivalent. LEC.

**JPN 569. Advanced Business Japanese. 3 Hours. U.**
This course strengthens reading and writing skills and continues developing conversational ability. It assumes a higher level of competency in Japanese than JPN 509 and includes both verbal and non-verbal aspects of Japanese business practices. Prerequisite: Completion of third-year Japanese or the equivalent. LEC.

**JPN 598. Readings in: _____. 1-3 Hours. H/W.**
Students will read selections from materials on a given topic or topics. May be repeated for credit. Prerequisite: JPN 564 or permission of instructor. IND.

**JPN 690. Seminar in: _____. 1-3 Hours. H/W.**
Varying topics with varying prerequisites. LEC.

**JPN 801. Directed Readings and Research in Japanese. 1-4 Hours.**
Advanced language training for the study of Japanese sources in the humanities or social science field of the student. Prerequisite: JPN 564 or consent of instructor. RSH.

**JPN 880. Advanced Japanese Research Materials. 2 Hours.**
A detailed examination of various Japanese language reference works and research materials. Emphasis will be placed on the use of different types of reference works to carry out research strategies. Prerequisite: JPN 508 or equivalent and JPN 580. LEC.

**KOR 104. Elementary Korean I. 5 Hours. U.**
Five hours of class and two hours of drill in the spoken language each week. Grammar and readings in selected texts. LEC.

**KOR 108. Elementary Korean II. 5 Hours. U.**
Continuation of KOR 104. Prerequisite: KOR 104. LEC.

**KOR 177. First Year Seminar: _____. 3 Hours. GE11 / U.**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Korean. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

**KOR 204. Intermediate Korean I. 5 Hours. U.**
Five hours of class and two hours of spoken drill. Readings in selected texts in modern Korean. Prerequisite: KOR 108 or equivalent. LEC.

**KOR 208. Intermediate Korean II. 5 Hours. U.**
Continuation of KOR 204. Prerequisite: KOR 204. LEC.

**KOR 498. Directed Readings in Korean. 1-4 Hours. H/W.**
Readings in Korean on a subject selected by a student with the advice and direction of the instructor. Individual meetings and reports. Prerequisite: Consent of instructor. IND.

**KOR 504. Advanced Modern Korean I. 4 Hours. H/W.**
Readings in and discussion of selected modern Korean texts on various topics: history, literature, society, and language. Prerequisite: KOR 208 or equivalent. LEC.

**KOR 508. Advanced Modern Korean II. 4 Hours. H/W.**
Readings and analysis of modern or contemporary texts from various fields. Includes oral discussion and written essays. Prerequisite: KOR 504 or equivalent. LEC.

**KOR 562. Modern Korean Texts I. 1-5 Hours. H.**
Readings and analysis of modern or contemporary texts from various fields. Includes oral discussion and written essays. Prerequisite: KOR 508 or equivalent. LEC.

**KOR 564. Modern Korean Texts II. 1-5 Hours. H.**
Continuation of KOR 562. Reading and analysis of modern or contemporary texts from various fields. Includes oral discussion and written essays. Prerequisite: KOR 562 or equivalent. LEC.

**MONG 101. Elementary Mongolian I. 3 Hours. U.**
The first semester of Elementary Mongolian is designed to give the student basic communicative competency, including pronunciation and intonation, structure, and syntax. Effective oral and written communication is stressed. LEC.

**MONG 102. Elementary Mongolian II. 3 Hours. U.**
A continuation of Elementary Mongolian I. Prerequisite: Elementary Mongolian I or the equivalent. LEC.

**MONG 177. First Year Seminar: _____. 3 Hours. GE11 / U.**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Mongolian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

**TIB 101. Elementary Tibetan I. 3 Hours. U.**
An introduction to the Tibetan language in both its literary and colloquial forms according to the Central Tibetan dialects. Four semesters of 3-credit Tibetan language courses fulfill the College of Liberal Arts and Sciences foreign language requirement. LEC.
that all new first-year students must meet to be admitted. Consult the
students should be aware that KU has qualified admission requirements
ACT or SAT scores to the Office of Admissions. Prospective first-year
students with at least 24 hours of credit, prospective students must send
transcripts to the Office of Admissions. Unless they are college transfer
All students applying for admission must send high school and college

Bachelor of Arts in East Asian Languages and Cultures

Why study East Asian languages and cultures?

Because knowledge of East Asia is critical in the new global culture and marketplace.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the

Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Major and Concentrations

For undergraduates in the department, the B.A. degree in East Asian languages and cultures is available in the following concentrations:

1. Chinese language and literature.
2. Japanese language and literature.
3. East Asian studies with Chinese language.
4. East Asian studies with Japanese language.
5. East Asian studies with Korean language.
6. Double language Concentration: Chinese and/or Japanese and/or Korean.

First- and Second-Year Preparation

Students considering a major in EALC should begin language training as soon as possible, starting with CHIN 104/JPN 104/KOR 104-CHIN 108/JPN 108/KOR 108 in the first year and advancing to the intermediate 204-208 level. Students are encouraged to take ECIV 304/ECIV 305 as soon as possible. Talk to the undergraduate advisor in the target language to plan a 4-year course of study. Call 785-864-3100 for information about advisors to contact.

Requirements for the B.A. Major

Chinese Language and Literature Concentration

East Asian Languages and Cultures Prerequisite Knowledge (20)

Elementary Chinese I. Satisfied by:

CHIN 104 Elementary Chinese I 5

Elementary Chinese II. Satisfied by:

CHIN 108 Elementary Chinese II 5

Language Proficiency. Satisfied by:

CHIN 204 Intermediate Chinese I & CHIN 208 and Intermediate Chinese II 10

East Asian Languages and Cultures Core Knowledge and Skill (22)

 Majors choosing this concentration must complete a course or courses in each of the following areas:

Eastern Civilizations. Satisfied by:

ECIV 304 Eastern Civilizations 3

or ECIV 305 Eastern Civilizations Honors
Advanced Language. Satisfied by:
- CHIN 504 Advanced Modern Chinese I 10
- & CHIN 508 and Advanced Modern Chinese II
- CHIN 342 Introduction to Classical Chinese 3
- or CHIN 542 Introduction to Classical Chinese
- CHIN 562 Modern Chinese Texts I 3

And one of the following:
- CHIN 544 Readings in Classical Chinese: _____ 3
- CHIN 564 Modern Chinese Texts II
- EALC/LING 572 The Structure of Chinese

East Asian Languages and Cultures Required Elective (0)
Majors choosing this concentration must complete a course in each of the following areas (a course cannot be used in more than 1 area):
- Chinese Literature or Culture in Translation. Satisfied by one course, e.g.:
  - EALC 314 Traditional Chinese Literature in Translation
  - EALC 318 Modern Chinese Fiction and Film
  - or EALC 518 Modern Chinese Fiction & Film
  - EALC 319 Contemporary Chinese Fiction and Film
  - or EALC 519 Contemporary Chinese Fiction and Film
  - EALC 330/530 Chinese Literature and Culture: Premodern Times
  - EALC 370 Chinese Folk Belief
  - EALC 418/618 Sexual Politics in Chinese Literature and Culture: Premodern Times
  - EALC 499 Honors Thesis
  - EALC 578 Gender and Society in Modern China

Pre-modern China. Satisfied by one course, e.g.:
- EALC 330/530 Chinese Literature and Culture: Premodern Times
  - EALC 415/615 Ancient China
  - EALC 418/618 Sexual Politics in Chinese Literature and Culture: Premodern Times
  - EALC 508 Religion in China
  - EALC 555 Buddhists and Buddhism in China
  - EALC 583 Imperial China
  - EALC 642 Chinese Thought
  - EALC 499 Honors Thesis

Modern China. Satisfied by one course, e.g.:
- EALC 318 Modern Chinese Fiction and Film
  - or EALC 518 Modern Chinese Fiction & Film
  - EALC 319 Contemporary Chinese Fiction and Film
  - or EALC 519 Contemporary Chinese Fiction and Film
  - EALC 368 The Peoples of China
  - EALC 420/620 Daily Life in China From the Opium War to the Present
  - EALC 578 Gender and Society in Modern China
  - EALC 584 Modern China
  - EALC 585 Reform in Contemporary China
  - EALC 649 Doing Business With China: Law and Policy
  - EALC 678 Chinese Foreign Policy
  - EALC 499 Honors Thesis

Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 31 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 12 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 31 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Japanese Language and Literature Concentration

East Asian Languages and Cultures Prerequisite Knowledge (20)
- Elementary Japanese I. Satisfied by:
  - JPN 104 Elementary Japanese I 5

Elementary Japanese II. Satisfied by:
- JPN 108 Elementary Japanese II 5

Language Proficiency. Satisfied by:
- JPN 204 Intermediate Japanese I 10
  - & JPN 208 Intermediate Japanese II

East Asian Languages and Cultures Core Knowledge and Skills (19)
Majors choosing this concentration must complete a course or courses in each of the following areas:
- Eastern Civilizations. Satisfied by one of the following:
  - ECIV 304 Eastern Civilizations 3
  - or ECIV 305 Eastern Civilizations Honors

Advanced Language. Satisfied by:
- JPN 306 Advanced Japanese Conversation I 4
  - & JPN 310 and Advanced Japanese Conversation II
- JPN 504 Advanced Modern Japanese I 6
  - & JPN 508 and Advanced Modern Japanese II
- JPN 562 Modern Japanese Texts I 3

And one of the following:
- JPN 564 Modern Japanese Texts II
- JPN 569 Advanced Business Japanese
- EALC/LING 570 The Structure of Japanese

East Asian Languages and Cultures Required Elective (0)
Majors choosing this concentration must complete a course in each of the following areas (a course cannot be used in more than 1 area):
- Japanese Literature in Translation. Satisfied by one course, e.g.:
  - EALC 312 Traditional Japanese Literature in Translation
  - EALC 575 Love, Sexuality and Gender in Japanese Literature

Modern Japanese Literature in Translation. Satisfied by one course, e.g.
Bachelor of Arts in East Asian Languages and Cultures

EALC 316  Modern Japanese Literature in Translation: 1868-1945
EALC 317  Contemporary Japanese Literature in Translation: 1945-Present
EALC 328  The Body in Japan
EALC 412  Visual and Literary Culture in Modern Japan

Pre-Modern Japan. Satisfied by one course on pre-modern Japan, e.g.:
EALC 312  Traditional Japanese Literature in Translation
EALC 410  The Culture of Play in Japan
EALC 411  The Culture of Play in Japan, Honors
EALC 509  Religion in Japan
EALC 587  Early Modern Japan
EALC 499  Honors Thesis

Modern Japan. Satisfied by one course on modern Japan, e.g.:
EALC 316  Modern Japanese Literature in Translation: 1868-1945
EALC 317  Contemporary Japanese Literature in Translation: 1945-Present
EALC 328  The Body in Japan
EALC 543  Contemporary Japanese Film
EALC 588  Japan, 1853-1945
EALC 589  Japan Since 1945
EALC 499  Honors Thesis

Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 31 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 12 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 31 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

East Asian Studies with Chinese Language Concentration

East Asian Languages and Cultures Prerequisite Knowledge (20)
Elementary Chinese I. Satisfied by:
CHIN 104  Elementary Chinese I 5
Elementary Chinese II. Satisfied by:
CHIN 108  Elementary Chinese II 5
Language Proficiency. Satisfied by:
CHIN 204  Intermediate Chinese I 10
& CHIN 208  and Intermediate Chinese II

East Asian Languages and Cultures Core Knowledge and Skills (13)

 Majors choosing this concentration must complete a course or courses in each of the following areas:

Pre-Modern China. Satisfied by one course on pre-modern China, e.g.:
EALC 314  Traditional Chinese Literature in Translation
or EALC 514  Traditional Chinese Literature & Film
EALC 330  Chinese Literature and Culture: Premodern Times
EALC 318  Modern Chinese Fiction and Film
or EALC 518  Modern Chinese Fiction & Film
EALC 415  Ancient China
EALC 418  Sexual Politics in Chinese Literature and Culture: Premodern Times
EALC 583  Imperial China

Modern China. Satisfied by one course on modern China, e.g.:
EALC 318  Modern Chinese Fiction and Film
or EALC 518  Modern Chinese Fiction & Film
EALC 330  Chinese Literature and Culture: Premodern Times
EALC 578  Gender and Society in Modern China
EALC 420  Daily Life in China From the Opium War to the Present
EALC 584  Modern China
EALC 585  Reform in Contemporary China

China in the Humanities. Satisfied by one course on China in a humanities discipline, e.g.:
EALC 301  Cultural Traditions of China, Inner Asia, and Tibet
EALC 310  The Chinese Novel
EALC 314  Traditional Chinese Literature in Translation
EALC 317  Contemporary Japanese Literature in Translation: 1945-Present
EALC 318  Modern Chinese Fiction and Film
or EALC 518  Modern Chinese Fiction & Film
EALC 330  Chinese Literature and Culture: Premodern Times
EALC 370  Chinese Folk Belief
EALC 415  Ancient China
EALC 418  Sexual Politics in Chinese Literature and Culture: Premodern Times
EALC 508  Religion in China
EALC 530  Chinese Literature and Culture: Premodern Times
EALC 555  Buddhists and Buddhism in China
EALC 578  Gender and Society in Modern China
EALC 583  Imperial China
EALC 584  Modern China

China in the Social Sciences. Satisfied by one course on China in a social science discipline, e.g.:
EALC 368  The Peoples of China
EALC 572  The Structure of Chinese
EALC 585  Reform in Contemporary China
Advanced East Asian Languages and Cultures. Satisfied by one junior/senior-level (300+) EALC course.

East Asian Course. Satisfied by one course based on an East Asian country other than China, e.g.:

EALC 302 Cultural Traditions of Japan and Korea

### Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

#### Major Hours

Satisfied by 31 hours of major courses.

#### Major Hours in Residence

Satisfied by a minimum of 12 hours of KU resident credit in the major.

#### Major Junior/Senior Hours

Satisfied by a minimum of 31 hours from junior/senior courses (300+) in the major.

#### Major Junior/Senior Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

### East Asian Studies with Japanese Language Concentration

**East Asian Languages and Cultures Prerequisite Knowledge (20)**

Elementary Japanese I. Satisfied by:

JPN 104 Elementary Japanese I 5

Elementary Japanese II. Satisfied by:

JPN 108 Elementary Japanese II 5

Language Proficiency. Satisfied by:

JPN 204 Intermediate Japanese I 10 & JPN 208 Intermediate Japanese II

**East Asian Languages and Cultures Core Knowledge and Skill (13)**

Majors choosing this concentration must complete a course or courses in each of the following areas:

- **Eastern Civilizations.** Satisfied by one of the following:
  - ECIV 304 Eastern Civilizations 3
  - or ECIV 305 Eastern Civilizations Honors

- **Advanced Language.** Satisfied by:
  - JPN 306 Advanced Japanese Conversation I 4 & JPN 310 Advanced Japanese Conversation II
  - JPN 504 Advanced Modern Japanese I 6 & JPN 508 Advanced Modern Japanese II

**East Asian Languages and Cultures Required Elective (6)**

Majors choosing this concentration must complete a course in each of the following areas (a course cannot be used in more than one area):

- **Pre-modern Japan.** Satisfied by one course on pre-modern Japan, e.g.:
  - EALC 312 Traditional Japanese Literature in Translation
  - EALC 410 The Culture of Play in Japan
  - EALC 411 The Culture of Play in Japan, Honors

- **Modern Japan.** Satisfied by one course on modern Japan, e.g.:
  - EALC 316 Modern Japanese Literature in Translation: 1868-1945
  - EALC 317 Contemporary Japanese Literature in Translation: 1945-Present
  - EALC 328 The Body in Japan
  - EALC 543 Contemporary Japanese Film
  - EALC 588 Japan, 1853-1945
  - EALC 589 Japan Since 1945

- **Japan in the Humanities.** Satisfied by one course on Japan in a humanities discipline, e.g.:
  - EALC 312 Traditional Japanese Literature in Translation
  - EALC 315 Survey of Japanese Film
  - EALC 316 Modern Japanese Literature in Translation: 1868-1945
  - EALC 317 Contemporary Japanese Literature in Translation: 1945-Present
  - EALC 328 The Body in Japan
  - EALC 410 The Culture of Play in Japan
  - EALC 411 The Culture of Play in Japan, Honors
  - EALC 412 Visual and Literary Culture in Modern Japan
  - EALC 509 Religion in Japan
  - EALC 543 Contemporary Japanese Film
  - EALC 575 Love, Sexuality and Gender in Japanese Literature
  - EALC 587 Early Modern Japan
  - EALC 588 Japan, 1853-1945
  - EALC 589 Japan Since 1945

- **Japan in the Social Sciences.** Satisfied by one course on Japan in a social science discipline, e.g.:
  - EALC 350 Contemporary Japan
  - EALC 328 The Body in Japan
  - EALC 570 The Structure of Japanese

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

#### Major Hours

Satisfied by 31 hours of major courses.

#### Major Hours in Residence

Satisfied by a minimum of 12 hours of KU resident credit in the major.

#### Major Junior/Senior Hours

Satisfied by a minimum of 31 hours from junior/senior courses (300+) in the major.

#### Major Junior/Senior Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).
East Asian Studies with Korean Language Concentration

East Asian Languages and Cultures Prerequisite Knowledge (20)
- Elementary Korean I. Satisfied by:
  - KOR 104: Elementary Korean I (5)
- Elementary Korean II. Satisfied by:
  - KOR 108: Elementary Korean II (5)
- Language Proficiency. Satisfied by:
  - KOR 204: Intermediate Korean I (5)
  - & KOR 208: Intermediate Korean II (5)

East Asian Languages and Cultures Core Knowledge and Skills (11)
- Majors choosing this concentration must complete a course or courses in each of the following areas:
  - Eastern Civilizations. Satisfied by one of the following:
    - ECIV 304: Eastern Civilizations (3)
    - or ECIV 305: Eastern Civilizations Honors
  - Advanced Language. Satisfied by:
    - KOR 504: Advanced Modern Korean I (5)
    - & KOR 508: Advanced Modern Korean II (5)

East Asian Languages and Cultures Required Elective (0)
- Advanced Language. Satisfied by one of the following sequences:
  - CHIN 504 & CHIN 508: Advanced Modern Chinese I and Advanced Modern Chinese II
  - KOR 504 & KOR 508: Advanced Modern Korean I and Advanced Modern Korean II

Pre-Modern Culture (6)
- Choose 2 of the following 3, matching language choices (6 credits combined - must be in the same two languages as chosen to fulfill the language sequences):
  - China

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 32 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 32 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Double Language Concentration
- Majors choosing this concentration must complete the following requirements for 2 languages from the following: Japanese, Chinese, and/or Korean. Total hours required for this concentration will depend on the languages chosen and will range from 30-32 jr/sr hours.

East Asian Languages and Cultures Prerequisite Knowledge (0)
- Elementary Japanese or Chinese or Korean I. Satisfied by one of the following:
  - JPN 104: Elementary Japanese I
  - CHIN 104: Elementary Chinese I
  - KOR 104: Elementary Korean I
- Elementary Japanese or Chinese or Korean II. Satisfied by one of the following:
  - JPN 108: Elementary Japanese II
  - CHIN 108: Elementary Chinese II
  - KOR 108: Elementary Korean II
- Language Proficiency. Satisfied by one of the following:
  - JPN 204 & JPN 208: Intermediate Japanese I and Intermediate Japanese II
  - CHIN 204 & CHIN 208: Intermediate Chinese I and Intermediate Chinese II
  - KOR 204 & KOR 208: Intermediate Korean I and Intermediate Korean II

East Asian Languages and Cultures Core Knowledge and Skills (0)
- Advanced Language. Satisfied by one of the following sequences:
  - JPN 306: Advanced Japanese Conversation I
  - & JPN 310: and Advanced Japanese Conversation II
  - & JPN 504: and Advanced Modern Japanese I
  - & JPN 508: and Advanced Modern Japanese II
  - CHIN 504: Advanced Modern Chinese I
  - & CHIN 508: and Advanced Modern Chinese II
  - KOR 504: Advanced Modern Korean I
  - & KOR 508: and Advanced Modern Korean II

Pre-Modern Culture (6)
- Choose 2 of the following 3, matching language choices (6 credits combined - must be in the same two languages as chosen to fulfill the language sequences):

1. EALC 499 may be used to fulfill either of these requirements.
Choose 2 of the following 3, matching language choices (6 credits combined - must be in the same two languages as chosen to fulfill the language sequences):

China
Japan
Korea

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 30-32 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 30-32 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).


Departmental Honors

The department awards honors to undergraduates who demonstrate exceptional academic achievement. Students should make their intentions known in writing before the final undergraduate semester, preferably during the junior year. The candidate must achieve a minimum overall grade-point average of 3.25 and a minimum of 3.5 in the major and complete EALC 499 with a grade of B or higher. In EALC 499, the student writes an honors thesis under the supervision of a faculty member. Two faculty members evaluate the thesis.

Study Abroad

Students are encouraged to undertake a substantial study abroad experience as part of the major. Studying abroad helps students master the language and affords them cultural understanding far beyond what can be conveyed in a classroom.

KU offers several options for academic-year abroad, direct-exchange programs for undergraduates and graduates in China (Nankai, Nanjing, Huazhong Normal universities and the University of Hong Kong), Japan (Fukuoka, J.F. Obirin, Okayama, Sophia universities and Tsuda College) and South Korea (Korea University). The department sponsors a five-week study abroad program in Hiratsuka, Japan, every summer.

The study abroad office also helps students find other summer, semester, or academic-year programs that meet unique student needs. Credit is usually similar to credit earned during an academic year at KU, and costs are about the same. Some scholarship aid is available. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu) for program and scholarship information as well as program offerings in other countries in Asia.

Minor in East Asian Languages and Cultures

Why study East Asian languages and cultures?

Because knowledge of East Asia is critical in the new global culture and marketplace.

Requirements for the Minor

Students selecting this minor must complete one of the following options:

East Asian Languages and Cultures Minor Option I

Advanced Language Requirement for Minor Option I (10)
Must complete the third year of one of the following languages: (students who complete this requirement by taking KOR 504 and KOR 508 will complete a 20 hour minor)

Japanese. Satisfied by:
JPN 306 Advanced Japanese Conversation I
JPN 310 Advanced Japanese Conversation II
JPN 504 Advanced Modern Japanese I
JPN 508 Advanced Modern Japanese II

Chinese. Satisfied by:
CHIN 504 Advanced Modern Chinese I
CHIN 508 Advanced Modern Chinese II

Korean. Satisfied by:
KOR 504 Advanced Modern Korean I
KOR 508 Advanced Modern Korean II

Required Electives for Minor Option I (9-12)

Students who choose to pursue Korean language must complete 1 additional Korean culture course.

Select one of the following categories:

Japanese or Chinese Culture Requirement. Satisfied by three courses on Japanese or Chinese culture (9 hours)

Korean Culture Requirement. Satisfied by four courses on Korean culture (12 hours)
East Asian Languages and Cultures Minor Option II

Core Knowledge and Skills for Minor Option II (10)
Must complete the second year of one of the following languages: 10
- Japanese
  - JPN 204 Intermediate Japanese I
  - JPN 208 Intermediate Japanese II
- Chinese
  - CHIN 204 Intermediate Chinese I
  - CHIN 208 Intermediate Chinese II
- Korean
  - KOR 204 Intermediate Korean I
  - KOR 208 Intermediate Korean II

Required Electives for Minor Option II (18)
Select courses on East Asian Studies pertaining to the language studied:
- Pre-Modern History. Satisfied by the completion of 1 course on the pre-modern history of 1 of the following: Japan, China, or Korea (3 hours).
- Modern History. Satisfied by the completion of 1 course on the modern history of 1 of the following: Japan, China, or Korea (3 hours).
- East Asian Studies Electives. Satisfied by the completion of 4 courses on 1 of the following: Japan, China, or Korea (12 hours).

Minor Hours & Minor GPA
While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

Minor Hours
Satisfied by 18-20 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the minor.

Minor Junior/Senior Hours
Satisfied by a minimum of 18-20 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Master of Arts in East Asian Languages and Cultures

Why study East Asian languages and cultures?
The areas of East Asia covered represent 3 of the oldest continuous civilizations of the world. The great historical contributions of China, Japan, and Korea in literature, philosophy, and art are widely recognized and studied throughout the world. Today, the highly advanced industries of Japan, the enormous human resources of China, and the rapidly growing economies of Korea and Taiwan have contributed to the development of extremely valuable socio-political and economic ties between these areas and the United States.

M.A. Program Overview
The Department of East Asian Languages and Cultures (EALC) is the only department in Kansas offering a regular program of instruction in the languages, literatures, and cultures of East Asia.

The EALC Thesis M.A. program trains students who will devote themselves to becoming effective links between the Far East and the United States. Students concentrate in Chinese, Japanese, or East Asian Cultures, usually entering the program with at least two years of college-level language. The program typically takes two years to complete, including the defense of a required Master's thesis.

FLAS Fellowships
Students in the M.A. program may also be eligible for a Foreign Language and Area Studies (FLAS) (http://flas.ku.edu) fellowship through the Center for East Asian Studies. FLAS fellowships include:
- Summer award - up to $5,000 for tuition and a stipend of $2,500 for living expenses for summer language study equivalent to one full year of language study
- Academic Year award - full KU tuition and a $15,000 stipend for living expenses for academic year study that includes two semesters of language and six credits or more of East Asian culture courses.

Students in the joint J.D./M.A. or who are also admitted to other programs are strongly encouraged to apply (http://flas.ku.edu/how-apply) for this funding.

Admission to Graduate Studies
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission to the M.A. program
Apply to the EALC M.A. program via the Office of Graduate Studies online application system (http://www.graduate.ku.edu). For additional information regarding departmental admissions requirements, deadlines, and the application process, please visit the graduate admissions page (https://ealc.drupal.ku.edu/admission) of the EALC Department website, or contact the EALC Department Graduate Program directly at ealc@ku.edu.

Master’s Program
The department offers a master’s degree in East Asian languages and cultures. The student declares his or her concentration in 1 of 3 options:
- Chinese language and literature
- Japanese language and literature
• East Asian cultures

Students of Chinese or Japanese language and literature gain in-depth knowledge of these ancient civilizations, which have produced some of the world’s greatest literature.

Students of East Asian cultures develop a broad interdisciplinary knowledge of East Asia. This concentration is for students pursuing professional or noncollege teaching careers, for students in the early stages of language training, or for students who have already acquired competence in an East Asian language.

**Prerequisites**

Entrance requirements for a concentration in either Chinese or Japanese language and literature include

• 3 years of the modern language and, for Chinese language students, one year of classical Chinese or the demonstrated equivalent. Students not meeting this prerequisite may be admitted with deficiencies provided they achieve this level of proficiency outside the minimum of 30 graduate credit hours required for the degree.
• 2 lecture courses dealing with East Asia.

Entrance requirements for a concentration in East Asian cultures are

• At least 2 years of an East Asian language. Students not meeting this prerequisite may be admitted with deficiencies provided they achieve this level of proficiency outside the minimum of 30 graduate credit hours required for the degree.
• 2 lecture courses dealing with East Asia.

**Requirements for Chinese or Japanese Language and Literature Concentration**

1. A minimum of 30 graduate credit hours:
   a. Fourth-year level of language courses.
   b. At least 18 credit hours must be taken in the department in residence.
   c. 6 of these 18 credit hours must demonstrate research capacity in the student’s major language in lecture courses or seminars.
   d. EALC 700 Introduction to East Asian Studies and the relevant bibliography course must be included.
   e. No more than 3 hours of directed readings courses may be included in the required 30 hours.
   f. Students are expected to take at least one course at the 500 level or above in the literature of their concentration.
   g. Students must take 1 course that deals wholly with an East Asian country outside their concentration.
2. A thesis (3 credit hours) involving significant use of materials in the student’s major language.

**Requirements for East Asian Cultures Concentration**

1. A minimum of 30 graduate credit hours:
   a. Third-year level of language courses.
   b. At least 24 credit hours, taken in the department in residence.
   c. EALC 700 Introduction to East Asian Studies must be included in the student’s curriculum.
   d. Students are expected to select 1 of the East Asian cultures for concentration and to include in their programs at least 2 courses dealing wholly with an East Asian culture outside their concentrations.
   e. Students may not take more than 3 hours of directed readings.
   f. Students may, in consultation with the department graduate advisor, take other credit hours in a discipline or disciplines closely related to their studies. East Asian area courses are offered in anthropology, film and media studies, geography, history, history of art, linguistics, philosophy, political science, religious studies, sociology, and theatre.
   g. Students must take 1 course at the 500 level or above in the literature or thought of the country of their concentration.

2. A thesis (3 credit hours) that must deal with a subject in the concentration chosen by the student.

**East Asian Courses in Other Departments**

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<th>Department</th>
<th>Course</th>
<th>Title</th>
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<td>Anthropology</td>
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<td>Popular Images in Japanese Culture, Literatures, and Films</td>
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<td>Communication Studies</td>
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<td>East Asian Communication</td>
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<td>Economics</td>
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</table>
Joint Degree Program in Law and East Asian Languages and Culture

Joint Degree Program in Law and East Asian Languages and Cultures

The J.D./M.A. EALC program, which leads to the J.D. and M.A. in East Asian Languages and Cultures degrees, combines into 4 years and one summer of full time study the Juris Doctor program offered by the School of Law and the Master of East Asian Languages and Cultures program offered by the Department of East Asian Languages and Cultures in the College of Liberal Arts and Sciences.

Growing interdependence with East Asia, particularly with China, provides a need for lawyers versed in culture and language. A joint degree in Law and East Asian Languages and Cultures opens many doors for its recipients. One can find opportunities in international trade and finance, immigration law, and other related fields, as well as a greater ability to work with clients from various backgrounds.

Funding

Joint J.D./M.A. students are eligible and strongly encouraged to apply for a Foreign Language and Area Studies (FLAS) (http://flas.ku.edu) fellowship through the Center for East Asian Studies. FLAS fellowships include:

- Summer award - up to $5,000 for tuition and a stipend of $2,500 for living expenses for summer language study equivalent to 1 full year of language study
- Academic Year award - full KU tuition and a $15,000 stipend for living expenses for academic year study that includes 2 semesters of language and 6 credits or more of East Asian culture courses.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission to the Joint Program

To be admitted to the joint J.D./M.A. EALC Program, an applicant must hold an earned baccalaureate degree from an accredited college or university, complete the admission processes, meet the admission requirements for both the School of Law and the Department of East Asian Languages and Cultures, and be admitted to both programs no later than the end of the first year of study in Law or the completion of more than 16 credit hours in EALC. Full-time study is required for the joint J.D./M.A. EALC program. The Law School Admission Test (LSAT) is the only standardized test required for an applicant to the joint degree program.

For information about applying to the Law School, see the school website (http://www.law.ku.edu/admissions). For information about applying to the EALC Department, please visit the graduate admissions page (https://ealc.drupal.ku.edu/admission) of the EALC Department website, or contact the EALC Department Graduate program directly at ealc@ku.edu.

Degree Requirements

To receive the J.D./M.A. EALC, a student must successfully complete a minimum of 106 credit hours, 81 in the School of Law and 25 in the Department of East Asian Languages and Cultures. The School of Law requires a 2.0 grade point average, while the Graduate School requires a 3.0 GPA for all courses counting toward the M.A. in EALC portion of the degree.

J.D. Requirements

Students must complete all required first year School of Law courses (29 credit hours) prior to enrolling in courses for the joint degree. In addition to these course requirements, the School of Law has an upper-class writing requirement, a residence requirement, and a time limit for completion of the degree.

In addition to the 44 TOTAL credit hours of coursework required of all law students, students in the joint J.D./M.A. EALC program must complete an additional 12 credit hours of coursework consisting of courses in any two of the following four areas of concentration:

International Trade (6)
- LAW 944 International Trade Law 3
- LAW 864 Advanced International Trade Law 3

International Commerce (3)
- LAW 945 International Commerce and Investment 3

Public International Law (3)
- LAW 974 Public International Law 3

Comparative Law (6)
- LAW 879 Comparative Law 3
- LAW 918 Islamic Law 3

Students may choose courses to complete the remaining hours necessary to reach the total of 81 hours of law school credit needed for the joint degree from any part of the Law School curriculum.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 676</td>
<td>International Relations of Asia</td>
<td>3</td>
</tr>
<tr>
<td>POLS 678</td>
<td>Chinese Foreign Policy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 956</td>
<td>The Governments and Politics of Asia</td>
<td>2-3</td>
</tr>
<tr>
<td>REL 508</td>
<td>Religion in China</td>
<td>3</td>
</tr>
<tr>
<td>REL 509</td>
<td>Religion in Japan</td>
<td>3</td>
</tr>
<tr>
<td>REL 510</td>
<td>Religion in Korea</td>
<td>3</td>
</tr>
<tr>
<td>REL 733</td>
<td>Seminar in Eastern Religious Texts: _____</td>
<td>3</td>
</tr>
<tr>
<td>REL 762</td>
<td>Seminar in Eastern Religious Thought: _____</td>
<td>3</td>
</tr>
<tr>
<td>REL 776</td>
<td>Seminar in Religion and Society in Asia: _____</td>
<td>3</td>
</tr>
<tr>
<td>Theatre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THR 527</td>
<td>Asian Theatre and Performance</td>
<td>3</td>
</tr>
</tbody>
</table>

For additional courses in the above disciplines, see appropriate sections of the online catalog.
Please refer to the current School of Law Catalog for further details about the requirements for the J.D. portion of the degree.

**EALC Requirements**

Students shall consider the degree in East Asian Cultures to be interdisciplinary in nature:

1. A minimum of 22 graduate credit hours plus 1 of the two options listed in part 7.
2. Each student is expected to select 1 of the East Asian Cultures (Japan, China, or Korea) for concentration and to include in his or her program at least two courses dealing wholly with an East Asian culture outside of his or her concentration. Up to 2 courses can be pan-East Asian courses including the student’s country of concentration.
3. Students must complete a third year of language of the country of concentration.
4. EALC 700, Introduction to East Asian Studies, must be included in the student’s curriculum if the course is offered during the time the student is in resident study.
5. No more than 3 hours of directed reading in a language may count toward the M.A. degree.
6. Students are required to take 1 course in the literature or thought of the country of concentration at 500 level or above.
7. Students are required to fulfill 1 of the following requirements:
   a. Write a thesis (3 credit hours) which must deal with a subject within the concentration chosen by the student, or
   b. Practical thesis: Hold an internship or job in the country of concentration for a period of at least 8 weeks, at the advisor’s approval, and write a 40 page analysis of the cultural aspects of the experience (3 credits)

Students MUST consult with the EALC Director of Graduate Studies (DGS) immediately upon admission to the joint program to determine an enrollment plan and obtain a list of current approved joint courses. Joint students must also consult with the DGS during advising periods each semester.

Third and fourth year Chinese, Japanese, and Korean language courses fulfill the requirements, as well.

**Typical Enrollment Pattern**

<table>
<thead>
<tr>
<th></th>
<th>Law</th>
<th>EALC</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year</td>
<td>29</td>
<td>0</td>
<td>32</td>
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<tr>
<td>First Summer</td>
<td>0</td>
<td>1st year language</td>
<td>3</td>
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<tr>
<td>Second Year</td>
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<td>2nd year language</td>
<td>18</td>
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<tr>
<td>Third Year</td>
<td>12</td>
<td>3rd year language</td>
<td>28</td>
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<tr>
<td>Fourth Year</td>
<td>22</td>
<td>6 (including thesis)</td>
<td>28</td>
</tr>
<tr>
<td>Total Credit Earned</td>
<td>81</td>
<td>25</td>
<td>106</td>
</tr>
<tr>
<td>Law credit allowed</td>
<td>8</td>
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<tr>
<td>EALC credit allowed</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
</tbody>
</table>

1. There is no credit toward the degree for first and second year language. First and second year language are 10 credits each. Third year language is 10 credits and counts toward the degree.

**East Asian Studies**

Founded in 1959, the Center for East Asian Studies (CEAS) at the University of Kansas is the only East Asian resource center in the Great Plains region. CEAS supports East Asian language instruction and promotes East Asian studies across the curriculum. Seventy affiliated faculty members teach in 29 departments and 10 professional schools at KU, offering over 250 courses fully or partially devoted to East Asia.

**Courses**

CEAS 200. **Topics in East Asian Studies:** _____ 1-3 Hours. U.
An introductory interdisciplinary topics course addressing contemporary issues related to one or more East Asian countries. Format and content will vary. Does not count toward the EALC major or minor requirements unless otherwise indicated by EALC in the Schedule of Classes. LEC.

CEAS 500. **Seminar in East Asian Studies:** _____ 1-3 Hours. U.
An interdisciplinary seminar addressing contemporary issues related to one or more East Asian countries. Prerequisites to be determined by instructor(s) on the basis of course content. Does not count toward the EALC major or minor requirements unless otherwise indicated by EALC in the Schedule of Classes. LEC.

CEAS 610. **Minorities in Japan. 3 Hours. S.**
This course offers a sociological and historical exploration of Japan’s minorities: the Ainu, Okinawans, Burakumin, and Zainichi Koreans who are often excluded from narratives of Japanese history. Exclusion of the minority issue not only overlooks the existence of minority populations in Japan but also contributes to misconceptions of Japan as a homogeneous country. The course objective is to challenge the conventional master narrative of racial and cultural homogeneity. We shed light on Japan’s minorities, their historical experiences, current struggles, and future challenges. Prerequisite: An introductory East Asian Studies course or consent of instructor. LEC.

CEAS 700. **Contemporary East Asia. 3 Hours.**
This graduate seminar explores rapidly changing societies in contemporary East Asia, particularly China, Japan, and Korea. The course provides a critical overview of East Asia and its diversity and complexity using cross-cultural perspectives and interdisciplinary social science approaches, and situates East Asian societies in the context of globalization. LEC.

CEAS 802. **Research Seminar. 3 Hours.**
Students will work with the instructor and, when appropriate, an additional faculty advisor to design, research and write up a research paper on an East Asian topic of their choosing. Students enrolling in this course are expected to have taken a social science research methods class prior to taking this course and to apply those methods to the research process. A core course for the MA in Contemporary East Asian Studies. Prerequisite: Permission of the instructor. SEM.
Master of Arts in Contemporary East Asian Studies

The MA in Contemporary East Asian Studies is a new interdisciplinary degree program focused on 20th and 21st-century East Asia that will provide students with 1) in-depth, interdisciplinary knowledge of the modern history, politics, economics, and societies of one East Asian country, e.g. China, Korea, or Japan; 2) broad knowledge of modern East Asia, and 3) social science research skills and methods appropriate to international area studies.

Admission Criteria and How to Apply

To be considered for admission to the M.A. program in Contemporary East Asian Studies, students must meet the following criteria:

- B.A. or B.S. degree or the equivalent
- Minimum 3.0 grade-point average in their bachelor’s degree
- Proficiency in an East Asian Language at either the second or third level, depending on the concentration.

To apply to the CEAS M.A. program in Contemporary East Asian Studies, submit an application and supporting documentation online through the Office of Graduate Studies Application (http://www.graduate.ku.edu/01-04_apply.shtml) website. Before applying, please be aware that the following items will need to be uploaded with the online application:

1. A two-page statement of purpose explaining your educational and academic objectives.
2. One official transcript for all post-secondary education.
3. Three letters of recommendation, each accompanied by the Graduate Letter of Recommendation Form (http://www.graduate.ku.edu/sites/graduate.drupal.ku.edu/files/docs/ApplicationProcess/GraduateLetterOfRecForm.pdf) [PDF].
4. Official Graduate Record Examination (GRE) result. All applicants including international applicants are required to submit a GRE score from the General test (verbal, quantitative, analytical writing).
5. International students must submit TOEFL scores taken within the past two years. The Applied English Center (http://www.aec.ku.edu) may also require incoming international students to complete an examination to show their English proficiency upon arrival in Lawrence. Information about the minimum acceptable English scores is available through the KU Office of International Programs (http://www.international.ku.edu) and through the Office of Graduate Studies (http://www.graduate.ku.edu/06-01_eng_prof.shtml).
6. A writing sample that demonstrates your writing skills and basic research capacity.
7. A current C.V. (Curriculum Vitae) or resume.
8. An application fee paid by credit card or by electronic check (For the amount (http://policy.ku.edu/graduate-studies/application-fees-graduate-students). Domestic applications are normally $55 and international applications are normally $65).

Although May 1 is the final deadline for submitting an application for a Fall semester start, our graduate committee will complete a first round review of applications on or before April 1. To ensure that your application is included for first priority consideration, please ensure that all materials are received no later than March 15.

Students are encouraged to apply for the Fall semester admission. However, it may be possible for students to begin the program in the Spring or Summer semesters. Please contact the Director, Dr. Megan Greene at mgreene@ku.edu or the Assistant Director, Dr. Ayako Mizumura at mizu@ku.edu to discuss this option.

If you wish to learn more about the coming M.A. program in Contemporary East Asian Studies at The University of Kansas, please contact:

Ayako Mizumura, Assistant Director
Center for East Asian Studies
ceasma@ku.edu (mizu@ku.edu)
Megan Greene, Director
Center for East Asian Studies
mgreene@ku.edu

The Center for East Asian Studies (CEAS) at The University of Kansas will offer a new M.A. program in Contemporary East Asian Studies, beginning with the 2013-2014 school year. This 12-month interdisciplinary program focused on 20th and 21st century East Asia will provide students with

1. in-depth interdisciplinary knowledge of the modern history, politics, economy, and society of one East Asian country;
2. broad knowledge of modern East Asia; and
3. social science research skills and methods appropriate to international area studies.

A wide range of course options across academic disciplines will enable students to earn expertise in their target country while also enhancing their regional knowledge and global perspectives. With the creation of this program, KU has become one of the few universities in the United States to offer an M.A. program focusing on contemporary East Asia that can be completed in 12 months by students with prior language preparation.

All candidates for the M.A. degree are required to complete 30 semester hours of graduate credit, including an introductory course, a social science research methods course, and a research seminar, at a satisfactory level, and to demonstrate proficiency in an East Asian Language at either the second or third level, depending on the concentration.

There are two concentrations to choose from: 1. Contemporary East Asia (http://ceas.drupal.ku.edu/curriculum) 2) Foreign Affairs Studies (FAST): Contemporary East Asia in Global Content (http://ceas.drupal.ku.edu/foreign-affairs-studies-fast-contemporary-east-asia-global-context).

If you are a Foreign Area Officer interested in our program, please read Information for FAOs. (http://ceas.drupal.ku.edu/overview-0)

Department of Ecology and Evolutionary Biology

Ecology and Evolutionary Biology Graduate Programs

The department comprises a large number of biologists with a variety of research interests. 3 broad overlapping themes capture the interests and activities in EEB — biodiversity and macroevolution, ecology and global change biology, and evolutionary mechanisms. The department
offers graduate study leading to Master of Arts and Doctor of Philosophy degrees in botany, entomology, and ecology and evolutionary biology. General information about the department and its faculty, current graduate students, admission, and financial support may be found on the department's website (http://www2.ku.edu/~eeb).

Neotropical biodiversity is a special area of concentration among EEB faculty. Many faculty members have courtesy appointments in the Latin American Area Studies Program, which fosters multidisciplinary research in Latin America across the campus. KU is a member of the Organization for Tropical Studies, and many faculty members and students participate in advanced, field-oriented OTS courses. Graduate students can receive fellowships for courses, e.g. BIOL 786 Fundamentals of Tropical Biology, or research projects in Costa Rica. Other EEB faculty have research concentrations in Asia, Africa, Antarctica, and elsewhere, creating a genuinely global reach for EEB research activities.

(B.A. and B.S. degree programs in biology are listed under Biology Undergraduate Programs (p. 1476).)

Facilities

Departmental physical facilities include laboratories, natural history collections, and field-study sites near the university. Most laboratory facilities are in Dyche Hall, Higuchi Hall, McGregor Herbarium, Haworth Hall, and the Public Safety Building. Special facilities in Haworth include controlled-environment rooms, greenhouses, and various instrument rooms, including an excellent electron microscope laboratory.

The natural history collections are housed by the Biodiversity Institute and include approximately 8 million specimens, including mammals, birds, reptiles, amphibians, fishes, arthropods and other invertebrates, parasites, and plants, as well as fossils of vertebrates, arthropods, other invertebrates, and plants. Collections support diverse research in evolutionary biology, paleobiology, and ecology including systematics, phylogenetics, biogeography, morphology, behavior, biodiversity informatics, and biotic surveys and inventories. The BI also has leading facilities for diverse analyses of biodiversity information, including well-equipped spatial analysis laboratories, and extensive facilities for molecular systematics.

The Kansas Biological Survey is a KU research and service unit and a nonregulatory state agency, whose mission is to gather information on the kinds, distribution, and abundance of plants and animals in Kansas, and to compile, analyze, interpret, and distribute this information broadly. KBS is a nationally recognized leader in several fields of environmental research and maintains a strong tradition of natural history studies. Scientists at KBS study terrestrial ecosystem ecology, aquatic ecology, water quality, biodiversity, ecology and population biology of animals and plants, and conservation and restoration of natural communities. KBS researchers routinely use technologies such as satellite and airborne remote sensing, aerial photography, and Geographic Information Systems.

KBS administers the University of Kansas Field Station, 3,400 acres of field-sites dedicated to environmental research and education. KUFS sites are in the transition zone between the Eastern Deciduous Forest and Tallgrass Prairie biomes and include woodland, prairie, old fields, and wetlands. The Fitch Natural History Reservation and Baldwin Woods are used primarily to study unmanipulated ecological processes in undisturbed habitats. The John H. Nelson Environmental Study Area is used for experimental ecological studies and has experimental ponds, a dedicated lake and watershed, a common garden, small-mammal enclosures, and a succession facility.

Courses

BIOL 100. Principles of Biology. 3 Hours. NB GE3N / N. Intended for non-science majors. The basic concepts of biology at the cellular, organismal, and population levels of organization and their applications to humans and modern society. An honors section, BIOL 101, is offered for students with superior academic records. BIOL 100 and BIOL 102 (or BIOL 101 and BIOL 103, honors) satisfy the College natural science with laboratory requirement. Concurrent enrollment in BIOL 102 is recommended. LEC.

BIOL 101. Principles of Biology, Honors. 3 Hours. NB GE3N / N. Intended for non-science majors with superior academic records. The basic concepts of biology at the cellular, organismal, and population levels of organization and their applications to humans and modern society. Concurrent enrollment in BIOL 102 or BIOL 103 is recommended. BIOL 101 and either BIOL 102 or BIOL 103 satisfy the College natural science with laboratory requirement. Prerequisite: Membership in the College Honors Program or consent of instructor. LEC.

BIOL 102. Principles of Biology Laboratory. 1 Hour. U. Intended for non-science majors. Exercises are designed to give the student hands-on experience with selected topics from the associated lecture course (BIOL 100). An honors laboratory (BIOL 103) is offered for students with superior academic records. Prerequisite: Concurrent enrollment in BIOL 100 is recommended. LAB.

BIOL 103. Principles of Biology Laboratory, Honors. 1 Hour. U. Intended for non-science majors with superior academic records. Exercises are designed to give the students hands-on experience with selected topics from the associated lecture course (BIOL 101). Prerequisite: Membership in the College Honors Program or consent of instructor. Concurrent enrollment in BIOL 101 is recommended. LAB.

BIOL 105. Biology Orientation Seminar. 1 Hour. N. Introduces interested students to information about majoring in the biological sciences at the University of Kansas. Students learn about degree requirements, academic advising, research opportunities, and career options, as well as how to align academic and professional goals. Graded on a satisfactory/unsatisfactory basis. LEC.

BIOL 110. Microorganisms in Your World. 3 Hours. NB / N. A course for students who are not science majors. Designed to acquaint students with some microbial activities which affect their lives. Includes the historical development of microbiology, the basic principles of microbial growth, disinfection, antibiotics, infection, and immunity; and some commercial, agricultural, and industrial uses of microorganisms. Emphasis is on infectious diseases. Not open to students with any credit in microbiology. May not be counted as a prerequisite for any other microbiology course. LEC.

BIOL 116. Introduction to Evolutionary Biology. 3 Hours. N. An account of evolutionary thinking from classical to contemporary time. The emphasis is on mainstream developments (Darwinism, Mendelism, the Modern Synthesis, Cultural Ecology), but certain social issues will be examined (social Darwinism, creationism). LEC.

BIOL 120. Insects in Your World. 3 Hours. NB GE3N / N. Students will learn about the global impact of insects on human concerns, both positive (pollination and decomposition) and negative (competition with humans for food, fiber, and shelter, and disease transmission) while developing an appreciation for the ways in which scientists work with real problems involving insects. The course will cover the overwhelming abundance and diversity of insects, and their life history, ecology,
behavior, and physiology. This course is intended for both nonbiology and biology majors. Format: two lectures and one discussion section per week. LEC.

BIOL 150. Principles of Molecular and Cellular Biology. 4 Hours. NB GE3N / N.
An integrated lecture and laboratory course for biology majors and students planning to take additional courses in biology. This course covers basic biochemistry, cell structure and function, molecular biology, genetics, physiology, and development of plants and animals. Three hours of lecture and three hours of laboratory per week. An honors section (BIOL 151) is offered for students with superior academic records. Prerequisite: Concurrent or prior enrollment in CHEM 130, CHEM 190, CHEM 150, or CHEM 170, or consent of instructor. LEC.

BIOL 151. Principles of Molecular and Cellular Biology, Honors. 4 Hours. NB GE3N / N.
An integrated lecture and laboratory course for students with superior academic records who are biology majors or who plan to take additional courses in biology. This course covers basic biochemistry, cell structure and function, molecular biology, genetics, physiology, and development of plants and animals. Three hours of lecture and three hours of laboratory per week. Prerequisite: Membership in the University Honors Program and concurrent or prior enrollment in CHEM 130, CHEM 190, CHEM 150, or CHEM 170, or consent of instructor. LEC.

BIOL 152. Principles of Organismal Biology. 4 Hours. NB GE3N / N.
An integrated lecture and laboratory course for biology majors and students who plan to take additional courses in biology. This course covers basic elements of plant and animal morphology and physiology, principles of evolution, organismal diversity and phylogeny, population biology, population genetics, ecology, and behavior. Three hours of lecture and three hours of laboratory per week. An honors section (BIOL 153) is offered for students with superior academic records. Prerequisite: BIOL 150 or BIOL 151. LEC.

BIOL 153. Principles of Organismal Biology, Honors. 4 Hours. NB GE3N / N.
An integrated lecture and laboratory course for students with superior academic records who are biology majors or planning to take additional courses in biology. This course covers basic elements of plant and animal morphology and physiology, principles of evolution, organismal diversity and phylogeny, population biology, population genetics, ecology, and behavior. Three hours of lecture and three hours of laboratory per week. Prerequisite: BIOL 150 or BIOL 151 and membership in the University Honors Program or consent of instructor. LEC.

BIOL 155. Principle Lab in: ____. 1-3 Hours. U.
This introductory laboratory exposes the students to basic principles in biology and modern experimental techniques through an open-ended authentic research experience directed by a faculty member. Prerequisite: Consent of instructor. LEC.

BIOL 177. First Year Seminar: ____. 3 Hours. NB GE11.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in biology. Does not contribute to major requirements in biology. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

BIOL 200. Basic Microbiology. 3 Hours. NB GE3N / N.
Introduction to bacteria and viruses. Topics include historical development of microbiology, bacterial structure and growth, enzymes and energy production, disinfection, antibacterial drugs, gene transfer, viral replication, infection and immunity, with emphasis on infectious diseases. Can be substituted for BIOL 201 as a prerequisite for other microbiology courses by consent of department. Not open to those with credit in BIOL 110, BIOL 201, BIOL 400, or BIOL 401. Prerequisite: A course in high school biology and a course in high school chemistry. This course is not recommended for first semester freshmen. LEC.

BIOL 203. Introductory Microbiology Laboratory. 2 Hours. U.
Laboratory exercises to complement BIOL 200. Prerequisite: BIOL 200. May be taken concurrently. LAB.

BIOL 210. Introduction to Clinical Laboratory Sciences. 1 Hour. U.
An introductory overview of medical technology as a profession including types of analyses performed, specialties, interrelationships in the health care system and a visit to a clinical laboratory. This course will enable those considering a major in medical technology to have a clear definition of the profession. This course does not meet any degree requirements in biology. No prerequisite. (Same as CLS 210.) LEC.

BIOL 215. Plants Through Time. 3 Hours. NB / N.
Examines the evolution of plants and their environments from the origin of life to the present, including the historical development of the biosphere, mass extinctions (past and present), and social implications of future climate changes and deforestation. Not recommended for students with credit in GEOL 121. LEC.

BIOL 225. Evolution and the History of Life. 3 Hours. GE3N / N.
This introductory course for non-majors focuses on the significance of the history of life and the fossil record for our understanding of evolution. Key events in the history of life are considered, including the origins of life, the eukaryotic cell, and humans, and also various mass extinctions. The focus is on general scientific and evolutionary principles and mechanisms that can be extracted from the study of the fossil record. It also uses the lessons of the fossil record to consider the prospects for our own species. LEC.

BIOL 240. Fundamentals of Human Anatomy. 3 Hours. N.
Introduction to the gross anatomy of the human body. Covers the spatial arrangement and appearance of structures throughout the body, including visual identification of these structures. Musculoskeletal relationships, and the anatomy of major organ systems, are emphasized. Not intended for biology majors. Prerequisite: BIOL 100, or equivalent. LEC.

BIOL 241. Human Anatomy Observation Laboratory. 2 Hours. U.
One of the two laboratories in gross anatomy designed to complement BIOL 240. Emphasizes the three-dimensional appearance and spatial relationships of anatomical structures through supervised observations of pre-dissected human cadavers. Limited to students enrolled in, or seeking admission to, programs that require a human anatomy observation laboratory. Prerequisite: Concurrent or prior enrollment in BIOL 240 is required. LAB.

BIOL 242. Human Anatomy Dissection Laboratory. 3 Hours. U.
One of the two laboratories in gross anatomy designed to complement BIOL 240. Provides an opportunity to develop a comprehensive three-dimensional understanding of anatomical structures and spatial relationships while gaining substantial dissecting experience. Student perform supervised dissection of human cadavers. Limited to students enrolled in, or seeking admission to, programs that require a human anatomy laboratory. Concurrent or prior enrollment in BIOL 240 is required. LAB.

BIOL 246. Principles of Human Physiology. 3 Hours. N.
An introduction to the physiological and biochemical processes and general physiological principles necessary to sustain life. Organ and organ system processes are emphasized. Intended for students majoring in allied health or sports related curricula who require a course in human physiology. Not intended for biology majors. Prerequisite: BIOL 100 or equivalent. LEC.
BIOL 247. Principles of Human Physiology Laboratory. 2 Hours. U.
Designed to complement BIOL 246. Uses experiments and simulations to demonstrate laboratory techniques and representative processes in areas of human physiology. Concurrent or prior enrollment in BIOL 246 required. LAB.

BIOL 350. Principles of Genetics. 4 Hours. N.
Why are related individuals more similar than unrelated individuals and what is the basis for heritable traits? From Mendel's discoveries of the patterns of genetic inheritance, to the study of transmissible hereditary factors, genetics is central to understanding the biological sciences. Topics include molecular genetics and genetic engineering; Mendelian genetics and mapping; control of gene expression; cytogenetics; epigenetics and non-Mendelian genetics; and population and quantitative genetics. Examples are taken from a wide variety of organisms, including viruses, bacteria, plants, fungi, insects, and humans. Prerequisite: Two semesters of college-level chemistry and BIOL 150 or BIOL 152; or consent of the instructor. LEC.

BIOL 360. Principles of Genetics, Honors. 4 Hours. N.
The science of genetics aims to explain why individuals differ from one another and how these differences are inherited. Honors Genetics covers all core topics in fundamental genetics: Mendelian inheritance, meiosis and recombination, mutation, molecular genetics, population genetics, quantitative genetics and genomics. Special attention given to the practice of genetics and the complex relationship between genotype, phenotype and environment. A broader goal of Honors Genetics is to provide students a framework for understanding recent advances in medical genetics and the modern era of personal genomics. Prerequisite: Two semesters of college-level chemistry and BIOL 150 or BIOL 152, membership in the University Honors Program; or consent of the instructor. LEC.

BIOL 400. Fundamentals of Microbiology. 3 Hours. NB GE3N / N.
Fundamental principles of microbiology with emphasis on physical and chemical properties of the bacterial cell; microbial metabolism, cultivation, growth and death of bacteria; microbial genetics, pathogenesis and immunity, industrially important microorganisms. Prerequisite: BIOL 150 or BIOL 151 and two semesters of college chemistry, or consent of the instructor. LEC.

BIOL 401. Fundamentals of Microbiology, Honors. 3 Hours. N.
Honors section of BIOL 400 and BIOL 612, by application and invitation. Prerequisite: BIOL 151, two semesters of college chemistry, and membership in the University Honors Program, or consent of the instructor. LEC.

BIOL 402. Fundamentals of Microbiology Laboratory. 2 Hours. U.
Laboratory exercises designed to complement BIOL 400 or BIOL 700. Prerequisite: BIOL 400 or BIOL 612, or BIOL 400 or BIOL 612 concurrently. LAB.

BIOL 405. Laboratory in Genetics. 2 Hours. U.
A laboratory program which includes written reports on fruit fly crosses, exercises on meiosis, probability and statistics, human genetics and computer simulations of genetics problems. Prerequisite: Concurrent or prior (preferred) enrollment in BIOL 350 or its equivalent. LAB.

BIOL 408. Physiology of Organisms. 3 Hours. N.
A comprehensive and integrative approach to the study of organisms with an emphasis on physiological, ecological, structural, and behavioral adaptations to differing environments. Prerequisite: BIOL 152 or BIOL 153 and CHEM 130 or CHEM 190 or CHEM 170; or consent of the instructor. LEC.

BIOL 409. Physiology of Organisms, Laboratory. 2 Hours. U.
The laboratory exposes the students to the structure and function of the major groups of animals and plants. Students use basic techniques of biological observation, such as microscopy and dissection, and experimental techniques to analyze plant and animal function. Prerequisite: Concurrent or prior enrollment in BIOL 408, or consent of the instructor. LAB.

BIOL 410. Human Biogeography, Honors. 3 Hours. N.
Principles of evolution and earth change are used to examine distributions of human populations, wealth, and resources. Readings from the current literature will be included. Lecture and discussion. (Same as GEOG 410.) Prerequisite: BIOL 152 or BIOL 153 or GEOG 107 and membership in the University Honors Program or consent of instructor. LEC.

BIOL 412. Evolutionary Biology. 4 Hours. N.
Introduction to the patterns and processes of organic evolution. Considered are the history of evolutionary thought, molecular evolution, genetics and microevolution, selection and adaptation, and speciation and macroevolution. Emphasis will be placed on how scientists study and document change over time in natural populations, methods for testing hypotheses about events in evolutionary history, and how discovering evolutionary mechanisms at one level of organization can help to explicate general processes in the natural world. Prerequisite: BIOL 152 and BIOL 350, or consent of the instructor. LEC.

BIOL 413. History and Diversity of Organisms. 3 Hours. N.
An integrated lecture and laboratory course presenting an overview of the variety and ancestry of life on earth. Using representatives from prokaryotes, protists, plants, fungi, and animals, principles of phylogenetic reconstruction are illustrated and evolutionary trends in the life history features, functional morphology, and structural complexity of extant and extinct organisms are presented. Two hours of lecture and three hours of laboratory per week. Prerequisite: BIOL 152 or BIOL 153, or consent of the instructor. LEC.

BIOL 414. Principles of Ecology. 3 Hours. N.
Study of the principles underlying species population density changes, community structure and dynamics, biogeochemical cycles, and energy flow and nutrient cycling in ecosystems. Prerequisite: BIOL 152 or BIOL 153, or consent of the instructor. LEC.

BIOL 415. Field and Laboratory Methods in Ecology. 2 Hours. N.
This course complements BIOL 414 with field trips and laboratory exercises that illustrate the basic concepts of ecology. Topics covered include methodologies for quantitative sampling of terrestrial and aquatic systems, design of field studies, computer simulation and digital data analysis techniques, and scientific writing. Prerequisite: Concurrent or prior enrollment in BIOL 414. A statistics course is recommended. FLD.

BIOL 416. Cell Structure and Function. 3 Hours. N.
Lecture survey of molecular cell biology with emphasis on experimental approaches to understanding cell function; topics include biological membranes and transmembrane transport, vesicular trafficking (secretion and endocytosis), cell signaling, cell motility and the cytoskeleton, and the regulation of the cell division cycle. Prerequisite: BIOL 150 or BIOL 151; BIOL 350 or BIOL 360; CHEM 130 or CHEM 190 or CHEM 170; and CHEM 135 or CHEM 195 or CHEM 175, or consent of the instructor. LEC.

BIOL 417. Biology of Development. 3 Hours. N.
A general course designed to introduce students to the developmental biology of animals. Emphasis is placed on understanding how a single-celled fertilized egg develops into a complex multicellular organism by the processes of cell division, differentiation, growth, and morphogenesis. Lectures stress experimental approaches to investigating
development, including classic embryology and modern molecular genetics. Prerequisite: BIOL 350 or consent of the instructor. LEC.

**BIOL 418. Laboratory in: ______. 1-3 Hours. U.**
A varied program of laboratory and fieldwork designed to introduce students to investigative approaches in the study of the basic concepts of biological science. Students may enroll in more than one section. Prerequisite: BIOL 100, BIOL 101, BIOL 150, BIOL 151, or exemption. Each section may have additional prerequisites to be determined by instructor. LAB.

**BIOL 419. Topics in: ______. 1-3 Hours. N.**
Courses on special topics in biology, given as need arises. May be lectures, discussions, readings, laboratory, or fieldwork. Students may select sections according to their special needs. IND.

**BIOL 420. Seminar: ______. 1-3 Hours. N.**
The preparation and presentation of oral reports on selected topics from the recent research literature. Students may choose one interest group each semester, but may enroll in a given interest group only once. Enrollment in each interest group limited to twenty students. Prerequisite: Course work varying with the topic of the seminar, or consent of instructor. LEC.

**BIOL 421. Topics in Molecular Biosciences: ______. 3 Hours. N.**
Lecture instruction and the preparation and presentation of oral and written reports on selected topics from the recent research literature in molecular biosciences. Students may enroll in a given topic only once. Prerequisite: Consent of instructor. LAB.

**BIOL 422. Non-laboratory Independent Study. 1-9 Hours. AE61 / N.**
Original study in discussion or preparation of review papers on selected topics of current interest. May be undertaken only with the consent of the major advisor and of the faculty member who will guide the research. Prerequisite: Consent of instructor. IND.

**BIOL 423. Independent Study. 1-9 Hours. AE61 / N.**
Original study in laboratory or field in selected topics of current research interest. May be undertaken only with the consent of the major advisor and of the faculty member who will guide the research. Prerequisite: Consent of instructor. IND.

**BIOL 425. Teaching Apprenticeship in Biology. 1-9 Hours. N.**
Involvement as teaching assistant for a course in Biology. Credit hours shall not exceed the credits offered for the course being taught. May be undertaken only with the consent of the Director of Undergraduate Biology and of the faculty member who will teach the course. Prerequisite: Consent of instructor and Director of Undergraduate Biology. FLD.

**BIOL 426. Laboratory in Cell Biology. 3 Hours. U.**
Laboratory exercises will examine the function, organization, and composition of eukaryotic cells. Prerequisite: BIOL 150 or BIOL 151, CHEM 130 or CHEM 190 or CHEM 170; concurrent or prior enrollment in BIOL 416 or BIOL 536; or consent of the instructor. BIOL 350 or BIOL 360 is highly recommended. LAB.

**BIOL 428. Introduction to Systematics. 3 Hours. N.**
Basic elements of systematic theory and practice; phylogenetic reconstruction using morphological and molecular data; interpretation of phylogenetic hypotheses; principles of nomenclature and classification; evolutionary processes and patterns of species diversity; discussion of the aims and needs of taxonomy; species and speciation; construction of keys; significance of biological collections. Prerequisite: BIOL 152 or BIOL 153. Not intended for students with advanced systematics background. LEC.

**BIOL 430. Laboratory in Molecular Biology. 3 Hours. U.**
Practical experience in recombinant DNA technology and molecular cloning. Prerequisite: BIOL 416 or a course in biochemistry or microbiology. LAB.

**BIOL 432. Human Behavioral Genetics. 3 Hours. S.**
A survey of human behavioral genetics for upper division undergraduates. Emphasis is on how the methods and theories of quantitative, population, medical, and molecular genetics can be applied to individual and group differences in humans. Both normal and abnormal behaviors are covered, including intelligence, mental retardation, language and language disorders, communication, learning, personality, and psychopathology. (Same as ANTH 447, PSYC 432, SPLH 432.) Prerequisite: Introductory courses in biology/genetics or biological anthropology and psychology are recommended. LEC.

**BIOL 435. Introduction to Neurobiology. 3 Hours. N.**
Basic principles of neurobiology. The focus will be on the nature of communication among nerve cells and their targets. Topics will include the development, structure and function of nerve cells, chemistry of neurotransmission, processing and integration including the cellular and molecular basis of higher functions and neurological disorders. Prerequisite: BIOL 150 or BIOL 151. LEC.

**BIOL 440. Advanced Human Anatomy. 6 Hours. N.**
Integrated lecture and laboratory course designed to provide students with a detailed understanding of the structure of the human body. Cadaver dissection will reinforce three-dimensional relationships discussed in lecture and each of the main organ systems will be considered using a regional approach to the body. Prerequisite: BIOL 152 or equivalent; BIOL 240, BIOL 241, or BIOL 242; and instructor consent. LEC.

**BIOL 448. Kansas Plants. 3 Hours. N.**
A study of common and important non-cultivated Kansas plants, with special emphasis on the ecology of the state; paleoclimatic and paleobotanical background of the central prairies and plains; present climate, physiography and vegetation; poisonous, edible, and medicinal plants; identification by means of simplified keys. Prerequisite: BIOL 100, BIOL 101, BIOL 150, or BIOL 151 and BIOL 152 or BIOL 153. LEC.

**BIOL 449. Laboratory/Field Work in Human Biology. 1-3 Hours. AE61 / N.**
Faculty supervised laboratory or field research for Human Biology majors. Students design and complete a research project in collaboration with a Human Biology faculty member. (Same as ANTH 449, PSYC 449, and SPLH 449.) Prerequisite: Consent of instructor and Human Biology major. FLD.

**BIOL 454. Brain Diseases and Neurological Disorders. 3 Hours. N.**
Major brain diseases and neurological disorders such as stroke, Alzheimer's Disease, Parkinson's Disease, Huntington's Disease, Multiple Sclerosis, Epilepsy, Schizophrenia, etc., will be discussed in terms of the etiology, molecular, and cellular basis of potential therapeutic interventions. Graduate students are required to present original research paper assigned by the instructor to the class in addition to other assignments for all the students enrolled. Prerequisite: BIOL 150, or consent of instructor. LEC.

**BIOL 461. Biodiversity of the Rainforest. 3 Hours. N.**
An introduction to birds, bats, and plants of the rainforest, with emphasis on general characteristics of each of the taxa and their relationship to the tropical ecosystem, as well as their particular anatomy, ecology, behavior, and diversity. Field work focuses on identification of birds and bats (at species level), plants (at family level), and on capturing and preservation techniques. Taught in Golfito, Costa Rica. Contact Undergraduate Biology, or the Office of Study Abroad. Prerequisite: BIOL 150 or BIOL
151 and BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses are taught in Spanish; therefore, four semesters of Spanish are required. Summer courses are taught in English. LEC.

**BIOL 463. Introduction to Ornithology of the Tropics. 4 Hours. N.**
A theory and practice course on birds. Course covers morphology, reproduction, evolution, ecology, and behavior, as well as systematics of Costa Rican birds. Course includes field work on bird identification. Taught in Golfito, Costa Rica. Contact Undergraduate Biology, or the Office of Study Abroad. Prerequisite: BIOL 150 or BIOL 151 and BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses are taught in Spanish; therefore, four semesters of Spanish are required. Summer courses are taught in English. LEC.

**BIOL 465. Marine Biology. 4 Hours. N.**
A theory and practice course on biotic relations, the role of organisms and marine biodiversity. It covers basic marine principles and physico-chemical processes (temperature, salinity, dissolved oxygen, nutrients, and pH in the water) and their effect on the abundance, and horizontal and vertical distribution of marine organisms. Course includes field work on data collection. Taught in Golfito, Costa Rica. Contact Undergraduate Biology, or the Office of Study Abroad. Prerequisite: BIOL 150 or BIOL 151 and BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses are taught in Spanish; therefore, four semesters of Spanish are required. Summer courses are taught in English. LEC.

**BIOL 466. Fresh Water Ecology. 4 Hours. N.**
A theory and practice class on the study of rivers and lagoons. It includes systematics of rivers, lagoons, and reservoirs. Course includes theory and field work to monitor the growth of fish, shrimp, and mollusks, with the purpose of understanding the variables that could produce the best yields. The course covers ecology (population growth, competition, predators, ecosystem dynamics), and fishery biology (growth, fish yield, capture efficiency) applicable in the field experiments. Taught in Golfito, Costa Rica. Contact Undergraduate Biology, or the Office of Study Abroad. Prerequisite: BIOL 150 or BIOL 151 and BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses are taught in Spanish; therefore, four semesters of Spanish are required. Summer courses are taught in English. LEC.

**BIOL 467. Marine Resources Management. 3 Hours. N.**
A theory and practice course which focuses on the techniques used for monitoring the growth of fish, shrimp, and mollusks, with the purpose of understanding the variables that could produce the best yields. The course covers ecology (population growth, competition, predators, ecosystem dynamics), and fishery biology (growth, fish yield, capture efficiency) applicable in the field experiments. Taught in Golfito, Costa Rica. Contact Undergraduate Biology, or the Office of Study Abroad. Prerequisite: BIOL 150 or BIOL 151 and BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses are taught in Spanish; therefore, four semesters of Spanish are required. Summer courses are taught in English. LEC.

**BIOL 468. Ecology and Global Change. 3 Hours. N.**
Humans influence both natural and managed ecosystems. This course studies the effects of climate change, land-use change, and reductions in biodiversity on ecosystems. Emphasis is placed on how biological and physical processes may be perturbed by human influences. Topics include the greenhouse effect, species extinctions, human disease expansion, and the effects of global change on agricultural productivity. A combination of lectures and discussion address issues from a scientific basis and link these ecological issues to our everyday lives and society as a whole. Prerequisite: BIOL 152, BIOL 153, or equivalent, or permission of instructor. LEC.

**BIOL 480. Biology and Diversity of Parasites. 3 Hours. N.**
Introductory lecture course to the field of Parasitology. Provides basic knowledge about the morphology and biology of parasitic animals. Coverage includes a diversity of protozoan and metazoan groups parasitizing animals, including humans (e.g., malaria, amoebas, hookworms, tapeworms). Some emphasis is given to groups of parasites of particular medical and/or economic importance. Selected principles of parasitism are introduced. Prerequisite: BIOL 152 or BIOL 153, or permission of instructor. LEC.

**BIOL 481. Parasitology Laboratory. 1 Hour. U.**
Laboratory course in the study of protozoan and metazoan parasites of animal, including humans, emphasizing their diversity, classification, morphology, and identification. One three-hour laboratory each week. Prerequisite: Concurrent or prior enrollment in BIOL 480. LAB.

**BIOL 494. Introduction to Mammalogy. 3 Hours.**
A study of mammals, with emphasis on evolution, biogeography, systematics, and natural history. Lectures, laboratory, and field study. Prerequisite: BIOL 152 or 153 or permission of instructor. LEC.

**BIOL 499. Introduction to Honors Research. 2 Hours. N.**
Intended for sophomores planning to enroll in the Biology Honors Program. Students interested in pursing Biology Honors discuss with Biology faculty members the rationale, methods, and interpretations of research being carried out in individual faculty labs to learn how scientific research is conducted. Prerequisite: At least 17 credit hours of college level natural sciences coursework or consent of instructor. LEC.

**BIOL 500. Biology of Insects. 3 Hours. N.**
Lectures and demonstrations providing an introduction to the study of insects, including general classification, structure, phylogeny, identification, development, physiology, behavior, ecology, and relations to human affairs. Prerequisite: BIOL 152, 153, or equivalent, or permission of instructor. LEC.

**BIOL 502. Laboratory in Insect Biology and Diversity. 2 Hours. U.**
Laboratory and field studies of insects, emphasizing their diversity, classification, ecological relationships, morphology, and behavior. Course provides practical application of principles covered in BIOL 500. Prerequisite: Concurrent or prior enrollment in BIOL 500 or the equivalent. LAB.

**BIOL 503. Immunology. 3 Hours. N.**
Lectures on the nature and mechanisms of natural and acquired resistance including humoral and cellular immunity. Characteristics of antigens and antibodies and of their interaction; ontogeny and cellular basis of immune responsiveness, hypersensitivity; specific immunologic tolerance. Not open to those with credit in BIOL 524. Prerequisite: BIOL 400 or BIOL 401, or consent of instructor. LEC.

**BIOL 504. Immunology Laboratory. 2 Hours. U.**
Laboratory designed to complement BIOL 503. Prerequisite: BIOL 503, or BIOL 503 concurrently. LAB.

**BIOL 505. Social Insects. 3 Hours. N.**
Lectures and laboratory demonstrations on presocial and social insects, specifically termites, ants, wasps, and bees. Emphasis will be placed on evolution of social behavior and the place of social insects in sociobiology. Prerequisite: BIOL 152, BIOL 153, or equivalent. LEC.

**BIOL 506. Pathogenic Microbiology. 3 Hours. N.**
Lectures. Characteristics and mechanisms of pathogenic microorganisms and disease processes. Elements of host-parasite interactions. Not open to freshmen or sophomores. Prerequisite: BIOL 503, or consent of instructor. LEC.

**BIOL 507. Pathogenic Microbiology Laboratory. 2 Hours. U.**
Laboratory to complement BIOL 506. Cultivation of pathogenic microorganisms, diagnostic procedures, and experiments to demonstrate various aspects of microbial pathogenicity and host responses.
Prerequisite: BIOL 402 and BIOL 506 (or concurrent enrollment) or consent of instructor. LAB.

**BIOL 509. Biology of Spiders. 3 Hours. N.**
An introduction to the evolution, anatomy, physiology, behavior, and ecology of spiders and other arachnids. Special topics include the action of spider venoms; the composition and uses of silk; courtship and mating; predation; social behavior; and the role of spiders in natural and agricultural ecosystems. Concurrent enrollment in BIOL 511 is encouraged. Prerequisite: BIOL 152, BIOL 153 or permission of instructor. LEC.

**BIOL 510. Comparative Anatomy. 5 Hours. N.**
Structure, function, and evolution of the vertebrates. Lectures and laboratory study. A course designed for zoologists. Prerequisite: BIOL 100, BIOL 101, BIOL 150, or BIOL 151 and BIOL 152 or BIOL 153. LEC.

**BIOL 511. Biology of Spiders Laboratory. 1 Hour. U.**
Topics will include comparative biology of arachnid orders (spiders, scorpions, harvestmen, mites, and others), external and internal anatomy of spiders, identification of common spider families and genera, and spider behavior. Students will be required to make a small collection (collect, preserve, and identify specimens). Prerequisite: BIOL 509; concurrent enrollment is preferred. LAB.

**BIOL 512. General Virology. 3 Hours. N.**
Lectures and discussions covering the basic nature and characteristics of viruses from a general biological point of view: viruses of bacteria, animals and plants, physical-chemical properties; host cell-viral interactions; mode of replication of DNA and RNA viruses, tumor viruses. Prerequisite: BIOL 400, BIOL 401 or consent of instructor. LEC.

**BIOL 513. Virology Laboratory. 2 Hours. U.**
Experiments involving cultivation, quantitation, and identification of animal viruses, continuous cell culture and primary chicken embryo culture techniques. Molecular biology techniques are used to demonstrate the steps in virus replication. The value of viruses as tools to understand normal cellular processes is emphasized in experiments which demonstrate the relative simplicity of viruses and the relative complexity of eukaryotic cells. Demonstrations include transformation of cells by tumor viruses and electron microscopy of virus particles. Prerequisite: BIOL 402 and BIOL 512, or consent of instructor. LAB.

**BIOL 514. Principles of Ecology, Honors. 3 Hours. N.**
Honors section of BIOL 414 for students with superior academic records. Course covers core concepts on the ecology of individuals, populations, communities, and ecosystems. Relative to BIOL 414, topics are presented in greater depth with increased student participation and stronger emphasis on the primary scientific literature. Prerequisite: BIOL 100, BIOL 101, BIOL 150, or BIOL 151 and BIOL 152 or BIOL 153. Open only to students admitted to the University Honors Program or by consent of instructor. LEC.

**BIOL 516. Microbial Physiology. 3 Hours. N.**
Elements of microbial physiology. Carbohydrate metabolism; enzymes and coenzymes; microbial nutrition; quantitative problems in microbial physiology; a survey of microbial metabolic types. Prerequisite: BIOL 400 or BIOL 612 and BIOL 402, and five hours of organic chemistry. LEC.

**BIOL 517. Microbial Physiology Laboratory. 2 Hours. U.**
Laboratory designed to complement BIOL 516. Prerequisite: BIOL 516, or BIOL 516 concurrently. LAB.

**BIOL 518. Microbial Genetics. 3 Hours. N.**
Bacteria and viruses as models of genetic systems. Mutagenesis and repair. Transformation, transductions, and recombination. Molecular biology of gene expression. Prerequisite: An introductory microbiology course. LEC.

**BIOL 519. Microbial Genetics Laboratory. 2 Hours. U.**
Laboratory designed to complement BIOL 518. Prerequisite: BIOL 402, BIOL 518, or BIOL 518 concurrently. LAB.

**BIOL 520. Marine Biology. 3 Hours. N.**
This introductory course covers biological, physical, and chemical ocean sciences, with an emphasis on ecological aspects. In addition to this Lawrence campus course, students may enroll for a supplementary 1 credit field trip class to a Caribbean coral reef island offered in December or January. Prerequisite: BIOL 414 or permission of the instructor. LEC.

**BIOL 521. Insect Systematics. 4 Hours. N.**
A study of the diversity of insects, including the classification of all living and fossil orders and the more common families primarily on the basis of external morphology. The biology, ecology, phylogeny, and geological history of each order is covered. Includes both lectures and laboratory exercises. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 500, BIOL 502 or equivalent, or permission of instructor. LEC.

**BIOL 525. Aquatic Entomology. 4 Hours. N.**
Designed to enable students to develop skill in the area of identification of aquatic insects and to gain a detailed comprehension of their community structure and dynamics. The external morphology of all aquatic orders is covered, followed by consideration of specific physiological and behavioral adaptations that facilitate an aquatic existence. Includes both lectures and laboratory exercises. Requirements include making a collection of aquatic insects. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 414 or BIOL 500. LEC.

**BIOL 526. Insect Physiology and Internal Morphology. 3 Hours. N.**
Mechanisms and integration of the internal life-supporting systems of insects, emphasizing the interdependence of structure and function. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 408 and BIOL 500, or permission of instructor. LEC.

**BIOL 528. External Morphology of Insects. 4 Hours. N.**
A study of external structure common to all insect orders, with detailed comparative laboratory studies of representative species. Includes both lectures and laboratory exercises. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 500, BIOL 502 or equivalent, or permission of instructor. LEC.

**BIOL 529. Immature Insects. 3 Hours. N.**
The classification, structure, and ecological distribution of immature insects, especially larvae of Holometabola. Includes both lectures and laboratory exercises. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 502 or permission of instructor. LEC.

**BIOL 533. Biology of Fungi. 4 Hours. N.**
A study of the major groups of fungi from slime molds to mushrooms. Emphasis on their activities in natural substrates, isolation techniques, parasitic and mutualistic relationships with other organisms, uses in research, industrial applications, production of mycotoxins and poisons, and physiological, genetic and reproductive behavior. Lectures, laboratory, and field trips. Prerequisite: BIOL 100, BIOL 101, BIOL 150, or BIOL 151 and BIOL 152 or BIOL 153. LEC.

**BIOL 536. Cell Structure and Function (Honors). 3 Hours. N.**
BIOL 536 is the honors version of BIOL 416. Completion of this class will satisfy the BIOL 416 requirement. Open to students in the Honors...
program or by permission of instructor. Prerequisite: BIOL 350 or consent of instructor. LEC.

BIOL 540. General Invertebrate Zoology. 4 Hours. N.
Phylogeny, physiology, and embryology; evolutionary processes; characteristics of major ecological groupings. Laboratory will consider major taxonomic categories with emphasis on functional morphology and its evolutionary modifications. Prerequisite: BIOL 152 or BIOL 153. LEC.

BIOL 545. Evolution of Development. 5 Hours. N.
An advanced course designed to expose students to evolutionary change in the developmental patterning of plant and animal form. This course includes a lecture component and a laboratory component to integrate multiple biological disciplines including comparative morphology, molecular evolution, developmental genetics and experimental development, to explore biodiversity at a mechanistic level. Lectures are designed to give students background on topics ranging from homology assessment to empirical examples of how changes in gene expression or function may have shaped morphological diversity. The laboratory complements these topics through observations of normal development in a diversity of plant and animal model organisms, and through conducting independent research experiments. Prerequisite: BIOL 350 or equivalent. LEC.

BIOL 555. General Plant Physiology. 3 Hours. N.
The principal physiological processes of higher plants including photosynthesis, respiration, water relations, mineral nutrition, and factors associated with morphogenesis. Prerequisite: BIOL 408 or consent of instructor. LEC.

BIOL 560. Histology. 3 Hours. N.
Study of detailed microscopic anatomy of cells, tissues, and organs of mammals. Examples are drawn from normal and abnormal tissue, histochemistry, and electron microscopy. Lecture and demonstrations. A course in anatomy and physiology is highly recommended. Prerequisite: BIOL 152 or BIOL 153. LEC.

BIOL 570. Introduction to Biostatistics. 3 Hours. N.
Statistical concepts related to biological problems. Topics include the scientific method, data representation, descriptive statistics, elementary probability distributions, estimation and hypothesis testing, emphasizing the analysis of variation. Prerequisite: College algebra and ten hours of natural science. LEC.

BIOL 571. Introduction to Biostatistics Laboratory. 2 Hours. U.
Introductory statistical analyses on microcomputers. Data entry and export; simple graphs and exploratory data analysis; descriptive statistics; sampling; point and interval estimation; one and two sample t-tests; Chi-square; regression and correlation; analysis of variance; and nonparametric methods. Prerequisite: BIOL 570 or equivalent (may be taken concurrently). LAB.

BIOL 582. Principles of Biogeography. 3 Hours. N.
An introduction to the study of the distribution of life on earth. Covers geographical patterns of species diversity and the processes that give rise to those patterns: speciation, extinction, dispersal, vicariance, continental drift, ecological interactions, and phylogeny. Topics are presented within the framework of evolutionary history and include discussion of the biology of species on islands, terrestrial biomes, altitudinal zonation of species, latitudinal species gradients, historical factors governing species distributions, macroevolutionary trends in the fossil record, and application of modern molecular techniques for testing biogeographical hypotheses. Prerequisite: BIOL 152 or 153 and past or concurrent enrollment in BIOL 412, 413, 414, or 550; or permission of Instructor. LEC.

BIOL 583. Herpetology. 3 Hours. N.
A study of amphibians and reptiles. This lecture course will explore the taxonomic diversity of amphibians and reptiles, and current areas of active research in herpetology. Topics will be considered within a phylogenetic framework, and include discussion on systematics, biogeography, tetrapod origins, skeletal systems, growth, circulatory system, locomotion, thermal and water regulation, hibernation, ecology, sexual behavior, parental care, and mimicry. LEC.

BIOL 592. Ichthyology. 4 Hours. N.
A study of fishes. Lecture topics include the structure and adaptations of fishes to the aquatic environment and a survey of major fish groups with emphasis on their evolution and biogeography. Laboratory topics include a survey of fish diversity using specimens and the use of keys to identify fishes, with emphasis on the Kansas fish fauna. This course meets with BIOL 792. Students taking this course at the 700 level will have additional work required of them. Prerequisite: BIOL 152 and/or BIOL 413. LEC.

BIOL 593. Ornithology. 3 Hours. N.
A lecture and laboratory course on the biology, evolution, and diversity of birds. Prerequisite: BIOL 412 (or BIOL 413), or permission of instructor. LEC.

BIOL 594. Forest Ecosystems. 3 Hours.
Students learn basic concepts of forest productivity, forest water relations, forest hydrology, nutrient cycling, through soils and vegetation, nutrient uptake, carbon cycling, decomposition, linkages to aquatic ecosystems, and agents of disturbance to these cycles. The class spends a significant part of the semester exploring forest soil profiles and the challenges they present to different forest ecosystems. We discuss the function of forested ecosystems in a global context and identify and understand smaller-scale processes that drive forest function. Prerequisite: CHEM 135 or CHEM 195 or CHEM 175, and BIOL 414. LEC.

BIOL 595. Human Genetics. 3 Hours. N.
A lecture course providing balanced coverage of Mendelian and molecular genetics of humans; includes discussions and presentations on current issues in human and medical genetics. Prerequisite: BIOL 350. LEC.

BIOL 598. Research Methods. 3 Hours. N.
An introduction for pre-service teachers to the tools used by scientists to solve scientific problems. Topics include design of experiments and interpretation of their results, use of statistics, mathematical modeling, laboratory safety, ethical treatment of human subjects, writing scientific papers, giving oral presentations, and obtaining data from the scientific literature. Open only to students in the UKanTeach program. LEC.

BIOL 599. Senior Seminar: ______. 1 Hour. AE61 / N.
A synthesis and discussion of current trends in a discipline or disciplines related to one of the degrees offered in the biological sciences. Emphasis is placed on providing seniors with an appreciation of the discipline's state-of-the-art and on developing skills for success in the next stage of a career in the biological sciences. Topics depend on the associated degree program. Prerequisite: Must be taken in the final year of a degree and students must have completed most of the course work required for one of the degrees in the biological sciences. LEC.

BIOL 600. Introductory Biochemistry. Lectures. 3 Hours. N.
Designed to offer the essentials of the chemistry of the constituents of living organisms and the changes these constituents undergo (during life processes) in the human body and other living forms. Prerequisite: BIOL 150 or BIOL 151 and one semester of organic chemistry. LEC.

BIOL 601. Principles of Biochemistry Laboratory. 2 Hours.
Theory and methods in the development of protein separation and purification, enzyme structure/function, and enzyme kinetics derived from
primary literature searches and readings. Prerequisite or Co-requisite: BIOL 600; or consent of instructor. LAB.

BIOL 602. Plant Ecology. 3 Hours. N.
Introduction to basic concepts, focused at community and species level. Architectural ecomorphology of plants and their physiological responses to physical factors: solar radiation, climate, and soils. Plant succession as an interaction among species differing in ecomorphology and life style. Classification and ordination of plant communities: practice and theory. Other topics include: species diversity and lognormal distribution as to abundance classes; species/area relations and theory of island biogeography; allelochemical defenses; genealogy; paleoecology. Prerequisite: BIOL 414 or consent of instructor. Concurrent enrollment in parallel laboratory, BIOL 607, recommended. LEC.

BIOL 603. Systemic Botany. 3 Hours. N.
A lecture/laboratory course providing hands-on experience with plant identification, a history of plant classification, the principles of nomenclature and character analysis, the basics of systematics theory, and a phylogenically-oriented introduction to vascular plant diversity. Prerequisite: BIOL 413 or equivalent. LEC.

BIOL 606. Ecological Plant Physiology. 3 Hours. N.
Physiological responses of higher plants to environmental factors are discussed. Major topics are: water relations, heat transfer, resistance to water and temperature stress, dormancy, photoperiodism, photosynthesis and respiration under natural conditions, and effects of environmental pollution. Prerequisite: BIOL 408 or consent of instructor. LEC.

BIOL 607. Field and Laboratory Exercises in Plant Ecology. 2 Hours. U.
Introduction to quantitative analysis of plant communities and correlated environmental parameters; field and/or laboratory measurements of ecophysiological traits and comparative ecomorphology of principal species. Prerequisite: BIOL 414. Concurrent enrollment in parallel lecture, BIOL 602, recommended, but not required. LAB.

BIOL 609. Current Progress in Microbiology. 1 Hour. U.
A seminar course which will focus on current research in microbiology. A term paper will be required of each student. May be repeated for credit. Required of all majors in the senior year. Prerequisite: Two courses in microbiology. LEC.

BIOL 611. Molecular Systematics and Evolution. 4 Hours. N.
An introduction to the use of molecular data in systematics and population biology. Topics include: evolution of genes and proteins; properties of mitochondrial DNA, chloroplast DNA, ribosomal RNA genes, protein-coding genes, and repetitive DNAs; laboratory methods for data collection; and data analysis. Prerequisite: BIOL 350. BIOL 550 or equivalent is recommended. LEC.

BIOL 612. Fundamentals of Microbiology. 3 Hours. NB / N.
Lectures. Fundamental principles of microbiology with emphasis in physical and chemical properties of the bacterial cell; microbial metabolism, cultivation, growth and death of bacteria; microbial genetics; pathogenesis and immunity, industrially important microorganisms. Meets with BIOL 400, but students will be given additional and more advanced assignments, and will carry higher expectations. Prerequisite: BIOL 150 or BIOL 151 and two semesters of college chemistry, or consent of instructor. LEC.

BIOL 613. Biology of Honeybees. 3 Hours. N.
Social organization, evolution, behavior, morphology, communication, pollination biology, and ecology of honeybees. Experience will be gained with colony dynamics and behavior while working with bees in the field. Prerequisite: BIOL 152, BIOL 153, or consent of instructor. LEC.

BIOL 616. Medical Entomology. 3 Hours. N.
A study of the major human diseases transmitted by arthropods with emphasis on the biology and ecology of vectors, vector feeding mechanisms as related to disease transmission, epidemiology of arthropod-borne diseases, and the impact of arthropod-borne diseases on humans. Laboratory work on recognition of vector species, information sources, and use of taxonomic keys. Prerequisite: BIOL 152 or BIOL 153 and a course in microbiology or consent of instructor. LEC.

BIOL 622. Paleontology. 3 Hours. N.
A study of the structure and evolution of ancient life; the nature and diversity of life through time; the interactions of ancient organisms with their environments and the information that the study of fossils provides about ancient environments; the use of fossils to determine the ages of rocks and the timing of past events in earth history; and the patterns of extinction through time. (Same as GEOL 521.) Prerequisite: BIOL 100, BIOL 101, BIOL 152, BIOL 153, GEOL 105, or GEOL 304. LEC.

BIOL 623. Paleontology Laboratory. 1 Hour. U.
Laboratory course in the study of fossils with emphasis on the practice of paleontology and the morphology of ancient organisms. (Same as GEOL 523.) LAB.

BIOL 625. Behavioral Ecology and Sociobiology. 3 Hours. N.
The role of natural selection in animal behavior, and the influence of behavior on population biology and social dynamics of animal species. Topics include: game theory and optimization as applied to animal behavior; altruism, cooperation and competition; kin recognition and interactions; group formation and dynamics, dominance, aggression, and territoriality; feeding strategies; reproductive behavior including mate choice, parental care, and mating systems. Prerequisite: BIOL 152; either BIOL 350, BIOL 412 or BIOL 414 recommended; or consent of instructor. LEC.

BIOL 630. Conservation and Wildlife Biology. 3 Hours. N.
Examination of the concepts and processes involved in conservation of plant and animal populations and communities. Topics to be covered include conservation of endangered species, problems with invasions of exotic species and habitat fragmentation, wildlife management, and design of nature reserves. Prerequisite: BIOL 414, BIOL 412 strongly recommended. LEC.

BIOL 636. Biochemistry I. 3 Hours. N.
First semester of a two-semester lecture course in introductory biochemistry. Emphasis upon the physical structure of macromolecules and membranes, enzyme structure/function, and enzyme kinetics. Prerequisite: CHEM 335 or consent of instructor. LEC.

BIOL 637. Introductory Biochemistry Laboratory. 2 Hours. U.
The laboratory portion of BIOL 600 or 636. Experiments have been selected to introduce the student to cell constituents and biochemical reactions. One four-hour laboratory and one-hour lecture each week. Prerequisite: BIOL 600 or BIOL 636, or concurrent enrollment. LAB.

BIOL 638. Biochemistry II. 3 Hours. N.
Second semester of a two-semester lecture course in introductory biochemistry. Emphasis upon the metabolism of carbohydrates, lipids, amino acids, proteins, and nucleic acids. Prerequisite: BIOL 636. LEC.

BIOL 639. Advanced Biochemistry Laboratory. 2 Hours. U.
The laboratory portion of BIOL 638. One four-hour laboratory and a one-hour lecture each week. Experiments have been selected to familiarize students with experimental biochemical techniques using state-of-the-art methodology. Prerequisite: BIOL 637 and 638 (BIOL 638 may be taken concurrently). LAB.
BIOL 640. The Biology and Evolution of Fossil Plants. 3 Hours. N. A lecture course in which fossil plants, protists and fungi are examined throughout geologic time. Emphasis will be directed at paleoecology, biogeography and the stratigraphic distribution and composition of ancient floras. (Same as GEOL 528.) Prerequisite: BIOL 413 or permission of instructor. LEC.

BIOL 641. Laboratory in Paleobotany. 1 Hour. U. An examination of selected fossil plants throughout geological time and the techniques used to study them; laboratory will include identification and the use of plant fossils in biostratigraphy. (Same as GEOL 529.) Prerequisite: BIOL 413 or permission of instructor. Must be taken concurrently with BIOL 640. LAB.

BIOL 644. Comparative Animal Physiology. 3 Hours. N. Lecture and discussion of the basic mechanism of organic maintenance and integration; a comparative treatment of the uniformities and diversity of animal function; emphasis on environmental adaptations and evolutionary relationships. Prerequisite: BIOL 152 or BIOL 153, and a course in organic chemistry, or consent of instructor. A college physics course is recommended but not required. LEC.

BIOL 646. Mammalian Physiology. 4 Hours. N. Lectures and demonstrations. An intermediate course in the functions, mechanisms and interactions of mammalian organ systems. Discussions span topics from molecular to whole animal functions. Required for pharmacy students and strongly recommended for students planning advanced work in any area of physiology. The student is assumed to have the knowledge and ability to utilize their math and science background. Prerequisite: Five hours of organic chemistry, a course of college physics. LEC.

BIOL 647. Mammalian Physiology Laboratory. 2 Hours. U. Laboratory experiments in representative areas of mammalian physiology designed to complement BIOL 646. Not open to students with credit in BIOL 247. Prerequisite or Co-requisite: BIOL 646. LAB.

BIOL 648. Systematics and Macroevolution. 3 Hours. N. An introduction to the theory of macroevolution and the fundamental principles of systematics. Intended for students planning to pursue advanced studies in organismal biology, evolution, and/or systematics. Topics in macroevolution will include hierarchy theory, species concepts, speciation and species selection. Methods of phylogenetic estimation will be discussed and include parsimony, Maximum likelihood and Bayesian inference. Evolutionary studies utilizing phylogenies including tests of homology, studies of character evolution, and biogeography will be discussed. An overview of classification and nomenclature will also be provided. Prerequisite: BIOL 412 or equivalent. LEC.

BIOL 650. Advanced Neurobiology. 3 Hours. N. The course builds an in depth knowledge about basic mechanisms of synaptic communication among nerve cells and their targets, and the structure and function of nervous systems. Topics include nervous system development and synapse formation, structure and function of neurons, physiological and molecular basis of synaptic communication between neurons, mechanisms of synaptic plasticity involved in learning and memory, sensory systems (vision, auditory, vestibular, motor reflexes and pain), processing of neural information at cellular and system levels, synapse regeneration and diseases of the nervous system. Prerequisite: BIOL 435 (Introduction to Neurobiology), or consent of instructor. LEC.

BIOL 652. Comparative Animal Behavior. 3 Hours. N. A comparative analysis of behavior as an adaptive mechanism; emphasis on ontogenetic and evolutionary aspects of behavior. Prerequisite: BIOL 152 or BIOL 153; and BIOL 412. Alternatively, BIOL 412 may be taken as a corequisite. LEC.

BIOL 654. Comparative Animal Behavior, Laboratory. 1 Hour. U. Laboratory and field phase of BIOL 652. Students may elect sections according to their special interests. Prerequisite: Prior or concurrent enrollment in BIOL 652. LAB.

BIOL 655. Behavioral Genetics. 3 Hours. N. A survey of behavioral genetics in animals and humans. Emphasis is on how the methods and theories of quantitative, population and molecular genetics can be applied to individual and group differences in animals. Behaviors covered may include circadian rhythms, foraging, courtship, learning and memory, anxiety, social structures and human behaviors. Prerequisite: BIOL 350 or consent of instructor. LEC.

BIOL 656. Ecosystem Ecology. 3 Hours. N. An introduction to the patterns and processes that affect terrestrial ecosystems. Emphasis is placed on understanding nutrient cycles (e.g., carbon nitrogen phosphorous), hydrologic cycles, and patterns of net primary productivity. The role of both natural and anthropogenic disturbances in structuring terrestrial ecosystems is examined in the context of global land-use patterns. Discussion of current research literature will be expected. (Same as EVRN 656.) Prerequisite: BIOL 414 and CHEM 130. LEC.

BIOL 661. Ecology of Rivers and Lakes. 3 Hours. N. Study of the ecology and structure of creeks, rivers, ponds, lakes, and wetlands as well as some of the major human impacts. Prerequisite: One year of biology or permission of the instructor. BIOL 414 recommended. LEC.

BIOL 662. Aquatic Ecology Laboratory. 2 Hours. U. A field and laboratory course introducing biological, physical, and chemical characteristics of lentic (ponds and lakes) and lotic (creoks and rivers) habitats. Students learn sampling and monitoring techniques and how to classify aquatic biota at higher taxonomic levels. Co- or prerequisite: CHEM 130 or CHEM 190 or CHEM 170, and BIOL 661. LAB.

BIOL 664. Vertebrate Biology. 3 Hours. N. A laboratory course emphasizing principles of systematics and identification and the behavioral ecology of local vertebrate animals. Prerequisite: BIOL 152, BIOL 153 or consent of instructor. LAB.

BIOL 666. Chemical Communication in Sex, Feeding, and Fighting. 3 Hours. N. The course focuses on the role of chemical information molecules in the interrelationships among organisms, with particular attention to interactions (a) within and between animal species, (b) within and between plant species, (c) between animals and plants, (d) between predators and prey, and (e) between parasites and hosts. Prerequisite: BIOL 100 or BIOL 101 or BIOL 152 or BIOL 153 or consent of instructor. LEC.

BIOL 668. Evolutionary Ecology. 3 Hours. N. Emphasis will be on the themes that interface ecology and evolutionary studies. Topics will include selection theory; reproductive, foraging, and sex allocation problems; coevolution; patterns or morphological and behavioral adaptations; competition, predation, and population regulation. Special attention will be given to the philosophy and practice of resolving unanswered questions in evolutionary ecology. Prerequisite: BIOL 412 or permission of instructor. LEC.

BIOL 669. Biology of Freshwater Invertebrates. 3 Hours. N. A lecture, field, and laboratory course examining the classification, biological characteristics, and ecology of invertebrates in lotic and lentic habitats. Major groups of benthic and planktonic invertebrates will be studied, including aquatic insects, crustaceans, molluscs, and others. Prerequisite: BIOL 540, BIOL 660, BIOL 661, or BIOL 663, or permission of instructor. LEC.
BIOL 672. Gene Expression. 3 Hours. N.
A study of the structure and expression of genes in prokaryotes and eukaryotes. Emphasis on the mechanisms of DNA, RNA, and protein biosynthesis. Prerequisite: A course in biochemistry or consent of instructor. LEC.

BIOL 673. Cellular and Molecular Neurobiology. 3 Hours.
Mechanisms of neural function and development will be considered at the cellular and molecular levels. Synaptic mechanisms of learning and memory, modulation of transmitter release, and the molecular basis of neurodegenerative disorders will also be discussed. Prerequisite: BIOL 435, BIOL 646, or permission of instructor. LEC.

BIOL 676. Mammalian Neuroanatomy. 3 Hours. N.
Lectures, video tape demonstrations, and laboratory dissection of mammalian nervous system with some attention to human material. Major emphasis on nervous system structure as it relates to function. For neurobiology and pre-health science majors. Prerequisite or Corequisite: A course in neurobiology (BIOL 435, BIOL 650), or permission of the instructor. LAB.

BIOL 688. The Molecular Biology of Cancer. 3 Hours. N.
The basic concepts of molecular biology are examined and used to probe the process by which a normal cell becomes a cancer cell. The course investigates DNA damage and repair, chemical carcinogenesis, gene cloning and manipulation, the control of gene expression in eukaryotes, tumor viruses, the roles of oncogenes and tumor suppressor genes in carcinogenesis, and cancer therapy. Prerequisite: BIOL 350 and BIOL 416; or BIOL 536; or consent of instructor. LEC.

BIOL 694. The Art of Becoming a Professional Scientist. 3 Hours. N.
Discusses aspects of graduate education that are directed at students entering graduate school and that focus on how to be successful in the post PhD phases of a career, but that must be initiated early in the graduate student program of study. One three hour discussion per week. Senior standing and planning on entering graduate school. LEC.

BIOL 695. Animal Communication and Sensory Ecology. 3 Hours. N.
Lectures and discussion sessions. A study of the propagation and perception of olfactory, acoustic, and visual signals produced by animals in the context of communication. Both physiological and evolutionary perspectives will be treated. Prerequisite: A course in behavior or consent of instructor. LEC.

BIOL 699. Biology Honors Research Colloquium. 1 Hour. AE61 / U.
Students pursuing Honors in Biology will meet weekly to discuss, both formally and informally, their honors research. Background information and experimental approaches of the research will be examined and critiqued. Prerequisite: Enrollment in Biology Honors program and consent of instructor. LEC.

BIOL 700. Conservation Principles and Practices. 3 Hours.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects will also be considered. (Same as AMS 714, GEOL 780, HIST 722 and MUSE 706.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 701. Topics in: _____. 1-3 Hours.
Advanced courses on special topics in biology, given as need arises. Lectures, discussions, readings, laboratory, or field work. Students may select sections according to their special interests. LEC.

BIOL 702. Laboratory Practice: Radiation Safety Procedures. 0.75 Hour.
An introduction to the basic properties of radioisotopes, and the fundamental safety practices needed for the safe use of low levels of radioactive materials. Risks associated with radiation exposures and applicable state and federal regulations are discussed. (Normally the content of the first ten hours of BIOL 703.) Prerequisite: Senior standing in one of the sciences. LAB.

BIOL 703. Radioisotopes and Radiation Safety in Research. 1.25 Hour.
An introduction to the properties of radioactive materials, radiations, and their interaction with matter, methods of radiation detection and measurement, protective measures, applicable state and federal regulations, design and implementation of safety management systems in the research laboratory, design of tracer experiments, and the risks associated with radiation exposure. Prerequisite: BIOL 702 or concurrent enrollment in BIOL 702, algebra and two semesters of either physics or chemistry. LEC.

BIOL 704. Research Animal Methods. 3 Hours.
Lectures, discussions, and laboratory sessions. Selection of proper animal models for specific research studies. Various external influences that alter research data. Routine techniques including restraint, sample collection, injection, anesthesia and euthanasia. Prevention and handling of common research animal problems or diseases. Proper and humane animal care as defined by the Federal Animal Welfare Act. Prerequisite: Senior or graduate standing in one of the biological sciences or permission of instructor. LEC.

BIOL 706. Current Trends in Curation and Collection Management. 2 Hours.
Seminar course to provide students with a working knowledge of the primary issues and current trends in building, administration, and care of scientific collections. Topics include permits, collecting, accessioning, cataloging, preservation, preventive conservation, and access to collections and data. The course format consists of readings, lectures, guest speakers, discussions, and visits to scientific collections on campus. (Same as MUSE 710.) LEC.

BIOL 708. External Morphology of Insects. 4 Hours.
A study of external structure common to all insect orders, with detailed comparative laboratory studies of representative species. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 500, BIOL 502 or equivalent, or permission of instructor. LEC.

BIOL 709. Immature Insects. 3 Hours.
The classification, structure, and ecological distribution of immature insects, especially larvae of Holometabola. Includes both lectures and laboratories. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 502 or consent of instructor. LEC.

BIOL 710. Insect Development. 3 Hours.
A study of the embryonic and postembryonic development of insects. Emphasis is placed on developmental physiology of the early embryonic stages, the morphogenesis of organ systems, and the action of hormones in postembryonic development. Laboratory includes demonstrations and histological and experimental work. Prerequisite: Consent of instructor or BIOL 500. LEC.

BIOL 711. Insect Systematics. 4 Hours. N.
A study of the diversity of insects, including the classification of all living and fossil orders and the more common families primarily on the basis of external morphology. The biology, ecology, phylogeny, and
geological history of each order will be covered. Includes both lectures and laboratory exercises. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 500 and BIOL 502 or equivalent, or permission of instructor. LEC.

BIOL 712. Evolutionary Biology - Graduate. 3 Hours.
A thorough survey of evolutionary biology. Topics include: the history of evolutionary thought, genetics and the nature of variation, adaptation, speciation, coevolution, macroevolution, the comparative method, and the history of life. Prerequisite: BIOL 350 or equivalent or consent of instructor. LEC.

BIOL 714. Community and Ecosystem Ecology. 3 Hours.
Study of factors determining distribution of organisms, community structures, energy flow in ecosystems, and functional analysis of ecosystems. Discussion periods will include reading from current scientific literature. Prerequisite: Intended for graduate students in biology who did not have an undergraduate course in community ecology. Consent of instructor. LEC.

BIOL 716. Insect Physiology and Internal Morphology. 3 Hours.
Mechanisms and integration of the internal life-supporting systems of insects, emphasizing the interdependence of structure and function. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 408 and BIOL 500, or permission of instructor. LEC.

BIOL 717. Insect Ecology and Behavior. 3 Hours.
Lectures and laboratory demonstrations. A study of insect population dynamics, life history strategies, co-evolutionary interactions, foraging, and reproductive and social behaviors. Approaches from basic population biology and behavioral ecology are emphasized. Prerequisite: A course in ecology or behavior, or consent of instructor. LEC.

BIOL 718. Laboratory in Molecular Biology. 3 Hours.
Practical experience in recombinant DNA technology and molecular cloning. Given concurrent with BIOL 418. Prerequisite: BIOL 416 or course in biochemistry or microbiology. Training in radiation safety preferred. LAB.

BIOL 719. Light and Electron Microscopy. 3 Hours.
A lecture and laboratory class emphasizing the theoretical and practical use of light microscopes and scanning and transmission electron microscopes. A variety of approaches using light microscopy will be employed, including brightfield, phase, fluorescence, DIC, polarization, and darkfield optics. A variety of techniques will be used to prepare specimens and view them using scanning and transmission electron microscopy. Video and computer-aided analysis of images as well as conventional photographic techniques will be included. Prerequisite: Permission of instructor. LEC.

BIOL 720. Scientific Illustration. 3 Hours.
Lectures, demonstrations, and studio participation. Instruction in the preparation of illustrations for scientific publications, theses, and oral and poster presentations. Emphasis on basic drafting and layout skills, and pen and ink and tone renderings intended for publication. Attention given to preparation of photographs for publication and oral presentations. Instruction provided in use of specialized optical equipment for drawing. Prerequisite: Upper division or graduate standing and permission of instructor. LEC.

BIOL 721. Microbial Genetics. 3 Hours.
Bacteria and viruses as models of genetic systems. Mutagenesis and repair. Transformation, transductions, and recombination. Molecular biology of gene expression. This course is the graduate-level section of BIOL 518 and MCRB 510. Graduate students will be assigned additional and more advanced studies. Prerequisite: An introductory microbiology course or permission of instructor. LEC.

BIOL 725. Aquatic Entomology. 4 Hours.
Identification of aquatic insects and detailed study of their community structure and dynamics. The external morphology of all aquatic orders will be covered, followed by consideration of specific physiological and behavioral adaptations that facilitate an aquatic existence. Includes both lectures and laboratory exercises. Requirements include making a collection of aquatic insects. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 414 or BIOL 500 or permission of instructor. LEC.

BIOL 746. Principles of Systematics. 4 Hours.
Lectures: historical and philosophical foundations of modern systematics; theory and practice of classifications; character analysis; phylogeny reconstruction; formulation and testing of systematic hypotheses; species concepts and speciation; the interface between systematics and evolutionary theory, particularly the origins of asymmetric diversity patterns, macroevolution, adaptation, coevolution, and the evolution of higher taxa; roles of paleontological, ontogenetic, biochemical, and molecular data in systematics; and biogeography. Laboratory work: practical applications of nomenclature, development of keys, descriptions and systematic revisions, character analysis, phylogeny reconstruction, hypothesis testing, interpretation of biogeographic patterns. (Three hours lecture and two hours laboratory per week.) Prerequisite: BIOL 628 or equivalent. Intended for graduate students planning to specialize in systematics. LEC.

BIOL 747. Quantitative Genetics. 3 Hours.
A discussion of genetic traits for which individual gene differences do not separate a population into qualitatively distinct groups. Includes the estimation of heritability, genetic determination, and number of loci, and a study of selection theory. Prerequisite: BIOL 404 or BIOL 412 or equivalent and a course in statistics. LEC.

BIOL 749. Topics in Stable Isotopes in the Natural Sciences:. 2-3 Hours.
Isotopic compositions of substances provide powerful insights into many topics in the natural sciences. Applications of isotopic analyses of carbon, hydrogen, oxygen, and nitrogen to selected research topics such as plant resource use, food web analysis, paleoecology, paleodiet reconstruction, hydrology, and soils genesis will be examined. Knowledge of isotope
chemistry is not required. (Concepts necessary to understand pertinent articles will be taught during the first class meetings.) May be repeated. (Same as GEOG 749.) LEC.

**Biol 750. Advanced Biochemistry. 3 Hours.**
The structures and dynamics of proteins and nucleic acids will be developed in terms of well-understood examples which will also be used to discuss the function of major classes of proteins. The application of structural and dynamical principles to biological membranes and their function will also be discussed. Prerequisite: BIOL 807 and BIOL 808, a general biochemistry course, or permission of instructor. LEC.

**Biol 751. Plant Communities of North America. 3 Hours.**
Physiognomic and floristic analysis of the vegetation, with emphasis on the Southwest; distribution of communities in relation to climate, substratum, and disturbance; recognition of dominant elements of vegetation through study of specimens and illustrative material. Prerequisite: BIOL 602. LEC.

**Biol 752. Cell Biology. 3 Hours.**
A lecture course emphasizing biochemical, developmental, and molecular aspects of cell structure and function. Prerequisite: BIOL 807 and BIOL 808, or BIOL 416 or BIOL 536, or permission of instructor. LEC.

**Biol 753. Advanced Genetics. 3 Hours.**
An advanced course in modern genetic analysis of eukaryotes. Course material will consist mainly of primary literature in the field of genetics. Topics covered include: genomic structure and genome projects; nature of mutations; mutant analysis; genetic recombination and mapping; analysis of gene function; genetic buffering; DNA and epigenetics; and the genetics of model organisms. This course is meant for graduate students in the Molecular Biosciences and Genetics programs. Prerequisite: BIOL 807 and BIOL 808, or a course in genetics and a course in biochemistry, or permission of the instructor. LEC.

**Biol 754. Brain Diseases and Neurological Disorders. 3 Hours.**
Major brain diseases and neurological disorders such as stroke, Alzheimer's Disease, Parkinson's Disease, Huntington's Disease, Multiple Sclerosis, Epilepsy, Schizophrenia, etc., will be discussed in terms of the etiology, molecular, and cellular basis of potential therapeutic interventions. Graduate students are required to present original research paper assigned by the instructor to the class in addition to the other assignments for all the students enrolled. Prerequisite: BIOL 150, or consent of instructor. LEC.

**Biol 755. Mechanisms of Development. 3 Hours.**
Molecular aspects of differential gene function, signal transduction, and cell polarity in the regulation of morphogenesis. Prerequisite: BIOL 807 and BIOL 808 for graduate students; BIOL 417 or equivalent for undergraduate students; or permission of instructor. LEC.

**Biol 756. Cell and Tissue Culture Laboratory. 3 Hours.**
An introduction to current laboratory methods of cell and tissue culture, intended to provide an understanding of and substantial experience in several aspects of animal cell growth, cell synchrony, cell nutrition, the production and selection of mutant cell lines, the production and use of heterokaryons and interspecific hybrids, cell transformation in vitro, the cultivation and characterization of differentiated cells in culture, enzyme induction, and cell karyotyping. LAB.

**Biol 757. Carcinogenesis and Cancer Biology. 3 Hours.**
This course surveys the field of cancer research. The major goal is to introduce the breadth of cancer research while, at the same time, providing sufficient depth to allow the student to recognize problems in cancer and to design experiments which study cancer biology. Toward that end, the student should (at the conclusion of the course) be able to: define cancer, identify and discuss its causes; identify and discuss the genetic basis for cancer development and progression; discuss the theoretical basis for cancer therapy design and efficacy testing; discuss the biochemical, molecular and cellular events involved in the natural history of major human neoplasms. Prerequisite: Permission of instructor. LEC.

**Biol 767. The Vegetation of the Earth. 3 Hours.**
A discussion of the world's vegetation in its natural condition and as affected by man. Included are aspects of its economic and cultural usefulness and the problem of its preservation. Prerequisite: BIOL 634. LEC.

**Biol 768. Plant Molecular Biology. 3 Hours.**
Gene expression in chloroplasts, mitochondria, and plant nuclei, and regulatory interactions among these genomes. Special topics include the molecular biology of the photosynthetic apparatus, nitrogen fixation, stress and development, viruses and viroids, transposable genetic elements and gene evolution, and gene transfer and plant genetic engineering. Prerequisite: A course in biochemistry, cell or molecular biology, or permission of instructor. LEC.

**Biol 770. Plant Biochemistry. 3 Hours.**
A detailed study of plant biochemistry with emphasis on metabolic and regulatory processes particularly characteristic or unique in plants. Prerequisite: BIOL 600 or equivalent. LEC.

**Biol 772. Gene Expression. 3 Hours.**
A study of the structure and expression of genes in prokaryotes and eukaryotes. Emphasis on the mechanisms of DNA, RNA, and protein biosynthesis. This course meets concurrently with BIOL 672 and is open to graduate students seeking a more rigorous treatment of techniques in molecular biology that students receive in BIOL 672. Prerequisite: A course in biochemistry or consent of instructor. LEC.

**Biol 775. Chemistry of the Nervous System. 3 Hours.**
A detailed study of the molecular aspects of nerve transmission will be covered with special emphasis on the uptake, storage, release, biosynthesis and metabolism of specific neurotransmitters. Drugs affecting these processes and current research on receptor isolation and receptor mechanisms will be discussed from a chemical viewpoint. (Same as CHEM 775, MDCM 775, NURO 775, PTX 775, and PHCH 775.) Prerequisite: BIOL 600 or equivalent or consent of instructor. LEC.

**Biol 777. Integrative and Developmental Neurobiology. 3 Hours.**
Cellular processing of neural information both at the local level and in long distance integration. Local computing functions, and integration of these functions among the various areas to produce coherent movement and perceptions will be discussed. A description of forces guiding the development of the nervous system to form a coherent working system in both invertebrate and vertebrate animals will be presented, as well as determinants of brain sexual dimorphism. Prerequisite: An upper level course in physiology or BIOL 520. LEC.

**Biol 780. Fisheries. 2 Hours.**
Philosophy and practice of conservation as it applies to major world fisheries. Species principally utilized, factors affecting production, methods for appraisal and management of stocks. Historical and prospective roles of the fisheries in relation to human food supplies and recreational needs. Prerequisite: BIOL 412. LEC.

**Biol 781. Fisheries Laboratory. 2 Hours.**
Training in field and laboratory techniques for fishery research and management. Prerequisite: Concurrent or prior enrollment in BIOL 780. LAB.
BIOL 782. Principles of Biogeography. 3 Hours.
A synthesis of historical and ecological biogeography of plants and
animals, treating vicariance, dispersal, and community patterns; lectures,
readings, discussions. A course in systematics and a course in ecology
are recommended. LEC.

BIOL 783. Herpetology. 3 Hours. N.
A study of amphibians and reptiles. This lecture course will explore the
taxonomic diversity of amphibians and reptiles, and current areas of active
research in herpetology. Topics will be considered within a phylogenetic
framework, and include discussion on systematics, biogeography,
tetrapod origins, skeletal systems, growth, circulatory system, locomotion,
thermal and water regulation, hibernation, ecology, sexual behavior,
parental care, and mimicry. Students taking the course at the 700 level
will have additional work required of them. Prerequisite: BIOL 152
Principles of Organismal Biology, and/or BIOL 413 History and Diversity of
Organisms. LEC.

BIOL 784. Introduction to Museum Public Education. 3 Hours.
Consideration of the goals of an institution’s public education services,
developing programs, identifying potential audiences, developing
audiences, and funding. Workshops and demonstrations are designed for
students to gain practical experience working with various programs
and developing model programs. (Same as AMS 797, GEOL 784, HIST
721, and MUSE 705.) Prerequisite: Museum Studies student, Indigenous
Nations Studies student, or consent of instructor. LEC.

BIOL 785. Museum Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museums
as organizations; accounting, budget cycles, personnel management,
and related topics will be presented using, as appropriate, case studies
and a simulated museum organization model. (Same as AMS 731, GEOL
783, HIST 728, and MUSE 701.) Prerequisite: Museum Studies student,
Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 786. Fundamentals of Tropical Biology. 1-8 Hours.
The tropical environment and biota; ecological relations, communities and
evolution in the tropics. Primarily a field course, taught in Costa Rica; two
sessions per year, February-March, July-August. FLD.

BIOL 787. Introduction to Museum Exhibits. 3 Hours.
This course will consider the role of exhibits as an integrated part of
museum collection management, research, and public service. Lecture
and discussion will focus on issues involved in planning and producing
museum exhibits. Laboratory exercises will provide first hand experience
with basic preparation techniques. Emphasis will be placed on the
management of an exhibit program in both large and small museums in
the major disciplines. (Same as AMS 730, GEOL 781, HIST 723, and
MUSE 703.) Prerequisite: Museum Studies student, Indigenous Nations
Studies student, or consent of instructor. LEC.

BIOL 788. The Nature of Museums. 3 Hours.
The purpose of this course is to provide an overview of the kinds of
museums, their various missions, and their characteristics and potentials
as research, education, and public service institutions responsible for
collections of natural and cultural objects. (Same as AMS 720, GEOL
782, HIST 720, and MUSE 702.) Prerequisite: Museum Studies student,
Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 789. Field Course in Entomology. 1-6 Hours.
Field experiences in various habitats, with an emphasis in ecology,
systematics, behavior, and collection techniques. FLD.

BIOL 790. Paleontology of Lower Vertebrates. 3 Hours.
General account of the osteology, geological distribution, and evolution
of the principal groups of fishes, amphibians, reptiles, and birds. Lectures
and laboratory. (Same as GEOL 725.) LEC.

BIOL 791. Paleontology of Higher Vertebrates. 3 Hours.
Evolution of mammals, and anatomical modifications involved in the
process as ascertained from the fossil record. Lectures and laboratory.
(Same as GEOL 726.) LEC.

BIOL 792. Ichthyology. 4 Hours.
A study of fishes. Lecture topics include the structure and function of
fishes; the adaptations of fishes to the aquatic environment; and a
survey of major fish groups with emphasis on evolutionary relationships
and biogeography. Laboratory topics include a survey of fishes using
specimens, and the use of keys to identify fishes with emphasis on the
Kansas fish fauna. A research paper using primary scientific literature is
required. Prerequisite: Graduate standing or permission of the instructor.
LEC.

BIOL 794. Mammalogy. 3 Hours.
A study of mammals, with emphasis on systematics, biogeography, and
natural history. Lectures, laboratory, and field study. Prerequisite: BIOL
100 or BIOL 413. LEC.

BIOL 795. Biology of Amphibians. 3 Hours.
Evolutionary biology of amphibians with emphasis on systematics,
morphology, development, reproductive strategies, and distribution;
lectures and laboratory. Prerequisite: BIOL 664 or permission of
instructor. LEC.

BIOL 796. Biology of Reptiles. 3 Hours.
Evolutionary biology of reptiles with emphasis on systematics,
morphology, reproductive strategies, and distribution; lectures and
laboratory. Prerequisite: BIOL 664 or permission of instructor. LEC.

BIOL 797. Field Course in Vertebrate Paleontology. 3-6 Hours.
Training in the techniques of collecting vertebrate fossils, description
and interpretation of the stratigraphy of fossiliferous sediments, and
interpretation of the adequacy and bias of samples. FLD.

BIOL 798. Principles and Practices of Museum Collection
Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museum
collections, their associated data, and their use in scholarly research;
cataloging, storage, fumigation, automated information management and
related topics will be presented for museums of art, history, natural history
and anthropology. (Same as AMS 730, GEOL 785, HIST 725, and MUSE
704.) Prerequisite: Museum Studies student, Indigenous Nations Studies
student, or consent of instructor. LEC.

BIOL 799. Natural History Museum Apprenticeship. 1-6 Hours.
Provides directed, practical experience in collection care and
management, public education, exhibits and administration with
emphases to suit the particular requirements of each student. Full time for
one semester or half time for two semesters. (Same as AMS 799, ANTH
799, GEOL 723, HIST 799, and MUSE 799.) FLD.

BIOL 801. Topics in: ______. 1-3 Hours.
Advanced courses on special topics in biology, given as need arises.
Lectures, discussing readings, laboratory or field work. Students may
select sections according to their special interests. LEC.

BIOL 802. The Art of Becoming a Professional Scientist. 3 Hours.
Discusses aspects of graduate education that are directed at the post
PhD phases of a career, but that must be initiated early in the graduate
student program of study. One 3-hour discussion per week. LEC.

BIOL 804. Scientific Integrity: Molecular Biosciences. 1 Hour.
This course introduces aspects and issues associated with being an
ethical, responsible, and professional research scientist. Included
topics are professional practices, regulations, and rules that define
the responsible and ethical conduct of research. Graduate students
BIOL 806. Major Patterns in Insect Evolution. 3 Hours. Extensive reading and discussion of the primary literature on topics relating to major patterns in the evolutionary history of insects, including the fossil history of insects, the monophyly of arthropods, the origin of wings, the changing role of insects in ecological communities, the origins of social behavior, modes and mechanisms of speciation, and patterns of species diversity. Assigned readings require a solid background in evolutionary theory and insect biology, especially morphology, development, and classification. Prerequisite: Permission of instructor. LEC.

BIOL 807. Graduate Molecular Biosciences. 6 Hours. An introduction to the advanced study of biochemistry, microbiology, genetics, cell and developmental biology, and neurobiology for all Molecular Biosciences graduate students. Topics can include macromolecular structure, metabolism, kinetics and thermodynamics, bioinformatics, prokaryotic and eukaryotic genetic mechanisms, cell structure and function, signal transduction, basic and pathogenic bacteriology, immunology, virology, membrane potentials, synaptic transmission, and sensory neurophysiology. Prerequisite: Admission to the graduate program in Molecular Biosciences, or consent of instructor. LEC.

BIOL 808. Graduate Molecular Biosciences for Medicinal Chemists. 4 Hours. An introduction to the advanced study of biochemistry, microbiology, and neurobiology for graduate students in Medicinal Chemistry. Prerequisite: Admission to the graduate program in Medicinal Chemistry and consent of instructor. LEC.

BIOL 809. Seminar in Biochemistry. 1 Hour. Presentation and discussion of specific areas of recent research in biochemistry. This course may be taken more than once. LEC.

BIOL 810. Advanced Molecular and Cellular Immunology. 2 Hours. Covers recent advances in immunochemistry and immunobiology. Topics include structure and function of antibodies, hybridoma systems, idiotypes, induction and regulation of the immune response through cell interactions and cytokine action, and the role of immune activity in disease states such as hypersensitivity, autoreactivity, and cancer. Prerequisite: BIOL 807 and BIOL 808, or an introductory course in immunology, or consent of instructor. LEC.

BIOL 811. Biometry I. 5 Hours. A survey of methods for inferring phylogenetic trees from character data and using phylogenies to address evolutionary questions. Lectures will present the relevant theory and algorithmic description of methods. This course is primarily devoted to special advanced topics in analysis of variance, analysis of covariance and regression analysis. Polynomial regression and multiple linear regression will be presented as will the general linear model. Elementary matrix algebra will be developed as needed. Prerequisite: BIOL 841. LEC.

BIOL 812. Biometry II. 3 Hours. An introduction to the theory and practice of phylogenetic systematics. Includes principles of character analysis including determination of homology and determination of character polarity, testing alternate phylogenetic trees, and reconstructing trees using computer techniques. Also includes principles of constructing phylogenetic classifications and the nature of taxa in the phylogenetic system. Other topics, such as the nature of species and principles of biogeography are included. Prerequisite: Twenty hours natural history. LEC.

BIOL 813. Advanced Bacterial Physiology. 2 Hours. The intermediary reactions catalyzed by the bacterial cell during energy-requiring processes. Thermodynamic considerations of these processes are discussed. Knowledge of calculus is recommended. Prerequisite: BIOL 807 and BIOL 808, or a course in microbiology and a course in biochemistry, or consent of instructor. LEC.

BIOL 814. Advanced Molecular Virology. 2 Hours. The course concentrates on evaluation of current literature concerning all aspects of molecular biology, biochemical characterization, and pathogenic mechanisms involved in host-virus interactions. Students will be expected to present articles and participate in discussions. Prerequisite: BIOL 807 and BIOL 808, or a course in microbial genetics and a course in virology, or consent of instructor. LEC.

BIOL 815. Advanced Molecular Genetics. 2 Hours. A literature-based course that covers recent advances in microbial molecular genetics. Topics include transcription, translation, mutagenesis and repair, genetic exchange mechanisms, and regulation of gene expression. Prerequisite: BIOL 807 and BIOL 808, or a course in microbial genetics, or consent of instructor. LEC.

BIOL 816. Careers in Chemical Biology. 1 Hour. Advanced course examining current research topics in chemical biology. An emphasis will be placed on career options open to PhD scientists in Chemical Biology, and preparation for the different career paths. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. This course will be graded satisfactory/unsatisfactory. (Same as CHEM 816, MDCM 816 and PHCH 816.) Prerequisite: Permission of instructor. SEM.

BIOL 817. Techniques in Molecular Biosciences. 2 Hours. This course provides an introduction to common techniques used for research strategies in molecular biosciences. The course will cover common techniques in cell biology, biochemistry, microbiology, and neurobiology. Information will be presented in lectures and through practical demonstrations. This course is primarily intended for first year graduate students in the Department of Molecular Biosciences. Prerequisite: Enrollment in the Molecular Biosciences Graduate Program or consent of instructor. LAB.

BIOL 818. Phylogenetics. 3 Hours. An introduction to the theory and practice of phylogenetic systematics. Includes principles of character analysis including determination of homology and determination of character polarity, testing alternate phylogenetic trees, and reconstructing trees using computer techniques. Also includes principles of constructing phylogenetic classifications and the nature of taxa in the phylogenetic system. Other topics, such as the nature of species and principles of biogeography are included. Prerequisite: Twenty hours natural history. LEC.
Computer lab will familiarize students with software that implements the analyses discussed in lecture, intended for graduate students specializing in systematics. Prerequisite: BIOL 845 and BIOL 841 or consent of instructor. LEC.

BIOL 860. Principles and Practice of Chemical Biology. 3 Hours.
A survey of topics investigated by chemical biology methods including: transcription and translation, cell signaling, genetic and genomics, biochemical pathways, macromolecular structure, and the biosynthesis of peptides, carbohydrates, natural products, and nucleic acids. Concepts of thermodynamics and kinetics, bioconjugations and bioorthogonal chemistry will also be presented. (Same as CHEM 860, MDCM 860 and PHCH 860.) Prerequisite: Permission of instructor. LEC.

BIOL 872. Gene Expression II. 3 Hours.
Second semester of a two-semester lecture course on gene expression. Emphasis on control of gene expression at the transcriptional and post-transcriptional levels. Prerequisite: BIOL 772 or consent of instructor. LEC.

BIOL 888. Topics in Evolutionary Morphology: ____. 2 Hours.
Presentation and discussion by graduate students and faculty of selected topics centering on observed changes in structure and function of organisms from a phylogenetic point of view. Presentation will include results of original research when possible and appropriate, and otherwise, will be based on syntheses of recent literature. RSH.

BIOL 890. Advanced Study in Microbiology. 1-10 Hours.
Original investigation by students at the master's degree level. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Ten or more hours of microbiology and consent of department. RSH.

BIOL 895. Human Genetics. 3 Hours.
A lecture course providing balanced coverage of Mendelian and molecular genetics of humans; includes discussions and presentations on current issues in human and medical genetics. Prerequisite: A course in genetics. LEC.

BIOL 899. Master's Thesis. 1-10 Hours.
Research which is to be incorporated into an M.A. thesis. Not more than ten hours may be earned. Graded on a satisfactory/unsatisfactory basis. THE.

BIOL 901. Graduate Seminar in Biochemistry and Biophysics. 1 Hour.
Advanced course examining current research topics in biochemistry and biophysics. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Prerequisite: Enrollment in graduate school, and departmental admission. LEC.

BIOL 902. Graduate Seminar in Molecular, Cellular, and Developmental Biology. 1 Hour.
Advanced course examining current research topics in molecular, cellular, and developmental biology. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Prerequisite: Enrollment in graduate school, and departmental permission. SEM.

BIOL 903. Graduate Seminar in Neurobiology. 1 Hour.
Advanced course examining current research topics in neurobiology. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Prerequisite: Enrollment in graduate school, and departmental permission. LEC.

BIOL 904. Graduate Seminar in Microbiology. 1 Hour.
Advanced course examining current research topics in microbiology. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Enrollment in graduate school, and departmental permission. RSH.

BIOL 905. Advanced Molecular Genetics. 1-3 Hours.
A review of current literature in molecular genetics. RSH.

BIOL 906. Advanced Genetics. 1-3 Hours.
May be repeated for credit up to six hours. Review of current literature and genetic theory of selected topics such as population, molecular, quantitative, and physiological genetics. RSH.

BIOL 911. Research Topics in Plant Physiology and Biochemistry. 1-6 Hours.
Directed research on selected topics. Prerequisite: BIOL 770 or equivalent. RSH.

BIOL 918. Modern Biochemical and Biophysical Methods. 4 Hours.
This course emphasizes the use of techniques for solving problems of structure and function of biological macromolecules. Students will complete several modules that consist of lectures relating to theory and practical aspects of each methodological approach, and apply these techniques to solving a specific problem. Students will submit a paper describing the resulting data and conclusions. Prerequisite: BIOL 807, BIOL 808, and BIOL 818, or permission of instructor. LEC.

BIOL 925. Research Grant Proposal Preparation. 3 Hours.
This course introduces the basics of preparing a successful scientific grant application. Topics to be covered include how to develop a novel, fundable project, scientific writing and grantsmanship, and what criteria reviewers consider in evaluating grants. The course will be a mix of instruction and class discussion. Prerequisite: Admission to the graduate program in Molecular Biosciences, or consent of instructor. LEC.

BIOL 930. Ultrastructure and Cellular Mechanisms. 3 Hours.
Two lectures and one seminar-recitation. A detailed consideration of electron microscopic analyses of cell structure as related to cell function. Prerequisite: BIOL 416. LEC.

BIOL 943. Multivariate Data Analysis. 3 Hours.
Matrix formulation of multivariate models and data. Specific methods covered include Principal Components Analysis, Factor Analysis, Multiple Group Discriminant Analysis and Canonical Analysis, and Canonical Correlation Analysis. Prerequisite: BIOL 842 or knowledge of elementary matrix algebra. LEC.

BIOL 944. Topics in Quantitative Ecology: ____. 1-3 Hours.
Presentation and discussion by instructor and students of mathematical and statistical concepts in ecology. Topics are selected from texts or sets of readings. LEC.

BIOL 950. Evolutionary Mechanisms. 3 Hours.
Reading and discussions of evolutionary mechanisms from the genetic, ecological, and systematic viewpoints. Prerequisite: BIOL 412. LEC.

BIOL 952. Introduction to Molecular Modeling. 3 Hours.
Introduction to theory and practice of contemporary molecular modeling, including molecular mechanics, molecular dynamics, computer graphics, data analysis, use of structure and sequence databases, docking, and homology modeling. Weekly computer laboratory section aimed at allowing participants to pursue independent research projects that incorporate modeling aspects. Lectures, laboratory manuals, program descriptions, and technical notes are presented on course web page. (Same as MDCM 952.) Prerequisite: Graduate standing or consent of instructor. LEC.
BTEC 340. Biotechnology Research Methods and Applications. 3 Hours. N.
Introduction to fermentation and protein chemistry. Theory behind laboratory techniques and overview of industrial scale expression systems. Bacterial cell culture techniques, principles of fermenter operation and purification, documentation procedures, important tasks for clean room operations, including sanitization, sterilization, cleaning procedures, calibration, and environmental monitoring. Prerequisite: BTEC 300; BTEC 340 or concurrent enrollment in BTEC 340. LAB.

BTEC 341. Principles of Bioprocessing Laboratory I. 1 Hour. N.
Laboratory sessions involve use of microbial expression vectors, fermentation systems, and large-scale purification of recombinant protein. Includes bacterial cell culture techniques, principles of bioreactor/fermentation operations and purification techniques, and calibration. Primary goal of this course is to provide students with an advanced background in bacterial upstream and downstream biotechnology. Prerequisite: BTEC 300; BTEC 340 or concurrent enrollment in BTEC 340. LAB.

BTEC 342. Biotechnology Research Methods and Applications II. 3 Hours. N.
Original research that is to be incorporated into a Ph.D. dissertation. Prerequisite: Consent of instructor. IND.

BTEC 344. Principles of Bioprocessing Laboratory II. 1 Hour. N.
Mammalian cell culture techniques, principles of bioreactor operations and purification techniques, and calibration. The primary goal of this course is to provide students with an advanced background in mammalian upstream and downstream biotechnology. Prerequisite: BTEC 340; BTEC 341. LEC.

BTEC 440. Biotechnology Research Methods and Applications II. 3 Hours. N.
Theory and practicum behind laboratory techniques and overview of industrial scale expression systems of insect or mammalian protein chemistry. Cell culture techniques, principles of bioreactor operation and purification, documentation procedures, important tasks for clean room operations, including sanitization, sterilization, cleaning procedures, calibration, and environmental monitoring are evaluated. Prerequisite: BTEC 340; BTEC 341. LEC.

BTEC 445. Applied Bioinformatics. 3 Hours. N.
Overview of the fields of bioinformatics and genomics. Topics, tools, issues, and current trends in these and related fields are discussed. Principles and practical application of bioinformatics tools in molecular biology and genomics are evaluated. The haploid human genome occupies a total of just over 3 billion DNA base pairs. This information is not contained in books, but stored in electronic databases. Computational biology utilizes infer function by comparative analysis. This course is designed for life scientists from all fields to introduce them to the power of bioinformatics and enable them to access and utilize biological information in databases for their own research. Prerequisite: BTEC 340; BIOL 570 or MATH 365 or PSYC 210. LEC.

BTEC 445. Applied Bioinformatics. 3 Hours. N.
Overview of the fields of bioinformatics and genomics. Topics, tools, issues, and current trends in these and related fields are discussed. Principles and practical application of bioinformatics tools in molecular biology and genomics are evaluated. The haploid human genome occupies a total of just over 3 billion DNA base pairs. This information is not contained in books, but stored in electronic databases. Computational biology utilizes infer function by comparative analysis. This course is designed for life scientists from all fields to introduce them to the power of bioinformatics and enable them to access and utilize biological information in databases for their own research. Prerequisite: BTEC 340; BIOL 570 or MATH 365 or PSYC 210. LEC.

BTEC 446. Introduction to Quality Control/Quality Assurance in Biotechnology. 3 Hours. N.
Quality control techniques, assurance issues, and management methods. Quality in design and planning, in the constructed project, and in production of goods and services. Prerequisite: BTEC 330. LEC.

BTEC 447. Bioseparations Laboratory. 2 Hours. N.
Develop novel and effective strategies for extraction and purification of recombinant and native biomolecules by understanding constraints posed by the biological system and the products. Research projects are geared toward developing cost-effective processes for recovery of industrial and biopharmaceutical products derived from a variety of native and/or transgenic sources. Prerequisite: BTEC 405; BTEC 441. LAB.

BTEC 448. Selected Topics in Biotechnology. 1 Hour. N.
Course work varies with the topic of the seminar. The preparation and presentation of oral reports on selected topics from recent translational research literature. Students may choose one interest group each semester, but may enroll in a given interest group only once. May be repeated for credit when topics vary. Prerequisite: BTEC 300 and approval of instructor. LEC.

BTEC 451. Ethical Issues in Biotechnology. 1 Hour. N.
Student investigations and discussions of current controversial issues in biotechnology. This course emphasizes thinking about new technologies in a rational and thoughtful way. Prerequisite: BTEC 300. LEC.

BTEC 454. Gene Expression Analysis: Microarrays. 2 Hours. N.
This course reviews current theory, techniques, instrumentation, troubleshooting, analysis tools, and advanced protocols for microarray analysis. Students have the opportunity to utilize skills learned during lecture in a laboratory environment. At the conclusion of this course, students understand microarray experimental design, its tools, and analysis of generated data. Prerequisites: BTEC 300. LAB.
**BTEC 542. Protein Expression in Insect Cells. 2 Hours. N.**
Introduction to the insect cells expression system, and its advantages and disadvantages. Introduction to expression of recombinant proteins with baculovirus. Outline of antibody and antibody fragments as well as other complex proteins. Basic techniques used for growth and maintenance of insect cell cultures. The lab portion of the course provides students with practical experience in protein expression techniques in the insect cells expression system. Prerequisite: BTEC 300. LAB.

**BTEC 545. RNA Interference and Model Organisms. 2 Hours. N.**
Introduction and history of RNA interference technology. Principles, mechanism, and applications of RNA interference in model organisms. Laboratory sessions include RNA interference-mediated silencing of genes in plants, C. elegans, and mammalian cell culture. Prerequisite: BTEC 300. LAB.

**BTEC 547. Bioanalytical Lab. 2 Hours. N.**
Analytical methods used for testing biotherapeutics are examined. Emphasis is placed on assessing protein concentration, purity, identity and activity. The importance of sample processing, throughput and level of validation are explored as samples from upstream processing, downstream processing and final bulk are interrogated. Students also learn key concepts used to validate the performance of analytical methods. Prerequisite: BTEC 300. LAB.

**BTEC 599. Biotechnology Capstone Experience. 3 Hours. N.**
Supervised internship at a biotech company; or an independent thesis; or honors thesis with Honors Program. Prerequisite: BTEC 441 and approval of instructor. FLD.

**Master of Arts in Ecology and Evolutionary Biology, Botany, or Entomology**

**Ecology and Evolutionary Biology Graduate Programs**

The department comprises a large number of biologists with a variety of research interests. Three broad overlapping themes capture the interests and activities in EEB — biodiversity and macroevolution, ecology and global change biology, and evolutionary mechanisms. The department offers graduate study leading to Master of Arts and Doctor of Philosophy degrees in botany, entomology, and ecology and evolutionary biology. General information about the department and its faculty, current graduate students, admission, and financial support may be found on the department’s website (http://www2.ku.edu/~eeb).

Neotropical biodiversity is a special area of concentration among EEB faculty. Many faculty members have courtesy appointments in the Latin American Area Studies Program, which fosters multidisciplinary research in Latin America across the campus. KU is a member of the **Organization for Tropical Studies**, and many faculty members and students participate in advanced, field-oriented OTS courses. Graduate students can receive fellowships for courses, e.g. BIOL 786 Fundamentals of Tropical Biology, or research projects in Costa Rica. Other EEB faculty have research concentrations in Asia, Africa, Antarctica, and elsewhere, creating a genuinely global reach for EEB research activities.

(B.A. and B.S. degree programs in biology are listed under Biology Undergraduate Programs (p. 1476).)

**Admission to Graduate Studies**
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**

The departmental graduate admissions committee reviews the record of each applicant. Admission is based on background, preparation, test scores, and academic performance. The committee considers each candidate’s overall undergraduate record in the context of the institution(s) from which the record was received. A graduate student should have a broad undergraduate background in natural science and math, including calculus, physics, chemistry, organismal biology, genetics, ecology, and evolutionary biology. Faculty recommendations, honors, awards, undergraduate research experience, publications, and professional experience also are considered. Enthusiasm, scientific expertise, and clarity of writing as evidenced by the applicant’s essay are particularly important.

A bachelor's degree or equivalent and a minimum overall grade-point average of 3.0 on a 4.0 scale is required for regular admission. The master’s degree is not a prerequisite for entering a Ph.D. program. Domestic applicants must provide a certified score report from the Graduate Record Examination for the general test (scores from the GRE biology subject test are optional). Non-native English speakers must provide evidence of English proficiency, typically in the form of certified scores from the Test of English as a Foreign Language or from the International English Language Testing System. For more details on admission requirements, visit the EEB website (http://www2.ku.edu/~eeb).

Applicants are encouraged to correspond with one or more faculty members before and during the application process, because students cannot be admitted without a faculty sponsor. Interested students are encouraged to visit campus to meet faculty members and graduate students. Graduate school is critically important in beginning a career, and the choice of a program in which to enroll should be made carefully.

The number of students admitted is limited. Qualified candidates may be denied admission because of lack of a faculty sponsor, financial support, or research facilities.

Applications and supplemental materials may be submitted online. Applications from underrepresented groups are encouraged. For a detailed description of the application process, visit the EEB website (http://www2.ku.edu/~eeb). All application materials for fall admission must be received no later than **December 1**. Only complete applications are considered. Send inquiries to the graduate coordinator (a4ashe@ku.edu).
M.A. Degree Requirements: Ecology and Evolutionary Biology, Botany, or Entomology

**Options I (Thesis) and II (Nonthesis)**

Two options leading to the M.A. degree are offered. Option I (Thesis) is research-oriented and requires a thesis. Option II (Nonthesis) emphasizes broader graduate training without a concentration on research. For each option, the advisory committee must have at least 3 Graduate Faculty members, 2 of whom must be in EEB. No faculty member outside the department is required. A faculty member from a different department with a courtesy appointment in the student's home department may serve in fulfillment of the committee majority.

**Required Course Work**

Most course work requirements are identified during the student's preliminary advisory committee meeting. Students are expected to take graduate-level courses (or have equivalent knowledge) in ecology, evolution, and systematics. A student's advisory committee may add course requirements during annual meetings. Listed below are specific course requirements for all master's students in the EEB department:

1. Students must complete BIOL 701 Topics in Responsible Scholarship & Teaching Effectiveness during the first year of graduate education in the fall semester. Students are expected to attend departmental seminars in subsequent semesters.
2. Students must complete BIOL 801 Current Research in Ecology and Evolutionary Biology Seminar during the first year of graduate study in the spring semester.
3. Students must complete a graduate-level course in statistics, typically fulfilled by completing BIOL 841 Biometry I. Alternatively, students may demonstrate equivalent background knowledge.
4. Students pursuing Option I (Thesis) must complete a minimum of 1 credit hour of BIOL 899 Master’s Thesis.

Master's students must meet a credit-hour-completion requirement. Those in the thesis program must complete a minimum of 30 graduate-level credit hours with no more than 10 of the 30 from enrollment in thesis, research, or advanced study hours. Those in the nonthesis program must complete a minimum of 36 graduate level credit hours with no more than 12 of the 36 from enrollment in thesis, research, or advanced study hours.

Students seeking an M.A. in botany must take a graduate-level course in at least 2 of the following 3 areas:

1. Plant ecology
2. Plant systematics or morphology
3. Plant development or physiology

Students seeking an M.A. in entomology must take BIOL 500 Biology of Insects and BIOL 502 Laboratory in Insect Biology and Diversity, unless they have taken equivalent courses. Students who have taken a course equivalent to BIOL 502 elsewhere are encouraged to take BIOL 502 to familiarize themselves with the local insect fauna. In addition, students must take at least 1 of the following courses: BIOL 708 External Morphology of Insects, BIOL 711 Insect Systematics, or BIOL 716 Insect Physiology and Internal Morphology.

**Master’s Defense for Option I (Thesis) Students**

During the final semester of enrollment, students pursuing the Option I (Thesis) master's degree must present the results of thesis research in a public forum and complete a thesis defense. The thesis presentation should follow the standard departmental seminar format. The master's thesis defense consists of a substantive test of the student's knowledge of the field and the thesis topic, with approximately 50 percent of the time devoted to questions in the general examination realm, covering the full breadth of the candidate’s field of study (i.e., general knowledge of ecology and evolutionary biology). At the discretion of the student and advisor, the exam may be held on the same day as the thesis presentation, or the events may be held on separate days. The defense examining committee must be composed of 3 members of the Graduate Faculty, the majority of which must be tenured, or tenure-track EEB faculty with regular or dissertation status on the Graduate Faculty. In some cases it may be possible for committee members to attend the examination via mediated means such as tele/video-conferencing (for details view the exam attendance policy (http://www.policy.ku.edu/graduate-studies/oral-exam-attendance)). To pass the thesis defense, a student must receive a majority of passing votes from the examining committee. Students must contact the EEB graduate coordinator 3 weeks prior to the anticipated presentation and defense to request departmental and College permission to schedule the events.

Students planning to defend a master's thesis must submit copies of the thesis to the entire examining committee and to the GPC no less than 2 weeks (or longer if requested by the student's committee) in advance of the planned defense. The thesis should meet general formatting regulations (http://clas.ku.edu/coga/graduation/masters).

**Master’s Final Examination for Option II (Nonthesis) Students**

During the final semester of enrollment in course work when nonthesis program activities are nearing completion, students pursuing the Option II (Nonthesis) master's degree must successfully complete a general oral examination. The examination's structure is similar to that of the doctoral oral comprehensive examination; however, the examination is shorter, and depth and breadth of knowledge required of the student are less comprehensive than expected of a successful doctoral aspirant. The examining committee must be comprised of at least 3 members of the Graduate Faculty, the majority of which must be tenured or tenure-track EEB faculty with regular or dissertation status on the Graduate Faculty. In some cases it may be possible for committee members to attend the examination via mediated means such as tele/video conferencing (for details view the exam attendance policy (http://www.policy.ku.edu/graduate-studies/oral-exam-attendance)). To pass the master's final examination, a student must receive a majority of passing votes from the examining committee. Students must contact the EEB graduate coordinator 3 weeks prior to the anticipated examination to request departmental and College permission to schedule the event.

**Research**

Upon completion of their work, students in M.A. Option I (Thesis) must submit a thesis reporting original research. The committee-approved thesis must be submitted electronically to Graduate Studies. Instructions for formatting and submitting the electronic thesis are online (http://www.graduate.ku.edu/electronic-thesis-and-dissertation). The thesis also must be submitted to the department as a PDF document. Paper copies of the title and acceptance pages containing the signatures of the
examining committee members must be submitted to both the College and the department.

Students in M.A. Option II (Nonthesis) must conduct research with 1 or more faculty members involving work on a research problem that requires use of literature, and laboratory or field techniques. Nonthesis students must submit a comprehensive written report to the advisory committee. Examples of research problems that could be the basis of the written report include a literature review of a critical issue in a scientific discipline, original research, or other creative activity approved by the advisory committee. The committee-approved report must be submitted to the department as a PDF document. A paper copy of the title page containing signatures of the advisory committee members must also be submitted.

**Time Constraints**

A student beginning graduate study with only a bachelor's degree should complete all work for the master's degree within 2 or 3 years of initial enrollment at KU. A student beginning graduate study with a master's degree in the biological sciences should complete all work for the doctoral degree within 4 to 5 years of initial enrollment at KU. A student beginning graduate study with only a bachelor's degree in the biological sciences should complete all work for the doctoral degree within 5 or 6 years.

The maximum tenure for EEB graduate students varies according to degree program. Master's students are allowed a maximum of 4 years to complete the degree program, and doctoral students are allowed 8 years. If a student earns both an M.A. and a Ph.D. from KU, he or she has a total of 10 years to complete both degrees. Petitions to extend the time limits must be approved by the student's advisory committee and forwarded to the EEB Graduate Program Committee for consideration before being forwarded to the College for final approval.

As required by the university, doctoral students must complete the equivalent of at least 3 academic years of full-time graduate study. This may include the time spent earning a master's degree.

**Doctor of Philosophy in Ecology and Evolutionary Biology, Botany, or Entomology**

**Ecology and Evolutionary Biology Graduate Programs**

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applications are considered. Send inquiries to the graduate coordinator (a4ashe@ku.edu).

**Ph.D. Degree Requirements: Ecology and Evolutionary Biology, Botany, or Entomology**

**Required Course Work**

Most course work requirements for EEB graduate students are identified during the student’s preliminary advisory committee meeting. Students are expected to take graduate-level courses (or have equivalent knowledge) in ecology, evolution, and systematics. A student’s advisory committee may add course requirements to a student’s degree program during annual meetings. Listed below are specific course requirements for all doctoral students in the EEB department:

1. Students must complete BIOL 701 Topics in Responsible Scholarship & Teaching Effectiveness during the first year of graduate education in the fall semester. They are expected to attend departmental seminars in subsequent semesters.
2. Students must complete the BIOL 801 Current Research in Ecology and Evolutionary Biology seminar course during the first year of graduate study in the spring semester.
3. Students must complete a graduate-level course in statistics, typically fulfilled by completing BIOL 841 Biometry I. Alternatively, students may demonstrate equivalent background knowledge.
4. Students pursuing the doctorate must complete at least 1 credit hour of BIOL 999 Doctoral Dissertation.

In addition, students seeking a Ph.D. in botany must take a specialty seminar focusing on a plant-related topic and must complete a graduate-level course in each of the following 3 areas:

1. Plant ecology
2. Plant systematics or morphology
3. Plant development or physiology

Students seeking a Ph.D. in entomology must take BIOL 500 Biology of Insects and BIOL 502 Laboratory in Insect Biology and Diversity unless they have taken equivalent courses. Students who have taken a course equivalent to BIOL 502 elsewhere still are encouraged to take BIOL 502 to familiarize themselves with the local insect fauna. In addition, students must take all 3 of the following courses: BIOL 708 External Morphology of Insects, BIOL 711 Insect Systematics, and BIOL 716 Insect Physiology and Internal Morphology.

**Assistantships**

Doctoral students must complete at least 2 semesters of half-time supervised teaching, curatorial, or research assistantships. Alternative experiences may be approved by the student’s advisory committee.

**Research Skills and Responsible Scholarship**

Before proceeding to the Comprehensive Oral Examination, doctoral students must fulfill the Research Skills and Responsible Scholarship requirement. This requirement has 2 components: (1) training in responsible scholarship pertinent to the field of research; and (2) obtaining research skills pertinent to the field of research. Upon completion of any portion of the research skills and responsible scholarship requirement, students must contact the EEB graduate coordinator to complete documentation. Note that students are not allowed to schedule the comprehensive oral examination for the doctorate until the graduate coordinator has received documentation of the completion of this requirement.

**Responsible Scholarship:** Training in responsible scholarship is part of the curriculum for BIOL 701 Topics in Responsible Scholarship and Teaching Effectiveness. Completion of this course fulfills the responsible scholarship portion.

**Research Skills:** Doctoral students can fulfill the research skills component in one of 4 ways:

1. Exhibiting reading knowledge of 2 foreign languages
2. Exhibiting fluency in a foreign language
3. Exhibiting reading knowledge of 1 foreign language and fulfilling the requirements of 1 other research skill
4. Fulfilling the requirements of 2 research skills

**1. Reading Knowledge of a Foreign Language**

Students without prior experience must enroll in a 3-credit-hour reading course in a major modern language and achieve a final grade of A or B. Students with prior knowledge of a language may choose instead to translate, in a set amount of time, a pre-approved passage from the scientific literature in that language. Approval of the foreign language requirement must be obtained from the instructor of the reading course, from an appropriate representative of a language department, or from a qualified individual from EEB or another department.

**2. Fluency in a Foreign Language**

Fluency in reading, writing, and speaking a language that is not native to the student is determined by a faculty member who is fluent in the chosen language. Whenever possible, a qualified faculty member from the department should make the determination; otherwise, the student should contact the appropriate language department to identify a qualified individual. The faculty member must submit a letter to the EEB graduate program committee indicating that the student is fluent.

If the student is not a native English speaker, the student’s committee may determine fluency in reading, writing, and speaking English. Following the committee’s determination, the student’s advisor must provide a letter to the EEB graduate program committee indicating that the student is fluent.

**3. Other Research Skills**

Other research skills may be attained either through course work or through completion of a project. In either case, the skill must be approved in advance of its completion by the EEB Graduate Program Committee. A list of previously approved skills appears in the EEB Graduate Student Handbook (http://eeb.ku.edu/student-handbook). Other courses or projects can be added to this list by petitioning the EEB graduate program committee for pre-approval.

Students with no prior experience using the chosen research skill should take a course recommended by the department; students with experience might choose to develop a project. A qualified faculty member must approve the choice of a project. Upon completion, a letter that describes the project and is signed by the supervising faculty member should be submitted to the departmental graduate coordinator for documentation purposes.

**Note:** Contact your department or program for more information about research skills and responsible scholarship, and the current requirements.
for doctoral students. Current policies on Doctoral Research Skills and Responsible Scholarship are listed in the KU Policy Library (https://policy.ku.edu/graduate-studies/research-skills-responsible-scholarship).

**Residence Requirement**

Graduate Studies requires all doctoral students to complete 2 terms, which may include 1 summer session, in full-time resident study at KU. See the KU Policy Library (https://policy.ku.edu/graduate-studies/doctoral-program-time-contraints) for details.

**Comprehensive Oral Examination**

The comprehensive oral examination tests the breadth of a student's knowledge and explores the student's ability to synthesize information and think critically. The examination should include, but is not limited to, questions relating to ecology, evolution, and systematics, as well as information about general biology. Examinations are conducted in English. Students are recommended to take the examination within four semesters of entering the program and are expected to complete the examination within six semesters. To be eligible to take the examination, both the research skills and responsible scholarship and doctoral residence requirements must be fulfilled and documented. All doctoral aspirants must prepare a dissertation proposal that follows the National Science Foundation Doctoral Dissertation Improvement Grant model. The dissertation proposal must be submitted to all members of the examination committee for review and approval at least 2 weeks before the examination. Students must contact the EEB graduate coordinator 3 weeks before the anticipated examination to request departmental and College permission to schedule the event.

Doctoral committees must be comply with Graduate Studies Policy (http://policy.ku.edu/graduate-studies/doctoral-student-oral-exam-committee-composition) on committee composition.

A majority vote of the committee is required for the student to pass the examination. If the advisor or committee members wish, secret ballots may be used. To award Honors, at least 80 percent of the committee members must judge the student's performance to be exceptional. An exceptional performance would be one that is judged to be in the top 10 percent of examinations in which the committee members have participated. If a student fails the comprehensive examination, another examination may be scheduled a minimum of 90 days after the first examination, but under no circumstances may a student take the examination more than twice.

A successful pass of the comprehensive oral examination is considered valid by the university for 5 years. Doctoral candidates who do not complete the dissertation within 5 years may be required to take the examination again to demonstrate current knowledge in the field.

**Research Progress, Final Oral Examination, and Dissertation Defense**

After passing the comprehensive oral examination and advancing to degree candidacy, doctoral students are expected to focus on completing original research and writing of the dissertation. Although opportunities for taking valuable courses may arise, the majority of a doctoral candidate's enrollment should be in dissertation credits (BIOL 999 Doctoral Dissertation).

It is generally expected that the dissertation should be completed two to three years after advancing to candidacy. During these years, the student should continue to meet with his or her advisory committee on an annual basis to receive guidance on research progress. Committee membership should follow university requirements.

When the student and the faculty advisor are able to reasonably predict when the dissertation research and writing will be done, the dissertation defense and final oral examination may be scheduled. At least 5 months must have elapsed between successful completion of the oral examination and the date of the defense. Students must contact the EEB graduate coordinator at least 3 weeks prior to the anticipated defense date to request departmental and university approval of the defense.

A complete dissertation must be provided to the EEB Graduate Program Committee and to the student's entire dissertation committee no less than 2 weeks (or longer if requested by the student's committee) in advance of the planned defense. All members of the dissertation committee are required to read and comment on the work. 3 members are designated readers and provide a more detailed review. The dissertation must be written to meet general university regulations (http://www.graduate.ku.edu/electronic-thesis-and-dissertation).

The dissertation defense and final oral examination include a presentation of the candidate's dissertation as a formal, public lecture. Whenever possible, the presentation should be part of the regular departmental seminar series. The presentation is followed by a question period, after which the final oral examination committee meets with the student for further discussion of the dissertation. A majority vote of the committee is required for the student to pass the examination; 80 percent of the committee must agree to award a student Honors. Both the dissertation and the presentation are considered in the decision. In rare cases it may be possible for committee members to attend the defense and examinations via mediated means such as tele/video-conferencing (for details view the exam attendance policy statement (http://www.policy.ku.edu/graduate-studies/oral-exam-attendance)). After passing the final oral examination, the student will make any corrections to the dissertation that are required. The final version will be submitted for approval to the department and the University.

**Time Constraints**

A student beginning graduate study with only a bachelor's degree should complete all work for the master's degree in 2 or 3 years after initial enrollment at KU. A student beginning graduate study with a master's degree in the biological sciences should complete all work for the doctoral degree within 4 or 5 years. A student beginning graduate study with only a bachelor's degree in the biological sciences should complete all work for the doctoral degree within 5 or 6 years.

The maximum tenure for EEB graduate students varies according to degree program. Master's students are allowed a maximum of 4 years to complete the degree program, and doctoral students are allowed 8 years. If a student earns both an M.A. and a Ph.D. from KU, he or she has a total of 10 years to complete both degrees. Petitions to extend the time limits must be approved by the student's advisory committee and forwarded to the EEB Graduate Program Committee for consideration before being forwarded to the College for final approval.

As required by the university, doctoral students must complete the equivalent of at least 3 academic years of full-time graduate study. This may include the time spent earning a master's degree.
Department of Economics

Why study economics?

Because it will give you the tools you need to understand our increasingly interconnected world.

Undergraduate Programs

The study of economics offers students insight into some of the most fundamental issues facing societies today: what goods and services should we produce, how should they be produced, and how should they be distributed around the world? Economics is outstanding preparation for a career in finance, business, policy analysis, international relations, or any other field that requires rigorous analytic thinking. It also makes an excellent foundation for graduate study in economics, business, law, political science, or public administration.

Courses for Nonmajors

ECON 104 is recommended for students who want only an introductory course. Students planning to teach social sciences should consult the School of Education. Students who plan to enter the School of Business in the junior year should consult the School of Business. Students who plan to enter the School of Journalism should consult the School of Journalism and Mass Communications.

Graduate Programs

The economics department offers a Master of Arts degree and a Doctor of Philosophy degree and, in conjunction with the School of Law, a program in which one can earn the Master of Arts and Juris Doctor degrees. These programs help students prepare for careers in education, government, and business.

Courses

ECON 104. Introductory Economics. 4 Hours. SF GE3S / S.
An introduction to modern economics designed primarily for students who do not plan to major in economics. Topics include economic history, the operation of economic institutions, and the formation and execution of economic policies to meet the current problems of the domestic and international economy. Course may be offered in lecture or online format. Prerequisite: MATH 101 or MATH 104, or eligibility for MATH 115 or MATH 121. LEC.

ECON 105. Introductory Economics, Honors. 4 Hours. SF GE3S / S.
An introduction to modern economics designed primarily for students who do not plan to major in economics. Topics include economic history, the operation of economic institutions, and the formation and execution of economic policies to meet the current problems of the domestic and international economy. Prerequisite: Consent of the Economics Department and MATH 101 or MATH 104, or eligibility for MATH 115 or MATH 121. LEC.

ECON 110. The Economics of Globalization. 3 Hours. SF AE42 / S.
The course emphasizes the application of economic methods of analysis to the public policy issues that globalization creates. Topics covered may include the following: winners and losers from trade; links between trade and labor markets; links between trade and foreign investment; the international financial system and exchange rates; outsourcing and multinational corporations; international institutions and regional trade agreements. LEC.

ECON 142. Principles of Microeconomics. 3 Hours. SF GE3S / S.
An analytical introduction to microeconomics. Topics include theory of markets, public policy, international trade, economic efficiency, and equity. Prerequisite: MATH 101 or MATH 104, or eligibility for MATH 115 or MATH 121. LEC.

ECON 143. Principles of Microeconomics, Honors. 3 Hours. SF GE3S / S.
An honors section of ECON 142. An analytical introduction to microeconomics. Topics include theory of markets, public policy, international trade, economic efficiency, and equity. Prerequisite: Consent of the Economics Department and MATH 101 or MATH 104, or eligibility for MATH 115 or MATH 121. LEC.

ECON 144. Principles of Macroeconomics. 3 Hours. SF GE3S / S.
An analytical introduction to macroeconomics. Topics include determination of aggregate income, employment, inflation, exchange rates, and the role of fiscal and monetary policy in dealing with unemployment, inflation, and economic growth. Prerequisite: MATH 101, MATH 104, or eligibility for MATH 115 or MATH 121. LEC.

ECON 145. Principles of Macroeconomics, Honors. 3 Hours. SF GE3S / S.
An honors section of ECON 144. An analytical introduction to macroeconomics. Topics include determination of aggregate income, employment, inflation, exchange rates, and the role of fiscal and monetary policy in dealing with unemployment, inflation, and economic growth. Prerequisite: Consent of the Economics Department and MATH 101, MATH 104, or eligibility for MATH 115 or MATH 121. LEC.

ECON 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Economics. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

ECON 250. Study Abroad Topics in: ______. 1-5 Hours. S.
This course is designed for the study of special topics in economics at the freshman/sophomore level. Coursework must be arranged by the office of KU Study Abroad and approved by the Economics Department. This course may be repeated for credit if content varies. LEC.

ECON 310. Topics in Applied Economics: ______. 3 Hours. S.
(Topic, instructor, and specific prerequisites to be announced in the Schedule of Classes.) This course will focus on an area of applied economics of current interest. This course cannot be used to fulfill the elective course requirements for the Economics major or the Economics minor. LEC.

ECON 450. Study Abroad Topics in: ______. 1-5 Hours. S.
This course is designed for the study of special topics in economics at the junior/senior level. Coursework must be arranged by the office of KU Study Abroad, approved by the Economics Department, and may count as an economics elective for economics majors. This course may be repeated for credit if content varies. LEC.

ECON 497. Senior Research Honors. 1-3 Hours. AE61 / S.
Open to seniors in the College who have a grade-point average of 3.5 or above in economics and a grade-point average of 3.25 or above in all
courses. A directed reading and research course for qualifying seniors. Involves preparation of a research paper under the supervision of a faculty member whose area of interest and specialization corresponds with the area of study selected by the student. Prerequisite: Approval of major adviser and selected faculty member. IND.

ECON 498. Oswald Undergraduate Seminar in Economics. 3 Hours. S.
Examine issues in economics of contemporary interest. Enrollment is limited to current Oswald, Boynton, and Pritchard scholarship holders. May be repeated for credit, but does not fulfill the elective course requirements for the Economics major or minor. Prerequisite: ECON 520, ECON 522, and permission of department. LEC.

ECON 505. History of Economic Analysis. 3 Hours. S.
The history of intellectual efforts to understand economic phenomena and the impact of these efforts on the social and economic development of the modern world. Prerequisite: ECON 104 or ECON 142 and ECON 144. LEC.

ECON 510. Energy Economics. 3 Hours. S.
The application of basic economic concepts and methods to the analysis of energy markets, regulation, and policies. Topics covered include energy trends and projections, economic growth and resource exhaustion, the organization and regulation of fossil fuel industries, nuclear power and non-conventional energy technologies, the world oil market, energy conservation, environmental pollution, and national energy policies in the U.S. and other developed as well as developing countries. Prerequisite: ECON 142 and ECON 144 or permission of instructor. LEC.

ECON 515. Income Distribution and Inequality. 3 Hours. AE41 / S.
An analysis of the distribution of income and wealth in the United States and a few other developed countries. The concepts of economic inequality, economic justice, statistical measures of inequality and their applications will be discussed. Various theories of income distribution (e.g., Ricardian, Marxian, neoclassical, and neo-Keynesian) will be covered. Prerequisite: ECON 142 and ECON 144. LEC.

ECON 516. Income Distribution and Inequality, Honors. 3 Hours. AE41 / H.
This course examines the definition and impact of social and economic inequality. Beginning with a review of economic and philosophical perspectives of inequality, the course considers the measurement of inequality, current trends in U.S. and international inequality, and policies designed to eliminate inequality. The course requires both writing and quantitative analysis and includes a term paper. Students should be comfortable with methods of quantitative social science. The Honors section is taught as a seminar where philosophical perspectives on inequality are debated and discussed. Prerequisite: ECON 142 and ECON 144. Open only to students who have been admitted to the University Honors Program, or by consent of instructor. LEC.

ECON 520. Microeconomics. 3 Hours. S.
The theory of consumption, production, pricing, and resource allocation. Not open for credit to students with credit in ECON 524. Prerequisite: ECON 142, ECON 144, and Math 116 or Math 122 (or equivalent). LEC.

ECON 521. Microeconomics Honors. 3 Hours. S.
The theory of consumption, production, pricing, and resource allocation. Prerequisite: ECON 142 and ECON 144 and consent of department. LEC.

ECON 522. Macroeconomics. 3 Hours. S.
The theory of national income and employment, the analysis of aggregate demand, the general degree of utilization of productive resources, the general level of prices, and related questions of policy. Prerequisite: ECON 142 and ECON 144. LEC.

ECON 523. Macroeconomics Honors. 3 Hours. S.
The theory of national income and unemployment, the analysis of aggregate demand, the general degree of utilization of productive resources, the general level of prices, and related questions of policy. Prerequisite: ECON 142 and ECON 144 and consent of department. LEC.

ECON 526. Introduction to Econometrics. 3 Hours. S.
An introduction to the statistical analysis of economic data and its application to economic inquiry. Includes extensive use of statistical software. Prerequisite: ECON 142, ECON 144, and MATH 526 or equivalent. LEC.

ECON 530. American Economic Development. 3 Hours. H.
An introductory study of the development of the American economy from colonial times to the present. Investigates long-term trends in output, population, and output per capita, as well as short-term fluctuations, and the variables and institutions that determined these fluctuations and trends. (Same as HIST 628.) Prerequisite: ECON 104 or ECON 142 and ECON 144. LEC.

ECON 535. Economic History of Europe. 3 Hours. S.
An introductory study of European economic history from the Middle Ages to the 1980s. Investigates the sources of economic growth, and the interaction between economic forces and social institutions. Topics covered will include the rise of commerce, the agricultural and industrial revolutions, imperialism, the Great Depression, and European recovery after World War II. (Same as HIST 528.) Prerequisite: ECON 104 or ECON 142 and ECON 144. LEC.

ECON 536. Economic Issues of the European Union. 3 Hours. S.
A survey of the economies of the European Union, with a focus on the economic development of the member states since World War II, and an examination of the various economic issues confronting them today. (Same as EURS 536.) Prerequisite: ECON 104 or ECON 144. LEC.

ECON 540. Recent American Economic History. 3 Hours. S.
An empirically oriented examination of the American economy designed to apply economic concepts to a wide variety of topics such as monetary and fiscal policy, income distribution, the Great Depression, poverty, population growth, the defense sector, education, research and development, technological change, and industrial organization. Prerequisite: ECON 104 or ECON 142 and ECON 144; ECON 520 and/or ECON 522 recommended. LEC.

ECON 550. Environmental Economics. 3 Hours. U.
This course provides an overview of the theory and empirical practice of economic analysis as it applies to environmental issues. Topics include externalities (a type of market failure), the valuation of nonmarket goods, the practice of benefit-cost analysis, and the efficiency and cost effectiveness of pollution control policies. Most importantly, the course permits students to perform economic field research, using state-of-the-art techniques in a manner accessible to undergraduate students. (Same as EVRN 550.) Prerequisite: ECON 104 or ECON 142. LEC.

ECON 560. Economic Systems. 3 Hours. S.
Critical analysis of economic theories underlying such economic systems as capitalism, different types of socialism, communism, and fascism. Comparative study of economic planning, production, distribution, price formation, economic institutions, and forms of government in countries under different economic systems. Prerequisite: ECON 104 or ECON 142 and ECON 144. LEC.

ECON 562. The Russian Economy. 3 Hours. S/W.
An analytical survey of Russian economic development, with emphasis on the structure and operation of the Russian economy and transition issues. Prerequisite: ECON 104 or 142 and ECON 144 and consent of instructor. LEC.
ECON 563. Current Economic Issues of East Europe. 3 Hours. S.
An institutional and theoretical analysis of the issues arising from the transition from a command economy to a free market-oriented economy. With emphasis on the former Soviet Union, topics will include: assessment of the central planning experience; changes in property rights and their effect on resource allocation; market mechanisms and how they work when market institutions are at the formative stage; and public interest under privatization. Prerequisite: ECON 142 and ECON 144. LEC.

ECON 564. Topics in Applied Economics: _____. 3 Hours. S.
This course will focus on an area of applied economics of current interest. This course can be used to fulfill the elective course requirement for the Economics major. Prerequisite: ECON 142 and ECON 144. LEC.

ECON 570. Economics for Management Decisions. 3 Hours. S.
Economic analysis of the firm with emphasis on managerial decisions in a business environment. Topics include supply and demand with applications, consumer behavior, quantitative demand analysis, production and cost, transactions costs and the organization of the firm, strategic decisions in alternative market environments, risk and uncertainty, imperfect information, and project evaluation. Prerequisite: ECON 142. LEC.

ECON 582. Economic Development. 3 Hours. S.
An introduction to economic growth and development in high and low income countries, problems of development, and development policy. Prerequisite: ECON 104 or ECON 142. LEC.

ECON 583. Economic Issues of East Asia. 3 Hours. S.
This course will study the economics of the East Asian countries, especially China, Japan, Korea, and Taiwan. Topics to be covered include economic growth, development and change, international trade, inflation, unemployment, income distribution, and urbanization. Emphasis will be on the post World War II period. Prerequisite: ECON 104 or ECON 142 and ECON 144. ECON 522 recommended. LEC.

ECON 584. Economic Development of Latin America. 3 Hours. S.
This course explores development strategies followed in the countries of Latin America and the Caribbean, and analyzes current debates over development strategy. Topics covered include: debt, structural adjustment, and multilateral lending agencies; trade policy, and regional or hemispheric integration; state intervention in the economy; the role of elites; environmental degradation and sustainable development; land reform and agricultural policy; transnational enterprises and foreign investment; women in work and the household; migration (rural-urban, and international); and grassroots development projects. Prerequisite: ECON 104 or ECON 144. LEC.

ECON 586. Economic Issues in China. 3 Hours. S.
This course studies the Chinese economy, especially during the post-1979 reform period, and its relationship to the development of the Greater China Circle (China, Hong Kong, and Taiwan). Topics to be covered include economic development during the pre-1979 reform period, economic reform, and its impacts on China, Hong Kong, Taiwan, and lessons from the Chinese economic reforms. Prerequisite: ECON 142 and ECON 144. LEC.

ECON 587. Economic Development of Africa. 3 Hours. S.
This course studies current economic issues facing African countries. It studies the general characteristics of several African economies and examines the impact of economic development policies, including those of international organizations, on the economies of Africa. Topics include poverty, income inequality, debt, foreign investment policies, trade policies, and government regimes. Prerequisite: ECON 104 or ECON 142 and ECON 144. LEC.

ECON 590. Game Theory. 3 Hours. S.
Analysis of strategic choice problems. Firms, voters, bargainers, animals, sports competitors, and persons in everyday life choose alternative options with the outcomes depending on the choices of one or more other similar decision makers. Strategies of rational choices will be derived and analyzed in economic and other environments. Prerequisite: ECON 142. LEC.

ECON 600. Money and Banking. 3 Hours. S.
The basic principles of money, credit, and banking and their relation to prices and business fluctuations; a study of commercial and central banking and the problems of credit control. Prerequisite: ECON 522. LEC.

ECON 604. International Trade. 3 Hours. S.
An introduction to the nonmonetary theory of international trade, the cause and pattern of trade, the gains from trade, and the contemporary issues in international economic policy. Prerequisite: ECON 520 or ECON 524. LEC.

ECON 605. International Finance. 3 Hours. S.
This course covers theories of exchange rate and balance of payments determination. Included are the elasticity approach, Keynesian models, and the monetary approach. The mechanics of foreign exchange trading, balance of payments accounting, and the working of the international monetary system are also discussed. Prerequisite: ECON 522. LEC.

ECON 609. Sports Economics. 3 Hours. S.
The course covers the microeconomics of the sports industry. Topics include analysis of teams, leagues, players, incomes, strategies, history, and government policy. Prerequisite: ECON 520 or permission of instructor. LEC.

ECON 610. Resource Economics and Environmental Policy. 3 Hours. S.
Survey of the economics of natural resources, designed to introduce the student to the economic models and analytical methods commonly used in natural resource problems and policy issues. Topics covered include environmental pollution and regulation, environmental case studies and applications of cost-benefit analysis, theoretical models, policy issues in the utilization of renewable and nonrenewable resources, sustainable development, and global environmental problems. Prerequisite: ECON 520 or ECON 524 or permission of instructor. LEC.

ECON 620. Elements of Mathematical Economics. 3 Hours. S.
Selected aspects of economic theory with emphasis on those parts where the spirit of mathematical analysis, rather than dexterity, is utilized. The simplification of the subject matter is accomplished by stressing complete treatment of special cases such as a two commodity-two individual world. Prerequisite: ECON 520 or ECON 524 and MATH 116 or MATH 121. LEC.

ECON 622. Public Finance. 3 Hours. S.
A general introduction to the science of public finance. Topics covered include public expenditures, public revenues and public credit, and the shifting and incidence of taxation. Prerequisite: ECON 520 or ECON 524. LEC.

ECON 630. Industrial Organization and Antitrust Policy. 3 Hours. S.
An examination of the structure, conduct and performance of American industry applying the concepts and techniques of economic analysis. Topics covered include the theories of monopoly, competition and oligopoly, concentration, barriers to entry, price-fixing and other restrictive practices, mergers, technological change, and public regulation. The course will also focus on the historical development of American antitrust law. Prerequisite: ECON 520 or ECON 524. LEC.
ECON 631. Economics of Regulation. 3 Hours. S.
This course studies topics in the economic effects of industry regulation by administrative agencies as a substitute for market competition. Topics include various theories of regulatory behavior, the theory of natural monopoly, the economic effects of rate of return regulation on the performance of electric utilities, and the effects of recent social and environmental regulation. Prerequisite: ECON 520 or ECON 524. LEC.

ECON 635. Science and Technology in Economic Growth. 3 Hours. S.
An analytical and historical exploration of the roles that science and technology have played in the economic growth of industrial societies. This course will examine the forces that have shaped the rate and direction of technological change, and the impact of technological change on Western living standards. Topics covered will include factors influencing the pace of innovation, the diffusion of new technologies, international technology transfers, growth accounting, and models of aggregate economic growth. Prerequisite: ECON 520 or ECON 524. LEC.

ECON 640. Labor Economics. 3 Hours. S.
Analysis of labor markets and differences in wage rates and incomes. Topics include returns to education and training, labor unions, unemployment, anti-poverty programs, and other government policies influencing the labor market. Prerequisite: ECON 520 or ECON 524. LEC.

ECON 669. The Economics of Financial Markets. 3 Hours. S.
This course provides an introduction to the theory of finance and its use in the understanding of the economic role of financial markets. There are two central themes: the allocation of resources over time and the allocation of resources under uncertainty. Topics may include: household saving and investment, investment projects, valuation of financial assets, choice under uncertainty, portfolio choice, and capital asset pricing. Prerequisite: ECON 520 and ECON 526. LEC.

ECON 675. Introduction to Welfare Economics. 3 Hours. S.
This course provides a nontechnical introduction to optimal resource allocation from the societal point of view as well as alternative individual mechanisms for achieving such an optimum. Prerequisite: ECON 520 or ECON 524. LEC.

ECON 680. Economic Growth. 3 Hours. S.
This course studies growth with an emphasis on national evidence and macroeconomic policy issues. Classic and modern growth theories are developed and evaluated on the basis of how well they fit empirical evidence. Theories are developed in which productivity growth results from endogenous changes in technology or in the efficiency with which factors are utilized. The fundamental factors that affect productivity are examined, and they may include government policies, income inequality, geography, climate, resources and other factors. Prerequisite: ECON 522. LEC.

ECON 700. Survey of Microeconomics. 3 Hours.
A comprehensive survey of microeconomics, including the theories of consumption, production, distribution, pricing, and resource allocation. Prerequisite: ECON 520 and MATH 116 or MATH 121; and completion of ECON 142 and ECON 144, ECON 520, and ECON 522 with a grade-point average of at least 3.0 or graduate standing. LEC.

ECON 701. Survey of Macroeconomics. 3 Hours.
A comprehensive survey of the modern theory of national income determination with particular emphasis on the foundation of macroeconomic models and their empirical implementation. Prerequisite: ECON 522 and MATH 116 or MATH 121. LEC.

ECON 705. Development of Economic Thought. 3 Hours.
The development of economic thought from the time of the physiocrats through the modern period. Consideration is given to the works of the English Classical school, the school of Vienna, the historical school, the Lausanne school, and Cambridge school. In addition, the development of economic thought in the United States during the period is treated. Prerequisite: ECON 520 and ECON 522. LEC.

ECON 715. Elementary Econometrics. 3 Hours.
An elementary analysis of the problems of estimation, prediction, and hypothesis testing in the context of general linear, stochastic difference equation and simultaneous equations models. Applications of econometric theory to practical economic problems will be emphasized. Prerequisite: DSCI 301 or its equivalent; MATH 116 or MATH 121; and completion of ECON 142 and ECON 144, ECON 520, and ECON 522 with a grade-point average of at least 3.00 (B) or graduate standing. LEC.

ECON 716. Econometric Forecasting. 3 Hours.
An analysis of econometric forecasting techniques, including time-series models, single-equation regression models, and multiple-equation regression models. The course will examine forecasts of (a) macroeconomic variables, such as interest rates, investment, GNP, and the rate of inflation; and (b) market variables, such as price and quantity. Prerequisite: ECON 715 or ECON 817. LEC.

ECON 730. Topics in Industrial Organization. 3 Hours.
Advanced study of recent research in applied microeconomics and business behavior. Topics include vertical integration, collusion, multi-plant and multi-product operations, regulated industries, tying arrangements, and the empirical links between monopoly power and profitability. Prerequisite: ECON 630 or equivalent. LEC.

ECON 735. Science and Technology in Economic Growth. 3 Hours.
An analytical and historical exploration of the roles that science and technology have played in the economic growth of industrial societies. Topics covered include factors influencing the pace and character of technological innovation, national systems of innovation, the diffusion of new technologies, measurement of the benefits of new technologies, and the role of technology in various growth theories. Prerequisite: ECON 520, or ECON 524, or consent of instructor. LEC.

ECON 740. Theory of Economic Growth and Development. 3 Hours.
Advanced study of the theory of economic growth and development. Recent growth models, theory of underdevelopment, programming, policies and plans for development. Prerequisite: ECON 520 and ECON 522. LEC.

ECON 741. Economic Planning. 3 Hours.
A study of the techniques employed in the preparation of a national economic plan and of the policies required for its implementation. Special attention is given to the purposes of a plan, development strategies, investment requirements, and project appraisal. The development plans of several countries are examined to illustrate problems of planning economic development. Prerequisite: ECON 520 and ECON 522. LEC.

ECON 750. The Theory of International Finance. 2-3 Hours.
This course examines the modern, financial-asset market approach to exchange rate determination as well as dynamic exchange rate models. Possible topics may include exchange rate overshooting, exchange rate crises, and international policy coordination. Prerequisite: ECON 605 and MATH 116. LEC.

ECON 760. The Theory of Public Finance. 3 Hours.
An analysis of governmental fiscal activity and its economic effects with emphasis on the determination and incidence of budget policy. Prerequisite: ECON 520 and ECON 522; ECON 622 recommended. LEC.

ECON 761. Public Sector: Urban and Regional Finance. 3 Hours.
An analysis of the American state and local finance scene with special emphasis on urban and regional tax and expenditure problems.
and issues. Prerequisite: ECON 520 and ECON 522; ECON 622 recommended. LEC.

ECON 765. Advanced American Economic Development. 3 Hours.
A study of the process of economic growth as it has occurred in the American economy, with emphasis on 19th century developments. The structural changes that accompanied growth and the impact of technological change are among the major topics considered. Prerequisite: ECON 520, ECON 522 and ECON 530, or consent of instructor. LEC.

ECON 766. Economic History. 3 Hours.
The development of market economies and economic institutions. The course will focus on Europe, but will include comparisons with other developed nations. Topics include: long-run economic growth, the rise of capitalistic agriculture and industry, the causes and consequences of technological change; changes in income distribution and economic organization; and the social and cultural effects of economic change. Prerequisite: ECON 520, ECON 522, and ECON 535 or ECON 530, or consent of instructor. LEC.

ECON 768. The Industrial Revolution. 3 Hours.
An examination of the development of the industrialization of England and its impact on the North Atlantic economy. Consideration will be given to the effects of demographic and technical changes upon economic structure and the changing economic relationships between nations. Prerequisite: ECON 520 and ECON 522 or consent of instructor. LEC.

ECON 769. Financial Economics. 3 Hours.
An introduction to the economic analysis of choice under uncertainty and asset pricing theory. Topics include: the general equilibrium Arrow-Debreu model of complete markets; capital asset pricing model; stochastic dominance; portfolio frontiers; mutual fund separation theorems; arbitrage pricing theory; valuation of derivative securities. Both single-period models and multi-period models will be discussed. Students should have some background in elementary linear algebra, calculus, and probability theory. Prerequisite: DSCI 301 and ECON 700 or equivalent. LEC.

ECON 770. Economics of the Labor Market. 3 Hours.
A theoretical and empirical analysis of labor supply and demand, human capital, information and labor mobility, unemployment, discrimination, and union behavior and influence. Prerequisite: ECON 520, and MATH 121 or MATH 115 and MATH 116. LEC.

ECON 790. Game Theory and Applications. 3 Hours.
This course covers basic game theory and applications. Topics covered include strategic games with complete information, Bayesian games (with incomplete information), extensive games with perfect information, and extensive games with imperfect information. Equilibrium concepts covered include Nash equilibrium, mixed-strategy Nash equilibrium, rationalizability, Bayesian Nash equilibrium, sub-game perfect Nash equilibrium, and sequential equilibrium. Depending on availability of time, additional topics may include strictly competitive games and repeated games. The course may include diverse applications such as in business strategy, auctions, voting, international trade, military conflicts, contracts, regulation, and industrial organization. Prerequisite: MATH 122 and MATH 526. LEC.

ECON 791. Game Theory and Applications II. 3 Hours.
This course is a continuation of game theory and applications (ECON 790). Topics may include rationality and common knowledge, multi-stage games and repeated games, coalitional games and the core, and sequential rationality, including possible applications such as signaling, reputation, and information transmission. Additional topics may include, among others, strictly competitive games, auctions, and evolutionary game theory. The course may include diverse applications within and outside economics. Perquisite: ECON 790 or consent of instructor LEC.

ECON 800. Optimization Techniques I. 3 Hours.
Economic models involving the maximization of a scalar (vector) function subject to equality and inequality constraint where the variables are in a finite dimensional Euclidean space. Characterization of optimal points by way of first and second order derivatives and by way of saddle points. Duality theorems of mathematical programming. Prerequisite: Consent of instructor. LEC.

ECON 801. Microeconomics I. 3 Hours.
An advanced course in price and distribution theory. Prerequisite: ECON 800 or consent of instructor. LEC.

ECON 802. Microeconomics II. 3 Hours.
The study of the operation of the economic system taking into account the diversity of goods and services. Primary attention is centered upon the competitive economy. A study is made of the existence, uniqueness, stability, and comparative statics of equilibrium positions. In addition, a study is made of ways of evaluating alternative states of the economy in terms of systems of value judgments. This includes a discussion of the Arrow Impossibility Theorem: the notion of a Pareto-satisfactory process is introduced and the relationship between Pareto-optimal states and competitive equilibrium positions is studied. Prerequisite: ECON 801. LEC.

ECON 803. Growth Theory. 3 Hours.
The study of Harrod-Domar growth models; the Solow model; Uzawa's two sector model; n-sector growth models; and other application of growth theory to public policy. Prerequisite: ECON 700 and ECON 701. LEC.

ECON 805. Teaching Methods in Economics. 3 Hours.
The goal of the course is to enhance undergraduate student learning by refining and expanding the teaching techniques in the teaching assistant's arsenal. The course starts by discussing and illustrating the importance of setting the tone on the first day of class. Then the course turns to ways of creating intellectually exciting lectures and discussion sections. Active learning comes next as the course presents techniques to involve actively the students in their learning experience. Then the course examines ways for recognizing and broadening our teaching styles to include different learning styles. The course also discusses the evaluation of students by emphasizing the importance of matching the assessment of students with course objectives. This course will not assume any prior teaching experience. Prerequisite: Consent of instructor. LEC.

ECON 809. Optimization Techniques II. 3 Hours.
Economic models involving the maximization of an integral (a vector of integrals) subject to differential inequality (inequality), integral equality (inequality), and finite equality (inequality) constraints. Characterization of optimal paths by way of first and second derivatives. Existence of optimal paths. Prerequisite: Consent of instructor. LEC.

ECON 810. Macroeconomics I. 3 Hours.
A survey of basic macroeconomic models, including Classical and Keynesian as well as more recent ones. Topics also cover monetary and fiscal stabilization policies, the role of rational expectations, and basic behavioral equations. Tradeoffs of inflation and unemployment are examined both theoretically and empirically. Prerequisite: ECON 809 or consent of instructor. LEC.

ECON 811. Macroeconomics II. 3 Hours.
Structure of dynamic models and intertemporal optimization. Monetary and real business cycle theories and long-run economic growth. Microeconomic foundations of macroeconomics, theories of explicit and
implicit contracts, and implications of overlapping generations models. Prerequisite: ECON 810. LEC.

ECON 817. Econometrics I. 3 Hours.
An intensive study of the general linear model and distribution theory associated with the multivariate normal; stochastic difference equation; autocorrelation, errors in variables. Prerequisite: MATH 628. LEC.

ECON 818. Econometrics II. 3 Hours.
The study of estimation and hypothesis testing within the context of the stochastic simultaneous equations model. Prerequisite: ECON 817. LEC.

ECON 820. Applied General Equilibrium. 3 Hours.
A study of numerical applications of Walrasian general equilibrium theory to problems in public finance, international trade, and macroeconomics. The Arrow-Debreu model will be reviewed with emphasis on the use of Kakutani’s fixed point theorem to prove existence of equilibrium. Fixed point algorithms used to solve the general equilibrium model will be studied. The Shoven-Whalley method for introducing taxes into the general equilibrium model will be discussed and extended to open economy models with tariffs and quotas. Finally, dynamic macroeconomic models will be studied and financial assets will be introduced in perfect foresight models. Prerequisite: ECON 801. LEC.

ECON 825. Tutorial. 0 Hours.
This course is designed to provide extra assistance for graduate students in economics. RSH.

ECON 830. Game Theory and Industrial Organization. 3 Hours.
A comprehensive introduction to game theory and the theory of industrial organization. Basic game theoretic equilibrium concepts will be discussed in the context of static games, games of incomplete information, and dynamic games. These concepts will be applied to the theory of industrial organization. Topics may include mechanism design, market failure, monopoly, imperfect competition and oligopoly, limit pricing, predatory pricing, innovation and technical change, advertising and signaling theory, collusion and coordination, regulation under incomplete information, agency and auditing problems, incentives in hierarchies, job market signaling, insurance markets, nonlinear pricing and monopoly, and bargaining and long term relations. Prerequisite: ECON 801 and 802. RSH.

ECON 831. Economics of Regulation. 3 Hours.
This course provides an analytical introduction to the study of the economic rationale for and effects of government regulation of industry. Special emphasis will be placed on public utility regulation. Prerequisite: ECON 700. LEC.

ECON 835. Comparative Economic Systems. 3 Hours.
Comparative studies of the organization, operation, and performance of economic systems. Theoretical issues involving the comparison of different economic systems will be covered. Theoretical characterizations of different economic systems such as capitalist economies, socialist economies, and centrally planned economies, will be developed. Case studies of economic institutions and economic performance in various countries will be examined. Prerequisite: ECON 700 and ECON 701. LEC.

ECON 840. Microeconomic Issues in Development Economics. 3 Hours.
This course will examine the process and policies of economic development from a microeconomic perspective. Selected topics may include: the use of input-output matrices in development planning; price controls and corrections for their allocative distortions; international trade policies; transformations from planned to market economies; labor markets and labor mobility; and capital markets and capital mobility. LEC.

ECON 842. Theory of Economic Planning. 3 Hours.
Formal construction of the foundations of economic planning with emphasis on concise discussion of the logic behind the techniques utilized in economic planning. Topics that will be studied include: social welfare, short-term planning, price guided planning procedures, non-price guided planning procedures, long-term planning objectives, and characteristics of optimal plans. Prerequisite: ECON 802 or consent of instructor. LEC.

ECON 844. Macroeconomic Issues in Development Economics. 3 Hours.
This course will examine the process and policies of economic development from a macroeconomic perspective. Topics will include the theory of growth in the dual economy, the role of foreign trade in economic development, inflation and stabilization in developing economies, the problem of foreign debt, the relationship between financial and real development, and various development policies. Prerequisite: ECON 810 or consent of instructor. LEC.

ECON 850. The Advanced Theory of International Finance. 3 Hours.
This is an advanced course in international finance. Possible topics include optimizing, equilibrium models of exchange rate determination, empirical tests of international asset-pricing models, international policy coordination, and properties of different international monetary arrangements. Prerequisite: ECON 811. LEC.

ECON 851. The Theory of International Trade. 3 Hours.
The study of the pure theory of international trade; factor-price equalization, trade and welfare, general equilibrium in the international economy, comparative statics, and stability conditions. Prerequisite: ECON 700 and ECON 701. LEC.

ECON 855. Natural Resources. 3 Hours.
Advanced analysis of the economic relationships between natural resources, population, and environment. Emphasis is on the analytical techniques useful for solving the economic problems of natural resource allocation over time. Prerequisite: ECON 700. LEC.

ECON 860. Advanced Public Finance. 3 Hours.
a rigorous treatment of the economics of the public sector. Emphasis will be placed on government expenditure and taxation. Possible topics include tax incidence, optimal taxation, dynamic analysis of fiscal policy, public goods, and cost benefit analysis. Prerequisite: ECON 801 or permission of instructor. LEC.

ECON 866. Selected Problems in American Economic History. 3 Hours.
A critical study of selected aspects of American economic history with particular emphasis upon the testing of hypotheses that have been advanced to explain the growth and development of the American economy. Prerequisite: ECON 766. LEC.

ECON 869. Advanced Financial Economics. 3 Hours.
This course presents an analysis of financial markets and instruments, together with the quantitative tools essential for research in the field. The material will be presented in a discrete time setting and will stress the link between financial economics and equilibrium theory. Topics will include securities pricing in the absence of arbitrage, the theory of risk and utility in the basic portfolio problem, mean variance analysis and the CAPM, the Martingale properties of security prices, restricted participation, asymmetric information, and recent research results. Prerequisite: ECON 802 or consent of instructor. LEC.
microeconomic fields. Topics covered include economic data and statistical programming, instrumental variables, difference-in-differences, regression discontinuity, count data, sample selection, treatment effects, and duration models. Attention will be given to the suitability of the methods to the research question under consideration. Each topic will emphasize the proper application of the methods using the standard textbook treatment as well as assigned papers that examine the basic economic issues, the econometric techniques, and the applications to data. Prerequisite: ECON 817 and ECON 818, or consent of instructor. ECON 915 is recommended. LEC.

ECON 880. Selected Topics in Economic Theory: ____. 1-3 Hours. An advanced course in economic theory that will study selected topics in economic theory as such consumer theory, linear economics, decision theory, stability of economic equilibrium, comparative statics, etc. Prerequisite: Consent of instructor. LEC.

ECON 899. Master's Thesis. 1-10 Hours. THE.

ECON 901. Advanced Economic Theory I. 3 Hours. Advanced study of current general equilibrium analysis, the mathematical tools involved in such analysis, and some applications to other branches of economic theory. Prerequisite: ECON 802 and ECON 810. LEC.

ECON 902. Advanced Economic Theory II. 3 Hours. A continuation of the advanced study of general equilibrium analysis. Prerequisite: ECON 901. LEC.

ECON 903. Advanced Economic Theory III. 3 Hours. Advanced study of current general equilibrium analysis, the mathematical tools involved in such analysis, and some applications to other branches of economic theory. Prerequisite: ECON 802 and ECON 810. LEC.

ECON 910. Economic Theory Seminar-Workshop. 1-3 Hours. This seminar-workshop is designed to study advanced research topics in the areas of microeconomic and macroeconomic theory, and also provide assistance in the preparation and development of the dissertations of Ph.D. candidates in these areas of specialization. LEC.

ECON 911. Applied Macroeconomics. 3 Hours. An advanced exploration of the microeconomic foundations of macroeconomics, neoclassical macroeconomics with and without money, Keynesian and neo-Keynesian macroeconomics, and economic stabilization, inflation, and unemployment. Prerequisite: ECON 802 and ECON 810. LEC.

ECON 912. Advanced Macroeconomics. 3 Hours. An analysis of economic policy in dynamic economic models. The effects of various policies on the equilibrium, stability, and adjustment paths of the models will be considered. Both open and closed economies will be analyzed. Prerequisite: ECON 810. MATH 320 is recommended. LEC.

ECON 913. Monetary Economics. 3 Hours. This course examines how money, monetary policy, and monetary institutions influence the macroeconomy. Modern theories of money demand are presented and critiqued. The function of commercial banks, non-bank financial intermediaries, and central banks in the money supply process is addressed. Interrelationships between the tools, the instruments, the operating procedures, the intermediate targets, and the goals of policy are examined. Additional topics may include the monetary transmission mechanism, the effect of uncertainty on optimal policy decisions, the rules versus discretion debate, the monetary implications of fiscal policy, the term structure of interest rates, the causes and consequences of bank runs and financial panics, and the optimal method of constructing weighted monetary aggregates. Prerequisite: ECON 811 or consent of instructor. LEC.

ECON 915. Advanced Econometrics I. 3 Hours. The study of selected topics in applied cross-section econometrics for uses mainly in applied microeconomics, public finance, and labor economics. Topics include traditional econometrics of production and demand, latent variable models, panel data studies, probabilistic choice models, censored and truncated models, sample selection, disequilibrium models, duration studies, and semi- and non-parametric models. Prerequisite: ECON 818, or consent of instructor. LEC.

ECON 916. Advanced Econometrics II. 3 Hours. A study of selected topics in applied time-series econometrics for use mainly in applied macroeconomics, international finance, and development economics. Topics include empirical applications of ARCH models, VAR models (study of impulse response function and variance decomposition), unit-root cointegration and long memory models. Bayesian unit root analysis, estimation and inference of dynamic general equilibrium models, model calibration and simulation are also possible topics of this course. Prerequisite: ECON 818, or consent of instructor. LEC.

ECON 917. Advanced Econometrics III. 3 Hours. A study of structural and nonlinear time series approaches to econometric modeling and inference. The course emphasizes techniques needed to use economic theory in system-wide econometrics. Emphasis is placed on selection of functional form for approximation to theoretical functions and the use of duality theorems for derivation of the resulting econometric systems of equation. Inference with those models will be by nonlinear parametric, semi-parametric, and nonparametric methods. Prerequisite: ECON 818. LEC.

ECON 918. Financial Econometrics. 3 Hours. This course is designed to provide a variety of new econometric tools useful to investigate financial data. It discusses how to measure and forecast financial volatility using models such as Stochastic Volatility, multivariate GARCH, and Dynamic Conditional Correlation models. It also covers Dynamic Factor models and State Space models, which can be used in many financial data analyses. The course will be particularly helpful for the students preparing dissertations in the field of finance, macro-finance, monetary economics, international finance, and development economics. It will also benefit the students interested in more practical use of tools in the field such as financial risk management, insurance, and commercial banking. Prerequisite: ECON 818. ECON 916 is recommended. LEC.

ECON 920. Econometrics Seminar-Workshop. 1-3 Hours. This seminar-workshop is designed to study advanced research topics in the area of econometric theory and application, and also provide assistance in the preparation and development of the dissertations of Ph.D. candidates in this area of specialization. LEC.

ECON 925. Economic Dynamics. 3 Hours. A study of the concepts of equilibrium and stability in various economic frameworks; static economies, changing economies, and disaggregated and aggregated economies. Prerequisite: ECON 802. LEC.

ECON 930. Economic History Seminar-Workshop. 1-3 Hours. This seminar-workshop is designed to study advanced research topics in the area of economic history, and also provide assistance in the preparation and development of the dissertations of Ph.D. candidates in this area of specialization. LEC.

ECON 940. Economic Seminar-Workshop in: ____. 1-3 Hours. This seminar-workshop is designed to study advanced research topics in the specified area of applied economics (public finance, monetary analysis, environment-energy, economic growth and development, urban economics, health care economics, natural resources, labor-manpower, international trade and finance, comparative economic systems, Soviet economics), and also provide assistance in the preparation and development of the dissertations of Ph.D. candidates with dissertations in a specific area of applied economics. LEC.
ECON 950. Special Problems in Economics. 1-3 Hours.
LEC.

ECON 955. Advanced Topics in Natural Resources. 3 Hours.
Rigorous analysis of an Arrow-Debreu economy with natural resources and extensions (including optimal growth, planning procedures, and uncertainty). Investigation of current research topics in theoretical and applied resource economics. Required course for Ph.D. candidates writing dissertations in natural resources. Prerequisite: Consent of instructor. ECON 927 recommended. RSH.

ECON 970. Advanced Labor Economics. 3 Hours.
A survey of recent labor economics research. Topics include labor supply and demand, human capital investment, and unemployment. Prerequisite: ECON 770. LEC.

ECON 999. Doctoral Dissertation. 1-10 Hours.
THE.

Bachelor of Arts and Bachelor of General Studies in Economics

Why study economics?
Because it will give you the tools you need to understand our increasingly interconnected world.

Economics Majors
The economics department offers 3 degrees.

- The B.A. or B.G.S. major in economics is designed for the majority of students who will go on to professional graduate schools or into the workforce.
- The Bachelor of Science degree in economics is designed for the student interested in going to graduate school in economics or a closely related field. It requires the minimum amount of preparation in economics and mathematics required to be successful in graduate study. Students interested in pursuing a Ph.D. in economics are strongly urged to double major in economics and mathematics.

First- and Second-Year Preparation
Students considering an economics major should enroll in ECON 142 (or ECON 143) Principles of Microeconomics or ECON 144 (or ECON 145) Principles of Macroeconomics no later then the end of the sophomore year. Students should also have completed at least 1 course in the calculus sequence (MATH 115 or MATH 121) by the end of the sophomore year.

Requirements for the B.A. or B.G.S. Major

**Economics Core Knowledge and Skills (15)**

- Majors must complete a course in each of the following areas:
  - Principles of Microeconomics. Satisfied by:
    - ECON 142 Principles of Microeconomics 3
    - or ECON 143 Principles of Microeconomics, Honors
  - Principles of Macroeconomics. Satisfied by:
    - ECON 144 Principles of Macroeconomics 3
    - or ECON 145 Principles of Macroeconomics, Honors
  - Microeconomics. Satisfied by:
    - ECON 520 Microeconomics 3
    - or ECON 521 Microeconomics Honors
    - or ECON 522 Principles of Microeconomics
    - or ECON 523 Principles of Microeconomics, Honors

**Economics Required Electives (6)**

- Majors must complete 2 courses (6 hours) in economics outside of the core courses at the 500-level or above.

**Economics Required Capstone Elective Courses (9)**

- Majors must complete 3 courses (9 hours) in economics outside of the core courses at the 600-level or above.

**Major Hours & Major GPA**
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

- **Major Hours**
  - Satisfied by 30 hours of major courses.

- **Major Hours in Residence**
  - Satisfied by a minimum of 15 hours of KU resident credit in the major. (At least 3 of the required elective courses must be taken from the KU Department of Economics.)

- **Major Junior/Senior Hours**
  - Satisfied by a minimum of 24 hours from junior/senior courses (300+) in the major. At least 9 hours of the required elective courses must be taken from the KU Department of Economics.

- **Major Junior/Senior Graduation GPA**
  - Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the field of study including F's and repeated courses. See the Semester/ Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

- **Major Junior/Senior Major Attempts**
  - Summary includes American Studies junior/senior (300+) hours attempted, including F's and incompletes.
  - A sample 4-year plan for the BA degree in Economics here: Economics (http://catalog.ku.edu/liberal-arts-sciences/economics/ba-bgs/ba-
  - economics), or by using the left-side navigation.
  - Sample 4-year plans for the BGS and BS degrees in Economics will be coming soon.

**Departmental Honors**
Graduation with honors in economics is limited to undergraduate majors who have fulfilled these requirements:

1. Completed all economics major requirements and achieved a grade-point average of 3.5 or above in all economics courses and an overall average of 3.25 or above at the time of graduation.
2. Completed ECON 497 Senior Research Honors.
3. Submitted and defended a research paper before at least 3 faculty members of the Department of Economics.
Honors candidates should consult the department honors coordinator before enrolling the first semester of the senior year and file a declaration of intent form with the coordinator at that time.

**Bachelor of Science in Economics**

**Why study economics?**

Because it will give you the tools you need to understand our increasingly interconnected world.

**Economics Majors**

The economics department offers 3 degrees.

- The Bachelor of Science degree in economics is designed for the student interested in going to graduate school in economics or a closely related field. It requires the minimum amount of preparation in economics and mathematics required to be successful in graduate study. Students interested in pursuing a Ph.D. in economics are strongly urged to double major in economics and mathematics.
- The B.A. or B.G.S. major in economics is designed for the majority of students who will go on to professional graduate schools or into the work force.

**First- and Second-Year Preparation**

**Economics Prerequisite or Co-Requisite Knowledge**

Majors must complete courses as specified in each of the following two areas. These hours do not contribute to the minimum number of hours required for the major.

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<tr>
<th>College Algebra or Pre-Calculus (3)</th>
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<td>Satisfied by:</td>
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<td>MATH 101</td>
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<td>or MATH 104</td>
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<td>Calculus I (5)</td>
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<td>Satisfied by:</td>
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<td>MATH 121</td>
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<td>Calculus II (5)</td>
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<td>Satisfied by:</td>
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<td>MATH 223</td>
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<td>or MATH 243</td>
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**Vector Calculus (3)**

Satisfied by:
- MATH 223 Vector Calculus
- or MATH 243 Vector Calculus, Honors

**Elementary Linear Algebra (2)**

Satisfied by:
- MATH 290 Elementary Linear Algebra
- or MATH 291 Elementary Linear Algebra, Honors

**Statistics (3)**

Satisfied by:
- MATH 526 Applied Mathematical Statistics I
- or DSCI 202 Statistics

**Economics General Education Requirements**

**Written Communication - Core Skill and Critical Inquiry**

**Composition (0)**

Satisfied by one of the following. Requirement must be completed during initial term of admission at KU.

- ENGL 101 Composition
- ACT English score of 27 or above or SAT English score of 600 or above
- AP English Literature & Composition score of 3 or above
- Equivalent transfer course

**Critical Reading and Writing (0)**

Satisfied by one of the following. Requirement must be completed within the first academic year at KU.

- ENGL 102 Critical Reading and Writing
- or ENGL 105 Freshman Honors English
- AP English Literature & Composition score of 4 or above
- Equivalent transfer course

**Sophomore Reading and Writing II (0)**

Satisfied by:
- ENGL 203 Topics in Reading and Writing: _____
- or ENGL 205 Freshman-Sophomore Honors Proseminar: _____
- ENGL 209 Introduction to Fiction
- ENGL 210 Introduction to Poetry
- ENGL 211 Introduction to the Drama
- AP English Literature & Composition score of 5 or above
- Equivalent transfer course

**Western Civilization - Exploration of One’s Own and Diverse Culture.**

(Advising Alert: Requires sophomore-level standing. Courses at other universities may have the same title but may not meet this requirement.)

**Western Civilization I - Ancient, Medieval & Early Modern Periods of Western Civilization (3)**

Satisfied by:
- HWC 204 Western Civilization I
- or HWC 114 Western Civilization I Honors

**Western Civilization II - Modern Western Civilization (3)**

Satisfied by:
- HWC 205 Western Civilization II
- or HWC 115 Western Civilization II Honors

**Humanities - Understanding the Human Condition.** Satisfied by completing 3 courses at least 1 of the following categories: historical studies (requirement code HT), literature and the arts (requirement code HL), and philosophy and religion (requirement code HR). Approved courses may be searched for availability through the Kyou portal.

**Social and Behavioral Sciences - Understanding Society and Behavior.** Satisfied by completing 3 courses at least one in 1 of the following categories: individual behavior (requirement code SI), culture and society (requirement code SC), or public affairs (requirement code SF). Approved courses may be searched for availability through the Kyou portal.

**Natural Science & Mathematics - Understanding the Natural World.** Satisfied by completing 1 course in 3 of the 4 requirement codes: biological sciences (requirement code NB), earth sciences (requirement code NE), mathematical sciences (requirement code NM), and physical
requirements (NP). Approved courses may be searched for availability through the Kyou portal. The purpose of this requirement is to expose students to several disciplines in an effort to help them make informed choices regarding potential majors or minors. Principal courses should be completed early in the curriculum.

Requirements for the B.S. Degree

Economics Core Knowledge and Skills (18)

Majors must complete a course in each of the five following areas:

- Principles of Microeconomics. Satisfied by:
  - ECON 142 Principles of Microeconomics 3
  or ECON 143 Principles of Microeconomics, Honors

- Principles of Macroeconomics. Satisfied by:
  - ECON 144 Principles of Macroeconomics 3
  or ECON 145 Principles of Macroeconomics, Honors

- Microeconomics. Satisfied by:
  - ECON 520 Microeconomics 3
  or ECON 521 Microeconomics Honors

- Macroeconomics. Satisfied by:
  - ECON 522 Macroeconomics 3
  or ECON 523 Macroeconomics Honors

- Survey of Microeconomics. Satisfied by:
  - ECON 700 Survey of Microeconomics 3

Introduction to Econometrics. Satisfied by:

- ECON 715 Elementary Econometrics 3

Economics Required Electives (18)

Majors must complete 6 courses (18 hours) in economics outside of the core courses at the 500-level or above.

Departmental Honors

Graduation with honors in economics is limited to undergraduate majors who have fulfilled these requirements:

1. Completed all economics major requirements and achieved a grade-point average of 3.5 or above in all economics courses and an overall average of 3.25 or above at the time of graduation.
2. Completed ECON 497 Senior Research Honors.
3. Submitted and defended a research paper before at least 3 faculty members of the Department of Economics.

Honors candidates should consult the department honors coordinator before enrolling the first semester of the senior year and file a declaration of intent form with the coordinator at that time.

Minor in Economics

Why study economics?

Because it will give you the tools you need to understand our increasingly interconnected world.

Requirements for the Minor

Economics Minor Course Requirements (6)

Students selecting this minor must complete courses as specified in each of the following areas:

College Algebra or Pre-Calculus Prerequisite. Satisfied by one of the following:

- MATH 105 Introduction to Topics in Mathematics
- MATH 111 Matrix Algebra, Probability, and Statistics
- MATH 115 Calculus I
- MATH 121 Calculus I
- MATH 365 Elementary Statistics
- BIOL 570 Introduction to Biostatistics
- AP Calculus (AB or BC) score of 3 or above
- AP Statistics score of 3 or above
- Equivalent transfer course

Principles of Microeconomics. Satisfied by:

- ECON 142 Principles of Microeconomics 3
  or ECON 143 Principles of Microeconomics, Honors

Principles of Macroeconomics. Satisfied by one of the following:

- ECON 144 Principles of Macroeconomics 3
  or ECON 145 Principles of Macroeconomics, Honors

Economics Required Electives. Majors must complete 4 ECON courses (12 hours) at the junior/senior level (300+).

Minor Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

- **Major Hours**
  Satisfied by 36 hours of major courses.

- **Major Hours in Residence**
  Satisfied by a minimum of 15 hours of KU resident credit in the major.
  (At least 3 of the required elective courses must be taken from the KU Department of Economics.)

- **Major Junior/Senior Hours**
  Satisfied by a minimum of 24 hours from junior/senior courses (300+) in the major.
  (At least 9 hours of the required elective courses must be taken from the KU Department of Economics.)

- **Major Junior/Senior Graduation GPA**
  Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Minor Hours & Major GPA

While completing all required courses, minors must also meet each of the following hour and grade-point average minimum standards:

- **Minor Hours**
  Satisfied by 18 hours of minor courses.

- **Minor Junior/Senior (300+) Hours in Residence**
  Satisfied by a minimum of 9 hours of junior/senior (300+) resident credit in the minor.

- **Minor Junior/Senior Hours**
Satisfied by a minimum of 12 hours of junior/senior courses (300+) in the minor.

**Minor Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in all department courses in the minor. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

**Master of Arts in Economics**

**Financial Aid**
Visit the Graduate Studies website for information about funding opportunities (http://graduate.ku.edu/funding) for graduate students at KU.

Financial Aid and Scholarships (http://affordability.ku.edu/steps/index.shtml) administers grants, loans, and need-based financial aid.

**Facilities and Services**
In addition to KU computing and library facilities, students in the M.A. and Ph.D. programs may use the department’s computer laboratory, which provides access to a variety of databases and econometric software packages useful for economics research.

**Admission to Graduate Studies**
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**
 Applicants to the M.A. and M.A./J.D. programs should have taken a minimum of 2 courses in calculus (6 to 10 semester hours) and a statistics course. Students with little background in economics may be advised to take ECON 520 Microeconomics and/or ECON 522 Macroeconomics and/or ECON 526 Introduction to Econometrics as preparation for M.A. courses. ECON 520, ECON 522, and ECON 526 do not count toward completion of M.A. degree requirements.

Applications submitted before May 1 receive first consideration for fall or summer admission. Applications submitted before November 1 receive first consideration for spring admission.

Submit your graduate application online (http://graduate.ku.edu/application-process). Send all other requested application materials to the department:

**The University of Kansas**
Department of Economics
Graduate Secretary
Snow Hall
1460 Jayhawk Blvd., Room 415
Lawrence, KS 66045-7514

**English Proficiency and Test of English as a Foreign Language or International English Language Testing System Scores**
An applicant who has graduated with a baccalaureate degree or higher from an accredited institution of higher education in the U.S., U.K., Australia or Canada (excluding Quebec) automatically meets the English language proficiency requirement. All other students whose native language is not English are required to provide evidence of English language proficiency. The university accepts TOEFL and IELTS scores. The required scores are listed below.

<table>
<thead>
<tr>
<th>TOEFL (paper)</th>
<th>TOEFL (CBT)</th>
<th>TOEFL (iBT)</th>
<th>IELTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>All part scores at least 53</td>
<td>All part scores at least 20</td>
<td>Reading, Listening, and Writing part scores at least 20</td>
<td>Minimum overall score 6.0 with no part score below 5.5</td>
</tr>
</tbody>
</table>

**M.A. Degree Requirements**
The Master of Arts degree program serves students with little previous background in economics as well as students who majored in economics as undergraduates. The program provides maximum flexibility for students to pursue their own special interests.

Candidates for the M.A. degree must complete a minimum of 30 semester hours of graduate work, including 9 hours of required core classes (ECON 700, ECON 701, ECON 715). At least 18 hours, including the required core courses, must be in economics; but students may take up to 12 hours in related areas, such as business administration, computer science, political science, or mathematics, subject to the approval of the M.A. advisor. No more than 9 hours of economics classes may be taken at the 500 and 600 levels. At initial enrollment, each candidate must discuss a preliminary plan of study with his or her graduate advisor. This plan may be revised over time.

**Thesis and Nonthesis Options**
Candidates may pursue either a thesis or a nonthesis track. Students electing the thesis track must complete 24 hours of formal course work and 6 hours of thesis under the direction of a thesis supervisor. This work is to be devoted to the completion of a satisfactory thesis. An oral examination is held on completion of the thesis. Students electing the nonthesis track must complete 30 hours of formal course work.

**Written Comprehensive Examination**
All candidates for the M.A. degree, including students enrolled in the M.A./J.D. program, must demonstrate proficiency in the application of economic theory through a written examination taken during the last semester of enrollment.

**Plan of Study**
Most M.A. students complete the program in 2 academic years. Unless they must complete prerequisites, new M.A. students enroll in ECON 700 Survey of Microeconomics and ECON 715 Elementary Econometrics and 1 elective during the first fall semester. In the first spring semester, M.A. students enroll in ECON 701 Survey of Macroeconomics and 2 electives. Enrollments in subsequent semesters are electives until 30 credit hours are complete.
M.A.-J.D. Degree Program

Why study economics?

Because it will give you the tools you need to understand our increasingly interconnected world.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

M.A.-J.D. Degree Program

In this program a student can earn both the Juris Doctor (p. 752) and the Master of Arts in economics in 3 years and 1 summer session. The requirements for the combined degree are as follows:

1. Admission to the M.A.-J.D. degree program must be approved by the School of Law (http://www.law.ku.edu), the Department of Economics (http://www.economics.ku.edu), and the College of Liberal Arts and Sciences (http://clas.ku.edu).

2. The program requires 100 credit hours of course work, of which 82 hours must be completed in the law school and 18 hours in the Department of Economics. The department gives credit toward the M.A. degree for 12 hours of pertinent work in the law school, and the law school counts 8 credit hours in economics toward the J.D. degree. The 8 hours of economics courses that count toward the J.D. degree can be chosen from certain courses numbered 500-799 and from all 800-900 level courses. Prerequisites continue to apply, as does the requirement that all students seeking the M.A. degree must have taken several foundation courses that do not count toward a graduate degree in economics: microeconomics, macroeconomics, and calculus. In addition, ECON 700, ECON 701, and ECON 715 must be included in the M.A. program. The student takes only law classes the first year and spreads out the 18 hours of credit in economics in the following semesters (e.g., one course per semester).

3. The M.A.-J.D. degree is a nonthesis degree in economics.

4. A written comprehensive examination in economics is required of all candidates for the M.A.-J.D. degree.

Doctor of Philosophy in Economics

Financial Aid

Financial aid may be awarded in the form of Graduate Teaching Assistantships or Graduate Research Assistantships. First consideration for financial aid is given to applications received before February 1. To be considered for GTAs, international students must include a score from the Test of Spoken English or a TOEFL-iBT examination that includes a speech component. A minimum iBT speaking score of 24 or an IELTS speaking score of 8 or a score of 50 on the TSE or SPEAK tests.

Visit the Graduate Studies website for information about funding opportunities (http://graduate.ku.edu/funding) for graduate students at KU.

Financial Aid and Scholarships (http://affordability.ku.edu/steps/index.shtml) administers grants, loans, and need-based financial aid.

Facilities and Services

In addition to KU computing and library facilities, students in the M.A. and Ph.D. programs may use the department’s computer laboratory, which provides access to a variety of databases and econometric software packages useful for economics research.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Applicants to the Ph.D. program should have taken 3 courses in calculus (12 to 15 semester hours) and a course in linear algebra.

Applications submitted before February 1 receive first consideration for financial aid for fall admission. Applications may continue to be submitted until May 1 for fall admission. Applications submitted before November 1 receive first consideration for spring admission.

Submit your graduate application online (http://graduate.ku.edu/application-process). Send all other requested application materials to the department:

The University of Kansas
Department of Economics
Graduate Secretary
Snow Hall
1460 Jayhawk Blvd., Room 415
Lawrence, KS 66045-7514

Students whose native language is not English usually have difficulty in the program unless their English is excellent. The university accepts TOEFL and IELTS scores. The required scores are listed below.

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</tr>
</tbody>
</table>
Ph.D. Degree Requirements

Course Requirements

In addition to meeting general requirements, the Ph.D. candidate in economics must complete a minimum of 54 credit hours of course work, at least 48 of which must be in economics.

1. All Ph.D. candidates must complete these core courses in economic theory and quantitative methods:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 800</td>
<td>Optimization Techniques I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 801</td>
<td>Microeconomics I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 802</td>
<td>Microeconomics II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 809</td>
<td>Optimization Techniques II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 810</td>
<td>Macroeconomics I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 811</td>
<td>Macroeconomics II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 817</td>
<td>Econometrics I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 818</td>
<td>Econometrics II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 727</td>
<td>Probability Theory</td>
<td>3</td>
</tr>
<tr>
<td>MATH 728</td>
<td>Statistical Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

2. Course work beyond these required core courses is a matter of choice for the student in consultation with his or her graduate advisor. The graduate advisor develops a program to assist the student in specialized interests. Each program must include a sufficiently broad range of topics in economics to prepare the student for comprehensive examinations.

Qualifying Examinations

Ph.D. degree aspirants must pass written qualifying examinations in microeconomics and macroeconomics after completion of the core courses in these areas, ordinarily at the beginning of the fourth semester of full-time study. A student who does not pass a qualifying examination may be permitted 1 retake, ordinarily at the end of the fourth semester of full-time study.

Fields of Specialization

Each student must demonstrate competence in at least 2 fields of specialization in economics by completing 2 courses in each of these areas. Current fields of specialization include financial economics, economic development, industrial organization, international economics, labor economics, econometrics, economic history, economic theory, and macroeconomics.

Seminar-Workshops and Responsible Scholarship

Beginning in the third year of the program, each student must enroll in ECON 910 and attend the weekly department seminars for 6 continuous semesters. Every doctoral student is required to have training in responsible scholarship pertinent to economics research. Each semester there will be 1 90-minute seminar on this topic led by either a faculty member or a visiting speaker.

Third-Year Paper

Each student must complete a third-year seminar paper. This would typically be in one of the fields of specialization. Usually the third-year paper becomes part of the student’s doctoral dissertation.

Comprehensive Oral Examination

Upon completion of most of the course work and other requirements for the doctoral degree, inclusive of research skills and residence requirements, the student must prepare a dissertation proposal under the direction of a thesis advisor and pass a comprehensive oral examination related to the dissertation proposal.

Dissertation

Following the comprehensive oral examinations, the candidate must organize and write a dissertation on his or her chosen topic under the supervision of a dissertation committee.

Final Oral Examination

The candidate must defend the dissertation successfully in a final oral examination.

Plan of Study

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ECON 800</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECON 801</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MATH 727</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>ECON 802</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECON 811</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECON 817</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>ECON 910</td>
<td>1-3</td>
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<tr>
<td></td>
<td>Specialization</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7-9</td>
</tr>
<tr>
<td>4</td>
<td>ECON 910</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td>Elective/Specialization</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective/Specialization^1</td>
<td>6-9</td>
</tr>
<tr>
<td></td>
<td>ECON 999</td>
<td>3-6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7-12</td>
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<tr>
<td></td>
<td></td>
<td>9-12</td>
</tr>
</tbody>
</table>

Total Hours: 66-78

^1 If needed.

Department of English

Why study English language and literature?

Because reading and writing shape the world.

KU’s English Department is at the core of the humanities, highlighting the "human" through our individual, one-on-one interactions with our students,
our emphasis on community and global engagement, and our abiding interest in our shared humanity through the stories of others. We seek to challenge the mind and to engage the imagination of our students, to teach them to ask questions and to seek for answers. We encourage them to grapple with the complexity of a culturally and commercially interconnected world and the global networks and processes of cultural exchange. We believe that words and ideas will shape the world. We teach our students life-long skills, so that they learn to write clearly, creatively, and effectively—discovering themselves even as they lay a solid foundation for professional success.

A commitment to teaching and learning.

Our department is renowned for its tradition of excellence in teaching. The vast majority of our undergraduate classes have 20-35 students, and much of the class time is dedicated to active learning and engagement with texts and ideas. In the last ten years, faculty members in the department of English have won ten Kemper Fellowships for Excellence in Teaching, two Chancellors Club Teaching Professorships, a Career Achievement Teaching Award, and a wide variety of other university-level teaching and advising awards, and the department as a whole received the Center of Teaching Excellence (CTE) award for Department Excellence in Teaching at the University of Kansas.

A variety of career and life paths.

English students at all levels graduate and embark upon a variety of careers, including law, teaching, scholarship, publishing, library science, and journalism—as well as medicine, politics, design, and any number of other fields that value clear communication, interpretive skill, and critical and creative thinking.

Engaged and innovative scholarship.

KU's English Department has several core strengths that cross tracks and periods, including Global and Cross-Cultural Approaches; Literature, Rhetoric, and Social Action; Diversity Studies; Language, Literature and Science; and Popular Expressive Forms.

In the KU English Department, students work closely with nationally-renowned writers and researchers. Our faculty have won national awards that recognize excellence in research, including grants from the National Endowment for the Humanities, the American Philosophical Society, and the Newberry Library, among others. English Department faculty members have also received major research funding from the University of Kansas, including the Hall Center for the Humanities Research fellowships and Keeler Intra-University Fellowships for interdisciplinary work. Undergraduate students can work one-on-one with faculty mentors in the Honors Program, McNair Scholars Program, and Dean's Scholars Program, as well as through independent Directed Studies. Advanced graduate students have the opportunity to work collaboratively with faculty members as research assistants.

Undergraduate Programs

The English major prepares undergraduates for engagement with the world through language by helping them

• to cultivate the craft of writing in a variety of rhetorical contexts,
• to read and interpret a broad range of texts,
• to develop and sustain critical arguments, and
• to produce independent research.

The major is crafted to ensure students' familiarity with

• written forms and genres;
• a range of literary histories and writers;
• multiple regional and historical contexts of literature and language;
• the theories, methodologies, and terminology of English Studies; and
• the relationship between literature, language, and the larger culture.

Courses for Non-majors

Many English courses fulfill KU Core requirements; see catalog course listings for details. All students are encouraged to take a 200-level English course before enrolling in 300+ level English courses. For students following University requirements prior to Fall 2013, please consult the principal and non-Western course lists. English principal courses under the Literature and the Arts heading are designated HL. Prospective English teachers in the public schools should consult the requirements of the School of Education.

Transfer Credit

English undergraduate majors may take up to 6 hours out of residence with the prior approval of the Director of Undergraduate Studies.

Double Majors

Double majors within the College or dual-degree programs are encouraged.

Placement in English courses

In general, entering KU students should enroll in ENGL 101, with the following exceptions:

ACT English Scores:

• 31-36 — Enroll in ENGL 105. 1/2 of KU Core Goal 2.1 (Written Communication, 6 hours) complete; ENGL 102 or ENGL 105 + an additional KU Core Goal 2.1 course will fulfill CLAS BA-specific writing requirement.

• 27-30 — Enroll in ENGL 102 and petition for honors placement for possible admittance to ENGL 105. 1/2 of KU Core Goal 2.1 complete; ENGL 102 + an additional KU Core Goal 2.1 course will fulfill CLAS BA-specific writing requirement.

• 00-26 — Enroll in ENGL 101. ENGL 101 + ENGL 102 fulfill KU Core Goal 2.1 and CLAS BA-specific writing requirement.

SAT Verbal Scores:

• 650 or higher — Enroll in ENGL 105. 1/2 of KU Core Goal 2.1 complete; ENGL 105 + an additional KU Core Goal 2.1 course will fulfill CLAS BA-specific writing requirement.

• 600-649 — Enroll in ENGL 102 and petition for honors placement for possible admittance to ENGL 105. 1/2 of KU Core Goal 2.1 complete; ENGL 102 or ENGL 105 + an additional KU Core Goal 2.1 course will fulfill CLAS BA-specific writing requirement.

• 599 or lower — Enroll in ENGL 101. ENGL 101 + ENGL 102 fulfill KU Core Goal 2.1 and CLAS BA-specific writing requirement.

Advanced Placement Scores — Literature and Composition Exam:
• AP 5 — Enroll in ENGL 205; 3 hours of credit given. 1/2 of KU Core Goal 2.1 complete. ENGL 205 satisfies both KU Core Goal 2.1 and CLAS BA-specific writing requirement.

• AP 3 — Enroll in ENGL 105 or ENGL 102*. No credit is given for ENGL 101 or ENGL 102. 1/2 of KU Core Goal 2.1 complete; ENGL 102 or ENGL 105 + an additional KU Core Goal 2.1 course will fulfill CLAS BA-specific writing requirement.

• AP 2 — Enroll in ENGL 101 and petition for honors placement. If the petition is successful, it admits the student to ENGL 105. ENGL 101 + ENGL 102 or ENGL 105 for an additional KU Core Goal 2.1 course fulfill KU Core 2.1 and CLAS BA-specific writing requirement.

Advanced Placement Scores — Language and Composition Exam:
• AP 4-5 — Enroll in ENGL 205; 3 hours of credit given. ENGL 205 satisfies both KU Core Goal 2.1 and CLAS BA-specific writing requirement.

• AP 3 — Enroll in ENGL 105 or ENGL 102*. No credit is given for ENGL 101 or ENGL 102. 1/2 of KU Core Goal 2.1 complete; ENGL 102 or ENGL 105 + an additional KU Core Goal 2.1 course will fulfill CLAS BA-specific writing requirement.

• AP 2 — Enroll in ENGL 101 and petition for honors placement. If the petition is successful, it admits the student to ENGL 105. ENGL 101 + ENGL 102 or ENGL 105 + an additional KU Core Goal 2.1 course fulfill KU Core 2.1 and CLAS BA-specific writing requirement.

International Baccalaureate Scores:
• IB 5 and up — Enroll in ENGL 102. 1/2 of KU Core Goal 2.1 complete; ENGL 102 or ENGL 105 + an additional KU Core Goal 2.1 course will fulfill CLAS BA-specific writing requirement.

*If you choose to take ENGL 102, you will need to petition if you want to enroll in ENGL 205 next. You could also choose to take ENGL 203, or ENGL 209, ENGL 210, or ENGL 211 for a second English course, or another KU Core Goal 2.1 course to fulfill the KU Core and the CLAS BA-specific requirements.

Graduate Programs
The department offers a full graduate program, leading to the Master of Arts (Literature, Literary & Literary Theory, Rhetoric & Composition, and English Language Studies), Master of Fine Arts in Creative Writing, and Doctor of Philosophy degrees with specializations in Literature, Composition and Rhetoric, and Creative Writing.

Courses
ENGL 50. Basic Writing Skills. 3 Hours. U.
A review of the basic skills of written English, with emphasis on sentence-level grammar. Recommended for all students who score 16 or below on the ACT English test. May be repeated for credit. LEC.

ENGL 100. Introduction to Literature. 3 Hours. H.
An introduction to critical thinking skills through the study of works of literature drawn from a variety of genres and methods of critical inquiry. This course does not fulfill any KU writing requirement. LEC.

ENGL 101. Composition. 3 Hours. GE21 / U.
Instruction and practice in writing in a variety of rhetorical contexts, including academic ones. LEC.

ENGL 102. Critical Reading and Writing. 3 Hours. GE21 / U.
Builds upon the instruction in writing of ENGL 101, emphasizing critical thinking through careful, thoughtful reading and writing. Also instructs in the evaluation and use of secondary sources. Prerequisite: Completion of ENGL 101 or its equivalent, or an ACT score of 27-31, or an SAT score of 600-649, or an AP exam score of 3 on either the Literature and Composition exam or the Language and Composition exam, or an IB score of 5. LEC.

ENGL 105. Freshman Honors English. 3 Hours. GE21 / U.
Study of significant works of world literature. The primary aims are to develop reading and writing skills and to introduce the students to works of literature drawn from a variety of genres and historical periods. Prerequisite: An ACT score of 31-36, or an SAT score of 650 or higher, or an AP exam score of 3 on either the Literature and Composition exam or the Language and Composition exam, or membership in the University Honors Program. LEC.

ENGL 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in English. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

ENGL 199. Orientation to English Studies. 1 Hour. H.
Provides an overview of English Studies at the University of Kansas. Students learn about degree requirements and specializations; research, extracurricular, and study abroad opportunities; and career and internship options. Graded on a satisfactory/unsatisfactory basis. LEC.

ENGL 200. Study Abroad Topics in: _____. 1-6 Hours. H.
This course is designed for the study of special topics in English. Coursework is completed through a KU study abroad program. Available only to KU study abroad participants. May be repeated for credit if content varies. Does NOT fulfill any part of the Freshman-Sophomore requirement. LEC.

ENGL 203. Topics in Reading and Writing: _____. 3 Hours. GE11/GE21/GE3H / H.
In-depth reading and writing on a significant topic, theme, or genre. Includes a variety of textual types or a range of historical periods. Continued practice in critical reading and writing. May include but will not be limited to writing in literary genres. Prerequisite: Completion of ENGL 101 and ENGL 102, or their equivalent. LEC.

ENGL 205. Freshman-Sophomore Honors Proseminar: _____. 3 Hours. GE11/GE21/GE3H / H.
Study of a major movement, topic, or theme in literature and culture. The primary aims are to further develop reading and writing skills and to consider significant cultural and artistic issues. Prerequisite: ENGL 105 or an AP exam score of 4 on either the Literature and Composition exam or the Language and Composition exam. LEC.

ENGL 209. Introduction to Fiction. 3 Hours. GE11/GE21/GE3H / H.
In-depth reading of and writing about prose fiction with emphasis on critical analysis of a variety of narrative types from different historical periods. Prerequisite: Completion of ENGL 101 and ENGL 102, or their equivalent. LEC.

ENGL 210. Introduction to Poetry. 3 Hours. GE11/GE21/GE3H / H.
In-depth reading of and writing about poetry with emphasis on critical analysis of a variety of forms and techniques used in poems from different historical periods. Prerequisite: Completion of ENGL 101 and ENGL 102, or their equivalent. LEC.
ENGL 211. Introduction to the Drama. 3 Hours. GE11/GE21/GE3H / H.
Study of plays selected to familiarize the student with dramatic masterpieces and with the drama as a literary type. Prerequisite: Completion of ENGL 101 and ENGL 102, or their equivalent. LEC.

ENGL 300. The Bible, the Classics, and Modern Literature. 3 Hours. H.
An introduction to the nature and function of literature, emphasizing Biblical, Classical, and other major cultural traditions and their influence on British and American literature. Some ancient and modern works will be studied in conjunction. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 301. Topics in British Literature to 1800: _____. 3 Hours. H.
Study of British literary works before 1800. Topics may focus on a particular genre, theme, topical period, author, or group of authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 302. Topics in British Literature Since 1800: _____. 3 Hours. H.
Study of British literary works since 1800. Topics may focus on a particular genre, theme, topical period, author, or group of authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 305. World Indigenous Literatures. 3 Hours. NW AE42 / H.
A survey of contemporary world indigenous literatures that includes those from North America, Australia, New Zealand, the South Pacific, the Arctic, and Latin America. Texts are in English (original or translation). Genres studied include the novel, poetry, and drama, supplemented by works from the oral tradition, the visual arts, and film. (Same as ISP 305.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 306. Global Environmental Literature. 3 Hours. H.
An examination of a variety of literary and other representations of human and non-human environments and environmentalism. Particular attention will be paid to how race, gender, class, sexuality, and geography produce and are produced by those representations. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 308. Introduction to Literary Criticism and Theory. 3 Hours. GE3H / H.
Study of significant problems in literary interpretation and methodology, in which basic critical principles and approaches are systematically examined and applied. These approaches might include, but are not limited to, feminism, Marxism, deconstruction, psychoanalysis, and cultural studies. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 309. The British Novel. 3 Hours. HL / H.
Study of five or more significant novels representative of developments in the British novel of the eighteenth, nineteenth, and twentieth centuries. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 310. Literary History I. 3 Hours. H.
A study of literature in English, including major forms and movements, from the medieval period to Romanticism. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 312. Major British Writers to 1800. 3 Hours. H.
Outstanding works of British literature, from the earliest times to the close of the eighteenth century, studied in chronological sequence and with some attention to the characteristics of the various periods of English literary history embraced. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 314. Major British Writers after 1800. 3 Hours. H.
Outstanding works of British literature, from 1800 to the present, studied in chronological sequence and with some attention to the characteristics of the various periods of English literary history embraced. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 315. Studies in British Literature. 3 Hours. HL AE42 / H.
For students enrolled in the annual summer Study Abroad program, an interdisciplinary program conducted with other humanities departments. British literature is studied in the context of visits to relevant sites such as London, the Lake District, and Edinburgh. Prerequisite: Prior completion of the KU Core Written Communication requirement. Approval for enrollment in the Summer Institute through the Study Abroad office is required. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 316. Introduction to Major American Writers. 3 Hours. H.
Outstanding works of American literature, studied in chronological sequence and with some attention paid to the characteristics of the various periods of American literary history embraced. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 317. Topics in American Literature to 1865: _____. 3 Hours. H.
Study of American literary works before 1865. Topics may focus on a particular genre, theme, topical period, author, or group of authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 318. Topics in American Literature Since 1865: _____. 3 Hours. H.
Study of American literary works since 1865. Topics may focus on a particular genre, theme, topical period, author, or group of authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 320. American Literature I. 3 Hours. H.
From the beginnings to 1865, with emphasis on the major writers and movements. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 322. American Literature II. 3 Hours. H.
From 1865 to the present, with emphasis on the major writers and movements. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 323. Twentieth Century Literature and Culture. 3 Hours. H.
The study of British and American literature, emphasizing important figures and movements since World War I. On occasion, the study of literature will be enriched with an investigation of other arts, such as music, film, and painting. Prerequisite: Prior completion of the KU Core
ENGL 324. Contemporary Authors: _____ 3 Hours. H.  
Study of one or more recent British and/or American authors. (Different authors in different semesters.) May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 325. Recent Popular Literature. 3 Hours. HL / H.  
Study of recent best sellers or other works of popular interest. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 326. Introduction to African Literature. 3 Hours. NW AE42 / H/W.  
Reading, analysis, and discussion of contemporary fiction, poetry, and drama from sub-Saharan Africa. Brief attention is paid to historical development and to traditional literature. (Same as AAAS 332.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 327. Studies in Twentieth-Century Drama: _____ 3 Hours. H.  
A survey of major twentieth-century playwrights and theatre groups, to be selected by the instructor. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 328. Literature and Film: _____ 3 Hours. H.  
The comparative study of the literary and film treatments of a particular topic or theme, with special attention to the generic qualities of literature and film. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 330. Literary History II. 3 Hours. H.  
A study of literature in English, including major forms and movements, from the Romantics to the present. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 331. Chaucer. 3 Hours. H.  
Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 332. Shakespeare. 3 Hours. H.  
A study of ten to fourteen of Shakespeare’s plays. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 334. Major Authors: _____ 3 Hours. H.  
Study of one or two major British and/or American authors. Different authors in different semesters. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 336. Jewish American Literature and Culture. 3 Hours. AE41 / H.  
An examination of Jewish American literature and culture from the 17th century to the present. Materials may include a broad range of literary genres as well as folklore, music, film, and visual art. (Same as JWSH 336.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 337. Introduction to U.S. Latino/a Literature. 3 Hours. AE41 / H.  
An historical survey of literature by U.S. Latino/a writers of Mexican, Puerto Rican, Cuban, Dominican, and Central/South American descent. Various genres, including oral forms such as corridos as well as novels, poetry, essays, and autobiographical writing, will be considered. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 338. Introduction to African-American Literature. 3 Hours. AE41 / H.  
An introduction to prominent works of African-American literature from the 18th century to the present as well as to the basic approaches to study and principles of this body of work, including its connection with African sources. Literature will include a wide variety of genres, and course materials may be supplemented by folklore, music, film, and visual arts. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 339. Introduction to Caribbean Literature. 3 Hours. AE42 / H.  
Reading, analysis, and discussion of fiction, poetry, and drama from the Caribbean, including a small selection of Spanish, French, and Dutch Antillean works in translation. (Same as AAAS 333.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 340. Topics in U.S. Ethnic Literature: _____ 3 Hours. AE41 / H.  
A study of literature by authors from one or more ethnic groups within the U.S., including but not limited to Asian American, African American, American Indian, Jewish American, Italian American, U.S. Latina/o. Different topics in different semesters. May be repeated for credit as topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 341. American Literature of Social Justice. 3 Hours. AE41 / H.  
An examination of U.S. literature that addresses situations of political and economic oppression or repression with the potential function of enlisting readers’ sympathies in a project of social justice. The course focuses on U.S. literary texts dealing with social injustice and the curtailment of human and civil rights and addresses debates surrounding cultural authority and authenticity, identity politics, attempts to represent the voice of the “oppressed,” and revision of strategies used in slave narrative or in testimonio, and ethical and rhetorical appeals to an assumed readership. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 351. Fiction Writing I. 3 Hours. H.  
A study of narrative techniques and practice in the writing of fiction. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 352. Poetry Writing I. 3 Hours. H.  
A study of prosody and practice in the writing of poetry. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 353. Screenwriting I. 3 Hours. H.  
An introduction to the practice of writing and evaluating scripts for film. Prerequisite: Prior completion of the KU Core Written Communication
requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 354. Playwriting I. 3 Hours. H.
An introduction to the practice of writing and evaluating scripts for stage. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 355. Nonfiction Writing I. 3 Hours. H.
An introduction to the literary techniques of nonfiction and practice in the writing of one or more of the genre's subtypes, such as the personal essay, the familiar essay, the lyric essay, the memoir, nature writing, or travel writing. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 359. English Grammar. 3 Hours. U.
A course in traditional English grammar for students who wish to understand and be able to analyze English sentence structure. Students might apply the course to studies of style (their own or other authors'), rhetorical analysis, literary interpretation, or teaching. This course may be offered in either lecture or online format. Prerequisite: Prior completion of the KU Core Written Communication requirement. LEC.

ENGL 360. Advanced Composition: _____ 3 Hours. H.
The principles of effective composition, as applied to a specific topic such as critical writing, expository writing, pre-legal English, book reviewing, etc. May be repeated for credit as topic varies. Prerequisite: Prior completion of the KU Core Written Communication requirement. LEC.

ENGL 361. Professional Writing: _____ 3 Hours. H.
Principles of writing for specific professional contexts, which might include such areas as business writing, legal writing, and literary or arts reviewing, etc. May be repeated for credit as topic varies. Prerequisite: Prior completion of the KU Core Written Communication requirement. LEC.

ENGL 362. Foundations of Technical Writing. 3 Hours. H.
Introduces students to the principles of technical communication. Students learn to organize, develop, write, and revise various technical documents (e.g., letters, manuals, presentations, proposals, reports, resumes, websites) often needed in business, engineering and scientific settings. Includes an introduction to technical-writing software. This course fulfills the prerequisite for English 562 and English 564. Prerequisite: Prior completion of the KU Core Written Communication requirement. LEC.

ENGL 380. Introduction to Rhetoric and Composition. 3 Hours. GE3H / H.
Introduces students to rhetoric and composition, a field that investigates questions about the nature, processes, teaching and historical, social and cultural contexts of writing. Students survey the themes, debates, and trends that inform the work of scholars in this field. Students also become acquainted with the historical traditions of discourse instruction, and the relevance of those traditions to our current understandings of writing. Prerequisite: Prior completion of the KU Core Written Communication requirement. LEC.

ENGL 385. The Development of Modern English. 3 Hours. H.
An introduction to the history of the English language, with special attention to general structural changes throughout its history, especially changes in vocabulary and meaning, and past influences of other languages upon present usage. Prerequisite: Prior completion of the KU Core Written Communication requirement. LEC.

ENGL 387. Introduction to the English Language. 3 Hours. HL GE3H / H.
A survey of the English language, its historical development, and its grammatical structure. Prerequisite: Prior completion of the KU Core Written Communication requirement. LEC.

ENGL 390. Studies in: _____ 3 Hours. H.
A study of a specialized theme or topic in English studies. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 400. Teaching and Tutoring Writing. 3 Hours. U.
Students explore theories and strategies of teaching and tutoring writing across academic disciplines. They learn more about themselves as writers as they build a repertoire of writing techniques useful in their studies, in the workplace, and in their personal lives. By observing and consulting in the writing center, they understand how reflection leads to responsible/responsive and engaged practice. (Same as LAS 400.) LEC.

ENGL 404. The Literature of: _____ 3 Hours. H.
A study of the literary treatment of a particular aspect of British and/ or American society. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ENGL 420. The London Review. 3 Hours. AE42 / H.
This class meets one day a week throughout the semester and includes a nine-day visit to London over the spring break period. Students spend the early part of the semester selecting special interests, researching places to visit and study, and exchanging information. After the trip, students compile and publish a journal entitled "The London Review", which is comprised of essays, photos, art work, and other reflections about their experience in London. Prerequisite: Admission to University Honors Program or permission of instructor. LEC.

ENGL 492. Internship. 1-3 Hours. H.
Practical research experience in English studies gained by assisting a faculty member on a faculty research, editorial, pedagogical, or outreach project. Credit hours are graded on a satisfactory/unsatisfactory basis. May be used as a component of the Research Experience Program (REP). Prerequisite: At least one 300-level English course, declaration of English major, and permission of instructor. FLD.

ENGL 493. Directed Study: _____ 1-3 Hours. H.
Work for advanced majors in fields or on topics not covered in course work. May be repeated for a total of up to six hours. Does not satisfy specific course requirements for the English major. May be counted as part of the total junior-senior credit hours required. Prerequisite: Completion of three junior-senior courses in English and consent of instructor. IND.

ENGL 494. Internship. 1-3 Hours. H.
Practical experience in the use of English skills in supervised academic or professional settings. Credit hours are graded on a satisfactory/unsatisfactory basis, according to the written evaluation provided by the supervisor to the director. Prerequisite: At least one 300-level English
course, declaration of English major, and permission of Undergraduate Director. FLD.

**ENGL 497. Service Learning Internship. 1-3 Hours. H.**
Practical experience in the use of English skills in a non-profit or advocacy context. Credit hours are graded by faculty on a satisfactory/unsatisfactory basis, according to the written evaluation student provided by the on-site supervisor and on the student's written reflective component assigned and evaluated by the supervising faculty member. May be used as a component of the Service Learning certification program. Prerequisite: At least one 300-level English course, declaration of English major, and permission of instructor. FLD.

**ENGL 506. Science Fiction. 3 Hours. AE61 / H.**
The development of science fiction as a literary genre, and as a literature of ideas for a future-oriented society. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

**ENGL 507. Science, Technology, and Society: Examining the Future through a Science-Fiction Lens. 3 Hours. AE61 / H.**
Science and technology offer many benefits to individuals and to societies, yet they also present many challenges. This course explores the past, present, and possible future effects of science and technology on society through readings and discussions of nonfiction articles in conjunction with science-fiction stories and novels. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

**ENGL 508. Contemporary Literary Theory. 3 Hours. AE61 / H.**
Study of selected works of literary theory and of current issues in literary studies. The course is designed for advanced undergraduates who intend to continue their study of literature in graduate school and for new graduate students who require a grounding in literary theory. According to each instructor's interest, the course may survey contemporary literary theory or may focus on a particular topic (e.g., authorship, canon formation, creativity, metaphor, narrative, rhetoric) or on a theoretical position (e.g., cultural studies, deconstruction, feminism, historicism, Marxism, psychoanalysis). A student may repeat the course with the permission of the appropriate director. Prerequisite: Completion of three junior-senior courses in English (or their equivalent) or graduate standing. LEC.

**ENGL 520. History of the Book. 3 Hours. AE61 / H.**
Brief history of writing materials and handwritten books; history of printed books from the fifteenth century as part of cultural history; technical progress and aesthetic change. (Same as HIST 500.) LEC.

**ENGL 521. Advanced Topics in British Literature 1800: ____. 3 Hours. AE61 / H.**
A Study of texts written before 1800. May be organized around a particular genre, historical period, a group of writers, or a theme. May be repeated for credit as topic varies. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

**ENGL 522. Advanced Topics in British Literature After 1800: ____. 3 Hours. H.**
A study of texts written after 1800. May be organized around a particular genre, historical period, group of writers, or a theme. May be repeated for credit as topic varies. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

**ENGL 525. Shakespeare: ____. 3 Hours. AE61 / H.**
Intensive study of selected works. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

**ENGL 530. Irish Literature and Culture: ____. 3 Hours. AE61 / H.**
Study of topics in Irish literature and culture. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. (Same as EURS 512.) Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

**ENGL 531. James Joyce. 3 Hours. AE61 / H.**
A study of the major works of James Joyce, with the majority of the semester dedicated to Ulysses. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

**ENGL 532. Whitman and Dickinson. 3 Hours. AE61 / H.**
A study of selected works of Walt Whitman and Emily Dickinson. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

**ENGL 533. William Faulkner. 3 Hours. AE61 / H.**
A study of selected works of William Faulkner. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

**ENGL 534. Major Authors (Capstone): ____. 3 Hours. AE61 / H.**
Study of one or two major authors. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

**ENGL 536. Readings in the Holocaust. 3 Hours. AE61 / H.**
An examination of Holocaust literature, which may include fiction, nonfiction, poetry, drama, and film. Theoretical concerns may include such issues as memory, trauma, representation, imagination, exile, alienation, silence, the body and emotions, and intergenerational transmission. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

**ENGL 551. Fiction Writing II. 3 Hours. AE61 / H.**
Continuation of ENGL 351. May be repeated for undergraduate credit up to a total of six hours. Prerequisite: ENGL 351 or equivalent. LEC.

**ENGL 552. Poetry Writing II. 3 Hours. AE61 / H.**
Continuation of ENGL 352. May be repeated for undergraduate credit up to a total of six hours. Prerequisite: ENGL 352 or its equivalent. LEC.

**ENGL 553. Screenwriting II. 3 Hours. AE61 / H.**
A continuation of ENGL 353. May be repeated for undergraduate credit up to a total of six hours. Prerequisite: ENGL 353 or its equivalent. LEC.

**ENGL 554. Playwriting II. 3 Hours. AE61 / H.**
A continuation of ENGL 354. May be repeated for undergraduate credit up to a total of six hours. Prerequisite: ENGL 354 or its equivalent. LEC.

**ENGL 555. Nonfiction Writing II. 3 Hours. AE61 / H.**
Continuation of ENGL 355. May be repeated for undergraduate credit up to a total of six hours. Prerequisite: ENGL 355 or its equivalent. LEC.

**ENGL 560. British Literature of the 20th Century: ____. 3 Hours. AE61 / H.**
Study of twentieth-century literary works. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

**ENGL 562. Advanced Technical Writing I. 3 Hours. AE61 / H.**
Stresses research methods in technical communication and simulates on-the-job training through live interviews and other forms of research. Students master the relevant software tools and begin to develop a technical-writing portfolio. Prerequisite: ENGL 362. LEC.
<table>
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<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Pre-Requisites</th>
<th>Description</th>
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<tr>
<td>ENGL 563.</td>
<td>Advanced Technical Writing and Editing</td>
<td>3 Hours. AE61 / H.</td>
<td>Students apply the principles of communicating business, scientific, and technical information to targeted readers. Concentration on the varying writing styles for online documents, proposals, reports, specifications, journal articles, and larger documents, as appropriate to their audience. Simulates an internship and helps students further develop a technical-writing or -editing portfolio. Students provide weekly status reports and a final report detailing their learning experience and present it to an appropriate technical communication class to help other students better understand the field. Prerequisite: Instructor permission. LEC.</td>
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<tr>
<td>ENGL 564.</td>
<td>Advanced Technical Editing I</td>
<td>3 Hours. AE61 / H.</td>
<td>Students learn to use specialized vocabulary and editing tools such as proofreaders' marks, style guides, and standard editorial reference material; and they practice how to identify and correct common problems. Students usually work with writers in other technical writing courses, learning to work productively with other peoples' print and online documents. Students practice taking editing tests and develop a technical-editing portfolio. Prerequisite: ENGL 362. LEC.</td>
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<tr>
<td>ENGL 565.</td>
<td>The Gothic Tradition</td>
<td>3 Hours. H.</td>
<td>This course explores and defines the Gothic tradition in British and American literature from its beginnings in the late eighteenth century to more recent twentieth-century texts in literature and film. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.</td>
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<tr>
<td>ENGL 567.</td>
<td>Modern Drama</td>
<td>3 Hours. AE61 / H.</td>
<td>A study of American, British, or comparative drama from the late nineteenth century to the present. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.</td>
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<tr>
<td>ENGL 568.</td>
<td>American Literary Environmentalism</td>
<td>3 Hours. AE61 / H.</td>
<td>An examination of representations of nature and human/nature relations and their political, social and environmental consequences, with a special focus on the 19th and 20th centuries, including the writings of transcendentalists and conservationists, slave narratives, scientific writing on toxicity and other topics, and environmental justice literature. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.</td>
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<tr>
<td>ENGL 569.</td>
<td>The Modern Tradition</td>
<td>3 Hours. AE61 / H.</td>
<td>An intensive study of the formative backgrounds of the &quot;modern&quot; spirit as it is expressed in imaginative literature. Readings from such influential spokesmen as W. James, Zola, Marx, Darwin, Henry Adams, Kierkegaard, Dostoevsky, Nietzsche, I.A. Richards, T.S. Eliot, Joyce, Auden, Rilke, Croce, Yeats, Malraux, Freud, Jung, D.H. Lawrence, Sarthe, Camus, and Gide. Prerequisite: Prior completion of the freshman-sophomore English requirement or its equivalent. LEC.</td>
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<tr>
<td>ENGL 570.</td>
<td>Topics in American Literature</td>
<td>3 Hours. AE61 / H.</td>
<td>Different topics in different semesters. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.</td>
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<tr>
<td>ENGL 571.</td>
<td>American Indian Literature</td>
<td>3 Hours. NW AE41/ AE61 / H/W.</td>
<td>The study of a wide range of American Indian literature, from various tribes and in a variety of genres. Satisfies the non-western culture course requirement. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.</td>
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<tr>
<td>ENGL 572.</td>
<td>Women and Literature</td>
<td>3 Hours. AE61 / H.</td>
<td>Different topics in different semesters. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.</td>
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<tr>
<td>ENGL 573.</td>
<td>U.S. Latina/o Literature</td>
<td>3 Hours. AE41/AE61 / H.</td>
<td>A study of the literature written by U.S. Latina/o writers of Mexican, Puerto Rican, Cuban, Dominican, and other Central/South American descent, in a variety of genres. Attention is given to the cultural and historical contexts of the literature and to the specificity of particular U.S. Latina/o groups. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.</td>
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<tr>
<td>ENGL 574.</td>
<td>African American Literature</td>
<td>3 Hours. AE41/AE61 / H.</td>
<td>A study of the literature written by African Americans from the pre-Civil War period to the present. Emphasis upon specific historical periods in the development of African American literature as well as on a critical analysis of major autobiographical, poetic, and fictional works. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.</td>
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<tr>
<td>ENGL 575.</td>
<td>Literature of the American South</td>
<td>3 Hours. AE61 / H.</td>
<td>A survey of fiction, non-fiction, poetry, and drama written by selected writers of the American South from the pre-Civil War period to the present. The course will emphasize the critical analysis of individual texts as well as the cultural and historical context of the works. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.</td>
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<tr>
<td>ENGL 576.</td>
<td>Advanced Topics in American Literature to 1865</td>
<td>3 Hours. AE61 / H.</td>
<td>Study of American literary works before 1865. Topics may focus on a particular genre, theme, topic, historical period, author, or group of authors. May be repeated for credit as the topic changes. (Same as AMS 554.) Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.</td>
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<tr>
<td>ENGL 577.</td>
<td>Advanced Topics in American Literature Since 1865</td>
<td>3 Hours. AE61 / H.</td>
<td>Study of American literary works after 1865. Topics may focus on a particular genre, theme, topic, historical period, author, or group of authors. May be repeated for credit as the topic changes. (Same as AMS 555.) Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.</td>
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<tr>
<td>ENGL 578.</td>
<td>Poetry, 1900-1945</td>
<td>3 Hours. AE61 / H.</td>
<td>A Study of English-language poetry of the early twentieth century. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.</td>
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<tr>
<td>ENGL 579.</td>
<td>Poetry since 1945</td>
<td>3 Hours. AE61 / H.</td>
<td>A study of English-language poetry from the mid-twentieth century to the present. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.</td>
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<tr>
<td>ENGL 580.</td>
<td>Rhetoric and Writing</td>
<td>3 Hours. AE61 / H.</td>
<td>A study of selected broad topics in rhetoric and writing, including such topics as the rhetoric of law, the rhetoric of education, persuasion in literature, literacy, and rhetorical genres. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.</td>
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<tr>
<td>ENGL 581.</td>
<td>English Language Studies</td>
<td>3 Hours. AE61 / H.</td>
<td>A study of selected topics in English language studies (e.g. World Englishes, Language and Literary Style, and The Secret Life of English</td>
<td></td>
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</tbody>
</table>
A broad view of major works and authors in a particular period, genre, or mode. May be repeated for credit as the topic varies. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 590. Studies in: ____. 1-3 Hours. AE61 / H.
A study of a specialized theme or topic in English studies. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of the first-and-second-year English requirement or its equivalent, and at least one 300- or 400-level ENGL course; or permission of instructor. LEC.

ENGL 592. Survey of: ____. 3 Hours. AE61 / H.
A broad view of major works and authors in a particular period, genre, or mode. May be repeated for credit as the topic varies. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 596. Technical Communication Internship. 1-3 Hours. AE61 / H.
Practical experience in the use of technical-writing or editing skills in supervised professional settings for which the student normally does not receive pay. A 1-3-hour internship requires 40-120 hours of documented on-site work in one semester (40 hours per credit). Credit hours are graded on a satisfactory/unsatisfactory basis, according to a written recommendation from the student's workplace manager, student work logs and self-evaluation, and an oral report. Prerequisite: Advanced Technical Writing I (ENGL 562) and permission of instructor. LEC.

ENGL 598. Honors Proseminar: ____. 3 Hours. AE61 / H.
Directed reading and participation in small discussion groups, each formed to consider a specific and limited subject during the semester. Written work will be required, and will be judged on both content and form. The course is part of a departmental program leading to Honors in English. Prerequisite: Admission must be approved by the departmental director of undergraduate studies. LEC.

ENGL 599. Honors Essay. 3 Hours. AE61 / H.
Independent study, culminating in a substantial essay prepared under the direction of a member of the Department of English who is a specialist in the area of the student's interest. Prerequisite: Admission must be approved by the departmental director of undergraduate studies. LEC.

ENGL 610. The Literature of England to 1500. 3 Hours. AE61 / H.
A survey of the literature of medieval England (in translation). Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 620. Renaissance English Literature: ____. 3 Hours. AE61 / H.
A broad view of literary works written between 1485 and 1660. Surveys may be offered with focus on a particular genre (poetry, drama, or prose), historical period (16th- or 17th-century literature), or group of authors (women writers). May be repeated for credit as topic varies. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 633. Milton. 3 Hours. AE61 / H.
A close reading of Paradise Lost, Paradise Regained, Samson Agonistes, and the minor poems, with illustrative selections of prose. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 640. British Literature, 1600-1800: ____. 3 Hours. AE61 / H.
Study of literary works from the Restoration and eighteenth century. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 650. Romantic Literature: ____. 3 Hours. AE61 / H.
Study of literary works from the British Romantic period. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 655. Victorian Literature: ____. 3 Hours. AE61 / H.
Study of literary works from the Victorian period. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 660. Ecocriticism. 3 Hours. AE61 / H.
A study of the relationship between various modes of representation and environmentalism. Particular attention paid to the intersection between ecocriticism and other forms of contemporary literary theory, including, for example, critical race studies, poststructuralism, postcolonial theory, gender and sexuality studies, class-based criticism, and animal theory. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 674. African Literature: ____. 3 Hours. NW AE42/AE61 / H.
An advanced study of a topic, genre, or area of written and/or oral African literature. Emphasis is placed on the critical analysis of major works, as well as their cultural and historical contexts. The course also addresses central critical and theoretical debates in the field. May be repeated for credit as the topic changes. Prerequisite: At least one 300- or 400-level English course, or permission of instructor. LEC.

ENGL 690. Studies in: ____. 3 Hours. AE61 / H.
A study of a major topic of concern to English literature. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

ENGL 707. Literary Criticism to 1800. 3 Hours.
An introduction to the major writings of literary criticism, in their historical context, from Plato and Aristotle to Samuel Johnson. LEC.

ENGL 708. Literary Criticism after 1800. 3 Hours.
An introduction to modern criticism, in its historical context, from Wordsworth and Coleridge to the present. The emphasis will be on major critics and predominant schools. LEC.

ENGL 709. Critical Theory: Problems and Principles: ____. 3 Hours.
Study of a topic (such as mimesis, influence, deconstruction) that is important in critical theory. May be repeated for credit as topic varies. LEC.

ENGL 710. Introduction to Old English. 3 Hours.
A study of the grammatical features of the earliest form of written English, with readings in Old English prose and poetry. LEC.

ENGL 712. Beowulf. 3 Hours.
Prerequisite: An introductory course in Old English. LEC.

ENGL 714. Middle English Literature. 3 Hours.
Reading of selected works in Middle English (exclusive of the works of Chaucer). LEC.
ENGL 720. Chaucer: ____. 3 Hours.
Intensive study of either the Canterbury Tales or Troilus and Criseyde and the earlier poems. May be repeated for credit up to a maximum of six hours. LEC.

ENGL 725. Shakespeare: ____. 3 Hours.
Intensive study of selected plays. May be repeated for credit as the topic changes. LEC.

ENGL 730. Topics in Early Modern Literature: ____. 3 Hours.
Intensive study of texts written between 1485 and 1800. The course may be organized around a particular genre (poetry, prose, drama), historical period (e.g. Elizabethan literature), a major author (e.g. Milton), group of authors (e.g. women writers), or theme (e.g. literature and politics 1660-1800). Students will be expected to read and apply relevant criticism and theory as well as study primary texts. May be repeated for credit as topic varies. LEC.

ENGL 750. British Literature of the 19th Century: ____. 3 Hours.
Intensive study of British literary works of the 1800s. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. LEC.

ENGL 751. Fiction Writing III. 1-3 Hours.
Practice in the writing of fiction under the direction of a member of the department working in conjunction with one or more writers in residence. Membership is limited to students who submit, well in advance enrollment, manuscripts showing unusual ability. May be repeated for credit. LEC.

ENGL 752. Poetry Writing III. 1-3 Hours.
Practice in the writing of poetry under the direction of a member of the department working in conjunction with one or more writers in residence. Membership is limited to students who submit, well in advance of enrollment, manuscripts showing unusual ability. May be repeated for credit. LEC.

ENGL 753. Writers Workshop. 1-3 Hours.
An intensive course in writing prose fiction and/or verse. Criticism (NEW) of manuscripts through group meetings and individual conferences with the instructor. Membership limited to students who submit manuscripts showing special ability in at least one of the creative writing forms. May be repeated for credit. LEC.

ENGL 756. Forms: ____. 3 Hours.
A study of literary works belonging to a particular genre or to multiple genres (fiction, nonfiction, poetry, drama etc), either in a particular form (short story, essay, sonnet, etc.), concerned with a particular topic, or illustrative of a particular element of craft (voice, point of view, character development, etc.). Intended primarily for creative writing students with an interest in developing their skills at reading as writers. May be repeated for credit as the topic varies. LEC.

ENGL 757. Speculative Fiction Writing Workshop. 3 Hours.
An intensive, 2-week course in writing speculative fiction, including genres such as slipstream, magical realism, fantasy, horror, and science fiction. The course is part of the Center for the Study of Science Fiction Summer Institute. Application period: January 1 - April 15. Application includes note to instructor expressing interest and one story. May be repeated for credit with instructor's permission. LEC.

ENGL 760. British Literature of the 20th Century: ____. 3 Hours.
Intensive study of British literary works written during the 20th century. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. LEC.

ENGL 764. Modern Irish Literature: ____. 3 Hours.
Intensive study of topics in modern Irish literature. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. LEC.

ENGL 767. Studies in Modern Drama: ____. 3 Hours.
Reading of selected works in modern and contemporary drama. May be repeated for credit as the topic changes. LEC.

ENGL 770. Studies in Life Writing: ____. 3 Hours.
This course focuses on or surveys individual writers in the tradition of life writing; or intensively examines topics such as "Autobiography," "Memoir and Diary," "Biography," "Slave Narrative," "Letters," "Personal Essays," or "Autobiographical Fictions." Special emphasis within a topic, such as period, gender, or ethnicity, are possible. May be repeated for credit up to a maximum of six hours. LEC.

ENGL 774. Topics in Literatures of Africa and the African Diaspora: ____. 3 Hours.
An intensive study of the literatures of Africa and/or African diaspora (people of African descent dispersed around the world). This study will focus on the major characteristics of a particular period, genre, mode, and/or theme in literatures such as African, Caribbean, Afro-Brazilian, African American, African Canadian, Black British. Critical theories pertinent to writers and their work will be covered. Topics may include studies in drama, poetry, or the novel; migration narratives; literature of a particular era, such as the Harlem Renaissance, Negritude, or the Black Arts Movement; representations of gender, etc. As topics vary by semester, the course may be repeated for credit. (Same as AAAS 774.) LEC.

ENGL 776. American Literature to 1900: ____. 3 Hours.
A colloquium for graduate students, sampling the range of poetries and poetics produced in the United States in the twentieth and twenty-first centuries. LEC.

ENGL 777. American Literature after 1900: ____. 3 Hours.
A study of contemporary American literature. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. LEC.

ENGL 779. U.S. Poetries Since 1900. 3 Hours.
A study of contemporary American literature. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. LEC.

ENGL 780. Composition Studies. 3 Hours.
This course surveys the field of composition studies, examining major issues and theories in the study of writing. The course may include theories from classical to contemporary rhetoric, composition theory from the twentieth century, and the most current debates in the study of writing. LEC.

ENGL 781. Criticism and the Teaching of Literature. 3 Hours.
A survey of selected critical theories and of the applicability of those theories to the teaching of literature. LEC.

ENGL 785. History of the English Language. 3 Hours.
A course in the study of the history of the English language, including phonology, morphology, syntax, vocabulary, and semantics of English; the relation between linguistic and cultural change. LEC.

ENGL 787. Modern English Grammar. 3 Hours.
A study of contemporary English: phonology, morphology, syntax, and usage. The emphasis is structural, but "traditional" grammar is referred to for contrast, example, and clarification. LEC.
ENGL 790. Studies in: _____. 3 Hours.
Examination of a significant topic in literature or the English language.
May be repeated for credit as the topic varies. LEC.

ENGL 800. Methods, Theory, and Professionalism. 3 Hours.
Acquaintance with resources and practice in techniques that are essential
to other graduate courses. Major concerns include the writing and
documentation of scholarly papers; basic reference and bibliographical
aids; critical approaches to literature and literary historiography; and
the place of language and rhetoric in English studies today. LEC.

ENGL 801. Study and Teaching of Writing. 3 Hours.
A survey of major concepts and issues in the study of writing, especially
as applied to teaching composition. Practices in writing pedagogy are
also discussed, and students’ teaching of composition is observed and
explored. Required of and enrollment limited to new teachers of English
101. May not be repeated for credit toward graduate degree. FLD.

ENGL 802. Practicum in the Teaching of College English. 1 Hour.
A course concerned primarily with the pedagogy and practice of teaching
English 102. Includes weekly group meetings, individual conferences,
and class visitations. Required of and enrollment limited to new teachers
of English 102. May not be repeated for credit toward graduate degree.
Course graded on a satisfactory/unsatisfactory basis. FLD.

ENGL 803. Practicum in the Teaching of Creative Writing. 1 Hour.
A course for graduate teaching assistants pursuing the M.F.A. or
Ph.D. with emphasis in Creative Writing. Normally taken in the third
year. Concerns primarily the pedagogy of creative writing: workshop
techniques, approaches to conferencing, revision strategies, and the like.
Includes weekly group meetings as well as class visitations and individual
conferences. May not be repeated for credit towards graduate degree.
Graded on a satisfactory/unsatisfactory basis. FLD.

ENGL 880. Topics in Composition Studies and Rhetoric: _____. 3
Hours.
Examination of selected topics in composition and rhetoric, such as
literary studies, genre theory, dialogism, or writing across the curriculum.
May be repeated for credit as the topic changes. Prerequisite: ENGL 780
or equivalent. LEC.

ENGL 885. Writing Center Theory and Administration. 3 Hours.
This course explores theories motivating writing center administration
and practice. Students will investigate the multiple functions of writing
centers, from writing labs associated with college composition instruction,
to decentralized resources for writing faculty teaching writing across the
disciplines, to elementary, secondary, and community support centers for
writers, to online administrative perspective, design a research study and
propose actions such as creating policy, developing curricula, designing
materials, or conducting assessments. (Same as LAS 700.) Prerequisite:
LAS 400, ENGL 400, or consent of instructor. LEC.

ENGL 896. Internship. 1-3 Hours.
Practical experience under professional supervision in editing, theatrical
production, and other activities relevant to the completion of an advanced
degree in English. FLD.

ENGL 897. Preparation for the M.A. Examination. 1-3 Hours.
An independent reading course for students preparing to take the M.A.
examination. The grade in the course will be an S or U, as determined by
performance on the examination. Prerequisite: Consent of the Director of
Graduate Studies. RSH.

Graded on a satisfactory/unsatisfactory basis. THE.

ENGL 904. Seminar in Composition Theory: _____. 3 Hours.
Intensive study of one or more theoretical aspects of composition in
English (e.g., rhetoric, text grammar, stylistics). Prerequisite: ENGL 800.
LEC.

ENGL 905. Seminar in the English Language: _____. 3 Hours.
Close study of the English language in a particular period. Prerequisite:
ENGL 800. LEC.

ENGL 906. Seminar in the English Language: _____. 3 Hours.
Close study of one or more major critics, of a major critical school, or of a
topic important in literary criticism. Prerequisite: ENGL 800. LEC.

ENGL 915. Seminar in Medieval English Literature: _____. 3 Hours.
Study may center on either Old or Middle English language and literature.
Prerequisite: ENGL 800. LEC.

ENGL 916. Seminar in Chaucer: _____. 3 Hours.
Prerequisite: ENGL 800. LEC.

ENGL 920. Seminar in Renaissance English Literature: _____. 3
Hours.
Close study of one or two major authors or of a group of related works.
Prerequisite: ENGL 800. LEC.

ENGL 926. Seminar in Shakespeare: _____. 3 Hours.
Prerequisite: ENGL 800. LEC.

ENGL 932. Seminar in Milton: _____. 3 Hours.
Prerequisite: ENGL 800. LEC.

ENGL 940. Seminar in Restoration and 18th Century British
Literature: _____. 3 Hours.
One or two authors are read closely, or a group of related works is
studied. Prerequisite: ENGL 800. LEC.

ENGL 950. Seminar in 19th Century British Literature: _____. 3
Hours.
Concentrated study of one or two major figures, or a group of significant
writers, or an aspect of the literary scene. Prerequisite: ENGL 800. LEC.

ENGL 960. Seminar in 20th Century British Literature: _____. 3
Hours.
Concentrated study of one or two authors, or a group of significant writers,
or an aspect of the literary scene. Prerequisite: ENGL 800. LEC.

ENGL 974. Seminar in Literatures of Africa and the African Diaspora:
_____. 3 Hours.
Advanced study in a topic related to literature, language, and cultures of
Africa and the African Diaspora, such as a concentrated study of one or
two authors, a group of significant writers, an historical period or important
movement, or an aspect of the literary or cultural scene of Black writing.
May be repeated for credit as the topic varies. LEC.

ENGL 980. Seminar In: _____. 3 Hours.
Advanced study in a topic related to literature, language, theory, or a
special skill such as analytical bibliography or editing. Prerequisite: ENGL
800. LEC.

ENGL 997. Preparation for the Doctoral Examination. 1-12 Hours.
An independent reading course for students preparing to take the Ph.D.
comprehensive examination. May normally be taken in the semester or
summer session immediately preceding the semester in which
the comprehensive examination is taken. Does not count toward
the residence requirement. Graded on a satisfactory/unsatisfactory basis.
Prerequisite: Consent of the Director of Graduate Studies. RSH.
ENGL 998. Investigation and Conference: _____. 1-6 Hours. 
Individual work in (a) language, (b) literature, (c) composition, or (d) the 
teaching of English, by properly qualified graduate students under the 
direction of appropriate members of the Graduate Faculty as assigned 
by the Graduate Director. Limited to 6 hours of credit toward the M.A. or 
Ph.D. degree; only on three-hour enrollment may substitute for a formal 
course in satisfying a field distribution requirement. Normally offered for 
only up to three credit hours in any one enrollment. Permission of the 
supervising faculty member and of the Graduate Director required for 
enrollment. RSH.

ENGL 999. Doctoral Dissertation. 1-12 Hours. 
Graded on a satisfactory/unsatisfactory basis. THE.

Bachelor of Arts and Bachelor of 
General Studies in English

Why study English language and 
literature?

Because reading and writing shape the world.

KU's English Department is at the core of the humanities, highlighting the 
"human" through our individual, one-on-one interactions with our students, 
our emphasis on community and global engagement, and our abiding 
interest in our shared humanity through the stories of others. We seek 
to challenge the mind and to engage the imagination of our students, 
to teach them to ask questions and to seek for answers. We encourage 
them to grapple with the complexity of a culturally and commercially 
interconnected world and the global networks and processes of cultural 
exchange. We believe that words and ideas will shape the world. We 
teach our students life-long skills, so that they learn to write clearly, 
creatively, and effectively—discovering themselves even as they lay a 
solid foundation for professional success.

A commitment to teaching and learning.

Our department is renowned for its tradition of excellence in teaching. 
The vast majority of our undergraduate classes have 20-35 students, and 
much of the class time is dedicated to active learning and engagement 
with texts and ideas. In the last ten years, faculty members in the 
department of English have won ten Kemper Fellowships for Excellence 
in Teaching, two Chancellor's Club Teaching Professorships, a Career 
Achievement Teaching Award, and a wide variety of other university-
level teaching and advising awards, and the department as a whole 
received the Center of Teaching Excellence (CTE) award for Department 
Excellence in Teaching at the University of Kansas.

A variety of career and life paths.

English majors graduate to a variety of careers, including law, teaching, 
scholarship, publishing, library science, and journalism—as well as 
medicine, politics, design, and any number of other fields that value clear 
communication, interpretive skill, and critical and creative thinking.

Engaged and innovative scholarship.

KU's English Department has several core strengths that cross tracks 
and periods, including Global and Cross-Cultural Approaches; Literature, 
Rhetoric, and Social Action; Diversity Studies; Language, Literature and 
Science; and Popular Expressive Forms.

At the KU English Department, students work closely with nationally-
renowned writers and researchers. Our faculty have won national awards 
that recognize excellence in research, including grants from the National 
Endowment for the Humanities, the American Philosophical Society, 
and the Newberry Library, among others. English Department faculty 
members have also received major research funding from the University 
of Kansas, including the Hall Center for the Humanities Research 
fellowships and Keeler Intra-University Fellowships for interdisciplinary 
work. Undergraduate students can work one-on-one with faculty mentors 
in the Honors Program, McNair Scholars Program, and Dean's Scholars 
Program, as well as through independent Directed Studies.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college 
transcripts to the Office of Admissions. Unless they are college transfer 
students with at least 24 hours of credit, prospective students must send 
ACT or SAT scores to the Office of Admissions. Prospective first-year 
students should be aware that KU has qualified admission requirements 
that all new first-year students must meet to be admitted. Consult the 
Office of Admissions (http://admissions.ku.edu) for application deadlines 
and specific admission requirements.

Visit the Office of International Student and Scholar Services (http:// 
www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-
level course work will transfer on the Office of Admissions (http:// 
credittransfer.ku.edu) website.

Admission to the College of Liberal Arts 
and Sciences

Admission to the College is a different process from admission to a 
major field. Some CLAS departments have admission requirements. 
See individual department/program sections for departmental admission 
requirements.

Undergraduate First- and Second-Year 
Preparation

Prospective English majors and minors are encouraged to complete their 
KU Core Goal 2.1 requirements and their BA degree-specific written 
communication requirements with English Department coursework (i.e., 
ENGL 101, 102 or 105, and 200-level ENGL courses). Students are 
strongly encouraged to take a 200-level English course before taking 
300- and 400-level coursework in English. Prospective English majors 
are encouraged to consult with the Director or Associate Director of 
Undergraduate Studies in order to declare the major, review major 
and degree requirements, and become familiar with departmental 
opportunities.

Requirements for the B.A. or B.G.S. Major

The major in English requires 30 hours (33 for Honors English), of 
which 3 hours may be an appropriate 200-level English course. The 
Department offers three tracks in the major, with an Honors variation of 
each: General; Creative Writing; and Rhetoric, Language, and Writing.

As part of these 30 hours (33 for Honors English), all English majors must 
choose courses from each of the following 7 categories:

1. Individual Authors or Movements
2. Literary Theory

3. English Language or Rhetoric

4. Transcultural Approaches to Language, Literature, or Writing

5. Writing

6. Forms and Genres

7. Literary History (2 courses)

Note: courses may be listed in more than one category, but may only count in one category for an individual student. 2 courses must be at the 500 level or above (i.e., a capstone course); one additional course must be focused language, literature, or writing before 1850 (see course list at the bottom of this page). See Additional Requirements section of each track for requirements specific to that track.

### General Track

**General Track, category requirements:**

1. Individual Authors or Movements (3)

   - ENGL 301 Topics in British Literature to 1800: __________
   - ENGL 302 Topics in British Literature Since 1800: __________
   - ENGL 315 Studies in British Literature
   - ENGL 317 Topics in American Literature to 1865: __________
   - ENGL 318 Topics in American Literature Since 1865: __________
   - ENGL 324 Contemporary Authors: __________
   - ENGL 325 Recent Popular Literature
   - ENGL 327 Studies in Twentieth-Century Drama: __________
   - ENGL 331 Chaucer
   - ENGL 332 Shakespeare
   - ENGL 334 Major Authors: __________
   - ENGL 340 Topics in U.S. Ethnic Literature: __________
   - ENGL 479 The Literature of: __________
   - ENGL 521 Advanced Topics in British Literature 1800: __________
   - ENGL 522 Advanced Topics in British Literature After 1800: __________
   - ENGL 530 Irish Literature and Culture: __________
   - ENGL 531 James Joyce
   - ENGL 532 Whitman and Dickinson
   - ENGL 533 William Faulkner
   - ENGL 534 Major Authors (Capstone): __________
   - ENGL 560 British Literature of the 20th Century: __________
   - ENGL 565 The Gothic Tradition
   - ENGL 567 Modern Drama: __________
   - ENGL 568 American Literary Environmentalism
   - ENGL 570 Topics in American Literature: __________
   - ENGL 571 American Indian Literature: __________
   - ENGL 573 U.S. Latina/o Literature: __________
   - ENGL 574 African American Literature: __________
   - ENGL 575 Literature of the American South
   - ENGL 576 Advanced Topics in American Literature to 1865: __________
   - ENGL 577 Advanced Topics in American Literature Since 1865: __________
   - ENGL 578 Poetry, 1900-1945
   - ENGL 579 Poetry since 1945
   - ENGL 610 The Literature of England to 1500
   - ENGL 620 Renaissance English Literature: __________
   - ENGL 633 Milton
   - ENGL 640 British Literature, 1600-1800: __________
   - ENGL 650 Romantic Literature: __________
   - ENGL 655 Victorian Literature: __________
   - ENGL 674 African Literature: __________

2. Literary Theory (3)

   - ENGL 308 Introduction to Literary Criticism and Theory
   - ENGL 508 Contemporary Literary Theory
   - ENGL 660 Ecocriticism

3. English Language or Rhetoric (3)

   - ENGL 359 English Grammar
   - ENGL 380 Introduction to Rhetoric and Composition
   - ENGL 385 The Development of Modern English
   - ENGL 387 Introduction to the English Language
   - ENGL 580 Rhetoric and Writing: __________
   - ENGL 581 English Language Studies: __________
   - ENGL 587 American English

4. Transcultural Approaches to Language, Literature, or Writing (3)

   - ENGL 305 World Indigenous Literatures
   - ENGL 306 Global Environmental Literature
   - ENGL 326 Introduction to African Literature
   - ENGL 336 Jewish American Literature and Culture
   - ENGL 337 Introduction to U.S. Latina/o Literature
   - ENGL 338 Introduction to African-American Literature
   - ENGL 339 Introduction to Caribbean Literature
   - ENGL 340 Topics in U.S. Ethnic Literature: __________
   - ENGL 341 American Literature of Social Justice
   - ENGL 360 Advanced Composition: __________ (as Pura Vida: Travel Writing and the Costa Rica Experience) only Pura Vida: Travel Writing and the Costa Rica Experience currently counts in this category.
   - ENGL 492 The London Review
   - ENGL 571 American Indian Literature: __________
   - ENGL 572 Women and Literature: __________
   - ENGL 573 U.S. Latina/o Literature: __________
   - ENGL 574 African American Literature: __________
   - ENGL 674 African Literature: __________

5. Writing (3)

   - ENGL 203 Topics in Reading and Writing: __________
   - ENGL 205 Freshman-Sophomore Honors Prosersman: __________
   - ENGL 209 Introduction to Fiction
   - ENGL 210 Introduction to Poetry
   - ENGL 211 Introduction to the Drama
   - ENGL 351 Fiction Writing I (creative writing workshop)

Note: students not pursuing the Creative Writing Track may only count one creative writing workshop toward the major; creative writing workshops noted below.
ENGL 352 | Poetry Writing | creative writing workshop
ENGL 353 | Screenwriting | creative writing workshop
ENGL 354 | Playwriting | creative writing workshop
ENGL 355 | Nonfiction Writing | creative writing workshop
ENGL 360 | Advanced Composition: ______
ENGL 361 | Professional Writing: ______
ENGL 362 | Foundations of Technical Writing
ENGL 400 | Teaching and Tutoring Writing
ENGL 492 | The London Review
ENGL 551 | Fiction Writing II | creative writing workshop
ENGL 552 | Poetry Writing II | creative writing workshop
ENGL 553 | Screenwriting II | creative writing workshop
ENGL 554 | Playwriting II | creative writing workshop
ENGL 555 | Nonfiction Writing II | creative writing workshop
ENGL 598 | Honors Proseminar: ______
ENGL 599 | Honors Essay

6. Forms and Genres (3) note: students not pursuing the Creative Writing Track may only count one creative writing workshop toward the major; creative writing workshops noted below.

ENGL 209 | Introduction to Fiction
ENGL 210 | Introduction to Poetry
ENGL 211 | Introduction to the Drama
ENGL 309 | The British Novel
ENGL 327 | Studies in Twentieth-Century Drama: ______
ENGL 351 | Fiction Writing | creative writing workshop
ENGL 352 | Poetry Writing | creative writing workshop
ENGL 353 | Screenwriting | creative writing workshop
ENGL 354 | Playwriting | creative writing workshop
ENGL 355 | Nonfiction Writing | creative writing workshop
ENGL 360 | Advanced Composition: ______
ENGL 506 | Science Fiction
ENGL 551 | Fiction Writing II | creative writing workshop
ENGL 552 | Poetry Writing II | creative writing workshop
ENGL 553 | Screenwriting II | creative writing workshop
ENGL 554 | Playwriting II | creative writing workshop
ENGL 555 | Nonfiction Writing II | creative writing workshop
ENGL 567 | Modern Drama: ______
ENGL 578 | Poetry, 1900-1945
ENGL 579 | Poetry since 1945

7. Literary History: 2 courses (6)

ENGL 312 | Major British Writers to 1800 & ENGL 322 | and American Literature II
ENGL 320 | American Literature I & ENGL 314 | and Major British Writers after 1800
ENGL 310 | Literary History I & ENGL 330 | and Literary History II
ENGL 312 | Major British Writers to 1800 & ENGL 330 | and Literary History II

Additional Requirements, General Track:

- One course (3 hours) in addition to 7. (Literary History) must focus on literature before 1850. *See course list at the bottom of this page. (p. 1647)
- Two courses (6 hours) must be capstone courses, i.e., at the 500 level or above.
- 27 hours must be at the junior/senior level.
- One 200-level course may count toward major requirements. No 100-level ENGL courses count toward major requirements.

Notes:

- Only 1 (3 credits) creative writing workshop (fiction writing, nonfiction writing, poetry writing, screen writing or playwriting) may be applied as a major course for students not pursuing the creative writing track.
- Up to 6 credits combined of ENGL 494 (Research Internship) or ENGL 495 (Directed Study) may be applied as major electives.
- Up to 3 credit hours of ENGL 496 (Internship) or ENGL 497 (Service Learning Internship) may be applied as a major elective.

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 30 hours of major courses (33 for Honors English).

Major Hours in Residence
Satisfied by a minimum of 24 hours of KU resident credit in the major; exceptions by permission of Director of Undergraduate Studies only.

Major Junior/Senior Hours
Satisfied by a minimum of 24 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Creative Writing Track

Creative Writing Track, category requirements:

1. Individual Authors or Movements (3)

ENGL 301 | Topics in British Literature to 1800: ______
ENGL 302 | Topics in British Literature Since 1800: ______
ENGL 315 | Studies in British Literature
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENGL 317</td>
<td>Topics in American Literature to 1865: _____</td>
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</tr>
<tr>
<td>ENGL 318</td>
<td>Topics in American Literature Since 1865: _____</td>
<td></td>
</tr>
<tr>
<td>ENGL 324</td>
<td>Contemporary Authors: _____</td>
<td></td>
</tr>
<tr>
<td>ENGL 325</td>
<td>Recent Popular Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL 327</td>
<td>Studies in Twentieth-Century Drama: ______</td>
<td></td>
</tr>
<tr>
<td>ENGL 331</td>
<td>Chaucer</td>
<td></td>
</tr>
<tr>
<td>ENGL 332</td>
<td>Shakespeare</td>
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<tr>
<td>ENGL 334</td>
<td>Major Authors: _____</td>
<td></td>
</tr>
<tr>
<td>ENGL 340</td>
<td>Topics in U.S. Ethnic Literature: _____</td>
<td></td>
</tr>
<tr>
<td>ENGL 479</td>
<td>The Literature of: _____</td>
<td></td>
</tr>
<tr>
<td>ENGL 521</td>
<td>Advanced Topics in British Literature 1800: _____</td>
<td></td>
</tr>
<tr>
<td>ENGL 522</td>
<td>Advanced Topics in British Literature After 1800:</td>
<td></td>
</tr>
<tr>
<td>ENGL 530</td>
<td>Irish Literature and Culture: ______</td>
<td></td>
</tr>
<tr>
<td>ENGL 531</td>
<td>James Joyce</td>
<td></td>
</tr>
<tr>
<td>ENGL 532</td>
<td>Whitman and Dickinson</td>
<td></td>
</tr>
<tr>
<td>ENGL 533</td>
<td>William Faulkner</td>
<td></td>
</tr>
<tr>
<td>ENGL 534</td>
<td>Major Authors (Capstone): _____</td>
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</tr>
<tr>
<td>ENGL 560</td>
<td>British Literature of the 20th Century: _____</td>
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</tr>
<tr>
<td>ENGL 565</td>
<td>The Gothic Tradition</td>
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<tr>
<td>ENGL 567</td>
<td>Modern Drama: _____</td>
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<tr>
<td>ENGL 568</td>
<td>American Literary Environmentalism</td>
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<tr>
<td>ENGL 570</td>
<td>Topics in American Literature: _____</td>
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<td>ENGL 571</td>
<td>American Indian Literature: _____</td>
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<td>ENGL 573</td>
<td>U.S. Latina/o Literature: _____</td>
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<td>African American Literature: _____</td>
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<td>ENGL 575</td>
<td>Literature of the American South</td>
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<tr>
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<td>Advanced Topics in American Literature to 1865:</td>
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<tr>
<td>ENGL 577</td>
<td>Advanced Topics in American Literature Since 1865:</td>
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<tr>
<td>ENGL 578</td>
<td>Poetry, 1900-1945</td>
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<tr>
<td>ENGL 579</td>
<td>Poetry since 1945</td>
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<tr>
<td>ENGL 610</td>
<td>The Literature of England to 1500</td>
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<tr>
<td>ENGL 620</td>
<td>Renaissance English Literature: ______</td>
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<tr>
<td>ENGL 633</td>
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<td>ENGL 640</td>
<td>British Literature, 1600-1800: _____</td>
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<td>ENGL 650</td>
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<td>ENGL 655</td>
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<td>ENGL 674</td>
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<tr>
<td>ENGL 318</td>
<td>Topics in American Literature Since 1865: _____</td>
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<td>ENGL 324</td>
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<td>Recent Popular Literature</td>
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<tr>
<td>ENGL 327</td>
<td>Studies in Twentieth-Century Drama: ______</td>
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<td>ENGL 331</td>
<td>Chaucer</td>
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<tr>
<td>ENGL 332</td>
<td>Shakespeare</td>
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<tr>
<td>ENGL 334</td>
<td>Major Authors: _____</td>
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<tr>
<td>ENGL 340</td>
<td>Topics in U.S. Ethnic Literature: _____</td>
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<tr>
<td>ENGL 479</td>
<td>The Literature of: _____</td>
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<tr>
<td>ENGL 521</td>
<td>Advanced Topics in British Literature 1800: _____</td>
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<tr>
<td>ENGL 522</td>
<td>Advanced Topics in British Literature After 1800:</td>
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<td>ENGL 530</td>
<td>Irish Literature and Culture: ______</td>
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<td>ENGL 534</td>
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<tr>
<td>ENGL 560</td>
<td>British Literature of the 20th Century: _____</td>
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<tr>
<td>ENGL 565</td>
<td>The Gothic Tradition</td>
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<td>ENGL 567</td>
<td>Modern Drama: _____</td>
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<td>ENGL 568</td>
<td>American Literary Environmentalism</td>
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<td>ENGL 570</td>
<td>Topics in American Literature: _____</td>
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<td>ENGL 571</td>
<td>American Indian Literature: _____</td>
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<tr>
<td>ENGL 573</td>
<td>U.S. Latina/o Literature: _____</td>
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<td>ENGL 574</td>
<td>African American Literature: _____</td>
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<td>ENGL 575</td>
<td>Literature of the American South</td>
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<td>ENGL 576</td>
<td>Advanced Topics in American Literature to 1865:</td>
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<tr>
<td>ENGL 577</td>
<td>Advanced Topics in American Literature Since 1865:</td>
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<td>Milton</td>
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<tr>
<td>ENGL 640</td>
<td>British Literature, 1600-1800: _____</td>
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<td>ENGL 650</td>
<td>Romantic Literature: _____</td>
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<tr>
<td>ENGL 655</td>
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<tr>
<td>ENGL 674</td>
<td>African Literature: _____</td>
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</tr>
</tbody>
</table>

2. Literary Theory (3)  
| ENGL 308 | Introduction to Literary Criticism and Theory |         |
| ENGL 508 | Contemporary Literary Theory                   |         |
| ENGL 600 | Ecocriticism                                    |         |

3. English Language or Rhetoric (3)  
| ENGL 359 | English Grammar                                |         |
| ENGL 380 | Introduction to Rhetoric and Composition       |         |
| ENGL 385 | The Development of Modern English              |         |
| ENGL 387 | Introduction to the English Language           |         |
| ENGL 580 | Rhetoric and Writing: _____                    |         |
| ENGL 581 | English Language Studies: _____                |         |
| ENGL 587 | American English                               |         |

4. Transcultural Approaches to Language, Literature, or Writing (3)  
| ENGL 305 | World Indigenous Literatures                   |         |
| ENGL 306 | Global Environmental Literature                |         |
| ENGL 326 | Introduction to African Literature             |         |
| ENGL 336 | Jewish American Literature and Culture         |         |
| ENGL 337 | Introduction to U.S. Latino/a Literature       |         |
| ENGL 338 | Introduction to African-American Literature    |         |
| ENGL 339 | Introduction to Caribbean Literature           |         |
| ENGL 340 | Topics in U.S. Ethnic Literature: _____        |         |
| ENGL 341 | American Literature of Social Justice          |         |
| ENGL 360 | Advanced Composition: _____ (as Pura Vida: Travel Writing and the Costa Rica Experience) | 3 |
| ENGL 492 | The London Review                              |         |
| ENGL 571 | American Indian Literature: _____              |         |
| ENGL 572 | Women and Literature: _____                   |         |
| ENGL 573 | U.S. Latina/o Literature: _____                |         |
| ENGL 574 | African American Literature: _____             |         |
| ENGL 674 | African Literature: _____                      |         |

5. Writing (3) note: only courses below count in this category for creative writing majors  
| ENGL 351 | Fiction Writing I                              |         |
| ENGL 352 | Poetry Writing I                               |         |
| ENGL 353 | Screenwriting I                                |         |
| ENGL 354 | Playwriting I                                  |         |
| ENGL 355 | Nonfiction Writing I                           |         |
| ENGL 360 | Advanced Composition: _____                    |         |
| ENGL 492 | The London Review                              |         |
| ENGL 551 | Fiction Writing II                             |         |
| ENGL 552 | Poetry Writing II                              |         |
| ENGL 553 | Screenwriting II                               |         |
| ENGL 554 | Playwriting II                                 |         |
| ENGL 599 | Honors Essay (as creative writing thesis)      |         |

6. Forms and Genres (3) note: only courses below count in this category for creative writing majors  
| ENGL 351 | Fiction Writing I                              |         |
| ENGL 352 | Poetry Writing I                               |         |
| ENGL 353 | Screenwriting I                                |         |
| ENGL 354 | Playwriting I                                  |         |
| ENGL 355 | Nonfiction Writing I                           |         |
| ENGL 360 | Advanced Composition: _____                    |         |
| ENGL 551 | Fiction Writing II                             |         |
| ENGL 552 | Poetry Writing II                              |         |
| ENGL 553 | Screenwriting II                               |         |
| ENGL 554 | Playwriting II                                 |         |
| ENGL 555 | Nonfiction Writing II                          |         |

7. Literary History: 2 courses (6)  
| ENGL 312 | Major British Writers to 1800                 |         |
| ENGL 322 | and American Literature II                    |         |
| ENGL 320 | American Literature I                          |         |
| ENGL 314 | and Major British Writers after 1800          |         |
ENGL 310 & ENGL 330: Literary History I and Literary History II

ENGL 312 & ENGL 330: Major British Writers to 1800 and Literary History II

ENGL 320 & ENGL 330: American Literature I and Literary History II

ENGL 310 & ENGL 314: Literary History I and Major British Writers after 1800

ENGL 310 & ENGL 322: Literary History I and American Literature II

Total Hours: 24

Additional Creative Writing courses: (6)

ENGL 351: Fiction Writing I
ENGL 352: Poetry Writing I
ENGL 353: Screenwriting I
ENGL 354: Playwriting I
ENGL 355: Nonfiction Writing I
ENGL 360: Advanced Composition: _____
ENGL 492: The London Review
ENGL 495: Directed Study: _____ (in Creative Writing: only one may count toward major)

or ENGL 494: Research Internship

ENGL 496: Internship

or ENGL 497: Service Learning Internship

ENGL 551: Fiction Writing II
ENGL 552: Poetry Writing II
ENGL 553: Screenwriting II
ENGL 554: Playwriting II
ENGL 555: Nonfiction Writing II

FMS 373: Intermediate Screenwriting

Total Hours: 6

Additional requirements, Creative Writing Track:

- One course (3 hours) in addition to 7. (Literary History) must focus on literature before 1850. *See course list at the bottom of this page. (p. 1647)
- Two courses (6 hours) must be capstone courses, i.e., at the 500 level or above; at least one creative writing workshop at the 500 level or above is required for creative writing majors.
- Creative writing students must complete workshops in at least two genres. For the purposes of the Creative Writing Tracks, genres are 1) fiction; 2) poetry; 3) playwriting, screenwriting, and/or scriptwriting; and 4) creative non-fiction.
- 27 hours must be at the junior/senior level.
- No 100-level ENGL courses count toward major requirements.

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 30 hours of major courses (33 for Honors English).

Major Hours in Residence

Major Junior/Senior Hours
Satisfied by a minimum of 24 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Rhetoric, Language, and Writing Track
Rhetoric, Language, and Writing Track, category requirements:

1. Individual Authors or Movements (3)

ENGL 301: Topics in British Literature to 1800: _____
ENGL 302: Topics in British Literature Since 1800: _____
ENGL 315: Studies in British Literature (Note: may count for one but not both British literature requirement)
ENGL 317: Topics in American Literature to 1865: _____
ENGL 318: Topics in American Literature Since 1865: _____
ENGL 324: Contemporary Authors: _____
ENGL 325: Recent Popular Literature
ENGL 327: Studies in Twentieth-Century Drama: _____
ENGL 331: Chaucer
ENGL 332: Shakespeare
ENGL 334: Major Authors: _____
ENGL 340: Topics in U.S. Ethnic Literature: _____
ENGL 479: The Literature of: _____
ENGL 521: Advanced Topics in British Literature 1800: _____
ENGL 522: Advanced Topics in British Literature After 1800: _____
ENGL 529: Modern Drama: _____
ENGL 530: Irish Literature and Culture: _____
ENGL 531: James Joyce
ENGL 532: Whitman and Dickinson
ENGL 533: William Faulkner
ENGL 534: Major Authors (Capstone): _____
ENGL 560: British Literature of the 20th Century: _____
ENGL 565: The Gothic Tradition
ENGL 566: Modern Drama: _____
ENGL 567: American Literary Environmentalism
ENGL 570: Topics in American Literature: _____
ENGL 571: American Indian Literature: _____
ENGL 572: Women and Literature: _____
ENGL 573: U.S. Latina/o Literature: _____
ENGL 574: African American Literature: _____
ENGL 575: Literature of the American South
ENGL 576: Advanced Topics in American Literature to 1865: _____
ENGL 577: Advanced Topics in American Literature Since 1865: _____
ENGL 578: Poetry, 1900-1945

Satisfied by a minimum of 24 hours of KU resident credit in the major; exceptions by permission of Director of Undergraduate Studies only.
ENGL 579  Poetry since 1945
ENGL 610  The Literature of England to 1500
ENGL 620  Renaissance English Literature: ______
ENGL 633  Milton
ENGL 640  British Literature, 1600-1800: ______
ENGL 650  Romantic Literature: ______
ENGL 655  Victorian Literature: ______
ENGL 674  African Literature: ______

2. Literary Theory (3)
   ENGL 308  Introduction to Literary Criticism and Theory
   or ENGL 508  Contemporary Literary Theory
   ENGL 508  Contemporary Literary Theory
   ENGL 660  Ecocriticism

3. English Language or Rhetoric (3)
   ENGL 359  English Grammar
   ENGL 380  Introduction to Rhetoric and Composition
   ENGL 385  The Development of Modern English
   ENGL 387  Introduction to the English Language
   ENGL 580  Rhetoric and Writing: ______
   ENGL 581  English Language Studies: ______
   ENGL 587  American English

4. Transcultural Approaches to Language, Literature, or Writing (3)
   ENGL 305  World Indigenous Literatures
   ENGL 306  Global Environmental Literature
   ENGL 336  Jewish American Literature and Culture
   ENGL 337  Introduction to U.S. Latino/a Literature
   ENGL 338  Introduction to African-American Literature
   ENGL 339  Introduction to Caribbean Literature
   ENGL 340  Topics in U.S. Ethnic Literature: ______
   ENGL 341  American Literature of Social Justice
   ENGL 360  Advanced Composition: ______ (as Pura Vida: Travel Writing and the Costa Rica Experience) only
   ENGL 492  The London Review
   ENGL 571  American Indian Literature: ______
   ENGL 572  Women and Literature: ______
   ENGL 573  U.S. Latina/o Literature: ______
   ENGL 574  African American Literature: ______
   ENGL 674  African Literature: ______

5. Writing (3)
   ENGL 203  Topics in Reading and Writing: ______
   ENGL 209  Introduction to Fiction
   ENGL 210  Introduction to Poetry
   ENGL 211  Introduction to the Drama
   ENGL 351  Fiction Writing I creative writing workshop
   ENGL 352  Poetry Writing I creative writing workshop
   ENGL 353  Screenwriting I creative writing workshop
   ENGL 354  Playwriting I creative writing workshop

6. Forms and Genres (3)
   ENGL 355  Nonfiction Writing I creative writing workshop
   ENGL 360  Advanced Composition: ______
   ENGL 361  Professional Writing: ______
   ENGL 362  Foundations of Technical Writing
   ENGL 400  Teaching and Tutoring Writing
   ENGL 492  The London Review
   ENGL 551  Fiction Writing II
   ENGL 552  Poetry Writing II creative writing workshop
   ENGL 553  Screenwriting II creative writing workshop
   ENGL 554  Playwriting II creative writing workshop
   ENGL 555  Nonfiction Writing II creative writing workshop
   ENGL 598  Honors Proseminar: ______
   ENGL 599  Honors Essay

7. Literary History: 2 courses (6)
   ENGL 209  Introduction to Fiction
   ENGL 210  Introduction to Poetry
   ENGL 211  Introduction to the Drama
   ENGL 309  The British Novel
   ENGL 327  Studies in Twentieth-Century Drama: ______
   ENGL 351  Fiction Writing I creative writing workshop
   ENGL 352  Poetry Writing I creative writing workshop
   ENGL 353  Screenwriting I creative writing workshop
   ENGL 354  Playwriting I creative writing workshop
   ENGL 355  Nonfiction Writing I creative writing workshop
   ENGL 360  Advanced Composition: ______
   ENGL 361  Professional Writing: ______
   ENGL 362  Foundations of Technical Writing
   ENGL 380  Introduction to the Drama
   ENGL 385  Introduction to Poetry
   ENGL 387  Introduction to Fiction
   ENGL 492  The London Review
   ENGL 551  Fiction Writing II creative writing workshop
   ENGL 552  Poetry Writing II creative writing workshop
   ENGL 553  Screenwriting II creative writing workshop
   ENGL 554  Playwriting II creative writing workshop
   ENGL 598  Honors Proseminar: ______
   ENGL 599  Honors Essay

   ENGL 312  Major British Writers to 1800
   & ENGL 322  and American Literature II
   ENGL 320  American Literature I
   & ENGL 341  and Major British Writers after 1800
   ENGL 310  Literary History I
   & ENGL 330  and Literary History II
   ENGL 312  Major British Writers to 1800
   & ENGL 330  and Literary History II
   ENGL 320/330 American Literature I
   & ENGL 314  and Major British Writers after 1800
ENGL 310  Literary History I
& ENGL 322  and American Literature II

Total Hours 24

Rhetoric, Language, and Writing courses (9 hours of the courses listed below, taken in addition to the RLW course taken in category 3 above; 3 of the 9 hours may be taken in category 6 or other categories as appropriate) (6) note: students not pursuing the Creative Writing Track may only count one creative writing workshop toward the major; creative writing workshops noted below.

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<th>Title</th>
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<tr>
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<td>Poetry Writing I</td>
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<td>ENGL 353</td>
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<td>Professional Writing:</td>
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<td>ENGL 494</td>
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<td>Directed Study: __________________________</td>
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<td>ENGL 496</td>
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<td>or ENGL 497</td>
<td>Service Learning Internship: ____________</td>
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<td>English Language Studies:</td>
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<td>ENGL 587</td>
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</table>

Total Hours 6

Additional requirements, Rhetoric, Language, and Writing Track:

- One course (3 hours) in addition to 7. (Literary History) must focus on literature before 1850. *See course list at the bottom of this page (p. 1647).
- Two courses (6 hours) must be capstone courses, i.e., at the 500 level or above.
- 27 hours must be at the junior/senior level.
- One 200-level course may count toward major requirements. No 100-level ENGL courses count toward major requirements.

Note:

- Only 1 (3 credits) creative writing workshop (fiction writing, nonfiction writing, poetry writing, screen writing or playwriting) may be applied as a major course for students not pursuing the creative writing track.

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 30 hours of major courses (33 for Honors English).

Major Hours in Residence
Satisfied by a minimum of 24 hours of KU resident credit in the major; exceptions by permission of Director of Undergraduate Studies only.

Major Junior/Senior Hours
Satisfied by a minimum of 24 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

*Courses that fulfill the additional pre-1850 requirement (in addition to any relevant course taken for category 7):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 301</td>
<td>Topics in British Literature to 1800:</td>
</tr>
<tr>
<td>ENGL 310</td>
<td>Literary History I</td>
</tr>
<tr>
<td>ENGL 312</td>
<td>Major British Writers to 1800</td>
</tr>
<tr>
<td>ENGL 315</td>
<td>Studies in British Literature</td>
</tr>
<tr>
<td>ENGL 317</td>
<td>Topics in American Literature to 1865:</td>
</tr>
<tr>
<td>ENGL 320</td>
<td>American Literature I</td>
</tr>
<tr>
<td>ENGL 331</td>
<td>Chaucer</td>
</tr>
<tr>
<td>ENGL 332</td>
<td>Shakespeare</td>
</tr>
<tr>
<td>ENGL 521</td>
<td>Advanced Topics in British Literature 1800:</td>
</tr>
<tr>
<td>ENGL 525</td>
<td>Shakespeare:</td>
</tr>
<tr>
<td>ENGL 555</td>
<td>The Gothic Tradition</td>
</tr>
<tr>
<td>ENGL 610</td>
<td>The Literature of England to 1500</td>
</tr>
<tr>
<td>ENGL 620</td>
<td>Renaissance English Literature:</td>
</tr>
<tr>
<td>ENGL 633</td>
<td>Milton</td>
</tr>
<tr>
<td>ENGL 640</td>
<td>British Literature, 1600-1800:</td>
</tr>
<tr>
<td>ENGL 650</td>
<td>Romantic Literature:</td>
</tr>
</tbody>
</table>

Sample 4-year plans for the BA degree in English with the following concentrations can be found here: English General Track (http://catalog.ku.edu/liberal-arts-sciences/english/ba-bgs-english/ba-english), Creative Writing (http://catalog.ku.edu/liberal-arts-sciences/english/ba-bgs-english/ba-english-creative-writing), and Language, Rhetoric, and Writing (http://catalog.ku.edu/liberal-arts-sciences/english/ba-bgs-english/ba-english-rhetoric-language-writing).

Sample 4-years plans for the BGS degrees in English will be coming soon.
Departmental Honors

To be admitted to the English Honors major program, an undergraduate must have earned a 3.25 overall grade-point average, and a 3.5 grade-point average in English courses.

Honors English majors must complete at least 1 section of ENGL 598 Honors Proseminar: _____ and ENGL 599 Honors Essay. This requirement, in effect, adds 3 hours of capstone-level coursework to the student’s emphasis.

Bachelor of Arts and Bachelor of General Studies in Literature, Language, and Writing

Why study English language and literature?

Because reading and writing shape the world.

KU’s English Department is at the core of the humanities, highlighting the “human” through our individual, one-on-one interactions with our students, our emphasis on community and global engagement, and our abiding interest in our shared humanity through the stories of others. We seek to challenge the mind and to engage the imagination of our students, to teach them to ask questions and to seek for answers. We encourage them to grapple with the complexity of a culturally and commercially interconnected world and the global networks and processes of cultural exchange. We believe that words and ideas will shape the world. We teach our students life-long skills, so that they learn to write clearly, creatively, and effectively—discovering themselves even as they lay a solid foundation for professional success.

A commitment to teaching and learning.

Our department is renowned for its tradition of excellence in teaching. The vast majority of our undergraduate classes have 20–35 students, and much of the class time is dedicated to active learning and engagement with texts and ideas. In the last ten years, faculty members in the department of English have won ten Kemper Fellowships for Excellence in Teaching, two Chancellors Club Teaching Professorships, a Career Achievement Teaching Award, and a wide variety of other university-level teaching and advising awards, and the department as a whole received the Center of Teaching Excellence (CTE) award for Department Excellence in Teaching at the University of Kansas.

A variety of career and life paths.

The Literature, Language, and Writing program at the Edwards campus helps to prepare undergraduate students for a variety of professions, including law, scholarship, publishing, library science, and marketing—as well as any number of other fields that value clear communication, interpretive skill, and critical and creative thinking.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.isss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Requirements for the B.A. or B.G.S. Literature, Language, and Writing Major

KU Edwards Campus

The undergraduate program in literature, language, and writing is offered in its entirety only at the KU Edwards Campus (http://edwardscampus.ku.edu). 12600 Quivira Rd., Overland Park, KS 66213. This program is designed for students who have earned an associate’s degree or equivalent hours and wish to complete the upper-level courses necessary for a bachelor’s degree.

Literature, Language, and Writing Program

The program includes professional writing courses. Internship opportunities may be pursued as credit toward the major, offering students the opportunity to develop communication skills in specific professional contexts.

In today’s rapidly changing work environment, employers are seeking people who can deal with concepts and abstractions, who are imaginative and creative, and who have good communication and people skills. A degree in English can help develop these skills, and it is good preparation for a variety of advanced professional degrees in areas such as business and law. English majors pursue a range of careers including editing, technical writing, advertising and public relations, teaching, market research, retail management, teaching English as a second language, nonprofit fund-raising and/or advocacy, Web design, speech writing, sales, video production, script reading, radio and television, and many others. Some career paths require an advanced degree or specialized post-graduate training, but an undergraduate degree in English is an excellent base from which to explore career options.

Contact the CLAS undergraduate advisor on the Edwards Campus, Dan Mueller, dmueller@ku.edu, 864-8659 (from Lawrence) or 913-897-8659 (outside of Lawrence) for more information.

Requirements for the B.A. or B.G.S. Major

Course Requirements

| Literature, Language and Writing Core Knowledge and Skills (12) | 12 |

Majors must complete a total of 4 courses (12 hours) satisfying the distribution indicated in each of the following 3 areas:
Literature Before 1900. Satisfied by two courses (6 hours) from the following:

- ENGL 301 Topics in British Literature to 1800:
- ENGL 309 The British Novel
- ENGL 312 Major British Writers to 1800
- ENGL 314 Major British Writers after 1800
- ENGL 315 Studies in British Literature
- ENGL 316 Introduction to Major American Writers
- ENGL 317 Topics in American Literature to 1865:
- ENGL 320 American Literature I
- ENGL 322 American Literature II
- ENGL 331 Chaucer
- ENGL 332 Shakespeare
- ENGL 521 Advanced Topics in British Literature 1800:
- ENGL 525 Shakespeare:
- ENGL 532 Whitman and Dickinson
- ENGL 568 American Literary Environmentalism
- ENGL 576 Advanced Topics in American Literature to 1865:
- ENGL 610 The Literature of England to 1500
- ENGL 620 Renaissance English Literature:
- ENGL 633 Milton
- ENGL 640 British Literature, 1600-1800:
- ENGL 650 Romantic Literature:
- ENGL 655 Victorian Literature:

British Literature. Satisfied by one course (3 hours) from the following:

- ENGL 301 Topics in British Literature to 1800:
- ENGL 302 Topics in British Literature Since 1800:
- ENGL 309 The British Novel
- ENGL 312 Major British Writers to 1800
- ENGL 314 Major British Writers after 1800
- ENGL 315 Studies in British Literature
- ENGL 331 Chaucer
- ENGL 332 Shakespeare
- ENGL 521 Advanced Topics in British Literature 1800:
- ENGL 522 Advanced Topics in British Literature After 1800:
- ENGL 525 Shakespeare:
- ENGL 530 Irish Literature and Culture:
- ENGL 568 American Literary Environmentalism
- ENGL 610 The Literature of England to 1500
- ENGL 620 Renaissance English Literature:
- ENGL 633 Milton
- ENGL 640 British Literature, 1600-1800:
- ENGL 650 Romantic Literature:
- ENGL 655 Victorian Literature:
- ENGL 690 Studies in:

American Literature. Satisfied by one course (3 hours) from the following:

- ENGL 316 Introduction to Major American Writers
- ENGL 320 American Literature I
- ENGL 325 Recent Popular Literature
- ENGL 336 Jewish American Literature and Culture
- ENGL 337 Introduction to U.S. Latino/a Literature
- ENGL 338 Introduction to African-American Literature
- ENGL 340 Topics in U.S. Ethnic Literature:
- ENGL 341 American Literature of Social Justice
- ENGL 353 Whitman and Dickinson
- ENGL 533 William Faulkner
- ENGL 568 American Literary Environmentalism
- ENGL 570 Topics in American Literature:
- ENGL 571 American Indian Literature:
- ENGL 574 African American Literature:
- ENGL 575 Literature of the American South
- ENGL 576 Advanced Topics in American Literature to 1865:
- ENGL 577 Advanced Topics in American Literature Since 1865:
- ENGL 578 Poetry, 1900-1945
- ENGL 579 Poetry since 1945

Writing or English Language Required Electives (9)

Majors must complete a total of 3 courses (9 hours) of writing and/or English language courses.

English Required Elective (9)

Majors must complete 3 courses (9 hours) of junior/senior level ENGL courses. Up to 6 credits combined of ENGL 494 (Research Internship) or ENGL 495 (Directed Study) may be applied as major electives; they may not count as English core equivalents. Up to 3 credit hours of ENGL 496 (Internship) or ENGL 497 (Service Learning Internship) can be applied as major elective credit. In addition, the following courses offered in other CLAS departments may be selected: HWC 304, HWC 308, HWC 312, FMS 373, FMS 773, THR 709.

Total Hours

30

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours

Satisfied by 30 hours of major courses.

Major Hours in Residence

Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours

Satisfied by a minimum of 30 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

A sample 4-year plan for the BA degree in Literature, Language, and Writing can be found here: Literature, Language and Writing (http://
catalog.ku.edu/liberal-arts-sciences/english/ba-bgs-literature/ba), or by using the left-side navigation.

A sample 4-year plan for the BGS degree in Literature, Language, and Writing will be coming soon.

**Departmental Honors**

To be admitted to the English Honors major program, an undergraduate student must have earned a 3.25 overall grade-point average, and a 3.5 grade-point average in English courses. The student should declare an English major, if enrolled in the College of Liberal Arts and Sciences, or an English concentration, if enrolled in the School of Business or the School of Education.

Honors English majors must complete at least 1 section of ENGL 598 Honors Proseminar: _____ and ENGL 599 Honors Essay. This requirement, in effect, adds 3 hours of capstone-level coursework to the student’s emphasis.

**Minor in English**

**Why study English language and literature?**

Because reading and writing shape the world.

KU’s English Department is at the core of the humanities, highlighting the “human” through our individual, one-on-one interactions with our students, our emphasis on community and global engagement, and our abiding interest in our shared humanity through the stories of others. We seek to challenge the mind and to engage the imagination of our students, to teach them to ask questions and to seek for answers. We encourage them to grapple with the complexity of a culturally and commercially interconnected world and the global networks and processes of cultural exchange. We believe that words and ideas will shape the world. We teach our students life-long skills, so that they learn to write clearly, creatively, and effectively—discovering themselves even as they lay a solid foundation for professional success.

**A commitment to teaching and learning.**

Our department is renowned for its tradition of excellence in teaching. The vast majority of our undergraduate classes have 20-35 students, and much of the class time is dedicated to active learning and engagement with texts and ideas. In the last ten years, faculty members in the department of English have won ten Kemper Fellowships for Excellence in Teaching, two Chancellors Club Teaching Professorships, a Career Achievement Teaching Award, and a wide variety of other university-level teaching and advising awards, and the department as a whole received the Center of Teaching Excellence (CTE) award for Department Excellence in Teaching at the University of Kansas.

**A variety of career and life paths.**

The English minor is an excellent complement to any major or professional degree. English students graduate to a variety of careers, including law, teaching, scholarship, publishing, library science, and journalism—as well as medicine, business, politics, design, and any number of other fields that value clear communication, interpretive skill, and critical and creative thinking.

**Engaged and innovative scholarship.**

KU's English Department has several core strengths that cross tracks and periods, including Global and Cross-Cultural Approaches; Literature, Rhetoric, and Social Action; Diversity Studies; Language, Literature and Science; and Popular Expressive Forms.

At the KU English Department, students work closely with nationally-renowned writers and researchers. Our faculty have won national awards that recognize excellence in research, including grants from the National Endowment for the Humanities, the American Philosophical Society, and the Newberry Library, among others. English Department faculty members have also received major research funding from the University of Kansas, including the Hall Center for the Humanities Research fellowships and Keeler Intra-University Fellowships for interdisciplinary work. Undergraduate students can work one-on-one with faculty mentors in the Honors Program, McNair Scholars Program, and Dean's Scholars Program.

**Requirements for the Minor**

The minor in English requires students to complete 18 hours of English coursework in one of two tracks: **Regular or Creative Writing**.

**Requirements for the English Minor, Regular Track**

18 hours, of which 12 hours must be selected from 4 of the following categories that comprise the common requirements of the English major, and of which at least 15 must be jr/sr hours. No more than 1 creative writing course may count for the regular track. ENGL 494, 495, 496, and 497 may not be applied to English minor requirements.

**Categories:**

1. Individual Authors or Movements
2. Literary Theory
3. English Language or Rhetoric
4. Transcultural Approaches to Language, Literature, or Writing
5. Writing
6. Forms and Genres
7. Literary History

For full course lists for each category, see the [General Track of the English Major](http://catalog.ku.edu/liberal-arts-sciences/english/ba-bgs-english/#Gen).

**Requirements for the Creative Writing Track of the English Minor**

18 hours, of which 12 hours must be creative writing workshops (see below) in at least two genres, and of which at least 15 must be jr/sr hours. For the purposes of the creative writing tracks of the major and minor, genres are 1) fiction; 2) poetry; 3) playwriting, screenwriting, and/or scriptwriting; and 4) non-fiction. At least one workshop must be at the 500 level or above. ENGL 494, 495, 496, and 497 may not be applied to English minor requirements.

**Creative Writing workshops:**

ENGL 351 Fiction Writing I (3)
ENGL 352 Poetry Writing I (3)
ENGL 353 Screenwriting I (3)
ENGL 354 Playwriting I (3)
ENGL 355 Nonfiction Writing I (3)
ENGL 360 Advanced Composition: _____ (3)
ENGL 492 The London Review (3)
ENGL 551 Fiction Writing II (3)
ENGL 552 Poetry Writing II (3)
ENGL 553 Screenwriting II (3)
ENGL 554 Playwriting II (3)
ENGL 555 Nonfiction Writing II (3)
FMS 373 Intermediate Screenwriting (3)

Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 12 hours of KU resident credit in the minor.

Minor Junior/Senior Hours
Satisfied by a minimum of 15 hours from junior/senior courses (300+) in the minor.

Minor Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the field of study including F's and repeated courses. See the Semester/ Cumulative GPA Calculator.

Master of Arts in English

Why study English language and literature?

Because reading and writing shape the world.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

To be admitted to any of the department’s graduate degree tracks, a student must have a strong undergraduate record, particularly in the humanities. A grade-point average of at least 3.3 on a 4.0 scale normally is required. College courses should include at least 18 hours of junior/senior work in literature. Applicants are expected to have some familiarity with British and American literary history and the work of the major writers in English. Applicants for graduate work in literary studies and rhetoric-composition studies should be able to demonstrate, with writing samples, their ability to produce advanced analytical and interpretive scholarly writing. Candidates for admission must submit Graduate Record Examination scores in support of their applications. For complete admission information, see the English department website (http://english.ku.edu/graduate-admission).

All applicants must submit their graduate application online (http://www.graduate.ku.edu). All supplemental materials (transcripts, writing samples, letters of recommendation, etc.) may be attached electronically and submitted with the online application. Those who cannot submit supplemental materials electronically may mail them to the department:

The University of Kansas
Department of English
Graduate Applications
1445 Jayhawk Blvd., Room 3001
Lawrence, KS 66045-7594

M.A. Degree Requirements

While continuously enrolled, a student has a total of 7 years to complete the master’s degree; however, the expected time to degree is 2.5 to 3 years. The candidate’s program should be arranged in consultation with the director of graduate studies or a member of the departmental committee on graduate studies.

Students who elect to write a master’s thesis must enroll in ENGL 899. M.A. candidates in Options 1a, 1b, 2a and 2b must take at least 18 hours of their course work, in addition to ENGL 800, at the 700, 800, and 900 levels.

Option 1a—Literature

1. A total of 30 hours in English courses carrying graduate credit. No more than 6 hours may be taken at the 600 level. At least 6 hours must be taken at the 900 or seminar level. ENGL 998 does not count as a seminar or 900-level class. Exam option students will take 9 conventional courses (27 hours), plus 3 hours of ENGL 897 (exam preparation hours) or another elective course. Thesis option students will take 8 conventional courses (24 hours), plus 6 hours of ENGL 899 (MA or MFA thesis hours).

2. 3 hours (1 course) on Methods or Theory appropriate to different areas of focus in Literary Studies: ordinarily 708, 709, 800, or another course appropriately designated by the Graduate Director. A 998 (Directed Reading) directly focused on questions of methods and theory can fulfill this requirement if approved by the Graduate Director.

3. 3 hours (1 course) on Pedagogy: the 801-802 sequence (required for TAs), 780, or other appropriate course as approved by the Graduate Director.

4. 18 (6 courses with thesis option) or 21 (7 courses with exam option) distribution hours to be selected in consultation with advisors.
Option Ib—Literature and Literary Theory

1. A total of 30 hours in English courses carrying graduate credit. No more than 6 hours may be taken at the 600 level. At least 6 hours must be taken at the 900 or seminar level. ENGL 998 does not count as a seminar or 900-level class. Exam option students will take 9 conventional courses (27 hours), plus 3 hours of ENGL 897 (exam preparation hours) and another elective course. Thesis option students will take 8 conventional courses (24 hours), plus 6 hours of ENGL 899 (MA or MFA thesis hours).

2. 3 hours (1 course) on Methods or Theory appropriate to different areas of focus in Literary Studies: ordinarily 708, 709, 800, or another course appropriately designated by the Graduate Director. A 998 (Directed Reading) directly focused on questions of methods and theory can fulfill this requirement if approved by the Graduate Director.

3. 3 hours (1 course) on Pedagogy: the 801-802 sequence (required for TAs), 780, or other appropriate course as approved by the Graduate Director.

4. 18 (6 courses with thesis option) or 21 (7 courses with exam option) distribution hours to be selected in consultation with advisors (Graduate Director during first year and thereafter advisors with whom students plan to move toward exam or thesis options). At least 6 hours in English Language Studies courses (including at least 6 hours in ENGL 899 (MA or MFA thesis hours)).

5. 6 hours of elective courses

6. For students selecting the exam option, 6 hours in second exam area (rhetoric and composition, literature, literary theory), including at least 1 seminar.

7. 2 courses (6 hours) outside the department may be included in the 18 distribution hours with approval of the Graduate Director.

8. Exam option (3 hours): The student will generally enroll in 3 hours of ENGL 897 (exam preparation hours) and must pass a 90-minute oral exam based on 2 lists developed in consultation with advisors: a) a 15-item exam list of works in English Language Studies, and b) a 15-item exam list of works in a second area: literature, literary theory, or rhetoric and composition. The student may opt to enroll in an additional 3-hour elective course instead of ENGL 897.

9. Thesis Option (6 hours): The student must enroll in 6 hours of ENGL 899 (MA or MFA thesis hours) over 2 semesters of thesis work: (1) a first semester of work with the thesis director leading to polished proposal with a bibliography; and (2) a thesis semester of writing leading to defense of finished thesis.

Option 2a—Rhetoric and Composition

1. A total of 30 hours in English courses carrying graduate credit. No more than 6 hours may be taken at the 600 level. At least 6 hours must be taken at the 900 or seminar level. ENGL 998 does not count as a seminar or 900-level class. Exam option students will take 9 conventional courses (27 hours), plus 3 hours of ENGL 897 (exam preparation hours) or another elective course. Thesis option students will take 8 conventional courses (24 hours), plus 6 hours of ENGL 899 (MA or MFA thesis hours).

2. 3 hours (1 course) on Methods or Theory appropriate to different areas of focus in Rhetoric and Composition, ordinarily 780 (Composition Studies), or another course appropriately designated by the Graduate Director. A 998 (Directed Reading) directly focused on questions of methods and theory can fulfill this requirement if approved by the Graduate Director.

3. 3 hours (1 course) on Pedagogy: the 801-802 sequence (required for TAs), 780, 781, or other appropriate course as approved by the Graduate Director.

4. 18 (6 courses with thesis option) or 21 (7 courses with exam option) distribution hours to be selected in consultation with advisors (Graduate Director during first year and thereafter advisors with whom students plan to move toward exam or thesis options). At least 6 hours in English Language Studies courses (including at least 6 hours in ENGL 899 (MA or MFA thesis hours)).

5. 6 hours of elective courses

6. For students selecting the exam option, 6 hours in second exam area (rhetoric and composition, literature, literary theory), including at least 1 seminar.

7. 2 courses (6 hours) outside the department may be included in the 18 distribution hours with approval of the Graduate Director.

8. Exam option (3 hours): The student will generally enroll in 3 hours of ENGL 897 (exam preparation hours) and must pass a 90-minute oral exam based on 2 lists developed in consultation with advisors: a) a 15-item exam list of works in English Language Studies, and b) a 15-item exam list of works in a second area: literature, literary theory, or rhetoric and composition. The student may opt to enroll in an additional 3-hour elective course instead of ENGL 897.

9. Thesis Option (6 hours): The student must enroll in 6 hours of ENGL 899 (MA or MFA thesis hours) over 2 semesters of thesis work: (1) a first semester of work with the thesis director leading to polished proposal with a bibliography; and (2) a thesis semester of writing leading to defense of finished thesis.

Option 2b—English Language Studies

1. A total of 30 hours in English courses carrying graduate credit. No more than 6 hours may be taken at the 600 level. At least 6 hours must be taken at the 900 or seminar level. ENGL 998 does not count as a seminar or 900-level class. Exam option students will take 9 conventional courses (27 hours), plus 3 hours of ENGL 897 (exam preparation hours) or another elective course. Thesis option students will take 8 conventional courses (24 hours), plus 6 hours of ENGL 899 (MA or MFA thesis hours).

2. 3 hours (1 course) on Methods or Theory appropriate to different areas of focus in Rhetoric and Composition, ordinarily 780 (Composition Studies), or another course appropriately designated by the Graduate Director. A 998 (Directed Reading) directly focused on questions of methods and theory can fulfill this requirement if approved by the Graduate Director.

3. 3 hours (1 course) on Pedagogy: the 801-802 sequence (required for TAs), 780, 781, or other appropriate course as approved by the Graduate Director.

4. 18 (6 courses with thesis option) or 21 (7 courses with exam option) distribution hours to be selected in consultation with advisors (Graduate Director during first year and thereafter advisors with whom students plan to move toward exam or thesis options). At least 6 hours in English Language Studies courses (including at least 6 hours in ENGL 899 (MA or MFA thesis hours)).

5. 6 hours of elective courses

6. For students selecting the exam option, 6 hours in second exam area (rhetoric and composition, literature, literary theory), including at least 1 seminar.

7. 2 courses (6 hours) outside the department may be included in the 18 distribution hours with approval of the Graduate Director.

8. Exam option (3 hours): The student will generally enroll in 3 hours of ENGL 897 (exam preparation hours) and must pass a 90-minute oral exam based on 2 lists developed in consultation with advisors: a) a 15-item exam list of works in English Language Studies, and b) a 15-item exam list of works in a second area: literature, literary theory, or rhetoric and composition. The student may opt to enroll in an additional 3-hour elective course instead of ENGL 897.

9. Thesis Option (6 hours): The student must enroll in 6 hours of ENGL 899 (MA or MFA thesis hours) over 2 semesters of thesis work: (1) a first semester of work with the thesis director leading to polished proposal with a bibliography; and (2) a thesis semester of writing leading to defense of finished thesis.
3. 3 hours (1 course) on Pedagogy: the 801-802 sequence (required for TAs), 780, or other appropriate course as approved by the Graduate Director.

4. 18 (6 courses with thesis option) or 21 (7 courses with exam option) distribution hours (6 courses) to be selected in consultation with advisors (Graduate Director during first year and thereafter advisors with whom students plan to move toward exam or thesis options). At least 6 hours in Rhetoric and Composition courses (including at least 1 seminar) beyond the courses used to fulfill requirements 2 (Methods and Theory) and 3 (Pedagogy).

5. 6 hours of elective courses

6. For students selecting the exam option, 6 hours in second exam area (rhetoric and composition specialty, English language studies, literature, literary theory), including at least 1 seminar

7. 2 courses (6 hours) outside the department may be included in the 18 distribution hours with approval of the Graduate Director.

8. Exam option (3 hours): The student will generally enroll in 3 hours of ENGL 897 (exam preparation hours) and must pass a 90-minute oral exam based on 2 lists developed in consultation with advisors: a) a 15-item exam list of works in rhetoric and composition, and b) a 15-item exam list of works in a second area: literature, literary theory, English Language Studies, or specialty within rhetoric and composition. The student may opt to enroll in 1 additional 3-hour elective course instead of ENGL 897.

9. Thesis Option (6 hours): The student must enroll in 6 hours of ENGL 899 (MA or MFA thesis hours) over 2 semesters of thesis work: (1) a first semester of work with the thesis director leading to polished proposal with a bibliography; and (2) a thesis semester of writing leading to defense of finished thesis.

Master of Fine Arts in Creative Writing

Why study English language and literature?

Because reading and writing shape the world.

Admission to Graduate Studies

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Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

To be admitted to any of the department’s graduate degree tracks, a student must have a strong undergraduate record, particularly in the humanities. A grade-point average of at least 3.3 on a 4.0 scale normally is required. Creative writing applicants need to submit writing samples that demonstrate an advanced level of writing skills in their respective genres. Candidates for admission must submit Graduate Record Examination scores in support of their applications. For complete admission information, see the English department website (http://english.ku.edu/graduate-admission).

All applicants must submit their graduate application online (http://www.graduate.ku.edu). All supplemental materials (transcripts, writing samples, letters of recommendation, etc.) may be attached electronically and submitted with the online application. Those who cannot submit supplemental materials electronically may mail them to the department:

The University of Kansas
Department of English
Graduate Applications
1445 Jayhawk Blvd., Room 3001
Lawrence, KS 66045-7594

Master of Fine Arts in Creative Writing Degree Requirements

Requirements for the M.F.A. in Creative Writing (http://www2.ku.edu/~englishmfa) include

1. 4 graduate courses (12 hours) in literature, English or American.

2. 4 graduate courses (12 hours) in creative writing.

3. No more than 2 classes (6 hours) may be taken at the 600-level.

4. 7 to 9 hours in electives or practica, chosen from graduate courses in the Department of English, or approved courses in another department.

5. ENGL 899, Thesis (15 hours). Original writing in prose fiction, poetry, drama, or nonfiction prose.

Doctor of Philosophy in English

Why study English language and literature?

Because reading and writing shape the world.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

To be admitted to any of the department’s graduate degree tracks, a student must have a strong undergraduate record, particularly in the humanities. A grade-point average of at least 3.3 on a 4.0 scale normally is required. Applicants are expected to have some familiarity with British and American literary history and the work of the major writers in English. Most importantly, applicants for graduate work in literary studies and rhetoric-composition studies should be able to demonstrate, with writing samples, their ability to produce advanced analytical and interpretive
Ph.D. in English Degree Requirements

Students entering the program with the B.A. have, while being continuously enrolled, 10 years to complete the M.A. and Ph.D. combined. Students entering with the M.A. have 7 years to complete the Ph.D.; however, the expected time to degree is 6-7 years for the M.A. plus Ph.D., and 4-5 years for the Ph.D.

Ph.D. Requirements: Literature and Creative Writing

1. At least 24 hours of credit in appropriate formal graduate courses beyond the M.A. or M.F.A. At least 15 hours (in addition to introduction to ENGL 800 if not taken for the M.A.) of this course work must be taken from among courses offered by the Department of English at the 700 level and above. ENGL 997 and ENGL 999 credits cannot be included among the 24 hours. Students may petition to take up to 6 hours outside the department.

2. Required courses: ENGL 800 and 2 seminars (courses numbered 900 or above) offered by the Department of English at KU beyond the M.A. ENGL 998 does not fulfill this requirement. Students with master’s degrees earned elsewhere may be required by the director of graduate studies, acting on behalf of the graduate committee, to take additional course work.

3. A reading knowledge of 1 of the following languages: French, German, Greek, Hebrew, Italian, Japanese, Latin, Russian, Old English, or Spanish, and completion of the Responsible Scholarship and Research Skills requirement (usually fulfilled with ENGL 800).

4. ENGL 999, Dissertation (at least 12 hours).

5. A comprehensive examination, to be completed after satisfaction of formal course requirements. This examination, which has both written and oral components, consists of three areas of study.

6. In the semester following the comprehensive examination, a 90-minute review of the dissertation proposal, which is to provide formal direction for the dissertation.

7. At least 1 year of supervised quarter-time teaching for qualified candidates except for those who do not plan to undertake teaching careers or who have already had extensive teaching experience.


Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current policies on Doctoral Research Skills and Responsible Scholarship are listed in the KU Policy Library.

Ph.D. Requirements: Composition and Rhetoric, M.A. to Ph.D., standard track

1. At least 24 hours of credit in appropriate formal graduate courses beyond the M.A. or M.F.A. At least 15 hours (in addition to introduction to ENGL 800 if not taken for the M.A.) of this course work must be taken from among courses offered by the Department of English at the 700 level and above. ENGL 997 and ENGL 999 credits cannot be included among the 24 hours. Students may petition to take up to 6 hours outside the department.

2. An introduction to the field: either ENGL 800 or ENGL 780.

3. 2 seminars (courses numbered 900 or above) offered by the Department of English at KU beyond the M.A., at least one of which should be in Rhetoric and Composition. ENGL 998 does not fulfill this requirement.

4. A reading knowledge of 1 of the following languages: French, German, Greek, Hebrew, Italian, Japanese, Latin, Russian, Old English, or Spanish, and completion of the Responsible Scholarship and Research Skills requirement (usually fulfilled with ENGL 800).

5. ENGL 999, Dissertation (at least 12 hours).

6. An examination, to be completed after satisfaction of formal course requirements. This examination, which has both written and oral components, consists of three areas of study.

7. In the semester following the comprehensive examination, a 90-minute review of the dissertation proposal, which is to provide formal direction for the dissertation.

8. At least 1 year of supervised quarter-time teaching for qualified candidates except for those who do not plan to undertake teaching careers or who have already had extensive teaching experience.


Ph.D. Requirements: Composition and Rhetoric, B.A. to Ph.D. accelerated track

Each student admitted to the Ph.D. program in composition and rhetoric is assigned a graduate advisor from among the faculty in composition and rhetoric, who will help the student plan an initial course of study. After the first semester, students may ask other faculty members in the field to serve as their graduate advisors, depending on availability. The students and their graduate advisors together design and monitor a coherent program of study, individualized to serve each student’s goals within current expectations for a Ph.D. in composition and rhetoric. As an interdisciplinary field, study in composition and rhetoric might involve work in other departments, programs, or schools as well as English, including, for example, communication studies, linguistics, education, psychology, American studies, women’s studies, or history.

Each student’s individualized program of study must meet the minimum requirements detailed below.

1. At least 36 hours of credit in appropriate formal graduate courses beyond the B.A. At least 30 hours of this course work must be taken...
The goals of the program are to provide a holistic view of the environment, one in which the synergistic nature of perturbations, natural and anthropogenic, can be understood and to provide the technical and evaluative skills for active participation in an environmental career.

The environment is the central theme around which a liberal arts education is focused.

Students may declare an interest in environmental studies or a major in environmental studies by filling out the appropriate forms. CLAS Interests Code and Major Declaration forms are available from College Student Academic Services (http://clas.ku.edu/undergrad), 109 Strong Hall, or in the environmental studies office. Students are strongly encouraged to declare an environmental studies major as soon as possible.

Electives provide the opportunity to specialize, and these can be chosen by consulting the various pathways in the major (http://www.kumc.edu/school-of-medicine/pathology.html), which contain a list of faculty members associated with the pathway who are available to help decide on electives and environmental careers. An elective approval form must be submitted to 109 Strong Hall before a student is allowed to graduate. Forms may be obtained from the environmental studies office. Except for study abroad, a maximum of 8 hours of nonclassroom course work may be counted toward electives (e.g., internship or research).

**Exceptions and Substitutions**

All substitutions must be approved by a student's environmental studies faculty advisor. A student must submit a requirement substitution form to the environmental studies faculty advisor. Forms can be obtained from the environmental studies office.

**Internships**

Internships allow majors to develop new skills and test their abilities and educational backgrounds. Students can assess their career objectives in professional settings. Internships are done in city, county, state, and federal agencies and in environmental organizations and private companies or agencies. Students are encouraged to participate at the end of the sophomore or junior year. Completion of an internship by the end of the junior year provides an opportunity to make career changes and final elective selections before the senior year. It is not possible to participate in an internship after graduation. The applicant must have a grade-point average of 2.5 or above, must have completed 12 hours of required environmental studies courses, and must have a suitable internship opportunity. A maximum of 3 hours may be applied to the 12 hours of required electives.

**Professional Science Masters**

The Professional Science Masters professional graduate degree is designed for graduates of bachelor’s programs in physical/natural sciences, environmental studies, civil/environmental engineering or related fields who are currently employed in private firms, public agencies, and not-for-profit organizations that address a range of environmental issues. Key foci in the science curriculum of this program are environmental impact assessment; soils, water, and ecosystems science; geospatial analysis; environmental health and policy; and an understanding of environmental law and policy and the regulatory environment.

The P.S.M. degree is a unique professional degree grounded in natural science, technology, engineering, mathematics and/or computational science, technology, engineering, mathematics and/or computational
sciences and designed to prepare students for direct entry into a variety of career options in industry, business, government, or non-profit organizations. P.S.M. programs prepare graduates for high-level careers in science that have a strong emphasis on such skill areas as management, policy, entrepreneurship, communication and project management. P.S.M. programs consist of 2 years of academic training in an emerging or interdisciplinary area, along with a professional component that may include internships and "cross-training" in workplace skills.

**Graduate Certificate in Environmental Studies**

The Graduate Certificate in Environmental Studies is designed to give students already admitted to a graduate program at KU the opportunity for interdisciplinary coursework in Environmental Studies, spanning the humanities, natural/physical sciences, and social sciences.

**Graduate Certificate in Environmental Assessment**

The Certificate in Environmental Assessment is designed for graduates of bachelor's programs in physical/natural sciences, environmental studies, civil/environmental engineering or related fields who are currently employed in private firms, public agencies, and not-for-profit organizations that address a range of environmental issues. Key foci in the science curriculum of this program are environmental impact assessment; soils, water, and ecosystems science; geospatial analysis; environmental health and policy; and an understanding of environmental law and policy and the regulatory environment.

**Courses**

**EVRN 103. Environment and History. 3 Hours. H.**

Nature is our oldest home and newest challenge. This course surveys the environmental history of the earth from the extinction of the dinosaurs to the present with a focus on the changing ecological role of humans. It analyzes cases of ecological stability, compares cultural attitudes toward nature, and asks why this ancient relationship seems so troubled. (Same as HIST 103.) LEC.

**EVRN 140. Global Environment I: The Discovery of Environmental Change. 5 Hours. GE3N / U.**

This interdisciplinary course and laboratory sections survey the foundations of environmental understanding and the process of scientific discovery from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the history of environmental systems and life on earth, the discovery of biotic evolution, ecological change, and climate change. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as GEOG 140 and HIST 140.) Open only to students admitted to the University Honors Program or by permission of instructor. LEC.

**EVRN 144. Global Environment I: Discovery of Environmental Change, Honors. 5 Hours. GE3N / U.**

This interdisciplinary course surveys the foundations of environmental understanding and the process of scientific discovery from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the history of environmental systems and life on earth, the discovery of biotic evolution, ecological change, and climate change. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as GEOG 144 and HIST 144.) Open only to students admitted to the University Honors Program or by permission of instructor. LEC.

**EVRN 145. Global Environment II: The Ecology of Human Civilization, Honors. 5 Hours. GE3S / U.**

This interdisciplinary course and its laboratory sections survey the history of humanity's relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the ecology of colonialism and industrial civilization, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to the humanity's engagement with the global environment using historical and present-day examples. (Same as GEOG 145 and HIST 145.) Open only to students admitted to the University Honors Program or by permission of instructor. LEC.

**EVRN 148. Scientific Principles of Environmental Studies. 3 Hours. NB GE3N / N.**

This course presents an overview of our understanding of environmental processes and issues. Topics include scientific principles, resource issues, pollution and global change, among others. This course gives students a rigorous understanding of interactions between humans and their environment and provides students with a scientific basis for making informed environmental decisions. (Same as GEOG 148.) LEC.

**EVRN 149. Scientific Principles of Environmental Studies, Honors. 3 Hours. NB GE3N / N.**

This course presents an overview of our understanding of environmental processes and issues. Topics include scientific principles, resource issues, pollution and global change, among others. This course gives students a rigorous understanding of interactions between humans and their environment and provides students with a scientific basis for making informed environmental decisions. An honors section of EVRN 149, designed for superior students. (Same as GEOG 149.) Prerequisite: Membership in the University Honors Program or approval of instructor required. LEC.

**EVRN 150. Environment, Culture and Society. 3 Hours. SC GE3S / S.**

An introduction to geographic approaches to the study of the environment, emphasizing societal and cultural factors that influence human interaction with the biosphere, hydrosphere, lithosphere and atmosphere. The course involves analysis of a broad range of contemporary environmental issues from the local to global scales. (Same as GEOG 150.) LEC.
EVRN 170. Introduction to Kansas Landscapes. 1 Hour. N.
A course focused on the land and environment of Kansas. Field trips provide students with direct experience of the diverse landscapes in our area. Coursework also emphasizes the dynamic nature of the current landscape and the natural and cultural processes that have shaped it. LEC.

EVRN 171. Understanding Kansas Landscapes. 1 Hour. N.
An introduction to the research methods used by scholars in diverse fields, applied to environmental issues introduced in EVRN 170. Prerequisite: EVRN 170. LEC.

EVRN 172. Kansas Landscape Projects. 1 Hour. N.
Students participate in the design and execution of a simple research project focused on a local environmental topic. Prerequisite: EVRN 170, and EVRN 171. LEC.

EVRN 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Environmental Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

EVRN 200. Study Abroad Topics In: ______. 1-6 Hours. S.
This course is designed for the study of special topics in Environmental Studies. Coursework must be arranged through the Office of Study Abroad. May be repeated for credit if content varies. LEC.

EVRN 304. Environmental Conservation. 3 Hours. NE GE3N / N.
A survey of current methods of describing and modeling the function, structure, and productivity of natural and anthropogenically modified earth resource systems, along with a discussion of contemporary views of what constitutes a natural landscape. Fundamental natural science principles about the interplay among lithospheric, atmospheric, hydrospheric, and biospheric components of earth systems are emphasized. Uses of natural resources, including fossil fuels, minerals, and water, are described with attention to the earth's total energy budget. Human activities that affect preservation, conservation, and multiple uses of earth regions receive attention. Systems under stress through population and other contemporary forces serve as examples. (Same as GEOG 304.) LEC.

EVRN 320. Environmental Policy Analysis. 3 Hours. N.
An historical and analytical study of the formulation, implementation, and consequences of environmental policy in the United States. Attention will be directed at relevant interest groups, issues specific to both rural and urban populations, relationships between national policies and international organizations concerned with environmental problems. Prerequisite: EVRN 148/GEOG 148; and EVRN 103/HIST 103, EVRN 347/HIST 347 or EVRN 150/GEOG 150. LEC.

EVRN 332. Environmental Law. 3 Hours. U.
An introduction to how the American legal process improves, transforms, and damages the natural environment. Emphasizes and compares shifting responsibilities of legal forces and institutions: judges and litigants, legislators and statutes, agencies and administrations, and citizens and regulated entities. Prerequisite: EVRN 148 and EVRN 103/HIST 103, EVRN 347/HIST 347 or EVRN 150/GEOG 150. LEC.

EVRN 335. Introduction to Soil Geography. 4 Hours. N.
The course focuses on the properties and processes of soils as they occur in their environment. The student is introduced to the nature of soil as it functions as a body; genesis of soils; properties of soil solids, especially colloids; soil chemical composition, properties, and reactions; interaction between solid, liquid, and gaseous components in soils; plant-soil-water relationships; biological interactions with soil; classification of soils; and the distribution of soils on the landscape. Not open to students who have taken GEOG 535 or EVRN 535. (Same as GEOG 335.) Prerequisite: GEOG 104 or GEOL 101 or consent of instructor; BIOL 100 and CHEM 130 or CHEM 190 recommended. LEC.

EVRN 336. Ethics, Ideas and Nature. 3 Hours. AE51 / H.
This course examines the ethical frameworks developed for thinking about, using, and protecting the natural world. Examples of topics include indigenous approaches to nature, the history of ecological ideas, environmental movements, the role of the state in managing resources, utilitarianism and progressivism, environmental lawmaking, wilderness advocacy, nature and theology, the rights of nature, and environmental justice. Students are introduced to the theories of duty ethics, justice ethics, utilitarianism, and rights ethics, and required to apply ethical decision making to contemporary and historical environmental issues. Multiple perspectives on the history of human interactions with nature demonstrate the importance of reflecting upon the value systems inherent in human-centered environmental ethics and nature-centered environmental ethics. (Same as HIST 336.) LEC.

EVRN 338. Permaculture Design. 6 Hours. N.
Students learn how a local, sustainable design system known as permaculture design creates an ecologically sound and economically viable way of living. The course consists of lecture, field, and practicum sessions. Lecture topics include food security, permaculture ethics, ecological principles, system design, sustainable soils, food production, food forests, earth works, and construction of human habitats. LEC.

EVRN 347. Environmental History of North America. 3 Hours. H.
A survey of changes in the landscape and in people's perceptions of the natural world from 1500 to present. Topics include agroecology, water and energy, the impact of capitalism, industrialism, urbanization, and such technologies as the automobile and the origins of conservation. (Same as HIST 347.) LEC.

EVRN 371. Environmental Geopolitics. 3 Hours. S.
This course examines how human relationships with the biophysical world are politicized. Examines key contributions to debates surrounding environmental security, resource conflicts, and related issues, as well as geopolitical assumptions on which these debates build. (Same as GEOG 371.) LEC.

EVRN 385. Environmental Sociology. 3 Hours. S.
This course invites students to study society and its impact on the environment. Environmental problems are social problems. This course will address such items as social paradigms, theories, inequalities, movements, and research. (Same as SOC 385.) LEC.

EVRN 410. Geospatial Analysis. 3 Hours. N.
Focuses on applications of geospatial technologies to environmental issues using case study examples and data, and provide students with a foundational skill-set in geographic information systems, remote sensing, and GPS techniques. Prerequisite: EVRN/GEOG 148/149; EVRN/HIST 103, EVRN 347/HIST 347 or EVRN 150/GEOG 150. LEC.

EVRN 420. Topics in Environmental Studies: ______. 1-6 Hours. N.
Courses on special topics in Environmental Science and/or Policy. These courses may be lecture, discussions, or readings. Students may enroll in more than one interest group but may enroll in a given interest group only once. LEC.

EVRN 425. Global Water Scarcity. 3 Hours. S.
Though natural factors are introduced, this course focuses primarily on the human factors that contribute to global water scarcity. This course also discusses the consequences of water scarcity and its effects on society. Prerequisite: EVRN 148 or permission of instructor. LEC.
EVRN 433. Biogeography Field and Laboratory Techniques. 3 Hours. N.
This course provides undergraduate students with practical experience in field data collection techniques and laboratory data analysis methods. During the first half of the semester, students work in the field using a variety of methods to measure such vegetation characteristics as: cover, density, biomass, leaf area, and canopy architecture. Students gain experience in the use of field instruments including a spectroradiometer, and techniques for quantifying biophysical attributes of vegetation. During the later part of the course, students learn to summarize their field data and examine relationships between the vegetation attributes and measurements made using remote sensing instruments. Recommended: GEOG 316 or an introductory statistics equivalent. (Same as GEOG 433.) FLD.

EVRN 460. Field Ecology. 3 Hours. N.
An introduction to research methods for environmental science. The course includes fieldwork in diverse ecosystems (lakes, streams, forests, prairies). It emphasizes the development of skills in data analysis and interpretation that are essential to a full understanding of environmental issues. Enrollment limited to environmental studies majors, or by instructor permission. Prerequisite: Junior or Senior standing, completion of the natural sciences requirement of the KU Core (GE3N), and either EVRN 320 or EVRN 332. FLD.

EVRN 490. Internship in Environmental Studies. 1-8 Hours. AE61 / N.
Supervised practical experience in a specific environmental area of interest. The advisor will schedule regular meetings to evaluate progress and provide assistance. A written summary of the internship experience and evaluation will be prepared independently by the student, a representative of the cooperating agency, and the advisor. Total credit may not exceed 8 hours. Prerequisite: Junior or Senior standing, or consent of instructor. Restricted to declared Environmental Studies majors. Restricted to students with a 2.5 overall GPA or above. FLD.

EVRN 510. Advanced Environmental Applications in Geospatial Techniques. 3 Hours. H/N.
This course focuses on applying advanced geospatial mapping and analysis techniques to "real-world" environmental issues. Course content may include lecture/lab time on advanced geospatial topics: a major class project, small-group projects, or individual projects; or half-semester internships with state agencies or campus entities that will culminate in an individual project. The specific nature of projects will be driven largely by student interest and ability, as well as agency/center needs. Prerequisite: EVRN 410 or equivalent course; or permission of the instructor. LEC.

EVRN 519. Sociology of Global Food. 5 Hours. U.
The Sociology of Global Food offers a critical examination of the global food system since the Industrial Revolution. Topics include the industrialization of agriculture, sustainable agriculture, and the role of food and agriculture in organizing society. This course discusses the emergence of current debates around food and agriculture including food activism, technological developments, human/environment relationships, and labor issues. There is a lab component to this course. (Same as SOC 519.) Prerequisite: Junior standing. LEC.

EVRN 526. Remote Sensing of the Environment I. 4 Hours. N.
Introduction to study of the environment through air photos and satellite imagery, including principles of remote sensing, interactions of electromagnetic energy with the atmosphere and earth's surface, aerial photography, satellite systems, and sensors (electro-optical, thermal, and radar). Emphasis in the latter part of the course is on such applications as global monitoring, land cover mapping, forestry, agriculture, and oceanography. Laboratory emphasizes visual interpretation of aerial photography and satellite imagery and an introduction to digital image processing in the department's NASA Earth Science Remote Sensing Laboratory. (Same as GEOG 526.) Prerequisite: MATH 101 or equivalent. GEOG 358 recommended. LEC.

EVRN 528. Environmental Justice and Public Policy. 3 Hours. S.
This course provides an overview of environmental justice, both as a social movement and as a public policy initiative. Environmental justice examines the distribution of environmental externalities across different socio-economic and racial groups. We will discuss several different public policy areas that have been impacted by the environmental justice movement: hazardous waste facility siting, urban redevelopment and Brownfields, transportation policy, and Native American sovereignty. We will also touch upon international environmental policy in an environmental justice context. Throughout the course we will evaluate empirical issues in studying environmental justice. (Same as POLS 528.) Prerequisite: POLS 306, or a statistics class, or consent of instructor. LEC.

EVRN 535. Soil Geography. 5 Hours. N.
A broad study of the principles and properties of soils and their distribution on the landscape. Topics covered include: pedology, clay mineralogy, soil physics, soil chemistry, management of soils, soil biology, taxonomy, and soil geomorphology. Laboratory section and a field project are required. Not open to students who have taken GEOG 335 or EVRN 335. (Same as GEOG 535.) Prerequisite: GEOG 104 or GEO 101 or consent of the instructor; BIOL 100 and CHEM 130 or CHEM 190 recommended. LEC.

EVRN 538. Soil Chemistry. 3 Hours. N.
This course examines the chemical properties and processes of soils and methods of evaluation. Topics include solid and solution speciation, mineral solubility, soil colloidal behavior, ion exchange, surface complexation, soil salinity and sodicity, soil acidity, oxidation-reduction reactions, and kinetics of soil chemical processes. (Same as GEOG 538.) Prerequisite: GEOG 335 or GEOG 535 or EVRN 335 or EVRN 353 or CHEM 135 or CHEM 195, MATH 121, PHSX 114, or consent of the instructor. LEC.

EVRN 542. Ethnobotany. 3 Hours. S.
Course will involve lectures and discussion of Ethnobotany - the mutual relationship between plants and traditional people. Research from both the field of anthropology and botany will be incorporated in this course to study the cultural significance of plant materials. The course has 7 main areas of focus: 1) Methods in Ethnobotanical Study; 2) Traditional Botanical Knowledge - knowledge systems, ethnolinguistics; 3) Edible and Medicinal Plants of North America (focus on North American Indians); 4) Traditional Phytochemistry - how traditional people made use of chemical substances; 5) Understanding Traditional Plant Use and Management; 6) Applied Ethnobotany; 7) Ethnobotany in Sustainable Development (focus on medicinal plant exploration by pharmaceutical companies in Latin America). (Same as ANTH 582.) Prerequisite: ANTH 104, ANTH 108, EVRN 148, or consent of instructor. LEC.

EVRN 550. Environmental Economics. 3 Hours. U.
This course provides an overview of the theory and empirical practice of economic analysis as it applies to environmental issues. Topics include externalities (a type of market failure), the valuation of nonmarket goods, the practice of benefit-cost analysis, and the efficiency and cost effectiveness of pollution control policies. Most importantly, the course permits students to perform economic field research, using state-of-the-art techniques in a manner accessible to undergraduate students. (Same as ECON 550.) Prerequisite: ECON 104, ECON 140, or ECON 142. LEC.

EVRN 553. Comparative Environmental Politics. 3 Hours. S.
This course compares environmental politics and policies across a number of countries, including those in North America, Western Europe, East Asia, and Latin America. (Same as POLS 553.) LEC.
EVRN 562. United States Environmental History in the 20th Century. 3 Hours. H.
Americans dramatically changed the natural world between 1900 and 2000. This course asks how transformed environments shaped the American experience during a century of technological innovation, democratic renewal, economic expansion, global conflict, and cultural pluralism. Topics include food and markets, energy and transportation, law and politics, protest and resistance, suburbanization, and environmentalism's fate in a global information era. (Same as HIST 562.) LEC.

EVRN 563. U.S. Environmental Thought in the 20th Century. 3 Hours. H.
Explores both leading and dissident ideas that Americans have had about the natural world since 1900. Broad chronological periods are explored in some depth, including the Progressive Era, New Deal, Cold War, the Sixties, and the Reagan Eighties. The course uses articles and books, as well as visual and aural forms of communication. Commercial speech, as well as scholarly and literary works, are considered. (Same as HIST 563.) Prerequisite: EVRN 148 or HIST 129, or by permission of instructor. LEC.

EVRN 611. Water Quality, Land Use, and Watershed Ecosystems. 3 Hours. N.
Water quality issues are integrated with land use planning and the development of watershed management strategies. Interrelationships among the hydrologic cycle, atmospheric deposition, nutrient transformations and pesticide use are examined in regards to stream, lake, and groundwater quality. Prerequisite: CHEM 110 or CHEM 130 and BIOL 414, or consent of instructor. LEC.

EVRN 615. Capstone Project. 3 Hours. AE61 / N.
The capstone project provides students with a broad-based, interdisciplinary educational experience and allows them to integrate and synthesize the knowledge they have gained in their environmental studies major. It rejoins the cohort that has separately pursued the BA/BGS and BS tracks and places them in situations in which they address real world environmental issues with a team approach and produce professionally meaningful analytical reports. Prerequisite: Junior standing; EVRN 320, EVRN 332, and EVRN 460. Restricted to declared Environmental Studies majors. LEC.

EVRN 616. Environmental Impact Assessment. 3 Hours. N.
This course provides an overview of environmental laws and regulations. Additional focus is given to the process described in the National Environmental Policy Act (NEPA). Students will learn when NEPA is triggered, the difference between Environmental Impact Statements (EIS) and Environmental Assessments (EIA), and how to write an EIS/EIA. Prerequisite: An introductory course in environmental law, or consent of instructor. LEC.

EVRN 620. Environmental Politics and Policy. 3 Hours. S.
Analysis of environmental politics and the formulation and implementation of environmental policy. Examines the history and development of environmental politics as well as current trends. Themes include interest groups, business interests, political institutions, and specific environmental policy issues. (Same as POLS 624.) LEC.

EVRN 624. Independent Study. 1-9 Hours. AE61 / N.
A research course, in any of the fields of environmental studies, consisting of either experimental research, original policy analysis, or the preparation of an extensive paper based on library investigation. Project topic to be agreed upon in advance with supervising faculty member. Prerequisite: Consent of instructor. IND.

EVRN 625. Honors Research in Environmental Studies. 3 Hours. AE61 / N.
A course giving eligible majors the opportunity to earn Departmental Honors by engaging in an intensive program of study leading to an original piece of research. Prerequisite: Senior standing, approval of the Environmental Studies Program, the Honors Project Director, and an overall 3.25 cumulative grade point average during the semester of enrollment. Restricted to declared Environmental Studies majors. IND.

EVRN 628. The Politics of Public Health. 3 Hours. S.
This course examines the social, institutional and political context of public health policy in the United States. We will examine factors that shape the nation’s public health, explore the role of government in reducing risk and promoting well being, and analyze the major institutions responsible for monitoring, protecting and promoting general public health. Themes include the social determinants of health, health disparities, emerging infectious diseases, food safety, transportation, and environmental health. (Same as POLS 628.) Prerequisite: POLS 110 and POLS 306 are recommended. LEC.

EVRN 635. Soil Physics. 3 Hours. N.
Provides theoretical and practical foundations for understanding physical properties and processes of variably-saturated porous media. Focus is on the transport, retention, and transformation of water, heat, gas, and solutes through the soil. We examine modern vadose zone measurement methods, analytical tools, and numerical models for data collection and interpretation. (Same as GEOG 335.) Prerequisite: GEOG 335 or EVRN 335; or GEOG 535 or EVRN 535, and MATH 121, PHSX 114; or consent of instructor. LEC.

EVRN 656. Ecosystem Ecology. 3 Hours. N.
An introduction to the patterns and processes that affect terrestrial ecosystems. Emphasis is placed on understanding nutrient cycles (e.g., carbon nitrogen phosphorous), hydrologic cycles, and patterns of net primary productivity. The role of both natural and anthropogenic disturbances in structuring terrestrial ecosystems is examined in the context of global land-use patterns. Discussion of current research literature will be expected. (Same as BIOL 656.) Prerequisite: BIOL 414 and CHEM 130. LEC.

EVRN 700. Colloquium. 1 Hour.
Topics of current interest in environmental studies. May be repeated for credit for different topics. LEC.

EVRN 701. Climate Change, Ecological Change and Social Change. 3 Hours.
This interdisciplinary graduate seminar examines the history of climate change from natural and physical science, social science, and humanities perspectives. The class explores the ways that different disciplines approach understanding climate change and its impact on natural and human systems and how these understandings have changed over time. The course is team-taught by faculty from the natural and physical sciences, social sciences, humanities, and professional schools, and will include faculty guest speakers from KU and off-campus. Students will write a research paper on a climate change topic of their choice that reflects the historical and interdisciplinary approaches of the seminar. A goal of the seminar is to assemble student papers for presentation and possible publication. Prerequisite: Consent of instructor. LEC.

EVRN 702. Energy, Ecology and Community in Kansas. 3 Hours.
This interdisciplinary graduate seminar examines the role of climate in shaping energy, ecology, and community in Kansas from natural and physical science, social science, and/or humanities perspectives. The class will combine lectures, group projects, and field research to understand the ways that climate change and energy production are reshaping the human and natural systems in Kansas and the Great
Plains. The course is team-taught by faculty from the natural and physical science, social science, humanities and professional schools, and will include faculty guest speakers from KU and off-campus. LEC.

EVRN 720. Topics in Environmental Studies. 1-6 Hours.
Courses on special topics in Environmental Studies. These courses may be lecture, seminars, or readings. Students may enroll in more than one interest group but may enroll in a given interest group only once. LEC.

EVRN 721. Environmental Regulation and Policy. 3 Hours.
This course provides a survey of the environmental regulations, environmental problems, and environmental solutions that must be dealt with by environmental scientists in agencies and industry. Considers both theoretical and practical/applied aspects of environmental practices. LEC.

EVRN 730. Environmental Toxicology. 3 Hours.
Examines the effects of toxic chemicals on individuals, populations, communities and ecosystems. Topics include major classes of pollutants, movement, distribution and fate of pollutants in the environment, mechanisms of action, toxicity testing, and environmental assessment. LEC.

EVRN 740. Soil Science for Environmental Assessment. 3 Hours.
Provides students with a solid understanding of soils in the environment, particularly as it relates to environmental assessment. Topics include soil geomorphology, soil physics/chemistry/biology, management of soils, and soil contaminants. Prerequisite: CHEM 130 or CHEM 190 recommended or consent of the instructor. LEC.

EVRN 745. Environmental Data Analysis and Statistics. 3 Hours.
Survey of common statistical methods for analyzing environmental data. Includes techniques for environmental monitoring, impact assessment, and site reclamation, as well as methods for handling censored data, time series, and spatial analysis. Sampling design, data interpretation, and presentation of statistical results will be emphasized. Prior coursework or practical experience in statistics is expected. Prerequisite: Permission of instructor. LEC.

EVRN 750. Environmental Air Quality Assessment. 3 Hours.
Addresses scientific, regulatory, and technical aspects of air quality monitoring, including pollutant formation and dispersion, pollution control, national emissions standards, and methods for monitoring pollutants and air quality. Prerequisite: CHEM 130 or CHEM 190 recommended or consent of the instructor. LEC.

EVRN 815. Professional Science Masters Capstone. 3 Hours.
A culminating experience to develop a workforce project, producing a written report and presented orally to a committee that includes an industry member. Students will develop an applied workforce project in the student's place of employment for full time employees or an internship for full time students. The students will document their project in a written report and present their project to the Environmental Studies faculty (2), and the student's employer or representative if practical. LEC.

EVRN 915. Capstone. 3 Hours.
The goal of this research seminar is to discuss individual students' research, culminating in the completion of a paper in Environmental Studies for presentation at a professional meeting and/or publication in a professional journal. SEM.

Bachelor of Arts and Bachelor of General Studies in Environmental Studies

Why study environmental studies?
The KU Environmental Studies Program provides a rigorous interdisciplinary education and stimulates exchange concerning the environment from natural science, social science, and humanities perspectives.

Requirements for the B.A. or B.G.S. Major

Environmental Studies Introduction to Science and Culture (16-18)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EVRN 720</td>
<td>Topics in Environmental Studies</td>
<td>1-6</td>
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<tr>
<td>EVRN 721</td>
<td>Environmental Regulation and Policy</td>
<td>3</td>
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<tr>
<td>EVRN 730</td>
<td>Environmental Toxicology</td>
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<tr>
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<td>Environmental Data Analysis and Statistics</td>
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<td>EVRN 750</td>
<td>Environmental Air Quality Assessment</td>
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<td>EVRN 815</td>
<td>Professional Science Masters Capstone</td>
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<tr>
<td>EVRN 915</td>
<td>Capstone</td>
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Environmental Studies Core Knowledge and Skills (12)

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIOL 570</td>
<td>Biogeography Field and Laboratory Techniques</td>
<td>3-4</td>
</tr>
<tr>
<td>EVRN 410</td>
<td>Geospatial Analysis</td>
<td>3</td>
</tr>
<tr>
<td>EVRN 510</td>
<td>Advanced Environmental Applications in Geospatial Techniques</td>
<td>3-4</td>
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<tr>
<td>GEOL 351</td>
<td>Environmental Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 510</td>
<td>Human Factors</td>
<td>3</td>
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<tr>
<td>MATH 365</td>
<td>Elementary Statistics</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 316</td>
<td>Methods of Analyzing Geographical Data</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 570</td>
<td>Introduction to Biostatistics</td>
<td>3</td>
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Environmental Studies Required Electives/Options (0)

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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>EVRN 320</td>
<td>Environmental Policy Analysis</td>
<td>3</td>
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<td>EVRN 332</td>
<td>Environmental Law</td>
<td>3</td>
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<tr>
<td>EVRN 460</td>
<td>Field Ecology</td>
<td>3</td>
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<tr>
<td>EVRN 615</td>
<td>Capstone Project</td>
<td>3</td>
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</table>
Majors must select an option or design their own. Self-designed emphases must be approved in their entirety by an environmental studies advisor and the undergraduate studies director before implementation. Each option requires 4 courses at the 300+ level.

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 40 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 30 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the field of study including F's and repeated courses. See the Semester/ Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

A sample 4-year plan for the BA degree in Environmental Studies can be found here: Environmental Studies (http://catalog.ku.edu/liberal-arts-sciences/environmental-studies/ba-bgs/ba-environmental-studies), or by using the left-side navigation.

Sample 4-year plans for the BGS degree and BS degree in Environmental Studies will be coming soon.

**Departmental Honors**

To graduate with honors in environmental studies, an undergraduate must maintain a minimum overall grade-point average of 3.25 and 3.5 in the major. The student must also complete an individual honors research project in cooperation with a faculty mentor. This project normally represents 2 semesters of original work, the completion of 3 credit hours of EVRN 624 Independent Study, and 3 credit hours of EVRN 625 Honors Research in Environmental Studies. All 6 hours may be applied to the 12 hours of environmental studies electives required for the major. Upon completion of the research project, honors candidates are required to present the results of their work at the department’s Undergraduate Research Colloquium.

**Bachelor of Science in Environmental Studies**

**Why study environmental studies?**

The KU Environmental Studies Program provides a rigorous interdisciplinary education and stimulates exchange concerning the environment from natural science, social science, and humanities perspectives.

**Requirements for the B.S. Degree**

**General Education Requirements**

In addition to degree and major requirements, all students must complete the KU Core.

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**Environmental Studies Prerequisite or Co-requisite Knowledge**

**Mathematics (0)**

Majors must complete the following:

- Calculus. Satisfied by one of the following:
  - MATH 115 & MATH 116 and Calculus II
  - MATH 121 Calculus I

- Statistics. Satisfied by one of the following:
  - MATH 365 Elementary Statistics
  - GEOG 316 Methods of Analyzing Geographical Data
  - BIOL 570 Introduction to Biostatistics

**Supporting Laboratory Science (0)**

Majors must complete one of the following:

- Principles of Physical Geography and Intro Lab to in Physical Geography. Satisfied by:
  - GEOG 104 & GEOG 105 Principles of Physical Geography
  - GEOG 106 & GEOG 107 Principles of Physical Geography Laboratory

- Introduction to Geology, Honors and Geological Fundamentals Laboratory. Satisfied by:
  - GEOL 102 & GEOL 103 The Way The Earth Works, Honors
  - GEOL 104 & GEOL 105 The Way The Earth Works, Honors Laboratory

- Introduction to Geology and Geological Fundamentals Laboratory. Satisfied by:
  - GEOL 101 & GEOL 103 The Way The Earth Works
  - GEOL 104 & GEOL 105 The Way The Earth Works Laboratory

- Fundamentals of Organic Chemistry and Organic Chemistry Laboratory. Satisfied by:
  - CHEM 310 Fundamentals of Organic Chemistry
  - CHEM 331 and Organic Chemistry I Laboratory

**Biology and Ecology (0)**

Majors must complete the following:

- Principles of Molecular and Cellular Biology. Satisfied by:
  - BIOL 150 Principles of Molecular and Cellular Biology
  - BIOL 151 Principles of Molecular and Cellular Biology, Honors

- Principles of Organismal Biology. Satisfied by:
  - BIOL 152 Principles of Organismal Biology
  - BIOL 153 Principles of Organismal Biology, Honors

- Principles of Ecology. Satisfied by:
  - BIOL 414 Principles of Ecology

**Chemistry (0)**

Majors must complete the following:

- Foundations of Chemistry I. Satisfied by:
  - CHEM 130 General Chemistry I
  - CHEM 190 Foundations of Chemistry I, Honors

- Foundations of Chemistry II. Satisfied by:
  - CHEM 135 General Chemistry II
  - CHEM 195 Foundations of Chemistry II, Honors

**Environmental Studies Core Requirements**

**Environmental Studies Introduction to Science and Culture (10)**

Majors must complete both of the following:

- Global Environment I: The Discovery of Environmental Change. Satisfied by one of the following:
Minor in Environmental Studies

Why study environmental studies?

The KU Environmental Studies Program provides a rigorous interdisciplinary education and stimulates exchange concerning the environment from natural science, social science, and humanities perspectives.

Requirements for the Minor

Environmental Studies Minor Core (15-20)

Principals of Environmental Studies. Satisfied by 1 of the following options:

- EVRN 140 Global Environment I: The Discovery of Environmental Change
- or EVRN 144 Global Environment I: Discovery of Environmental Change, Honors

Scientific Principles of Environmental Studies. Satisfied by 1 of the following:

- EVRN/GEOG 148 Scientific Principles of Environmental Studies
- or EVRN/GEOG 149 Scientific Principles of Environmental Studies, Honors

Environmental History and Culture. Satisfied by 1 of the following options:

- EVRN 142 Global Environment II: The Ecology of Human Civilization
- or EVRN 145 Global Environment II: The Ecology of Human Civilization, Honors

Environmental Policy Analysis. Satisfied by:

- EVRN 320 Environmental Policy Analysis

Environmental Law. Satisfied by:

- EVRN 332 Environmental Law

Field Ecology. Satisfied by:

- EVRN 460 Field Ecology

Capstone Experience. Satisfied by:

- EVRN 615 Capstone Project

Environmental Studies Required Electives/Options (0)

Majors must select an option or design their own. Self-designed emphases must be approved in their entirety by an environmental studies advisor and the undergraduate studies director before implementation. Each option requires 4 courses at the 300+ level.

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 32 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 24 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Departmental Honors

To graduate with honors in environmental studies, an undergraduate must maintain a minimum overall grade-point average of 3.25 and 3.5 in the major. The student must also complete an individual honors research project in cooperation with a faculty mentor. This project normally represents 2 semesters of original work, the completion of 3 credit hours of EVRN 624 Independent Study, and 3 credit hours of EVRN 625 Honors Research in Environmental Studies. All 6 hours may be applied to the 12 hours of environmental studies electives required for the major. Upon completion of the research project, honors candidates are required to present the results of their work at the department’s Undergraduate Research Colloquium.
Environmental Planning Techniques. Satisfied by:
UBPL 538 Environmental Planning Techniques
Environmental Geology. Satisfied by:
GEOL 351 Environmental Geology

Environmental Studies elective at the Junior/Senior Level. Satisfied by 1 additional EVRN course at the Junior/Senior Level (300+).

**Minor Hours & Minor GPA**

While completing all required courses, minors must also meet each of the following hour and grade-point average minimum standards:

**Minor Hours**
Satisfied by 18 hours of major courses.

**Minor Hours in Residence**
Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the major.

**Minor Junior/Senior Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the minor. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

### Professional Science Masters in Environmental Assessment

The Professional Science Masters professional graduate degree is designed for graduates of bachelor's programs in physical/natural sciences, environmental studies, civil/environmental engineering or related fields who are currently employed in private firms, public agencies, and not-for-profit organizations that address a range of environmental issues. Key foci in the science curriculum of this program are environmental impact assessment; soils, water, and ecosystems science; geospatial analysis; environmental health and policy; and an understanding of environmental law and policy and the regulatory environment.

The Professional Science Master’s (PSM) is a relatively new interdisciplinary graduate degree that combines advanced coursework in science with a set of professional skills courses (project management, technical writing/communications, financial management), and a capstone/internship experience.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Entering students are expected to have a B.S. degree in geography or in related physical science, earth science, mathematics, or engineering disciplines. Applicants should have a minimum Grade Point Average (GPA) of 3.0 on a 4.0 scale. Applicants with a GPA of less than 3.0 may be considered for admission on a probationary or provisional status. Entering students will be expected to have studied quantitative methods. Graduate Record Examination scores (verbal, quantitative and analytical) are required of all applicants.

The admissions requirements for the Professional Science Masters with a concentration in Environmental Assessment are as follows:

1. A 3.0 or higher grade point average (on a 4.0 scale)
2. GRE scores on the verbal and quantitative sections
3. Bachelor’s degree from an accredited institution
4. Submission of a letter of interest and at least two letters of recommendation
5. The student must have an undergraduate background of at least 20 semester hours in the natural and applied sciences
6. International students must also meet the English proficiency, visa/I-20, and financial support requirements

All PSMs must include a core of business, communication, and project management skills.

**P.S.M. Core (12)**
- PMGT 824 Project Cost Estimation, Analysis, and Control 3
- ENTR 701 Starting Your Own Business 3
- COMS 730 Writing and Speaking for Decision Makers 3
- Accounting Course (selected in consultation with Graduate Advisor) 3

**Concentration (12)**
- EVRN 611 Water Quality, Land Use, and Watershed Ecosystems 3
- EVRN 616 Environmental Impact Assessment 3
- Select two from: 6
  - EVRN 611 Water Quality, Land Use, and Watershed Ecosystems
  - EVRN 740 Soil Science for Environmental Assessment
- EVRN 750 Environmental Air Quality Assessment

**Related Electives (6)**
- Choose 2 courses
  - EVRN 510 Advanced Environmental Applications in Geospatial Techniques
  - EVRN 535 Soil Geography
  - EVRN 656 Ecosystem Ecology
  - EVRN 730 Environmental Toxicology
  - EVRN 745 Environmental Data Analysis and Statistics

**Capstone (3)**
European Studies Program

Why study European studies?

Because European studies broaden, deepen, and strengthen through interdisciplinary study a student’s knowledge and understanding of the enduring importance of our transatlantic partners, the Europeans.

Undergraduate Programs

The degree in European Studies is available as a co-major in conjunction with a bachelor’s degree major in another academic discipline. Students take advantage of this option by combining the co-major with modern European languages & literatures, History, Philosophy, or Global & International Studies, for example. The co-major also can be combined with a bachelor’s degree in a professional school, such as business or journalism. The European Studies co-major provides students with a solid foundation in the cultures, politics, languages, and history of Europe in preparation for graduate studies and/or careers in a wide variety of international fields. Studying with KU faculty in the broader disciplines such as social sciences, humanities, the arts, and business will enable students to increase their awareness and understanding of Europe’s past, present, and future and its significant role in our increasingly globalized world. The program offers personalized advising, interdisciplinary flexibility, diverse course offerings, opportunities to conduct research, frequent co-curricular activities, and many options for studying and completing internships abroad.

Courses

EURS 150. Study Abroad Topics in European Studies: ____. 1-5 Hours. U.
This course is designed for the study of special topics in European Studies at the 100-level (Freshman/Sophomore level). Coursework must be arranged through the KU Office of Study Abroad and approved by a faculty advisor in European Studies. May be repeated for credit if content varies. LEC.

EURS 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in European Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

EURS 302. European Culture and Society 1945 to Present. 3 Hours. HT AE42 / H.
The course provides historical, cultural, and political overviews of Europe since 1945 with particular emphasis on the contribution of French and Italian culture and society. The course emphasizes Europe's contribution to Western intellectual thought, social movements, arts and literature, and global society. (Same as HWC 302.) LEC.

EURS 329. History of War and Peace. 3 Hours. HL / H.
A study of the changing nature of warfare and the struggle to bring about peace. Topics include pacifism, the "military revolution" that created the first professional armies; the development of diplomatic immunity, truces, and international law; the peace settlements of Westphalia, Utrecht, Vienna, Versailles, San Francisco; the creation of peace movements and peace prizes; the evolution of total war, civil war; and guerrilla warfare involving civilians in the twentieth century; the history of the League of Nations and United Nations; and the rise of intergovernmental and non-governmental organizations. (Same as HIST 329 and PCS 329.) LEC.

EURS 350. Study Abroad Topics in: ____. 1-5 Hours. H.
This course is designed for the study of special topics in European Studies at the Junior/Senior level. Coursework must be arranged through the KU Office of Study Abroad and approved by a faculty advisor in European Studies. May be repeated for credit if content varies. LEC.

EURS 430. European Civilization in World Context: ____. 3 Hours. HL AE42/GE3H / H.
Investigation of Muslim migration into Europe and day-to-day interactions of Muslims with other European populations. This is an integrated study of historical, political, religious and economic influences that determine Muslim experience in contemporary European culture. (Same as HWC 435.) LEC.

EURS 500. Seminar in European Studies. 3 Hours. AE42/AE61 / H.
Provides an interdisciplinary approach to the study of modern European civilization. By discussing both classic and contemporary, controversial readings each week and writing several papers during the semester, students acquire an understanding of the development of modern European culture and society and Europe's contemporary problems. Topics for discussions and papers are drawn from the following subjects: the economic and political integration of European states; modernism and anti-modernism in European culture; imperialism, migration, and ethnic and racial division in European society; democracy versus dictatorship; American-European relations; mass culture, urban development, and the welfare state; and contrasts and comparisons between European Cultures-East and West, North and South. Seminar discussions are led by invited European Studies faculty as well as the instructor or instructors. Required of all European Studies majors. Prerequisite: Junior standing or consent of instructor. LEC.

EURS 501. Senior Thesis in European Studies. 3 Hours. AE61 / H.
European Studies majors will do research and write a substantial paper on a topic in the culture, economy, history, or politics of Europe. Topics will be approved by the European Studies Committee. Students will work with an advisor chosen from among the European Studies faculty and with the European Studies Coordinator. The majority of the students' work will be done independently with their advisors, but students will meet with the European Studies Coordinator several times as a class to report on their progress and present their final drafts. Required of all European Studies majors. Prerequisite: Completion of EURS 500 and 15 hours toward the Co-Major. IND.

EURS 502. Senior Honors Thesis in European Studies. 3 Hours. AE61 / H.
Open to European Studies majors doing their senior thesis for Honors. Prerequisite: Completion of EURS 500, 15 hours toward the Co-Major, and approval of Honors thesis by European Studies Committee. Completion of or concurrent enrollment in EURS 501. IND.
EURS 503. Europe Today. 3 Hours. S.
This intensive, interdisciplinary seminar focuses on current social, political, and economic changes in Europe. Topics include European integration and the European Union, the conflict between nationalism and European consciousness, NATO and U.S.-European relations, and international business in Europe. The seminar will include guest lectures from an international array of scholars, political officials, and business representatives, as well as site visits to their institutions and companies. The seminar takes place in Brussels, Belgium, and enrollment is restricted to students accepted in the KU Summer Institute for European Studies study abroad program. LEC.

EURS 505. Studies in Exile Literature. 3 Hours. H.
A multidisciplinary study of selected literary, scholarly, and creative works produced by those Europeans forced into exile, emphasizing their impact on culture and society both in Europe and in those countries in which the exiles resided. Examples: exile during the Nazi dictatorship in Germany (1933-1945), during Cold War crises (Berlin 1960, Prague 1968). LEC.

EURS 506. Culture and Politics of the Cold War in Western Europe. 3 Hours. H.
An interdisciplinary overview of the Cold War period (1945-1985) focusing on Western European dimensions of the problem, based on the view that the Cold War structured political institutions, cultures, and societies in enduring ways that continue to be relevant today. LEC.

EURS 507. Research in European Collections. 1-3 Hours. H.
This course allows students in the European Studies Co-Major and related disciplines to receive credit for research related to European Collections in one or more of the following institutions: Watson and Spencer Research Libraries, the Dole Institute, the Eisenhower and Truman Presidential Libraries, the U.S. Army Combined Arms Research and Foreign Military Studies Office at Fort Leavenworth, the Linda Hall Library in Kansas City, and the Winston Churchill Collection at the Westminster College Library in Fulton, Missouri. May be taken in place of EURS 501 by European Studies Honors Students if taken for three credit hours. Permission of instructor necessary. IND.

EURS 508. Politics and Economics of Cultural Production in Western Europe. 3 Hours. H.
Artists and intellectuals in their relation to state and society. This course is designed to introduce students (1) to the role European artists and intellectuals have often played in the arena of politics and (2) to the privileged place cultural production (arts, literature, media) occupies in the formation of various European identities and economies. LEC.

EURS 509. Introduction to the Study of Southern European Societies. 3 Hours. H.
Social, historical, and economic study of Southern European societies with emphasis on modern period. Relevant to the study of European integration and EU enlargement. Consideration of the distinctive southern Mediterranean societies from the perspective of their collective identity as a regional economic and geopolitical bloc. LEC.

EURS 510. Scandinavian Life and Civilization. 3 Hours. H.
This course is designed to impart a general knowledge of life in Denmark, Finland, Iceland, Norway, and Sweden with emphasis on social and cultural conditions, against a geographical and historical background, from the Viking Age to the present. Slides and other illustrated materials. (Same as SCAN 570.) LEC.

EURS 511. Topics in European Studies: ______. 3 Hours. H.
A study of significant themes, movements, or problems in European history, literature, politics, society, or culture. May also relate European issues to issues in other world areas (Africa, North America, Asia, etc.) May be repeated for credit when topic varies. LEC.

EURS 512. Irish Literature and Culture: ______. 3 Hours. H.
Study of topics in Irish literature and culture. Topics may focus on a particular genre, theme, historical period, or group of authors. May be repeated for credit as the topic changes. (Same as ENGL 530.) Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

EURS 536. Economic Issues of the European Union. 3 Hours. S.
A survey of the economies of the European Union, with a focus on the economic development of the member states since World War II, and an examination of the various economic issues confronting them today. (Same as ECON 536) Prerequisite: ECON 104 or ECON 144. LEC.

EURS 550. Classics of Peace Literature. 3 Hours. HL AE51/AE61 / H.
A study of influential proposals for world peace from Erasmus’ The Complaint of Peace (1516) to the 1995 Hague Appeal for World Peace. Selected writings by such authors as Erasmus, Hugo Grotius, Jean-Jacques Rousseau, Immanuel Kant, Henry Thoreau, Henri Dunant, Berthe von Suttner, Woodrow Wilson, Mahatma Gandhi, and Martin Luther King, Jr., are considered. (Same as PCS 550.) Prerequisite: HWC 204 or HWC 205. LEC.

EURS 565. The Literature of Human Rights. 3 Hours. H.
Examines in literature, art, and film from about 1800 to the present, both sides of the ongoing debate surrounding the idea that all human persons possess inalienable rights because all persons possess intrinsic value as persons, value independent of race, gender, caste or class, wealth, age, sexual preference, etc. Anti- and pro-rights proponents are paired and studied with equal care. (Same as PCS 565.) LEC.

EURS 580. Directed Study. 1-3 Hours. AE61 / H.
Independent study and directed reading on special topics. Permission of the instructor who will supervise the student’s work is required. LEC.

EURS 581. Discussion Section in French. 1 Hour. U.
The 1 credit hour course represents a foreign language discussion section to be attached to a major 3-credit hour EURS course (example: EURS 500). Foreign language discussion sections are an integral part of the KULAC program envisaged to reinforce foreign language proficiency. LEC.

EURS 582. Discussion Section in German. 1 Hour. U.
The 1 credit hour course represents a foreign language discussion section to be attached to a major 3-credit hour EURS course (example: EURS 500). Foreign language discussion sections are an integral part of the KULAC program envisaged to reinforce foreign language proficiency. LEC.

EURS 583. Discussion Section in Italian. 1 Hour. U.
The 1 credit hour course represents a foreign language discussion section to be attached to a major 3-credit hour EURS course (example: EURS 500). Foreign language discussion sections are an integral part of the KULAC program envisaged to reinforce foreign language proficiency. LEC.

EURS 584. Discussion Section in Spanish. 1 Hour. U.
The 1 credit hour course represents a foreign language discussion section to be attached to a major 3-credit hour EURS course (example: EURS 500). Foreign language discussion sections are an integral part of the KULAC program envisaged to reinforce foreign language proficiency. LEC.

EURS 604. The European Union. 3 Hours. H.
The European Union, the union of 27 European countries, is a culmination of a long history of European unity. The European Union now encompasses population and economic strength rivaling that of the United States. This course examines selected topics in the history
of European integration and the political, legal, economic, and social implications of the present European Union as well as its relations with the United States and other regions of the world. LEC.

FARS 110. Elementary Farsi I. 5 Hours. U.
Vocabulary acquisition, pronunciation, grammar, and writing. Course includes reading of simple texts. Five hours of class per week. LEC.

FARS 120. Elementary Farsi II. 5 Hours.
Continuation of FARS 110. Vocabulary acquisition, pronunciation, grammar, and writing. Course includes reading of simple texts. Five hours of class per week. Prerequisite: FARS 110 or departmental permission. LEC.

FARS 210. Intermediate Farsi I. 3 Hours. U.
A continuation of FARS 120. Course emphasizes oral and written work in Farsi. Systematic review of grammar and introduction to reading in cultural texts. Prerequisite: FARS 120 or departmental permission. LEC.

FARS 220. Intermediate Farsi II. 3 Hours. U.
A continuation of FARS 210. Course emphasizes oral and written work in Farsi. Systematic review of grammar and introduction to reading in cultural texts. Prerequisite: FARS 210 or departmental permission. LEC.

FARS 310. Advanced Farsi I. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in Farsi. Readings from Farsi literature introduced. Prerequisite: FARS 220 or placement exam that establishes a level of proficiency in Farsi suited to Advanced Farsi I. LEC.

FARS 320. Advanced Farsi II. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in Farsi. Readings from Farsi literature introduced. Prerequisite: FARS 310 or placement exam that establishes a level of proficiency in Farsi suited to Advanced Farsi II. LEC.

FARS 593. Directed Study in Persian Culture and Literature: _____. 1-3 Hours. U.
This course is designed for students seeking proficiency in Farsi beyond FARS 320. The instructor directs the student through readings and materials in Farsi that add to the student's substantive knowledge of Iran and culture in the Farsi language. May be taken multiple semesters for credit with varying content. Prerequisite: FARS 320 and consent of instructor. LEC.

GIST 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Global International Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

GIST 201. Topics in: _____. 1-3 Hours. U.
An interdisciplinary study of international topics. Designed especially for freshmen and sophomores. May be repeated for credit if content varies. LEC.

GIST 202. Topics in South Asian Studies: _____. 1-3 Hours. U.
An interdisciplinary study of topics related to South Asia. Designed especially for freshmen and sophomores. May be repeated for credit if content varies. LEC.

GIST 203. Topics in Middle Eastern Studies: _____. 1-3 Hours. U.
An interdisciplinary study of topics related to the Middle East. Designed especially for freshmen and sophomores. May be repeated for credit if content varies. LEC.

GIST 204. Topics in: _____. 1-3 Hours. U.
This course is designed to meet the critical thinking learning outcome of the KU Core. Topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

GIST 205. Introduction to Globalization. 3 Hours. S.
Along with an overview of the origins and historical development of globalization, the course addresses various aspects of the growth of transnational economic, cultural, institutional, and political interconnections, including the implications of rapidly-developing information technology and social media, international security in a transnational world, and the issues related to the movement of goods, people (immigration), images, ideas, and institutional forms across national borders. LEC.

GIST 301. Introduction to Global and International Studies. 3 Hours. GE11 / S.
This course provides an overview to the major ways and themes involved in the study of world cultures, politics, and societies as applied by disciplines in the social sciences. Topics such as the construction and maintenance of cultures, comparative political systems, global and regional economies, popular culture, gender and the environment will be covered through their manifestations in particular regional and global contexts. LEC.

GIST 302. Love, Sex and Marriage in India. 3 Hours. H.
This course addresses diverse aspects of the philosophies and expressions of intimacy and pleasure as found in India. Using old and new literature, including from the Kamasutra, as well as media, we examine the following: how and why in ancient times sensual pleasure was another path for ultimate bliss; how perspectives and traditions of intimacy have changed over time; diverse types of marriages; the culture and practice of arranged marriages; same-sex intimacy; and universal concepts of love. LEC.

GIST 305. Peoples and Cultures of South Asia. 3 Hours. S.
This course provides an introduction to the diversity of peoples in South Asia, including India, Pakistan, Nepal, Bangladesh and Bhutan. The particular cultures and language of the indigenous peoples in the region are highlighted through academic sources and the direct study of reproductions of these cultures in literature and film. LEC.

GIST 350. Study Abroad Topics in: _____. 1-5 Hours. U.
This course is designed for the study of special topics in global and international studies at the junior/senior level. Course work must be arranged through the KU Office of Study Abroad and approved by a faculty advisor in Global and International Studies. May be repeated for credit if content varies. LEC.

GIST 424. Nationalism(s) in Turkey. 3 Hours. S.
This course analyzes the major variations in nationalist paradigms existing in contemporary Turkey, including conservative nationalism, secular nationalism, religious (Islamic) nationalism, and Kurdish nationalism. Through the lens of seminal theories on the origins, development, and types of nationalism and the relevant historical background of the Turkish Republic, we explore how these competing visions of “the nation” and “homeland” have changed, fragmented, and manifested themselves in everyday Turkish politics and society. LEC.

GIST 493. Directed Readings. 3 Hours. U.
Individual and supervised readings in a selected area of international studies. Course is repeatable with permission of the program director. LEC.

GIST 495. Global Internship. 3 Hours. U.
Semester-long internship with a business or organization located abroad or that provides a global or international working context for the interning student. A term paper is required. Prerequisite: Consent of instructor. FLD.
GIST 501. Topics in: ____. 1-3 Hours. U.
An interdisciplinary study of international topics. Designed especially for juniors and seniors. May be repeated for credit if content varies. LEC.

GIST 502. Advanced Topics in South Asian Studies: ____. 1-3 Hours. U.
An interdisciplinary study of topics related to South Asia. May be repeated for credit if content varies. Prerequisite depends on specific topic offered. LEC.

GIST 503. Advanced Topics in Middle East Studies: ____. 3 Hours. U.
An interdisciplinary study of topics related to the Middle East. May be repeated for credit if content varies. Prerequisite: GIST 301 or POLS 150. LEC.

GIST 530. Politics and Society in the Contemporary Persianate World. 3 Hours. S.
This course examines the major currents of political developments and their linkages with religion, culture and civil society in Turkey, Iran, Afghanistan, Pakistan and India since the late nineteenth century. During the "pre-modern" period, all these countries formed part of "the Persianate world," a region that extended from the Iranian plateau to the Balkans, Central Asia and the Indian subcontinent, mostly under the Turkic administrations, and tied together by trade, Islam, and Persian as the lingua franca. The dissemination of modern Western political thought and nationalism during the colonial period led to nation-states and the end of the linguistic domination of Persian in the region. Though each of these nation-states ultimately took a different trajectory, they each were faced with similar challenges that offer the basis for interesting comparisons between them. This course explores the trajectories of these countries in regard to the relations between the state, religion, and politics, various strands of nationalism, pluralism, religious and ethnic minorities, social equality, and democratization. Prerequisite: GIST 301 or POLS 150. LEC.

GIST 535. Literature and Society in the Contemporary Middle East. 3 Hours. S.
This course offers a general introduction to the modern Middle Eastern literatures in English translation. Through analyses of selected short stories and novels from Arabic, Turkish and Persian literature, the students develop an understanding of the issues that shape everyday life in the Contemporary Middle East. The course investigates issues of nation and national identity, war, ethnicity, class, religion, and gender and sexuality. We use a variety of paradigms, namely nationalist, Marxist, feminist, and Islamist, to provide a theoretical framework for discussion of the selected works. No prior knowledge of Arabic, Turkish or Persian language is needed. Prerequisite: GIST 301. LEC.

GIST 610. Interdisciplinary Methods for Global Contexts. 3 Hours. S.
An introduction to a variety of widely-employed quantitative and qualitative research methods in the social sciences and humanities, including methods such as statistical analysis, ethnography, and content analysis. LEC.

GIST 624. Social Movements in the Middle East. 3 Hours. S.
Using the major theories and approaches comparatively applied to social movements around the world, this course critically analyzes historical and existing cases of social movements and "nonmovements" in the Middle East. We cover examples of Islamist (and post-Islamist), women's, nationalist, democratic, youth and labor movements and their impact on the region. Contextual factors like technology and social networking, regime type, institutions, and socioeconomic structures are also considered for their role in supporting or inhibiting collective action. Prerequisite: GIST 301 or POLS 150. LEC.

GIST 684. International Law: The State and the Individual. 3 Hours. S.
International law has assumed an increasingly significant role in international life. This course examines major issues in international law including (but not limited to): the changing status and role of the state; rights of minorities and self-determination; the environment; and human rights. The course examines the central questions and the relevant international legal principles associated with each issue. Prerequisite: POLS 170. LEC.

GIST 685. International Law: Laws of Armed Conflict. 3 Hours. S.
This course examines the principles, roles, and functions of international law in the conduct of war. As the course reviews the development and application of the basic rules of armed conflict, several current issues and conflicts are addressed including: the legitimate use of force; the proper definitions of combatants and civilians; actions that constitute war crimes, the legality of new weapons technology, and, if the laws of armed conflict apply to the current "war on terrorism." Prerequisite: POLS 170. LEC.

GIST 697. Diplomacy Lab. 1-3 Hours. S.
This course is designed to partner with an innovative program implemented by the US Department of State. Students enrolling in this course team up with a group of four or more students to address a real world problem posed by a State Department officer. The team, with the assistance of the instructor, engages in extensive and systematic research to address the problem and presents their findings in a formal report presented to the State Department in the desired format. Throughout the semester, the students teleconference with the State Department officer posing the question and utilize their accumulated cultural, linguistic and research knowledge to tackle a real-life, global issue. Prerequisite: GIST 301. LEC.

GIST 698. Capstone Seminar. 3 Hours. AE61 / H.
A seminar designed to introduce students to the theory and practice of global and international studies. A research paper will be required. May not be repeated for credit. Prerequisite: 12 hours of junior/senior level and above courses that satisfy requirements for the major. LEC.

GIST 699. Capstone Seminar, Honors. 3 Hours. AE61 / H.
A seminar designed to introduce honors students to the theory and practice of global and international studies. A research paper will be required. May not be repeated for credit. Prerequisite: 12 hours of junior/senior level and above courses that satisfy requirements for the major. LEC.

GIST 701. Approaches to International Studies. 3 Hours.
This course examines various approaches to the study of cultures, politics, and societies in their global and international contexts through the exploration of a series of exemplary works of global/international research from a variety of disciplines (eg. anthropology, sociology, political science, economics, geography, history, etc.). The course will cover the major contributions of these disciplines in their approaches to global questions and themes and will provide a multi-disciplinary framework within which students can begin exploring their own global and international research questions. The course also provides an introduction to the major regions and many of the themes that students will be able to specialize in during the course of the MA program. LEC.

GIST 702. Globalization. 3 Hours.
A central issue in international studies is globalization, the increasing interconnectedness of societies and economies. This course examines globalization from an historical and contemporary perspective. Major topics include (but are not necessarily limited to) the historical expansion of the West since 1500, the growth of international economic institutions, conflict among global cultures, the future of state sovereignty, and the challenges of economic integration. LEC.
GIST 703. The World Economy. 3 Hours.
An introduction to international trade and finance, theories of economic development, and international economic structures. Not appropriate for economics majors. LEC.

GIST 704. Global Cultures and Societies. 3 Hours.
Examination of the components of culture, economic and political anthropology, major global cultural areas, and the impact of cultural differences as expressed through language, literature, religion, thought, and motivation in cross-cultural communications. LEC.

GIST 705. Globalization in History. 3 Hours.
A study of the increasing interaction among world societies since 1500 and an investigation of the long-term developments behind current world problems. Major topics include Western expansion since 1500, the spread of state sovereignty, the formation of a world economy, and the spread of international institutions. Current issues will vary, but may include environmental crises, human rights, migration, free trade and the spread of consumer culture, ethnicity and nationalism, and international intervention within states. (Same as HIST 705.) LEC.

GIST 706. Comparative Governments. 3 Hours.
Survey of different governmental structures in the contemporary world and the ways these countries have confronted issues such as modernization and development, economic security, ethnic pluralism and conflict, and globalization. LEC.

GIST 710. Interdisciplinary Research Methods for Global Contexts. 3 Hours.
This course addresses the challenges for students engaged in research in an interdisciplinary and international context. The course will take issues for research and place them within the structure of a research design process, including formulation of a general question, the appropriating of theory, the grounding of a literature review, and the posing of a testable research question and/or hypothesis. Students will also be exposed to research methodologies and how these manifest themselves through the logic of the disciplines--such as anthropology, sociology, geography, political science, history and literature. With a final thesis project design in mind, students will be expected to be expected to be able to utilize the research tools of accessing secondary analytical data, archival research, SPSS, ArcView and methods such as survey construction, implementation, and analysis, interviews, content analysis, discourse analysis, case study, and GIS. Prerequisite: GIST 701 or consent of instructor. LEC.

GIST 750. Topics in International Studies: _____. 3 Hours.
A study of one or more selected topics in international studies. Course may be taken more than once. LEC.

GIST 793. Directed Readings. 1-5 Hours.
Individual and supervised readings in a selected area of international studies. Course is repeatable with permission of the program director. LEC.

GIST 888. Contemporary China Studies. 3 Hours.
This course will review and analyze the current literature on China's social and political development, including a wide range of topics within political science. There is a rich body of literature within each topic such as civil society in China, legal reform, political culture, nationalism, gender issues, ethnicity, political behavior, elections, economic development, and inequality. This course will introduce key literature within each topic focusing on the debates among China scholars as well as how these debates fit in the general field of political science. (Same as EALC 888 and POLS 888.) Prerequisite: POLS 668 or permission of the instructor. LEC.

GIST 897. Examination Preparation. 1 Hour.
Independent study in preparation for the Comprehensive M.A. examination. Graded on satisfactory/unsatisfactory basis. May be repeated. LEC.

GIST 898. Thesis Writing. 3 Hours.
This course guides MA students through the crafting of their academic or professional thesis. The students begin the course with a literature review and data/research completed, and they will be directed through in-class workshops and deadlines with the intention to produce a full draft of their thesis. Students may choose to draft a thesis that fits either academic conventions for a similar body of research, or they may develop a body of research whose target would be a business or professional audience. Course is designed to assist students in the development of theses with varying methodologies, methods, and audiences on global and international topics. Prerequisite: GIST 710. THE.

GIST 899. Thesis. 1-6 Hours.
Enrollment for writing thesis for master's degree. THE.

HEBR 110. Elementary Israeli Hebrew I. 5 Hours. U.
A beginning course in modern Israeli Hebrew. Essentials of grammar, syntax and conversational practice; elementary reading and writing. Note: Students with other previous experience in Hebrew must take a placement exam. LEC.

HEBR 120. Elementary Israeli Hebrew II. 5 Hours. U.
A continuation of HEBR 110. Note Students with other previous experience in Hebrew must take a placement exam. Prerequisite: HEBR 110. LEC.

HEBR 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Hebrew. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

HEBR 210. Intermediate Israeli Hebrew I. 3 Hours. U.
Further development of language skills: listening comprehension, oral efficiency, intermediate grammar and syntax, reading and writing. Note: Students with other previous experience in Hebrew must take a placement exam. Prerequisite: HEBR 120. LEC.

HEBR 220. Intermediate Israeli Hebrew II. 3 Hours. U.
A continuation of HEBR 210. Note: Students with other previous experience in Hebrew must take a placement exam. Prerequisite: HEBR 210. LEC.

HEBR 230. Biblical Hebrew. 3 Hours. U.
This course introduces students to the grammatical structure and vocabulary of biblical Hebrew. It includes basic biblical passages for students to translate into English and analyze. LEC.

HEBR 240. Biblical Hebrew II. 3 Hours. U.
This is a continuation of HEBR 230. It continues the study of the grammatical structure and vocabulary of biblical Hebrew, and includes biblical texts for students to translate and analyze. Prerequisite: HEBR 230 or permission of the instructor. LEC.

HEBR 340. Advanced Israeli Hebrew I. 3 Hours. U.
Advanced study of Modern Hebrew. This course is designed to strengthen linguistic skills, enrich vocabulary, and further the study of grammar and syntax. Not open to native speakers of Hebrew. Prerequisite: HEBR 220 or permission of the instructor. LEC.
HEBR 350. Advanced Israeli Hebrew II. 3 Hours. U.
Continued advanced study of modern Hebrew. Not open to native speakers of Hebrew. Prerequisite: HEBR 340 or permission of the instructor. LEC.

HEBR 395. Study Abroad Topics in Hebrew: _____. 3-6 Hours. H.
This course is designed for the study abroad of special topics in Hebrew at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

HEBR 410. Studies in Modern Hebrew Literature. 3 Hours. H.
An introduction to Hebrew literature from the nineteenth century to the present day. The course emphasizes the development of basic interpretive skills and the understanding of basic literary movements, genres, and concepts. Not open to native speakers of Hebrew. Prerequisite: HEBR 220 or equivalent. LEC.

HEBR 420. Studies in Modern Hebrew. 3 Hours. U.
This course is designed to help students achieve fluency in speaking, listening, and writing Modern Hebrew. Not open to native speakers of Hebrew. Prerequisite: HEBR 220 or equivalent. IND.

HEBR 490. Independent Study. 1-3 Hours. U.
Intensive reading or research under faculty supervision. Not open to native speakers of Hebrew. Prerequisite: HEBR 220 or equivalent. LEC.

HNDI 110. Beginning Hindi I. 5 Hours. U.
An introduction to modern standard Hindi that emphasizes acquisition of basic language skills (speaking, comprehension, reading and writing) through a combination of lecture, drill, and work with the Devanagari script. LEC.

HNDI 120. Beginning Hindi II. 5 Hours. U.
A continuation of Beginning Hindi I that builds on basic skills of speaking and comprehension, and the writing and reading of the Devanagari script developed in Beginning Hindi I. Prerequisite: HNDI 110 or placement exam that establishes a level of proficiency in Hindi suited to Beginning Hindi II. LEC.

HNDI 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Hungarian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

HNDI 210. Intermediate Hindi I. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in modern standard Hindi, with emphasis on grammar. Readings will be introduced from representative genres of Hindi literature. Prerequisite: HNDI 120 or placement exam that establishes a level of proficiency in Hindi suited to Intermediate Hindi I. LEC.

HNDI 220. Intermediate Hindi II. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in modern standard Hindi, with emphasis on grammar. Readings will be introduced from representative genres of Hindi literature. Prerequisite: HNDI 210 or placement exam that establishes a level of proficiency in Hindi suited to Intermediate Hindi II. LEC.

HNDI 301. Topics in Hindi Culture, Language and Literature: _____. 3 Hours. U.
Investigation of special topics on Hindi culture, language and literature at the undergraduate level. May be repeated for credit when topic varies. LEC.

HNDI 310. Advanced Hindi I. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in Hindi. Readings are introduced from representative genres of Hindi literature. Prerequisite: HNDI 220 or placement exam that establishes a level of proficiency in Hindi suited to Advanced Hindi I. LEC.

HNDI 320. Advanced Hindi II. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in Hindi. Readings are introduced from representative genres of Hindi literature. Prerequisite: HNDI 310 or placement exam that establishes a level of proficiency in Hindi suited to Advanced Hindi II. LEC.

HNDI 593. Directed Study in Hindi Culture and Literature: _____. 1-3 Hours. H.
This course is designed for students seeking proficiency in Hindi beyond HNDI 320. Instructor will direct the student through readings and materials in Hindi that will add to the students substantive knowledge of India and culture in the Hindi language. May be taken multiple semesters for credit with varying content. Prerequisite: HNDI 320, and consent of instructor. LAB.

JWSH 107. Living Religions of the West. 3 Hours. HR / H.
A basic introduction to the major religious traditions of the Near East, Europe, and the Americas, with an emphasis on their development through the modern period and their expressions in contemporary life. Not open to students who have taken REL 109. (Same as REL 107.) LEC.

JWSH 124. Understanding the Bible. 3 Hours. HR / H.
An introduction to the literature of the Bible, exploring the relationships among the various types of literature present and the function of each type in the history and religious life of the people who produced and used them. Cannot be taken concurrently with REL 311 or JWSH 321 or REL 315. Not open to students who have taken REL 125 or JWSH 125. (Same as REL 124.) LEC.

JWSH 125. Understanding the Bible, Honors. 3 Hours. HR / H.
An introduction to the literature of the Bible, exploring the relationships among the various types of literature present and the function of each type in history and religious life of the people who produced and used them. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken REL 124 or JWSH 124. (Same as REL 125.) LEC.

JWSH 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Jewish Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

JWSH 300. Topics in Jewish Studies: _____. 3 Hours. H.
Examination of special topics in Jewish Studies. May be repeated if topic varies. LEC.

JWSH 311. Narratives of Jewish Life. 3 Hours. HL AE42 / H.
The course focuses on the narratives through which Jews made sense of their lives under the impact of the forces of modernity, beginning in the “old world,” and moving through the 19th century and into the 20th. The goal is to analyze how the imagination of Jewish writers was captured by the changes in social structures such as new educational, residential and occupational opportunities, leading to increased interactions with the gentile society. Students read and discuss literary works based in the shtetl in revolutionary Russia, and in America. We will also look at memoirs and letters written by ordinary Jews. All assigned texts will be in English. LEC.

JWSH 315. The Spanish Inquisition. 3 Hours. H.
A broad historical study of the Spanish Inquisition from 1478 to its afterlife in modern culture, including its use in political debates and its depiction in popular culture. Topics include anti-Semitism, the nature
of the inquisitorial investigation, the use of torture, censorship and the relationship between the Inquisition, the Spanish monarchy and other religious and lay authorities. Taught in English. Will not count toward the Spanish major. (Same as HIST 325 and SPAN 302.) LEC.

JWSH 318. Jews and Slavs in Eastern Europe. 3 Hours. H.
Jews and Slavs have shared territory from the Middle Ages to the present day. The contact between these culturally and linguistically distinct groups have shaped many centuries of Eastern European history - from the extreme violence of the pogroms to long periods of peaceful coexistence and cooperation. "Jews and Slavs" examines the history and cultural geography of Slavic-Jewish contact from the perspectives of both groups. Through literature, film, journalism, and folklore, students learn about the profound influence Jews and Slavs have had on each other, the uneasy feelings that accompanied their interactions, and the creative and fascinating impact their interaction had on both cultures. (Same as SLAV 318.) LEC.

JWSH 321. Religion of Ancient Israel. 3 Hours. H.
A study of the development of the Hebrew Bible from its earliest stages of oral tradition to its canonization with an emphasis on the relationship of the historical, intellectual, and cultural contexts shaping that development. (Same as REL 311.) Prerequisite: REL 124 or JWSH 124 or permission of instructor. LEC.

JWSH 325. Introduction to Judaism. 3 Hours. H.
Analyzes a selection of the core texts, teachings, and practices of Jewish religious traditions in terms of classical and contemporary understanding. (Same as REL 325.) LEC.

This course demystifies the Talmud, arguably the most central yet also the most mysterious text of rabbinic Judaism. Students are introduced to the scope, substance, styles, and major figures of the Talmud, and also learn how the text came into being over the course of several centuries. (Same as REL 326.) Prerequisite: REL 104, REL 107, or REL 124 or REL 125, or permission of the instructor. LEC.

JWSH 327. Jewish Secular Culture. 3 Hours. HL AE42 / H.
By examining the modern concept of Yiddishkeit (Jewishness), this course explores Jewish secularism as a set of modern intellectual, literary, and cultural practices that redefined the relationship between the secular and religious in literature, music, theatre, art, humor, and foodways. This interdisciplinary course draws on theoretical approaches from history, cultural studies, religious studies, folklore, and linguistics to examine the different secularizing cultural practices of the Jews in Central and Eastern Europe, as well as in North America. LEC.

JWSH 335. History of Jewish Women. 3 Hours. H.
This course explores the history of Jewish women from antiquity to the twentieth century. It examines the historical constructions of women's gender roles and identities in Jewish law and custom as well as the social and cultural impact of those constructions in the context of the realities of women's lives in both Jewish and non-Jewish society. (Same as HIST 335, WGSS 335.) LEC.

JWSH 336. Jewish American Literature and Culture. 3 Hours. AE41 / H.
An examination of Jewish American literature and culture from the 17th century to the present. Materials may include a broad range of literary genres as well as folklore, music, film, and visual art. (Same as ENGL 336.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

JWSH 338. Languages of the Jews. 3 Hours. H.
From the beginning, Jewish history and culture is closely tied to language, from Hebrew and Aramaic to the languages of diaspora such as Yiddish and Ladino. Focusing on issues of language in society, this course will survey the languages spoken by the Jews throughout their long history in diverse communities around the world. We will learn about Hebrew as a spoken and a sacred language, examine how Jewish languages are born and die, and discuss the resurrection of Modern Hebrew in the state of Israel. All readings are in English. No prior knowledge of languages or linguistics is required. (Same as LING 338.) LEC.

JWSH 339. Languages of the Jews, Honors. 3 Hours. H.
Honors version of JWSH 338 or LING 338, Languages of the Jews. Prerequisite: Membership in the University Honors Program or consent of instructor. (Same as LING 339.) LEC.

JWSH 340. Topics in Modern Jewish Literature: ____. 3 Hours.
This course treats Jewish literature in English or English translation in the 20th and 21st centuries either as a broad survey or according to specific themes. May be repeated for credit. LEC.

JWSH 341. Hitler and Nazi Germany. 3 Hours. H/W.
An examination of the rise of Hitler and Nazism, beginning with the breakdown of 19th century culture in the First World War and continuing through the failure of democracy under the Weimar Republic. The course will also discuss the impact of Nazism on Germany and how Nazism led to the Second World War and the Holocaust. (Same as HIST 341.) LEC.

JWSH 343. The Holocaust in History. 3 Hours. H.
The systematic murder of the Jews of Europe by the Nazis during World War II is one of the most important events of modern history. This course studies the Holocaust by asking about its place in history. It compares other attempted genocides with the Holocaust and examines why most historians argue that it is unique. Other topics covered include the reasons the Holocaust occurred in Europe when it did, the changing role of anti-Semitism, and the effects of the Holocaust on civilization. The course also discusses why some people have sought to deny the Holocaust. The course concludes by discussing the questions people have raised about the Holocaust and such issues as support for democracy, the belief in progress, the role of science, and the search for human values which are common to all societies. (Same as HIST 343.) LEC.

JWSH 344. Modern Jewish History. 3 Hours. H.
This course explores the complex of interactions between Jews, Judaism, and modernity by examining the challenges to Jewish life and thought, community and culture, self-understanding and survival, from the early modern period to the present day. Through the lenses of religious, cultural, intellectual, and political expression, the course examines the social, economic, and demographic changes in Jewish communities in Western, Central and Eastern Europe, the United States, and Israel along with the impact of antisemitism and the Holocaust. (Same as HIST 344.) LEC.

JWSH 350. Contemporary Jewish Identities. 3 Hours. SC / H.
This course explores the variety of ways in which American Jews create Jewish identities as individuals and groups. It traces the emergence of the various current divisions within Judaism: Reform Judaism (which by definition, implies Orthodoxy), then Conservative Judaism, and then the later development of Reconstructionist Judaism. The course also explores other contemporary options for being Jewish: cultural Jews, secular Jews, unaffiliated Jews, religious Jews, and gay or lesbian or transgendered Jews. LEC.

JWSH 361. Jewish Film. 3 Hours. HL / H.
An examination of the cultural history of the Jews through films that explore Jewish themes, including but not limited to: issues of tradition
and modernity, religion and secularism, immigration, gender, Zionism, anti-Semitism, and the Holocaust. Films studied may be in English and in foreign languages (with English subtitles) like Yiddish, Hebrew, and Russian. LEC.

JWSH 395. Study Abroad Topics in Jewish Studies: _____. 3-6 Hours. H.
This course is designed for the study of special topics in Jewish Studies at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

JWSH 490. Directed Study in Jewish Studies. 3 Hours. AE61 / H.
Intensive reading or research under faculty supervision. Prerequisite: Consent of instructor. IND.

JWSH 491. Directed Study in Jewish Studies, Honors. 3 Hours. AE61 / H.
Honors version of JWSH 490. Intensive reading or research under faculty supervision. Prerequisite: Membership in the University Honors Program or consent of instructor. IND.

JWSH 523. The Dead Sea Scrolls. 3 Hours. H.
A study of the archeological evidence and texts from the Dead Sea area that provide primary evidence for Jewish religious belief and practice in the Greek and Roman periods (ca. 250 B.C.E. - 135 C.E.). (Same as REL 523.) Prerequisite: REL 124 or JWSH 124 or consent of instructor. LEC.

JWSH 525. Jews and Christians. 3 Hours. H.
This course examines the ways Jews and Christians have interacted with and characterized one another at various points in their histories. Special emphasis is placed on the gradual separation of the two religious traditions in the 1st-4th centuries. (Same as REL 525.) Prerequisite: A previous course in Religious Studies or Jewish Studies; or consent of instructor. LEC.

JWSH 526. Jewish History and Literature in the Greek and Roman Periods. 3 Hours. H.
The history and literature of the Jewish people from the hellenistic period (late fourth century B.C.E. to the codification of the Mishnah 210 C.E.). Select texts from the Hebrew Bible, the so-called apocrypha and pseudepigrapha, the Qumran scrolls, Philo, Josephus, related early Christian texts, and Rabbinic texts will be studied. (Same as REL 526.) Prerequisite: REL 124 or JWSH 124 or permission of instructor. LEC.

JWSH 560. Classical and Contemporary Jewish Thought. 3 Hours. H.
An introduction to individual Jewish thinkers and collective projects from Philo to the present, including The Talmud and Midrash, Middle Age and Early Modern Jewish philosophical and Talmudic rationalism and mysticism. Considers such thinkers as Spinoza, Cohen, Soloveitchik, Rosenzweig, and Levinas. (Same as REL 560.) Prerequisite: A previous course in Religious Studies or Jewish Studies; or consent of instructor. LEC.

JWSH 570. Studies in Judaism. 3 Hours. H.
A study of the major intellectual sources of the Jewish tradition from the Mishna, Talmud, Midrash, prayerbook, philosophers, the Zohar, and the Shulchan Aruch. (Same as REL 570.) Prerequisite: A course in Religious Studies or Jewish Studies numbered 300 or above. LEC.

JWSH 572. Jewish Folklore. 3 Hours. H.
Jewish folklore is extraordinarily rich and varied. From folktales to riddles, from legends about the exalted rabbis to irreverent jokes, folklore is central to the Jewish way of life. This course traces the extent to which oral elements appear in traditional Jewish literary texts such as the Bible; read and discuss folktales, and examine minor genres such as proverbs, riddles and jokes. Topics include the supernatural beings of Jewish folklore dybbuks, seductive female demons, and golems.

Students acquire theoretical tools with which to analyze folklore (Jewish or otherwise), read stories, watch movies, and collect samples of folklore from informants. LEC.

JWSH 573. Jewish Folklore, Honors. 3 Hours. H.
Honors version of JWSH 572. Jewish folklore is extraordinarily rich and varied. From folktales to riddles, from legends about the exalted rabbis to irreverent jokes, folklore is central to the Jewish way of life. This course traces the extent to which oral elements appear in traditional Jewish literary texts such as the Bible; read and discuss folktales, and examine minor genres such as proverbs, riddles and jokes. Topics include the supernatural beings of Jewish folklore dybbuks, seductive female demons, and golems. Students acquire theoretical tools with which to analyze folklore (Jewish or otherwise), read stories, watch movies, and collect samples of folklore from informants. Open only to students in the University Honors Program or by permission of instructor. LEC.

JWSH 600. Advanced Topics in Jewish Studies: _____. 3 Hours. H.
Examination of advanced topics in Jewish Studies. May be repeated if topic varies. Prerequisite: Consent of instructor. LEC.

JWSH 650. Service Learning in Jewish Studies. 3 Hours. S.
This course, to be taken in the junior or senior year, is designed to give students the opportunity to apply the knowledge, concepts, and ideas gained in courses in Jewish studies to real-life situations in appropriate agencies and organizations. Open to students in the Jewish Studies program. Prerequisite: Permission of instructor. FLD.

TAJ 110. Elementary Tajik I. 5 Hours. U.
Vocabulary acquisition, pronunciation, grammar, and writing. Course includes reading of simple texts. Five hours of class per week. LEC.

TAJ 120. Elementary Tajik II. 5 Hours. U.
Continuation of TAJ 110. Vocabulary acquisition, pronunciation, grammar, and writing. Course includes reading of simple texts. Five hours of class per week. Prerequisite: TAJ 110 or departmental permission. LEC.

TAJ 210. Intermediate Tajik I. 3 Hours. U.
A continuation of TAJ 120. Course emphasizes oral and written work in Tajik. Systematic review of grammar and introduction to reading in cultural texts. Prerequisite: TAJ 120 or departmental permission. LEC.

TAJ 220. Intermediate Tajik II. 3 Hours. U.
A continuation of TAJ 210. Course emphasizes oral and written work in Tajik. Systematic review of grammar and introduction to reading in cultural texts. Prerequisite: TAJ 210 or departmental permission. LEC.

TAJ 310. Advanced Tajik I. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in Tajik. Readings from Tajik literature introduced. Prerequisite: TAJ 220 or placement exam that establishes a level of proficiency in Tajik suited to Advanced Tajik I. LEC.

TAJ 320. Advanced Tajik II. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in Tajik. Readings from Tajik literature introduced. Prerequisite: TAJ 220 or placement exam that establishes a level of proficiency in Tajik suited to Advanced Tajik II. LEC.

TAJ 510. Tajik for Geographers. 1 Hour. H.
The course is designed to facilitate the use of primary sources in Tajik for carrying out research in human geography of Tajikistan. TAJ 510 complments REES 510. Prerequisite: TAJ 220, or consent of instructor. LEC.

TAJ 532. Tajik For Sociologists. 1 Hour. H.
The course is designed to facilitate the use of primary sources in Tajik for carrying out research in sociology of Tajikistan. TAJ 532 complments SOC 532. Prerequisite: TAJ 220, or consent of instructor. LEC.
Co-Major in European Studies

Why study European studies?

European studies broaden, deepen, and strengthen, through interdisciplinary study, a student’s knowledge and understanding of the enduring importance of our transatlantic partners, the Europeans.

First- and Second-Year Preparation

To complete the requirements for the degree in 4 years, prospective co-majors are encouraged to complete all general education and language requirements no later than fall semester of the junior year. Students should begin study of a western European language other than English or Russian as early as possible. For more information, contact the European Studies Advising Specialist, Laura Leonard, 785-864-3500, laleonar@ku.edu.

During their first and second years, students are required to enroll in HIST 115 and in 1 additional course from the list below:

Choose 1 of the following: 3-4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 104</td>
<td>Introductory Economics</td>
</tr>
<tr>
<td>ECON 144</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>ECON 145</td>
<td>Principles of Macroeconomics, Honors</td>
</tr>
<tr>
<td>GEOG 100</td>
<td>World Regional Geography</td>
</tr>
<tr>
<td>GEOG 102</td>
<td>Principles of Human Geography</td>
</tr>
<tr>
<td>POLS 150</td>
<td>Introduction to Comparative Politics</td>
</tr>
<tr>
<td>POLS 151</td>
<td>Introduction to Comparative Politics Honors</td>
</tr>
<tr>
<td>POLS 170</td>
<td>Introduction to International Politics</td>
</tr>
<tr>
<td>POLS 171</td>
<td>Introduction to International Politics Honors</td>
</tr>
<tr>
<td>HA 100</td>
<td>Introduction to Western Art History</td>
</tr>
<tr>
<td>PHIL 180</td>
<td>Introduction to Social and Political Philosophy</td>
</tr>
</tbody>
</table>

Note: Enrollment in the above courses counts toward College principal course distribution requirements in the humanities and social sciences.

Note: European Studies co-majors are strongly encouraged to study abroad and should discuss this opportunity with the Advising Specialist or Academic Director early in their undergraduate career.

Admission to the Co-Major

Admission Requirements

1. Second-semester sophomore or junior standing.
2. Declared major in a department or admission to a professional school.

Requirements for the Co-Major

European Studies Prerequisites or Co-requisites (18)

Students selecting this co-major must complete the following:

French Revolution to the Present: Europe 1789–Present. Satisfied by:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 115</td>
<td>French Revolution to the Present: Europe 1789–Present</td>
</tr>
</tbody>
</table>

Interdisciplinary Perspective. Satisfied by one course from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 104</td>
<td>Introductory Economics</td>
</tr>
<tr>
<td>ECON 144</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>GEOG 100</td>
<td>World Regional Geography</td>
</tr>
</tbody>
</table>

Students selecting this co-major must complete the following:

Second Language Skills (3 hours). Students must complete one semester beyond the College general education second language requirement (completion of a fourth-semester course) in a modern western European language (Danish, Dutch, French, German, Hungarian, Italian, Portuguese, Polish, Spanish, Swedish).

Seminar in European Studies. Satisfied by one of the following: 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EURS 500</td>
<td>Seminar in European Studies</td>
</tr>
<tr>
<td>EURS 503</td>
<td>Europe Today</td>
</tr>
</tbody>
</table>

Upper-Division General European Studies Required Electives. 9

Satisfied by three approved courses (9 hours), two of which must be from different departments. The following list is not exhaustive; visit the European Studies website or speak with the undergraduate advisor each semester for a complete list of approved general European Studies courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 542</td>
<td>History of Architecture III: Modern</td>
</tr>
<tr>
<td>ARCH 665</td>
<td>History of Urban Design</td>
</tr>
<tr>
<td>ECON 535</td>
<td>Economic History of Europe</td>
</tr>
<tr>
<td>EURS/EURS</td>
<td>Economic Issues of the European Union</td>
</tr>
<tr>
<td>536</td>
<td></td>
</tr>
<tr>
<td>EURS 563</td>
<td>Current Economic Issues of East Europe</td>
</tr>
<tr>
<td>EURS 502</td>
<td>European Culture and Society 1945 to Present</td>
</tr>
<tr>
<td>EURS/HIST/</td>
<td>History of War and Peace</td>
</tr>
<tr>
<td>PCS 329</td>
<td></td>
</tr>
<tr>
<td>EURS 503</td>
<td>Europe Today</td>
</tr>
<tr>
<td>EURS 505</td>
<td>Studies in Exile Literature</td>
</tr>
<tr>
<td>EURS 506</td>
<td>Culture and Politics of the Cold War in Western Europe</td>
</tr>
<tr>
<td>EURS 507</td>
<td>Research in European Collections</td>
</tr>
<tr>
<td>EURS 508</td>
<td>Politics and Economics of Cultural Production in Western Europe</td>
</tr>
<tr>
<td>EURS 509</td>
<td>Introduction to the Study of Southern European Societies</td>
</tr>
<tr>
<td>EURS 511</td>
<td>Topics in European Studies: ______ (when covering 2 or more countries)</td>
</tr>
<tr>
<td>EURS 604</td>
<td>The European Union</td>
</tr>
<tr>
<td>HA 533</td>
<td>European Art 1789-1848: Gender and Revolution</td>
</tr>
<tr>
<td>HA 564</td>
<td>European Art, 1900-1945</td>
</tr>
<tr>
<td>HA 565</td>
<td>Art Since 1945</td>
</tr>
<tr>
<td>HIST 334</td>
<td>The Great War: The History of World War I</td>
</tr>
<tr>
<td>HIST 340</td>
<td>The History of the Second World War</td>
</tr>
<tr>
<td>HIST 343</td>
<td>The Holocaust in History</td>
</tr>
<tr>
<td>HIST 380</td>
<td>Revolutionary Europe: The People in Arms</td>
</tr>
<tr>
<td>HIST 527</td>
<td>Recent European History, 1870 to the Present</td>
</tr>
<tr>
<td>HIST 528/</td>
<td>Economic History of Europe</td>
</tr>
<tr>
<td>ECON 535</td>
<td></td>
</tr>
<tr>
<td>HIST 529</td>
<td>Intellectual History of 19th Century Europe</td>
</tr>
</tbody>
</table>
HIST 533  The History of Women and the Family in Europe, from 1500 to the Present
HWC/EURS 430  European Civilization in World Context: ______
IBUS 400  Special Topics in International Business: ______
IBUS 410  Introduction to International Business
PCS/EURS 550  Classics of Peace Literature
PHIL 560  Nineteenth Century Philosophy
PHIL 592  Contemporary Continental Philosophy
POLS 652  Politics in Europe
POLS 655  Politics of East-Central Europe
POLS 663  Protest and Revolution
POLS 669  Topics in Comparative Politics: ______ (when covering Europe, among other regions)
POLS 681  Comparative Foreign Policy
POLS 689  Topics in International Relations: (when covering Europe, among other regions)
SOC 500  Sociological Theory
SOC 530  Industrial Revolution and Capitalist Development
SOC 780  Advanced Topics in Sociology: ______ (when covering comparative social policy between the United States and Europe)
THR 526  History of Theatre

**Upper-Division National or Regional European Studies Requirements (0)**

Satisfied by two approved country- or region-specific courses (6 hours), two of which must cover two different countries or regions. This list is not exhaustive; go to the European Studies website or speak with the undergraduate advisor each semester for a complete list of approved upper-division national or regional European Studies courses.

ARCH 632  Contemporary French Architecture
ARCH 690  Architecture Study Abroad (France, Italy, Germany, or United Kingdom)
ENGL 309  The British Novel
ENGL 314  Major British Writers after 1800
ENGL 315  Studies in British Literature
ENGL 324  Contemporary Authors: ______ (when British or Irish)
ENGL 327  Studies in Twentieth-Century Drama: ______ (when at least 50 percent British/Irish)
ENGL 332  Shakespeare
ENGL 334  Major Authors: ______ (when British or Irish)
ENGL 479  The Literature of: ______ (when British or Irish)
ENGL 530/512  Irish Literature and Culture: ______
EPRS 509  Introduction to the Study of Southern European Societies
EPRS 510  Scandinavian Life and Civilization
EPRS 511  Topics in European Studies: ______ (when country-specific)
EPRS 512/530  Irish Literature and Culture: ______
FREN 152  France and the French (taught in English)
FREN 326  Introduction to French Literature
FREN 470  French Literature of the Twentieth Century
GERM 462  The German Business Environment
HA 530  Renaissance Art in Italy: The 15th Century
HA 534  Art in France 1840-1900: Modernism
HA 600  Biography of a City: ______ (European city only)
HIST 341  Hitler and Nazi Germany
HIST 525  Modern France: From Napoleon to de Gaulle
HIST 537  France from the Renaissance to the French Revolution
HIST 548  British History, 1832 to the Present.
HIST 551  Spain and Its Empire, 1450-1700
HIST 555  Aspects of British Political Thought
HWC 520  Literature in Translation: ______ (when a European literature)
ITAL 301 & ITAL 302  Introduction to Italian Literature I and Introduction to Italian Literature II
ITAL 335 & ITAL 336  Italy and the Italians I and Italy and the Italians II (taught in English)
POLS 655  Politics of East-Central Europe
SCAN 570  Scandinavian Life and Civilization
SPAN 448  Spanish Language and Culture for Business
SPAN 453  Twentieth Century Spanish Studies: ______
SPAN 470  Studies in Spanish Culture and Civilization: ______
SPAN 550  Colloquium on Spanish Film

Note: This list is not exhaustive. Visit the European Studies website or the program office each semester for a complete list of upper-division national or regional European Studies courses.

**Capstone-Final Senior Course**

In the senior year, students complete one of the following options:

**Option A: Senior Thesis in European Studies.** Satisfied by EPRS 501. A semester-long independent research project under the supervision of a faculty thesis director. Students should contact Lorie A. Vanchena, Academic Director of European Studies, vanchena@ku.edu, before registering for EPRS 501.

**Option B.** Two additional upper-division European Studies courses. Satisfied by general European or country-specific electives chosen from the course lists above.

**Junior/Senior (300+) European studies courses.** Satisfied by 2 courses (6 hours) of general European or country-specific electives chosen from the course lists above.

Courses taken during a study abroad program in Europe may fulfill co-major requirements. Students should consult the Advising Specialist for European Studies about study abroad credit before their program departure.

**Co-Major Hours & Major GPA**

While completing all required courses, co-majors must also meet each of the following hour and grade-point average minimum standards:

**Co-Major Hours**
Satisfied by 24 hours of co-major courses.
The KU Core website (http://kucore.ku.edu/courses). To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

Below is a sample 4-year plan for students pursuing the co-major in European Studies. The European Studies co-major must be completed along with a full major. The co-major requires 4th-semester language proficiency in a modern western European language (Danish, Dutch, French, German, Hungarian, Italian, Portuguese, Polish, Spanish, Swedish), as well as one additional semester of an advanced language course (i.e. one 300-level language course).

To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

<table>
<thead>
<tr>
<th>Major Hours in Residence</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied by a minimum of 24 hours of KU resident credit in the co-major.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Major Junior/Senior Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied by a minimum of 24 hours from junior/senior courses (300+) in the co-major.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major Junior/Senior Graduation GPA</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (<a href="http://clas.ku.edu/undergrad/tools/gpa">http://clas.ku.edu/undergrad/tools/gpa</a>).</td>
<td></td>
</tr>
</tbody>
</table>

No more than 12 hours may be shared between a 27-hour European Studies co-major and another major.

| No major courses may be shared between a 27-hour European Studies co-major and another major. | |

Below is a sample 4-year plan for students pursuing the co-major in European Studies. The European Studies co-major must be completed along with a full major. The co-major requires 4th-semester language proficiency in a modern western European language (Danish, Dutch, French, German, Hungarian, Italian, Portuguese, Polish, Spanish, Swedish), as well as one additional semester of an advanced language course (i.e. one 300-level language course).

To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

<table>
<thead>
<tr>
<th>Freshman</th>
<th>13-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Hours Spring</td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 (2 crs req), BA Writing I)</td>
<td>3 ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)</td>
</tr>
<tr>
<td>MATH 101 (Goal 1.2 Quantitative Reasoning)</td>
<td>3 Quantitative Reasoning (Goal 1.2, BA Quantitative Reasoning)</td>
</tr>
<tr>
<td>1st Semester Language (BA 1st Language)</td>
<td>5 2nd Semester Language (BA 2nd Language)</td>
</tr>
<tr>
<td>1st Semester Language (BA 1st Language)</td>
<td>5 2nd Semester Language (BA 2nd Language)</td>
</tr>
<tr>
<td>HIST 115 (Goal 1.1 or Goal 3 Humanities, Co-Major Requirement)</td>
<td>3 Goal 2.2 Communication</td>
</tr>
<tr>
<td>Elective or possible minor course (Total Hours)</td>
<td>3 EURS Co-Major Interdisciplinary Perspective Course (Co-Major Requirement)</td>
</tr>
<tr>
<td></td>
<td>17</td>
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</table>

<table>
<thead>
<tr>
<th>Sophomore</th>
<th>13-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Hours Spring</td>
</tr>
<tr>
<td>3rd Semester Language (BA 3rd Language)</td>
<td>3 4th Semester Language (BA 4th Language)</td>
</tr>
<tr>
<td>Second Language (BA 2nd Language)</td>
<td>3 4th Semester Language (BA 4th Language)</td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3 Goal 3 Natural Science</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3 Lab Science (BA Lab Requirement)</td>
</tr>
<tr>
<td>Major Course</td>
<td>3 Major Course</td>
</tr>
<tr>
<td>Elective or possible minor course (Total Hours)</td>
<td>3 Elective or possible minor course 300+ (Total Hours)</td>
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<td>15</td>
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</table>

<table>
<thead>
<tr>
<th>Junior</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Hours Spring</td>
</tr>
<tr>
<td>Advanced Language Course 300+ (Co-Major Requirement)</td>
<td>3 Goal 4.2 Global Awareness</td>
</tr>
<tr>
<td>Major Course</td>
<td>3 Goal 5 Social Responsibility &amp; Ethics</td>
</tr>
<tr>
<td>Major Course</td>
<td>3 Major Course 300+</td>
</tr>
<tr>
<td>EURS Elective 300+ (Co-Major Requirement)</td>
<td>3 Major Course 300+</td>
</tr>
<tr>
<td>EURS Elective 300+ (Co-Major Requirement)</td>
<td>3 EURS Elective 300+ (Co-Major Requirement)</td>
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<td></td>
<td>15</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Senior</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Hours Spring</td>
</tr>
<tr>
<td>EURS National or Regional Elective 300+ (Co-Major Requirement)</td>
<td>3 EURS National or Regional Elective 300+ (Co-Major Requirement)</td>
</tr>
<tr>
<td>Major Course 300+</td>
<td>3 EURS 500 or 503 (Goal 6 Integration &amp; Creativity, Co-Major Requirement)</td>
</tr>
<tr>
<td>Major Course 300+</td>
<td>3 Major Course 300+</td>
</tr>
<tr>
<td>Major Course 300+</td>
<td>3 Elective or possible minor course 300+ (Total Hours)</td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3 LA&amp;S 492 (Job Search Strategies, or elective)</td>
</tr>
<tr>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

Total Hours: 120-121

1 The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2 The BA degree requires 4th-semester language proficiency. The European Studies Co-Major requires 4th-semester language proficiency specifically in a modern western European language (Danish, Dutch, French, German, Hungarian, Italian, Portuguese, Polish, Spanish, Swedish).

3 Visit this website (http://college.ku.edu/undergrad/curriculum/ba_QR) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

4 An interdisciplinary perspective course is required for the European Studies Co-Major. Visit the degree requirements (http://catalog.ku.edu/liberal-arts-sciences/european-studies/co-major/#requirementstext) tab for a list of approved courses.

5 This degree plan does not include specific major requirements as the European Studies Co-Major can be paired with any major. Most majors do include approximately 30 credit hours, of which 15 must be at the Jr/Sr level. Additionally, students typically take a Goal 6 Integration & Creativity course within their major.

6 The European Studies Co-Major requires one advanced language course beyond 4th-semester proficiency (i.e. one 300-level course).
3 courses (9 hours) of upper-division general European Studies elective courses are required. Two of which must be from different departments. Visit the degree requirements (http://catalog.ku.edu/liberal-arts-sciences/european-studies/co-major/#requirementstext) tab for a list of approved courses, or meet with an undergraduate advisor in European Studies.

2 courses (6 hours) of upper-division National or Regional European Studies courses are required, which must cover two different countries or regions. Visit the degree requirements (http://catalog.ku.edu/liberal-arts-sciences/european-studies/co-major/#requirementstext) tab for a list of approved courses, or meet with an undergraduate advisor in European Studies.

A seminar course in European Studies is required. This requirement can be fulfilled by one of two options:

Option A: Senior Thesis in European Studies. Satisfied by EURS 501. A semester-long independent research project under the supervision of a faculty thesis director. Students should contact Lorie A. Vanchena, Academic Director of European Studies, vanchena@ku.edu, before registering for EURS 501.

Option B. Two additional upper-division European Studies courses. Satisfied by general European or country-specific electives chosen from the course lists above.

* No more than 12 hours may be shared between a 27-hour European studies co-major and another major.

Please note:

All students in the College of Liberal Arts and Sciences are required to completed 120 total hours of which 45 hours must be at the Jr/Sr (300+) level, and 100 hours must be from within the College of Liberal Arts and Sciences.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

Departmental Honors

Honors in European Studies is open to co-majors who have earned, both at the time of entry into the program and at graduation, overall grade-point averages of 3.25 or higher and of 3.5 or higher in European studies. A student must complete all co-major requirements, including EURS 502 Senior Honors Thesis in European Studies, with a grade of A.

The senior honors thesis affords exceptional students the opportunity to work closely with an individual faculty member on a specific research project over an extended period of time, usually two semesters. The senior honors thesis may be combined with EURS 501 Senior Thesis in European Studies, substantially increasing the length and scope of the final thesis, or the senior honors thesis may be a separate extension of the senior thesis.

A student in EURS 502 must defend the thesis in a 1-hour oral examination with faculty. The examination committee is composed of 3 faculty members, 1 of whom must be the thesis director. The student selects the committee members in consultation with the thesis director. Students should consult Dr. Lorie A. Vanchena, Academic Director of European Studies, vanchena@ku.edu, early in their junior year.

Study Abroad

The European Studies program strongly encourages students to enroll in one of KU’s many study abroad programs in Europe.

European Studies participates in the Humanities and Western Civilization semester abroad program in Paris and Florence.

Summer language institutes offering upper-division courses in language of literary study may also qualify for European Studies co-major or minor credit. Contact a program advisor in the Office of Study Abroad (http://www.studyabroad.ku.edu), 108 Lippincott Hall, 785-864-3742.

Minor in European Studies

Why study European studies?

European studies broaden, deepen, and strengthen, through interdisciplinary study, a student’s knowledge and understanding of the enduring importance of our transatlantic partners, the Europeans.

Requirements for the Minor

Students selecting this minor must complete the following:

European Studies Minor Core Knowledge and Skills (18)

Second Language Skills. (3 hours) Students must complete one semester beyond the College general education, second language requirement (which is the completion of a fourth-semester course) in a modern western European language (Danish, Dutch, French, German, Hungarian, Italian, Portuguese, Polish, Spanish, or Swedish).

Foundation Course: Seminar in European Studies. Satisfied by:

EURS 500 Seminar in European Studies or EURS 503 Europe Today

1 approved modern European history course

European Studies Minor Electives.

Select three of the four following options:

1 approved European politics course
1 approved European economics or business course
1 approved general European culture or history course
1 approved national or regional European course

A current list of approved courses for the minor is available on the European Studies website and from the Program’s Advising Specialist and Academic Director.

Note: No more than 1 course may be counted both in the minor and another degree or minor program.

Minor Hours & Minor GPA

Minor Hours

Satisfied by 18 hours of minor courses.

Minor Junior/Senior (300+) Hours in Residence

Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the minor.

Minor Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Department of French and Italian

Why study French, Italian, and Francophone studies?
French, Italian, and Francophone studies ensure that our students succeed in an interconnected world.

Undergraduate French
The Department of French & Italian offers a comprehensive undergraduate program in French language, literature, and culture, as well as Francophone literature and culture from around the world. In addition to first and second year courses in basics of grammar and conversation, advanced undergraduate courses in composition, literature, and culture are offered every semester. We offer a summer study abroad option in Paris, and a full semester study abroad program in Angers. Our summer and semester-long study abroad programs in Paris and Angers offer a wide variety of levels to students at all stages of linguistic competence. The major prepares students for a variety of careers in teaching or in graduate studies, as well as in fields such as interpreting, international business, art, art history, and travel. We encourage applicants from traditional and non-traditional backgrounds to investigate French as a major or as a minor field.

Undergraduate Italian
The Department of French & Italian offers a comprehensive undergraduate program in Italian language, literature, and culture, leading to the BA in French with the Italian Option or to the Minor in Italian. Italian offers courses in basic grammar, composition and conversation, literature and culture. The course sequence Italy and the Italians (ITAL 335-336) is also offered via ITV at the Edwards Campus in Kansas City. Our summer study abroad program in Florence offers a wide variety of levels to students at all stages of linguistic competence. The major prepares students for a variety of careers in teaching or in graduate studies, as well as in fields such as interpreting, international business, art, art history, architecture, and travel. We encourage applicants from traditional and non-traditional backgrounds to enrich their time at KU through the study of Italian.

Graduate French
The Department of French & Italian offers the M.A. and Ph.D. degrees in French and Francophone language, literature, and culture. Graduate study is supported through teaching assistantships offered to qualified candidates, who receive thorough training in language instruction. Excellent facilities, strong library holdings, and a faculty dedicated to both teaching and research assure students of a challenging and professional graduate preparation.

Undergraduate Programs
Course work in the Department of French and Italian gives undergraduates a valuable and useful linguistic tool; offers cultural training for students specializing in other fields; trains majors in the literature, culture, and civilization of France and Italy; and prepares prospective language teachers. The department welcomes qualified students from all disciplines, regardless of major.

Placement
In general, placement depends on the overall proficiency of the student and on what was accomplished in previous French or Italian courses. A student entering KU with no previous French should enroll in FREN 110. A student entering KU with no previous Italian should enroll in ITAL 107, ITAL 110, or ITAL 155.

Students with past course work/experience in French should take the online French placement examination offered through the Ermal Garinger Academic Resource Center (http://egarc.ku.edu) at KU. Once the student has the placement score, he or she should contact the French language coordinator in the Department of French and Italian to determine which French course is appropriate for his or her level. A student who has four years of high school French and wants to continue the study of French beyond the language requirement generally enrolls in FREN 300 or FREN 326, depending on the placement examination results. Students who feel they are sufficiently prepared to test out of the language requirement may contact the department office to arrange to take a French proficiency test.

Any student with past course work or experience in Italian should contact the Italian program director in the Department of French and Italian to determine which Italian course is appropriate for his or her level.

Retroactive Credit
Students with no prior college or university French or Italian course credit are eligible for retroactive credit according to this formula:

- 3 hours of retroactive credit are awarded to a student with 2 or 3 years of high school French or Italian who enrolls initially at KU in a third-semester French or Italian course (FREN 230 or FREN 231 or ITAL 230) and receives a grade of C– or higher.
- 6 hours of retroactive credit are awarded to a student with 3 or 4 years of high school French or Italian who enrolls initially at KU in a fourth-semester French or Italian course (FREN 240 or FREN 241 or ITAL 240) and receives a grade of C– or higher.
- 9 hours of retroactive credit are awarded to a student with 4 years of high school French or Italian who enrolls initially at KU in a French or Italian course with a fourth-semester course as a prerequisite and receives a grade of C– or higher.

Courses for Nonmajors
All courses are open to nonmajors who meet requirements. Candidates for the B.S. degree in education who want to major or minor in French (p. 341) should consult the School of Education. Special concentrations in French and Italian are also available through business and journalism.

Graduate Program in French
The Department of French and Italian offers a comprehensive graduate program (M.A. and Ph.D.) in French and Francophone language, literature, and culture. Our faculty (http://www.frenchitalian.ku.edu/faculty) is dynamic, professionally active, and committed to excellence in scholarship and teaching. Although the major emphasis of teaching and research is French and Francophone literature, the department also offers courses in literary theory, cultural studies, and film. The department offers a balanced emphasis on all periods from medieval through twentieth century.
Our students represent a diverse group, and we encourage equally applicants from traditional and nontraditional backgrounds. Excellent facilities, strong library holdings, and a faculty dedicated to both teaching and research assure students of a challenging and professional graduate preparation. Please visit the Graduate Program page (https://frenchitaliandev.drupal.ku.edu/overview-5) of the department website for additional information.

**Departmental Funding**

While it is not guaranteed, the department does its best to provide funding in the form of Graduate Teaching Assistantship (GTA) appointments to all incoming graduate students. GTA appointments are awarded for the academic year and come with:

- a competitive academic year (9 month) salary
- a 100% tuition waiver for all courses at KU
- payment of up to 3 hours of student fees
- optional University-subsidized group health insurance

The appointments are guaranteed based on performance for up to 3 years for M.A. students, 5 years for Ph.D. students and 6 years for students who receive both an M.A. and a Ph.D. at The University of Kansas. GTAs receive thorough training in language instruction, close mentoring, and the opportunity to teach French at a variety of levels, forming a strong base of teaching experience upon entering the job market. Additional information about teaching for the department is available on the Graduate Funding page (https://frenchitaliandev.drupal.ku.edu/graduate-teaching) of our departmental website.

**Additional Funding**

Other funding opportunities for graduate students include the Office of Study Abroad’s Springer award; the department’s Cornell, Mahieu, and Magerus fellowships; awards for research abroad; and French university exchanges.

Visit the Graduate Studies website for additional information about funding opportunities (http://graduate.ku.edu/funding) for graduate students at KU.

Financial Aid and Scholarships (http://affordability.ku.edu/steps/index.shtml) administers grants, loans, and need-based financial aid.

**Courses**

**FREN 100. French for Reading Knowledge. 3 Hours. U.**
Special course for candidates for advanced degrees in other departments. Fundamentals of grammar and reading of material of medium difficulty. Intended primarily for graduate students, but open also to seniors planning graduate study. Does not satisfy any part of the undergraduate language requirement. Presupposes no previous study of French. Conducted in English. LEC.

**FREN 104. Elementary French, Overseas. 1-5 Hours. U.**
Basic language instruction in French for beginners participating in study abroad programs in France or a French-speaking country. Graded satisfactory/unsatisfactory. LEC.

**FREN 107. Elementary French I for the Professional Schools. 3 Hours.**
Essentials of French grammar; practice in speaking, reading, and writing French. Introduction to French business culture. Three hours of class per week. This course does not satisfy the College of Liberal Arts and Sciences foreign language requirement. LEC.

**FREN 108. Elementary French II for the Professional Schools. 3 Hours. U.**
Essentials of French grammar; practice in speaking, reading, and writing French. Introduction to French business culture. Three hours of class per week. This course does not satisfy the College of Liberal Arts and Sciences foreign language requirement. Prerequisite: FREN 107 or equivalent. LEC.

**FREN 109. Elementary French III for the Professional Schools. 3 Hours. U.**
Essentials of French grammar; practice in speaking, reading, and writing French. Introduction to French business culture. Three hours of class per week. This course does not satisfy the College of Liberal Arts and Sciences foreign language requirement. Prerequisite: FREN 108 or equivalent. LEC.

**FREN 110. Elementary French I. 5 Hours. U.**
Five hours of class per week. A balanced approach stressing understanding, speaking, reading, and writing. LEC.

**FREN 111. Introduction to French I. 3 Hours. U.**
Introduction to French for special purposes; no previous French required. Provides basic familiarity with the French language, focusing on speaking, listening, reading and the essentials of French grammar. Introduction to the culture of the French-speaking world. Three class hours per week; may be delivered by videoconference or face-to-face. Does not satisfy any KU language requirement. Prerequisite: Instructor permission required. LEC.

**FREN 112. Introduction to French II. 3 Hours. U.**
Continuation of FREN 111. Further development of basic familiarity with the French language, focusing on speaking, listening, reading and the essentials of French grammar. Continued exploration of the culture of the French-speaking world. Three class hours per week; may be delivered by videoconference or face-to-face. Does not satisfy any KU language requirement. Prerequisite: FREN 111 or permission of instructor. LEC.

**FREN 113. Introduction to French III. 1.5 Hour. U.**
Continuation of FREN 112. Further development of basic familiarity with the French language, focusing on speaking, listening, reading and the essentials of French grammar. Continued exploration of the culture of the French-speaking world. Three class hours per week; may be delivered by videoconference or face-to-face. Does not satisfy any KU language requirement. Prerequisite: FREN 112 or permission of instructor. LEC.

**FREN 120. Elementary French II. 5 Hours. U.**
Five hours of class per week. A balanced approach stressing understanding, speaking, reading, and writing. Prerequisite: FREN 110 or by departmental permission. LEC.

**FREN 152. France and the French. 3 Hours. HL AE42/GE2H / H.**
A comprehensive, interdisciplinary survey of French culture that may include topics ranging from the earliest times to the present, with particular attention to literature, the arts, thought, politics, society, food, and customs. Taught in English. Does not fulfill any requirement in the French major or minor. LEC.

**FREN 177. First Year Seminar: _____ 3 Hours. GE11 / U.**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in French. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

**FREN 230. Intermediate French I. 3 Hours. U.**
Third-semester course stressing oral and written work in French; systematic review of grammar and introduction to reading in cultural
texts. (See also FREN 231, FREN 234.) Prerequisite: FREN 120 or by departmental permission. LEC.

FREN 231. Intermediate French I, Honors. 3 Hours. U.
Similar in approach and content to FREN 230; smaller class size; open to students who had done very good to excellent work in previous French classes. Prerequisite: Grade of B or A in FREN 120 or departmental permission. LEC.

FREN 234. Intermediate French I and II. 6 Hours. U.
One-semester course meeting five times a week for six hours credit. Material same as in FREN 230 and FREN 240. (FREN 234, FREN 240, FREN 241--each completes foreign language requirement.) Prerequisite: FREN 120 or by departmental permission. LEC.

FREN 240. Intermediate French II. 3 Hours. U.
Continuation of FREN 230. (FREN 234, FREN 240, FREN 241--each completes foreign language requirement.) (See also FREN 241.) Prerequisite: FREN 230, FREN 231, or by departmental permission. LEC.

FREN 241. Intermediate French II, Honors. 3 Hours. U.
Similar in approach and content to FREN 240; smaller class size; open to students who have done very good to excellent work in previous French classes. Prerequisite: A grade of A in FREN 230 or FREN 231, or departmental permission. LEC.

FREN 300. Intensive Review of French Grammar. 3 Hours. H/W.
Designed to provide essential skills for advanced courses. Prerequisite: FREN 234, FREN 240, FREN 241--each completes foreign language requirement.) (See also FREN 241.) Prerequisite: FREN 230, FREN 231, or by departmental permission. LEC.

FREN 310. French Phonetics. 3 Hours. GE3S / H/W.
A course in practical phonetics with exercises stressing rhythm, intonation, and individual sounds. Prerequisite: FREN 240, FREN 241, or by departmental permission. LEC.

FREN 315. Le Francais Pratique. 1-6 Hours. H/W.
Supplementary non-major language course that can be a sequel to the first four semesters of French. Primarily for students studying abroad. Covers vocabulary study, oral exercises, discussion of texts, writing, and free conversation. Prerequisite: FREN 230/231 or FREN 234, FREN 240/241. LEC.

FREN 326. Introduction to French Literature. 3 Hours. HL AE42/GE3H / H.
Analysis of selected texts from various genres; special emphasis on explication de texte. Prerequisite: FREN 300 (or with FREN 300), or by departmental permission. LEC.

FREN 330. French Language and Civilization I. 3 Hours. H.
A study of French grammar, conversation, and composition, with selected aspects of French civilization. Available to participants in the Summer Language Institutes, and selected Study Abroad programs. LEC.

FREN 340. French Language and Civilization II. 3 Hours. H.
A study of French grammar, conversation, and composition, with selected aspects of French civilization. Available to participants in the Summer Language Institutes, and selected Study Abroad Programs. LEC.

FREN 350. Applied French Grammar and Composition I. 3 Hours. H/W.
Systematic grammar review with extensive practice in writing French. Prerequisite: FREN 300 or FREN 326. LEC.

FREN 352. French for Journalism and Business. 3 Hours. H/W.
Practical acquisition of skills necessary to understand the language of journalism and business. Prerequisite: FREN 300. LEC.

FREN 375. Intermediate French Conversation. 3 Hours. H/W.
Three meetings per week. Guided discussions designed to increase fluency, improve pronunciation, and acquire vocabulary. Sections limited to twelve students. May be designated a KULAC class at the discretion of the instructor. Prerequisite: FREN 300 or concurrent enrollment in FREN 300. LEC.

FREN 376. Advanced French Conversation. 3 Hours. H/W.
Three meetings per week. Guided discussions designed to increase fluency, improve pronunciation, and knowledge of French culture and language. Classes have centered around topics such as the French Revolution, the Arts, Renaissance Festivals, and French cinema. Sections limited to twelve students. May be designated a KULAC class at the discretion of the instructor. Prerequisite: FREN 375. LEC.

FREN 401. Paris, City of Lights and Legends. 3 Hours. HL AE42/GE3H / H.
An exploration of the French capital from its origins to present as emblem and icon of the social, literary, cultural, and political development of the French nation and of French ideals. Topics include great persons, events, works, symbols, and myths since the founding of the city to the present. Taught in English. Does not fulfill any requirement in the French major or minor. LEC.

FREN 405. French Literature in Translation. 3 Hours. HL AE42/GE3H / H.
Readings and discussions of representative great masterpieces of French literature from the medieval Arthurian romances and chantons de geste to the present, with particular emphasis on the question of the interrelations of form and content. Includes such authors as Rabelais, Montaigne, Racine, Moliere, Voltaire, Balzac, Flaubert, Baudelaire, Proust, Gide, Camus, and Beckett. Conducted in English. A reading knowledge of French is extremely useful but not a requirement. LEC.

FREN 406. Introduction to French Culture Through Film. 3 Hours. AE42/GE3H / H/W.
Discussion of great masterpieces of French film from the silent era to the present, with a particular emphasis on how film portrays and conveys important aspects of French culture past and present. The works of a variety of film-makers may be covered, and may include among others Georges Melies, Jean Vigo, Jean Renoir, Abel Gance, Rene Clair, Marcel Carne, Jean Cocteau, Alain Resnais, Jean-Luc Godard, Francois Truffaut, Agnes Varda, Louis Malle, Eric Rohmer, and Claude Berri. Films will be shown in French with subtitles in English. Knowledge of French is useful, but not required. LEC.

FREN 410. Survey of French Culture I. 3 Hours. AE42/GE3H / H/W.
A survey of the historical, philosophical, literary, and artistic development of France, from the beginning through the 17th century. Prerequisite: FREN 300 and FREN 326. May be designated a KULAC class at the discretion of the instructor. LEC.

FREN 420. Survey of French Culture II. 3 Hours. AE42/GE3H / H/W.
Continuation of FREN 410, from the 18th century to the present. Prerequisite: FREN 300 and FREN 326. May be designated a KULAC class at the discretion of the instructor. LEC.

FREN 430. La France d'Aujourd'Hui. 3 Hours. AE42/GE3H / H/W.
Social, political, and economic trends from 1939 to present, with emphasis on period since 1968. Prerequisite: FREN 300 and FREN 326. May be designated a KULAC class at the discretion of the instructor. LEC.

FREN 431. French-Speaking World (Outside France). 3 Hours. AE42/GE3H / H/W.
Cultures of the some 235 million persons in the five world areas whose everyday and/or official language is French: Canada; Caribbean (e.g., Tahiti, New Caledonia). Also French-speaking settlers in the United States (Louisiana, South Carolina, New England, Kansas). French
presence in Indo-China and the Near East. Prerequisite: FREN 300 and FREN 326. (May be taken concurrently with FREN 300 and/or FREN 326.) May be designated a KULAC class at the discretion of the instructor. LEC.

FREN 432. Francophone African Literature. 3 Hours. NW AE42/GE3S / H/W.
This course is an introduction of 20th Century African literature written in French, covering selected works by major authors from both sub-Saharan Africa and the Maghreb. Attention will be given primarily to the novel, although some poetry will also be read. Topics and themes include negritude, African identity in the wake of colonialism, Islam, and women's writing. Classes will be conducted in English. Students may read the texts in French or in translation. (Same as AAAS 432.) Prerequisite: ENGL 102 and a 200-level English course. LEC.

FREN 440. Studies in French Culture: ____. 3 Hours. H/W.
Representative topics are: History of Paris, Role of Women in French Literature and Culture, Interrelationships of the Arts, French-speaking African Culture, Culture of French Canada. May be repeated for credit with departmental permission; may also be repeated as part of major in French language and culture. Prerequisite: FREN 300 and FREN 326. May be designated a KULAC class at the discretion of the instructor. LEC.

FREN 450. French Literature of the Middle Ages. 3 Hours. AE42/GE3S / H/W.
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 300 and FREN 326. LEC.

FREN 455. French Literature of the Renaissance. 3 Hours. AE42/GE3S / H/W.
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 300 and FREN 326. LEC.

FREN 460. French Literature of the Seventeenth Century. 3 Hours. AE42/GE3S / H/W.
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 300 and 326. LEC.

FREN 462. French Literature of the Eighteenth Century. 3 Hours. AE42/GE3S / H/W.
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 300 and 326. LEC.

FREN 465. French Literature of the 19th Century. 3 Hours. AE42 / H/W.
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 300 and FREN 326. LEC.

FREN 470. French Literature of the Twentieth Century. 3 Hours. AE42/GE3S / H/W.
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 300 and FREN 326. LEC.

FREN 480. Studies in French Literature: ____. 3 Hours. H/W.
A study of a period, theme, group of authors, or movement. Subject matter will vary; may be taken more than once if subject differs. Prerequisite: FREN 300 and FREN 326. LEC.

FREN 495. Directed Readings in French. 1-15 Hours. AE61 / U.
May be taken more than once, total credit not to exceed fifteen hours. Fields not covered by course work, and/or field of student's special interest. Conferences. Counts as humanities when taken for two or three hours. Prerequisite: Twenty-five hours of French and consent of instructor. IND.

FREN 499. Honors in French. 3 Hours. AE61 / H/W.
Various topics in French or Francophone literature or culture. May be taken more than once, total credit not to exceed nine hours. Minimum of six hours of FREN 499 required for B.A. with Honors in French. Student must discuss Honors eligibility and their topic with a faculty member before enrolling. IND.

FREN 500. Advanced French Phonetics. 3 Hours. GE3S / H/W.
Advanced theory and practice of French pronunciation. Not open to students who have taken FREN 310, except by departmental permission. Prerequisite: FREN 300 or FREN 326 or graduate standing. LEC.

FREN 530. Studies in Film: ____. 3 Hours. AE42/AE61 / H/W.
Studies in an aspect of film, a director or group of directors. Emphasis on French film. Given in French or English. LEC.

FREN 592. French Culture Through Film I, Beginnings to 1950. 3 Hours. AE42/AE61 / H/W.
A survey of the major public images of French culture as surveyed in French silent and sound film from the early 1900s through World War II and its immediate aftermath. Students will view and discuss a selection of films that address crucial aspects of French culture such as (but not limited to) gender, war and peace, daily life, art and artists, tradition and revolution, city life versus country life, social classes, moral choice, and individual freedoms. The course will include discussion of the cultural and artistic significance of major French film movements like Poetic Realism. In addition to viewing and discussing films, students will read and analyze the writings of a number of French intellectuals, writers, and artists who have had a major influence on French culture as it appears in films from 1900-1950. May be taught in French or English. For students who already have some knowledge of French culture. LEC.

FREN 593. French Culture Through Film II, 1950-Present. 3 Hours. AE42/AE61 / H/W.
A survey of the major public images of French culture as surveyed in French silent and sound film from 1950 to present. Students will view and discuss a selection of films that address crucial aspects of French culture such as (but not limited to) gender, war and peace, daily life, art and artists, tradition and revolution, city life versus country life, colonialism and post-colonialism, social classes, moral choice, and individual freedoms. The course will include discussion of the cultural and artistic significance of major French film movements like the New Wave. In addition to viewing and discussing films, students will read and analyze the writings of a number of French intellectuals, writers, and artists who have had a major influence on French culture as it appears in films from 1950-present. May be taught in French or English. For students who already have some knowledge of French culture. LEC.

FREN 600. Studies in: ____. 3 Hours. H/W.
Topics vary by semester. May be repeated for credit. Prerequisite: Departmental permission. LEC.

FREN 610. Theme et Version. 3 Hours. H/W.
Exercises in English-French and French-English translation, designed to enable the student to write with greater clarity and precision in both languages. LEC.

FREN 620. Expository French Writing. 3 Hours. H/W.
Intensive practice in writing French, designed to clarify fine points of grammar and usage and to aid the student in developing an accurate and graceful prose style. LEC.

FREN 680. Language Teaching and Advanced Conversation. 2-3 Hours. U.
A summer course designed principally for secondary school language teachers. Discussion of current theory in language acquisition integrated into an intensive oral review of French. Meets three hours daily for two weeks; includes lab. (Not applicable toward a major or graduate degree in French.) LEC.
FREN 681. Language Teaching for Oral Proficiency. 1 Hour. U.
A summer course designed principally for secondary school language
teachers. Provides an orientation to proficiency-based models in foreign
language instruction, national standards in the rating of foreign language
proficiency, and curriculum development which address issues of
articulation in foreign language curricula. (Not applicable toward a
major or graduate degree in French.) (Same as GERM 681 and SPAN
681.) LEC.

FREN 700. Old French. 3 Hours.
Introduction to grammar and structure through the reading of
representative works. LEC.

FREN 701. History of the French Language. 3 Hours.
Major aspects of development and growth. Conducted in English. LEC.

FREN 702. Provençal. 3 Hours.
Introduction to grammar and structure of the language through a reading
of representative works from the Troubadour period. LEC.

FREN 703. Structure of Modern French. 3 Hours.
Linguistic analysis of the phonological, morphological, and syntactic
structure of modern French. Description in terms of current theories and
models. Application of linguistic analyses to the teaching of French. LEC.

FREN 704. Methods in French Language Instruction. 3 Hours.
This course provides an overview of current and historical approaches
to foreign language teaching, with reference to the instruction of French.
Past and current trends and methodologies of language instruction
are examined in order to acquaint students with various classroom
approaches. Research findings in second language acquisition are
explored and their implications discussed so as to show how these
findings lead to more effective classroom practices. LEC.

FREN 720. Introduction to Graduate Studies in French. 3 Hours.
This course is an introduction to the skills required of students doing
graduate degrees in French; areas covered include 1) introduction to
literary theory and criticism, 2) bibliography and research methods,
including database management software, 3) preparation and
presentations of a research/conference paper, 4) technology training,
including web design, on-line portfolio, and digital humanities, and 5)
professional ethics and awareness of the academic market and alternative
careers. LEC.

FREN 730. Introduction to French Poetry. 3 Hours.
A detailed introduction to versification, rhetoric, image and symbol as
they apply to the study of poetry. Texts will be chosen from one or more
periods of French literature and will include poems in verse and prose.
Considerations and readings on the history of French poetry, on the
composition of recuells, on poetic theory, and on the relation of poetry to
other genres and media may be incorporated. LEC.

FREN 732. Francophone Studies. 3 Hours.
Selected movements, themes, genres, topics in the cultures and/or
literatures of the French-speaking world outside France. May be repeated
for credit. LEC.

FREN 740. Medieval French Literature. 3 Hours.
Literary history of the period, with discussion of representative works read
for the most part in the original old French. LEC.

FREN 750. French Literature of the Sixteenth Century. 3 Hours.
A survey of the major writers, covering Rabelais, Sceve, Louise Labe,
Marguerite de Navarre, Ronsard, Du Bellay, Montaigne, and d'Aubigné.
LEC.

FREN 763. French Drama of the Seventeenth Century. 3 Hours.
Development of baroque and classical French drama, with emphasis on
Corneille, Molière, and Racine. LEC.

FREN 765. Nondramatic French Literature of the Seventeenth Century. 3 Hours.
Esthetics of baroque and classicism. Emphasis on Descartes, Pascal,
La Rochefoucauld, Mme de Lafayette, although other authors may be
studied. LEC.

FREN 770. French Literature of the Eighteenth Century. 3 Hours.
Special attention paid to Montesquieu, Voltaire, Diderot, and Rousseau;
also development of novel and drama. LEC.

FREN 782. French Novel of the 19th Century. 3 Hours.
Emphasis on major novelists of the century: Balzac, Stendhal, Flaubert,
and Zola. LEC.

FREN 785. French Romantic Movement. 3 Hours.
Major Romantic writers viewed in context of intellectual, esthetic, and
social milieu of period 1800-1850. LEC.

FREN 787. French Post-Romanticism. 3 Hours.
Literary movements developing out of reaction to Romanticism: Realism,
Naturalism, Parnassianism. LEC.

FREN 790. Contemporary French Writers. 3 Hours.
Major 20th century authors, stressing Proust, Gide, Giraudoux, Claudel,
Sartre, and Camus. LEC.

FREN 792. Proust. 3 Hours.
Principal movements, structures, and tensions of À la recherche du temps
perdu. LEC.

FREN 795. Studies in: ____. 3 Hours.
Study of topics not limited to one century. May be repeated for credit.
LEC.

FREN 800. Studies in: ____. 3 Hours.
Study of topics not limited to one century. May be repeated for credit.
LEC.

Selected topics to be specified. Study of form, movements, or themes in
the French Novel, not limited to one century. May be repeated for credit.
LEC.

Selected topics to be specified. Study of form and theory of the French
short story, not limited to one century. LEC.

FREN 842. Arthurian Literature in France. 3 Hours.
Origins and development of Arthurian legend; analysis of major texts.
Prerequisite: FREN 700. LEC.

FREN 848. Studies in Medieval French Literature: ____. 3 Hours.
Various movements, themes, or genres. May be repeated for credit.
Prerequisite: FREN 700. LEC.

FREN 850. Early Renaissance Literature. 3 Hours.
Emphasis on Rabelais, Marguerite de Navarre, Marot, Maurice Sceve and
Louise Labe. LEC.
ITAL 107. Elementary Italian Conversation I. 3 Hours.
First part of a two-course sequence (with ITAL 108) for students with no previous study of a foreign language and minimal linguistic background as well as for students in professional schools who plan to participate in study abroad programs in Italy. Offers knowledge of essential grammar and basic oral communication skills through practice in grammar, listening comprehension, and conversation. Active participation required. Completion of both ITAL 107 and ITAL 108 is equivalent to ITAL 110 and allows students to enroll in ITAL 120. LEC.

ITAL 108. Elementary Italian Conversation II. 3 Hours. U.
A continuation of ITAL 107, second part of a two-course sequence for students with no previous study of a foreign language and minimal linguistic background as well as for students in professional schools who plan to participate in study abroad programs in Italy. Offers knowledge of essential grammar and basic oral communication skills through practice in grammar, listening comprehension, and conversation. Active participation required. Completion of both ITAL 107 and ITAL 108 is equivalent to ITAL 110 and allows students to enroll in ITAL 120. Prerequisite: ITAL 107 or Italian Coordinator's approval. LEC.

ITAL 109. Elementary Italian III. 3 Hours.
Introduction to Italian language and culture. Essentials of grammar and practice in speaking, understanding, reading, and writing. Active participation required. Five hours of class per week. LEC.

ITAL 110. Elementary Italian I. 5 Hours. U.
First part of a two-course sequence (with ITAL 112) for students with previous language study or strong linguistic background. Same content as ITAL 110 but accomplished in three hours of class per week. Active participation required. Prerequisite: Previous study of another language or ITAL 111 or permission of instructor. LEC.

ITAL 112. Elementary Italian II. 5 Hours. U.
Second part of a two-course sequence (with ITAL 110) for students with previous language study or strong linguistic background. Same content as ITAL 112 but accomplished in three hours of class per week. Active participation required. Prerequisite: ITAL 110 or permission of instructor. LEC.

ITAL 120. Elementary Italian II. 5 Hours. U.
Five hours of class. Reading of simple texts; diction; speaking; elementary composition. Prerequisite: ITAL 110. LEC.

ITAL 152. Studies in Italian Heritage. 3 Hours. AE41/GE11 / H.
A comprehensive, interdisciplinary survey of the ways in which the historical culture of Italy can be found in Lawrence, KS. Emphasis is on politics, sciences, philosophy, media, and immigration. Uses materials from various KU collections. Taught in English. Does not fulfill any requirement in the Italian major or minor. LEC.

ITAL 155. Intensive Basic Italian I. 3 Hours. U.
First part of a two-course sequence (with ITAL 156) for students with previous language study or strong linguistic background. Same content as ITAL 110 but accomplished in three hours of class per week. Active participation required. Prerequisite: Previous study of another language or permission of instructor. LEC.

ITAL 156. Intensive Basic Italian II. 3 Hours. U.
A continuation of ITAL 155, second part of a two-course sequence for students with previous language study or strong linguistic background. Same content as ITAL 120 but accomplished in three hours of class per week. Active participation required. Prerequisite: ITAL 155 or permission of instructor. LEC.

ITAL 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Italian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

ITAL 203. Intermediate Italian Language and Civilization. 3 Hours. H.
A systematic review of Italian grammar through practice in conversation and composition, with an introduction to Italian culture. Available only to participants in study abroad programs. This course does not satisfy the College of Liberal Arts and Sciences foreign language requirement. Prerequisite: ITAL 120. LEC.

ITAL 230. Intermediate Italian I. 3 Hours. U.
Review and expansion of grammatical structures introduced in Elementary Italian I and II, with continued practice in speaking, understanding, reading, and writing, coordinated with the study of cultural texts. Active participation required. Prerequisite: ITAL 120 or ITAL 156. LEC.
ITAL 240. Intermediate Italian II. 3 Hours. U.
Continuation of ITAL 230. (ITAL 240 completes foreign language requirement.) Review and expansion of grammatical structures introduced in Elementary Italian I and II, with continued practice in speaking, understanding, reading, and writing, coordinated with the study of cultural texts. Active participation required. Prerequisite: ITAL 230. LEC.

ITAL 300. Composition and Conversation. 3 Hours. H/W.
Study of advanced grammatical structures with extensive practice in writing and conversation. Guided discussions on a variety of contemporary Italian literary, journalistic, and cinematic works. Active participation required. Prerequisite: ITAL 240 or permission of instructor. LEC.

ITAL 301. Introduction to Italian Literature I. 3 Hours. AE42/GE3S / H/W.
Representative works and trends from origins to Renaissance. Prerequisite: ITAL 240 or reading knowledge of Italian. LEC.

ITAL 302. Introduction to Italian Literature II. 3 Hours. AE42/GE3S / H/W.
Representative works and trends from 17th century to present. Prerequisite: ITAL 240 or reading knowledge of Italian. LEC.

ITAL 303. Italian Language and Civilization I. 3 Hours. U.
An advanced study of Italian grammar, conversation, composition, with selected aspects of Italian civilization. Available only to participants in the KU summer language institute or semester abroad program in Florence or Rome. Prerequisite: ITAL 240. LEC.

ITAL 304. Italian Language and Civilization II. 3 Hours. U.
An advanced study of Italian grammar, conversation, composition, with selected aspects of Italian civilization. Available only to participants in the KU summer language institute or semester abroad program in Florence or Rome. Prerequisite: ITAL 303. LEC.

ITAL 315. Advanced Composition and Conversation. 3 Hours. H/W.
Continuation of ITAL 300. Study of advanced grammatical structures with extensive practice in writing and conversation. Guided discussions on a variety of contemporary Italian literary, journalistic, and cinematic works. Active participation required. Prerequisite: ITAL 300 or permission of instructor. LEC.

ITAL 335. Italy and the Italians I. 3 Hours. HL AE42/GE3H / H.
Survey of Italian culture with study of geography, history, government, education, Roman archaeology, and music. Lecture, discussion, and supportive readings. Not open to native speakers of Italian. LEC.

ITAL 336. Italy and the Italians II. 3 Hours. GE11/GE3H/GE3S / H.
Survey of Italian culture with study of art and architecture, literary masterpieces in translation, science, culinary arts, and cinema. Lecture, discussion, and supportive readings. Not open to native speakers of Italian. LEC.

ITAL 340. Studies in Italian Culture: ______. 3 Hours. AE42 / H.
A study of particular aspects of and/or periods in Italian culture. May be repeated for credit with departmental permission. Prerequisite: ITAL 240 or permission of instructor. LEC.

ITAL 405. Italian Literature in Translation: ______. 3 Hours. AE42/GE3S / H/W.
Major works representing various movements, themes, or genres. May be repeated with departmental permission. All work done in English. LEC.

ITAL 410. 19th and 20th Century Short Stories. 3 Hours. AE42 / H/W.
A survey of representative short stories of the 19th and 20th Centuries, including Verga, Panzini, Pirandello, Guareschi, Moravia, Calvino, Landolfi, and Bigiaretti. Prerequisite: ITAL 240 or reading knowledge of Italian or permission of instructor. LEC.

ITAL 420. 19th and 20th Century Poetry. 3 Hours. AE42 / H/W.
A survey of 19th and 20th century poets and their works, including Leopardi, Pascoli, d'Annunzio, Govoni, Palazzeschi, Gozzano, Marinetti, Boccioni, Ungaretti, Montale, Quasimodo, and Pasolini. Prerequisite: ITAL 240 or reading knowledge of Italian or permission of instructor. LEC.

ITAL 430. Dante's Masterpiece. 3 Hours. AE61 / H/W.
Detailed study of Dante's epic poem with a close reading of the Inferno. Prerequisite: ITAL 300 or demonstrated knowledge of Italian. LEC.

ITAL 440. Italian Renaissance and Early Modern Literature. 3 Hours. H/W.
Detailed study of selected masterpieces of the Italian Renaissance from the 13th to the 18th centuries. Prerequisite: ITAL 300 or demonstrated knowledge of Italian. LEC.

ITAL 465. 19th and 20th Century Novels I. 3 Hours. AE42/GE3S / H/W.
With Italian 466, a survey of representative 19th and 20th century novels including those of Manzoni, Pirandello, Svevo, Deledda, Vittorini, Moravia, Pavese, Pratolini, Buzzati, Ginzburg, and Calvino. Prerequisite: ITAL 240 or reading knowledge of Italian or permission of instructor. LEC.

ITAL 466. 19th and 20th Century Novels II. 3 Hours. AE42/GE3S / H/W.
See ITAL 465. Prerequisite: ITAL 240 or reading knowledge of Italian or permission of instructor. LEC.

ITAL 480. Studies in Italian Literature: ______. 3 Hours.
A study of a period, theme, group of authors, or cultural movement. Subject matter will vary; may be taken more than once if subject differs. Prerequisite: ITAL 300 or demonstrated knowledge of Italian. LEC.

ITAL 495. Directed Readings in Italian. 1-3 Hours. AE61 / U.
May be taken more than once, total credit not to exceed nine hours. Various topics in Italian literature. Prerequisite: Consent of instructor, given only to those having demonstrated ease in reading Italian. IND.

ITAL 499. Honors in Italian. 3 Hours. AE61 / H.
Various topics in Italian literature or culture. Minimum of three hours of Italian 499 required for a B.A. with Honors in the Italian option of the French degree. Students must discuss Honors eligibility and their topic with a faculty member before enrolling. Honors paper must be written in Italian. LEC.

ITAL 502. Dante's Divine Comedy I. 3 Hours. AE61 / H/W.
Detailed study of Dante's masterpiece. Attention will also be given to such matters as the development of the Italian language at Dante's period and the relation of the Comedy to Dante's other works. Prerequisite: Reading knowledge of Italian. LEC.

ITAL 503. Dante's Divine Comedy II. 3 Hours. AE61 / H/W.
Continuation of ITAL 502. Prerequisite: Completion of ITAL 502. LEC.

ITAL 695. Graduate Directed Readings in Italian. 1-3 Hours. U.
May be taken more than once, total credit not to exceed nine hours. Directed readings, conferences with instructor. Prerequisite: ITAL 495 or consent of instructor. IND.
Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

French and Italian Programs

The department offers the major in French, an option in Italian, and an option in French and Italian studies. Prospective majors should consult the department during or before the second semester of the sophomore year.

Students pursuing a major in French or an option in Italian are encouraged to take courses in European studies, European history, art history, and philosophy, as well as English and foreign languages, literatures, and linguistics. Students often combine a major in French or the option in Italian with majors in business, humanities, journalism, the sciences, premedicine, or prelaw.

Language majors are useful in a variety of careers. The study of languages, literatures, and cultures enhances personal growth and broadens professional horizons, allowing fuller participation in an increasingly global community.

First- and Second-Year Preparation

The normal course progression for first- and second-year students considering a major in French is FREN 110, FREN 120, FREN 230, and FREN 240. FREN 230 and FREN 240 may be replaced by FREN 234. Eligible students are encouraged to enroll in honors sections of third-semester French (FREN 231) and fourth-semester French (FREN 241). FREN 300 is the prerequisite for all other 300-level courses, although FREN 300 and FREN 375 may be taken concurrently. FREN 326 is the prerequisite for all 400-level courses. The normal course progression for first- and second-year students considering the option in Italian is ITAL 110, ITAL 120, ITAL 230, and ITAL 240. Eligible students are encouraged to enroll in intensive sections of first-semester Italian (ITAL 155) and second-semester Italian (ITAL 156).

Requirements for the B.A. Major

French Option

Fourth Semester Proficiency (3)

Majors must complete courses to gain fourth semester language proficiency. These hours do not contribute to the minimum number of hours required for the major.

Fourth Semester Proficiency. Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 240</td>
<td>Intermediate French II</td>
<td>3</td>
</tr>
<tr>
<td>or FREN 241</td>
<td>Intermediate French II, Honors</td>
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</tr>
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</table>

French Core Knowledge and Skills (12)

Majors choosing this option must complete courses as indicated in following areas:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 300</td>
<td>Intensive Review of French Grammar</td>
<td>3</td>
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Phonetics. Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 310</td>
<td>French Phonetics</td>
<td>3</td>
</tr>
<tr>
<td>or FREN 500</td>
<td>Advanced French Phonetics</td>
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Introduction to French Literature. Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 326</td>
<td>Introduction to French Literature</td>
<td>3</td>
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</tbody>
</table>

Applied French. Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 350</td>
<td>Applied French Grammar and Composition I</td>
<td></td>
</tr>
<tr>
<td>FREN 352</td>
<td>French for Journalism and Business</td>
<td></td>
</tr>
</tbody>
</table>

Intermediate French Conversation. Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 375</td>
<td>Intermediate French Conversation</td>
<td>3</td>
</tr>
</tbody>
</table>

French Literature Required Electives (0)

Satisfied by three courses (9 hours) from courses numbered FREN 423-FREN 470:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 432</td>
<td>Francophone African Literature</td>
<td></td>
</tr>
<tr>
<td>FREN 450</td>
<td>French Literature of the Middle Ages</td>
<td></td>
</tr>
<tr>
<td>FREN 455</td>
<td>French Literature of the Renaissance</td>
<td></td>
</tr>
<tr>
<td>FREN 460</td>
<td>French Literature of the Seventeenth Century</td>
<td></td>
</tr>
<tr>
<td>FREN 462</td>
<td>French Literature of the Eighteenth Century</td>
<td></td>
</tr>
<tr>
<td>FREN 465</td>
<td>French Literature of the 19th Century</td>
<td></td>
</tr>
<tr>
<td>FREN 470</td>
<td>French Literature of the Twentieth Century</td>
<td></td>
</tr>
</tbody>
</table>

Required Electives (0)

Satisfied by two courses (6 hours) from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 376</td>
<td>Advanced French Conversation</td>
<td></td>
</tr>
<tr>
<td>FREN 410</td>
<td>Survey of French Culture I</td>
<td></td>
</tr>
<tr>
<td>FREN 420</td>
<td>Survey of French Culture II</td>
<td></td>
</tr>
<tr>
<td>FREN 430</td>
<td>La France d'AUjourd'Hui</td>
<td></td>
</tr>
<tr>
<td>FREN 431</td>
<td>French-Speaking World (Outside France)</td>
<td></td>
</tr>
<tr>
<td>FREN 440</td>
<td>Studies in French Culture: _____</td>
<td></td>
</tr>
<tr>
<td>FREN 480</td>
<td>Studies in French Literature: _____</td>
<td></td>
</tr>
<tr>
<td>FREN 530</td>
<td>Studies in Film: _____</td>
<td></td>
</tr>
<tr>
<td>FREN 592</td>
<td>French Culture Through Film I, Beginnings to 1950</td>
<td></td>
</tr>
<tr>
<td>FREN 593</td>
<td>French Culture Through Film II, 1950-Present</td>
<td></td>
</tr>
<tr>
<td>FREN 600</td>
<td>Studies in: _____</td>
<td></td>
</tr>
</tbody>
</table>

Majors are strongly encouraged to study abroad. Please see your advisor about this opportunity.
Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 30 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Italian Option

**French and Italian Major Prerequisite (3)**
Majors must complete courses to gain fourth semester language proficiency. These hours do not contribute to the minimum number of hours required for the major.

Fourth Semester Proficiency. Satisfied by:

- **ITAL 240** Intermediate Italian II
  
**Italian Core Knowledge and Skills (6)**
Majors choosing this option must complete courses as indicated in following areas:

- **Composition and Conversation.** Satisfied by:
  - **ITAL 300** Composition and Conversation
  - **ITAL 315** Advanced Composition and Conversation

- **Italian Literature.** Satisfied by two courses (6 hours) chosen from the following:
  - **ITAL 301** Introduction to Italian Literature I
  - **ITAL 302** Introduction to Italian Literature II
  - **ITAL 495** Directed Readings in Italian
  - **ITAL 695** Graduate Directed Readings in Italian

**Required Electives (0)**
Satisfied by four courses (12 hours) chosen from the following:

- **ITAL 335** Italy and the Italians I
- **ITAL 336** Italy and the Italians II
- **ITAL 340** Studies in Italian Culture: _____
- **ITAL 405** Italian Literature in Translation: _____
- **ITAL 410** 19th and 20th Century Short Stories
- **ITAL 420** 19th and 20th Century Poetry
- **ITAL 430** Dante's Masterpiece
- **ITAL 440** Italian Renaissance and Early Modern Literature
- **ITAL 465** 19th and 20th Century Novels I
- **ITAL 466** 19th and 20th Century Novels II
- **ITAL 480** Studies in Italian Literature: _____
- **ITAL 502** Dante's Divine Comedy I
- **ITAL 503** Dante's Divine Comedy II

**French and Italian Studies Option**

**Fourth Semester Proficiency (0)**
Majors must complete courses to gain fourth semester language proficiency. These hours do not contribute to the minimum number of hours required for the major.

Fourth Semester Proficiency. Satisfied by:

- **FREN 240** Intermediate French II
- **FREN 241** Intermediate French II, Honors
- **ITAL 240** Intermediate Italian II

**French and Italian Studies Core Knowledge and Skills (18)**
Majors choosing this option must complete courses as indicated in following areas:

- **French Grammar and/or Composition.** Satisfied by one of the following:
  - **FREN 300** Intensive Review of French Grammar
  - **FREN 350** Applied French Grammar and Composition I
  - **FREN 352** French for Journalism and Business
- **French Conversation.** Satisfied by one of the following:
  - **FREN 375** Intermediate French Conversation
  - **FREN 376** Advanced French Conversation

- **Italian Grammar and Composition.** Satisfied by two courses (6 hours): 6
  - **ITAL 300** Composition and Conversation
  - **ITAL 315** Advanced Composition and Conversation

- **French Literature.** Satisfied by two courses:
  - **FREN 326** Introduction to French Literature
  - And an additional course chosen from the following:
  - **FREN 432** Francophone African Literature
  - **FREN 440** Studies in French Culture: _____

\(^1\) One approved 3-credit course offered by another department or program and with significant content related to Italian culture (300-500 level) may be counted toward the Italian BA Option.

Majors are strongly encouraged to study abroad. Please see your advisor about this opportunity.
Departmental Honors in French
Undergraduate students may graduate with honors in French by completing 6 hours of FREN 499, intensive honors tutorials on limited areas of French or Francophone literature or culture. Consult the department early in the junior year. To begin honors work and to graduate with honors, students must have minimum grade-point averages of 3.25 in all courses and 3.5 in French.

Departmental Honors in Italian
Undergraduate students may graduate with honors in Italian by completing 3 hours of ITAL 499 and one approved 3-hour course in a relevant field in addition to the 24-hour requirement for the option. Consult the department early in the junior year. To begin honors work and to graduate with honors, students must have minimum grade-point averages of 3.25 in all courses and 3.5 in Italian.

Summer Language Institute in Paris
The department conducts a 6-week summer institute in Paris focusing on French language and culture. Students take courses in intermediate and advanced French language at L’Etoile, a private language institute in the center of Paris. Before the stay in Paris, students spend 10 days to 2 weeks touring regions such as Normandy, Brittany, and the château country along the Loire River. Some scholarship aid is available. Consult the department (http://www.frenchitalian.ku.edu) or the Office of Study Abroad (http://www.studyabroad.ku.edu) for information.

Summer Program in Florence, Italy
The department conducts a 4- or 8-week summer program for elementary, intermediate, or advanced students of Italian. Students take courses in language and culture at an institute where all instructors are native speakers. Students live with Italian families and usually have weekends free to travel. Consult the department (http://www.frenchitalian.ku.edu) or the Office of Study Abroad (http://www.studyabroad.ku.edu) for information.

Semester and Year Programs in France
A semester program is available in cooperation with CIDEF, the language institute of the Université Catholique de l’Ouest in Angers. Consult the department (http://www.frenchitalian.ku.edu) or the Office of Study Abroad (http://www.studyabroad.ku.edu) for information. A faculty member from University of Kansas, or from Texas A&M University in alternate years, leads the spring semester program.

Year-long programs at French institutions are available through the International Student Exchange Program. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu).

Semester Program in Rome, Italy
The department conducts a semester program in Rome for elementary, intermediate, or advanced students. Students take courses in Italian language and culture in a private language institute. All instructors are native speakers, and students live in shared apartments with other students at the institute. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu) for information.

Semester Program in Florence, Italy
The department conducts a semester program in Florence for elementary, intermediate, or advanced students. Students take courses in Italian language and culture in a private language institute. All instructors are native speakers, and students live with Italian families. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu) for information.

### Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
- Satisfied by 30 hours of major courses.

**Major Hours in Residence**
- Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
- Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
- Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Sample 4-year plans for the BA degree in French and Italian are available here: French Option (http://catalog.ku.edu/liberal-arts-sciences/french-italian/ba/french), Italian Option (http://catalog.ku.edu/liberal-arts-sciences/french-italian/ba/italian), or French and Italian Option (http://catalog.ku.edu/liberal-arts-sciences/french-italian/ba/french-italian-studies), or by using the left-side navigation.

### Departmental Honors in French
Undergraduate students may graduate with honors in French by completing 6 hours of FREN 499, intensive honors tutorials on limited areas of French or Francophone literature or culture. Consult the department early in the junior year. To begin honors work and to graduate with honors, students must have minimum grade-point averages of 3.25 in all courses and 3.5 in French.

### Departmental Honors in Italian
Undergraduate students may graduate with honors in Italian by completing 3 hours of ITAL 499 and one approved 3-hour course in a relevant field in addition to the 24-hour requirement for the option. Consult the department early in the junior year. To begin honors work and to graduate with honors, students must have minimum grade-point averages of 3.25 in all courses and 3.5 in Italian.
Minor in French

Why study French, Italian, and Francophone studies?

French, Italian, and Francophone studies ensure that our students succeed in an interconnected world.

Requirements for the Minor in French

The department offers minors in both French and Italian. Consult an advisor in the appropriate language.

Minor in French

French Minor Course Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Satisfied by</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensive Review of French Grammar (3)</td>
<td>FREN 300</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to French Literature (3)</td>
<td>FREN 326</td>
<td>3</td>
</tr>
<tr>
<td>French Minor Required Electives (12)</td>
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<td>12</td>
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</tbody>
</table>

Four elective courses chosen from among the courses already approved for the major in French. At least two of the four electives must be at the 400 level.

Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

- **Minor Hours**: Satisfied by 18 hours of minor courses.
- **Minor Hours in Residence**: Satisfied by a minimum of 9 hours of junior/senior (300+) KU resident credit in the minor.
- **Minor Junior/Senior Hours**: Satisfied by a minimum of 18 hours from junior/senior courses (300+) in the minor.
- **Minor Graduation GPA**: Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Summer Language Institute in Paris

The department conducts a 6-week summer institute in Paris focusing on French language and culture. Students take courses in intermediate and advanced French language at L’Etoile, a private language institute in the center of Paris. Before the stay in Paris, students spend 10 days to 2 weeks touring regions such as Normandy, Brittany, and the château country along the Loire River. Some scholarship aid is available. Consult the department (http://www.frenchitalian.ku.edu) or the Office of Study Abroad (http://www.studyabroad.ku.edu) for information.

Summer Program in Florence, Italy

The department conducts a 4- or 8-week summer program for elementary, intermediate, or advanced students of Italian. Students take courses in language and culture at an institute where all instructors are native speakers. Students live with Italian families and usually have weekends free to travel. Consult the department (http://www.frenchitalian.ku.edu) or the Office of Study Abroad (http://www.studyabroad.ku.edu) for information.

Semester and Year Programs in France

A semester program is available in cooperation with CIDEF, the language institute of the Université Catholique de l’Ouest in Angers. Consult the department (http://www.frenchitalian.ku.edu) or the Office of Study Abroad (http://www.studyabroad.ku.edu) for information. A faculty member from University of Kansas, or from Texas A&M University in alternate years, leads the spring semester program.

Year-long programs at French institutions are available through the International Student Exchange Program. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu).

Semester Program in Rome, Italy

The department conducts a semester program in Rome for elementary, intermediate, or advanced students. Students take courses in Italian language and culture in a private language institute. All instructors are native speakers, and students live in shared apartments with other students at the institute. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu) for information.

1 ITAL 340 Studies in Italian Culture: _______ and ITAL 495 Directed Readings in Italian may be taken in place of ITAL 335 Italy and the Italians I and/or ITAL 336 Italy and the Italians II only by permission of the Italian advisor.
Semester Program in Florence, Italy

The department conducts a semester program in Florence for elementary, intermediate, or advanced students. Students take courses in Italian language and culture in a private language institute. All instructors are native speakers, and students live with Italian families. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu) for information.

Minor in Italian

Why study French, Italian, and Francophone studies?

French, Italian, and Francophone studies ensure that our students succeed in an interconnected world.

Requirements for the Minor in Italian

The department offers minors in both French and Italian. Consult an advisor in the appropriate language.

Minor in Italian

18 credit hours are required, as follows:

Prerequisite Knowledge: (0)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL 240</td>
<td>Intermediate Italian II</td>
</tr>
</tbody>
</table>

Composition and Conversation (3)

Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL 300</td>
<td>Composition and Conversation</td>
</tr>
</tbody>
</table>

Advanced Composition and Conversation (3)

Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL 315</td>
<td>Advanced Composition and Conversation</td>
</tr>
</tbody>
</table>

Elective Courses: (Four) (12)

Students choose four courses from among the courses already approved for the BA Option in Italian, one of which must be an Italian Literature course.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL 301</td>
<td>Introduction to Italian Literature I 1</td>
</tr>
<tr>
<td>ITAL 302</td>
<td>Introduction to Italian Literature II</td>
</tr>
<tr>
<td>ITAL 335</td>
<td>Italy and the Italians I</td>
</tr>
<tr>
<td>ITAL 336</td>
<td>Italy and the Italians II</td>
</tr>
<tr>
<td>ITAL 405</td>
<td>Italian Literature in Translation: _____</td>
</tr>
<tr>
<td>ITAL 410</td>
<td>19th and 20th Century Short Stories</td>
</tr>
<tr>
<td>ITAL 420</td>
<td>19th and 20th Century Poetry</td>
</tr>
<tr>
<td>ITAL 430</td>
<td>Dante's Masterpiece</td>
</tr>
<tr>
<td>ITAL 440</td>
<td>Italian Renaissance and Early Modern Literature</td>
</tr>
<tr>
<td>ITAL 465</td>
<td>19th and 20th Century Novels I</td>
</tr>
<tr>
<td>ITAL 466</td>
<td>19th and 20th Century Novels II</td>
</tr>
<tr>
<td>ITAL 502</td>
<td>Dante's Divine Comedy I</td>
</tr>
<tr>
<td>ITAL 503</td>
<td>Dante's Divine Comedy II</td>
</tr>
<tr>
<td>ITAL 495</td>
<td>Directed Readings in Italian 1</td>
</tr>
<tr>
<td>ITAL 695</td>
<td>Graduate Directed Readings in Italian 1</td>
</tr>
</tbody>
</table>

One approved 3-credit course offered by another department or program and with significant content related to Italian culture (300-500 level) may be counted toward the Italian minor.

Summer Language Institute in Paris

The department conducts a 6-week summer institute in Paris focusing on French language and culture. Students take courses in intermediate and advanced French language at L’Étoile, a private language institute in the center of Paris. Before the stay in Paris, students spend 10 days to 2 weeks touring regions such as Normandy, Brittany, and the château country along the Loire River. Some scholarship aid is available. Consult the department (http://www.frenchitalian.ku.edu) or the Office of Study Abroad (http://www.studyabroad.ku.edu) for information.

Semester Program in Florence, Italy

The department conducts a 4- or 8-week summer program for elementary, intermediate, or advanced students of Italian. Students take courses in language and culture at an institute where all instructors are native speakers. Students live with Italian families and usually have weekends free to travel. Consult the department (http://www.frenchitalian.ku.edu) or the Office of Study Abroad (http://www.studyabroad.ku.edu) for information.

Semester and Year Programs in France

A semester program is available in cooperation with CIDEF, the language institute of the Université Catholique de l’Ouest in Angers. Consult the department (http://www.frenchitalian.ku.edu) or the Office of Study Abroad (http://www.studyabroad.ku.edu) for information. A faculty member from University of Kansas, or from Texas A&M University in alternate years, leads the spring semester program.

Year-long programs at French institutions are available through the International Student Exchange Program. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu).

Summer Program in Rome, Italy

The department conducts a semester program in Rome for elementary, intermediate, or advanced students. Students take courses in Italian language and culture in a private language institute. All instructors are native speakers, and students live in shared apartments with other students at the institute. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu) for information.

Semester Program in Florence, Italy

The department conducts a semester program in Florence for elementary, intermediate, or advanced students. Students take courses in Italian language and culture in a private language institute. All instructors are native speakers, and students live with Italian families. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu) for information.

Master of Arts in French

The Department of French and Italian offers a comprehensive graduate program (M.A. and Ph.D.) in French and Francophone language, literature, and culture. Our faculty (http://www.frenchitalian.ku.edu/faculty) is dynamic, professionally active, and committed to excellence in scholarship and teaching. Although the major emphasis of teaching and research is French and Francophone literature, the department also offers courses in literary theory, cultural studies, and film. The department offers a balanced emphasis on all periods from medieval through twentieth and twenty-first centuries. Our students represent a diverse group, and
we encourage equally applicants from traditional and nontraditional backgrounds. Excellent facilities, strong library holdings, and a faculty dedicated to both teaching and research assure students of a challenging and professional graduate preparation. Please visit the Graduate Program page (https://frenchitalian.dev.drupal.ku.edu/overview-5) of the department website for additional information.

Departmental Funding

While it is not guaranteed, the department does its best to provide funding in the form of Graduate Teaching Assistantship (GTA) appointments to all incoming graduate students. GTA appointments are awarded for the academic year and come with:

- a competitive academic year (9 month) salary
- a 100% tuition waiver for all courses at KU
- payment of up to 3 hours of student fees
- optional University-subsidized group health insurance

The appointments are guaranteed based on performance for up to 3 years for M.A. students, and 6 years for students who receive both an M.A. and a Ph.D. at The University of Kansas. GTAs in the department receive thorough training in language instruction, close mentoring, and the opportunity to teach French at a variety of levels, providing them with a strong base of teaching experience upon entering the job market. Additional information about teaching for the department is available on the Graduate Funding page (https://frenchitalian.dev.drupal.ku.edu/graduate-teaching) of our departmental website.

Additional Funding

Other funding opportunities for graduate students include the Office of Study Abroad’s Springer award; the department’s Cornell, Mahieu, and Magerus fellowships; awards for research abroad; and French university exchanges.

Visit the Graduate Studies website for additional information about funding opportunities (http://graduate.ku.edu/funding) for graduate students at KU.

Financial Aid and Scholarships (http://affordability.ku.edu/steps/index.shtml) administers grants, loans, and need-based financial aid.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission to the M.A. Program in French

In addition to the general admission requirements (http://www.graduate.ku.edu/application-process) from the Office of Graduate Studies, applicants should have the equivalent of a major in French at the B.A. level, with a minimum of 9 hours of advanced undergraduate course work in French literature.

Submit your graduate application online (http://www.graduate.ku.edu/graduate-application). For further information regarding the application process, including department-specific deadlines and required supplemental documentation, please visit the Admissions (http://www.frenchitalian.ku.edu/admission) page of the department website, or contact the department’s Graduate Program Coordinator, Morgan Swartzlander, mswartz@ku.edu.

M.A. Degree Requirements

1. 30 credit hours, including*
   - FREN 704 Methods in French Language Instruction 3
   - FREN 720 Introduction to Graduate Studies in French 3
   - FREN 610 Theme et Version 3
   - FREN 899 M.A. Thesis
   - FREN 900 Seminar in French: _____ (2 seminars of 3 hours each)

As part of the 30-hour requirement, students may also take:
- A maximum of two graduate-level courses (up to 6 hours) outside the department. (e.g. Women, Gender and Sexuality Studies, Linguistics, Art History, etc.) This selection should be determined in consultation with the Director of Graduate Studies.
- A maximum of 3 hours of FREN 795 Investigation and Conference.

*In the event that a required course cannot be offered during the time when the student completes coursework, the student will take a substitute course in consultation with the DGS.

2. A reading knowledge of a second Romance language, Greek, Latin, German, Arabic, or other relevant language.

3. Comprehensive written and oral examinations.

Handbook for Graduate Students

A detailed presentation of departmental processes and regulations is included in the department’s Graduate Student Handbook (http://www.frenchitalian.ku.edu/graduate-program-manual).

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The department conducts a 6-week summer institute in Paris focusing on French language and culture. Students take courses in intermediate and advanced French language at L’Etoile, a private language institute in the center of Paris. Before the stay in Paris, students spend 10 days to 2 weeks touring regions such as Normandy, Brittany, and the château country along the Loire River. Some scholarship aid is available. Consult the department (http://www.frenchitalian.ku.edu) or the Office of Study Abroad (http://www.studyabroad.ku.edu) for information.

Summer Program in Florence, Italy

The department conducts a 4- or 8-week summer program for elementary, intermediate, or advanced students of Italian. Students take courses in language and culture at an institute where all instructors are native speakers. Students live with Italian families and usually have weekends free to travel. Consult the department (http://www.frenchitalian.ku.edu)
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Semester and Year Programs in France

A semester program is available in cooperation with CIDEF, the language institute of the Université Catholique de l’Ouest in Angers. Consult the department (http://www.frenchitalian.ku.edu) or the Office of Study Abroad (http://www.studyabroad.ku.edu) for information. A faculty member from University of Kansas, or from Texas A&M University in alternate years, leads the spring semester program. Year-long programs at French institutions are available through the International Student Exchange Program. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu).

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Graduate Study Abroad

Graduate students have the opportunity to serve as program assistants for the department’s Paris Summer Language Institute. The department also has a graduate exchange agreement with the Université de Franche-Comté, Besançon, France. The university has a Graduate Direct Exchange program with the École Supérieure de Commerce et d’Administration des Entreprises, Clermont Ferrand, France.

Doctor of Philosophy in French

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In addition to the general admission requirements (http://www.graduate.ku.edu/application-process) from the Office of Graduate Studies, applicants should have the equivalent of the M.A. in French offered at KU. Submit your graduate application online (http://www.graduate.ku.edu/ku-graduate-application). For further information regarding the application process, including department-specific deadlines and required supplemental documentation, please visit the Admissions (http://www.frenchitalian.ku.edu/admission) page of the department website, or contact the department’s Graduate Program Coordinator, Cari Ann Kreienhop, ckreienhop@ku.edu.

Ph.D. Degree Requirements

In addition to the general requirements for the Doctor of Philosophy (http://www.policy.ku.edu/graduate-studies/doctoral-degree-requirements), a student must complete the following departmental requirements:

1. 24 hours of post-M.A. work (exclusive of dissertation hours). Ph.D. students who did not receive their MA in French at KU must complete a total of 30 post M.A. hours, including:

FREN 704 Methods in French Language Instruction
**Handbook for Graduate Students**

A detailed presentation of departmental processes and regulations may be found in the department’s Graduate Student Handbook (http://www.frenchitalian.ku.edu/graduate-program-manual).

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**Summer Program in Florence, Italy**

The department conducts a 6-8-week summer program for elementary, intermediate, or advanced students of Italian. Students take courses in language and culture at an institute where all instructors are native speakers. Students live with Italian families and usually have weekends free to travel. Consult the department (http://www.frenchitalian.ku.edu) or the Office of Study Abroad (http://www.studyabroad.ku.edu) for information.

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**Genetics**

**Genetics Graduate Program**

The Genetics Program at KU offers graduate students an integrated and multidisciplinary training in genetics focused on research. Students
have the opportunity to interact with a diverse faculty who use modern molecular and mathematical approaches to address many different questions in modern genetics, including molecular and developmental genetics, evolutionary and ecological genetics, and human genetics.

Genetics Program students earn a Ph.D. from a participating home department:

- Anthropology (p. 1110),
- Ecology and Evolutionary Biology (p. 1596),
- Molecular Biosciences, (p. 1871) or
- Philosophy (p. 1894).

A B.S. degree in biology (p. 1517) with a concentration in genetics is also available.

Department of Geography

Why study geography?

Because people, places, and environments interact and evolve in a changing world.

Why study atmospheric science?

The study of atmospheric processes enables us to understand human interactions with the environment.

Career Counseling

A major in geography may lead to a career in cartography, environmental analysis, physical geography, regional analysis, urban and regional planning, or to work that requires some combination of geographic subfields.

Professors in the Department of Geography (http://www.geog.ku.edu) provide career counseling. For general questions, see the undergraduate coordinator. For career counseling, see these professors:

Atmospheric Science

Donna Tucker, 417 Lindley; David Braaten, 413C Lindley; Nate Brunsell, 214A Lindley; David Rahn, 201 Lindley; David Mechem, 230 Lindley; Kees van der Veen, 203 Lindley

Cartography

Terry Slocum, 207 Lindley; Margaret Pearce, 404 Lindley

GIS

Xingong Li, 409 Lindley; Terry Slocum, 207 Lindley; Stephen Egbert, 217C Lindley; Jerome Dobson, 214 Lindley

Human and Cultural Geography

Pete Shortridge, 209 Lindley; Chris Brown, 223 Lindley; Peter Herlihy, 202 Lindley; Shannon O’Lear, 219B Lindley; So-Min Cheong, 221 Lindley; Barney Warf, 219C Lindley; Jay Johnson, 402 Lindley; Margaret Pearce, 404 Lindley; Alexander Diener, 413A Lindley

Physical and Environmental Geography

William Johnson, 420 Lindley; Johannes Feddema, 204 Lindley; Kees van der Veen, 203 Lindley; Dan Hirmas, 415A Lindley

Regional Geography and Area Studies

Chris Brown, 223 Lindley; Shannon O’Lear, 219B Lindley; So-Min Cheong, 221 Lindley; Peter Herlihy, 202 Lindley; Pete Shortridge, 209 Lindley; Jay Johnson, 402 Lindley

Remote Sensing/Environmental and Land-Use Analysis

Stephen Egbert, 217C Lindley; Jerome Dobson, 214 Lindley

Undergraduate Programs

Geography integrates information from a variety of sources to study the nature of culture areas, the emergence of physical and human landscapes, and problems of interaction between people and the environment. Mapping and other techniques for gathering and displaying spatial information are integral parts of the field.

The atmospheric science program offers undergraduates a fundamental knowledge of the atmosphere and the weather it generates. Interactions between weather phenomena and human decisions and activities give the subject important applications. Several tracks lead to a Bachelor of Science degree.

Courses for Nonmajors

All geography courses below the 500 level are open to nonmajors, as are several above that level.

Graduate Programs

Geography

The graduate curriculum emphasizes broad geographic training while encouraging in-depth commitment to specialized concentrations. Students also are encouraged to take course work outside the department that complements their degree programs. Credit-hour requirements below are considered minimums for degree programs. Programs are tailored by the student and advisor to conform to the student’s interests and needs, as well as to fulfill the general degree requirements.

The central thrust of the department and the chief capabilities and interests of the faculty fall within these research-teaching areas:

1. Human geography including cultural geography, regional development, and environmental policy;
2. Geographic information science including cartography, geographic information systems, and remote sensing;
3. Physical geography including geomorphology, soils, and biogeography;
4. Regional geography including Africa, East Asia, Russia, Latin America, and the United States; and
5. Atmospheric science and climatology.

Atmospheric Science

The purpose of the program is to expand the student’s knowledge of fundamental atmospheric processes and how the atmosphere interacts with other parts of the environment. Students become familiar with quantitative research methods and how these various approaches can be used to address different problems in atmospheric science. Students gain an in-depth ability to learn specific skills and apply them toward thesis work. These skills consist of, for example, statistical analysis techniques, numerical modeling, or work with atmospheric instrumentation. The
broadth of the program and the diverse research topics explored by the faculty are able to accommodate students with a variety of interests.

**Courses**

**ATMO 105. Introductory Meteorology. 5 Hours. NE GE3N / N.**
A lecture and laboratory course introducing students to the atmosphere, weather and climate phenomena, and their controlling physical processes. Topics covered include: the structure of the atmosphere, energy and energy budgets, climate and climate change, air pollution, clouds and precipitation, pressure and wind systems, severe weather, and weather forecasting. LEC.

**ATMO 106. Introductory Meteorology, Honors. 5 Hours. NE GE3N / N.**
Honors version of ATMO 105. A lecture and laboratory course introducing students to the atmosphere, weather and climate phenomena, and their controlling physical processes. Topics covered include: the structure of the atmosphere, energy and energy budgets, climate and climate change, air pollution, clouds and precipitation, pressure and wind systems, severe weather, and weather forecasting. Prerequisite: Membership in University Honors Program or by permission of instructor. LEC.

**ATMO 177. First Year Seminar: _____, 3 Hours. GE11 / U.**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Atmospheric Science. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

**ATMO 220. Unusual Weather. 3 Hours. NE GE11/GE3N / N.**
An introductory lecture course which surveys the general principles and techniques of atmospheric science and illustrates their application through discussions of natural but unusual weather phenomena such as blizzards, hurricanes, tornados, and chinooks, of the effects of air pollution on weather, and of intentional human alteration of the atmosphere. LEC.

**ATMO 310. Aviation Meteorology. 3 Hours.**
This course introduces students to meteorological events that affect aircraft operations. Aviation applications of meteorological observations including satellite and radar observations are discussed. Students learn about graphical displays of meteorological information. Numerical forecasting models and how their output is applied for aviation is also considered. Forecasting of weather events of particular interest to aviation such as ceiling, visibility, icing and turbulence is emphasized. Prerequisite: ATMO 105 or AE 245 or equivalent. LEC.

**ATMO 321. Climate and Climate Change. 3 Hours. N.**
This course is designed to introduce students to the nature of the Earth's physical climate. It introduces the basic scientific concepts underlying our understanding of our climate system. Particular emphasis is placed on energy and water balances and their roles in evaluating climate change. The course also evaluates the impact of climate on living organisms and the human environment. Finally, past climates are discussed and potential future climate change and its impact on humans is evaluated. (Same as GEOG 321.) Prerequisite: ATMO 105 or GEOG 104. LEC.

**ATMO 499. Honors Course in Atmospheric Science. 2-3 Hours. AE61 / N.**
Open to students with nine hours of upper level credit in Atmospheric Science, an average of at least 3.5 in all Atmospheric Science courses, and an overall average of at least 3.25. Includes the preparation of an honors paper and its defense before a committee of a least two regular faculty members. LEC.

**ATMO 505. Weather Forecasting. 3 Hours. N.**
A first course in synoptic meteorology designed to introduce students to weather analysis and forecasting through the application of hydrodynamic and thermodynamic principles to operational analysis and forecasting. Topics include analysis and interpretation of surface and upper-air observations and data from satellites, radars, and wind profilers; chart and sounding analysis; and three-dimensional, conceptual models of weather systems. The course includes student-led weather briefings and analysis exercises. Prerequisite: ATMO 105 and MATH 121 or MATH 115. LEC.

**ATMO 506. Forecasting Models and Methods. 3 Hours. N.**
Introduction to basic numerical weather prediction methods. Computer programs are used to apply numerical methods to weather data and to evaluate dynamical processes on numerical grids. Meteorological graphics packages are used to analyze current weather data and numerical model output. Current operational numerical models and output products are discussed. Prerequisite: ATMO 505, MATH 122, and EECS 138 or EECS 168. LEC.

**ATMO 515. Energy and Water Balance. 3 Hours. N.**
A study of the distribution and circulation of water in the air-earth system as influenced by atmospheric processes and surface conditions. The solar and terrestrial radiation budget and the water balance at the earth's surface will be applied to agricultural and urban energy and water problems. Prerequisite: ATMO 105 or EECS 138. LEC.

**ATMO 521. Microclimatology. 3 Hours. N.**
A study of climatic environment near the earth-atmosphere interface. Consideration of rural climates in relation to agriculture and urban climates as influenced by air pollution and other factors. Emphasis is on physical processes in the lower atmosphere, distribution of atmospheric variables, the surface energy budget and water balance. (Same as GEOG 521.) Prerequisite: ATMO 105 and MATH 121. LEC.

**ATMO 525. Air Pollution Meteorology. 3 Hours. N.**
A study of background levels and concentrated sources of atmospheric pollution together with considerations of pollution buildup in urban areas as related to particular weather conditions. Inadvertent weather modifications and effects of atmospheric pollution on particular weather events and general climate will be discussed. Prerequisite: ATMO 105, MATH 121, and EECS 138. LEC.

**ATMO 531. Topics in Atmospheric Science: _____, 1-3 Hours. N.**
An investigation of special topics in atmospheric science. May include topics in dynamic, physical or synoptic meteorology or climatology as well as related topics in earth and physical sciences. May be repeated if topic differs. LEC.

**ATMO 605. Operational Forecasting. 2 Hours. N.**
Students enhance their forecasting expertise by preparing forecasts for presentation to the public through a variety of media. Classroom activities include weekly map discussions and analysis of current weather situations. Forecasting topics such as forecast verification, aviation forecast products, severe weather, flash floods and watches and warnings are examined. Credit for ATMO 605, ATMO 606, and ATMO 607 is limited to a total of eight hours, six of which may be counted toward a degree in atmospheric science. Prerequisite: ATMO 505. FLD.

**ATMO 606. Forecasting Practicum - Private Industry. 2 Hours. AE61 / N.**
Practical experience in private industry working with current and/or archived meteorological data. Possibilities include the preparation of forecasts for TV stations and meteorological consulting firms, and working with environmental consulting firms to assess air pollution hazards. May be repeated two times for credit. Credit for ATMO 605, ATMO 606, and ATMO 607 is limited to a total of eight hours, six of which may be counted toward a degree in atmospheric science. Prerequisite: ATMO 605. FLD.
ATMO 607. Forecasting Intern - National Weather Service. 2 Hours. AE52/AE61 / N.
Practical experience working in a National Weather Service forecasting center in analyzing weather data and preparing weather forecasts. May be repeated two times for credit. Credit for ATMO 605, ATMO 606, and ATMO 607 is limited to a total of eight hours, six of which may be counted toward a degree in atmospheric science. Prerequisite: ATMO 605. FLD.

ATMO 630. Synoptic Meteorology. 3 Hours. N.
Interpretation, development, and analysis of synoptic charts. Prerequisite: ATMO 505 and ATMO 640. LEC.

ATMO 634. Physical Climatology. 3 Hours. N.
Atmospheric processes are described and discussed in relation to the climate of the earth's surface. Such topics as the greenhouse effect, ozone depletion, and the effect of solar irradiance on climatic change will be included. The physical processes and relationships between various climatic features will be studied. Prerequisite: ATMO 505 and DSCI 301 or MATH 526. LEC.

ATMO 640. Dynamic Meteorology. 3 Hours. N.
This course introduces the student to the fundamentals of fluid dynamics necessary for understanding large scale atmospheric motions. Fundamental physical laws of conservation of mass, momentum and energy are examined and applied to atmospheric flows. Rotation in the atmosphere is examined quantitatively in terms of both circulation and vorticity. Prerequisite: MATH 223 and PHSX 214 or PHSX 212 and PHSX 236. LEC.

ATMO 642. Remote Sensing. 3 Hours.
This course is designed to prepare students to effectively use remotely sensed data in operational or research settings for further work in this field. Topics include radiation and radiation transfer applied to active and remote sensing; radiative properties of space, sun, earth and atmosphere; instrument design considerations and operational characteristics; inversion methods for temperature or concentration profiling; surface temperature measurement; cloud top height determination; rain rate and wind velocity measurement; severe weather detection; satellite photograph interpretation. Prerequisite: ATMO 680, MATH 581. LEC.

ATMO 650. Advanced Synoptic Meteorology. 3 Hours. N.
Analysis and interpretation of synoptic weather charts including treatment of numerical weather forecasting. Prerequisite: ATMO 630 and ATMO 660. LEC.

ATMO 660. Advanced Dynamic Meteorology. 3 Hours. N.
Advanced study of the atmosphere including treatment of the vorticity equation. Prerequisite: ATMO 640 and MATH 220 or MATH 320. LEC.

ATMO 680. Physical Meteorology. 3 Hours. N.
This course is designed to enhance the student's understanding of atmospheric processes through the study of these processes at molecular through micro scales. Topics include the properties and behavior of gases; transfer processes; phase change; solar and earth radiation; cloud drop, ice crystal and precipitation formation; atmospheric electricity; stratospheric chemistry. Prerequisite: MATH 223; PHSX 214, or PHSX 212 and PHSX 236. LEC.

ATMO 690. Special Problems in Meteorology. 1-3 Hours. N.
Prerequisite: Nine hours in meteorology. IND.

ATMO 697. Seminar for Seniors. 1 Hour. AE61 / N.
Current research in atmospheric science will be discussed. May be repeated for a total of two credit hours. Prerequisite: Senior level in atmospheric science. LEC.

ATMO 699. Undergraduate Research. 2 Hours. AE61 / U.
Work on a research project under the supervision of a faculty member. Prerequisite: Nine credit hours in atmospheric science. May be taken up to three times for credit. IND.

ATMO 710. Atmospheric Dynamics. 3 Hours.
Presentation of contemporary approaches to the study of atmospheric dynamics. May include methodologies that provide insight into global, synoptic, mesoscale or microscale motions. Prerequisite: ATMO 660 or equivalent. LEC.

ATMO 720. Atmospheric Modeling. 3 Hours.
Illustration and application of contemporary approaches to mathematical and statistical description of atmospheric phenomena. Prerequisite: MATH 122, ATMO 640, ATMO 680, and a course in statistics, or consent of instructor. LEC.

ATMO 727. Atmospheric Storms. 3 Hours.
The physical processes and operating principles involved in the development and life cycles of extreme or unusual weather events including tornadoes, blizzards, lightning displays, and tropical storms. Prerequisite: EECS 138, MATH 121, and ATMO 320. LEC.

ATMO 731. Advanced Topics in Atmospheric Science: ____. 1-3 Hours.
Advanced investigation of special topics in atmospheric science. May include topics in dynamic, physical or synoptic meteorology or climatology as well as related topics in earth and physical sciences. May be repeated if topic differs. LEC.

ATMO 750. Numerical Weather Prediction. 3 Hours.
An exploration of the mathematical methods used to describe the current state of the atmosphere and to predict future states. Current operational numerical weather prediction techniques will be included. Prerequisite: ATMO 660. LEC.

ATMO 825. Seminar in Climatology. 2-3 Hours. LEC.

ATMO 827. Seminar in Atmospheric Science. 1-3 Hours. LEC.

ATMO 899. Master's Thesis. 1-10 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

GEOG 100. World Regional Geography. 3 Hours. SC AE42 / S.
An introductory survey of the environmental setting, historically formative periods, and present-day issues that distinguish the major culture areas of the world. LEC.

GEOG 101. World Regional Geography, Honors. 3 Hours. SC AE42 / S.
An introductory survey of the environmental setting, historically formative periods, and present-day issues that distinguish the major culture areas of the world. Open only to students in the College Honors Program, or by consent of instructor. LEC.

GEOG 102. Principles of Human Geography. 3 Hours. SC AE42/GE33 / S.
An examination of the relationships between humans and their environments. The course introduces students to basic concepts in human geography relating to economic activities, landscapes, languages, migrations, nations, regions, and religions. Serves as the basis for further course work in cultural, economic, political, population, and urban geography. LEC.
GEOG 103. Principles of Human Geography, Honors. 3 Hours. SC AE42/GE3S / S.
An introduction to how human societies organize space and modify the world about them. Resultant patterns on the landscape are interpreted through principles of space perception, cultural ecology, diffusion, land use, and location theory. Comparisons are made between urban and rural areas and between subsistence and commercial societies. Open to students who have been accepted into the College Honors Program. LEC.

GEOG 104. Principles of Physical Geography. 3 Hours. NE GE3N / N.
The components of the physical environment are discussed in order to familiarize the student with their distributions and dynamic nature. Major topics include the atmosphere, landforms, soils, and vegetation together with their interrelationships and their relevance to human activity. This course and GEOG 105 together satisfy the laboratory science requirement. Both courses are required for geography majors. LEC.

GEOG 105. Introductory Laboratory in Physical Geography. 2 Hours. U.
A laboratory course designed to complement GEOG 104 in satisfying the laboratory science requirement. It is required for geography majors. Laboratory exercises include a wide variety of analyses using data on the atmosphere, hydrosphere, biosphere, and lithosphere. Prerequisite: GEOG 104, which may be taken concurrently. LAB.

GEOG 107. Principles of Physical Geography, Honors. 3 Hours. NE GE3N / N.
Interactive processes among the systems of the earth are studied and discussed. Major topics include vegetation, soils, landforms, water, the atmosphere, and cycles of matter between these portions of the earth. The course includes lectures and critical discussions to address study problems in physical geography. Open only to students in the University Honors Program or by consent of the instructor. LEC.

GEOG 110. Geopolitics in the News. 3 Hours. S.
This course examines leading contemporary geopolitical events and processes through the lens of geography. It focuses on major political conflicts and struggles as they play out unevenly over space, contextualizing them within broader themes of neocolonialism, globalization, and the international system of nation-states. Emphasis is put on making issues commonly found in the media understandable to students by providing a relevant historical background and drawing comparisons among events. LEC.

GEOG 111. Maps and Mapping. 4 Hours. H.
How do people find their way from here to there or just around? Simple--they use maps. Maybe not maps on pieces of paper but maps in their heads: mental maps. Different people have different maps, even of the same place. Mapping is an ancient form of communication and maps have created ideas and opinions, promoted understanding and confusion. A non-technical approach to the transformation of space onto maps, to their content and structure, and their role and impact in human activity, past and present. Neither background in geography nor artistic skills are required. LEC.

GEOG 140. Global Environment I: The Discovery of Environmental Change. 5 Hours. GE3S / U.
This interdisciplinary course and laboratory sections survey the foundations of environmental understanding and the process of scientific discovery from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the history of environmental systems and life on earth, the discovery of biotic evolution, ecological change, and climate change. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as EVRN 140 and HIST 140.) LEC.

GEOG 142. Global Environment II: The Ecology of Human Civilization. 5 Hours. GE3S / U.
This interdisciplinary course and its laboratory sections survey the history of humanity’s relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the ecology of colonialism and industrial civilization, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to the humanity's engagement with the global environment using historical and present-day examples. (Same as EVRN 142 and HIST 142.) LEC.

GEOG 144. Global Environment I: The Discovery of Environmental Change, Honors. 5 Hours. U.
This interdisciplinary course surveys the foundations of environmental understanding and the process of scientific discovery from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the history of environmental systems and life on earth, the discovery of biotic evolution, ecological change, and climate change. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as EVRN 144 and HIST 144.) Open only to students admitted to the University Honors Program or by permission of instructor. LEC.

GEOG 145. Global Environment II: The Ecology of Human Civilization, Honors. 5 Hours. U.
This interdisciplinary course and its laboratory sections survey the history of humanity's relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the ecology of colonialism and industrial civilization, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to the humanity's engagement with the global environment using historical and present-day examples. (Same as EVRN 145 and HIST 145.) Open only to students admitted to the University Honors Program or by permission of instructor. LEC.

GEOG 148. Scientific Principles of Environmental Studies. 3 Hours. NB / N.
This course presents an overview of our understanding of environmental processes and issues. Topics include scientific principles, resource issues, pollution and global change, among others. This course gives students a rigorous understanding of interactions between humans and their environment and provides students with a scientific basis for making informed environmental decisions. (Same as EVRN 148.) LEC.

GEOG 149. Scientific Principles of Environmental Studies, Honors. 3 Hours. NB / N.
This course presents an overview of our understanding of environmental processes and issues. Topics include scientific principles, resource issues, pollution and global change, among others. This course gives students a rigorous understanding of interactions between humans and their environment and provides students with a scientific basis for
making informed environmental decisions. An honors section of GEOG 148 designed for superior students. (Same as EVRN 149.) Prerequisite: Membership in the University Honors Program or approval of instructor required. LEC.

GEOG 150. Environment, Culture and Society. 3 Hours. SC / S.
An introduction to geographic approaches to the study of the environment, emphasizing societal and cultural factors that influence human interaction with the biosphere, hydrosphere, lithosphere, and atmosphere. The course involves analysis of a broad range of contemporary environmental issues from the local to global scales. (Same as EVRN 150.) LEC.

GEOG 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Geography. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

GEOG 210. Computers, Maps, and Geographical Analysis. 3 Hours. N.
This course will introduce students to a number of different methods for the visualization, representation, and analysis of geographical phenomena. Both field and computer-based techniques will be employed to demonstrate the concept of experimental design and the collection, processing, and analysis of geographical data. Topics include: 1) the unique nature of geographic data; 2) mapping techniques and technologies; 3) geographical information systems; 4) remote sensing (aerial photography and satellite imagery); and 5) methods of geographical analysis (e.g., statistic and spatial modeling). LEC.

GEOG 304. Environmental Conservation. 3 Hours. NE GE3N / N.
A survey of current methods of describing and modeling the function, structure, and productivity of natural and anthropogenically modified earth resource systems, along with a discussion of contemporary views of what constitutes a natural landscape. Fundamental natural science principles about the interplay among lithospheric, atmospheric, hydrospheric, and biospheric components of earth systems are emphasized. Uses of natural resources, including fossil fuels, minerals, and water are described with attention to the earth's total energy budget. Human activities that affect preservation, conservation, and multiple uses of earth regions receive attention. Systems under stress through population and other contemporary forces serve as examples. (Same as EVRN 304.) LEC.

GEOG 311. Map Conception and Development. 4 Hours. N.
An examination of the map process with emphasis on two areas: 1) the mental map formed during interaction with the environment and 2) the map as a physical object which emerges from mapping activity. A local area will serve as the laboratory/environment for the mapping activity including production and use. LEC.

GEOG 316. Methods of Analyzing Geographical Data. 4 Hours. N.
Introduces the benefits and limitations of using quantitative methods to analyze geographical problems. Covers traditional descriptive (e.g., measures of central tendency) and inferential statistics (e.g., hypothesis testing) but also inherently geographical approaches such as shape and point pattern analysis, and spatial autocorrelation. Laboratory emphasizes using the computer to explore and analyze geographical problems. LEC.

GEOG 319. Topics in Techniques: _____. 1-3 Hours. N.
An investigation of special topics in Techniques. May include coursework in cartography, GIS, or remote sensing. May be repeated if topic differs. LEC.

GEOG 321. Climate and Climate Change. 3 Hours. N.
This course is designed to introduce students to the nature of the Earth's physical climate. It introduces the basic scientific concepts underlying our understanding of our climate system. Particular emphasis is placed on energy and water balances and their roles in evaluating climate change. The course also evaluates the impact of climate on living organisms and the human environment. Finally, past climates are discussed and potential future climate change and its impact on humans is evaluated. (Same as ATMO 321.) Prerequisite: ATMO 105 or GEOG 104. LEC.

GEOG 331. Regional Geomorphology of the United States. 3 Hours. N.
This course examines forces and processes affecting the earth's surface, and furthermore identifies and describes the physiographic regions that are the result of these processes. Special efforts are made to explore various photographic resources, satellite imagery, and internet sources or geomorphic data from a regional perspective since there is no wholly satisfactory text available for the course. A research paper is required. Prerequisite: An introductory earth science course or consent of instructor. LEC.

GEOG 332. Glaciers and Landscape. 3 Hours. N.
Elements from glaciology, geology, and climatology are merged to examine the interactions between glaciers and their natural environments, including the processes involved in glacier formation, the relationship between glaciers and climate, the mechanisms of glacier flow, and interpretation of the Earth's glacial record. Emphasis is placed on an interdisciplinary approach to study environmental change and paleoclimate reconstruction. Prerequisite: GEOG 104 or GEOL 101, or consent of instructor. LEC.

GEOG 335. Introduction to Soil Geography. 4 Hours. N.
This course focuses on the properties and processes of soils as they occur in their environment. The student is introduced to the nature of soil as it functions as a body: genesis of soils; properties of soil solids, especially colloids; soil chemical composition, properties, and reactions; interaction between solid, liquid, and gaseous components in soils; plant-soil-water relationships; biological interactions with soil; classification of soils; and the distribution of soils on the landscape. Not open to students who have taken EVRN 535 or GEOG 535. (Same as EVRN 335.) Prerequisite: GEOG 104 or GEOL 101 or consent of instructor; BIOL 100 and CHEM 130 or CHEM 190 recommended. LEC.

GEOG 338. Introduction to River Systems. 3 Hours. N.
A course of fluvial geomorphology. Topics include the drainage basin, fluvial processes, river channel adjustment and forms, human disturbance and geomorphic response, and research methods in fluvial geomorphology. Field trip. Prerequisite: GEOG 104. LEC.

GEOG 339. Topics in Physical Geography: _____. 1-3 Hours. N.
An investigation of special topics in Physical Geography. May include coursework under headings of soils, vegetation, climate, or geomorphology. May be repeated if topic differs. LEC.

GEOG 350. Physical Geography of Africa. 3 Hours. N.
This course is a survey of the basic physical features of the African continent including structure and relief, rivers and lakes, soils and mineral resources. It includes characteristics and processes of African climates, and the ecology of Africa's four major biomes: tropical rain forest, savanna, steppe, and desert. Climatic and environmental variations of the past, emergence of humankind, and development of pastoral and farming systems are discussed. Contemporary environmental concerns also include deforestation and desertification, the impacts of drought, methods for monitoring African environments, and Africa's prospects in a 21st century suffering from global warming. (Same as AAAS 350.) LEC.
GEOG 351. Africa's Human Geographies. 3 Hours. NW AE42/GE3H/GE3S / S/W.
An introduction to historical, cultural, social, political, and economic issues in Africa from a geographic perspective. The course begins with the historical geography of humanity in Africa, from ancient times through to the present. Other topics include cultural dynamics, demography, health, rural development, urbanization, gender issues, and political geography. Case studies from Eastern and Southern Africa will be used to illustrate major themes. (Same as AAAS 351.) LEC.

GEOG 352. Economic Geography. 3 Hours. S.
This course offers an overview of contemporary economic geography with an underlying theme of uneven regional development. Topics examined include: the historical context in which capitalism emerged; the major theoretical approaches used to understand the temporal and spatial dynamics of capitalist society; a series of case studies of different economic sectors; and the global economy, including its development with respect to colonialism, neocolonialism, international trade, third world development, and population growth. LEC.

GEOG 354. Globalization. 3 Hours. S.
This course is designed to provide a broad overview of some major facets of the historical, economic, political, cultural, and geographical dimensions of contemporary globalization, the process by which individual regions and nations have become progressively linked to, and structured by, the world-system of states and markets, and the cultural contradictions associated with this process. LEC.

GEOG 357. History and Philosophy of Geographic Information Science. 3 Hours. N.
An examination of the development of geographic information science (GISci) from its roots in traditional geography, cartography, and remote sensing to modern geographic information systems (GIS). GIS is explored as a new scientific instrument, a "macroscope" for representing and analyzing complex earth processes, both physical and cultural. The societal benefits and risks of GIS are demonstrated and discussed. LEC.

GEOG 358. Principles of Geographic Information Systems. 4 Hours. N.
An introduction to computer-based analysis of spatial data. Covers basic principles of collecting, storing, analyzing, and displaying spatial data. Emphasis is on problem-solving activities using common spatial analytical techniques (e.g., map overlay). The student will gain extensive hands-on experience with state-of-the-art GIS software. LEC.

GEOG 370. Introduction to Cultural Geography. 3 Hours. GE3S / H.
Charts some of the major lines of research in cultural geography, including critical theory, political economy, poststructuralist thought, feminism, and global consumption. Through fieldwork, diverse research methods are applied to issues such as community development, cultural patterns on the landscape and global impacts on local economies. Prerequisite: GEOG 100, GEOG 101, GEOG 102 or GEOG 103; or consent of instructor. LEC.

GEOG 371. Environmental Geopolitics. 3 Hours. S.
This course examines how human relationships with the biophysical world are politicized. Examines key contributions to debates surrounding environmental security, resource conflicts, and related issues, as well as geopolitical assumptions on which these debates build. (Same as EVRN 371.) LEC.

GEOG 372. Environmental Policy. 3 Hours. N.
An historical and analytical study of the formulation, implementation, and consequences of environmental policy in the United States. Attention is directed at relevant interest groups, issues specific to both rural and urban populations, relationships between national policies and international organizations concerned with environmental problems. Prerequisite: GEOG 148 or EVRN 148; and either EVRN 103 or HIST 103, EVRN 347 or HIST 347, or GEOG150 or EVRN 150. LEC.

GEOG 373. Political Geography. 3 Hours. S.
Political Geography is concerned with spatial dynamics of power. It concerns issues such as territory, boundaries, and identity as well as feminist, post-colonial, geopolitical, and environmental perspectives. This class will consider the development of this subfield, the role it has played in imperial expansion, and ways in which more recent critiques have shaped political geography to be a means of understanding different forms of power and its relationship to people and places. Prerequisite: GEOG 100 or GEOG 102 or equivalent or consent of instructor. LEC.

GEOG 375. Intermediate Human Geography. 3 Hours. S.
An examination of processes of cultural-economic interaction and patterns of human activity on a global scale. The topics cover the whole spectrum of human geography, with focus on urban-economic development, innovation and diffusion, and trade. Each week the third hour will be devoted to discussion of topics dealt with in lectures presented during the first two hours. Prerequisite: Introductory course in Geography or consent of the instructor. LEC.

GEOG 377. Urban Geography. 3 Hours. S.
This course explores the city from the multiple perspectives of its inhabitants. The cultural viewpoints of place, gender, age, and ethnicity are stressed. Traditional topics such as urban hierarchy, functions of the city, suburbanization, and ongoing changes in core and peripheral areas also receive attention. The distinctive landscapes of individual North American cities are emphasized, but examples also are drawn from throughout the world. LEC.

GEOG 379. Topics in Cultural Geography: ____. 1-3 Hours. S.
An investigation of special topics in Cultural Geography. May include coursework under headings of culture theory, material culture, language, foodways, or religion. May be repeated if topic differs. LEC.

GEOG 390. Geography of the United States and Canada. 3 Hours. S.
A study of the different physical, economic, and cultural settings in the United States and Canada which form the basis for the various forms of livelihood. Emphasis on the United States. (Same as AMS 390.) Prerequisite: An introductory geography course or background in the United States or Canadian history, social science, or culture or consent of instructor. LEC.

GEOG 395. Environmental Issues of: ____. 3 Hours. S.
This regional geography course examines contemporary environmental issues of a particular region of the world based on the expertise of the professor. Course emphasis is on the interaction of natural, socio-economic, and cultural factors of development that give rise to environmental problems. Students learn how local, national, and international government and non-governmental stakeholders address environmental problems. Course may be repeated with different professors. LEC.

GEOG 396. East Asia. 3 Hours. NW AE42/GE3H/GE3S / S/W.
This course is an introduction to the contemporary politics, economy, and culture of Korea, China, and Japan in the context of globalization. In addition to the discussion of individual countries, the course examines the cross-cutting themes such as international relations, cultural exchange, and economic development in the region of East Asia. LEC.

GEOG 397. Geography of Kansas and the Plains. 3 Hours. S.
A study of the different physical, economic, and cultural settings in Kansas and the Plains that form the basis for various kinds of livelihood. LEC.
GEOG 399. Topics in Regional Studies: ____. 1-3 Hours. S.
An investigation of special topics in Regional Studies. May include coursework related to a specific country or region. May be repeated if topic differs. LEC.

GEOG 410. Human Biogeography, Honors. 3 Hours. N.
Principles of evolution and earth change are used to examine distributions of human populations, wealth, and resources. Readings from the current literature will be included. Lecture and discussion. (Same as BIOL 410.) Prerequisite: BIOL 152 or 153 or GEOG 107 and membership in the University Honors Program or consent of instructor. LEC.

GEOG 418. Workshop in Production Cartography. 1-3 Hours. AE61 / N.
Theory and practice of map production and other related graphics using the latest graphic and GIS software. Projects vary but include the processes of design and production, editing and quality control, and a final printed or operational product. Involves a weekly consultation session and laboratory time in KU Cartographic GIS Services. Prerequisite: Completion of GEOG 311 and consent of instructor. IND.

GEOG 433. Biogeography Field and Laboratory Techniques. 3 Hours. N.
This course provides undergraduate students with practical experience in field data collection techniques and laboratory data analysis methods. During the first half of the semester, students work in the field using a variety of methods to measure such vegetation characteristics as; cover, density, biomass, leaf area, and canopy architecture. Students gain experience in the use of field instruments including a spectroradiometer, and techniques for quantifying biophysical attributes of vegetation. During the later part of the course, students learn to summarize their field data and examine relationships between the vegetation attributes and measurements made using remote sensing instruments. Recommended: GEOG 316 or an introductory statistics equivalent. (Same as EVRN 433.) FLD.

GEOG 458. Geographical Information Systems: ____. 1-6 Hours. N.
An introduction to the organization and components of geographic information systems and their software. Fundamental concepts and their implementation with applications to physical and human systems. LEC.

GEOG 490. Geographic Internship. 1-6 Hours. AE61 / N.
Supervised practical experience. The student submits a proposal describing the internship prior to enrollment. Upon acceptance, regularly scheduled meetings with the advisor provide assistance, guidance and evaluation of progress in the professional experience. A written summary of the experience or outcomes of the research project are prepared independently by the student, a representative of the host agency, and the advisor. Total credit not to exceed six hours. Prerequisite: Fifteen hours of geography and permission of instructor. FLD.

GEOG 498. Special Topics in Geography: ____. 1-5 Hours. U.
Prerequisite: Fifteen hours of geography. IND.

GEOG 499. Honors Course in Geography. 2-3 Hours. AE61 / U.
Open to students with nine hours of upper level credit in geography, an average of at least 3.5 in all geography courses, and an overall average of at least 3.25. Includes the preparation of an honors paper and its defense before a committee of at least two regular faculty members. IND.

GEOG 500. Senior Capstone in Geography. 3 Hours. AE61 / N.
The capstone project provides students with a broad-based, interdisciplinary educational experience and allows them to integrate and synthesize the knowledge they have gained in their studies. The course is designed to achieve several objectives: provide an overview of geography as a unified, coherent discipline with multiple perspectives, emphasize writing and analytical skills, introduce students to a major research project that integrates elements of physical and human geography, and cultivate knowledge of future professional development. Graduate students may take this course by permission only. Prerequisite: Nine hours in Geography and status as a senior major in the department; or permission of instructor. LEC.

GEOG 510. Human Factors. 4 Hours. N.
An introduction to the concepts and theories underlying the study of human-technological systems. Human-machine interfaces and system properties and the environment are considered. Lecture-discussion sessions are supplemented by computer-supported laboratory and research activities. LEC.

GEOG 511. Intermediate Cartography: ____. 1-6 Hours. N.
An investigation of special topics in cartography. Can be repeated for different topics. Prerequisite: A course in cartography and consent of instructor. LEC.

GEOG 513. Cartographic Design. 3 Hours. S.
A study of graphic elements and their role in the physical and perceptual structure of the map image. Concepts and principles of design are stressed with particular emphasis on the figure-ground relationships, color and lettering. Prerequisite: GEOG 311. LEC.

GEOG 514. Visualizing Spatial Data. 4 Hours. N.
Students use Visual Basic or other currently prominent programming language to visualize spatial data. Early projects cover basic principles such as color manipulation and spatial transformations. Later projects involve developing more sophisticated software for data presentation, data exploration, and map animation. Prerequisite: Some experience with Visual Basic or other programming language. LAB.

GEOG 516. Applied Multivariate Analysis in Geography. 3 Hours. N.
An introduction to the application of multivariate statistical analysis in geography. Techniques covered include univariate and multivariate analysis of variance, multiple regression, logistic regression, principle components analysis, and spatial regression. Practical applications of the techniques in a geographical research context are emphasized. Students will learn how to use statistical packages such as SPSS. Prerequisite: GEOG 316 or equivalent. LEC.

GEOG 517. Data Handling and Map Symbolization. 3 Hours. N.
An analysis of methods for manipulating and symbolizing spatial data. Techniques studied include dot, choropleth, proportional symbols, and isarithmic (contour) mapping. Topics covered include data classification, the use of color, and automated methods of interpolation (triangulation, inverse distance, and kriging). Emphasis is on developing maps that can be presented to the general public, although some consideration is given to visualization software that can be utilized by individuals to explore spatial data. Prerequisite: GEOG 111 or GEOG 210 or GEOG 311. LEC.

GEOG 519. History of Cartography. 3 Hours. H.
A history of mapmaking worldwide from its origins to the present day. Emphasis on maps as historical records of evolving civilizations and cultural landscapes and methods of studying early maps. (Same as HIST 546.) LEC.

GEOG 521. Microclimatology. 3 Hours. N.
A study of climatic environments near the earth-atmosphere interface. Consideration of rural climates in relation to agriculture and urban climates as influenced by air pollution and other factors. Emphasis is on physical processes in the lower atmosphere, distribution of atmospheric variables, the surface energy budget, and water balance. (Same as ATMO 521.) Prerequisite: ATMO 105 and MATH 121. LEC.
GEOG 526. Remote Sensing of Environment I. 4 Hours. N.
Introduction to study of the environment through air photos and satellite imagery, including principles of remote sensing, interactions of electromagnetic energy with the atmosphere and earth’s surface, aerial photography, satellite systems, and sensors (electro-optical, thermal, and radar). Emphasis in the latter part of the course is on such applications as global monitoring, land cover mapping, forestry, agriculture, and oceanography. Laboratory emphasizes visual interpretation of aerial photography and satellite imagery and an introduction to digital image processing in the department's NASA Earth Science Remote Sensing Laboratory. (Same as EVRN 526.) Prerequisite: MATH 101 or equivalent. GEOG 358 recommended. LEC.

GEOG 531. Topics in Physical Geography: ____. 1-3 Hours. N.
An investigation of special topics in physical geography. May include specific course work under the headings of geomorphology, climatology, soils, vegetation, quaternary, paleoenvironments, hydrology, etc. May be repeated, if topic differs. LEC.

GEOG 532. Geoaarchaeology. 3 Hours. N.
Application of the concepts and methods of the geosciences to interpretation of the archeological record. The course will focus primarily on the field aspects of geoaarchaeology (e.g., stratigraphy, site formation processes, and landscape reconstruction), and to a lesser extent on the array of laboratory approaches available. (Same as ANTH 517.) Prerequisite: GEOG 104, ANTH 110, or ANTH 310. LEC.

GEOG 535. Soil Geography. 4 Hours. N.
A broad study of the principles and properties of soils and their distribution on the landscape. Topics covered include: pedology, clay mineralogy, soil physics, soil chemistry, management of soils, soil biology, taxonomy, and soil geomorphology. Laboratory section and a field project are required. Not open to students who have taken GEOG 335 or EVRN 335. (Same as EVRN 535.) Prerequisite: GEOG 104 or GEOL 101 or consent of the instructor; BIOL 104 and CHEM 130 or 190 recommended. LEC.

GEOG 537. Elements of Plant Geography. 3 Hours. N.
An introduction to spatial and temporal variation in natural plant populations and communities. Included is an introduction to methods of analysis, and an overview of structure and process in the earth's major biomes. Prerequisite: GEOG 331; or an introductory biology/botany course and GEOG 104; or consent of instructor. LEC.

GEOG 538. Soil Chemistry. 3 Hours. N.
This course examines the chemical properties and processes of soils and methods of evaluation. Topics include solid and solution speciation, mineral solubility, soil colloidal behavior, ion exchange, surface complexation, soil salinity and sodicity, soil acidity, oxidation-reduction reactions, and kinetics of soil chemical processes. (Same as EVRN 538.) Prerequisite: GEOG 335 or GEOG 535 or EVRN 335 or EVRN 535, CHEM 135 or CHEM 195, MATH 121, PHYS 114, or consent of the instructor. LEC.

GEOG 541. Geomorphology. 4 Hours. N.
A critical study of land forms in relation to tectonics, climatic environment, and geologic processes. The use of geomorphic methods in the interpretation of Cenozoic history is emphasized. Laboratory exercises in analysis of field observations, maps, and photographs. Required field trip and fee. (Same as GEOL 541.) Prerequisite: GEOL 101 and GEOL 103, GEOG 104 and GEOG 105, or GEOL 103 and GEOL 304. LEC.

GEOG 550. Environmental Issues in Africa. 3 Hours. S.
Acquaints students with the complexities of debates on environmental problems in Sub-Saharan Africa. Topics addressed may include deforestation, desert expansion, wildlife conservation, soil erosion, climate change, coral reef destruction, water resources development, mangrove preservation, the environmental effects of war, industrialization, and urbanization. Class presentations and projects synthesize the perspectives of both human and physical geography. (Same as AAAS 551.) Prerequisite: GEOG 104 or permission of instructor. LEC.

GEOG 552. Topics in Urban/Economic Geography: ____. 1-3 Hours. S.
An investigation of special topics in urban/economic geography. May include specific course work under the headings of energy, economic development, international trade, environmental perception, housing, transportation, and migration. May be repeated. LEC.

GEOG 553. Geography of African Development. 3 Hours. NW AE42/GE3H/GE3S / S.
Acquaints students with the values of social parameters of African agricultural and pastoral practice. Topics include customary land rights, African perspectives on the natural world, gender issues in African agriculture, and the urbanization of African cultures. The course also contrasts African views with those of Western development practitioners and donor agencies. Case studies from different countries are used to highlight the continent’s regional differences. (Same as AAAS 553.) LEC.

GEOG 556. Geography of the Energy Crisis. 3 Hours. S.
A discussion and analysis of the basic facts and causes of energy problems on a national and world scale. Examines current production, consumption, efficiency, reserves, conservation, and other energy policy options, including adjustments that will affect consumer use, national politics, and strategic issues. Prerequisite: GEOG 102 or GEOG 375. LEC.

GEOG 557. Cities and Development. 3 Hours. S.
An intermediate level course in urban geography, with an emphasis on cities in the developing world. Example cities in Latin America and the Caribbean, Sub-Saharan Africa, the Middle East, South Asia, and/or Southeast Asia may be examined. The main focus is on the intersection between urbanization and economic development, but social, political, and cultural aspects of development in cities are considered. Other topics include the geographic impacts of European colonialism, urbanization and industrialization, rural-to-urban migration, urban structure and spatial dynamics, urban planning, and environmental sustainability. (Same as AAAS 557.) LEC.

GEOG 558. Intermediate Geographical Information Systems. 4 Hours. N.
An intermediate level course in geographic information science designed for advanced undergraduate and graduate level students who already have an introductory understanding of GIS. Emphasis will be placed on the application of spatial analytical techniques to geographical problem-solving. Topics include spatial data structures, interpolation techniques, terrain analysis, cost surfaces, and database management technique. Students will apply knowledge gained in lecture and reading to natural resource, urban, and scientific applications using state-of-the-art GIS software. Prerequisite: GEOG 358 or consent of instructor. LEC.

GEOG 560. GIS Application Programming. 3 Hours. N.
This course teaches programming within Geographic Information Systems. Students learn how to customize GIS applications to automate data processing and spatial analysis through programming languages. GIS programming concepts and methods are introduced from the aspects of spatial data management and analysis covering both the vector and raster data models. Prerequisite: GEOG 558 and a course in programming languages. LEC.
GEOG 570. Geography of American Indians. 3 Hours. NW AE42/GE3H/GE3S / S.
A survey of the culture and history of selected indigenous peoples of the Americas. Emphasis is placed on the environmental setting, the settlement and subsistence patterns, and the impact of European colonization. Discussion includes present-day ethnic and resource issues. LEC.

GEOG 571. Topics in Cultural Geography: ____. 1-3 Hours. S.
An investigation of special topics in cultural geography. May include specific course work under the headings of cultural theory and methodology, material culture, foodways, religion, and similar topics. May be repeated, if topic differs. LEC.

GEOG 574. Exploring Oceania. 3 Hours. S.
Acquaints students with the culture and history of Oceania including its settlement and the impacts of European and American colonialism on Australasia, Melanesia, Micronesia and Polynesia. Emphasis is placed on applying broad geographical concepts to this vast Oceanic region through the lenses of development, media and migration studies. Prerequisite: GEOG 102 or GEOG 103; or consent of instructor. LEC.

GEOG 576. Cultural Geography of the United States. 3 Hours. S.
Distributions of major culture elements including folk architecture, religion, dialect, foodways, and political behavior are systematically studied from a predominately historical perspective. These discussions are followed by a survey of the major culture regions in America. Although not absolutely necessary, familiarity with concepts treated in any of the following courses would be helpful: AMS 100, AMS 110, ANTH 108, ANTH 308, GEOG 102, or GEOG 390. (Same as AMS 576.) LEC.

GEOG 579. Geography of American Foodways. 3 Hours.
An interdisciplinary approach to food that explores the diversity of eating habits across the United States and the role of food as in indicator of cultural identity and change. Current regional and ethnic food consumption patterns are stressed. Topics include multiculturalism and regional identity, the symbiotic relationship between restaurant food and home cooking, the recent interest in farmers’ markets and organic foods, and the importance of the food industry and the popular press in setting trends. (Same as AMS 579.) LEC.

GEOG 590. Understanding Central Asia. 3 Hours. NW / S/W.
An intensive, multidisciplinary survey of Central Asia, focusing on the former Soviet republics-Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan-with additional coverage of neighboring regions (the Caucasus and the Caspian basin, Afghanistan, and western China). The course addresses the history of the region (from the Silk Road to Soviet rule), geography, religion, and the building of post-Soviet states and societies. (Same as REES 510.) LEC.

GEOG 591. Geography of Latin America. 3 Hours. SC AE42/GE3S / S/W.
A study of the different physical, economic, and cultural settings in Latin America which form the basis for the various forms of livelihood. LEC.

GEOG 592. Middle American Geography. 3 Hours. S.
This regional study of the natural environments and cultural-historical backgrounds of Mexico, Central America, and the Caribbean details the physical and historical processes that have shaped the cultural landscape. LEC.

GEOG 593. Central American Peoples and Lands. 3 Hours. S.
This is a study of the natural and cultural history of the region's lands and peoples that focuses on the cultural geography of the surviving indigenous populations, including their culture area, culture history, cultural landscape, and cultural ecology. LEC.

GEOG 594. Geography of the Former Soviet Union. 3 Hours. S/W.
An analysis of the spatial organization of the successor states to the USSR. A study of the diverse human and natural resources, demographic, cultural, and economic conditions. Prerequisite: An introductory geography course or background in Russian-East European history, social science, or culture, or consent of instructor. LEC.

GEOG 595. Geography of Eastern Europe. 3 Hours. S/W.
A study of nations and regions of Eastern Europe, excluding Russia. Prerequisite: An introductory geography course or background in Slavic-East European history, social science, or culture or consent of instructor. LEC.

GEOG 597. Geography of Brazil. 3 Hours. S.
Study of geographic factors, physical and cultural, that are basic to understanding the historical development of Portuguese South America and the contemporary and cultural geography of Brazil. Course also includes a survey of Brazil’s South American neighbors. LEC.

GEOG 601. Indigenous Peoples of the World. 3 Hours. S.
A survey of the varied responses of global Indigenous peoples as a result of the imposition of external economic and political systems. An overview of diverse, thematic issues such as land rights, economic development, resources and cultural patrimony, languages, knowledge systems, and women’s rights from the perspectives of Indigenous societies around the world. Detailed studies of Indigenous peoples seeking recognition and protection under international law are used. (Same as ISP 601.) Prerequisite: Permission of instructor. LEC.

GEOG 635. Soil Physics. 3 Hours. N.
Provides theoretical and practical foundations for understanding physical properties and processes of variably-saturated porous media. Focus is on the transport, retention, and transformation of water, heat, gas, and solutes through the soil. We examine modern vadose zone measurement methods, analytical tools, and numerical models for data collection and interpretation. (Same as EVRN 635.) Prerequisite: GEOG 335 or EVRN 335, or GEOG 535 or EVRN 535, and MATH 121, PHSX 114; or consent of instructor. LEC.

GEOG 658. Topics in Geographic Information Science: ____. 1-6 Hours.
An investigation of special topics in geographic information science. May include specific coursework under the headings of methodology, basic research, thematic or regional applications, geographic information systems (GIS), Global Positioning System (GPS), and geostatistics. May be repeated if topic differs. LEC.

GEOG 670. Cultural Ecology. 3 Hours. S.
Investigation of the interrelations between socio-cultural systems and the natural environment, including a survey of major theories and descriptive studies. (Same as ANTH 695.) Prerequisite: An introductory geography course or background in Slavic-social science, or culture, or consent of instructor. LEC.

GEOG 710. Information Design. 3 Hours.
Concepts and principles for the organization of verbal, numerical, and graphic/spatial data and their application to the production of information displays and instruments. Examination of the evolution of the information design process from the traditional (communication system) perspective to interactive user-centered design approaches. The nature of human information processing in handling information for both visualization and analysis, with particular emphasis on decision-making and usability. Prerequisite: GEOG 510, INDD 510, PSYC 318, PSYC 685, or equivalent, or consent of instructor. LEC.

GEOG 711. Advanced Cartography: ____. 3 Hours.
An investigation of special topics in cartography. Can be repeated for different topics. Prerequisite: Consent of instructor. LEC.
GEOG 713. Practicum in Cartography. 1-6 Hours.
Experience in the organization and presentation of cartographic material in lecture, discussion, and laboratory formats. May be repeated to a total of six credits. Prerequisite: Consent of instructor. FLD.

GEOG 714. Field Experience. 3 Hours. AE61.
Working in a new environment presents problems unlike those encountered in a classroom situation. Data collection techniques and exercises discussed in this off-campus course are intended to provide experience in dealing with an unfamiliar situation. Course location is dictated by the interests and composition of the student group; offered in the first three weeks of August. Geography majors are encouraged to attend. This course is required for graduate students. Fee required. Prerequisite: Junior-senior standing and fifteen hours of geography or consent of instructor. FLD.

GEOG 716. Advanced Geostatistics. 3 Hours.
An introduction to the practical application of advanced geospatial statistical techniques. Potential topics include: spatial regression, interpolation, clustering, and advanced nonparametric statistics. Knowledge of a statistical package and GIS is assumed. Prerequisite: GEOG 516 or equivalent and GEOG 358 or equivalent. LEC.

GEOG 719. Development of Geographic Thought. 2-3 Hours.
Critical analysis of the growth of geographic thought from antiquity to the present: emphasis on structure of modern geography. Prerequisite: Twenty hours of geography or consent of instructor. LEC.

GEOG 726. Remote Sensing of Environment II. 4 Hours.
An overview of techniques for computer analysis of digital data from earth orbiting satellites for environmental applications. Topics covered include: data formats, image enhancements and analysis, classification, thematic mapping, and environmental change detection. The laboratory exercises provide hands-on experience in computer digital image processing in the department's NASA Earth Science Remote Sensing Laboratory. Prerequisite: Introductory statistics and GEOG 526 or equivalent. LEC.

GEOG 731. Topics in Physical Geography: ____. 1-3 Hours.
An investigation of special topics in physical geography. May include specific course work under the headings of geomorphology, climatology, soils, vegetation, quaternary, paleoenvironments, hydrology, etc. May be repeated. RSH.

GEOG 733. Advanced Biogeography Field and Laboratory Techniques. 3 Hours.
This course provides graduate students with practical experience in field data collection techniques and laboratory data analysis methods. During the first half of the semester, students will work in the field using a variety of methods to measure such vegetation characteristics as: cover, density, biomass, leaf area, and canopy architecture. Students will gain experience in the use of field instruments including a spectroradiometer, and techniques for quantifying vegetation biophysical attributes. The laboratory analyses component will include: data summary, data entry, correlation, regression, MANOVA, cluster analysis, and data display, and reporting. Recommended: GEOG 516 or multivariate statistics equivalent. LEC.

GEOG 735. Soil Geomorphology. 3 Hours.
Examines the interaction of pedogenic and geomorphic processes during the Quaternary with an emphasis on strategies and methodologies employed in soil-geomorphic studies. Group research projects incorporating field data collection and analyses are required. Prerequisite: GEOG 335 or GEOG 535 or consent of the instructor. LEC.

GEOG 741. Advanced Geomorphology. 1-3 Hours.
Detailed discussions of processes and landforms characteristic of specific environments. Considered during separate semesters will be general methodology, and fluvial, arid regions, glacial, and shoreline geomorphology. Course may be taken more than once. (Same as GEOL 741.) Prerequisite: GEOG 541. LEC.

GEOG 749. Topics in Stable Isotopes in the Natural Sciences: ____. 2-3 Hours.
Isotopic compositions of substances provide powerful insights into many topics in the natural sciences. Applications of isotopic analyses of carbon, hydrogen, oxygen, and nitrogen to selected research topics such as plant resource use, food web analysis, paleoecology, paleodiet reconstruction, hydrology, and soils genesis will be examined. Knowledge of isotope chemistry is not required. (Concepts necessary to understand pertinent articles will be taught during the first class meetings.) May be repeated. (Same as BIOL 749.) LEC.

GEOG 751. Analysis of Regional Development. 3 Hours.
An analytical approach to spatial organization of economic activities and aspects of growth and development. Location theory and the geography of trade and migration. A research paper is required. Prerequisite: GEOG 551, or a course in economics, or consent of instructor. LEC.

GEOG 752. Topics in Urban/Economic Geography: ____. 1-3 Hours.
An investigation of special topics in urban/economic geography. May include specific coursework under the headings of energy, economic development, international trade, environmental perception, housing, transportation, and migration. May be repeated. LEC.

GEOG 756. Energy Problems and the Economic-Physical Environment. 2-3 Hours.
This course investigates the economic, social, political, and environmental conditions of energy production, transport, and use: total energy consumption and mix, relations to the level and structure of the economy, substitutability of fuel and energy sources, resource endowment in an international setting. Prerequisite: GEOG 551 or a course in economics or consent of instructor. LEC.

GEOG 758. Geographic Information Science. 4 Hours.
This course integrates topics in geographical information science (GISci) with spatial analytical techniques to solve spatial problems. Focuses on the most current research in GISci and its relevance to the environmental sciences, natural resource management, and spatial decision-making. Students are expected to apply the concepts and techniques learned in this class to their own research projects. Prerequisite: GEOG 316 and GEOG 558, or consent of instructor. LEC.

GEOG 771. Topics in Cultural Geography: ____. 1-3 Hours.
An investigation of special topics in cultural geography. May include specific course methodology, material culture, foodways, religion, and similar topics. May be repeated. LEC.

GEOG 772. Problems in Political Geography. 3 Hours.
Case studies of regional and national power settings with particular emphasis upon the geographical analysis of political developments in unstable areas of the world. Prerequisite: GEOG 102 or GEOG 375. LEC.

GEOG 773. Humanistic Geography. 3 Hours.
A discussion and project-oriented course focused on ways of studying the character and meaning of places. Concepts examined include place image and image makers, landscapes as text, sense of place, vernacular regions, and alternate representations of space. Prerequisite: Graduate standing or fifteen hours of geography or consent of instructor. LEC.
GEOG 775. Proseminar in Population Geography. 3 Hours.
Evaluation of problem formulation data gathering, research methods, and substantive knowledge in the geography of human populations. Concurrent auditing of GEOG 575 plus an additional meeting each week is required. Prerequisite: GEOG 575 and GEOG 516, and SOC 514. LEC.

GEOG 790. North American Regions: _____. 3 Hours.
A detailed description and analysis of selected regions of North America. Prerequisite: An introductory geography course or background in United States or Canadian history, social science, or culture or consent of instructor. LEC.

GEOG 791. Latin American Regions: _____. 3 Hours.
A description and analysis of the principal sources of geographic information pertaining to portions or all of Latin America. Prerequisite: GEOG 591 or concurrent auditing of GEOG 591, or consent of instructor. LEC.

GEOG 794. Regions of the Former USSR. 3 Hours.
A description and analysis of geographic data pertaining to the successor states to the USSR. Prerequisite: Fifteen hours of Geography courses or background in Russian, East European or Middle East studies, or consent of instructor. LEC.

GEOG 795. European Regions: _____. 3 Hours.
Prerequisite: Fifteen hours of geography, background in specified area, or consent of instructor. LEC.

GEOG 796. Asian Regions: _____. 2-3 Hours.
Prerequisite: Fifteen hours in geography courses or background in Asia, or consent of instructor. LEC.

GEOG 801. Indigenous Peoples of the World. 3 Hours.
A survey of the varied responses of global Indigenous peoples as a result of the imposition of externally-dominated economic and political systems. An overview of diverse, thematic issues such as land rights, economic development, resources and cultural patrimony, languages, knowledge systems, and women’s rights from the perspectives of Indigenous societies around the world. Detailed studies of Indigenous peoples seeking recognition and protection under international law will be used. The course is offered at the 600 and 800 levels, with additional assignments at the 800 level. (Same as ISP 801.) LEC.

GEOG 802. Urban Geographic Information Systems. 3 Hours.
An advanced survey of urban GIS/LIS focusing on: (1) history; (2) the wide range of applications from Automated Mapping/Facilities Management (AM/FM) to topologically related GIS; (3) generic analytical functions in both raster and vector modalities; and (4) software employed, hardware platforms, and institutional settings. A limited experience in the use of GIS is provided from exercises employing ARC/INFO software. Prerequisite: Some experience with DOS based computing. LEC.

GEOG 805. History of Geographic Thought. 2 Hours.
A course to familiarize students with the history and philosophy of geography as a science and humanity. The course summarizes, reviews, and explores the ongoing relevance of 2,500 years of theoretical and methodological advancements in human and physical geography. LEC.

GEOG 806. Basic Seminar. 2 Hours.
The second of two courses required of M.A. students designed to provide experience in the development of research proposals and exposure to methodologies in geography. This course deals with approaches to geographic problems, and involves individual examination of special topics which require preparation, presentation, and critical evaluation of research proposals. LEC.

GEOG 818. Problems in Production Cartography. 1-3 Hours.
Advanced instruction in the theory and practice of producing maps and other related graphics for classroom instruction and research projects. Emphasis will be on current photo-mechanical and automated techniques. Prerequisite: By appointment. Consent of instructor. LEC.

GEOG 835. Practicum in Soil Mapping and Soil Erosion. 3 Hours.
This course is designed to give graduate students field experience in soil mapping and in the evaluation of soils for loss through processes of erosion. Prerequisite: GEOG 535 or equivalent or consent of instructor. LEC.

GEOG 858. Environmental Geographic Information Systems. 4 Hours.
An introduction to the use of GIS for environmental inventory, monitoring, and modeling. This course integrates the principles of landscape ecology with the analytical tools of GIS, remote sensing, and spatial analysis. Students will be taught GIS methodologies used to address real world problems and the use of GIS spatial analysis techniques to characterize landscapes and monitor their change. Prerequisite: GEOG 316 and GEOG 558 or equivalents, multivariate analysis recommended. LEC.

GEOG 890. Geographic Internship. 1-6 Hours.
Supervised professional experience. The student submits to the program committee a proposal describing the internship prior to enrollment. Upon acceptance, regularly scheduled meetings with the advisor provide assistance, guidance and evaluation of progress in the professional experience. A written summary of the experience or outcomes of the research project are prepared independently by the student, a representative of the host agency, and the advisor. Total credit not to exceed six hours. Prerequisite: Twelve hours of graduate level geography courses and consent of program committee. FLD.

GEOG 898. Readings in Geography. 1-4 Hours.
RSH.

GEOG 899. Master’s Thesis. 1-10 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

GEOG 911. Seminar in Cartography: _____. 1-4 Hours.
Study of selected topics in cartography. Can be repeated for different topics. Prerequisite: GEOG 513 or consent of instructor. LEC.

GEOG 912. Seminar in Quantitative Methods. 2-3 Hours.
LEC.

GEOG 926. Seminar in Remote Sensing. 2-4 Hours.
Study of selected topics in remote sensing theory and application. May include independent or group research and/or development work. Topic will be specified in advance. Prerequisite: GEOG 726 or consent of instructor. LEC.

GEOG 935. Seminar in Soil Geography. 2-3 Hours.
Subject matter varies but focuses on modern concepts and trends in soil geography. Sample topics include classification, paleopedology, and soil genesis. Field trip and fee may be required. Prerequisite: GEOG 735 or consent of instructor. LEC.

GEOG 937. Seminar in Vegetation Geography. 1-3 Hours.
(Same as BIOL 968.) LEC.

GEOG 939. Seminar in Fluvial Systems. 2-3 Hours.
Study of selected topics in theory and method of fluvial systems. Samples include hydraulic geometry, the nature of alluvial sediments, and basin case studies. Topic will be specified in advance. LEC.

GEOG 957. Seminar in Urban and Economic Geography. 2-3 Hours.
LEC.
Bachelor of Arts and Bachelor of General Studies in Geography

GEOG 958. Seminar in Geographic Information Systems. 2-4 Hours. Study of selected topics in analysis of digital geographic data. May include research and/or developmental work. Prerequisite: GEOG 758 or equivalent, or consent of instructor. LEC.

GEOG 970. Seminar in Cultural Geography: ____. 2-3 Hours. Study of selected topics in the theory and method of cultural geography. Samples include religious patterns, folk architecture, and place-defining novels. Topic will be specified in advance. LEC.

GEOG 972. Seminar in Political Geography. 2-3 Hours. Study of selected topics in the theory and method of political geography. Samples include insurgent states, electoral patterns, and political ecology. Topic will be specified in advance. Prerequisite: GEOG 772 or consent of instructor. LEC.

GEOG 975. Seminar in Population Geography. 2-3 Hours. Study of selected geographic topics and problems dealing with the distribution of human populations. Prerequisite: GEOG 775 or consent of instructor. LEC.

GEOG 980. Seminar in Geography: ____. 1-3 Hours. LEC.

GEOG 990. Seminar in Regional Geography: ____. 1-3 Hours. (Selected areas to be specified.) LEC.

GEOG 998. Research in Geography. 1-5 Hours. RSH.

GEOG 999. Doctoral Dissertation. 1-10 Hours. Graded on a satisfactory/unsatisfactory basis. THE.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Geography Programs

The B.A., B.G.S., and B.S. in geography provide general liberal arts enrichment, preparation for graduate work, and training for careers in geography and related fields. Geography may be combined with another program as a double major, or courses in another area may simply be added to those in geography.

First- and Second-Year Preparation

Students should begin the major by meeting the core requirements and preparing for major courses.

Requirements for the B.A. or B.G.S. Major

Geography Core Knowledge and Skills (18)

Majors must complete a course in each of the following areas:

- Principles of Physical Geography. Satisfied by: GEOG 104 Principles of Physical Geography (Required Geography Courses)
- or GEOG 107 Principles of Physical Geography, Honors

Introductory Laboratory in Physical Geography. Satisfied by:

- GEOG 105 Introductory Laboratory in Physical Geography

Principles of Human Geography. Satisfied by:

- GEOG 102 Principles of Human Geography
- or GEOG 103 Principles of Human Geography, Honors

Computers, Maps and Geographical Analysis. Satisfied by:

- GEOG 210 Computers, Maps, and Geographical Analysis

Mapping. Satisfied by:

- GEOG 316 Methods of Analyzing Geographical Data
- or GEOG 358 Principles of Geographic Information Systems

Senior Capstone in Geography. Satisfied by:

- GEOG 500 Senior Capstone in Geography
- or GEOG 714 Field Experience

Geography Required Elective Hours (0)

Majors must complete five courses (15 hours) at the 200-500 level, in addition to the core above, from at least 3 of the following 4 groups, one of which must be a regional course:

Physical Studies. Satisfied by:

- GEOG 148 Scientific Principles of Environmental Studies
- GEOG 304 Environmental Conservation
- GEOG 321 Climate and Climate Change
- GEOG 331 Regional Geomorphology of the United States
- GEOG 332 Glaciers and Landscape
- GEOG 335 Introduction to Soil Geography
- GEOG 338 Introduction to River Systems
- GEOG 339 Topics in Physical Geography: _____
- GEOG 350 Physical Geography of Africa
- GEOG 410 Human Biogeography, Honors

Bachelor of Arts and Bachelor of General Studies in Geography

Why study geography?

Because people, places, and environments interact and evolve in a changing world.

Why study atmospheric science?

The study of atmospheric processes enables us to understand human interactions with the environment.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.
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<td>Geographical Information Systems: _____</td>
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<tr>
<td>GEOG 511</td>
<td>Intermediate Cartography: _____</td>
</tr>
<tr>
<td>GEOG 513</td>
<td>Cartographic Design</td>
</tr>
<tr>
<td>GEOG 514</td>
<td>Visualizing Spatial Data</td>
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<tr>
<td>GEOG 516</td>
<td>Applied Multivariate Analysis in Geography</td>
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<tr>
<td>GEOG 517</td>
<td>Data Handling and Map Symbolization</td>
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<td>GEOG 526</td>
<td>Remote Sensing of Environment I</td>
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<tr>
<td>GEOG 558</td>
<td>Intermediate Geographical Information Systems</td>
</tr>
<tr>
<td>GEOG 560</td>
<td>GIS Application Programming</td>
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<tr>
<td>GEOG 658</td>
<td>Topics in Geographic Information Science: _____</td>
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<tr>
<td>GEOG 711</td>
<td>Advanced Cartography: _____</td>
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<tr>
<td>GEOG 713</td>
<td>Practicum in Cartography</td>
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<td>GEOG 714</td>
<td>Field Experience</td>
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<td>GEOG 716</td>
<td>Advanced Geostatistics</td>
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<td>GEOG 726</td>
<td>Remote Sensing of Environment II</td>
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<tr>
<td>GEOG 733</td>
<td>Advanced Biogeography Field and Laboratory</td>
</tr>
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<td>GEOG 738</td>
<td>Techniques</td>
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<td>GEOG 758</td>
<td>Geographic Information Science</td>
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<tr>
<td>GEOG 519</td>
<td>History of Cartography</td>
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<tr>
<td>GEOG 552</td>
<td>Topics in Urban/Economic Geography: _____</td>
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<tr>
<td>GEOG 556</td>
<td>Geography of the Energy Crisis</td>
</tr>
<tr>
<td>GEOG 557</td>
<td>Cities and Development</td>
</tr>
<tr>
<td>GEOG 570</td>
<td>Geography of American Indians</td>
</tr>
<tr>
<td>GEOG 571</td>
<td>Topics in Cultural Geography: _____</td>
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<td>GEOG 576</td>
<td>Cultural Geography of the United States</td>
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<tr>
<td>GEOG 579</td>
<td>Geography of American Foodways</td>
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<td>GEOG 601</td>
<td>Indigenous Peoples of the World</td>
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<td>GEOG 670</td>
<td>Cultural Ecology</td>
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<tr>
<td>GEOG 710</td>
<td>Information Design</td>
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<td>GEOG 719</td>
<td>Development of Geographic Thought</td>
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<td>GEOG 752</td>
<td>Topics in Urban/Economic Geography: _____</td>
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<tr>
<td>GEOG 756</td>
<td>Energy Problems and the Economic-Physical</td>
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<td>GEOG 771</td>
<td>Environment</td>
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<tr>
<td>GEOG 772</td>
<td>Problems in Political Geography</td>
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<tr>
<td>GEOG 711</td>
<td>Topics in Cultural Geography: _____</td>
</tr>
<tr>
<td>GEOG 712</td>
<td>Problems in Political Geography</td>
</tr>
</tbody>
</table>

**Regional Studies. Satisfied by:**

- GEOG 351  Africa's Human Geographies
- GEOG 390  Geography of the United States and Canada
- GEOG 395  Environmental Issues of: _____
- GEOG 396  East Asia
- GEOG 397  Geography of Kansas and the Plains
- GEOG 399  Topics in Regional Studies: _____
- GEOG 550  Environmental Issues in Africa
- GEOG 553  Geography of African Development
- GEOG 574  Exploring Oceania
- GEOG 591  Geography of Latin America
- GEOG 590  Understanding Central Asia
- GEOG 592  Middle American Geography
- GEOG 593  Central American Peoples and Lands
- GEOG 594  Geography of the Former Soviet Union
- GEOG 595  Geography of Eastern Europe
- GEOG 597  Geography of Brazil
- GEOG 790  North American Regions: _____
- GEOG 791  Latin American Regions: _____
- GEOG 794  Regions of the Former USSR
- GEOG 795  European Regions: _____
- GEOG 796  Asian Regions: _____

**Major Hours & Major GPA**

While completing all required courses (above), majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 33 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior (300+) Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior (300+) Graduation GPA**
Bachelor of Science in Geography

Why study geography?
Because people, places, and environments interact and evolve in a changing world.

Why study atmospheric science?
The study of atmospheric processes enables us to understand human interactions with the environment.

Undergraduate Admission

Admission to KU
All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences
Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements.

See individual department/program sections for departmental admission requirements.

Geography Programs
The B.A., B.G.S., and B.S. in geography provide general liberal arts enrichment, preparation for graduate work, and training for careers in geography and related fields. Geography may be combined with another program as a double major, or courses in another area may simply be added to those in geography.

First- and Second-Year Preparation
Students should begin the major by meeting the core requirements and preparing for major courses.

Requirements for the B.S. Degree

Geography B.S. General Education Requirements

Written Communication – Core Skill and Critical Inquiry.

Composition (0)
Satisfied by one of the following. Requirement must be completed during initial term of admission at KU.
ENGL 101 Composition
ACT English score of 27 or above or SAT English score of 600 or above
AP English Literature & Composition score of 3 or above
Equivalent transfer course

Critical Reading and Writing (0)
Satisfied by one of the following. Requirement must be completed during initial term of admission at KU.
ENGL 102 Critical Reading and Writing
or ENGL 105 Freshman Honors English
AP English Literature & Composition score of 4 or above
Equivalent transfer course

Sophomore Reading and Writing II (0)
Satisfied by one of the following:
ENGL 203 Topics in Reading and Writing: _____
or ENGL 205 Freshman-Sophomore Honors Proseminar: _____
ENGL 209 Introduction to Fiction
ENGL 210 Introduction to Poetry
ENGL 211 Introduction to the Drama
ENGL 362 Foundations of Technical Writing (recommended)
AP English Literature & Composition score of 5 or above
Equivalent

Communications. Satisfied by COMS 130 (COMS 230, PHIL 148, PHIL 310 or exemption).

History or philosophy of science.

Select one of the following or consult undergraduate committee for approval of alternatives:
HIST 103 Environment and History
HIST 136 Early Science to 1700
HIST 305 The Scientific Revolution
HIST 306 Science and Western Culture
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>HIST 311</td>
<td>Great Lives in Science</td>
</tr>
<tr>
<td>HIST 347</td>
<td>Environmental History of North America</td>
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<tr>
<td>HIST 360</td>
<td>Science and Religion</td>
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<td>HIST 407</td>
<td>History of Science in the United States</td>
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<tr>
<td>PHIL 370</td>
<td>Moral Issues in Medicine</td>
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<td>PHIL 375</td>
<td>Moral Issues in Computer Technology</td>
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<td>PHIL 380</td>
<td>Environmental Ethics</td>
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<tr>
<td>PHIL 620</td>
<td>Philosophy of Natural Science</td>
</tr>
<tr>
<td>PHIL 622</td>
<td>Philosophy of Social Science</td>
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<td>GEOG 357</td>
<td>History and Philosophy of Geographic Information Science</td>
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<td>PHSX 115</td>
<td>College Physics II</td>
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<tr>
<td>&amp; PHSX 202</td>
<td>and Calculus Supplement to College Physics II</td>
</tr>
<tr>
<td>&amp; PHSX 236</td>
<td>and General Physics II Laboratory</td>
</tr>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
</tr>
<tr>
<td>&amp; BIOL 152</td>
<td>and Principles of Organismal Biology</td>
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<td>CHEM 130</td>
<td>General Chemistry I</td>
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<tr>
<td>&amp; CHEM 135</td>
<td>and General Chemistry II (or CHEM 190 and CHEM 195)</td>
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<td>EECS 138</td>
<td>Introduction to Computing: ________</td>
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<tr>
<td>GEOF 104</td>
<td>Principles of Physical Geography</td>
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<tr>
<td>or GEOF 107</td>
<td>Principles of Physical Geography, Honors</td>
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<tr>
<td>GEOF 201</td>
<td>Introductory Laboratory in Physical Geography</td>
</tr>
<tr>
<td>GEOF 202</td>
<td>Introductory Laboratory in Physical Geography</td>
</tr>
<tr>
<td>GEOL 200</td>
<td>One course in Human or Regional Geography</td>
</tr>
<tr>
<td>MATH 125</td>
<td>Calculus I</td>
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<td>MATH 126</td>
<td>Calculus II</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 320</td>
<td>Calculus II</td>
</tr>
<tr>
<td>PHSX 211</td>
<td>General Physics I</td>
</tr>
<tr>
<td>&amp; PHSX 215</td>
<td>and General Physics I Laboratory (recommended)</td>
</tr>
<tr>
<td>PHSX 114</td>
<td>College Physics I</td>
</tr>
<tr>
<td>&amp; PHSX 201</td>
<td>and Transition to General Physics</td>
</tr>
<tr>
<td>&amp; PHSX 216</td>
<td>and General Physics I Laboratory</td>
</tr>
<tr>
<td>PHSX 212</td>
<td>General Physics II</td>
</tr>
<tr>
<td>&amp; PHSX 236</td>
<td>and General Physics II Laboratory</td>
</tr>
</tbody>
</table>

Humanities - Understanding the Human Condition. Satisfied by completing 2 principal courses in the humanities. Approved courses may be searched for availability through the Kyou portal.

Social and Behavioral Sciences - Understanding Society and Behavior. Satisfied by completing 2 principal courses in the social sciences. Approved courses may be searched for availability through the Kyou portal.

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 50 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

**Physical Geography Option**

**Geography Prerequisite or Co-requisite Knowledge (29-31)**

Calculus I. Satisfied by one of the following:

- MATH 125 Calculus I

Calculus II. Satisfied by one of the following:

- MATH 126 Calculus II

(MATH 220 and 320 are also recommended)

Physics I. Satisfied by one of the following:

- MATH 220 Calculus I

Physics II. Satisfied by one of the following:

- MATH 320 Calculus II

**Techniques Courses (11)**

Methods of Analyzing Geographical Data. Satisfied by:

- GEOF 316 Methods of Analyzing Geographical Data

Principles of Geographic Information Systems. Satisfied by:

- GEOF 358 Principles of Geographic Information Systems

One 500-level or above course from GIS Studies. (GEOF 526 Remote Sensing of Environment I recommended)

**Senior Capstone (3)**

Satisfied by one of the following:

- GEOF 500 Senior Capstone in Geography

- GEOF 714 Field Experience

**Elective Courses (9)**

Select two or more of the following:

**Biogeography:**

- GEOF 537 Elements of Plant Geography

**Climate:**

- GEOF 521 Microclimatology

**Geomorphology:**

- GEOF 532 Geoarchaeology

- GEOF 541 Geomorphology

**Soil Geography:**

- GEOF 538 Soil Chemistry
Geographical Information and Analysis Option

**Geography Prerequisite or Co-requisite Knowledge (6-11)**

Calculus I. Satisfied by one of the following:
- MATH 125 Calculus I
- or MATH 145 Calculus I, Honors

Calculus II. Satisfied by one of the following:
- MATH 126 Calculus II
- or MATH 146 Calculus II, Honors

General Physics I. Satisfied by:
- PHSX 211 General Physics I (or PHSX 114 and PHSX 201) 1-4

General Physics II. Satisfied by:
- PHSX 212 General Physics II (or PHSX 115 and PHSX 202) 1-3

Visualizing Spatial Data. Satisfied by:
- GEOG 514 Visualizing Spatial Data 4
- or EECS 138 Introduction to Computing: _____

**Overview Geography Courses (0)**

Principles of Physical Geography or Scientific Principles of Environmental Studies. Satisfied by one of the following:
- GEOG 104 Principles of Physical Geography
- & GEOG 105 and Introductory Laboratory in Physical Geography
- GEOG 107 Principles of Physical Geography, Honors
- & GEOG 105 and Introductory Laboratory in Physical Geography
- GEOG 140 Global Environment I: The Discovery of Environmental Change

Maps and Mapping or Computers, Maps, and Geographical Analysis. Satisfied by:
- GEOG 111 Maps and Mapping
- or GEOG 210 Computers, Maps, and Geographical Analysis

Principles of Human Geography. Satisfied by:
- GEOG 102 Principles of Human Geography
- or GEOG 103 Principles of Human Geography, Honors

2 GEOG 300+ courses. One in Physical and one in Human and/or Regional Geography

**Core Geographic Information Science Courses (0)**

Six courses, at least one from each category:

- Cartography and Visualization. Satisfied by:
  - GEOG 311 Map Conception and Development
  - GEOG 513 Cartographic Design
  - GEOG 517 Data Handling and Map Symbolization

- Geographical Information Systems. Satisfied by:
  - GEOG 358 Principles of Geographic Information Systems
  - GEOG 558 Intermediate Geographical Information Systems
  - GEOG 758 Geographic Information Science

- Remote Sensing. Satisfied by:
  - GEOG 526 Remote Sensing of Environment I
  - GEOG 726 Remote Sensing of Environment II

- Statistics. Satisfied by:
  - GEOG 316 Methods of Analyzing Geographical Data
  - GEOG 516 Applied Multivariate Analysis in Geography

- GEOG 716 Advanced Geostatistics

**Senior Capstone in Geography (0)**

Satisfied by:
- GEOG 500 Senior Capstone in Geography
- or GEOG 714 Field Experience

**Geographic Information Science Electives (0)**

Two other courses from geographic information science

**Allied Field (9)**

Three courses and nine hours minimum in one field (or a minor) (area studies, atmospheric science, biology, computer science, design, environmental studies, engineering, geology, psychology, urban planning).

**Electives (14-23)**

14-23 credit hours of any university courses.

**Geography Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 50 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior (300+) Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior (300+) Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

**Departmental Honors in Geography**

To be accepted as a candidate for honors, an undergraduate major must have completed at least 9 hours of upper-division credit in geography with a grade-point average of 3.5 in all geography courses and of at least 3.25 overall. In addition to outstanding work in geography, the program requires GEOG 499, an independent study course consisting of an honors paper.

The student presents the results of this paper in an oral examination to a committee of at least 2 faculty members, normally from the geography department, chaired by the GEOG 499 supervisor. To graduate with honors, the student must complete the paper and the examination and maintain the 3.5 and 3.25 grade-point averages.

**Bachelor of Science in Atmospheric Science**

The Bachelor of Science in Atmospheric Science (B.S.) is designed to meet the recommendations of the American Meteorological Society for a bachelor’s degree in meteorology/atmospheric science. There are four options, each of which meet these recommendations.

1. **General Option**
This option is for students who want a broad background in atmospheric science. It is also the most suitable option for those who are aiming at a career in weather forecasting. It includes a third semester of synoptic meteorology as well as an air pollution course.

1. **Air Pollution Option**

Students prepare for a career emphasizing environmental aspects of meteorology. This option includes an additional semester of chemistry as well as environmental studies.

1. **Hydrometeorology Option**

Students prepare for a career involving the interface between meteorology and hydrology. These studies have important applications to flash floods, droughts and water supply. This option includes additional courses on fluid flow and hydrology from the School of Engineering.

1. **News Media Option**

This option is for students who wish to enter careers whose main function is to provide information to the general public. It requires additional courses from the School of Journalism.

### Undergraduate Admission

#### Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

### Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

### Degree Requirements

#### Advising

Students who may decide to major in atmospheric science should confer early with a departmental representative about the selection of courses.

### Requirements for the B.S. Degree in Atmospheric Science

4 specialized options are available for students who plan professional careers in meteorology or atmospheric science. The **general meteorology** option satisfies all the traditional professional meteorology requirements for employment with the National Weather Service, airlines, or other agencies. The **air pollution meteorology** option meets the need for trained specialists. The **hydrometeorology** option may lead to a career as a meteorologist in one of the many water-related activities in private and governmental agencies. The **news media forecasting** option can lead to a career forecasting the weather on television or radio. The B.S. degree with any of these specialties also prepares students to begin graduate programs in meteorology or atmospheric science.

#### Written Communication – Core Skill and Critical Inquiry.

**Composition (0)**

Satisfied by one of the following. Requirement must be completed during initial term of admission at KU.

- ENGL 101
- ACT English score of 27 or above or SAT English score of 600 or above
- AP English Literature & Composition score of 3 or above
- Equivalent transfer course

**Critical Reading and Writing (0)**

Satisfied by one of the following. Requirement must be completed within the first academic year at KU.

- ENGL 102 Critical Reading and Writing
- or ENGL 105 Freshman Honors English
- AP English Literature & Composition score of 4 or above
- Equivalent transfer course

**Sophomore Reading and Writing II (0)**

Satisfied by one of the following:

- ENGL 203 Topics in Reading and Writing: ______
- or ENGL 205 Freshman-Sophomore Honors Proseminar: ______
- ENGL 209 Introduction to Fiction
- ENGL 210 Introduction to Poetry
- ENGL 211 Introduction to the Drama
- ENGL 362 Foundations of Technical Writing (recommended)
- AP English Literature & Composition score of 5 or above
- Equivalent

**Communication - Core Skills and Critical Inquiry.** Satisfied by: Completing COMS 130, COMS 131 (Honors), or COMS 150.

**Humanities - Understanding the Human Condition.** Satisfied by completing 1 course with requirement code H. Approved courses may be searched for availability through the Kyou portal.

**Social and Behavioral Sciences - Understanding Society and Behavior.** Satisfied by completing 2 principal courses in the social sciences. Approved courses may be searched for availability through the Kyou portal.

**Atmospheric Science Prerequisite or Co-requisite Knowledge (40-42)**

Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.

**Computing and Programming.** Satisfied by:

- EECS 138 Introduction to Computing: ______ (Fortran preferred; C++ and Matlab accepted)

**Scientific Principles of Environmental Studies.** Satisfied by:
<table>
<thead>
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<th>Title</th>
<th>Credits</th>
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</thead>
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<tr>
<td>EVRN 148</td>
<td>Scientific Principles of Environmental Studies</td>
<td>3</td>
</tr>
<tr>
<td>GEOF 358</td>
<td>Principles of Geographic Information Systems</td>
<td>4</td>
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<tr>
<td>Calculus I, Satisfied by:</td>
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<tr>
<td>MATH 121</td>
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<td>or MATH 141</td>
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<td>MATH 122</td>
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<td>5</td>
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<td>or MATH 142</td>
<td>Calculus II: Honors</td>
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<td></td>
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<tr>
<td>PHSX 211</td>
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<td></td>
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<tr>
<td>&amp; PHSX 216</td>
<td>General Physics I Laboratory</td>
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<tr>
<td>PHSX 213</td>
<td>General Physics I Honors</td>
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<tr>
<td>General Physics II, Satisfied by one of the following:</td>
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<td></td>
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<td>PHSX 212</td>
<td>General Physics II</td>
<td>1-3</td>
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<tr>
<td>&amp; PHSX 236</td>
<td>General Physics II Laboratory</td>
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<tr>
<td>or PHSX 214</td>
<td>General Physics II Honors</td>
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<td>Foundations of Chemistry I, Satisfied by:</td>
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<td></td>
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<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
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<td>or CHEM 190</td>
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<td>MATH 223</td>
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<td>Applied Differential Equation, Satisfied by one of the following:</td>
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<td>MATH 320</td>
<td>Elementary Differential Equations</td>
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<td>or MATH 220</td>
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<td>Statistics, Satisfied by:</td>
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<td>MATH 526</td>
<td>Applied Mathematical Statistics</td>
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<td>Numerical Methods, Satisfied by:</td>
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<td>MATH 581</td>
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</tbody>
</table>

**Atmospheric Science Core Knowledge and Skills (30)**

Majors must complete all of the following:

- Introductory Meteorology (5). Satisfied by:
  - ATMO 105  Introductory Meteorology  5
- Climate and Climate Change (3). Satisfied by:
  - ATMO/GEOF 321  Climate and Climate Change  3
- Weather Forecasting (3). Satisfied by:
  - ATMO 505  Weather Forecasting  3
- Microclimatology (3). Satisfied by:
  - ATMO/GEOF 521  Microclimatology  3
- Synoptic Meteorology (3). Satisfied by:
  - ATMO 630  Synoptic Meteorology  3
- Dynamic Meteorology (3). Satisfied by:
  - ATMO 640  Dynamic Meteorology  3
- Remote Sensing (3). Satisfied by:
  - ATMO 642  Remote Sensing  3
- Advanced Dynamic Meteorology (3). Satisfied by:
  - ATMO 660  Advanced Dynamic Meteorology  3

- Physical Meteorology (3). Satisfied by:
  - ATMO 680  Physical Meteorology  3
- Seminar for Seniors (1). Satisfied by:
  - ATMO 697  Seminar for Seniors  1

**Meteorology Option**

Students selecting this major must select one of the following options:

**General Meteorology Option**

This option satisfies all the traditional professional meteorology requirements for employment with the National Weather Service, airlines, or other agencies.

- Air Pollution Meteorology (3). Satisfied by:
  - ATMO 525  Air Pollution Meteorology  3
- Operational Forecasting (2). Satisfied by:
  - ATMO 605  Operational Forecasting  2
- Advanced Synoptic Meteorology (3). Satisfied by:
  - ATMO 650  Advanced Synoptic Meteorology  3

**Air Pollution Meteorology Option**

This option meets the need for trained specialists.

- Air Pollution Meteorology (3). Satisfied by:
  - ATMO 525  Air Pollution Meteorology  3
- Foundations of Chemistry II (5). Satisfied by:
  - CHEM 135  General Chemistry II  5
- Introduction to Environmental Engineering and Science (3). Satisfied by:
  - CE 477  Introduction to Environmental Engineering and Science  3

**Hydrometeorology Option**

This option may lead to a career as a meteorologist in one of the many water-related activities in private and governmental agencies.

- Air Pollution Meteorology (3). Satisfied by:
  - ATMO 525  Air Pollution Meteorology  3
- Operational Forecasting (2). Satisfied by:
  - ATMO 605  Operational Forecasting  2
- Statics and Dynamics (5). Satisfied by:
  - CE 301  Statics and Dynamics  5
- Fluid Mechanics (4). Satisfied by:
  - CE 330  Fluid Mechanics  4
- Hydrology (3). Satisfied by:
  - CE 455  Hydrology  3

**News Media Forecasting Option**

This option can lead to a career forecasting the weather on television or radio.

- Operational Forecasting (2). Satisfied by:
  - ATMO 605  Operational Forecasting  2
- Advanced Synoptic Meteorology (3). Satisfied by:
  - ATMO 650  Advanced Synoptic Meteorology  3
Infomania: Information Management (3). Satisfied by:
JOUR 302 Infomania: Information Management 3
Writing for Media (3). Satisfied by:
JOUR 304 Media Writing 3
Multimedia Reporting (3). Satisfied by:
JOUR 415 Multimedia Reporting 3

Major Hours
Satisfied by 33 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior (300+) Hours
Satisfied by a minimum of 30 hours from junior/senior courses (300+) in the major.

Major Junior/Senior (300+) Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://www.collegesas.ku.edu/GPAcalculator.shtml).

Concentration in Business
An undergraduate student may graduate from the School of Business with a concentration in atmospheric science.

Atmospheric Science Prerequisite or Co-requisite Knowledge (19-22)
Student selecting this minor must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.
Computing and Programming. Satisfied by:
EECS 138 Introduction to Computing: _____ 3
Calculus I. Satisfied by:
MATH 121 Calculus I (or equivalent) 5
or MATH 141 Calculus I: Honors
Calculus II. Satisfied by:
MATH 122 Calculus II (or equivalent) 5
or MATH 142 Calculus II: Honors
General Physics I. Satisfied by:
PHSX 211 General Physics I 1-4
or PHSX 213 General Physics I Honors
Introductory Meteorology (5). Satisfied by:
ATMO 105 Introductory Meteorology 5

Atmospheric Science Required Courses (18)
Students selecting this minor must complete all of the following:
Climate and Climate Change (3). Satisfied by:
ATMO/GEOG 321 Climate and Climate Change 3
Weather Forecasting (3). Satisfied by:
ATMO 505 Weather Forecasting 3
Microclimatology (3). Satisfied by:
ATMO/GEOG 521 Microclimatology 3

Air Pollution Meteorology (3). Satisfied by:
ATMO 525 Air Pollution Meteorology 3
Dynamic Meteorology (3). Satisfied by:
ATMO 640 Dynamic Meteorology 3
Physical Meteorology (3). Satisfied by:
ATMO 680 Physical Meteorology 3

Departmental Honors in Atmospheric Science
To be accepted as a candidate for honors, an undergraduate major must have completed at least 9 hours of upper-division credit in atmospheric science with a grade-point average of 3.5 in all atmospheric science courses and an overall average of at least 3.25. In addition, the program requires ATMO 499, an independent study course consisting of the creation of an honors paper. The student presents the results of this paper in an oral examination to a committee of a minimum of 2 faculty members, normally from the geography department, and chaired by the ATMO 499 supervisor. To graduate with honors, the student must complete the paper and the examination and maintain the 3.5 and 3.25 grade-point averages.

Minor in Geography

Why study geography?
Because people, places, and environments interact and evolve in a changing world.

Why study atmospheric science?
The study of atmospheric processes enables us to understand human interactions with the environment.

Requirements for the Minor in Geography
The department offers 2 minor options. The first is a general minor in geography. The second is specifically designed to give students a background in geographic information science. Students should carefully consider which minor best meets their academic goals before choosing one.

Geography General Option
Students selecting this minor must complete 6 GEOG courses (18 hours), 12 hours of which must be taken at the 300 level or above.

Geographic Information Science
Maps and Mapping/computers, Maps, and Geographical Analysis. Satisfied by:
GEOG 111 Maps and Mapping 4
or GEOG 210 Computers, Maps, and Geographical Analysis
Methods of Analyzing Geographical Data. Satisfied by:
GEOG 316 Methods of Analyzing Geographical Data 4
Principles of Geographic Information Systems. Satisfied by:
GEOG 358 Principles of Geographic Information Systems 4
Three additional courses from Geographic Information Science group 300-level or above.
Geography Minor Hours & Minor GPA
While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 hours of KU resident credit in the minor.

Minor Junior/Senior (300+) Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Minor in Atmospheric Science
Why study geography?
Because people, places, and environments interact and evolve in a changing world.

Why study atmospheric science?
The study of atmospheric processes enables us to understand human interactions with the environment.

Requirements for the Minor in Atmospheric Science
Student selecting this minor must complete courses as specified in each of the following areas:

Atmospheric Science Prerequisite or Co-requisite Knowledge (9-13)

Calculus I. Satisfied by:
MATH 125 Calculus I 4
or MATH 145 Calculus I, Honors

Calculus II. Satisfied by:
MATH 126 Calculus II 4
or MATH 146 Calculus II, Honors

General Physics I. Satisfied by one of the following: 1-5
PHSX 211 General Physics I
& PHSX 216 and General Physics I Laboratory
PHSX 213 General Physics I Honors

Atmospheric Science Minor Course Requirements (11)

Introductory Meteorology (5). Satisfied by:
ATMO 105 Introductory Meteorology 5

Climate and Climate Change (3). Satisfied by:
ATMO/GEOG 321 Climate and Climate Change 3

Weather Forecasting (3). Satisfied by:
ATMO 505 Weather Forecasting 3

Atmospheric Science Required Electives (9)

Student selecting this minor must complete three courses (9 hours) of the following:
ATMO 521 Microclimatology
ATMO 525 Air Pollution Meteorology
ATMO 630 Synoptic Meteorology
ATMO 640 Dynamic Meteorology
ATMO 642 Remote Sensing
ATMO 680 Physical Meteorology

Minor Hours & Minor GPA
While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

Minor Hours
Satisfied by 20 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 hours of KU resident credit in the minor.

Minor Junior/Senior (300+) Hours
Satisfied by a minimum of 15 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Master of Arts in Geography
Why study geography?
Because people, places, and environments interact and evolve in a changing world.

Why study atmospheric science?
The study of atmospheric processes enables us to understand human interactions with the environment.

Admission to Graduate Studies
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission
Applicants without prior training in geography are welcome but are required to improve their basic knowledge of the broad divisions of geography: systematic, methodological, and regional. Courses taken to remedy deficiencies may not count toward graduate degrees. Graduate
Record Examination scores (verbal, quantitative, and analytical) are required of all applicants.

**Joint Degree application for M.A. and M.U.P**

An interdisciplinary program combines in three years the degrees of MA in geography and Master of Urban Planning. Details, including degree requirements, are available in a separate booklet either online or from either of the two departments. Entering students should submit separate applications to each department.

Submit your graduate application online (http://www.graduate.ku.edu). Send all other requested application materials to the geography department:

The University of Kansas
Department of Geography
Lindley Hall
1475 Jayhawk Blvd., Room 213
Lawrence, KS 66045-7575

**Geography M.A. Degree Requirements**

The program continues the general training of the undergraduate degree but also provides for concentration in preparation either for employment or further study. The student takes courses in several areas of the discipline as well as at least three courses in an acceptable concentration. The 30-credit-hour minimum for the M.A. thesis program may include 6 hours outside the department and a maximum of 6 hours for the master's thesis. The M.A. degree requires a final oral examination. Students with 6 or more hours of Incomplete are denied permission to enroll until these hours are reduced to the allowable limit (5 hours).

**Joint Degree application for M.A. and M.U.P**

This interdisciplinary program combines in three years the degrees of MA in geography and Master of Urban Planning. Details, including degree requirements, are available in a separate booklet either online or from either of the two departments. Entering students should submit separate applications to each department. The joint degree entails 61 credit hours of coursework (39 in planning, 22 in geography) including a thesis.

Urban Planning and Geography have a long history of interaction and connection. Responsible planning in urban communities requires an understanding of the human and physical geographies of these communities, and contemporary planning practice demands familiarity with advanced geographic techniques and information systems. Conversely, expertise in geography—and particularly concentration in urban geography—may require an understanding of and competence to deal with the planning dynamics of urban communities.

The objective of this program is to meet the needs of both Urban Planning and Geography for interdisciplinary knowledge by offering a dual degree program for the graduate student who intends to engage professionally in both planning and geography. The program combines in three years the normal two year Master of Urban Planning (48 credit hours) and the normal two year Master of Arts (MA) degree in Geography (30 credit hours) offered by the College of Liberal Arts and Sciences.

**Geography Courses Required of All Combined Degree Candidates**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 805</td>
<td>2</td>
</tr>
<tr>
<td>1 Techniques course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Handbook for Graduate Students**

Detailed information on departmental regulations is included in Policies for Graduate Study in Geography at the University of Kansas, available on the department's website (http://www.geog.ku.edu).

**Master of Science in Atmospheric Science**

**Why study geography?**

Because people, places, and environments interact and evolve in a changing world.
Why study atmospheric science?
The study of atmospheric processes enables us to understand human interactions with the environment.

Admission to Graduate Studies
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission
Entering students are expected to have completed an undergraduate degree in a physical science (e.g., physics, chemistry, atmospheric science, oceanography), mathematics, or engineering and studied mathematics, including vector calculus and ordinary differential equations. Courses taken to remedy deficiencies may not count toward graduate degrees. Graduate Record Examination scores (verbal, quantitative, and analytical) are required of all applicants.

Submit your graduate application online (http://www.graduate.ku.edu). Send all other requested application materials to the geography department:

The University of Kansas
Department of Geography
Lindley Hall
1475 Jayhawk Blvd., Room 213
Lawrence, KS 66045-7575

Atmospheric Science M.S. Degree Requirements
The purpose of the program is to expand the student's knowledge of fundamental atmospheric processes and how the atmosphere interacts with other parts of the environment. Students become familiar with quantitative research methods and how these various approaches can be used to address different problems in atmospheric science. Students gain an in depth ability to learn specific skills and apply them toward his/her thesis work. These skills consist of, for example, statistical analysis techniques, numerical modeling, or work with atmospheric instrumentation. The breadth of the program and the diverse research topics explored by the faculty are able to accommodate students with a variety of interests.

Required credit hours:
30 credits 500 level or above.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATMO 710</td>
<td>Atmospheric Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>ATMO 720</td>
<td>Atmospheric Modeling</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 716</td>
<td>Advanced Geostatistics</td>
<td>3</td>
</tr>
<tr>
<td>Select</td>
<td>3 credit hours of electives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>in atmospheric science</td>
<td></td>
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<tr>
<td></td>
<td>electives at the 700 level</td>
<td></td>
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<tr>
<td></td>
<td>or above</td>
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</tbody>
</table>

Select 6 credit hours of electives at the 500 level or above outside the geography department

A maximum of 6 hours of 500- and 600-level atmospheric science courses may be included in the program, excluding ATMO 505

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATMO 899</td>
<td>Master's Thesis</td>
<td>6</td>
</tr>
</tbody>
</table>

Total Hours 30

Thesis
A master's thesis is a demonstration of a student's ability to formulate an atmospheric science research problem, collect and analyze relevant data, synthesize appropriate literature, arrive at logical conclusions, and present the entire exercise in a public academic forum. The thesis should address an original problem of scientific importance, though at the M.S. level, the research will to a significant degree be guided by the faculty advisor.

Thesis proposal
During the second semester in the program, the student must submit to his committee a thesis research plan. All M.S thesis proposals are expected to contain three basic elements:

1. A statement of the research problem or questions to be investigated.
2. A survey of relevant literature and how it relates to the student's research problem
3. An outline of the general methodology, if not specific techniques, to be utilized in addressing the research problem or answering the basic research questions.

Thesis seminar and defense
Students are required to make a formal presentation to the faculty and fellow students in the form of a research seminar, and subsequently defend orally to their committee the results of their thesis research. Ideally, the final examination takes place immediately following the research seminar, but if necessary the two can be scheduled at separate times.

As part of their research training, graduate students are expected to attend departmental colloquia and seminars.

Details of the regulations on graduate study are included in the department's Policies for Graduate Study in Atmospheric Science, available on the department's website (http://www.geog.ku.edu).

Master of Science in Geography

Graduate Programs

Geography
The graduate curriculum emphasizes broad geographic training while encouraging in-depth commitment to specialized concentrations. Students also are encouraged to take course work outside the department that complements their degree programs. Credit-hour requirements below are considered minimums for degree programs. Programs are tailored by the student and advisor to conform to the student's interests and needs, as well as to fulfill the general degree requirements.

The central thrust of the department and the chief capabilities and interests of the faculty fall within these research-teaching areas:

1. Human geography including cultural geography, regional development, and environmental policy;
2. Geographic information science including cartography, geographic information systems, and remote sensing;
3. Physical geography including geomorphology, soils, and biogeography;
4. Regional geography including Africa, East Asia, Russia, Latin America, and the United States; and
5. Atmospheric science and climatology.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Entering students are expected to have a B.S. degree in geography or in related physical science, earth science, mathematics, or engineering disciplines. Applicants should have a minimum Grade Point Average (GPA) of 3.0 on a 4.0 scale. Applicants with a GPA of less than 3.0 may be considered for admission on a probationary or provisional status. Entering students will be expected to have studied quantitative methods. Graduate Record Examination scores (verbal, quantitative and analytical) are required of all applicants.

Applicants without prior training in geography are welcome but are required to improve their basic knowledge of the broad divisions of geography: systematic, methodological, and regional. Courses taken to remedy deficiencies may not count toward graduate degrees. Graduate Record Examination scores (verbal, quantitative, and analytical) are required of all applicants.

Applicants without prior training in geography are welcome but are required to improve their basic knowledge of the broad divisions of geography: systematic, methodological, and regional. Courses taken to remedy deficiencies may not count toward graduate degrees. Graduate Record Examination scores (verbal, quantitative and analytical) are required of all applicants.

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Lindley Hall
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Lawrence, KS 66045-7575

The M.S. in Geography is of interest to students with a variety of different backgrounds because geography integrates concepts from various disciplines. There is also a nationwide interest in climate change, earth system science, and GIScience. Graduate study in physical geography and GIScience is quantitative in nature, and forms the core of many observational studies related to these fields of study.

The program requires a 30 credit hour minimum. Students must pass an oral examination and write a thesis. In addition, students are required to take the 2-day (non-credit) field trip before classes begin in the fall semester and GEOG 980 (Colloquium) for 1 credit hour during each of the first 2 semesters in residence at KU.

Doctor of Philosophy in Geography

Why study geography?

Because people, places, and environments interact and evolve in a changing world.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Applicants without prior training in geography are welcome but are required to improve their basic knowledge of the broad divisions of geography: systematic, methodological, and regional. Courses taken to remedy deficiencies may not count toward graduate degrees. Graduate Record Examination scores (verbal, quantitative, and analytical) are required of all applicants.

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The University of Kansas
Department of Geography
Lindley Hall
1475 Jayhawk Blvd., Room 213
Lawrence, KS 66045-7575
Geography Ph.D. Degree Requirements

The aspirant is expected to demonstrate proficiency in research and achieve a teaching competence in geography. The student may concentrate in 1 area or may offer a concentration in a second area in the department or an outside discipline. Whatever the choice, the student develops the plan of research and study with the advice and supervision of professors in the chosen area(s) of concentration who also sit on the student’s examination and dissertation committees. A minimum of 30 hours of course and seminar work in addition to dissertation credit usually is required beyond the M.A.

Required Courses

GEOG 805 (History of Geographic Thought); 2-day (non-credit) orientation before classes begin in the fall semester; GEOG 980 (Seminar in Geography: Colloquium) for 1 credit hour during each of the first 2 semesters of residence at KU. Non-credit 8-hour Responsible Scholarship session held just before classes start in the spring semester.

Research Skills Requirement

Research skills are important elements of any graduate program and should complement the student’s research topic. Coursework necessary to meet this requirement should commence early in the program. Selection of a particular Research Skills option must be approved by the student’s advisor and student’s committee members. A student’s Research Skills requirement may be met by 1 of the following:

1. Demonstrate a reading, writing, and speaking capability in a single foreign language sufficient to enable the student to do field work without an interpreter. An examination for competence, including written and oral portions, will be conducted by the appropriate language department having expertise in that language.

2. Demonstrate a satisfactory capability in 1 research skill from the list below. The actual courses must be approved by the student’s advisor and committee members.
   a. Computer Science--complete a computer-programming course in the Department of Electrical Engineering and Computer Science (e.g., C++, Fortran, or Visual Basic) with a grade of B or higher and create a substantial computer program that illustrates a geographic application of that language. Both the course and computer program must be approved by the Computer Programming Committee of the Department of Geography.
   b. Mathematics--complete 9 hours of courses at the 500-level or above with a grade of B or higher.
   c. Statistics--complete 9 hours of courses outside the Geography Department at the 500-level or above with a grade of B or higher.
   d. An outside discipline relevant to the student’s field(s) of specialization within geography (e.g. anthropology, biology, economics, geology, history, or psychology) -- complete 9 hours of courses at the 500-level or above with a grade of B or higher (Atmospheric science courses may be used for this option, but not courses listed or cross-listed as geography.) Students may petition the Graduate Affairs Committee to have 9 hours of courses at the 500-level or above in multiple departments fulfill this requirement.

Students whose native language is not English may, in some cases, use their native language to fulfill Research Skills but only if the language is considered an adequate research tool for their program and is endorsed by the student’s advisor and committee members. Using a native

Financial Aid

Undergraduate Scholarships

The department awards scholarships from its endowment to meritorious incoming or continuing students in geology. Scholarships also are awarded to students enrolled in Field Camp or Field Investigation. For information, contact the chair.

KU Financial Aid

All undergraduates who wish to be considered for KU financial aid must complete applications with Financial Aid and Scholarships (http://affordability.ku.edu/steps/index.shtml).

Graduate Assistantships and Scholarships

All prospective graduate students are considered for employment and financial aid. Employment may be in the form of teaching assistantships or research assistantships. Research assistantships may be supported with funds from external grants, Geology Associates endowments, the Biodiversity Institute, or the Kansas Geological Survey, which is on campus. Duties, compensation, and conditions of awards are prescribed as much as possible before enrollment. The department also receives funds from corporations and endowments to support fellowships, which permit students to enroll full time without specific research or teaching duties.

Graduate students are eligible for scholarships from the Geology Associates Program. Endowed scholarships include the Angino, Hall, Henbest, Holden, Ireland, McGee, Moore, Patterson, Peoples, and Walters scholarship funds. Other scholarships are awarded from donations from individuals and corporations. Scholarships are awarded on the basis of academic excellence; some funds are designated for protected minorities or women.

Through the Selig Fund and other donations, the department supports graduate student field work. Through the McCollum Fund and other donations, the department underwrites partially some other research expenses, such as purchase of time on analytical equipment. Funding requires an acceptable thesis or dissertation proposal. Students who have no other sources of research support are given preference. Degree-
senior years. Substantial scholarship support is available for geology by the program ideally are taken in the summer between the junior and summers. Students should plan to take GEOL 360 in the summer after All undergraduate degree programs require field courses during 2

Summer Field Courses

Courses for Nonmajors

The department offers several courses of interest to nonmajors who wish to learn more about geology and related areas such as environmental science, oceanography, and economic resources. Principal courses include GEOL 101, GEOL 105, GEOL 121, GEOL 171, GEOL 302, and GEOL 351. GEOL 103 may be taken in conjunction with either GEOL 101 or GEOL 105 to fulfill the CLAS laboratory science requirement. GEOL 304, GEOL 360, and GEOL 552 all offer opportunities to study more specialized aspects of the earth and do not require advanced prerequisites.

Summer Field Courses

All undergraduate degree programs require field courses during 2 summers. Students should plan to take GEOL 360 in the summer after completing the introductory course. GEOL 560 and GEOL 561 (if required by the program) ideally are taken in the summer between the junior and senior years. Substantial scholarship support is available for geology majors who enroll in those courses.

Combined Degree Programs

A student may combine an interest in geology with a degree in business, education, or journalism.

Graduate Programs

The department offers the M.S. and Ph.D. in geology but permits specialization in a number of areas of geology and in geophysics and hydrogeology. Active areas of instruction and research include geophysics, geomorphology, geochemistry, microbial biogeochemistry, paleontology, sedimentology, tectonics, and petroleum geology. Students also may work with faculty supervisors at the Kansas Geological Survey and at Kansas State University.

Courses

GEOL 101. The Way The Earth Works. 3 Hours. GE3N / N. Introduction to the principles of earth science. Study of the formation, occurrence, and structure of minerals and rocks; action of streams, oceans, glaciers, and other agents in the formation and modification of the landscape; volcanism, earthquakes, and plate tectonics. Discussion of earth processes in the context of sustainable energy, environmental concerns, climate and other topical issues. This course with GEOL 103 satisfies the College laboratory science requirement. Concurrent enrollment in GEOL 103 is recommended for students taking both. Course may be offered in lecture or online format. LEC.

GEOL 102. The Way The Earth Works, Honors. 3 Hours. GE3N / N. Honors section of GEOL 101. An introduction to the principles of earth science. Study of the formation, occurrence, and structure of minerals and rocks; action of streams, oceans, glaciers, and other agents in the formation and modification of the landscape; mountain building, volcanism, earthquakes, and plate tectonics. Discussion of earth processes in the context of sustainable energy, environmental concerns, climate and other topical issues. Not open to students who have taken GEOL 101. This course with GEOL 103 satisfies the College laboratory science requirement. Concurrent enrollment in GEOL 103 is recommended for students taking both. Course may be offered in lecture or online format. LEC.

GEOL 103. Geology Fundamentals Laboratory. 2 Hours. U. A course in geologic laboratory studies. This course plus GEOL 101, GEOL 102, GEOL 105, GEOL 106, or GEOL 121 satisfies the College laboratory science requirement. Gives students practical, hands-on experience with identifying earth materials (rocks, minerals, fossils), understanding their relationships to earth processes, understanding topographic and geologic maps, interpreting results of surficial processes, and learning about deep-earth processes such as earthquakes. Includes short field trips to see geologic structures and results of local geologic processes. This lab course may be offered in on-campus lab or online format. Prerequisite: Previous or concurrent enrollment in GEOL 101, GEOL 102, GEOL 105, GEOL 106 or GEOL 121. LAB.

GEOL 105. History of the Earth. 3 Hours. GE3N / N. An introduction to the physical and biological history of the earth, the methods used to decipher earth history, and the development of the geological sciences. This course with GEOL 103 satisfies the College laboratory science requirement. Concurrent enrollment in GEOL 103 is recommended for students taking both. Not open to students who have taken GEOL 106 or GEOL 304. LEC.

GEOL 106. History of the Earth Honors. 3 Hours. GE3N / N. Honors section of GEOL 105. An introduction to the physical and biological history of the earth, the methods used to decipher earth history, and the development of the geological sciences. This course with GEOL
103 satisfies the College laboratory science requirement. Concurrent enrollment in GEOL 103 is recommended for students taking both. Not open to students who have taken GEOL 105 or GEOL 304. LEC.

GEOL 121. Life Through Times: DNA to Dinosaurs. 3 Hours. NB GE11/GE3N / N.
This course leads students on a journey through time to explore the interconnection between life and the geology of Earth, including our own complex relationship with the world around us. This course with GEOL 103 satisfies the College laboratory science requirement. Concurrent enrollment in GEOL 103 is recommended, but not required, for students taking both. LEC.

GEOL 171. Earthquakes and Natural Disasters. 3 Hours. NE GE3N / N.
Addresses the subject of natural disasters with concentration on earthquake effects and their mitigation. Briefly treats volcanic eruptions, tidal waves, floods, global warming, severe weather, and catastrophic meteorite impacts from the perspective of geological and human significance. Provides a basic background into earth-science processes. LEC.

GEOL 177. First Year Seminar: ____. 3 Hours. GE1N.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in geology. May not contribute to major requirements in geology. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

GEOL 302. Oceanography. 3 Hours. NE GE3N / N.
Basic description of oceanography: description and discussion of the ocean as a dynamic system. Relationships between and dependence upon the interactions of submarine topography, water chemistry, wave action, and biota in understanding the ocean system. Review of part that humanity plays in perturbing the natural oceanic environment. Discussions of estuarine problems as related to the sea, cultural activities, and rivers. Course may be offered in lecture or online format. Prerequisite: An introductory science course. LEC.

GEOL 304. Historical Geology. 3 Hours. N.
An introduction to the physical and biological history of the Earth, the methods used to decipher earth history, and the development of the geological sciences. Concepts of lithostratigraphy, chronostratigraphy and biostratigraphy, and methods of analysis of stratigraphic data focus on the interpretation of Earth history. Prerequisite: GEOL 101 and GEOL 103. LEC.

GEOL 311. Mineralogy and Structure of the Earth. 3 Hours. GE3N / N.
Basic identification and properties of rocks and minerals in the context of whole-earth structure and evolution. Includes basic chemical equilibria for rock and mineral systems and their bearing on processes involved with formation and evolution of Earth's crust, mantle, and core. Two lectures and one lab per week. Prerequisite: GEOL 101, CHEM 130, and eligibility for MATH 121 or MATH 115. LEC.

GEOL 312. Mineral Structures and Equilibria Laboratory. 1 Hour. U.
A laboratory to accompany GEOL 311. Presents more rigorous analysis of the structures, compositions, and chemical equilibria governing the formation and stability of common rock-forming mineral systems. Prerequisite: GEOL 311 (may be taken concurrently), CHEM 130, and eligibility for MATH 121 or MATH 115. LAB.

GEOL 315. Gemstones. 3 Hours. N.
The properties, occurrence, description, determination, and mineral affinities of gems, ornamental stones, and gem materials. LEC.

GEOL 316. Geochemistry. 3 Hours. N.
The course is intended to be an introduction to all types of geochemistry. It focuses on the chemistry of the natural world and the chemical evolution of the Earth over geological time. The course is composed of three modules: (a) geochemical fundamentals; (b) natural and anthropogenically perturbed aspects of the Earth’s hydrosphere and its interaction with surficial rocks, sediments, soils, the biosphere and the atmosphere and (c) the origin and evolution of Earth (crust-mantle-core) and the solar system through nuclear and high temperature chemical processes. Prerequisite: GEOL 101, CHEM 130 or 190; and eligibility for MATH 115. LEC.

GEOL 331. Sedimentology and Stratigraphy. 4 Hours. GE3N / N.
Basic principles used in the study of sedimentology and stratigraphy. Physical, chemical, and biological processes in sedimentary environments applied to the recognition of the depositional environment, preservation, and alteration of sedimentary rocks. Field and laboratory study of sedimentary rocks with emphasis on interpretation of original depositional environments and preservation in the stratigraphic record. Prerequisite: GEOL 101 and GEOL 103; and GEOL 304 or taken concurrently. LEC.

GEOL 351. Environmental Geology. 3 Hours. NE GE3N / N.
An introductory course dealing with the implications of geologic processes and materials for civilization. Topics to be considered include: geologic hazards such as floods, landslides, earthquakes, and volcanism; the availability of water, mineral, and energy resources; and the environmental impact of resource utilization. The importance of recognizing geologic constraints in land use planning and engineering projects is emphasized and illustrated by examples. LEC.

GEOL 360. Field Investigation. 2 Hours. N.
Summer session. A field-geology course that provides beginning geology students with an initial understanding of the nature of geological evidence in the field, the breadth of geological phenomena, and the importance of the interplay of information from many geological disciplines in solving problems. Given at various geologically diverse locations. Fee. Prerequisite: GEOL 101. LEC.

GEOL 391. Special Studies in Geology. 1-6 Hours. N.
Special reports upon subjects in which students have a particular interest. Prerequisite: Fifteen hours of geology. IND.

GEOL 399. Senior Honors Research. 2-5 Hours. AE61 / N.
Normally two to five hours in any one semester with a maximum of eight hours. An undergraduate research course, in any of the fields of geology, open by permission of the department to seniors in the College who have an average grade of B or higher in geology courses. Prerequisite: Thirty hours of geology, five of which may be taken concurrently with this course. IND.

GEOL 501. Error Analysis. 1 Hour. N.
This course covers basic error analysis as it applies to geology. The course will emphasize the description and propagation of errors in data collection and reduction. Subjects include: how to report data and associated errors, error propagation in simple and complex equations, the Normal, Gaussian, and Poisson distributions, linear and higher order regression, and X-squared test. Prerequisite: MATH 121. LEC.

GEOL 512. Igneous and Metamorphic Petrology. 3 Hours. N.
The study of minerals, rocks and fluids within the Earth's crust and mantle to elucidate their mechanisms of formation and the pressure-temperature-composition conditions within the Earth. The course emphasizes equilibrium thermodynamics, phase equilibria, fractionation mechanisms, tectonic control of petrogenesis, and quantitative analysis of mineral parageneses. Prerequisite: GEOL 311 and first semester calculus, or permission of instructor. LEC.
GEOL 513. Petrology Laboratory. 1 Hour. U.
A laboratory course to accompany GEOL 512. Material covered will include the use of the polarizing microscope in study of rocks in thin sections; identification of rock-forming minerals in thin section; study of textures as guides to the crystallization process; calculations of chemical changes during fractional crystallization and partial melting. Students will also make extensive study of igneous and metamorphic rocks in hand specimens, accompanied by thin section study, with emphasis on composition, texture, and structure. Students must co-enroll in GEOL 512. Prerequisite: GEOL 312. Concurrent enrollment in GEOL 512 required. LAB.

GEOL 521. Paleontology. 3 Hours. N.
A study of the structure and evolution of ancient life; the nature and diversity of life through time; the interactions of ancient organisms with their environments and the information that the study of fossils provides about ancient environments; the use of fossils to determine the ages of rocks and the timing of past events in earth history; and the patterns of extinction through time. (Same as BIOL 622.) Prerequisite: BIOL 100 or BIOL 152 or GEOL 105 or GEOL 304. LEC.

GEOL 523. Paleontology Laboratory. 1 Hour. U.
Laboratory course in the study of fossils with emphasis on the practice of paleontology and the morphology of ancient organisms. (Same as BIOL 623.) LEC.

GEOL 528. The Biology and Evolution of Fossil Plants. 3 Hours. N.
A lecture course in which fossil plants, protists and fungi are examined throughout geologic time. Emphasis will be directed at paleoecology, biogeography and the stratigraphic distribution and composition of ancient floras. (Same as BIOL 640.) Prerequisite: BIOL 413 or permission of instructor. LEC.

GEOL 529. Laboratory in Paleobotany. 1 Hour. U.
An examination of selected fossil plants throughout geological time and the techniques used to study them; laboratory will include identification and the use of plant fossils in biostratigraphy. (Same as BIOL 641.) Prerequisite: BIOL 413 or permission of instructor. Must be taken concurrently with GEOL 528. LAB.

GEOL 532. Stratigraphy. 4 Hours. AE61 / N.
A study of the principles of lithostratigraphy, biostratigraphy, and sequence stratigraphy. Methods of analysis of stratigraphic data focus on the interpretation of earth history. The stratigraphic record of North America is presented for evaluation of its geologic history. Three lectures and one laboratory per week. Required field trip. Prerequisite: GEOL 101, GEOL 521, and GEOL 331. LEC.

GEOL 534. Volcanology. 3 Hours. N.
Physical and geochemical volcanology. Considers relationship of tectonics and volcanism: types of magmas; rheology of lavas, pyroclastic density currents, and mass movements in volcanic environments; and interpretation of processes and conditions of formation of volcanic rocks from their field character. Field trips to ancient volcanic complexes. Prerequisite: GEOL 331 and GEOL 512, or permission of instructor. LEC.

GEOL 535. Petroleum and Subsurface Geology. 4 Hours. N.
A general study of the occurrence, properties, origin, and migration of petroleum. Studies of various oil fields and oil-bearing basins. Laboratory studies include well logs, subsurface mapping, and cross-sections. Prerequisite: GEOL 331, GEOL 562, and GEOL 572; or CPE 527, or permission of instructor. LEC.

GEOL 536. Geological Log Analysis. 1 Hour. U.
Application of well logging measurements to interpretation subsurface. LEC.

GEOL 537. Petroleum Reservoir Characterization. 3 Hours. N.
Geological, geophysical, and engineering characterization of a petroleum reservoir. Includes mapping; petrophysical, production, and pressure analysis; and numerical modeling. Considers economic analysis of steps to improve oil recovery. Students who have completed GEOL 837 may not take GEOL 537 for credit. Prerequisite: GEOL 535 and permission of instructor. LEC.

GEOL 541. Geomorphology. 4 Hours. N.
A critical study of landforms in relation to tectonics, climatic environment, and geologic processes. The use of geometric methods in the interpretation of Cenozoic history is emphasized. Laboratory exercises in analysis of field observations, maps, and photographs. Required field trip and fee. (Same as GEOG 541.) Prerequisite: GEOL 101 and GEOL 103, GEOG 104 and GEOG 105, or GEO 304 and GEO 103. LEC.

GEOL 551. Engineering Geology. 3 Hours. N.
Consideration of geologic factors affecting engineering projects. Topics include: techniques of site exploration, engineering properties of soil and rock, geologic conditions important in the design of major structures, and geologic information useful in land-use planning. Prerequisite: An introductory course in geology or consent of instructor. LEC.

GEOL 552. Introduction to Hydrogeology. 3 Hours. N.
Physical description of hydrogeologic media. Elementary groundwater hydraulics: analytical and graphical solutions for steady-state application. Well hydraulics and pumping tests. Basic groundwater geology. Effects of topography and geology on regional flow systems. Field and numerical delineation and analysis of groundwater flow systems and applications. Chemical characteristics of groundwaters and their relationship to aquifer geology and hydrology. Investigations of groundwater quality and contamination. Prerequisite: Two semesters each of calculus, physics, and chemistry. LEC.

GEOL 560. Introductory Field Geology. 3 Hours. AE61 / N.
Summer session. The study of the principles of field geology and the application of field methods to solve geological problems. Includes use of topographic maps and aerial photographs for geological mapping, the study of stratigraphic methods by measuring sections, and working field trips to areas of regional geological interest. Given at the University of Kansas Geology Field Camp near Canon City, Colorado. Fee. Prerequisite: GEOL 331, GEOL 360, and GEOL 562, or consent of instructor. FLD.

GEOL 561. Field Geology. 3 Hours. N.
Summer session. The application of the principles of field geology to solve complex geological problems in the field. Given at the University of Kansas Geology Field Camp near Canon City, Colorado, or at other sites as appropriate. Fee. Prerequisite: GEOL 560. FLD.

GEOL 562. Structural Geology. 4 Hours. N.
A study of primary and secondary rock-structures and their genesis. Includes techniques of structural analysis and introduces mechanics of rock deformations. Lectures, laboratory, and required field trip. Prerequisite: GEOL 311; PHSX 111, PHSX 114, or PHSX 211 and PHSX 216; and MATH 115 or MATH 121. LEC.

GEOL 572. Geophysics. 3 Hours. N.
Introductory study of gravitational, magnetic, seismic, electrical, and thermal properties of the earth. Measurements, interpretation, and applications to exploration, earth structure, and global tectonics. Prerequisite: An introductory course in geology; MATH 116 or MATH 122; and PHSX 115 or PHSX 212 and PHSX 236. PHSX 115 or PHSX 212 may be taken concurrently. LEC.
GEOL 573. Geodynamics and Plate Tectonics. 3 Hours. N.
Study of physical processes in the solid Earth and of geophysical approaches to studying Earth systems at regional and global scales. Topics include global potential fields, thermal regime, rheology and Earth deformation, earthquakes and seismic structure, plate motions and global tectonics. (Same as PHSX 528.) Prerequisite: An introductory course in geology; MATH 116 or MATH 122; and PHSX 115, PHSX 214, or PHSX 212 and PHSX 236. LEC.

GEOL 575. Seismic Exploration. 3 Hours. N.
Application of seismic reflection and refraction techniques to the description of near-surface geology and the exploration for energy and mineral resources. Theory of seismic information, data collection, data processing using computers, and geologic interpretation. Prerequisite: A course in computer programming, either FORTRAN or C, which may be taken concurrently. An introductory geophysics course, such as GEOL 572. LEC.

GEOL 576. Potential Fields Exploration. 3 Hours. N.
Use of gravity, magnetic, and electrical signals in the exploration for energy and mineral resources. Elementary potential field theory, data collection methods, data analysis, and interpretation using computers. Prerequisite: A course in computer programming, either FORTRAN or C, which may be taken concurrently. An introductory geophysics course, such as GEOL 572. LEC.

GEOL 577. Environmental Geophysics. 3 Hours.
Application of the methods of geophysical exploration to evaluate, mitigate, and prevent environmental problems below the surface of the earth. Development of fundamental principles and discussion of environmental case histories using seismic, gravity, magnetic, electromagnetic, electrical, and radar methods. Prerequisite: An introductory course in geology; MATH 116 or MATH 122; and PHSX 115, or PHSX 212 and PHSX 236. LEC.

GEOL 578. Seismic Data Analysis and Interpretation. 3 Hours. N.
Interpretation methods applied to seismic exploration and reservoir characterization. Topics include: rock physics, the convolutional model, synthetic seismograms, seismic response of hydrocarbon reservoirs, resolution, seismic velocity, depth conversion, seismic attributes, AVO, inversion, seismic anisotropy, 3-D 4-D interpretation, S-wave and converted wave interpretation, laboratory use of commercial seismic interpretation software. Prerequisite: GEOL 575 or consent of the instructor. LEC.

GEOL 591. Topics in Geology: _______. 1-5 Hours. N.
May include lectures, discussions, readings, laboratory, and field work in geology. Will be given as needed. May be taken more than once. LEC.

GEOL 711. X-Ray Analysis. 1-2 Hours.
Introduction to the theory and practice of X-ray diffraction and X-ray fluorescence analysis as applied to geological materials. Includes safety training necessary for the operation of X-ray analytical equipment in the department. Prerequisite: GEOL 311 and PHSX 115 or PHSX 212. LEC.

GEOL 712. Microstructures and Petrofabrics. 3 Hours.
This course is geared towards developing a qualitative and quantitative understanding of the fundamentals of rock and mineral deformation necessary to interpret comprehensively microstructural data. Microstructures and petrofabrics contain a wealth of information on kinematics, rheology, and boundary conditions of deforming rocks, important information that often goes unnoticed and unused. This course builds on knowledge acquired in undergraduate structural geology and petrology courses and will give students the tools for a more rigorous and sophisticated evaluation of thin sections and quantitative microstructural and textural data. Required field trip. Prerequisite: GEOL 512 and GEOL 562; or consent of the instructor. LEC.

GEOL 713. Advanced Petrology. 1 Hour.
Advanced topics in igneous and metamorphic petrology with emphasis on chemical and isotopic modeling. Course may be repeated, as topics covered vary. LEC.

GEOL 714. Thermochronology. 3 Hours.
This advanced course is intended to provide students with an in-depth understanding of the fundamentals and an appreciation of the complexities of thermochronology. The primary focus of this course is on modern thermochronological dating methods, a quantitative understanding of noble gas diffusion, data acquisition and interpretation, numerical modeling of complex thermochronological data, and hands-on laboratory experience in the KU thermochronology facilities. Prerequisite: MATH 122 and GEOL 717; or consent of the instructor. LEC.

GEOL 715. Geochemistry. 3 Hours.
Application of chemical equilibria and kinetics to geological environments and processes, with emphasis on processes involving solution equilibria. Includes introduction to thermodynamic aspects of equilibria. Prerequisite: CHEM 188 and MATH 122. LEC.

GEOL 716. Geologic Thermodynamics. 2 Hours.
Classical thermodynamics with an emphasis on phase equilibria, solid-solution chemistry, and modeling of natural systems. Prerequisite: Second semester calculus, or permission of instructor. LEC.

GEOL 717. Geochronology. 2-4 Hours.
Principles and applications of natural radioactive systems for geochronology and cosmochemistry, including use of radiogenic isotopes as geochemical tracers. Prerequisite: GEOL 512 or consent of instructor. LEC.

GEOL 718. Stable Isotope Geochemistry. 1-3 Hours.
Principles and applications of equilibria among stable isotopes in the geological environment, with emphasis on the isotopic systems of hydrogen, carbon, and oxygen. Prerequisite: GEOL 715 or consent of instructor. LEC.

GEOL 721. Micropaleontology. 3 Hours.
Systematics, paleontology, evolution, and biostratigraphy of microfossils, particularly foraminifera, ostracodes, and conodonts. Preparation of material for study. Applications of micropaleontology to geologic problems. Prerequisite: GEOL 521 or BIOL 100 or 152. LEC.

GEOL 722. Paleozoology. 3 Hours.
Principles of ecology as applied to the interpretation of past environments. Prerequisite: GEOL 521. LEC.

GEOL 723. Paleontology Museum Apprenticeship. 1-6 Hours. N.
Provides directed, practical experience in care and management of paleontology collections, public education, exhibits, and museum administration with emphasis tailored to fit the needs and interests of each student. Students should expect to spend a minimum of five hours per week for each hour in which they are enrolled. (Same as AMS 799, ANTH 799, BIOL 799, HIST 799, and MUSE 799.) FLD.

GEOL 724. Paleobiogeography. 3 Hours.
The study of the coevolution of the Earth and its biota. The class will focus on using phylogenetic approaches with fossil taxa to study how tectonic change has influenced the evolution of life and also to determine what evolutionary patterns can tell us about the nature and sequence of geological events. Prerequisite: GEOL 521, or consent of the instructor. LEC.
GEOL 725. Paleontology of Lower Vertebrates. 3 Hours. General account of the osteology, geologic distribution, and evolution of the principal groups of fishes, amphibians, reptiles, and birds. Lectures and laboratory. (Same as BIOL 790.) Prerequisite: GEOL 105 or GEOL 304, or GEOL 521. LEC.

GEOL 726. Paleontology of Higher Vertebrates. 3 Hours. Evolution of mammals and anatomical modifications involved in the process as ascertained from the fossil record. Lectures and laboratory. (Same as BIOL 791.) Prerequisite: GEOL 105 or GEOL 304 or GEOL 521. LEC.

GEOL 727. Macroevolution. 3 Hours. This course will present a broad survey of topics in macroevolution including the differences between micro- and macroevolutionary patterns and processes and the manner of formulating and analyzing macroevolutionary questions. Discussions will focus on the relevance of hierarchy theory and levels of selection; an overview of species concepts, both ontological and epistemological; and an analysis of the neo-Darwinian synthesis as related to innovations in evolutionary theory. In addition, the relevance of contingency and extinction to evolutionary theory will be emphasized. LEC.

GEOL 728. Paleopedology. 3 Hours. Paleopedology is the study of ancient soils preserved in the geologic record. The course covers concepts of paleopedology and its applications to the interpretation of paleoenvironmental, paleoecologic, and paleohydrogeologic settings and its use in sequence stratigraphy and paleoclimatology. Prerequisite: GEOG 535, GEOL 331, or GEOL 532; or consent of the instructor. LEC.

GEOL 729. Ichnology. 3 Hours. Ichnology is the study of organism-substrate interactions. The class will cover concepts and applications of ichnology in the marine and continental realms, including the behavior of such organisms as microbes, plants, invertebrates, and vertebrates preserved in the geologic record as trace fossils. Ichnology is applied in geology and in the petroleum industry to interpret ancient environments, hydrogeology, ecology, and climate. Prerequisite: GEOL 331, GEOL 521, or GEOL 532; or consent of the instructor. LEC.

GEOL 731. Terrigenous Depositional Systems. 4 Hours. Processes that operate in recent sedimentary environments, responses of sediment to those processes, and criteria for determining depositional environments of ancient sedimentary rocks. Lectures, practical exercises, and field trips. Prerequisite: GEOL 331 or GEOL 532. LEC.

GEOL 732. Carbonate Depositional Systems. 3 Hours. Patterns and processes of contemporaneous carbonate deposition and diagenesis, depositional models; applications to interpretation of carbonate rocks. Lecture, discussion, laboratory and field trips. Prerequisite: GEOL 532 (may be taken concurrently). LEC.

GEOL 741. Advanced Geomorphology. 1-3 Hours. Detailed discussions of processes and landforms characteristic of specific environments. Considered during separate semesters will be general methodology, and fluvial, arid regions, glacial, and shoreline geomorphology. Course may be taken more than once. (Same as GEG 741.) Prerequisite: GEOL 541. LEC.

GEOL 751. Physical Hydrogeology. 3 Hours. Study of fluid flow in subsurface hydrologic systems. Investigation of the ground water environment including porosity, and hydraulic conductivity and their relationship to typical geologic materials. Examination of Darcy’s law and the continuity equation leading to the general flow equations. Discussion of typical hydraulic testing methods to estimate aquifer parameters in various situations and apply these to water resource problems. Study of the basic mechanisms that determine the behavior of typical regional flow systems. (Same as CE 752.) LEC.

GEOL 753. Chemical and Microbial Hydrogeology. 4 Hours. Lecture and discussion of chemical and microbiological controls on groundwater chemistry. Topics include thermodynamic and microbiological controls on water-rock reactions; kinetics; and microbiological, chemical and isotopic tools for interpreting water chemistry with respect to chemical weathering and shallow diagenesis. Origins of water chemistry, changes along groundwater flow paths, and an introduction to contaminant biogeochemistry will be discussed through the processes of speciation, solubility, sorption, ion exchange, oxidation-reduction, elemental and isotopic partitioning, microbial metabolic processes and microbial ecology. An overview of the basics of environmental microbiology, including cell structure and function, microbial metabolism and respiration, microbial genetics and kinetics of microbial growth will be covered. (Same as CE 754.) Prerequisite: One year of chemistry, one year of calculus, one year of biology, an introductory course in hydrogeology, or consent of the instructors. LEC.

GEOL 754. Contaminant Transport. 3 Hours. A study of the transport of conservative and non-conservative pollutants in subsurface waters. Case studies are used to illustrate and develop a conceptual understanding of such processes as diffusion, advection, dispersion, retardation, chemical reactions, and biodegradation. Computer models are developed and used to quantify these processes. (Same as CE 754.) Prerequisite: Introductory Hydrogeology or consent of instructor. LEC.

GEOL 761. Regional Field Geology. 1-5 Hours. A detailed field study of a carefully selected area that includes features of several phases of geology. Field trip fee. Prerequisite: GEOL 561 or equivalent and departmental approval. FLD.

GEOL 763. Tectonics and Regional Geology. 3 Hours. Topics vary with demand and include fundamental features of plate tectonics, interpretation and distribution of regional geology of mountain belts with emphasis on tectonic setting and processes, regional geology, and tectonics of selected mountain belts. Prerequisite: GEOL 562, GEOL 512, or GEOL 331, and GEOL 572. LEC.

GEOL 771. Advanced Geophysics: ______. 1-3 Hours. Topics to vary with demand and include heat flow, wave propagation, synthetic seismograms, groundwater exploration, geothermal exploration, electrical methods in exploration, rock mechanics-geophysics, rock magnetism, geomagnetism, paleomagnetism, geophysical inverse theory, and others upon sufficient demand. May be repeated for different topics. (Same as PHSX 727.) Prerequisite: GEOL 572 or GEOL 573/PHSX 528 or consent of instructor. LEC.

GEOL 772. Geophysical Data Analysis. 3 Hours. Fourier analysis, sampling theory, prediction and interpolation of geophysical data, filtering theory, correlation techniques, deconvolution. Examples will be chosen from various fields of geophysics. (Same as PHSX 722.) Prerequisite: MATH 250/250/250/250/250/250/250/250/250/ME 250 and either GEOL 572 or GEOL 573 or PHSX 528. LEC.

GEOL 773. Seismology. 3 Hours. General theory of seismic waves, wave field extrapolation (migration) by finite difference methods, construction of travel-time curves, reflection and attenuation of coefficients, earthquake source mechanism, distribution and forecasting of earthquakes. (Same as PHSX 723.) Prerequisite: MATH 250/250/250/250/250/250/250/250/250/ME 250 and either GEOL 572 or GEOL 573 or PHSX 528. LEC.
GEOL 775. Near-Surface Seismology. 3 Hours.
Theoretical and applied study of all aspects of near-surface reflection, refraction, and surface-wave seismology from design and acquisition to interpretation. Prerequisite: MATH 250, GEOL 572, or consent of the instructor. LEC.

GEOL 776. Ground Penetrating Radar. 3 Hours.
Theoretical and applied study of radar methods used for imaging the subsurface. Topics include EM theory relating to wave propagation through earth environments, GPR data acquisition, processing and interpretation. Prerequisite: Consent of the instructor. LAB.

GEOL 780. Conservation Principles and Practices. 3 Hours.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects will also be considered. (Same as AMS 714, BIOL 700, HIST 722 and MUSE 706.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

GEOL 781. Introduction to Museum Exhibits. 3 Hours.
This course will consider the role of exhibits as an integrated part of museum collection management, research, and public service. Lecture and discussion will focus on issues involved in planning and producing museum exhibits. Laboratory exercises will provide first hand experience with basic preparation techniques. Emphasis will be placed on the management of an exhibit program in both large and small museums in the major disciplines. (Same as AMS 700, BIOL 787, HIST 723, and MUSE 703.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

GEOL 782. The Nature of Museums. 3 Hours.
The purpose of this course is to provide an overview of the kinds of museums, their various missions, and their characteristics and potentials as research, education, and public service institutions responsible for collections of natural and cultural objects. (Same as AMS 720, BIOL 788, HIST 720, and MUSE 702.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

GEOL 783. Museum Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as AMS 731, BIOL 785, HIST 728, and MUSE 701.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

GEOL 784. Introduction to Museum Public Education. 3 Hours.
Consideration of the goals of an institution’s public education services, developing programs, identifying potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as AMS 797, BIOL 784, HIST 721, and MUSE 705.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

GEOL 785. Principles and Practices of Museum Collection Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museum collections, their associated data, and their use in scholarly research; cataloging, storage, fumigation, automated information management and related topics will be presented for museums of art, history, natural history and anthropology. (Same as AMS 730, BIOL 798, HIST 725, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

GEOL 791. Advanced Topics in Geology. 3 Hours.
Selected offerings in geology. Intended primarily for graduate students and qualified seniors. May include lectures, discussions, reading, laboratory and field work. Prerequisite: Consent of instructor. LEC.

GEOL 837. Geoscience and Petroleum Engineering. 3 Hours.
Advanced geological, geophysical, and engineering characterization of a petroleum reservoir. Includes mapping; petrophysical, production, and pressure analysis; and numerical modeling. Considers economic analysis of steps to improve recovery. Students who have completed GEOL 537 may not take GEOL 837 for credit. LEC.

GEOL 851. Field and Laboratory Methods: Physical Hydrogeology. 1 Hour.
Introduction to field and laboratory methods commonly used in physical hydrogeology. Practical experience with common water level measurement techniques, various well pumping techniques, well installation and geologic core sampling, and hydraulic testing. Prerequisite: Introductory course in hydrogeology and familiarity with computer use for data processing, or consent of instructor. FLD.

GEOL 852. Field and Laboratory Methods: Contaminant Transport. 1 Hour.
Introduction to laboratory methods for evaluating reactive transport parameters, followed by development and implementation of computer models. Students will gain experience building models starting from basic transport equations using a spreadsheet platform and, where appropriate, commercial software packages. Prerequisite: GEOL 751 (may be taken concurrently) or equivalent, or consent of the instructor. LEC.

GEOL 853. Field and Laboratory Methods: Chemical Hydrogeology. 1 Hour.
Practical experience in measuring unstable chemical parameters in groundwater, including pH, Eh, dissolved oxygen, temperature, alkalinity, specific conductance, and turbidity. Practical experience in collecting water samples for chemical analysis, choosing appropriate sample containers and preservation methods, and special techniques for collecting samples for determination of parameters sensitive to environmental changes such as oxygen level or temperature. Prerequisite: GEOL 753 (may be taken concurrently) or equivalent, or consent of the instructor. FLD.

GEOL 854. Field and Laboratory Methods: Geobiology. 1 Hour.
Practical experience in cultivating, enumerating and visualizing groundwater microorganisms. Geochemical and molecular techniques for studying microbial community diversity, biominalization and mineral dissolution, and biodegradation of organic contaminants will be covered. Practical experience in collecting water samples for preservation of microorganisms sensitive to environmental changes such as oxygen level or temperature. Prerequisite: GEOL 753 (may be taken concurrently) or equivalent, or consent of the instructor. FLD.

GEOL 891. Special Studies in Geology. 1-5 Hours.
May be repeated. RSH.

GEOL 899. Master’s Thesis. 1-12 Hours.
May be repeated. THE.

GEOL 921. Advanced Invertebrate Paleontology. 1-3 Hours.
Detailed study of systematics, morphology, stratigraphic distribution and paleoecology of major groups of organisms in the fossil record. Specific group or groups covered will vary according to student and faculty needs and interests. May be repeated. Prerequisite: An introductory course in invertebrate paleontology. LEC.
GEOL 932. Carbonate Petrology. 3 Hours.
Study of the physical and chemical factors important in the genesis and diagenesis of carbonate rocks. Includes the application of principles learned from research on modern marine environments to the interpretation of ancient carbonates. Various analytical techniques are covered with emphasis on thin section petrography. Prerequisite: GEOL 331 and GEOL 732. LEC.

GEOL 933. Sandstone Petrology. 3 Hours.
Description, classification, and interpretation of sedimentary rocks, emphasizing petrographic methods applied to terrigenous rocks and interpretation of provenance of sedimentary sequences. Prerequisite: GEOL 511 and GEOL 531 or GEOL 532. LEC.

GEOL 991. Seminar in: _____. 1-5 Hours.
A review of the principles of the geological sciences. Fields considered are: geomorphology, igneous petrology, metamorphic petrology, invertebrate paleontology, groundwater, geochemistry, stratigraphy, sedimentation, micropaleontology, mineralogy, structural geology, and geophysics. Several may be taken concurrently. May be taken more than one semester. LEC.

GEOL 999. Doctoral Dissertation. 1-12 Hours.
THE.

Bachelor of Arts in Geology

Why study geology?
Because its leadership role among geoscience programs advances higher learning and serves society through the discovery, dissemination, and application of knowledge.

Undergraduate Admission

Admission to KU
All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences
Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Geology Programs
The B.A. program allows many free electives for background courses in the sciences or liberal arts. The program permits study of traditional geology (with emphasis on the solid earth, the earth’s surface, or environmental geology and natural resources), environmental geology (with emphasis on water or urban environmental geology), or an individually tailored program.

Degree requirements may be altered to suit particular needs of a student upon petition to the undergraduate studies committee and in consultation with a geology faculty advisor. Special consideration is given to students with strong backgrounds in supporting sciences and students with superior records who decide to major in geology late in their programs.

First- and Second-Year Preparation
Students interested in geology should see a department advisor as soon as possible. They should enroll in mathematics, chemistry, and English in addition to Introduction to Geology and electives. Students should take GEOL 360 as soon as possible.

Advising
Developing a strong relationship with a faculty advisor helps students get the most out of their educational programs in the shortest time. Most courses for majors are offered in only one semester each year. Advisors can guide the student through complexities of the curriculum or into a specialized program.

Requirements for the B.A. Major

Geology Major Course Requirements

Geology Prerequisite or Co-requisite Knowledge (21-27)

Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.

Calculus I. Satisfied by:
MATH 115 or MATH 121 Calculus I (or equivalent) 3

Foundations of Chemistry I. Satisfied by:
CHEM 130 General Chemistry I 5

Physics. Satisfied by one of the following:
PHSX 111 Introductory Physics 3
PHSX 114 College Physics I 1-4
PHSX 211 General Physics I 1-2
& PHSX 216 General Physics I Laboratory 5

Biology. Satisfied by:
BIOL 100 Principles of Biology 4
& BIOL 102 Principles of Biology Laboratory (or higher level biology course)

Information Technology. Satisfied by:
EECS 128 Foundations of Information Technology: ____ 3
or EECS 138 Introduction to Computing: ____

Geology Core Knowledge and Skills (24)

Majors must complete the following core courses:

Introduction to Geology. Satisfied by:
GEOL 101 The Way The Earth Works 3
Geology Fundamentals Laboratory. Satisfied by:
GEOL 103 Geology Fundamentals Laboratory 2
Mineralogy and Structure of the Earth. Satisfied by:
GEOL 311 Mineralogy and Structure of the Earth 3
Sedimentology and Stratigraphy. Satisfied by:
GEOL 331 Sedimentology and Stratigraphy 4

Field Investigation. Satisfied by:
GEOL 360 Field Investigation 2

Paleontology. Satisfied by:
GEOL 521 Paleontology 3

Introductory Field Geology. Satisfied by:
GEOL 560 Introductory Field Geology 3

Structural Geology. Satisfied by:
GEOL 562 Structural Geology 4

Geology Required Electives (15)
Majors must complete a minimum of 15 hours in geology or related courses. Several possible tracks of upper-level course work are given below.

General Geology Options
Concentrate on traditional geology with emphasis on the solid earth and the earth’s interior, earth surface processes, or environmental geology and natural resources.

Solid Earth (15)
GEOL 312 Mineral Structures and Equilibria Laboratory 1
GEOL 512 Igneous and Metamorphic Petrology 3
GEOL 513 Petrology Laboratory 1
GEOL 532 Stratigraphy 4
GEOL 572 Geophysics 3
GEOL 573 Geodynamics and Plate Tectonics 3

Surface Earth (17)
GEOL 171 Earthquakes and Natural Disasters 3
GEOL 351 Environmental Geology 3
GEOL 532 Stratigraphy 4
GEOL 541 Geomorphology 4
GEOL 722 Paleoclimatology 3

Geology and Natural Resources (14-19)
GEOL 351 Environmental Geology 3
GEOL 391 Special Studies in Geology 1-6
GEOL 541 Geomorphology 4
GEOL 572 Geophysics 3
EVRN 332 Environmental Law (prerequisite: EVRN 148) 3

Environmental Geology Options
Concentrate on environmental geology with emphasis on water and the environment or urban environmental geology.

Water, Geology, and the Environment (23-28)
GEOL 302 Oceanography 3
GEOL 351 Environmental Geology 3
GEOL 391 Special Studies in Geology 1-6
GEOL 541 Geomorphology 4
GEOL 552 Introduction to Hydrogeology 3
ATMO 515 Energy and Water Balance 3
CE 477 Introduction to Environmental Engineering and Science 3
BIOL 661 Ecology of Rivers and Lakes 3

Urban Environmental Geology (12)
GEOL 351 Environmental Geology 3
ATMO 525 Air Pollution Meteorology 3
CE 477 Introduction to Environmental Engineering and Science 3
GEOG 304 Environmental Conservation 3

Other Elective Courses (16)
GEOL 532 Stratigraphy 4
ATMO 105 Introductory Meteorology 5
BIOL 414 Principles of Ecology 3
GEOG 558 Intermediate Geographical Information Systems 4

Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 30 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Sample 4-year plans for the BA degree in Geology with the following concentrations can be found here: General Geology (http://catalog.ku.edu/liberal-arts-sciences/geology/ba/general-geology) and Environmental Geology (http://catalog.ku.edu/liberal-arts-sciences/geology/ba/environmental-geology), or by using the left-side navigation.

Sample 4-year plans for the BGS degree and BS degree in Geology will be coming soon.

Departmental Honors
Pursuit of departmental honors in Geology is by invitation from the Department of Geology honors coordinator.
Requirements include:
3.25 or higher KU GPA at graduation.
3.50 or higher KU geology-courses GPA at graduation.
Completion of at least 2 credit hours of GEOL 399.
Completion and successful defense of an honor’s thesis. Additional requirements and more information may be obtained from the Department of Geology honors coordinator and web site.
Bachelor of Science in Geology

Why study geology?
Because its leadership role among geoscience programs advances higher learning and serves society through the discovery, dissemination, and application of knowledge.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.isss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Geology Programs

The B.S. program provides intensive training in geology and other sciences. B.S. majors may emphasize traditional geology, environmental geology (with a specialized track in hydrogeology), engineering geology, geophysics, or earth and space science licensure. The hydrogeology track, the engineering geology option, and the geophysics option combine basic training in geology with training in mathematics, engineering, physics, and geophysics. The environmental geology option combines training in geology with many different sciences.

Degree requirements may be altered to suit particular needs of a student upon petition to the undergraduate studies committee and in consultation with a geology faculty advisor. Special consideration is given to students with strong backgrounds in supporting sciences and students with superior records who decide to major in geology late in their programs.

First- and Second-Year Preparation

Students interested in geology, especially in the B.S. degree, should see a department advisor as soon as possible. They should enroll in mathematics, chemistry, and English in addition to Introduction to Geology and electives. Students should take GEOL 360 as soon as possible.

Advising

Developing a strong relationship with a faculty advisor helps students get the most out of their educational programs in the shortest time. Most courses for majors are offered in only one semester each year. Advisors can guide the student through complexities of the curriculum or into a specialized program.

Requirements for the B.S. Degree

The B.S. program provides intensive training in geology and other sciences. B.S. majors may emphasize traditional geology, environmental geology (with a specialized track in hydrogeology), engineering geology, geophysics, or earth and space science licensure. The hydrogeology track, the engineering geology option, and the geophysics option combine basic training in geology with training in mathematics, engineering, physics, and geophysics. The environmental geology option combines training in geology with many different sciences.

Degree requirements may be altered to suit particular needs of a student upon petition to the undergraduate studies committee and in consultation with a geology faculty advisor. Special consideration is given to students with strong backgrounds in supporting sciences and students with superior records who decide to major in geology late in their programs.

General Geology Option

Written Communication - Core Skill and Critical Inquiry.

Composition (3)

Satisfied by one of the following. Requirement must be completed during initial term of admission at KU.

<table>
<thead>
<tr>
<th>Course</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
</tr>
<tr>
<td>ACT English score of 27 or above or SAT English score of 600 or above</td>
<td></td>
</tr>
<tr>
<td>AP English Literature &amp; Composition score of 3 or above</td>
<td></td>
</tr>
<tr>
<td>Equivalent transfer course</td>
<td></td>
</tr>
</tbody>
</table>

Critical Reading and Writing (3)

Satisfied by one of the following. Requirement must be completed during initial term of admission at KU.

<table>
<thead>
<tr>
<th>Course</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
</tr>
<tr>
<td>or ENGL 105</td>
<td>Freshman Honors English</td>
</tr>
<tr>
<td>AP English Literature &amp; Composition score of 4 or above</td>
<td></td>
</tr>
<tr>
<td>Equivalent transfer course</td>
<td></td>
</tr>
</tbody>
</table>

Sophomore Reading and Writing II (15)

Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 203</td>
<td>Topics in Reading and Writing: _____</td>
</tr>
<tr>
<td>or ENGL 205</td>
<td>Freshman-Sophomore Honors Proseminar: _____</td>
</tr>
<tr>
<td>ENGL 209</td>
<td>Introduction to Fiction</td>
</tr>
<tr>
<td>ENGL 210</td>
<td>Introduction to Poetry</td>
</tr>
<tr>
<td>ENGL 211</td>
<td>Introduction to the Drama</td>
</tr>
<tr>
<td>ENGL 362</td>
<td>Foundations of Technical Writing</td>
</tr>
<tr>
<td>AP English Literature &amp; Composition score of 5 or above</td>
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</tr>
<tr>
<td>Equivalent</td>
<td></td>
</tr>
</tbody>
</table>

Communications.

Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication</td>
</tr>
<tr>
<td>or COMS 150</td>
<td>Personal Communication</td>
</tr>
</tbody>
</table>

Humanities - Understanding the Human Condition. Satisfied by completing 2 courses (requirement code H). Approved courses may be searched for availability through the Kyou portal.
Bachelor of Science in Geology

Social and Behavioral Sciences - Understanding Society and Behavior. Satisfied by completing 2 courses (requirement code S). Approved courses may be searched for availability through the Kyou portal. An introductory course in economics is recommended.

Geology Prerequisite or Co-requisite Knowledge (34-39)
Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.

Calculus I. Satisfied by:
MATH 121 Calculus I (Prerequisite: MATH 104; or MATH 103; or three years of college preparatory mathematics including trigonometry and a score of 28 or higher on ACT mathematics or 640 or higher on the SAT; or a qualifying score on the mathematics placement test. Students may complete MATH 115 and MATH 116 prior to completing MATH 122.)

Calculus II. Satisfied by:
MATH 122 Calculus II

Chemistry. Satisfied by:
CHEM 130 General Chemistry I
& CHEM 135 and General Chemistry II

Physics. Satisfied by:
PHSX 211 General Physics I
& PHSX 216 and General Physics I Laboratory
PHSX 212 General Physics II
& PHSX 236 and General Physics II Laboratory

Biology. Satisfied by BIOL:

Information Technology. Satisfied by one of the following:
EECS 138 Introduction to Computing: _____
C&PE 121 Introduction to Computers in Engineering

Geology Core Knowledge and Skills (32)
Majors must complete the following core courses:
Introduction to Geology. Satisfied by:
GEOL 101 The Way The Earth Works
Geology Fundamentals Laboratory. Satisfied by:
GEOL 103 Geology Fundamentals Laboratory
Historical Geology. Satisfied by:
GEOL 304 Historical Geology
Mineralogy and Structure of the Earth. Satisfied by:
GEOL 311 Mineralogy and Structure of the Earth
Mineral Structures and Equilibria Laboratory. Satisfied by:
GEOL 312 Mineral Structures and Equilibria Laboratory
Sedimentology and Stratigraphy. Satisfied by:
GEOL 331 Sedimentology and Stratigraphy
Field Investigation. Satisfied by:

Field Geology. Satisfied by:
GEOL 561 Field Geology
Structural Geology. Satisfied by:
GEOL 562 Structural Geology

Geology Required Electives (18)
At least one course from each of the three categories listed below: Life; Water & Climate; Rocks. Additional elective credit requirements fulfilled by 500 level and above geology courses. 3 hours of GEOL 121 (taken before the student has completed 60 hrs), 391 or 399 can also count.

Life
GEOL 316 Geochemistry
GEOL 521 Paleontology
GEOL 521 Paleontology
& GEOL 523 and Paleontology Laboratory
GEOL 591 Topics in Geology: _____ (Geobiology)

Rocks
GEOL 535 Petroleum and Subsurface Geology
GEOL 572 Geophysics

Water and Climate
GEOL 552 Introduction to Hydrogeology
GEOL 591 Topics in Geology: _____ (Climate: Past, Present and Future)

Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 50 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 18 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Engineering Geology Option
Written Communication - Core Skill and Critical Inquiry.

Composition (3)
Satisfied by one of the following. Requirement must be completed during initial term of admission at KU.
ENGL 101 Composition
ACT English score of 27 or above or SAT English score of 600 or above
AP English Literature & Composition score of 3 or above
Equivalent transfer course

Critical Reading and Writing (3)
Satisfied by one of the following. Requirement must be completed within the first academic year at KU.
ENGL 102 Critical Reading and Writing 3 or ENGL 105 Freshman Honors English
AP English Literature & Composition score of 4 or above
Equivalent transfer course

Sophomore Reading and Writing II (3)
Satisfied by one of the following:
ENGL 362 Foundations of Technical Writing 3
AP English Literature & Composition score of 5 or above
Equivalent

Communications.
Satisfied by:
COMS 130 Speaker-Audience Communication 3 or COMS 150 Personal Communication

Humanities - Understanding the Human Condition. Satisfied by completing 2 courses (requirement code H). Approved courses may be searched for availability through the Kyou portal.

Social and Behavioral Sciences - Understanding Society and Behavior. Satisfied by completing 2 courses (requirement code S). Approved courses may be searched for availability through the Kyou portal. An introductory course in economics is recommended.

Geology Prerequisite or Co-requisite Knowledge (54-59)
Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.

Mathematics. Satisfied by:
MATH 121 Calculus I (Prerequisite: MATH 104; or MATH 103; or 3 years of college preparatory mathematics including trigonometry and a score of 28 or higher on ACT mathematics or 640 or higher on the SAT; or a qualifying score on the mathematics placement test.) 5
MATH 122 Calculus II 5
MATH 220 Applied Differential Equations 3
MATH 290 Elementary Linear Algebra 2
Chemistry. Satisfied by:
CHEM 130 General Chemistry I 10
CHEM 135 General Chemistry II
& CHEM 135

Physics. Satisfied by:
PHSX 211 General Physics I 2-5
& PHSX 216 and General Physics I Laboratory
PHSX 212 General Physics II 2-4
& PHSX 236 and General Physics II Laboratory

Information Technology. Satisfied by one of the following:
EECS 138 Introduction to Computing: ____ 3
C&PE 121 Introduction to Computers in Engineering 3

Statics. Satisfied by:
CE 201 Statics 2
Dynamics. Satisfied by:
CE 300 Dynamics 3
Strength of Materials. Satisfied by:
CE 311 Strength of Materials 3

Fluid Mechanics. Satisfied by:
CE 330 Fluid Mechanics 4

Hydrology. Satisfied by:
CE 455 Hydrology 3

Soil Mechanics. Satisfied by:
CE 487 Soil Mechanics 4

Geology Core Knowledge and Skills (42)
Majors must complete the following core courses:
Introduction to Geology. Satisfied by one of the following:
GEOL 101 The Way The Earth Works 3
GEOL 103 Geology Fundamentals Laboratory 2
GEOL 304 Historical Geology 3

Mineralogy and Structure of the Earth. Satisfied by:
GEOL 311 Mineralogy and Structure of the Earth 3

Mineral Structures and Equilibria Laboratory. Satisfied by:
GEOL 312 Mineral Structures and Equilibria Laboratory 1

Sedimentology and Stratigraphy. Satisfied by:
GEOL 331 Sedimentology and Stratigraphy 4

Environmental Geology. Satisfied by:
GEOL 351 Environmental Geology 3

Field Investigation. Satisfied by:
GEOL 360 Field Investigation 2

Igneous and Metamorphic Petrology. Satisfied by:
GEOL 512 Igneous and Metamorphic Petrology 3

Petrology Laboratory. Satisfied by:
GEOL 513 Petrology Laboratory 1

Geomorphology. Satisfied by:
GEOL 541 Geomorphology 4

Introductory Field Geology. Satisfied by:
GEOL 560 Introductory Field Geology 3

Field Geology. Satisfied by:
GEOL 561 Field Geology 3

Structural Geology. Satisfied by:
GEOL 562 Structural Geology 4

Geophysics or Geodynamics and Plate Tectonics. Satisfied by one of the following:
GEOL 572 Geophysics 3

Geology or Civil Engineering Required Electives (19)
Majors must complete three additional geology or civil engineering courses, at least two of which must be from the following:

GEOL 521 Paleontology 3
GEOL 535 Petroleum and Subsurface Geology 4
GEOL 715 Geochemistry 3
GEOL 751 Physical Hydrogeology 3
CE 770 Concepts of Environmental Chemistry 2
CE 771 Environmental Chemical Analysis 1

Electives may include an upper-division course in statistics:
MATH 365 Elementary Statistics 3 or BIOL 570 Introduction to Biostatistics
Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 45 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 18 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Environmental Geology Option

Written Communication - Core Skill and Critical Inquiry.

Composition (3)
Satisfied by one of the following. Requirement must be completed during initial term of admission at KU.

ENGL 101 Composition 3

ACT English score of 27 or above or SAT English score of 600 or above

AP English Literature & Composition score of 3 or above

Equivalent transfer course

Critical Reading and Writing (3)
Satisfied by one of the following. Requirement must be completed within the first academic year at KU.

ENGL 102 Critical Reading and Writing 3

or ENGL 105 Freshman Honors English

AP English Literature & Composition score of 4 or above

Equivalent transfer course

Sophomore Reading and Writing II (15)
Satisfied by one of the following:

ENGL 203 Topics in Reading and Writing: _____ 3

or ENGL 205 Freshman-Sophomore Honors Proseminar: _____

ENGL 209 Introduction to Fiction 3

ENGL 210 Introduction to Poetry 3

ENGL 211 Introduction to the Drama 3

ENGL 362 Foundations of Technical Writing 3

AP English Literature & Composition score of 5 or above

Equivalent transfer course

Communications.
Satisfied by:

COMS 130 Speaker-Audience Communication 3

or COMS 150 Personal Communication

Geology Prerequisite or Co-requisite Knowledge (40-51)

Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.

Calculus I. Satisfied by:

MATH 121 Calculus I (Prerequisite: MATH 104; or MATH 103; or three years of college preparatory mathematics including trigonometry and a score of 28 or higher on ACT mathematics or 640 or higher on the SAT; or a qualifying score on the mathematics placement test. Students may complete MATH 115 and MATH 116 prior to completing MATH 122.) 5

Calculus II. Satisfied by:

MATH 122 Calculus II

Chemistry. Satisfied by:

CHEM 130 General Chemistry I & CHEM 135 General Chemistry II

Physics. Satisfied by:

Select one of the following:

PHSX 211 General Physics I & PHSX 216 General Physics I Laboratory 2-5

PHSX 212 General Physics II & PHSX 236 General Physics II Laboratory (recommended) 2-4

PHSX 114 College Physics I & PHSX 115 College Physics II 2-8

Biology. Satisfied by:

BIOL 150 Principles of Molecular and Cellular Biology & BIOL 152 Principles of Organismal Biology 8

Information Technology. Satisfied by one of the following:

EECS 138 Introduction to Computing: _____ 3

C&PE 121 Introduction to Computers in Engineering 3

Geology Core Knowledge and Skills (40)

Majors must complete the following core courses:

Introduction to Geology. Satisfied by:

GEOL 101 The Way The Earth Works 3

Geology Fundamentals Laboratory. Satisfied by:

GEOL 103 Geology Fundamentals Laboratory 2

Historical Geology. Satisfied by:

GEOL 304 Historical Geology 3

Mineralogy and Structure of the Earth. Satisfied by:

GEOL 311 Mineralogy and Structure of the Earth 3

Sedimentology and Stratigraphy. Satisfied by:

GEOL 331 Sedimentology and Stratigraphy 4

Environmental Geology. Satisfied by:

GEOL 351 Environmental Geology 3

Field Investigation. Satisfied by:
Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Geophysics Option
Written Communication - Core Skill and Critical Inquiry.

Composition (3)
Satisfied by one of the following. Requirement must be completed during initial term of admission at KU.
ENGL 101 Composition 3
ACT English score of 27 or above or SAT English score of 600 or above
AP English Language & Composition score of 3 or above
Equivalent transfer course

Critical Reading and Writing (3)
Satisfied by one of the following. Requirement must be completed during initial term of admission at KU.
ENGL 102 Critical Reading and Writing 3
or ENGL 105 Freshman Honors English
AP English Language & Composition score of 4 or above
Equivalent transfer course

Sophomore Reading and Writing II (15)
Satisfied by one of the following:
ENGL 203 Topics in Reading and Writing: _____ 3
or ENGL 205 Freshman-Sophomore Honors Proseminar: _____
ENGL 209 Introduction to Fiction 3
ENGL 210 Introduction to Poetry 3
ENGL 211 Introduction to the Drama 3
ENGL 362 Foundations of Technical Writing 3
AP English Language & Composition score of 5 or above
Equivalent

Humanities - Understanding the Human Condition. Satisfied by completing 2 courses (requirement code H). Approved courses may be searched for availability through the Kyou portal.

Social and Behavioral Sciences - Understanding Society and Behavior. Satisfied by completing 2 courses (requirement code S). Approved courses may be searched for availability through the Kyou portal. An introductory course in economics is recommended.

Geology Prerequisite or Co-requisite Knowledge (44-49)
Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.

Calculus I. Satisfied by:
MATH 121 Calculus I (Prerequisite: MATH 104; or MATH 103; or three years of college preparatory mathematics including trigonometry and a score of 28 or higher on ACT mathematics or 640 or higher on the SAT; or a qualifying score on the mathematics placement test. Students may complete MATH 115 and MATH 116 prior to completing MATH 122.) 5

Major Junior/Senior Hours
Satisfied by a minimum of 45 hours from junior/senior courses (300+) in the major.

Paleontology. Satisfied by:
GEOL 521 Paleontology 3

Geomorphology. Satisfied by:
GEOL 541 Geomorphology 4

Introduction to Hydrogeology. Satisfied by:
GEOL 552 Introduction to Hydrogeology 3

Introductory Field Geology. Satisfied by:
GEOL 560 Introductory Field Geology 3

Structural Geology. Satisfied by:
GEOL 562 Structural Geology 4

Geophysics. Satisfied by:
GEOL 572 Geophysics 3

Geology Required Electives (38-43)
Majors must complete additional courses to total at least nine hours numbered 500 or above. The following are recommended:
GEOL 391 Special Studies in Geology 1-6
GEOL 535 Petroleum and Subsurface Geology 4
GEOL 715 Geochemistry 3
GEOL 751 Physical Hydrogeology 3
CE 770 Concepts of Environmental Chemistry 3 & CE 771 and Environmental Chemical Analysis
GEOG 535 Soil Geography 4
GEOG 558 Intermediate Geographical Information Systems 4
GEOL 753 Chemical and Microbial Hydrogeology 4
BIOL 400 Fundamentals of Microbiology 3

Environmental Hydrogeology Track
Besides the general program above, a specialized track in hydrogeology satisfies degree requirements. In addition to College, supporting science, and geology courses, the environmental hydrogeology track requires the following mathematics and civil engineering/physics courses:

MATH 220 Applied Differential Equations 3
MATH 290 Elementary Linear Algebra 2
CE 330 Fluid Mechanics 4
or PHSX 623 Physics of Fluids

In addition, Technical Electives (9 hours). These normally are chosen from courses numbered 500 or above in geology, physics, mathematics, chemistry, engineering or computer science. Courses numbered below 500 must be approved by a geology advisor.

Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 49 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 45 hours from junior/senior courses (300+) in the major.

Written Communication - Core Skill and Critical Inquiry.

Composition (3)
Satisfied by one of the following. Requirement must be completed during initial term of admission at KU.
ENGL 101 Composition 3
ACT English score of 27 or above or SAT English score of 600 or above
AP English Literature & Composition score of 3 or above
Equivalent transfer course

Critical Reading and Writing (3)
Satisfied by one of the following. Requirement must be completed during initial term of admission at KU.
ENGL 102 Critical Reading and Writing 3
or ENGL 105 Freshman Honors English
AP English Literature & Composition score of 4 or above
Equivalent transfer course

Sophomore Reading and Writing II (15)
Satisfied by one of the following:
ENGL 203 Topics in Reading and Writing: _____ 3
or ENGL 205 Freshman-Sophomore Honors Proseminar: _____
ENGL 209 Introduction to Fiction 3
ENGL 210 Introduction to Poetry 3
ENGL 211 Introduction to the Drama 3
ENGL 362 Foundations of Technical Writing 3
AP English Language & Composition score of 5 or above
Equivalent

Humanities - Understanding the Human Condition. Satisfied by completing 2 courses (requirement code H). Approved courses may be searched for availability through the Kyou portal.

Social and Behavioral Sciences - Understanding Society and Behavior. Satisfied by completing 2 courses (requirement code S). Approved courses may be searched for availability through the Kyou portal. An introductory course in economics is recommended.

Geology Prerequisite or Co-requisite Knowledge (44-49)
Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.

Calculus I. Satisfied by:
MATH 121 Calculus I (Prerequisite: MATH 104; or MATH 103; or three years of college preparatory mathematics including trigonometry and a score of 28 or higher on ACT mathematics or 640 or higher on the SAT; or a qualifying score on the mathematics placement test. Students may complete MATH 115 and MATH 116 prior to completing MATH 122.) 5

Paleontology. Satisfied by:
GEOL 521 Paleontology 3

Geomorphology. Satisfied by:
GEOL 541 Geomorphology 4

Introduction to Hydrogeology. Satisfied by:
GEOL 552 Introduction to Hydrogeology 3

Introductory Field Geology. Satisfied by:
GEOL 560 Introductory Field Geology 3

Structural Geology. Satisfied by:
GEOL 562 Structural Geology 4

Geophysics. Satisfied by:
GEOL 572 Geophysics 3

Geology Required Electives (38-43)
Majors must complete additional courses to total at least nine hours numbered 500 or above. The following are recommended:
GEOL 391 Special Studies in Geology 1-6
GEOL 535 Petroleum and Subsurface Geology 4
GEOL 715 Geochemistry 3
GEOL 751 Physical Hydrogeology 3
CE 770 Concepts of Environmental Chemistry 3 & CE 771 and Environmental Chemical Analysis
GEOG 535 Soil Geography 4
GEOG 558 Intermediate Geographical Information Systems 4
GEOL 753 Chemical and Microbial Hydrogeology 4
BIOL 400 Fundamentals of Microbiology 3

Environmental Hydrogeology Track
Besides the general program above, a specialized track in hydrogeology satisfies degree requirements. In addition to College, supporting science, and geology courses, the environmental hydrogeology track requires the following mathematics and civil engineering/physics courses:

MATH 220 Applied Differential Equations 3
MATH 290 Elementary Linear Algebra 2
CE 330 Fluid Mechanics 4
or PHSX 623 Physics of Fluids

In addition, Technical Electives (9 hours). These normally are chosen from courses numbered 500 or above in geology, physics, mathematics, chemistry, engineering or computer science. Courses numbered below 500 must be approved by a geology advisor.

Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 49 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 45 hours from junior/senior courses (300+) in the major.
Calculus II. Satisfied by:
MATH 122 Calculus II 5
Vector Calculus and Elementary Linear Algebra. Satisfied by:
MATH 223 Vector Calculus 3
MATH 290 Elementary Linear Algebra 2
Elementary Differential Equations. Satisfied by:
MATH 320 Elementary Differential Equations 3
Chemistry. Satisfied by:
CHEM 130 General Chemistry I 10
& CHEM 135 and General Chemistry II
Physics. Satisfied by:
PHSX 211 General Physics I 2-5
& PHSX 216 and General Physics I Laboratory
PHSX 212 General Physics II 2-4
& PHSX 236 and General Physics II Laboratory
PHSX 313 General Physics III 3
PHSX 521 Mechanics I 3
PHSX 531 Electricity and Magnetism 3
or EECS 220 Electromagnetics I
Intro to Computing. Satisfied by one of the following:
EECS 138 Introduction to Computing: ____ 3
Demonstrate equivalent programming skills

Geology Core Knowledge and Skills (30)
Majors must complete the following core courses:

Introduction to Geology. Satisfied by:
GEOL 101 The Way The Earth Works 3
Geology Fundamentals Laboratory. Satisfied by:
GEOL 103 Geology Fundamentals Laboratory 2
Historical Geology. Satisfied by:
GEOL 304 Historical Geology 3
Mineralogy and Structure of the Earth. Satisfied by:
GEOL 311 Mineralogy and Structure of the Earth 3
Sedimentology and Stratigraphy. Satisfied by:
GEOL 331 Sedimentology and Stratigraphy 4
Field Investigation. Satisfied by:
GEOL 360 Field Investigation 2
Igneous and Metamorphic Petrology. Satisfied by:
GEOL 512 Igneous and Metamorphic Petrology 3
Introductory Field Geology. Satisfied by:
GEOL 560 Introductory Field Geology 3
Structural Geology. Satisfied by:
GEOL 562 Structural Geology 4
Geophysics. Satisfied by one of the following:
GEOL 572 Geophysics 3

Additional Geology Courses (9)
Geophysics elective 500 and above (at least 9 hours) 9
GEOL 575 Seismic Exploration
GEOL 577 Environmental Geophysics
GEOL 578 Seismic Data Analysis and Interpretation
GEOL 772 Geophysical Data Analysis
GEOL 776 Ground Penetrating Radar

Technical Required Electives (6) 6

At least 6 hours from the list below or other 500 and above Geology, Physics, Mathematics, Engineering, or Computer Science.

GEOL 535 Petroleum and Subsurface Geology
GEOL 536 Geological Log Analysis
GEOL 552 Introduction to Hydrogeology
MATH 581 Numerical Methods

Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 45 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Earth and Space Science Licensure Option
This program fulfills the requirements for a Bachelor of Science degree in geology. The program also meets course requirements necessary to gain state licensure eligibility in earth and space science to become a secondary teacher in Kansas, but completion of the program does not guarantee the student’s licensure. This list is a guideline. Contact the geology department for further information about meeting degree and additional licensure requirements. You may also contact the UKanTeach Office for information about similar tracks resulting in eligibility for licensure in this and other science and mathematics fields.

Written Communication - Core Skill and Critical Inquiry.

Composition (3)
Satisfied by one of the following. Requirement must be completed during initial term of admission at KU.
ENGL 101 Composition 3
ACT English score of 27 or above or SAT English score of 600 or above
AP English Literature & Composition score of 3 or above
Equivalent transfer course

Critical Reading and Writing (3)
Satisfied by one of the following. Requirement must be completed within the first academic year at KU.
ENGL 102 Critical Reading and Writing 3
or ENGL 105 Freshman Honors English
AP English Literature & Composition score of 4 or above
Equivalent transfer course

Sophomore Reading and Writing II (15)
Satisfied by one of the following:
ENGL 203  Topics in Reading and Writing: _____  3
or ENGL 205  Freshman-Sophomore Honors Proseminar: _____  3
ENGL 209  Introduction to Fiction  3
ENGL 210  Introduction to Poetry  3
ENGL 211  Introduction to the Drama  3
ENGL 362  Foundations of Technical Writing  3
  AP English Literature & Composition score of 5 or above
  Equivalent

Communications.
Satisfied by:
COMS 130  Speaker-Audience Communication  3
or COMS 150  Personal Communication

Humanities - Understanding the Human Condition. Satisfied by completing 2 courses (requirement code H). Approved courses may be searched for availability through the Kyou portal.

Social and Behavioral Sciences - Understanding Society and Behavior. Satisfied by completing 2 courses (requirement code S). Approved courses may be searched for availability through the Kyou portal. An introductory course in economics is recommended.

Geology Prerequisite or Co-requisite Knowledge (32-37)
Majors must complete courses as specified in the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.

Calculus I. Satisfied by:
MATH 121  Calculus I (Prerequisite: MATH 104; or MATH 103; or three years of college preparatory mathematics including trigonometry and a score of 28 or higher on ACT mathematics or 640 or higher on the SAT; or a qualifying score on the mathematics placement test. Students may complete MATH 115 and MATH 116 prior to completing MATH 122)  5

Calculus II. Satisfied by:
MATH 122  Calculus II  5

Chemistry. Satisfied by:
CHEM 130  General Chemistry I  10
& CHEM 135  General Chemistry II

Physics. Satisfied by:
PHSX 211  General Physics I  2-5
& PHSX 216  General Physics I Laboratory
PHSX 212  General Physics II  2-4
& PHSX 236  General Physics II Laboratory

Biology. Satisfied by:
BIOL 150  Principles of Molecular and Cellular Biology  4
or BIOL 151  Principles of Molecular and Cellular Biology, Honors
BIOL 152  Principles of Organismal Biology  4
or BIOL 153  Principles of Organismal Biology, Honors

Geology Core Knowledge and Skills (31)
Majors must complete the following core courses:
Introduction to Geology. Satisfied by:
GEOL 101  The Way The Earth Works  3
Geology Fundamentals Laboratory. Satisfied by:
GEOL 103  Geology Fundamentals Laboratory  2
Historical Geology. Satisfied by:
GEOL 304  Historical Geology  3
Mineralogy and Structure of the Earth. Satisfied by:
GEOL 311  Mineralogy and Structure of the Earth  3
Sedimentology and Stratigraphy. Satisfied by:
GEOL 331  Sedimentology and Stratigraphy  4
Field Investigation. Satisfied by:
GEOL 360  Field Investigation  2
Paleontology. Satisfied by:
GEOL 521  Paleontology  4
& GEOL 523  and Paleontology Laboratory
Introduction to Hydrogeology. Satisfied by:
GEOL 552  Introduction to Hydrogeology  3
Introductory Field Geology. Satisfied by:
GEOL 560  Introductory Field Geology  3
Structural Geology. Satisfied by:
GEOL 562  Structural Geology  4

Space Science Core Knowledge and Skills (8)
Majors must complete the following core courses:
Introductory Meteorology. Satisfied by:
ATMO 105  Introductory Meteorology  5
Contemporary Astronomy. Satisfied by:
ASTR 191  Contemporary Astronomy  3

Earth and Space Required Electives (0)
Majors must complete one of the areas below:
Geology Focus. Satisfied by 4 hours in a geology course numbered 300 or above.
Astronomy Focus. Satisfied by 4 hours in astronomy courses numbered 300 or above. This can include three hours of GEOL 121 (if taken before the completion of 60 hours), or ASTR 390 or GEOL 399.

Research Methods (3)
Satisfied by:
CHEM 598  Research Methods  3

Professional Development Course Work (2)
A minimum grade of C is required in all courses.
Liberal Arts and Sciences. Satisfied by:
LA&S 290  Approaches to Teaching Science and Mathematics I  1
LA&S 291  Approaches to Teaching Science and Mathematics II  1

Curriculum and Teaching (19 hours). Satisfied by:
C&T 448  Reading and Writing across the Curriculum and 16 hours of courses approved by UKanTeach in curriculum and teaching. These should include courses such as Classroom Interactions (3), Knowing and Learning (3), Project Based Instruction (3), Student Teaching (6), and Special Topics Seminar (1).

Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Minor in Geology

Why study geology?
Because its leadership role among geoscience programs advances higher learning and serves society through the discovery, dissemination, and application of knowledge.

Requirements for the Minor
The minor requires 18 to 23 hours of geology courses, of which 12 hours must be junior/senior hours or higher (courses numbered 300 or above).

Geology Minor Course Requirements (5)
Students selecting this minor must complete the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 101</td>
<td>The Way The Earth Works</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Geology Fundamentals Laboratory</td>
<td></td>
</tr>
</tbody>
</table>

Students selecting this minor must complete a minimum of 13 hours in geology courses. GEOL 311 and GEOL 331 are recommended because they are necessary as prerequisites for many upper-division courses.

Students must work with an advisor to select courses to complete the requirements for the minor. Students must turn in a signed Geology Minor Advising form and a Minor Declaration form to the department office, 120 Lindley Hall, before taking any courses numbered 500 or above.

Minor Hours
Satisfied by 18 hours of minor courses.

Master of Science in Geology

Why study geology at the University of Kansas?
KU-Geology is a leader among geoscience programs, where students learn to serve society through the discovery, dissemination, and application of knowledge.

Admission to Graduate Studies
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission
Admission is based on academic records including grade-point average and general preparedness in geology and supporting sciences, letters of recommendation, and the applicant’s stated academic and professional interests and goals. Results of the aptitude tests of the Graduate Record Examination are required. An attempt is made to balance the interests of students with the availability of faculty members to supervise them and laboratory space in which they may work. Consequently, new admissions in areas of geology that are heavily subscribed or in which the department has little expertise may be limited. As a result, some students who meet KU’s minimum standard for admission may be refused. Students who do not hold master’s degrees in geology normally are admitted to pursue the master’s degree. Students with exceptional records may be invited to study for the Ph.D. without first earning the M.S. degree.

Submit your graduate application online (http://www.graduate.ku.edu). Inquiries may be sent to the Department:

The University of Kansas
Department of Geology
Lindley Hall
1475 Jayhawk Blvd., Room 120
Lawrence, KS 66045-7594
M.S. Degree Requirements
Details of the regulations on graduate study are included in the department’s Ground Rules for Graduate Students, to admitted students online through Blackboard.

Prerequisites include credit in one year each of general biology, general chemistry, general physics, and calculus, plus junior- or senior-level courses in mineralogy, petrology, structural geology, paleontology, stratigraphy, geophysics, and a summer course in field geology. Students planning to specialize in geophysics also should have more advanced backgrounds in calculus and physics. Incoming graduate students meet with a departmental advisory review committee before enrollment to identify deficiencies and strengths and to set up curricula aimed at providing a broad background in geology at the intermediate to advanced level during the first year. Some deficiencies may be waived at this time if they are deemed nonessential.

Geology has many subdisciplines, and the department tailors each student’s curriculum to the needs of the individual. There is no departmental core curriculum or list of required courses.

Thesis Option (M.S. Degree)
The master’s degree curriculum requires completion of 30 credit hours, including up to 6 credit hours for thesis research, and an acceptable master’s thesis. The student sets the curriculum in consultation with a 3-member advisory committee selected from the Graduate Faculty and approved by the Graduate Advisor. Course work counted toward the degree must be distributed to provide a comprehensive general knowledge of geology in addition to specialized knowledge required for the thesis. It may include courses in departments other than Geology.

Although the Department of Geology does not award a master’s degree in geophysics, students can specialize in geophysics at the master’s level. The requirements for the degree are overseen by geophysics faculty within the Department and scientists on the staff of the Kansas Geological Survey. Geophysics research projects are also supervised by Departmental geophysics faculty and scientists on the staff of the Survey. Similar arrangements with faculty outside the Department can be made for students specializing in geobiology, glaciology, hydrogeology, paleontology, sedimentology, or tectonics.

Students seeking to earn an M.S. in geology must maintain at least a 3.0 grade-point average in geology and supporting science courses and pass a final oral general examination with emphasis on the areas of geology relevant to the thesis project. This examination may be repeated once, if necessary.

Nonthesis Option (M.S. Degree)
A student may complete an M.S. degree program based primarily on course work and specialized skills. For this degree, a minimum of 36 credit hours of graduate-level study must be completed, including two written reports based on small projects (non-thesis with projects) or a single written report on a prescribed topic (non-thesis without projects). The student determines the structure of the curriculum and projects in consultation with an advisory committee of 5 faculty members. A student must declare an intention to follow the nonthesis option during the first semester of graduate study. The nonthesis degree is a terminal degree and normally cannot lead to doctoral study. In addition to maintaining a 3.0 grade-point average in course work, the student must demonstrate proficiency in the areas of geology covered by the program. This is accomplished by satisfactory performance on a series of written examinations assembled and administered by the advisory committee (non-thesis with projects) or an oral examination (non-thesis without projects). These constitute the final examination for the degree and may be repeated once, if necessary.

During or after the period of residence, a student who wishes to change to an M.S. (thesis) program or a Ph.D. program must petition the graduate studies committee.

Doctor of Philosophy in Geology
Why study geology at the University of Kansas?
KU-Geology is a leader among geoscience programs, where students learn to serve society through the discovery, dissemination, and application of knowledge.

Admission to Graduate Studies
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission
Admission is based on academic records including grade-point average and general preparedness in geology and supporting sciences, letters of recommendation, and the applicant’s stated academic and professional interests and goals. Results of the aptitude tests of the Graduate Record Examination are required. An attempt is made to balance the interests of students with the availability of faculty members to supervise them and laboratory space in which they may work. Consequently, new admissions in areas of geology that are heavily subscribed or in which the department has little expertise may be limited. As a result, some students who meet KU’s minimum standard for admission may be refused. Students who do not hold master’s degrees in geology normally are admitted to pursue the master’s degree. Students with exceptional records may be invited to study for the Ph.D. without first earning the M.S. degree.

Submit your graduate application online (http://www.graduate.ku.edu). Inquiries may be sent to the Department:

The University of Kansas
Department of Geology
Lindley Hall
1475 Jayhawk Blvd., Room 120
Lawrence, KS 66045-7594

Ph.D. Degree Requirements
Doctoral students can specialize in any area of faculty expertise, including hydrogeology and geophysics. Prospective Ph.D. candidates are subject to the same initial requirements as master’s students. The master’s degree is not a prerequisite for doctoral aspirancy. A student with good
background and good performance during the first 2 semesters may be invited to proceed directly toward the doctorate.

The student’s advisory committee and the student construct a curriculum that offers the best preparation for the chosen field of interest and satisfies the research skills requirement. Each student is expected to enroll in courses in supporting fields to develop a multidisciplinary approach to geology. The student must maintain at least a 3.0 grade-point average in geology and supporting science courses.

Research Skills & Responsible Scholarship Requirements

The university requires that every doctoral student have training in responsible scholarship and research skills pertinent to the field of research and appropriate to the doctoral level. This requirement must be met before taking the comprehensive oral exam. Doctoral students in geology meet this requirement by the following:

- Completion of GEOL 791: Ethics in the Geosciences with a grade of “B” or higher.
- With the approval of the advisory committee, the student may meet the research skills requirement by taking either a curriculum of at least 3 graduate-level courses outside the department that are relevant to the specialty, or by completing a combination of languages, research skills, and courses.

Either coursework plan must be approved by the Graduate Advisor, and a list of these courses must be in the student’s file.

Please contact your advisor or the Director of Graduate studies for further information about research skills and responsible scholarship, and see the current policy on Doctoral Research Skills and Responsible Scholarship in the Graduate Studies section of the online catalog and in the KU Policy Library.

Admission to Candidacy

To be admitted to Ph.D. candidacy, a student must pass an oral comprehensive examination on the specialty in geology in which the student is doing doctoral research and on other relevant areas of geology and supporting sciences. The student must prepare and have approved a research proposal based on the doctoral research project before the oral comprehensive examination. The examination is based on the material presented in the proposal and its application to geology in general. The examination is conducted by a 5-member faculty committee; 1 member of the committee must be from a KU department other than geology and is appointed by Graduate Studies on recommendation of the department. The same committee is also responsible for conducting a final oral examination based on the doctoral dissertation. Three members of the committee supervise research and preparation for the dissertation.

Shared Doctoral Program with Kansas State University

The Department has a shared education program whereby doctoral students may study under the direction of a faculty member of the Department of Geology at Kansas State University, with a KU faculty member as co-chair of the dissertation committee. After one year of course work in Lawrence to fulfill the residence requirement, students may enroll at Kansas State University. Degrees are awarded by KU. For specific information on departmental practices in shaping individual curricula, in controlling general examinations, and in evaluating dissertation proposals, contact the department Graduate Advisor.

Department of Germanic Languages and Literatures

Why study Germanic languages and literatures?

Knowledge and appreciation of the language, literature, and culture of Central Europe will help us understand our own past, present, and future and will also provide students with translingual and transcultural competence that will help them participate actively and productively in our increasingly global world.

Libraries

Special Library Collections in German

The Rainer Maria Rilke Collection comprises more than 1,200 volumes, including all first editions, critical editions, translations, bibliographies, criticism, and various materials on the reception of his works. The Collection is located in the Max Kade Center for German-American Studies.

The Engel German Library is an endowed departmental library housing an expanding collection of reference works, standard editions, basic secondary literature, current German periodicals, newspapers and magazines, as well as tape recordings, records, slides, and audio-visual equipment.

Max Kade Center for German-American Studies

The center collects materials on German culture in the United States and fosters scholarship in German-American Studies, especially dialect, literary, and interdisciplinary cultural studies, including dissertation research. The materials—10,000 books, as well as magazines, journals, and other writings—were produced or brought to this country by German-speaking immigrants and, in the 20th century, by exiles from Nazi Germany. Among the holdings are materials from the Turner societies of New York, Milwaukee and Lawrence. The center sponsors lectures, symposia, workshops, and conferences; publishes the Yearbook of German-American Studies for the Society of German-American Studies; and houses the Linguistic Atlas of Kansas German Dialects.

For information, contact James Morrison, Interim Director, Sudler House, 785-864-7343 or 7342, german@ku.edu.

Undergraduate Programs

We offer students a diverse and challenging program in the language and cultural forms of German-speaking Europe, including literature, the arts, history, business, and politics. Our program is characterized by personalized advising, interdisciplinary flexibility, co-curricular activities, and opportunities to conduct independent research and to study and undertake internships abroad. Courses at the 100, 200, and 300 levels emphasize student involvement with the aim of developing students’ use of the German language, including the ability to comprehend, interpret, and produce spoken, written, and multimedia texts in different genres. Cultural topics are integrated into instruction starting in the first semester. At the 400 and 500 levels, survey courses provide students with a broader
All of our courses except GERM 315: German Literature and the Modern Era are taught in German. Majors have the option of taking two approved courses offered by other departments that are taught in English and include significant content related to German-speaking Europe; minors may take one such course. Courses taken in departments such as the history of art, philosophy, political science, Slavic languages & literatures, sociology, and theatre will enhance students’ study of the language and cultural forms of German-speaking Europe.

Both the German major and minor can be combined with majors and minors in other departments. Many students take advantage of this opportunity and combine their study of German with linguistics, business, philosophy, European studies, and history, for example.

The department on occasion offers a 4-semester proficiency sequence in a Scandinavian language (Swedish, Danish, or Norwegian) and in Dutch. The Department of Slavic Languages & Literatures offers a 4-semester Yiddish proficiency sequence. Courses for reading knowledge in German, Danish, and Dutch are also offered, subject to availability.

Placement

Students beginning the study of German at KU should take GERM 104. Students who have studied German before should take the online German placement examination and contact the department’s placement officer, Prof. Nina Vyatkina, vyatkina@ku.edu.

Retroactive Credit

Students with no prior college or university German course credit are eligible for retroactive credit as follows:

• 3 hours of retroactive credit are awarded to a student with 2 or 3 years of high school German who initially enrolls at KU in the third-semester German course (GERM 201) and receives a grade of C or higher.
• 6 hours of retroactive credit are awarded to a student with 3 or 4 years of high school German who initially enrolls at KU in the fourth-semester German course (GERM 202) and receives a grade of C or higher.
• 9 hours of retroactive credit are awarded to a student with 4 years of high school German who initially enrolls at KU in a German course with GERM 202 as a prerequisite and receives a grade of C or higher.

Students must be actively enrolled at the university when they apply for retroactive credit. There is a flat-rate charge of $50; you will receive a bill from the Bursar’s Office after the credit has been applied to your transcript. To apply for retroactive credit, you must bring the following 3 items to the Undergraduate Advisor:

• Copy of your high school transcript, available from the Office of Admissions at the Visitor Center
• A copy of your DPR
• A note stating that you wish to apply for retroactive credit for the German course(s) that you took in high school.

Advanced Placement

KU encourages students to take Advanced Placement Examinations in any of the areas under the College Entrance Examination Board (CEEB) program. KU gives credit only in certain courses with certain scores from the AP examinations.

The results of these examinations must be sent to KU directly from CEEB. Departments may grant advanced placement and/or credit on the basis of the test scores. No college grade is assigned when advanced placement credit is given. Instead, a credit is recorded on the student’s KU record. No fee, beyond that charged by CEEB, is assessed for such college credit or placement. For information on how Advanced Placement scores in English and mathematics affect graduation requirements and initial enrollment in all schools, see the College of Liberal Arts and Sciences Degree Requirements page and the English (p. 1630) and Mathematics (p. 1856) department pages. Contact the Office of Admissions (http://admissions.ku.edu), adm@ku.edu, for further information.

Credit by Examination

KU offers its own program of examinations for advanced credit. Applications are available online (http://www.registrar.ku.edu/forms). They must be approved by the Undergraduate Advisor and the chair of the department concerned and by the student’s dean or dean’s representative. A report of the examination taken, showing the hours of credit to be granted and the grade awarded, must be signed by the professor giving the examination, the chair, and the dean or dean’s representative.

At the discretion of each academic dean, grades of A, B, C, or D may be used to indicate degrees of achievement, or a grade of Credit may indicate satisfactory performance. No record is made of an unsatisfactory attempt. Credit by Examination grades are not included in the grade-point average that appears on the official transcript.

A fee is charged for each course. For current fee information, contact the Office of the University Registrar (http://www.registrar.ku.edu), kuregistrar@ku.edu.

Warning: Some medical schools do not accept credit by examination.

Native Speakers

Students who have completed secondary education in a German-speaking country are generally not eligible to enroll in German courses below the 400 level. The department reserves the right to disenroll such students.

Courses for Future Teachers

Candidates for the B.S. in Education majoring or minoring in German should consult the School of Education.

General Information about the Graduate Program

The Department offers the M.A. and Ph.D. degrees in Germanic Languages & Literatures. Work toward the M.A. degree consists of a traditional curriculum providing important foundational knowledge. The curriculum includes historical surveys of the major literary periods and genres, of the structure and function of German and Germanic languages, knowledge of disciplinary methodologies employed in the field, development of language capacity, and control of writing and research strategies. Building on the M.A. foundational base, the KU Ph.D. degree program encourages students to develop their particular intellectual interests in collaboration with KU faculty and their areas of specialization. The graduate program focuses on the following areas:

• German literature
• Germanic linguistics/philology
• German second-language acquisition/applied linguistics

The Doctoral Program Profile (PDF) (http://graduate.ku.edu/sites/graduate.drupal.ku.edu/files/docs/dpp/DPP_A_GERM.pdf) gives a retrospective overview of our time-to-degree and other statistics relevant to the graduate program and graduate-student experience. More information regarding areas of concentration is available on the Graduate Admission (http://germanic.ku.edu/graduate-admission) page of the departmental website.

Departmental Funding

While it is not guaranteed, the department does its best to provide funding in the form of Graduate Teaching Assistantship (GTA) appointments to all incoming graduate students. GTA appointments are awarded for the academic year and come with:

- a competitive academic year (9 month) salary
- a 100% tuition waiver for all courses at KU
- payment of up to 3 hours of student fees
- optional University-subsidized group health insurance

The appointments are guaranteed based on performance for up to 3 years for M.A. students, 5 years for Ph.D. students and 6 years for students who receive both an M.A. and a Ph.D. at The University of Kansas. GTAs in the department receive thorough training in language instruction, close mentoring, and the opportunity to teach French at a variety of levels, providing them with a strong base of teaching experience upon entering the job market. Additional information about teaching for the department is available on the Graduate Funding page (https://germanic.drupal.ku.edu/gta-appointments-and-fellowships) of our departmental website.

Post-comprehensive students completing their dissertations are also eligible to apply for one of the the departmental Max Kade Dissertation Fellowships.

Additional Funding

There are also university fellowships for truly outstanding students. Visit the Graduate Studies website for information about funding opportunities (http://graduate.ku.edu/funding) for KU graduate students.

Contact

For inquiries concerning the graduate program, please contact:

Professor William D. Keel (https://germanic.drupal.ku.edu/william-d-keel), Director of Graduate Studies and/or Cari Ann Kreienhop (https://germanic.drupal.ku.edu/cariann-kreienhop), Graduate Program Coordinator & Graduate Admissions Administrator.

Courses

DANE 100. Danish Reading Course. 3 Hours. U.
Special course designed to enable graduate students to develop a reading knowledge of Danish as a research skill. Enrollment for undergraduate credit is required. Does not satisfy any part of the undergraduate language requirement. Not open to native speakers of Danish. LEC.

DANE 101. Danish Reading Course II. 3 Hours. U.
Continuation of DANE 100 and introduction to reading Norwegian and Swedish. Not open to native speakers of Danish. Prerequisite: DANE 100 or equivalent. LEC.

DANE 104. Elementary Danish I. 5 Hours. U.
Essentials of grammar, practice in speaking, reading, and writing Danish. Five hours of recitation per week. Not open to native speakers of Danish. LEC.

DANE 105. Elementary Danish I, Honors. 5 Hours. H.
Course content similar to DANE 104, with additional work to expand the student’s cultural context and understanding. Not open to native speakers of Danish or students who have completed DANE 104. Prerequisite: Open only to students admitted to the University Honors Program or by permission of instructor. LEC.

DANE 108. Elementary Danish II. 5 Hours. U.
Continuation of grammar; practice in conversation, composition, and reading. Five hours of recitation per week. Not open to native speakers of Danish. Prerequisite: DANE 104 or permission of instructor. LEC.

DANE 109. Elementary Danish II, Honors. 5 Hours. H.
Course content similar to DANE 108, with additional cultural study. Not open to native speakers of Danish or students who have completed DANE 108. Prerequisite: Open to students who received a grade of A in DANE 104 or an A or B in DANE 105. LEC.

DANE 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Danish. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

DANE 212. Intermediate Danish I. 3 Hours. U.
A continuation of DANE 108. Structured grammar review, composition, conversation with readings of literary and cultural texts. Not open to native speakers of Danish. Prerequisite: DANE 108 or permission of instructor. LEC.

DANE 213. Intermediate Danish I, Honors. 3 Hours. H.
Course content similar to DANE 212, with additional cultural study. Not open to native speakers of Danish or students who have completed DANE 212. Prerequisite: Completion of DANE 108 with a grade of A, or DANE 109 with a grade of A or B. LEC.

DANE 216. Intermediate Danish II. 3 Hours. U.
A continuation of DANE 212. Structured grammar review, composition, conversation with readings of literary and cultural texts. Not open to native speakers of Danish. Prerequisite: DANE 212 or permission of instructor. LEC.

DANE 217. Intermediate Danish II, Honors. 3 Hours. H.
Course content similar to DANE 216, with additional cultural study. Not open to native speakers of Danish or students who have completed DANE 216. Prerequisite: Completion of DANE 212 with a grade of A, or DANE 213 with a grade of A or B. LEC.

DANE 220. Intensive Danish. 16 Hours. U.
This course is designed to teach speaking, reading, writing, and comprehension skills of first and second year Danish in one semester. Classes are held for four hours a day Monday through Friday (8:30 a.m. - 12:20 p.m.). There are intensive drills in grammar, integrated language lab work, and homework assignments. Not open to native speakers of Danish. Prerequisite: Admission to Danish Institute at the University of Kansas. LEC.

DTCCH 100. Dutch Reading Course. 3 Hours. U.
Special course designed to enable graduate students to develop a reading knowledge of Dutch as a research skill. Enrollment for undergraduate credit is required. Does not satisfy any part of the
undergraduate language requirement. Not open to native speakers of Dutch. LEC.

**DTCH 101. Dutch Reading Course II.** 3 Hours.
Continuation of DTCH 100. Not open to native speakers of Dutch. Prerequisite: DTCH 100 or equivalent. LEC.

**DTCH 104. Elementary Dutch I.** 5 Hours. U.
Essentials of grammar; practice in speaking, reading, and writing Dutch. Five hours of recitation per week. Not open to native speakers of Dutch. LEC.

**DTCH 105. Elementary Dutch I, Honors.** 5 Hours. U.
Similar to DTCH 104 with additional work to expand the student's cultural context and understanding. Not open to native speakers of Dutch or students who have completed DTCH 104. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

**DTCH 108. Elementary Dutch II.** 5 Hours. U.
Continuation of grammar, practice in conversation, composition, and reading. Five hours of recitation per week. Not open to native speakers of Dutch. Prerequisite: DTCH 104 or equivalent. LEC.

**DTCH 109. Elementary Dutch II, Honors.** 5 Hours. U.
Course content similar to DTCH 108, with additional cultural study. Meets 5 days a week. Not open to native speakers of Dutch. Prerequisite: Open only to students admitted to the University Honors Program or by permission of instructor. LEC.

**DTCH 177. First Year Seminar:** ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Dutch. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

**DTCH 212. Intermediate Dutch I.** 3 Hours. U.
A continuation of DTCH 108. Structured grammar review, composition, conversation, with readings of literary and cultural texts. Three class meetings per week. Not open to native speakers of Dutch. Prerequisite: DTCH 108 or equivalent. LEC.

**DTCH 213. Intermediate Dutch I, Honors.** 3 Hours. U.
Course content similar to DTCH 212, with additional cultural study. Three class meetings per week. Not open to native speakers of Dutch. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

**DTCH 216. Intermediate Dutch II.** 3 Hours. U.
A continuation of DTCH 212. Structured grammar review, composition, conversation, with readings of literary and cultural texts. Three class meetings per week. Not open to native speakers of Dutch. Prerequisite: DTCH 212 or equivalent. LEC.

**DTCH 217. Intermediate Dutch II, Honors.** 3 Hours. U.
Course content similar to DTCH 216, with additional cultural study. Three class meetings per week. Not open to native speakers of Dutch. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

**DTCH 453. Investigation and Conference:** ____. 1-3 Hours. H/W.
Independent study and directed reading on special topics. Permission of the instructor who will supervise the student's work is required. Not open to native speakers of Dutch. IND.

**GERM 100. German Reading Course I.** 3 Hours. U.
Primarily for graduate students in other departments but also open to seniors planning to pursue graduate study. Fundamentals of grammar and reading texts of medium difficulty. Does not count toward undergraduate language requirement. Previous study of German not necessary. Not open to native speakers of German. LEC.

**GERM 101. German Reading Course II.** 3 Hours. U.
Continuation of GERM 100. Advanced grammar and reading advanced texts in the students' respective fields. Does not count toward undergraduate language requirement. Not open to native speakers of German. Prerequisite: GERM 100 or permission of instructor. LEC.

**GERM 104. Elementary German I.** 5 Hours. AE42 / U.
Introductory German; no previous German required. Development of students' balanced knowledge of the German language and culture, including the ability to understand and produce short spoken, written, and multimedia texts on everyday topics and to interpret, compare, and contrast German and American cultural phenomena. Emphasis on interaction. Not open to native speakers of German. Students who complete this course successfully should take GERM 108. LEC.

**GERM 108. Elementary German II.** 5 Hours. AE42 / U.
Continuation of GERM 104. Further development of students' balanced knowledge of the German language and culture, including the ability to understand and produce short spoken, written, and multimedia texts on everyday topics and to interpret, compare, and contrast German and American cultural phenomena. Emphasis on interaction. Not open to native speakers of German. Students who complete this course successfully should take GERM 201. Prerequisite: GERM 104 or placement by examination. LEC.

**GERM 111. Introduction to German I.** 3 Hours. U.
Introduction to German for special purposes; no previous German required. Provides basic familiarity with the German language, focusing on speaking and reading skills and the essentials of German grammar. Introduction to the culture of the German-speaking world. Three class hours per week; may be delivered by video conference or face-to-face. Does not satisfy any KU language requirement. LEC.

**GERM 112. Introduction to German II.** 3 Hours. U.
Continuation of GERM 111. Further development of basic familiarity with the German language, focusing on speaking and reading skills and the essentials of German grammar. Continued exploration of the culture of the German-speaking world. Three class hours per week; may be delivered by video conference or face-to-face. Does not satisfy any KU language requirement. LEC.

**GERM 113. Introduction to German III.** 1.5 Hour. U.
Continuation of GERM 112. Further development of basic familiarity with the German language, focusing on speaking and reading skills and the essentials of German grammar. Continued exploration of the culture of the German-speaking world. Three class hours per week; may be delivered by video conference or face-to-face. Does not satisfy any KU language requirement. LEC.

**GERM 124. German Cinema in Context.** 3 Hours. HL AE42 / H.
Taught in English. Screening and analysis of German films from the early 20th century to the present. Readings, lectures, and discussions on the films' sources, ideologies, techniques, and artistic achievements. Does not count toward the German major or minor. LEC.

**GERM 125. German Cinema in Context (Honors).** 3 Hours. HL AE42.
Course content similar to GERM 124. Taught in English. Screening and analysis of German films from the early 20th century to the present. Readings, lectures, and discussions on the films' sources, ideologies, techniques, and artistic achievements. Does not count toward German major or minor. LEC.
GERM 126. Introduction to the Arts in German-Speaking Europe. 3 Hours. H.
Taught in English. Exploration of the arts in German-speaking Europe: major cultural periods, movements, art forms, and people (artists, architects, composers, writers, filmmakers) from the Middle Ages to the present. Consideration of the arts within the larger European historical and cultural context from which they emerged. Does not count toward the German major or minor. This course is offered at the 100 and 300 levels with additional assignments at the 300-level. Not open to students who have completed GERM 328. LEC.

GERM 130. German-Speaking Europe and German-Speaking Europeans. 3 Hours. H.
A survey of contemporary German-speaking Europe that covers topics such as geography, the environment, technology, the arts, music, film, literature, politics, immigration, language, religion, customs. Focus on Germany, Austria, Switzerland, Belgium, Luxembourg, Liechtenstein. Taught in English. Does not count toward the German Studies major or minor. LEC.

GERM 132. The City of Berlin in German Culture. 3 Hours. H.
Taught in English. Introduction to Berlin within the context of major German and European historical, social, intellectual, and artistic developments since 1800. Exploration of complex epochs such as the Bismarck, Nazi, Cold War, and post-unification eras through journalism, literature, sociological writings, and film. Does not count toward German major or minor. This course is offered at the 100 and 300 levels with additional assignments at the 300-level. Not open to students who have completed GERM 332. LEC.

GERM 136. The German Transatlantic Experience. 3 Hours. HT AE41 / U.
Taught in English. Introduction to the migration of German-speaking Europeans to North America, 17th-century-present. Consideration of European and North American factors motivating migration, the journey to the New World, the experiences of immigrants and their descendants, and the ways in which German-speaking Europeans shaped the multicultural history of America. LEC.

GERM 148. Germanic Mythology, Religion, and Folklore. 3 Hours. H/W.
Taught in English. Introduction to the pagan myths and beliefs of Teutonic antiquity and their survival in the popular traditions of Germanic countries, within the framework of comparative mythology, archaeology, and anthropology. Does not count toward the German major or minor. LEC.

GERM 177. First Year Seminar: _____ 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in German. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

GERM 201. Intermediate German I. 3 Hours. AE42 / U.
Continuation of GERM 108. Further development of students' balanced knowledge of the German language and culture, including the ability to understand and produce short spoken, written, and multimedia texts in different genres and to interpret, compare, and contrast German and American cultural phenomena. Emphasis on interaction. Not open to native speakers of German. Students who successfully complete this course should take GERM 301. Prerequisite: GERM 201 or placement by examination. LEC.

GERM 203. Introduction to Business German: Deutsch im Berufsalltag. 3 Hours. AE42 / H.
Continuation of GERM 201; completes language proficiency sequence. Further development of students' balanced knowledge of the German language and culture, including the ability to understand and produce short spoken, written, and multimedia texts on the topics related to professional communication and to interpret, compare, and contrast German and American business cultural phenomena. Emphasis on interaction. Recommended for students planning to take GERM 352 and GERM 462. Not open to native speakers of German. Prerequisite: GERM 201 or placement by examination. LEC.

GERM 220. Special Studies in Germanic Languages. 1-5 Hours. U.
Credits awarded for elementary instruction in a Germanic language while studying abroad. Transfer credits must be arranged through the KU Office of Study Abroad, with permission from the departmental undergraduate advisor. May be repeated for credit if content varies. LEC.

GERM 222. Special Studies in German: _____. 1-3 Hours. H/W.
Credits awarded for the study of special topics in German while studying abroad. Transfer credits must be arranged through the KU Office of Study Abroad, with permission from the departmental undergraduate advisor. May be repeated for credit if content varies. LEC.

GERM 301. High Intermediate German I. 3 Hours. AE42 / H/W.
Continuation of GERM 202. Further development of students' use of German through reading and discussion of literary and non-literary texts (spoken, written, multimedia, combined with intensive grammar review). Introduction to expressive functions of German with emphasis on spoken and written communication. Not open to native speakers of German. Students who complete this course successfully should take GERM 302. Prerequisite: GERM 202 or placement by examination. LEC.

GERM 302. High Intermediate German II. 3 Hours. AE42 / H/W.
Continuation of GERM 301. Refinement and expansion of students' use of German. Reading and discussion in German of literary and non-literary texts (spoken, written, multimedia), combined with continued intensive grammar review. Emphasis on better understanding German grammatical structures and acquisition of vocabulary. Not open to native speakers of German. Students who complete this course successfully should take GERM 401. Prerequisite: GERM 301 or placement by examination. LEC.

GERM 315. German Literature and the Modern Era. 3 Hours. H.
Introduction in English to German writers 1750-present. Discussion of themes such as technology, modern and postmodern developments, gender, war, politics, and culture in German-speaking Europe. Readings include works in translation by influential German writers. Open to first-year students and non-majors; qualifies for major or minor credit when taken with GERM 316, a one-hour discussion section. GERM 315 and GERM 316 are required for admission to all courses beyond GERM 402 (except GERM 444 and GERM 462). LEC.

GERM 316. Discussion Section for German Literature and the Modern Era. 1 Hour. H.
Discussion section to be taken with GERM 315: German Literature and the Modern Era. Introduction to critical German vocabulary for discussing German-language literature in its historical and cultural context. Prerequisite: GERM 202 or placement by examination. GERM 315 qualifies for major or minor credit when taken with GERM 316. LEC.
GERM 320. Border Crossings in German Culture. 3 Hours. HT AE42.
Taught in English. Exploration of writers, filmmakers, and artists who have emigrated from, or migrated to German-speaking Europe. Emphasis on both their transnational impact and their representations of border crossings. Topics may include exile communities before, during, and after World War II and multiculturalism in contemporary Germany, Austria, and Switzerland. Does not count toward German major or minor. LEC.

GERM 324. Magic, Monsters and the Occult in German Literature. 3 Hours. HL AE42.
Taught in English. Reading and discussion of fictional and non-fictional works by German writers that address topics such as magic, monsters, the occult sciences, the Faust legend and pact with the devil, and the vampire. Consideration of the works' influence on other nations' literatures. Does not count toward the German major or minor. LEC.

GERM 325. Magic, Monsters, and the Occult in German Literature, Honors. 3 Hours. HL / H.
Taught in English. For centuries German scientists, philosophers and poets have produced groundbreaking literature that has featured magic, monsters and the occult sciences. German poets introduced popular themes, such as the Faust legend and the pact with the devil, and they introduced one of the most popular monsters into literature - the vampire. In this course we read and discuss fictional and nonfictional works by German authors that address these themes, and we discuss the influence that these works have had on other nations' literatures. Does not fulfill any requirement in the German major or minor. Prerequisite: Membership in the University Honors Program or permission of instructor. LEC.

GERM 328. The Arts in German-Speaking Europe. 3 Hours. HL AE42.
Taught in English. Exploration of the arts in German-speaking Europe: major cultural periods, movements, art forms, and people (artists, architects, composers, writers, filmmakers) from the Middle Ages to the present. Consideration of the arts within the larger European historical and cultural context from which they emerged. Does not count toward the German major or minor. This course is offered at the 100 and 300 levels with additional assignments at the 300-level. Not open to students who have completed GERM 128. LEC.

GERM 330. Topics in: _______. 3 Hours. H.
Taught in English. Interdisciplinary study of selected aspects of the society or culture of German-speaking Europe or of the European experience. Does not count toward the German major or minor. LEC.

GERM 332. Berlin in German Culture. 3 Hours. HL AE42.
Taught in English. Introduction to Berlin within the context of major German and European historical, social, intellectual, and artistic developments since 1800. Exploration of complex epochs such as the Bismarck, Nazi, Cold War, and post-unification eras through journalism, literature, sociological writings, and film. Does not count toward German major or minor. This course is offered at the 100 and 300 levels with additional assignments at the 300-level. Not open to students who have completed GERM 132. LEC.

GERM 333. German Conversation and Idioms. 3 Hours. H.
Intensive practice in conversational German with instruction in proper pronunciation as well as an introduction to idiomatic usage. Only for students in the KU Summer Language Institute in Holzkirchen, Germany. Prerequisite: GERM 202 or equivalent fourth -semester German course. LEC.

GERM 335. Love and the German Middle Ages. 3 Hours. H.
Taught in English. Introduction to German conceptions of love, marriage, and adultery in medieval and early modern German-speaking Europe. Exploration of the German contribution to discourse of love through theoretical, literary, and legal texts, as well as through visual and material culture. Examination of German discourse within the broader European context, and of similarities, differences, and continuities between medieval and modern constructs. Does not count toward German major or minor. LEC.

GERM 352. Business German: Deutsch Fur Den Beruf. 3 Hours. H/W.
Extensive practice in business communication: terminology, texts and correspondence, oral practice in business situations. Not open to native speakers of German. Prerequisite: G ERM 202 or placement by examination. LEC.

GERM 353. German Conversation. 3 Hours. H/W.
Further development of practical conversational skills for students with intermediate proficiency in German. Discussion of topics from everyday German life and current affairs, based on German newspapers and magazines. May be repeated but counts only once toward the major or minor. Not open to native speakers of German. Prerequisite: GERM 202. LEC.

GERM 375. Topics in Film of German-Speaking Europe: _______. 3 Hours. H.
Examination of topics such as Expressionism, Turkish-German culture in contemporary German film, popular filmmaking, post-unification film, German literature as film, German film and national identity. Topics and periods vary. Prerequisite: GERM 302. LEC.

GERM 400. Introduction to German Literary Masterpieces. 3 Hours. H/W.
For students enrolled in the KU Summer Language Institute in Germany. Selected works of major German Language writers of the 19th and 20th centuries. Not open to native speakers of German. Prerequisite: GERM 302. LEC.

GERM 401. Advanced German I. 3 Hours. H.
Continuation of GERM 302. Expansion and refinement of proficiency in German (speaking, listening, reading, writing), increased understanding of German grammatical structures, development of a more sophisticated vocabulary, and introduction to stylistics through discussion and analysis of literary and nonliterary texts. Students successfully completing GERM 401 may take all other GERM courses at the 400 and 500 levels. Prerequisite: GERM 302. LEC.

GERM 402. Advanced German II. 3 Hours. H.
Continuation of GERM 401. Development of advanced proficiency in German through analysis and discussion of literary and nonliterary texts and practice in advanced composition. Emphasis in both discussions and papers on style and rhetoric and on developing skill in textual analysis. Focus on advanced German grammar and on style and idiomatic expression in spoken and written German. Prerequisite: GERM 401. LEC.

GERM 411. German Culture 1150-1750. 3 Hours. AE61 / H.
Exploration of major cultural periods and movements within the framework of historical and political change, with investigation of themes such as nation and national identity, founding myths, geography, and language. Study of forms of culture in German-speaking Europe, including visual art, music, literature, architecture, and the press. Prerequisite: GERM 316 and GERM 401. LEC.

GERM 412. German Culture 1750-Present. 3 Hours. AE61 / H.
Exploration of major cultural periods and movements 1750-present within the framework of historical and political change, with investigation of themes such as nation and national identity, founding myths, geography, and language. Study of forms of culture in German-speaking Europe, including visual art, music, literature, architecture, and the press. Prerequisite: GERM 316 and GERM 401. LEC.
GERM 453. Investigation and Conference: ______. 1-3 Hours. H/W.
Independent study and directed reading on special topics. Permission of the instructor who will supervise the student's work is required. Not open to native speakers of German. IND.

GERM 452. The German Business Environment. 3 Hours. H/W.
Introduction to German business practices, including basic information about German economic and corporate life. Especially designed for students intending to participate in an internship with a German company and those who wish to enhance their knowledge of basic business German. Taught in German. Not open to native speakers of German. Prerequisite: One 300-level German course. LEC.

GERM 475. Topics in German Studies: ______. 3 Hours. H.
Exploration of cultural forms such as literature, film, philosophy, social institutions, linguistics, the arts, and the press. Examination of how cultural meaning is produced and interpreted. Topics vary, and course may address topics across a narrow or broad time frame. May be repeated if content varies. Prerequisite: GERM 316 and GERM 401. LEC.

GERM 480. Literature and Culture of German-Speaking Europe 1150-1750. 3 Hours. AE61 / H.
Exploration of medieval and early modern literature within the framework of major cultural movements and historical, political, and economic change. Prerequisite: GERM 316 and GERM 401. LEC.

GERM 481. Literature and Culture of German-Speaking Europe 1750-1830. 3 Hours. AE61 / H.
Exploration of literature within the framework of major cultural movements and historical, political, and economic change. Prerequisite: GERM 316 and GERM 401. LEC.

GERM 482. Literature and Culture of German-Speaking Europe 1830-1918. 3 Hours. AE61 / H.
Exploration of literature within the framework of major cultural movements and historical, political, and economic change. Prerequisite: GERM 316 and GERM 401. LEC.

GERM 483. Literature and Culture of German-Speaking Europe 1918-Present. 3 Hours. AE61 / H.
Exploration of literature within the framework of major cultural movements and historical, political, and economic change. Prerequisite: GERM 316 and GERM 401. LEC.

GERM 501. Advanced German III. 3 Hours. H.
Focus on usage-based grammar of contemporary German. Extensive reading and analysis of grammatical structures in context and integration of form, meaning, and use. Exploration of grammatical structures using contemporary electronic textual analysis tools. Prerequisite: GERM 402. LEC.

GERM 550. German Language Seminar: History of the German Language. 3 Hours. H.
Introduction to basic concepts of German philology and historical linguistics and exploration of the development of a national German language. Prerequisite: GERM 316 and GERM 401. LEC.

GERM 560. German Language Seminar: Structure of the German Language. 3 Hours. H.
This course provides an overview of the structure of modern standard German. Students will explore different levels of the linguistic system of German (including phonology, morphology, and syntax) and complete practical exercises. Prerequisite: GERM 316 and GERM 401. LEC.

GERM 575. Topics in Genre: ______. 3 Hours. H.
Study of the definition, style, form, and content of a specific literary genre in German-language literature and the social, cultural, political, and economic factors that led to its emergence. Consideration of the genre's suitability for particular writers or periods. Topic and period vary. May be repeated if content varies. Prerequisite: GERM 316 and GERM 401. LEC.

GERM 579. Investigation and Conference: ______. 1-3 Hours. AE61 / H/W.
Independent study and directed reading on special topics. Permission of the instructor who will supervise the student's work is required. Prerequisite: GERM 316 and GERM 401. LEC.

GERM 580. Senior Capstone Course: German-Speaking Europe Today. 3 Hours. AE61 / H.
Focus on synthesizing students' knowledge of the history, culture, and politics of German-speaking Europe 1945-present. Consideration of scholarly articles, journalism, essays, literary texts, film, and the arts on topics including cultural identity in post-unified Germany; European integration; current debates and controversies; political parties and leading political figures; role of literature, film, music, visual arts, media, and popular culture; role of universities. Required of all German majors in senior year. Prerequisite: GERM 316, GERM 401, and senior standing. LEC.

GERM 598. Research for Departmental Honors. 3 Hours. H.
Research for a departmental honors project, on a topic chosen in conjunction with the faculty advisor. Emphasis on independent study and writing. Open to students with previous coursework in German at the 400 level, an overall 3.0 GPA, and at least a B+ average in advanced work in German. Prerequisite: GERM 316, GERM 401, senior standing, and permission of Undergraduate Advisor. LEC.

GERM 599. Departmental Honors Project. 3 Hours. H.
Continuation of GERM 598. Course consists of completion of Departmental Honors project. Quality of project determines whether student receives credit only or Honors in German. Prerequisite: GERM 598. LEC.

GERM 614. Course in Representative Authors: ______. 3 Hours. AE61 / H.
Readings and discussions in German of selected literary works by a major author (e.g., Goethe, Heine, Fontane, Brecht, Kafka, Grass, etc.). May be repeated. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416 and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent. LEC.

GERM 616. Topics in German Literature: ______. 3 Hours. AE61 / H/W.
Readings and discussions in German of selected literary works on a particular topic or theme (e.g., nature, women, art and literature, etc.). May be repeated. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416, and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent. LEC.

GERM 618. Topics in German Language and Linguistics: ______. 3 Hours. AE61 / H/W.
Readings and discussions in German in an area of specialized language or linguistic study (e.g., lexical fields, modern German dialects, etc.). May be repeated. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416, and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent. LEC.

GERM 620. Topics in German Culture and Folklore: ______. 3 Hours. AE61 / H/W.
Readings and discussions in German on some aspect of German culture or folklore, including Landeskunde (study of contemporary Germany). May be repeated. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416, and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent. LEC.
GERM 626. Idiomatic Usage in Modern Colloquial and Literary German. 3 Hours. AE61 / H/W.
Practical exercises in the systematic study of idioms and synonyms, designed to foster a more discriminating and effective usage of German. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416 and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent. LEC.

GERM 628. Translation into German (Advanced). 3 Hours. AE61 / H/W.
Exercises in the translation of expository and stylistically sophisticated texts from various fields. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416 and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent. LEC.

GERM 630. Advanced German Grammar. 3 Hours. AE61 / H/W.
Recommended for students intending to teach German. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416 and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent. LEC.

GERM 632. Deutscher Stil (Advanced German Composition). 3 Hours. AE61 / H/W.
Training in writing reports and seminar papers in German. Recommended for students intending to do graduate work in German. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416 and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent. LEC.

GERM 681. Language Teaching for Oral Proficiency. 1 Hour. AE61 / U.
A summer course designed principally for secondary school language teachers. Provides an orientation to proficiency-based models in foreign language instruction, national standards in the rating of foreign language proficiency, and curriculum development sessions which address issues of articulation in foreign language curricula. (Not applicable toward a major or graduate degree in German.) (Same as FREN 681 and SPAN 681.) LEC.

GERM 700. Introduction to Graduate Studies in German. 3 Hours.
An introduction to the skills required of students enrolled in graduate degree programs in German Studies; areas covered include 1) introduction to literary theory and criticism, 2) bibliography and research methods, including database management software, 3) preparation and presentations of a research/conference paper, 4) technology training, including web design, on-line portfolio, and digital humanities, and 5) professional ethics and awareness of the academic market and alternative careers. We will also be working on practical, professionally useful goals, such as how to (better) make use of technology, how to create a CV and modify it for different positions, how to write an abstract, and how to produce a conference paper. Course requirements will include a variety of smaller assignments and two larger projects, a web-based professional portfolio and an 8 to10-page conference paper. LEC.

GERM 701. Introduction to the Study of Literature. 3 Hours.
Introduction to methods of literary research and presentation of seminar papers. Exercises in the use of basic guides to the study of German language and literature, in the documentation of scholarly research, and in the writing of interpretive essays, based on reading and discussion of selected works from different periods of the departmental "Basic Reading List. LEC.

GERM 703. Methods of Literary Criticism. 3 Hours.
Differentiation of critical methods. Exercises in textual criticism. LEC.

GERM 704. German Stylistics. 3 Hours.
Stylistic analysis of literary texts; writing in German. LEC.

GERM 705. German Phonetics. 3 Hours.
A systematic study of German phonetics. Prerequisite: Graduate standing or consent of instructor. LEC.

GERM 710. Workshop for M.A. Students. 1 Hour.
Discussion of policies in the M.A. program, examinations, thesis proposals, writing of theses, grant proposals, conference presentations, publications of scholarship, and entrance into the academic job market. Required of all M.A. students in the first year in the program. Does not count toward completion of 30 hours of course work for the M.A. RSH.

GERM 711. History of the German Language. 3 Hours.
A comprehensive introduction to the basic concepts of German philology and various aspects of historical linguistics, including the nature of language and linguistic change, discoveries of the pioneer philologists of the 19th century regarding the prehistory of German, and the beginnings of a national German language. LEC.

GERM 712. The Structure of Modern Standard German. 3 Hours.
A comprehensive introduction to the structure and usage of contemporary German, including phonetics, phonology, morphology, syntax, text linguistics, semantics, pragmatics, and language variation. Students will listen to lectures, read texts on German linguistics, participate in discussions, and work extensively on linguistic problems involving German. LEC.

GERM 716. Topics in German Literature: _______. 3 Hours.
Intensive study of a selected topic in German literature. May be repeated. Offered only in conjunction with GERM 616 when taught by a Max Kade Distinguished Visiting Professor. Graduate students will be assigned additional work. LEC.

GERM 718. Topics in German Language and Linguistics: _______. 3 Hours.
Intensive study of a selected topic in German language and linguistics. May be repeated for credit. LEC.

GERM 721. Introduction to Middle High German Literature. 3 Hours.
The elements of Middle High German as required for reading medieval texts in the original. Intensive reading and literary study of at least one text in full. LEC.

GERM 732. Early Modern Period. 3 Hours.
Reading and discussion of major literary works of the period; combined with lectures and background readings on literary, cultural, and political history. LEC.

GERM 734. Age of Goethe. 3 Hours.
Reading and discussion of major literary works in the period; combined with lectures and background readings on literary, cultural, and political history. LEC.

GERM 736. Post-Romantic Nineteenth Century. 3 Hours.
Reading and discussion of major literary works in the period; combined with lectures and background readings on literary, cultural, and political history. LEC.

GERM 738. Twentieth Century. 3 Hours.
Reading and discussion of major literary works in the period; combined with lectures and background readings on literary, cultural, and political history. LEC.

GERM 740. Introduction to the Culture of German-Speaking Central Europe. 3 Hours.
An introduction to major cultural traditions, currents, and specific aspects that shaped and continue to characterize modern Germany, Austria and Switzerland. LEC.
GERM 751. Topics in German Studies: ____. 3 Hours.
Course covers key topics in German Studies and represents the expertise of faculty in the department as well as department-affiliated faculty. Topics will vary from semester to semester and instructor to instructor to allow flexibility for in-depth analysis of particular topics. May be repeated as topics vary. LEC.

GERM 753. Investigation and Conference: ____. 1-6 Hours.
To be taken only in exceptional cases. Permission of the instructor who will supervise the student’s work is required. RSH.

GERM 754. Studies in Humanism, Renaissance, and Reformation Literature: ____. 3 Hours.

LEC.

GERM 756. Studies in Enlightenment Literature: ____. 3 Hours.
LEC.

GERM 760. Studies on Writers of the Age of Goethe: ____. 3 Hours.
LEC.

GERM 762. Studies in Romanticism: ____. 3 Hours.
LEC.

GERM 764. Studies in the Literature of the 19th Century: ____. 3 Hours.
LEC.

GERM 766. Studies in Literature since 1890: ____. 3 Hours.
LEC.

GERM 800. Seminar: Teaching German as a Second Language. 3 Hours.
Introduction to selected aspects of second-language acquisition, foreign-language pedagogy, and contrastive grammar, with the major concentration on practical guidance in teaching elementary German, in test preparation and grading, and in the use of equipment. LEC.

GERM 801. Practicum in GTAs. 1 Hour.
Discussion of matters relating to the teaching of German in specific courses. Required of all GTAs in each semester of teaching, unless enrolled in GERM 800. Does not count toward completion of 30 hours of course work for the M.A. or 27 hours of course work for the Ph.D. IND.

GERM 820. Survey of Medieval German Literature. 3 Hours.
Text-oriented study of the literature of 750-1500 with selected readings in the original and in translation. Prerequisite: GERM 721. LEC.

GERM 823. Readings in Middle High German Epic: ____. 3 Hours.
Reading and literary analysis of one of the following: Nibelungenlied, Erec and Iwein, Tristan, Parzival. Prerequisite: GERM 721. LEC.

GERM 824. Readings in Middle High German Lyrics. 3 Hours.
Reading and literary analysis of one of the following: Minnesangs Fruehling, Walther von der Vogelweide. Prerequisite: GERM 721. LEC.

GERM 851. Studies in German Philology: ____. 3 Hours.
Topics to be announced. Emphasis on studies in etymology, semantics, vocabulary, medieval dialects, linguistic theories. Prerequisite: GERM 711. LEC.

GERM 852. Special Topics in Literature: ____. 3 Hours.
Prerequisite: GERM 701. LEC.

GERM 854. Studies in the Works of: ____. 3 Hours.
In-depth study of the work of a major author in German literature. Prerequisite: GERM 701. LEC.

GERM 855. Introduction to German Applied Linguistics. 3 Hours.
Introduction to theories and topics in German applied linguistics. SEM.

GERM 860. Introduction to Modern German Dialects. 3 Hours.
Introduction to modern German dialects, methods of dialect research and aspects of linguistic assimilation and loss as well as a survey of German-American dialects. Prerequisite: Permission of instructor required. SEM.

GERM 898. Master’s Project. 3 Hours.
Faculty directed project that satisfies the requirements for the degree of Master of Arts in German Studies. Prerequisite: Restricted to German Studies MA students. Prerequisite: Restricted to German Studies MA students. RSH.

GERM 899. Master’s Thesis. 3 Hours.
May not be repeated. THE.

GERM 900. Workshop for Ph.D. Students. 1 Hour.
Discussion of policies in the Ph.D. program, research specializations, examinations, dissertation proposals, writing of dissertations, grant proposals, conference presentations, publication of scholarship, and entrance into the academic job market. Required of all Ph.D. students in the first year in the program. Does not count toward completion of 27 hours of course work for the Ph.D. LEC.

GERM 901. Gothic. 3 Hours.
Reading of selected Gothic texts. Historical and descriptive study of Gothic phonology and grammar, with an introduction to comparative Germanic grammar. Prerequisite: GERM 711. LEC.

GERM 902. Old Saxon. 3 Hours.
Introduction to the elements of its grammar and discussion of its role in the Germanic family of languages. Selected readings from the Heliand and discussion of the entire work. Prerequisite: GERM 711. LEC.

GERM 903. Old High German. 3 Hours.
Reading and discussion of selected prose texts and poetic documents; phonological and grammatical features of the Old High German dialects. Prerequisite: GERM 711. LEC.

GERM 904. Gothic and Its Closest Relatives. 3 Hours.
A survey of the earliest Germanic languages with an emphasis on the comparative phonology and grammar of Gothic, Old High German, and Old Saxon as well as the reading of selections of major texts in those three language. LEC.

GERM 951. Seminar in Germanic Philology: ____. 3 Hours.
LEC.

GERM 952. Seminar in Medieval German Literature: ____. 3 Hours.
LEC.

GERM 953. Investigation and Conference: ____. 1-6 Hours.
To be taken only in exceptional cases. Permission of the instructor who will supervise the student’s work is required. RSH.

GERM 954. Seminar in Humanism, Renaissance, and Reformation Literature: ____. 3 Hours.
LEC.

GERM 955. Seminar in Baroque Literature: ____. 3 Hours.
LEC.

GERM 956. Seminar in Enlightenment Literature: ____. 3 Hours.
LEC.

GERM 960. Seminar on Writers of the Age of Goethe: ____. 3 Hours.
LEC.

GERM 962. Seminar in Romanticism: ____. 3 Hours.
LEC.

GERM 964. Seminar in the Literature of the 19th Century: ____. 3 Hours.
LEC.
GERM 966. Seminar in Problems in Literature since 1890: _____. 3 Hours. LEC.

GERM 967. Seminar in Special Topics: _____. 3 Hours. LEC.

GERM 999. Doctoral Dissertation. 1-10 Hours. THE.

HNGR 103. Survival Hungarian. 3 Hours. U.
Practical training for people intending to live, study, travel, or work in Hungary. Focus on conversational skills. Intensive practice in speaking and listening, with vocabulary about Hungarian geography, culture, and business. Introduction to basic grammar. Not for native speakers LEC.

HNGR 104. Elementary Hungarian I. 5 Hours. U.
Essentials of grammar, practice in speaking, reading, and writing Hungarian. Five class meetings per week. Not open to native speakers of Hungarian. LEC.

HNGR 108. Elementary Hungarian II. 5 Hours. U.
Continuation of grammar; practice in conversation, composition, and reading. Five class meetings per week. Not open to native speakers of Hungarian. Prerequisite: HNGR 104 or equivalent. LEC.

HNGR 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Hungarian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

HNGR 212. Intermediate Hungarian I. 3 Hours. U.
A continuation of HNGR 108. Structured grammar review, composition, conversation, with readings of literary and cultural texts. Three class meetings per week. Not open to native speakers of Hungarian. Prerequisite: HNGR 108 or equivalent. LEC.

HNGR 216. Intermediate Hungarian II. 3 Hours. U.
A continuation of HNGR 212. Structured grammar review, composition, conversation, with readings of literary and cultural texts. Three class meetings per week. Not open to native speakers of Hungarian. Prerequisite: HNGR 212 or equivalent. LEC.

HNGR 453. Investigation and Conference: _____. 1-3 Hours. U.
Independent study and directed reading on special topics. Permission of the instructor who will supervise the student's work is required. Not open to native speakers of Hungarian. Prerequisite: HNGR 216 or equivalent. LEC.

NORW 104. Elementary Norwegian I. 5 Hours. U.
Essentials of grammar, practice in speaking, reading, and writing Norwegian. Five hours of recitation per week. Not open to native speakers of Norwegian. LEC.

NORW 108. Elementary Norwegian II. 5 Hours. U.
Continuation of grammar; practice in conversation, composition, and reading. Five hours of recitation per week. Not open to native speakers of Norwegian. Prerequisite: NORW 104 or permission of instructor. LEC.

NORW 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Norwegian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

NORW 212. Intermediate Norwegian I. 3 Hours. U.
A continuation of NORW 108. Structured grammar review, composition, conversation with readings of literary and cultural texts. Not open to native speakers of Norwegian. Prerequisite: NORW 108 or permission of instructor. LEC.

NORW 216. Intermediate Norwegian II. 3 Hours. U.
A continuation of NORW 212. Structured grammar review, composition, conversation with readings of literary and cultural texts. Not open to native speakers of Norwegian. Prerequisite: NORW 212 or permission of instructor. LEC.

SCAN 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Scandinavian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

SCAN 453. Investigation and Conference: _____. 1-3 Hours. U.
Independent study and directed reading on special topics. Prerequisite: Permission of instructor. IND.

SCAN 560. Scandinavia Past and Present. 3 Hours. H.
This course presents a historical survey of Denmark, Finland, Iceland, Norway and Sweden. In a comparative framework, the course focuses on a variety of central aspects that shaped Scandinavia from the Viking Age to the present. LEC.

SCAN 570. Scandinavian Life and Civilization. 3 Hours. H/W.
This course is designed to impart a general knowledge of life in Denmark, Finland, Iceland, Norway, and Sweden, with emphasis on social and cultural conditions, against a geographical and historical background, from the Viking age to the present. Slides and other illustrated materials. (Same as EURS 510.) LEC.

SCAN 660. Representative Authors in English. 3 Hours. H/W.
Intensive study of one or more major authors from the literatures of Scandinavia. May be repeated. LEC.

SCAN 661. Topics in Scandinavian Languages and Linguistics: _____. 3 Hours.
Intensive study of a selected topic in Scandinavian languages and linguistics. The course deals with the linguistic analysis of language rather than the acquisition of a particular language. May be repeated. Prerequisite: A course in linguistics. LEC.

SCAN 753. Investigation and Conference: _____. 1-3 Hours.
Independent study and directed reading on special topics. Permission of the instructor is required. RSH.

SCAN 906. Old Norse. 3 Hours.
Introduction to the grammar and reading of the prose literature of the "saga-age" (1100-1350). Varied selections from the literature provide the context in which the language is discussed. LEC.

SCAN 907. Readings in Old Norse Literature. 3 Hours.
Intensive discussion of a single longer saga or several shorter works, or a combination of these on a single theme. Dialectal differences between W. Norse and older Germanic dialects will be noted. Prerequisite: SCAN 906. LEC.

SWED 104. Elementary Swedish I. 5 Hours. U.
Essentials of grammar, practice in speaking, reading, and writing Swedish. Five hours of recitation per week. Not open to native speakers of Swedish. LEC.

SWED 105. Elementary Swedish I, Honors. 5 Hours. U.
Similar to SWED 104 with additional work to expand the student's cultural context and understanding. Not open to native speakers of Swedish or students who have completed SWED 104. Prerequisite: Open only to
students admitted to the University Honors Program, or by permission of instructor. LEC.

SWED 108. Elementary Swedish II. 5 Hours. U.
Continuation of grammar; practice in conversation, composition, and reading. Five hours of recitation per week. Not open to native speakers of Swedish. Prerequisite: SWED 104 or permission of instructor. LEC.

SWED 109. Elementary Swedish II, Honors. 5 Hours. U.
Course content similar to SWED 108, with additional cultural study. Meets 5 days a week. Not open to native speakers of Swedish. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

SWED 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Swedish. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

SWED 212. Intermediate Swedish I. 3 Hours. U.
A continuation of SWED 108. Structured grammar review, composition, conversation with readings of literary and cultural texts. Not open to native speakers of Swedish. Prerequisite: SWED 108 or permission of instructor. LEC.

SWED 213. Intermediate Swedish I, Honors. 3 Hours. U.
Course content similar to SWED 212, with additional cultural study. Three class meetings per week. Not open to native speakers of Swedish. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

SWED 216. Intermediate Swedish II. 3 Hours. U.
A continuation of SWED 212. Structured grammar review, composition, conversation with readings of literary and cultural texts. Not open to native speakers of Swedish. Prerequisite: SWED 212 or permission of instructor. LEC.

SWED 217. Intermediate Swedish II, Honors. 3 Hours. U.
Course content similar to SWED 216, with additional cultural study. Three class meetings per week. Not open to native speakers of Swedish. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

SWED 330. Intermediate Swedish Composition and Conversation. 3 Hours. H.
Extensive practice in writing and speaking Swedish with grammar and review and selected readings. Not open to native speakers of Swedish. Prerequisite: SWED 216 or equivalent. LEC.

Bachelor of Arts in German Studies

Why study Germanic languages and literatures?
Translingual and transcultural competence will help students participate actively and productively in our increasingly global world.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements. Admission to 400- and 500-level courses after GERM 402 (except GERM 462) without completion of GERM 315 and GERM 316 is only with permission of the Undergraduate Advisor.

Elective Courses

A minimum of 14 credit hours at the 300, 400, and 500 levels must be completed beyond the required courses. 12 of these credit hours must be at the 400 or 500 level. In exceptional cases, undergraduates may take courses at the 600 level with permission of the Undergraduate Advisor and the instructor.

With permission of the Undergraduate Advisor, 6 credit hours at the 300, 400, or 500 levels may be counted toward the major by completing two approved courses offered by other departments with significant content...
related to German-speaking Europe; permission of the Undergraduate Advisor is required. A 600-level course may be counted with approval of the Undergraduate Advisor.

Germanic languages & literatures majors are strongly encouraged to study abroad and should discuss this opportunity with the Undergraduate Advisor early in their undergraduate career.

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and GPA minimum standards:

**Major Hours**

Satisfied by 30 hours of major courses.

**Major Hours in Residence**

At least 15 hours of coursework at the 300, 400, and 500 levels, including the senior capstone course, GERM 580, must be completed in residence at KU.

**Major Junior/Senior Hours**

Satisfied by a minimum of 30 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Below is a sample 4-year plan for students pursuing the BA in Germanic Languages & Literatures. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/).

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1) (2 crs req, BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1) (2 crs req, BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101 (Goal 1.2 Quantitative Reasoning)</td>
<td>3</td>
<td>Quantitative Reasoning (Goal 1.2, BA Quantitative Reasoning)</td>
<td>3</td>
</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3</td>
<td>COMS 130 (Goal 2.2 Communication)</td>
<td>3</td>
</tr>
<tr>
<td>GERM 104 (Major Pre-Requisite)</td>
<td>5</td>
<td>Goal 3 Social Science</td>
<td>3</td>
</tr>
<tr>
<td>Elective or possible minor course (Total Hours)</td>
<td>3</td>
<td>GERM 108 (Major Pre-Requisite)</td>
<td>5</td>
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### Sophomore

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<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>GERM 201 (Major Pre-Requisite)</td>
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<td>GERM 202 (Major Pre-Requisite, BA Second Language)</td>
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<tr>
<td>Goal 3 Humanities</td>
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<td>Goal 3 Natural Science</td>
<td>3</td>
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<tr>
<td>Goal 4.1 US Diversity</td>
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<td>Lab Science (BA Lab Requirement)</td>
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### Junior

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<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>GERM 301 (Major Requirement)</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
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<tr>
<td>GERM 315 (Major Requirement)</td>
<td>3</td>
<td>GERM 302 (Major Requirement)</td>
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<tr>
<td>GERM 316 (Major Requirement)</td>
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<td>GERM Elective 300-500+ (Major Requirement)</td>
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<tr>
<td>Elective or possible minor course (Total Hours)</td>
<td>3</td>
<td>GERM Elective 300-500+ (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Elective or possible minor course (Total Hours)</td>
<td>3</td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
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</table>

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### Senior

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<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>GERM 401 (Major Requirement)</td>
<td>3</td>
<td>GERM 580 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
<td>3</td>
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<tr>
<td>GERM Elective 300-500+ (Major Requirement)</td>
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<td>GERM 300-500+ Elective (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>GERM Elective 300-500+ (Major Requirement)</td>
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<td>L&amp;S 490 (Recommended, or elective)</td>
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<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
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<td>Elective or possible minor course 300+ (Total Hours)</td>
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<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
</tbody>
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![15](15) ![15](15)

**Total Hours: 120-121**

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. GERM 104, GERM 108, GERM 201, GERM 202, GERM 203, GERM 301, and GERM 302 all fulfill Goal 4.2 Global Awareness. Completing one of these courses fulfills Goal 4.2; it does not matter which course a student takes to begin German language study.
3. Visit this website (http://college.ku.edu/undergrad/curriculum/ba_QR) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

Please note:

All students in the College of Liberal Arts and Sciences are required to completed 120 total hours of which 45 hours must be at the Jr/Sr (300+) level, and 100 hours must be from within the College of Liberal Arts and Sciences.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/minors.
Departmental Honors in German
To qualify for the B.A. in Germanic Languages & Literatures with Honors, the student must have a minimum grade point average of 3.25 overall and 3.5 in German at graduation. Students must complete an honors research project during their final year at KU. Topics are selected in consultation with the faculty project advisor from Germanic Languages & Literatures. Applications for departmental honors must be submitted by the end of the first week of classes, normally during the fall of senior year. Upon acceptance of an application, the student registers for the GERM 598 - GERM 599 sequence. The student presents the completed research project to the project advisor and two other members of the Departmental Honors Committee about one month before concluding his or her final semester at KU. A grade of B or higher in GERM 598 and GERM 599 is required for departmental honors. GERM 598 and GERM 599 may not be used to satisfy other course requirements.

Study Abroad
The department conducts two Summer Language Institutes in Germany for students in second-, third-, and fourth-year German. Students normally enroll for 6-9 credit hours and live with German families.

Juniors and seniors are encouraged to spend a semester or a full academic year at a university in Germany. Consult with the Office of Study Abroad and the Undergraduate Advisor early in your undergraduate career.

Graduating seniors may apply for Direct Exchange Program fellowships at universities in Germany. For information, consult the department (http://www2.ku.edu/~germanic) or the Office of International Programs (http://www.studyabroad.ku.edu).

Minor in German Studies
Why study Germanic languages and literatures?
Translingual and transcultural competence will help students participate actively and productively in our increasingly global world.

Requirements for the Minor
The minor requires 18 hours in courses numbered 300 and above. The prerequisite is completion of the proficiency sequence in German (GERM 202 or equivalent).

German Minor Course Requirements
Required Courses
After completion of GERM 202: Intermediate German II, students must complete the following two courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM 301</td>
<td>High Intermediate German I</td>
<td>3</td>
</tr>
<tr>
<td>GERM 302</td>
<td>High Intermediate German II</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective Courses
12 additional hours at the 300, 400, and 500 levels. GERM 315 and GERM 316 are strongly encouraged because they are prerequisites for courses above GERM 402 (except GERM 462).

With approval of the Undergraduate Advisor, one approved 3-credit course offered by another department or program and with significant content related to German-speaking Europe (300-500 level) may be counted toward the German minor. A 600-level course may be counted only with approval of the Undergraduate Advisor.

Minor Hours & GPA
While completing required courses, minors must also meet each of the following hour and grade point average minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 hours of junior/senior (300+), 300+ hours of KU resident credit in the minor.

Minor Junior/Senior Hours
Satisfied by a minimum of 18 hours from junior/senior courses (300+) in the major.

Minor Graduation GPA
Satisfied by a minimum of a 2.0 GPA in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including Fs and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Master of Arts in Germanic Languages and Literatures
Overview
Work toward the M.A. degree consists of a traditional curriculum providing important foundational knowledge. The curriculum includes historical surveys of the major literary periods and genres, of the structure and function of German and Germanic languages, knowledge of disciplinary methodologies employed in the field, development of language capacity, and control of writing and research strategies.

Departmental Funding
While it is not guaranteed, the department does its best to provide funding in the form of Graduate Teaching Assistantship (GTA) appointments to all incoming graduate students. GTA appointments are awarded for the academic year and come with:

- a competitive academic year (9 month) salary
- a 100% tuition waiver for all courses at KU
- payment of up to 3 hours of student fees
- optional University-subsidized group health insurance

The appointments are guaranteed based on performance for up to 3 years for M.A. students, and 6 years for students who receive both an M.A. and a Ph.D. at The University of Kansas. GTAs in the department receive thorough training in language instruction, close mentoring, and the opportunity to teach French at a variety of levels, providing them with a strong base of teaching experience upon entering the job market. Additional information about teaching for the department is available on the Graduate Funding page (https://germanic.drupal.ku.edu/gta-appointments-and-fellowships) of our departmental website.

Post-comprehensive students completing their dissertations are also eligible to apply for 1 of the the departmental Max Kade Dissertation Fellowships.
Additional Funding

There are also university fellowships for truly outstanding students. Visit the Graduate Studies website for information about funding opportunities (http://graduate.ku.edu/funding) for KU graduate students.

Contact

For inquiries concerning the M.A. program, please contact:

Professor William D. Keel (https://germanic.drupal.ku.edu/william-d-keel), Director of Graduate Studies, and/or Cari Ann Kreienhop (https://germanic.drupal.ku.edu/cariann-kreienhop), Graduate Program Coordinator & Graduate Admissions Administrator.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Germanic Languages & Literatures Graduate Admission

In addition to the general admission requirements (http://www.graduate.ku.edu/application-process) from the Office of Graduate Studies, applicants to the M.A. program in German should have the equivalent of the German Studies B.A. offered at KU.

Submit your application through the Graduate Studies Office of Admissions application system (http://www.graduate.ku.edu). For additional information regarding admissions and the application process, including deadlines, department-specific prerequisites and required supplemental documentation, please visit the graduate admission (https://germanic.drupal.ku.edu/graduate-admission) page of the department website, or contact the department Graduate Program Coordinator, Cari Ann Kreienhop, ckreienhop@ku.edu.

Master of Arts in German Studies

Requirements

1. 30 credits that must include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM 700</td>
<td>Introduction to Graduate Studies in German</td>
<td>3</td>
</tr>
<tr>
<td>GERM 712</td>
<td>The Structure of Modern Standard German</td>
<td>3</td>
</tr>
<tr>
<td>GERM 800</td>
<td>Seminar: Teaching German as a Second Language</td>
<td>3</td>
</tr>
<tr>
<td>GERM 740</td>
<td>Introduction to the Culture of German-Speaking Central Europe</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>AND select 1 of the following</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Non-Thesis Option - 6 elective Courses (18 hours)</td>
<td></td>
</tr>
</tbody>
</table>

2. Comprehensive written and oral examinations

Elective Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM 626</td>
<td>Idiomatic Usage in Modern Colloquial and Literary German</td>
<td>3</td>
</tr>
<tr>
<td>GERM 751</td>
<td>Topics in German Studies: _____</td>
<td>3</td>
</tr>
</tbody>
</table>

1 This German Studies Topics course is offered with specific topics and subtitles as needed in different semesters. Each semester it will cover key topics in German Studies and represents the expertise of faculty in the department as well as department-affiliated faculty. See current Graduate Student Handbook for possible topics

First Year Plan of Study:

1st semester: Students choose a graduate advisor and begin compiling a course-based individual reading list. The reading list should consist of twenty primary and secondary works approved by the advisor.

2nd semester: Students declare their choice of thesis, non-thesis or project option and organize their reading list accordingly with the assistance of their advisor.

Thesis Option Exam

The Master’s Thesis (50 pages minimum) consists of a scholarly analysis of a chosen topic that is derived from a term paper and expanded to contribute new insights to the discourse surrounding the topic. Students enroll in German 899 Master’s Thesis during their third and fourth semesters (6 credits total) to develop and complete their thesis under the direction of a graduate faculty advisor.

Variant within the non-thesis track: Master’s Project

The Master’s Project (30 pages minimum) provides the opportunity to combine scholarly and practical learning. The project, which may be developed from an internship or a broader topic, such as digital Humanities, must be approved in advance by a graduate faculty advisor with whom the student enrolls in GERM 898 Master’s Project (3 credits).

Doctor of Philosophy in Germanic Languages and Literatures

Overview

Building on the M.A. foundational base, the KU Ph.D. degree program encourages students to develop their particular intellectual interests in collaboration with KU faculty and their areas of specialization. The graduate program focuses on the following areas:

- German literature
- Germanic linguistics/philology
- German second-language acquisition/applied linguistics

Ph.D. students studying literature and culture and those studying Germanic philology also benefit from the opportunity to choose a minor field of study. Students may choose a minor of up to 9 credit hours of coursework taken outside the department and chosen in consultation.
with their dissertation advisor. This minor may also consist of coursework combined with a project.

The Doctoral Program Profile (PDF) (http://graduate.ku.edu/sites/graduate.drupal.ku.edu/files/docs/dpp/DPP_A_GERM.pdf) gives a retrospective overview of our time-to-degree and other statistics relevant to the graduate program and graduate-student experience.

**Departmental Funding**

While it is not guaranteed, the department does its best to provide funding in the form of Graduate Teaching Assistantship (GTA) appointments to all incoming graduate students. GTA appointments are awarded for the academic year and come with:

- a competitive academic year (9 month) salary
- a 100% tuition waiver for all courses at KU
- payment of up to 3 hours of student fees
- optional University-subsidized group health insurance

The appointments are guaranteed based on performance for up to 3 years for M.A. students, 5 years for Ph.D. students and 6 years for students who receive both an M.A. and a Ph.D. at The University of Kansas. GTAs in the department receive thorough training in language instruction, close mentoring, and the opportunity to teach French at a variety of levels, providing them with a strong base of teaching experience upon entering the job market. Additional information about teaching for the department is available on the Graduate Funding page (https://germanic.drupal.ku.edu/gta-appointments-and-fellowships) of our departmental website.

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**Additional Funding**

There are also university fellowships for truly outstanding students. Visit the Graduate Studies website for information about funding opportunities (http://graduate.ku.edu/funding) for KU graduate students.

**Contact**

For inquiries concerning the graduate program, please contact:

Professor William Keel (http://germanic.ku.edu/william-d-keel), Director of Graduate Studies, and/or Cari Ann Kreienhop (http://germanic.ku.edu/cariann-kreienhop), Graduate Program Coordinator & Graduate Admissions Administrator.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

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**Germanic Languages & Literatures Graduate Admission**

In addition to the general admission requirements (http://www.graduate.ku.edu/application-process) from the Office of Graduate Studies, applicants to the Ph.D. program in German should have the equivalent of the to the Master's Degree in German offered at KU.

Submit your application through the Graduate Studies Office of Admissions application system (http://www.graduate.ku.edu). For additional information regarding admissions and the application process, including deadlines, department-specific prerequisites and required supplemental documentation, please visit the graduate admissions (https://germanic.drupal.ku.edu/graduate-admission) page of the Germanic Languages and Literatures website, or contact the department Graduate Program Coordinator, Cari Ann Kreienhop, ckreienhop@ku.edu.

**Ph.D. Degree Requirements**

In addition to the general requirements for the Doctor of Philosophy degree concerning research skills, the oral comprehensive examination, the dissertation, and the final examination, a student must meet the following specific departmental requirements:

1. Normally a minimum of 27 credit hours (excluding GERM 999 Doctoral Dissertation) beyond that required for the M.A. For students in German Applied Linguistics, some of the courses may be taken outside of the department. Students in literature and culture and students in Germanic philology may choose a minor up to 9 credit hours of coursework outside the department in consultation with their advisor. This minor may consist of coursework combined with a project. The 9 hours of the minor are included in the required 27 credit hours. Required Courses: One research seminar in the area of specialization; Approved elective courses in the area of specialization; Approved elective courses for the outside minor area (depending on specialization).

2. At least 1 semester of half-time teaching or the equivalent (normally GERM 800 is required concurrently with the first semester of teaching).

3. a). A portfolio evaluation in the third semester of study after successful completion of 18 credit hours of coursework. For a detailed description of portfolio content, see the Graduate Handbook. Upon passing the portfolio evaluation and fulfilling all degree requirements, students advance to the comprehensive examination in the fourth semester of their doctoral studies. b). A comprehensive written and oral examination in the fourth semester upon completion of all required coursework (27 credit hours in German Studies; for students in German Applied Linguistics and for students with a minor option, some of the courses will be taken outside of the department) and fulfillment of all degree requirements. The comprehensive examination consists of a 2-part written departmental preliminary examination based on the student’s submitted portfolio followed by an oral examination.

**Research Skills & Responsible Scholarship**

The University requires that every doctoral student have training in responsible scholarship and research skills pertinent to the field of research and appropriate to the doctoral level. This requirement must be met before taking the comprehensive oral exam. For Germanic Languages and Literatures doctoral students, this requirement is met by the following:
M.A. is offered only to those pursuing a Ph.D. Students seeking a terminal M.A. in gerontology are not admitted; the program provides services to older individuals.

For professional careers in private and public institutions and agencies students for academic and research careers in gerontology, as well as on a strong foundation in basic research on aging. The program prepares students for careers in gerontology, built for her or his career objectives. Courses give students a multidisciplinary perspective on the issues and problems of aging, built on a strong foundation in basic research on aging. The program prepares students for academic and research careers in gerontology, as well as for professional careers in private and public institutions and agencies providing services to older individuals.

Students seeking a terminal M.A. in gerontology are not admitted; the M.A. is offered only to those pursuing a Ph.D.

Doctor of Philosophy in Gerontology

Graduate Study in Gerontology at KU consists of Master of Arts and Doctor of Philosophy degrees in gerontology, along with the option for a dual-title Ph.D. in Gerontology and selected social science disciplines.

They are administered through the Gerontology Center, a component of the Schiefelbusch Institute for Life Span Studies.

The Doctor of Philosophy degree in gerontology was approved by the Kansas Board of Regents during the 1996-97 academic year. KU is one of only several universities nationwide offering the Ph.D. in gerontology. KU’s gerontology graduate program is unique in that it is an interdisciplinary research degree emphasizing social and behavioral gerontology.

Faculty affiliated with the program include members of the College of Liberal Arts and Sciences, including the School of the Arts; and the Schools of Architecture, Design and Planning; Education; Engineering; Health Professions; Law; Medicine; Music; Nursing; Pharmacy; and Social Welfare.

The graduate program in gerontology gives students a broad, advanced educational experience in gerontology. It provides a common focus for all students, yet allows each student to design a course of study most appropriate for her or his career objectives. Courses give students a multidisciplinary perspective on the issues and problems of aging, built on a strong foundation in basic research on aging. The program prepares students for academic and research careers in gerontology, as well as for professional careers in private and public institutions and agencies providing services to older individuals.

Students seeking a terminal M.A. in gerontology are not admitted; the M.A. is offered only to those pursuing a Ph.D.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Application and Admission

Any student who has completed at least a B.A. or B.S. degree at an accredited institution of higher education may apply to the Ph.D. program. Required application materials include a résumé, a personal statement of professional and educational goals in gerontology, 1 copy of all undergraduate and graduate transcripts, list of all courses taken that are relevant to gerontology, 3 letters of recommendation, and scores from the Graduate Record Examination. Applicants whose first language is not English must submit proof of proficiency in English. GRE and other scores should be from the last two years. Further information is

GERM 700 Introduction to Graduate Studies in German 3
GERM 800 Seminar: Teaching German as a Second Language 3
GERM 855 Introduction to German Applied Linguistics 3

Demonstrated reading knowledge of French and one other modern language, Latin or Greek. 1

1This requirement can be fulfilled by completing an approved course or by completing a proficiency examination. Language course may be taken in the summer. If that is not possible, a student may take the course during a Fall or Spring semester while also taking 2 three-credit hour graduate courses in German. Students specializing in medieval philology or older literature must select Latin as the second language for reading knowledge.

Gerontology Program

Gerontology Graduate Programs

Graduate study in gerontology at KU consists of Master of Arts and Doctor of Philosophy degrees in gerontology, along with the option for a dual-title Ph.D. in Gerontology and selected social science disciplines.

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Admission to Graduate Studies

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Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Application and Admission

Any student who has completed at least a B.A. or B.S. degree at an accredited institution of higher education may apply to the Ph.D. program. Required application materials include a résumé, a personal statement of professional and educational goals in gerontology, 1 copy of all undergraduate and graduate transcripts, list of all courses taken that are relevant to gerontology, 3 letters of recommendation, and scores from the Graduate Record Examination. Applicants whose first language is not English must submit proof of proficiency in English. GRE and other scores should be from the last two years. Further information is
Program Requirements

For the Ph.D., the student must complete all general degree requirements, including residence, training in research skills and responsible scholarship, the written preliminary examination, the comprehensive oral examination, preparation of a dissertation, and the final oral examination.

Each student designs his or her own curriculum with the assistance of a support committee of 3 gerontology faculty members. All students are expected to acquire multidisciplinary training in gerontology by taking courses in the sociology, psychology, and biology of aging.

Students may enter the program with an acceptable master’s degree from KU or another institution. The admissions committee reviews master’s-level preparation for doctoral-level research. An acceptable level of preparation includes basic training in statistics, program assessment, or policy analysis and completion of an empirical research study or thesis.

Students entering the program without an acceptable master’s degree must complete the M.A. in gerontology before the Ph.D.

The requirements for the M.A. in gerontology are as follows:

- Gerontology proseminar
- 6 hours of core courses in gerontology (selected from at least 2 of the following areas: biology of aging, psychology of aging, social gerontology)
- 12 hours of supplemental courses in gerontology and related fields
- 6 hours of basic statistics courses
- 3 hours of methodology
- 6 hours of thesis credit

For students who enter the program with master’s degrees or who complete the M.A. in gerontology, minimum requirements for the Ph.D. are as follows:

- Gerontology proseminar
- At least 6 hours of core courses in gerontology (selected from at least 2 of the following areas: biology of aging, psychology of aging, social gerontology)
- At least 12 hours of additional supplemental courses in gerontology and related fields
- 6 hours of advanced statistics courses
- 6 additional hours of methodology
- Completion of written and oral comprehensive examination
- 6 hours of dissertation credit, completion of dissertation, and final oral examination

A list of courses meeting requirements in gerontology, statistics, and methodology is available from the graduate advisor.

Evaluation of Satisfactory Performance

The gerontology proseminar and core courses should be completed during the first 2 semesters. Students normally are expected to complete the M.A. degree in 2 years. The maximum time limit for completing all requirements for the M.A. degree is 3 years. Students normally are expected to complete the Ph.D. within 3 years of entering the program or of completing the M.A. The maximum time limit for completing all requirements for the doctoral degree is 8 years after admission to the doctoral program with an acceptable master’s degree or after completion of the M.A. degree in gerontology. Students who complete the M.A. degree in gerontology at KU and subsequently begin doctoral studies have a total enrolled time of 10 years to complete both degrees.

Written Preliminary Examination

Upon completion of the M.A., a major portion of the course requirements, and the research skills and responsible scholarship requirement, each student must pass a written preliminary examination. This examination covers two content areas reflecting the student’s area of concentration and integrates theoretical and methodological issues in gerontology.

Comprehensive Oral Examination

The comprehensive oral examination covers gerontology. The examination can take one of 5 forms:

1. A defense of the written preliminary examination,
2. A defense of a completed research project,
3. A defense of a prospectus for a future research project, including the dissertation,
4. A discussion of a major review paper written by the student,
5. A review of a research grant proposal and a simulated site visit defense of the proposal.

Dissertation Preparation and Final Oral Examination

Upon passing the comprehensive oral examination, the student becomes a candidate for the doctorate. Graduate Studies designates a dissertation committee based on the recommendation of the program. The dissertation committee includes at least three members of the gerontology program faculty.

After passing the comprehensive oral examination, the candidate must be continuously enrolled until all degree requirements have been met. When the completed dissertation has been accepted by the committee, but before it has been bound, and all degree requirements have been met, the program requests the final oral examination to be scheduled, allowing a minimum of 2 weeks to verify the requirements and publicize the examination. At least 5 months must elapse between successful completion of the comprehensive oral examination and the final oral examination.

Research Skills and Responsible Scholarship Requirement

Doctoral students must demonstrate competence in a research skill “distinct from, but strongly supportive of, the dissertation.” The program
advisory committee establishes requirements for research skills, including the following options:

1. Demonstrated competency of a language, other than English, relevant to research in gerontology;
2. Competency in research methodology, including quantitative and/or qualitative data analysis;
3. Competency in both computer programming skills and computer applications.
4. A record of professional experience, publication, or presentation at professional meetings or a record of course work in a substantive area such as statistics beyond that required to satisfy the master’s or doctoral degree requirements in gerontology.
5. Successful completion of SPLH 982/PSYC 982 with a grade of B or higher.

Doctoral students are required to have training in responsible scholarship. Such topics may include protection of human subjects; welfare of laboratory animals; conflicts of interest; data management; mentor/student responsibilities; collaborative research; authorship, publication, plagiarism, copyright; peer review; professional practices; maintenance of confidentiality; and appropriate research conduct and research misconduct.

Please contact your advisor or the Director of Graduate Studies for more information about the Research Skills & Responsible Scholarship requirement. More information can also be found in the departmental Graduate Student Handbook.

Research Experience

All students are expected to be continuously involved in research under the supervision of the graduate advisor and support committee. Research involvement includes the design, execution, and dissemination of research on aging.

Courses

Cooperating departments and schools list courses related to aging. See the website (http://www.gerontology.ku.edu) for course listings from recent semesters.

Dual-title Ph.D. in Gerontology

Gerontology Graduate Programs

Graduate study in gerontology at KU consists of Master of Arts and Doctor of Philosophy degrees in gerontology, along with the option for a dual-title Ph.D. in Gerontology and selected social science disciplines.

They are administered through the Gerontology Center, a component of the Schiefelbusch Institute for Life Span Studies.

The Doctor of Philosophy degree in gerontology was approved by the Kansas Board of Regents during the 1996-97 academic year. KU is one of only several universities nationwide offering the Ph.D. in gerontology. KU’s gerontology graduate program is unique in that it is an interdisciplinary research degree emphasizing social and behavioral gerontology.

Faculty affiliated with the program include members of the College of Liberal Arts and Sciences, including the School of the Arts; and the Schools of Architecture, Design and Planning; Education; Engineering; Health Professions; Law; Medicine; Music; Nursing; Pharmacy; and Social Welfare.

The graduate program in gerontology gives students a broad, advanced educational experience in gerontology. It provides a common focus for all students, yet allows each student to design a course of study most appropriate for her or his career objectives. Courses give students a multidisciplinary perspective on the issues and problems of aging, built on a strong foundation in basic research on aging. The program prepares students for academic and research careers in gerontology, as well as for professional careers in private and public institutions and agencies providing services to older individuals.

Students seeking a terminal M.A. in gerontology are not admitted; the M.A. is offered only to those pursuing a Ph.D.

Admission to Graduate Studies

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Submit your graduate application online (http://www.graduate.ku.edu). Send all other requested application materials to the department:

The University of Kansas
Gerontology Program
Admissions Committee
Dole Human Development Center
1000 Sunnyside Ave., Room 3090
Lawrence, KS 66045-7561

Dual-title Ph.D. Program in Gerontology

This dual-title degree is an option available to students who have first been admitted to the doctoral program in one of these departments: Communication Studies, Psychology, and Sociology (as of January 2012). The dual-title degree allows the pursuit of a single degree that incorporates study within a traditional discipline and training in an interdisciplinary field; the student is awarded one degree (Ph.D.) with both titles identified on the diploma (e.g., “Ph.D. in Psychology and Gerontology”).
This option is designed to appeal to students who are strong in a traditional discipline but also motivated to study across disciplinary lines. In the course of study, students can avail themselves of disciplinary depth and interdisciplinary breadth. At the post-doctoral stage, dual-title graduates will have enhanced career and employment opportunities, able to claim expertise in one or both titles of their degree when seeking positions in education and research.

**Plan of Study**

The dual-title Ph.D. integrates two programs of doctoral study for students who enter doctoral study having earned a Master’s degree. To ensure integration of the fields in regard to coursework, examinations, and dissertation, the student’s principal faculty advisor must be a faculty member in both fields; or, if this is not possible, the student must have co-advisors from each of the two fields.

The student completes required coursework in the traditional discipline and required coursework in Gerontology. Many theory, methods, and content courses for each side of the pairing can jointly fulfill requirements for both programs in the dual-title degree. Nonetheless, the dual-title student may require an additional semester to fulfill requirements in both programs. Course requirements for doctoral study in Gerontology and the partner discipline are those described in the programs’ respective graduate student handbooks. The course requirements for the Gerontology Ph.D. are those listed in the preceding section under Gerontology Graduate Programs.

**Evaluation of Satisfactory Performance**

The programs’ respective graduate student handbooks likewise describe procedures for written preliminary material, the Comprehensive Oral Examination, the dissertation, and the Final Oral Examination. With the consent of advisors in both programs, any required written preliminary examinations will be harmonized between the two programs. Comprehensive oral examination: The dual-title degree student’s candidacy examination committee must be composed of faculty from the partner discipline as well as at least one faculty member from the Gerontology Program. The dual-title faculty member may be someone who is appointed in both programs. Typically, the dual-title member will participate in constructing and grading candidacy examination questions in gerontology. The comprehensive exam requirements for both programs must be met, including a defense of the prospectus for the dissertation.

Dissertation and final oral examination: The dissertation topic should integrate both fields and be defended before graduate faculty from both programs.

**Application for Admission to the Dual-title Program**

Students must enroll in the disciplinary Ph.D. program for at least one semester and be in good academic standing before applying to the dual-title Ph.D. Program. Students may inquire further about the dual-title option and admission procedures by contacting the graduate advisor of the Gerontology Doctoral Program. Before applying, students should likewise consult with their advisor in the department that admitted them to KU.

Students apply by means of a letter to Graduate Advisor of the Gerontology Doctoral Program. This letter should describe one’s professional and educational goals in gerontology and also include one’s reasons for pursuing the dual-title option. The letter should be accompanied by a resume and by a list of all courses previously taken in relevant areas such as sociology, psychology, human development, social welfare, biology, and health services. The Gerontology program may request access to recent materials that the student filed in order to apply for graduate study at KU (undergraduate and graduate transcripts, letters of recommendation, scores from the Graduate Record Examination, and, for international applicants, proof of proficiency in the English language), or the program may request updates of these materials.

If accepted to undertake the dual-title Ph.D. option, the student will select or be assigned an advisor who is a member of both programs. If this is not possible, the student must have two advisors, one from each field. The student will work with her or his advisor(s) in both programs to draft a joint plan of study that outlines the key courses and seminars that will fulfill the course requirements for both programs, to the extent that these are foreseeable. The advisor(s) will sign the joint plan of study to indicate discussion and approval of the plan.

**Global and International Studies**

**Why study global and international studies?**

Because global and international studies will give you the tools to understand the rapid and profound changes that are occurring around the world. Today’s job market demands employees who are able to negotiate the cross-cultural, multilingual environment, increasingly the norm across the professions. The programs in Global and International Studies at KU emphasize cultural and language knowledge, overseas experience, critical thinking and research skills that give our students a leg up in both the general job market and in international careers. Our programs are strongly enhanced by the impressive array of international resources available at KU, such as KU’s nationally-ranked Office of Study Abroad and the vast number of foreign languages offered, including many of the languages the US government considers “critical languages,” which provide a huge advantage to graduates applying to foreign service and intelligence careers.

**Undergraduate Programs**

Global and international studies at KU offers an interdisciplinary program in which faculty and students think critically about some of the most fundamental issues facing societies today: population growth, politics and governance, migration, the global economy, poverty and inequality, religion, race and ethnicity, gender and sexuality, peace and conflict, and climate change. Through an investigation of these topics, global and international studies majors acquire an enriched understanding of the world today, which is not only a desirable end in itself but also a useful background for professionals whose careers may involve them in different geographical and cultural areas. A major in global and international studies is helpful for careers in journalism, foreign service, business and industry, education, law, politics and government, and social service agencies.

Students are also strongly encouraged to add to their global and international expertise by incorporating double-majors or minors in KU’s other excellent regional studies programs (such as in Latin American Studies, Russian East European and Eurasian Studies, Slavic Languages and Cultures, African and African-American Studies, East Asian Languages and Cultures, European Studies, Jewish Studies and Middle East Studies), in Political Science, Geography, etc. or from other Schools (such as Business and Journalism). The possibility for overlapping
coursework make it an excellent strategic and efficient opportunity to further your educational expertise and portfolio on the global job market.

The co-major in European Studies is taken in conjunction with an undergraduate major in another academic discipline, such as with one of the majors in modern European languages & literatures, Business, Journalism, History, Philosophy, or Global & International Studies. The co-major provides students with a solid foundation in the cultures, politics, languages, and history of Europe in preparation for graduate studies and/or careers in a wide variety of international fields. Studying with KU faculty in the broader disciplines such as social sciences, humanities, the arts, and business, will enable students to increase their awareness and understanding of Europe’s past, present, and future and its significant role in our increasingly globalized world. The program offers personalized advising, interdisciplinary flexibility, diverse course offerings, opportunities to conduct research, frequent co-curricular activities, and many options for studying and completing internships abroad.

Graduate Programs

The Master of Arts in Global and International Studies provides an analytically sophisticated understanding of the contemporary global arena and cultivates the skills and knowledge to operate in a world where traditional boundaries are disappearing. Through the 33 credit hour program, students develop a specialization in a world region and can pursue interests in global politics, society, and culture across a broad range of courses in the humanities and social sciences. Or, with our flexible thematic specialization, students can enhance their global knowledge with a 9-12 credit hour course cluster that would provide additional graduate certification in a variety of disciplines and professional fields, such as certification in Community Health and Development, African Studies, or the certification options available from the School of Business or the School of Public Administration.

Global and International Studies also offers an MA concentration in Foreign Affairs Studies with a focus on the Middle East and North Africa. This 30 credit hour program is designed for completion within 12 months and meets the needs of Foreign Area Officers in particular but is open to all interested in its curricular path. Students interested in this degree will take many courses from the Lawrence Campus but also some from the Edwards Campus in Overland Park, Kansas City.

Students interested in combining global knowledge with business expertise are able to take our Global MA/MBA dual degree program. The 56 credit hour degree program can be completed entirely through the Edwards Campus in Overland Park, Kansas City, and the curriculum is constructed to be able to be completed in 3 years. Students completing this dynamic program with organic overlap between Business and Global and International Studies will finish with both an MA (in Global and International Studies) and an MBA (from the School of Business).

Finally, for those who are interested in a shorter graduate curriculum to enhance their global knowledge for career enrichment and advancement, Global and International Studies now offers a Graduate Certificate. The 12 credit-hour (4 course) Certificate can be taken as part of a module embedded within another graduate degree program at KU or as a stand alone certificate program.

Campuses

Although students may take much of their coursework for these programs from the Lawrence campus, the core courses for the program are based at the KU Edwards Campus (http://edwardscampus.ku.edu). The School of Business, the School of Public Administration, and the department of Communication Studies also provide significant course options at the Edwards Campus that can be incorporated into the MA in Global and International Studies.

KU Edwards Campus

KU offers a variety of graduate and undergraduate programs on the KU Edwards Campus in Overland Park, Kansas. The Edwards Campus offers late-afternoon and evening classes, catering to working professionals. Students residing within the KC Metro area, including those on the Missouri side, are able to attend Edwards Campus courses at the in-state tuition rate. For more information, call the Edwards Campus at 864-8400 from Lawrence or 913-897-8400 from other locations.

Center for Global and International Studies

The Center for Global and International Studies (http://global.ku.edu) supports and promotes global and international studies at KU. In collaboration with International Programs and the area centers, CGIS works to provide a single point of contact for faculty with international expertise to help facilitate interdisciplinary research and teaching opportunities. Building on longstanding institutional strength in international studies, the center focuses on topics and themes of transnational scope and on world areas of economic and strategic importance not covered by the existing area studies centers. CGIS contributes to the preparation of students for careers in an increasingly interconnected world by housing undergraduate and graduate degrees in global and international studies, and by supporting the introduction of new course offerings and study abroad opportunities. In addition, the center offers outreach activities to K-12 teachers, businesses, and governmental agencies across the region and serves as a resource for the local and international community.

Courses

EURS 150. Study Abroad Topics in European Studies: ____. 1-5 Hours. U.
This course is designed for the study of special topics in European Studies at the 100-level (Freshman/Sophomore level). Coursework must be arranged through the KU Office of Study Abroad and approved by a faculty advisor in European Studies. May be repeated for credit if content varies. LEC.

EURS 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in European Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

EURS 302. European Culture and Society 1945 to Present. 3 Hours. HT AE42 / H.
The course provides historical, cultural, and political overviews of Europe since 1945 with particular emphasis on the contribution of French and Italian culture and society. The course emphasizes Europe’s contribution to Western intellectual thought, social movements, arts and literature, and global society. (Same as HWC 302.) LEC.

EURS 329. History of War and Peace. 3 Hours. HL / H.
A study of the changing nature of warfare and the struggle to bring about peace. Topics include pacifism, the “military revolution” that created the first professional armies; the development of diplomatic immunity, truces, and international law; the peace settlements of Westphalia, Utrecht,
Vienna, Versailles, San Francisco; the creation of peace movements and peace prizes; the evolution of total war, civil war; and guerrilla warfare involving civilians in the twentieth century; the history of the League of Nations and United Nations; and the rise of intergovernmental and non-governmental organizations. (Same as HIST 329 and PCS 329.) LEC.

EURS 350. Study Abroad Topics in: _____ 1-5 Hours. H.
This course is designed for the study of special topics in European Studies at the Junior/Senior level. Coursework must be arranged through the KU Office of Study Abroad and approved by a faculty advisor in European Studies. May be repeated for credit if content varies. LEC.

EURS 430. European Civilization in World Context: _____ 3 Hours. HL AE42/GE3H / H.
An introduction to the literature of encounter between European and non-European civilizations, drawing on both Western and non-Western sources. The course may include European interactions with areas such as the Mediterranean Basin, Sub-saharan Africa, South and East Asia, and the Americas. World areas and historical periods chosen for study will vary from semester to semester according to the interest and field of the instructor. Not open to freshmen. (Same as HWC 430.) Prerequisite: HWC 114 or HWC 204 and HWC 115 or HWC 205. LEC.

EURS 435. Islam in Europe. 3 Hours. AE42 / H.
Investigation of Muslim migration into Europe and day-to-day interactions of Muslims with other European populations. This is an integrated study of historical, political, religious and economic influences that determine Muslim experience in contemporary European culture. (Same as HWC 435.) LEC.

EURS 500. Seminar in European Studies. 3 Hours. AE42/AE61 / H.
Provides an interdisciplinary approach to the study of modern European civilization. By discussing both classic and contemporary, controversial readings each week and writing several papers during the semester, students acquire an understanding of the development of modern European culture and society and Europe's contemporary problems. Topics for discussions and papers are drawn from the following subjects: the economic and political integration of European states; modernism and anti-modernism; global and international relations; nationalism; the European Union; the changing European nation state and the welfare state; and contrasts and comparisons between European and Eastern Europe. (Same as HWC 500.) LEC.

EURS 501. Senior Thesis in European Studies. 3 Hours. AE61 / H.
European Studies majors will do research and write a substantial paper on a topic in the culture, economy, history, or politics of Europe. Topics will be approved by the European Studies Committee. Students will work with an advisor chosen from among the European Studies faculty and the European Studies Coordinator. The majority of the students' work will be done independently with their advisors, but students will meet with the European Studies Coordinator several times a class to report on their progress and present their final drafts. Required of all European Studies majors. Prerequisite: Junior standing or consent of instructor. LEC.

EURS 502. Senior Honors Thesis in European Studies. 3 Hours. AE61 / H.
Open to European Studies majors doing their senior thesis for Honors. Prerequisite: Completion of EURS 500, 15 hours toward the Co-Major, and approval of Honors thesis by European Studies Committee. Completion of this course or concurrent enrollment in EURS 501. IND.

EURS 503. Europe Today. 3 Hours. S.
This intensive, interdisciplinary seminar focuses on current social, political, and economic changes in Europe. Topics include European integration and the European Union, the conflict between nationalism and European consciousness, NATO and U.S.-European relations, and international business in Europe. The seminar will include guest lectures from an international array of scholars, political officials, and business representatives, as well as site visits to their institutions and companies. The seminar takes place in Brussels, Belgium, and enrollment is restricted to students accepted in the KU Summer Institute for European Studies study abroad program. LEC.

EURS 505. Studies in Exile Literature. 3 Hours. H.
A multidisciplinary study of selected literary, scholarly, and creative works produced by those Europeans forced into exile, emphasizing their impact on culture and society both in Europe and in those countries in which the exiles resided. Examples: exile during the Nazi dictatorship in Germany (1933-1945), during Cold War crises (Berlin 1960, Prague 1968). LEC.

EURS 506. Culture and Politics of the Cold War in Western Europe. 3 Hours. H.
An interdisciplinary overview of the Cold War period (1945-1985) focusing on Western European dimensions of the problem, based on the view that the Cold War structured political institutions, cultures, and societies in enduring ways that continue to be relevant today. LEC.

EURS 507. Research in European Collections. 1-3 Hours. H.
This course allows students in the European Studies Co-Major and related disciplines to receive credit for research related to European Collections in one or more of the following institutions: Watson and Spencer Research Libraries, the Dole Institute, the Eisenhower and Truman Presidential Libraries, the U.S. Army Combined Arms Research and Foreign Military Studies Office at Fort Leavenworth, the Linda Hall Library in Kansas City, and the Winston Churchill Collection at the Westminster College Library in Fulton, Missouri. May be taken in place of EURS 501 by European Studies Honors Students if taken for three credit hours. Permission of instructor necessary. IND.

EURS 508. Politics and Economics of Cultural Production in Western Europe. 3 Hours. H.
Artists and intellectuals in their relation to state and society. This course is designed to introduce students (1) to the role European artists and intellectuals have often played in the arena of politics and (2) to the privileged place cultural production (arts, literature, media) occupies in the formation of various European identities and economies. LEC.

EURS 509. Introduction to the Study of Southern European Societies. 3 Hours. H.
Social, historical, and economic study of Southern European societies with emphasis on modern period. Relevant to the study of European integration and EU enlargement. Consideration of the distinctive southern Mediterranean societies from the perspective of their collective identity as a regional economic and geopolitical bloc. LEC.

EURS 510. Scandinavian Life and Civilization. 3 Hours. H.
This course is designed to impart a general knowledge of life in Denmark, Finland, Iceland, Norway, and Sweden with emphasis on social and cultural conditions, against a geographical and historical background, from the Viking Age to the present. Slides and other illustrated materials. (Same as SCAN 570.) LEC.

EURS 511. Topics in European Studies: _____. 3 Hours. H.
A study of significant themes, movements, or problems in European history, literature, politics, society, or culture. May also relate European issues to issues in other world areas (Africa, North America, Asia, etc.) May be repeated for credit when topic varies. LEC.
EURS 512. Irish Literature and Culture: ______. 3 Hours. H.
Study of topics in Irish literature and culture. Topics may focus on a particular genre, theme, historical period, or group of authors. May be repeated for credit as the topic changes. (Same as ENGL 530.) Prerequisite: Prior completion of at least one 300- or 400-level English course. LEC.

EURS 536. Economic Issues of the European Union. 3 Hours. S.
A survey of the economies of the European Union, with a focus on the economic development of the member states since World War II, and an examination of the various economic issues confronting them today. (Same as ECON 536) Prerequisite: ECON 104 or ECON 144. LEC.

EURS 550. Classics of Peace Literature. 3 Hours. HL AE51/AE61 / H.
A study of influential proposals for world peace from Erasmus' The Complaint of Peace (1516) to the 1995 Hague Appeal for World Peace. Selected writings by such authors as Erasmus, Hugo Grotius, Jean-Jacques Rousseau, Immanuel Kant, Henry Thoreau, Henri Dunant, Berthe von Suttner, Woodrow Wilson, Mahatma Gandhi, and Martin Luther King, Jr., are considered. (Same as PCS 550.) Prerequisite: HWC 204 or HWC 205. LEC.

EURS 556. The Literature of Human Rights. 3 Hours. H.
Examines in literature, art, and film from about 1800 to the present, both sides of the ongoing debate surrounding the idea that all human persons possess inalienable rights because all persons possess intrinsic value as persons, value independent of race, gender, caste or class, wealth, age, sexual preference, etc. Anti- and pro-rights proponents are paired and studied with equal care. (Same as PCS 565.) LEC.

EURS 580. Directed Study. 1-3 Hours. AE61 / H.
Independent study and directed reading on special topics. Permission of the instructor who will supervise the student's work is required. LEC.

EURS 581. Discussion Section in French. 1 Hour. U.
The 1 credit hour course represents a foreign language discussion section to be attached to a major 3-credit hour EURS course (example: EURS 500). Foreign language discussion sections are an integral part of the KULAC program envisaged to reinforce foreign language proficiency. LEC.

EURS 582. Discussion Section in German. 1 Hour. U.
The 1 credit hour course represents a foreign language discussion section to be attached to a major 3-credit hour EURS course (example: EURS 500). Foreign language discussion sections are an integral part of the KULAC program envisaged to reinforce foreign language proficiency. LEC.

EURS 583. Discussion Section in Italian. 1 Hour. U.
The 1 credit hour course represents a foreign language discussion section to be attached to a major 3-credit hour EURS course (example: EURS 500). Foreign language discussion sections are an integral part of the KULAC program envisaged to reinforce foreign language proficiency. LEC.

EURS 584. Discussion Section in Spanish. 1 Hour. U.
The 1 credit hour course represents a foreign language discussion section to be attached to a major 3-credit hour EURS course (example: EURS 500). Foreign language discussion sections are an integral part of the KULAC program envisaged to reinforce foreign language proficiency. LEC.

EURS 604. The European Union. 3 Hours. H.
The European Union, the union of 27 European countries, is a culmination of a long history of European unity. The European Union now encompasses population and economic strength rivalling that of the United States. This course examines selected topics in the history of European integration and the political, legal, economic, and social implications of the present European Union as well as its relations with the United States and other regions of the world. LEC.

FARS 110. Elementary Farsi I. 5 Hours. U.
Vocabulary acquisition, pronunciation, grammar, and writing. Course includes reading of simple texts. Five hours of class per week. LEC.

FARS 120. Elementary Farsi II. 5 Hours.
Continuation of FARS 110. Vocabulary acquisition, pronunciation, grammar, and writing. Course includes reading of simple texts. Five hours of class per week. Prerequisite: FARS 110 or departmental permission. LEC.

FARS 210. Intermediate Farsi I. 3 Hours. U.
A continuation of FARS 120. Course emphasizes oral and written work in Farsi. Systematic review of grammar and introduction to reading in cultural texts. Prerequisite: FARS 120 or departmental permission. LEC.

FARS 220. Intermediate Farsi II. 3 Hours. U.
A continuation of FARS 210. Course emphasizes oral and written work in Farsi. Systematic review of grammar and introduction to reading in cultural texts. Prerequisite: FARS 210 or departmental permission. LEC.

FARS 310. Advanced Farsi I. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in Farsi. Readings from Farsi literature introduced. Prerequisite: FARS 220 or placement exam that establishes a level of proficiency in Farsi suited to Advanced Farsi I. LEC.

FARS 320. Advanced Farsi II. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in Farsi. Readings from Farsi literature introduced. Prerequisite: FARS 310 or placement exam that establishes a level of proficiency in Farsi suited to Advanced Farsi II. LEC.

FARS 593. Directed Study in Persian Culture and Literature: ______. 1-3 Hours. U.
This course is designed for students seeking proficiency in Farsi beyond FARS 320. The instructor directs the student through readings and materials in Farsi that add to the student's substantive knowledge of Iran and culture in the Farsi language. May be taken multiple semesters for credit with varying content. Prerequisite: FARS 320 and consent of instructor. LEC.

GIST 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Global International Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

GIST 201. Topics in: ______. 1-3 Hours. U.
An interdisciplinary study of international topics. Designed especially for freshmen and sophomores. May be repeated for credit if content varies. LEC.

GIST 202. Topics in South Asian Studies: ______. 1-3 Hours. U.
An interdisciplinary study of topics related to South Asia. Designed especially for freshmen and sophomores. May be repeated for credit if content varies. LEC.

GIST 203. Topics in Middle Eastern Studies: ______. 1-3 Hours. U.
An interdisciplinary study of topics related to the Middle East. Designed especially for freshmen and sophomores. May be repeated for credit if content varies. LEC.
GIST 250. Introduction to Globalization. 3 Hours. S.
Along with an overview of the origins and historical development of globalization, the course addresses various aspects of the growth of transnational economic, cultural, institutional, and political interconnections, including the implications of rapidly-developing information technology and social media, international security in a transnational world, and the issues related to the movement of goods, people (immigration), images, ideas, and institutional forms across national borders. LEC.

GIST 301. Introduction to Global and International Studies. 3 Hours. GE11 / S.
This course provides an overview to the major ways and themes involved in the study of world cultures, politics, and societies as applied by disciplines in the social sciences. Topics such as the construction and maintenance of cultures, comparative political systems, global and regional economies, popular culture, gender and the environment will be covered through their manifestations in particular regional and global contexts. LEC.

GIST 320. Love, Sex and Marriage in India. 3 Hours. H.
This course addresses diverse aspects of the philosophies and expressions of intimacy and pleasure as found in India. Using old and new literature, including from the Kamasutra, as well as media, we examine the following: how and why in ancient times sensual pleasure was another path for ultimate bliss; how perspectives and traditions of intimacy have changed over time; diverse types of marriages; the culture and practice of arranged marriages; same-sex intimacy; and universal concepts of love. LEC.

GIST 325. Peoples and Cultures of South Asia. 3 Hours. S.
This course provides an introduction to the diversity of peoples in South Asia, including India, Pakistan, Nepal, Bangladesh and Bhutan. The particular cultures and language of the indigenous peoples in the region are highlighted through academic sources and the direct study of reproductions of these cultures in literature and film. LEC.

GIST 350. Study Abroad Topics in: ____. 1-5 Hours. U.
This course is designed for the study of special topics in global and international studies at the junior/senior level. Course work must be arranged through the KU Office of Study Abroad and approved by a faculty adviser in Global and International Studies. May be repeated for credit if content varies. LEC.

GIST 424. Nationalism(s) in Turkey. 3 Hours. S.
This course analyzes the major variations in nationalist paradigms existing in contemporary Turkey, including conservative nationalism, secular nationalism, religious (Islamic) nationalism, and Kurdish nationalism. Through the lens of seminal theories on the origins, development, and types of nationalism and the relevant historical background of the Turkish Republic, we explore how these competing visions of "the nation" and "homeland" have changed, fragmented, and manifested themselves in everyday Turkish politics and society. LEC.

GIST 493. Directed Readings. 3 Hours. U.
Individual and supervised readings in a selected area of international studies. Course is repeatable with permission of the program director. LEC.

GIST 495. Global Internship. 3 Hours. U.
Semester-long internship with a business or organization located abroad or that provides a global or international working context for the interning student. A term paper is required. Prerequisite: Consent of instructor. FLD.

GIST 501. Topics in: ____. 1-3 Hours. U.
An interdisciplinary study of international topics. Designed especially for juniors and seniors. May be repeated for credit if content varies. LEC.

GIST 502. Advanced Topics in South Asian Studies: ____. 1-3 Hours. U.
An interdisciplinary study of topics related to South Asia. May be repeated for credit if content varies. Prerequisite depends on specific topic offered. LEC.

GIST 503. Advanced Topics in Middle East Studies: ____. 3 Hours. U.
An interdisciplinary study of topics related to the Middle East. May be repeated for credit if content e depends on specific topic offered. LEC.

GIST 530. Politics and Society in the Contemporary Persianate World. 3 Hours. S.
This course examines the major currents of political developments and their linkages with religion, culture and civil society in Turkey, Iran, Afghanistan, Pakistan and India since the late nineteenth century. During the "pre-modern" period, all these countries formed part of "the Persianate world," a region that extended from the Iranian plateau to the Balkans, Central Asia and the Indian subcontinent, mostly under the Turkic administrations, and tied together by trade, Islam, and Persian as the lingua franca. The dissemination of modern Western political thought and nationalism during the colonial period led to nation-states and the end of the linguistic domination of Persian in the region. Though each of these nation-states ultimately took a different trajectory, they each were faced with similar challenges that offer the basis for interesting comparisons between them. This course explores the trajectories of these countries in regard to the relations between the state, religion, and politics, various strands of nationalism, pluralism, religious and ethnic minorities, social equality, and democratization. Prerequisite: GIST 301 or POLS 150. LEC.

GIST 535. Literature and Society in the Contemporary Middle East. 3 Hours. H.
This course offers a general introduction to the modern Middle Eastern literatures in English translation. Through analyses of selected short stories and novels from Arabic, Turkish and Persian literature, the students develop an understanding of the issues that shape everyday life in the Contemporary Middle East. The course investigates issues of nation and national identity, war, ethnicity, class, religion, and gender and sexuality. We use a variety of paradigms, namely nationalist, Marxist, feminist, and Islamist, to provide a theoretical framework for discussion of the selected works. No prior knowledge of Arabic, Turkish or Persian language is needed. Prerequisite: GIST 301. LEC.

GIST 510. Interdisciplinary Methods for Global Contexts. 3 Hours. S.
An introduction to a variety of widely-employed quantitative and qualitative research methods in the social sciences and humanities, including methods such as statistical analysis, ethnography, and content analysis. LEC.

GIST 624. Social Movements in the Middle East. 3 Hours. S.
Using the major theories and approaches comparatively applied to social movements around the world, this course critically analyzes historical and existing cases of social movements and "nonmovements" in the Middle East. We cover examples of Islamist (and post-Islamist), women’s, nationalist, democratic, youth and labor movements and their impact on the region. Contextual factors like technology and social networking, regime type, institutions, and socioeconomic structures are also considered for their role in supporting or inhibiting collective action. Prerequisite: GIST 301 or POLS 150. LEC.
GIST 684. International Law: The State and the Individual. 3 Hours. S.
International law has assumed an increasingly significant role in international life. This course examines major issues in international law including (but not limited to): the changing status and role of the state; rights of minorities and self-determination; the environment; and human rights. The course examines the central questions and the relevant international legal principles associated with each issue. Prerequisite: POLS 170. LEC.

GIST 685. International Law: Laws of Armed Conflict. 3 Hours. S.
This course examines the principles, roles, and functions of international law in the conduct of war. As the course reviews the development and application of the basic rules of armed conflict, several current issues and conflicts are addressed including: the legitimate use of force; the proper definitions of combatants and civilians; actions that constitute war crimes, the legality of new weapons technology, and, if the laws of armed conflict apply to the current "war on terrorism." Prerequisite: POLS 170. LEC.

GIST 697. Diplomacy Lab. 1-3 Hours. S.
This course is designed to partner with an innovative program implemented by the US Department of State. Students enrolling in this course team up with a group of four or more students to address a real world problem posed by a State Department officer. The team, with the assistance of the instructor, engages in extensive and systematic research to address the problem and presents their finding in a formal report presented to the State Department in the desired format. Throughout the semester, the students teleconference with the State Department officer posing the question and utilize their accumulated cultural, linguistic and research knowledge to tackle a real-life, global issue. Prerequisite: GIST 301. LEC.

GIST 698. Capstone Seminar. 3 Hours. AE61 / H.
A seminar designed to introduce students to the theory and practice of global and international studies. A research paper will be required. May not be repeated for credit. Prerequisite: 12 hours of junior/senior level and above courses that satisfy requirements for the major. LEC.

GIST 699. Capstone Seminar, Honors. 3 Hours. AE61 / H.
A seminar designed to introduce honors students to the theory and practice of global and international studies. A research paper will be required. May not be repeated for credit. Prerequisite: 12 hours of junior/senior level and above courses that satisfy requirements for the major. LEC.

GIST 701. Approaches to International Studies. 3 Hours.
This course examines various approaches to the study of cultures, politics, and societies in their global and international contexts through the exploration of a series of exemplary works of global/international research from a variety of disciplines (eg. anthropology, sociology, political science, economics, geography, history, etc.). The course will cover the major contributions of these disciplines in their approaches to global questions and themes and will provide a multi-disciplinary framework within which students can begin exploring their own global and international research questions. The course also provides an introduction to the major regions and many of the themes that students will be able to specialize in during the course of the MA program. LEC.

GIST 702. Globalization. 3 Hours.
A central issue in international studies is globalization, the increasing interconnectedness of societies and economies. This course examines globalization from an historical and contemporary perspective. Major topics include (but are not necessarily limited to) the historical expansion of the West since 1500, the growth of international economic institutions, conflict among global cultures, the future of state sovereignty, and the challenges of economic integration. LEC.

GIST 703. The World Economy. 3 Hours.
An introduction to international trade and finance, theories of economic development, and international economic structures. Not appropriate for economics majors. LEC.

GIST 704. Global Cultures and Societies. 3 Hours.
Examination of the components of culture, economic and political anthropology, major global cultural areas, and the impact of cultural differences as expressed through language, literature, religion, thought, and motivation in cross-cultural communications. LEC.

GIST 705. Globalization in History. 3 Hours.
A study of the increasing interaction among world societies since 1500 and an investigation of the long-term developments behind current world problems. Major topics include Western expansion since 1500, the spread of state sovereignty, the formation of a world economy, and the spread of international institutions. Current issues will vary, but may include environmental crises, human rights, migration, free trade and the spread of consumer culture, ethnicity and nationalism, and international intervention within states. (Same as HIST 705.) LEC.

GIST 706. Comparative Governments. 3 Hours.
Survey of different governmental structures in the contemporary world and the ways these countries have confronted issues such as modernization and development, economic security, ethnic pluralism and conflict, and globalization. LEC.

GIST 710. Interdisciplinary Research Methods for Global Contexts. 3 Hours.
This course addresses the challenges for students engaged in research in an interdisciplinary and international context. The course will take issues for research and place them within the structure of a research design process, including formulation of a general question, the appropriation of theory, the grounding of a literature review, and the positing of a testable research question and/or hypothesis. Students will also be exposed to research methodologies and how these manifest themselves through the logic of the disciplines—such as anthropology, sociology, geography, political science, history and literature. With a final thesis project design in mind, students will be expected to be expected to be able to utilize the research tools of accessing secondary analytical data, archival research, SPSS, ArcView and methods such as survey construction, implementation, and analysis, interviews, content analysis, discourse analysis, case study, and GIS. Prerequisite: GIST 701 or consent of instructor. LEC.

GIST 750. Topics in International Studies: ______. 3 Hours.
A study of one or more selected topics in international studies. Course may be taken more than once. LEC.

GIST 793. Directed Readings. 1-5 Hours.
Individual and supervised readings in a selected area of international studies. Course is repeatable with permission of the program director. LEC.

GIST 888. Contemporary China Studies. 3 Hours.
This course will review and analyze the current literature on China's social and political development, including a wide range of topics within political science. There is a rich body of literature within each topic such as civil society in China, legal reform, political culture, nationalism, gender issues, ethnicity, political behavior, elections, economic development, and inequality. This course will introduce key literature within each topic focusing on the debates among China scholars as well as how these debates fit in the general field of political science. (Same as EALC 888 and POLS 888.) Prerequisite: POLS 668 or permission of the instructor. LEC.
GIST 897. Examination Preparation. 1 Hour.
Independent study in preparation for the Comprehensive M.A.
examination. Graded on satisfactory/unsatisfactory basis. May be
repeated. LEC.

GIST 898. Thesis Writing. 3 Hours.
This course guides MA students through the crafting of their academic
or professional thesis. The students begin the course with a literature
review and data/research completed, and they will be directed through
in-class workshops and deadlines with the intention to produce a full
draft of their thesis. Students may choose to draft a thesis that fits either
academic conventions for a similar body of research, or they may develop
a body of research whose target would be a business or professional
audience. Course is designed to assist students in the development of
theses with varying methodologies, methods, and audiences on global
and international topics. Prerequisite: GIST 710. THE.

GIST 899. Thesis. 1-6 Hours.
Enrollment for writing thesis for master's degree. THE.

HEBR 110. Elementary Israeli Hebrew I. 5 Hours. U.
A beginning course in modern Israeli Hebrew. Essentials of grammar,
syntax and conversational practice; elementary reading and writing.
Note: Students with other previous experience in Hebrew must take a
placement exam. LEC.

HEBR 120. Elementary Israeli Hebrew II. 5 Hours. U.
A continuation of HEBR 110. Note Students with other previous
experience in Hebrew must take a placement exam. Prerequisite: HEBR
110. LEC.

HEBR 177. First Year Seminar: _____, 3 Hours, GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing
current issues in Hebrew. Course is designed to meet the critical
thinking learning outcome of the KU Core. First-Year Seminar topics
are coordinated and approved by the Office of First-Year Experience.
Prerequisite: First-time freshman status. LEC.

HEBR 210. Intermediate Israeli Hebrew I. 3 Hours. U.
Further development of language skills: listening comprehension, oral
efficiency, intermediate grammar and syntax, reading and writing.
Note: Students with other previous experience in Hebrew must take a
placement exam. Prerequisite: HEBR 120. LEC.

HEBR 220. Intermediate Israeli Hebrew II. 3 Hours. U.
A continuation of HEBR 210. Note: Students with other previous
experience in Hebrew must take a placement exam. Prerequisite: HEBR
210. LEC.

HEBR 230. Biblical Hebrew. 3 Hours. U.
This course introduces students to the grammatical structure and
vocabulary of biblical Hebrew. It includes basic biblical passages for
students to translate into English and analyze. LEC.

HEBR 240. Biblical Hebrew II. 3 Hours. U.
This is a continuation of Hebrew 230. It continues the study of the
grammatical structure and vocabulary of biblical Hebrew, and includes
biblical texts for students to translate and analyze. Prerequisite: HEBR
230 or permission of the instructor. LEC.

HEBR 340. Advanced Israeli Hebrew I. 3 Hours. U.
Advanced study of Modern Hebrew. This course is designed to strengthen
linguistic skills, enrich vocabulary, and further the study of grammar and
syntax. Not open to native speakers of Hebrew. Prerequisite: HEBR 220
or permission of the instructor. LEC.

HEBR 350. Advanced Israeli Hebrew II. 3 Hours. U.
Continued advanced study of modern Hebrew. Not open to native
speakers of Hebrew. Prerequisite: HEBR 340 or permission of the
instructor. LEC.

HEBR 395. Study Abroad Topics in Hebrew: _____, 3-6 Hours. H.
This course is designed for the study abroad of special topics in Hebrew
at the junior/senior level. Coursework must be arranged through the Office
of KU Study Abroad. May be repeated for credit if content varies. LEC.

HEBR 410. Studies in Modern Hebrew Literature. 3 Hours. H.
An introduction to Hebrew literature from the nineteenth century to
the present day. The course emphasizes the development of basic
interpretive skills and the understanding of basic literary movements,
genres, and concepts. Not open to native speakers of Hebrew.
Prerequisite: HEBR 220 or equivalent. LEC.

HEBR 420. Studies in Modern Hebrew. 3 Hours. U.
This course is designed to help students achieve fluency in speaking,
listening, and writing Modern Hebrew. Not open to native speakers of
Hebrew. Prerequisite: HEBR 220 or equivalent. LEC.

HEBR 490. Independent Study. 1-3 Hours. U.
Intensive reading or research under faculty supervision. Not open to
native speakers of Hebrew. Prerequisite: HEBR 220 or equivalent. IND.

HNDI 110. Beginning Hindi I. 5 Hours. U.
An introduction to modern standard Hindi that emphasizes acquisition
of basic language skills (speaking, comprehension, reading and writing)
through a combination of lecture, drill, and work with the Devanagari
script. LEC.

HNDI 120. Beginning Hindi II. 5 Hours. U.
A continuation of Beginning Hindi I that builds on basic skills of speaking
and comprehension, and the writing and reading of the Devanagari script
developed in Beginning Hindi I. Prerequisite: HNDI 110 or placement
exam that establishes a level of proficiency in Hindi suited to Beginning
Hindi II. LEC.

HNDI 177. First Year Seminar: _____, 3 Hours, GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing
current issues in Hungarian. Course is designed to meet the critical
thinking learning outcome of the KU Core. First-Year Seminar topics
are coordinated and approved by the Office of First-Year Experience.
Prerequisite: First-time freshman status. LEC.

HNDI 210. Intermediate Hindi I. 3 Hours. U.
A limited-enrollment, seminar course for first-time freshmen, addressing
current issues in Hindi II. LEC.

HNDI 220. Intermediate Hindi II. 3 Hours. U.
Prerequisite: HNDI 210 or placement exam that establishes a level of proficiency in Hindi suited to Intermediate Hindi I. LEC.

HNDI 310. Advanced Hindi I. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities
in modern standard Hindi. Readings are introduced from representative genres of Hindi

HNDI 310. Advanced Hindi I. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities
in modern standard Hindi. Readings are introduced from representative genres of Hindi

HNDI 395. Study Abroad Topics in Hindi: _____, 3-6 Hours. H.
This course is designed for the study abroad of special topics in Hindi
at the junior/senior level. Coursework must be arranged through the Office
of KU Study Abroad. May be repeated for credit if content varies. LEC.

HNDI 410. Studies in Modern Hindi Literature. 3 Hours. H.
An introduction to Modern Hindi literature that emphasizes acquisition
of basic language skills (speaking, comprehension, reading and writing)
through a combination of lecture, drill, and work with the Devanagari
script. LEC.

HNDI 420. Studies in Modern Hindi. 3 Hours. U.
This course is designed to help students achieve fluency in speaking,
listening, and writing Modern Hindi. Not open to native speakers of
Hindi. Prerequisite: HNDI 220 or equivalent. LEC.

HNDI 490. Independent Study. 1-3 Hours. U.
Intensive reading or research under faculty supervision. Not open to
native speakers of Hindi. Prerequisite: HNDI 220 or equivalent. IND.
literature. Prerequisite: HNDI 220 or placement exam that establishes a level of proficiency in Hindi suited to Advanced Hindi I. LEC.

HNDI 320. Advanced Hindi II. 3 Hours. U.
Enhancement of speaking, comprehension, reading and writing abilities in Hindi. Readings are introduced from representative genres of Hindi literature. Prerequisite: HNDI 310 or placement exam that establishes a level of proficiency in Hindi suited to Advanced Hindi II. LEC.

HNDI 593. Directed Study in Hindi Culture and Literature: ____. 1-3 Hours. H.
This course is designed for students seeking proficiency in Hindi beyond HNDI 320. Instructor will direct the student through readings and materials in Hindi that will add to the students substantive knowledge of India and culture in the Hindi language. May be taken multiple semesters for credit with varying content. Prerequisite: HNDI 320, and consent of instructor. LAB.

JWSH 107. Living Religions of the West. 3 Hours. HR / H.
A basic introduction to the major religious traditions of the Near East, Europe, and the Americas, with an emphasis on their development through the modern period and their expressions in contemporary life. Not open to students who have taken REL 109. (Same as REL 107.) LEC.

JWSH 124. Understanding the Bible. 3 Hours. HR / H.
An introduction to the literature of the Bible, exploring the relationships among the various types of literature present and the function of each type in the history and religious life of the people who produced and used them. Cannot be taken concurrently with REL 311 or JWSH 321 or REL 315. Not open to students who have taken REL 125 or JWSH 125. (Same as REL 124.) LEC.

JWSH 125. Understanding the Bible, Honors. 3 Hours. HR / H.
An introduction to the literature of the Bible, exploring the relationships among the various types of literature present and the function of each type in history and religious life of the people who produced and used them. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken REL 124 or JWSH 124. (Same as REL 125.) LEC.

JWSH 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Jewish Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

JWSH 300. Topics in Jewish Studies: ____. 3 Hours. H.
Examination of special topics in Jewish Studies. May be repeated if topic varies. LEC.

JWSH 311. Narratives of Jewish Life. 3 Hours. HL AE42 / H.
The course focuses on the narratives through which Jews made sense of their lives under the impact of the forces of modernity, beginning in the "old world," and moving through the 19th century and into the 20th. The goal is to analyze how the imagination of Jewish writers was captured by the changes in social structures such as new educational, residential and occupational opportunities, leading to increased interactions with the gentile society. Students read and discuss literary works based in the shetel in revolutionary Russia, and in America. We will also look at memoirs and letters written by ordinary Jews. All assigned texts will be in English. LEC.

JWSH 315. The Spanish Inquisition. 3 Hours. H.
A broad historical study of the Spanish Inquisition from 1478 to its afterlife in modern culture, including its use in political debates and its depiction in popular culture. Topics include anti-Semitism, the nature of the inquisitorial investigation, the use of torture, censorship and the relationship between the Inquisition, the Spanish monarchy and other religious and lay authorities. Taught in English. Will not count toward the Spanish major. (Same as HIST 325 and SPAN 302.) LEC.

JWSH 318. Jews and Slavs in Eastern Europe. 3 Hours. H.
Jews and Slavs have shared territory from the Middle Ages to the present day. The contact between these culturally and linguistically distinct groups have shaped many centuries of Eastern European history - from the extreme violence of the pogroms to long periods of peaceful coexistence and cooperation. "Jews and Slavs" examines the history and cultural geography of Slavic-Jewish contact from the perspectives of both groups. Through literature, film, journalism, and folklore, students learn about the profound influence Jews and Slavs have had on each other, the uneasy feelings that accompanied their interactions, and the creative and fascinating impact their interaction had on both cultures. (Same as SLAV 318.) LEC.

JWSH 321. Religion of Ancient Israel. 3 Hours. H.
A study of the development of the Hebrew Bible from its earliest stages of oral tradition to its canonization with an emphasis on the relationship of the historical, intellectual, and cultural contexts shaping that development. (Same as REL 311.) Prerequisite: REL 124 or JWSH 124 or permission of instructor. LEC.

JWSH 325. Introduction to Judaism. 3 Hours. H.
Analyzes a selection of the core texts, teachings, and practices of Jewish religious traditions in terms of classical and contemporary understanding. (Same as REL 325.) LEC.

This course demystifies the Talmud, arguably the most central yet also the most mysterious text of rabbinic Judaism. Students are introduced to the scope, substance, styles, and major figures of the Talmud, and also learn how the text came into being over the course of several centuries. (Same as REL 326.) Prerequisite: REL 104, REL 107, or REL 124 or REL 125, or permission of the instructor. LEC.

JWSH 327. Jewish Secular Culture. 3 Hours. HL AE42 / H.
By examining the modern concept of Yiddishkeit (Jewishness), this course explores Jewish secularism as a set of modern intellectual, literary, and cultural practices that redefined the relationship between the secular and religious in literature, music, theatre, art, humor, and foodways. This interdisciplinary course draws on theoretical approaches from history, cultural studies, religious studies, folklore, and linguistics to examine the different secularizing cultural practices of the Jews in Central and Eastern Europe, as well as in North America. LEC.

JWSH 335. History of Jewish Women. 3 Hours. H.
This course explores the history of Jewish women from antiquity to the twentieth century. It examines the historical constructions of women's gender roles and identities in Jewish law and custom as well as the social and cultural impact of those constructions in the context of the realities of women's lives in both Jewish and non-Jewish society. (Same as HIST 335, WGSS 335.) LEC.

JWSH 336. Jewish American Literature and Culture. 3 Hours. AE41 / H.
An examination of Jewish American literature and culture from the 17th century to the present. Materials may include a broad range of literary genres as well as folklore, music, film, and visual art. (Same as ENGL 336.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.
JWSH 338. Languages of the Jews. 3 Hours. H.
From the beginning, Jewish history and culture is closely tied to language, from Hebrew and Aramaic to the languages of diaspora such as Yiddish and Ladino. Focusing on issues of language in society, this course will survey the languages spoken by the Jews throughout their long history in diverse communities around the world. We will learn about Hebrew as a spoken and a sacred language, examine how Jewish languages are born and die, and discuss the resurrection of Modern Hebrew in the state of Israel. All readings are in English. No prior knowledge of languages or linguistics is required. (Same as LING 338.) LEC.

JWSH 339. Languages of the Jews, Honors. 3 Hours. H.
Honors version of JWSH 338 or LING 338, Languages of the Jews. Prerequisite: Membership in the University Honors Program or consent of instructor. (Same as LING 339.) LEC.

JWSH 340. Topics in Modern Jewish Literature: ___. 3 Hours.
This course explores Jewish literature in English or English translation in the 20th and 21st centuries either as a broad survey or according to specific themes. May be repeated for credit. LEC.

JWSH 341. Hitler and Nazi Germany. 3 Hours. H/W.
An examination of the rise of Hitler and Nazism, beginning with the breakdown of 19th century culture in the First World War and continuing through the failure of democracy under the Weimar Republic. The course will also discuss the impact of Nazism on Germany and how Nazism led to the Second World War and the Holocaust. (Same as HIST 341.) LEC.

JWSH 343. The Holocaust in History. 3 Hours. H.
The systematic murder of the Jews of Europe by the Nazis during World War II is one of the most important events of modern history. This course studies the Holocaust by asking about its place in history. It compares other attempted genocides with the Holocaust and examines why most historians argue that it is unique. Other topics covered include the reasons the Holocaust occurred in Europe when it did, the changing role of anti-Semitism, and the effects of the Holocaust on civilization. The course also discusses why some people have sought to deny the Holocaust. The course concludes by discussing the questions people have raised about the Holocaust and such issues as support for democracy, the belief in progress, the role of science, and the search for human values which are common to all societies. (Same as HIST 343.) LEC.

JWSH 344. Modern Jewish History. 3 Hours. H.
This course explores the complex of interactions between Jews, Judaism, and modernity by examining the challenges to Jewish life and thought, community and culture, self-understanding and survival, from the early modern period to the present day. Through the lenses of religious, cultural, intellectual, and political expression, the course examines the social, economic, and demographic changes in Jewish communities in Western, Central and Eastern Europe, the United States, and Israel along with the impact of antisemitism and the Holocaust. (Same as HIST 344.) LEC.

JWSH 350. Contemporary Jewish Identities. 3 Hours. SC / H.
This course explores the variety of ways in which American Jews create Jewish identities as individuals and groups. It traces the emergence of the various current divisions within Judaism: Reform Judaism (which by definition, implies Orthodoxy), then Conservative Judaism, and then the later development of Reconstructionist Judaism. The course also explores other contemporary options for being Jewish: cultural Jews, secular Jews, unaffiliated Jews, religious Jews, and gay or lesbian or transgendered Jews. LEC.

JWSH 361. Jewish Film. 3 Hours. HL / H.
An examination of the cultural history of the Jews through films that explore Jewish themes, including but not limited to: issues of tradition and modernity, religion and secularism, immigration, gender, Zionism, anti-Semitism, and the Holocaust. Films studied may be in English and in foreign languages (with English subtitles) like Yiddish, Hebrew, and Russian. LEC.

JWSH 395. Study Abroad Topics in Jewish Studies: ___. 3-6 Hours. H.
This course is designed for the study of special topics in Jewish Studies at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

JWSH 401. Directed Study in Jewish Studies. 3 Hours. AE61 / H.
Intensive reading or research under faculty supervision. Prerequisite: Consent of instructor. IND.

JWSH 491. Directed Study in Jewish Studies, Honors. 3 Hours. AE61 / H.
Honors version of JWSH 401. Intensive reading or research under faculty supervision. Prerequisite: Membership in the University Honors Program or consent of instructor. IND.

JWSH 523. The Dead Sea Scrolls. 3 Hours. H.
A study of the archeological evidence and texts from the Dead Sea area that provide primary evidence for Jewish religious belief and practice in the Greek and Roman periods (ca. 250 B.C.E. - 135 C.E.). (Same as REL 523.) Prerequisite: REL 124 or JWSH 124 or consent of instructor. LEC.

JWSH 525. Jews and Christians. 3 Hours. H.
This course examines the ways Jews and Christians have interacted with and characterized one another at various points in their histories. Special emphasis is placed on the gradual separation of the two religious traditions in the 1st-4th centuries. (Same as REL 525.) Prerequisite: A previous course in Religious Studies or Jewish Studies; or consent of instructor. LEC.

JWSH 526. Jewish History and Literature in the Greek and Roman Periods. 3 Hours. H.
The history and literature of the Jewish people from the hellenistic period (late fourth century B.C.E. to the codification of the Mishnah 210 C.E.). Select texts from the Hebrew Bible, the so-called apocrypha and pseudepigrapha, the Qumran scrolls, Philo, Josephus, related early Christian texts, and Rabbinic texts will be studied. (Same as REL 526.) Prerequisite: REL 124 or JWSH 124 or permission of instructor. LEC.

JWSH 560. Classical and Contemporary Jewish Thought. 3 Hours. H.
An introduction to individual Jewish thinkers and collective projects from Philo to the present, including The Talmud and Midrash, Middle Age and Early Modern Jewish philosophical and Talmudic rationalism and mysticism. Considers such thinkers as Spinoza, Cohen, Soloveitchik, Rosenzweig, and Levinas. (Same as REL 560.) Prerequisite: A previous course in Religious Studies or Jewish Studies; or consent of instructor. LEC.

JWSH 570. Studies in Judaism. 3 Hours. H.
A study of the major intellectual sources of the Jewish tradition from the Mishna, Talmud, Midrash, prayerbook, philosophers, the Zohar, and the Shulchan Aruch. (Same as REL 570.) Prerequisite: A course in Religious Studies or Jewish Studies numbered 300 or above. LEC.

JWSH 572. Jewish Folklore. 3 Hours. H.
Jewish folklore is extraordinarily rich and varied. From folktales to riddles, from legends about the exalted rabbis to irreverent jokes, folklore is central to the Jewish way of life. This course traces the extent to which oral elements appear in traditional Jewish literary texts such as the Bible; read and discuss folktales, and examine minor genres such as proverbs, riddles and jokes. Topics include the supernatural beings of Jewish folklore dybbuks, seductive female demons, and golems.
Students acquire theoretical tools with which to analyze folklore (Jewish or otherwise), read stories, watch movies, and collect samples of folklore from informants. LEC.

**JWSH 573. Jewish Folklore, Honors. 3 Hours. H.**
Honors version of JWSH 572. Jewish folklore is extraordinarily rich and varied. From folktales to riddles, from legends about the exalted rabbis to irreverent jokes, folklore is central to the Jewish way of life. This course traces the extent to which oral elements appear in traditional Jewish literary texts such as the Bible; read and discuss folktales, and examine minor genres such as proverbs, riddles and jokes. Topics include the supernatural beings of Jewish folklore dybbuks, seductive female demons, and golems. Students acquire theoretical tools with which to analyze folklore (Jewish or otherwise), read stories, watch movies, and collect samples of folklore from informants. Open only to students in the University Honors Program or by permission of instructor. LEC.

**JWSH 600. Advanced Topics in Jewish Studies: ______. 3 Hours. H.**
Examination of advanced topics in Jewish Studies. May be repeated if topic varies. Prerequisite: Consent of instructor. LEC.

**JWSH 650. Service Learning in Jewish Studies. 3 Hours. S.**
This course, to be taken in the junior or senior year, is designed to give students the opportunity to apply the knowledge, concepts, and ideas gained in courses in Jewish studies to real-life situations in appropriate agencies and organizations. Open to students in the Jewish Studies program. Prerequisite: Permission of instructor. FLD.

**TAJ 110. Elementary Tajik I. 5 Hours. U.**
Vocabulary acquisition, pronunciation, grammar, and writing. Course includes reading of simple texts. Five hours of class per week. LEC.

**TAJ 120. Elementary Tajik II. 5 Hours. U.**
Continuation of TAJ 110. Vocabulary acquisition, pronunciation, grammar, and writing. Course includes reading of simple texts. Five hours of class per week. Prerequisite: TAJ 110 or departmental permission. LEC.

**TAJ 210. Intermediate Tajik I. 3 Hours. U.**
A continuation of TAJ 120. Course emphasizes oral and written work in Tajik. Systematic review of grammar and introduction to reading in cultural texts. Prerequisite: TAJ 120 or departmental permission. LEC.

**TAJ 220. Intermediate Tajik II. 3 Hours. U.**
A continuation of TAJ 210. Course emphasizes oral and written work in Tajik. Systematic review of grammar and introduction to reading in cultural texts. Prerequisite: TAJ 210 or departmental permission. LEC.

**TAJ 310. Advanced Tajik I. 3 Hours. U.**
Enhancement of speaking, comprehension, reading and writing abilities in Tajik. Readings from Tajik literature introduced. Prerequisite: TAJ 220 or placement exam that establishes a level of proficiency in Tajik suited to Advanced Tajik I. LEC.

**TAJ 320. Advanced Tajik II. 3 Hours. U.**
Enhancement of speaking, comprehension, reading and writing abilities in Tajik. Readings from Tajik literature introduced. Prerequisite: TAJ 220 or placement exam that establishes a level of proficiency in Tajik suited to Advanced Tajik II. LEC.

**TAJ 510. Tajik for Geographers. 1 Hour. H.**
The course is designed to facilitate the use of primary sources in Tajik for carrying out research in human geography of Tajikistan. TAJ 510 compliments REES 510. Prerequisite: TAJ 220, or consent of instructor. LEC.

**TAJ 532. Tajik For Sociologists. 1 Hour. H.**
The course is designed to facilitate the use of primary sources in Tajik for carrying out research in sociology of Tajikistan. TAJ 532 compliments SOC 532. Prerequisite: TAJ 220, or consent of instructor. LEC.

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**Bachelor of Arts in Global and International Studies**

**Why study global and international studies?**

Because global and international studies will give you the tools to understand the rapid and profound changes that are occurring around the world.

**First- and Second-Year Preparation**

To complete the requirements for the degree in 4 years, prospective majors are strongly urged to complete all general education and language requirements no later than the end of the fall semester of the junior year and the general requirements for the major from the options listed below. For more information, set up an appointment with the Global and International Studies advising specialist by calling 785-864-0508.

**Admission to the Major**

**Admission Requirements**

Students are admitted to the major by application. To declare a major in Global and International Studies, please set up an appointment with the Global and International Studies advising specialist by calling 785-864-0508.

**Course Requirements**

1. **GIST 301 - Introduction to Global and International Studies.**

2. One course from the following list:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ABSC 150</td>
<td>Community Leadership</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 108</td>
<td>Introduction to Cultural Anthropology</td>
<td>3-4</td>
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<tr>
<td>or ANTH 109</td>
<td>Introduction to Cultural Anthropology, Honors</td>
<td>3-4</td>
</tr>
<tr>
<td>ANTH 308</td>
<td>Introduction to Cultural Anthropology</td>
<td>3-4</td>
</tr>
<tr>
<td>ANTH 160</td>
<td>The Varieties of Human Experience</td>
<td>3</td>
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<tr>
<td>or ANTH 360</td>
<td>The Varieties of Human Experience</td>
<td>3</td>
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<tr>
<td>ECON 104</td>
<td>Introductory Economics</td>
<td>4</td>
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<tr>
<td>or ECON 105</td>
<td>Introductory Economics, Honors</td>
<td>4</td>
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<tr>
<td>ECON 144</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
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<tr>
<td>or ECON 145</td>
<td>Principles of Macroeconomics, Honors</td>
<td>3</td>
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<tr>
<td>GEOG 100</td>
<td>World Regional Geography</td>
<td>3</td>
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<tr>
<td>GEOG 102</td>
<td>Principles of Human Geography</td>
<td>3</td>
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<tr>
<td>or GEOG 103</td>
<td>Principles of Human Geography, Honors</td>
<td>3</td>
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<tr>
<td>GIST 250</td>
<td>Introduction to Globalization</td>
<td>3</td>
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<tr>
<td>HIST 308</td>
<td>Key Themes in Modern Global History</td>
<td>3</td>
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<tr>
<td>POLS 150</td>
<td>Introduction to Comparative Politics</td>
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<tr>
<td>or POLS 151</td>
<td>Introduction to Comparative Politics Honors</td>
<td>3</td>
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<tr>
<td>POLS 170</td>
<td>Introduction to International Politics</td>
<td>3</td>
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<tr>
<td>or POLS 171</td>
<td>Introduction to International Politics Honors</td>
<td>3</td>
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<tr>
<td>REL 106</td>
<td>Living Religions of the East</td>
<td>3</td>
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<tr>
<td>or REL 107</td>
<td>Living Religions of the West</td>
<td>3</td>
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<tr>
<td>SOC 130</td>
<td>Comparative Societies</td>
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<tr>
<td>or SOC 131</td>
<td>Comparative Societies, Honors</td>
<td>3</td>
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</table>
Grade-Point Average Requirements

A minimum grade-point average of 2.70 is required.

Grade-Point Average Calculation. The admission grade-point average calculation includes all designated admission courses. It may not include all KU course work. KU’s course repeat policy applies to the grade-point average calculation. If a student has taken more than the minimum number of course options in the application term, grades received in any designated admission course requirement up to and including that term may be computed in the grade-point average for admission consideration. Only course grades from repeated lower-level courses, meeting the standards of the KU course repeat policy (https://documents.ku.edu/policies/governance/USRR.htm#art2sect2), are omitted from the grade-point average calculation.

Application Term

Declaration of the Global and International Studies Major should occur immediately following the term in which designated admission requirements will be initially completed.

Requirements for the B.A. Major

Global & International Studies Core Knowledge and Skills. (One course from the following list, plus GIST 301. These courses must be completed prior to the declaration of the major.)

Select one course from the following list:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 150</td>
<td>Community Leadership</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 108</td>
<td>Introduction to Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>or ANTH 109</td>
<td>Introduction to Cultural Anthropology, Honors</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 308</td>
<td>Introduction to Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 160</td>
<td>The Varieties of Human Experience</td>
<td>3</td>
</tr>
<tr>
<td>or ANTH 360</td>
<td>The Varieties of Human Experience</td>
<td>3</td>
</tr>
<tr>
<td>ECON 104</td>
<td>Introductory Economics</td>
<td>4</td>
</tr>
<tr>
<td>or ECON 105</td>
<td>Introductory Economics, Honors</td>
<td>3</td>
</tr>
<tr>
<td>ECON 144</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 145</td>
<td>Principles of Macroeconomics, Honors</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 100</td>
<td>World Regional Geography</td>
<td>3</td>
</tr>
<tr>
<td>or GEOG 102</td>
<td>Principles of Human Geography</td>
<td>3</td>
</tr>
<tr>
<td>GIST 250</td>
<td>Introduction to Globalization</td>
<td>3</td>
</tr>
<tr>
<td>HIST 308</td>
<td>Key Themes in Modern Global History</td>
<td>3</td>
</tr>
<tr>
<td>POLS 150</td>
<td>Introduction to Comparative Politics</td>
<td>3</td>
</tr>
<tr>
<td>or POLS 151</td>
<td>Introduction to Comparative Politics Honors</td>
<td>3</td>
</tr>
<tr>
<td>POLS 170</td>
<td>Introduction to International Politics</td>
<td>3</td>
</tr>
<tr>
<td>or POLS 171</td>
<td>Introduction to International Politics Honors</td>
<td>3</td>
</tr>
<tr>
<td>REL 106</td>
<td>Living Religions of the East</td>
<td>3</td>
</tr>
<tr>
<td>or REL 107</td>
<td>Living Religions of the West</td>
<td>3</td>
</tr>
<tr>
<td>SOC 130</td>
<td>Comparative Societies</td>
<td>3</td>
</tr>
<tr>
<td>or SOC 131</td>
<td>Comparative Societies, Honors</td>
<td>3</td>
</tr>
</tbody>
</table>

Introduction to Global and International Studies Satisfied by: (3)

GIST 301 Introduction to Global and International Studies

Additional Language. (3-5 hours/1 unit) Satisfied by:

Completion of one additional foreign language course (3 hours) beyond the 4th semester proficiency language requirement (300 level or above), or any available additional language course (3-5 hours).

The Capstone Research Coursework (6 hours/2 units) Satisfied by the completion of the following two courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIST 610</td>
<td>Interdisciplinary Methods for Global Contexts</td>
<td>3</td>
</tr>
<tr>
<td>Students must complete GIST 301 prior to taking this course.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIST 698</td>
<td>Capstone Seminar</td>
<td>3</td>
</tr>
<tr>
<td>or GIST 699</td>
<td>Capstone Seminar, Honors</td>
<td>3</td>
</tr>
<tr>
<td>Students must complete GIST 610 prior to taking this course.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Regional Experience. (9 hours/3 units) Majors must take 3 courses on one of the following regions of the world: Africa; the Middle East; Asia; Latin America and the Caribbean; Western Europe; and Russia, Eastern Europe and Central Asia. Of these 9 hours, a minimum of 6 must be at the 300 level or above and at least 3 of these must be taken from a regional overview course listed with the respective regions below.

Africa (9)

Satisfied by completing one of the following courses and two additional approved courses about Africa.

- AAAS 542 The History of Islam in Africa
- AAAS 305 Modern African History
- AAAS 300 African Traditional Religion and Thought

The Middle East (9)

Satisfied by completing one of the following courses and two additional approved courses about the Middle East.

- HIST 328 The Modern Middle East
- POLS 661 Politics of the Middle East

Asia (9)

Satisfied by completing one of the following courses and two additional approved courses about Asia.

- EALC 331 Studies In: _____
- EALC 380 Popular Cultures of East Asia
- EALC 656 Government and Politics of East Asia

Latin America & the Caribbean (9)

Satisfied by completing the following course and two additional approved courses about Latin America and the Caribbean.

- LAA 300 Interdisciplinary Themes in Latin American Studies

Western Europe (9)

Satisfied by completing one of the following courses and two additional approved courses about Western Europe.

- EURS 302 European Culture and Society 1945 to Present
- EURS 503 Europe Today
- EURS 604 The European Union

Russia, Eastern Europe, & Central Asia (9)

Satisfied by completing one of the following courses and two additional approved courses about Russia, Eastern Europe and Central Asia.

- REES 492 Research Methods in Russian, East European, and Eurasian Studies
- REES 220 Societies and Cultures of Eurasia
- REES 110 Understanding Russia and Eastern Europe

Global & International Studies Substantive Specialization. Students must take 3 courses in one of the specialization fields. The content of these courses must be global, trans-regional or relating to countries and
regions outside of the student’s regional specialization. Of these 9 hours, a minimum of 6 must be at the 300 level of above.

**Comparative Political & Social Systems (9)**
Satisfied by completing 3 approved courses in comparative political and social systems.

**International Business and the Global Economy (9)**
Satisfied by completing 3 approved courses about the global economy.

**Culture, Ethnicity, and Belief (9)**
Satisfied by completing 3 approved courses about culture, ethnicity, and belief systems.

**Literature, Popular Culture, and the Arts in the Global Context (9)**
Satisfied by completing 3 approved courses about literature, popular culture, and/or the arts in the global context.

**Gender & Sexuality in the Global Context (9)**
Satisfied by completing 3 approved courses about gender and sexuality in the global context.

**The Global Environment (9)**
Satisfied by completing 3 approved courses about the global environment.

NOTE: Students may not use the same class to fulfill both a regional expertise and a substantive specialization requirement. Not all courses which satisfy the regional expertise and substantive specialization requirements will be offered every year. Students may petition to have a course not on the list count toward the regional expertise or substantive specialization requirements. Petition forms can be downloaded from the website (http://global.ku.edu/academics/major.shtml) and should be submitted to the undergraduate advisor.

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 33 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 21 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Below is a sample 4-year plan for students pursuing the BA in Global and International Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

### Freshman

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours Fall</th>
<th>Hours Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 (2 hrs req), BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 (2 hrs req), BA Writing II)</td>
</tr>
<tr>
<td>MATH 101 (Goal 1.2 Quantitative Reasoning)</td>
<td>3</td>
<td>Quantitative Reasoning (Goal 1.2, BA Quantitative Reasoning)</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
</tr>
<tr>
<td>LA&amp;S 292 (Research Methods, or elective)</td>
<td>1</td>
<td>GIST Core Knowledge Course (Major Requirement)</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>17</td>
</tr>
</tbody>
</table>

### Sophomore

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours Fall</th>
<th>Hours Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language (BA Second Language, Major Requirement)</td>
</tr>
<tr>
<td>Goal 3 Humanities</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>Lab Science (BA Lab Requirement)</td>
</tr>
<tr>
<td>Elective or possible minor course (Total Hours)</td>
<td>3</td>
<td>GIST 301 (Major Requirement)</td>
</tr>
<tr>
<td>Elective or possible minor course (Total Hours)</td>
<td>3</td>
<td>Elective or possible minor course (Total Hours)</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>13-14</td>
</tr>
</tbody>
</table>

### Junior

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours Fall</th>
<th>Hours Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>Goal 4.2 Global Awareness</td>
</tr>
<tr>
<td>Additional Language Course</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
</tr>
<tr>
<td>Regional Expertise Overview Course 300+ (Major Requirement)</td>
<td>3</td>
<td>Regional Expertise Course 300+ (Major Requirement)</td>
</tr>
<tr>
<td>Substantive Specialization Course 300+ (Major Requirement)</td>
<td>3</td>
<td>Substantive Specialization Course 300+ (Major Requirement)</td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

### Senior

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours Fall</th>
<th>Hours Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIST 610 (Major Requirement)</td>
<td>3</td>
<td>GIST 698 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
</tr>
<tr>
<td>Regional Expertise Course 300+ (Major Requirement)</td>
<td>3</td>
<td>Substantive Specialization Course 300+ (Major Requirement)</td>
</tr>
</tbody>
</table>

Below is a sample 4-year plan for students pursuing the BA in Global and International Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).
of their research topic by a faculty member affiliated with the Center for Global and International Studies who will serve as their thesis director. Each student who completes an honor’s thesis must defend it in an oral examination before a thesis committee of three faculty members. The student’s thesis director chairs and chooses the committee in consultation with the student and the center director.

Co-Major in European Studies

Why study European studies?

European Studies, through interdisciplinary study, broadens, deepens, and strengthens a student’s knowledge and understanding of the enduring importance of our transatlantic partners, the Europeans.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

First- and Second-Year Preparation

To complete the requirements for the degree in 4 years, prospective co-majors are encouraged to complete all general education and language requirements no later than fall semester of the junior year. Students should begin study of a western European language other than English or Russian as early as possible. For more information, contact the European Studies undergraduate advisor, Laura Leonard, 785-864-3500, laleonar@ku.edu.

During their first and second years, students are strongly encouraged to enroll in HIST 115 French Revolution to the Present: Europe 1789-Present (3) plus 1 additional course from the list below:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 104</td>
<td>Introductory Economics</td>
<td>4</td>
</tr>
<tr>
<td>ECON 144</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 100</td>
<td>World Regional Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 102</td>
<td>Principles of Human Geography</td>
<td>3</td>
</tr>
<tr>
<td>POLS 150</td>
<td>Introduction to Comparative Politics</td>
<td>3</td>
</tr>
</tbody>
</table>
Students selecting this co-major must complete the following:

Career.

opportunity with the undergraduate advisor early in their undergraduate

majors are strongly encouraged to study abroad and should discuss this

other than English or Russian as early as possible. European Studies co-

Note: Students should begin study of a western European language
course distribution requirements in the humanities and social sciences.

Note: Enrollment in the above courses counts toward College principal
course distribution requirements in the humanities and social sciences.

Admission to the Co-Major

Admission Requirements

1. Second-semester sophomore or junior standing.

2. Declared major in a department or admission to a professional school.

Requirements for the Co-Major

European Studies Prerequisites or Co-

requisites

Students selecting this co-major must complete the following:

French Revolution to the Present: Europe 1789–Present. Satisfied by:

HIST 115 French Revolution to the Present: Europe 1789- Present 3

Interdisciplinary Perspective. Satisfied by 1 course from the following: 3-4

ECON 104 Introductory Economics

ECON 144 Principles of Macroeconomics

or ECON 145 Principles of Macroeconomics, Honors

GEOG 100 World Regional Geography

GEOG 102 Principles of Human Geography

POLS 150 Introduction to Comparative Politics

or POLS 151 Introduction to Comparative Politics Honors

POLS 170 Introduction to International Politics

or POLS 171 Introduction to International Politics Honors

HA 100 Introduction to Western Art History

PHIL 180 Introduction to Social and Political Philosophy

Note: Enrollment in the above courses counts toward College principal
course distribution requirements in the humanities and social sciences.

Note: Students should begin study of a western European language
other than English or Russian as early as possible. European Studies co-
majors are strongly encouraged to study abroad and should discuss this
opportunity with the undergraduate advisor early in their undergraduate
career.

Students selecting this co-major must complete the following:

Second Language Skills (3)

Students must complete one semester beyond the College general

education second language requirement (which is the completion of a

fourth-semester course) in a modern western European language

(Danish, Dutch, French, German, Hungarian, Italian, Portuguese,

Polish, Spanish, or Swedish).

Foundational Course: Seminar in European Studies (3)
## Upper-Division National or Regional European Studies Required

Satisfied by two approved courses (6 hours), two of which must cover two different countries or regions (this list is not exhaustive; go to the European Studies website or speak with the undergraduate advisor each semester for a complete list of approved upper-division national or regional European Studies courses):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 555</td>
<td></td>
</tr>
<tr>
<td>HIST 551</td>
<td></td>
</tr>
<tr>
<td>HIST 548</td>
<td></td>
</tr>
<tr>
<td>HIST 537</td>
<td></td>
</tr>
<tr>
<td>HIST 525</td>
<td></td>
</tr>
<tr>
<td>HIST 515</td>
<td></td>
</tr>
<tr>
<td>HIST 470</td>
<td></td>
</tr>
<tr>
<td>HIST 453</td>
<td></td>
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<td>HIST 448</td>
<td></td>
</tr>
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<td>HIST 447</td>
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</tr>
<tr>
<td>HIST 341</td>
<td></td>
</tr>
<tr>
<td>HA 600</td>
<td></td>
</tr>
<tr>
<td>SOC 500</td>
<td>Sociological Theory</td>
</tr>
<tr>
<td>SOC 530</td>
<td>Industrial Revolution and Capitalist Development</td>
</tr>
<tr>
<td>SOC 780</td>
<td>Advanced Topics in Sociology: (when covering comparative social policy between the United States and Europe)</td>
</tr>
<tr>
<td>THR 526</td>
<td>History of Theatre II</td>
</tr>
</tbody>
</table>

## Electives (6)

Satisfied by 2 courses (6 hours) of general European or country-specific electives chosen from the course lists above.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 327</td>
<td>Studies in Twentieth-Century Drama: (when at least 50 percent British/Irish)</td>
</tr>
<tr>
<td>ENGL 332</td>
<td>Shakespeare</td>
</tr>
<tr>
<td>ENGL 334</td>
<td>Major Authors: (when British or Irish)</td>
</tr>
<tr>
<td>ENGL 479</td>
<td>The Literature of: (when British or Irish)</td>
</tr>
<tr>
<td>EURS 509</td>
<td>Introduction to the Study of Southern European Societies</td>
</tr>
<tr>
<td>EURS 510</td>
<td>Scandinavian Life and Civilization</td>
</tr>
<tr>
<td>EURS 511</td>
<td>Topics in European Studies: (when country-specific)</td>
</tr>
<tr>
<td>EURS 512</td>
<td>Irish Literature and Culture:</td>
</tr>
<tr>
<td>ENGL 530</td>
<td></td>
</tr>
<tr>
<td>FREN 152</td>
<td>France and the French (taught in English)</td>
</tr>
<tr>
<td>FREN 326</td>
<td>Introduction to French Literature</td>
</tr>
<tr>
<td>FREN 470</td>
<td>French Literature of the Twentieth Century</td>
</tr>
<tr>
<td>GERM 462</td>
<td>The German Business Environment</td>
</tr>
<tr>
<td>HA 530</td>
<td>Renaissance Art in Italy: The 15th Century</td>
</tr>
<tr>
<td>HA 534</td>
<td>Art in France 1848-1900: Modernisms</td>
</tr>
<tr>
<td>HA 600</td>
<td>Biography of a City: (European city only)</td>
</tr>
<tr>
<td>HIST 341</td>
<td>Hitler and Nazi Germany</td>
</tr>
<tr>
<td>HIST 525</td>
<td>Modern France: From Napoleon to de Gaulle</td>
</tr>
<tr>
<td>HIST 537</td>
<td>France from the Renaissance to the French Revolution</td>
</tr>
<tr>
<td>HIST 548</td>
<td>British History, 1832 to the Present.</td>
</tr>
<tr>
<td>HIST 551</td>
<td>Spain and its Empire, 1450-1700</td>
</tr>
<tr>
<td>HIST 555</td>
<td>Aspects of British Political Thought</td>
</tr>
<tr>
<td>HWC 520</td>
<td>Literature in Translation: (when a European literature)</td>
</tr>
<tr>
<td>ITAL 301</td>
<td>Introduction to Italian Literature I</td>
</tr>
<tr>
<td>&amp; ITAL 302</td>
<td>Introduction to Italian Literature II</td>
</tr>
<tr>
<td>ITAL 335</td>
<td>Italy and the Italians I</td>
</tr>
<tr>
<td>&amp; ITAL 336</td>
<td>Italy and the Italians II (taught in English)</td>
</tr>
<tr>
<td>POLS 655</td>
<td>Politics of East-Central Europe</td>
</tr>
<tr>
<td>SCAN 570</td>
<td>Scandinavian Life and Civilization</td>
</tr>
<tr>
<td>SPAN 448</td>
<td>Spanish Language and Culture for Business</td>
</tr>
<tr>
<td>SPAN 453</td>
<td>Twentieth Century Spanish Studies:</td>
</tr>
<tr>
<td>SPAN 470</td>
<td>Studies in Spanish Culture and Civilization:</td>
</tr>
<tr>
<td>SPAN 550</td>
<td>Colloquium on Spanish Film</td>
</tr>
</tbody>
</table>

## Capstone-Final Senior Course (0)

In the senior year, students complete one of the following options:

### Option A: Senior Thesis in European Studies

- Satisfied by EURS 501, a semester-long, independent research project under the supervision of a faculty thesis director. Students should contact Lorie A. Vanchena, Coordinator of European Studies, vanchena@ku.edu, before registering for EURS 501.

- 2 additional upper-division European Studies courses. These courses can be general European or country-specific electives chosen from the course lists above.

### Option B

Courses taken during a study abroad program in Europe may fulfill co-major requirements. Students should consult with a program advisor in the Office of Study Abroad about study abroad credit.

## Co-Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

### Co-Major Hours

Satisfied by 24 hours of co-major courses.

### Major Hours in Residence

Satisfied by a minimum of 24 hours of KU resident credit in the co-major.

### Major Junior/Senior Hours

Satisfied by a minimum of 24 hours from junior/senior courses (300+) in the co-major.

### Major Junior/Senior Graduation GPA

Satisfied by a minimum of 2.0 KU GPA in junior/senior courses and in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

No more than 12 hours may be shared between a 27-hour European Studies co-major and another major.

## Departmental Honors

Honors in European Studies is open to co-majors who have earned, both at the time of entry into the program and at graduation, overall grade-point averages of 3.25 or higher and of 3.5 or higher in European Studies. A
student must complete all co-major requirements, including EURS 502 Senior Honors Thesis in European Studies, with a grade of A.

The senior honors thesis affords exceptional students the opportunity to work closely with an individual faculty member on a specific research project over an extended period of time, usually two semesters. EURS 502 Senior Honors Thesis may be combined with EURS 501 Senior Thesis in European Studies, substantially increasing the length and scope of the final thesis, or the senior honors thesis may be a separate extension of the senior thesis.

A student in EURS 502 must defend the thesis in a 1-hour oral examination with faculty. The examination committee is composed of 3 faculty members, 1 of whom must be the thesis director. The student selects the committee members in consultation with the thesis director. Students should consult a program advisor early in the junior year.

The European Studies program strongly encourages students to enroll in one of KU’s many study abroad programs in Europe.

European Studies participates in the Humanities and Western Civilization semester abroad program in Paris and Florence.

Summer language institutes offering upper-division courses in language or literature study may also qualify for European Studies co-major or minor credit. Contact a program advisor in the Office of Study Abroad (http://www.studyabroad.ku.edu), 108 Lippincott Hall, 785-864-3742.

Minor in European Studies

Why study global and international studies?

Because global and international studies will give you the tools to understand the rapid and profound changes that are occurring around the world.

Why study European studies?

European Studies, through interdisciplinary study, broadens, deepens, and strengthens a student’s knowledge and understanding of the enduring importance of our transatlantic partners, the Europeans.

Requirements for the Minor

Students selecting this minor must complete the following:

European Studies Minor Core Knowledge and Skills (21)

Second Language Skills. (3 hours) Students must complete 1 semester beyond the College general education, second language requirement (which is the completion of a fourth-semester course) in a modern western European language (Danish, Dutch, French, German, Hungarian, Italian, Portuguese, Polish, Spanish, or Swedish).

Foundational Course: Seminar in European Studies. Satisfied by:

EURS 500 Seminar in European Studies 3 or EURS 503 Europe Today

1 approved modern European history course 3

European Studies Minor Electives. Select 3 of the 4 following options:

1 approved European politics course
1 approved European economics or business course
1 approved general European culture or history course
1 approved national or regional European course

A current list of approved courses for the minor is available on the European Studies website and from the Program’s undergraduate advisor.

Note: No more than 1 course may be counted both in the minor and another degree or minor program.

Minor Hours & Minor GPA

Minor Hours

Satisfied by 18 hours of minor courses.

Minor Junior/Senior (300+) Hours in Residence

Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the minor.

Minor Junior/Senior Hours

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Global and International Studies Minor

Why study global and international studies?

Because global and international studies will give you the tools to understand the rapid and profound changes that are occurring around the world.

Why study European studies?

European Studies, through interdisciplinary study, broadens, deepens, and strengthens a student’s knowledge and understanding of the enduring importance of our transatlantic partners, the Europeans.

Requirements for the Minor

Students selecting this minor must complete the following:

GIST Minor Core Requirements

Global & International Studies Core Knowledge and Skills. Satisfied by completion of GIST 301, and one course from the following list:

GIST 301 Introduction to Global and International Studies 3

and one of the following:

ABSC 150 Community Leadership 3
ANTH 108 Introduction to Cultural Anthropology 3-4
or ANTH 109 Introduction to Cultural Anthropology, Honors
or ANTH 308 Introduction to Cultural Anthropology
ANTH 160 The Varieties of Human Experience
or ANTH 360 The Varieties of Human Experience
ECON 104 Introductory Economics 4
GIST Substantive Specialization

Global & International Studies Substantive Specialization Requirement (6 hours/2 courses). Students must take 2 courses in one of the specialization fields. The content of these courses must be global, trans-regional or relating to countries and regions outside of the student’s regional specialization.

- **Comparative Political & Social Systems.** Satisfied by 2 approved courses in comparative political and social systems.
- **International Business and the Global Economy.** Satisfied by 2 approved courses about the global economy.

- **Literature, Popular Culture, and the Arts in the Global Context.** Satisfied by 2 approved courses about literature, popular culture, and/or the arts in the global context.
- **Culture, Ethnicity, and Belief.** Satisfied by 2 approved courses about culture, ethnicity, and belief systems.
- **Gender & Sexuality in the Global Context.** Satisfied by 2 approved courses about gender and sexuality in the global context.
- **The Global Environment.** Satisfied by 2 approved courses about the global environment.

Global & International Studies Minor Foreign Language

Global & International Studies Foreign Language Course. Satisfied by completing one additional foreign language course (3 hours) beyond the 4th semester proficiency language requirement (300 level or above); or any available additional language course (3-5 hours).

Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

- **Minor Hours**
  Satisfied by 18 hours of minor courses.

- **Minor Hours in Residence**
  Satisfied by a minimum of 9 hours of KU resident credit in the minor.

- **Minor Junior/Senior Hours**
  Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

- **Minor Graduation GPA**
  Satisfied by a minimum of 2.0 KU GPA in all departmental courses (300+) in the minor. GPA calculations include all courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Minor in Jewish Studies

We offer an undergraduate minor and courses in Jewish Studies, Hebrew, and Yiddish, as well as co-sponsor courses in a variety of other units.

Among the oldest of academic interdisciplinary studies, dating back to the 19th century, Jewish studies explores Judaism, the Jewish people and culture, and their role in the shaping of human experience. The subject matter of Jewish studies makes it relevant to every department and program in the humanities and social sciences. The breadth of Jewish studies is extensive, with a strong foundation in biblical scholarship and the ancient world combined with more recent study of European, American, Mediterranean and Middle Eastern history. It can involve the study of almost every discipline -- religion, literature, folklore, sociology, anthropology, psychology, political science, philosophy, modern and ancient languages, art, music, film and theatre, law, social welfare, and women's, cultural, and American studies. Jewish studies can benefit students exploring their own identity or pursuing an interest in Western civilization. Jewish studies prepares students for graduate school; for careers in Jewish agencies, federations, and community centers or for pre-professional training. The Jewish studies minor can be readily integrated with several KU majors and programs, such as American studies, English, history, or religious studies.
Requirements for the Minor

Jewish Studies Minor Course Requirements

Student selecting this minor must complete a course in each of the following areas:

Jewish Studies

Jewish Culture or History. Satisfied by one course, for example one of the following: (3)

- JWSH 300: Topics in Jewish Studies: Israeli Politics in Society
- JWSH 311: Narratives of Jewish Life
- JWSH 327: Jewish Secular Culture

Jewish Religion. Satisfied by one course, for example one of the following: (3)

- JWSH 300: Topics in Jewish Studies: The Story of the Talmud
- JWSH 321: Religion of Ancient Israel
- JWSH 325: Introduction to Judaism

Electives. Satisfied by: (12)

- Any other JWSH course or appropriate cross-listed or cross-referenced courses in other units. (see below)
- 6 credit hours in Yiddish (YDSH) and/or in Hebrew (HEBR) at the 200-level or above may count among these 12 credit hours.
- More HEBR or YDSH courses may be approved for the minor upon petition.

Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and grade-point average minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the minor.

Minor Junior/Senior (300+) Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in all courses in the minor. GPA calculations include all courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Courses Offered in the Jewish Studies Program

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JWSH 124</td>
<td>Understanding the Bible</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 125</td>
<td>Understanding the Bible, Honors</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 177</td>
<td>First Year Seminar: _____</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 300</td>
<td>Topics in Jewish Studies:_____</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 311</td>
<td>Narratives of Jewish Life</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 318</td>
<td>Jews and Slavs in Eastern Europe</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 321</td>
<td>Religion of Ancient Israel</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 325</td>
<td>Introduction to Judaism</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 327</td>
<td>Jewish Secular Culture</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 338</td>
<td>Languages of the Jews</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 339</td>
<td>Languages of the Jews, Honors</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 340</td>
<td>Topics in Modern Jewish Literature: ____</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 343</td>
<td>The Holocaust in History</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 350</td>
<td>Contemporary Jewish Identities</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 361</td>
<td>Jewish Film</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 395</td>
<td>Study Abroad Topics in Jewish Studies: ____</td>
<td>3-6</td>
</tr>
<tr>
<td>JWSH 490</td>
<td>Directed Study in Jewish Studies</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 491</td>
<td>Directed Study in Jewish Studies, Honors</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 523</td>
<td>The Dead Sea Scrolls</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 525</td>
<td>Jews and Christians</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 526</td>
<td>Jewish History and Literature in the Greek and Roman Periods</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 560</td>
<td>Classical and Contemporary Jewish Thought</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 570</td>
<td>Studies in Judaism</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 572</td>
<td>Jewish Folklore</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 573</td>
<td>Jewish Folklore, Honors</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 600</td>
<td>Advanced Topics in Jewish Studies: ____</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 650</td>
<td>Service Learning in Jewish Studies</td>
<td>3</td>
</tr>
<tr>
<td>HEBR 110</td>
<td>Elementary Israeli Hebrew I</td>
<td>5</td>
</tr>
<tr>
<td>HEBR 120</td>
<td>Elementary Israeli Hebrew II</td>
<td>5</td>
</tr>
<tr>
<td>HEBR 177</td>
<td>First Year Seminar: _____</td>
<td>3</td>
</tr>
<tr>
<td>HEBR 210</td>
<td>Intermediate Israeli Hebrew I</td>
<td>3</td>
</tr>
<tr>
<td>HEBR 220</td>
<td>Intermediate Israeli Hebrew II</td>
<td>3</td>
</tr>
<tr>
<td>HEBR 230</td>
<td>Biblical Hebrew</td>
<td>3</td>
</tr>
<tr>
<td>HEBR 240</td>
<td>Biblical Hebrew II</td>
<td>3</td>
</tr>
<tr>
<td>HEBR 340</td>
<td>Advanced Israeli Hebrew I</td>
<td>3</td>
</tr>
<tr>
<td>HEBR 350</td>
<td>Advanced Israeli Hebrew II</td>
<td>3</td>
</tr>
<tr>
<td>HEBR 410</td>
<td>Studies in Modern Hebrew Literature</td>
<td>3</td>
</tr>
<tr>
<td>HEBR 420</td>
<td>Studies in Modern Hebrew</td>
<td>3</td>
</tr>
<tr>
<td>HEBR 490</td>
<td>Independent Study</td>
<td>1-3</td>
</tr>
<tr>
<td>YDSH 104</td>
<td>Elementary Yiddish I</td>
<td>5</td>
</tr>
<tr>
<td>YDSH 108</td>
<td>Elementary Yiddish II</td>
<td>5</td>
</tr>
<tr>
<td>YDSH 177</td>
<td>First Year Seminar: _____</td>
<td>3</td>
</tr>
<tr>
<td>YDSH 212</td>
<td>Intermediate Yiddish I</td>
<td>3</td>
</tr>
<tr>
<td>YDSH 216</td>
<td>Intermediate Yiddish II</td>
<td>3</td>
</tr>
<tr>
<td>YDSH 300</td>
<td>Studies in Yiddish: _____</td>
<td>3</td>
</tr>
<tr>
<td>YDSH 395</td>
<td>Study Abroad Topics in Yiddish: ____</td>
<td>3-6</td>
</tr>
<tr>
<td>YDSH 490</td>
<td>Independent Study</td>
<td>1-3</td>
</tr>
</tbody>
</table>

Cross-Referenced Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 344</td>
<td>Case Study in American Studies: _____ (Jewish-American Literature and Culture (service-learning course only))</td>
<td>3</td>
</tr>
<tr>
<td>AMS 494</td>
<td>Topics in:____ (Jewish-American Literature and Culture)</td>
<td>1-4</td>
</tr>
<tr>
<td>AMS 494</td>
<td>Topics in:____ (Blacks and Jews in the United States)</td>
<td>1-4</td>
</tr>
<tr>
<td>AMS 696</td>
<td>Studies in:____ (Biography of a City: Jerusalem: 3000 Year History)</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 465</td>
<td>Genocide and Ethnocide</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 203</td>
<td>Topics in Reading and Writing: ____ (Holocaust Literature)</td>
<td>3</td>
</tr>
</tbody>
</table>
Middle East Studies Minor

The minor in Middle East Studies provides students with in-depth knowledge of the Middle East and complements many majors within the College as well as other degrees across the University. In addition, the Middle East Studies minor prepares students for careers in international business, government, and other related fields.

Requirements for the Minor

<table>
<thead>
<tr>
<th>Core Courses (6)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>REL 350</td>
<td>Islam</td>
</tr>
<tr>
<td>and</td>
<td></td>
</tr>
<tr>
<td>POLS 661</td>
<td>Politics of the Middle East</td>
</tr>
<tr>
<td>or HIST 328</td>
<td>The Modern Middle East</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives (12)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GIST 201</td>
<td>Topics in: _____</td>
</tr>
<tr>
<td>GIST 424</td>
<td>Nationalism(s) in Turkey</td>
</tr>
<tr>
<td>GIST 530</td>
<td>Politics and Society in the Contemporary Persianate World</td>
</tr>
<tr>
<td>GIST 624</td>
<td>Social Movements in the Middle East</td>
</tr>
<tr>
<td>POLS 661</td>
<td>Politics of the Middle East</td>
</tr>
<tr>
<td>POLS 663</td>
<td>Protest and Revolution</td>
</tr>
<tr>
<td>POLS 667</td>
<td>Islam and Politics</td>
</tr>
<tr>
<td>POLS 670</td>
<td>United States Foreign Policy</td>
</tr>
<tr>
<td>SOC 532</td>
<td>Sociology of the Middle East</td>
</tr>
<tr>
<td>or JWSH 300</td>
<td>Topics in Jewish Studies:_____</td>
</tr>
</tbody>
</table>

**Middle East Studies Minor Hours & GPA**

While completing all required courses, minors must also meet each of the following hour and grade point average minimum standards:

**Minor Hours**

Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**

Satisfied by a minimum of 9 hours of junior/senior (300+) hours of KU resident credit in the minor.

**Minor Junior/Senior (300+) Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**

Satisfied by a minimum of a 2.0 GPA in all departmental courses in the Minor. GPA calculations include all departmental courses in the field of study including Fs and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).
Master of Arts in Global and International Studies

Why study global and international studies?

Because global and international studies will give you the tools to understand the rapid and profound changes that are occurring around the world.

Why study European studies?

European Studies, through interdisciplinary study, broadens, deepens, and strengthens a student’s knowledge and understanding of the enduring importance of our transatlantic partners, the Europeans.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Students are admitted for both fall and spring semesters. Applicants must submit the following materials:

1. An application with appropriate application fee,
2. 1 official transcript from each institution of higher education attended for undergraduate and graduate work,
3. A 500- to 1,000-word essay outlining relevant experiences and reasons for pursuing this degree,
4. A current résumé,
5. 3 letters of recommendation sent directly from the references, and
6. Graduate Record Examination scores (Law School Admission Test or Graduate Management Admission Test results are acceptable substitutes).

International students also must submit Test of English as a Foreign Language scores for an examination taken within the past 2 years, unless they hold degrees from English-speaking institutions.

All materials must be received before the application can be evaluated. More information about the application process can be found on the program’s website (http://global.ku.edu). In general, to enter this program, a student must have a bachelor’s degree from an accredited institution with at least a 3.0 grade-point average on a 4.0 scale; admitted students typically have grade-point averages well above 3.0. Materials are reviewed by a subcommittee of the program advisory committee, which also considers the applicant’s overall record and prospects for success.

Submit your graduate application (http://www.graduate.ku.edu) and fee online. Send all other application materials to the following address:

The University of Kansas Lawrence Campus

Global and International Studies Applications
Attn: Alyssa McDonald
1440 Jayhawk BLVD, 310 Bailey Hall
Lawrence, KS 66045

or

The University of Kansas Edwards Campus
Global and International Studies Applications
Attn: Michelle Welch
12600 Quivera Road
Overland Park, KS 66213

The new concentration, called the Foreign Affairs Studies (FAS) concentration, will allow a student to focus on a specific world area while earning the Global and International Studies MA. The first world area focus to be offered will be “Middle East and North Africa.”

The FAS concentration is designed to meet the needs of Army Foreign Affairs Officers (FAOs), but it is also expected to attract civilian students with comparable language training and in-country experience. It will allow such well-prepared students to deepen and diversify their area expertise and, because it will be an intensive program that will run fall-spring-summer, it will allow FAOs to complete the MA within the 12-month constraint set by the Army’s FAO program.

Required (9) 9
GIST 701 Approaches to International Studies
GIST 710 Interdisciplinary Research Methods for Global Contexts
GIST 898 Thesis Writing

Concentration (12) 12
4 regional focus courses

Electives (9) 9
3 regionally-relevant courses

Total Hours 30

M.A. Degree Requirements
KU Edwards Campus

The Master of Arts in Global and International Studies is a 33-credit-hour degree. All students complete 3 required courses:

GIST 701 Approaches to International Studies 3
GIST 702 Globalization 3
GIST 710 Interdisciplinary Research Methods for Global Contexts 3

The first two courses (GIST 701, GIST 702) should be taken early in the program while GIST 710 should be taken in the 2nd year or later. In addition to the three required courses, students must then complete 7 graduate-level elective courses (21 credit hours).

These electives form 2 coherent clusters: One cluster must be around a world region, such as the Middle East, Africa, Asia, Latin America, Russia and Eurasia, or Western Europe. The other cluster must focus on a topic specialization approved by the student’s adviser. Students can choose logical themes, such as international law or international political institutions, or they can select an existing concentration with global relevance from a department that offers such programs, such as...
community health and development, peace and conflict, women gender and sexuality studies, international business, or multiple options for concentration from Public Administration.

For all students, the M.A. degree also requires evidence of current competence (equivalent to 2 years of successful college-level study) in a modern spoken and written language other than English; courses taken to complete this requirement generally do not count toward the degree. Students must meet all general requirements as well as program requirements.

**Thesis Option**

Students electing to write a thesis must have their thesis project proposal approved by their thesis advisor and either the Center Director or the Center’s Graduate Coordinator. Following project approval, the student must also enroll in the thesis writing course (GIST 898) and complete a significant original research project approved by a faculty committee.

**Nonthesis Option**

Students pursuing the nonthesis option are still required to take GIST 710 and must complete an additional 3 credit hours that correspond to one of their two coherent clusters. In the final semester, the student must successfully complete a written examination over the core course content and the student’s regional and topic concentrations as well as an oral examination.

**Regional Specializations**

These courses give students substantial knowledge about a selected region of the world. Up to 3 language courses (9 hours) at or above the 500 level may count toward this requirement. Regional specializations usually correspond to one of the regions below, which are regularly covered by KU’s area studies programs:

- Africa
- East Asia
- Latin America
- Middle East and North America
- Eastern Europe, Russia and Eurasia
- Western Europe

A student may petition to focus on a region that does not correspond to these regional boundaries, like South Asia, for instance. The petition is granted only if the program committee and director are assured that the student has a qualified academic advisor with expert knowledge of that area and relevant course options are available.

**Topic Specialization**

Topic specialization courses allow the student to develop an understanding of a particular issue of interest that reaches across national and regional borders. Topics might include gender and development, international conflict, intercultural communication, international politics, globalization, international business, global urbanization, peace studies, or another topic approved by the director. The courses below are examples of electives that might be used in some of these areas; each student works with an advisor to identify appropriate courses.

**International Culture and Communications** focuses on issues of culture, ethnicity, diversity, and cross-cultural communications and examines how various cultures around the world deal with outside influences and define themselves as distinctive societies. Sample courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAS 560</td>
<td>Race, Gender, and Post-Colonial Discourses</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 674</td>
<td>Political Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>COMS 647</td>
<td>Issues in Intercultural Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 774</td>
<td>Topics in Literatures of Africa and the African Diaspora</td>
<td>3</td>
</tr>
<tr>
<td>FMS 813</td>
<td>Development of the International Sound Film</td>
<td>3</td>
</tr>
<tr>
<td>HWC 500</td>
<td>Studies in:</td>
<td>3</td>
</tr>
<tr>
<td>SOC 626</td>
<td>Religion and Society</td>
<td>3</td>
</tr>
</tbody>
</table>

**International Politics and Policies** addresses foreign policy, comparative public policy, general theories of international relations and comparative politics, and current global issues. Sample courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAS 554</td>
<td>Contemporary Health Issues in Africa</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 571</td>
<td>Violence, Aggression, and Terrorism in the Modern World</td>
<td>3-4</td>
</tr>
<tr>
<td>ANTH 674</td>
<td>Political Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 864</td>
<td>International Issues in the K-12 Classroom</td>
<td>3</td>
</tr>
<tr>
<td>POLS 670</td>
<td>United States Foreign Policy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 673</td>
<td>International Organization</td>
<td>3</td>
</tr>
<tr>
<td>POLS 774</td>
<td>International Law</td>
<td>3</td>
</tr>
<tr>
<td>SOC 672</td>
<td>Sociology of War and Peace</td>
<td>3</td>
</tr>
</tbody>
</table>

**International Business and Economics** offers a foundation in global business and economics, economic history, and political economy. Sample courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 835</td>
<td>Comparative Economic Systems</td>
<td>3</td>
</tr>
<tr>
<td>HIST 509</td>
<td>Multinational Corporations: The Role of Money and Power</td>
<td>3</td>
</tr>
<tr>
<td>HIST 528/ECON 535</td>
<td>Economic History of Europe</td>
<td>3</td>
</tr>
<tr>
<td>IBUS 701</td>
<td>International Business</td>
<td>2</td>
</tr>
</tbody>
</table>

**Global Master of Arts/Master of Business Administration**

When you earn a Global MA/MBA, a dual degree program from the Center for Global and International Studies and the School of Business at the University of Kansas, you’ll receive a well-rounded education that not only supports your career goals, but also incorporates both the theoretical background and practical experience needed to succeed in today’s ever-changing global economy. This program synthesizes critical knowledge of the contemporary social, cultural, and political global context with the tremendous skills acquired from KU’s excellent MBA program. This dual degree option was designed in particular for working professionals who wanted to take advantage of the convenient options available at the Edwards Campus in Overland Park.

The Global MA/MBA Program includes 56 hours of coursework and is structured to be completed in three years. New students are admitted each fall semester. Classes are offered weekday evenings at the Edwards Campus. KU’s Global MA/MBA program is designed for business leaders, from the recent college graduate to the seasoned executive with an eye toward global opportunities. If you are looking to advance, re-brand,
Admission to the Global MA/MBA Dual Degree Program

The Global MA/MBA program is open to those who have earned baccalaureate degrees from accredited colleges or universities and whose undergraduate academic records, scores on the required standardized examination, and prior work experience indicate that they have the capability to complete the program. Admission to all programs in business is reviewed by the MBA Admissions Committee and the graduate admissions committee in Global and International Studies. Those who have not completed a baccalaureate degree are not eligible for enrollment in MBA courses.

Applicants for the Global MA/MBA graduate program must take the Graduate Management Admission Test (http://www.mba.com/us/the-gmat-exam/register.aspx) administered by Pearson VUE. The GMAT is administered in most foreign countries and by appointment at designated testing centers throughout the United States. The test typically is taken during the academic year before the term for which admission is sought.

Students whose native language is not English or who have not completed a degree from a college or university in the United States, Great Britain, Canada, or Australia must also have a score of at least 600 for the MBA program on the Test of English as a Foreign Language. A minimum score of 57 on each of the three sections of the TOEFL is required. For students taking the computerized version of the TOEFL, an overall score of 250 is required, with a minimum score of 23 on each of the 3 sections of the test.

All applications for admission to the Global MA/MBA program must include:

1. Graduate application (http://graduate.ku.edu/ku-graduate-application);
2. 3 essays;
3. An official transcript from each college or university that conferred a degree;
4. 2 letters of recommendation from faculty members and/or employers;
5. Scores on the GMAT and scores on the TOEFL if required;
6. A $65 nonrefundable application fee ($75 for international applicants); and
7. A current résumé.

Completed applications are reviewed by the MBA committee and GIST committee and action is taken on them on a rolling basis. Each applicant is notified by email of the action taken on his or her application.

Admission to any graduate program in business is subject to and in accordance with all rules and regulations of the University of Kansas. See the Graduate Studies Admission (http://policy.ku.edu/graduate-studies/admission-to-graduate-study?num1_1=) policy in the KU online Policy Library for more information.

Submit your graduate application online (http://graduate.ku.edu/ku-graduate-application). Send original transcripts of all completed college and university coursework and all other requested application materials to the School of Business MBA Office:

The University of Kansas
School of Business
MBA Admissions Coordinator

Summerfield Hall
1300 Sunnyside Ave., Room 124
Lawrence, KS 66045-7543

Degree Requirements

To complete the Global MA/MBA dual degree program, students must meet the following sets of requirements, uniquely designed for this particular dual program. Within the dual program, the Master of Arts in GIST portion of the degree requires 30 credit hours, 6 of which are considered as overlapping with the MBA degree. All students complete 4 required courses (12 credit hours):

- GIST 701 Approaches to International Studies 3
- GIST 702 Globalization 3
- GIST 710 Interdisciplinary Research Methods for Global Contexts 3
- GIST 898 Thesis Writing 3

Beyond this, students must also take 4 additional elective courses (12 credit hours) on regional or internationally-themed foci. Students could focus on a world region, such as the Middle East, Africa, Asia, Latin America, Russia and Eurasia, or Western Europe, and/or take classes on contemporary international themes, such as law, domestic or international political dynamics, gender, environment, peace and conflict studies in their global or international context.

For all students, the M.A. degree also requires evidence of current competence (equivalent to 2 years of successful college-level study) in a modern spoken and written language other than English; courses taken to complete this requirement generally do not count toward the degree. Students must meet all general requirements as well as program requirements in accordance with all rules and regulations of the University of Kansas. See the Graduate Studies Admission (http://policy.ku.edu/graduate-studies/admission-to-graduate-study?num1_1=) policy in the KU online Policy Library for more information.

In conjunction with the requirements for the MBA portion of the dual degree, the following courses are counted as also meeting a thematic specialization within the Global and International Studies MA:

- IBUS 701 International Business 2
- MGMT 701 Organizational Behavior 2
- MGMT 704 Strategic Management 2

The additional 26 hours required for the MBA degree come from the following 18 hours of required courses:

- ACCT 701 Financial Accounting 2
- BE 701 Business Economics 2
- BLAW 701 Introduction to the Legal Environment of Business 2
- DSCI 701 Statistical Decision Making 2
- FIN 701 Financial Management 2
- IST 701 Managerial Information Systems 2
- MGMT 705 Ethical Decision Making in Business 2
- MKTG 701 Marketing Management 2
- SCM 701 Introduction to Supply Chain Management 2

The final 8 hours in the MBA degree (4 courses) are advanced core electives that build off of these foundational courses.
Graduate Certificate in Global and International Studies

The Global & International Studies (GIST) certificate is a 12-unit/4-course certificate designed for KU graduate students from other disciplines and working professionals in the Kansas City area, but students located near the Lawrence campus or in graduate programs on the Lawrence campus are also welcome to consider the graduate certificate option. The graduate-level certificate coursework fits particularly well with the other graduate programs at the Edwards Campus (http://edwardscampus.ku.edu/about-ku-edwards-campus) in Overland Park and allows students to gain expertise in globalization and international issues in approximately one year (or less) of study.

Admissions for Current KU Graduate Students

Current KU graduate students must submit the following materials:

1. Online application (http://www.graduate.ku.edu/ku-graduate-application) along with a $30 application fee.
2. A letter of support from a departmental advisor.
3. A current copy of the student’s KU advising report (DPR) showing a GPA of 3.00 or higher.

Admissions for Working Professionals

Working professionals seeking only the GIST certificate at KU must submit the following materials:

1. Online application (http://www.graduate.ku.edu/ku-graduate-application) along with a $30 application fee.
2. An official transcript copy from their degree-granting undergraduate institution showing a 3.00 GPA or higher. (Exceptions may be granted at the discretion of the admissions committee.)
3. A statement of purpose of 250-500 words describing the applicant’s interest in Global & International Studies and their professional goals.
4. A current resume. (Optional)

Admission Deadlines

We recommend that domestic applicants apply by August 1 for fall semesters and January 1 for spring semesters. International applicants should apply by June 15 for fall semesters and November 15 for spring semesters.

Questions? Please contact one of our graduate advisors, Michelle Welch (for Edwards campus applicants) at michelle.welch@ku.edu, or Alyssa McDonald (for Lawrence campus applicants) at mcdonalda@ku.edu for more information.

The certificate requires the completion of one core course (either GIST 701 Approaches to International Studies or GIST 702 Globalization), an elective in a regional area, an elective in a topical area of focus, and one general internationally-focused elective. Students will work with the graduate advisor and graduate director to choose appropriate electives. You can view our certificate checklist here (http://global.ku.edu/sites/global.ku.edu/files/docs/CertificateChecklist_forWeb_Fall2014-Present.pdf).

Department of History

Studying history at the University of Kansas will expand your mind. Our course offerings introduce students to medieval witches and Samurai warriors, conspiracy cranks and Native American prophets, Chairman Mao and the Black Panthers. Students can take courses on the history of sexuality, or, if that isn’t exciting enough, courses on natural disasters, wars, and plagues. With 35 tenured and tenure-track faculty, the Department of History covers the globe.

But studying history is more than just an entertaining adventure. Training in historical research, analysis, and writing develops skills that are essential in our information economy, and this preparation is especially useful to students planning to pursue graduate training and careers in law, public policy, journalism, education, and a universe of other possibilities, as our recent undergraduate and graduate alumni throughout the world can attest.

The Department of History at KU offers an outstanding undergraduate program with approximately 250 majors and an additional group of History minors. These students are taught by faculty who consistently win awards for their teaching as well as their research. Beyond the introductory level, class sizes are small, including two required seminars that are capped at fifteen students each, and the optional Senior Honors Thesis, which features direct one-on-one advising with a faculty mentor.

Our graduate program has consistently ranked in the top 25 among public research universities. With an average of 80 graduate students enrolled, we are primarily a doctoral program, granting Ph.D. degrees in standard geographical areas such as the United States, Europe, Asia, Africa, the Middle East, and Latin America, as well as in thematic fields such as military, environmental, and gender and sexuality. Recent Ph.D. recipients have gone on to tenure-track positions at research universities, liberal arts colleges, junior colleges, and a variety of non-academic careers.

Finally, faculty in the Department of History are nationally and even internationally known for their research. The books and articles they have published just in the last two years are too numerous to list here, but you can scroll through the faculty page to gain a sense of their significance shaping our knowledge about the world. Their productivity plays an important role in helping KU maintain its position in the prestigious American Association of Universities.

Take some time to search through our website. You’ll find information about our programs, our courses, and our prolific faculty, and you can hear the voices of undergraduates and graduate students who have passed through the Department. Please feel free to contact any of the administrative staff, faculty, and faculty officers with your questions.

Undergraduate Programs

The History Department at the University of Kansas is particularly distinguished in undergraduate teaching. Previous honors include the Excellence in Undergraduate Advising Award from the College of Liberal Arts and Sciences.

In addition, many History faculty members have won individual awards for their teaching, such as the Kemper Prize and Distinguished Professor awards. The department as a whole ranks well above the University average in student evaluations.

- Faculty (http://www.history.ku.edu/%7Ehistory/faculty) in the department are often nationally and internationally recognized leaders
in their field, and they bring this advanced knowledge to bear on their teaching.

- Courses (http://www.catalogs.ku.edu/undergraduate/majors/History.pdf) in the department are usually small, and the larger courses always include Teaching Assistants, so students can receive individual attention and feedback on their work.

- Flexibility is given in the department: students have only two required courses—a course on historical methods and a senior research seminar—and a choice of concentrating on any of ten fields, as well as the opportunity to design their own major. The department and faculty also have links to interdisciplinary work in Environmental Studies, African and African-American Studies, Indigenous Nations Studies, and other area studies programs.

- Resources for history research at KU are rich. Watson and Anschutz libraries help make up a major research library collection, and the Spencer Library offers such resources as the Wilcox Collection on extremist politics, the University Archives, and major collections in British history, among others.

- For more information, see the History Major Program Description (http://www.history.ku.edu/under/pdfs/UG%20Major%20Hand%20Out.pdf).

### Courses for Nonmajors

The department offers courses that span time (from ancient to contemporary history) and space (North and South America, Europe, Asia, and Africa). The department offers courses in social history, including the history of women and the family, African-American and Native American history, and topical courses in such areas as politics, diplomacy, war and society, culture, the environment, ideas, cities, economics, and religion. History courses are cross-listed with a variety of departments and programs.

### Graduate Programs

The Department of History (http://www.history.ku.edu/about.shtml) at the University of Kansas is a dynamic place, with a proud tradition of training scholars from across the globe who have transformed the practice of history. The program offers major or minor concentrations in the areas of United States, African American, Modern European, British & Imperial, Russian/East European, East Asian, Latin American, African, Medieval, Women and Gender, Military, and Environmental History. KU offers its graduate students great flexibility in their choice of fields, as defined both by traditional geographical and chronological parameters and thematic topics. Students also have the opportunity to take coursework outside the department in fields such as Public History, Museum Studies, Environmental Studies, and the History of Medicine.

Primarily a doctoral program, the Department currently enrolls approximately 80 graduate students from throughout the United States and the world, including Japan, China, Peru, and Russia. Our students make up a very diverse group, and we encourage applicants from traditional and non-traditional backgrounds.

For statistics regarding our program, please see our Doctoral Program Profile (http://www.gra...), which demonstrates our success at funding and placing current and recent graduates.

### Courses

**HIST 101. Introduction to History: _____. 3 Hours. HT GE11 / H.**

An introduction to the study of history. The course will expose the student to the major issues and methods of historical study. This will be done through the study of a specific historical period or topical area. In the study of this period or topic, students will be introduced to schemes of interpretation, critical readings and analysis, primary sources, and evaluation of evidence. LEC.

**HIST 102. Introduction to History, Honors: _____. 3 Hours. HT / H.**

An introduction to the study of history. The course will expose the student to the major issues and methods of historical study. This will be done through the study of a specific historical period or topical area. In the study of this period or topic, students will be introduced to schemes of interpretation, critical readings and analysis, primary sources, and evaluation of evidence. Prerequisite: Membership in the College Honors Program or consent of department. LEC.

**HIST 103. Environment and History. 3 Hours. H.**

Nature is our oldest home and newest challenge. This course surveys the environmental history of the earth from the extinction of the dinosaurs to the present with a focus on the changing ecological role of humans. It analyzes cases of ecological stability, compares cultural attitudes toward nature, and asks why this ancient relationship seems so troubled. (Same as EVRN 103.) LEC.

**HIST 104. Introduction to African History. 3 Hours. NW GE11/GE3H / H/W.**

An introduction to important historical developments in Africa mainly south of the Sahara. Topics will include early history, empires, kingdoms, and city-states, the slave trade, southern Africa, partition and colonialism, the independence era, military and civilian governments, and liberation movements. Approaches will include literature, the visual arts, politics, economics, and geography. (Same as AAAS 105.) LEC.

**HIST 105. Introduction to Ancient Near Eastern and Greek History. 3 Hours. NW GE3H / H/W.**

A general survey of the political, social, and economic developments of Mesopotamia, Egypt, Asia Minor, and Greece from Paleolithic times to 323 B.C. LEC.

**HIST 106. Introduction to Roman History. 3 Hours. H/W.**

A general survey of the political, social, and economic developments of ancient Rome from 753 B.C. to 475 A.D. LEC.

**HIST 107. Introduction to the Ancient World. 3 Hours. H.**

This course covers the history of the ancient Near East, Greece and Rome with emphasis on the origins of agriculture, writing, cities, empires, and democracy. Students will be introduced to schemes of interpretation, critical readings, and analysis, primary sources, and evaluation of evidence. LEC.

**HIST 108. Medieval History. 3 Hours. HT GE11 / H/W.**

The history of Europe from the Barbarian Invasions to the beginning of the 16th century. LEC.

**HIST 109. The Black Experience in the Americas. 3 Hours. HT AE41 / H/W.**

An interdisciplinary study of the history of the African peoples of the New World, relating their cultures and institutions to the African background and to their peculiar New World experiences up to and including the nineteenth century. While the main emphasis is on the U.S.A., attention is also paid to the Caribbean and Latin America. Approaches include demography, economics, social and political developments, literature, and music. (Same as AAAS 106.) LEC.
HIST 111. Introduction to African History, Honors. 3 Hours. NW / H/W.
An intensive version of AAAS 105/HIST 104. An introduction to important historical developments in Africa, mainly south of the Sahara. Topics include early history, empires, kingdoms and city-states, the slave trade, southern Africa, partition and colonialism, the independence era, military and civilian governments, and liberation movements. Approaches include literature, the visual arts, politics, economics, and geography. Open only to students in the University Honors Program or by consent of instructor. (Same as AAAS 115.) LEC.

HIST 112. Introduction to British History. 3 Hours. H.
This course will introduce students to the concepts, issues, and methods of historical study, at the same time as it explores the main processes and events which shaped the history of Britain and its imperial dependencies. Students will be introduced to the nature and validity of different historical interpretations, and to the purpose and merit of historical writings. LEC.

HIST 113. Europe 1500-1789, Honors. 3 Hours. HT / H.
An introduction to early modern European history, with emphasis on the cultural, political, economic, and social processes and events which helped to shape the modern world: The renaissance, the rise of the nation states, the Reformation, absolutism, and constitutionalism, the Enlightenment, and the coming of the French Revolution. Not open to students who have taken HIST 114. This Honors course is a Humanities Historical Studies Principal Course. Prerequisite: Membership in the College Honors Program or consent of department. LEC.

HIST 114. Renaissance to Revolution: Europe 1500-1789. 3 Hours. HT GE11 / H/W.
An introduction to early modern European history, with emphasis on the cultural, political, economic, and cultural forces which have helped to shape the modern world. The renaissance, the rise of nation states, the Reformation, absolutism and constitutionalism, the Enlightenment, and the coming of the French Revolution. LEC.

HIST 115. French Revolution to the Present: Europe 1789-Present. 3 Hours. HT GE11/GE3H / H/W.
An introduction to recent European history, with emphasis on the social, political, economic, and cultural forces which have helped to create the Europe of today: the French Revolution, the romantic movement, the revolutions of 1848, nationalism, imperialism, Communism, and two World Wars, the cold war, and its aftermath. LEC.

HIST 116. French Revolution to the Present: Europe 1789 to Present, Honors. 3 Hours. HT GE11/GE3H / H.
An introduction to recent European history, with emphasis on the social, political, economic, and cultural forces which have helped to create the Europe of today: The French Revolution, the romantic movement, the revolutions of 1848, nationalism, imperialism, Communism, and two World Wars, the cold war and its aftermath. Not open to students who have taken HIST 115. This Honors course is a Humanities Historical Studies Principal Course. Prerequisite: Membership in the College Honors Program or consent of department. LEC.

HIST 117. Russia, an Introductory History. 3 Hours. HT / H/W.
A survey of the evolution of Russia from its origins to the present. The focus will be on the interaction of government and society and on internal and external pressures affecting modernization and reform, revolution, and territorial expansion. LEC.

HIST 118. History of East Asia. 3 Hours. NW AE42 / H/W.
A survey of the history of China, Japan, Korea, and other cultures in East Asia from premodern to modern times. Students are introduced to the major currents of East Asian history and historical methods used to study them. Not open to students with credit in upper division East Asian history. LEC.

HIST 119. History of East Asia, Honors. 3 Hours. NW AE42 / H/W.
A survey of the history of China, Japan, Korea, and other cultures in East Asia from premodern to modern times. Students are introduced to the major currents of East Asian history and historical methods used to study them. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

HIST 120. Colonial Latin America. 3 Hours. NW AE42/GE3H / H/W.
The principal focus is on the evolution and analysis of societies, economies, and religions of native American peoples, the impact of Spanish and Portuguese conquests and settlement, government, trade and culture upon native civilizations, the influence of African population and culture, and the creole nature of the resulting society in the colonial period. Changes in the society and economy which presaged the movements for independence are also discussed. LEC.

HIST 121. Modern Latin America. 3 Hours. HT GE3H / H/W.
Students are introduced to historical analysis within the context of the emergence of national identities and the process of modernization in the region. It also discusses key processes such as urbanization and industrialization and examines social movements for reform or revolution in the 20th Century. The course compares social, cultural, economic, and political changes across a variety of countries since 1810, giving particular attention to the legacies of colonialism. In this way the course deals with interpretations of the processes and movements and major issues of Latin American historiography. LEC.

HIST 122. Colonial Latin America, Honors. 3 Hours. NW AE42/GE3H / H/W.
The principal focus is on the evolution and analysis of societies, economies, and religions of native American peoples, the impact of Spanish and Portuguese conquests and settlement, government, trade and culture upon native civilizations, the influence of African population and culture, and the creole nature of the resulting society in the colonial period. Changes in the society and economy which presaged the movements for independence are also discussed. Prerequisite: Membership in the College Honors Program or permission of instructor. LEC.

HIST 123. Modern Latin America, Honors. 3 Hours. HT GE3H / W.
Similar in content to HIST 121. Students are introduced to historical analysis within the context of the emergence of national identities and the process of modernization in the region. The course compares social, cultural, economic, and political changes across a variety of countries since 1810, giving particular attention to the legacies of colonialism. It also discusses key processes such as urbanization and industrialization and examines social movements for reform and revolution in the 20th century. In this way the course deals with interpretations of these processes and movements and major issues of Latin American historiography. Prerequisite: Membership in the University Honors Program or permission of instructor. LEC.

HIST 124. Latin American Culture and Society. 3 Hours. SC AE42 / S.
An introduction to the interdisciplinary study of Latin America, as manifest in the arts and literature, history, and in environmental, political, economic, and social realities. Explores and critiques the principal themes and methodologies of Latin American Studies, with an aim towards synthesizing contributions from several different disciplines. Emphasizes the unique insights and perspectives made possible by interdisciplinary collaboration and provides students with the basic knowledge base for understanding Latin America today. (Same as LAA 100.) LEC.
HIST 128. History of the United States Through the Civil War. 3 Hours. HT GE3H / H.
A historical survey of the United States from the peopling of the continent through the Civil War. This survey is designed to reflect the diversity of the American experience, to offer the student a chronological perspective on the history of the United States, and to explore the main themes, issues, ideas, and events which shaped that history. LEC.

HIST 129. History of the United States After the Civil War. 3 Hours. HT GE3H / H.
A historical survey of the American people from Reconstruction to the present. This survey is designed to reflect the diversity of the American experience, to offer the student a chronological perspective on the history of the United States, and to explore the main themes, issues, ideas, and events which shaped that history. Not open to students who have taken HIST 128. Prerequisite: Membership in the College Honors Program or consent of department. LEC.

HIST 130. History of the United States Through the Civil War, Honors. 3 Hours. HT GE3H / H.
A historical survey of the United States from the peopling of the continent through the Civil War. This survey is designed to reflect the diversity of the American experience, to offer the student a chronological perspective on the history of the United States, and to explore the main themes, issues, ideas, and events which shaped that history. Not open to students who have taken HIST 128. Prerequisite: Membership in the College Honors Program or consent of department. LEC.

HIST 131. History of the United States After the Civil War, Honors. 3 Hours. HT GE3H / H.
A historical survey of the American people from Reconstruction to the present. This survey is designed to reflect the diversity of the American experience, to offer the student a chronological perspective on the history of the United States, and to explore the main themes, issues, ideas, and events which shaped that history. Not open to students who have taken HIST 129. Prerequisite: Membership in the College Honors Program or consent of department. LEC.

HIST 136. Early Science to 1700. 3 Hours. H.
Surveys the Western scientific tradition from roots in ancient Egypt, Mesopotamia, and Greece to the Scientific Revolution in seventeenth-century Europe. Focuses on the theoretical, methodological, and institutional development of the physical and bio-medical sciences. Addresses interactions of science with the technological, religious, philosophical, and social dimensions of Western culture. LEC.

HIST 137. History of Modern Science. 3 Hours. H.
Surveys the history of science from the seventeenth century to the present with study of the changing theoretical, institutional, and social character of the scientific enterprise. Addresses physical, biological, and social sciences with attention to the chemical revolution at the turn of the nineteenth century, evolutionary biology, the new physics of the early twentieth century, and the professionalization of social science. Relates scientific changes to historical developments in technology, religion, national traditions in Europe and the USA, and non-Western cultures. LEC.

HIST 140. Global Environment I: The Discovery of Environmental Change. 5 Hours. GE3H / U.
This interdisciplinary course and laboratory sections survey the foundations of environmental understanding and the process of scientific discovery from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the history of environmental systems and life on earth, the discovery of biotic evolution, ecological change, and climate change. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as EVRN 140 and GEOG 140.) LEC.

HIST 142. Global Environment II: The Ecology of Human Civilization. 5 Hours. GE3H / U.
This interdisciplinary course and its laboratory sections survey the history of humanity's relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the ecology of colonialism and industrial civilization, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to humanity's engagement with the global environment using historical and present-day examples. (Same as EVRN 142 and GEOG 142) LEC.

HIST 144. Global Environment I: The Discovery of Environmental Change, Honors. 5 Hours. U.
This interdisciplinary course surveys the foundations of environmental understanding and the process of scientific discovery from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the history of environmental systems and life on earth, the discovery of biotic evolution, ecological change, and climate change. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as GEOG 144 and EVRN 144.) Open only to students admitted to the University Honors Program or by permission of instructor. LEC.

HIST 145. Global Environment II: The Ecology of Human Civilization, Honors. 5 Hours. U.
This interdisciplinary course and its laboratory sections survey the history of humanity's relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the ecology of colonialism and industrial civilization, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to humanity's engagement with the global environment using historical and present-day examples. (Same as EVRN 145 and GEOG 145.) Open only to students in the University Honors Program or by permission of instructor. LEC.

HIST 160. Introduction to West African History. 3 Hours. NW AE42/GE3H / H.
This course treats West African history through the first part of the 20th century. The student is provided with a perspective on the major historical patterns that gave rise to West Africa's development as an integral part of world history. Special attention is paid to anthropological geographical, and technological developments that influenced West African political and socioeconomic changes. (Same as AAAS 160.) LEC.

HIST 177. First Year Seminar: _____ 3 Hours. HT GE11.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in history. May not contribute to major requirements in history. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.
HIST 206. Disasters in Mediterranean Antiquity. 3 Hours. H.
This course examines a variety of natural and man-made disasters in the ancient Mediterranean world including floods, volcanic eruptions, earthquakes, famines, plagues, and tsunamis. Emphasis throughout is on exploring the range of impacts, responses, and attempts at recovery documented by ancient sources and proposed by modern scholars. The focus lies on primary evidence, ranging from the Bible to Greece and Rome via Egypt and Mesopotamia. The course aims to familiarize students with several types of catastrophic events that occurred in antiquity in order to gain an understanding of their effects on the environment and on decision making process. In addition to investigating what these disasters entailed, we seek to appreciate how they affected societies in various ways including economically, psychologically, and demographically, and how individuals and governments reacted and responded to these crises. LEC.

HIST 210. Brazil and Africa: Atlantic Encounters. 3 Hours. H.
This is a survey course on the history of the relationships between Brazil and Western Africa from the sixteenth century onward. We examine the shape of the Atlantic world, the nature of the Portuguese empire in Brazil and Africa, the presence of Brazilian-born agents in Western Africa, the cultural exchanges, the impact of colonial rule, and the responses of indigenous societies to these developments. Among the topics to receive attention are Brazil/Portuguese slave trade; slavery in Western Africa, urban and rural context of African slavery in Brazil; the family and religious life in both sides of the Atlantic; Brazilian communities in the coast of Africa; the abolition of slavery; and the long lasting relationships between Western Africa and Brazil. Students develop familiarity with major historical concepts, themes, and subjects. The course also aims to explore history as process to make sense of the past and the present. (Same as AAAS 210.) LEC.

HIST 220. A Global History of Human Health. 3 Hours. H.
This course surveys how human populations have experienced diseases including those induced by infectious microbes, environmental agents, and dietary causes from prehistoric hunter-gatherer societies to today's global population. Particular emphasis is on major transitions and historical events that have had led to major epidemics. These transitions and events include but are not limited to the transition to agriculture, urbanization, imperial expansion, colonialism, industrialization, world wars, factory farming, and the transportation revolution. The development of medicine, public policies, and global health organizations is a central theme as is the development of global health disparities. Students are challenged to think historically and apply a long-term perspective to understand today's global health problems. LEC.

HIST 250. Study Abroad Topics in: ______. 1-5 Hours. H.
This course is designed for the study of special topics in History at the freshman/sophomore level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

HIST 300. Modern African History. 3 Hours. NW AE42 / H/W.
A survey of social, political, and economic developments during the colonial era and independence struggles, followed by a closer examination of the contemporary experience in a selected country or region. (Same as AAAS 305.) LEC.

HIST 301. The Historian's Craft. 3 Hours. H.
This course introduces students to the practice and methods of the study of history and serves as the gateway to the major. Students learn (1) to think historically; (2) to understand how historians construct and write about the past through narratives, theory and analytical discussion; (3) to critically evaluate historical arguments and the material used to substantiate those arguments, including an introduction to the process of peer review; (4) to develop writing and research skills including the interpretation of primary sources; and (5) to master professional standards of presenting their findings. This course is required of all history majors and is a prerequisite for HIST 696 Seminar in: ______. Prerequisite: Open only to declared History majors or by consent of instructor. LEC.

HIST 302. The Historian's Craft, Honors. 3 Hours. H.
This course introduces students to the practice and methods of the study of history and serves as the gateway to the major. Students learn (1) to think historically; (2) to understand how historians construct and write about the past through narratives, theory and analytical discussion; (3) to critically evaluate historical arguments and the material used to substantiate those arguments, including an introduction to the process of peer review; (4) to develop writing and research skills including the interpretation of primary sources; and (5) to master professional standards of presenting their findings. This course, or HIST 301 - its non-honors equivalent, is required of all history majors and is a prerequisite for HIST 696 Seminar in: ______. Prerequisite: Open only to students admitted to the University Honors Program who are declared History majors, or by consent of instructor. LEC.

HIST 303. Sin Cities. 3 Hours. H.
This course offers a comparative global introduction to the history of the modern city by looking at the ways in which certain metropolises developed an attractive underbelly of decadence at the same time as they sought to be centers of refined and orderly cosmopolitan life. The course examines topics such as popular culture, gambling, prostitution, crime, violence, nightlife, tourism, and corruption in the context of the increased social mobility that characterized the beginning of the industrial age and that has extended into the 21st century. Students investigate the changing relation between work and leisure, spectacle and consumerism, and urban space and the struggle for order. LEC.

HIST 304. 1642, 1688, 1776: Three British Revolutions. 3 Hours. H.
Explains and analyzes the three revolutions in the English-speaking world which, more than any others, are held to have laid the foundations of modernity. Themes discussed include social, intellectual, and political developments, structures, and conflicts. 1642 and 1688 are treated in the setting of England's relations with Scotland and Ireland, and against the background of European wars of religion. 1776 is analyzed in a transatlantic context as a civil war within the wider British polity. LEC.

HIST 305. The Scientific Revolution. 3 Hours. H.
Describes and analyzes the factors producing a Scientific Revolution in early-modern Europe. Focuses on fundamental changes in astronomy-cosmology, physics, and biology from Copernicus to Newton. Examines the emergence of experimental method as an essential part of Western science. Portrays the development of new forms of scientific organization and the cultural frameworks that bore and shaped them. Surveys the various interpretations of this period expressed by current historians of science. LEC.

HIST 306. Science and Western Culture. 3 Hours. H.
Analyzes the institutional, social, technological, and political circumstances of science in the Western tradition. Examines the place of science in pre-modern European settings. Emphasizes the shifting centers of national scientific prominence since the seventeenth century from Italy to Britain to France to Germany to the USA. LEC.

HIST 307. Modern African History, Honors. 3 Hours. NW AE42 / H.
An intensive version of HIST 300. A survey of social, political, and economic developments during the colonial era and independence struggles, followed by a closer examination of the contemporary experience in a selected country or region. Open only to students admitted to the University Honors Program, or by consent of the instructor. (Same as AAAS 307.) LEC.
HIST 308. Key Themes in Modern Global History. 3 Hours. H.
A comparative historical analysis of major global developments from the late 15th century to the present. Some of the themes likely to be explored are empire-building, contact between cultures and colonial social relations; the attraction of cities, their role in a global economy and the shift to an urban world; and the impact of capitalism and industrialization on social organization including conflict between classes and changes in the nature of work. Students learn ways of interpreting primary historical documents and comparing historical investigations across time and space. Not open to students who have completed HIST 100. LEC.

HIST 309. History of Chemistry. 3 Hours. H.
Birth of modern chemical science from roots in Greek natural philosophy, alchemy, Renaissance medicine, and technology. The Chemical Revolution of Lavoisier and Dalton. Maturity of chemistry in the 19th and 20th centuries, along with an examination of the growth of chemical institutions and the rise of chemical industry. Emphasis on developments from the 18th century to the present. (Same as CHEM 309.) LEC.

HIST 310. American Culture, 1600-1876. 3 Hours. H.
An examination of the major historical shifts, trends, and conflicts that have shaped the multicultural nature of life in the United States from the initial European settlements to 1876. In addition to tracing developments in literature, architecture, drama, music, and the visual arts, this course will investigate patterns and changes in the popular, domestic, and material culture of everyday life in America. (Same as AMS 310.) Prerequisite: AMS 100 or AMS 110 or HIST 128. LEC.

HIST 311. Great Lives in Science. 3 Hours. H.
This course examines the lives of selected great scientists. Lectures and biographical readings deal with scientists who lived in the period between the seventeenth century and the present. Through comparative biography, the course assesses the theoretical, methodological, institutional, and social development of modern science. LEC.

HIST 312. American Culture, 1877 to the Present. 3 Hours. H.
An examination of the major historical shifts, trends, and conflicts that have shaped the multicultural nature of life in the United States from 1877 to the present. In addition to tracing developments in literature, architecture, drama, music, and the visual arts, this course investigates patterns and changes in the popular, domestic, and material culture of everyday life in America. (Same as AMS 312.) LEC.

HIST 313. Conspiracies and Paranoia in American History. 3 Hours. H.
The theme of conspiracy is a recurring motif in American history. This course uses a case-study method to revisit episodes such as the Salem witch trials, the movement against freemasonry, the Slave Power conspiracy, and more recent obsessions such as UFOs and the assassination of John F. Kennedy to explain why so many Americans have embraced conspiracy theories to explain mysterious events and dramatic social change. The course will rely on primary accounts, fiction, and film, as well as secondary historical literature, to examine both "real" and "imaginary" conspiracies and their effects on the politics, culture, and society of the United States. LEC.

HIST 314. Globalization: History and Theory. 3 Hours. H.
Explores the rise of global capitalism in the 19th and 20th centuries, contemporary debates about 21st century globalization, and the role of globalization in our everyday lives. Questions considered include: Is globalization an incremental process that has been going on for centuries, or is it a dramatic new force reshaping the post-Cold War world? Is it a cultural and social process or an economic and political one? Or is it all of these things? Not open to students who have completed HIST 315. LEC.

HIST 315. Globalization: History and Theory Honors. 3 Hours. H.
Explores the rise of global capitalism in the 19th and 20th centuries, contemporary debates about 21st century globalization, and the role of globalization in our everyday lives. Questions considered include: Is globalization an incremental process that has been going on for centuries, or is it a dramatic new force reshaping the post-Cold War world? Is it a cultural and social process or an economic and political one? Or is it all of these things? Not open to students who have completed HIST 314. Open only to students in the College Honors Program or consent of instructor. LEC.

HIST 316. Ministers and Magicians: Black Religions from Slavery to the Present. 3 Hours. H.
This course examines the history and diversity of African American religious expression from slavery until the present, emphasizing both mainstream and alternative faiths. It covers the religious world views of enslaved Africans, and examines faiths inside and outside of Christianity. Topics may include: independent black churches, magical practices, the Holiness and Penteconomic movements, black Islam, religious freemasonry, and esoteric faiths. The class emphasizes the influence of gender, class, race, migration, and urbanization on black religion. (Same as AAAS 316 and AMS 316.) LEC.

HIST 317. African American Women: Colonial Era to the Present. 3 Hours. AE41 / H.
This interdisciplinary course covers the history of African American women, beginning in West and Central Africa, extending across the Middle Passage into the Americas, and stretching through enslavement and freedom into the 21st century. The readings cover their experiences through secondary and tertiary source materials, as well as autobiographies and letters, plays and music, and poems, novels, and speeches. (Same as AAAS 317, AMS 317, and WGSS 317.) LEC.

HIST 318. Indian Territory. 3 Hours. H.
This course examines the cultural, social, economic, environmental, and political history of Indian Territory in what is now the state of Oklahoma. It surveys the diverse geographical regions, tribal cultures, the impact of Indian Removal Act, assimilation, acculturation, westward expansion, the Civil War, boarding schools, the Dawes Act, the Curtis Act, and land runs on Indian Territory residents. The course also treats post-Civil War violence, outlaws, and the role of tribal courts along with controversies over removals, Land Run celebrations, allotment scandals, and Osage oil murders. (Same as HWC 345 and ISP 345.) LEC.

HIST 319. History, Women, and Diversity in the U.S.. 3 Hours. AE41 / H.
This survey course explores the history of being female in America through a focus on the ways differences in race, sexuality, ethnicity, class, and life cycle have shaped various aspects of women’s lives. Themes to be explored could include, but are not limited to: social and political activism; intellectual developments; family; women’s communities; work; sexuality; and culture. LEC.

HIST 320. From Goddesses to Witches: Women in Premodern Europe. 3 Hours. HT GE11/GE3H / H.
This course examines the social, cultural, and political contexts of women’s spirituality and their relations to gender relations in Europe from about 30,000 B.C.E. to the 16th century Protestant Reformation. Lectures move both chronologically and topically, covering such subjects as goddess-worshiping cultures, women’s roles in Christian and Jewish societies, symbols of women, and male attitudes toward women. Students will be able to participate in weekly discussions of primary and secondary source readings about women. (Same as WGSS 320.) LEC.
HIST 321. From Mystics to Feminists: Women's History in Europe 1600 to the Present. 3 Hours. HT AE42/GE11/GE3H / H.
This survey of women's history in Europe looks at changing patterns of women's economic roles and family structures in preindustrial and industrial society, the importance of women in religious life, cultural assumptions underlying gender roles, and the relationship of women to political movements, including the rise of feminism. (Same as WGSS 321.) LEC.

HIST 324. History of Women and the Body. 3 Hours. H.
This course examines different notions about women and their bodies from a historical perspective. It discusses the arguments and circumstances that have shaped women's lives in relation to their bodies, and women's responses to those arguments and circumstances. This course covers a wide geographical and chronological spectrum, from Ancient societies to the present, from Latin America and the Middle East, to North America and Western Europe. (Same as WGSS 324.) LEC.

HIST 325. The Spanish Inquisition. 3 Hours. H.
A broad historical study of the Spanish Inquisition from 1478 to its afterlife in modern culture, including its use in political debates and its depiction in popular culture. Topics include anti-Semitism, the nature of the inquisitorial investigation, the use of torture, censorship and the relationship between the Inquisition, the Spanish monarchy and other religious and lay authorities. Taught in English. Will not count toward the Spanish major. (Same as JWSH 315 and SPAN 302.) LEC.

HIST 326. Native American Civilizations and their European Conquerors. 3 Hours. NW AE42/GE11/GE3H / H/W.
The societies, economies, and cultures of Native American peoples in Brazil, Peru, Mexico, and the Southwestern United States will provide the main focus of this course to understand the culture and values of those who preceded the Europeans in the Americas. European culture is also examined, including the motivations for exploration and conquest. The details of the particular conquests and how they affected the resulting composite society will also be discussed, using contemporary eye-witness accounts, films recreating the action, and modern accounts. LEC.

HIST 327. The Premodern Middle East. 3 Hours. NW AE42 / H.
A survey of the history of the Middle East from the origins of Islam in the seventh century to the rise and consolidation of the Ottoman Empire in the eighteenth century. Lectures and discussions focus on diversity within the Middle East at the height of the Islamic empires. Topics include the life of Muhammad and early Islamic communities, expansion of Islam into Asia, Africa and Europe, intellectual strength in the medieval period, and the everyday lives of women, Christians, Jews and other minority groups. LEC.

HIST 328. The Modern Middle East. 3 Hours. NW AE42 / H.
A survey of the history of the Middle East from 1800 to the present. Lectures and discussions focus on diversity within the Middle East over two centuries of major political and cultural change. Topics include causes for the decline of the Ottoman Empire, debates over modernization, European imperialism and the formation of nation-states, twentieth century cultural revolutions and women's activism, the Arab-Israeli conflict, and the revival of Islamic social movements. LEC.

HIST 329. History of War and Peace. 3 Hours. HL / H.
A study of the changing nature of warfare and the struggle to bring about peace. Topics include pacifism, the "military revolution" that created the first professional armies; the development of diplomatic immunity, truces, and international law; the peace settlements of Westphalia, Utrecht, Vienna, Versailles, and San Francisco; the creation of peace movements and peace prizes; the evolution of total war, civil war, and guerilla warfare involving civilians in the twentieth century; the history of the League of Nations and United Nations; and the rise of intergovernmental and non-governmental organizations. (Same as EURLS 329 and PCS 329.) LEC.

HIST 330. Revolt and Revolution in Early Modern Europe. 3 Hours. H.
A study of forces giving rise to riots, rebellions, and revolution in Western Europe from 1600-1790. The course will examine social and ideological aspects of famine, religious persecution, taxation, war, landlord-peasant relations, and the increasing power of kings. LEC.

HIST 331. Atlantic Societies, 1450-1800: A Comparative History of European Colonization. 3 Hours. H.
This course offers a comparative history of the European (Portuguese, Spanish, French, English, and Dutch) colonization of the Americas. It examines the interaction among peoples and cultures across the Atlantic, from the age of European exploration to the start of the independence movements in the Americas. Themes that will receive special attention include: comparing patterns of colonization, the forging of American societies of European, Native American, and African cultures, the slave trade, and the history of sugar production. LEC.

HIST 333. Eurometro: Visions of the European Metropolis, 1849-1939. 3 Hours. H.
This course investigates the interrelated symbols of the European metropolis during the "Age of Great Cities", from the filth of the sewers to the "filthiness" of prostitution. Students investigate gender and class in the metropolis by exploring a few stereotypes: the juvenile delinquent, the woman on the street, and the flaneur. The course format stresses discussion of common texts, including short readings of literature from the period and historical scholarship. Students also analyze contemporary photographs, art, architecture, and advertising. LEC.

HIST 334. The Great War: The History of World War I. 3 Hours. H.
A historical survey of the causes, course, and consequences of the conflict, 1878-1919, stressing its socio-economic dimensions as well as its political ramifications and military aspects. Considerable use will be made of visual aids. No prerequisites. LEC.

HIST 335. History of Jewish Women. 3 Hours. H.
This course explores the history of Jewish women from antiquity to the twentieth century. It examines the historical constructions of women's gender roles and identities in Jewish law and custom as well as the social and cultural impact of those constructions in the context of the realities of women's lives in both Jewish and non-Jewish society. (Same as JWSH 335, WGSS 335.) LEC.

HIST 336. Ethics, Ideas, and Nature. 3 Hours. AE51 / H.
This course examines the ethical frameworks developed for thinking about, using, and protecting the natural world. Examples of topics include indigenous approaches to nature, the history of ecological ideas, environmental movements, the role of the state of managing resources, utilitarianism and progressivism, environmental lawmaking, wilderness advocacy, nature and theology, the rights of nature, and environmental justice. Students are introduced to the theories of duty ethics, justice ethics, utilitarianism, and right ethics, and required to apply ethical decision making to contemporary and historical environmental issues. Multiple perspectives on the history of human interactions with nature demonstrate the importance of reflecting upon the value systems inherent in human-centered environmental ethics and nature-centered environmental ethics. (Same as EVRN 336.) LEC.

HIST 337. History, Ethics, Modernity. 3 Hours. H.
This course will examine the question "How has human dignity been preserved or violated in the modern age?" Cast in a global framework, some of the probable themes are the history of human rights; the moral universe of genocide; the (in)dignity of industrial work; the shifting status of the poor and the colonized and their treatment by the state.
and society; the impact of changing technology on ethics in war, peace and the environment; and the violation of dignity as a factor in collective resistance. LEC.

HIST 338. African American Urban Community and Class in the Midwest. 3 Hours. H.
This course provides historical perspective on African Americans and the politics of economic class within black urban spaces from the end of Reconstruction to the post-World War II era. It focuses on the development of an upwardly mobile urban black middle class, and impoverished black urban "underclass," since the 1960s. Students are encouraged to have taken one of three courses: AAAS 104, AAAS 106, or AAAS 306. (Same as AAAS 328.) LEC.

HIST 340. The History of the Second World War. 3 Hours. H.
A survey of the origins, course, and consequences of the war, 1930-1945. Political, economic, military, and social aspects will be dealt with in the context of their global effects. Extensive use will be made of motion pictures and other media. LEC.

HIST 341. Hitler and Nazi Germany. 3 Hours. H/W.
An examination of the rise of Hitler and Nazism, beginning with the breakdown of 19th century culture in the First World War and continuing through the failure of democracy under the Weimar Republic. The course will also discuss the impact of Nazism on Germany and how Nazism led to the Second World War and the Holocaust. (Same as JWSH 341.) LEC.

HIST 343. The Holocaust in History. 3 Hours. H.
The systematic murder of the Jews of Europe by the Nazis during World War II is one of the most important events of modern history. This course studies the Holocaust by asking about its place in history. It compares other attempted genocides with the Holocaust and examines why most historians argue that it is unique. Other topics covered include the reasons the Holocaust occurred in Europe when it did, the changing role of anti-Semitism, and the effects of the Holocaust on civilization. The course also discusses why some people have sought to deny the Holocaust. The course concludes by discussing the questions people have raised about the Holocaust and such issues as support for democracy, the belief in progress, the role of science, and the search for human values which are common to all societies. (Same as JWSH 343.) LEC.

HIST 344. Modern Jewish History. 3 Hours. H.
This course explores the complex of interactions between Jews, Judaism, and modernity by examining the challenges to Jewish life and thought, community and culture, self-understanding and survival, from the early modern period to the present day. Through the lenses of religious, cultural, intellectual, and political expression, the course examines the social, economic, and demographic changes in Jewish communities in Western, Central and Eastern Europe, the United States, and Israel along with the impact of antisemitism and the Holocaust. (Same as JWSH 344.) LEC.

HIST 345. Hard Times: The Depression Years in America, 1929-1941. 3 Hours. H.
An analysis of the experiences of the American people during the Great Depression. Attention will also be given to the global dimensions of the crisis, socioeconomic dislocation, cultural and institutional change, and the impact of the Asian and European wars. LEC.

HIST 346. Law and Society in America. 3 Hours. H.
Law and lawyers have powerfully shaped American values and institutions. This course explores law's impact on American society from the age of European colonization through present. Topics include liberty, public order, race and ethnicity, the family, property, speech, environment, and self-government. The course also examines the changing images of lawyers and the law over time. Course materials include not just statutes and court decisions, but literature, imagery, and popular culture materials. LEC.

HIST 347. Environmental History of North America. 3 Hours. H.
A survey of changes in the landscape and in people's perceptions of the natural world from 1500 to present. Topics include agroecology, water and energy, the impact of capitalism, industrialism, urbanization, and such technologies as the automobile, and the origins of conservation. (Same as EVRN 347.) LEC.

HIST 348. History of the Peoples of Kansas. 3 Hours. H.
A survey of culture and society in Kansas from prehistory to the present. Topics include Native American life, Euro-American resettlement, Bleeding Kansas and the Civil War, agricultural settlement, urbanization and industrialization, depression and recovery, and modern Kansas in transition. Emphasis in the course will be on social and economic conditions, the experience of ethnic and racial groups, inter-racial relations, and the role of women. LEC.

HIST 350. The Korean War, 1950-1953. 3 Hours. H.
An examination of the origins, pattern of development, and legacy of this still unsettled conflict, which in many ways set the tone for the entire post-1945 era of the Cold War. Points of emphasis will include the motives and policies of the major participants (Koreans, Americans, Chinese, and Soviets), as well as the effects of the war on their domestic politics and foreign policy positions. LEC.

HIST 351. American Indian and White Relations to 1865. 3 Hours. H.
This course provides an intensive survey of the Indians of North America from Prehistory to 1865, and focuses on ancient indigenous cultures, early European-Indian relations and the impact of European culture upon the indigenous peoples of North America. (Same as HWC 348, ISP 348.) LEC.

HIST 352. American Indians Since 1865. 3 Hours. H.
This course examines American Indian/White relations from reconstruction to the present. It surveys the impact of westward expansion and cultural changes brought about by the Civil War, forced education, internmarriage, the Dawes Act, the New Deal, the World Wars, termination, relocation and stereotypical literature and movies. The class also addresses the Red Power and AIM movements, as well as indigenous efforts to decolonize and to recover and retain indigenous knowledge. After learning about the past from both Native and non-Native source materials, students will multiple perspectives about historical events and gain understandings of diverse world views, values, and responses to adversity. (Same as HWC 350 and ISP 350.) LEC.

HIST 353. Indigenous Peoples of North America. 3 Hours. NW AE41 / H/W.
This course surveys the history of the first peoples to inhabit North America from prehistory to present. Commonly and collectively referred to as American Indians, indigenous peoples include a diverse array of nations, chiefdoms, confederacies, tribes, and bands, each of which has its own unique cultures, economies, and experiences in dealing with colonial and neocolonial powers. This class seeks to demonstrate this diversity while at the same time providing an understanding of the common struggle for political and cultural sovereignty that all indigenous nations face. Indigenous nations that have developed a relationship with the United States will receive primary focus, but comparative reference will be made to First Nations of Canada. LEC.

HIST 354. Spanish Borderlands in North America. 3 Hours. AE51 / H.
The Northern frontier provinces of the Viceroyalty of New Spain from their exploration and occupation by Spain until their absorption by the United States. LEC.
HIST 355. U.S. Borderlands Since 1848. 3 Hours. H.
This course discusses issues associated with the Mexican borderlands region after conquest and acquisition by the United States. Themes include race relations, immigration, labor, economics, politics, culture, and the environment. We discuss how the region was incorporated into the United States, and how this relationship is evolving. We also examine the notion of a borderlands region and whether or not this is a valid characterization for Kansas. LEC.

HIST 358. The Vietnam War. 3 Hours. H.
This course is a survey of the Vietnam War. It covers the early days of Cold War, 1945-54, and all phases of the Vietnam War: the advisory phase (1955-64); the Americanization phase (1965-68); the Vietnamization Phase (1969-73); and the final phase, the Vietnam Civil War, 1972-75. This course covers the causes, course, conduct, and consequences of the war and in so doing provides a political, military, and social history of the war. LEC.

HIST 359. The Black Experience in the U.S. Since Emancipation. 3 Hours. H.
An interdisciplinary study of the history and culture of Black people in American from Reconstruction to the present. Topics covered include an analysis of Reconstruction, Black leaders, organizations and movements, the Harlem Renaissance, migration, and race relations. Demographic variables covered include socio-economic class, education, political persuasion, and influence by avant-garde culture changes. (Same as AAAS 306.) LEC.

HIST 360. Science and Religion. 3 Hours. H.
The interaction and significant confrontations between science and religion will be considered together with the religious responses to science and technology. LEC.

HIST 362. The American Way of War Since World War II. 3 Hours. H.
This course is a survey of American Military History from World War II to current military operations. It covers the Cold War, the Korean War, the Vietnam War, both Persian Gulf wars, the global war on terrorism, and the war in Afghanistan. The course examines the causes, course, conduct, and consequences of the wars and covers advances in technology and doctrine, civil-military relations, foreign policy, and inter-service rivalry, providing a political, military, and cultural history of the wars. LEC.

HIST 365. Invention of the Tropics. 3 Hours. H.
This course surveys the history of the tropical environment and its peoples from Europe’s first encounter to today’s ecotourism boom. It focuses on portrayals of the tropics in historical travel accounts and films. Through these sources, we seek to understand how science, technology, and tourism have been used, in turn, as instruments of progress and destruction, tools of empire and national liberation. Case studies are drawn from Latin America, Africa, Oceania, and Asia. LEC.

HIST 366. Old Regime and Revolution in France, 1648-1799. 3 Hours. H.
This course explores the political, social and cultural system of early modern France. It culminates with study of the collapse of monarchy and establishment of republican government during the French Revolution. LEC.

HIST 367. Magic and Superstition in European History. 3 Hours. H.
This course traces the changing role and understanding of magic in European culture, religion, politics and science from the late Middle Ages through the early 20th century. Topics may include alchemy, miracles, magical healing, witchcraft, monsters and demonic possession. LEC.

HIST 368. A History of Afro-Latin America. 3 Hours. H.
This course examines the history of Africans and their descendants in Latin America. In this region, Africans could be found serving as militia commanders, laboring as skilled tradesmen, running their own businesses, working as household servants, and toiling on plantations. Students will study the varied experiences of these men and women across colonial and national boundaries. Topics include: acculturation/Creolization, manumission, family formation, social networks, economic roles, political mobilization, and interaction with indigenous peoples. LEC.

HIST 369. Colonialism and Revolution in the Third World, Honors. 3 Hours. NW AE42 / H.
This course will study the structure and dynamics of colonialism and neo-colonialism in the third world beginning in the 19th Century and continuing to the 1980s. It will also examine responses to these systems, from small-scale resistance to nationalist revolutions. Attention will be given to the relationship between ideology and collective behavior. Case studies will be drawn from Africa, Asia, and Latin America. Prerequisite: Membership in the University Honors Program or permission of instructor. LEC.

HIST 370. Violence and Conflict in Latin American History. 3 Hours. H.
This course treats the history of Latin America since the European conquest through the prism of violence and social conflict. It traces the roots of the region’s social collapse during the twentieth century to political and cultural factors in the colonial and early national periods. Using films and literature in addition to historical texts, the course examines the sources of nationalism, civil wars, banditry, urbanization, violent dissent, military dictatorships, human rights abuses and guerrilla insurgencies as well as the political uses of violence made by different social groups. LEC.

HIST 371. The Cultural History of Modern Latin America. 3 Hours. H.
This course explores themes such as the evolution of national identities, the conflict between the city and the countryside, exile, the surrealist imagination and the cultural resistance against foreign influences through an examination of the literature, film, art, music, religions and popular and material culture of 19th and 20th century Latin America. LEC.

HIST 372. Violence and Conflict in Latin American History, Honors. 3 Hours. H/W.
This course treats the history of Latin America since the European conquest through the prism of violence and social conflict. It traces the roots of the region’s social collapse during the 20th century to political and cultural factors in the colonial and early national periods. Using films and literature in addition to historical texts, the course examines the sources of nationalism, civil wars, banditry, urbanization, violent dissent, military dictatorships, human rights abuses, and guerrilla insurgencies as well as the political uses of violence made by different social groups. Not open to students who have taken HIST 370. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

HIST 373. The Supreme Court and Religious Issues in the United States. 3 Hours. H.
Historical study of the interpretation of the religion clauses of the First Amendment with special reference to the questions of establishment, the free exercise of religion, freedom of religious belief, worship, and action, and religion and the public schools. Not open to freshmen. (Same as REL 373.) LEC.

HIST 375. The Supreme Court and Religious Issues in the United States, Honors. 3 Hours. H.
Historical study of the interpretation of the religion clauses of the First Amendment with special reference to the questions of establishment, the free exercise of religion, freedom of religious belief, worship, and action, and religion and the public schools. Open only to students in the University Honors Program or by permission of the instructor. (Same as REL 375.) LEC.
HIST 377. Everyday Communism in Eastern Europe. 3 Hours. H.
This course investigates through film, literature, memoirs, photography, architecture, and scholarship the experience of ordinary citizens under Soviet-style communism in Eastern Europe. We study the ways people supported, resisted, opposed, and merely got by under state socialism from the late 1940s to the collapse of Communism in 1989. LEC.

HIST 378. Beyond the Iron Curtain: Soviet Perspectives on the Cold War. 3 Hours. AE42 / H.
This course reimagines the Cold War through Soviet eyes, challenging assumptions and offering less familiar perspectives on a global conflict. Analyzing Soviet and American mass media, popular culture, declassified documents, and personal stories, students investigate the following: Who started the Cold War, and who won it? Was it a time of relative peace or paranoia? How did the two sides view each other and did espionage help them know each other better? How did people and culture sometimes cross the iron curtain? What were the Soviets doing in places like Latin America and the Middle East? And why were both sides so concerned with Olympic athletes, ballet defectors, and cosmonauts? LEC.

HIST 380. Revolutionary Europe: The People in Arms. 3 Hours. H/W.
A survey of the political, social, economic and cultural transformation of Europe in a century of turmoil, from the Old Regime through the liberal and national revolts of 1848, the Paris Commune and the Russian Revolution. LEC.

HIST 385. Themes in British History. 3 Hours. H.
For students enrolled in the annual summer Study Abroad program. This course examines some of the main events and trends in British history, from the earliest times to recent British history. The specific historical themes investigated will depend upon the instructor. The course can be taken only via enrollment in the KU British Summer Institute in the Humanities. Prerequisite: Approval for enrollment in the Summer Institute through the Study Abroad office. LEC.

HIST 390. Topics in: ___. 3 Hours. H.
A study of a specialized theme or topic in History. May be repeated for credit when topic varies. LEC.

HIST 391. Topics in (Honors): ___. 3 Hours. H.
A study of a specialized theme or topic in History. May be repeated for credit when topic varies. Open only to students admitted to the University Honors Program. Prerequisite: Permission of instructor. LEC.

HIST 392. Huns, Turks, and Mongols: The Nomad Factor in Asian History. 3 Hours. NW / H/W.
This course introduces the history of major nomadic powers in Eurasian Steppe and their impact in the world from the first Millennium BCE to around 1500 AD. The main topics include the culture of the Scythians, the Hun and Xiongnu confederacy, the Mongol conquest, and the Turkish empires in Central and West Asia. It investigates the natural and human forces that shape the identities of the nomads and their changing images in history. LEC.

HIST 393. The Silk Road. 3 Hours. H.
A comprehensive introduction to the cultural influence and material exchange among major civilizations along the Silk Road. It covers the period of more than one thousand years between the 2nd and the 15th centuries CE, during which time forces wielded by the Persians, the Chinese, the Indians, the Tibetans and the Mongols shaped the geopolitical landscape of the vast region that spreads from the Caspian Sea to the Gobi Desert. Students explore the role of the Silk Road in the formation of the religious and ethnic identities of these civilizations, as well as their perceptions towards one another. Along with textual materials, the course uses extensive visual and musical materials to present interesting phenomena, such as Sogdian burial practice, Arab accounts of Tang China, Nestorian Christianity at the Mongol court, and Marco Polo's journey to the East. The course begins and concludes with discussion of the contemporary significance of the Silk Road as a historical category. LEC.

HIST 394. Made in China: Chinese Business History. 3 Hours. H.
This course examines the development of business in China since 1900. Topics include the rise of industrialism, the role of foreign investment, China's role in the global market place, the relationship between business and the state, state-run enterprises, factory life, entrepreneurialism, building a domestic market for industrial goods, advertising, consumerism, and economic nationalism LEC.

HIST 395. History of Sushi. 3 Hours. H.
Sushi, now served at Midwestern supermarkets and university cafeterias, reveals the transformation of an ancient Japanese dish into a global phenomenon. This course takes familiar Japanese dishes like sushi and ramen as starting points to ask how food accrues or sheds national characteristics in an age of globalization. To learn the origin of sushi and ramen, the class traces the evolution of the diet in the context of the development of Japanese civilization. Using the methodology of food history, course assignments include short research papers on Japanese foodstuffs; analyses of primary sources from statistics to comic books to movies; and short essays drawing from participant observation of Japanese foods now available locally. LEC.

HIST 397. From Mao to Now: China's Red Revolution. 3 Hours. NW AE42/GE11 / H.
This course on China's Communist revolution considers the evolution of Maoism, or Chinese Communism, from its ideological origins through its implementation during and after the Chinese Communist revolution. It examines major Maoist movements such as Land Reform, the Great Leap Forward, the Cultural Revolution, and the cult of Mao. It further considers the globalization of Maoism by examining examples of other Maoist revolutions and revolutionaries in places like Cambodia, Peru, and Nepal. LEC.

HIST 398. Introduction to History of Japan: Anime to Zen. 3 Hours. NW / H/W.
This course provides a foundation for study of Japanese history. It combines lectures on the scope of Japanese history over the past 2,000 years with discussions of topics key to the development of Japanese civilization such as religion and literature. We analyze how different media, such as film, Japanese animation (anime), and art can be used as historical sources, and how these shape our understanding of Japan. Students hone their ability to analyze both thematic and historical questions through writing assignments and discussions. LEC.

HIST 399. The Samurai. 3 Hours. NW AE42/GE11 / H/W.
Japanese's warrior class, the samurai, dominated politics and society for more than half of Japan's recorded history. This course traces the history of the samurai from their origins to the dissolution of their class in 1877, examining their military role, philosophy, and cultural contributions. It also considers continued references to the “spirit of the samurai” in the twentieth century. LEC.

HIST 401. Case Studies in: ___. 2-3 Hours. H.
Examination of a limited aspect of a general subject; other aspects of the same subject may be offered other semesters. LEC.

HIST 402. Roman Military History. 3 Hours. H.
The Defense of the Roman Frontiers. This course emphasizes the development of the frontiers of the Roman empire from Caesar to the late second century. It includes the origins of the Germans and their society, the Celtic background, and the relationship between the emperor and the army. LEC.
HIST 404. Technology: Its Past and Its Future. 3 Hours. H.
An examination of the role of technology and its influence on society. The historical development of technology will be traced up to modern times with an emphasis on its relations to the humanities. Attention will be given to the future of different branches of technology and alternative programs for their implementation. (Same as ENGR 304.) LEC.

HIST 407. History of Science in the United States. 3 Hours. H.
Traces the evolution of a scientific tradition in American culture. Examines the growth of scientific ideas and institutions under European and indigenous influences. Studies the interactions of science with technological, theological, political, and socio-economic developments. LEC.

HIST 410. The American Revolution. 3 Hours. H.
This course will focus on the meaning the American Revolution had for different groups of Americans. Particular emphasis will be on the relationship between ideology and experience, and the impact of the Revolution on such groups as women, slaves, Indians, African-Americans, the poor, merchants, and loyalists. LEC.

HIST 411. The New Republic: U.S. History 1787-1848. 3 Hours. H.
This course traces the history of the United States from the debates over the ratification of the Constitution until 1848. Major topics include the republican experiment, the Market Revolution, the Age of Jackson, religious revivals and reform, slavery and the cotton kingdom, the Manifest Destiny. Historians view the period as vital to understanding the development of the society, economy, culture, and politics of the modern United States. LEC.

HIST 412. The Civil War in America, 1828-1877. 3 Hours. H.
The United States from the rise of sectional conflict through the disintegration and reunification of the Union. LEC.

HIST 413. The Rise of Industrial America, 1877-1920. 3 Hours. H.
The political, economic, social, and intellectual development of the United States from 1877 to 1920. LEC.

HIST 414. Gone with the Wind. 3 Hours. H.
For four years, another country occupied part of what we now think of as the United States. The Confederate States of America was a short-lived experiment founded on the cornerstone of slavery that advocated small government, states' rights, agriculture, and patriarchy. Even before the Confederacy collapsed, though, none of those ideals was working out well in real life. Why, then, do so many Americans have such a hallowed view of the Confederate experience? This class discusses some military matters but focuses primarily on the homefront. LEC.

HIST 420. Dante’s Comedy. 3 Hours. H.
The complete Divine Comedy will be read in English translation, with equal stress on each of its three parts: the Inferno, the Purgatory, and the Paradise. No prerequisite. (Same as HWC 410.) LEC.

HIST 421. Economic and Social History of Later Medieval Europe, 1000-1500. 3 Hours. H.
An introductory study of European economic and social history from the Tenth Century Crisis to the 1490s. This course investigates the causes of economic development and the interactions among market, nonmarket, and social institutions such as the family. Topics covered include trade, labor, technologies, consumerism, social unrest and the rise of social and economic thought. LEC.

HIST 424. Venice and Florence in the Renaissance. 3 Hours. H.
Comparative urban study of Florence and Venice from the thirteenth through the sixteenth centuries. Principal subjects are the distinctive economies of the city-states, political developments, Renaissance humanism, patronage of the arts, family life, and foreign policy. LEC.

HIST 425. History of the Mediterranean World, 1099-1571. 3 Hours. H.
This course examines Mediterranean civilizations from the First Crusade to the Battle of Lepanto. Topics include the commercial revolution, medieval colonization, the Byzantine and Ottoman states, shipping and navigation, and the Atlantic. Equal coverage of the eastern and western Mediterranean. LEC.

HIST 440. War and United States Society. 3 Hours. H.
A survey of the American experience in military conflict, both foreign and domestic, from the colonial period to the present. In addition to the strategic and tactical aspects of war, the course will treat the political, economic, and social effects in their national and global contexts. Extensive use will be made of audio-visual materials. LEC.

HIST 444. Frozen in Time: Politics and Culture in the Cold War, 1945-75. 3 Hours. H.
This course deals with the interactions between Cold War culture and domestic and international politics chiefly from the American and to some degree comparative perspective. It focuses on the period 1945-1975, and makes use of films, television, music, works of science fiction and related genres, and other cultural manifestations to examine such themes as programs of domestic and international repression, consensus politics, cultural imperialism, gender roles, and class, status, and racial dynamics in the context of what was perceived as bipolar rivalry. LEC.

HIST 450. Study Abroad Topics in: _____, 1-5 Hours. H.
This course is designed for the study of special topics in History at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

HIST 451. Suburbia. 1.5 Hour. H.
A history of the growth of suburban enclaves, from their emergence during the electric streetcar era to their dominance in the late 20th century. This short course features the analysis of class dynamics, racial exclusions, commuting, social conformity and the alienation of the young within a U.S. context, but some attention is given to comparisons with other parts of the world. LEC.

HIST 452. Chicago. 1.5 Hour. H.
A history of the Midwestern metropolis from its origins as a swamp to an industrial port city. Topics covered in this short course may include the meat-packing industry, political corruption and reform, immigration and migration, the rise and demise of neighborhoods, transportation systems, working-class social movements, modern architecture and urban popular culture. LEC.

HIST 453. Anarchism: A Global History. 1.5 Hour. H.
This short course examines the key theorists and organizers of the anarchist movement, beginning with its emergence in the 19th century and extending into its reappearance in the 21st century. It traces developments in Europe, South America, Asia and the United States. Topics may include the Paris Commune, credit unions, propaganda by the deed, wage slavery, resistance to authority, and the general strike. LEC.

HIST 454. Work. 1.5 Hour. H.
This short course traces the evolution of work from pre-industrial times to the computerized workplace. Issues such as the meaning of work, dignity and respect, time efficiency and exploitation, unionization and strikes, workplace democracy, collectives and worker-owned businesses, laziness as a form of resistance to authority, leisure, the culture of commuting, and hierarchy and status are explored. The evolution of work in non-U.S. societies is analyzed comparatively. LEC.

HIST 455. Havana. 1.5 Hour. H.
This short course examines the history of the Cuban port city from the era of Spanish colonialism to the "special period" of shortages and deprivations during the 1990s. Topics covered may include popular
culture, Caribbean pirates, cigar factories and labor, urban slavery, Chinatown, social revolution, restructuring of urban public space, suburban expansion, modernist architecture, tourism, gambling and vice, historical preservation and the changing conditions of streetlife. LEC.

HIST 460. Topics in: ______. 1.5 Hour. H.
An eight-week course devoted to a specific historical topic. May be repeated for credit as topics change. LEC.

HIST 461. The Asia-Pacific War, 1937-1945. 3 Hours. H.
This course introduces students to the Asia-Pacific War, which began with the outbreak of fighting between Japan and China in July 1937 and ended with the unconditional surrender of the Japanese Empire to Allied forces in August 1945. The course revolves around three themes, which are explored through lecture, discussion, and extensive use of film and visual materials: the geopolitical and colonial origins of the conflict; the concept of total war and the political and social transformations it unleashed on all belligerent nations; and the ideologies on the home front justifying the mass slaughter of soldiers and civilians. There is also discussion about how people in Japan, the United States, China, Korea, and other countries remember the war in the postwar period. LEC.

HIST 470. Popular Culture in Latin America and Africa. 3 Hours. NW / H.
This course offers a comparative assessment of the origins and practice of various forms of popular culture in the 20th Century in these two regions. Theories that explain the links between modernism and popular culture are discussed. Topics investigated may include the impact of spectacle on the urban environment, the legacies of colonialism in the sphere of culture, and the intersection of public space and popular culture. Forms such as music, cinema, street theater, and sports are explored. LEC.

HIST 471. Social History of South America. 3 Hours. H/W.
The various republics of South America have experienced radical social change since the late 19th century. Compressed industrialization has propelled the accelerated growth of global megacities, mass immigration from Europe and Asia, and the rise of populist and socialist politics that address the needs of the working class. This course follows a thematic approach by examining collective violence, endemic poverty, shifting gender relations, labor conflict, public health, revolutionary movements, and dictatorships. LEC.

HIST 472. Traveler's Tales of the Middle East. 3 Hours. H.
This reading-intense seminar examines the multiple visions of "the Orient" that appeared in the letters, memoirs, and novels of Western travelers to the Middle East in the nineteenth and twentieth centuries. We examine the rise of tourism and travel-writing within the Middle East and their links to European imperialism. Working closely with primary source documents, we question what these highly personal and often misinformed types of writing can tell us about the politics and culture of everyday life in the Middle East. LEC.

HIST 473. From Harem to the Streets: Gender in the Middle East, 1900-Presevant. 3 Hours. H.
This reading-intensive seminar examines shifts in gender roles and expectations in the Middle East during the twentieth and twenty-first centuries. The course begins with the importance of harem within Middle Eastern society, and traces Middle Eastern women's increasingly public presence in national movements, feminist activism, and peace protests as well as the impact of Western standards of marriage, child-rearing, beauty, and sexuality on gender roles. The course uses primary and secondary sources to analyze how gender identity is informed by religion and culture and grounded in specific historical moments. LEC.

HIST 490. Honors Course in History. 1-3 Hours. AE61 / H.
May be taken more than once; total credit not to exceed six hours. Prerequisite: Approval of the Coordinator of the Honors Program of the Department of History. IND.

HIST 492. Readings in History, 1-4 Hours. AE61 / H.
Investigation of a subject selected by the student with the advice and direction of an instructor. Individual reports and conferences. Two (2) Readings in History courses may be applied to the major and no more than one (1) may be applied to the minor. Prerequisite: Ten hours of college history including at least two upper-class courses and a "B" average in history. Consent of instructor. IND.

HIST 493. History Research Internship, 1-3 Hours. H.
The course allows students to work with a faculty mentor and learn firsthand the tasks that historians undertake to research and present their findings. Potential student assignments include database entry and retrieval, translation, fact checking, and compiling sources. Graded on a satisfactory/unsatisfactory basis. Prerequisite: At least one 300-level history course; declared major in history; and permission of the instructor. LEC.

HIST 494. Service Learning in History, 1-3 Hours. AE61 / H.
This course is designed to give students the opportunity to apply historical knowledge and ideas gained through course work to real-life situations in volunteer service agencies and community centers. Open to History majors and others with significant History backgrounds. Permission of instructor is required. LEC.

HIST 498. Undergraduate History Honors Seminar. 3 Hours. AE61 / H.
Required for students in the History major honors program, normally in the second semester of their honors projects. Prerequisite: Approval of the Coordinator of the Honors Program of the Department of History. Another seminar experience may be substituted, with the approval of the Honors Coordinator. LEC.

HIST 500. History of the Book. 3 Hours. H.
Brief history of writing materials and handwritten books; history of printed books from the 15th century as part of cultural history; technical progress and aesthetic change. Offered every second year. (Same as ENGL 520.) LEC.

HIST 501. Social History of the Near East. 3 Hours. H.
History of the rise of civilizations in the ancient Near East from the earliest time to the Muslim conquest of the early seventh century, including the areas of Mesopotamia, Egypt, Syria, Palestine and Asia Minor. An archaeological approach is used in focusing attention on the cultural phenomena and achievements of the peoples of these areas, including the Babylonians, Assyrians, Persians, ancient Israelites, Greeks and Romans. LEC.

HIST 502. Development of Ancient Greece, ca. 1000-300 B.C., 3 Hours. H/W.
Emphasis on the ancient sources and texts, developments in political institutions and society, the changing definitions of personal, cultural, and national identities, and the cultural tensions between Greece and the cultures to the west and east, especially Italy and Persia. No knowledge of the ancient languages is required. (Same as CLSX 502.) LEC.

HIST 503. The Ancient History of the Near East. 3 Hours. H.
History of the rise of civilizations in the ancient Near East from the earliest time to the Muslim conquest of the early seventh century, including the areas of Mesopotamia, Egypt, Syria, Palestine and Asia Minor. An archaeological approach is used in focusing attention on the cultural phenomena and achievements of the peoples of these areas, including the Babylonians, Assyrians, Persians, ancient Israelites, Greeks and Romans. LEC.

HIST 504. The History of the Book, 3 Hours. H.
Brief history of writing materials and handwritten books; history of printed books from the 15th century as part of cultural history; technical progress and aesthetic change. Offered every second year. (Same as ENGL 520.) LEC.
world-empire until economic and military problems forced a complete reorganization of the imperial system. LEC.

HIST 508. Late Roman Empire (284-527). 3 Hours. H.
An investigation and analysis of the later Roman Empire from Diocletian, emphasizing the Christianization of the empire, its division into Western and Eastern/Byzantine Empires, and the barbarian invasions. LEC.

HIST 509. Multinational Corporations: The Role of Money and Power. 3 Hours. H.
This course explores the origins, historical evolution, and global expansion of multinational corporations since the 1880s. Particular attention is devoted to U.S.-directed multinational businesses with both market-oriented and supply-oriented direct investments abroad and the competitive advantages gained by American capital, management, and marketing expertise vis-a-vis foreign firms operating in Canada, Europe, Asia, Latin America, and Africa. An objective of the course is to assist the student of international business in understanding, analyzing, and addressing various complex, interrelated and interdependent trends and issues in the world community that have had a critical impact on business performance in the international marketplace. LEC.

HIST 510. Topics in: ____. 2-3 Hours. H.
A study of a specialized theme or topic in History. May be repeated for credit when topic varies. LEC.

HIST 511. Foodways: Native North America. 3 Hours. H.
This course surveys the traditional foodways of the indigenous peoples of North America. We survey hunting, gathering and fishing methods, meal preparation, medicinal plants and the cultivation of crops according to tribal seasons. Because modern indigenous peoples are suffering from unprecedented health problems, such as diabetes, obesity, high blood pressure and related maladies, the course traces through history the reasons why tribal peoples have become unhealthy and why some have lost the traditional knowledge necessary to plant, cultivate, and save seeds. The course also addresses the destruction of flora and fauna from environmental degradation. (Same as HWC 551 and ISP 551.) Prerequisite: Upper division course on indigenous / American Indian history, or permission of the instructor. LEC.

HIST 512. Foodways: Latin American. 3 Hours. H.
This course explores the traditional foods, ways of eating, and cultural significance of food among peoples of Latin America. The course surveys the vast array of flora in Central and South America and the Caribbean, and focuses on issues of environmental protection, bioethics, food security, and the growth of farming and ranching. The class studies the impact that foods such as maize, potatoes and cacao have had globally, and includes African, Asian, and European influences on Latin cuisine, as well as health problems associated with dietary changes. (Same as HWC 552 , ISP 552, and LAA 552.) Prerequisite: Upper division course on Latin American history, or permission of the instructor. LEC.

HIST 513. Early Medieval Culture. 3 Hours. H/W.
The formation of a new civilization in Western Europe between the decline of the Roman Empire and the First Crusade is the central stress in this topical study of the institutions and ideas characteristic of the Latin West, 300-1100. LEC.

HIST 515. The Crusades in Cross-Cultural Perspective. 3 Hours. H.
This course examines the development and evolution of the crusade as well as the history of the crusading movement from the 11th to the 15th centuries. Through an analysis of documents from Christian, Jewish, and Muslim perspectives, this course aims to consider "the Crusades" in the broadest possible context. One of the key questions to be addressed in this course is: how did these expeditions to the Holy Land both reflect and influence cross-cultural relations in the medieval Mediterranean World? LEC.

HIST 516. Later Medieval Culture. 3 Hours. H.
The civilization of Medieval Europe at its height (1100-1350); its subsequent disintegration and transformation. LEC.

HIST 517. Roots of Human Trafficking: Modern Slavery and Africa. 3 Hours. H.
This reading-intensive seminar explores human trafficking in the modern world. It examines labor exploitation and commercialization in a historical perspective. The course aims to explore how imperialism led to the expansion of human trafficking and how women, men and children experienced labor exploitation in different ways. We examine how forced labor was/is behind the car and bicycle industries, sugar, coffee, and chocolate consumption. Today more than 27 million people are held, sold, and trafficked as slaves around the world. This course discusses similarities and differences between contemporary and historical slavery and analyzes why and how it persists nowadays. Readings include accounts of people held in bondage, case studies, and reports. Students develop familiarity with major historical concepts, themes, and subjects. Students also engage, investigate, and understand history as a process to explain how we make sense of the past and the present. Students carry on a research project throughout the semester about the historical roots of a modern case of slavery and/or human trafficking, producing original scholarship. (Same as AAAS 517.) Prerequisite: Successful completion of a history course numbered below 500, or permission of instructor. LEC.

HIST 519. European Intellectual History of the Seventeenth Century. 3 Hours. H/W.
A study of a specialized theme or topic in History. May be repeated for credit when topic varies. LEC.

HIST 520. The Age of the Renaissance. 3 Hours. H/W.
A survey of economic, political, social, and cultural developments in Italy in the 14th and 15th centuries, with special attention to those elements in the life of the age which look forward to the modern world. LEC.

HIST 521. The Age of the Reformation. 3 Hours. H/W.
The Protestant revolt of the 16th century. LEC.

HIST 522. The Age of Religious Wars, 1540-1648. 3 Hours. H/W.
The Catholic or Counter-Reformation and the wars of religion, including the Thirty Years War. LEC.

HIST 523. Europe between Absolutism and Revolution. 3 Hours. H/W.
An investigation of why the major states of Europe underwent a crisis at the end of the 1700s that culminated in a wave of democratic revolutions, reforms, and the wars of Napoleon. LEC.

HIST 524. The French Revolution. 3 Hours. H/W.
A study of the origins, development, and impact of the French Revolution, beginning with a description of France in the 18th century and ending with a look at France under Napoleon. LEC.

HIST 525. Modern France: From Napoleon to de Gaulle. 3 Hours. H/W.
A survey of the history of modern France. Beginning with an exploration of the impact of the Revolutionary and Napoleonic era on French institutions, politics, and society, this course examines the search for a viable political system, the acquisition of a colonial empire, the church-state controversy, and the rise of socialism in the nineteenth century, and considers the impact of two world wars on French society, the rapid modernization of
countryside and cities, and French political leadership from Clemenceau to Blum to de Gaulle in the twentieth century. LEC.

HIST 527. Recent European History, 1870 to the Present. 3 Hours. H/W.
A study of the issues and themes that have shaped the contemporary European world, exploring European politics, economy, and society from the zenith of Europe's power and influence at the turn of the century through two world wars and into the contemporary era. This survey begins with the period of consolidation of a system of major national states in western Europe and ends with the search for alternatives to that system in the break-up of empires and movements for European unity in the post-World War II era. The course also considers the emergence of the states of central and eastern Europe and examines the impact of the Russian Revolution and the Soviet state on European affairs. Not open to those who have credit in either HIST 435 or HIST 436. LEC.

HIST 528. Economic History of Europe. 3 Hours. S/W.
An introductory study of European economic history from the Middle Ages to the 1980s. Investigates the sources of economic growth, and the interaction between economic forces and social institutions. Topics covered will include the rise of commerce, the agricultural and industrial revolutions, imperialism, the Great Depression, and European recovery after World War II. (Same as ECON 535.) Prerequisite: ECON 104 or ECON 142 and ECON 144. LEC.

HIST 529. Intellectual History of 19th Century Europe. 3 Hours. H/W.
A survey of significant currents of thought during this period. Attention to the problem of the relationship between ideas and the historical situation. LEC.

HIST 530. History of American Women--Colonial Times to 1870. 3 Hours. AE41 / H.
A survey of women's history in the United States that will consider women's roles as housewives, mothers, consumers, workers, and citizens in preindustrial, commercial, and early industrial America. (Same as AMS 510 and WGSS 510.) LEC.

HIST 531. History of American Women--1870 to Present. 3 Hours. AE41 / H.
A survey of women's history in the United States that will include radical and reform movements, the impact of war and depression, professionalization, immigration, women's work, and the biographies of leading figures in women's history. (Same as AMS 511 and WGSS 511.) LEC.

HIST 532. History of Women and Work in Comparative Perspective. 3 Hours. H.
This course explores the connection between historical changes in the labor process and the occupational choices available to women in different countries. Through discussion and analyses of texts, students will evaluate the construction of a gendered division of work as shaped over time by economic, cultural, and political forces. The chronological and geographical focus may vary depending on the instructor. (Same as AMS 512 and WGSS 512.) LEC.

HIST 533. The History of Women and the Family in Europe, from 1500 to the Present. 3 Hours. H/W.
This course examines how women's roles and the family have changed in Europe from the early modern period to the present. It will consider the relation of women and the family to such cultural, social, and political changes as the Reformation, the French Revolution, middle class culture, industrialization, and the mass movements of the 19th and 20th centuries. LEC.

HIST 534. Captivity in America, 1492-1800. 3 Hours. H.
Captivity, threatened and actual, shaped the lives of the people of North America. It profoundly influenced the ways in which individuals and communities thought about themselves and the people around them. Colonists feared captivity among Native Americans; centuries later, Americans in the early republic rallied to the cause of their countrymen captured by Barbary pirates. This course examines the impacts, cultural, social, religious, and otherwise, of a variety of forms of captivity in colonial British, Spanish, and French North America. Topics in this course may include the captivity of European explorers and settlers by Native American groups; the enslavement of peoples from Africa to European and Native American masters; prisoners of war; naval impressment; and the displacement and captivity of Native American individuals and communities. Prerequisite: Successful completion of prior history course numbered below 500. LEC.

HIST 537. France from the Renaissance to the French Revolution. 3 Hours. H.
A study of the major political developments of early modern France, including absolutism, corporate institutions, and popular revolts, as well as an examination of the everyday life and beliefs of ordinary people. LEC.

HIST 538. European Intellectual History of the Eighteenth Century. 3 Hours. H.
An examination of the writing, ideas, and language of the major thinkers of the Enlightenment, including Diderot, Hume, Kant, Lessing, Rousseau, and Voltaire. LEC.

HIST 541. British History, 1500-1660. 3 Hours. H.
An introduction to the impact on the British Isles of the Reformation and Renaissance; the development of the Tudor state; Parliament; the Stuart monarchy; the Anglican counter-reformation; civil war; the Cromwellian experiment. LEC.

HIST 543. Modern Iran. 3 Hours. NW / H.
A history of Iran from the sixteenth century to the present with an emphasis on religious, political, and cultural history. Topics will include the establishment of Shi'ism as the state religion in the sixteenth century, the evolution of religio-political thought among the Shi'ite clerical establishment, great power politics in the nineteenth century, European cultural and intellectual influence, nation-building and nationalism in the twentieth century, the Islamic revolution of 1979, and Iranian politics since the revolution. Prerequisite: HIST 327 and HIST 328. LEC.

HIST 544. Britain and Ireland from 1200 to 1500. 3 Hours. H.
Survey of social, cultural, political, and economic developments with particular emphasis on interaction between Anglo-Norman/English and Celtic societies. LEC.

HIST 545. British History, 1660-1832. 3 Hours. H.
A study of Britain's recovery from civil war; state formation and national identity; ideological conflict; the Revolution of 1688; religion andsecularization; social stability and commercial expansion; reform; threats to the state, and the American revolution; Britain's survival of the French Revolution; the breakdown of the ancient regime in 1828-32. LEC.

HIST 546. History of Cartography. 3 Hours. H.
A history of mapmaking worldwide from its origins to the present day. Emphasis on maps as historical records of evolving civilizations and cultural landscapes and methods of study early maps. (Same as GEOG 519.) LEC.

HIST 547. The Intellectual History of Europe in the Twentieth Century. 3 Hours. H.
This course will examine in depth the leading developments in European thought from the 1920's to the present. Topics will include: existentialism, philosophic hermeneutics, and postmodernism. LEC.
HIST 548. British History, 1832 to the Present. 3 Hours. H.
A study of the rise of modern Britain from the 1832 Reform Act, a major step on the path from aristocratic government to mass democratic politics. It covers the politics and society of the Victorian era, the extension of British influence overseas, the origins and social impact of two world wars, the creation of the Welfare State, the loss of Empire, and Britain's entry into Europe. LEC.

HIST 551. Spain and its Empire, 1450-1700. 3 Hours. H.
This course will examine the society and culture of Spain in the period known as "the Golden Age." Subjects that will receive attention include: rural and urban society, economic and political organization of the Spanish and American peoples in the early years of the conquest, the place of women in society, the social basis for "Golden Age" culture, and the debate over the "decline of Spain. LEC.

HIST 555. Aspects of British Political Thought. 3 Hours. H.
This course will offer an introduction to a number of classic works in British political thought, placed against their historical background. Close reading of selected texts will be combined with contextual analysis. LEC.

HIST 556. Aspects of British Political Thought, Honors. 3 Hours. H.
Similar in content to HIST 543. This course will offer an introduction to a number of classic works in British political thought, placed against their historical background. Close reading of selected texts will be combined with contextual analysis. Open only to students in the University Honors Program or by permission of the instructor. LEC.

HIST 557. Nationalism and Communism in East Central Europe from 1772 to the Present. 3 Hours. H/W.
The peoples of East Central Europe under Hapsburg, Romanov, and German rule; the dissolution of the empires, independence and the role of the new states in the European balance of power; World War II, Soviet domination, and the recent role of East Central Europe in the Communist World. LEC.

HIST 558. Religion in Britain Since the Reformation: A Survey. 3 Hours. H.
This course will deal analytically and synoptically with religion in Britain from the Reformation to the present with special reference to the Church of England, and focuses on the theses of ecclesiology, ecclesiastical polity, and political theology. It is essentially an examination of religious history from a perspective of the history of ideas. (Same as REL 558.) LEC.

HIST 559. Religion in Britain Since the Reformation: A Survey, Honors. 3 Hours. H.
This course deals analytically and synoptically with religion in Britain from the Reformation to the present with special reference to the Church of England, and focuses on the themes of ecclesiology, ecclesiastical polity, and political theology. It is essentially an examination of religious history from the perspective of the history of ideas. Open only to students in the University Honors Program or by permission of instructor. (Same as REL 559.) LEC.

HIST 560. The Value of Freedom. 4 Hours. H.
This course explores multiple definitions of freedom: its value, limitations, and evolving meaning. The course specifically focuses on four major contexts in which human beings have faced existential questions about freedom's value: politics, religion, work, and gender relations. The goals are to explore the ways in which other societies and epochs have valued freedom and balanced it against competing social goods and thus to attune students to the particularities of today's definitions and celebrations of freedom. LEC.

HIST 561. Liberation in Southern Africa. 3 Hours. NW AE42 / H.
This course examines struggles for freedom in southern Africa and the consequences of political, economic, and social changes in the region. The end of colonial rule, the demise of white-settler domination, and the fall of the apartheid regime is discussed. As a major political event of the twentieth century, the liberation of southern Africa had both local and global consequences. The course analyzes transnational issues of liberation and resistance to consider broader regional and international perspectives. Course themes pay particular attention to gender and ethnicity and include a focus on democratization and contemporary meanings of liberation. Prior coursework in African Studies is strongly recommended, but not required. (Same as AAAS 561 and POLS 561.) LEC.

HIST 562. United States Environmental History in the 20th Century. 3 Hours. H.
Americans dramatically changed the natural world between 1900 and 2000. This course asks how transformed environments shaped the American experience during a century of technological innovation, democratic renewal, economic expansion, global conflict, and cultural pluralism. Topics include food and markets, energy and transportation, law and politics, protest and resistance, suburbanization, and environmentalism's fate in a global information era. (Same as EVRN 562.) LEC.

HIST 563. U.S. Environmental Thought in the 20th Century. 3 Hours. H.
Explores both leading and dissident ideas that Americans have had about the natural world since 1900. Broad chronological periods are explored in some depth, including the Progressive Era, New Deal, Cold War, the Sixties, and the Reagan Eighties. The course uses articles and books, as well as visual and aural forms of communication. Commercial speech, as well as scholarly and literary works, are considered. (Same as EVRN 563.) Prerequisite: EVRN 148 or HIST 129, or permission of instructor. LEC.

HIST 564. Medieval Russia. 3 Hours. H.
Political, economic, social, cultural, and religious developments of Russia from the beginnings of the Russian state in the 9th Century through the 17th Century. LEC.

HIST 565. Imperial Russia. 3 Hours. H/W.
The history of Imperial Russia from Peter the Great's reinvention of the empire in the eighteenth century to its demise in the revolutions of 1917. Placing Russia in a global context, the course examines change and continuity in politics, society, economy, and culture and looks at Russia as a diverse empire between Europe and Asia. Readings include historical scholarship and some of the classics of Russian literature. LEC.

HIST 568. Rise and Fall of the Soviet Union. 3 Hours. H/W.
An exploration of the Soviet Union's creation, evolution, collapse, and legacy in contemporary Russia and Eurasia. Drawing on historical scholarship, literature, music, and film, the course examines the major trends and developments in Soviet politics, ideology, society, economy, and culture. Special attention is paid to how the multietnic Soviet state's rise and fall reflected broader changes in the world during the "Soviet century. LEC.

HIST 570. The Middle East After World War II. 3 Hours. NW AE42 / H/W.
An intensive study of developments and changes in the Middle East since World War II. Topics and themes will vary, but may include the long-lasting effects of European imperialism, Big Oil and the energy crisis, the Arab-Israeli conflict and peace process, American intervention in the Middle East, minority communities, and the revival of Islamic and popular protest movements. LEC.
HIST 573. Latin America in the 19th Century. 3 Hours. H/W.
The course will analyze the social, political, and economic problems of the Latin American nations from their independence to the Mexican Revolution (1910). Emphasis will be on the emergence and shaping of the new countries; their transition to modern industrializing societies; and the impact of this transition on Latin American society. LEC.

HIST 574. Slavery in the New World. 3 Hours. H/W.
Slavery, slave culture, and the slave trade in the U.S., Latin America, and the Caribbean will be examined comparatively. Attention will also be given to African cultures, the effects of the slave trade on Africa, and the effects of African cultures on institutions in the New World. (Same as AAAS 574.) LEC.

HIST 575. History of Mexico. 3 Hours. H/W.
Mexican history from preconquest days to the contemporary period. LEC.

HIST 576. History of the Caribbean and Central America. 3 Hours. H/W.
A comparative examination of Central America and the Caribbean. Emphasis is on understanding the complex social, cultural, and political development of this broad region from the pre-Columbian period until the modern era. Topics include: conquest, colonization, racial and ethnic diversity, economic development, political conflict, and globalization. Prerequisite: HIST 120, HIST 121, or HIST 370. LEC.

HIST 579. The History of Brazil. 3 Hours. H/W.
The history of Brazil from European discovery to the present with emphasis on social and economic change. Topics discussed will include the Indian, African, and European backgrounds, slave society, the frontier in Brazilian development, cycles of economic growth and regionalism, the role of foreign capital, industrial development, labor, urban problems, the military in government, and human rights. LEC.

HIST 580. Economic History of Latin America. 3 Hours. H/W.
A study of the changing economic conditions in Latin America from Colonial times through the Twentieth Century and the effect of these conditions on Latin American society. Emphasis will be on the major theoretical issues of development economics, patterns of growth, and suggested strategies for economic development. Analysis will center on changes in agriculture, industry, labor, finance, transportation and technology, urbanization, immigration, role of women, export and commerce, and foreign involvement. LEC.

HIST 581. The Japanese Empire. 3 Hours. H.
Although the history of modern Japan was for a long time conventionally understood within the parameters of the nation-state, in fact modern Japanese identity coalesced around empire. This reading-intensive course explores the Japanese empire from its origins in the late nineteenth century to its collapse at the end of World War II in 1945, as well as the empires post-1945 legacies in Asia. Particular attention is paid to different forms of Japanese colonial domination practiced in Hokkaido, Okinawa, Taiwan, Korea, the South Seas Islands, Manchuria, occupied China, and Southeast Asia. We also study the ways in which the empire and colonial subjects, in turn, transformed Japanese state and society. Furthermore, we examine transnational themes the Japanese empire shared with other modern empires in areas such as colonial violence, gender, migration, settlements, war mobilization, and historical memories of the colonial experience. Prerequisite: Successful completion of an East Asian history or culture course numbered below 500; or a history course numbered below 500; or permission of the instructor. LEC.

HIST 582. Ancient Japan. 3 Hours. NW / H.
Course covers the history of Japan from the prehistoric era through the ancient period (approximately 10,000 BC to 1200 AD). Topics examined include the rise of Japanese Civilization, state formation, early capitals, belief systems, courtly culture in the Heian period (794-1185), and daily life. Writing assignments provide students with opportunities to gain familiarity with historical methods for analysis and to strengthen their written expressions. Not open to students who have taken HIST/EALC 586. LEC.

HIST 583. Imperial China. 3 Hours. NW / H/W.
An intensive survey of China's traditional civilization and its history, with emphasis on the last centuries of imperial rule under the Sung, Yuan, Ming, and Ch'ing dynasties (to 1850). (Same as EALC 583.) LEC.

HIST 584. Modern China. 3 Hours. NW AE42 / H/W.
An intensive survey of China's history from the early 19th century to the present. Key topics include the decline of the traditional system, the rise of communism, the Maoist era, and the tensions of change and control in the 1980s and 1990s. (Same as EALC 584.) LEC.

HIST 585. Beer, Sake, Tea-Beverages in Japan History. 3 Hours. H.
Sake and tea are synonymous with Japan today, but the history of beverages from water to whiskey illuminates key developments in Japanese civilization. This course makes a thematic survey of Japanese beverages introducing the place of drinks in global history before examining their distinct context in Japan. Topics include the ritual consumption of beverages as in the tea ceremony; the place of alcohol in Japanese culture; locales for consuming beverages such as bars, teahouses and coffee shops; and the Westernization of taste preferences as characterized by the introduction of beer and wine. By taking this course, students gain insight into ways that beverages contribute to Japanese culture and help shape personal and national identity. Prerequisite: Successful completion of an East Asian history or culture course number below 500 or permission of the instructor. LEC.

HIST 587. Early Modern Japan. 3 Hours. NW AE42 / H/W.
Early modern Japan (16th to 19th century) examines the history, culture, and patterns of life during an era of rigid social control but artistic brilliance. After an historical overview of the period, students will explore topics including the social structure, travel, religion, thought, and the formation of traditional cultural forms such as Kabuki theater. (Same as EALC 587.) LEC.

HIST 588. Japan, 1853-1945. 3 Hours. NW AE42 / H/W.
This course provides an intensive survey of Japanese history from the arrival of Commodore Perry through the Pacific War. Social, economic, and political themes will be emphasized. Among the topics covered will be the Meiji Restoration, industrialization, Japanese imperialism, Taisho democracy, and wartime mobilization. (Same as EALC 588.) LEC.

HIST 589. Japan Since 1945. 3 Hours. NW / H/W.
This course provides an overview of Japanese history from the end of World War II to the present day. Among the topics covered will be the Allied Occupation, postwar politics and social change, the economic “miracle,” popular culture, women and the family, crime and punishment, the educational system, and Japan's place in the world. (Same as EALC 589.) LEC.

HIST 590. Cultural History of Korea. 3 Hours. H.
This course examines the cultural history of Korea in periods prior to the 19th Century. Special attention is given to varying constructions of cultural value, heritage, and identity, together with the historically specific factors that engendered them. (Same as EALC 563.) LEC.

HIST 591. Food in History: West and East. 3 Hours. H/W.
A survey of scholarship on food in the West and in East Asia, choosing works primarily by historians, but also by sociologists, geographers, and anthropologists. We consider how scholars have approached issues concerning food productions and consumption, what habits of eating reveal about daily life, and how and when food is embedded with
historiography related to these topics, keeping in mind the famous maxim of the noted French gastronome Brillat-Savarin (d. 1826): “Tell me what you eat: I will tell you what you are. LEC.

HIST 593. Modern Korea. 3 Hours. NW / H/W.
This course will examine selected topics in Modern Korean history in the 19th and 20th centuries, with special emphasis on Korea's connections to China and Japan. (Same as EALC 593.) Prerequisite: A college-level course in East Asian history or culture, or consent of instructor. LEC.

HIST 594. Law and Society in Traditional China. 3 Hours. S/W.
The course begins with a series of lectures on the main principles underlying Chinese social structure. The course then examines the application of those principles in legal cases. Students read legal cases in translation and argue them in class. (Same as EALC 594.) Prerequisite: A course in Chinese history. LEC.

HIST 596. Defining Japan: Marginalized Groups and the Construction of National Identity. 3 Hours. NW / H/W.
This course investigates the construction of national identity in modern Japan by examining the historical experiences of groups marginalized by mainstream society. We will explore the pressures of conformity, the pervasiveness of social ostracism and the surprising diversity in Japanese society. Among the groups discussed will be indigenous peoples (the Ainu, Okinawans), the Korean minority, the outcast class (burakumin), the sick and disabled, the yakuza, and political activists. (Same as EALC 596.) LEC.

HIST 597. Japanese Theater History. 3 Hours. NW / H/W.
This course examines the historical development and characteristics of Japanese theater, with special attention to traditional theater and the genres of noh, kyogen, and kabuki in particular, tracing their origins in the pre-modern era and their continued performance today. To gain an understanding of the historical and artistic setting of these arts, lectures and readings will consider broader issues such as performance and ritual in religion and daily life, gender and representation, and folk theater. A portion of this class will include practical studies of theatrical forms including noh dance and kabuki music (shamisen). (Same as EALC 597.) LEC.

HIST 598. Sexuality and Gender in African History. 3 Hours. NW AE42 / H.
An examination of the history of sexuality and gender in Africa with a focus on the 19th and 20th centuries. Major issues and methods in the historical scholarship on gender and sexuality will be covered. Topics of historical analysis include life histories, rites of passage, courtship, marriage, reproduction, education, masculinities, homosexuality, colonial control, and changing gender relations. Prior course work in African history is suggested. Graduate students will complete an additional project in consultation with the instructor. (Same as AAAS 598.) LEC.

HIST 599. The Rise and Fall of Apartheid. 3 Hours. H.
This course will deal with the last fifty years of South African history during which apartheid came to be formulated, supported, and perpetuated, and the forces that were responsible for its disintegration by 1990. Reference will also be made to the transformation process since April 1994. (Same as AAAS 590.) LEC.

HIST 600. West African History. 3 Hours. NW / H/W.
A study of the political, social, and economic development of West Africa until the colonial era. Major focus will be on the role of state formation, trade, ecology, and urbanization in the formation of centralized politics from the 11th to the 16th centuries and the impact of the process of Islamization and Muslim revolution on political and socioeconomic change in selected West African societies in the 19th century. LEC.
larger historical context, particularly the expansion of the British Empire in the early modern period. Emphasis in the course will be on migration, social and economic conditions, and inter-racial relations. LEC.

HIST 611. Early American Indian History. 3 Hours. H.
This course will focus on the history of American Indians, especially those of the eastern woodlands, from precontact times to the 1830's. Particular emphasis will be on the response of Indians to demographic catastrophe, the development of trade between Indians and colonists, and Indian responses to European colonization in British America and New France. The role of Indians in the American Revolution and the changes caused by Removal will also be treated. LEC.

HIST 612. History of Federal Indian Law and Policy. 3 Hours. H.
This course offers a comprehensive examination of federal legislation and court decisions in the United States that have affected American Indians. The history of law and policy will be traced from the colonial period, but the major emphasis will be on the struggle of American Indians to preserve sovereignty in the 19th and 20th centuries. LEC.

HIST 613. Slavery and Freedom in the Age of Jackson. 3 Hours. H.
This course focuses on the growing importance of the issues of slavery and freedom in the United States between 1815-1848. Recently, scholars have demonstrated that the period was one of disorienting, dramatic, and unprecedented change as politics, economics, racial and gender roles, and key institutions were permanently transformed. The course will examine these changes and how they, in turn, remade the values and identities of all Americans. LEC.

HIST 615. Rise of Modern America: Politics, Culture, and Society, 1900-1950. 3 Hours. H.
The history of the United States in the First Half of the Twentieth Century. LEC.

HIST 616. Contemporary America, 1941-Present. 3 Hours. H.
A history of the United States from its entry into World War II to the present. A study of such selected topics as women's history and feminism, race relations and the Afro-American civil rights movement, power, poverty, the military-industrial complex, McCarthyism, and presidential administrations. LEC.

HIST 617. America in the 1960's. 3 Hours. H.
The people of the United States experienced significant social political, and cultural change during the 1960's. This course studies the history of these changes, focusing on the American people, the institutions that shaped their lives, and the social and political movements, for and against change, that surfaced during this decade. Specific topics include: the struggle for racial equality, the Kennedy, Johnson, and Nixon administrations; the Vietnam War, the antiwar movement, New Left, and counterculture; feminism's rebirth; the white backlash; and the resurgence of political and cultural conservatism. Course requirements include readings, discussion, and original historical research and writing. LEC.

HIST 618. History of the American West to 1890. 3 Hours. H.
A survey of Western history with emphasis on such topics as Native Americans and Indian-white relations, environment and resource use, exploration and discovery, expansionism and Manifest Destiny, economic development, urban, rural, and alternative communities, ethnic and racial experience, women and violence. Consideration will also be given to topics such as fur trade, mining, the cattle business, and agriculture. LEC.

HIST 619. History of the American Indian. 3 Hours. NW / H/W.
A study of Indians in the United States from colonial times to the present. Consideration will be given to the political, social, and cultural history of selected Indian tribes and to Indian-white relations with particular attention to the Indian point of view. Other topics will include a comparative study of Indian policy of nations colonizing in America, cultural intermingling and cultural conflict, and current Indian problems. Slides, films, and guest speakers (including American Indians) will be used in the course. LEC.

HIST 620. History of Kansas. 3 Hours. H.
A survey of the history of culture and society from prehistory to the present. Topics include Native American life, Euro-American resettlement, Bleeding Kansas and the Civil War, agricultural settlement, urbanization and industrialization, depression and recovery, and modern Kansas in transition. LEC.

HIST 621. The American West in the 20th Century. 3 Hours.
A study of the post-frontier era and the struggle to create a regional identity, drawn from legends of the heroic past, varieties of racial and ethnic experience, political culture, and the possibilities of the land. LEC.

HIST 622. History of the Plains Indians. 3 Hours. NW / H/W.
A history of the Plains Indians from the sixteenth century to the present. Consideration will be given to tribal culture and society, to the impact of the fur trade and international rivalries on tribes, and to Indian-white relations. LEC.

HIST 625. Body, Self and Society. 3 Hours. H.
An intensive examination of the role of the human body in the creation of personal and social identities in the Western world. Students become acquainted with contemporary theories of embodiment and senses as they are applied to a variety of historical themes, and develop research projects on a topic negotiated with the instructor. (Same as HWC 575, WGSS 575.) Prerequisite: An upper-division course in History, Humanities and Western Civilization, or Women Gender and Sexuality Studies; or permission of instructor. LEC.

HIST 626. Men and Masculinities. 3 Hours. H.
An intensive examination of the history and theory of masculinities in the Western world. Students become acquainted with some of the key theories of men and masculinities, and develop research projects on a topic negotiated with the instructor. (Same as HWC 570, WGSS 570.) Prerequisite: An upper-division course in History, Humanities and Western Civilization, or Women Gender and Sexuality Studies; or permission of instructor. LEC.

HIST 628. American Economic Development. 3 Hours. H.
An introductory study of the development of the American economy from colonial times to the present. Investigates long-term trends in output, population, and output per capita, as well as short period fluctuations, and the variables and institutions that determined these fluctuations and trends. (Same as ECON 530.) Prerequisite: ECON 104 or ECON 142 and ECON 144. LEC.

HIST 629. The United States and the World to 1890. 3 Hours. H.
The origins of American diplomacy from the wars of the 18th century and the Revolution to 1901. The foreign relations of the American government and the reactions of the American people to international problems. LEC.

HIST 630. The United States and the World, 1890-2003. 3 Hours. H.
An examination of the history of United States foreign relations over the course of the twentieth century. Treats America's emergence as a world power before World War I, imperialism and interventionism, involvement in World War I and World War II, internationalism, the Cold War and America's anti-communist crusade, third world nationalism, responses to a global economy, and the obligations of a military superpower in a chaotic world. LEC.

HIST 631. The Contemporary Afro-American Experience. 3 Hours. H.
A history of Afro-America from the end of the Civil War to the present. Consideration will be given to such topics as America's capitulation to racism, blacks in agriculture, blacks and the labor movement, Booker
T. Washington and W.E.B. DuBois, civil rights protest, migration and urbanization, Marcus Garvey and black nationalism, the Harlem Renaissance, blacks during the New Deal, blacks in recent politics, the modern civil rights movement, ghetto uprisings, and the changing relationships among race, caste, and class. LEC.

HIST 636. Agriculture in World History. 3 Hours. H.
A survey of the development of agriculture from prehistory through the present. The major themes of the course will be how various methods of farming have spread around the world, how new techniques have transformed agriculture, and how peasants and farmers have interacted with cities and governments. LEC.

HIST 640. Entrepreneurship in East Asia. 3 Hours. NW / H.
An intensive examination of the history and current status of entrepreneurship in China, Japan, and other nations in East Asia. This course investigates the role of entrepreneurs in Asian economic development from the nineteenth century to the present, as well as the relation between entrepreneurship and Asian cultural traditions. The opportunities and challenges of entrepreneurship in East Asia today are also considered. (Same as EALC 520.) LEC.

HIST 646. Witches in European History and Historiography. 3 Hours. H.
This course examines witches, witchcraft, and magic in Europe in the late medieval and early modern period (approximately 1200-1700 C.E.). Particular emphasis will be on the variety of historical and anthropological approaches that have been used to study the subject and their meaning in the context of gender politics and gender theory. (Same as WGSS 646.) LEC.

HIST 649. History of Feminist Theory. 3 Hours. H.
This discussion course will cover the development of feminist theories from the late Middle Ages to the present. Reading will include Pisan, Wollstonecraft, Mill, Freud, Woolf, Beauvoir, Friedan, Daly, Kristeva, and others. (Same as WGSS 549.) LEC.

HIST 653. American Constitutional History to 1887. 3 Hours. H.
A historical study of the colonial origins, revolutionary development, creation of, struggle over and preservation of the American constitutional system from 1763 to 1887. LEC.

HIST 654. American Constitutional History Since 1887. 3 Hours. H.
A historical study of the evolution of thought and practice of the constitutional system from the conflict over government regulation of business, through the expansion of executive and legislative power, to the evolution of protections of Bill of Rights guarantees by the Supreme Court and the reaction against that evolution. LEC.

HIST 660. Biography of a City: _______. 3 Hours. AE42 / H.
These interdisciplinary, team-taught courses survey the artistic, intellectual, and historical development of the great cities of the world. London, Paris, and Rome have been offered in recent semesters, and other cities will be studied in the future. LEC.

HIST 661. Palestine and Antiquity. 3 Hours. H.
A survey of the history of Palestine from biblical origins to the Muslim conquest, with emphasis on such topics as social and religious institutions, cultural and communal diversity, and relations between foreign powers and local authorities. The course further explores the roots of the present conflictual situation in this part of the Middle East. LEC.

HIST 666. Contemporary America, 1941-Present, Honors. 3 Hours. H.
A survey of the economic, social, political, and cultural history of the United States from its entry into World War II to the present. Students with credit in HIST 614 or HIST 616 should not enroll in HIST 666. LEC.

HIST 670. Comparative Diasporas. 3 Hours. H.
This course examines history from the point of view of diasporas, groups who move across established borders but maintain an identity linked to an original homeland. This course examines commonalities and differences in the diaspora experience by looking comparatively at a range of prominent cases, including the Jewish, African, Armenian, Greek, Turkish, German, Irish, Italian, South Asian, and Chinese diasporas, the “Gypsies,” and the internal diasporas of multiethnic states like Russia. The course also gives students the opportunity to pursue research on a diaspora of their own choosing. LEC.

HIST 696. Seminar in: _______. 3 Hours. AE61 / H.
A seminar designed to introduce students to the theory and practice of historical inquiry. A research paper will be required. May not be repeated for credit. Prerequisite: Twelve hours of upper-class courses in history and completion of HIST 301 or consent of instructor. LEC.

HIST 699. Philosophy of History. 3 Hours. H.
Topics will include: The nature of historical knowledge; the problems of historical inquiry; a critique of philosophies of history; and a study of history and related disciplines. (Same as PHIL 696.) Prerequisite: A distribution course in philosophy. LEC.

HIST 705. Globalization in History. 3 Hours.
A study of the increasing interaction among world societies since 1500 and an investigation of the long-term developments behind current world problems. Major topics include western expansion since 1500, the spread of state sovereignty, the formation of a world economy, and spread of international institutions. The current world problems investigated will vary, but may include issues such as environmental crises, human rights, migration, free trade and the spread of consumer culture, ethnicity and nationalism, and international intervention within states. (Same as INTL 705.) LEC.
and care of objects will also be considered. (Same as AMS 714, BIOL 700, GEOL 780, and MUSE 706.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

HIST 723. Introduction to Museum Exhibits. 3 Hours. This course will consider the role of exhibits as an integrated part of museum collection management, research, and public service. Lecture and discussion will focus on issues involved in planning and producing museum exhibits. Laboratory exercises will provide first hand experience with basic preparation techniques. Emphasis will be placed on the management of an exhibit program in both large and small museums in the major disciplines. (Same as AMS 730, BIOL 798, GEOL 781, and MUSE 703.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

HIST 725. Principles and Practices of Museum Collection Management. 3 Hours. Lecture, discussion, and laboratory exercises on the nature of museum collections, their associated data, and their use in scholarly research; cataloging, storage, fumigation, automated information management and related topics will be presented for museums of art, history, natural history and anthropology. (Same as AMS 730, BIOL 798, GEOL 781, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

HIST 727. Practical Archival Principles. 3 Hours. Study of the principles and practices applicable to the preservation, care, and administration of archives and manuscripts. Practical experience will be an integral part of this course. (Same as MUSE 707.) LEC.

HIST 728. Museum Management. 3 Hours. Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as AMS 731, BIOL 785, GEOL 783, and MUSE 701.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

HIST 740. Topics in History for Educators: ____. 1-3 Hours. Reading and discussion of selected historical topics, designed specifically for K-12 educators. Pedagogical methods and resources for the study of history will be addressed. Prerequisite: Approval of the instructor. LEC.

HIST 747. East Asian History and Culture for Teachers. 2 Hours. An advanced survey of the history, culture, and contemporary affairs of China, Japan and Korea, specifically designed for K-12 educators who wish to incorporate East Asian topics into their classroom teaching. Pedagogical methods and resources for the study of East Asia will be emphasized. Topics covered will address relevant benchmarks in the state curricular standards in social studies, themes from the Advanced Placement world history examination, and the national standards in world history. (Same as EALC 747.) Prerequisite: Approval of the instructor. LEC.

HIST 748. East Asian Historical Materials: ____. 3 Hours. The aim of the course is to provide students with the linguistic tools needed for archival research in East Asian history by assisting them in gaining experience reading primary and secondary language materials in Japanese and/or Chinese including texts in classical forms of these languages. After studying the rules of classical grammar and the particulars of historical materials as needed, students will read primary documents in conjunction with secondary readings in Japanese and/or Chinese. Fundamental aspects of paleography may also be introduced in this course depending on student need. Prerequisite: Capability of reading Japanese or Chinese and permission of the instructor. LEC.

HIST 799. Museum Studies Apprenticeship. 1-6 Hours. Provides directed, practical experience in the collection, care, use, and/or management of historical materials. (Same as AMS 799, ANTH 799, BIOL 799, GEOL 723, and MUSE 799.) Prerequisite: Consent of instructor. FLD.

HIST 800. Readings in: ____. 1-8 Hours. Prerequisite: Consent of instructor. RSH.

HIST 801. Colloquium in: ____. 1-6 Hours. Reading and discussion of selected topics. LEC.

HIST 802. Seminar in: ____. 3 Hours. Research Seminar on selected topics. SEM.

HIST 805. The Nature of History. 3 Hours. Analysis of what historians do and how the profession of history has developed in terms of training, concepts, and practices in both research and teaching. Consideration also of the major controversies that have developed over historical method and historical interpretation, giving greatest emphasis to American and European historiography by providing a relationship to the leading concepts of world history. LEC.

HIST 806. Studies in: ____, 3 Hours. The core course for each thematic major field in the graduate program in History. The course, offered in a colloquium style format, will serve as an introduction to the principal standard literature in the field, and will consider the full range of methodologies or approaches appropriate to the field. LEC.

HIST 807. Professional Development Colloquium in Pedagogy. 3 Hours. This course will help train future professional historians to teach. It will focus on a variety of pedagogical topics for future college history faculty, including: developing students’ critical and analytical thinking; teaching research skills; promoting student involvement/participation; determining course goals; use of multi-media technology. In addition to attending class meetings of History 807, students will attend as observers throughout the semester one 500/600-level course in an area relevant to their future teaching and complete the readings assigned to the class. They will produce a course portfolio for an undergraduate course, including: a syllabus designed by the student; a set of assignments that will be part of that course, such as examinations and papers; sample lesson plans; an annotated bibliography of materials relevant to the subject-matter of the course. LEC.

HIST 808. Colloquium in Comparative History: ____. 3 Hours. A readings-oriented course which explores themes in two or more geographic and/or chronological fields of history. The benefits and disadvantages of comparative methodologies will be analyzed. Topics will vary each term but may include the examination of such subjects as the history of urbanization, labor, colonialism, immigration, the family, political thought, or industrialization. Prerequisite: Varies with area of subtopic. LEC.

HIST 820. Colloquium on Popular Culture in Latin America. 3 Hours. This course examines the history and theory of popular culture in 19th and 20th century Latin America from a cross-disciplinary perspective. Some of the topics covered could include: the historical development of urban popular culture from broadsides and newspapers to radio and telenovelas; the politics of music from the tango to the new song movement; folk art vs. High art in the definition of national identity; cultural imperialism; sports and public rituals as spectacles for the working class; relationship between mass culture and the novel; gender roles and social order as revealed in forms of popular culture; and the politics of the New Latin American Cinema. Discussions will be in English. No prerequisites. LEC.
HIST 822. Colloquium in the Urban History of Latin America. 3 Hours. 
Explores the growth of the city and urban culture from the Spanish conquest to the present. Focus on such topics as crime, public health, leisure activities, artisans, unionization, residential patterns and transportation. LEC.

HIST 823. Colloquium on Colonial Latin America. 3 Hours. 
Explores the historiography and major themes and problems of the history of colonial Latin America. Ordinarily this will involve reading and discussion of historiographical articles, major works in the field and works involving new approaches and perspectives. A long historiographical paper will be required. LEC.

HIST 824. Seminar on Labor in Latin America. 3 Hours. 
Major problems in class conflict resulting from industrialization of peripheral economies. Focus on such topics as labor movements, worker-inspired revolutions, women in the workforce, the ideology of work, labor migration, occupational culture and worker's relationship to the state. LEC.

HIST 825. Seminar in Latin American Foreign Relations. 3 Hours. 
This seminar examines the history of Latin American attitudes and policies toward other parts of the world as well as among the Latin American nations themselves. Examples of topics of interest are anti-imperialism, Pan-Americanism, foreign cultural influences, non-intervention, international cooperation and conflict, dependency, transnational corporations, regional integration, international law and doctrine and national security. LEC.

HIST 826. Seminar in Twentieth Century South America. 3 Hours. 
Research seminar which examines major topics in the recent history of the Andean and Southern Cone countries. Topics such as the history of poverty, the dirty wars and the rise of military regimes, the social collapse of Colombia, Argentina and Peru, and the persistence of traditional cultures in the face of capitalist transformations will be thoroughly explored. LEC.

HIST 827. Colloquium in the Social History of Latin America. 3 Hours. 
Explores the historiography, methods and themes of Latin American social history from the conquest to the present. Sessions will focus on specific groups including the history of indigenous groups, peasants, slaves, women, families, workers, and the poor. A long historiographical paper will be required. LEC.

HIST 830. Colloquium in Eighteenth and Nineteenth-Century Britain. 3 Hours. 
This course examines the varied elite and popular responses to the creation of a capitalist economy (agrarian and industrial) in Britain between 1750 and 1890. LEC.

HIST 831. Colloquium in Twentieth-Century Britain. 3 Hours. 
This course examines the main developments in the political, social, and cultural history of Britain since 1890. The aim is to trace the relationship between political movements and socio-cultural attitudes and institutions. LEC.

HIST 833. Colloquium in British History, 1500-1660. 3 Hours. 
This course will engage with recent scholarship on the Renaissance and Reformation, the Civil War and the English Republic. LEC.

HIST 834. Colloquium in the History of the British Empire. 3 Hours. 
The course will deal selectively with themes in the political and cultural interaction of the peoples of the British Isles with peoples overseas, the expansion and contraction of empire, and the rationales for these processes. LEC.

HIST 836. Colloquium in British Political Thought. 3 Hours. 
This course provides an introduction to the rich tradition of British writings on politics through a close reading of a number of classic texts, interpreted in their historical settings. LEC.

HIST 837. Colloquium in British Religious History. 3 Hours. 
This course will deal analytically and synoptically with religion in Britain from the reformation to the present with special reference to the Church of England, and will focus on the themes of ecclesiology, ecclesiastical polity, and political theology. LEC.

HIST 844. Colloquium on East Central Europe, 1772-1914. 3 Hours. 
The colloquium covers the period beginning with the decline and partitions with Poland and ends with the outbreak of World War I. The major areas of study are the development of modern national consciousness among Poles, Czechs, Slovaks, Magyars, and Ukrainians, and the status of the Jews in these areas; economic, social, and educational development; and the rise of modern political parties. Prerequisite: HIST 557. LEC.

HIST 845. Eastern Europe, 19th and 20th Centuries. 3 Hours. 
The course considers the challenges of modernity in Eastern Europe, with a focus on the lands of the former Habsburg Empire. The course is designed to introduce students to major issues in modern Eastern European history and historiography, with an emphasis on recent scholarship. Topics include: nationalism, identity formation, anti-Semitism, modernization and urbanization, World War I, interwar nation-states, World War II, Communist takeovers, everyday life under Communism, dissidence, Solidarity, the collapse of Communism, and post-socialist transitions. LEC.

HIST 847. Colloquium in Russian History. 3 Hours. 
A group readings course that begins with Russia in the medieval period and continues through the end of the twentieth century. Topics may vary each term, but may include such subjects as political, social, religious, gender, or intellectual history. The course will focus around significant interpretive issues and the historiography that address them. Basic familiarity with the chronology and the main problems of Russian history is assumed. LEC.

HIST 848. Colloquium in 20th Century Russia. 3 Hours. 
The focus will be on reading and discussion of historical literature on the end of Imperial Russia, the Russian revolutions, and the Soviet Union and its aftermath. LEC.

This graduate seminar will focus on interactions between the so-called Old and New Worlds in the three centuries following Columbus’ voyages. The course will pay particular attention to the changes in the lives of Europeans, Africans, and the peoples of the Americas as a result of the emergence of transatlantic economies, empires, and cultural systems. LEC.

HIST 856. Colloquium in Modern European History I - Renaissance to the French Revolution. 3 Hours. 
This course will concentrate upon a number of selected topics in the history of Europe between the Renaissance and the French Revolution. Emphasis will be placed upon certain problems within this period and the recent historiography that deals with them. The first in a sequence of colloquia in Modern European History. Required for European history graduate students and students majoring in other fields whose secondary fields correspond to this time frame. LEC.

HIST 857. Colloquium in Modern European History II - Major Themes in Early Modern History. 3 Hours. 
This course will concentrate upon a number of selected topics in early modern European history. Emphasis will be placed upon certain problems
within this period and the recent historiography that deals with them. The second in a sequence of colloquia in Modern European History. Required for European history graduate students and students majoring in other fields whose secondary fields correspond to this time frame. LEC.

HIST 858. Colloquium in Modern European History III - French Revolution to the Present. 3 Hours.
From the French Revolution into the contemporary era. The third in a sequence of colloquia in Modern European History. Required for European history graduate students and students majoring in other fields whose secondary fields correspond to this time frame. LEC.

HIST 859. Colloquium in Modern European History IV - Major Themes in Modern History. 3 Hours.
This course will concentrate upon a number of selected topics in modern European history. Emphasis will be placed upon certain problems within this period and the recent historiography that deals with them. The fourth in a sequence of colloquia in Modern European History. Required for European history graduate students and students majoring in other fields whose secondary fields correspond to this time frame. LEC.

HIST 879. Colloquium on North American Environmental History. 3 Hours.
Intensive survey of significant works in the field from colonial times to the present, with attention to bibliography, research methods and needs, and leading issues in interpretation. LEC.

HIST 880. Colloquium in Iberian World History. 3 Hours.
A graduate colloquium focused on a historical topic that examines from a transregional perspective the historical foundations, development, and colonial heritage of regions and societies touched by Iberian expansionism. LEC.

HIST 881. Slavery in the Atlantic World. 3 Hours.
A graduate colloquium examining the historical roots, processes, experiences, and legacies of human slavery from local, regional, comparative, and global perspectives. LEC.

HIST 882. Gender, Sexuality, and Family in Iberian. 3 Hours.
A graduate colloquium that develops theoretical approaches and examines historical case studies focused on the social and cultural construction of gender roles, sexual identities, family structures, and living strategies for peoples and places touched by Iberian expansionism. LEC.

HIST 883. Ethnohistory of the Americas. 3 Hours.
A graduate colloquium that develops methodologies and examines historical case studies for the study of ethnicity, interethnic relations, and cultural hybridity from a hemispheric perspective, not only for indigenous peoples, but also for African-, Asian-, European-, or Pacific-derived groups, as well as new ethnic groupings and identities that emerged from their interaction. LEC.

HIST 890. Colloquium in American History 1492-1800. 3 Hours.
Study of the leading interpretations of major issues in the history of Colonial and Revolutionary America, including appropriate attention to new approaches and techniques in research. The first course in the sequence of colloquia in United States history. Required of all U.S. history graduate students. LEC.

HIST 891. Colloquium in 19th Century U.S. History. 3 Hours.
Study of the leading interpretations of major issues in the history of the United States in the 19th century. The third course in the sequence of colloquia in United States history. LEC.

HIST 892. Colloquium in 20th Century U.S. History. 3 Hours.
Study of the leading interpretations of major issues in the history of the United States in the 20th century. The third course in the sequence of colloquia in United States history. LEC.

HIST 895. Colloquium in the History of Gender. 3 Hours.
This colloquium will cover theoretical and topical readings on the history of manhood, womanhood, and gender systems. (Same as AMS 835 and WGSS 835.) LEC.

HIST 896. Colloquium in United States Women's History. 3 Hours.
This colloquium will cover theoretical and topical readings on the history of women in the United States from the pre-contact period to the present. It is designed to familiarize students with the most important and current historiography in the field. (Same as AMS 836 and WGSS 836.) LEC.

HIST 897. Comparative Colloquium in Women's History. 3 Hours.
This colloquium will approach the history of women from a comparative perspective through theoretical and topical readings on women in at least two different cultures. (Same as AMS 837 and WGSS 837.) LEC.

HIST 898. Colloquium in Material Culture and History. 3 Hours.
This course provides an overview of theories and methods used in material culture studies and their application to historical research, writing, and presentation. Topics may vary from semester to semester, but could include vernacular architecture, museum studies, anthropology, cultural geography, historical archeology, and perceptual theory. The course will consist of intensive reading, discussion, and written work. While it is not limited to a particular geographical or chronological area, or discipline, given the state of the field most topics will be drawn from U.S. history. LEC.

HIST 900. Independent Research Seminar: _______. 3 Hours.
Design and completion of an independent project, culminating in the production of a professional-quality paper based on original, primary source research. Prerequisite: Consent of the instructor. LEC.

HIST 901. Research Seminar in Global History. 3 Hours.
A research seminar oriented around cross-regional, comparative, and transnational aspects of history, culminating in production of a professional-quality paper based on original, primary source research. SEM.

HIST 910. Seminar in Roman History: _______. 3 Hours.
A research seminar in specialized aspects of Roman history. May be repeated for credit. LEC.

HIST 913. Numismatics as a Basis for Study of Roman Noble Families of the Late Republic. 3 Hours.
A seminar involving the study of the importance and influence of the noble families of Rome on Roman history (200-27 B.C.) with special emphasis on the literary and numismatic evidence. Reading knowledge of Latin will be essential for this course. LEC.

HIST 914. The Major Roman Historians. 3 Hours.
An analysis and criticism of the works of the most significant Roman historians from Sallust to Ammianus Marcellinus, including a comparison and contrast between the Latin and Greek historians who wrote during the Graeco-Roman period (150 B.C.-378 A.D.). LEC.

HIST 918. Elements of Latin Paleography. 3 Hours.
Introduction to the techniques of reading, dating, and localizing medieval Latin manuscripts. LEC.

HIST 919. Seminar in Medieval Europe. 2-6 Hours.
LEC.

HIST 929. Seminar in Modern European History: _______. 2-5 Hours.
A study of sources in some restricted fields and the presentation of research results. A reading knowledge of French or German or some other modern language is desirable. LEC.
HIST 930. Seminar in British History. 3 Hours.
A research seminar focusing on new, actively-investigated and controversial themes in British history, chiefly c. 1660-1832. LEC.

HIST 932. Order and Disorder in Britain and America, c. 1750-1920. 3 Hours.
The study of the history of crime and protest in their relationship with the wider social and political theory of Britain and America. Specific topics may include the impact of industrialization, the notion of the 'moral economy,' the legal and ideological nature of the death penalty, the crowd in history, and the administrative and intellectual developments in policing, prisons, and asylums. LEC.

HIST 934. Seminar in Modern European History. 1-12 Hours.
A research seminar in modern European history, with emphasis on the 19th and 20th centuries. The European impact on and relationships with the Middle East are stressed. LEC.

HIST 946. Seminar in the Middle East. 3 Hours.
A research seminar in Middle East history, with emphasis on the 19th and 20th centuries. The European impact on and relationships with the Middle East are stressed. LEC.

HIST 949. Seminar in Modern Russian History. 3 Hours.
A focus on major problems of historical interpretation and research investigation from Peter the Great to the present. LEC.

HIST 950. Seminar in Latin American History. 3 Hours.
A research seminar focused on a major theme or problem in Latin American history. LEC.

HIST 951. Seminar in Latin American Revolutions. 3 Hours.
This seminar focuses on sweeping socio-political upheavals such as occurred in Mexico in 1910, Guatemala in 1944, Bolivia in 1952, Cuba in 1959, and Nicaragua in 1979. After considering various sociological and political theories of revolution the seminar searches for an understanding of the basic reasons for revolutions in the countries mentioned (and failure of revolutionary efforts elsewhere) and possible common characteristics of the Latin American revolutionary process. LEC.

HIST 952. Seminar in Ideology, Violence and Social Change in Latin America. 3 Hours.
Research seminar focusing on the role of ideas and ideologies, values and cultural norms in the history of Latin America. Political action, including rebellions, movements and strikes by the masses and efforts toward social control by elites will also be a major theme. Finally the course will examine the meaning of "social change" for Latin America and when it can be said that "social change" actually occurs. LEC.

HIST 955. Seminar in East Asian History. 3 Hours.
A research seminar in East Asian history. Prerequisite: Open only to graduate students having a reading knowledge of at least one East Asian language. LEC.

HIST 962. Seminar in American History. 1-12 Hours.
A research and thesis seminar offered by several members of the Standing Field Committee in United States History. Students seeking advanced degrees in United States history will enroll in the seminar for theses and dissertation credit. May be repeated. LEC.

HIST 964. Seminar in American Colonial History. 3 Hours.
An intensive, research-oriented study of American history from the 1580s to the 1760s. The course will cover both British America and New France. May be repeated. LEC.

HIST 965. The American Revolutionary Experience. 3 Hours.
An intensive, research-oriented study of American history from 1760 to 1800. May be repeated. LEC.

HIST 971. Recent American History, 1920 to the Present. 3 Hours.
LEC.

HIST 973. Seminar in United States Women's History. 3 Hours.
This research seminar will focus on the history of women in the United States from the pre-contact period to the present. Students will research and write a paper using primary sources, and present those papers to the seminar for evaluation. (Same as AMS 973 and WGSS 873.) LEC.

HIST 974. Seminar in American History: ____. 3 Hours.
A research course focusing on selected topics in history. LEC.

HIST 975. Seminar in the History of United States Foreign Relations. 3 Hours.
An intensive study of United States foreign policy during a selected period. LEC.

HIST 980. Seminar in the Trans-Mississippi West. 1-5 Hours.
LEC.

HIST 981. Seminar in Environment and History. 3 Hours.
An inquiry into major issues and methods in environmental history, viewed from both an American and modern world perspective. LEC.

HIST 982. Colloquium in the History of the American West. 3 Hours.
Study of issues and interpretations in the history of the American West from prehistory to the present, including attention to new approaches and techniques in research. LEC.

HIST 986. Seminar in Historiography of Science. 3 Hours.
Examines the various patterns of interpretation influencing current historiography of science: the substance and impact of "internalist" history, which deals with the evolution of scientific ideas; the diversity of "externalist" history, which stresses interaction between the scientist's activity and social environment. Readings and discussions will assess intellectual, chronological, socio-economic, theological, philosophical, national, institutional and literary aesthetic influences on the history of science. LEC.

HIST 999. Doctoral Dissertation. 1-6 Hours.
Writing and editing of materials in the student's professional portfolio. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Permission of the instructor. RSH.

HIST 998. Portfolio Preparation. 1-6 Hours.
An inquiry into the source material upon a specific subject. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Consent of instructor. THE.

Bachelor of Arts and Bachelor of General Studies in History

Why study history?
Because it's our past, your future.

Undergraduate Admission

Admission to KU
All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements...
that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

### Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

### History Program

The history major allows students to explore the richness and diversity of human experience in the past while building skills of analysis, interpretation, research, and communication. All history majors gain knowledge of significant historical transformations that have shaped the world. History majors learn to think critically, to conduct historical research, and to present the results of their research in clear and coherent writing.

### First- and Second-Year Preparation

Prospective majors are encouraged to enroll in 1 or 2 introductory courses at the 100 or 300 level in the first 2 years. Many introductory history courses fulfill the College’s HT or NW principal course requirements, and prospective majors might choose one of them to explore their interests in history. Students who come to KU with AP or transfer credit should be aware that only 6 hours of history course work numbered 100-299 may be counted toward the major. Students interested in history as a major are encouraged to meet with a department advisor early in their careers at KU to discuss their academic goals and interests. Contact the undergraduate secretary to schedule an advising appointment.

### Requirements for the B.A. or B.G.S. Major

#### History Major Core Knowledge and Skills (3)

Majors must complete a course in the following area:

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<tr>
<td>HIST 301</td>
<td>The Historian's Craft</td>
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<tr>
<td>or HIST 302</td>
<td>The Historian's Craft, Honors</td>
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#### History Required Electives (24)

Majors must complete 5 courses (15 hours) in either category below; 3 courses (9 hours) are required from the other category below:

- **History Category I: Western Orientation. Satisfied by courses in Ancient, Medieval, Modern Western Europe, History of Science, Russia/Eastern Europe, United States:**
  - HIST 103 Environment and History
  - HIST 105 Introduction to Ancient Near Eastern and Greek History
  - HIST 106 Introduction to Roman History
  - HIST 107 Introduction to the Ancient World
  - HIST 108 Medieval History

- **History Category II: Themes and Traditions. Satisfied by courses in Western, Modern, Contemporary, Latin America, Middle East, Africa, Asia:**
  - HIST 110 The Historian’s Craft Honors
  - HIST 111 Introduction to the Modern World
  - HIST 112 Introduction to British History
  - HIST 113 History of the United States Through the Civil War
  - HIST 114 Renaissance to Revolution: Europe 1500-1789
  - HIST 115 French Revolution to the Present: Europe 1789-Present
  - HIST 116 French Revolution to the Present: Europe 1789 to Present, Honors
  - HIST 117 Russia, an Introductory History
  - HIST 118 History of the United States After the Civil War
  - HIST 119 History of the United States Through the Civil War, Honors
  - HIST 120 History of the United States After the Civil War, Honors
  - HIST 121 Early Science to 1700
  - HIST 122 Global Environment I: The Discovery of Environmental Change
  - HIST 123 Global Environment II: The Ecology of Human Civilization
  - HIST 124 Sin Cities
  - HIST 125 1642, 1688, 1776: Three British Revolutions
  - HIST 126 The Scientific Revolution
  - HIST 127 Science and Western Culture
  - HIST 128 Key Themes in Modern Global History
  - HIST 129 History of Chemistry
  - HIST 130 American Culture, 1600-1876
  - HIST 131 Great Lives in Science
  - HIST 132 American Culture, 1877 to the Present
  - HIST 133 Conspiracies and Paranoia in American History
  - HIST 134 Globalization: History and Theory
  - HIST 135 Globalization: History and Theory Honors
  - HIST 136 History, Women, and Diversity in the U.S.
  - HIST 137 From Goddesses to Witches: Women in Premodern Europe
  - HIST 138 From Mystics to Feminists: Women's History in Europe 1600 to the Present
  - HIST 139 History of Women and the Body
  - HIST 140 The Spanish Inquisition
  - HIST 141 History of War and Peace
  - HIST 142 Revolt and Revolution in Early Modern Europe
  - HIST 143 Atlantic Societies, 1450-1800: A Comparative History of European Colonization
  - HIST 144 Eurometro: Visions of the European Metropolis, 1849-1939
  - HIST 145 The Great War: The History of World War I
  - HIST 146 The History of the Second World War
  - HIST 147 Hitler and Nazi Germany
  - HIST 148 The Holocaust in History
  - HIST 149 Hard Times: The Depression Years in America, 1929-1941
  - HIST 150 Law and Society in America
  - HIST 151 Environmental History of North America
  - HIST 152 History of the Peoples of Kansas
  - HIST 153 The Korean War, 1950-1953
  - HIST 154 Science and Religion
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<td>Religion in Britain Since the Reformation: A Survey, Honors</td>
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HIST 661  Palestine and Antiquity
HIST 666  Contemporary America, 1941-Present, Honors
HIST 670  Comparative Diasporas
HIST 699  Philosophy of History

History Category II: Non-western Orientation. Satisfied by courses in Africa, East Asia, Latin America, Native America:

HIST 104  Introduction to African History
HIST 118  History of East Asia
HIST 119  History of East Asia, Honors
HIST 120  Colonial Latin America
HIST 121  Modern Latin America
HIST 122  Colonial Latin America, Honors
HIST 123  Modern Latin America, Honors
HIST 160  Introduction to West African History
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HIST 622  History of the Plains Indians
HIST 636  Agriculture in World History
HIST 640  Entrepreneurship in East Asia
HIST 670  Comparative Diasporas

History Capstone Seminar (3)

Majors must complete a capstone research experience in which they research and write an original thesis based on primary sources. It normally is taken during the senior year. Alternatively, majors with a GPA above 3.5 may choose to write a senior honors thesis. Satisfied by one of the following:

HIST 696  Seminar in: ______  3
or HIST 498  Undergraduate History Honors Seminar & HIST 490  and Honors Course in History

History Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade point average minimum standards:

Major Hours

Satisfied by 30 hours of major courses. No more than 2 HIST 492 Readings in History courses may be applied to the major. Only courses taken in the Department of History or cross-listed in other units are accepted for credit toward the major.

Major Hours in Residence

Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours

Satisfied by a minimum of 24 hours from junior/senior courses (300+) in the major. Of these 24 hours, at least 6 hours (two courses) must be taken at the 500-699 level (in addition to HIST 696).

Major Junior/Senior Graduation (300+) GPA

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of
study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

**Graduation Plan**

With careful planning and commitment to a full-time course load, you can graduate in 4 years. Consult the department for details.

**Double Majors**

Many history majors choose to pursue a second major. Fulfilling the requirements of 2 majors in a timely fashion requires careful choice of courses. Consult a department advisor.

A sample 4-year plan for the BA degree in History can be found here: History (http://catalog.ku.edu/liberal-arts-sciences/history/ba-bgs/ba-history), or by using the left-side navigation.

A sample 4-year plan for the BGS degree in History will be coming soon.

**Departmental Honors**

The honors program in history allows exceptional undergraduates to work closely with faculty members on a research project. To graduate with honors, a student must complete the requirements for the major in history, including HIST 301 but excluding HIST 696 Seminar.

Students in the honors program also must take HIST 498 Undergraduate History Honors Seminar and HIST 490 Honors Course in History, directed research. Usually, HIST 490 is offered in the fall semester and HIST 498 in the spring. Or a prospective honors student may complete HIST 696 and, by invitation, enroll in HIST 490 to develop the seminar paper into an honors thesis.

Prospective honors candidates are encouraged to select a thesis topic and thesis director in the junior year. The honors seminar helps students write their theses and allows them to learn from each other in a small-group setting. The honors coordinator assists students during both semesters.

To enroll in the program requires at least

1. A 3.5 grade-point average in history and a 3.25 overall cumulative grade-point average, which must be maintained throughout the student’s final years of enrollment; and
2. Acceptance by a thesis director, a history faculty member, before entering the program.

Each student who completes an honors thesis must defend it in an oral examination before a thesis committee of 3 faculty members. The student’s thesis director chairs and chooses the committee in consultation with the student and the honors coordinator. In most cases, the committee is composed of history faculty members. A student who wants the committee to include faculty members from outside the department should inform the thesis director by March 1. A copy of the thesis is deposited in the department.

Petitions for exceptions to these regulations should be submitted to the honors coordinator.

---

**Minor in History**

**Why study history?**

Because it’s our past, your future.

**Requirements for the Minor**

**History Minor Course Requirements**

Students selecting this minor must complete the following:

**History Category I: Western Orientation (6)**

Satisfied by two courses (6 hours) from the following:

- HIST 103 Environment and History
- HIST 105 Introduction to Ancient Near Eastern and Greek History
- HIST 106 Introduction to Roman History
- HIST 107 Introduction to the Ancient World
- HIST 108 Medieval History
- HIST 112 Introduction to British History
- HIST 114 Renaissance to Revolution: Europe 1500-1789
- HIST 115 French Revolution to the Present: Europe 1789-Present
- HIST 116 French Revolution to the Present: Europe 1789 to Present, Honors
- HIST 117 Russia, an Introductory History
- HIST 128 History of the United States Through the Civil War
- HIST 129 History of the United States After the Civil War
- HIST 130 History of the United States Through the Civil War, Honors
- HIST 131 History of the United States After the Civil War, Honors
- HIST 136 Early Science to 1700
- HIST 140 Global Environment I: The Discovery of Environmental Change
- HIST 142 Global Environment II: The Ecology of Human Civilization
- HIST 303 Sin Cities
- HIST 304 1642, 1688, 1776: Three British Revolutions
- HIST 305 The Scientific Revolution
- HIST 306 Science and Western Culture
- HIST 308 Key Themes in Modern Global History
- HIST 309 History of Chemistry
- HIST 310 American Culture, 1600-1876
- HIST 311 Great Lives in Science
- HIST 312 American Culture, 1877 to the Present
- HIST 313 Conspiracies and Paranoia in American History
- HIST 314 Globalization: History and Theory
- HIST 315 Globalization: History and Theory Honors
- HIST 319 History, Women, and Diversity in the U.S.
- HIST 320 From Goddesses to Witches: Women in Premodern Europe
- HIST 321 From Mystics to Feminists: Women's History in Europe 1600 to the Present
- HIST 324 History of Women and the Body
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<tr>
<th>Course Code</th>
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<td>HIST 325</td>
<td>The Spanish Inquisition</td>
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<td>HIST 329</td>
<td>History of War and Peace</td>
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<td>HIST 330</td>
<td>Revolt and Revolution in Early Modern Europe</td>
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<td>HIST 331</td>
<td>Atlantic Societies, 1450-1800: A Comparative History of European Colonization</td>
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<td>HIST 333</td>
<td>Eurometro: Visions of the European Metropolis, 1849-1939</td>
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<td>The Great War: The History of World War I</td>
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<td>Hitler and Nazi Germany</td>
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<td>HIST 345</td>
<td>Hard Times: The Depression Years in America, 1929-1941</td>
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<td>Law and Society in America</td>
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<td>Environmental History of North America</td>
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<td>History of the Peoples of Kansas</td>
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<td>The Korean War, 1950-1953</td>
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<td>Old Regime and Revolution in France, 1648-1799</td>
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<td>HIST 380</td>
<td>Revolutionary Europe: The People in Arms</td>
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<td>Themes in British History</td>
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<td>HIST 402</td>
<td>Roman Military History</td>
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<td>Technology: Its Past and Its Future</td>
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<td>History of Science in the United States</td>
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<td>The New Republic: U.S. History 1787-1848</td>
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<td>Venice and Florence in the Renaissance</td>
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<td>Modern France: From Napoleon to de Gaulle</td>
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<td>Recent European History, 1870 to the Present</td>
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<td>British History, 1660-1832</td>
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HIST 636  Agriculture in World History
HIST 640  Entrepreneurship in East Asia
HIST 670  Comparative Diasporas

History Electives (6)
Satisfied by 2 HIST courses (6 hours)

History Minor Hours & GPA
While completing all required courses, majors must also meet each of the following hour and grade point average minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 hours of junior/senior (300+) hours of KU resident credit in the minor.

**Minor Junior/Senior (300+) Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**
Satisfied by a minimum of a 2.0 GPS in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including Fs and repeated courses. See the Semester/Cumulative GPA Calculator (http://cias.ku.edu/undergrad/tools/gpa).

**Master of Arts in History**

The Department of History (http://www.history.ku.edu/about.shtml) at the University of Kansas is a dynamic place, with a proud tradition of training scholars from across the globe who have transformed the practice of history. The program offers major or minor concentrations in the areas of United States, African American, Modern European, British & Imperial, Russian/East European, East Asian, Latin American, African, Medieval, Women and Gender, Military, and Environmental History. KU offers its graduate students great flexibility in their choice of fields, as defined both by traditional geographical and chronological parameters and thematic topics. Students also have the opportunity to take coursework outside the department in fields such as Public History, Museum Studies, Environmental Studies, and the History of Medicine.

Primarily a doctoral program, the Department currently enrolls approximately 80 graduate students from throughout the United States and the world, including Japan, China, Peru, and Russia. Our students make up a very diverse group, and we encourage applicants from traditional and non-traditional backgrounds.

For statistics regarding our program, please see our Doctoral Program Profile (http://www.graduate.ku.edu/sites/graduate.drupal.ku.edu/files/docs/dpp/DPP_A_HIST.pdf), which demonstrates our success at funding and placing current and recent graduates.

**Graduate Admission**

Graduate applicants are expected to contact their prospective advisors in advance. It is useful to discuss shared research interests, and to inquire whether the faculty member is taking new students, and to decide whether this can become a productive relationship. This faculty advisor will then be able to more effectively advocate for the applicant's candidacy based upon this correspondence.

Candidates requesting consideration for admission to the MA, MA/PhD, or PhD program in History must complete the online application through the KU Office of Graduate Studies (http://www.graduate.ku.edu/ku-graduate-application). Information about minimum requirements and codes for GRE or TOEFL tests can be found on this site. Note that documents, including a writing sample and transcripts, should be uploaded to the application. There is no need to send hard copies of application materials to the History Department. When you submit your online application, it is made available to the Department of History. The application deadline for Fall 2015 entry is December 1, 2014. International applicants need to submit their materials by November 15, 2014.

When you apply, specify to which program you intend to join: MA only, the MA/PhD, or the PhD. We recommend that candidates seeking admission directly into the PhD program first earn an MA in History or a related field.

The application materials that each candidate must submit are:

- **Statement of Academic Objectives**, including a clear plan for graduate research in a specific field of study
- **Curriculum Vitae**
- **Writing Sample** demonstrating independent historical research and analysis (20-25 pages maximum)
  - **Submit a writing sample that best represents your scholarly abilities**: The Department is interested in reviewing your well-crafted, persuasively argued sample. Such papers are often derived from an upper-level undergraduate history class in which you conducted independent research and employed both primary and secondary sources. If you have an MA in history, the writing sample should be taken from your thesis or a major paper written in a graduate seminar.
  - **GRE Scores**, conveyed from ETS to the University of Kansas (School Code 6871)
  - **Official Transcript** from each institution that has granted you a degree, or at which you are currently enrolled
  - **Three letters of recommendation** – The letters can be directly uploaded online directly by those who write the recommendations, or they can be mailed to the Department of History, ATTN: Graduate Administrator, 1445 Jayhawk Boulevard, Wescoe 3650, University of Kansas, Lawrence, KS 66045. A recommendation form for hard copy letters can be downloaded here (http://www.graduate.ku.edu/sites/graduate.drupal.ku.edu/files/docs/ApplicationProcess/KULetterOfRecForm.pdf).

**M.A. Degree Requirements**

The master’s program in history requires satisfactory completion of 30 credit hours of graduate courses including at least 6 hours in history research seminars and the passing of a comprehensive oral examination.

Soon after admission, the student should select a faculty member as his or her advisor. The advisor directs the student’s work and advises the student about selecting Option A or Option B.

**Option A**

**3 fields of history**

The fields are the equivalent of secondary fields drawn from 3 different major fields. With the consent of departmental advisors, when a student’s program warrants a substitution, she or he may substitute an allied field outside the department that provides vital support for the program (e.g., substituting international relations for U.S. diplomatic history). At least 9 hours of course work must be taken in each of the 3 fields. Students must take HIST 805.

9 hours of work in courses numbered HIST 801 or higher and 6 hours of research seminar are required. Normally, at least 3 hours of seminar under each program should be taken with the student’s program advisor, who chairs the oral examining committee.

All master’s candidates must produce 2 professional-quality, article-length papers (approximately 30 pages) in the 2 required seminars. The final oral examination for the master’s degree includes questions concerning the papers as well as coverage of the student’s major and secondary fields.
Option B
A major field and 1 secondary field
At least 2 history faculty members must serve on the student’s M.A. committee for the major field. At least 18 hours of course work in the major field and 9 hours in the secondary field must be taken. Students must take HIST 805.

9 hours of work in courses numbered HIST 801 or higher and 6 hours of research seminar are required. Normally, at least 3 hours of seminar under each program should be taken with the student’s program advisor, who chairs the oral examining committee.

All master’s candidates must produce 2 professional-quality, article-length papers (approximately 30 pages) in the 2 required seminars. The final oral examination for the master’s degree includes questions concerning the papers as well as coverage of the student’s major and secondary fields.

Doctor of Philosophy in History

The Department of History (http://www.history.ku.edu/about.shtml) at the University of Kansas is a dynamic place, with a proud tradition of training scholars from across the globe who have transformed the practice of history. The program offers major or minor concentrations in the areas of United States, African American, Modern European, British & Imperial, Russian/East European, East Asian, Latin American, African, Medieval, Women and Gender, Military, and Environmental History. KU offers its graduate students great flexibility in their choice of fields, as defined both by traditional geographical and chronological parameters and thematic topics. Students also have the opportunity to take coursework outside the department in fields such as Public History, Museum Studies, Environmental Studies, and the History of Medicine.

Primarily a doctoral program, the Department currently enrolls approximately 80 graduate students from throughout the United States and the world, including Japan, China, Peru, and Russia. Our students make up a very diverse group, and we encourage applicants from traditional and non-traditional backgrounds.

For statistics regarding our program, please see our Doctoral Program Profile (http://www.granduate.ku.edu/sites/graduate.drupal.ku.edu/files/docs/dpp/DPP_A_HIIST.pdf), which demonstrates our success at funding training scholars from across the globe who have transformed the practice of history.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree-seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Graduate applicants are expected to contact their prospective advisors in advance. It is useful to discuss shared research interests, and to inquire whether the faculty member is taking new students and to decide whether this can become a productive relationship. This faculty advisor will then be able to more effectively advocate for the applicant’s candidacy based upon this correspondence.

Candidates requesting consideration for admission to the M.A., M.A./Ph.D., or Ph.D. program in History must complete the online application through the KU Office of Graduate Studies (http://www.granduate.ku.edu/ku-graduate-application). Information about minimum requirements and codes for GRE or TOEFL tests can be found on this site. Note that documents, including a writing sample and transcripts, should be uploaded to the application. There is no need to send hard copies of application materials to the History Department. When you submit your online application, it is made available to the Department of History. The application deadline for Fall 2015 entry is December 1, 2014. International applicants need to submit their materials by November 15, 2014.

When you apply, specify to which program you intend to join: M.A. only, the M.A./Ph.D., or the Ph.D. We recommend that candidates seeking admission directly into the Ph.D. program first earn an M.A. in History or a related field.

The application materials that each candidate must submit are:

- **Statement of Academic Objectives**, including a clear plan for graduate research in a specific field of study
- **Curriculum Vitae**
- **Writing Sample** demonstrating independent historical research and analysis (20-25 pages maximum)
- **Submit a writing sample that best represents your scholarly abilities**: The Department is interested in reviewing your well-crafted, persuasively argued sample. Such papers are often derived from an upper-level undergraduate history class in which you conducted independent research and employed both primary and secondary sources. If you have an M.A. in history, the writing sample should be taken from your thesis or a major paper written in a graduate seminar.
- **GRE Scores**, conveyed from ETS to the University of Kansas (School Code 6871)
- **Official Transcript** from each institution that has granted you a degree, or at which you are currently enrolled
- **Three letters of recommendation** – The letters can be directly uploaded online directly by those who write the recommendations, or they can be mailed to the Department of History, ATTN: Graduate Administrator, 1445 Jayhawk Boulevard, Wescoe 3650, University of Kansas, Lawrence, KS 66045. A recommendation form for hard copy letters can be downloaded here (http://www.granduate.ku.edu/sites/graduate.drupal.ku.edu/files/docs/ApplicationProcess/KULetterOfRecForm.pdf).

Ph.D. Degree Requirements

Students normally must complete the M.A. degree before they are eligible to enter the Ph.D. program. Students who enter the M.A. program may either complete the degree or petition for direct admission to the Ph.D. program. This petition first must be endorsed by the student’s advisor and the field committee and then be approved by the department’s graduate board.

In addition to general requirements, the following departmental requirements must be met. A minimum of 11 courses (33 credit hours) is
required for the Ph.D. Students may choose between 2 options for their course work.

Research Skills and Responsible Scholarship

The university requires that every doctoral student have training in responsible scholarship and research skills pertinent to the field of research and appropriate to the doctoral level. In order to fulfill these requirements, all graduate students in History must take HIST 805 and become certified in a foreign language before taking the comprehensive oral exam.

Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current policies on Doctoral Research Skills and Responsible Scholarship are listed in the Graduate Studies section of the online catalog and in the KU Policy Library.

Track A

Students select a major and 2 secondary fields. The major field includes 6 courses (18 credit hours). The secondary fields include 2 courses (6 credit hours), for a total of 12 credit hours; 1 of the secondary fields may be taken in a discipline outside the department, but a student may offer all 3 fields in history. Students must take HIST 805.

For both Track A and Track B, the major and secondary fields are those listed in this catalog or approved by the graduate board.

The department requires proficiency, at the level the student’s committee deems necessary, in 1 or 2 foreign languages appropriate to the student’s fields of specialization. Students should present satisfactory evidence of proficiency in the first language before enrollment in the second semester of degree work. Appropriate proficiency in the second language (if necessary) must be achieved before the student may take the oral comprehensive examination.

Before taking the oral comprehensive examination, students must complete (in addition to the language requirement) a minimum of 5 colloquia and seminars, including 2 in the major field(s) and 1 in each secondary field. At least 2 of the 5 must be research seminars in which the student produces professional-quality, article-length papers (approximately 30 pages).

In lieu of written examinations, students compile portfolios of their professional work demonstrating command of their fields and their preparation to undertake dissertation research. Following presentation of the portfolio, students take an oral examination covering their fields of study and their dissertation proposals.

Department of History of Art

Why study the history of art?

The study of the visual arts in their historical contexts enriches our understanding of human creativity and the human condition. It provides students with the cultural literacy and critical thinking, research, and communication skills that are relevant for a variety of careers, including in art museums, galleries, and collections, as well as schools, universities, publishers and archives. The study of art history can also provide the foundation for a career in other professions such as business, law, media, or government.

Undergraduate Programs

The curriculum introduces the student to the visual arts of the past and the present. Courses cover the arts of ancient, medieval, and early modern Europe, the Mediterranean, and the Near East, modern Europe, the United States, Africa, and East Asia, including China, Japan, Korea, and the art of Buddhism. Courses are offered in the history of photography, prints, and drawings.

Several introductory courses are offered every semester. These include 1- and 2-semester surveys in Western art (HA 100, HA 300, HA 150, and HA 151), HA 261 Introduction to Modern Art, HA 165 Introduction to Asian Art, HA 166 The Visual Arts of East Asia, HA 367 Art and Culture of Japan, HA 368 Art and Culture of China, HA 369 Art and Culture of Korea, and HA 330 Italian Renaissance Art.

Courses for Nonmajors

All courses are open to nonmajors if they have the necessary prerequisite, which in most cases is one of the introductory courses. An undergraduate advisor counsels nonmajors who need help selecting a course.

Graduate Programs

The department offers M.A. and Ph.D. degrees in European, American, and/or East Asian art history. The M.A. provides students with a broad knowledge of the visual arts in those fields, as well as an introduction to the basic concepts and methods of the discipline. The M.A. may be pursued as a terminal degree or as preparation to petition for specialized doctoral studies at KU or to apply elsewhere. The Combined M.A./Ph.D. is intended for students who want to pursue the Ph.D. in art history at KU, but who do not yet hold the M.A. degree in art history. The Ph.D.
degree offers the opportunity for advanced research and concentration to students who hold the M.A. degree in art history from KU or elsewhere. Both the Combined M.A./Ph.D. and Ph.D. students are eligible for competitive funding packages and GTA, GRA, and GA positions.

Courses

HA 100. Introduction to Western Art History. 3 Hours. HT AE42/GE3H / H.
A chronological survey of Western art and architecture, including the ancient Near East, Europe from antiquity to the present, and North America from the colonial period to the present. The course emphasizes major historical and cultural developments, analyzes key art works and monuments, and introduces basic art historical principles and analytical methods. The course is offered at the 100 and 300 levels, with additional reading and writing assigned at the 300 level. Intended for non-majors. Does not count toward the 30 required hours in the major. Not open to students with credit in HA 103, HA 150, HA 151, HA 160, HA 161, or HA 300. LEC.

HA 103. Introduction to Western Art History, Honors. 3 Hours. HT AE42/GE3H / H.
A chronological survey of Western art and architecture, including the ancient Near East, Europe from antiquity to the present, and North America from the colonial period to the present. The course emphasizes major historical and cultural developments, analyzes key art works and monuments, and introduces basic art historical principles and analytical methods. The course is offered at the 100 and 300 levels, with additional reading and writing assigned at the 300 level. Intended for non-majors. Does not fulfill the 30 required hours in the major. Not open to students with credit in HA 100, HA 150, HA 151, HA 160, HA 161, or HA 300. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

HA 105. Special Study: _____. 1-6 Hours. H.
This course is designed for the study of special topics in art history at the introductory level, including courses taken in the study abroad program. May deal with individual artists, special themes, or other topics not generally covered in courses offered by the department. May be repeated for credit if content varies. LEC.

HA 150. History of Western Art: Ancient Through Medieval. 3 Hours. HT AE42/GE3H / H.
A survey of the art of earlier periods in the West, from prehistoric times through the middle ages in Europe, with special emphasis on the relationship between artistic developments and cultural changes. Not open to students with credit in HA 160. LEC.

HA 151. History of Western Art: Renaissance to Contemporary. 3 Hours. GE3H / H.
A survey of art in the West from the Renaissance to the contemporary period in Europe and America, with special emphasis on the achievements of individual artists in relation to the cultural movements of their times. Not open to students with credit in HA 161. LEC.

HA 160. History of Western Art: Ancient Through Medieval, Honors. 3 Hours. HT AE42/GE3H / H.
A survey of the art of earlier periods in the West, from prehistoric times through the middle ages in Europe, with special emphasis on the relationship between artistic developments and cultural changes. Not open to students with credit in HA 150. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

HA 161. History of Western Art: Renaissance to Contemporary, Honors. 3 Hours. GE3H / H.
A survey of the art in West from the Renaissance to the contemporary period in Europe and America, with special emphasis on the achievements of individual artists in relation to the cultural movements of their times. Not open to students with credit in HA 151. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

HA 165. Introduction to Asian Art. 3 Hours. HT/NW AE42/GE3H / H/W.
An introduction to the visual arts of India, China, Korea, and Japan. Emphasis is placed on cultural context, including religion, social class and gender, and on cultural interactions between these countries. LEC.

HA 166. The Visual Arts of East Asia. 3 Hours. HT/NW AE42/GE3H / H.
An introduction to the visual arts of India, China, Korea, and Japan. Emphasis is placed on cultural context, including religion, social class and gender, and on cultural interactions between these countries. LEC.

HA 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in History of Art. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

HA 261. Introduction to Modern Art. 3 Hours. HT GE3H / H.
A general survey of painting, sculpture, architecture, and graphic art of the 19th and 20th centuries. Emphasis is placed on major movements and their artists, including Neo-Classicism, Romanticism, Realism, Impressionism, Post-Impressionism, Fauvism, Expressionism, Cubism, Surrealism, Abstract Art, Pop Art, and the developments of the contemporary period. LEC.

HA 300. Introduction to Western Art History. 3 Hours. HT AE42/GE3H / H.
A chronological survey of Western art and architecture, including the ancient Near East, Europe from antiquity to the present, and North America from the colonial period to the present. The course emphasizes major historical and cultural developments, analyzes key art works and monuments, and introduces basic art historical principles and analytical methods. The course is offered at the 100 and 300 levels, with additional reading and writing assigned at the 300 level. Intended for non-majors. Does not count toward the 30 required hours in the major. Not open to students with credit in HA 100, HA 150, HA 151, HA 160, HA 161, or HA 303. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

HA 303. Introduction to Western Art History, Honors. 3 Hours. HT / H.
A chronological survey of Western art and architecture, including the ancient Near East, Europe from antiquity to the present, and North America from the colonial period to the present. The course emphasizes major historical and cultural developments, analyzes key art works and monuments, and introduces basic art historical principles and analytical methods. The course is offered at the 100 and 300 levels, with additional reading and writing assigned at the 300 level. Intended for non-majors. Does not count toward the 30 required hours in the major. Not open to students with credit in HA 100, HA 103, HA 150, HA 151, HA 160, HA 161, or HA 300. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

HA 305. Special Study: _____. 1-6 Hours. H.
This course is designed for the study of special topics in art history, including courses taken in the study abroad program. May deal with individual artists, special themes, or other topics not generally covered in
courses offered by the department. May be repeated for credit if content varies. LEC.

HA 307. Directed Readings. 1-6 Hours. U.
Supervised study and research into special fields of art of particular interest to the student. Weekly consultation and reports. LEC.

HA 310. The Art and Architecture of Florence and Paris. 3 Hours. H.
Taught in the Humanities and Western Civilization Program Abroad, this course examines the major movements that defined and shaped the art and architecture of Florence and Paris, with special attention to the Renaissance in Florence and the Gothic and modern periods in Paris. Through classroom lectures, readings, and visits to museums, churches, and other historic sites, selected works of art and architecture are analyzed in terms of their formal qualities, iconography, and cultural context. Prerequisite: Approval for enrollment in the Humanities and Western Civilization Study Abroad program through the KU Office of Study Abroad. LEC.

HA 311. The Art and Architecture of the British Isles. 3 Hours. H.
Taught in the British Summer Institute in the Humanities Study Abroad program, this course offers an introductory survey of British art and architecture. Through classroom lectures, readings, and visits to museums, churches, and other historic sites, selected works of art and architecture are analyzed in terms of their formal qualities, iconography, and cultural context. Prerequisite: Approval for enrollment in the British Summer Institute in the Humanities Study Abroad program through the KU Office of Study Abroad. LEC.

HA 315. The Prehistory of Art. 3 Hours. S.
A survey of prehistoric art focusing on the material record and interpretations of rock art (paintings, engravings on rock surfaces in rock-shelters, caves and in open air sites) and portable art created by prehistoric people. The emphasis is on the small-scale societies (hunter-gatherer and early food producers) around the world before the appearance of written records in respective geographic areas. Environmental, social and cultural contexts in which these art forms were created are discussed along with a review of past scholarship and current interpretive approaches to this old and enduring expression of human creativity. Course may be offered in lecture or online format. (Same as ANTH 315.) LEC.

HA 317. Greek and Roman Art. 3 Hours. H/W.
A survey of the art of ancient Greece and Rome (ca. 1000 B.C.E. - 500 C.E.). Emphasis on major sites, architecture, sculpture, and painting. Illustrated lectures and discussion; use of the Wilcox Classical Museum. No knowledge of Greek or Latin is required. Not open to students who have taken both CLSX 526/HA 526 and CLSX 527/HA 537, except with permission of the instructor. (Same as CLSX 317, HWC 317.) LEC.

HA 329. Politics and Conflict in Israel and Palestine. 3 Hours. H.
This course focuses on various aspects of the Israeli-Palestinian conflict including its history from the Ottoman period to the present day, the social and political effects on Israeli and Palestinian life and citizenship, official and unofficial narratives, and international responses. LEC.

HA 330. Italian Renaissance Art. 3 Hours. GE3H / H/W.
A survey of the art and architecture of Italy from c. 1300 to 1550. Special emphasis is placed on regional styles and the private, political, and devotional contexts in which works of art and architecture functioned. Some of the artists whose works are considered are Giotto, Duccio, Donatello, Botticelli, Leonardo, and Michelangelo. LEC.

HA 340. Special Study in Asian Art Before 1900: _____. 1-6 Hours. H.
This course is designed for the study of special topics in Asian art before 1900, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 341. Special Study in Islamic Art, 14th-17th Century: _____. 1-6 Hours. H.
This course is designed for the study of special topics in Islamic art of the 14th-17th centuries. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels LEC.

HA 342. Special Study in 18th/19th-Century European or American Art: _____. 1-6 Hours. H.
This course is designed for the study of special topics in European or American art of the 18th and/or 19th centuries, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels LEC.

HA 343. Special Study in 20th/21st-Century Art: _____. 1-6 Hours. H.
This course is designed for the study of special topics in art of the 20th and/or 21st centuries, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 353. Modern and Contemporary African Art. 3 Hours. H.
In this course, we examine the development of artistic modernisms in Africa in historical context. We also study the content, production, patronage, and display of modern and contemporary African art. In doing so, we consider African artists’ engagement with modernity, globalization, and contemporary issues, as well as interrogate influential myths and assumptions regarding African artists and the work they produce. Course themes include the workshop as a critical site, independence movements and the creation of national art forms, art as global commodity, and art in resistance, remembrance, and revolution. (Same as AAAS 353.) LEC.

HA 354. Japanese Prints. 3 Hours. NW / H/W.
This course explores the history of Japanese prints with special emphasis on ukiyo-e (pictures of the floating world) woodblock prints made during the Edo Period (early 17th to 19th century). The course is organized thematically as well as chronologically and examines woodblock prints by focusing on both design and socio-political history. The course is taught at the 300 and 500-levels with additional work required at the 500-level. LEC.

HA 361. Buddhist Art of Korea. 3 Hours. H.
Introduction to the history of Buddhist temple buildings, paintings, sculptures and illuminated hand-scrolls in Korea from the 4th through the 19th centuries, with special emphasis on their stylistic, geographical, social, devotional and literary contexts. Current theories and controversies pertinent to the history and study of Korean Buddhist art are also addressed. Not open to students who have taken HA 561 or REL 511. Work requirements will be greater for students enrolled at the 500 level than at the 300 level. Prerequisite: A college level introduction to Asian art history, or consent of instructor. LEC.

HA 362. Ceramics of Korea. 3 Hours. H.
A survey covering the history of Korean ceramics from prehistoric times through the early modern period, with special emphasis on their stylistic, geographical, social and political context. Topics include celadon-glazed, stamped and slip-decorated stoneware, Korean ceramics related to the Japanese tea ceremony and Mingei pottery. Not open to students who have taken HA 562. Work requirements will be greater for students
enrolled at the 500 level than at the 300 level. Prerequisite: A college level introduction to Asian art history, or consent of instructor. LEC.

HA 363. Modern Korean Art and Culture. 3 Hours. H.
This course is a thematic introduction to Korean art and culture with an emphasis on modern and contemporary Korea. Pre-modern works are contextualized with respect to contemporary issues. Students learn how to conduct a comprehensive analysis of an artwork by considering the political, historical and social conditions of its time within a broader East Asian cultural framework. Prerequisite: An introductory course in art history at the college level, or consent of instructor. LEC.

HA 367. Art and Culture of Japan. 3 Hours. NW AE42/GE3H / H/W.
An introduction to the arts of Japan in historical and cultural context. Visual arts are stressed. LEC.

HA 368. Art and Culture of China. 3 Hours. NW AE42/GE3H / H/W.
An introduction to the arts of China in historical and cultural context. Visual arts are stressed. LEC.

HA 369. Art and Culture of Korea. 3 Hours. NW AE42/GE3H / H/W.
An introduction to the arts of Korea in historical and cultural context. Visual arts are stressed. LEC.

HA 370. American Art. 3 Hours. H.
A survey of American painting, sculpture, and architecture from colonial to recent times. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 376. West African Art. 3 Hours. NW / H/W.
Introduction to the rich visual art traditions of West Africa. Emphasis is given to the major art-producing cultures of the Western Sudan and the Guinea Coast, including the pre-historic cultures of Nigeria, Mali, and Ghana. The diverse forms of figure sculptures and masquerade performance and meanings of these arts in historical and cultural contexts are examined. (Same as AAAS 376.) LEC.

HA 380. History of Photography. 3 Hours. H.
An introduction to the history of photography as a means of artistic expression and visual communication. Special attention is placed on the relation between developments in photography and the artistic and cultural context of the time. LEC.

HA 388. Modern and Contemporary Visual Arts of Japan. 3 Hours. H.
This course covers Japanese visual arts from the Meiji era (1868-1912) through the present day. The course is designed thematically as well as chronologically, and examines painting, sculpture and architecture focusing on both socio-political contexts and artistic concerns that emerged at certain times in recent Japanese history. The aim of this course is to provide first-hand knowledge of Japanese modern and contemporary visual arts as well as an in-depth consideration of some of the key issues attached to Japan's modernization and modernity. The course is taught at the 300 and 500-levels with additional work required at the 500-level. LEC.

HA 390. Special Study in African Art: ____. 1-6 Hours. H.
This course is designed for the study of special topics in African art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 391. Special Study in Asian Art: ____. 1-6 Hours. H.
This course is designed for the study of special topics in Asian art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 392. Special Study in Ancient Art: ____. 1-6 Hours. H.
This course is designed for the study of special topics in ancient art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 393. Special Study in Medieval Art: ____. 1-6 Hours. H.
This course is designed for the study of special topics in medieval art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 394. Special Study in Renaissance Art: ____. 1-6 Hours. H.
This course is designed for the study of special topics in Renaissance art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 395. Special Study in Baroque Art: ____. 1-6 Hours. H.
This course is designed for the study of special topics in Baroque art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 396. Special Study in American Art: ____. 1-6 Hours. H.
This course is designed for the study of special topics in American art. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 397. Special Study in Modern Art: ____. 1-6 Hours. H.
This course is designed for the study of special topics in modern art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. LEC.

HA 467. Art and Culture of Japan, Honors. 3 Hours. NW / H/W.
An introduction to the arts of Japan using fundamental principles and analytical methods of art history. Emphasis is placed on cultural contexts of art production, including history and religion. Honors version of HA 367, with more classroom discussion and opportunities for original research. Prerequisite: Membership in the University Honors Program or permission of the instructor. Not open to freshmen or students with credit in HA 267 or HA 367. LEC.

HA 468. Art and Culture of China, Honors. 3 Hours. NW / H/W.
An introduction to the arts of China using fundamental principles and analytical methods of art history. Emphasis is placed on cultural contexts of art production, including history and religion. Honors version of HA 368, with more classroom discussion and opportunities for original research. Prerequisite: Membership in the University Honors Program or permission of the instructor. Not open to freshmen or students with credit in HA 268 or HA 368. LEC.

HA 469. Art and Culture of Korea, Honors. 3 Hours. NW / H/W.
An introduction to the arts of Korea using fundamental principles and analytical methods of art history. Emphasis is placed on cultural contexts of art production, including history and religion. Honors version of HA 369, with more classroom discussion and opportunities for original research. Prerequisite: Membership in the University Honors Program or permission of the instructor. Not open to freshmen or students with credit in HA 269 or HA 369. LEC.

HA 488. Chinese Painting, Honors. 3 Hours. NW / H/W.
A survey of the development of painting in China, beginning with the earliest forms of figural and landscape depiction. Emphasis will be placed on the major painting traditions of the Song, Yuan, Ming, and Qing Dynasties. Prerequisite: An introductory course in art history or
Students enrolled in this course engage in a series of assignments designed to build and hone their reading, critical thinking, visual analysis, research, and writing skills. The same assignments allow students to integrate new knowledge of Greek or Latin is required. (Same as CLSX 525.) LEC.

HA 526. Greek Archaeology and Art. 3 Hours. H/W. An interdisciplinary survey of the material culture of the ancient Greek world from the Neolithic period to the end of the Hellenistic age (ca. 1100 - 30 B.C.E.), with an emphasis on the major sites, monuments, and changing forms of social and artistic expression (architecture, sculpture, vase painting, and other arts). Includes lectures with slides and discussion; use of the Wilcox Museum of Classical Antiquities. No knowledge of Greek or Latin is required. For advanced undergraduates and graduate students with backgrounds in the humanities and for graduate students (especially in Classics and History of Art). (Same as CLSX 526.) LEC.

HA 527. Late Medieval Art in Italy. 3 Hours. H. This course examines the history of paintings, sculptures and buildings produced in Italy from c. 1250 to 1400. Important individual works, artists, and decorative complexes, such as Giotto’s Scrovegni (Arena) Chapel, are analyzed in terms of their stylistic, geographical, social, historical, devotional, and literary contexts. Current theories and controversies pertinent to the history and study of 13th- and 14th-century Italian art are also addressed. Prerequisite: HA 100, HA 150, or the equivalent, or consent of instructor. LEC.

HA 529. Archaeology and Art of the Ancient Near East. 3 Hours. H. A cross-cultural survey of the material remains of the major civilizations of the ancient Near East, including Anatolia, Mesopotamia, the Levant, and Egypt from Neolithic period to the rise of the Roman empire (ca. 6000 B.C.E. - 30 B.C.E.). Includes lectures with slides and discussion. For advanced undergraduates with backgrounds in the humanities and for graduate students (especially in Classics and History of Art). No knowledge of Greek or Latin is required. (Same as CLSX 529.) LEC.

HA 530. Renaissance Art in Italy: The 15th Century. 3 Hours. H/W. The focus of this course is the history of Italian painting, sculpture, and architecture from 1400 to 1500. Special emphasis is placed on the diverse artistic styles and functions of works of art, as well as on the artists and patrons that produced them. Domestic art and the art and architecture of the 15th-century Italian courts are also discussed. Prerequisite: HA 100, HA 150, or the equivalent, or consent of instructor. LEC.

HA 531. Renaissance Art in Italy: The 16th Century. 3 Hours. H. This course explores the history of Italian painting, sculpture, and architecture from c. 1500 to 1600. It focuses on the artistic centers of Florence, Rome, Parma, and Venice. Some of the artists whose works is considered are Leonardo, Michelangelo, Raphael, Pontormo, Titian, Cellini, and Giambologna. The history of 16th-century women patrons and
artists is also addressed. Prerequisite: HA 100, HA 150, HA 151, or the equivalent, or consent of instructor. LEC.

HA 532. Michelangelo. 3 Hours. H.
During the sixteenth century, the writer Ludovico Ariosto described the Florentine artist Michelangelo Buonarroti (1475-1564) as “divine.” Since that time more has been written about Michelangelo than any other artist of the Italian Renaissance. His ability to work in diverse media, namely painting, sculpture, and architecture, as well as the power of his works, earned him this prominent position in the history of art and made him one of the most influential artists of the early modern period. This course will trace various aspects of Michelangelo’s long, sometimes troubled, and vibrant career, focusing on issues such as his techniques, patrons, and the innovative style of his works. Special emphasis will be placed on interpreting primary sources to understand better his life and works and place them within their artistic, historical, social, and religious contexts. Prerequisite: HA 100, HA 150, HA 151, or the equivalent, or consent of instructor. LEC.

HA 533. European Art 1789-1848: Gender and Revolution. 3 Hours. H.
This course will analyze painting in Europe from the late 18th century to the mid-19th century. Particular attention will be paid to the ways in which images represent and/or repress such themes as politics, history, gender, ethnicity, race, and class. Assigned readings present a variety of methodological perspectives—social-historical, feminist, formalist, and psychoanalytic. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 534. Art in France 1848-1900: Modernisms. 3 Hours. H.
This course will examine painting in France from 1848 to 1900 with particular emphasis given to the visual articulation and/or repression of such constructs as gender, race, history, and ethnicity. Assigned readings present a variety of methodological perspectives—social-historical, feminist, formalist, and psychoanalytic. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 536. Islamic Art and Architecture in Africa. 3 Hours. H.
Study of Islamic art and architecture in various cultural and geographical settings, from the first mosques of North African and the Swahili coast to contemporary Islamized masquerades in West Africa. We consider art objects and architectural sites in terms of religious practice, trade and commerce, ritual and political power, and contemporary expression. (AAAS 536.) Prerequisite: AAAS 102, AAAS 103, or consent of instructor. LEC.

HA 537. Roman Archaeology and Art. 3 Hours. H/W.
An interdisciplinary survey of the material culture of ancient Rome from its origins to the late empire (8th c.B.C.E. - 4th c.C.E.). Emphasis on major sites, monuments, and changing forms of social and artistic expression, as well as on Etruscan and Greek influence on Rome and Rome’s influences on its provinces. Includes lectures with slides and discussion; use of the Wilcox Museum of Classical Antiquities. No knowledge of Greek or Latin is required. For advanced undergraduates and graduate students with backgrounds in the humanities; and for graduate students (especially those in History of Art and Classics). (Same as CLSX 527.) LEC.

HA 538. Pompeii and Herculaneum. 3 Hours. H.
An interdisciplinary treatment of the art and archaeology of the ancient Roman cities of Pompeii and Herculaneum in Italy. Emphasis on the structures and decorations of major public spaces and houses and on aspects of cultural, social, political, commercial, and religious life from the period of the second century B.C.E. to 79 C.E., when Pompeii and Herculaneum were buried by the eruption of Mt. Vesuvius. Slide lectures and discussion. (Same as CLSX 538, HWC 538.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, History of Art, or permission of the instructor. LEC.

HA 539. History of Japanese Buddhist Art. 3 Hours. H.
A survey of the Buddhist art of Japan that begins with the introduction of Buddhism in the sixth century and ends with contemporary Buddhist art. Students will also consider how Buddhist images function as part of the living religious tradition in Japan. Prerequisite: A survey of either Asian art, Japanese art, Asian religions, Japanese culture, or consent of instructor. LEC.

HA 540. Special Study in Asian Art Before 1900: ______. 1-6 Hours. H.
This course is designed for the study of special topics in Asian art before 1900, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in Asian art history, or consent of the instructor LEC.

HA 541. Special Study in Islamic Art, 14th-17th Century: ______. 1-6 Hours. H.
This course is designed for the study of special topics in Islamic art of the 14th-17th centuries. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor. LEC.

HA 542. Special Study in 18th-19th Century European or American Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in European or American art of the 18th and/or 19th centuries, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor. LEC.

HA 543. Special Study in Islamic Art, 14th-17th Century: ______. 1-6 Hours. H.
This course is designed for the study of special topics in Islamic art of the 14th-17th centuries. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor. LEC.

HA 544. Early Chinese Art. 3 Hours. NW / H.
A survey of Chinese art from Neolithic times through the Han Dynasty (ca. 200 B.C.E.). Emphasis will be placed on recent archaeological excavations and also on the development of bronze vessels of the Shang and Zhou Dynasties. Prerequisite: A college level introduction to Asian art history, or consent of instructor. LEC.

HA 545. Chinese Sculpture. 3 Hours. H.
A survey of Chinese sculpture from the Shang dynasty through the Song dynasty (1600 BCE-1279 CE), focused on sculptural programs in native funerary art and Buddhist temples and cave-shrines. LEC.

HA 546. Buddhist Scriptures in Chinese Painting. 3 Hours. H.
Examination of Chinese paintings based on the major Buddhist scriptures (sutras) popular in China from the 8th century through the early modern period. Readings include selections from the sutras (in translation). Emphasis is placed on the cultural and religious reasons why certain
scriptural themes were selected for representation and on the distinctively Chinese interpretation of these themes in pictorial art. Prerequisite: An introductory course in Asian art history, Eastern Civilizations, or Eastern religions or consent of instructor. LEC.

HA 549. Chinese Painting. 3 Hours. H.
An introductory survey of painting in China from the 7th through the 19th centuries. Prerequisite: One course in art history, or in East Asian languages cultures; or consent of instructor. LEC.

HA 550. Capstone in Art History: ______. 3 Hours. AE61 / H.
An advanced course dedicated to the in-depth study of special topics in art history. Students conduct research on a question within the parameters of the course topic and produce a research product that integrates knowledge from within the discipline of art history or in combination with other disciplines to generate new ideas. May be repeated for credit if content varies. Prerequisite: Junior or senior standing and twelve hours of art history, or consent of the instructor. LEC.

HA 554. Japanese Prints. 3 Hours. NW / H/W.
This course explores the history of Japanese prints with special emphasis on ukiyo-e (pictures of the floating world) woodblock prints made during the Edo Period (early 17th to 19th century). The course is organized thematically as well as chronologically and examines woodblock prints by focusing on both design and socio-political history. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Prerequisite: An introductory course in art history or consent of instructor. LEC.

HA 561. Buddhist Art of Korea. 3 Hours. H.
Introduction to the history of Buddhist temple buildings, paintings, sculptures and illuminated hand-scrolls in Korea from the 4th through the 19th centuries, with special emphasis on their stylistic, geographical, social, devotional and literary contexts. Current theories and controversies pertinent to the history and study of Korean Buddhist art are also addressed. Not open to students who have taken HA 361. Work requirements will be greater for students enrolled at the 500 level than at the 300 level. (Same as REL 511.) Prerequisite: A college level introduction to Asian art history, or consent of instructor. LEC.

HA 562. Ceramics of Korea. 3 Hours. H.
A survey covering the history of Korean ceramics from prehistoric times through the early modern period, with special emphasis on their stylistic, geographical, social and political context. Topics include celadon-glazed, stamped and slip-decorated stoneware, Korean ceramics related to the Japanese tea ceremony and Mingei pottery. Not open to students who have taken HA 362. Work requirements will be greater for students enrolled at the 500 level than at the 300 level. Prerequisite: A college level introduction to Asian art history, or consent of instructor. LEC.

HA 564. European Art, 1900-1945. 3 Hours. H.
A detailed survey of modern European art from the turn of the century through World War II. Movements to be considered may include post-impressionism, cubism, constructivism, dada, and surrealism. Graduate students may be expected to do additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 565. Art Since 1945. 3 Hours. H.
An international survey of modern and postmodern art since 1945. Topics to be covered may include abstract expressionism, pop art, minimalism, happenings, and performance art, earth works, conceptual art, feminist art, photo-realism, crafts, and new media. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 566. Art From 1945 to the 1980s: Modernism to Post-Modernism. 3 Hours. H.
An international survey of modern and post-modern art from World War II to the 1980s. Topics may include abstract expressionism, pop art, minimalism, happenings and performance art, earth works, conceptual art, feminist art, photo-realism, the craft revival, and new media. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151 or the equivalent, or consent of instructor. LEC.

HA 567. Contemporary Art. 3 Hours. H.
An examination of recent developments internationally in art and visual culture. Emphases may include consideration of diverse critical perspectives, theoretical debates, post- and trans-national art, the impact of new media, and the internationalization of institutions, exhibitions, audiences, and markets. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 570. American Art. 3 Hours. H.
A survey of American painting, sculpture, and architecture from colonial times to the present. (Same as AMS 580.) Prerequisite: An introductory course in Western art history at the college level. LEC.

HA 571. Modern Sculpture. 3 Hours. H.
A survey of avant-garde sculpture in Europe and America from the late 19th century to recent times. Attention will focus on the work of major sculptors considered within larger artistic, cultural, and historical contexts. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 575. Northern Renaissance Art. 3 Hours. H.
French, Netherlandish, and German art in the 15th and 16th centuries. Manuscripts, painting, prints, and sculpture from Jan Van Eyck to Pieter Brueghel, the Elder. Prerequisite: HA 100, HA 150, HA 151, or the equivalent, or consent of instructor. LEC.

HA 576. Northern Baroque Art. 3 Hours. H.
Seventeenth-century art in the northern and southern Netherlands with emphasis on painting of Rubens and Rembrandt. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 577. Italian Baroque Art. 3 Hours. H.
This course explores the history of art and architecture in Italy during the late sixteenth and seventeenth centuries. The visual culture of the Italian Baroque is examined in terms of style, patronage, and religious or secular function. Attention is also paid to art theory, practice, gender issues, and foreign artists working in Italy, as well as to understanding and interpreting primary sources. Prerequisite: HA 100/HA 300, HA 151, or consent of instructor. LEC.

HA 578. Central African Art. 3 Hours. NW / H/W.
Introduction to the arts and cultures of Central Africa. Emphasis is given to the major art-producing cultures of the Equatorial Forest and the Southern Savanna regions of Cameroon, Gabon, Congo, Zaire, and Angola. The historical and cultural contexts for the visual arts associated with centralized leadership and non-centralized societies are explored. (Same as AAAS 578.) LEC.

HA 580. History of Photography. 3 Hours.
An advanced introduction to the history of photography as a means of artistic expression and visual communication. Special emphasis will be placed on critical readings and research projects. Prerequisite: Six hours of Western art history. LEC.
HA 581. American Art to 1860: Inventing a Nation. 3 Hours. H.
A survey of major artists and movements in painting, sculpture, and allied arts, from the period of initial European settlement to the mid-19th century. Consideration will be given to developments in portraiture, history painting, landscape, still-life, statuary, and decorative arts. Attention will be paid both to formal developments and to cultural context. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 582. American Art 1860-1900: Gilded Age. 3 Hours.
A survey of major artists and movements in painting, sculpture, and allied arts in the later 19th century. Consideration will be given to developments in landscape painting and images of the American West, the impact of impressionism and other European movements, and the decorative programs of the Gilded Age. Attention will be paid both to formal developments and to cultural context. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 583. American Art 1900-1945: Rise of Modernism. 3 Hours. H.
A survey of major artists and movements in painting, sculpture, and allied arts, from the early urban realists to the emergent avant-garde at mid century. Consideration will be given to the cosmopolitan tendencies of the 1910s and the 1920s, to regionalist impulses of the 1930s, and the assimilation of European modernism. Attention will be paid both to formal developments and to cultural context. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor. LEC.

HA 584. Kansas Art, History, and Popular Culture. 3 Hours. H.
An overview of the art and cultural history of Kansas (and Kansas City) from territorial days to the present. Emphasis is placed on key issues, figures and events. A general familiarity with American history is recommended. (Same as FMS 414). LEC.

HA 585. The Art of Buddhism. 3 Hours. NW / H/W.
A survey of the Buddhist arts (architecture, sculpture, and painting) of India, China, and Japan. LEC.

HA 586. Japanese Painting. 3 Hours. NW / H/W.
A survey covering the development of Japanese painting from the Kofun period to the early twentieth century. Topics include Buddhist and other religious paintings, narrative handscrolls, ink painting, decorative screens, ukiyo-e, and western-style paintings of the Meiji and Taisho periods. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: An introductory course in Asian art or consent of instructor. LEC.

HA 587. Japanese Sculpture. 3 Hours. NW / H.
A survey of Japanese sculpture from the Kofun period (300-700 C.E.) to the present day. Emphasis is placed on works of Buddhist sculpture from the 7th through the 13th centuries. Prerequisite: An introductory course in Asian art history or consent of instructor. LEC.

HA 588. Modern and Contemporary Visual Arts of Japan. 3 Hours. H.
This course covers Japanese visual arts from the Meiji era (1868-1912) through the present day. The course is designed thematically as well as chronologically, and examines painting, sculpture and architecture focusing on both socio-political contexts and artistic concerns that emerged at certain times in recent Japanese history. The aim of this course is to provide first-hand knowledge of Japanese modern and contemporary visual arts as well as an in-depth consideration of some of the key issues attached to Japan's modernization and modernity. Prerequisite: an introductory course in art history or consent of instructor. The course is taught at the 300 and 500-levels with additional work required at the 500-level. LEC.

HA 589. Japanese Artistic Encounters with Europe and the United States. 3 Hours. NW / H.
Consideration of Japanese artistic responses to visual culture from Europe and the United States. The course focuses upon Japanese art from the 16th century to the present. Prerequisite: A college-level introduction to Asian art history or consent of instructor. LEC.

HA 590. Special Study in African Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in African art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history or African Studies, or consent of the instructor. LEC.

HA 591. Special Study in Asian Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in Asian art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history or Asian Studies, or consent of the instructor. LEC.

HA 592. Special Study in Ancient Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in ancient art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in Art History or Classics, or consent of the instructor. LEC.

HA 593. Special Study in Medieval Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in medieval art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor. LEC.

HA 594. Special Study in Renaissance Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in Renaissance art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor. LEC.

HA 595. Special Study in Baroque Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in Baroque art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor. LEC.

HA 596. Special Study in African Art: ______. 1-6 Hours. H.
This course is designed for the study of special topics in African art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in African art, or consent of the instructor. LEC.
HA 676. West African Art. 3 Hours. NW / H/W.
Introduction to the rich visual art traditions of West Africa. Emphasis is given to the major art-producing cultures of the Western Sudan and the Guinea Coast, including the archaeological cultures of Nigeria, Mali, and Ghana. The diverse forms of figure sculptures and masquerade performance and the meanings of these arts in historical and cultural contexts are examined. Upper division and graduate students can enroll for this course with appropriate course requirements. Not open to students who have taken AAAS 376/HA 376. (Same as AAAS 676.) LEC.

HA 677. African Design. 3 Hours. NW / H/W.
A survey of sub-Saharan African media, emphasizing textiles, ceramics, metal and bead work, the artist's techniques, working methods and apprenticeship, and historical and contemporary cultural contexts, including the influence of tourism and the international art market on artistic production and style. Open to juniors, seniors, and graduate students only. (Same as AAAS 677.) Prerequisite: AAAS 376 or HA 376, or AAAS 578 or HA 578, or an introductory course in art history at the college level, or consent of instructor. LEC.

HA 679. African Expressive Culture: ______. 3 Hours. NW / H/W.
An in-depth examination of an artistic tradition shared by a number of African cultures. Discussion includes historical development related to style, use and meaning and other relevant issues critical to the topic. Open to juniors, seniors, and graduate students only. (Same as AAAS 679.) Prerequisite: AAAS 376 or HA 376, or AAAS 578 or HA 578, or an introductory course in art history at the college level, or consent of instructor. LEC.

HA 704. Seminar on Christian Iconography. 3 Hours.
A study of subject matter in the visual arts and of modes of representing certain themes and categories of ideas and meanings in the history of art. Prerequisite: Nine hours of history of art and knowledge of a foreign language. SEM.

HA 705. Major Artist: ______. 1-3 Hours.
The study in detail of a single artist or of an artist and his school or shop. Prerequisite: An introductory course in Western art history at the college level and the 400-level course in the period in which the artist's work falls. SEM.

HA 706. Seminar on Special Problems in Art History: ______. 1-6 Hours.
Seminar dealing with particular art historical problems of a special and specific nature. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 707. Directed Readings. 1-6 Hours.
Supervised study and research into special fields of art of particular interest to the student. Weekly consultations and reports. RSH.

HA 710. Museum Techniques and Functions. 3 Hours.
Primarily for graduate students interested in pursuing a career in art museum work. The development of the museum idea, the activities of the art museum, as well as practical experience in the various fields of art museum curatorship and public activity are among the areas studied. SEM.

HA 712. Directed Museum Study. 1-6 Hours.
Supervised study and research projects related to art works in the permanent collections or special exhibitions of local museums of art. Planned in consultation with a faculty member and the director of the museum. RSH.

HA 715. Seminar in African Art. 3 Hours.
A concentrated study of a special topic relating to African Art studies. Different topics are offered in different semesters. (Same as AAAS 715.) Prerequisite: Nine hours of Art History and/or consent of instructor. SEM.

HA 716. Art of the Early Middle Ages in the West. 3 Hours.
A pro-seminar in the art of the West from the Migration Period through the art of the Carolingian Empire. SEM.

HA 719. Art Histories: Theory and Methodology. 3 Hours.
This course examines the major methodologies and theories that have shaped and continue to shape the field of art history. Through critical reading of primary, secondary, and interpretive texts, the course will analyze closely the history and current state of the discipline. Prerequisite: Nine hours of History of Art or consent of instructor. SEM.

HA 720. Asian Art: Theory and Method. 3 Hours.
This course examines important methodologies and theories of the past and present employed in the field of Asian art history. Through critical reading of primary documents and secondary scholarship, students will gain historical perspective and practical tools for research in the history of Asian art and visual culture. Prerequisite: Nine hours of History of Art or consent of instructor. SEM.

HA 723. Romanesque Art. 3 Hours.
A study of Western European sculpture, painting, and architecture from the period of the Migrations, through the so-called "Dark Ages" to the creation of the Gothic style. Prerequisite: A survey of Medieval art. SEM.

HA 725. The Gothic Cathedral. 3 Hours.
The development and spread of Gothic architecture and sculpture in France, England, Spain, and Germany. Prerequisite: A college level introduction to Medieval art history. SEM.

HA 745. Dutch and Flemish Painting of the 17th Century. 3 Hours.
A detailed study of the art of Hals, Rembrandt and Vermeer, on the one hand, and of Rubens and Van Dyck on the other. Prerequisite: A survey of Northern Baroque art or consent of instructor. SEM.

HA 760. Proseminar in Korean Art. 3 Hours.
Intensive study of a selected topic in the visual arts of Korea; topics may focus on a particular genre, theme, historical period or group of artists, for example Buddhist painting and sculpture, Choson period landscape and genre painting, ceramics and lacquerware or modern and contemporary art in North and South Korea. May be repeated for credit up to a maximum of 12 hours. Prerequisite: Consent of instructor. SEM.

HA 782. Japanese Painting. 3 Hours.
A survey covering the development of Japanese painting from the Kofun period down to the early twentieth century. Topics will include Buddhist and other religious paintings, narrative handscrolls, suibokuga, decorative screens, genre paintings and ukiyo-e prints, and Western-style paintings of the Meiji and Taisho periods. Work requirements will be greater for students enrolled at the 700 level. Prerequisite: HA 265, or HA 267, or consent of instructor. LEC.

HA 788. Proseminar in Japanese Art. 3 Hours.
Critical analysis of readings on selected topics in Japanese art. May be repeated for credit up to a maximum of 12 hours. Prerequisite: Consent of instructor. SEM.

HA 805. Seminar in Graphic Arts: ______. 3 Hours.
A concentrated study of one or more artists, techniques, or movements. Different topics are offered in different semesters. May be repeated for
credit up to a maximum of 12 credit hours. Prerequisite: A course in graphic art, or in a discipline related to the field of the seminar. SEM.

HA 808. Problems in Connoisseurship West: _____, 3-6 Hours. The analysis of the work of a specific artist, medium or period, and developing a knowledge of the methods and means of establishing standards of quality and authorship. Includes study in Spencer and/or Nelson Museums. Prerequisite: Nine hours of art history and a reading knowledge of a pertinent foreign language. SEM.

HA 822. Seminar in Buddhist Art: _____, 3 Hours. A concentrated study of selected problems dealing with Buddhist art in Asia. Different topics are offered in different seminars. May be repeated for credit up to a maximum of twelve hours. Prerequisite: Reading knowledge of Chinese or Japanese and consent of instructor. SEM.

HA 824. Seminar in Edo Period Painting: _____, 3 Hours. Special study of one or more schools of painting of the Edo period (1615-1868) in Japan. Individual works will be analyzed in depth. Prerequisite: A course in Japanese painting. SEM.

HA 870. Seminar in Photographic History: _____, 3 Hours. Advanced study of photographic images as made and used in the nineteenth and twentieth centuries. Requires primary research. Prerequisites include study of nineteenth century history of art. Specific topics vary. SEM.

HA 898. Franklin Murphy Seminar in Art History: _____, 3 Hours. This seminar is given each spring by the Murphy Lecturer of the year and includes two weeks of intensive study with a nationally known expert in a special field of art history. The other weeks of seminar meetings for the semester are conducted by the faculty member most closely specialized in this field. Prerequisite: Consent of supervising faculty member. SEM.

HA 899. Thesis. 1-6 Hours. THE.

HA 906. Seminar on Special Problems in Art History: _____, 1-6 Hours. Seminar dealing with particular art historical problems of a special and specific nature. Different topics are offered in different seminars. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 907. Directed Readings in Art. 1-12 Hours. Supervised study and research into special fields of art of particular interest to the student. Weekly consultation and reports. Prerequisite: Nine hours of art history and a reading knowledge of a pertinent foreign language. RSH.

HA 910. Curatorial Problems: 3-8 Hours. Primarily for the graduate student interested in art museum work. The student will engage in specialized research related to museum activities resulting in a thesis or a seminar paper. Includes study of some portion of the museum's holdings. Prerequisite: Nine hours of history of art and a reading knowledge of a pertinent foreign language. SEM.

HA 920. Seminar in Early Medieval Art: _____, 3 Hours. A study of selected problems dealing with the art of the early Middle Ages. Different topics are offered in different seminars. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 925. Seminar in Late Medieval Art: _____, 3 Hours. A study of selected problems dealing with the art of the later Middle Ages. Different topics are offered in different seminars. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 930. Seminar in Italian Renaissance Art: _____, 3 Hours. A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 935. Seminar in Northern Renaissance Art: _____, 3 Hours. A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 940. Seminar in 17th Century Art: _____, 3 Hours. A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 950. Seminar in 18th Century Art: _____, 3 Hours. A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 955. Seminar in 19th Century Art: _____, 3 Hours. A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 960. Seminar in 20th Century Art: _____, 3 Hours. A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 965. Seminar in American Art: _____, 3 Hours. A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 990. Seminar in Japanese Art: _____, 3 Hours. A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 995. Seminar in Korean Art: _____, 3 Hours. A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours. SEM.

HA 996. Seminar in Later Chinese Art: _____, 3 Hours. A concentrated study of artists, monuments or movements in Later Chinese art. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 16 credit hours. SEM.

HA 999. Doctoral Dissertation. 1-12 Hours. THE.
Bachelor of Arts and Bachelor of General Studies in History of Art

Why study the history of art?

The study of the visual arts in their historical contexts enriches our understanding of human creativity and the human condition. It provides students with the cultural literacy and critical thinking, research, and communication skills that are relevant for a variety of careers, including in art museums, galleries, and collections, as well as schools, universities, publishers, and archives. The study of art history can also provide the foundation for a career in other professions such as business, law, media, or government.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

History of Art Programs

Bachelor's degrees with majors in the history of art are offered in the College of Liberal Arts and Sciences (B.A. and B.G.S.) and in the School of the Arts (B.F.A.). See Bachelor of Fine Arts in History of Art (p. 179) in the School of the Arts Department of Visual Art section of the catalog for B.F.A. requirements.

Requirements for the B.A. or B.G.S. Major

1. Foundation Courses: (9)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 150</td>
<td>History of Western Art: Ancient Through Medieval</td>
</tr>
<tr>
<td>or HA 160</td>
<td>History of Western Art: Ancient Through Medieval, Honors</td>
</tr>
<tr>
<td>HA 151</td>
<td>History of Western Art: Renaissance to Contemporary</td>
</tr>
<tr>
<td>or HA 161</td>
<td>History of Western Art: Renaissance to Contemporary, Honors</td>
</tr>
<tr>
<td>and either</td>
<td></td>
</tr>
<tr>
<td>HA 165</td>
<td>Introduction to Asian Art</td>
</tr>
</tbody>
</table>

2. Breadth Courses: Complete one course at or above the 300 level in each of the following six categories: (18)

A. Art between 400-1400: European, Mediterranean, or Near Eastern

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 393</td>
<td>Special Study in Medieval Art: _____</td>
</tr>
<tr>
<td>HA 506</td>
<td>Early Medieval and Romanesque Art</td>
</tr>
<tr>
<td>HA 507</td>
<td>Gothic Art</td>
</tr>
<tr>
<td>HA 510</td>
<td>Medieval Manuscripts and Early Printed Books</td>
</tr>
<tr>
<td>HA 527</td>
<td>Late Medieval Art in Italy</td>
</tr>
<tr>
<td>HA 593</td>
<td>Special Study in Medieval Art: _____</td>
</tr>
</tbody>
</table>

B. Art between 1300-1600: European, Mediterranean, or Near Eastern

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 330</td>
<td>Italian Renaissance Art</td>
</tr>
<tr>
<td>HA 394</td>
<td>Special Study in Islamic Art, 14th-17th Century: _____</td>
</tr>
<tr>
<td>HA 500</td>
<td>Prints and Printmakers</td>
</tr>
<tr>
<td>HA 508</td>
<td>The Italian Renaissance Home</td>
</tr>
<tr>
<td>HA 530</td>
<td>Renaissance Art in Italy: The 15th Century</td>
</tr>
<tr>
<td>HA 531</td>
<td>Renaissance Art in Italy: The 16th Century</td>
</tr>
<tr>
<td>HA 532</td>
<td>Michelangelo</td>
</tr>
<tr>
<td>HA 541</td>
<td>Special Study in Islamic Art, 14th-17th Century: _____</td>
</tr>
</tbody>
</table>

C. Art between 1600 and 1700: European

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 395</td>
<td>Special Study in Baroque Art: _____</td>
</tr>
<tr>
<td>HA 576</td>
<td>Northern Baroque Art</td>
</tr>
<tr>
<td>HA 577</td>
<td>Italian Baroque Art</td>
</tr>
<tr>
<td>HA 595</td>
<td>Special Study in Baroque Art: _____</td>
</tr>
</tbody>
</table>

D. Art between 1700 and 1900: European or American

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 370</td>
<td>American Art</td>
</tr>
<tr>
<td>HA 533</td>
<td>European Art 1789-1848: Gender and Revolution</td>
</tr>
<tr>
<td>HA 534</td>
<td>Art in France 1848-1900: Modernisms</td>
</tr>
<tr>
<td>HA 342</td>
<td>Special Study in 18th/19th-Century European or American Art: _____</td>
</tr>
</tbody>
</table>

E. Asian Art before 1900:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 340</td>
<td>Special Study in Asian Art Before 1900: _____</td>
</tr>
<tr>
<td>HA 354</td>
<td>Japanese Prints</td>
</tr>
<tr>
<td>HA 361</td>
<td>Buddhist Art of Korea</td>
</tr>
<tr>
<td>HA 362</td>
<td>Ceramics of Korea</td>
</tr>
<tr>
<td>HA 367</td>
<td>Art and Culture of Japan</td>
</tr>
<tr>
<td>HA 368</td>
<td>Art and Culture of China</td>
</tr>
<tr>
<td>HA 369</td>
<td>Art and Culture of Korea</td>
</tr>
<tr>
<td>HA 467</td>
<td>Art and Culture of Japan, Honors</td>
</tr>
<tr>
<td>HA 468</td>
<td>Art and Culture of China, Honors</td>
</tr>
<tr>
<td>HA 469</td>
<td>Art and Culture of Korea, Honors</td>
</tr>
<tr>
<td>HA 488</td>
<td>Chinese Painting, Honors</td>
</tr>
<tr>
<td>or HA 166</td>
<td>The Visual Arts of East Asia</td>
</tr>
</tbody>
</table>
Major Junior/Senior Hours
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

A sample 4-year plan for the BA degree in History of Art can be found here: History of Art (http://catalog.ku.edu/liberal-arts-sciences/history-art/ba-bgs/ba-history-art), or by using the left-side navigation.

A sample 4-year plan for the BGS degree in History of Art will be coming soon.

Departmental Honors
The department invites art history undergraduate majors to apply for graduation with departmental honors. They must meet the following criteria:

1. An overall grade-point average of at least 3.25 and an art history grade-point average of 3.5 at the time of declaring intention to seek honors.
2. In consultation with the departmental honors coordinator and with approval from a supervising professor, declared intention of seeking honors no later than the time of enrollment for the final undergraduate semester.
3. Enrollment in HA 498 Honors Essay and full participation in a concurrent art history graduate seminar (numbered 700 or above) for which the student must write a substantial, original research paper to be submitted to the supervising professor as an honors essay.
4. Approval of the honors essay by the supervising professor and 2 other faculty members who, as a committee, certify to the departmental honors coordinator that the student has successfully completed the requirements to earn honors.

Minor in History of Art
Why study the history of art?
The study of the visual arts in their historical contexts enriches our understanding of human creativity and the human condition. It provides students with the cultural literacy and critical thinking, research, and communication skills that are relevant for a variety of careers, including in art museums, galleries, and collections, as well as schools, universities, publishers, and archives. The study of art history can also provide the foundation for a career in other professions such as business, law, media, or government.

Requirements for the Minor
History of Art Minor Requirements
Students selecting this minor must complete a minimum of 6 History of Art courses. Satisfied by 18 hours of History of Art coursework. 12 of the 18 hours must be at the 300 level or above. With approval of the art history undergraduate advisor, 1 closely related course taught outside of the art history department (e.g., history of architecture or design) may count toward the minor.
Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and grade-point average minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the minor.

Minor Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA
Satisfied by a minimum of 2.0 KU GPA in junior/senior courses (300+) in the minor. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Master of Arts in History of Art

The M.A. provides students with a broad knowledge of the visual arts in European/American or East Asian art history, as well as an introduction to the basic concepts and methods of the discipline. The M.A. may be pursued as a terminal degree or as preparation to petition for specialized doctoral studies at KU or to apply elsewhere. The Combined M.A./Ph.D. is intended for students who want to pursue the Ph.D. in art history at KU, but who do not yet hold the M.A. degree in art history. All applicants are considered for competitive funding packages and GTA, GRA, and GA positions, however Combined M.A./Ph.D. students are given priority.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

M.A. and Combined M.A./Ph.D. applicants are expected to hold the B.A. or equivalent degree with an overall grade-point average of 3.3 or better and to have taken at least 6 college courses in art history or the equivalent, distributed to provide the basic foundation for advanced study. M.A. and Combined M.A./Ph.D. applicants should specify their area of proposed study (European/American art or East Asian art).

Completed applications must be submitted by January 1 for fall admission. The Graduate Record Examination general test is required.

Submit your graduate application online (http://www2.ku.edu/~kuarthis). The M.A./Ph.D. applicant must apply to the Combined M.A./Ph.D. program. Only one application fee is required.

The University of Kansas
Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Applicants for the Ph.D. are expected to hold an appropriate M.A. degree.

Admission to the Ph.D. program for students who receive the M.A. degree from KU:

The M.A. student who wishes to be considered for admission to the Ph.D. program must complete and sign the Petition for Continuation in the Ph.D. Program form, which will be distributed at the M.A. exam and collected with the completed exams on day two of testing. It is expected that such students will already have expressed this interest to a potential major field advisor and received that faculty member’s support. The student must pass the M.A. exam in order for his/her petition to be considered by the graduate faculty. After receiving departmental approval for the petition and completing all requirements for the M.A. degree, the student will automatically be entered into the Ph.D. program and will be expected to maintain his/her enrollment as per Graduate Studies guidelines.

M.A. students who do not submit the petition at the time of the M.A. exam will need to reapply for admission to the art history graduate program.

The Combined M.A./Ph.D. student does not need to submit the Petition for Continuation in the Ph.D. Program form. He/she will be automatically evaluated by the graduate faculty upon successfully passing the M.A. exam to determine whether he/she remains eligible to continue to the Ph.D. or if the M.A. is the appropriate terminal degree. In most cases, Combined M.A./Ph.D. students will enter the Ph.D. program upon completion of the requirements for the M.A. degree.

Completed applications must be submitted by January 1 for fall admission. The Graduate Record Examination general test is required.

Submit your graduate application online (http://www.graduate.ku.edu).

The University of Kansas
Department of History of Art
Graduate Admissions
Spencer Museum of Art
1301 Mississippi St., Room 209
Lawrence, KS 66045-7500

Ph.D. Degree Requirements

Ph.D. candidates must satisfy all general requirements. Ph.D. candidates must demonstrate proficiency in 2 research skills (normally foreign languages) relevant to their research; this requirement must be met before candidates are admitted to the comprehensive Ph.D. examinations. One of the 2 research skills is usually the foreign language that met the M.A. language requirement.

Normally, Ph.D. students are expected to complete no fewer than 21 and no more than 27 post-M.A. course credit hours. These credit hours must be taken at the graduate level. The graduate faculty reserves the right to require more than 27 post-M.A. course credit hours when appropriate.

Normally, Combined M.A./Ph.D. students are expected to complete no fewer than 15 and no more than 21 post-M.A. course credit hours. These credit hours must be taken at the graduate level. The graduate faculty reserves the right to require more than 21 post-M.A. course credit hours when appropriate.

Students must take both written and comprehensive oral examinations at the end of their course work. Both written and oral examinations cover the major area and 2 minor areas specified in the student’s Doctoral Program of Study petition (see department’s Graduate Student Handbook). The oral examination normally follows the written examination by 2 weeks.

The dissertation proposal must be approved by the student’s primary advisor and the graduate faculty within three months of passing the comprehensive Ph.D. examinations. The student is strongly encouraged to work closely with his/her primary advisor immediately following the comprehensive examination to meet this deadline.

Upon acceptance of the dissertation in final draft form, the candidate must successfully pass the final oral examination (the dissertation defense) to complete the degree.

Research Skills & Responsible Scholarship Requirement

All graduate seminars include instruction in and discussion of appropriate research conduct and research misconduct; authorship, publication, plagiarism, copyright; peer review; and professional practices. For more information on the Research Skills and Responsible Scholarship requirement, please see the Graduate Studies section of the online catalog.

Handbook for Graduate Students

A detailed presentation of departmental degree requirements and regulations is included in the department’s Graduate Student Handbook, available online (http://www2.ku.edu/~kuarthhs).

University Honors Program

Honors Courses

Honors courses are open to qualified undergraduates in any school of the university.

University Honors Program

The University Honors Program (http://www.honors.ku.edu) provides opportunities for outstanding and creative undergraduate students in all schools at KU to develop their full potential during their undergraduate years. The Honors Program brings talented students together in honors classes and seminars to benefit from mutual interests and association. It brings students and faculty members together in a teaching and research environment that ensures high academic achievement and standards.

The program coordinates merit-based scholarship opportunities for qualified students, including KU awards such as the University Scholars Program. Honors Program staff are also responsible for the campus-wide nomination process for many competitive national awards, including the Goldwater, Truman, Rhodes, Marshall, Mitchell, and Udall scholarship.
Students interested in these opportunities receive guidance from Honors Program staff for all aspects of these applications.

The Honors Student Council, the Honors Ambassador Program, and Peer Mentor Program provide opportunities for student leadership.

In general, honors classes are small, oriented to discussion, and taught by full-time members of the faculty. Most honors courses fulfill requirements and deal with introductory fundamentals and principles, but they are likely to do so in more depth than their non-honors equivalents. Honors courses are distinguished by the energetic atmosphere and critical thinking generated by the students in them and the faculty members who teach them.

Honors students are interested in expanding their knowledge and take a broad range of liberal arts and sciences courses. This is true of students in the professional schools (architecture, engineering, business, etc.) as well as students in the College of Liberal Arts and Sciences. Honors program advisors typically recommend that students explore their interests through the broad curriculum choices KU has to offer.

A first-year, semester-long tutorial experience provides an introduction to an academic area of study in an informal setting that allows students to get to know one another and the instructor. The tutorial explores the research methods of a discipline and acquaints the student with the research resources at KU.

Honors advising is personalized in meetings with honors staff, faculty fellows, and specially selected advisors from across the university. The program’s staff facilitates early and frequent contact with academic advisors in the students’ areas of interest. Honors students benefit from priority enrollment, which provides flexibility in planning one’s academic curriculum.

The program does not require a minimum number of honors courses a semester. However, students in the program quickly discover that honors courses engage the intellect, hold the interest, and create the enthusiasm for learning they seek at a university. Students in the professional schools are particularly encouraged to seek out honors course opportunities early, while their curricula still have breadth and flexibility.

Honors students are strongly encouraged to include research, study abroad experiences, internships, and community service in their academic programs. Consult Honors Program staff about applying these activities toward completion of honors requirements.

**Admission**

Students with strong high school curricula and excellent academic records are encouraged to apply to the University Honors Program. Students with composite ACT scores of 30 or above and unweighted high school grade-point averages of 3.75 or above are more likely to be admitted. Applications are evaluated on the basis of high school curriculum, grades, an essay, activities, and standardized test scores. Applications from first- and second-year students currently attending KU, as well as incoming transfer students, are evaluated on the basis of college course work, an essay, and college activities. Review of applications begins in October and continues through April. Send inquiries to the University Honors Program, 1506 Engel Road, Lawrence, KS 66045-3845. View further information and the online application (http://www.honors.ku.edu).

**Completion of the Program**

Students graduate from the program by completing 8 honors units and the first-year, semester-long tutorial. The 8 units must be completed as follows:

1. 6 honors courses (may include graduate-level courses numbered 700 and above).
2. 1 out-of-classroom experience such as study abroad, departmental honors, documented research experience, approved and documented internship experience, or approved and documented community service.
3. The eighth unit may be from either category 1 or category 2. Students also must maintain a minimum 3.25 grade-point average.

**Nunemaker Center**

This unique building, with its modern architectural design, is the home of the Honors Program, near the Daisy Hill residence halls at 15th Street and Engel Road. The Honors Program is home to several faculty fellows who serve the program and bring additional resources to the program to complement the full-time staff. Faculty fellows are available for advising, consultation about majors and careers, and guiding research projects.

Students are encouraged to take advantage of the spaces available at Nunemaker, including several classrooms and study areas, a kitchen, comfortable lounges that include 2 fireplaces, and wireless Internet access. Nunemaker also serves as a gallery for undergraduate art. The center is open days and evenings.

**Courses**

**HNRS 177. First Year Seminar: _____**. 3 Hours. GE11 / U.

A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Honors. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

**HNRS 190. Freshman Honors Seminar. 1 Hour. U.**

This seminar serves as an introduction to the Honors Program, to the research opportunities and other academic resources available at the University of Kansas and to specific disciplinary perspectives on an overarching theme. While closely examining a topic germane to the instructor, students develop skills in research, reading, writing and in-depth discussion. The instructor of the student’s seminar also serves as the academic honors advisor for the enrolled students. Required of all freshman Honors students; open only to freshmen in the University Honors Program. LEC.

**HNRS 195. Transfer Honors Seminar. 1 Hour. U.**

This seminar serves as an introduction to the Honors Program, and to the research opportunities and other academic resources available at the University of Kansas. This seminar fosters the transfer students’ oral and written communication and the critical assessment of their academic and pre-professional goals. The instructor of the student’s seminar also serves as the academic honors advisor for the enrolled students. Open only to transfer students in the University Honors Program. LEC.

**HNRS 250. Citizen Philanthropy: An Introduction to the Nonprofit World. 3 Hours. U.**

This interdisciplinary course explores the historical and economic roots of citizen generosity and the role of the nonprofit/philanthropic sector. This service learning course combines volunteer experiences and public service internships with research and exploration of the missions and
ethic orientations of nonprofit organizations. The course is designed to explore the social and the ethical contexts of the nonprofit sector with opportunities to demonstrate social and civic responsibility. LEC.

HNRS 300. Honors Commons Course. 3 Hours. H.
An opportunity to investigate a broad topic across various subjects and disciplines. In alliance with the University Commons at Spooner Hall, this course examines a problem or topic from perspectives of several disciplines across the arts, sciences, social sciences and humanities. The course is complemented by a dedicated annual university lecture series germane to the course’s topic. Prerequisite: Membership in the University Honors Program. LEC.

HNRS 310. University Scholars Seminar. 3 Hours. U.
An interdisciplinary survey to acquaint students with some of the main ideas, methods, and outstanding problems in various areas of scholarship. The organization of human knowledge inside and outside the university, as well as the implications of this organization for scholarship and society, are emphasized. Ideas and methods in various disciplines are contrasted and compared. Required of and open only to newly admitted students in the University Scholars Program. LEC.

HNRS 320. Global Scholars Seminar. 3 Hours. H.
The Global Scholars Seminar is designed to foster academically talented and motivated undergraduate students’ interest in global studies. Through interdisciplinary coursework, mentorship and research experience in global studies, the seminar provides cohorts of students with opportunities to develop their intellectual capabilities and interests to the fullest and better prepares them for careers, further study, and leadership roles in today’s complex international arena. Required of and open only to newly admitted students in the Global Scholars Program. LEC.

HNRS 370. Personal Writing Seminar. 1 Hour. U.
This seminar helps students develop their personal writing abilities. Students analyze language and rhetorical choices in the genre of the personal essay. Students demonstrate rhetorical flexibility within the genre, considering audience, purpose, and application of the material. Prerequisite: Permission of the University Honors Program. LEC.

HNRS 380. Critical Thinking and Advocacy Seminar. 1 Hour. U.
The focus of this class is on honing the two basic skills of critical thinking and advocacy. In this seminar, students develop a basic system for critical analysis that can be applied generally; test that critical analysis system in a series of practicums to develop the skills necessary to apply it; and develop a basic system for designing effective and ethical persuasive messages. Prerequisite: Permission of the University Honors Program. LEC.

HNRS 430. Honors Interdisciplinary Seminar. 3 Hours. U.
A seminar course designed for advanced-level students majoring in the humanities. Participants work closely with a faculty advisor. Prerequisite: HNRS 310 or concurrently. LEC.

HNRS 497. Honors Freshman Seminar Assistantship. 0 Hours.
Open to all Honors students selected to be Honors Freshman Seminar Assistants, regardless of major field. These students assist Seminar instructors in the teaching of an Honors seminar in various ways, including but not limited to: leading group discussion; engaging students in the learning process; developing classroom material; encouraging and guiding students to solve problems themselves and helping students prepare for their advising assignments. Offered fall semester only. May be repeated. LEC.

HNRS 520. University Scholars Junior/Senior Seminar. 2-3 Hours. U.
An interdisciplinary seminar course designed for advanced-level students in the University Scholars Program. Faculty mentors are invited to attend. Will count toward completion of the University Honors Program. Prerequisite: HNRS 310 or concurrently. LEC.

Humanities and Western Civilization Program

Why study Humanities and Western Civilization?
Integrated learning in humanities and western civilization fosters broad cultural understanding by exploring the connections among diverse areas of knowledge. Studying humanities and western civilization allows students to examine key issues relating to human experiences and the human condition from a variety of perspectives, including philosophy, history, religion, literature, art, and language. Such study provides excellent preparation for 21st century careers by preparing students to take part in the world around them, equipping them for success in many fields, including business, medicine, law, marketing, sales, and social services.

Undergraduate Programs
Courses for Nonmajors
All HWC courses are open to nonmajors. HWC 204, 205, 206, and PCS 120 are recommended to nonmajors for fulfilling KU CORE Goal 1.1 (Critical Thinking). HWC 110 and 204 are recommended for fulfilling KU CORE Goal 2.1 (Written Communication). HWC 110, 206, 250, 304, 308, 312, and 430 are recommended for fulfilling KU CORE Goal 3 (Breadth of Knowledge). HWC 204, 205, 302, 430, 435, 505, and 600 are recommended for fulfilling KU CORE Goal 4.2 (Culture and Diversity).

Humanities Programs
Students have unusual freedom to select courses from a variety of departments. They can create integrated interdisciplinary programs and work closely with a faculty advisor. Majors may choose a track in civilizations in a global context, world literatures, or peace and conflict studies. Depending on the track, majors may focus on a particular era or culture in Eastern or Western civilization, such as the Italian Renaissance or China during the Ming dynasty, from an interdisciplinary perspective. Or they may examine a theme or issue that cuts across disciplinary lines, such as classicism versus romanticism or ideas of war and peace.
Students should plan their studies within the general requirements and consult an advisor early in the major. During the senior year, the student enrolls in HWC 424 Senior Seminar in Humanities or PCS 650 Senior Seminar in Peace and Conflict Studies for 3 credit hours to produce a substantial project that reflects and utilizes the interdisciplinary perspectives of the humanities.

**Courses**

**HWC 110. Introduction to Humanities. 3 Hours. HL GE21/GE3H / H.**
An introduction to the humanities as a division of learning and to interdisciplinary study in the humanities. Topics include the history and role of the humanities in a liberal education, perspectives and methods in the humanities, the humanities and human diversity, and interdisciplinary approaches to understanding and interpreting texts. LEC.

**HWC 111. Introduction to Humanities, Honors. 3 Hours. HL GE21/GE3H / H.**
An introduction to the humanities as a division of learning and to interdisciplinary study in the humanities. Topics include the history and role of the humanities in a liberal education; perspectives and methods in the humanities; the humanities and human diversity; and interdisciplinary approaches to understanding and interpreting texts. Prerequisite: Membership in the University Honors Program. LEC.

**HWC 114. Western Civilization I Honors. 3 Hours. AE42/GE11/GE21 / H.**
A program of study using readings and writing to explore and understand the record of Western Civilization from the ancient world through the early modern period. This is a writing intensive and writing instructive course designed to expand critical thinking and global awareness through the medium of composition practice. Prerequisite: Membership in the University Honors Program or permission of the department. LEC.

**HWC 115. Western Civilization II Honors. 3 Hours. AE42/GE11 / H.**
A program of study emphasizing the reading and discussion of some of the influential writings and ideas that have shaped the intellectual and cultural heritage of the Western world. Western Civilization II includes readings from the modern period. Prerequisite: Membership in the University Honors Program or permission of department. LEC.

**HWC 175. Kansas Environment and Culture. 3 Hours. H.**
An introduction to the inhabitants of Kansas and their experiences of the unique landscapes found within the state. Through the use of sources such as letters, autobiographies, novels, art, architecture and film, this course explores how Kansas environments have shaped and been shaped by the humans that occupy them, and why Kansas has had a powerful hold on the American imagination. LEC.

**HWC 177. First Year Seminar: ___. 3 Hours. GE11 / U.**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Humanities and Western Civilization. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

**HWC 204. Western Civilization I. 3 Hours. AE42/GE11/GE21 / H.**
A program of study using readings and writing to explore and understand the record of Western Civilization from the ancient world through the early modern period. This is a writing intensive and writing instructive course designed to expand critical thinking and global awareness through the medium of composition practice. LEC.

**HWC 205. Western Civilization II. 3 Hours. AE42/GE11 / H.**
A program of study emphasizing the reading and discussion of some of the influential writings and ideas that have shaped the intellectual and cultural heritage of the Western world. Western Civilization II includes readings from the modern period. LEC.

**HWC 206. Contemporary Western Civilization. 3 Hours. HL GE11/GE3H / H.**
A sequel to the two Western Civilization courses which offers the opportunity to examine influential works of literature, philosophy, history, and political thought written since the end of World War II. In keeping with the decline of colonialism and the growth of global and multicultural civilization since 1945, the readings of the course are selected from both Western and non-Western writers. LEC.

**HWC 240. Introduction to World Literature. 3 Hours. H.**
This course provides an introduction to the field of world literature as an approach to critical reading and writing about literary works in a global context. Topics may include: what constitutes literature; challenges to reading works across time or within different cultural traditions; reading works in translation; history of writing technologies and canon formation; literature and market forces; and the literature of global encounters and exchanges. This is a writing intensive and writing instructive course designed to expand critical thinking and global awareness through the medium of composition practice. LEC.

**HWC 250. Civilizations and the Individual. 3 Hours. HL GE3H / H.**
Introduction to perennial themes that define human experience through reading and discussion of primary texts. Topics may include the nature of humanity; nature and the supernatural; the individual and the state. LEC.

**HWC 251. Civilizations and Individual, Honors. 3 Hours. HL GE3H / H.**
Honors version of HWC 250. Introduction to perennial themes that define human experience through reading and discussion of primary texts. Topics may include the nature of humanity; nature and the supernatural; the individual and the state. Prerequisite: Membership in the University Honors Program, or permission of instructor. LEC.

**HWC 300. Studies In: ___. 3 Hours. H.**
An interdisciplinary course, focusing on different topics and drawing on diverse media, cultures, and historical periods. Humanities-based, this course, depending on its topic, may include the arts, the social sciences, and the natural sciences. May be repeated for credit with different topics. LEC.

**HWC 302. European Culture and Society 1945 to Present. 3 Hours. HT AE42 / H.**
The course provides historical, cultural, and political overviews of Europe since 1945 with particular emphasis on the contribution of French and Italian culture and society. The course emphasizes Europe's contribution to Western intellectual thought, social movements, arts and literature, and global society. (Same as EURL 302.) LEC.

**HWC 304. World Literature I. 3 Hours. HL GE3H / H.**
The study of great books in English translation from antiquity through the fifteenth century from two or more national literatures. LEC.

**HWC 308. World Literature II. 3 Hours. HL GE3H / H.**
The study of great books in English translation from the sixteenth, seventeenth, eighteenth, and early nineteenth centuries from two or more national literatures. LEC.

**HWC 312. World Literature III. 3 Hours. HL GE3H / H.**
The study of great books in English translation in the modern period (late nineteenth and twentieth centuries) from two or more national literatures. LEC.

**HWC 317. Greek and Roman Art. 3 Hours. H/W.**
A survey of the art of ancient Greece and Rome (ca. 1000 B.C.E. -500 C.E.). Emphasis on major sites, architecture, sculpture, and painting. Illustrated lectures and discussion; use of the Wilcox Classical Museum.
No knowledge of Greek or Latin is required. Not open to students who have taken both CLSX 526/HA526 and CLSX 527/HA 537, except with permission of the instructor. (Same as CLSX 317, HA 317.) LEC.

HWC 320. Being Human in the Workplace. 3 Hours. H.
A study of what it means to be human and humane in the workplace. Topics include the concepts of work, the worker, and the workplace; workers’ rights; issues of discrimination; business ethics; privacy and confidentiality; bullying; whistle blowing; workplace environment. LEC.

HWC 324. Undergraduate Writing & Research Methods. 1 Hour. H.
Preparation for senior thesis project required of HWC majors. Introduction to writing strategies, library investigation, and time management skills. Open to HWC majors and others engaged in research and writing at the undergraduate level. Class will proceed by discussion of skills, methods, and examples, and will culminate in a written proposal from each student. LEC.

HWC 325. Theory and Method in Interdisciplinary Studies in the Humanities. 3 Hours. H.
An introduction to recent cultural theory and interdisciplinary methods used across the humanities and qualitative social sciences. Includes examination of traditional views of the humanities and its implicit cultures along with discussion of new methodologies of cultural analysis. LEC.

HWC 328. Law and the Legal Profession. 3 Hours. H.
An overview of Western Legal education, both in historical and modern contexts. Legal subjects such as constitutional law, contracts, property, the courts and ethics are also studied. Students gain perspective on law as a profession, and the legal environments in which we live. Note: this course does not guarantee admission to law school or constitute entry into the legal profession as a career. It is intended to provide information and help students identify interests in the field of legal study. LEC.

HWC 335. Introduction to Indigenous Studies. 3 Hours. NW / H.
This course is an introduction to the study of modern and historic indigenous peoples. It surveys the concepts, methods and content relevant to Indigenous Studies, using case studies drawn from the diverse indigenous cultures. Special attention is paid to the various ways in which standard academic disciplines--history, anthropology, literature, law, political science, among others--contribute to the study of Indigenous cultures and current issues. The course illustrates that the social, political, religious, and economic aspects of indigenous life are interconnected and tribal histories and cultures cannot be understood without an awareness of these fields. (Same as ISP 335.) LEC.

HWC 345. Indian Territory. 3 Hours. H.
This course examines the cultural, social, economic, environmental, and political background of Indian territory in what is now the state of Oklahoma. It surveys the diverse geographical regions, tribal cultures, the impact of the Indian Removal Act, assimilation, acculturation, westward expansion, the Civil War, boarding schools, the Dawes Act, the Curtis Act, and land runs on Territory residents. The course also treats post-Civil War violence, outlaws, and the role of tribal courts along with controversies over removals, Land Run celebrations, allotment scandals, and Osage oil murders. (Same as HIST 318 and ISP 345.) LEC.

HWC 348. American Indian and White Relations to 1865. 3 Hours. H.
This course provides an intensive survey of the Indians of North America from Prehistory to 1865, and focuses on ancient indigenous cultures, early European-Indian relations and the impact of European culture upon the indigenous peoples of North America. (Same as HIST 351, ISP 348.) LEC.

HWC 350. American Indians Since 1865. 3 Hours. H.
This course examines American Indian/White relations from reconstruction to the present. It surveys the impact of westward expansion and cultural changes brought about by the Civil War, forced education, intermarriage, the Dawes Act, the New Deal, the World Wars, termination, relocation and stereotypical literature and movies. The class also addresses the Red Power and AIM movements, as well as indigenous efforts to decolonize and to recover and retain indigenous knowledge. After learning about the past from both Native and non-Native source materials, students will multiple perspectives about historical events and gain understandings of diverse world views, values, and responses to adversity. (Same as HIST 352 and ISP 350.) LEC.

HWC 370. The Twentieth Century. 3 Hours. H.
An integrated study of several disciplines such as history, philosophy, art, music, and literature as they relate to the twentieth century in one country, or one historical or aesthetic movement occurring during this time. LEC.

HWC 374. Gender and Sexuality, Ancient and Modern. 3 Hours. H.
Classical Greek and Roman attitudes to gender and sexuality compared and contrasted with modern nations and behaviors. Attention is paid to literature (dramatic, philosophical, medical, and legal texts) and archaeological evidence (vase painting, sculpture, and domestic architecture). The course may include the following topics: age divisions and rites of passage from childhood to maturity; marriage; conception, birth, and infanticide; the family; love; homosexuality; property and economics; and sexuality and the law, politics, and religion. No knowledge of Greek or Latin is required. (Same as CLSX 374.) LEC.

HWC 380. Modern Themes, Ancient Models: ____. 3 Hours. H.
The study of the evolution of a cultural or literary tradition from the Graeco-Roman world into modern times. The theme of the course will normally vary from semester to semester; topics such as these may be examined: the analysis of a literary genre (e.g. drama, satire, lyric), the transformation of the ancient mythical heritage, the reception of ancient astronomy. Students should consult the Schedule of Classes for the theme of the course in a given semester. With departmental permission, may be repeated for credit as topic varies. (Same as CLSX 350.) LEC.

HWC 390. Comparative Literary Theory. 3 Hours. H.
A study of selected works in literary theory and of selected problems in literary interpretation and comparative literary methodology, designed to examine and apply systematically basic critical principles and approaches. Study of approaches such as feminism, Marxism, deconstruction, psychoanalysis, and cultural studies are carried out through discussion and writing. Prerequisite: Completion of the freshman-sophomore English requirement or its equivalent. LEC.

HWC 410. Dante's Comedy. 3 Hours. H.
The complete Divine Comedy will be read in English translation, with equal stress on each of its three parts--the Inferno, the Purgatory, and the Paradise. The poem will be explained for the general reader by specialists having a variety of perspectives. (Same as HIST 420.) LEC.

HWC 420. The Interrelations of the Humanities and the Arts. 3 Hours. H.
An interdisciplinary seminar on the relations of several of the humanities and the arts. Topics will vary, but the interrelation of the humanities and arts will be the central focus. Not open to freshmen and sophomores; recommended in the junior year. Required of students majoring in humanities. LEC.

HWC 424. Senior Seminar in Humanities. 3 Hours. AE61 / H.
A seminar to result in the student's integration of knowledge within the Humanities major. Students undertake a project that reflects and utilizes the interdisciplinary perspectives of the humanities. Options for the final project include a portfolio, web page, or significant writing project. Not open to freshmen and sophomores; recommended in the senior year.
HWC 430. European Civilization in World Context: ____. 3 Hours. 
HL AE42/GE3H / H.
An introduction to the literature of encounters between European and non-European civilizations, drawing on both Western and non-Western sources. The course may include European interactions with areas such as the Mediterranean Basin, Sub-Saharan Africa, South and East Asia, and the Americas. World areas and historical periods chosen for study will vary from semester to semester according to the interest and field of the instructor. Not open to freshmen. (Same as EURS 430.) Prerequisite: HWC 114 or HWC 204 and HWC 115 or HWC 205. LEC.

HWC 435. Islam in Europe. 3 Hours. AE42 / H.
Investigation of Muslim migration into Europe and day-to-day interactions of Muslims with other European populations. This is an integrated study of historical, political, religious and economic influences that determine Muslim experience in contemporary European culture. (Same as EURS 435.) LEC.

HWC 436. Islam in Europe, Honors. 3 Hours. H.
Investigation of Muslim migration into Europe and day-to-day interactions of Muslims with other European populations. This is an integrated study of historical, political, religious and economic influences that determine Muslim experience in contemporary European culture. Prerequisite: Membership in the University Honors Program or permission of department. Not open to students who have completed EURS/HWC 435 LEC.

HWC 460. Animals in Art and Literature. 3 Hours. H.
A study of the role of animals (especially mammals), both wild and domesticated, in defining the nature of human beings and human culture through the disciplines of religious studies, philosophy, history, art and literature. Both western and non-western courses are examined. LEC.

HWC 464. Visions in Art and Literature. 3 Hours. H.
A study of the phenomenon of visions, their expression in various media, and theories of visionary experience from the humanities and social sciences, with a particular emphasis on critically evaluating the relationship between the visionary experience and its expression. (Same as REL 464). LEC.

HWC 468. Illness in Art and Literature. 3 Hours. H.
An examination of how illness and health have been conceptualized, expressed, and explored in Western literature and art, as well as a consideration of issues and health from the perspectives of philosophy and religious studies. (Same as REL 468). LEC.

HWC 470. American Health Care: From Origins to Modern Models. 3 Hours. H.
An interdisciplinary analysis of the historical origins and present currents within American medicine. This is an integrated study of basic historical, political, economic and professional influences that underlie the character and practice of health care in our century. LEC.

HWC 477. Gender and Religion. 3 Hours. H.
Examination of the symbols, images, scriptures, rites and teachings that define gender in various religious traditions. (Same as REL 477.) LEC.

HWC 490. Roots of Federal Indian Policy. 3 Hours. H.
This course introduces students to the basic concepts and ideologies of US Federal Indian policy. It surveys European intellectual trends that were influential in creating policies applied to colonized native peoples. The course explores the origins of such policies, including removals, "civilization programs," the reservation period, the Dawes (Allotment) Act, the New deal, termination, relocation, NAGPRA and tribal rights, in addition to issues surrounding American Indian identity, tribal membership and demographics. This course serves as a foundation for more in-depth study of Federal Indian Law pertinent to the Indigenous peoples of the United States. (Same as ISP 490.) LEC.

HWC 494. Humanities Directed Study: ____. 1-3 Hours. AE61 / H.
Investigation of a subject in fields or on topics not covered in regularly scheduled courses. May be repeated for a total of 6 hours. Does not replace or satisfy specific course requirements for the HWC major. May be counted as part of the total junior-senior credit hours required. LEC.

HWC 500. Studies in: ____. 3 Hours. H.
A study of significant themes, topics, or problems in the humanities. May also relate an issue in the humanities to the social sciences or natural sciences. May be repeated for credit when the topic varies. LEC.

HWC 505. Europe Today. 3 Hours. AE42 / H.
An exploration of major social, political and economic developments post World War II including the rise of the European Union, the integration of Eastern and Western Europe, the growing role of Islam, attitudes towards the United States, and Europe's role in the world economy. Topics may vary based on current events. LEC.

HWC 508. Special Topics in World Literature: ____. 3 Hours. H.
An examination of selected theoretical texts and literary works relevant to the emerging field of "world literature studies" that seeks to account for the ways that global relationships structure literary production, circulation, and reception. Topics and texts vary. May be taken more than once if content differs sufficiently. LEC.

HWC 510. Science, Technology, and Society. 2-3 Hours. H.
The objective of this course is to provide members of the university community with information that enables them to judge the humanistic, moral, and ethical implications of scientific and technological developments. Formal presentations by guest lecturers, followed by question-and-answer periods, will alternate with panel discussions, symposia, etc., prepared by faculty members drawn from the various departments, schools, and organizational units of K.U. LEC.

HWC 514. Totalitarianism and Literature in Central Europe. 3 Hours. H.
This course asks how fiction written in Central Europe engaged and grappled with the totalitarian experience imposed by Nazi and Soviet forms of government. The course focuses on the works by 20th-century Polish, Czech, and Hungarian writers that deal with totalitarianism. (Same as SLAV 514.) LEC.

HWC 520. Literature in Translation: ____. 3 Hours. H.
Studies in one or more national literatures. Discussion and frequent critical papers. Prerequisite: Completion of one junior-senior level course in a language and literature department. LEC.

HWC 524. Chinese Thought. 3 Hours. NW / H/W.
A survey of the principal modes of Chinese thought from their origins through the imperial period. Not open to students with credit in EALC 132. (Same as EALC 642 and PHIL 506.) Prerequisite: Eastern civilization course or a course in Asian history or a distribution course in philosophy. LEC.

HWC 530. Study of a Culture: ____. 3 Hours. H/W.
An interdisciplinary study of elements that have contributed to the development of a particular civilization, such as Irish, Scottish, or Scandinavian. LEC.

HWC 538. Pompeii and Herculaneum. 3 Hours. H.
An interdisciplinary treatment of the art and archaeology of the ancient Roman cities of Pompeii and Herculaneum in Italy. Emphasis on the structures and decorations of major public spaces and houses and on
aspects of cultural, social, political, commercial and religious life from the period of the second century B.C.E. to 79 C.E., when Pompeii and Herculaneum were buried by the eruption of Mt. Vesuvius. Slide lectures and discussion. (Same as CLSX 538, HA 538) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, History of Art, or permission of the instructor. LEC.

HWC 540. Translation. 3 Hours. H.
Students will undertake substantial work in the translation of non-technical writing, e.g., poems, short stories, novels, essays, from any foreign language to English, and examine the practical and theoretical problems encountered in or raised by translation. Prerequisite: Satisfactory completion of at least third-year foreign language work. LEC.

HWC 551. Foodways: Native North America. 3 Hours. H.
This course surveys the traditional foodways of the indigenous peoples of North America. We survey hunting, gathering and fishing methods, meal preparation, medicinal plants and the cultivation of crops according to tribal seasons. Because modern indigenous peoples are suffering from unprecedented health problems, such as diabetes, obesity, high blood pressure and related maladies, the course traces through history the reasons why tribal peoples have become unhealthy and why some have lost the traditional knowledge necessary to plant, cultivate and save seeds. The course also addresses the destruction of flora and fauna from environmental degradation. (Same as HIST 511 and ISP 551.) Prerequisite: Upper division course in indigenous/ American Indian history, or permission of the instructor. LEC.

HWC 552. Foodways: Latin America. 3 Hours. H.
This course explores the traditional foods, ways of eating, and cultural significance of food among peoples of Latin America. The course surveys the vast array of flora in Central and South America and the Caribbean, and focuses on issues of environmental protection, bioethics, food security, and the growth of farming and ranching. The class studies the impact that foods such as maize, potatoes and cacao have had globally, and includes African, Asian, and European influences on Latin cuisine, as well as health problems associated with dietary changes. (Same as HIST 512, ISP 552, and LAA 552.) Prerequisite: Upper division course on Latin America, or permission of the instructor. LEC.

HWC 566. The Devil in Russian Literature. 3 Hours. H.
This course traces the various manifestations of the Devil through Russian and European folklore, myth, theology, culture, and literature. Although the focus is on Russian literature, classic European works are discussed, as they had a powerful impact on the modern Russian conception of the Evil One. Readings in English. (Same as SLAV 566.) LEC.

HWC 570. Men and Masculinities. 3 Hours. H.
An intensive examination of the history and theory of masculinities in the Western world. Students become acquainted with some of the key theories of men and masculinities, and develop research projects on a topic negotiated with the instructor. (Same as HIST 625, WGSS 575.) Prerequisite: An upper-division course in History, Humanities and Western Civilization, or Women Gender and Sexuality Studies; or permission of instructor. LEC.

HWC 575. The Body, Self and Society. 3 Hours. H.
An intensive examination of the role of the human body in the creation of personal and social identities in the Western world. Students become acquainted with contemporary theories of embodiment and senses as they are applied to a variety of historical themes, and develop research projects on a topic negotiated with the instructor. (Same as HIST 625, WGSS 575.) Prerequisite: An upper-division course in History, Humanities and Western Civilization, or Women Gender and Sexuality Studies; or permission of instructor. LEC.

HWC 600. Biography of a City: ______. 3 Hours. AE42 / H/W.
Examination in depth of the historical, social, and artistic growth and development of one major urban center. LEC.

HWC 620. Study of a Culture: ______. 3 Hours. H/W.
An interdisciplinary study of elements that have contributed to the development of a particular civilization, such as Irish, Scottish, or Scandinavian. LEC.

HWC 770. Research in Men and Masculinities. 3 Hours.
An intensive examination of the history and theory of masculinities in the Western World since the sixteenth century. Students will become acquainted with some of the key theories of men and masculinities, examine in depth the interplay between manhood and modernity, and develop research projects on a topic negotiated with the instructor. May be repeated if content varies sufficiently. LEC.

HWC 775. Advanced Study in the Body and Senses. 3 Hours.
An intensive examination of the role of the human body in the creation of personal and social identities in the West since the sixteenth century. Emphasis is on understanding how contemporary theories of embodiment are applied to concrete historical or contemporary problems. May be repeated if course content varies sufficiently. LEC.

PCS 150. Study Abroad in Topics in Peace and Conflict Studies: ______. 1-5 Hours. H.
This course is designed for the study of special topics in Peace Conflict Studies at the 100-200 level (Freshman/Sophomore level). Coursework must be arranged through the KU Office of Study Abroad and approved by a faculty advisor in Peace Conflict Studies. May be repeated for credit if content varies. LEC.

PCS 220. Introduction to Peace and Conflict Studies. 3 Hours. HT GE11/GE3H / H.
An introduction to the content and methods of peace studies. Peace studies is a multidisciplinary and interdisciplinary approach to the study of war and peace. Building on and integrating the work of various fields of study, the course examines the causes of structural and direct violence within and among societies and the diverse ways in which humans have sought peace, from conquest and balance of power to international organizations and nonviolent strategies. LEC.

PCS 221. Introduction to Peace and Conflict Studies, Honors. 3 Hours. H.
Honors version of PCS 220. An introduction to the content and methods of peace studies. Peace studies is a multidisciplinary and interdisciplinary approach to the study of war and peace. Building on and integrating the work of various fields of study, the course examines the causes of structural and direct violence within and among societies and the diverse ways in which humans have sought peace, from conquest and balance of power to international organizations and nonviolent strategies. Open only to students admitted to the University Honors Program or by permission of instructor. Not open to students who have completed PCS 220. LEC.

PCS 329. History of War and Peace. 3 Hours. HL / H.
A study of the changing nature of warfare and the struggle to bring about peace. Topics include pacifism, the "military revolution" that created the first professional armies; the development of diplomatic immunity, truces, and international law; the peace settlements of Westphalia, Utrecht, Vienna, Versailles, San Francisco; the creation of peace movements and peace prizes; the evolution of total war, civil war; and guerrilla warfare involving civilians in the twentieth century; the history of the League of Nations and United Nations; and the rise of intergovernmental and non-governmental organizations. (Same as HIST 329 and EURS 329.) LEC.
PCS 350. Study Abroad in Topics in Peace and Conflict Studies: _____ 1-5 Hours. H.
This course is designed for the study of special topics in Peace Conflict Studies at the Junior/Senior level. Coursework must be arranged through the KU Office of Study Abroad and approved by a faculty advisor in Peace Conflict Studies. May be repeated for credit if content varies. LEC.

PCS 550. Classics of Peace Literature. 3 Hours. HL AE51/AE61 / H.
A study of influential proposals for world peace from Erasmus’ The Complaint of Peace (1515) to the 1995 Hague Appeal for World Peace. Selected writings by such authors as Erasmus, Hugo Grotius, Jean-Jacques Rousseau, Immanuel Kant, Henri Thoreau, Henri Dunant, Berthe von Suttner, Woodrow Wilson, Mahatma Gandhi, and Martin Luther King, Jr., are considered. (Same as EURS 550.) Prerequisite: HWC 204 or HWC 205. LEC.

PCS 555. Topics in Peace and Conflict Studies: _____ 3 Hours. H.
This course offers specialized or interdisciplinary perspectives on historical, political, social, and religious movements, institutions, societies, agencies, or texts dealing with conflict resolution. May be repeated for credit with different topics. LEC.

PCS 556. Education for Peace and Non-Violence. 3 Hours. H.
This course reviews the history, aims and methodology of peace education. Topics include examination of the roots and causes of social violence; educational initiatives that seek to reduce structural and direct violence; and teaching methodologies in the field of multicultural education and pedagogy. LEC.

PCS 560. Directed Study in Peace and Conflict Studies. 1-3 Hours. AE61 / H.
Practicum or research under the supervision of a faculty member and with the approval of the Peace and Conflict Studies Minor. Individual conferences, reports, and papers, and, in the case of practicum, supervised experience with an approved organization or agency. Prerequisite: Completion of three core courses in the minor. IND.

PCS 565. The Literature of Human Rights. 3 Hours. H.
Examines in literature, art, and film from about 1800 to the present, both sides of the ongoing debate surrounding the idea that all human persons possess inalienable rights because all persons possess intrinsic value as persons, value independent of race, gender, caste or class, wealth, age, sexual preference, etc. Anti- and pro-rights proponents are paired and studied with equal care. (Same as EURS 565.) LEC.

PCS 560. Senior Seminar in Peace and Conflict Studies. 3 Hours. AE61 / H.
This capstone seminar provides a sustained and in-depth study of a particular topic in Peace and Conflict Studies, to be chosen by the instructor. Each student is required to carry out a substantive research project to produce a term paper or comparable work. Required for completion of minor. Prerequisite: Students must have completed at least nine hours in the minor before enrolling. LEC.

PCS 760. Investigation and Conference in Peace and Conflict Studies. 3 Hours.
Research under the supervision of a faculty member and approved for the Peace and Conflict Studies program. Individual conferences, reports, and papers; may be combined with classwork. Open only to graduate students. LEC.

PCS 801. Peace and Conflict Studies: Texts and Methods. 3 Hours.
An interdisciplinary study of the historic literature on human conflict and peacemaking and the methods used to analyze and interpret the literature. Peace literature encompasses a range of genres that include religious teachings, philosophical essays, political proposals, treaties and conventions, fiction, poetry, and drama. Approaches to solutions to human conflict cover a spectrum including political revolution, diplomacy and treaties, international law and organizations, and world government. Students produce a substantial graduate-level research project. PCS 801 is required for the Graduate Certificate in Peace Conflict Studies, and to be taken as early as possible in the students program of study. Open only to graduate students. LEC.

PCS 850. Peace and Conflict Studies Research Seminar. 3 Hours.
The capstone of the Graduate Certificate program, providing a sustained and in-depth study of a particular topic in Peace Conflict Studies, to be chosen by the instructor. The members of the seminar have the option of doing a research project or supervised practicum resulting in a substantial paper that integrates their work in the program. Required for the Graduate Certificate and open only to graduate students. Prerequisite: At least six hours of course work toward the Graduate Certificate including PCS 801.

Bachelor of Arts in Humanities
Why choose a degree in Humanities?
The BA in Humanities is an interdisciplinary degree program that provides excellent preparation for twenty-first century careers. Students choose from three major tracks and complete coursework in three or more humanities departments or programs across the university. The program's focus on values, ethics, and civil debate is also reflected in its emphasis on critical thinking, reading and writing, and on individualized student advising and a flexible curriculum.

Undergraduate Admission
Admission to KU
All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences
Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Requirements for the B.A. Major
Humanities Major Core Knowledge and Skills
The Humanities major requires a total of 30 credit hours. Students must take courses in at least 3 humanities or social science departments or programs with a maximum of 15 hours from 1 department (except HWC
in which students will take more than 15 hours). 18 of the 30 credit hours must be in courses numbered 300 or above.

Note: Sharing course work (credit hours) between any of the HWC major tracks and another major is restricted to 6 hours.

All other courses taken toward the major must be approved by the HWC undergraduate coordinator.

Majors must choose 1 of the following tracks: Civilizations in a Global Context, World Literatures, or Peace and Conflict Studies.

Majors are strongly encouraged to study abroad. Please see your advisor about this opportunity.

**Track 1: Civilizations in a Global Context**

**Civilizations in a Global Context**

This track studies aspects of the cultures of Western civilization and of one non-Western civilization (e.g., Africa, Asia, the Middle East, or Latin America). It is designed to provide the student with knowledge of diverse civilizations and with methods for investigating their differences and commonalities. 30 credit hours, to include the following:

<table>
<thead>
<tr>
<th>Introductory and Core Major Requirements (15)</th>
<th>15</th>
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</thead>
<tbody>
<tr>
<td>HWC 110 Introduction to Humanities</td>
<td></td>
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<tr>
<td>or HWC 111 Introduction to Humanities, Honors</td>
<td></td>
</tr>
<tr>
<td>HWC 206 Contemporary Western Civilization</td>
<td></td>
</tr>
<tr>
<td>HWC 424 Senior Seminar in Humanities (The senior project for this track is to be a comparative and integrative study of a topic that bridges the two civilizations studied.)</td>
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<tr>
<td>HWC 250 Civilizations and the Individual</td>
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<tr>
<td>HWC 430 European Civilization in World Context: _____</td>
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</tbody>
</table>

**15 additional hours to include: (15) | 15 |

6-9 hours in aspects of the cultures of Western Civilization, 1 of which must be an HWC course.

6-9 hours in aspects of the cultures of non-Western civilization

**Track 2: World Literatures**

This track offers literary-critical studies of both Western and non-Western literatures, designed to provide the student with knowledge of diverse literary traditions and methods for investigating their differences and commonalities. Majors choosing this option must complete 30 credit hours to include the following:

<table>
<thead>
<tr>
<th>Introductory and Capstone Coursework (9)</th>
<th>9</th>
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</thead>
<tbody>
<tr>
<td>9 hours of introductory and capstone coursework:</td>
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<tr>
<td>HWC 110 Introduction to Humanities</td>
<td></td>
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<tr>
<td>or HWC 111 Introduction to Humanities, Honors</td>
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<tr>
<td>HWC 240 Introduction to World Literature</td>
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<tr>
<td>HWC 424 Senior Seminar in Humanities (The senior project for this track is to be a comparative literary-critical study.)</td>
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</tbody>
</table>

**21 additional hours to include: (21) | 21 |

6 hours in the “Masterpieces of World Literature” series:

| HWC 304 World Literature I |   |
| HWC 308 World Literature II |   |
| HWC 312 World Literature III |   |

3 hours of additional literature coursework chosen from among the following:

- either the third HWC Masterpiece of World Literature course
- or any other HWC literature course upon approval from an advisor
- 6 hours in the literature of a non-English-language European culture in translation (France, Germany, Italy, Spain, etc.). Students possessing a reading knowledge of one of the European languages are strongly encouraged to take one of the literature courses in the original language.
- 6 hours in the literature of a non-Western culture in translation. Students possessing a reading knowledge of a Non-Western language are strongly encouraged to take one of the literature courses in the original language.

**Track 3: Peace and Conflict Studies**

This track provides students with opportunities to study issues of violence and methods of peace-making from an interdisciplinary humanities perspective. Majors choosing this option must complete 30 credit hours to include the following:

<table>
<thead>
<tr>
<th>Introductory and Capstone Coursework (9)</th>
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<tbody>
<tr>
<td>9 hours of introductory and capstone coursework:</td>
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<tr>
<td>HWC 110 Introduction to Humanities</td>
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<tr>
<td>or HWC 111 Introduction to Humanities, Honors</td>
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<tr>
<td>PCS 220 Introduction to Peace and Conflict Studies</td>
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<tr>
<td>PCS 650 Senior Seminar in Peace and Conflict Studies (students are required to carry out a substantive research project to produce a term paper or comparable work.)</td>
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</tbody>
</table>

**21 additional hours to include: (21) | 21 |

6 hours PCS upper division courses (2 out of 3):

| PCS 550 Classics of Peace Literature | 6 |
| PCS 555 Topics in Peace and Conflict Studies: _____ | |
| PCS 565 The Literature of Human Rights | |

6 hours of interdisciplinary core courses, for example:

| ANTH 501 Topics in Sociocultural Anthropology: _____ | 6 |
| HIST 314 Globalization: History and Theory | |
| POLS 674 International Ethics | |
| POLS 684 International Law: The State and the Individual or POLS 685 International Law: Laws of Armed Conflicts | |
| REL 667 Religious Perspectives on War and Peace | |
| REL/COMS 669 Human Conflict and Peace | |
| SOC 650 Transnational Migration | |

9 hours of courses from one of the three designated areas: 9

Area 1: The pursuit of social, economic and environmental justice, for example:

| HIST 314 Globalization: History and Theory | |
| POLS 663 Protest and Revolution | |
| SOC 351 Africa Today | |
| SOC 521 Wealth, Power, and Inequality | |

Area 2: The role of nation-states and of international norms and institutions, for example:

| HIST 334 The Great War: The History of World War I | |
| HIST 340 The History of the Second World War | |
Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

- **Major Hours**
  Satisfied by 30 hours of major courses.

- **Major Hours in Residence**
  Satisfied by a minimum of 15 hours of KU resident credit in the major.

- **Major Junior/Senior Hours**
  Satisfied by a minimum of 18 hours from junior/senior courses (300+) in the major.

- **Major Junior/Senior Graduation GPA**
  Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Sample 4-year plans for the BA degree in Humanities and Western Civilization with the following concentrations can be found here:
- Civilizations in Global Context (http://catalog.ku.edu/liberal-arts-sciences/humanities-western-civilization/ba/civilizations-global-context),
- Peace & Conflict Studies (http://catalog.ku.edu/liberal-arts-sciences/humanities-western-civilization/ba/peace-conflict-studies),
- World Literatures (http://catalog.ku.edu/liberal-arts-sciences/humanities-western-civilization/ba/world-literatures), or by using the left-side navigation.

Departmental Honors

An undergraduate student must maintain a minimum overall grade-point average of 3.25 and of 3.5 in the major. Students must be recommended for honors by the advisor of the comprehensive project completed for HWC 424 Senior Seminar in Humanities. Members of the HWC advisory committee then evaluate the project to determine whether the student should be awarded honors.

Minor in Humanities

The minor in Humanities addresses the needs of students who seek to complement their major field of study with a solid grounding in the intellectual traditions and cultural practices of a particular area of world culture, or who wish to deepen and broaden their knowledge and understanding of a specific historical period. In addition, study in the humanities provides an excellent opportunity for students preparing for careers in the professions that require high standards of written and oral communication skills. Given its emphasis on text-based curriculum that encourages critical thinking, shared discussion, and written and oral analysis on significant topics, the Minor in Humanities prepares undergraduates to excel as they move forward into graduate or professional schools or the work force.

Requirements for the Minor

The Minor in Humanities requires 18 hours of coursework, 12 hours of which must be taken at the junior/senior level, and 3 of which may be shared with a student’s major.

Students selecting this minor must complete the following:

- HWC 110 Introduction to Humanities (3)
- or HWC 111 Introduction to Humanities, Honors (3)
- or HWC 204 Western Civilization I (3)
- or HWC 205 Western Civilization II (3)
- or HWC 206 Contemporary Western Civilization (3)
- HWC 424 Senior Seminar in Humanities (3)
- Three HWC courses numbered 300 and above (nine hours), chosen in consultation with an advisor, and focusing on a specific theme (9)

Minor Hours and GPA

While completing all required courses, minors must also meet each of the following hour and grade point average minimum standards:

- **Minor Hours**
  Satisfied by 18 hours of minor courses.

- **Minor Hours in Residence**
  Satisfied by a minimum of 9 hours of junior/senior (300+) hours of KU resident credit in the minor.

- **Minor Junior/Senior (300+) Hours**
  Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

- **Minor Graduation GPA**
  Satisfied by a minimum of a 2.0 GPA in all courses in the minor. GPA calculations include all courses in the field of study including Fs and repeated courses.

Minor in Peace and Conflict Studies

Why study Peace and Conflict Studies?

This multidisciplinary program enables students to examine conflict within and between societies as well as ways that humans address conflict through war, mediation, law, diplomacy, institutions, and peaceful resistance.

Requirements for the Minor

Students selecting this minor must complete each of the following:

- **Introduction to Peace and Conflict Studies (3)**
  Satisfied by:
Note: Only 3 hours can be shared between the minor and any other minor or major. Students may not count more than 9 hours of course work from any one department toward completion of the minor.

Indigenous Studies Program

Indigenous Studies Graduate Program

The Indigenous Studies master's degree program provides students with in-depth knowledge of Indigenous peoples' complex and diverse cultures and histories, as well as their impacts on the global society. Our multidisciplinary program offers students the advantage of studying relevant issues from a wide range of academic perspectives. The expertise of our affiliate faculty members includes Native American history, including medical and legal aspects; indigenous literature; ethnobotany; Indigenous peoples' cultural survival and political activism; American Indian tribal governments; indigenous geographies and cartographic history; and much more.

Empowered by the resources on campus and in our community, we strive to provide unique learning opportunities for our students that go beyond the classroom. The mission of the multidisciplinary Indigenous Studies Program is to educate students and promote scholarship about the complexity and diversity of Indigenous peoples' cultures and histories, and to provide students with the knowledge to understand and assess the U.S. tribes’ unique relationships to the U.S. government. Indigenous Studies encourages appreciation of the contributions of Indigenous peoples to the global society, provides students with an understanding of the difficulties confronting tribal nations and offers foundational knowledge to assist them in finding innovative solutions to solve those problems.

Financial Aid

The program may nominate outstanding students for KU graduate fellowships and awards. Consideration requires submission of an application by January 15.

The program offers a few scholarships for excellence in academic work. Consideration requires the submission of all application materials by February 1.

Visit the Graduate Studies website for information about funding opportunities (http://www.graduate.ku.edu/funding-opportunities) for graduate students at KU.

Financial Aid and Scholarships (http://affordability.ku.edu/steps/index.shtml) administers grants, loans, and need-based financial aid.

Courses

ISP 101. Introduction to Indigenous Nations Studies. 3 Hours. NW / S.

An introduction to the study of Indigenous peoples. It surveys the concepts, methods, and content relevant to Applied Indigenous Studies, using case studies drawn from diverse cultures. The course illustrates that the social, political, religious, and economic aspects of American Indian life are interconnected and that tribal histories cannot be understood without an awareness of these fields. Students are introduced to controversies over how to research, write, and interpret American Indians, and will address the foundations of Indigenous Studies, and that is Indigenous concepts of decolonization, empowerment and Nation-building. The course explores how the lives of Indigenous people have been affected by colonization, while exploring the varying definitions of "colonialism", "colonizer" and the "colonized. LEC.
ISP 305. World Indigenous Literatures. 3 Hours. NW AE42 / H.
A survey of contemporary world indigenous literatures that includes those from North America, Australia, New Zealand, the South Pacific, the Arctic, and Latin America. Texts are in English (original or translation). Genres studied include the novel, poetry, and drama, supplemented by works from the oral tradition, the visual arts, and film. (Same as ENGL 305.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course. LEC.

ISP 330. Native American Religions. 3 Hours. NW AE41 / H.
A survey of religious traditions among selected Native American peoples. Topics include religious freedom, ritual activity, cultural narrative ("myth"), kinship, healing practices, ecology, government relations, impact of colonization, impact of missionization, contact between cultures, and secularization. Not open to students who have completed GINS 331. (Same as REL 330.) LEC.

ISP 331. Native American Religions, Honors. 3 Hours. NW AE41 / H.
A survey of religious traditions among selected Native American peoples. Topics include religious freedom, ritual activity, cultural narrative ("myth"), kinship, healing practices, ecology, government relations, impact of colonization, impact of missionization, contact between cultures, and secularization. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have completed ISP 330. (Same as REL 331.) LEC.

ISP 335. Introduction to Indigenous Studies. 3 Hours. NW / H.
This course is an introduction to the study of modern and historic indigenous peoples. It surveys the concepts, methods, and content relevant to Indigenous Studies, using case studies drawn from the diverse indigenous cultures. Special attention is paid to the various ways in which standard academic disciplines—history, anthropology, literature, law, political science, among others—contribute to the study of Indigenous cultures and current issues. The course illustrates that the social, political, religious, and economic aspects of indigenous life are interconnected and tribal histories and cultures cannot be understood without an awareness of these fields. (Same as HWC 335.) LEC.

ISP 345. Indian Territory. 3 Hours. H.
This course examines the cultural, social, economic, environmental, and political background of Indian Territory in what is now the state of Oklahoma. It surveys the diverse geographical regions, tribal cultures, the impact of the Indian Removal Act, assimilation, acculturation, westward expansion, the Civil war, boarding schools, the Dawes Act, the Curtis Act, and land runs on Territory residents. The course also treats post-Civil War violence, outlaws, and the role of tribal courts along with controversies over removals, Land Run celebrations, allotment scandals, and Osage oil murders. (Same as HIST 318 and HWC 345.) LEC.

ISP 348. American Indian and White Relations to 1865. 3 Hours. H.
This course provides an intensive survey of the Indians of North America from Prehistory to 1865, and focuses on ancient indigenous cultures, early European-Indian relations and the impact of European culture upon the indigenous peoples of North America. (Same as HIST 351, HWC 348.) LEC.

ISP 350. American Indians Since 1865. 3 Hours. H.
This course examines American Indian/White relations from reconstruction to the present. It surveys the impact of westward expansion and cultural changes brought about by the Civil War, forced education, internmarriage, the Dawes Act, the New Deal, the World Wars, termination, relocation and stereotypical literature and movies. The class also addresses the Red Power and AIM movements, as well as indigenous efforts to decolonize and to recover and retain indigenous knowledge. After learning about the past from both Native and non-Native source materials, students will multiple perspectives about historical events and gain understandings of diverse world views, values, and responses to adversity. (Same as HIST 352 and HWC 350.) LEC.

ISP 490. Roots of Federal Indian Policy. 3 Hours. H.
This course introduces students to the basic concepts and ideologies surrounding modern United States Federal Indian policy. It will survey the European intellectual trends that were influential in creating policies that were (and still are) applied to the colonized Native peoples. The course will explore the roots of US Indian policy, including removals, "civilization programs;" the reservation period, the Dawes (Allotment) Act, the New Deal, termination, relocation, NAGPRA and tribal rights, in addition to the issues surrounding American Indian identity, tribal membership and demographics. This course serves as the foundation for more in-depth study into the complicated and ever-changing field of Federal Indian Law as it pertains to the Indigenous peoples of the United States. (Same as HWC 490.) LEC.

ISP 504. Topics in Indigenous Nations Studies: ______. 3 Hours. NW / S.
This course concentrates on selected problems in the interdisciplinary field of Indigenous Nations Studies. Courses in this field utilize methods developed in various disciplines in order to examine issues related to the survival, self-sufficiency, mutual support, empowerment, and decolonization of Indigenous Peoples throughout the world. May be repeated for credit when the topic differs. Recommended for juniors or seniors, or for students who have completed ISP 101/GINS 101/INS 101. LEC.

ISP 510. Indigenous Women and Activism. 3 Hours. NW / S.
Examines the roles of activist Indigenous women in politics, social work, academia, business, environmental and health issues. Compares and contrasts the ideology of the predominantly white feminist movement with the goals and concerns of the "Red Power" movement and emphasizes Indigenous socio-cultural values and concerns. Profiles prominent Indigenous female activists, tribal leaders and writers, in addition to topics of serious concern to Indigenous women: violence, racism, loss of culture and language, education, health care and other manifestations of continued colonization. LEC.

ISP 530. Indigenous Food and Health. 3 Hours. NW / U.
This course investigates the historic diets of Indigenous peoples, including cultivation of crops, hunting and fishing methods, food preparation and seed preservation. The class traces through history the colonial policies and ideologies that caused the cultures to alter their ways of eating, resulting in unprecedented modern health problems and offers traditional cultural strategies for health recovery. LEC.

ISP 551. Foodways: Native North America. 3 Hours. H.
This course surveys the traditional foodways of the indigenous peoples of North America. We survey hunting, gathering and fishing methods, meal preparation, medicinal plants and the cultivation of crops according to tribal seasons. Because modern indigenous peoples are suffering from unprecedented health problems, such as diabetes, obesity, high blood pressure and related maladies, the course traces through history the reasons why tribal peoples have become unhealthy and why some have lost the traditional knowledge necessary to plant, cultivate, and save seeds. The course also addresses the destruction of flora and fauna from environmental degradation. (Same as HIST 511 and HWC 551.) Prerequisite: Upper division course on indigenous / American Indian history, or permission of the instructor. LEC.

ISP 552. Foodways: Latin America. 3 Hours. H.
This course explores the traditional foods, ways of eating, and cultural significance of food among peoples of Latin America. The course surveys the vast array of flora in Central and South America and the Caribbean,
and focuses on issues of environmental protection, bioethics, food security, and the growth of farming and ranching. The class studies the impact that foods such as maize, potatoes and cacao have had globally, and includes African, Asian, and European influences on Latin cuisine, as well as health problems associated with dietary changes. (Same as HIST 512, HWC 552 and LA 552.) Prerequisite: Upper division course on Latin America, or permission of the instructor. LEC.

ISP 600. Research Methods and Indigenous Peoples. 1-3 Hours. NW / U.
An introduction to the social science methods of investigation and analysis that are used in Indigenous Nations Studies as a discipline. The nature of Indigenous Nations Studies data sources and methods of data collection, the logic of social scientific inquiry, and key methods of data analysis are emphasized. In addition, the social and educational implications of the results are examined. Prerequisite: Permission of instructor. LEC.

ISP 601. Indigenous Peoples of the World. 3 Hours. NW / U.
A survey of the varied responses of global Indigenous peoples as a result of the imposition of external economic and political systems. An overview of diverse, thematic issues such as land rights, economic development, resources and cultural patrimony, languages, knowledge systems, and women's rights from the perspectives of Indigenous societies around the world. Detailed studies of Indigenous peoples seeking recognition and protection under international law are used. (Same as GEOG 601.) Prerequisite: Permission of instructor. LEC.

ISP 602. Indigenous Decolonization and Empowerment. 3 Hours. NW / U.
An Indigenous focus of the foundation and impact of colonization, decolonization, empowerment and nation-building. Prerequisite: Permission of instructor. LEC.

ISP 603. Introduction to Indigenous Nations Graduate Studies. 3 Hours. NW / U.
The goal of this course is two-fold: to introduce students to the academic discipline of Indigenous Nations Studies, its debates and contours, history, methods, and resources; and to develop the skills necessary to proceed successfully through the program. Key words and terms, critical thinking/reading/and writing skills, and research skills are emphasized. Guest lectures from ISP faculty members, librarian, and members of the Writing Center serve to complement and broaden assignments and discussions. Prerequisite: Permission of instructor. LEC.

ISP 611. Applied Indigenous Leadership. 3 Hours. NW / U.
Trains students in the skills of grant writing, leadership, conflict resolution, public presentation, organization and program development as applicable to Indigenous peoples. Prerequisite: Permission of instructor. LEC.

ISP 612. Native American Oppression, Resistance, and Liberation. 3 Hours. NW / U.
An interdisciplinary examination of the effects of historical and contemporary forms of colonialism and postcolonial strategies of resistance practiced by Indigenous peoples within and beyond the borders of the United States. Prerequisite: Permission of instructor. LEC.

ISP 613. Issues Facing Indigenous Peoples. 3 Hours. NW / U.
Explores the theories and methods of selected cultural, environmental, legal, political, and socio-economic issues confronting Indigenous societies throughout the world. Prerequisite: Permission of instructor. LEC.

ISP 614. Decolonizing Narratives. 3 Hours. NW / U.
With the decolonizing potential of Indigenous literary and cultural productions, this course seeks to both answer and explore such questions as: How can literary and cultural texts such as novels, poetry, music, and film from world Indigenous communities function as decolonizing tools? Can decolonizing methodologies be applied to such texts? How do such texts contribute to and strengthen Indigenous political, intellectual, cultural, visual and rhetorical sovereignty? Includes an overview of Indigenous literature, films and documentaries from North America, the Pacific, Australia, and New Zealand. Prerequisite: Permission of instructor. LEC.

ISP 670. Indigenous Peoples' Health Status, Beliefs, and Behaviors. 3 Hours. NW / U.
Explores the health status, beliefs, and behaviors of particular Indigenous cultures. Examines the role of internal and external influences on health, various mainstream and Indigenous models of health behavior, perceptions of illness and curing, health status, and healing practices. Focuses on the groups of the Maori of New Zealand, First Nations in Canada, Palestinian peoples in the Middle East, American Indians, and Indigenous Australians. Prerequisite: Permission of instructor. LEC.

ISP 673. Environmental Justice. 3 Hours. NW / U.
An examination of the impact of environmental justice and security in Indigenous communities throughout the world with a focus on tactics and strategies that incorporate Indigenous perspectives in responses and mitigation schemes. A survey of mining, dumping, and storage of toxic and radioactive waste activities as related to Indigenous peoples. Case study analyses of economic, military and mining interests contrasted with perspectives emerging from cultural traditions and beliefs of Indigenous peoples and communities. Prerequisite: Permission of instructor. LEC.

ISP 800. Indigenous Issues in the United States. 3 Hours.
This course will focus on contemporary issues relating to Indigenous peoples and nations within the United States, with particular emphasis on such issues as sovereignty, indigeneity, colonialism and decolonization. The course will address varied disciplinary approaches to this range of issues and will consider how this discourse bears upon scholarly conversations regarding broader themes in other selected fields of study. LEC.

ISP 801. Indigenous Peoples of the World. 3 Hours.
A survey of the varied responses of global Indigenous peoples as a result of the imposition of externally-dominated economic and political systems. An overview of diverse, thematic issues such as land rights, economic development, resources and cultural patrimony, languages, knowledge systems, and women's rights from the perspectives of Indigenous societies around the world. Detailed studies of Indigenous peoples seeking recognition and protection under international law will be used. The course is offered at the 600 and 800 levels, with additional assignments at the 800 level. (Same as GEOG 801.) LEC.

ISP 802. Indigenous Decolonization and Empowerment. 3 Hours.
An Indigenous focus of the foundation and impact of colonization, decolonization, empowerment and nation-building. LEC.

ISP 803. Introduction to Indigenous Nations Graduate Studies. 3 Hours.
The goal of this course is two-fold: to introduce students to the academic discipline of Indigenous Nations Studies, its debates and contours, history, methods, and resources; and to develop the skills necessary to proceed successfully through the program. Unpacking key words and terms, critical thinking/reading/and writing skills, and research skills will be emphasized. Guest lectures will serve to complement and broaden assignments and discussions LEC.

ISP 804. Special Topics: _____ 1-3 Hours.
Designed to fulfill program needs of the Indigenous Nations Studies master's program, this course may meet with appropriate professional or graduate courses. Can be repeated for credit when topic differs. LEC.
ISP 805. American Indian Leadership. 3 Hours.
Students will analyze the qualities of American Indian leadership and will examine circumstances and backgrounds of Indian leaders as heroes and role models paying particular attention to how they responded as individuals, leaders, and as community members of their tribes. Besides surveying noted Indian leaders in treaty negotiations, allotment, removal, war, etc., the course will examine leaders in medicine, education, and recent American Indian history including attention to women leaders. Students will learn about the leaders' tribes and cultures in addition to understanding the ethnohistory of Indian-white relations. LEC.

ISP 806. Directed Readings. 1-3 Hours.
An individual readings course with a qualified instructor on a topic in Indigenous Nations Studies. LEC.

ISP 807. Internship in Indigenous Nations Studies. 1-6 Hours.
Internships provide students the opportunity to obtain training and perform professional duties for academic credit at pre-approved indigenous-related agencies, organizations, and communities. Students are required to demonstrate a minimum of 60 contact hours for each one credit hour. To enroll, students must obtain the consent of a ISP faculty member and the Program's Curriculum Committee. May be repeated for credit. Prerequisite: permission from instructor. FLD.

ISP 809. Indigenous Women: Gender and Sexuality. 3 Hours.
This course examines gender and sexuality among indigenous communities in the world. Ethnographies about indigenous women are used to explore a variety of gender and sexual identities. Gendered and sexualized identities are analyzed within broader societal contexts such as the division of labor, kinship, marriage household, and the control of resources. Power relationships are examined between sub-altern women and the larger society, nation and globalizing world in which they play a part. LEC.

ISP 810. Indigenous Women and Activism. 3 Hours.
An examination of the roles and ideologies of prominent Indigenous female activists, tribal leaders and writers. LEC.

ISP 811. Applied Indigenous Leadership. 3 Hours.
A preparation to train students in the skills of grant writing, leadership, conflict resolution, public presentation, organization and program development as applicable to Indigenous peoples. LEC.

ISP 812. Native American Oppression, Resistance, and Liberation. 3 Hours.
An interdisciplinary examination of the effects of historical and contemporary forms of colonialism and postcolonial strategies of resistance practiced by Indigenous peoples within and beyond the borders of the United States. LEC.

ISP 813. Issues Facing Indigenous Peoples. 3 Hours.
This course explores the theories and methods of selected cultural, environmental, legal, political, and socio-economical issues confronting Indigenous societies throughout the world. LEC.

ISP 814. Decolonizing Narratives. 3 Hours.
With the decolonizing potential of Indigenous literary and cultural productions, this course seeks to both answer and explore such questions as: How can literary and cultural texts such as novels, poetry, music, and film from world Indigenous communities function as decolonizing tools? Can decolonizing methodologies be applied to such texts? How do such texts contribute to and strengthen Indigenous political, intellectual, cultural, visual and rhetorical sovereignty? An overview will be presented from Indigenous literature, films and documentaries from North America, the Pacific, Australia, and New Zealand. LEC.

ISP 824. Federal Indian Law. 2.5-3 Hours.
Addresses the law and policy of the United States regarding Indian nations and their members. Issues include the origins and contours of federal plenary power over Indian affairs, the scope of inherent tribal sovereignty, the limits of state power in Indian country, civil and criminal jurisdiction, and gaming. (Same as LAW 914) Prerequisite: Permission from instructor. LEC.

ISP 830. Indigenous Food and Health. 3 Hours.
Investigates the historic diets of Indigenous peoples, including cultivation of crops, hunting and fishing methods, food preparation and seed preservation. Traces through history the colonial policies and ideologies that caused the cultures to alter their ways of eating, resulting in unprecedented modern health problems. Will offer traditional cultural strategies for health recovery. LEC.

ISP 862. Indigenous Archives. 3 Hours.
A discussion of what constitutes an archive, including the theory and methodology of archival collections, and an introduction to archiving as a profession. Includes a discussion of records management, with an emphasis on tribal archives collections and tribal records. Includes instruction on arrangement and description of tribal archival collections, funding, environmentally controlled storage, and disaster recovery planning. The class will specifically address the needs of tribal archives: tribal records, oral history interviews, photographs, litigation records, grant writing, and culturally sensitive materials. Students will learn about primary and secondary sources, different formats of writing professional research papers, and will produce a research paper at the end of the semester. LEC.

ISP 863. Oral History. 3 Hours.
A discussion of the importance of the oral tradition in Indigenous nations and the difference between oral tradition and oral histories and myth. The class will concentrate on the methodologies of tribal oral history projects, from organizational aspects to personnel issues, equipment needed, sources of grant funding, interview methodology, as well as documentation and preservation of the interviews. The course will discuss how to share and make available these interviews and when access to them needs to be restricted. The students will conduct videotaped oral histories as part of the class exercises and get hands-on experience with the preservation, organization, and transcription of oral history projects. LEC.

ISP 864. Exhibiting Culture. 3 Hours.
A discussion of how museums and exhibits can be a vehicle for Indigenous community empowerment and the importance of Indigenous cultures to interpret their stories themselves. The class will also look at how different nations view the display and handling of their belongings and what kinds of belongings can or should be handled and displayed. LEC.

ISP 865. Grant Writing and Fundraising. 3 Hours.
A discussion of how to develop a grant writing and fundraising plan for a tribal project. Includes how to develop an idea or project and how to prepare a funding campaign. The students will produce a fundraising event and work on the various parts of an actual grant as the final class activity that will be designed to bring in funding to support KU Global Indigenous Nations Studies Program. LEC.

ISP 866. Indigenous Museum Management. 3 Hours.
A discussion of the community models of museum management, including museum administration, professional positions within a museum, museum exhibits, public education programs, security, and disaster planning. The course will compare and contrast museum management in European/ American museums and tribal museums and how these management styles affect collection policies, exhibit policies, traditional care of
collections, sacred and ceremonial item handling and display, NAGPRA and repatriation, and oral histories. LEC.

ISP 867. Indigenous Records Management. 3 Hours.
A discussion of what constitutes a record and how to manage records at the business or government level. Train students in hands-on records management techniques, policies, developing a records retention schedule, and how to plan and design a records management program for records pertaining to Indigenous nations. LEC.

ISP 868. Indigenous Records Management II. 3 Hours.
A discussion of what constitutes a record and how to manage records at the business or government level. This is a second level of records management leading to preparation for taking the certification examination. LEC.

ISP 869. Traditional Care of Collections. 3 Hours.
A discussion of on traditional care issues of handling and preserving of Indigenous belongings. The class will compare the methods of traditional care at tribal museums vs. conservation of Native items in mainstream museums. LEC.

ISP 870. Indigenous Peoples' Health Status, Beliefs, and Behaviors. 3 Hours.
This course is designed to explore the health status, beliefs, and behaviors of particular Indigenous cultures. The course examines the role of internal and external influences on health, various mainstream and Indigenous models of health behavior, perceptions of illness and curing, health status, and healing practices. The course will focus on the groups of the Maori of New Zealand, First Nations in Canada, Palestinian peoples in the Middle East, American Indians, and Indigenous Australians. LEC.

ISP 871. Community Health and Development. 3 Hours.
This course extends knowledge and skills for addressing issues in community health and development (e.g., substance abuse, adolescent pregnancy, child and youth development, prevention of violence). Students learn core competencies such as analyzing community problems and goals, strategic planning, intervention, and evaluation, and then apply these skills to issues that matter to them and to the communities they serve. (Same as ABSC 710.) LEC.

ISP 873. Environmental Justice. 3 Hours.
An examination of the impact of environmental justice and security in Indigenous communities throughout the world with a focus on tactics and strategies that incorporate Indigenous perspectives in responses and mitigation schemes. A survey of mining, dumping and storage of toxic and radioactive waste activities as related to Indigenous peoples. Case study analyses of economic, military and mining interests contrasted with perspectives emerging from cultural traditions and beliefs of Indigenous peoples and communities. LEC.

ISP 874. Natural Resource Management: Indigenous Perspectives. 3 Hours.
An examination of resource management issues in Indigenous communities throughout the world with a focus on tactics and strategies that incorporate Indigenous perspectives in the management schemes. Case study analyses of management techniques derived from European-based science with Indigenous traditions and beliefs. LEC.

ISP 875. Native and Western Views of Nature. 3 Hours.
A comparison of the attitudes and perspectives towards the natural world developed by different cultural traditions. A review of western attitudes and also the traditional ecological knowledge of Indigenous peoples toward management of natural resources, non-human animals, and the natural world. LEC.

ISP 876. Comparative Law. 2.5-3 Hours.
A general introduction to and comparison of major legal systems of the world, with special emphasis given to how those systems reflect differing cultural values in addressing common legal questions. A major goal of the course is to deepen the students’ understanding of law and practice in the United States and to broaden their perspective of law beyond the boundaries of the common law systems. (Same as LAW 879.) Prerequisite: Permission from instructor. LEC.

ISP 877. Public Lands and Natural Resources. 2.5-3 Hours.
Devoted to the law and legal systems that govern the classification and use of one-third of America’s land mass. Includes a survey of the acquisition and disposition of the public domain; general federal statutes and doctrines that affect public land law; and different forms of federal lands classifications, including national parks, scenic rivers, and grazing lands. (Same as LAW 975.) Prerequisite: Permission from instructor. LEC.

ISP 879. Water Law. 2.5-3 Hours.
A study of water rights including the riparian and prior appropriation doctrines for surface water, and the various doctrines for groundwater. Private and public water distribution organizations, and special water districts. Water pollution control. Interstate conflicts over water resources. Federal government involvement in water distribution including federal powers and programs. Indian and reserved rights. Kansas water law. (Same as LAW 995.) Prerequisite: Permission from instructor. LEC.

ISP 882. Native American Natural Resources. 2-3 Hours.
This course provides a detailed examination of natural resource law as it applies to Indian Country. Among the topics to be discussed are water law, environmental protection, and subsurface property rights. (Same as LAW 967.) LEC.

ISP 883. Sovereignty, Self-Determination and Indigenous Nations. 2-3 Hours.
Examines legal, governmental, political, social, cultural, and economic issues associated with American Indian tribal sovereignty and self-determination. Includes the source and scope of tribal sovereignty; the threats to tribal sovereignty; and the methods by which tribal sovereignty can be strengthened and revitalized. (Same as LAW 987.) Prerequisite: Permission from instructor. LEC.

ISP 888. Master's Non-Thesis. 1-6 Hours.
Course for Indigenous Studies students completing a portfolio Master's exam. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Permission from instructor. LEC.

ISP 889. Master's Thesis. 1-6 Hours.
Course for Global Indigenous Nations Studies students completing Master's thesis projects. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Permission from instructor. THE.

Indigenous Studies Minor

Indigenous Studies Minor

The minor in Indigenous Studies is designed to provide students with a focused program of study of the events, laws, policies, and treaties that have defined the relationship between the United States and Indigenous Nations and Peoples. This knowledge is essential to analysis of a broad variety of historical, political, religious and social issues in the U.S. Such issues are of paramount importance to ensure the students a solid grounding in the histories and cultures of the indigenous peoples of North America, while allowing them to gain disciplinary knowledge in preparation for graduate study or immediate employment in fields such as government service, museum/archival work, etc.
Requirements for the Minor

Indigenous Studies Minor Course Requirements

The Indigenous Studies minor requires 18 hours of Indigenous Studies courses, of which 12 must be in courses numbered 300 or above, with a 2.0 grade-point average.

One course taken at Haskell Indian Nations University is strongly recommended. (Courses must have 30% or more content focused on indigenous peoples, and are approved by the ISP Executive Committee.)

ISP courses approved for the minor include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 379</td>
<td>Indigenous Traditions of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>or LAA 334</td>
<td>Indigenous Traditions of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>or LAA 634</td>
<td>Indigenous Traditions of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 410</td>
<td>Archaeological Myths and Realities</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 501</td>
<td>Topics in Sociocultural Anthropology: _________</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 506</td>
<td>Ancient American Civilizations: Mesoamerica</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 508</td>
<td>Ancient American Civilizations: The Central Andes</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 562</td>
<td>Mexamerica</td>
<td>3</td>
</tr>
<tr>
<td>or LAA 302</td>
<td>Topics in Latin American Area Studies: _________</td>
<td></td>
</tr>
<tr>
<td>or LAA 602</td>
<td>Topics in Latin American Studies: _________</td>
<td></td>
</tr>
<tr>
<td>ANTH 603</td>
<td>Shamanism Past and Present</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 571</td>
<td>American Indian Literature: _________</td>
<td>3</td>
</tr>
<tr>
<td>FMS 410</td>
<td>Race, Class, and Gender in Visual Culture</td>
<td>3</td>
</tr>
<tr>
<td>FMS 592</td>
<td>Documentary Film and Video</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 370</td>
<td>Introduction to Cultural Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 395</td>
<td>Environmental Issues: ______ (The Wakarusa Wetlands)</td>
<td>3</td>
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<tr>
<td>GEOG 570</td>
<td>Geography of American Indians</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 571</td>
<td>Topics in Cultural Geography: _______ (Cultural Geography: Indigenous Latin American People and Lands; Indigenous Cartographies)</td>
<td>1-3</td>
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<tr>
<td>HIST 128</td>
<td>History of the United States Through the Civil War</td>
<td>3</td>
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<tr>
<td>HIST 331</td>
<td>Atlantic Societies, 1450-1800: A Comparative History of European Colonization</td>
<td>3</td>
</tr>
<tr>
<td>HIST 353</td>
<td>Indigenous Peoples of North America</td>
<td>3</td>
</tr>
<tr>
<td>ISP 101</td>
<td>Introduction to Indigenous Nations Studies</td>
<td>3</td>
</tr>
<tr>
<td>ISP 305</td>
<td>World Indigenous Literatures</td>
<td>3</td>
</tr>
<tr>
<td>ISP/REL 330</td>
<td>Native American Religions</td>
<td>3</td>
</tr>
<tr>
<td>ISP/REL 331</td>
<td>Native American Religions, Honors</td>
<td>3</td>
</tr>
<tr>
<td>ISP/HWC 335</td>
<td>Introduction to Indigenous Studies</td>
<td>3</td>
</tr>
<tr>
<td>ISP 350/HIST</td>
<td>American Indians Since 1865</td>
<td>3</td>
</tr>
<tr>
<td>352/HWC 350</td>
<td></td>
<td>3</td>
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<tr>
<td>ISP/HWC 490</td>
<td>Roots of Federal Indian Policy</td>
<td>3</td>
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<tr>
<td>ISP 504</td>
<td>Topics in Indigenous Nations Studies: _________</td>
<td>3</td>
</tr>
<tr>
<td>ISP 530</td>
<td>Indigenous Food and Health</td>
<td>3</td>
</tr>
<tr>
<td>ISP/GEOG 601</td>
<td>Indigenous Peoples of the World</td>
<td>3</td>
</tr>
<tr>
<td>ISP 614</td>
<td>Decolonizing Narratives</td>
<td>3</td>
</tr>
<tr>
<td>LING 441</td>
<td>Field Methods in Linguistic Description</td>
<td>3</td>
</tr>
<tr>
<td>LING 447</td>
<td>North American Indian Languages</td>
<td>3</td>
</tr>
<tr>
<td>LING 575</td>
<td>The Structure of: _______ (Kaqchikel Maya I-IV; Quichua I-IV)</td>
<td>3</td>
</tr>
<tr>
<td>POLS 684/GIST</td>
<td>International Law: The State and the Individual 750/501</td>
<td>3</td>
</tr>
</tbody>
</table>

Haskell courses taught through KU/Haskell Exchange program:

- LA&S 110 Cherokee Language I
- LA&S 120 Cherokee Language II
- LA&S 204 Contemporary Issues American Indian
- LA&S 206 Indian Law and Legislation
- LA&S 208 Tribal/Federal Government Reltn
- LA&S 230 Cherokee Language III
- LA&S 240 Cherokee Language IV
- LA&S 414 Ethnobiology
- LA&S 450 Topics HINU Lakhota Language & Philosophy

Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

**Minor Hours**

Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**

Satisfied by a minimum of 9 hours of KU resident credit in the minor.

**Minor Junior/Senior Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**

Satisfied by a minimum of 2.0 KU GPA in all departmental courses (300+) in the minor. GPA calculations include all courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator.

Master of Arts in Indigenous Studies

Indigenous Studies Graduate Program

The Indigenous Studies master’s degree program provides students with in-depth knowledge of Indigenous peoples’ complex and diverse cultures and histories, as well as their impacts on the global society. Our multidisciplinary program offers students the advantage of studying relevant issues from a wide range of academic perspectives. The expertise of our affiliate faculty members includes Native American history, including medical and legal aspects; indigenous literature; ethnobotany; Indigenous peoples’ cultural survival and political activism; American Indian tribal governments; indigenous geographies and cartographic history; Native American religions; and much more.

Empowered by the resources on campus and in our community, we strive to provide unique learning opportunities for our students that go beyond the classroom. The mission of the multidisciplinary Indigenous Studies Program is to educate students and promote scholarship about the complexity and diversity of Indigenous peoples’ cultures and histories, and to provide students with the knowledge to understand and assess the U.S. tribes’ unique relationships to the U.S. government. Indigenous Studies encourages appreciation of the contributions of Indigenous peoples to the global society, provides students with an understanding of
the difficulties confronting tribal nations and offers foundational knowledge to assist them in finding innovative solutions to solve those problems.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**

Candidates requesting consideration for admission to the Master of Arts program in Indigenous Studies must complete the online application through the Office of Graduate Studies. Applicants should upload the supporting application documents listed below to the online application. There is no need to send copies of application materials directly to the Indigenous Studies Program.

**Timelines**

The Indigenous Studies Program accepts students on a rolling admissions basis. Students may apply to be admitted for either the fall or spring semesters. Priority consideration will be given to applications received by April 1 for the fall semester and by October 1 for the spring semester.

**Application documents**

- GRE verbal and analytical writing scores
- Transcript(s) from undergraduate or graduate institution(s) you have attended
  
  The Office of Graduate Studies requires a minimum 3.0 undergraduate GPA for admission

Applicants can upload an unofficial, electronic copy of their transcripts with the application form

- Writing sample of at least 10 pages
- 5-page personal statement explaining how a Master's degree in Indigenous Studies will benefit you and why you will successfully complete the degree

Applicants can upload their writing samples and statements as part of the application.

- Three letters of recommendation

The letter of recommendation system works on the contact information provided by the applicant at the time of application.

**M.A. Degree Requirements**

Students pursuing the M.A. in Indigenous Studies must successfully complete a minimum of 30 graduate credit hours: a 9-hour core curriculum plus 21 hours taken according to either Plan A or Plan B.

**Core Curriculum**

ISP 800 Indigenous Issues in the United States. A 3-hour graduate-level course taught by the director of the ISP with guest presentations by faculty who study indigenous peoples from various disciplinary perspectives.

One 3-hour graduate-level course in the history of indigenous peoples of North America, e.g., HIST 801 Graduate Colloquium in Indigenous Peoples of North America.

One 3-hour graduate-level course with 50 percent or more content in Indigenous Peoples that has been approved by the executive committee, offered by certain departments such as English, History, and Humanities & Western Civilization.

**Plan A: Non-Thesis Option**

- 12 hours of approved coursework with content relevant to the field of indigenous studies approved by the student's graduate committee.
- 9 hours of electives.
- An M.A. examination: an oral examination in which the candidate defends his or her portfolio, which will be composed of the student's entire body of work completed in courses counted for the degree.

**Plan B: Thesis Option**

- 12 hours of approved coursework with content relevant to the field of indigenous studies approved by the student's graduate committee.
- 6 hours of electives.
- 3 hours of thesis on an approved subject with an oral defense.

**Joint Degree with KU Law**

The University of Kansas offers a joint degree program in Law and Indigenous Studies. As part of this unique program, students may graduate with both the J.D. and an M.A. in Indigenous Studies in three to four years, making it an ideal choice for students interested in tribal law. Students must apply separately to the law school and the Indigenous Studies graduate program.

The program "aspires to facilitate the protection and strengthening of indigenous sovereignty, self-determination, and self-sufficiency" in indigenous nations throughout the Americas.

The University of Kansas was the third institution of higher learning in the United States to offer a joint degree program relating to indigenous peoples.

For more information, contact Elizabeth Kronk Warner, Law School, (785) 864-4659, elizabeth.kronk@ku.edu; or Michael Zogry, Indigenous Studies, (785) 864-5271, mzogry@ku.edu.

**Graduate Certificate in Indigenous Studies**

The Indigenous Studies master's degree program provides students with in-depth knowledge of Indigenous peoples' complex and diverse cultures and histories, as well as their impacts on the global society. Our multidisciplinary program offers students the advantage of studying relevant issues from a wide range of academic perspectives. The expertise of our affiliate faculty members includes Native American
history, including medical and legal aspects; indigenous literature; ethnombotany; Indigenous peoples’ cultural survival and political activism; American Indian tribal governments; indigenous geographies and cartographic history; Native American religions; and much more.

Empowered by the resources on campus and in our community, we strive to provide unique learning opportunities for our students that go beyond the classroom. The mission of the multidisciplinary Indigenous Studies Program is to educate students and promote scholarship about the complexity and diversity of Indigenous peoples’ cultures and histories, and to provide students with the knowledge to understand and assess the U.S. tribes’ unique relationships to the U.S. government. Indigenous Studies encourages appreciation of the contributions of Indigenous peoples to the global society, provides students with an understanding of the difficulties confronting tribal nations and offers foundational knowledge to assist them in finding innovative solutions to solve those problems.

Certificate Application and Admissions Procedure

Current Students

Current graduate students wishing to enroll in the Graduate Certificate program will need to apply through Graduate Studies (http://graduate.ku.edu/ku-graduate-application). The application process entails completing the online application, paying a $30.00 application fee, and submitting materials required for the Indigenous Studies Certificate:

- A letter stating your interest in Indigenous Studies and its relationship to your graduate course of study;
- An unofficial copy of your KU transcript;
- A letter of support from your graduate degree program.

A student must be in good standing with their graduate degree program in order to participate in the certificate program. A graduate GPA of 3.0 or higher is required for admission.

Non-KU Students

Students who are not currently enrolled at KU must complete an application to Graduate Studies (http://graduate.ku.edu/ku-graduate-application) for admission into the certificate program and submit an application fee along with the following materials:

- A letter stating your interest in the Indigenous Studies Graduate Certificate program;
- A copy of your college transcript;
- Two letters of recommendation from persons familiar with your academic work or potential for graduate study.

Minimum requirements include a bachelor’s degree with a 3.0 or higher GPA. The GPA requirement may be waived at the discretion of the ISP Director.

Student Eligibility and Administration of the Program

Eligibility criteria for admission to the certificate program include a B.A. degree from an accredited institution with a 3.0 or higher GPA.

Students admitted to the certificate program may be enrolled either as a regular graduate student or admitted to Graduate Studies (http://graduate.ku.edu/ku-graduate-application) as a certificate seeking student.

Students must maintain grade-point averages of 3.0 or better in all courses taken to satisfy requirements of the Indigenous Studies Certificate. At the conclusion of the program, the student should ask the Indigenous Studies program to verify that the requirements for the certificate have been met.

Graduate Certificate

The Graduate Certificate in Indigenous Studies is designed to provide students with necessary knowledge of the events, laws, policies, and treaties that have defined the relationship between the United States and Indigenous Nations and Peoples. This knowledge is essential to analysis of a broad range of historical, political, religious and social issues in the U.S.

The program will provide students with a solid grounding in the histories and cultures of the indigenous peoples of North America. The certificate program enables students to integrate knowledge of indigenous issues into their own academic disciplines or professional training.

Completion of the certificate in Indigenous Studies represents an additional credential for graduate students from a variety of academic fields who are preparing for careers in research and teaching or professional practice. The certificate will also enhance the qualifications of students seeking careers with indigenous organizations, government, and museums, among many other options.

Enrollment in the program is open to students admitted to a regular KU graduate program as well as students who are not currently enrolled at KU.

Certificate Requirements

The Indigenous Studies Graduate Certificate requires 12 hours of coursework:

- ISP 800: Indigenous Issues in the United States (3 hrs)
- 9 hours of graduate-level coursework with 50% or more content in Indigenous Peoples; courses must be approved by the ISP Executive Committee.

Information Processing Studies

Courses

Information Processing Studies courses may be taken for credit, but are not a part of a specific degree program.

Courses

IPS 101. Elements of the Theory of Computation. 3 Hours. NM / N. An introduction to the theoretical areas of computer science and their applications. Emphasis will be placed on the methods and standards by which computer science makes judgments and on what computers can and cannot accomplish. Among major topics covered are: how to read and to implement algorithms; what is memory and how much of it is required for various tasks; why computers cannot multiply; how finite-state machines compute; applications of finite-state machines to programming; recognizing languages; formal grammars. “Can machines think?” and other contemporary topics in the philosophy of computer science will be covered as time permits. Prerequisite: MATH 101 or MATH 104. LEC.
IPS 302. Journey Through Genius, Honors. 3 Hours. N.
The course explores some of the most significant and enduring ideas in mathematics: the great theorems, discoveries of beauty and insight that stand today as monuments to the human intellect. Emphasis will be placed on the methods and standards by which mathematics makes judgments. Among the major topics covered are: Euclid and the infinitude of primes, Archimedes determination of circular area, Cardano and the solution of the cubic, the Bernoullis and the harmonic series, a sample of Euler's number theory, Cantor and the transfinite realm. Along with the essential mathematics, the humanity of these great mathematicians is captured. Prerequisite: Membership in the University Honors Program, high school algebra and geometry, and permission of the instructor. LEC.

IPS 400. Topics in the Theory of Computing, 1-3 Hours.
This course is designed to allow students to do further readings in the theory of computing beyond the material presented in IPS 101. Topics, scope, and meeting times to be arranged for the individual student. Prerequisite: IPS 101 and consent of instructor. LEC.

Interdisciplinary Studies in Liberal Arts and Sciences

Cross-Departmental Degree Programs

The College of Liberal Arts and Sciences offers graduate degrees that cross multiple departments and units. For information on these, see:

- Center for East Asian Studies;
- Center for Global and International Studies (p. 1750);
- Indigenous Studies Program (p. 1826);
- Center for Latin American & Caribbean Studies (p. 1834);
- Museum Studies Program (p. 1890); and
- Center for Russian, East European, and Eurasian Studies (p. 1893).

Cross-departmental studies that have no defined degree program may be authorized upon petition. See Interdisciplinary Studies in the Graduate Studies section of the online catalog for more information.

Graduate students in degree programs may add a cross-departmental certificate in the following areas:

- American Studies
- African Studies
- Brazilian Studies
- Central American and Mexican Studies
- Chemical Biology
- City and County Management
- Community Health and Development
- Environmental Assessment
- Gerontology
- Global and International Studies
- Indigenous Studies
- Museum Studies
- Peace and Conflict Studies
- Performance Management
- Professional Workplace Communication
- Russian, East European, and Eurasian Studies
- Women, Gender and Sexuality Studies

See Graduate Certificate Programs in the Graduate Studies section of the online catalog.

Latin American & Caribbean Studies

Why study Latin American and Caribbean studies?

Knowledge of Latin American and Caribbean culture, environment, and society is crucial to U.S. hemispheric relations and world understanding. KU's programs in Latin American and Caribbean Studies encourage the development of foreign language, research, writing, and critical thinking skills.

What kind of job can I get?

Many employers have a strong interest in Latin America and in Spanish-speaking employees who have an interest in Hispanic cultures. Speakers of Portuguese with an interest in Brazil may find themselves in demand as U.S. interest in Brazil grows. Graduates from Latin American Area Studies have found jobs with the U.S. Foreign Service or other government agencies and with companies with business interests in Latin America. Many graduates are teachers, from elementary school to college. Others work with non-governmental organizations doing development and social service work in Latin America.

Although students may choose to single major, most find that double majoring in Latin American Area Studies and another discipline makes them particularly attractive to employers. Students who combine Latin American & Caribbean Studies with journalism can work for newspapers, radio and television stations, and advertising agencies that serve Latin American countries and Latina/o communities in the United States. A double major in business or social welfare combines well with companies or social service agencies that work with or serve Latin American customers or clients.

Other students complement their Latin American & Caribbean Studies major with a second major in fields such as history, political science, Spanish, economics, or anthropology. Many students go on for an advanced degree in Latin American & Caribbean Studies or other liberal arts disciplines such as history, sociology or economics. Most of these students plan to teach in post-secondary schools or do research in Latin American areas.

Some Latin American Area Studies graduates go on for advanced degrees in business, education, or journalism where they use their knowledge of Spanish and Portuguese languages and cultures to develop a special career niche for themselves. Like many fields in the liberal arts, Latin American and Caribbean Studies helps students build a broad background of knowledge, strengthen writing and critical thinking skills, and develop the flexibility of thought that today's constantly changing workplace requires.

Undergraduate Programs

The program offers a range of opportunities for students from most academic disciplines to study this region. KU has particular depth in Central America, Mexico, Haiti, the Andes, Paraguay, and Brazil and professors and courses concerned with much of the rest of Latin America. KU has an excellent library collection on Latin America and is one of
the few U.S. universities teaching Haitian Creole, Kaqchikel Maya, and Andean Quichua.

The B.A. degree provides a broad academic background with a regional focus, usually in conjunction with a second major, and a mastery of Spanish and other languages. The program enables students to take courses in many departments and lays the foundation for graduate work. Students are encouraged to pursue graduation with honors in Latin American and Caribbean studies.

Prospective majors should begin language study in Spanish or Portuguese as early as possible. The intensive language program is recommended for those without high school preparation. Core courses in Latin American and Caribbean Studies have been certified as meeting KU Core learning outcomes, enabling majors to complete significant portions of their general education requirements within the major.

All students must be advised by the program’s advisor as early as possible; call the Center for Latin American and Caribbean Studies (http://latamst.ku.edu) at 785-864-4213 to make an appointment.

Graduate Programs

The Center for Latin American & Caribbean Studies administers an interdisciplinary program of substantive and language courses leading to the Master of Arts degree. Students may pursue the M.A. as a terminal degree for careers in the public or private sector or as preparation for additional graduate study. The center also offers 2 graduate certificates of 4 courses each in Brazilian Studies and Central American and Mexican Studies.

Center for Latin American and Caribbean Studies

The nationally recognized Center for Latin American and Caribbean Studies (http://latamst.ku.edu) promotes interdisciplinary study of the Americas and their languages through teaching, scholarship, outreach, study abroad, and international exchanges. It administers bachelor’s and master’s degree programs and graduate certificate programs in Central American and Mexican Studies and Brazilian Studies. Areas of particular strength are Central America, Mexico, Brazil, and Paraguay. Languages include Spanish, Portuguese, Kichiquel Maya, Quichua, and Haitian Creole. The center coordinates Latin American events on campus including lectures, films, exhibits, and theatrical performances. Exchanges and study abroad programs have been developed in Costa Rica, Mexico, Peru, and Brazil. The center offers outreach to schools, businesses, and the community and serves as a resource for the state, the region, and the nation.

Courses

KICH 110. Elementary Quichua I. 3 Hours. U.
An orientation to Ecuadorian Quichua language and culture for beginning students. Includes elements of grammar, conversation, and composition. Quichua (a.k.a. Kichwa, Quechua, Kechua, Ketchua, Kichwa, Khetchua, or Runa Ximi) in its various forms is an indigenous language spoken by over six million people in Ecuador, Peru and Bolivia combined. LEC.

KICH 114. Elementary Quichua II. 3 Hours. U.
Continuation of KICH 110. Prerequisite: KICH 110 or equivalent LEC.

KICH 230. Intermediate Quichua I. 3 Hours. U.
Continuation of KICH 114. Prerequisite: KICH 114 or equivalent. LEC.

KICH 234. Intermediate Quichua II. 3 Hours. U.
Continuation of KICH 230. Prerequisite: KICH 230 or equivalent. LEC.

KQKL 110. Elementary Kaqchikel Maya I. 3 Hours. U.
An orientation to Kaqchikel Maya language and culture for beginning students. Includes elements of grammar, conversation, and composition. Kaqchikel is the first language of approximately 500,000 people of highland Guatemala and one of roughly 30 Mayan languages. LEC.

KQKL 114. Elementary Kaqchikel Maya II. 3 Hours. U.
Continuation of KQKL 110. Prerequisite: Completion of KQKL 110 or equivalent. LEC.

KQKL 230. Intermediate Kaqchikel Maya I. 3 Hours. U.
Continuation of KQKL 114. Prerequisite: Completion of KQKL 114 or equivalent. LEC.

KQKL 234. Intermediate Kaqchikel Maya II. 3 Hours. U.
Continuation of KQKL 230. Prerequisite: Completion of KQKL 230 or equivalent LEC.

LAA 100. Latin American Culture and Society. 3 Hours. SC AE42 / S.
An introduction to the interdisciplinary study of Latin America, as manifest in the arts and literature, history, and in environmental, political, economic, and social realities. Explores and critiques the principal themes and methodologies of Latin American Studies, with an aim towards synthesizing contributions from several different disciplines. Emphasizes the unique insights and perspectives made possible by interdisciplinary collaboration and provides students with a basic knowledge base for understanding Latin America today. (Same as HIST 124.) LEC.

LAA 102. Orientation Seminar in Latin American and Caribbean Studies. 1 Hour. U.
LAA 102 is an online orientation seminar designed to introduce students to the Latin American and Caribbean Studies major at KU and help students place the major in the context of their overall undergraduate experience and career plans. The course provides students with introductory information about Latin America and the Caribbean and the nature of interdisciplinary inquiry, and an interdisciplinary major, and about resources available at KU and beyond for research and study related to the region. During the course, students also learn about typical careers pursued by Latin American and Caribbean Studies majors, reflect on their own educational and career goals, and determine whether the major matches those goals. Finally, the course provides students with information about requirements for the major, along with information about when required courses are offered and when they should be taken. LEC.

LAA 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Latin Area and Caribbean Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

LAA 300. Interdisciplinary Themes in Latin American Studies. 3 Hours. AE51 / U.
This course offers an in-depth examination of several key themes in Latin American Studies. Emphasis is placed on exploring the utility of interdisciplinary methods and on becoming familiar with the theoretical framework that underpins the field. Prior completion of LAA 100 recommended. LEC.

LAA 302. Topics in Latin American Area Studies:_____.. 3 Hours. U.
Investigation of special topics on Latin America at the undergraduate level. LEC.

LAA 332. Language and Society in Latin America. 3 Hours. NW AE42 / S.
This course will examine the cultural and social significance of Amerindian languages in Latin America. Spanish and Portuguese will be related in
LAA 333. Language and Society in Latin America, Honors. 3 Hours. NW AE42 / S.
This course will examine the cultural and social significance of Amerindian languages in Latin America. Spanish and Portuguese will be related in language situations to Amerindian languages, such as Quechua, Aymara, the Mayan languages, Nahuatl, and Guarani. Some African-substratum Creole languages will be used to illustrate the multifaceted relations between language and ethnic group, sex, nation, geography, social class, context, and social interaction. Prerequisite: Membership in the University Honors Program. LEC.

LAA 334. Indigenous Traditions of Latin America. 3 Hours. NW AE42 / S/W.
A survey of the major indigenous traditions of Mesoamerica, the Andes, and lowland tropical Latin America. Coverage emphasizes how indigenous cultural traditions and societies have both continued and changed since the European Invasion and addresses such current issues as language rights, territorial rights, sovereignty, and state violence. Students enrolled in the 600-level section will be required to complete additional research and class leadership tasks. Not open to students who have taken LAA 634. (Same as ANTH 379.) LEC.

LAA 335. The Politics of Language in Latin America. 3 Hours. NW / S.
Although approximately 600 indigenous languages are spoken by 30 million people in Latin America, public life is conducted in Spanish. The class provides a comprehensive survey of language issues in Latin America by analyzing the situation of minority language groups, language rights, language policies, and language planning, as well as by considering the questions that arise regarding bilingual education, literacy, and the role of minority languages in educational systems. LEC.

LAA 401. Multilingualism and Multiculturalism in Latin America. 3 Hours. AE61 / U.
The interdisciplinary focus of this class allows students to connect what they have learned about major issues in the field of Latin American Studies with a thematic focus of the professor's choosing. By the end of the class and culminating their study of the field at KU, they will be able to discuss these issues from a variety of theoretical, methodological, and disciplinary perspectives as demonstrated in the portfolio of written work maintained throughout the semester. Prerequisite: Completion of 3 courses at the 300 level and above with Latin American content in the Humanities and 3 at the 300 level and above in the Social Sciences (that is, at least 18 credits toward the major); or permission of instructor. LEC.

LAA 499. Honors Course in Latin American Studies. 3 Hours. AE61 / H.
Intensive study and research under faculty direction. Open to students wishing to graduate with honors in Latin American Studies and having a grade point average of at least 3.5 in Latin American Studies and at least 3.25 overall. Requires an interdisciplinary project concerning a specific topic involving at least two disciplines. Must be directed by a faculty member in Latin American Studies, approved by the Center Associate Director, and defended before a committee of at least three faculty members. To earn departmental honors, a student must take the course for two semesters (with a minimum grade of B the first semester, and an A the second), LEC.

LAA 500. Directed Study in Latin American Area Studies. 1-3 Hours. AE61 / U.
Independent study and directed reading on special topics. IND.

LAA 501. Multilingualism and Multiculturalism in Latin America. 3 Hours. H.
Examines the sociolinguistic issues of multilingual countries in Latin America from an interdisciplinary perspective. Topics include but are not limited to linguistic inequality, the language of politics, language and education, urban and rural linguistic interaction, and indigenous and creole languages. Prerequisite: A liberal arts course with Latin American content. LEC.

LAA 503. Race, Gender, Ethnicity, and Nationalism in Latin America. 3 Hours. NW AE42 / H.
The development of cultural identity in Latin America is traced through the study of major narrative trends including Amerindian languages and the analysis of "indigenista" literature. The African substratum of Latin American culture and its relation to concepts such as "marvelous realism" is explored. The importance of "race," "gender," and "ethnicity" are investigated as tools to define national identity in Latin America. The influence of modernization, industrialization, and nationalistic and populist thought on their emergence of distinctive writing and themes is also assessed. LEC.

LAA 504. Politics of Culture in Modern Latin America. 3 Hours. H.
This course explores the relationship between political development and cultural phenomena of Latin America from 1800 to the present, with special emphasis on gender, popular culture, and ideology. The influences of 20th-century ideologies and technology on cultural development in Latin America will also be examined. LEC.

LAA 505. U.S. Latino and Latin American Film and Literature. 3 Hours. H.
This course follows the development of U.S. Latino and Latin American cinema from its origins to the present and its relationship with literary discourse. U.S. Latino/Latin American cinema can be seen as a specific practice that cannot be reduced in all its manifestations to the institutional mode of production of the dominant Hollywood model. The course examines the creation of a national cinema that seems to be more dependent on a literary canon. Knowledge of Spanish is not required. LEC.

LAA 506. Race, Gender, Ethnicity, and Nationalism in Latin America, Honors. 3 Hours. NW AE42 / H.
The development of cultural identity in Latin America is traced through the study of major literary works of the nineteenth and twentieth centuries. The importance of "race," "gender," and "ethnicity" are explored as tools to define national identity in Latin America. The impact of modernization, industrialization, and nationalistic and populist thought on the emergence of distinctive writing and themes is also assessed. Prerequisite: Membership in the University Honors Program. LEC.

LAA 552. Foodways: Latin America. 3 Hours. H.
This course explores traditional foods, ways of eating, and cultural significance of food among peoples of Latin America. The course surveys the vast array of flora in Central and South America and the Caribbean, and focuses on issues of environmental protection, bioethics, food security, and the growth of farming and ranching. The class studies the impact that foods such as maize, potatoes and cacao have had globally, and includes African, Asian, and European influences on Latin cuisine, as well as health problems associated with dietary changes. (Same as HIST 512, HWC 552, and ISP 552.) Prerequisite: Upper division course on Latin America or permission of the instructor. LEC.
LAA 561. Indigenous Development in Latin America. 3 Hours. AE42 / S.
Surveys the history of the development enterprise since WWII, examines the marginalization and impoverishment of Latin America's indigenous peoples, and provides training to carry out projects for and with them to enhance their quality of life. Development is understood as not merely technological or economic, but also social, emotional, and educational. Students work in teams to design their own mock development project. A 3-credit non-obligatory companion course, Applied Anthropological Field School among the Ch'orti' Maya, will follow in the intersession after each version of this course. (Same as ANTH 561.) Prerequisite: ANTH 100, ANTH 108, ANTH 160 or LAA 100; or consent of instructor. LEC.

LAA 587. Multidisciplinary Field School in Partnership with the Chorti Maya. 3 Hours. S.
Teams of interdisciplinary students partner with the Chorti Maya of Guatemala and Honduras to share information and experiences. One third of the course consists of readings and 4-5 orientation sessions on campus, and two thirds entails two weeks in Central America. Examples of activities might include historical research, water testing and improvement, photography, art, music, tourism consultation, marketing of crafts, human rights advocacy, web design, computer training, and museum work, among others. There are no prerequisites, but students with a working knowledge of Spanish will receive preference for admission. (Same as ANTH 587.) LEC.

LAA 602. Topics in Latin American Studies: ______. 3 Hours. U.
Investigation of special topics on Latin America. LEC.

LAA 634. Indigenous Traditions of Latin America. 3 Hours. NW AE42 / S/W.
A survey of the major indigenous traditions of Mesoamerica, the Andes, and lowland tropical Latin America. Coverage emphasizes how indigenous cultural traditions and societies have both continued and changed since the European Invasion and addresses such current issues as language rights, territorial rights, sovereignty, and state violence. Students enrolled in the 600-level section will be required to complete additional research and class leadership tasks. Not open to students who have taken ANTH 379 or LAA 334. LEC.

LAA 665. Women, Health, and Healing in Latin America. 3 Hours. S.
This seminar uses a life-cycle approach to examine women's health (physical, mental, and spiritual) and their roles as healers. Special consideration is given to the effects of development programs on well-being, access to health care, and changing roles for women as healers. Cases will be drawn from a variety of Latin American contexts. (Same as ANTH 665 and WGSS 665.) Prerequisite: 6 hours coursework in Anthropology and/or Women's Studies and/or Latin American Studies. LEC.

LAA 700. Introduction to Latin American Library Resources. 3 Hours.
A survey of bibliographic and reference sources for research on Latin America in the humanities and social sciences. Designed to prepare students for library research at the seminar, thesis, or dissertation level. Prerequisite: Junior standing, reading knowledge of Spanish or Portuguese. LEC.

LAA 701. Interdisciplinary Seminar in Latin American Culture and Problems. 3 Hours.
An interdisciplinary seminar incorporating significant and pertinent materials from the fields of anthropology, economics, geography, history, political science, sociology, and Spanish and Portuguese literature. Required of all graduate students enrolled in the Master of Arts program in Latin American Area Studies. Prerequisite: LAA 700 (may be taken simultaneously with LAA 701 if both courses offered during same semester). LEC.

LAA 703. Research Colloquium on Brazil. 3 Hours.
An interdisciplinary research seminar on historical and contemporary issues in Brazil, incorporating information and analysis from such fields as anthropology, economics, geography, history, political science, sociology, and Spanish and Portuguese literature and culture. Required for the Brazilian Graduate Certificate. Prerequisite: Recommended reading proficiency in Portuguese. LEC.

LAA 704. Research Colloquium on Central America and Mexico. 3 Hours.
An interdisciplinary research seminar on historical and contemporary issues in Central America and Mexico, incorporating information and analysis from such fields as anthropology, economics, geography, history, political science, sociology, and Spanish and Portuguese literature and culture. Required for the Central America Mexico Graduate Certificate. Prerequisite: Recommended reading proficiency in Spanish. LEC.

LAA 800. Investigation and Conference. 1-2 Hours.
Investigation and research of interdisciplinary topics in Latin American Studies. RSH.

LAA 899. Thesis/Non-Thesis. 1-6 Hours.
Prerequisite: Consent of instructor. THE.

Bachelor of Arts and Bachelor of General Studies in Latin American Area and Caribbean Studies

Overview of the Bachelor of Arts degree in Latin American & Caribbean Studies

The Bachelor of Arts degree in Latin American & Caribbean Studies provides a broad academic background with a deep regional focus, often in conjunction with a second major in a specific discipline, and a mastery of Spanish and other languages. The program enables students to take courses in a variety of departments as a part of their plan of study and can lay a strong foundation for graduate work. Students are encouraged to pursue graduation with honors in Latin American & Caribbean Studies.

Prospective majors should begin language study in a Latin American Language of their choice as soon as possible. The intensive language program is recommended for those without high school preparation. All three core courses for the Latin American & Caribbean Studies major are certified as meeting KU Core learning outcomes. All students must be advised by the designated advisor (http://clas.ku.edu/people/SAS/cook) of the program.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.
Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

**Admission to the College of Liberal Arts and Sciences**

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

**Latin American and Caribbean Studies Majors**

Students may earn a double major (one in a particular discipline and one in Latin American and Caribbean studies) or a single major in Latin American and Caribbean studies. In addition to meeting the College language requirement in Spanish or Portuguese, all majors earn a minimum of 30 hours in substantive courses on Latin America and the Caribbean.

**Requirements for the B.A. or B.G.S. Major**

**Language Proficiency Requirements (0)**

Complete each of the following:

- Intermediate-level language (4 semesters or equivalent) at least up to the following:
  - SPAN 216 Intermediate Spanish II
  - SPAN 217 Honors Intermediate Spanish II
  - SPAN 220 Intensive Intermediate Spanish

**Course Requirements (9)**

Courses may count for 2 requirements. Complete each of the following (9 hours):

- LAA 100 Latin American Culture and Society 3
- LAA 300 Interdisciplinary Themes in Latin American Studies 3
- LAA 450 Capstone Course in Latin American Studies 3

**Core Requirements (24)**

A minimum of 24 hours (8 different courses) is required. These courses may also be used toward a minor. Complete each of the following:

- 12 hours in Culture, Literature, and the Arts (4 different courses) 12
- 12 hours in Society, Politics, and Economics (4 different courses) 12

**Minimum Major Requirements 33 Hours**

**Note:** Students earning a double major must have 15 hours unique to each major.

**Latin American and Caribbean Studies Courses by Topics**

**Note:** Students choosing their own topics for research papers must select a topic related to Latin America and the Caribbean. All courses must have at least 25 percent Latin American and Caribbean content to count toward the major.

Courses with a blank (_____) at the end of their titles are typically topics or seminar courses that may be repeated for credit. Usually these courses offer different topics each time they are taught. Students should check with the course instructor about the requirements to take the course and what the topic will be when it is offered.

**I. Culture, Literature, and the Arts**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tr>
<td>LAA 302/602</td>
<td>Topics in Latin American Area Studies:______ (may be repeated as topic changes)</td>
<td>3</td>
</tr>
<tr>
<td>LAA 332</td>
<td>Language and Society in Latin America</td>
<td>3</td>
</tr>
<tr>
<td>LAA 334/634</td>
<td>Indigenous Traditions of Latin America</td>
<td>3</td>
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<tr>
<td>LAA 503</td>
<td>Race, Gender, Ethnicity, and Nationalism in Latin America</td>
<td>3</td>
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<tr>
<td>MUSC 305</td>
<td>Music of Latin America</td>
<td>3</td>
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<tr>
<td>MUSC 312</td>
<td>Music in the Andes</td>
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<tr>
<td>MUSC 313</td>
<td>Music in Mexico and the Caribbean</td>
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<td>PORT 300</td>
<td>Brazilian Culture</td>
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<tr>
<td>PORT 340/540</td>
<td>Textual Analysis and Critical Reading</td>
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<td>PORT 347</td>
<td>Brazilian Studies:______</td>
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<td>PORT 365</td>
<td>Studies in Brazilian Film:______</td>
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<td>SPAN 448</td>
<td>Spanish Language and Culture for Business</td>
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<td>SPAN 460</td>
<td>Colonial Spanish-American Studies:______</td>
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<td>SPAN 462</td>
<td>Twentieth Century Spanish-American Studies:______</td>
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<td>SPAN 463</td>
<td>National Traditions in Spanish America:______</td>
<td>3</td>
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<tr>
<td>SPAN 560</td>
<td>Colloquium on Latin American Film</td>
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**II. Society, Politics, and Economics**

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<tr>
<th>Course Code</th>
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<tr>
<td>ANTH 379</td>
<td>Indigenous Traditions of Latin America</td>
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<tr>
<td>ANTH 380</td>
<td>Peoples of South America</td>
<td>3</td>
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<tr>
<td>ANTH 501</td>
<td>Topics in Sociocultural Anthropology:______ (Indigenous Development in Latin America/Contemporary Mesoamerica)</td>
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<tr>
<td>ANTH 506</td>
<td>Ancient American Civilizations: Mesoamerica</td>
<td>3</td>
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<td>ANTH 507</td>
<td>The Ancient Maya</td>
<td>3</td>
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<tr>
<td>ANTH 508</td>
<td>Ancient American Civilizations: The Central Andes</td>
<td>3</td>
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<td>ANTH 562</td>
<td>Mexicamerica</td>
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<td>ANTH 674</td>
<td>Political Anthropology</td>
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<td>HIST 121</td>
<td>Modern Latin America</td>
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<td>HIST 365</td>
<td>Invention of the Tropics</td>
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<tr>
<td>HIST 371</td>
<td>The Cultural History of Modern Latin America</td>
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<tr>
<td>HIST 471</td>
<td>Social History of South America</td>
<td>3</td>
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<tr>
<td>HIST 575</td>
<td>History of Mexico</td>
<td>3</td>
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<tr>
<td>HIST 576</td>
<td>History of the Caribbean and Central America</td>
<td>3</td>
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<tr>
<td>HIST 579</td>
<td>The History of Brazil</td>
<td>3</td>
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<td>IBUS 415</td>
<td>Business in Latin America</td>
<td>3</td>
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<tr>
<td>LAA 302/602</td>
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<td>Race, Gender, Ethnicity, and Nationalism in Latin America</td>
<td>3</td>
</tr>
<tr>
<td>POLS 658</td>
<td>Theories of Politics in Latin America</td>
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<tr>
<td>POLS 659</td>
<td>Political Dynamics of Latin America</td>
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Minor in Latin American Area Studies

The Undergraduate Minor in Latin American & Caribbean Studies provides students with a solid foundation of instruction on Latin American topics to supplement their primary field. There are two tracks within the minor: the General Latin American and Caribbean Studies Track and the Indigenous Studies in Latin America (ISLA) Minor Track. Both tracks require 3 hours of core classes followed by 15 hours of upper-division electives from a wide variety of courses approved by the center. No more than 1 course (3 hours) may be shared with the student’s major. For the General LACS minor track there is no language requirement. The ISLA track requires two semesters of an indigenous language spoken in Latin America. For the General Track LAA 100, LAA 300, LAA 332/333, or LAA 334/ANTH 379 can count as a core course. For the ISLA Track ISP 101 may also count as a core course.

The General Track is for students from several departments and schools who do not wish to concentrate in language studies, but who are interested in aspects such as the history, culture, geography, anthropology, art history, politics, business or journalism of Latin America. This minor will be a great complement to a degree in, for example, business or architecture. There is great flexibility for students who wish to create their own program in order to acquire knowledge in various disciplines subjects. The ISLA track is for similar students who are particularly interested in indigenous peoples of the Western Hemisphere and wish to study an indigenous language. In particular, the ISLA track allows students to integrate coursework on indigenous population of what is now the United States with coursework on such populations elsewhere in the Western Hemisphere.

The Latin American & Caribbean Studies advisor will be glad to speak with any student who may be interested in obtaining the minor. If you would like to make an appointment with the undergraduate advisor or have any questions about the new minor, please contact the Center of Latin American & Caribbean Studies.

Requirements for the Minor

Core Requirements

General Track

The general track requires 18 hours in the minor, 12 of which must be taken at the junior/senior level.

Core Minor Requirements (3)

Choose 1 of the following courses:

- LAA 100 Latin American Culture and Society
- LAA 300 Interdisciplinary Themes in Latin American Studies
- LAA 332 Language and Society in Latin America
- or LAA 333 Language and Society in Latin America, Honors
- LAA 334 Indigenous Traditions of Latin America

Junior/Senior Level Electives (15)

5 courses (15 hours) at the junior/senior level are required. They may be chosen from the list of courses approved for Latin American studies. Only 1 course may be shared with the major.

Indigenous Studies in Latin America Track

The track in Indigenous Studies in Latin America requires 21 hours in the minor, 12 of which must be taken at the junior/senior level.

Latin American and Carribean Studies Introductory Course.

Satisfied by: (3)

- LAA 100 Latin American Culture and Society
- or ISP 101 Introduction to Indigenous Nations Studies

Two Semesters of an Indigenous Language Spoken in Latin America (6)

Four upper-division courses in Anthropology, Economics, Indigenous Nations Studies, Geography, History, Latin American Area Studies, Linguistics, Music, Political Science, specifically approved as electives for the Minor. (12)

Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

Minor Hours

Satisfied by 18-21 hours of minor courses.

Minor Hours in Residence

Satisfied by a minimum of 9 hours of KU resident credit in the minor.

Minor Junior/Senior (300+) Hours

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://www.collegesas.ku.edu/GPAcalculator.shtml).

A sample 4-year plan for the BGS in Latin American & Caribbean Studies will be coming soon.

A sample 4-year plan for the BA in Latin American & Caribbean Studies can be found here: Latin American & Caribbean Studies (http://catalog.ku.edu/liberal-arts-sciences/latin-american-caribbean-studies/ba-bgs/ba), or by using the left-side navigation.

Departmental Honors

Honors in the Major: To attain the designation of departmental honors, students must fulfill all of the above requirements plus the following:

1. A minimum grade point average of 3.5 in all courses taken to complete the major, and a minimum overall GPA of 3.25.
2. Completion of a study abroad or a service learning experience related to Latin American and Caribbean Studies
3. Attainment of further foreign language competency equivalent to fourth-semester level in a second European language or second-semester level in an indigenous language
Master of Arts in Latin American and Caribbean Studies

Why study Latin American and Caribbean studies?

Knowledge of Latin American and Caribbean culture, environment, and society is crucial to U.S. hemispheric relations and world understanding.

Graduate Programs

The Center for Latin American & Caribbean Studies administers an interdisciplinary program of substantive and language courses leading to the Master of Arts degree. Students may pursue the M.A. as a terminal degree for careers in the public or private sector or as preparation for additional graduate study. The center also offers 2 graduate certificates of 4 courses each in Brazilian Studies and Central American and Mexican Studies.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Admission requires a B.A., preferably in one of the social sciences or humanities, and language proficiency in either Spanish or Portuguese as demonstrated by completion of a fourth-semester course or the equivalent. The Graduate Record Examination is required for U.S. citizens.

Submit your graduate application online (http://www.graduate.ku.edu). Send transcripts of all completed college and university course work and all other requested application materials to the program:

The University of Kansas The Center for Latin American & Caribbean Studies Bailey Hall 1440 Jayhawk Blvd., Room 320 Lawrence, KS 66045-7545

M.A. Degree Requirements

Course Work

A minimum of 30 graduate credit hours is required in social sciences or humanities courses with Latin American or Caribbean content. At least 18 hours must have 50 to 100 percent of their content dedicated to Latin America or the Caribbean. Literature courses with Latin American or Caribbean content at the 500-level or above (except PORT 611 and HAIT 500) may be counted as part of the 30 required hours. Required courses are LAA 700 Introduction to Latin American Library Resources, LAA 701 Interdisciplinary Seminar in Latin American Culture and Problems, and 2 other seminars with at least 50 percent of their content dedicated to Latin America, each in a separate discipline, at the 700 level or above (excluding thesis and readings hours).

Incoming students should enroll in LAA 700 during the first fall semester. All students must consult the graduate advisor before enrollment each semester. Up to 12 graduate hours from the University of Costa Rica may be applied to the M.A. To be eligible, students must have completed one semester of course work at KU and must obtain the graduate advisor’s approval of the UCR courses.

Language Proficiency

M.A. candidates must demonstrate comprehensive proficiency in Spanish or Portuguese. This includes aural, speaking, reading, and writing ability. Completion of SPAN 424 and SPAN 428 or a higher-level course constitutes comprehensive proficiency in Spanish. Comprehensive proficiency in Portuguese requires completion of a 500-level or higher literature course.

The language requirements should be satisfied as early as possible. Students also must complete two semesters in a second language (SPAN 104 and SPAN 108; PORT 104 and PORT 108), or the equivalent (e.g. PORT 611). Quichua, Kaqchikel Maya, or Haitian Creole may be substituted as the language of reading proficiency with approval of the director.

M.A. Degree Options

Thesis and nonthesis degrees are offered. The thesis degree is most appropriate as preparation for a doctoral program and dissertation. Students must declare their intention to write a thesis before the end of the first year and form a committee of three faculty members, each from a different discipline. The student defends the completed thesis in an oral examination before this committee. A student must enroll in at least 3 credit hours of thesis. Students may count up to 6 credit hours of thesis toward the degree.

The nonthesis M.A. degree is suitable for a career in public service or business. The culmination of the nonthesis M.A. is an oral examination during the last semester of the student’s program. The Center for Latin American and Caribbean Studies produces a handout, Nonthesis M.A. Degree Option: Oral Exam Guidelines.

According to the continuous enrollment policy of the College, once the student’s course work is completed, the student must enroll in at least 1 credit hour of thesis/nonthesis (LAA 899) a semester (excluding summers) until the thesis and its defense or the oral examination is completed.

Recommended Graduate Courses

Courses with a blank (_____) at the end of their titles are typically topics or seminar courses that may be repeated for credit. Usually these courses offer different topics each time they are taught. Students should check with the course instructor about the requirements to take the course and what the topic will be when it is offered.

These courses have 50 to 100 percent Latin American or Caribbean content:

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<tr>
<th>Course Code</th>
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<th>Credits</th>
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<tbody>
<tr>
<td>AAAS/HIST 574</td>
<td>Slavery in the New World</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 500</td>
<td>Topics in Archaeology: _____ (taught by Hoopes)</td>
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<td>ANTH 501</td>
<td>Topics in Sociocultural Anthropology: ________</td>
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<td>(taught by Metz)</td>
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<td>ANTH 506</td>
<td>Ancient American Civilizations: Mesoamerica</td>
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<td>ANTH 507</td>
<td>The Ancient Maya</td>
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<td>ANTH 508</td>
<td>Ancient American Civilizations: The Central Andes</td>
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<td>ANTH 718</td>
<td>Seminar in Latin American Archaeology:_____</td>
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<td>ANTH 775</td>
<td>Seminar in Cultural Anthropology:_____ (taught by 3-9 Dean, Gibson, Metz)</td>
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<td>ANTH 785</td>
<td>Topics in Ethnology:_____ (taught by Dean or Metz)</td>
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<td>ECON 584</td>
<td>Economic Development of Latin America</td>
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<td>ENGL 790</td>
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<td>Graduate Seminar in:______</td>
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<td>Topics in Cultural Geography:_____ (taught by Brown or Herlihy)</td>
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<td>GEOG 591</td>
<td>Geography of Latin America</td>
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<tr>
<td>GEOG 592</td>
<td>Middle American Geography</td>
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<td>GEOG 597</td>
<td>Geography of Brazil</td>
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<td>Latin American Regions:_____</td>
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<td>Seminar in Geography:_____ (taught by Herlihy)</td>
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<td>Seminar in Regional Geography:_____ (taught by Herlihy)</td>
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<td>HA 505</td>
<td>Special Study:______</td>
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<td>HAIT 501</td>
<td>Directed Studies in Haitian Culture</td>
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<td>HAIT 700</td>
<td>Investigation and Conference</td>
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<td>HIST 510</td>
<td>Topics in:_____ (taught by Schwaller, Cushman, Rosenthal, Kuznesof)</td>
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<td>HIST 573</td>
<td>Latin America in the 19th Century</td>
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<td>HIST/AAAS 574</td>
<td>Slavery in the New World</td>
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<td>HIST 575</td>
<td>History of Mexico</td>
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<td>HIST 576</td>
<td>History of the Caribbean and Central America</td>
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<td>HIST 579</td>
<td>The History of Brazil</td>
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<td>HIST 580</td>
<td>Economic History of Latin America</td>
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<td>HIST 801</td>
<td>Colloquium in:_____ (taught by Schwaller, Rosenthal, Kuznesof)</td>
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<td>HIST 808</td>
<td>Colloquium in Comparative History:_____ (taught by Schwaller, Cushman, Rosenthal, Kuznesof)</td>
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<td>HIST 820</td>
<td>Colloquium on Popular Culture in Latin America</td>
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<td>HIST 822</td>
<td>Colloquium in the Urban History of Latin America</td>
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<td>HIST 823</td>
<td>Colloquium on Colonial Latin America</td>
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<td>HIST 824</td>
<td>Seminar on Labor in Latin America</td>
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<td>HIST 825</td>
<td>Seminar in Latin American Foreign Relations</td>
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<td>HIST 826</td>
<td>Seminar in Twentieth Century South America</td>
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<tr>
<td>HIST 827</td>
<td>Colloquium in the Social History of Latin America</td>
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<tr>
<td>HIST 853</td>
<td>Research Seminar: The Atlantic World in the Early Modern Period (taught by Schwaller, Kuznesof)</td>
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<tr>
<td>HIST 950</td>
<td>Seminar in Latin American History</td>
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<tr>
<td>HIST 951</td>
<td>Seminar in Latin American Revolutions</td>
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<td>HIST 952</td>
<td>Seminar in Ideology, Violence and Social Change in Latin America</td>
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<tr>
<td>LING 565</td>
<td>Native Mesoamerican Writing</td>
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<tr>
<td>POLS 658</td>
<td>Theories of Politics in Latin America</td>
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<td>POLS 659</td>
<td>Political Dynamics of Latin America</td>
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<tr>
<td>POLS 758</td>
<td>Revolutionary Politics of Latin America</td>
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<td>PORT 740</td>
<td>Survey of Brazilian Literature</td>
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<tr>
<td>PORT 742</td>
<td>The Brazilian Novel</td>
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<td>PORT 746</td>
<td>The Brazilian Short Story</td>
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<td>PORT 750</td>
<td>Brazilian Poetry</td>
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<td>PORT 760</td>
<td>Contemporary Brazilian Literature</td>
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<td>PORT 780</td>
<td>Special Readings in Portuguese and Brazilian Literature</td>
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<tr>
<td>PORT 970</td>
<td>Seminar in Brazilian Literature</td>
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<tr>
<td>SOC 531</td>
<td>Global Social Change</td>
<td>3</td>
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<tr>
<td>SOC 780</td>
<td>Advanced Topics in Sociology</td>
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<td>SPAN 520</td>
<td>Structure of Spanish</td>
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<td>SPAN 522</td>
<td>Advanced Studies in Spanish Language</td>
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<tr>
<td>SPAN 540</td>
<td>Colloquium on Hispanic Studies:_____ (Taught with Latin American focus)</td>
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<td>SPAN 560</td>
<td>Colloquium on Latin American Film</td>
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<td>SPAN 570</td>
<td>Studies in Hispanic Linguistics</td>
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<td>SPAN 717</td>
<td>History of the Spanish Language</td>
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<td>SPAN 720</td>
<td>Syntax and Composition</td>
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<td>SPAN 770</td>
<td>Spanish-American Drama</td>
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<td>SPAN 771</td>
<td>Spanish-American Literature:_____</td>
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<td>SPAN 772</td>
<td>The Modern Spanish-American Novel, 1900-1950</td>
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<td>SPAN 773</td>
<td>The Modern Spanish-American Novel Since 1950</td>
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<td>SPAN 774</td>
<td>Spanish-American Poetry</td>
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<td>SPAN 776</td>
<td>Spanish-American Short Story</td>
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<td>SPAN 781</td>
<td>Colonial Identities</td>
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<td>SPAN 784</td>
<td>Spanish-American Modernism and Vanguards</td>
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<td>SPAN 785</td>
<td>Special Topics in Spanish-American Literature: 2-3</td>
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<td>SPAN 790</td>
<td>Spanish Linguistics: Theory and Application to Teaching</td>
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<td>SPAN 795</td>
<td>Literary Theory and Criticism</td>
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<td>SPAN 817</td>
<td>Spanish Historical Grammar</td>
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<td>SPAN 970</td>
<td>Seminar: Spanish American Drama</td>
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<td>SPAN 972</td>
<td>Seminar: Spanish American Novel:_____</td>
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<td>SPAN 974</td>
<td>Seminar: Spanish American Poetry:_____</td>
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<td>SPAN 976</td>
<td>Seminar: Spanish American Short Story</td>
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<tr>
<td>SPAN 978</td>
<td>Seminar: Spanish American Essay:_____</td>
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These courses have 25 to 50 percent Latin American and Caribbean content:

<table>
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<tr>
<th>Course Code</th>
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<tr>
<td>AAAS 520</td>
<td>African Studies in:______</td>
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<td>AAAS 555</td>
<td>African Film</td>
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<td>ANTH 501</td>
<td>Topics in Sociocultural Anthropology:_____</td>
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<td>ANTH 512</td>
<td>Ethnohistory:_____</td>
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<tr>
<td>ANTH 544</td>
<td>Origins of Native Americans</td>
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<td>ANTH 563</td>
<td>Cultural Diversity in the United States</td>
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<tr>
<td>ANTH 586</td>
<td>Visual Anthropology</td>
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<td>ANTH 595</td>
<td>The Colonial Experience</td>
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<tr>
<td>ANTH 652</td>
<td>Population Dynamics</td>
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<tr>
<td>ANTH 674</td>
<td>Political Anthropology</td>
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ANTH 695  Cultural Ecology (taught by Gibson or Herlihy)  3
ANTH 754  Biological Bases of Human Behavior (taught by Crawford)  3
ANTH 770  Research Methods in Physical Anthropology  3
ANTH 794  Material Culture  3
ARCH 800  Special Topics in Architecture: _____ (taught by Swann)  1-3
BIOL 607  Field and Laboratory Exercises in Plant Ecology  2
BIOL 789  Field Course in Entomology  1-6
C&T 807  Multicultural Education  3
C&T 864  International Issues in the K-12 Classroom  3
ECON 582  Economic Development  3
ECON 604  International Trade  3
ECON 605  International Finance  3
ECON 715  Elementary Econometrics  3
ECON 740  Theory of Economic Growth and Development  3
ELPS 773  School and Society in Comparative Education  3
ELPS 772  Philosphical Problems in Comparative Education  3
ENGL 570  Topics in American Literature: _____ (If taught by Giselle Anatol or Marta Caminero-Santangelo)  3
FMS 902  Film Seminar in: _____ (taught by Falicov)  3
GEOG 570  Geography of American Indians (taught by Herlihy)  3
GEOG 670  Cultural Ecology  3
GEOG 775  Proseminar in Population Geography  3
HA 706  Seminar on Special Problems in Art History: _____  1-6 (taught by Eldredge)
HAIT 500  Directed Studies in Haitian Language and Literature  1-15
HIST 509  Multinational Corporations: The Role of Money and Power  3
HIST 551  Spain and its Empire, 1450-1700  3
HIST 696  Seminar in: _____  3
HIST 806  Studies in: _____  3
HWC 620  Study of a Culture: _____  3
IBUS 701  International Business (taught by Kleinberg)  2
IBUS 895  Graduate Seminar in International Business: _____ 0.5-5 (taught by Birch)
LING 575  The Structure of: _____  3
LING 700  Introduction to Linguistic Science  3
LING 791  Topics in Linguistics: _____  1-3
MUSC 560  Music in World Cultures (taught by Wong)  3
MUSC 754  Music of the Baroque Era  3
MUSC 940  Seminar on Selected Topics in Musicology: _____  3 (taught by Schwartz-Kates)
POLS 600  Contemporary Feminist Political Theory  3
POLS 660  The Politics and Problems of Developing Countries  3
POLS 663  Protest and Revolution  3
POLS 672  International Political Economy  3
POLS 726  Public Policy in Comparative Perspective  3
POLS 774  International Law  3
POLS 850  Introduction to Comparative Politics  3
POLS 870  International Relations  3
POLS 960  Politics of Developing Countries  2-3
POLS 973  International Political Economy  3
POLS 974  International Mediation and Conflict Resolution  3
POLS 978  Advanced Topics in International Relations Theory  3
SOC 533  Industrialization in Developing Nations  3
SOC 619  Political Sociology  3
SOC 873  International Political Economy  3
SOC 892  Teaching Seminar  1-3
SOC 970  Seminar on Special Topics in Social Conflict and Change: _____  1-4
SPAN 801  Teaching Spanish in Institutions of Higher Learning  3
UBPL 565  Introduction to Sustainable Land Use Planning  3
WGSS 560  Race, Gender, and Post-Colonial Discourses (taught by Ajayi-Soyinka)  3
WGSS 600  Contemporary Feminist Political Theory  3

Study in Latin America

The center encourages students to study and do research in Latin America or the Caribbean. Intensive language institutes in Portuguese and Spanish are held in Salvador, Brazil; and Puebla, Mexico; respectively. The center has helped develop exchange relationships with universities in Costa Rica, Paraguay, Peru and Brazil. One of the oldest and most successful academic study abroad programs in Latin America is the Kansas program at the Universidad de Costa Rica.

Liberal Arts and Sciences Bachelor of General Studies Degree

Why pursue the B.G.S. Liberal Arts and Sciences degree option?

If, as a student, your personal goals are best served by:

- A more broad-based, liberal arts and sciences curriculum with balanced contributions from natural sciences and mathematics, social sciences, and the humanities (requiring exploration in 15 different disciplines with the completion of a minimum of 100 hours in the College).
- The broadest preparation for admission into a professional program.
- An avenue for adding a bachelor’s degree to an already existing technical degree or licensure certificate.
- A degree option with maximum flexibility.
- A distance-education option for a KU degree.
- A degree that provides students the opportunity to build the skills and knowledge employers indicate are required for success in our changing economy and world community — skills that are limited in current college graduates.

The B.G.S. Liberal Arts and Sciences degree option is

- Not an “Easy Out” degree option. Academic standards are the same for all degrees granted by the College of Liberal Arts and Sciences.
- Not a quick option for a bachelor’s degree when a minimum of 120 hours including a significant number of medical, technical and
professional courses have been completed. KU policy regarding acceptance of transfer work still applies. Students are allowed to use a maximum of 20 hours outside of the College toward the degree.

- Not an option in which students may pursue majors or minors in the College.

### Bachelor of General Studies in Liberal Arts and Sciences

**Why pursue the B.G.S. Liberal Arts and Sciences degree option?**

If, as a student, your personal goals are best served by:

- A more broad-based, liberal arts and sciences curriculum with balanced contributions from natural sciences and mathematics, social sciences, and the humanities (requiring exploration in 15 different disciplines with the completion of a minimum of 100 hours in the College).
- The broadest preparation for admission into a professional program.
- An avenue for adding a bachelor's degree to an already existing technical degree or licensure certificate.
- A degree option with maximum flexibility.
- A distance-education option for a KU degree.
- A degree that provides students the opportunity to build the skills and knowledge employers indicate are required for success in our changing economy and world community — skills that are limited in current college graduates.

### The B.G.S. Liberal Arts and Sciences degree option is

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- Not a quick option for a bachelor’s degree when a minimum of 120 hours including a significant number of medical, technical and professional courses have been completed. KU policy regarding acceptance of transfer work still applies. Students are allowed to use a maximum of 20 hours outside of the College toward the degree.
- Not an option in which students may pursue majors or minors in the College.

### Liberal Arts and Sciences Admission Criteria

- Exploration of 10 departments within the College.
- Admission GPA at or above cumulative 2.0 KU GPA (2.0 required).

### Undergraduate Admission

#### Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

#### Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

#### Requirements to Select B.G.S. Liberal Arts and Sciences Degree Option

**CLAS Bachelor of General Studies (BGS) General Education Requirements**

General Education provides opportunities for the development of core skills, critical inquiry, integrated knowledge, an appreciation of diversity, contemporary issues, and social responsibility.

**B.G.S. Liberal Arts and Sciences Degree Option Requirements**

The Bachelor of General Studies degree has two distinct options and requires, in addition to completion of the KU Core*, either

- **Option A.** Completion of the requirements of a single BGS major AND a secondary field of academic study (a second major or minor) OR
- **Option B.** Completion of the B.G.S. in Liberal Arts and Sciences, which is also offered as an online degree completion program. This degree program requires:
  - Liberal Arts and Sciences Breadth Requirement. Satisfied by the completion of a course (with a minimum of 2 credit hours) in 15 unique departments/programs within the College or School of the Arts (as determined by course prefix). Courses fulfilling this requirement may also contribute to the KU Core and other requirements.
  - World Language and Culture.
    - 2 courses (each with 3 credit hours or more) in a single world language, or proof of two-semester proficiency in a language other than English. OR
    - the KU Core, Completion of 3 courses (each with 3 credit hours or more) in world, non-Western culture (W or NW designated courses), or language areas beyond the KU Core. This may include a variety of areas, languages, and cultures.
  - Additional Natural Sciences and Mathematics. Satisfied by the completion of two additional courses from the natural sciences (requirement code N) and/or mathematics (MATH prefix courses) beyond the KU Core.

**NOTE:** Option B, the BGS in Liberal Arts and Sciences is not an option in which students may pursue a major or minor.
The Department of Linguistics houses 7 research and teaching laboratories.

The Developmental Psycholinguistics Laboratory is equipped to investigate how preschool-age children acquire and use the knowledge of meaning in their first language. The lab uses various psycholinguistic tasks, such as linguistic comprehension tasks and the visual-world eye tracking paradigm, to assess children’s representation and real-time processing of meaning. The lab houses an eye tracking system with a remote camera designed specifically for children to participate in the visual-world eye tracking paradigm.

The Field Linguistics Laboratory provides an environment for on-site elicitation work with speakers as well as the processing, analysis, and archiving of field data. The laboratory is equipped with computer workstations and an assortment of audio/video recording devices suitable for a range of fieldwork projects.

The Mayan Language Acquisition Laboratory provides facilities for documenting the acquisition of Mayan languages. The laboratory processes audio and video recordings of children acquiring the Mayan languages Ch’ol, K’iche’, Mam, and Q’anjob’al. The laboratory uses the Qanform software suite to produce transcriptions that conform to the Minimal Coding standard (Pye 2001). A uniform transcription protocol ensures that transcriptions for all the languages have a standard format. Transcripts are available online at the Adquisición de Lenguas Mayas (ALMA) website.

The Phonetics and Psycholinguistics Laboratory provides an integrated environment for the experimental study of speech and language, including production, perception, and acquisition. Primary research areas in the lab are acoustic and auditory phonetics as well as spoken and written word recognition, all across a variety of languages. Software includes MultiSpeech and Praat for speech analysis and Paradigm, Superlab, and Matlab for collecting responses from up to six subjects simultaneously. Digital noise-free recordings are made in our anechoic chamber.

The Second Language Acquisition Laboratory is equipped with 5 computer workstations and 2 dedicated testing rooms. Computers are equipped with software (Paradigm) for running psycholinguistic experiments (including interpretation tasks, reaction time, self-paced reading, and speeded grammaticality judgment) and for conducting statistical analyses. Primary research areas in the lab are the acquisition and processing of syntax and semantics by adult second language learners, all across a variety of languages. Our research focuses on the linguistic and cognitive factors that impact acquisition at varying stages of development.

The Second Language Processing & Eye-Tracking Laboratory has 2 testing rooms equipped with computer stations for investigating second language speech and sentence processing as well as a head-mounted eye tracker. The research methods employed in the lab include speech perception and word recognition, cross-modal priming and masked priming, self-paced reading and sentence comprehension, and eye tracking in the visual world paradigm and in reading.

Undergraduate Programs

The department offers a broad range of courses that provide a basic understanding of human language and communication. Linguistics courses examine features of language that underlie the human capacity to express concepts and communicate ideas. They address the connections between language, brain, culture, mind, and history.
Graduate Programs

The Department of Linguistics offers the full range of degrees (B.A., M.A., and Ph.D.). Its nucleus of full-time faculty members in linguistics, plus several actively involved faculty members in other departments, serves a student body of about 40 graduate students, 90 undergraduate majors, and many nonmajors taking introductory and intermediate courses each semester.

Areas of special strength in the graduate program include

- Phonetics and phonology
- Syntax and morphology
- First- and second-language acquisition
- Psycholinguistics and neurolinguistics

Courses

LING 106. Introductory Linguistics. 3 Hours. SC AE42/GE11/GE3S / S.
Introduction to the fundamentals of linguistics, with emphasis on the description of the sound system, grammatical structure and semantic structure of languages. The course will include a survey of language in culture and society, language change, computational linguistics and psycholinguistics, and will introduce students to techniques of linguistic analysis in a variety of languages including English. (Same as ANTH 106). LEC.

LING 107. Introductory Linguistics, Honors. 3 Hours. SC AE42/GE11/GE3S / S.
Introduction to the fundamentals of linguistics, with emphasis on the description of the sound system, grammatical structure, and semantic structure of languages. The course includes a survey of language in culture and society, language change, computational linguistics and psycholinguistics, and introduces students to techniques of linguistic analysis in a variety of languages including English. Open only to students admitted to the University Honors Program or by consent of instructor. (Same as ANTH 107.) LEC.

LING 110. Language and Mind. 3 Hours. SI AE41/GE11/GE3S / S.
A study of the relation between language and the human mind, focusing on language as a fundamental aspect of human cognition. Topics include what is innate and what is learned during first and second language acquisition, how we process language, and whether there are areas of the brain specialized for language. LEC.

LING 111. Language and Mind, Honors. 3 Hours. SI AE41/GE11/GE3S / S.
A study of the relation between language and the human mind, focusing on language as a fundamental aspect of human cognition. Topics include what is innate and what is learned during first and second language acquisition, how we process language, and whether there are areas of the brain specialized for language. Open only to students admitted to the University Honors Program, or by consent of instructor. LEC.

LING 120. The Physics of Speech. 4 Hours. N.
An introduction to the acoustic structure of speech intended for nonscience majors. Emphasis will be placed on the methods and standards by which scientists measure and evaluate the physical characteristics of speech. Topics will include: simple harmonic motion, the propagation of sound waves, aerodynamic aspects of vocal fold vibration, resonance, digital speech processing, frequency analysis, and speech synthesis. Three class hours and one laboratory per week. (Same as SPLH 120.) Prerequisite: MATH 101 or 104 or equivalent. LEC.

LING 177. First Year Seminar: ____. 3 Hours. SC GE11.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in linguistics. May not contribute to major requirements in linguistics. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

LING 180. Study Abroad Topics in Linguistics: ____. 1-3 Hours. U.
This course is designed for the study of special topics in Linguistics. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

LING 300. Empirical Approaches to Languages. 3 Hours. S.
This course provides students with a current overview of experimental data and up-to-date theories addressing empirical approaches to the study of language. A hands-on approach is used to facilitate understanding variation in language comprehension and production, the biological bases of language, and the acquisition of first and second languages. LEC.

LING 305. Phonetics I. 3 Hours. S.
This course provides a basic introduction to the study of human speech sounds. Topics to be covered include anatomy and physiology of the speech production apparatus, transcription and production of the world’s sounds, basic acoustics, computerized methods for speech analysis, acoustic characteristics of speech sounds, stress, and intonation. A hands-on laboratory project is part of the course. Prerequisite: An introductory course in Linguistics. LEC.

LING 307. Phonetics II. 3 Hours. AE61 / S.
This course is a continuation of Phonetics I (LING 305/705) and provides a more detailed survey of acoustic and auditory phonetics. Topics to be covered include vocal tract acoustics, quantal theory, speaker normalization, theories of speech perception, prosody, the phonetics of second language acquisition, and the production and perception of cues to gender, talker, region, and socio-economic status. In addition, a number of laboratory projects are required. Prerequisite: LING 305. LEC.

LING 308. Linguistic Analysis. 3 Hours. GE11 / H.
Practice in applying the techniques of phonological, grammatical, and syntactic analysis learned in introductory linguistics to data taken from a variety of languages of different structural types. Prerequisite: LING 106. LEC.

LING 312. Introduction to Phonology. 3 Hours. S.
This is an introductory course in phonology. It focuses on crucial phonological concepts such as the underlying and surface representations, phoneme and allophone, contrast, alternation, neutralization, distinctive features, and the syllable. It provides the basic skill set for phonological analysis, including how to discover phonological patterns, select underlying representations, and write phonological rules to capture the patterns. Common phonological universals in the world’s languages will also be discussed. Prerequisite: LING 305. LEC.

LING 314. Phonological Theory I. 3 Hours. AE61 / S.
This is a survey course on modern phonological theory. It starts with the discussion of the conspiracy and duplication problems in rule-based phonology and works its way to Optimality Theory (OT). Topics in OT include its conceptual and empirical advantages over rule-based phonology, its potential problems and their possible remedies, the relevance of phonetics in OT constraints, correspondence theory, and how OT can be applied to prosodic phenomena such as stress and tone. It also focuses on theory-building in phonology, with discussions on the external motivations for phonological grammar, how to lay out the predictions of a theoretical proposal, and how phonological predictions
can be empirically tested. Prerequisite: LING 312 or instructor consent. LEC.

LING 320. Language in Culture and Society. 3 Hours. SC AE41/AE61 / S.
Language is an integral part of culture and an essential means by which people carry out their social interactions with the members of their society. The course explores the role of language in everyday life of peoples in various parts of the world and the nature of the relationship between language and culture. Topics include world-view as reflected in language, formal vs. informal language, word taboo, and ethnography of speaking. (Same as ANTH 320.) LEC.

LING 321. Language in Culture and Society, Honors. 3 Hours. SC AE41/AE61 / S.
An honors section of LING 320 for students with superior academic records. Not open to students who have had ANTH 320 or LING 320. (Same as ANTH 321.) Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

LING 325. Syntax I. 3 Hours. H.
An introduction to generative syntax with special attention to theory and method. The course covers such topics as phrase structure, the lexicon, transformations and derivation. Prerequisite: LING 106. LEC.

LING 326. Syntax II. 3 Hours. AE61 / S.
An advanced course covering one or more current theories of syntax. The course provides in-depth reading and discussion on the major areas of syntactic theory including universal grammar, phrase structure theory; lexicon and argument structure; binding, control, locality conditions; constraints on representation and derivation; and the relation between syntax and the semantic module. Prerequisite: LING 325. LEC.

LING 327. Morphology. 3 Hours. S.
An exploration of several topics in word structure and formation. Covers three broad areas: traditional morphology, morpho-phonology, and morpho-syntax. Traditional morphology includes a survey of several kinds of word formation processes, the internal structure of words, morpheme types, inflection, paradigms, derivation, and compounding. Morpho-phonology deals with phonological constraints on morphological processes and prosodic morphology. Morpho- syntax concentrates on the syntactic properties of morphological phenomena and interaction of syntactic processes and morphology. The course has a strong emphasis on cross-linguistic comparative morphology. Prerequisite: Ling 325 or Ling 326, or permission of instructor. LEC.

LING 331. Semantics. 3 Hours. S.
A study of meaning in natural language usage. Emphasis on referential semantics. Set theory, propositional and first-order logic, and intensional and modal logic as they relate to natural language sentences in a formalized language. Prerequisite: A course in syntax. LEC.

LING 338. Languages of the Jews. 3 Hours. H.
From the beginning, Jewish history and culture is closely tied to language, from Hebrew and Aramaic to the languages of diaspora such as Yiddish and Ladino. Focusing on issues of language in society, this course will survey the languages spoken by the Jews throughout their long history in diverse communities around the world. We will learn about Hebrew as a spoken and a sacred language, examine how Jewish languages are born and die, and discuss the resurrection of Modern Hebrew in the state of Israel. All readings are in English. No prior knowledge of languages or linguistics is required. (Same as JWSH 338.) LEC.

LING 339. Languages of the Jews, Honors. 3 Hours. H.
Honors version of LING 338 or JWSH 338, Languages of the Jews. (Same as JWSH 339.) Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

LING 340. Sociolinguistics. 3 Hours. S.
The formal features of language reflect a broad range of social factors, including age, context, culture, occupation, sex and social class. This course will introduce students to the ways social variables affect the forms of spoken and written language. Prerequisite: An introductory linguistics course or consent of instructor. LEC.

LING 343. Bilingualism. 3 Hours. S.
This course provides an introduction to bilingualism and bilingual education exploring the linguistic, sociolinguistic, and psycholinguistic aspects of bilingualism. We read about and discuss bilingualism in the world and in the U.S.; language maintenance and language loss; effects of languages in contact; bilingual acquisition; the cognitive advantages of bilingualism; and the processing of language in the multilingual mind. Students are guided in conducting a small research project on one of these areas, learning how to read scientific studies about bilingualism and developing an understanding of the relationship between primary research sources and the popular press. LEC.

LING 345. Language and Gender. 3 Hours. S.
This course explores the relationship between language use and gender. The course will specifically focus on how gender affects the ways we use spoken language as well as how we interpret the speech of others. Topics to be discussed will include the function of language in social relationships and language variation in different social contexts. LEC.

LING 350. Comparative and Historical Linguistics. 3 Hours. S.
Human language may be characterized as possessing flexibility, which causes languages to be different from one another in different degrees. This course explores the way languages undergo change in time (historical linguistics), and the ways two or more languages are similar or different (comparative linguistics). The course teaches students how to establish whether languages are genetically related or belong to totally different language families. Prerequisite: An introductory course in linguistics. LEC.

LING 370. Introduction to the Languages of Africa. 3 Hours. NW AE42/GE3H / H/W.
A survey of the indigenous languages of Africa from a linguistic perspective, covering the main language families and their geographic distribution, and focusing on the features and structure of the more widely spoken and representative languages in each family (e.g. Fula, Hausa, Maninka, Swahili, Yoruba). (Same as AAAS 370.) LEC.

LING 415. Second Language Acquisition. 3 Hours. H.
Introduction to the study of second language acquisition: The application of theoretical linguistics to the description of the language that a learner acquires, and to the process of acquisition. Prerequisite: An introductory course in linguistics. LEC.

LING 416. Second Language Acquisition II. 3 Hours. AE61 / S.
This advanced course provides in-depth reading and discussion of several current topics including second language acquisition within a generative framework, processing approaches to second language acquisition, and the role of input and learnability principles in second language acquisition. Both theoretical and methodological issues are discussed. Prerequisite: LING 415 and LING 325; or permission of instructor. LEC.

LING 418. Introduction to Cognitive Science. 3 Hours. S.
Examines the data and methodologies of the disciplines that comprise Cognitive Science, an interdisciplinary approach to studying the mind and brain. Topics may include: consciousness, artificial intelligence, linguistics, education and instruction, neural networks, philosophy, psychology, anthropology, evolutionary theory, cognitive neuroscience, human-computer interaction, and robotics. (Same as PHIL 418, PSYC 418, and SPLH 418.) Prerequisite: Consent of instructor. LEC.
LING 420. Capstone: Research in Language Science. 3 Hours. AE61 / S.
This course provides a foundation for designing, conducting, and critically evaluating quantitative and qualitative research in the language sciences. Topics include formulating a research hypothesis, participant selection, ethical considerations, the scientific method, dependent and independent variables, data collection, descriptive and inferential statistics. Students apply their knowledge of linguistics to formulate a research hypothesis and design an experiment to evaluate this hypothesis. Prerequisite: LING 305, LING 312, LING 325, and either LING 415, LING 425, LING 435, or LING 438. LEC.

LING 421. Capstone: Typology-Unity and Diversity of Human Language. 3 Hours. H.
This course explores the similarities and differences among the worlds' languages. Students apply their knowledge of phonetics, phonology, morphology, and syntax in describing and analyzing phenomena from a number of languages. The typological perspective that students develop is applied to topics such as word order, morphological typology, case, lexical categories, and valency. In addition to lecture style instruction, students get hands on practice in collecting, transcribing, and analyzing data from different languages through face to face elicitation with native speakers. Prerequisite: LING 305, LING 312, and LING 325. LEC.

LING 425. First Language Acquisition. 3 Hours. S.
An introductory course in the acquisition of child language. The course will cover relevant historical studies of child language but will focus primarily on recent psycholinguistic approaches toward the description of the process by which a child acquires his native language. Phonological, syntactic, semantic, cognitive, pragmatic, sociolinguistic, and anthropological aspects of the acquisition process are covered. Prerequisite: An introductory course in linguistics or permission of instructor. LEC.

LING 430. Linguistics in Anthropology. 3 Hours. S.
The study of language as a symbolic system. Exploration into the interrelatedness of linguistic systems, of nonlinguistic communicative systems, and of other cultural systems. (Same as ANTH 430.) LEC.

LING 435. Psycholinguistics. 3 Hours. S.
A detailed examination of issues in the processing of language. The course provides a survey of research and theory in psycholinguistics, reflecting the influence of linguistic theory and experimental psychology. Spoken and written language comprehension and language production processes are examined. Prerequisite: An introductory course in linguistics or permission of instructor. LEC.

LING 437. Topics in Psycholinguistics. 3 Hours. AE61 / S.
An in-depth examination of selected topics in psycholinguistics. Topics may include spoken language processing, written language processing, neurolinguistics, prosody, and syntactic processing. Prerequisite: LING 435 or consent of instructor. LEC.

LING 438. Neurolinguistics I. 3 Hours. S.
The course explores how language is represented and processed in the human brain. This includes a critical survey of the foundations and the current research in the cognitive neuroscience of language, focusing on the techniques of functional brain imaging (fMRI, PET, EEG, MEG, and related methods), and research on aphasia and other language disorders. This course also includes a component providing laboratory experience with brain imaging research on language. Prerequisite: At least one course in linguistics or permission of the instructor. LEC.

LING 440. Linguistic Data Processing. 3 Hours. H.
This course introduces the tools and techniques necessary to analyze fieldwork data, including research design, recording and elicitation techniques, computational data processing and analysis, and field ethics. The course also covers field recording and data analysis technology, along with methods of phonetic transcription, grammatical annotation and analysis of language context. Practice of techniques is provided via short studies of at least one language. Prerequisite: LING 305 or permission of instructor. LEC.

LING 441. Field Methods in Linguistic Description. 3 Hours. AE61 / H.
The elicitation and analysis of phonological, grammatical, and discourse data from a language consultant. In-depth research on one language. Techniques of research design, methods of phonetic transcription, grammatical annotation, and analysis of language context. Prerequisite: LING 305, LING 312, and LING 325 or permission of instructor. LEC.

LING 442. Neurolinguistics II. 3 Hours. S.
An in-depth discussion of the representation and processing of language from a cognitive neuroscience perspective. This course involves critical discussion of selected topics of current research interest in neurolinguistics. The course also includes a significant hands-on component, in which students receive training in research on the cognitive neuroscience of language by developing and implementing a new EEG study on an aspect of language, as well by completing a series of mini-labs introducing neuroimaging methods and analyses. Prerequisite: LING 438 or permission of the instructor. LEC.

LING 447. North American Indian Languages. 3 Hours. AE41 / S.
This course introduces students to the indigenous languages of North America. Students critically examine the structures and status of these languages, which have greatly expanded our knowledge of human language and linguistic theory. Topics include the history and future of North American languages and indigenous speech communities, the history of the field of Americanist linguistics, as well as important linguistic questions raised by phenomena from American languages in phonology, morphology, syntax, semantics, and historical linguistics. Prerequisite: An introductory course in linguistics. Not open to students enrolled in 747 LEC.

LING 451. Topics in Research in Acquisition and Processing: ____. 3 Hours. H.
This course is primarily intended for student actively engaged in linguistic research on language acquisition, language processing, and neurolinguistics. Students in this course present and discuss study design, methods, data analysis and interpretation of results for their research projects. Professional development topics such as CV development, applications for fellowships, grants and jobs, and the dissemination of research findings are also discussed. May be repeated. Prerequisite: Permission of instructor. LEC.

LING 470. Language and Society in Africa. 3 Hours. NW AE42/GE3H / H/W.
Examines issues and problems associated with language use in sub-Saharan Africa from a sociological perspective. Topics covered include an overview of the types of languages spoken on the continent: indigenous languages, colonial languages, pidgins and creoles, and Arabic as a religious language; problems associated with the politics of literacy and language planning; writing and standardization of indigenous languages; and the cultural and ideological dilemmas of language choice. (Same as AAAS 470.) Prerequisite: AAAS 103, AAAS 305, or LING 106; or consent of instructor. LEC.

LING 483. Computational Linguistics. 3 Hours. S.
A survey of computer-based approaches to the study of morphology and syntax. In addition to its relevance for basic linguistic research, computer-based syntactic analysis in the form of parsers and syntactic/ string generators, provide model testers for the linguistic and analytical tools for the computer scientist concerned with language applications. When taught with LING 783, students at the 700 level will have different
course requirements. Prerequisite: An introductory course in linguistics. LEC.

LING 490. Independent Study. 1-3 Hours. AE61 / U.
A special research project or directed readings in an area of linguistics not covered in other courses. No more than 3 hours of LING 490 may be applied toward the requirements for the major. Prerequisite: Consent of instructor. IND.

LING 491. Topics in Linguistics: ____. 1-3 Hours. H.
The content, prerequisites, and credits of this course will vary. May be repeated. IND.

LING 492. Topics in Linguistics: ____. 1-3 Hours. S.
The content, prerequisites, and credits of this course will vary. May be repeated. (Distribution credit given for two or three hours only.) Prerequisite: Consent of instructor. IND.

LING 496. Honors Essay in Linguistics. 1-3 Hours. AE61 / H.
Individual directed research and preparation of an essay on a linguistic topic. Prerequisite: A grade-point average of 3.5 in linguistics and 3.25 in all courses, and consent of the major adviser. IND.

LING 539. First Language Acquisition II. 3 Hours.
A second semester course in child language that explores the acquisition of morphology, syntax, and the ways in which morphology and syntax interact in linguistic theory and language development. Topics covered in the course include agreement, case, null subjects, question formation, pronoun binding, quantification, and control. Prerequisite: LING 325 or LING 425 or consent of instructor. LEC.

LING 543. Language and Culture in Arabic-Speaking Communities. 3 Hours. NW AE42/GE3H / H.
The course examines the links between structure, patterns of use, language choice, and language attitudes in the diglossic and bi-lingual Arabic-speaking communities. It also explores language as a reflector and creator of Arab culture (e.g. linguistic encoding of politeness, the Quranic text as the spoken and written word, the role of tropes in Arabic rhetoric). The topics for discussion range from the micro-level language choice to the macro-level issues of national language policies and planning within the domain of government and education across the Arab world. (Same as AAAS 543) LEC.

LING 545. Native Mesoamerican Writing. 3 Hours. H.
An introduction to the Indigenous writing of Mesoamerica, primarily Epi-Olmec and Mayan hieroglyphic writing. The course will survey the languages of the cultures that originated writing in the New World, and demonstrate the methods being used to decipher Mesoamerican hieroglyphic writing. The connections between language, culture, and writing will be highlighted. Prerequisite: An introductory linguistics course. LEC.

LING 570. The Structure of Japanese. 3 Hours. H.
A detailed study of the phonological and grammatical structure of Japanese and the use of the language in social/cultural contexts. Primarily for students who want a linguistic knowledge of the language rather than a practical command of it. (Same as EALC 570.) LEC.

LING 572. The Structure of Chinese. 3 Hours. H.
A detailed study of the phonological and grammatical structure of Chinese and the interactions between language and culture. Depending on student interests, a unit on the pedagogy of teaching Chinese as a foreign language may also be included. Primarily for students who want a linguistic knowledge of the language rather than a practical command of it. (Same as EALC 572.) LEC.

LING 575. The Structure of: ____. 3 Hours. S.
A detailed study of a language, including its phonological, morphological, syntactic and semantic characteristics. The course provides students with a linguistic knowledge of the language rather than a practical command of it. Prerequisite: A course in linguistics. LEC.

LING 700. Introduction to Linguistic Science. 3 Hours.
An introduction to the theory and techniques of linguistic science for majors and others intending to do advanced work in linguistics and linguistic anthropology. Emphasis on the sound system, grammatical structure, and semantic structure of languages. Lectures and laboratory sessions. (Same as ANTH 725.) Not open to students who have taken ANTH/LING 106 or ANTH/LING 107. Prerequisite: Graduate standing. LEC.

LING 705. Phonetics I. 3 Hours.
This course provides a basic introduction to the study of human speech sounds. Topics to be covered include anatomy and physiology of the speech production apparatus, transcription and production of the world’s sounds, basic acoustics, computerized methods for speech analysis, acoustic characteristics of speech sounds, stress, and intonation. A ‘hands on’ laboratory project is part of the course. Prerequisite: LING 700 or equivalent course. LEC.

LING 706. Current Linguistic Anthropology. 3 Hours.
The fundamental issues, methods, and theories in contemporary linguistic anthropology. (Same as ANTH 706.) Prerequisite: Graduate standing or consent of the instructor. LEC.

LING 707. Phonetics II. 3 Hours.
This course is a continuation of Phonetics I (LING 705) and provides a more detailed survey of acoustic and auditory phonetics. Topics to be covered include vocal tract acoustics, quantal theory, speaker normalization, theories of speech perception, prosody, the phonetics of second language acquisition, and the production and perception of cues to gender, talker, region, and socio-economic status. In addition, a number of laboratory projects will be required. Prerequisite: LING 705. LEC.

LING 708. Linguistic Analysis. 3 Hours.
Practice in applying the techniques of phonological, grammatical, and syntactic analysis learned in introductory linguistics to data taken from a variety of languages of different structural type. (Same as ANTH 736.) Prerequisite: An introductory course in linguistics. Not open to students who have taken LING 308. LEC.

LING 709. First Language Acquisition. 3 Hours.
Introduction to the study of language acquisition: the significant findings, the basic methodological procedures, and some of the more recent theoretical accounts. Not open to students who have taken LING 425. Prerequisite: LING 700 or equivalent course. LEC.

LING 712. Phonological Theory I. 3 Hours.
This is a survey course on modern phonological theory. It starts with the discussion of the conspiracy and duplication problems in rule-based phonology and works its way to Optimality Theory (OT). Topics in OT include its conceptual and empirical advantages over rule-based phonology, its potential problems and their possible remedies, the relevance of phonetics in OT constraints, correspondence theory, and how OT can be applied to prosodic phenomena such as stress and tone. It also focuses on theory-building in phonology, with discussions on the external motivations for phonological grammar, how to lay out the predictions of a theoretical proposal, and how phonological predictions can be empirically tested. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. Prerequisite: LING 705. LEC.
LING 714. Phonological Theory II. 3 Hours.
This is an advanced course on modern phonological theory. It discusses phonology as an interdisciplinary and experimental discipline and presents current development in both experimental techniques that shed light on speakers' phonological knowledge and the formal modeling of speakers' phonological grammar. Issues of learnability and how phonological acquisition can be modeled will also be touched upon. Prerequisite: LING 712. LEC.

LING 715. Linguistics and Second Language Acquisition. 3 Hours.
Introduction to the study of second language acquisition: The application of theoretical linguistics to the description of the language a learner acquires, and to the process of acquisition. Prerequisite: LING 700 or equivalent course. LEC.

LING 716. Second Language Acquisition II. 3 Hours.
This advanced course will provide in-depth reading and discussion of several current topics including second language acquisition within a generative framework, processing approaches to second language acquisition, and the role of input and learnability principles in second language acquisition. Both theoretical and methodological issues will be discussed. Prerequisite: LING 715; LING 725, which may be taken concurrently, or permission of instructor. LEC.

LING 720. Research Methods in Linguistics. 3 Hours.
This course provides a foundation for designing, conducting, and critically evaluating quantitative and qualitative research in the language sciences. Topics include formulating a research hypothesis, participant selection, ethical considerations, the scientific method, validity, reliability, data collection, dependent and independent variables, descriptive and inferential statistics. This course will serve students who are interested in the basics of research design and statistics for the study of language. Prerequisite: LING 700 or equivalent course. LEC.

LING 722. Linguistic Typology. 3 Hours. H.
Different languages use different linguistic mechanisms to encode meanings. This course surveys grammatical concepts and categories found in the world's languages including tense, aspect, mood, voice, person, and number as well as case relations such as nominative, accusative, ergative, and absolutive. Basic word order typology and discourse functions such as topic, focus, and cohesion are introduced. Examples will be drawn from a wide variety of languages to illustrate how the same concept may be encoded differently, i.e., morphologically, syntactically, or lexically, in different languages. Prerequisite: LING 700 or equivalent course. LEC.

LING 725. Syntax I. 3 Hours.
The basics of theoretical syntax, examining the principles of universal grammar. Topics include phrase structure, relations among syntactic constituents, and the nature of syntactic roles and lexical categories. Prerequisite: LING 700 or equivalent course. LEC.

LING 726. Syntax II. 3 Hours.
An advanced course covering one or more current theories of syntax. The course will provide in-depth reading and discussion on the major areas of syntactic theory including universal grammar, phrase structure theory, lexical projections of argument structure, binding, control, locality condition, constraints on representation, and the relation between syntax and the semantic module. Prerequisite: LING 725. LEC.

LING 727. Morphology. 3 Hours.
An exploration of several topics in word structure and formation. Covers three broad areas: traditional morphology, morpho-phonology, and morpho-syntax. Traditional morphology includes a survey of several kinds of word formation processes, the internal structure of words, morpheme types, inflection, paradigms, derivation, and compounding. Morpho-phonology deals with phonological constraints on morphological processes and prosodic morphology. Morpho syntax concentrates on the syntactic properties of morphological phenomena and interaction of syntactic processes and morphology. The course has a strong emphasis on cross-linguistic comparative morphology. Prerequisite: LING 712, LING 725, or permission of instructor. LEC.

LING 730. Linguistics in Anthropology. 3 Hours.
The study of language as it concerns anthropology. Language systems in relation to culture, language taxonomy, semantics, linguistic analysis as an ethnographic tool. (Same as ANTH 730.) LEC.

LING 731. Semantics. 3 Hours.
A study of meaning in natural language usage. Emphasis on referential semantics. Set theory, propositional and first-order logic, and intensional and modal logic as they relate to nature. Questions that arise in representing the meanings of natural language sentences in a formalized language. Prerequisite: LING 725. LEC.

LING 732. Discourse Analysis. 3 Hours.
This course focuses on linguistic frameworks for the analysis of discourse. Discourse is a linguistic system larger than the sentence (utterance), which connects and contextualizes speech and written text. This course focuses on current issues and theoretical frameworks in the analysis of discourse. Using oral and written data, students will examine how contexts influence and shape linguistic form. Topics covered include transcription systems, the structure and organization of different genres of language, and the performance of social actions, including stance-taking, framing, and the construction of identity. Students will also have an opportunity to perform discourse analytic research on the data of their choice. (Same as ANTH 732.) Prerequisite: ANTH 706 or permission of the instructor. LEC.

LING 733. Language, Gender, and Sexuality. 3 Hours.
This course focuses on the complex relationship between language use and the social construction of gender and sexuality, i.e., how language is used in the construction of gender and sexuality, and how gender and sexuality are performed and enacted through language. Examines theoretical notions of language, gender, and sexuality from linguistics, linguistic anthropology, and sociology. Among the topics covered are cross-cultural definitions of masculinity and femininity, construction of gendered and sexual identities through language use, language and power, ideologies, style, and performativity. The course will consider research on language, gender, and sexuality from a variety of cultures within the last 50 years. (Same as ANTH 733.) Prerequisite: ANTH 706 or permission of the instructor. LEC.

LING 734. Language Evolution. 3 Hours.
Human language demonstrates a level of complexity not found in the communicative systems of other species. This course focuses on the development of human language, so as to obtain a better understanding of the origin and development of human language. Questions addressed include: what features of language are distinct from other communicative system, when did human language originate, in what stages did human language evolve, and how does language relate to properties of the human brain and mind? Data from a variety of disciplines will be considered, including primatology, human development, cognition, evolutionary biology, archaeology, and linguistics. (Same as ANTH 734.) Prerequisite: ANTH 106 or LING 106 or ANTH 107 or LING 107 or ANTH 736 or LING 708 or ANTH 725. LEC.

LING 735. Psycholinguistics I. 3 Hours.
A detailed examination of issues in the processing of language. The course will provide a survey of research and theory in psycholinguistics, reflecting the influence of linguistic theory and experimental psychology.
Spoken and written language comprehension and language production processes will be examined. (Same as PSYC 735.) LEC.

LING 737. Psycholinguistics I. 3 Hours.
An in-depth examination of selected topics in psycholinguistics. Topics may include spoken language processing, written language processing, neurolinguistics, prosody, and syntactic processing. (Same as PSYC 737.) Prerequisite: PSYC 735/LING 735 or consent of instructor. LEC.

LING 738. Neurolinguistics I. 3 Hours.
We will explore how language is represented and processed in the human brain. This will include a critical survey of the foundations and the newest state-of-the-art research in the cognitive neuroscience of language, focusing on the techniques of functional brain imaging (fMRI, PET, EEG, MEG, and related methods), and research on aphasia and other language disorders. This course will also include a laboratory component providing hands-on experience with brain imaging research on language. Prerequisite: LING 700 or equivalent course. LEC.

LING 739. First Language Acquisition II. 3 Hours.
A second semester course in child language which explores the acquisition of morphology, syntax and the ways in which morphology and syntax interact in linguistic theory and language development. Topics covered in the course include agreement, Case, null subjects, question formation, pronoun binding, quantification, and control. Prerequisite: LING 709 and LING 725 or permission of the instructor. LEC.

LING 740. Linguistic Data Processing. 3 Hours.
The tools and techniques necessary to analyze linguistic fieldwork data, including research design, recording and elicitation techniques, computational data processing and analysis, and field ethics. Techniques of research, field recording, and data analysis technology. Methods of phonetic transcription, grammatical annotation, and analysis of language context. Practice of techniques via short studies of at least one language. (Same as ANTH 740.) Prerequisite: LING 709 or permission of the instructor. LEC.

LING 741. Field Methods in Linguistic Description. 3 Hours.
The elicitation and analysis of phonological, grammatical, and discourse data from a language consultant. In-depth research on one language. Techniques of research design, methods of phonetic transcription, grammatical annotation, and analysis of language context. (Same as ANTH 741.) Prerequisite: LING 705 or permission of instructor. LEC.

LING 742. Neurolinguistics II. 3 Hours.
An in-depth discussion of the representation and processing of language from a cognitive neuroscience perspective. This course involves critical discussion of selected topics of current research interest in neurolinguistics. The course also includes a significant hands-on component, in which students receive training in research on the cognitive neuroscience of language by developing and implementing a new EEG study on an aspect of language, as well by completing a series of mini-labs introducing neuroimaging methods and analyses. Prerequisite: LING 738 or permission of the instructor. SEM.

LING 747. North American Indian Languages. 3 Hours.
This course introduces student to the indigenous languages of North America. Students will critically examine the structures and status of these languages, which have greatly expanded our knowledge of human language and linguistic theory. Topics include the history and future of North American languages and indigenous speech communities, the history of the field of Americanist linguistics, as well as important linguistic questions raised by phenomena from American languages in phonology, morphology, syntax, semantics, and historical linguistics. Prerequisite: An introductory course in linguistics. LEC.

LING 748. Language Contact. 3 Hours.
Theories and case studies of languages in contact. Areal and genetic linguistics, genesis of pidgins and creoles, multilingualism, Social, political, economic, and geographic factors in language change. (Same as ANTH 748.) Prerequisite: A course in Linguistics. LEC.

LING 749. Linguistics and Ethnolinguistics of China and Central Asia: ___. 3 Hours.
Selected topics in Linguistics and Linguistic Anthropology, focusing on dominant and/or minority languages of China, Central Asia, or a particular region of Central and Eastern Eurasia. Topics may include any subfield of linguistics, including language contact, typology, dialectology, and sociolinguistics. Topic for semester to be announced. (Same as ANTH 749.) Prerequisite: A course in Linguistics. LEC.

LING 782. Research Methods in Child Language. 3 Hours.
A survey of methods for studying phonological, morphological, syntactic, and semantic change during language development. Methods include: diary interpretation, language sample analysis, probe elicitation tasks, and clinical assessment. (Same as PSYC 782.) LEC.

LING 783. Computational Linguistics. 3 Hours.
A survey of computer-based approaches to the study of phonology, morphology, and syntax. In addition to its relevance for basic linguistic research, computer-based work on phonology is central to current research in speech analysis, speech synthesis, and the major artificial intelligence effort described as speech understanding. Computer-based morphological analysis is of theoretical interest to the linguist as well as a major component in content analysis, information retrieval, and other related application areas. Computer-based parsers and syntactic/string generators provide model tests for the linguist and analytical tools for the computer scientist concerned with language applications. Prerequisite: An introductory linguistics course. LEC.

LING 791. Topics in Linguistics: ___. 1-3 Hours.
The content and prerequisites of this course will vary. May be repeated. Prerequisite: Consent of instructor. LEC.

LING 794. Proseminar. 3 Hours.
Introduction to the field of linguistics. Topics include research literature and research methods, thesis and grant writing, and ethics in linguistic research. Required for all first-year graduate students in linguistics. Graded on satisfactory/unsatisfactory basis. LEC.

LING 799. Proseminar in Child Language. 2 Hours.
A review and discussion of current issues in children's language acquisition. May be repeated for credit. Students are graded S/F. (Same as ABSC 797, PSYC 799 and SPLH 799.) (Formerly HDFL 797.) LEC.

LING 810. Seminar in Ethnolinguistics: ___. 2-3 Hours.
An advanced study of the relations between language and culture. Subject will vary each semester. Students may repeat the course more than once. (Same as ANTH 810.) LEC.

LING 822. Seminar on Acquisition of Language. 3 Hours.
An analysis of recent theoretical issues and research problems in the study of children's acquisition of language. Prerequisite: LING 709 or consent of instructor. LEC.

LING 850. Topics in Research in Experimental Linguistics: ___. 3 Hours.
This course is primarily for students actively engaged in experimental linguistic research. The course provides students with the opportunity to focus on their current research projects and involves critical analysis, presentation, and discussion of research design, methods, statistical analysis, and data interpretation. May be repeated. Prerequisite: An advanced course in Linguistics or permission of instructor. SEM.
LING 851. Research in Language Acquisition and Processing. 3 Hours.
This course is primarily intended for students actively engaged in linguistic research on language acquisition, language processing, and neurolinguistics. Students in this course present and discuss study design, methods, data analysis and interpretation of results for their research projects. Professional development topics such as CV development, applications for fellowships, grants and jobs, and the dissemination of research findings are also discussed. May be repeated. Prerequisite: Permission of instructor. SEM.

LING 852. Research in Field Linguistics. 3 Hours.
This course is intended for students who are conducting field work on syntax or morphology, typically of an understudied language. The course is structured around a set of topics (variable by semester) which each student will investigate in a particular language. The focus of the course is on data collection and analysis and students will present and discuss the results of their research projects. May be repeated. Prerequisite: Permission of instructor. SEM.

LING 860. Seminar in Second Language Acquisition. 3 Hours.
Analysis of recent theoretical and methodological issues in the study of second language acquisition. Prerequisite: LING 716 or permission of instructor. LEC.

LING 899. Master’s Research Project. 1-3 Hours.
A course for students working on their M.A. Research Project. Normally to be taken during the semester in which the student is submitting the M.A. Research Project. Students must enroll for at least one credit hour. Up to three credits will count toward the minimum number of credits required for the M.A. degree in linguistics. RSH.

LING 910. Linguistic Seminar: ______. 1-3 Hours.
The content and prerequisites of this course will vary. May be repeated. LEC.

LING 947. Seminar in Amerindian Linguistics. 1-3 Hours.
The aim of the seminar is to provide opportunity for interaction among faculty and students sharing an interest in North American Native languages and linguistics. Activities include reading, discussion, and criticism of literature on Amerindian languages and linguistics, and reports on current research of the participants. May be repeated. Prerequisite: LING 747. LEC.

LING 980. Linguistics Field Work. 3-6 Hours.
Independent field work with an informant on a language not normally offered at the University of Kansas, or on a non-standard dialect of one of the more accessible languages. Student must show evidence (file slips for grammatical and phonological analysis, dictionary slips, etc.) of having done the required amount of work without necessarily being able to turn in a completed analysis. Normally for three credits; six credits would be available under certain circumstances such as intensive summer work on location away from the university. Graded on satisfactory/unsatisfactory basis. Prerequisite: LING 712 and LING 725. FLD.

LING 997. Ph.D. Examinations. 1-12 Hours.
A course for students writing answers to the preliminary Ph.D. examination and/or preparing to take the Oral Comprehensive Examination. Normally to be taken during the semester in which the student is submitting answers to the written preliminary examination. May be taken for a maximum of two semesters or twelve credits, whichever comes first. Does not count toward the minimum number of credits required for a graduate degree in linguistics. Graded satisfactory/unsatisfactory on the results of the examination. RSH.

LING 998. Independent Study. 1-12 Hours.
Prerequisite: Written consent of instructor. RSH.

LING 999. Doctoral Dissertation. 1-12 Hours.
THE.

Bachelor of Arts and Bachelor of General Studies in Linguistics

Career Opportunities

Linguistics is a superb preparation for careers that require expertise in the use of language as a means of communication, e.g., you will be well prepared for jobs in education, communications, speech-language pathology and audiology, cognitive science, artificial intelligence, law, and marketing. Knowledge of linguistics is useful in both foreign language and English language education, in helping those with speech and language impairments, and in advertising.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

First- and Second-Year Preparation

A student who plans to major in linguistics should fulfill the College foreign language requirement by the end of the junior year. LING 106 or LING 107, which is required for the major, provides an introductory survey of the field, and also fulfills a general education social sciences: culture and society (SC) principal course requirement. In addition, LING 110, which is required for the major, fulfills a general education social sciences: individual behavior (SI) principal course requirement. These courses prepare students for upper-division courses in the major. Students considering a major in linguistics should discuss their plans with the director of undergraduate studies.
Admission to the Major

Admission Requirements

Course Requirements
Prospective majors should enroll in the following 2 introductory courses:

- LING 106/ANTH 106 Introductory Linguistics (or its honors equivalent LING 107/ANTH 107)
- LING 110 Language and Mind

Grade-Point Average Requirements
Students must earn a 2.5 grade-point average in the 2 designated admission courses. KU's course repeat policy (https://documents.ku.edu/policies/governance/USRR.htm#art2sect2) applies to the GPA calculation.

Application Term
Students should apply to the major during the semester in which major admission criteria will be completed; normally no later than 60 hours, or for transferring students, normally during the initial term at KU. Application to this major after completion of 60 hours, or the initial KU term for transfer students, will likely delay graduation.

Requirements for the B.A. or B.G.S. Major

Linguistics Language Proficiency
Majors must meet Language Proficiency (4th level proficiency) in a second language. Even those seeking the B.G.S. in Linguistics must complete the 4th level of foreign language proficiency. See the chart of Foreign Languages offered at KU (http://www.collegesas.ku.edu/advising/foreignlanguage.shtml) for world languages with KU course offerings through the proficiency level.

Linguistics Major Core Knowledge and Skills (15)
Majors must complete a course in each of the following areas:

- Introductory Linguistics. Satisfied by:
  - LING 106 Introductory Linguistics 3
  - or LING 107 Introductory Linguistics, Honors
- Language & Mind. Satisfied by:
  - LING 110 Language and Mind 3
  - or LING 111 Language and Mind, Honors
- Phonetics I. Satisfied by:
  - LING 305 Phonetics I 3
- Introduction to Phonology. Satisfied by:
  - LING 312 Introduction to Phonology 3
- Syntax. Satisfied by:
  - LING 325 Syntax I 3

Linguistics Required Courses (3)
Majors must complete a course in each of the following areas:

- Acquisition & Processing. Satisfied by one of the following: 3
  - LING 415 Second Language Acquisition
  - LING 425 First Language Acquisition
  - LING 435 Psycholinguistics
  - LING 438 Neurolinguistics I
- Analysis & Description. Satisfied by one of the following:
  - LING 308 Linguistic Analysis

Electives (3)
Satisfied by 2 additional courses (6 hours) in linguistics at the junior/senior (300+) level, chosen by the student in consultation with the undergraduate coordinator.

Capstone Experience (3)
Majors must complete one capstone course:

- LING 420 Capstone: Research in Language Science 3
- or LING 421 Capstone: Typology-Unity and Diversity of Human Language

Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and GPA minimum standards:

Major Hours
Satisfied by 30 hours of major courses, or 33 hours required if completing departmental honors course LING 496.

Major Hours in Residence
Satisfied by a minimum of 24 junior/senior (300+) hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 24 hours from junior/senior courses (300+) in the major.

Major Junior/Senior (300+) Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

A sample 4-year plan for the BA degree in Linguistics can be found here: Linguistics (http://catalog.ku.edu/liberal-arts-sciences/linguistics/ba-bgs/linguistics), or by using the left-side navigation.

A sample 4-year plan for the BGS degree in Linguistics will be coming soon.

Departmental Honors
The honors program allows exceptional undergraduate students to work closely with faculty members on a research project. To graduate with honors in linguistics, a student must complete all requirements for the linguistics major and LING 496 Honors Essay in Linguistics (usually taken in the fall semester of the senior year). The student must have a grade-point average of at least 3.5 in linguistics and 3.25 in all courses.

Consult the departmental honors coordinator or the director of undergraduate studies for information. Prospective honors candidates are
encouraged to select a thesis topic and thesis director at the end of the junior year.

Minor in Linguistics

Why study linguistics?

Because language is a window into the mind. Linguistics provides an understanding of the human capacity to acquire, perceive, and produce language and of language's role in contemporary society.

Requirements for the Minor

Linguistics Minor Course Requirements

Students selecting this option must complete a course in each of the following areas:

**Linguistics Language Proficiency (0)**

In addition to completion of Language Proficiency (4th level proficiency) in a second language, students must complete the following minor requirements: (See the chart of Foreign Languages offered at KU for world languages with KU course offerings through the proficiency level.)

<table>
<thead>
<tr>
<th>Language &amp; Mind. Satisfied by: (3)</th>
<th>3</th>
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</thead>
<tbody>
<tr>
<td>LING 110 Language and Mind</td>
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</table>

**Phonetics I. Satisfied by: (3)**

<table>
<thead>
<tr>
<th>Phonetics I</th>
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</thead>
<tbody>
<tr>
<td>LING 305 Phonetics I</td>
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</tbody>
</table>

**Syntax. Satisfied by: (3)**

<table>
<thead>
<tr>
<th>Syntax</th>
<th>3</th>
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</thead>
<tbody>
<tr>
<td>LING 325 Syntax I</td>
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</table>

**Students choosing the general option must also complete: (9)**

<table>
<thead>
<tr>
<th>Students choosing the general option must also complete: (9)</th>
<th>9</th>
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</thead>
<tbody>
<tr>
<td>LING 106 Introductory Linguistics</td>
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<tr>
<td>or LING 107 Introductory Linguistics, Honors</td>
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<tr>
<td>LING 312 Introduction to Phonology</td>
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<tr>
<td>One junior/senior (300+) LING elective course, chosen by the student in consultation with the linguistics advisor.</td>
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</tbody>
</table>

**Students choosing the second language acquisition option must also complete: (9)**

<table>
<thead>
<tr>
<th>Students choosing the second language acquisition option must also complete: (9)</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>LING 343 Bilingualism</td>
<td></td>
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<tr>
<td>LING 415 Second Language Acquisition</td>
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</tbody>
</table>

On additional course (from the following advanced language list, or any other LING course numbered 300 or above)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 429</td>
<td>Spanish Phonetics</td>
<td></td>
</tr>
<tr>
<td>SPAN 520</td>
<td>Structure of Spanish</td>
<td></td>
</tr>
<tr>
<td>SPAN 570</td>
<td>Studies in Hispanic Linguistics: ____</td>
<td></td>
</tr>
<tr>
<td>FREN 310</td>
<td>French Phonetics</td>
<td></td>
</tr>
<tr>
<td>SLAV 520</td>
<td>Russian Phonetics, Phonology, and Inflectional Morphology</td>
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</tr>
<tr>
<td>SLAV 522</td>
<td>The Grammatical Categories of Russian: Linguistic Units, Functions and Meanings</td>
<td></td>
</tr>
<tr>
<td>EALC 570</td>
<td>The Structure of Japanese</td>
<td></td>
</tr>
<tr>
<td>EALC 572</td>
<td>The Structure of Chinese</td>
<td></td>
</tr>
<tr>
<td>AAAS 470</td>
<td>Language and Society in Africa</td>
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</tbody>
</table>

Minor Hours & GPA

While completing all required courses, minors must also meet each of the following hour and grade point average minimum standards:

**Minor Hours**

Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**

Satisfied by a minimum of 12 hours of junior/senior (300+) hours of KU resident credit in the minor.

**Minor Junior/Senior Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**

Satisfied by a minimum of a 2.0 GPA in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including Fs and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Master of Arts in Linguistics

Why study linguistics?

Because language is a window into the mind. Linguistics provides an understanding of the human capacity to acquire, perceive, and produce language and of language's role in contemporary society.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Applicants must submit a curriculum vitae, a statement of purpose, an official copy of transcript from the baccalaureate granting institution and any transcripts from institutions attended post-baccalaureate, 3 letters of recommendation, and Graduate Record Examination scores. Applicants who are not native speakers of English must demonstrate English proficiency with Test of English as a Foreign Language scores of at least 53 (paper) or 20 (computer or internet-based) in all sections or International English Language Testing System scores of at least 6.0 overall with no part score below 5.5.

Submit your graduate application online (http://www.graduate.ku.edu). Send all other requested application materials to the department:

The University of Kansas
Department of Linguistics
Blake Hall
1541 Lilac Lane, Room 427
Lawrence, KS 66045-3129
M.A. Degree Requirements

Prerequisites

3 credit hours of linguistics (LING 700 or equivalent). Students who do not meet the prerequisite but have undergraduate majors in related fields (such as a foreign language, English, speech, anthropology, or psychology) may be accepted with the provision that they make up the deficiency as soon as possible.

Reading ability in a foreign language (not English) with a significant linguistic literature.

Degree Requirements

The following are minimum requirements.

Course Work

33 credit hours of graduate work including

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>LING 794 Proseminar</td>
<td>3</td>
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<tr>
<td>LING 705 Phonetics I</td>
<td>3</td>
</tr>
<tr>
<td>LING 712 Phonological Theory I</td>
<td>3</td>
</tr>
<tr>
<td>LING 725 Syntax I</td>
<td>3</td>
</tr>
<tr>
<td>LING 709 First Language Acquisition</td>
<td>3</td>
</tr>
<tr>
<td>or LING 715 Linguistics and Second Language Acquisition</td>
<td>3</td>
</tr>
<tr>
<td>LING 735 Psycholinguistics I</td>
<td>3</td>
</tr>
<tr>
<td>or LING 738 Neurolinguistics I</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following research methods courses:

- LING 720 Research Methods in Linguistics
- LING 740 Linguistic Data Processing
- LING 741 Field Methods in Linguistic Description
- LING 782 Research Methods in Child Language

12 credit hours of electives to be determined by the student and the student’s advisor, excluding LING 998 Independent Study; Topics in Empirical Research in Linguistics; LING 850 Topics in Empirical Research in Linguistics; LING 851 Research in Language Acquisition and Processing; LING 852 Research in Field Linguistics.

M.A. students can complete the degree by one of the following options:

Research Project Option

Student will conduct and write a research project and pass the research project oral defense. A maximum of 3 hours of M.A. research project credit (LING 899) may be applied toward the minimum of 33 hours for the degree. The research project must be defended successfully in an oral examination.

Comprehensive Examination Option

The M.A. comprehensive examination option is only available to students seeking a terminal M.A. degree. A comprehensive written examination should be taken no later than the semester in which the student completes 33 hours of course work applicable to the M.A.

Plan of Study

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Hours</th>
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<tbody>
<tr>
<td>LING 794 Proseminar</td>
<td>3</td>
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<tr>
<td>LING 705 Phonetics I</td>
<td>3</td>
</tr>
<tr>
<td>LING 712 Phonological Theory I</td>
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</tbody>
</table>

Doctor of Philosophy in Linguistics

Why study linguistics?

Because language is a window into the mind. Linguistics provides an understanding of the human capacity to acquire, perceive, and produce language and of language's role in contemporary society.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Applicants must submit a curriculum vitae, a statement of purpose, an official copy of transcript from the baccalaureate granting institution and any transcripts from institutions attended post-baccalaureate, 3 letters of recommendation, and Graduate Record Examination scores. Applicants who are not native speakers of English must demonstrate English proficiency with Test of English as a Foreign Language scores of at least 53 (paper) or 20 (computer or internet-based) in all sections or International English Language Testing System scores of at least 6.0 overall with no part score below 5.5.

Students originally admitted to the M.A. program who are completing the M.A. degree (research project option) and want to continue toward the Ph.D. must submit the following to the Director of Graduate Studies by January 1st: a 5-7 page summary of the M.A. research project, a timeline for completing the M.A. which has been approved by the M.A. advisor, and a 1-2 page statement that outlines the type of research that the student would like to conduct at the Ph.D. level and the student’s ultimate goals upon completing the Ph.D. Any decision to apply for the Ph.D. program must be taken in consultation with the advisor or Director of Graduate Studies. Acceptance into the Ph.D. program will be contingent on two criteria: (1) a grade of ‘2’ on the M.A. research project (2) approval of the Linguistics faculty that the student should be allowed to continue in the program based on strength of the student’s application.
Ph.D. Degree Requirements

Prerequisites

M.A. in linguistics with a thesis. A student entering the Ph.D. program without courses equivalent to these must take them as soon as they are offered.

Degree Requirements

Residence

2 semesters, which may include 1 summer session, must be spent in full-time resident study at KU. Normally, an enrollment of 9 credit hours is considered full-time during the semester. See Doctoral Degree Requirements, 2. Program Time Constraints, in the Graduate Studies (p. 2369) section of the online catalog.

Research Skills and Responsible Scholarship

1. Language requirement: Reading ability in a foreign language (not English) demonstrated through one of the following ways:
   a. Pass a language examination devised and administered by the Linguistics Department.
   b. Complete DANE 101, DTCH 101, FREN 100, GERM 101, ITAL 100, RUSS 101, or SPAN 100 with a grade of C or higher, or LAT 104 with a grade of B or higher.
   c. Have a KU professor qualified in a given language certify that the student has the fourth level of competence in reading, comprehension, and speaking.
   d. Complete 16 hours (or 4 semesters) in a single language at KU or another university as a graduate or undergraduate student.

2. Research skills requirement: 1 of the following:
   • A course in statistics with a grade of B or above.
   • A course in a computer programming language with a grade of B or above.
   • LING 783 Computational Linguistics with a grade of B or above.

3. Responsible Scholarship: The university requires that every doctoral student have training in responsible scholarship pertinent to the field of research and appropriate to the doctoral level. This requirement must be met before taking the comprehensive oral exam. The Proseminar (LING 794) fulfills the requirements for responsible scholarship.

Minimum Course Requirements

24 credit hours, consisting of

Methods requirement: (3)
LING 741 Field Methods in Linguistic Description 3

If already taken for M.A., replace with one of the following:
LING 720 Research Methods in Linguistics
LING 740 Linguistic Data Processing
LING 782 Research Methods in Child Language

Second-level courses (9)
Select three of the following second-level courses: 9
LING 707 Phonetics II
LING 714 Phonological Theory II
LING 716 Second Language Acquisition II
LING 726 Syntax II
LING 727 Morphology
LING 731 Semantics
LING 737 Psycholinguistics II
LING 739 First Language Acquisition II
LING 742 Neurolinguistics II

Elective courses in linguistics (12)
Select four elective courses in linguistics. A total of 3 hours, but not more, from the following courses can count towards the elective requirement:
LING 998 Independent Study
LING 850 Topics in Research in Experimental Linguistics:
LING 851 Research in Language Acquisition and Processing
LING 852 Research in Field Linguistics

Qualifying Papers

The student needs to write 2 qualifying papers -- a major paper in the area of specialization and a minor paper in a different area. Both papers should represent original work. The major paper may be an expanded version of the M.A. thesis and should be of publishable quality. The minimum lengths of the major and minor papers are 25 pages and 15 pages, respectively.

The major and minor papers are developed in close consultation with an Advisory Committee (3 faculty members) and the 2 papers should be supervised by different faculty members when possible. The adequacy of the papers is evaluated on the quality of the literature review, theoretical contribution, and research integration as well as the basis of their logical coherence and organization. The student does not need to orally defend the qualifying papers.

Dissertation Proposal and the Oral Comprehensive Exam

When the major and minor qualifying papers have been approved by the Advisory Committee, the student may form a Ph.D. committee (4 inside members, 1 outside member), which helps the student work on the dissertation, starting from the dissertation proposal. The proposal should clearly identify the research questions that the dissertation will address, include a comprehensive literature review, lay out the methodology for the research, discuss preliminary data and results, if any, and present a timetable for the dissertation research. The minimum length for the dissertation proposal is 10 pages.

The Oral Comprehensive Exam is the official exam required by Graduate Studies and consists of an oral defense of the dissertation proposal and
the answering of any other questions related to the fields of study of
the dissertation research. It must be taken within 2 months (excluding
summer) after the student has turned in the dissertation proposal. The
oral exam will typically last 2 to 3 hours.

Dissertation and Dissertation Defense
The dissertation is developed in consultation with the Ph.D. committee.
The dissertation must be orally defended in front of the Ph.D. committee.
The student will be asked first to summarize his/her dissertation and
evidence, and then will be questioned by the committee. The defense will
normally last 1 to 1 and 1/2 hours.

Plan of Study
A plan of study should be developed in consultation with the student’s
advisor and committee.

Department of Mathematics
Why study mathematics?
Because mathematics is a framework upon which humanity builds an
understanding of the world.

Undergraduate Programs
Placement
Students who have not completed a college-level mathematics course
should consult the Placement Table for Initial Enrollment in Mathematics.
For information about the Early and Continuous Enrollment in Math
requirement, see the CLAS Degree Requirements page (p. 777).
Students also may take the Mathematics Placement Test, given by
the mathematics department during New Student Orientation (http://
firstyear.ku.edu/orientation) and several other times during the year, to
determine their proper initial placement in mathematics courses. Students
with college credit in mathematics should enroll according to the credit
shown on their transcripts and the stated prerequisites for the courses.

Courses for Nonmajors
Students interested in mathematics as part of a background in the liberal
arts should enroll in MATH 115, MATH 125, MATH 105, or MATH 365,
and other courses according to their interests. Students preparing to use
mathematics as a tool in another field should look at the requirements and
recommendations of their schools or departments.

MATH 2 is considered a developmental course by all KU schools and is
not counted in the minimum number of hours required for graduation.

Placement Table for Initial Enrollment in
Mathematics
KU encourages all entering students to complete 4 years of mathematics
in high school, including Algebra I and II, Geometry, Trigonometry, and
Analytic Geometry, along the lines of the Kansas Board of Regents
recommendations (http://admissions.ku.edu/regents-curriculum).

<table>
<thead>
<tr>
<th>Your math ACT/SAT score</th>
<th>Eligible to enroll in these mathematics courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT: 28-36 or SAT: 640-800</td>
<td>MATH 002, MATH 101, MATH 104, MATH 105, MATH 111, MATH 115, MATH 125 or MATH 365</td>
</tr>
<tr>
<td>ACT: 26-27 or SAT: 600-630</td>
<td>MATH 002, MATH 101, MATH 104, MATH 105, MATH 111, MATH 115, or MATH 365</td>
</tr>
<tr>
<td>ACT: 22-25 or SAT: 540-590</td>
<td>MATH 002, MATH 101, or MATH 104</td>
</tr>
<tr>
<td>ACT: 16-21 or SAT: 420-530</td>
<td>MATH 002</td>
</tr>
<tr>
<td>ACT: 0-15 or SAT: 0-410</td>
<td>KU does not offer a mathematics course below MATH 002. Although students with these scores are not prepared, they will be permitted to enroll in MATH 002. Before enrolling in MATH 002, these students are encouraged to prepare by self-study or by completing a beginning algebra course in high school or community college.</td>
</tr>
</tbody>
</table>

After their initial enrollment in mathematics, students must remain
continuously enrolled until they have completed MATH 101 or MATH 104.

Preparation for Graduate Study
Students who plan to attend graduate school in the mathematical
sciences should speak to an advisor about the best preparation,
depending on their goals. Students planning to enter a general
mathematics graduate program are encouraged to take MATH 765,
MATH 766, MATH 790, and MATH 791. Some graduate degrees require
a reading knowledge of French, German, or Russian.

Preparation for Graduate Study
Students who plan to attend graduate school in the mathematical
sciences should speak to an advisor about the best preparation,
depending on their goals. Students planning to enter a general
mathematics graduate program are encouraged to take MATH 765,
MATH 766, MATH 790, and MATH 791. Some graduate degrees require
a reading knowledge of French, German, or Russian.

Graduate Programs
The department offers a graduate program leading to both the M.A.
and Ph.D. degrees. A broad range of programs is possible in algebra,
analysis, combinatorics, control theory, dynamical systems, geometry,
numerical analysis, probability, statistics, partial differential equations, set
theory, and topology.

The Department of Mathematics has a long tradition of excellence. The
first Ph.D. granted at KU was in mathematics in the year 1895. Since
then, the graduate program has been a central part of the department’s
research and teaching mission and an important component of its long-
term planning. The department’s commitment to graduate education
has boosted its recent growth in size and enhanced its reputation.
Prospective students are encouraged to read additional information (http://
www.math.ku.edu/academics/graduate) online.

Courses
MATH 2. Intermediate Mathematics. 3 Hours. U.
Mathematics (primarily algebra) preparatory to MATH 101. Qualification:
Two years of high school college preparatory mathematics, algebra and
geometry, and a score of 16 or more on ACT mathematics; or a qualifying
score on the mathematics placement test. MATH 002 is the lowest level
mathematics course offered at the University of Kansas. Students not
prepared for MATH 101 will be permitted to enroll in MATH 002. However, before enrolling in MATH 002, such students are encouraged to prepare by self-study or by completing a beginning algebra course in high school, community college, or correspondence study. LEC.

MATH 101. College Algebra. 3 Hours. GE12 / U.
Coordinate systems, functions and their graphs; linear, quadratic, general polynomial, rational, exponential, and logarithmic functions; equations and inequalities; linear and non-linear systems and matrices. Not open to students with credit in MATH 104. Prerequisite: MATH 002, or two years of high school algebra and a score of 22 or higher on ACT mathematics, or a qualifying score on the mathematics placement test. LEC.

MATH 103. Trigonometry. 2 Hours. U.
The circular functions and their applications. Not open to students with credit in MATH 104. May not be used to fulfill the College mathematics requirement. Prerequisite: MATH 101, or two years of high school algebra and a score of 26 or higher on enhanced ACT mathematics, or a qualifying score on the mathematics placement test. LEC.

MATH 104. Precalculus Mathematics. 5 Hours. GE12 / U.
An introduction to the elementary functions (polynomial, rational, exponential, logarithmic, and trigonometric) and their properties. Intended primarily for students intending to enroll in MATH 121. Open for only two hours credit for students with credit in MATH 101. Not open to students with credit in MATH 103. Prerequisite: MATH 002, or two years of high school algebra and a score of 22 or higher on ACT mathematics, or a qualifying score on the mathematics placement test. LEC.

MATH 105. Introduction to Topics in Mathematics. 3 Hours. GE12 / N.
This course has two purposes. First, to provide the student with some experience and insight into several areas of mathematics not normally covered in elementary courses. Typical topics which may be covered are number theory, geometries, introductory calculus, introductory probability and statistics. Second, to provide the student with some skill in handling abstract mathematical concepts. The material will develop dually the intuitive and axiomatic approach. A high degree of manipulative skill is not required for this course. Prerequisite: MATH 101 or MATH 104, or two years of high school algebra and a score of 26 or higher on ACT mathematics, or a qualifying score on the mathematics placement test. LEC.

MATH 109. Mathematics for Elementary School Teachers I. 3 Hours. U.
This course is designed to give the prospective elementary school teacher an overview of several components of the elementary school mathematics curriculum, including number systems, estimation, inequalities and order, sequences and patterns, sets, and relations and functions. The class meets each week for three one-hour instruction sessions and one two-hour laboratory session. This course may not be used to satisfy the College mathematics requirement. Prerequisite: MATH 101 or equivalent placement. LEC.

MATH 110. Mathematics for Elementary School Teachers II. 3 Hours. U.
Continuation of MATH 109, including geometry (including transformations) and elementary probability and statistics. Class meets each week for three one-hour instruction sessions and one two-hour laboratory session. This course does not serve as a prerequisite for any mathematics course. It may not be used to satisfy the College mathematics requirement. Prerequisite: MATH 109. LEC.

MATH 111. Matrix Algebra, Probability, and Statistics. 3 Hours. N.
Introduction to topics in matrix algebra, probability, and statistics. Topics will include matrix operations, the use of matrices to solve systems of linear equations, elementary data analysis, elementary statistical procedures, sample spaces and probability measures, random variables, probability models, links between probability and statistics, and applications. Prerequisite: MATH 101 or MATH 104, or two years of high school algebra and a score of 26 or higher on the ACT mathematics, or a qualifying score on the mathematics placement test. LEC.

MATH 115. Calculus I. 3 Hours. GE12 / N.
Elementary differential and integral calculus, with applications in management and the biological sciences. Not open to students with credit in MATH 121. Prerequisite: MATH 101 or MATH 104, or two years of high school algebra and a score of 26 or higher on ACT mathematics, or a qualifying score on the mathematics placement test. LEC.

MATH 116. Calculus II. 3 Hours. NM / N.
Continuation of MATH 115 including exponential, logarithmic, and trigonometric functions, techniques of integration, and the calculus of functions of several variables. Not open to students with credit in MATH 122 or MATH 118. Prerequisite: MATH 115, plus a course in trigonometry, or MATH 121. MATH 103 may be taken concurrently. LEC.

MATH 118. Trigonometry and Calculus. 3-5 Hours. N.
A course combining the material of MATH 103 and MATH 116. Open for only three hours credit to students with credit in MATH 103 or MATH 104, or five hours credit for students who do not have credit in MATH 103 or MATH 104. Not open for credit for students with credit in MATH 116. Prerequisite: MATH 115. LEC.

MATH 119. Differential Calculus. 4 Hours. GE21 / N.
Study of limits and derivatives of algebraic, trigonometric, exponential and logarithmic functions. Curve sketching, optimization and other applications of the derivative. Antiderivatives, Riemann sums, the definite integral, and the fundamental theorem of calculus. Intended to facilitate appropriate transfer credit and course placement. Open for only 1 hour credit to students with credit in MATH 115. Not open for credit to students with credit in MATH 116 or 121. Prerequisite: MATH 103 or MATH 104, or 3 years of college preparatory mathematics including trigonometry, with a score of 28 or higher on the enhanced ACT Mathematics exam. LEC.

MATH 120. Integration Techniques and Applications. 1 Hour. U.
A study of techniques and applications of integration. Techniques include integration by parts, integration by trigonometric substitution, integration by partial fractions and improper integrals. Applications of integration include area, volume, arc length, average value, and physical applications such as work and hydrostatic force. Not open for credit to students with credit in MATH 116 or MATH 121. Prerequisite: MATH 119. LEC.

MATH 121. Calculus I. 5 Hours. GE12 / N.
Differentiation and integration of algebraic and trigonometric functions. Applications to physical sciences and engineering. Open for only two hours credit to students with credit in MATH 115. Prerequisite: MATH 104; or MATH 103; or three years of college preparatory mathematics including trigonometry and a score of 28 or higher on ACT mathematics; or a qualifying score on the mathematics placement test. LEC.

MATH 122. Calculus II. 5 Hours. NM / N.
Sequences and series. Calculus of functions in polar and spherical coordinates. Three-dimensional vector geometry and vector-valued functions. Multivariable calculus; partial derivatives and multiple integration. Open only for three hours credit to students with credit in both MATH 121 and MATH 116. Prerequisite: MATH 121, MATH 141, MATH 116, or MATH 120. LEC.

MATH 125. Calculus I. 4 Hours. N.
Limits, continuity and derivatives of algebraic, trigonometric, exponential and logarithmic functions. Curve sketching, optimization and other applications of the derivative. Antiderivatives, Riemann sums, the definite integral, and the fundamental theorem of calculus. Open for only 1
hour credit to students with credit in MATH 115. Not open for credit to students with credit in MATH 116, MATH 121, MATH 141, or MATH 145. Prerequisite: MATH 103 or MATH 104, with a grade of C- or higher; or 3 years of college preparatory mathematics including trigonometry, with a score of 28 or higher on the ACT Mathematics exam. LEC.

MATH 126. Calculus II. 4 Hours. N.
Volume, arc length, work and average value. Infinite sequences and series and Taylor series. Polar coordinates, vectors and the geometry of space. Open for only 2 hours credit to students with credit in MATH 116. Not open for credit to students with credit in MATH 122, MATH 142 or MATH 146. Prerequisite: MATH 116, MATH 121, MATH 125, MATH 141 or MATH 145, with a grade of C- or higher. LEC.

MATH 127. Calculus III. 4 Hours. N.
Multivariable functions, partial derivatives and their applications, multiple integrals and their applications. Vector-valued functions, line and surface integrals, Green, Gauss and Stokes Theorems. Open for only 2 hours credit to students with credit in MATH 122 or MATH 142. Not open for credit to students with credit in MATH 147, MATH 223 or MATH 243. Prerequisite: MATH 126 or MATH 146, with a grade of C- or higher. LEC.

MATH 141. Calculus I: Honors. 5 Hours. GE12 / N.
Differential and integral calculus and applications. Prerequisite: Three years of college preparatory mathematics including trigonometry, plus either (1) a score of 34 or more on ACT mathematics and a cumulative high school grade-point average of at least 3.5, or (2) a score of 32 or more on ACT mathematics and a cumulative high school grade-point average of at least 3.7. LEC.

MATH 142. Calculus II: Honors. 5 Hours. NM / N.
Transcendental functions, methods of integration, parametric equations, vector algebra and its applications to analytic geometry. Introduction to partial derivatives and multiple integration. Prerequisite: MATH 121, or equivalent, and invitation of the Department of Mathematics. LEC.

MATH 145. Calculus I, Honors. 4 Hours. N.
Limits, continuity and derivatives of algebraic, trigonometric, exponential and logarithmic functions. Curve sketching, optimization and other applications of the derivative. Antiderivatives, Riemann sums, the definite integral, and the fundamental theorem of calculus. Not open for credit to students with credit in MATH 116, MATH 121, MATH 125 or MATH 141. Prerequisite: An ACT Math score of 34 or more, or membership in the University Honors Program and an ACT Math score of 32 or higher. LEC.

MATH 146. Calculus II, Honors. 4 Hours. N.
Techniques of integration, including integration by parts. Applications of integration, including volume, arc length, work and average value. Infinite sequences and series and Taylor series. Polar coordinates, vectors and the geometry of space. Open for only 2 hours credit to students with credit in MATH 116. Not open for credit to students with credit in MATH 122, MATH 126 or MATH 142. Prerequisite: MATH 121, MATH 125, MATH 141 or MATH 145, with a grade of C- or higher; and invitation of the Department of Mathematics. LEC.

MATH 147. Calculus III, Honors. 4 Hours. N.
Multivariable functions, partial derivatives and their applications, multiple integrals and their applications. Vector-valued functions, line and surface integrals, Green, Gauss and Stokes Theorems. Open for only 2 hours credit to students with credit in MATH 122 or MATH 142. Not open for credit to students with credit in MATH 127, MATH 223 or MATH 243. Prerequisite: MATH 126 or MATH 146, with a grade of C- or higher; and invitation of the Department of Mathematics. LEC.

MATH 177. First Year Seminar: ______. 3 Hours. NM GE11.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in math. May not contribute to major requirements in math. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

MATH 197. Mathematical Workshops: ______. 1-3 Hours. U.
Offered to provide opportunities for deeper understanding of freshman-sophomore mathematics through interactive learning. Topics will vary. May be repeated for additional credit. Prerequisite: Variable. LAB.

MATH 200. Applied Differential Equations. 3 Hours. N.
Linear ordinary differential equations, Laplace transforms, systems of equations, and applications. Not open to those who have taken MATH 320. Prerequisite: MATH 122 or MATH 142, or MATH 126 or MATH 146 with grade of C- or higher; previous or concurrent enrollment in MATH 290 or MATH 291 recommended. LEC.

MATH 211. Applied Differential Equations, Honors. 3 Hours. N.
Linear Ordinary Differential Equations, Laplace Transforms, Systems of Equations, Enrichment Applications. Prerequisite: MATH 122 or MATH 142, or MATH 126 or MATH 146 with grade of C- or higher, and invitation from the Department of Mathematics; previous or concurrent enrollment in MATH 290 or MATH 291 recommended. Not open to students with credit in MATH 320. LEC.

MATH 221. Applied Differential Equations, Honors. 5 Hours. N.
Linear Ordinary Differential Equations, Laplace Transforms, Systems of Equations, Enrichment Applications. Prerequisite: Math 122 or Math 142 or equivalent, and invitation from the Department of Mathematics. LEC.

MATH 321. Basic Linear Algebra. 2 Hours. N.
Systems of linear equations, matrices, vector spaces, linear transformations, and applications. Not open to those who have taken MATH 590. Prerequisite: MATH 122 or MATH 142, or MATH 126 or MATH 146 with grade of C- or higher. LEC.

MATH 321. Elementary Linear Algebra, Honors. 2 Hours. N.
Systems of Linear Equations, Matrices, Vector Spaces, Linear Transformations, Enrichment Applications. Prerequisite: Math 122 or Math 142, or MATH 126 or MATH 146 with a grade of C- or higher, and invitation from the Department of Mathematics. Not open to students who have taken MATH 590. LEC.

MATH 326. Special Topics: ______. 1-3 Hours. U.
Designed for the study of special topics in mathematics at the freshman/sophomore level. May be repeated for additional credit; does not count toward the major or minor in mathematics. Prerequisite: Variable. LEC.

MATH 329. Directed Reading. 1-5 Hours. N.
Directed reading on a topic chosen by the student with the advice of an instructor. May be repeated for additional credit. Consent of the department required for enrollment. IND.

MATH 330. Elementary Differential Equations. 3 Hours. N.
Linear ordinary differential equations, series solutions. Laplace transforms. Systems of equations. Not open to those who have taken MATH 220. Prerequisite: MATH 223 or MATH 243, or MATH 127 or MATH 147 with a grade of C- or higher, and MATH 290 or MATH 291. LEC.

MATH 355. Elementary Statistics. 3 Hours. GE12 / N.
Elementary descriptive statistics of a sample of measurements; probability; the binomial, Poisson, and normal distributions, populations and sampling from populations; simple problems of statistical
inference. May not be counted for junior-senior credit toward a major in mathematics. Not open to students with credit in DSCI 202, BIOL 570, MATH 465, MATH 526, or MATH 628. Prerequisite: MATH 101, MATH 104, or two years of high school algebra and a score of 26 or higher on ACT mathematics, or a qualifying score on the mathematics placement test. LEC.

MATH 409. Topics in Geometry for Secondary and Middle School Teachers. 2 Hours. N.
Study of selected topics from Euclidean, non-Euclidean, and transformation geometry chosen to give breadth to the mathematical background of secondary and middle school teachers. May not be counted for junior-senior credit towards a major in mathematics. Prerequisite: MATH 122 or MATH 126 or MATH 142 or MATH 146. Students enrolled in MATH 409 must concurrently enroll in MATH 410. LEC.

MATH 410. Topics in History of Mathematics for Secondary and Middle School Teachers. 1 Hour. N.
Study of selected topics from mathematical history chosen to provide students with knowledge of major historical developments in mathematics including individual contributions and contributions from different cultures. These topics will include a historical development of Euclidean and non-Euclidean geometry. May not be counted for junior-senior credit towards a major in mathematics. Prerequisite: MATH 122 or MATH 126 or MATH 142 or MATH 146. Students enrolled in MATH 410 must concurrently enroll in MATH 409. LEC.

MATH 450. Discrete Mathematics. 3 Hours. N.
Basic topics in discrete mathematics including sets, logic, relations and functions, graphs and combinatorics. Advanced topics chosen from partially ordered sets and lattices, Boolean algebras, automata, game theory, coding theory, cryptography, optimization and enumeration. Prerequisite: MATH 290. LEC.

MATH 470. Problem Solving. 1-3 Hours. N.
An introduction to the general methods of solving mathematical problems. Particular techniques such as specialization, generalization, contradiction, and induction will be presented. Topics presented may vary from semester to semester. Prerequisite: MATH 122 or equivalent or concurrent enrollment in MATH 122 or MATH 127 or MATH 142 or MATH 147 or concurrent enrollment in MATH 127 or MATH 147. LEC.

MATH 500. Intermediate Analysis. 3 Hours. N.
A careful formulation of convergence and limits of sequences and functions; continuity and properties of continuous functions; differentiation; the Riemann integral; mean-value theorems and the fundamental theorem of calculus. Not open to students with credit in MATH 765. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 290 or MATH 291. LEC.

MATH 510. Introduction to the Theory of Computing. 3 Hours. N.
Finite state automata and regular expressions. Context-free grammars and push-down automata. Turing machines. Models of computable functions and undecidable problems. The course emphasis is on the theory of computability, especially on showing limits of computation. (Same as EECS 510.) Prerequisite: EECS 210 and upper-level EECS eligibility. LEC.

MATH 526. Applied Mathematical Statistics I. 3 Hours. NM / N.
A first course in statistics for students with the techniques of calculus at their disposal. The following topics are studied with illustrations and problems drawn from various fields of applications: basic notions of probability and probability distributions; classical estimation and testing procedures for one and two sample problems; chi-square test. Not open to those with credit in MATH 628 or DSCI 301. Prerequisite: MATH 122 or MATH 127 or MATH 142 or MATH 147 or MATH 116 (MATH 127 or MATH 147 recommended.) LEC.

MATH 530. Mathematical Models. 3 Hours. N.
An introduction to mathematical models useful in a large variety of scientific and technical endeavors. Topics include: model construction, Markov chain models, models for linear optimization, graphs as models, and game theory. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 290 or MATH 291. LEC.

MATH 540. Elementary Number Theory. 3 Hours. N.
Divisibility, primes and their distribution, the Euclidean algorithm, perfect numbers, Fermat's theorem, Diophantine equations, applications to cryptography. Prerequisite: MATH 122 or MATH 127 or MATH 142 or MATH 147. LEC.

MATH 542. Vector Analysis. 2 Hours. N.
Vector algebra; vector and scalar fields; line and surface integrals; theorems of Gauss, Green, and Stokes; curvilinear coordinates. Applications. Introduction to tensor analysis. Not open to those with credit in MATH 143. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 290 or MATH 291. LEC.

MATH 558. Introductory Modern Algebra. 3 Hours. N.
Development of the number systems. Polynomials. Introduction to abstract number systems such as groups and fields. Not open to students with credit in MATH 791. Prerequisite: MATH 290 or MATH 291. LEC.

MATH 559. Modern Geometries. 3 Hours. N.
Selected topics in Euclidean geometry. Synthetic and analytic projective geometry; duality, Desargues' theorem, perspectives, conics. Non-Euclidean and metric projective geometries. Prerequisite: MATH 122 or MATH 127 or MATH 142 or MATH 147. LEC.

MATH 581. Numerical Methods. 3 Hours. N.
An introduction to numerical methods and their application to engineering and science problems. Applied treatment of elementary algorithms selected from the subject areas: finding roots of a single nonlinear equation, numerical differentiation and integration, numerical solution of ordinary differential equations. Emphasis on implementing numerical algorithms using the computer. Not open to students with credit in MATH 781 or MATH 782. Prerequisite: MATH 220 and MATH 290, or MATH 320. LEC.

MATH 590. Linear Algebra. 3 Hours. N.
Vector spaces, linear transformations, and matrices. Canonical forms, Determinants. Hermitian, unitary and normal transformations. Not open to students with credit in MATH 792. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 290 or MATH 291. LEC.

MATH 591. Applied Numerical Linear Algebra. 3 Hours. N.
An introduction to numerical linear algebra. Possible topics include: applied canonical forms, matrix factorizations, perturbation theory, systems of linear equations, linear least squares, singular value decomposition, algebraic eigenvalue problems, matrix functions, and the use of computational software. Not open to students with credit in MATH 780 or MATH 782. Prerequisite: MATH 290 or MATH 291. EECS 138 or equivalent recommended. LEC.

MATH 596. Special Topics: ______. 1-3 Hours. N.
Arranged as needed to present appropriate material to groups of students. May be repeated for additional credit. Prerequisite: Variable. LEC.

MATH 597. Special Topics, Honors: ______. 3 Hours. AE61 / N.
A study of a specialized topic in mathematics. May be repeated for credit when the topic varies. Prerequisite: A previous Honors course in
Mathematics or permission of instructor. Other prerequisites depending on topic possible. LEC.

MATH 601. Algebraic Coding Theory. 3 Hours. N.
An introduction to error correcting codes. Included are: linear codes, cyclic codes, BCH codes, and convolutional codes. Prerequisite: MATH 290 or MATH 291. LEC.

MATH 605. Applied Regression Analysis. 3 Hours. N.
The matrix approach to regression. Weighted least squares, transformations, examination of residuals, model selection, and analysis of variance. Prerequisite: MATH 290 or MATH 291, and MATH 526 or MATH 628. LEC.

MATH 611. Time Series Analysis. 3 Hours. N.
An introduction to the theory and computational techniques in time series analysis. Descriptive techniques: trends, seasonality, autocorrelations. Time series models: autoregressive, moving average, ARIMA models; model specification and fitting; estimation, testing, residual analysis, forecasting. Stationary processes in the frequency domain: Fourier methods and the spectral density, periodograms, smoothing, spectral window. Prerequisite: MATH 122 and a calculus based statistics course. LEC.

MATH 624. Discrete Probability. 3 Hours. N.
Theory and applications of discrete probability models. Elementary combinatorial analysis, random walks, urn models, occupancy problems, and the binomial and Poisson distributions. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 290 or MATH 291. LEC.

MATH 627. Probability. 3 Hours. N.
Introduction to mathematical probability; combinatorial analysis; the binomial, Poisson, and normal distributions; limit theorems; laws of large numbers. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 290 or MATH 291. LEC.

MATH 628. Mathematical Theory of Statistics. 3 Hours. N.
An introduction to sampling theory and statistical inference; special distributions; and other topics. Prerequisite: MATH 627. LEC.

MATH 630. Actuarial Mathematics. 3 Hours. N.
This course is an introduction to some of the notions and computations in actuarial mathematics. Many computations are associated with compound interest with applications to bank accounts, mortgages, pensions, bonds, and annuities. Life contingencies are considered for annuities and insurance. Some introduction to option pricing is given, particularly the Black-Scholes formula. This course provides the background material needed for some of the initial examinations given by the societies for actuaries, including the Financial Mathematics Exam. Prerequisite: MATH 526 or MATH 627 or a comparable course in probability. LEC.

MATH 646. Complex Variable and Applications. 3 Hours. N.
Analytic functions of a complex variable, infinite series in the complex plane, theory of residues, conformal mapping and applications. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243. LEC.

MATH 647. Applied Partial Differential Equations. 3 Hours. N.
Boundary value problems; topics on partial differentiation; theory of characteristic curves; partial differential equations of mathematical physics. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 220 or MATH 221 or MATH 320. LEC.

MATH 648. Calculus of Variations and Integral Equations. 3 Hours. N.
Topics in the calculus of variations, integral equations, and applications. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 220 or MATH 221 or MATH 320. LEC.

MATH 650. Nonlinear Dynamical Systems. 3 Hours. N.
This course provides an introduction to nonlinear ordinary differential equations and dynamical systems theory with an emphasis on applications. Topics covered include the existence and uniqueness of solutions to initial value problems, as well as the qualitative behavior of solutions, including existence of equilibria, periodic and connecting orbits and their stability. Additional topics include an introduction to bifurcation theory and chaos. Prerequisite: MATH 122 or MATH 127 or MATH 142 or MATH 147, and MATH 220 or MATH 221 or MATH 320, and MATH 290 or MATH 291. LEC.

MATH 660. Geometry I. 3 Hours. N.
An introduction to modern geometry. Differential geometry of curves and surfaces, the topological classification of closed surfaces, dynamical systems, and knots and their polynomials. Other topics as time permits. Prerequisite: MATH 127 or MATH 147 or MATH 223 or MATH 243, and MATH 290 or MATH 291. LEC.

MATH 661. Geometry II. 3 Hours. N.
Continuation of Math 660. Prerequisite: MATH 660 or permission of instructor. LEC.

MATH 666. Special Topics: _____. 1-3 Hours. N.
Arranged as needed to present appropriate material to groups of students. May be repeated for additional credit. Prerequisite: Variable. LEC.

MATH 669. Directed Reading. 1-3 Hours. AE61 / N.
Directed reading on a topic chosen by the student with the advice of an instructor. May be repeated for additional credit. Consent of the department required for enrollment. IND.

MATH 701. Topics in Mathematics for Teachers: _____. 1-6 Hours.
Material, including both mathematical content and teaching methodology, related to classroom use at various levels, elementary through secondary. Topics may vary. May not be counted for junior-senior credit towards a major in mathematics, nor for graduate credit towards a graduate degree in mathematics. Prerequisite: Permission of instructor. RSH.

MATH 715. Sampling Techniques. 3 Hours.
Statistical methodology of survey sampling. Data analysis and estimation methods for various experimental designs; fixed or random sample sizes, pre-and/or post-stratified samples, and multistage sampling. Estimates of totals, means, ratios and proportions with methods of estimating variances of such estimates. Prerequisite: A post-calculus probability or statistics course. LEC.

MATH 717. Nonparametric Statistics. 3 Hours.
Methods requiring few assumptions about the populations sampled. Topics include quantile tests, tolerance limits, the sign test, contingency tables, rank-sum tests, and rank correlation. Prerequisite: MATH 628 or permission of instructor. LEC.

MATH 722. Mathematical Logic. 3 Hours.
Propositional calculus. First order theories and model theory. Elementary arithmetic and Godel's incompleteness theorems. (Same as EECS 722.) Prerequisite: MATH 665 or MATH 691, or equivalent evidence of mathematical maturity. LEC.

MATH 724. Combinatorial Mathematics. 3 Hours.
Counting problems, with an introduction to Polya's theory; Mobius functions; transversal theory; Ramsey's theorem; Sperner's theorem and related results. Prerequisite: MATH 290 and a math course numbered 450 or higher. LEC.

MATH 725. Graph Theory. 3 Hours.
Graphs; trees; connectivity; Menger's theorem; eulerian and hamiltonian graphs; planarity; coloring of graphs; factorization of graphs; matching
theory; alternating chain methods; introduction to matroids with applications to graph theory. Prerequisite: MATH 290 and a math course numbered 450 or higher. LEC.

MATH 727. Probability Theory. 3 Hours. A mathematical introduction to premeasure-theoretic probability. Topics include probability spaces, conditional probabilities and independent events, random variables and probability distributions, special discrete and continuous distributions with emphasis on parametric families used in applications, the distribution problem for functions of random variables, sequences of independent random variables, laws of large numbers, and the central limit theorem. Prerequisite: MATH 223 and MATH 290, or equivalent. LEC.

MATH 728. Statistical Theory. 3 Hours. N. Theory of point estimation and hypothesis testing with applications. Confidence region methodologies and relations to estimation and testing. Prerequisite: MATH 727 or equivalent. LEC.

MATH 735. Optimal Control Theory. 3 Hours. An examination of the mathematical methods of deterministic control theory is given by considering some specific examples and the general theory. The methods include dynamic programming, the calculus of variations, and Pontryagin's maximum principle. Various problems of linear control systems, e.g., the linear regulator problem, are solved. Prerequisite: MATH 320 or equivalent. LEC.

MATH 740. Number Theory. 3 Hours. Divisibility, the theory of congruences, primitive roots and indices, the quadratic reciprocity law, arithmetical functions and miscellaneous additional topics. Prerequisite: MATH 223 and MATH 290, or equivalent. LEC.

MATH 750. Stochastic Adaptive Control. 3 Hours. Stochastic adaptive control methods. Stochastic processes such as Markov chains and Brownian motion, stochastic integral, differential rule, stochastic differential equations, martingales and estimation techniques. Identification and control of discrete and continuous time linear stochastic systems. Specific applications and simulation results of stochastic adaptive control theory. Prerequisite: MATH 627 and some knowledge of control. LEC.

MATH 760. Complex Analysis I. 3 Hours. Cauchy's theorem and contour integration; the argument principle; maximum modulus principle; Schwarz symmetry principle; analytic continuation; monodromy theorem; applications to the gamma function and Riemann's zeta function; entire and meromorphic functions; conformal mapping; Riemann mapping theorem; univalent functions. Prerequisite: MATH 766 or concurrently with MATH 766. LEC.

MATH 761. Real Analysis and Measure Theory I. 3 Hours. Continuation of MATH 760. Prerequisite: MATH 760. LEC.

MATH 762. Numerical Analysis I. 3 Hours. Finite and divided differences. Interpolation, numerical differentiation, and integration. Gaussian quadrature. Numerical integration of ordinary differential equations. Curve fitting. (Same as EECS 781.) Prerequisite: MATH 320 and knowledge of a programming language. LEC.

MATH 763. Applied Numerical Methods for Partial Differential Equations. 3 Hours. Finite difference methods applied to particular initial-value problems (both parabolic and hyperbolic), to illustrate the concepts of convergence and stability and to provide a background for treating more complicated problems arising in engineering and physics. Finite difference methods for elliptic boundary-value problems, with a discussion of convergence and methods for solving the resulting algebraic system. Variational methods for elliptic problems. Prerequisite: MATH 647 or equivalent. LEC.

MATH 790. Linear Algebra II. 3 Hours. A theoretical course on the fundamental concepts and theorems of linear algebra. Topics covered are: vector space, basis, dimension, subspace, norm, inner product, Banach space, Hilbert space, orthonormal basis, positive definite matrix, minimal polynomial, diagonalization and other canonical forms, Cayley-Hamilton, spectral radius, dual space, quotient space. Prerequisite: MATH 590. LEC.

MATH 791. Modern Algebra. 3 Hours. This course includes the following topics: multiplicative properties of the integers and introductions to group theory, ring theory and field theory. Prerequisite: MATH 223 and MATH 290, or equivalent. LEC.

MATH 796. Special Topics: _____. 1-3 Hours. Arranged as needed to present appropriate material for groups of students. May be repeated for credit. Prerequisite: Variable. LEC.

MATH 799. Directed Readings. 1-3 Hours. Directed readings on a topic chosen by the student with the advice of an instructor. May be repeated for additional credit. Consent of the department required for enrollment. RSH.

MATH 800. Complex Analysis II. 3 Hours. Continuation of MATH 801. Prerequisite: MATH 800. LEC.

MATH 801. Complex Analysis II. 3 Hours. Continuation of MATH 800. Prerequisite: MATH 800. LEC.

MATH 802. Set Theory. 3 Hours. Axiomatic set theory; transfinite induction; regularity and choice; ordinal and cardinal arithmetic; miscellaneous additional topics (e.g., extra axioms such as GCH or MA; infinite combinatorics; large cardinals). Prerequisite: MATH 765 or MATH 791, or concurrent enrollment in MATH 765 or MATH 791, or equivalent evidence of mathematical maturity. LEC.

MATH 803. Real Analysis and Measure Theory II. 3 Hours. Continuation of MATH 810. Prerequisite: MATH 810. LEC.

MATH 804. Topology. 3 Hours. General topology. Set theory; topological spaces; connected sets; continuous functions; generalized convergence; product and quotient spaces; embedding in cubes; metric spaces and metrization; compact spaces; function spaces. Prerequisite: MATH 765. LEC.

MATH 805. Algebraic Topology I. 3 Hours. The fundamental group and covering spaces (including classification); compact surfaces; homology theory, computations (including homotopy invariance) and applications (including Brouwer fixed point theorem);
MATH 822. Algebraic Topology II. 3 Hours.
Review of simplicial homology; Lefschetz fixed point theorem and degree theory; singular, cellular, and axiomatic homology; Jordan Brouwer separation theorems; universal coefficient theorems, products in cohomology, homotopy groups, and the Hurewicz Theorem. Prerequisite: MATH 821. LEC.

MATH 824. Algebraic Combinatorics. 3 Hours.
An introduction to the fundamental structures and methods of modern algebraic combinatorics. Topics include partially ordered sets and lattices, matroids, simplicial complexes, polytopes, hyperplane arrangements, partitions and tableaux, and symmetric functions. Prerequisite: MATH 724 and MATH 791, or permission of the instructor. LEC.

MATH 830. Abstract Algebra. 3 Hours.
A study of some structures, theorems, and techniques in algebra whose use has become common in many branches of mathematics. Prerequisite: MATH 790 and MATH 791. LEC.

MATH 831. Abstract Algebra. 3 Hours.
Continuation of MATH 830. Prerequisite: MATH 830. LEC.

MATH 840. Differentiable Manifolds. 3 Hours.
Multilinear algebra of finite dimensional vector spaces over fields; differentiable structures and tangent and tensor bundles; differentiable mappings and differentials; exterior differential forms; curves and surfaces as differentiable manifolds; affine connections and covariant differentiation; Riemannian manifolds. Prerequisite: MATH 765 and MATH 790. LEC.

MATH 850. Differential Equations and Dynamical Systems. 3 Hours.
N.
Discrete and differentiable dynamical systems with an emphasis on the qualitative theory. Topics to be covered include review of linear systems, existence and uniqueness theorems, flows and discrete dynamical systems, linearization (Hartman-Grobman theorem), stable and unstable manifolds, Poincare sections, normal forms, Hamiltonian systems, and an introduction to bifurcation theory and chaos. Prerequisite: MATH 320 and MATH 766, or permission of instructor. LEC.

MATH 851. Topics in Dynamical Systems. 3 Hours. N.
Topics to be covered include complex dynamical systems, perturbation theory, nonlinear analysis of time series, chaotic dynamical systems, and numerical methods as dynamical systems. This course may be repeated for credit. Prerequisite: MATH 850 or permission of instructor. LEC.

MATH 855. Stochastic Processes I. 3 Hours.
Markov chains; Markov processes; diffusion processes; stationary processes. Emphasis is placed on applications: random walks; branching theory; Brownian motion; Poisson process; birth and death processes. Prerequisite: MATH 627 and MATH 765. LEC.

MATH 866. Stochastic Processes II. 3 Hours.
This is a second course in stochastic processes, focused on stochastic calculus with respect to a large class of semi-martingales and its applications to topics selected from classical analysis (linear PDE), finance, engineering, and statistics. The course will start with basic properties of martingales and random walks and then develop into the core program on Ito’s stochastic calculus and stochastic differential equations. These techniques provide useful and important tools and models in many pure and applied areas. Prerequisite: MATH 727 and MATH 865. LEC.

MATH 870. The Analysis of Variance. 3 Hours.
The general linear hypothesis with fixed effects; the Gauss-Markov theorem, confidence ellipsoids, and tests under normal theory; multiple comparisons and the effect of departures from the underlying assumptions; analysis of variance for various experimental designs and analysis of covariance. Prerequisite: MATH 628 or MATH 728, and either MATH 590 or MATH 790. LEC.

MATH 872. Multivariate Statistical Analysis. 3 Hours.
The multivariate normal distribution; tests of hypotheses on means and covariance matrices; estimation; correlation; multivariate analysis of variance; principal components; canonical correlation. Prerequisite: MATH 628 or MATH 728, and either MATH 590 or MATH 790. LEC.

MATH 874. Statistical Decision Theory. 3 Hours.
Game theory, admissible decision functions and complete class theorems; Bayes and minimax solutions; sufficiency; invariance; multiple decision problems; sequential decision problems. Prerequisite: MATH 628 and MATH 766. LEC.

MATH 881. Advanced Numerical Linear Algebra. 3 Hours. N.
Advanced topics in numerical linear algebra including pseudo-spectra, rounding error analysis and perturbation theory, numerical methods for problems with special structure, and numerical methods for large scale problems. Prerequisite: Math 781, 782, 790, or permission of the instructor. LEC.

MATH 882. Advanced Numerical Differential Equations. 3 Hours. N.
Advanced course in the numerical solution of ordinary and partial differential equations including modern numerical methods and the associated analysis. Prerequisite: MATH 781, 782, 783, or permission of the instructor. LEC.

MATH 889. Master's Research Component. 1-6 Hours.
RSH.

MATH 899. Master's Thesis. 1-10 Hours.
THE.

MATH 905. Several Complex Variables. 3 Hours.
Holomorphic functions in several complex variables, Cauchy’s integral for poly-discs, multivariable Taylor series, maximum modulus theorem. Further topics may include: removable singularities, extension theorems, Cauchy-Riemann operator, domains of holomorphy, special domains and algebraic properties of rings of analytic functions. Prerequisite: MATH 800. LEC.

MATH 910. Algebraic Curves. 3 Hours.
Algebraic sets, varieties, plane curves, morphisms and rational maps, resolution of singularities, Reimann-Roch theorem. Prerequisite: MATH 790 and MATH 791. LEC.

MATH 915. Homological Algebra. 3 Hours.
Injective and projective resolutions, homological dimension, chain complexes and derived functors (including Tor and Ext). Prerequisite: MATH 830 and MATH 831, or consent of instructor. LEC.
MATH 920. Lie Groups and Lie Algebras. 3 Hours.
General properties of Lie groups, closed subgroups, one-parameter subgroups, homogeneous spaces, Lie bracket, Lie algebras, exponential map, structure of semi-simple Lie algebras, invariant forms, Maurer-Cartan equation, covering groups, spinor groups. Prerequisite: MATH 766 and MATH 790 and MATH 791. LEC.

MATH 930. Topics in General Topology. 3 Hours.
Paracompact spaces, uniform spaces, topology of continua, Peano spaces, Hahn-Mazurkiewicz theorem, dimension theory, and theory of retracts. Prerequisite: MATH 820. LEC.

MATH 940. Advanced Probability. 3 Hours.
Probability measures, random variables, distribution functions, characteristic functions, types of convergence, central limit theorem. Laws of large numbers and other limit theorems. Conditional probability, Markov processes, and other topics in the theory of stochastic processes. Prerequisite: MATH 811. LEC.

MATH 950. Partial Differential Equations. 3 Hours.
Introduction; equations of mathematical physics; classification of linear equations and systems. Existence and uniqueness problems for elliptic, parabolic, and hyperbolic equations. Eigenvalue problems for elliptic operators; numerical methods. Prerequisite: MATH 766. LEC.

MATH 951. Advanced Partial Differential Equations II. 3 Hours.
The course uses functional analytic techniques to further develop various aspects of the modern framework of linear and nonlinear partial differential equations. Sobolev spaces, distributions and operator theory are used in the treatment of linear second-order elliptic, parabolic, and hyperbolic equations. In particular we discuss the kind of potential, diffusion and wave equations that arise in inhomogeneous media, with an emphasis on the solvability of equations with different initial/boundary conditions. Then, we will survey the theory of semigroup of operators, which is one of the main tools in the study of the long-time behavior of solutions to nonlinear PDE. The theories and applications encountered in this course will create a strong foundation for studying nonlinear equations and nonlinear science in general. Prerequisite: MATH 950 or permission of the instructor. LEC.

MATH 960. Functional Analysis. 3 Hours.
Topological vector spaces, Banach spaces, basic principles of functional analysis. Weak and weak-topologies, operators and adjoints. Hilbert spaces, elements of spectral theory. Locally convex spaces. Duality and related topics. Applications. Prerequisite: MATH 810 and MATH 820 or concurrent with MATH 820. LEC.

MATH 961. Functional Analysis. 3 Hours.
Continuation of MATH 960. LEC.

MATH 963. C*-Algebras. 3 Hours.
The basics of C*-algebras, approximately finite dimensional C*-algebras, irrational rotation algebras, C*-algebras of isometries, group C*-algebras, crossed products C*-algebras, extensions of C*-algebras and the BDF theory. Prerequisite: MATH 811 or MATH 960, or consent of instructor. LEC.

MATH 970. Analytic K-Theory. 3 Hours.
K0 for rings, spectral theory in Banach algebras, K1 for Banach algebras, Bott periodicity and six-term cyclic exact sequence. Prerequisite: MATH 790 and MATH 791 and MATH 960. LEC.

MATH 990. Seminar: ______. 1-10 Hours.
LEC.

MATH 993. Readings in Mathematics. 1-10 Hours.
RSH.

MATH 996. Special Topics: ______. 3 Hours.
Advanced courses on special topics; given as need arises. Prerequisite: Variable. LEC.

MATH 999. Doctoral Dissertation. 1-10 Hours.
THE.

Bachelor of Arts in Mathematics

Why study mathematics?
Because mathematics is a framework upon which humanity builds an understanding of the world.

Mathematics Programs

Separate programs lead to the B.A. in mathematics and the B.S. in mathematics. The B.A. has fewer mathematics course requirements and more general education requirements. The B.S. requires more mathematics courses, an applied mathematics concentration, and fewer general education courses. Students wishing to attend graduate school in mathematics or to pursue a career that makes substantial use of mathematics (as an actuary, for example) should get a B.S. in mathematics. Many students majoring in mathematics are interested in a liberal arts degree; such students may want to consider the B.A. in mathematics. Students who wish to teach mathematics in high school should pursue a B.A. or B.S. in mathematics while participating in the UKanTeach program (http://ukanteach.ku.edu).

Requirements for the B.A. Major

Mathematics Core Knowledge and Skills (20)
 Majors must complete courses as specified in each of the following areas:

<table>
<thead>
<tr>
<th>Calculus I</th>
<th>Satisfied by one of the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 125</td>
<td>Calculus I</td>
</tr>
<tr>
<td>or MATH 145</td>
<td>Calculus I, Honors</td>
</tr>
<tr>
<td>Calculus II</td>
<td>Satisfied by one of the following:</td>
</tr>
<tr>
<td>MATH 126</td>
<td>Calculus II</td>
</tr>
<tr>
<td>or MATH 146</td>
<td>Calculus II, Honors</td>
</tr>
<tr>
<td>Calculus III</td>
<td>Satisfied by one of the following:</td>
</tr>
<tr>
<td>MATH 127</td>
<td>Calculus III</td>
</tr>
<tr>
<td>or MATH 147</td>
<td>Calculus III, Honors</td>
</tr>
</tbody>
</table>

Elementary Linear Algebra. Satisfied by one of the following:

| MATH 290   | Elementary Linear Algebra         |
| or MATH 291| Elementary Linear Algebra, Honors |

Analysis. Satisfied by one of the following:

| MATH 500   | Intermediate Analysis             |
| or MATH 765| Mathematical Analysis I           |

Linear Algebra. Satisfied by one of the following:

| MATH 590   | Linear Algebra                    |
| or MATH 790| Linear Algebra II                 |

Math Sequence Requirement (6)

Majors must choose one of the following 2-course sequences.

<table>
<thead>
<tr>
<th>Probability &amp; Statistics. Satisfied by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 627 Probability</td>
</tr>
<tr>
<td>&amp; MATH 628 and Mathematical Theory of Statistics</td>
</tr>
</tbody>
</table>

Geometry. Satisfied by:
Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 30 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 15 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Below is a sample 4-year plan for students pursuing the BA in Mathematics. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

This degree plan assumes students will have the equivalent of MATH 101 prior to freshman year, fall semester.

Freshman

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Spring</th>
<th>Hours</th>
<th>Course</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 121 or 141 (Goal 1.2 Quant Req)</td>
<td>5 MATH 122 or 142 (Major Requirement)</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5 2nd Semester Language (BA Second Language)</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3 Goal 2.2 Communication</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sophomore

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 230 or 310 (Major Requirement)</td>
<td>3 MATH 590 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 231 or 241 (Major Requirement)</td>
<td>3 MATH 591 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3 Goal 3 Social Science</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Natural Science</td>
<td>3 Goal 4.2 Global Awareness</td>
<td>3</td>
</tr>
<tr>
<td>Lab Science (BA Lab Requirement)</td>
<td>1-2 Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
</tbody>
</table>

Junior

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 500 (Major Requirement)</td>
<td>3 Math Sequence Course</td>
<td>3</td>
</tr>
<tr>
<td>300+ (Major Requirement)</td>
<td>300+ (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Humanities</td>
<td>3 Math Elective or Sequence Course 300+ (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3 Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>
Elective or possible minor course 300+ (Total Hours) & 3 Elective or possible minor course 300+ (Total Hours) & 3 \\
Elective or possible minor course 300+ (Total Hours) & 3 Elective or possible minor course 300+ (Total Hours) & 3 \\

### Bachelor of Science in Mathematics

#### Why study mathematics?

Because mathematics is a framework upon which humanity builds an understanding of the world.

#### Mathematics Programs

Separate programs lead to the B.A. in mathematics and the B.S. in mathematics. The B.A. has fewer mathematics course requirements and more general education requirements. The B.S. requires more mathematics courses, an applied mathematics concentration, and fewer general education courses. Students wishing to attend graduate school in mathematics or to pursue a career that makes substantial use of mathematics (as an actuary, for example) should get a B.S. in mathematics. Many students majoring in mathematics are interested in a liberal arts degree; such students may want to consider the B.A. in mathematics. Students who wish to teach mathematics in high school should pursue a B.A. or B.S. in mathematics while participating in the UKanTeach program (http://ukanteach.ku.edu).

### Requirements for the B.S. Degree

#### First- and Second-Year Preparation (17)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 125</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 145</td>
<td>4</td>
</tr>
<tr>
<td>MATH 126</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 146</td>
<td>4</td>
</tr>
<tr>
<td>MATH 127</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 147</td>
<td>4</td>
</tr>
<tr>
<td>MATH 290</td>
<td>2</td>
</tr>
<tr>
<td>or MATH 291</td>
<td>2</td>
</tr>
</tbody>
</table>

Select one of the following:

- MATH 320 Elementary Differential Equations
- MATH 220 Applied Differential Equations
- MATH 221 Applied Differential Equations, Honors

#### Core Requirements (12)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 590</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 790</td>
<td>3</td>
</tr>
<tr>
<td>MATH 500</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 765</td>
<td>3</td>
</tr>
<tr>
<td>MATH 558</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 791</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

- MATH 526 Applied Mathematical Statistics I
- MATH 628 Mathematical Theory of Statistics
- MATH 728 Statistical Theory

#### Mathematics Concentration/Sequence Requirements (6-12)

Select one 2-course sequence from List A and a second 2-course sequence from either List A or List B

#### Electives (0-6)

Select up to 2 additional 3-credit-hour courses to complete a total of 24 credit hours of mathematics courses numbered MATH 450 and above.

### Departmental Honors

For undergraduate departmental honors, the student must satisfy the College requirements for honors, attain a grade-point average of 3.5 in all mathematics courses numbered 500 and above. The student must also complete two out of the following four sequences: MATH 727/728; MATH 765/766; MATH 781/782; and MATH 790/791, with a grade no lower than B- in each of these courses. The student must make a satisfactory oral presentation to the department, preferably on a topic related to his or her mathematics course work. Preparation should include enrollment in MATH 699 Directed Reading (for 1 or more credit hours) with a faculty mentor.
Bachelor of Science in Mathematics

Applied Concentration (8)
3 courses, totaling at least 8 credit hours, that make significant use of mathematics. At least 2 courses must be in the same area. Courses from List C have been approved for this requirement. Other upper-division courses making significant use of mathematics can be used for the applied concentration with the approval of a mathematics department advisor.

Note: Many of these courses have prerequisites that do not count toward the mathematics major.

Minimum Major Requirements
42 hours

Applied Concentration: 8 hours

General Education Requirements: 46-50 hours (Actual credit hours may be less because of overlap of Core Curriculum and degree-specific requirements.)

Completion of the University Core Curriculum

Writing (6)
ENGL 101 Composition (or exemption) 3
Select one of the following: 3
ENGL 102 Critical Reading and Writing (or exemption)
ENGL 105 Freshman Honors English (or exemption)

Computer Science (3-4)
Select one of the following: 3-4
EECS 138 Introduction to Computing: _____
EECS 168 Programming I
EECS 169 Programming I: Honors

Natural Science (7-10)
Select one course with laboratory 4-5
Select one additional course in a natural science other than mathematics 3-5

List A Sequences
MATH 627 Probability 6
& MATH 628 and Mathematical Theory of Statistics
MATH 660 Geometry I 6
& MATH 661 and Geometry II
MATH 727 Probability Theory 6
& MATH 728 and Statistical Theory
MATH 765 Mathematical Analysis I 6
& MATH 766 and Mathematical Analysis II
MATH 781 Numerical Analysis I 6
& MATH 782 and Numerical Analysis II
MATH 790 Linear Algebra II 6
& MATH 791 and Modern Algebra

List B Sequences
MATH 500 Intermediate Analysis 6
& MATH 646 and Complex Variable and Applications
MATH 526 Applied Mathematical Statistics I 6
& MATH 605 and Applied Regression Analysis
MATH 526 Applied Mathematical Statistics I 6
& MATH 611 and Time Series Analysis
MATH 540 Elementary Number Theory 6
& MATH 558 and Introductory Modern Algebra
MATH 558 Introductory Modern Algebra 6
& MATH 601 and Algebraic Coding Theory
MATH 540 Elementary Number Theory 6
& MATH 791 and Modern Algebra
MATH 581 Numerical Methods 6
& MATH 591 and Applied Numerical Linear Algebra
MATH 590 Linear Algebra 6
& MATH 790 and Linear Algebra II
MATH 601 Algebraic Coding Theory 6
& MATH 791 and Modern Algebra
MATH 605 Applied Regression Analysis 6
& MATH 611 and Time Series Analysis
MATH 646 Complex Variable and Applications 6
& MATH 647 and Applied Partial Differential Equations
MATH 646 Complex Variable and Applications 6
& MATH 765 and Mathematical Analysis I
MATH 647 Applied Partial Differential Equations 6
& MATH 648 and Calculus of Variations and Integral Equations
MATH 647 Applied Partial Differential Equations 6
& MATH 650 and Nonlinear Dynamical Systems
MATH 648 Calculus of Variations and Integral Equations 6
& MATH 650 and Nonlinear Dynamical Systems
MATH 724 Combinatorial Mathematics 6
& MATH 725 and Graph Theory

List C Applied Concentration Courses

Statistics (15)
MATH 605 Applied Regression Analysis 3
MATH 611 Time Series Analysis 3
MATH 624 Discrete Probability 3
ECON 817 Econometrics I 3
ECON 818 Econometrics II 3

Economics and Finance (42)
ECON 526 Introduction to Econometrics 3
ECON 590 Game Theory 3
ECON 620 Elements of Mathematical Economics 3
ECON 700 Survey of Microeconomics 3
ECON 701 Survey of Macroeconomics 3
ECON 715 Elementary Econometrics 3
ECON 716 Econometric Forecasting 3
FIN 310 Finance 3
FIN 410 Investment Theory and Applications 3
FIN 415 Corporate Finance 3
FIN 420 International Finance 3
FIN 425 Futures and Options 3
MATH 630 Actuarial Mathematics 3
SCM 310 Management Science and Operations Management 3

Biology (21)
BIOL 350 Principles of Genetics 4
BIOL 412 Evolutionary Biology 4
BINF 701 Bioinformatics I 5
BINF 702  Bioinformatics II  5  
BIOL 743  Population Genetics  3  

Physics and Astronomy (42)  
PHSX 313  General Physics III  3  
PHSX 511  Introductory Quantum Mechanics  3  
PHSX 518  Mathematical Physics  3  
PHSX 521  Mechanics I  3  
PHSX 531  Electricity and Magnetism  3  
ASTR 591  Stellar Astronomy  3  
ASTR 592  Galactic and Extragalactic Astronomy  3  
PHSX 621  Mechanics II  3  
PHSX 631  Electromagnetic Theory  3  
PHSX 655  Optics  3  
PHSX 671  Thermal Physics  3  
PHSX 691  Astrophysics I  3  
PHSX 711  Quantum Mechanics I  3  
PHSX 741  Nuclear Physics I  3  

Chemistry (10)  
CHEM 530  Physical Chemistry I  3  
CHEM 535  Physical Chemistry II  4  
CHEM 620  Analytical Chemistry  3  

Aerospace Engineering (28)  
AE 345  Fluid Mechanics  3  
AE 445  Aircraft Aerodynamics and Performance  3  
AE 507  Aerospace Structures I  3  
AE 545  Fundamentals of Aerodynamics  4  
AE 550  Dynamics of Flight I  4  
AE 551  Dynamics of Flight II  4  
AE 552  Honors Dynamics of Flight II  4  
AE 750  Applied Optimal Control  3  

Chemical and Petroleum Engineering (13)  
C&PE 211  Material and Energy Balances  3  
C&PE 511  Momentum Transfer  3  
C&PE 521  Heat Transfer  3  
C&PE 523  Mass Transfer  4  

Civil Engineering (34)  
CE 201  Statics  2  
CE 300  Dynamics  3  
CE 301  Statics and Dynamics  5  
CE 311  Strength of Materials  3  
CE 330  Fluid Mechanics  4  
CE 461  Structural Analysis  4  
CE 704  Dynamics and Vibrations  3  
CE 730  Intermediate Fluid Mechanics  3  
CE 461  Structural Analysis  4  
CE 704  Dynamics and Vibrations  3  

Electrical Engineering and Computer Science (56)  
EECS 211  Circuits I  3  
EECS 220  Electromagnetics I  4  
EECS 360  Signal and System Analysis  4  
EECS 420  Electromagnetics II  4  
EECS 444  Control Systems  3  
EECS 510  Introduction to the Theory of Computing  3  
EECS 560  Data Structures  4  
EECS 562  Introduction to Communication Systems  4  
EECS 638  Fundamentals of Expert Systems  3  
EECS 644  Introduction to Digital Signal Processing  3  
EECS 649  Introduction to Artificial Intelligence  3  
EECS 660  Fundamentals of Computer Algorithms  3  
EECS 662  Programming Languages  3  
EECS 672  Introduction to Computer Graphics  3  
EECS 718  Graph Algorithms  3  
EECS 730  Introduction to Bioinformatics  3  
EECS 744  Communications and Radar Digital Signal Processing  3  

Mechanical Engineering (20)  
ME 201  Statics  2  
ME 311  Mechanics of Materials  3  
ME 312  Basic Engineering Thermodynamics  3  
ME 508  Numerical Analysis of Mechanical Engineering Problems  3  
ME 510  Fluid Mechanics  3  
ME 612  Heat Transfer  3  
ME 682  System Dynamics and Control Systems  3  

Curriculum & Instruction (9)  
C&T 360  Knowing and Learning in Mathematics and Science  3  
C&T 366  Classroom Interactions in Mathematics and Science  3  
C&T 460  Project Based Instruction in Mathematics and Science  3  

Notes: A student using at least 2 statistics courses for the applied concentration must complete MATH 627 and MATH 628 (or MATH 727 and MATH 728) as a List A sequence. (MATH 627, MATH 628, MATH 727, and MATH 728 do not count for the applied concentration.) A student using at least 2 curriculum & instruction courses for the applied concentration must complete PHSX 211 as one of the natural science courses and must complete at least 1 of the geometry courses MATH 559, MATH 660, or MATH 661.

Courses used to satisfy the core requirements can also be used to complete List A and List B sequences. However, no course can be used for 2 List A or B sequences, and courses used for the Applied Concentration requirement cannot also be counted toward the 24 credit hours of advanced mathematics courses for the B.S. degree. Some courses satisfying the sequence requirements are taught infrequently. More advanced courses can be substituted for lower level courses in many cases. Consult the mathematics department for expected course offerings and substitutions.

Departmental Honors  
For undergraduate departmental honors, the student must satisfy the College requirements for honors, attain a grade-point average of 3.5 in all mathematics courses numbered 500 and above. The student must also complete two out of the following four sequences: MATH 727/728; MATH 765/766; MATH 781/782; and MATH 790/791, with a grade no lower than B- in each of these courses. The student must make a satisfactory oral presentation to the department, preferably on a topic related to his or her
Minor in Mathematics

Why study mathematics?

Because mathematics is a framework upon which humanity builds an understanding of the world.

Requirements for the Minor

The student must earn a grade point average of 2.0 in all mathematics courses attempted.

- Lower-Division Preparation: Calculus including MATH 127 or 147.
- Upper-Division Courses: 12 credit hours of courses numbered 300 and above (excluding MATH 365).

Note: Most upper-division mathematics courses have MATH 290 as a prerequisite.

Minimum Minor Requirements 18 hours

Master of Arts in Mathematics

Why study mathematics?

Because mathematics is a framework upon which humanity builds an understanding of the world.

Preparation for Graduate Study

Students who plan to attend graduate school in the mathematical sciences should speak to an advisor about the best preparation, depending on their goals. Students planning to enter a general mathematics graduate program are encouraged to take MATH 765, MATH 766, MATH 790 and MATH 791.

Graduate Programs

The department offers a graduate program leading to both the M.A. and Ph.D. degrees. A broad range of programs is possible in algebra, analysis, combinatorics, control theory, dynamical systems, geometry, numerical analysis, probability, statistics, partial differential equations, set theory, and topology.

The Department of Mathematics has a long tradition of excellence. The first Ph.D. granted at KU was in mathematics in the year 1895. Since then, the graduate program has been a central part of the department's research and teaching mission and an important component of its long-term planning. The department’s commitment to graduate education has boosted its recent growth in size and enhanced its reputation. Prospective students are encouraged to read additional information (http://www.math.ku.edu/academics/graduate.html) online.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

The minimum prerequisites for admission are an undergraduate degree from an accredited institution with a program of study in mathematics and a record of achievements that shows strong promise of success in graduate school. A 3.0 cumulative grade-point average in undergraduate studies and a 3.0 grade-point average in mathematics are required for admission.

A prospective student should have taken courses in mathematics at the undergraduate level in abstract algebra, linear algebra, and advanced calculus or introduction to analysis. Such courses should be comparable to KU courses numbered MATH 500, MATH 558, and MATH 590. It is also beneficial to students if they have minimum preparation in probability/statistics or numerical analysis (like KU courses MATH 627/MATH 628 and/or MATH 581). We also recommend that you take introductory courses in complex analysis, differential equations, and/or topology before considering graduate work in mathematics at KU (see for example KU courses numbered MATH 646 and MATH 647).

The department requires the general Graduate Record Examination for all incoming students. International students whose native language is not English also must fulfill English language requirements specified by university policies.

Applicants must submit a graduate application online (http://graduate.ku.edu/application-process). In addition the following required materials must be submitted online:

- Transcript from each college or university the applicant has attended (an official transcript must be sent upon acceptance and completion of degree),
- Applicant’s résumé/curriculum vitae,
- A list of the textbooks used in the mathematics courses beyond the calculus level that the applicant has taken,
- A statement of purpose indicating the applicant’s mathematical preferences and interests, and
- 3 letters of reference.

Official GRE scores and official Test of English as a Foreign Language scores must be sent to the department.

Incomplete applications will not be considered. The minimum admission requirements do not guarantee admission. The graduate committee of the Department of Mathematics evaluates candidates and makes recommendations to the Office of Graduate Studies regarding admission. The number of students admitted to the program changes from year to year, and admissions are competitive based on all application materials.

There are no additional application forms for financial support. Students are considered for support based on merit. Most of the students accepted by the program receive an offer of financial support in the form of a Graduate Teaching Assistantship. The number of GTAs available is limited. Further information about applications and admission (http://www.math.ku.edu/academics/graduate/admissions.html) is available online.

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Option 3 of the oral examination. Complete a research component and pass an oral examination. At least 24 of the 36 hours must be in courses numbered 700 or above. Course equivalents to MATH 727, MATH 765, MATH 781, MATH 790, or MATH 791 may be substituted if approved by the graduate studies committee. An M.A. candidate may, with prior approval of the chair of the graduate studies committee, substitute up to 9 hours of courses taught in other departments. Also, the 36 hours may include the credit (a minimum of 2 hours and a maximum of 6 hours) used to fulfill a research component (e.g., enrollment in MATH 896, MATH 899, MATH 990, MATH 993, or advanced courses). An M.A. candidate must demonstrate an ability to communicate mathematics both orally and in written form. In particular, an M.A. candidate not selecting the thesis option (MATH 899) is expected to write a technical report as part of his or her research component. Also, a candidate must give a short (30 to 60 minutes) presentation of her or his research in the first part of the oral examination. A proposed program of study must be submitted to the chair of the graduate studies committee at the earliest feasible time, preferably during the second semester of enrollment. The degree is awarded only on the basis of an approved program, which can, however, be revised.

**Doctor of Philosophy in Mathematics**

**Why study mathematics?**

Because mathematics is a framework upon which humanity builds an understanding of the world.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

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**Graduate Admission**

The minimum prerequisites for admission are an undergraduate degree from an accredited institution with a program of study in mathematics and a record of achievements that shows strong promise of success in graduate school. A 3.0 cumulative grade-point average in undergraduate studies and a 3.0 grade-point average in mathematics are required for admission.

A prospective student should have taken courses in mathematics at the undergraduate level in abstract algebra, linear algebra, and advanced calculus or introduction to analysis. Such courses should be comparable to KU courses numbered MATH 500, MATH 558, and MATH 590. It is also beneficial to students if they have minimum preparation in probability/statistics or numerical analysis (like KU courses MATH 627/MATH 628 and/or MATH 581). We also recommend that you take introductory courses in complex analysis, differential equations, and/or topology before considering graduate work in mathematics at KU (see for example KU courses numbered MATH 646 and MATH 647).
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Contact the department:

The University of Kansas
Department of Mathematics
Graduate Admissions Director
Snow Hall
1460 Jayhawk Blvd., Room 405
Lawrence, KS 66045-7514
admissions@math.ku.edu

Ph.D. Degree Requirements

In addition to general requirements, the department requires the student to meet the following requirements before being admitted to the comprehensive examination.

1. Pass 2 written qualifying examinations, 1 exam in either algebra or analysis and a second exam in either numerical analysis or probability/statistics and complete the required qualifying exam coursework. The qualifying examinations must be completed by the beginning of the student’s fifth semester. The qual course requirement must be met before taking the preliminary exam.
2. Pass 1 preliminary examination in an area close to the focus of the eventual doctoral dissertation. The preliminary examination must be completed by the beginning of the student’s eighth semester.
3. Satisfy the research skills and responsible scholarship requirement by demonstrating a working knowledge of a programming language such as C++ or FORTRAN and by completing the departmental training in responsible scholarship. To meet the research skills requirement students must complete an introductory programming language course approved by the graduate committee. Alternatively, students may complete an approved computing project demonstrating competence in either a programming language or the use of specialized software that supports the student's research.
4. Pass a set of required courses, differing in different tracks.

Note: Contact your department or program for more information about the qualifying exam coursework requirement, the research skills and responsible scholarship, and the current requirements for doctoral students. Current policies on Doctoral Research Skills and Responsible Scholarship are listed in the Graduate Studies section of the online catalog and in the KU Policy Library.

Pure Mathematics

This track requires:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 800</td>
<td>Complex Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 810</td>
<td>Real Analysis and Measure Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 830</td>
<td>Abstract Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 820</td>
<td>Introduction to Topology</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>MATH 821 Algebraic Topology I</td>
<td>3</td>
</tr>
</tbody>
</table>

Select an approved course in geometry, e.g.:

- MATH 840 Differentiable Manifolds
- MATH 910 Algebraic Curves
- MATH 920 Lie Groups and Lie Algebras

Applied Mathematics

This track requires:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 727</td>
<td>Probability Theory (or the corresponding qualifying examination)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 781</td>
<td>Numerical Analysis I (or the corresponding qualifying examination)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 800</td>
<td>Complex Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 810</td>
<td>Real Analysis and Measure Theory I</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

- MATH 881 Advanced Numerical Linear Algebra
  & MATH 882 Advanced Numerical Differential Equations
- MATH 865 Stochastic Processes I
  & MATH 866 Stochastic Processes II
- MATH 850 Differential Equations and Dynamical Systems
  & MATH 851 Topics in Dynamical Systems

Select one of the following:

- MATH 840 Differentiable Manifolds
- MATH 850 Differential Equations and Dynamical Systems
- MATH 950 Partial Differential Equations

Examination Preparation

Normally the work required to prepare a student for the oral comprehensive examination (and to do research) includes 1 or more semesters of advanced courses, directed readings, and seminars. In
the oral comprehensive examination, a student must show proficiency in the chosen area of mathematics. Precise areas of responsibility on this examination are discussed in detail with the advisory committee (the student’s advisor and two other members of the department’s Graduate Faculty).

The student must complete 4 additional courses at the 800 level or above before the final examination. Mathematics courses numbered 896, 899, 990, 993 and 999 may not be used to satisfy this requirement.

Department of Molecular Biosciences

Molecular Biosciences Graduate Programs

The department offers the Doctor of Philosophy and the Master of Arts in biochemistry and biophysics; microbiology; and molecular, cellular, and developmental biology. Programs in neurobiology and genetics also allow a research focus. Graduate students may pursue degree tracks in the disciplines of their choice but may also be involved in collaborative research. New students should confer with the graduate coordinator to plan a first-semester schedule. Until the student chooses a permanent advisor, the graduate coordinator advises him or her.

The department has established a level of enrollment appropriate for normal progress (course work and research effort) toward an advanced degree. These credit-hour requirements may exceed, but not fall below, minimum Graduate Studies requirements. A student must enroll full-time in residence for at least 2 regular academic-year semesters after the first year of graduate study. Nine credit hours constitute full-time enrollment. If the student holds a half-time research or teaching assistantship, 6 hours constitute full-time enrollment. The department expects graduate students who have not yet passed the comprehensive oral examination (including those with half-time assistantships) to enroll in at least 9 hours each semester and 3 hours each summer session. After passing the comprehensive oral examination, a doctoral candidate must be continuously enrolled, including summer sessions, until all degree requirements are completed. For the first 18 hours of post-comprehensive enrollment, the doctoral candidate must take a minimum of 6 hours a semester and 3 hours a summer session.

Graduate Teaching Assistantships and Graduate Research Assistantships are available. GTAs are appointed on a semester basis. GRAs are appointed on a semester, academic-year, or calendar-year basis.

During the first 2 semesters, a new Ph.D. graduate student follows a rotation schedule through 3 research laboratories. This program acquaints each student with the research conducted by each faculty member. Students then choose a home lab. This decision must be mutually agreed on with the major professor. Each graduate student must teach for at least 2 semesters.

(The B.S. degree in molecular biosciences (p. 1524) is offered on the KU Edwards Campus (http://edwardscampus.ku.edu/).

Courses

BIOL 100. Principles of Biology. 3 Hours. NB GE3N / N.
Intended for non-science majors. The basic concepts of biology at the cellular, organismal, and population levels of organization and their applications to humans and modern society. An honors section, BIOL 101, is offered for students with superior academic records. BIOL 100 and BIOL 102 (or BIOL 101 and BIOL 103, honors) satisfy the College natural science with laboratory requirement. Concurrent enrollment in BIOL 102 is recommended. LEC.

BIOL 101. Principles of Biology, Honors. 3 Hours. NB GE3N / N.
Intended for non-science majors with superior academic records. The basic concepts of biology at the cellular, organismal, and population levels of organization and their applications to humans and modern society. Concurrent enrollment in BIOL 102 or BIOL 103 is recommended. BIOL 101 and either BIOL 102 or BIOL 103 satisfy the College natural science with laboratory requirement. Prerequisite: Membership in the College Honors Program or consent of instructor. LEC.

BIOL 102. Principles of Biology Laboratory. 1 Hour. U.
Intended for non-science majors. Exercises are designed to give the student hands-on experience with selected topics from the associated lecture course (BIOL 100). An honors laboratory (BIOL 103) is offered for students with superior academic records. Prerequisite: Concurrent enrollment in BIOL 100 is recommended. LAB.

BIOL 103. Principles of Biology Laboratory, Honors. 1 Hour. U.
Intended for non-science majors with superior academic records. Exercises are designed to give the students hands-on experience with selected topics from the associated lecture course (BIOL 101). Prerequisite: Membership in the College Honors Program or consent of instructor. Concurrent enrollment in BIOL 101 is recommended. LAB.

BIOL 105. Biology Orientation Seminar. 1 Hour. N.
Introduces interested students to information about majoring in the biological sciences at the University of Kansas. Students learn about degree requirements, academic advising, research opportunities, and career options, as well as how to align academic and professional goals. Graded on a satisfactory/unsatisfactory basis. LEC.

BIOL 110. Microorganisms in Your World. 3 Hours. NB / N.
A course for students who are not science majors. Designed to acquaint students with some microbial activities which affect their lives. Includes the historical development of microbiology, the basic principles of microbial growth, disinfection, antibiotics, infection, and immunity; and some commercial, agricultural, and industrial uses of microorganisms. Emphasis is on infectious diseases. Not open to students with any credit in microbiology. May not be counted as a prerequisite for any other microbiology course. LEC.

BIOL 116. Introduction to Evolutionary Biology. 3 Hours. N.
An account of evolutionary thinking from classical to contemporary time. The emphasis is on mainstream developments (Darwinism, Mendelism, the Modern Synthesis, Cultural Ecology), but certain social issues will be examined (social Darwinism, creationism). LEC.

BIOL 120. Insects in Your World. 3 Hours. NB GE3N / N.
Students will learn about the global impact of insects on human concerns, both positive (pollination and decomposition) and negative (competition with humans for food, fiber, and shelter, and disease transmission) while developing an appreciation for the ways in which scientists work with real problems involving insects. The course will cover the overwhelming abundance and diversity of insects, and their life history, ecology, behavior, and physiology. This course is intended for both nonbiology and biology majors. Format: two lectures and one discussion section per week. LEC.

BIOL 150. Principles of Molecular and Cellular Biology. 4 Hours. NB GE3N / N.
An integrated lecture and laboratory course for biology majors and students planning to take additional courses in biology. This course covers basic biochemistry, cell structure and function, molecular biology, genetics, physiology, and development of plants and animals. Three
May be taken concurrently. LAB.
Laboratory exercises to complement BIOL 200. Prerequisite: BIOL 200.

BIOL 203. Introductory Microbiology Laboratory. 2 Hours. U.
Laboratory exercises to complement BIOL 200. Prerequisite: BIOL 200. May be taken concurrently. LAB.

BIOL 204. Basic Microbiology. 3 Hours. NB GE3N / N.
Introduction to bacteria and viruses. Topics include historical development of microbiology, bacterial structure and growth, enzymes and energy production, disinfection, antibacterial drugs, gene transfer, viral replication, infection and immunity, with emphasis on infectious diseases. Can be substituted for BIOL 201 as a prerequisite for other microbiology courses by consent of department. Not open to those with credit in BIOL 110, BIOL 201, BIOL 400, or BIOL 401. Prerequisite: A course in high school biology and a course in high school chemistry. This course is not recommended for first semester freshmen. LEC.

BIOL 207. First Year Seminar: _____. 3 Hours. NB GE11.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in biology. Does not contribute to major requirements in biology. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

BIOL 210. Introduction to Clinical Laboratory Sciences. 1 Hour. U.
An introductory overview of medical technology as a profession including types of analyses performed, specialties, interrelationships in the health care system and a visit to a clinical laboratory. This course will enable those considering a major in medical technology to have a clear definition of the profession. This course does not meet any degree requirements in biology. No prerequisite. (Same as CLS 210.) LEC.

BIOL 212. Genetics and Cell Biology. 4 Hours. NB GE3N / N.
A survey of the genetic and cell biology disciplines that form the foundation of modern biology. Topics include the basic principles of heredity, population genetics, molecular genetics, and cell biology. LEC.

BIOL 215. Plants Through Time. 3 Hours. NB / N.
Examines the evolution of plants and their environments from the origin of life to the present, including the historical development of the biosphere, mass extinctions (past and present), and social implications of future climate changes and deforestation. Not recommended for students with credit in GEOL 121. LEC.

BIOL 217. Cell Biology. 4 Hours. NB GE3N / N.
Introduction to the cell and its functions. Topics include the eukaryotic cell, and humans, and also various mass extinctions. The focus is on general scientific and evolutionary principles and mechanisms that can be extracted from the study of the fossil record. It also uses the lessons of the fossil record to consider the prospects for our own species. LEC.

BIOL 225. Evolution and the History of Life. 3 Hours. GE3N / N.
This introductory course for non-majors focuses on the significance of the history of life and the fossil record for our understanding of evolution. Key events in the history of life are considered, including the origins of life, the eukaryotic cell, and humans, and also various mass extinctions. The focus is on general scientific and evolutionary principles and mechanisms that can be extracted from the study of the fossil record. It also uses the lessons of the fossil record to consider the prospects for our own species. LEC.

BIOL 230. Fundamentals of Human Anatomy. 3 Hours. N.
Introduction to the gross anatomy of the human body. Covers the spatial arrangement and appearance of structures throughout the body, including visual identification of these structures. Musculoskeletal relationships, and the anatomy of major organ systems, are emphasized. Not intended for biology majors. Prerequisite: BIOL 100, or equivalent. LEC.

BIOL 240. Fundamentals of Human Anatomy. 3 Hours. N.
An introduction to the gross anatomy of the human body. Covers the spatial arrangement and appearance of structures throughout the body, including visual identification of these structures. Musculoskeletal relationships, and the anatomy of major organ systems, are emphasized. Not intended for biology majors. Prerequisite: BIOL 100, or equivalent. LEC.

BIOL 242. Human Anatomy Dissection Laboratory. 3 Hours. U.
One of the two laboratories in gross anatomy designed to complement BIOL 240. Provides an opportunity to develop a comprehensive three-dimensional understanding of anatomical structures and spatial relationships while gaining substantial dissection experience. Student perform supervised dissection of human cadavers. Limited to students enrolled in, or seeking admission to, programs that require a human anatomy observation laboratory. Prerequisite: Concurrent or prior enrollment in BIOL 240 is required. LAB.

BIOL 244. Principles of Human Physiology. 3 Hours. N.
An introduction to the physiological and biochemical processes and general physiological principles necessary to sustain life. Organ and organ system processes are emphasized. Intended for students majoring in allied health or sports related curricula who require a course in human physiology. Not intended for biology majors. Prerequisite: BIOL 100 or equivalent. LEC.

BIOL 247. Principles of Human Physiology Laboratory. 2 Hours. U.
Designed to complement BIOL 246. Uses experiments and simulations to demonstrate laboratory techniques and representative processes in areas of human physiology. Concurrent or prior enrollment in BIOL 246 required. LAB.
BIOL 350. Principles of Genetics. 4 Hours. N.
Why are related individuals more similar than unrelated individuals and what is the basis for inheritable traits? From Mendel's discoveries of the patterns of genetic inheritance, to the study of transmissible hereditary factors, genetics is central to understanding the biological sciences. Topics include molecular genetics and genetic engineering; Mendelian genetics and mapping; control of gene expression; cytotogenetics; epigenetics and non-Mendelian genetics; and population and quantitative genetics. Examples are taken from a wide variety of organisms, including viruses, bacteria, plants, fungi, insects, and humans. Prerequisite: Two semesters of college-level chemistry and BIOL 150 or BIOL 152; or consent of the instructor. LEC.

BIOL 360. Principles of Genetics, Honors. 4 Hours. N.
The science of genetics aims to explain why individuals differ from one another and how these differences are inherited. Honors Genetics covers all core topics in fundamental genetics: Mendelian inheritance, meiosis and recombination, mutation, molecular genetics, population genetics, quantitative genetics and genomics. Special attention given to the practice of genetics and the complex relationship between genotype, phenotype and environment. A broader goal of Honors Genetics is to provide students a framework for understanding recent advances in medical genetics and the modern era of personal genomics. Prerequisite: Two semesters of college-level chemistry and BIOL 150 or BIOL 152, membership in the University Honors Program; or consent of the instructor. LEC.

BIOL 400. Fundamentals of Microbiology. 3 Hours. NB GE3N / N.
Fundamental principles of microbiology with emphasis on physical and chemical properties of the bacterial cell; microbial metabolism, cultivation, growth and death of bacteria; microbial genetics, pathogenesis and immunity, industrially important microorganisms. Prerequisite: BIOL 150 or BIOL 151 and two semesters of college chemistry, or consent of the instructor. LEC.

BIOL 401. Fundamentals of Microbiology, Honors. 3 Hours. N.
Honors section of BIOL 400 and BIOL 612; by application and invitation. Prerequisite: BIOL 151, two semesters of college chemistry, and membership in the University Honors Program, or consent of the instructor. LEC.

BIOL 402. Fundamentals of Microbiology Laboratory. 2 Hours. U.
Laboratory exercises designed to complement BIOL 400 or BIOL 700. Prerequisite: BIOL 400 or BIOL 612, or BIOL 400 or BIOL 612 concurrently. LAB.

BIOL 405. Laboratory in Genetics. 2 Hours. U.
A laboratory program which includes written reports on fruit fly crosses, exercises on meiosis, probability and statistics, human genetics and computer simulations of genetics problems. Prerequisite: Concurrent or prior (preferred) enrollment in BIOL 350 or its equivalent. LAB.

BIOL 408. Physiology of Organisms. 3 Hours. N.
A comprehensive and integrative approach to the study of organisms with an emphasis on physiological, ecological, structural, and behavioral adaptations to differing environments. Prerequisite: BIOL 152 or BIOL 153 and CHEM 130 or CHEM 190 or CHEM 170; or consent of the instructor. LEC.

BIOL 409. Physiology of Organisms, Laboratory. 2 Hours. U.
The laboratory exposes the students to the structure and function of the major groups of animals and plants. Students use basic techniques of biological observation, such as microscopy and dissection, and experimental techniques to analyze plant and animal function. Prerequisite: Concurrent or prior enrollment in BIOL 408, or consent of the instructor. LAB.

BIOL 410. Human Biogeography, Honors. 3 Hours. N.
Principles of evolution and earth change are used to examine distributions of human populations, wealth, and resources. Readings from the current literature will be included. Lecture and discussion. (Same as GEOG 410.) Prerequisite: BIOL 152 or BIOL 153 or GEOG 107 and membership in the University Honors Program or consent of instructor. LEC.

BIOL 412. Evolutionary Biology. 4 Hours. N.
Introduction to the patterns and processes of organic evolution. Considered are the history of evolutionary thought, molecular evolution, genetics and microevolution, selection and adaptation, and speciation and macroevolution. Emphasis will be placed on how scientists study and document change over time in natural populations, methods for testing hypotheses about events in evolutionary history, and how discovering evolutionary mechanisms at one level of organization can help to explicate general processes in the natural world. Prerequisite: BIOL 152 and BIOL 350, or consent of the instructor. LEC.

BIOL 413. History and Diversity of Organisms. 3 Hours. N.
An integrated lecture and laboratory course presenting an overview of the variety and ancestry of life on earth. Using representatives from prokaryotes, protists, plants, fungi, and animals, principles of phylogenetic reconstruction are illustrated and evolutionary trends in the life history features, functional morphology, and structural complexity of extant and extinct organisms are presented. Two hours of lecture and three hours of laboratory per week. Prerequisite: BIOL 152 or BIOL 153, or consent of the instructor. LEC.

BIOL 414. Principles of Ecology. 3 Hours. N.
Study of the principles underlying species population density changes, community structure and dynamics, biogeochemical cycles, and energy flow and nutrient cycling in ecosystems. Prerequisite: BIOL 152 or BIOL 153, or consent of the instructor. LEC.

BIOL 415. Field and Laboratory Methods in Ecology. 2 Hours. N.
This course complements BIOL 414 with field trips and laboratory exercises that illustrate the basic concepts of ecology. Topics covered include methodologies for quantitative sampling of terrestrial and aquatic systems, design of field studies, computer simulation and digital data analysis techniques, and scientific writing. Prerequisite: Concurrent or prior enrollment in BIOL 414. A statistics course is recommended. FLD.

BIOL 416. Cell Structure and Function. 3 Hours. N.
Lecture survey of molecular cell biology with emphasis on experimental approaches to understanding cell function; topics include biological membranes and transmembrane transport, vesicular trafficking (secretion and endocytosis), cell signaling, cell motility and the cytoskeleton, and the regulation of the cell division cycle. Prerequisite: BIOL 150 or BIOL 151; BIOL 350 or BIOL 360; CHEM 130 or CHEM 190 or CHEM 170; and CHEM 135 or CHEM 195 or CHEM 175, or consent of the instructor. LEC.

BIOL 417. Biology of Development. 3 Hours. N.
A general course designed to introduce students to the developmental biology of animals. Emphasis is placed on understanding how a single-celled fertilized egg develops into a complex multicellular organism by the processes of cell division, differentiation, growth, and morphogenesis. Lectures stress experimental approaches to investigating development, including classic embryology and modern molecular genetics. Prerequisite: BIOL 350 or consent of the instructor. LEC.

BIOL 418. Laboratory in: _____. 1-3 Hours. U.
A varied program of laboratory and fieldwork designed to introduce students to investigative approaches in the study of the basic concepts of biological science. Students may enroll in more than one section. Prerequisite: BIOL 100, BIOL 101, BIOL 150, BIOL 151, or exemption.
Each section may have additional prerequisites to be determined by instructor. LAB.

**BIOL 419. Topics in: _____**. 1-3 Hours. N.
Courses on special topics in biology, given as need arises. May be lectures, discussions, readings, laboratory, or fieldwork. Students may select sections according to their special needs. IND.

**BIOL 420. Seminar: _____**. 1-3 Hours. N.
The preparation and presentation of oral reports on selected topics from the recent research literature. Students may choose one interest group each semester, but may enroll in a given interest group only once. Enrollment in each interest group limited to twenty students. Prerequisite: Course work varying with the topic of the seminar, or consent of instructor. LEC.

**BIOL 421. Topics in Molecular Biosciences: _____**. 3 Hours. N.
Lecture instruction and the preparation and presentation of oral and written reports on selected topics from the recent research literature in molecular biosciences. Students may enroll in a given topic only once. Prerequisite: Course work varying with the topic of the seminar; or consent of instructor. LEC.

**BIOL 423. Non-laboratory Independent Study.** 1-9 Hours. AE61 / N.
Original study in discussion or preparation of review papers on selected topics of current interest. May be undertaken only with the consent of the major advisor and of the faculty member who will guide the research. Prerequisite: Consent of instructor. IND.

**BIOL 424. Independent Study.** 1-9 Hours. AE61 / N.
Original study in laboratory or field in selected topics of current research interest. May be undertaken only with the consent of the major advisor and of the faculty member who will guide the research. Prerequisite: Consent of instructor. IND.

**BIOL 425. Teaching Apprenticeship in Biology.** 1-9 Hours. N.
Involvement as teaching assistant for a course in Biology. Credit hours shall not exceed the credits offered for the course being taught. May be undertaken only with the consent of the Director of Undergraduate Biology and of the faculty member who will teach the course. Prerequisite: Consent of instructor and Director of Undergraduate Biology. FLD.

**BIOL 426. Laboratory in Cell Biology.** 3 Hours. U.
Laboratory exercises will examine the function, organization, and composition of eukaryotic cells. Prerequisite: BIOL 150 or BIOL 151, CHEM 130 or CHEM 190 or CHEM 170; concurrent or prior enrollment in BIOL 416 or BIOL 536; or consent of the instructor. BIOL 350 or BIOL 360 is highly recommended. LAB.

**BIOL 428. Introduction to Systematics.** 3 Hours. N.
Basic elements of systematic theory and practice; phylogenetic reconstruction using morphological and molecular data; interpretation of phylogenetic hypotheses; principles of nomenclature and classification; evolutionary processes and patterns of species diversity; discussion of the aims and needs of taxonomy; species and speciation; construction of keys; significance of biological collections. Prerequisite: BIOL 152 or BIOL 153. Not intended for students with advanced systematics background. LEC.

**BIOL 430. Laboratory in Molecular Biology.** 3 Hours. U.
Practical experience in recombinant DNA technology and molecular cloning. Prerequisite: BIOL 416 or a course in biochemistry or microbiology. LAB.

**BIOL 432. Human Behavioral Genetics.** 3 Hours. S.
A survey of human behavioral genetics for upper division undergraduates. Emphasis is on how the methods and theories of quantitative, population, medical, and molecular genetics can be applied to individual and group differences in humans. Both normal and abnormal behaviors are covered, including intelligence, mental retardation, language and language disorders, communication, learning, personality, and psychopathology. (Same as ANTH 447, PSYC 432, SPLH 432.) Prerequisite: Introductory courses in biology/genetics or biological anthropology and psychology are recommended. LEC.

**BIOL 435. Introduction to Neurobiology.** 3 Hours. N.
Basic principles of neurobiology. The focus will be on the nature of communication among nerve cells and their targets. Topics will include the development, structure and function of nerve cells, chemistry of neurotransmission, processing and integration including the cellular and molecular basis of higher functions and neurological disorders. Prerequisite: BIOL 150 or BIOL 151. LEC.

**BIOL 440. Advanced Human Anatomy.** 6 Hours. N.
Integrated lecture and laboratory course designed to provide students with a detailed understanding of the structure of the human body. Cadaver dissection will reinforce three-dimensional relationships discussed in lecture and each of the main organ systems will be considered using a regional approach to the body. Prerequisite: BIOL 152 or equivalent; BIOL 240, BIOL 241, or BIOL 242; and instructor consent. LEC.

**BIOL 448. Kansas Plants.** 3 Hours. N.
A study of common and important non-cultivated Kansas plants, with special emphasis on the ecology of the state; paleoclimatic and paleobotanical background of the central prairies and plains; present climate, physiography and vegetation; poisonous, edible, and medicinal plants; identification by means of simplified keys. Prerequisite: BIOL 100, BIOL 101, BIOL 150, or BIOL 151 and BIOL 152 or BIOL 153. LEC.

**BIOL 449. Laboratory/Field Work in Human Biology.** 1-3 Hours. AE61 / N.
Faculty supervised laboratory or field research for Human Biology majors. Students design and complete a research project in collaboration with a Human Biology faculty member. (Same as ANTH 449, PSYC 449, and SPLH 449.) Prerequisite: Consent of instructor and Human Biology major. FLD.

**BIOL 454. Brain Diseases and Neurological Disorders.** 3 Hours. N.
Major brain diseases and neurological disorders such as stroke, Alzheimer's Disease, Parkinson's Disease, Huntington's Disease, Multiple Sclerosis, Epilepsy, Schizophrenia, etc., will be discussed in terms of the etiology, molecular, and cellular basis of potential therapeutic interventions. Graduate students are required to present original research paper assigned by the instructor to the class in addition to other assignments for all the students enrolled. Prerequisite: BIOL 150, or consent of instructor. LEC.

**BIOL 461. Biodiversity of the Rainforest.** 3 Hours. N.
An introduction to birds, bats, and plants of the rainforest, with emphasis on general characteristics of each of the taxa and their relationship to the tropical ecosystem, as well as their particular anatomy, ecology, behavior, and diversity. Field work focuses on identification of birds and bats (at species level), plants (at family level), and on capturing and preservation techniques. Taught in Golfito, Costa Rica. Contact Undergraduate Biology, or the Office of Study Abroad. Prerequisite: BIOL 150 or BIOL 151 and BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses are taught in Spanish; therefore, four semesters of Spanish are required. Summer courses are taught in English. LEC.

**BIOL 463. Introduction to Ornithology of the Tropics.** 4 Hours. N.
A theory and practice course on birds. Course covers morphology, reproduction, evolution, ecology, and behavior, as well as systematics of Costa Rican birds. Course includes field work on bird identification. Taught in Golfito, Costa Rica. Contact Undergraduate Biology, or the
Office of Study Abroad. Prerequisite: BIOL 150 or BIOL 151 and BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses are taught in Spanish; therefore, four semesters of Spanish are required. Summer courses are taught in English. LEC.

**BIOL 465. Marine Biology. 4 Hours. N.**
A theory and practice course on biotic relations, the role of organisms and marine biodiversity. It covers basic marine principles and physico-chemical processes (temperature, salinity, dissolved oxygen, nutrients, and pH in the water) and their effect on the abundance, and horizontal and vertical distribution of marine organisms. Course includes field work on data collection. Taught in Golfito, Costa Rica. Contact Undergraduate Biology, or the Office of Study Abroad. Prerequisite: BIOL 150 or BIOL 151 and BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses are taught in Spanish; therefore, four semesters of Spanish are required. Summer courses are taught in English. LEC.

**BIOL 467. Marine Resources Management. 3 Hours. N.**
A theory and practice course which focuses on the techniques used for monitoring the growth of fish, shrimp, and mollusks, with the purpose of understanding the variables that could produce the best yields. The course covers ecology (population growth, competition, predators, ecosystem dynamics), and fishery biology (growth, fish yield, capture efficiency) applicable in the field experiments. Taught in Golfito, Costa Rica. Contact Undergraduate Biology, or the Office of Study Abroad. Prerequisite: BIOL 150 or BIOL 151 and BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses are taught in Spanish; therefore, four semesters of Spanish are required. Summer courses are taught in English. LEC.

**BIOL 468. Fresh Water Ecology. 4 Hours. N.**
A theory and practice class on the study of rivers and lagoons. It includes systematics of rivers, lagoons, and reservoirs. Course includes theory and field work to monitor physical (stream topography, flow, edge vegetation), chemical (nutrients, temperature, pH levels, dissolved oxygen), and biological (collecting and identification of aquatic insects) conditions in rivers. Taught in Golfito, Costa Rica. Contact Undergraduate Biology, or the Office of Study Abroad. Prerequisite: BIOL 150 or BIOL 151 and BIOL 152 or BIOL 153, or equivalent. Fall and spring semester courses are taught in Spanish; therefore, four semesters of Spanish are required. Summer courses are taught in English. LEC.

**BIOL 477. Ecology and Global Change. 3 Hours. N.**
Humans influence both natural and managed ecosystems. This course studies the effects of climate change, land-use change, and reductions in biodiversity on ecosystems. Emphasis is placed on how biological and physical processes may be perturbed by human influences. Topics include the greenhouse effect, species extinctions, human disease expansion, and the effects of global change on agricultural productivity. A combination of lectures and discussion address issues from a scientific basis and link these ecological issues to our everyday lives and society as a whole. Prerequisite: BIOL 152, BIOL 153, or equivalent, or permission of instructor. LEC.

**BIOL 480. Biology and Diversity of Parasites. 3 Hours. N.**
Introductory lecture course to the field of Parasitology. Provides basic knowledge about the morphology and biology of parasitic animals. Coverage includes a diversity of protozoan and metazoan groups parasitizing animals, including humans (e.g., malaria, amoebas, hookworms, tapeworms). Some emphasis is given to groups of parasites of particular medical and/or economic importance. Selected principles of parasitism are introduced. Prerequisite: BIOL 152 or BIOL 153, or permission of instructor. LEC.

**BIOL 481. Parasitology Laboratory. 1 Hour. U.**
Laboratory course in the study of protozoan and metazoan parasites of animal, including humans, emphasizing their diversity, classification, morphology, and identification. One three-hour laboratory each week. Prerequisite: Concurrent or prior enrollment in BIOL 480. LAB.

**BIOL 494. Introduction to Mammalogy. 3 Hours.**
A study of mammals, with emphasis on evolution, biogeography, systematics, and natural history. Lectures, laboratory, and field study. Prerequisite: BIOL 152 or 153 or permission of instructor. LEC.

**BIOL 499. Introduction to Honors Research. 2 Hours. N.**
Intended for sophomores planning to enroll in the Biology Honors Program. Students interested in pursing Biology Honors discuss with Biology faculty members the rationale, methods, and interpretations of research being carried out in individual faculty labs to learn how scientific research is conducted. Prerequisite: At least 17 credit hours of college level natural sciences coursework or consent of instructor. LEC.

**BIOL 500. Biology of Insects. 3 Hours. N.**
Lectures and demonstrations providing an introduction to the study of insects, including general classification, structure, phylogeny, identification, development, physiology, behavior, ecology, and relations to human affairs. Prerequisite: BIOL 152, 153, or equivalent, or permission of instructor. LEC.

**BIOL 502. Laboratory in Insect Biology and Diversity. 2 Hours. U.**
Laboratory and field studies of insects, emphasizing their diversity, classification, ecological relationships, morphology, and behavior. Course provides practical application of principles covered in BIOL 500. Prerequisite: Concurrent or prior enrollment in BIOL 500 or the equivalent. LAB.

**BIOL 503. Immunology. 3 Hours. N.**
Lectures on the nature and mechanisms of natural and acquired resistance including humoral and cellular immunity. Characteristics of antigens and antibodies and of their interaction; ontogeny and cellular basis of immune responsiveness, hypersensitivity; specific immunologic tolerance. Not open to those with credit in BIOL 524. Prerequisite: BIOL 400 or BIOL 401, or consent of instructor. LEC.

**BIOL 504. Immunology Laboratory. 2 Hours. U.**
Laboratory designed to complement BIOL 503. Prerequisite: BIOL 503, or BIOL 503 concurrently. LAB.

**BIOL 505. Social Insects. 3 Hours. N.**
Lectures and laboratory demonstrations on presocial and social insects, specifically termites, ants, wasps, and bees. Emphasis will be placed on evolution of social behavior and the place of social insects in sociobiology. Prerequisite: BIOL 152, BIOL 153, or equivalent. LEC.

**BIOL 506. Pathogenic Microbiology. 3 Hours. N.**
Lectures. Characteristics and mechanisms of pathogenic microorganisms and disease processes. Elements of host-parasite interactions. Not open to freshmen or sophomores. Prerequisite: BIOL 503, or consent of instructor. LEC.

**BIOL 507. Pathogenic Microbiology Laboratory. 2 Hours. U.**
Laboratory to complement BIOL 506. Cultivation of pathogenic microorganisms, diagnostic procedures, and experiments to demonstrate various aspects of microbial pathogenicity and host responses. Prerequisite: BIOL 402 and BIOL 506 (or concurrent enrollment) or consent of instructor. LAB.

**BIOL 509. Biology of Spiders. 3 Hours. N.**
An introduction to the evolution, anatomy, physiology, behavior, and ecology of spiders and other arachnids. Special topics include the action of spider venoms; the composition and uses of silk; courtship
BIOL 510. Comparative Anatomy. 5 Hours. N.
Structure, function, and evolution of the vertebrates. Lectures and laboratory study. A course designed for zoologists. Prerequisite: BIOL 100, BIOL 101, BIOL 150, or BIOL 151 and BIOL 152 or BIOL 153. LEC.

BIOL 511. Biology of Spiders Laboratory. 1 Hour. U.
Topics will include comparative biology of arachnid orders (spiders, scorpions, harvestmen, mites, and others), external and internal anatomy of spiders, identification of common spider families and genera, and spider behavior. Students will be required to make a small collection (collect, preserve, and identify specimens). Prerequisite: BIOL 509; concurrent enrollment is preferred. LAB.

BIOL 512. General Virology. 3 Hours. N.
Lectures and discussions covering the basic nature and characteristics of viruses from a general biological point of view: viruses of bacteria, animals and plants, physical-chemical properties; host cell-viral interactions; modes of replication of DNA and RNA viruses, tumor viruses. Prerequisite: BIOL 400, BIOL 401 or consent of instructor. LEC.

BIOL 513. Virology Laboratory. 2 Hours. U.
Experiments involving cultivation, quantitation, and identification of animal viruses, continuous cell culture and primary chicken embryo culture techniques. Molecular biology techniques are used to demonstrate the steps in virus replication. The value of viruses as tools to understand normal cellular processes is emphasized in experiments which demonstrate the relative simplicity of viruses and the relative complexity of eukaryotic cells. Demonstrations include transformation of cells by tumor viruses and electron microscopy of virus particles. Prerequisite: BIOL 402 and BIOL 512, or consent of instructor. LAB.

BIOL 514. Principles of Ecology, Honors. 3 Hours. N.
Honors section of BIOL 414 for students with superior academic records. Course covers core concepts on the ecology of individuals, populations, communities, and ecosystems. Relative to BIOL 414, topics are presented in greater depth with increased student participation and stronger emphasis on the primary scientific literature. Prerequisite: BIOL 100, BIOL 101, BIOL 150, or BIOL 151 and BIOL 152 or BIOL 153. Open only to students admitted to the University Honors Program or by consent of instructor. LEC.

BIOL 516. Microbial Physiology. 3 Hours. N.
Elements of microbial physiology. Carbohydrate metabolism; enzymes and coenzymes; microbial nutrition; quantitative problems in microbial physiology; a survey of microbial metabolic types. Prerequisite: BIOL 400 or BIOL 612 and BIOL 402, and five hours of organic chemistry. LEC.

BIOL 517. Microbial Physiology Laboratory. 2 Hours. U.
Laboratory designed to complement BIOL 516. Prerequisite: BIOL 516, or BIOL 516 concurrently. LAB.

BIOL 518. Microbial Genetics. 3 Hours. N.
Bacteria and viruses as models of genetic systems. Mutagenesis and repair. Transformation, transductions, and recombination. Molecular biology of gene expression. Prerequisite: An introductory microbiology course. LEC.

BIOL 519. Microbial Genetics Laboratory. 2 Hours. U.
Laboratory designed to complement BIOL 518. Prerequisite: BIOL 402, BIOL 518, or BIOL 518 concurrently. LAB.

BIOL 520. Marine Biology. 3 Hours. N.
This introductory course covers biological, physical, and chemical ocean sciences, with an emphasis on ecological aspects. In addition to this Lawrence campus course, students may enroll for a supplementary 1 credit field trip class to a Caribbean coral reef island offered in December or January. Prerequisite: BIOL 414 or permission of the instructor. LEC.

BIOL 521. Insect Systematics. 4 Hours. N.
A study of the diversity of insects, including the classification of all living and fossil orders and the more common families primarily on the basis of external morphology. The biology, ecology, phylogeny, and geological history of each order is covered. Includes both lectures and laboratory exercises. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 500, BIOL 502 or equivalent, or permission of instructor. LEC.

BIOL 525. Aquatic Entomology. 4 Hours. N.
Designed to enable students to develop skill in the area of identification of aquatic insects and to gain a detailed comprehension of their community structure and dynamics. The external morphology of all aquatic orders is covered, followed by consideration of specific physiological and behavioral adaptations that facilitate an aquatic existence. Includes both lectures and laboratory exercises. Requirements include making a collection of aquatic insects. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 414 or BIOL 500. LEC.

BIOL 526. Insect Physiology and Internal Morphology. 3 Hours. N.
Mechanisms and integration of the internal life-supporting systems of insects, emphasizing the interdependence of structure and function. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 408 and BIOL 500, or permission of instructor. LEC.

BIOL 528. External Morphology of Insects. 4 Hours. N.
A study of external structure common to all insect orders, with detailed comparative laboratory studies of representative species. Includes both lectures and laboratory exercises. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 500, BIOL 502 or equivalent, or permission of instructor. LEC.

BIOL 529. Immature Insects. 3 Hours. N.
The classification, structure, and ecological distribution of immature insects, especially larvae of Holometabola. Includes both lectures and laboratory exercises. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 502 or permission of instructor. LEC.

BIOL 533. Biology of Fungi. 4 Hours. N.
A study of the major groups of fungi from slime molds to mushrooms. Emphasis on their activities in natural substrates, isolation techniques, parasitic and mutualistic relationships with other organisms, uses in research, industrial applications, production of mycotoxins and poisons, and physiological, genetic and reproductive behavior. Lectures, laboratory, and field trips. Prerequisite: BIOL 100, BIOL 101, BIOL 150, or BIOL 151 and BIOL 152 or BIOL 153. LEC.

BIOL 536. Cell Structure and Function (Honors). 3 Hours. N.
BIOL 536 is the honors version of BIOL 416. Completion of this class will satisfy the BIOL 416 requirement. Open to students in the Honors program or by permission of instructor. Prerequisite: BIOL 350 or consent of instructor. LEC.

BIOL 540. General Invertebrate Zoology. 4 Hours. N.
Phylogeny, physiology, and embryology; evolutionary processes; characteristics of major ecological groupings. Laboratory will consider
major taxonomic categories with emphasis on functional morphology and its evolutionary modifications. Prerequisite: BIOL 152 or BIOL 153. LEC.

BIOL 545. Evolution of Development. 5 Hours. N.
An advanced course designed to expose students to evolutionary change in the developmental patterning of plant and animal form. This course includes a lecture component and a laboratory component to integrate multiple biological disciplines including comparative morphology, molecular evolution, developmental genetics and experimental development, to explore biodiversity at a mechanistic level. Lectures are designed to give students background on topics ranging from homology assessment to empirical examples of how changes in gene expression or function may have shaped morphological diversity. The laboratory complements these topics through observations of normal development in a diversity of plant and animal model organisms, and through conducting independent research experiments. Prerequisite: BIOL 350 or equivalent. LEC.

BIOL 555. General Plant Physiology. 3 Hours. N.
The principal physiological processes of higher plants including photosynthesis, respiration, water relations, mineral nutrition, and factors associated with morphogenesis. Prerequisite: BIOL 408 or consent of instructor. LEC.

BIOL 560. Histology. 3 Hours. N.
Study of detailed microscopic anatomy of cells, tissues, and organs of mammals. Examples are drawn from normal and abnormal tissue, histochemistry, and electron microscopy. Lecture and demonstrations. A course in anatomy and physiology is highly recommended. Prerequisite: BIOL 152 or BIOL 153. LEC.

BIOL 570. Introduction to Biostatistics. 3 Hours. N.
Statistical concepts related to biological problems. Topics include the scientific method, data representation, descriptive statistics, elementary probability distributions, estimation and hypothesis testing, emphasizing the analysis of variation. Prerequisite: College algebra and ten hours of natural science. LEC.

BIOL 571. Introduction to Biostatistics Laboratory. 2 Hours. U.
Introductory statistical analyses on microcomputers. Data entry and export; simple graphs and exploratory data analysis; descriptive statistics; sampling; point and interval estimation; one and two sample t-tests; Chi-square; regression and correlation; analysis of variance; and nonparametric methods. Prerequisite: BIOL 570 or equivalent (may be taken concurrently). LAB.

BIOL 582. Principles of Biogeography. 3 Hours. N.
An introduction to the study of the distribution of life on earth. Covers geographical patterns of species diversity and the processes that give rise to those patterns: speciation, extinction, dispersal, vicariance, continental drift, ecological interactions, and phylogeny. Topics are presented within the framework of evolutionary history and include discussion of the biology of species on islands, terrestrial biomes, altitudinal zonation of species, latitudinal species gradients, historical factors governing species distributions, macroevolutionary trends in the fossil record, and application of modern molecular techniques for testing biogeographical hypotheses. Prerequisite: BIOL 152 or 153 and past or concurrent enrollment in BIOL 412, 413, 414, or 550; or permission of Instructor. LEC.

BIOL 583. Herpetology. 3 Hours. N.
A study of amphibians and reptiles. This lecture course will explore the taxonomic diversity of amphibians and reptiles, and current areas of active research in herpetology. Topics will be considered within a phylogenetic framework, and include discussion on systematics, biogeography, tetrapod origins, skeletal systems, growth, circulatory system, locomotion, thermal and water regulation, hibernation, ecology, sexual behavior, parental care, and mimicry. LEC.

BIOL 592. Ichthyology. 4 Hours. N.
A study of fishes. Lecture topics include the structure and adaptations of fishes to the aquatic environment and a survey of major fish groups with emphasis on their evolution and biogeography. Laboratory topics include a survey of fish diversity using specimens and the use of keys to identify fishes, with emphasis on the Kansas fish fauna. This course meets with BIOL 792. Students taking this course at the 700 level will have additional work required of them. Prerequisite: BIOL 152 and/or BIOL 413. LEC.

BIOL 593. Ornithology. 3 Hours. N.
A lecture and laboratory course on the biology, evolution, and diversity of birds. Prerequisite: BIOL 412 (or BIOL 413), or permission of instructor. LEC.

BIOL 594. Forest Ecosystems. 3 Hours.
Students learn basic concepts of forest productivity, forest water relations, forest hydrology, nutrient cycling, through soils and vegetation, nutrient uptake, carbon cycling, decomposition, linkages to aquatic ecosystems, and agents of disturbance to these cycles. The class spends a significant part of the semester exploring forest soil profiles and the challenges they present to different forest ecosystems. We discuss the function of forested ecosystems in a global context and identify and understand smaller-scale processes that drive forest function. Prerequisite: CHEM 135 or CHEM 195 or CHEM 175, and BIOL 414. LEC.

BIOL 595. Human Genetics. 3 Hours. N.
A lecture course providing balanced coverage of Mendelian and molecular genetics of humans; includes discussions and presentations on current issues in human and medical genetics. Prerequisite: BIOL 350. LEC.

BIOL 598. Research Methods. 3 Hours. N.
An introduction for pre-service teachers to the tools used by scientists to solve scientific problems. Topics include design of experiments and interpretation of their results, use of statistics, mathematical modeling, laboratory safety, ethical treatment of human subjects, writing scientific papers, giving oral presentations, and obtaining data from the scientific literature. Open only to students in the UKanTeach program. LEC.

BIOL 599. Senior Seminar: ______. 1 Hour. AE61 / N.
A synthesis and discussion of current trends in a discipline related to one of the degrees offered in the biological sciences. Emphasis is placed on providing seniors with an appreciation of the discipline’s state-of-the-art and on developing skills for success in the next stage of a career in the biological sciences. Topics depend on the associated degree program. Prerequisite: Must be taken in the final year of a degree and students must have completed most of the course work required for one of the degrees in the biological sciences. LEC.

BIOL 600. Introductory Biochemistry, Lectures. 3 Hours. N.
Designed to offer the essentials of the chemistry of the constituents of living organisms and the changes these constituents undergo (during life processes) in the human body and other living forms. Prerequisite: BIOL 150 or BIOL 151 and one semester of organic chemistry. LEC.

BIOL 601. Principles of Biochemistry Laboratory. 2 Hours.
Theory and methods in the development of protein separation and purification, enzyme structure/function, and enzyme kinetics derived from primary literature searches and readings. Prerequisite or Co-requisite: BIOL 600; or consent of instructor. LAB.

BIOL 602. Plant Ecology. 3 Hours. N.
Introduction to basic concepts, focused at community and species level. Architectural ecomorphology of plants and their physiological responses to physical factors: solar radiation, climate, and soils. Plant succession
as an interaction among species differing in ecomorphology and life style. Classification and ordination of plant communities: practice and theory. Other topics include: species diversity and lognormal distribution as to abundance classes; species/area relations and theory of island biogeography; allelochemic defenses; genealogy; paleoecology. Prerequisite: BIOL 414 or consent of instructor. Concurrent enrollment in parallel laboratory, BIOL 607, recommended. LEC.

BIOL 603. Systematic Botany. 3 Hours. N.
A lecture/laboratory course providing hands-on experience with plant identification, a history of plant classification, the principles of nomenclature and character analysis, the basics of systematics theory, and a phylogenically-oriented introduction to vascular plant diversity. Prerequisite: BIOL 413 or equivalent. LEC.

BIOL 606. Ecological Plant Physiology. 3 Hours. N.
Physiological responses of higher plants to environmental factors are discussed. Major topics are: water relations, heat transfer, resistance to water and temperature stress, dormancy, photoperiodism, photosynthesis and respiration under natural conditions, and effects of environmental pollution. Prerequisite: BIOL 408 or consent of instructor. LEC.

BIOL 607. Field and Laboratory Exercises in Plant Ecology. 2 Hours. U.
Introduction to quantitative analysis of plant communities and correlated environmental parameters; field and/or laboratory measurements of ecophysiological traits and comparative ecomorphology of principal species. Prerequisite: BIOL 414. Concurrent enrollment in parallel lecture, BIOL 602, recommended, but not required. LAB.

BIOL 609. Current Progress in Microbiology. 1 Hour. U.
A seminar course which will focus on current research in microbiology. A term paper will be required of each student. May be repeated for credit. Required of all majors in the senior year. Prerequisite: Two courses in microbiology. LEC.

BIOL 611. Molecular Systematics and Evolution. 4 Hours. N.
An introduction to the use of molecular data in systematics and population biology. Topics include: evolution of genes and proteins; properties of mitochondrial DNA, chloroplast DNA, ribosomal RNA genes, protein-coding genes, and repetitive DNAs; laboratory methods for data collection; and data analysis. Prerequisite: BIOL 350. BIOL 550 or equivalent is recommended. LEC.

BIOL 612. Fundamentals of Microbiology. 3 Hours. NB / N.
Lectures. Fundamental principles of microbiology with emphasis in physical and chemical properties of the bacterial cell; microbial metabolism, cultivation, growth and death of bacteria; microbial genetics; pathogenesis and immunity, industrially important microorganisms. Meets with BIOL 400, but students will be given additional and more advanced assignments, and will carry higher expectations. Prerequisite: BIOL 150 or BIOL 151 and two semesters of college chemistry, or consent of instructor. LEC.

BIOL 613. Biology of Honeybees. 3 Hours. N.
Social organization, evolution, behavior, morphology, communication, pollination biology, and ecology of honeybees. Experience will be gained with colony dynamics and behavior while working with bees in the field. Prerequisite: BIOL 152, BIOL 153, or consent of instructor. LEC.

BIOL 616. Medical Entomology. 3 Hours. N.
A study of the major human diseases transmitted by arthropods with emphasis on the biology and ecology of vectors, vector feeding mechanisms as related to disease transmission, epidemiology of arthropod-borne diseases, and the impact of arthropod-borne diseases on humans. Laboratory work on recognition of vector species, information sources, and use of taxonomic keys. Prerequisite: BIOL 152 or BIOL 153 and a course in microbiology or consent of instructor. LEC.

BIOL 622. Paleontology. 3 Hours. N.
A study of the structure and evolution of ancient life; the nature and diversity of life through time; the interactions of ancient organisms with their environments and the information that the study of fossils provides about ancient environments; the use of fossils to determine the ages of rocks and the timing of past events in earth history; and the patterns of extinction through time. (Same as GEOL 521.) Prerequisite: BIOL 100, BIOL 101, BIOL 152, BIOL 153, GEOL 105, or GEOL 304. LEC.

BIOL 623. Paleontology Laboratory. 1 Hour. U.
Laboratory course in the study of fossils with emphasis on the practice of paleontology and the morphology of ancient organisms. (Same as GEOL 523.) LAB.

BIOL 625. Behavioral Ecology and Sociobiology. 3 Hours. N.
The role of natural selection in animal behavior, and the influence of behavior on population biology and social dynamics of animal species. Topics include: game theory and optimization as applied to animal behavior; altruism, cooperation and competition; kin recognition and interactions; group formation and dynamics, dominance, aggression, and territoriality; feeding strategies; reproductive behavior including mate choice, parental care, and mating systems. Prerequisite: BIOL 152; either BIOL 350, BIOL 412 or BIOL 414 recommended; or consent of instructor. LEC.

BIOL 630. Conservation and Wildlife Biology. 3 Hours. N.
Examination of the concepts and processes involved in conservation of plant and animal populations and communities. Topics to be covered include conservation of endangered species, problems with invasions of exotic species and habitat fragmentation, wildlife management, and design of nature reserves. Prerequisite: BIOL 414, BIOL 412 strongly recommended. LEC.

BIOL 636. Biochemistry I. 3 Hours. N.
First semester of a two-semester lecture course in introductory biochemistry. Emphasis upon the physical structure of macromolecules and membranes, enzyme structure/function, and enzyme kinetics. Prerequisite: CHEM 335 or consent of instructor. LEC.

BIOL 637. Introductory Biochemistry Laboratory. 2 Hours. U.
The laboratory portion of BIOL 600 or 636. Experiments have been selected to introduce the student to cell constituents and biochemical reactions. One four-hour laboratory and one-hour lecture each week. Prerequisite: BIOL 600 or BIOL 636, or concurrent enrollment. LAB.

BIOL 638. Biochemistry II. 3 Hours. N.
Second semester of a two-semester lecture course in introductory biochemistry. Emphasis upon the metabolism of carbohydrates, lipids, amino acids, proteins, and nucleic acids. Prerequisite: BIOL 636. LEC.

BIOL 639. Advanced Biochemistry Laboratory. 2 Hours. U.
The laboratory portion of BIOL 638. One four-hour laboratory and a one-hour lecture each week. Experiments have been selected to familiarize students with experimental biochemical techniques using state-of-the-art methodology. Prerequisite: BIOL 637 and 638 (BIOL 638 may be taken concurrently). LAB.

BIOL 640. The Biology and Evolution of Fossil Plants. 3 Hours. N.
A lecture course in which fossil plants, protists and fungi are examined throughout geologic time. Emphasis will be directed at paleoecology, biogeography and the stratigraphic distribution and composition of ancient floras. (Same as GEOL 528.) Prerequisite: BIOL 413 or permission of instructor. LEC.
BIOL 641. Laboratory in Paleobotany. 1 Hour. U.
An examination of selected fossil plants throughout geological time and the techniques used to study them; laboratory will include identification and the use of plant fossils in biostratigraphy. (Same as GEOL 529.) Prerequisite: BIOL 413 or permission of instructor. Must be taken concurrently with BIOL 640. LAB.

BIOL 644. Comparative Animal Physiology. 3 Hours. N.
Lecture and discussion of the basic mechanism of organic maintenance and integration; a comparative treatment of the uniformities and diversity of animal function; emphasis on environmental adaptations and evolutionary relationships. Prerequisite: BIOL 152 or BIOL 153, and a course in organic chemistry, or consent of instructor. A college physics course is recommended but not required. LEC.

BIOL 646. Mammalian Physiology. 4 Hours. N.
Lectures and demonstrations. An intermediate course in the functions, mechanisms and interactions of mammalian organ systems. Discussions span topics from molecular to whole animal functions. Required for pharmacy students and strongly recommended for students planning advanced work in any area of physiology. The student is assumed to have the knowledge and ability to utilize their math and science background. Prerequisite: Five hours of organic chemistry, a course of college physics. LEC.

BIOL 647. Mammalian Physiology Laboratory. 2 Hours. U.
Laboratory experiments in representative areas of mammalian physiology designed to complement BIOL 646. Not open to students with credit in BIOL 247. Prerequisite or Co-requisite: BIOL 646. LAB.

BIOL 648. Systematics and Macroevolution. 3 Hours. N.
An introduction to the theory of macroevolution and the fundamental principles of systematics. Intended for students planning to pursue advanced studies in organismal biology, evolution, and/or systematics. Topics in macroevolution will include hierarchy theory, species concepts, speciation and species selection. Methods of phylogenetic estimation will be discussed and include parsimony, Maximum likelihood and Bayesian inference. Evolutionary studies utilizing phylogenies including tests of homology, studies of character evolution, and biogeography will be discussed. An overview of classification and nomenclature will also be provided. Prerequisite: BIOL 412 or equivalent. LEC.

BIOL 650. Advanced Neurobiology. 3 Hours. N.
The course builds an in depth knowledge about basic mechanisms of synaptic communication among nerve cells and their targets, and the structure and function of nervous systems. Topics include nervous system development and synapse formation, structure and function of neurons, physiological and molecular basis of synaptic communication between neurons, mechanisms of synaptic plasticity involved in learning and memory, sensory systems (vision, auditory, vestibular, motor reflexes and pain), processing of neural information at cellular and system levels, synapse regeneration and diseases of the nervous system. Prerequisite: BIOL 435 (Introduction to Neurobiology), or consent of instructor. LEC.

BIOL 652. Comparative Animal Behavior. 3 Hours. N.
A comparative analysis of behavior as an adaptive mechanism; emphasis on ontogenetic and evolutionary aspects of behavior. Prerequisite: BIOL 152 or BIOL 153; and BIOL 412. Alternatively, BIOL 412 may be taken as a corequisite. LEC.

BIOL 654. Comparative Animal Behavior, Laboratory. 1 Hour. U.
Laboratory and field phase of BIOL 652. Students may elect sections according to their special interests. Prerequisite: Prior or concurrent enrollment in BIOL 652. LAB.

BIOL 655. Behavioral Genetics. 3 Hours. N.
A survey of behavioral genetics in animals and humans. Emphasis is on how the methods and theories of quantitative, population and molecular genetics can be applied to individual and group differences in animals. Behaviors covered may include circadian rhythms, foraging, courtship, learning and memory, anxiety, social structures and human behaviors. Prerequisite: BIOL 350 or consent of instructor. LEC.

BIOL 656. Ecosystem Ecology. 3 Hours. N.
An introduction to the patterns and processes that affect terrestrial ecosystems. Emphasis is placed on understanding nutrient cycles (e.g., carbon nitrogen phosphorous), hydrologic cycles, and patterns of net primary productivity. The role of both natural and anthropogenic disturbances in structuring terrestrial ecosystems is examined in the context of global land-use patterns. Discussion of current research literature will be expected. (Same as EVRN 656.) Prerequisite: BIOL 414 and CHEM 130. LEC.

BIOL 661. Ecology of Rivers and Lakes. 3 Hours. N.
Study of the ecology and structure of creeks, rivers, ponds, lakes, and wetlands as well as some of the major human impacts. Prerequisite: One year of biology or permission of the instructor. BIOL 414 recommended. LEC.

BIOL 662. Aquatic Ecology Laboratory. 2 Hours. U.
A field and laboratory course introducing biological, physical, and chemical characteristics of lentic (ponds and lakes) and lotic (creeks and rivers) habitats. Students learn sampling and monitoring techniques and how to classify aquatic biota at higher taxonomic levels. Co- or prerequisite: CHEM 130 or CHEM 190 or CHEM 170, and BIOL 661. LAB.

BIOL 664. Vertebrate Biology. 3 Hours. N.
A laboratory course emphasizing principles of systematics and identification and the behavioral ecology of local vertebrate animals. Prerequisite: BIOL 152, BIOL 153 or consent of instructor. LAB.

BIOL 667. Chemical Communication in Sex, Feeding, and Fighting. 3 Hours. N.
The course focuses on the role of chemical information molecules in the interrelationships among organisms, with particular attention to interactions (a) within and between animal species, (b) within and between plant species, (c) between animals and plants, (d) between predators and prey, and (e) between parasites and hosts. Prerequisite: BIOL 100 or BIOL 101 or BIOL 152 or BIOL 153 or consent of instructor. LEC.

BIOL 668. Evolutionary Ecology. 3 Hours. N.
Emphasis will be on the themes that interface ecology and evolutionary studies. Topics will include selection theory; reproductive, foraging, and sex allocation problems; coevolution; patterns or morphological and behavioral adaptations; competition, predation, and population regulation. Special attention will be given to the philosophy and practice of resolving unanswered questions in evolutionary ecology. Prerequisite: BIOL 412 or permission of instructor. LEC.

BIOL 669. Biology of Freshwater Invertebrates. 3 Hours. N.
A lecture, field, and laboratory course examining the classification, biological characteristics, and ecology of invertebrates in lotic and lentic habitats. Major groups of benthic and planktonic invertebrates will be studied, including aquatic insects, crustaceans, molluscs, and others. Prerequisite: BIOL 540, BIOL 660, BIOL 661, or BIOL 663, or permission of instructor. LEC.

BIOL 672. Gene Expression. 3 Hours. N.
A study of the structure and expression of genes in prokaryotes and eukaryotes. Emphasis on the mechanisms of DNA, RNA, and protein
biosynthesis. Prerequisite: A course in biochemistry or consent of instructor. LEC.

BIOL 673. Cellular and Molecular Neurobiology. 3 Hours.
Mechanisms of neural function and development will be considered at the cellular and molecular levels. Synaptic mechanisms of learning and memory, modulation of transmitter release, and the molecular basis of neurodegenerative disorders will also be discussed. Prerequisite: BIOL 435, BIOL 646, or permission of instructor. LEC.

BIOL 676. Mammalian Neuroanatomy. 3 Hours. N.
Lectures, video tape demonstrations, and laboratory dissection of mammalian nervous system with some attention to human material. Major emphasis on nervous system structure as it relates to function. For neurobiology and pre-health science majors. Prerequisite or Corequisite: A course in neurobiology (BIOL 435, BIOL 650), or permission of the instructor. LAB.

BIOL 688. The Molecular Biology of Cancer. 3 Hours. N.
The basic concepts of molecular biology are examined and used to probe the process by which a normal cell becomes a cancer cell. The course investigates DNA damage and repair, chemical carcinogenesis, gene cloning and manipulation, the control of gene expression in eukaryotes, viral viruses, the roles of oncogenes and tumor suppressor genes in carcinogenesis, and cancer therapy. Prerequisite: BIOL 350 and BIOL 416; or BIOL 536, or consent of instructor. LEC.

BIOL 694. The Art of Becoming a Professional Scientist. 3 Hours. N.
Discusses aspects of graduate education that are directed at students entering graduate school and that focus on how to be successful in the post PhD phases of a career, but that must be initiated early in the graduate student program of study. One three hour discussion per week. Senior standing and planning on entering graduate school. LEC.

BIOL 695. Animal Communication and Sensory Ecology. 3 Hours. N.
Lectures and discussion sessions. A study of the propagation and perception of olfactory, acoustic, and visual signals produced by animals in the context of communication. Both physiological and evolutionary perspectives will be treated. Prerequisite: A course in behavior or consent of instructor. LEC.

BIOL 699. Biology Honors Research Colloquium. 1 Hour. AE61 / U.
Students pursuing Honors in Biology will meet weekly to discuss, both formally and informally, their honors research. Background information and experimental approaches of the research will be examined and critiqued. Prerequisite: Enrollment in Biology Honors program and consent of instructor. LEC.

BIOL 700. Conservation Principles and Practices. 3 Hours.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects will also be considered. (Same as AMS 714, GEOL 780, HIST 722 and MUSE 706.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 701. Topics in: ____. 1-3 Hours.
Advanced courses on special topics in biology, given as need arises. Lectures, discussions, readings, laboratory, or field work. Students may select sections according to their special interests. LEC.

BIOL 702. Laboratory Practice: Radiation Safety Procedures. 0.75 Hours.
An introduction to the basic properties of radioisotopes, and the fundamental safety practices needed for the safe use of low levels of radioactive materials. Risks associated with radiation exposures and applicable state and federal regulations are discussed. (Normally the content of the first ten hours of BIOL 703.) Prerequisite: Senior standing in one of the sciences. LAB.

BIOL 703. Radioisotopes and Radiation Safety in Research. 1.25 Hour.
An introduction to the properties of radioactive materials, radiations, and their interaction with matter, methods of radiation detection and measurement, protective measures, applicable state and federal regulations, design and implementation of safety management systems in the research laboratory, design of tracer experiments, and the risks associated with radiation exposure. Prerequisite: BIOL 702 or concurrent enrollment in BIOL 702, algebra and two semesters of either physics or chemistry. LEC.

BIOL 704. Research Animal Methods. 3 Hours.
Lectures, discussions, and laboratory sessions. Selection of proper animal models for specific research studies. Various external influences that alter research data. Routine techniques including restraint, sample collection, injection, anesthesia and euthanasia. Prevention and handling of common research animal problems or diseases. Proper and humane animal care as defined by the Federal Animal Welfare Act. Prerequisite: Senior or graduate standing in one of the biological sciences or permission of instructor. LEC.

BIOL 706. Current Trends in Curation and Collection Management. 2 Hours.
Seminar course to provide students with a working knowledge of the primary issues and current trends in building, administration, and care of scientific collections. Topics include permits, collecting, accessioning, cataloging, preservation, preventive conservation, and access to collections and data. The course format consists of readings, lectures, guest speakers, discussions, and visits to scientific collections on campus. (Same as MUSE 710.) LEC.

BIOL 708. External Morphology of Insects. 4 Hours.
A study of external structure common to all insect orders, with detailed comparative laboratory studies of representative species. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 500, BIOL 502 or equivalent, or permission of instructor. LEC.

BIOL 709. Immature Insects. 3 Hours.
The classification, structure, and ecological distribution of immature insects, especially larvae of Holometabola. Includes both lectures and laboratories. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 502 or consent of instructor. LEC.

BIOL 710. Insect Development. 3 Hours.
A study of the embryonic and postembryonic development of insects. Emphasis is placed on developmental physiology of the early embryonic stages, the morphogenesis of organ systems, and the action of hormones in postembryonic development. Laboratory includes demonstrations and histological and experimental work. Prerequisite: Consent of instructor or BIOL 500. LEC.

BIOL 711. Insect Systematics. 4 Hours. N.
A study of the diversity of insects, including the classification of all living and fossil orders and the more common families primarily on the basis of external morphology. The biology, ecology, phylogeny, and
BIOL 518 and MCRB 510. Graduate students will be assigned additional biology of gene expression. This course is the graduate-level section of repair. Transformation, transductions, and recombination. Molecular Bacteria and viruses as models of genetic systems. Mutagenesis and instructor. LEC.

Prerequisite: Upper division or graduate standing and permission of given to preparation of photographs for publication and oral presentations. Attention and poster presentations. Emphasis on basic drafting and layout skills, preparation of illustrations for scientific publications, theses, and oral and written interpretation. Modern instrumentation, including use of computer-aided analysis of images as well as conventional photographic techniques will be included. Prerequisite: BIOL 418 or BIOL 408 and BIOL 510, or permission of instructor. LEC.

BIOL 720. Scientific Illustration. 3 Hours.
Lectures, demonstrations, and studio participation. Instruction in the preparation of illustrations for scientific publications, theses, and oral and poster presentations. Emphasis on basic drafting and layout skills, and pen and ink and tone renderings intended for publication. Attention given to preparation of photographs for publication and oral presentations. Instruction provided in use of specialized optical equipment for drawing. Prerequisite: Upper division or graduate standing and permission of instructor. LEC.

BIOL 721. Microbial Genetics. 3 Hours.
Bacteria and viruses as models of genetic systems. Mutagenesis and repair. Transformation, transductions, and recombination. Molecular biology of gene expression. This course is the graduate-level section of BIOL 518 and MCRB 510. Graduate students will be assigned additional and more advanced studies. Prerequisite: An introductory microbiology course or permission of instructor. LEC.

BIOL 725. Aquatic Entomology. 4 Hours.
Identification of aquatic insects and detailed study of their community structure and dynamics. The external morphology of all aquatic orders will be covered, followed by consideration of specific physiological and behavioral adaptations that facilitate an aquatic existence. Includes both lectures and laboratory exercises. Requirements include making a collection of aquatic insects. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 414 or BIOL 500 or permission of instructor. LEC.

BIOL 746. Principles of Systematics. 4 Hours.
Lectures: historical and philosophical foundations of modern systematics; theory and practice of classifications; character analysis; phylogeny reconstruction; formulation and testing of systematic hypotheses; species concepts and speculation; the interface between systematics and evolutionary theory, particularly the origins of asymmetric diversity patterns, macroevolution, adaptation, coevolution, and the evolution of higher taxa; roles of paleontological, ontogenetic, biochemical, and molecular data in systematics; and biogeography. Laboratory work: practical applications of nomenclature, development of keys, descriptions and systematic revisions, character analysis, phylogeny reconstruction, hypothesis testing, interpretation of biogeographic patterns. (Three hours lecture and two hours laboratory per week.) Prerequisite: BIOL 628 or equivalent. Intended for graduate students planning to specialize in systematics. LEC.

BIOL 747. Quantitative Genetics. 3 Hours.
A discussion of genetic traits for which individual gene differences do not separate a population into qualitatively distinct groups. Includes the estimation of heritability, genetic determination, and number of loci, and a study of selection theory. Prerequisite: BIOL 404 or BIOL 412 or equivalent and a course in statistics. LEC.

BIOL 749. Topics in Stable Isotopes in the Natural Sciences: 2-3 Hours.
Isotopic compositions of substances provide powerful insights into many topics in the natural sciences. Applications of isotopic analyses of carbon, hydrogen, oxygen, and nitrogen to selected research topics such as plant resource use, food web analysis, paleoecology, paleoecological reconstruction, hydrology, and soil genesis will be examined. Knowledge of isotope
Chemistry is not required. (Concepts necessary to understand pertinent articles will be taught during the first class meetings.) May be repeated. (Same as GEOG 749.) LEC.

**Biol 750. Advanced Biochemistry. 3 Hours.**
The structures and dynamics of proteins and nucleic acids will be developed in terms of well-understood examples which will also be used to discuss the function of major classes of proteins. The application of structural and dynamical principles to biological membranes and their function will also be discussed. Prerequisite: BIOL 807 and BIOL 808, a general biochemistry course, or permission of instructor. LEC.

**Biol 751. Plant Communities of North America. 3 Hours.**
Physiognomic and floristic analysis of the vegetation, with emphasis on the Southwest; distribution of communities in relation to climate, substratum, and disturbance; recognition of dominant elements of vegetation through study of specimens and illustrative material. Prerequisite: BIOL 602. LEC.

**Biol 752. Cell Biology. 3 Hours.**
A lecture course emphasizing biochemical, developmental, and molecular aspects of cell structure and function. Prerequisite: BIOL 807 and BIOL 808, or BIOL 416 or BIOL 536, or permission of instructor. LEC.

**Biol 753. Advanced Genetics. 3 Hours.**
An advanced course in modern genetic analysis of eukaryotes. Course material will consist mainly of primary literature in the field of genetics. Topics covered include: genomic structure and genome projects; nature of mutations; mutant analysis; genetic recombination and mapping; analysis of gene function; genetic buffering; RNAi and epigenetics; and the genetics of model organisms. This course is meant for graduate students in the Molecular Biosciences and Genetics programs. Prerequisite: BIOL 807 and BIOL 808, or a course in genetics and a course in biochemistry, or permission of the instructor. LEC.

**Biol 754. Brain Diseases and Neurological Disorders. 3 Hours.**
Major brain diseases and neurological disorders such as stroke, Alzheimer's Disease, Parkinson's Disease, Huntington's Disease, Multiple Sclerosis, Epilepsy, Schizophrenia, etc., will be discussed in terms of the etiology, molecular, and cellular basis of potential therapeutic interventions. Graduate students are required to present original research paper assigned by the instructor to the class in addition to the other assignments for all the students enrolled. Prerequisite: BIOL 150, or consent of instructor. LEC.

**Biol 755. Mechanisms of Development. 3 Hours.**
Molecular aspects of differential gene function, signal transduction, and cell polarity in the regulation of morphogenesis. Prerequisite: BIOL 807 and BIOL 808 for graduate students; BIOL 417 or equivalent for undergraduate students; or permission of instructor. LEC.

**Biol 756. Cell and Tissue Culture Laboratory. 3 Hours.**
An introduction to current laboratory methods of cell and tissue culture, intended to provide an understanding of and substantial experience in several aspects of animal cell growth, cell synchrony, cell nutrition, the production and selection of mutant cell lines, the production and use of heterokaryons and interspecific hybrids, cell transformation in vitro, the cultivation and characterization of differentiated cells in culture, enzyme induction, and cell karyotyping. LAB.

**Biol 757. Carcinogenesis and Cancer Biology. 3 Hours.**
This course surveys the field of cancer research. The major goal is to introduce the breadth of cancer research while, at the same time, providing sufficient depth to allow the student to recognize problems in cancer and to design experiments which study cancer biology. Toward that end, the student should (at the conclusion of the course) be able to: define cancer, identify and discuss its causes; identify and discuss the genetic basis for cancer development and progression; discuss the theoretical basis for cancer therapy design and efficacy testing; discuss the biochemical, molecular and cellular events involved in the natural history of major human neoplasms. Prerequisite: Permission of instructor. LEC.

**Biol 767. The Vegetation of the Earth. 3 Hours.**
A discussion of the world's vegetation in its natural condition and as affected by man. Included are aspects of its economic and cultural usefulness and the problem of its preservation. Prerequisite: BIOL 634. LEC.

**Biol 768. Plant Molecular Biology. 3 Hours.**
Gene expression in chloroplasts, mitochondria, and plant nuclei, and regulatory interactions among these genomes. Special topics include the molecular biology of the photosynthetic apparatus, nitrogen fixation, stress and development, viruses and viroids, transposable genetic elements and gene evolution, and gene transfer and plant genetic engineering. Prerequisite: A course in biochemistry, cell or molecular biology, or permission of instructor. LEC.

**Biol 770. Plant Biochemistry. 3 Hours.**
A detailed study of plant biochemistry with emphasis on metabolic and regulatory processes particularly characteristic or unique in plants. Prerequisite: BIOL 600 or equivalent. LEC.

**Biol 772. Gene Expression. 3 Hours.**
A study of the structure and expression of genes in prokaryotes and eukaryotes. Emphasis on the mechanisms of DNA, RNA, and protein biosynthesis. This course meets concurrently with BIOL 672 and is open to graduate students seeking a more rigorous treatment of techniques in molecular biology that students receive in BIOL 672. Prerequisite: A course in biochemistry or consent of instructor. LEC.

**Biol 775. Chemistry of the Nervous System. 3 Hours.**
A detailed study of the molecular aspects of nerve transmission will be covered with special emphasis on the uptake, storage, release, biosynthesis and metabolism of specific neurotransmitters. Drugs affecting these processes and current research on receptor isolation and receptor mechanisms will be discussed from a chemical viewpoint. (Same as CHEM 775, MDCM 775, NURO 775, PTX 775, and PHCH 775.) Prerequisite: BIOL 600 or equivalent or consent of instructor. LEC.

**Biol 777. Integrative and Developmental Neurobiology. 3 Hours.**
Cellular processing of neural information both at the local level and in long distance integration. Local computing functions, and integration of these functions among the various areas to produce coherent movement and perceptions will be discussed. A description of forces guiding the development of the nervous system to form a coherent working system in both invertebrate and vertebrate animals will be presented, as will determinants of brain sexual dimorphism. Prerequisite: An upper level course in physiology or BIOL 520. LEC.

**Biol 780. Fisheries. 2 Hours.**
Philosophy and practice of conservation as it applies to major world fisheries. Species principally utilized, factors affecting production, methods for appraisal and management of stocks. Historical and prospective roles of the fisheries in relation to human food supplies and recreational needs. Prerequisite: BIOL 412. LEC.

**Biol 781. Fisheries, Laboratory. 2 Hours.**
Training in field and laboratory techniques for fishery research and management. Prerequisite: Concurrent or prior enrollment in BIOL 780. LAB.
BIOL 782. Principles of Biogeography. 3 Hours.
A synthesis of historical and ecological biogeography of plants and animals, treating vicariance, dispersal, and community patterns; lectures, readings, discussions. A course in systematics and a course in ecology are recommended. LEC.

BIOL 783. Herpetology. 3 Hours. N.
A study of amphibians and reptiles. This lecture course will explore the taxonomic diversity of amphibians and reptiles, and current areas of active research in herpetology. Topics will be considered within a phylogenetic framework, and include discussion on systematics, biogeography, tetrapod origins, skeletal systems, growth, circulatory system, locomotion, thermal and water regulation, hibernation, ecology, sexual behavior, parental care, and mimicry. Students taking the course at the 700 level will have additional work required of them. Prerequisite: BIOL 152 Principles of Organismal Biology, and/or BIOL 413 History and Diversity of Organisms. LEC.

BIOL 784. Introduction to Museum Public Education. 3 Hours.
Consideration of the goals of an institution's public education services, developing programs, of identifying potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as AMS 797, GEOL 784, HIST 721, and MUSE 705.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 785. Museum Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as AMS 731, GEOL 783, HIST 728, and MUSE 701.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 786. Fundamentals of Tropical Biology. 1-8 Hours.
The tropical environment and biota; ecological relations, communities and evolution in the tropics. Primarily a field course, taught in Costa Rica; two sessions per year, February-March, July-August. FLD.

BIOL 787. Introduction to Museum Exhibits. 3 Hours.
This course will consider the role of exhibits as an integrated part of museum collection management, research, and public service. Lecture and discussion will focus on issues involved in planning and producing museum exhibits. Laboratory exercises will provide first hand experience with basic preparation techniques. Emphasis will be placed on the management of an exhibit program in both large and small museums in the major disciplines. (Same as AMS 700, GEOL 781, HIST 723, and MUSE 703.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 788. The Nature of Museums. 3 Hours.
The purpose of this course is to provide an overview of the kinds of museums, their various missions, and their characteristics and potentials as research, education, and public service institutions responsible for collections of natural and cultural objects. (Same as AMS 720, GEOL 782, HIST 720, and MUSE 702.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 789. Field Course in Entomology. 1-6 Hours.
Field experiences in various habitats, with an emphasis in ecology, systematics, behavior, and collection techniques. FLD.

BIOL 790. Paleontology of Lower Vertebrates. 3 Hours.
General account of the osteology, geological distribution, and evolution of the principal groups of fishes, amphibians, reptiles, and birds. Lectures and laboratory. (Same as GEOL 725.) LEC.

BIOL 791. Paleontology of Higher Vertebrates. 3 Hours.
Evolution of mammals, and anatomical modifications involved in the process as ascertained from the fossil record. Lectures and laboratory. (Same as GEOL 726.) LEC.

BIOL 792. Ichthyology. 4 Hours.
A study of fishes. Lecture topics include the structure and function of fishes; the adaptations of fishes to the aquatic environment; and a survey of major fish groups with emphasis on evolutionary relationships and biogeography. Laboratory topics include a survey of fishes using specimens, and the use of keys to identify fishes with emphasis on the Kansas fish fauna. A research paper using primary scientific literature is required. Prerequisite: Graduate standing or permission of the instructor. LEC.

BIOL 794. Mammalogy. 3 Hours.
A study of mammals, with emphasis on systematics, biogeography, and natural history. Lectures, laboratory, and field study. Prerequisite: BIOL 100 or BIOL 413. LEC.

BIOL 795. Biology of Amphibians. 3 Hours.
Evolutionary biology of amphibians with emphasis on systematics, morphology, development, reproductive strategies, and distribution; lectures and laboratory. Prerequisite: BIOL 664 or permission of instructor. LEC.

BIOL 796. Biology of Reptiles. 3 Hours.
Evolutionary biology of reptiles with emphasis on systematics, morphology, reproductive strategies, and distribution; lectures and laboratory. Prerequisite: BIOL 664 or permission of instructor. LEC.

BIOL 797. Field Course in Vertebrate Paleontology. 3-6 Hours.
Training in the techniques of collecting vertebrate fossils, description and interpretation of the stratigraphy of fossiliferous sediments, and interpretation of the adequacy and bias of samples. FLD.

BIOL 798. Principles and Practices of Museum Collection Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museum collections, their associated data, and their use in scholarly research; cataloging, storage, fumigation, automated information management and related topics will be presented for museums of art, history, natural history and anthropology. (Same as AMS 730, GEOL 785, HIST 725, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor. LEC.

BIOL 799. Natural History Museum Apprenticeship. 1-6 Hours.
Provides directed, practical experience in collection care and management, public education, exhibits and administration with emphasis to suit the particular requirements of each student. Full time for one semester or half time for two semesters. (Same as AMS 799, ANTH 799, GEOL 723, HIST 799, and MUSE 799.) FLD.

BIOL 801. Topics in: ______. 1-3 Hours.
Advanced courses on special topics in biology, given as need arises. Lectures, discussing readings, laboratory or field work. Students may select sections according to their special interests. LEC.

BIOL 802. The Art of Becoming a Professional Scientist. 3 Hours.
Discusses aspects of graduate education that are directed at the post PhD phases of a career, but that must be initiated early in the graduate student program of study. One 3-hour discussion per week. LEC.

BIOL 804. Scientific Integrity: Molecular Biosciences. 1 Hour.
This course introduces aspects and issues associated with being an ethical, responsible, and professional research scientist. Included topics are professional practices, regulations, and rules that define the responsible and ethical conduct of research. Graduate students
will become familiar with and prepare to navigate through challenges that occur during a career in research science. The format of individual classes is expected to incorporate both instruction and discussion. Prerequisite: Admission to the graduate program in Molecular Biosciences, or consent of instructor. LEC.

BIOL 806. Major Patterns in Insect Evolution. 3 Hours. Extensive reading and discussion of the primary literature on topics relating to major patterns in the evolutionary history of insects, including the fossil history of insects, the monophyly of arthropods, the origin of wings, the changing role of insects in ecological communities, the origins of social behavior, modes and mechanisms of speciation, and patterns of species diversity. Assigned readings require a solid background in evolutionary theory and insect biology, especially morphology, development, and classification. Prerequisite: Permission of instructor. LEC.

BIOL 807. Graduate Molecular Biosciences. 6 Hours. An introduction to the advanced study of biochemistry, microbiology, genetics, cell and developmental biology, and neurobiology for all Molecular Biosciences graduate students. Topics can include macromolecular structure, metabolism, kinetics and thermodynamics, bioinformatics, prokaryotic and eukaryotic genetic mechanisms, cell structure and function, signal transduction, basic and pathogenic bacteriology, immunology, virology, membrane potentials, synaptic transmission, and sensory neurophysiology. Prerequisite: Admission to the graduate program in Molecular Biosciences, or consent of instructor. LEC.

BIOL 809. Graduate Molecular Biosciences for Medicinal Chemists. 4 Hours. An introduction to the advanced study of biochemistry, microbiology, and neurobiology for graduate students in Medicinal Chemistry. Prerequisite: Admission to the graduate program in Medicinal Chemistry and consent of instructor. LEC.

BIOL 810. Seminar in Biochemistry. 1 Hour. Presentation and discussion of specific areas of recent research in biochemistry. This course may be taken more than once. LEC.

BIOL 811. Advanced Molecular and Cellular Immunology. 2 Hours. Covers recent advances in immunochemistry and immunobiology. Topics include structure and function of antibodies, hybridoma systems, idiotypes, induction and regulation of the immune response through cell interactions and cytokine action, and the role of immune activity in disease states such as hypersensitivity, autoimmunity, and cancer. Prerequisite: BIOL 807 and BIOL 808, or an introductory course in immunology, or consent of instructor. LEC.

BIOL 812. Mechanisms of Host-Parasite Relationships. 2 Hours. Emphasis is on virulence factors of microorganisms and the host response to infection. Topics will include pathogenesis of intracellular and extracellular parasites, bacterial adhesins, and toxins, and the role of innate and acquired immunity in host resistance and the response to infection. Prerequisite: BIOL 807 and BIOL 808, or a course in biochemistry, or consent of instructor. LEC.

BIOL 813. Advanced Bacterial Physiology. 2 Hours. The intermediary reactions catalyzed by the bacterial cell during energy-requiring processes. Thermodynamic considerations of these processes are discussed. Knowledge of calculus is recommended. Prerequisite: BIOL 807 and BIOL 808, or a course in microbiology and a course in biochemistry, or consent of instructor. LEC.

BIOL 814. Advanced Molecular Virology. 2 Hours. The course concentrates on evaluation of current literature concerning all aspects of molecular biology, biochemical characterization, and pathogenic mechanisms involved in host-virus interactions. Students will be expected to present articles and participate in discussions. Prerequisite: BIOL 807 and BIOL 808, or a course in microbial genetics and a course in virology, or consent of instructor. LEC.

BIOL 815. Advanced Molecular Genetics. 2 Hours. A literature-based course that covers recent advances in microbial molecular genetics. Topics include transcription, translation, mutagenesis and repair, genetic exchange mechanisms, and regulation of gene expression. Prerequisite: BIOL 807 and BIOL 808, or a course in microbial genetics, or consent of instructor. LEC.

BIOL 816. Careers in Chemical Biology. 1 Hour. Advanced course examining current research topics in chemical biology. An emphasis will be placed on career options open to PhD scientists in Chemical Biology, and preparation for the different career paths. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. This course will be graded satisfactory/unsatisfactory. (Same as CHEM 816, MDCM 816 and PHCH 816.) Prerequisite: Permission of instructor. SEM.

BIOL 818. Techniques in Molecular Biosciences. 2 Hours. This course provides an introduction to common techniques used for research strategies in molecular biosciences. The course will cover common techniques in cell biology, biochemistry, microbiology, and neurobiology. Information will be presented in lectures and through practical demonstrations. This course is primarily intended for first year graduate students in the Department of Molecular Biosciences. Prerequisite: Enrollment in the Molecular Biosciences Graduate Program or consent of instructor. LAB.

BIOL 840. Scientific Communication. 2 Hours. N. Principles of English communication skills for the professional scientist. The course explores the form, function, and practice (including ethics) of scientific communication, emphasizing elements of writing and speech that are important to clarity and precision. The course covers written and verbal communication of primary research results as well as composing correspondence, a curriculum vitae, reviews, etc. Prerequisite: Graduate standing. LEC.

BIOL 841. Biometry I. 5 Hours. The application of statistical methods to data from various fields of biological research. Special emphasis is placed on practical computational procedures. Prerequisite: College algebra. LEC.

BIOL 842. Biometry II. 3 Hours. This course is primarily devoted to special advanced topics in analysis of variance, analysis of covariance and regression analysis. Polynomial regression and multiple linear regression will be presented as well the general linear model. Elementary matrix algebra will be developed as needed. Prerequisite: BIOL 841. LEC.

BIOL 847. Phylogenetics. 3 Hours. An introduction to the theory and practice of phylogenetic systematics. Includes principles of character analysis including determination of homology and determination of character polarity, testing alternate phylogenetic trees, and reconstructing trees using computer techniques. Also includes principles of constructing phylogenetic classifications and the nature of taxa in the phylogenetic system. Other topics, such as the nature of species and principles of biogeography are included. Prerequisite: Twenty hours natural history. LEC.

BIOL 848. Phylogenetic Methods. 4 Hours. A survey of methods for inferring phylogenetic trees from character data and using phylogenies to address evolutionary questions. Lectures will present the relevant theory and algorithmic description of methods.
Computer lab will familiarize students with software that implements the analyses discussed in lecture, intended for graduate students specializing in systematics. Prerequisite: BIOL 845 and BIOL 841 or consent of instructor. LEC.

BIOL 860. Principles and Practice of Chemical Biology. 3 Hours.
A survey of topics investigated by chemical biology methods including: transcription and translation, cell signaling, genetic and genomics, biochemical pathways, macromolecular structure, and the biosynthesis of peptides, carbohydrates, natural products, and nucleic acids. Concepts of thermodynamics and kinetics, bioconjugations and bioorthogonal chemistry will also be presented. (Same as CHEM 860, MDCM 860 and PHCH 860.) Prerequisite: Permission of instructor. LEC.

BIOL 872. Gene Expression II. 3 Hours.
Second semester of a two-semester lecture course on gene expression. Emphasis on control of gene expression at the transcriptional and post-transcriptional levels. Prerequisite: BIOL 772 or consent of instructor. LEC.

BIOL 888. Topics in Evolutionary Morphology: ____. 2 Hours.
Presentation and discussion by graduate students and faculty of selected topics centering on observed changes in structure and function of organisms from a phylogenetic point of view. Presentation will include results of original research when possible and appropriate, and otherwise, will be based on syntheses of recent literature. RSH.

BIOL 890. Advanced Study in Microbiology. 1-10 Hours.
Original investigation by students at the master's degree level. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Ten or more hours of microbiology and consent of department. RSH.

BIOL 895. Human Genetics. 3 Hours.
A lecture course providing balanced coverage of Mendelian and molecular genetics of humans; includes discussions and presentations on current issues in human and medical genetics. Prerequisite: A course in genetics. LEC.

BIOL 899. Master's Thesis. 1-10 Hours.
Research which is to be incorporated into an M.A. thesis. Not more than ten hours may be earned. Graded on a satisfactory/unsatisfactory basis. Prerequisite: BIOL 416. LEC.

BIOL 901. Graduate Seminar in Biochemistry and Biophysics. 1 Hour.
Advanced course examining current research topics in biochemistry and biophysics. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Prerequisite: Enrollment in graduate school, and departmental admission. LEC.

BIOL 902. Graduate Seminar in Molecular, Cellular, and Developmental Biology. 1 Hour.
Advanced course examining current research topics in molecular, cellular, and developmental biology. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Prerequisite: Enrollment in graduate school, and departmental permission. SEM.

BIOL 903. Graduate Seminar in Neurobiology. 1 Hour.
Advanced course examining current research topics in neurobiology. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Prerequisite: Enrollment in graduate school, and departmental permission. LEC.

BIOL 904. Graduate Seminar in Microbiology. 1 Hour.
Advanced course examining current research topics in microbiology. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Enrollment in graduate school, and departmental permission. RSH.

BIOL 905. Advanced Molecular Genetics. 1-3 Hours.
A review of current literature in molecular genetics. RSH.

BIOL 906. Advanced Genetics. 1-3 Hours.
May be repeated for credit up to six hours. Review of current literature and genetic theory of selected topics such as population, molecular, quantitative, and physiological genetics. RSH.

BIOL 911. Research Topics in Plant Physiology and Biochemistry. 1-6 Hours.
Directed research on selected topics. Prerequisite: BIOL 770 or equivalent. RSH.

BIOL 918. Modern Biochemical and Biophysical Methods. 4 Hours.
This course emphasizes the use of techniques for solving problems of structure and function of biological macromolecules. Students will complete several modules that consist of lectures relating to theory and practical aspects of each methodological approach, and apply these techniques to solving a specific problem. Students will submit a paper describing the resulting data and conclusions. Prerequisite: BIOL 807, BIOL 808, and BIOL 818, or permission of instructor. LEC.

BIOL 925. Research Grant Proposal Preparation. 3 Hours.
This course introduces the basics of preparing a successful scientific grant application. Topics to be covered include how to develop a novel, fundable project, scientific writing and grantsmanship, and what criteria reviewers consider in evaluating grants. The course will be a mix of instruction and class discussion. Prerequisite: Admission to the graduate program in Molecular Biosciences, or consent of instructor. LEC.

BIOL 930. Ultrastructure and Cellular Mechanisms. 3 Hours.
Two lectures and one seminar-recitation. A detailed consideration of electron microscopic analyses of cell structure as related to cell function. Prerequisite: BIOL 416. LEC.

BIOL 943. Multivariate Data Analysis. 3 Hours.
Matrix formulation of multivariate models and data. Specific methods covered include Principal Components Analysis, Factor Analysis, Multiple Group Discriminant Analysis and Canonical Analysis, and Canonical Correlation Analysis. Prerequisite: BIOL 842 or knowledge of elementary matrix algebra. LEC.

BIOL 944. Topics in Quantitative Ecology: ____. 1-3 Hours.
Presentation and discussion by instructor and students of mathematical and statistical concepts in ecology. Topics are selected from texts or sets of readings. LEC.

BIOL 950. Evolutionary Mechanisms. 3 Hours.
Reading and discussions of evolutionary mechanisms from the genetic, ecologic, and systematic viewpoints. Prerequisite: BIOL 412. LEC.

BIOL 952. Introduction to Molecular Modeling. 3 Hours.
Introduction to theory and practice of contemporary molecular modeling, including molecular mechanics, molecular dynamics, computer graphics, data analysis, use of structure and sequence databases, docking, and homology modeling. Weekly computer laboratory section aimed at allowing participants to pursue independent research projects that incorporate modeling aspects. Lectures, laboratory manuals, program descriptions, and technical notes are presented on course web page. (Same as MDCM 952.) Prerequisite: Graduate standing or consent of instructor. LEC.
BIOL 968. Seminar in Vegetation Geography. 2-3 Hours. (Same as GEOG 937.) LEC.

BIOL 985. Advanced Study. 1-10 Hours.
Individual investigations; laboratory, field or museum; or reading assignments in specialized topics not ordinarily treated in other courses. Graded on a satisfactory/unsatisfactory basis. RSH.

BIOL 999. Doctoral Dissertation. 1-12 Hours.
Original research that is to be incorporated into a Ph.D. dissertation. Graded on a satisfactory/unsatisfactory basis. THE.

BTEC 300. Introduction to Biotechnology. 3 Hours. N.
Review of techniques used in food, agricultural, pharmaceutical, industrial, and environmental biotechnology. Role of regulatory agencies during the discovery, development, and manufacture of new medical devices, biotechnology, biomedical, and pharmaceutical products. Guest presentations in biotechnology. Prerequisite: BIOI 416. LEC.

BTEC 330. Biotechnology Regulation and Documentation Processes. 3 Hours. N.
Current good manufacturing practices (GMP) as they apply in the biotechnology workplace. History, rationale, purpose, and GMP requirements applicable to the manufacturing, packaging, labeling, testing, and control of pharmaceutical products, and consequences of inaction. Prerequisite: BTEC 300. LEC.

BTEC 340. Biotechnology Research Methods and Applications. 3 Hours. N.
Introduction to fermentation and protein chemistry. Theory behind laboratory techniques and overview of industrial scale expression systems. Bacterial cell culture techniques, principles of fermentor operation and purification, documentation procedures, important tasks for clean room operations, including sanitization, sterilization, cleaning procedures, calibration, and environmental monitoring. Prerequisite: BTEC 300; BIOI 600. LEC.

BTEC 341. Principles of Bioprocessing Laboratory I. 1 Hour. N.
Laboratory sessions involve use of microbial expression vectors, fermentation systems, and large-scale purification of recombinant protein. Includes bacterial cell culture techniques, principles of bioreactor/fermentation operations and purification techniques, and calibration. Primary goal of this course is to provide students with an advanced background in bacterial upstream and downstream biotechnology. Prerequisite: BTEC 300; BTEC 340 or concurrent enrollment in BTEC 340. LAB.

BTEC 345. Microbial Genetics Laboratory. 4 Hours. N.
Research projects center on using molecular genetics to examine the biology of the bacterium Pseudomonas aeruginosa, an opportunistic pathogen often found in the lungs of cystic fibrosis patients. Students engage in independent projects to probe various aspects of P. aeruginosa physiology such as antibiotic resistance, phase variation, toxin production, secondary metabolite production, twitching motility, swarming behaviors, and more. Projects aim to discover the molecular basis for these processes using both classical and new, cutting-edge techniques. These include plasmid manipulation, genetic complementation, mutagenesis, PCR, DNA sequencing, enzyme assays, and gene expression studies. Prerequisite: BIOI 350; BIOI 402. LAB.

BTEC 414. Independent Study in Biotechnology. 1-3 Hours. N.
Independent project at a related bioscience industry partner or faculty in selected topics of current translational research interest. May be undertaken only with the consent of the major advisor who will guide the research after determining objectives with the interested industry partner or faculty. Prerequisite: Consent of instructor. IND.

BTEC 440. Biotechnology Research Methods and Applications II. 3 Hours. N.
Theory and practicum behind laboratory techniques and overview of industrial scale expression systems of insect or mammalian protein chemistry. Cell culture techniques, principles of bioreactor operation and purification, documentation procedures, important tasks for clean room operations, including sanitization, sterilization, cleaning procedures, calibration, and environmental monitoring are evaluated. Prerequisite: BTEC 340; BTEC 341. LEC.

BTEC 441. Principles of Bioprocessing Laboratory II. 1 Hour. N.
Mammalian cell culture techniques, principles of bioreactor operations and purification techniques, and calibration. The primary goal of this course is to provide students with an advanced background in mammalian upstream and downstream biotechnology. Prerequisite: BTEC 340 or concurrent enrollment in BTEC 440. LAB.

BTEC 450. Applied Bioinformatics. 3 Hours. N.
Overview of the fields of bioinformatics and genomics. Topics, tools, issues and current trends in these and related fields are discussed. Principles and practical application of bioinformatics tools in molecular biology and genetics are evaluated. The haploid human genome occupies a total of just over 3 billion DNA base pairs. This information is not contained in books, but stored in electronic databases. Computational biology utilizes infer function by comparative analysis. This course is designed for life scientists from all fields to introduce them to the power of bioinformatics and enable them to access and utilize biological information in databases for their own research. Prerequisite: BTEC 300; BIOL 570 or MATH 365 or PSYC 210. LEC.

BTEC 460. Introduction to Quality Control/Quality Assurance in Biotechnology. 3 Hours. N.
Quality control techniques, assurance issues, and management methods. Quality in design and planning, in the constructed project, and in production of goods and services. Prerequisite: BTEC 330. LEC.

BTEC 475. Bioseparations Laboratory. 2 Hours. N.
Develop novel and effective strategies for extraction and purification of recombinant and native biomolecules by understanding constraints posed by the biological system and the products. Research projects are geared toward developing cost-effective processes for recovery of industrial and biopharmaceutical products derived from a variety of native and/or transgenic sources. Prerequisite: BTEC 405; BTEC 441. LAB.

BTEC 494. Selected Topics in Biotechnology. 1 Hour. N.
Course work varies with the topic of the seminar. The preparation and presentation of oral reports on selected topics from recent translational research literature. Students may choose one interest group each semester, but may enroll in a given interest group only once. May be repeated for credit when topics vary. Prerequisite: BTEC 300 and approval of instructor. LEC.

BTEC 501. Ethical Issues in Biotechnology. 1 Hour. N.
Student investigations and discussions of current controversial issues in biotechnology. This course emphasizes thinking about new technologies in a rational and thoughtful way. Prerequisite: BTEC 300. LEC.

BTEC 541. Gene Expression Analysis: Microarrays. 2 Hours. N.
This course covers current theory, techniques, instrumentation, troubleshooting, analysis tools, and advanced protocols for microarray analysis. Students have the opportunity to utilize skills learned during lecture in a laboratory environment. At the conclusion of this course, students understand microarray experimental design, its tools, and analysis of generated data. Prerequisites: BTEC 300. LAB.
BTEC 542. Protein Expression in Insect Cells. 2 Hours. N.
Introduction to the insect cells expression system, and its advantages and disadvantages. Introduction to expression of recombinant proteins with baculovirus. Outline of antibody and antibody fragments as well as other complex proteins. Basic techniques used for growth and maintenance of insect cell cultures. The lab portion of the course provides students with practical experience in protein expression techniques in the insect cells expression system. Prerequisite: BTEC 300. LAB.

BTEC 545. RNA Interference and Model Organisms. 2 Hours. N.
Introduction and history of RNA interference technology. Principles, mechanism, and applications of RNA interference in model organisms. Laboratory sessions include RNA interference-mediated silencing of genes in plants, C. elegans, and mammalian cell culture. Prerequisite: BTEC 300. LAB.

BTEC 547. Bioanalytical Lab. 2 Hours. N.
Analytical methods used for testing biotherapeutics are examined. Emphasis is placed on assessing protein concentration, purity, identity and activity. The importance of sample processing, throughput and level of validation are explored as samples from upstream processing, downstream processing and final bulk are interrogated. Students also learn key concepts used to validate the performance of analytical methods. Prerequisite: BTEC 300. LAB.

BTEC 599. Biotechnology Capstone Experience. 3 Hours. N.
Supervised internship at a biotech company; or an independent thesis; or honors thesis with Honors Program. Prerequisite: BTEC 441 and approval of instructor. FLD.

M.A. in Biochemistry & Biophysics; Microbiology; or Molecular, Cellular, & Developmental Biology

Molecular Biosciences Graduate Programs

The department offers the Doctor of Philosophy and the Master of Arts in biochemistry and biophysics; microbiology; and molecular, cellular, and developmental biology. Programs in neurobiology and genetics also allow a research focus. Graduate students may pursue degree tracks in the disciplines of their choice but may also be involved in collaborative research. New students should confer with the graduate coordinator to plan a first-semester schedule. Until the student chooses a permanent advisor, the graduate coordinator advises him or her.

The department has established a level of enrollment appropriate for normal progress (course work and research effort) toward an advanced degree. These credit-hour requirements may exceed, but not fall below, minimum Graduate Studies requirements. A student must enroll full-time in residence for at least 2 regular academic-year semesters after the first year of graduate study. 9 credit hours constitute full-time enrollment. If the student holds a half-time research or teaching assistantship, 6 hours constitute full-time enrollment. The department expects graduate students who have not yet passed the comprehensive oral examination (including those with half-time assistantships) to enroll in at least 9 hours each semester and 3 hours each summer session. After passing the comprehensive oral examination, a doctoral candidate must be continuously enrolled, including summer sessions, until all degree requirements are completed. For the first 18 hours of post-comprehensive enrollment, the doctoral candidate must take a minimum of 6 hours a semester and 3 hours a summer session.

Graduate Teaching Assistantships and Graduate Research Assistantships are available. GTAs are appointed on a semester basis. GRAs are appointed on a semester, academic-year, or calendar-year basis.

During the first 2 semesters, a new Ph.D. graduate student follows a rotation schedule through 3 research laboratories. This program acquaints each student with the research conducted by each faculty member. Students then choose a home lab. This decision must be mutually agreed on with the major professor. Each graduate student must teach for at least 2 semesters.

(The B.S. degree in molecular biosciences (p. 1524) is offered on the KU Edwards Campus (http://edwardscampus.ku.edu).)

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

The department adheres to minimum admission requirements. The number of new students accepted each year depends largely on availability of laboratory space, financial resources, grants, and the number of students leaving the program. The department maintains a full enrollment.

The department’s website (http://www.molecularbiosciences.ku.edu) has information about application procedures and a link for applying directly online. A completed application file must include

1. An application form and fee;
2. 1 copy of all academic transcripts (international students must provide 1 copy in English and 1 in the native language);
3. A résumé (1 to 2 pages);
4. General Graduate Record Examination scores (GRE must have been taken within 2 years of the initial semester);
5. Internet-Based Test of English as a Foreign Language (iBT) or IELTS scores for international students;
6. 3 recommendation letters; and
7. A statement of aims (1 to 2 pages) describing the applicant’s interests and professional goals.

All files must be complete and received in the department by December 15 each year. First consideration is given to those who meet this deadline. Applicants are informed of decisions in early March.

All supporting documentation should be uploaded online when you apply. If this is not possible, please send documentation to:

The University of Kansas
Department of Molecular Biosciences
M.A. Degree Requirements

General Requirements for All M.A. Students
Refer to each discipline for specific course requirements. General requirements include:

1. A minimum of 30 hours of graduate credit;
2. A minimum of 1 laboratory rotation during the first semester of graduate study;
3. Enrollment every semester in BIOL 701 Topics in Molecular Biosciences Seminar;
4. Completion of the following courses: BIOL 807 Graduate Molecular Biosciences and BIOL 818 Techniques in Molecular Biosciences;
5. A graduate committee established by the beginning of the spring semester of the first year;
6. A minimum of 1 annual graduate committee meeting until completion of the degree.

The following thesis options are available:

1. Write a thesis resulting from original research on a laboratory problem.
2. Publish a research paper in a national, refereed journal. Acceptance of the paper for publication constitutes publication for conferral of the degree.
3. Write a library thesis on a topic approved by the student’s graduate committee.

Specific M.A. Requirements: Biochemistry and Biophysics

BIOL 750 Advanced Biochemistry 3
BIOL 772 Gene Expression 3

Electives to satisfy the 30-hour requirement. Electives are determined in consultation with the graduate advisor and graduate committee.

Specific M.A. Requirements: Microbiology

Select at least three graduate courses from the following: 6

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>BIOL 811</td>
<td>Advanced Molecular and Cellular Immunology</td>
</tr>
<tr>
<td>BIOL 812</td>
<td>Mechanisms of Host-Parasite Relationships</td>
</tr>
<tr>
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</tr>
<tr>
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</tr>
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</tr>
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</table>

Plus electives to satisfy the 30-hour course requirement. No more than 6 of these hours can be below the 700 level. Electives are determined in consultation with the graduate advisor and graduate committee.

Specific M.A. Requirements: Molecular, Cellular, and Developmental Biology

BIOL 752 Cell Biology 3
BIOL 755 Mechanisms of Development 3
BIOL 753 Advanced Genetics 3

or BIOL 772 Gene Expression

Electives to satisfy the 30-hour course requirement. Electives are determined in consultation with the graduate advisor and graduate committee.

Ph.D. in Biochemistry & Biophysics; Microbiology; or Molecular, Cellular, & Developmental Biology

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The University of Kansas
Department of Molecular Biosciences
Haworth Hall
1200 Sunnyside Ave., Room 2034
Lawrence, KS 66045-7566

Ph.D. Degree Requirements

General Requirements for All Ph.D. Students

All general requirements must be fulfilled. Refer to each discipline for specific course requirements. General requirements include:

1. At least 3 individual laboratory rotations during the first two semesters of graduate study;
2. Enrollment every semester in BIOL 701 Topics in: Molecular Biosciences Seminar;
3. Completion of the following courses: BIOL 804 Scientific Integrity: Molecular Biosciences, BIOL 807 Graduate Molecular Biosciences, and BIOL 818 Techniques in Molecular Biosciences;
4. A Research Skills and Responsible Scholarship requirement (satisfied by completion of BIOL 818) and a Responsible Scholarship requirement (satisfied by BIOL 804);
5. A minimum of 2 semesters of graduate teaching;
6. A graduate committee established before the beginning of the fall semester of the second year;
7. A minimum of 1 annual graduate committee meeting;
8. A written preliminary examination in the form of a research proposal completed by the end of the spring semester of the second year of graduate study (BIOL 925);
9. A comprehensive oral examination held no later than October 1 of the fall semester of the third year of graduate study (successful completion of the comprehensive oral examination admits the student to candidacy for the Ph.D. degree);
10. A dissertation based on original research presented to the dissertation examination committee for evaluation and presented and defended in a formal public lecture; and
11. Completion of the degree in 7 years.

Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current policies on Doctoral Research Skills and Responsible Scholarship are listed in the KU Policy Library.

First-year Curriculum for All Students

First-year courses include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 701</td>
<td>Topics in: Molecular Biosciences Seminar.</td>
<td>1-3</td>
</tr>
<tr>
<td>BIOL 804</td>
<td>Scientific Integrity: Molecular Biosciences</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 807</td>
<td>Graduate Molecular Biosciences</td>
<td>6</td>
</tr>
<tr>
<td>BIOL 818</td>
<td>Techniques in Molecular Biosciences</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 985</td>
<td>Advanced Study (fall and spring semester)</td>
<td>1-10</td>
</tr>
</tbody>
</table>

Specific Ph.D. Requirements: Biochemistry and Biophysics

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 750</td>
<td>Advanced Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 901</td>
<td>Graduate Seminar in Biochemistry and Biophysics (one semester)</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 918</td>
<td>Modern Biochemical and Biophysical Methods</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 952</td>
<td>Introduction to Molecular Modeling</td>
<td>3</td>
</tr>
</tbody>
</table>

The graduate committee may recommend that additional courses be taken.

Specific Ph.D. Requirements: Microbiology

Select at least four of the following five graduate courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 811</td>
<td>Advanced Molecular and Cellular Immunology</td>
<td></td>
</tr>
<tr>
<td>BIOL 812</td>
<td>Mechanisms of Host-Parasite Relationships</td>
<td></td>
</tr>
<tr>
<td>BIOL 813</td>
<td>Advanced Bacterial Physiology</td>
<td></td>
</tr>
<tr>
<td>BIOL 814</td>
<td>Advanced Molecular Virology</td>
<td></td>
</tr>
<tr>
<td>BIOL 815</td>
<td>Advanced Molecular Genetics</td>
<td></td>
</tr>
</tbody>
</table>

The graduate committee may recommend that additional courses be taken.

Specific Ph.D. Requirements: Molecular, Cellular, and Developmental Biology

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 752</td>
<td>Cell Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 755</td>
<td>Mechanisms of Development</td>
<td>3</td>
</tr>
</tbody>
</table>
Museum Studies Program

Museum Studies Graduate Program

These are exciting and challenging times for museums -- longstanding premises are being questioned, and many established practices are being reconsidered. Museum professionals today work in an environment far different than that of even a few years ago. Emerging technologies now allow museums to bring their collections and their programs to audiences well beyond the confines of museum buildings. With this expanded reach, museums are preparing for dramatic changes in the age, ethnicity, education, and economic status of their audiences. Exhibitions and public programs are evolving; more than ever, educators, curators, and designers are seeking ways to engage visitors in complex issues of broad concern. Behind the scenes, collection stewardship is being reevaluated in response to practical, political, and ethical concerns. Additionally, unprecedented scholarly attention is being directed toward the ways in which museums have acquired their collections, represented their subjects, and engaged with the public. In the midst of this transformation, long-standing assumptions about museums’ public value have been called into question, requiring museum leaders to craft new collaborations and community partnerships in order to survive.

To advance and thrive in this dynamic environment, twenty-first century museum professionals will need knowledge informed by practice, imagination tempered by rigor, and leadership stimulated by collaboration. This is what we can offer at the University of Kansas. Students take advantage of the superb facilities at KU, including the Dole Institute of Politics, Natural History Museum, Spencer Museum of Art, Spencer Research Library, and Wilcox Classical Museum, as well as nearby historical agencies, specialized libraries, and museums.

Courses

MUSE 701. Museum Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as AMS 731, BIOL 785, GEOL 783, and HIST 728.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor, LEC.

MUSE 702. The Nature of Museums. 3 Hours.
The purpose of this course is to provide an overview of the kinds of museums, their various missions, and their characteristics and potentials as research, education, and public service institutions responsible for collections of natural and cultural objects. (Same as AMS 720, BIOL 788, GEOL 782, and HIST 720.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor, LEC.

MUSE 703. Introduction to Museum Exhibits. 3 Hours.
Presentation of principles and practices of exhibit management, design, and production. Topics will include developing a master plan for museum exhibits; concept development; design, installation, and maintenance of exhibits; design theory; design process; label writing and editing; selection of materials architectural requirements and building codes; cost estimating; publicity; security; and exhibit evaluation. Consideration will be given to exhibition problems in public and private museums in the areas of anthropology, art, history, natural history, and technology. (Same as AMS 700, BIOL 787, GEOL 781, and HIST 723.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor, LEC.

MUSE 704. Principles and Practices of Museum Collection Management. 3 Hours.
Lecture, discussion, and laboratory exercises on the nature of museum collections, their associated data, and their use in scholarly research; cataloging, storage, fumigation, automated information management and related topics will be presented for museums of art, history, natural history and anthropology. (Same as AMS 730, BIOL 798, GEOL 785, and HIST 725.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor, LEC.

MUSE 705. Introduction to Museum Public Education. 3 Hours.
Consideration of the goals of an institution's public education services, developing programs, identifying potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as AMS 797, BIOL 784, GEOL 784, and HIST 721.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor, LEC.

MUSE 706. Conservation Principles and Practices. 3 Hours.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects will also be considered. (Same as AMS 714, BIOL 700, GEOL 780, and HIST 722.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor, LEC.

MUSE 707. Practical Archival Principles. 3 Hours.
Study of the principles and practices applicable to the preservation, care, and administration of archives and manuscripts. Practical experience will be an integral part of this course. (Same as HIST 727.) LEC.

MUSE 710. Current Trends in Curation and Collection Management. 2 Hours.
Seminar course to provide students with a working knowledge of the primary issues and current trends in building, administration, and care of scientific collections. Topics include permits, collecting, accessioning, cataloging, preservation, preventive conservation, and access to collections and data. The course format consists of readings, lectures, guest speakers, discussions, and visits to scientific collections on campus. (Same as BIOL 706.) LEC.

MUSE 780. Special Topics: ______. 1-3 Hours.
Advanced courses on special topics in museum studies, given as need arises. Lectures, discussions of readings, and guest speakers. Topic for semester to be announced. Prerequisite: Graduate standing in Museum Studies Program or permission of instructor. LEC.

MUSE 782. Seminar in Current Museum Topics: ______. 1-3 Hours.
In-depth examination of specific topics currently of concern to museums and museum professionals. Topic for semester to be announced. Prerequisite: Graduate standing in Museum Studies Program, or permission of instructor. LEC.

MUSE 790. Advanced Study. 1-3 Hours.
Individual research in a specialized topic not ordinarily treated in a Museum Studies core course for which there is a member of the graduate faculty competent and willing to direct a research project. Prerequisite: Consent of instructor. RSH.
MUSE 792. Directed Readings. 1-3 Hours.
Directed reading in an area of Museum Studies in which there is no particular course in the Museum Studies program or in cooperating departments but in which there is a member of the graduate faculty competent and willing to direct a program study. Prerequisite: Consent of instructor. IND.

MUSE 799. Museum Apprenticeship. 1-6 Hours.
Provides directed, practical experience in research, collection care, and management, public education, and exhibits with emphasis to suit the particular requirements of each student. (Same as AMS 799, ANTH 799, BIOL 799, GEOL 723, and HIST 799.) FLD.

MUSE 910. Materials Conservation. 3 Hours.
Preservation and collection conservation theory and principles, including condition reporting, conservation of furniture and wooden objects, inorganic-based materials, metal objects, organic-based materials, paintings, photographic materials, textiles, three-dimensional objects, and works on paper. LEC.

MUSE 930. Preventive Conservation. 3 Hours.
Theory and principles of preventive conservation, with emphasis on its application to storage environment quality, archival supports and housing, basic bookbinding, composite objects, integrated pest management, light and lighting, paper evaluation and mending, temperature, and relative humidity. LEC.

MUSE 940. Conservation Assessment. 3 Hours.
Understanding the conservator-curator relationship; principles of conservation assessment, documentation, research, environmental monitoring, handling objects, photographic documentation, and development of a publishable preservation research project. LEC.

MUSE 980. Advanced Conservation. 3 Hours.
Application of conservation theory and practice to exhibition development, planning, and preparation; conservation bookbinding; health and safety in conservation; integrated pest management; ethics of conservation; parameters of professional conservation practice. LEC.

Master of Arts in Museum Studies

Museum Studies Graduate Program

These are exciting and challenging times for museums -- longstanding premises are being questioned, and many established practices are being reconsidered. Museum professionals today work in an environment far different than that of even a few years ago. Emerging technologies now allow museums to bring their collections and their programs to audiences well beyond the confines of museum buildings. With this expanded reach, museums are preparing for dramatic changes in the age, ethnicity, education, and economic status of their audiences. Exhibitions and public programs are evolving; more than ever, educators, curators, and designers are seeking ways to engage visitors in complex issues of broad concern. Behind the scenes, collection stewardship is being reevaluated in response to practical, political, and ethical concerns. Additionally, unprecedented scholarly attention is being directed toward the ways in which museums have acquired their collections, represented their subjects, and engaged with the public. In the midst of this transformation, long-standing assumptions about museums' public value have been called into question, requiring museum leaders to craft new collaborations and community partnerships in order to survive.

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Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

To be considered for admission to regular graduate status in the Museum Studies program, a student must hold a baccalaureate degree and have earned at least a B (3.0) grade-point average in previous academic work. Acceptance in the program is determined by the Museum Studies Admissions Committee. A student interested in applying for admission must submit the following:

1. A completed application, along with a non-refundable application fee, submitted online through the Office of Graduate Studies (http://www.graduat.ku.edu/apply).

2. Transcripts from all undergraduate or graduate institutions attended. You may upload a scanned version of your official transcript from your undergraduate institution to the online application. Please note: A printout from a student portal is NOT considered to be an official copy of your transcript. Official transcripts will be required upon admission to the program. In addition, please calculate (http://www.clas.ku.edu/undergrad/tools/gpa) your Junior/Senior GPA and include it on your resume.

3. A statement of academic objectives. This component of the application is very important. It should be a thoughtful, well-written, 2-3 page statement addressing such topics as (a) what it is about museums and museum studies that particularly interests you, (b) your career goals, and the area of museum work that most attracts you, (c) your relevant experience and background, (d) the match of KU’s program to your interests, an (e) anything else you think is important to your application. If you feel that your academic record does not reflect your potential, or if your test scores are below expectations, be certain to provide an explanation of any extenuating circumstances related to this issue.

4. 3 letters of recommendation. (Please use KU’s online letter of recommendation system when you apply).

5. GRE scores. To submit scores, use University code 6871, Department code 5101.

6. A resume or curriculum vitae listing your employment history, scholarships/fellowships, and awards.

7. A sample of your written academic work (10 pages maximum, please).
8. For international students only, TOEFL scores or acceptable alternative to demonstrate English proficiency.

9. For international students only, proof of financial support. Applications will not be considered without financial documentation.

Students are admitted to the M.A. program only in the fall semester. The Museum Studies Admissions Committee will begin considering applicants for Fall admission in mid-January and will accept applications until the deadline for the fall semester on May 1. Students who meet the January 15 deadline will be notified of admission decisions in early March. Applications completed after the January 15 deadline are much less likely to be considered for scholarship support and may be placed on an admissions waiting list.

M.A. Degree Requirements

The M.A. degree in museum studies requires 36 credit hours at the graduate level. Students in the Museum Studies Program complete courses in six areas:

1. The Museum Studies Core - 9 credit hours
2. Museum Professional Areas - 9 credit hours
3. Museum Conceptual Domains - 6 credit hours
4. Electives - 9 credit hours
5. Museum Experience (Internship) - 3 credit hours
6. Final Product (Research) - 3 credit hours

1. Museum Studies Core (9 credit hours)
The Museum Studies Core ensures that all Museum Studies students gain a comprehensive understanding of the theories, history, techniques, and problems common to museums, historical agencies and related institutions. The Capstone course, taken in a student’s third semester of study, provides an avenue for students to conduct research or other creative activities that advance the discipline of museum studies.

MUSE 702 The Nature of Museums 3
MUSE 780 Special Topics: _____ 3
MUSE 782 Seminar in Current Museum Topics: _____ 3

2. Museum Professional Areas (9 credit hours)
Students will develop expertise in one of the principal specialties of museum work by completing at least two courses in that area, at least one of which must be a Museum Studies (MUSE) course. Many courses in other departments could fulfill requirements; it is the responsibility of students, and their advisors, to ensure that individual courses meet program requirements based on the general relevance of the course and assurance that the student’s work in the class will be applicable to museum studies by meeting with instructors and examining syllabi.

LEADERSHIP AND MANAGEMENT
Courses cover areas such as administration, policy, fund raising, and legal issues related to the management of non-profit organizations.

MUSE 701 Museum Management 3
Examples of Courses in Other Departments and Programs:
LAW 867 Law and the Arts 2-3
MEMT 823 Seminar in: _____ 1-3
PUAD 828 Nonprofit Management and Policy 3
PUAD 830 Administrative Ethics 3
PUAD 855 Financial Management for Public and Not-for-Profit Organizations 3

INTERPRETATION
Interpretation includes developing skills in exhibition design and installation, graphics, and marketing, public programs, as well as innovative approaches to new and emerging technologies.

MUSE 703 Introduction to Museum Exhibits 3
MUSE 705 Introduction to Museum Public Education 3
Examples of Courses in Other Departments and Programs:
ADS 712 Design Strategies and Methods 3
BIOL 720 Scientific Illustration 3
THR 618 Scenography and the Musical Theatre 3

COLLECTIONS
Courses provide opportunities to develop expertise in the practices and policies associated with the management and care of the range of materials in museum collections.

MUSE 704 Principles and Practices of Museum Collection Management 3
MUSE 706 Conservation Principles and Practices 3
MUSE 707 Practical Archival Principles 3
Examples of Courses in Other Departments and Programs:
ANTH 520 Archaeological Ceramics 3
ANTH 582 Ethnobotany 3
ANTH 648 Human Osteology 4
BIOL 603 Systematic Botany 3
BIOL 746 Principles of Systematics 4
GEOL 725 Paleontology of Lower Vertebrates 3
TD 504 History of Textiles, Lecture 3
UBPL 760 Historic Preservation Planning 3

COMMUNITY CONNECTIONS
Courses enable students to develop skills in public programming, curriculum planning, visitor studies, audience development, and volunteer management.

MUSE 705 Introduction to Museum Public Education 3
Examples of Courses in Other Departments and Programs:
ABSC 719 Experimental Field Work in Community Settings 1-5
C&T 808 Qualitative Research: Curriculum Inquiry 3
COMS 855 Qualitative Research Methods in Communication Studies 3
COMS 855 Qualitative Research Methods in Communication Studies 3
HIST 601 Oral History 3
VAE 750 Introduction to Art Museum Education 1-4

3. Courses focusing on Museum Conceptual Domains (6 credit hours) The conceptual domains of museum work address in depth the conceptual and theoretical foundations of museums. Courses that emphasize conceptual domains will place museological subjects in broader historical and intellectual frameworks. Students may take courses which may be offered in one or several disciplines. Courses will be selected based on the general relevance of the course, and assurance that the student’s work in the class will be applicable to museum studies.

4. Electives and Other Museum Studies Courses (9 credit hours) Students are expected to deepen their knowledge of the field by taking courses in a subject area pertinent to their area of specialization. Courses will be selected with the approval of the student’s committee chair, as well as the course instructor.
5. **Museum Experience (3 credit hours)**

While enrolled in the Museum Studies program, students are required to gain at least 500 hours of museum experience, of which at least 250 hours must be in an approved, professionally supervised internship.

6. **Final Product and Examination**

Each student will be responsible for a final product, developed through research or other creative activity, that contributes to museum studies and demonstrates the student’s ability to engage conceptually and professionally with the discipline of museum studies.

**Museum Studies Graduate Certificate**

**Graduate Certificate in Museum Studies**

The course of study leading to the Certificate in Museum Studies comprises 15 credit hours at the graduate level. The Graduate Certificate in Museum Studies is designed to provide students with a solid grounding in the histories, concepts, and practices of the discipline of museum studies. The certificate program enables students to integrate knowledge of museum studies into their own academic disciplines or professional training. Completion of the certificate in museum studies represents an additional credential for graduate students from a variety of academic fields who are preparing for careers in research and teaching or professional practice. Enrollment in the program is open to students admitted to a regular KU graduate program or to non-degree-seeking graduate students admitted to the Graduate School.

The Museum Studies core curriculum will be the basis for the graduate certificate, which emphasizes the essential interdisciplinary and collaborative nature of museum work by drawing on a range of departments in the University. The program allows students to gain knowledge in preparation for doctoral study, as well as for employment in museums and related fields such as historic preservation, cultural resource preservation, archives, and government agencies.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree-seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Eligibility criteria for admission to the certificate program include a B.A. degree from an accredited institution with a 3.0 or higher GPA. Awarding of certificates will be handled consistent with guidelines and timing of degree awards of the Graduate School. Completion of the program will appear on the graduate transcript.

**Current KU Students**

Current graduate students wishing to enroll in the Graduate Certificate program will apply through the Graduate School. A student must be in good standing with their graduate degree program in order to participate in the certificate program. A graduate GPA of 3.0 or higher is required for admission. The application process entails completing the online application, paying a $30.00 application fee, and submitting materials required for the Museum Studies Certificate:

- a. A letter stating your interest in Museum Studies and its relationship to your graduate course of study,
- b. An unofficial copy of your KU transcript; and
- c. A letter of support from your graduate degree program.

**Non-KU Students**

Non-KU graduate students must complete an application to the Graduate School for admission into the certificate program and submit an application fee along with the following materials:

- a. A letter stating your interest in the Museum Studies Graduate Certificate program. In 2-3 pages, address such topics as (1) what about museums and museum studies particularly interests you, (2) how the Certificate will support or enhance your career goals, (3) the area of museum work most relevant to your career goals, (4) relevant experience and background information, (5) how KU’s program matches your interests, and (6) anything else you think is important to your application,
- b. A copy of your college transcript;
- c. 2 letters of recommendation from persons familiar with your academic work or potential for graduate study.

The Museum Studies Graduate Certificate will require 15 hours of course work including a 3 credit (minimum) research practicum or internship. The remaining 9 hours will be selected from courses in which there is a demonstrable component that has relevance to museum studies.

**Required (6)**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>MUSE 702</td>
<td>The Nature of Museums</td>
<td>3</td>
</tr>
<tr>
<td>MUSE 780</td>
<td>Special Topics: _____ (Culture of Museums)</td>
<td>3</td>
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</table>

**Choose 1 course in a museum professional area (3)**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>MUSE 701</td>
<td>Museum Management</td>
</tr>
<tr>
<td>MUSE 703</td>
<td>Introduction to Museum Exhibits</td>
</tr>
<tr>
<td>MUSE 704</td>
<td>Principles and Practices of Museum Collection Management</td>
</tr>
<tr>
<td>MUSE 705</td>
<td>Introduction to Museum Public Education</td>
</tr>
<tr>
<td>MUSE 706</td>
<td>Conservation Principles and Practices</td>
</tr>
<tr>
<td>MUSE 707</td>
<td>Practical Archival Principles</td>
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</tbody>
</table>

**Choose 1 course in a museum conceptual domain (3)**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>AAAS 677</td>
<td>African Design</td>
</tr>
<tr>
<td>AMS 803</td>
<td>Research Methods in American Studies</td>
</tr>
<tr>
<td>ABSC 765</td>
<td>Evaluating and Disseminating Scientific Material I</td>
</tr>
<tr>
<td>ABSC 801</td>
<td>Design and Analysis of Community Development Methods</td>
</tr>
<tr>
<td>C&amp;T 809</td>
<td>Creative Thinking and Learning</td>
</tr>
<tr>
<td>COMS 959</td>
<td>Theories of Rhetoric: Contemporary</td>
</tr>
<tr>
<td>ELPS 811</td>
<td>Constructivist Learning Technologies</td>
</tr>
<tr>
<td>FMS 531</td>
<td>Contemporary Concepts in Media Studies</td>
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<tr>
<td>HA 505</td>
<td>Special Study: _____ (Business of Art)</td>
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<td>LAW 967</td>
<td>Native American Natural Resources</td>
</tr>
<tr>
<td>EPSY 807</td>
<td>Theories and Research in Human Learning</td>
</tr>
<tr>
<td>PUAD 931</td>
<td>Research Seminar in Public Management</td>
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</tbody>
</table>
Department of Philosophy

Why study philosophy?
Because philosophy teaches you how to think about all aspects of your life and the world around you.

Undergraduate Programs
The department offers a range of courses in philosophy, both in the main systematic divisions of the subject and in its major historical periods. Philosophy courses are often suitable not only for majors but also for students whose main interests lie in other areas. Many philosophy courses satisfy requirements in other degree programs in the College and professional schools.

Argument and Reason Requirement
PHIL 148 and PHIL 310 each meet the College argument and reason requirement for the B.A. and B.G.S. degrees.

Interdisciplinary Course Work
The department offers courses in applied ethics, ethics, feminism, logic, and the philosophy of science to fit the needs and interests of nonmajors. Many of these may be taken without prerequisites. The nonmajor may wish to supplement work in other fields or schools with a series of related courses in philosophy. Some suggested programs to be supplemented with this type of interdisciplinary course work are business, prelaw, premedicine, and engineering; classics, art history, and literature; and natural sciences and mathematics. Lists of philosophy courses relating to these areas are available. Consult the director of undergraduate studies.

Graduate Programs
The department offers graduate programs in philosophy leading to the M.A. and Ph.D. degrees. With the School of Law, the department also offers a joint program in law and philosophy leading to the J.D. in law and the M.A. in philosophy. Our faculty (http://philosophy.ku.edu/faculty) is dynamic, professionally active, and committed to excellence in scholarship and teaching. Excellent facilities, strong library holdings, and a faculty dedicated to both teaching and research assure students of a challenging and professional graduate preparation.

Departmental Funding
While it is not guaranteed, the department has best to provide funding in the form of Graduate Teaching Assistantship (GTA) appointments to all incoming graduate students. GTA appointments are awarded for the academic year (9 months) and come with a starting salary of about $14,500, a 100% tuition waiver, and qualify the student for University-subsidized group health insurance. The appointments are guaranteed based on performance for up to 3 years for M.A. students, 5 years for Ph.D. students and 6 years for students who receive both an M.A. and a Ph.D. at The University of Kansas. GTAs in the department receive thorough training, close mentoring, and the opportunity to teach courses in a variety of fields within Philosophy, providing them with a strong base of teaching experience upon entering the job market.

Additional Funding
There are also university fellowships for truly outstanding students. Visit the Graduate Studies website for information about funding opportunities (http://graduate.ku.edu/funding) for KU graduate students.

Courses
PHIL 140. Introduction to Philosophy. 3 Hours. HR GE11/GE3H / H. An introductory examination, based primarily on writings of major philosophers, of such central philosophical problems as religious belief, the mind and its place in nature, freedom and determinism, morality, and the nature and kinds of human knowledge. LEC.

PHIL 141. Introduction to Philosophy Honors. 3 Hours. HR GE11/GE3H / H. An introductory examination, based primarily on writings of major philosophers, of such central philosophical problems as religious belief, the mind and its place in nature, freedom and determinism, morality, and the nature and kinds of human knowledge. Prerequisite: Open only to students in the University Honors Program or by consent of department. LEC.

PHIL 148. Reason and Argument. 3 Hours. GE11/GE3H / H. An introduction to the theory and practice of logical analysis. Special emphasis is placed upon the logical appraisal of everyday arguments. LEC.

PHIL 150. Philosophical Communication. 3 Hours. GE22 / S. This course provides an introduction to philosophy, with a focus on the traditional philosophical practice of oral communication and argument. Through exploration of perennial philosophical questions (e.g., Are there different ways of knowing? What makes for a good life? Could computers have minds? Are we obligated to obey the law? What makes you the same person over time?), students develop their ability to participate in various forms of philosophical communication. In this course, students have the opportunity to teach course material to peers, engage in class debates over philosophical issues, and craft short presentations exploring a facet of the course topic. LEC.

PHIL 160. Introduction to Ethics. 3 Hours. HR AE51/GE11/GE3H / H. An introductory study of the nature of morality and of philosophical bases for the assessment of actions, agents, and institutions. Special emphasis will be placed upon the views of such important philosophers as Aristotle, Hume, Kant, and Mill. Some attention will be paid to applications of moral theory to practice. LEC.

PHIL 161. Introduction to Ethics Honors. 3 Hours. HR AE51/GE11/GE3H / H. An introductory study of the nature of morality and of philosophical bases for the assessment of actions, agents, and institutions. Special emphasis will be placed upon the views of such important philosophers as Aristotle, Hume, Kant, and Mill. Some attention will be paid to applications of moral theory to practice. Prerequisite: Open only to students in the University Honors Program or by consent of department. LEC.

PHIL 177. First Year Seminar: ______. 3 Hours. GE11 / U. A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Philosophy. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LAB.
PHIL 180. Introduction to Social and Political Philosophy. 3 Hours.  
HR AE51/GE3H / H.  
An introductory study, based primarily on classic philosophical texts, of such central issues as the justification of governmental authority, the social sources of power, the nature of a just distribution of social resources, competing conceptions of human nature, and the proper limits of governmental interference with individual liberty. LEC.

PHIL 181. Introduction to Social and Political Philosophy, Honors. 3 Hours. HR AE51/GE3H / H.  
An introductory study, based primarily on classic philosophical texts, of such central issues as the justification of governmental authority, the social sources of power, the nature of a just distribution of social resources, competing conceptions of human nature, and the proper limits of governmental interference with individual liberty. Prerequisite: Open only to students in the University Honors Program or by consent of department. LEC.

PHIL 350. Philosophical Issues in Religion. 3 Hours. HR AE51/GE3H / H.  
A philosophical analysis of theoretical and ethical issues that arise in the practice of the life sciences. Discusses the conceptual foundation of the life sciences-evolutionary theory and genetics. Critically explores the use of statistical and non-human-animal models. Examines ethical issues including problems that arise in human and other animal experimentation, obligations to the environment, proper use of patents, and conflicts in professional duties. LEC.

PHIL 355. Philosophical Issues in the Life Sciences. 3 Hours. HR AE51/GE3H / H.  
A philosophical analysis of ethical issues that arise in the practice of the life sciences. Discusses the conceptual foundation of the life sciences-evolutionary theory and genetics. Critically explores the use of statistical and non-human-animal models. Examines ethical issues including problems that arise in human and other animal experimentation, obligations to the environment, proper use of patents, and conflicts in professional duties. LEC.

PHIL 360. Moral Issues in Business. 3 Hours. AE51 / H.  
After a brief survey of techniques of moral argument and analysis, particular moral issues related to business will be discussed. These will include such topics as advertising, conflict of interest, personal and corporate responsibility, codes of conduct, private property, strikes, just wage, and the tension between moral ideals and business pressures. LEC.

PHIL 365. Moral Issues in the Professions. 3 Hours. H.  
An analysis of the nature and justification of standards of professional conduct. Issues of professional behavior that concern more than one profession such as fidelity to a client's interests, candor, confidentiality, obligations to human research subjects, obligations to uphold professional standards, professional strikes, and affirmative action will be discussed. LEC.

PHIL 368. Moral Issues in Sports. 3 Hours. H.  
This course is a philosophical investigation of the nature and value of sports. Provides students with an overview of ethical theory and considers principled answers to questions about the values of sports and about how those values can be sustained or demeaned. Students debate a variety of live controversies in sports today such as drugs, cheating, sexism, racism, the role of sports in educational institutions, Title IX, commercialization, and violence. LEC.

PHIL 370. Moral Issues in Medicine. 3 Hours. H.  
After a brief survey of techniques of moral argument and analysis, particular moral issues related to medicine will be discussed. The justification and limits of some rules of professional conduct that deal with such matters as confidentiality, truth-telling, and protection of medical research subjects will be considered. Issues relating to death and dying in medicine such as abortion, euthanasia, and the refusal of life-saving medical therapy also will be discussed. LEC.

PHIL 375. Moral Issues in Computer Technology. 3 Hours. AE51 / H.  
After surveying the nature of ethics and morality and learning some standard techniques of moral argumentation, we shall examine such topics as: property and ownership rights in computer programs and software; privacy in computer entry and records; responsibility for computer use and failure; the "big brother" syndrome made possible by extensive personal data banks; censorship and the world-wide web; computer illiteracy and social displacement; and ethical limits to computer research. Prerequisite: EECS 168 or permission of instructor. LEC.

PHIL 380. Environmental Ethics. 3 Hours. AE51 / H.  
After a brief survey of techniques of moral argument and analysis, particular moral issues related to the environment will be discussed. These will include such topics (one of which may be dealt with in depth) as animal rights, rights of future generations, wilderness preservation, population control, endangered species, and economics and public policy. Prerequisite: EVRN 148 or consent of instructor. LEC.

PHIL 384. Ancient Philosophy. 3 Hours. HR GE3H / H.  
A survey of the writings of such principal philosophers of the modern period as Descartes, Spinoza, Leibniz, Hobbes, Locke, Berkeley, Hume, and Kant. LEC.

PHIL 388. Analytic Philosophy: Frege to Quine. 3 Hours. AE41/GE3H / H.  
An examination of topics of philosophical interest that are important in the feminist movement such as the nature of sexism, the concept of sexual equality, the ethics of sexual behavior, the nature of love, feminist analyses of the value of marriage and family, the ethics of abortion, and justifications for preferential treatment of women. (Same as WGSS 381.) LEC.

PHIL 390. Issues in Philosophy. 3 Hours. AE51/GE3H / H.  
A survey of the works of such principal philosophers of the modern period as Descartes, Spinoza, Leibniz, Hobbes, Locke, Berkeley, Hume, and Kant. LEC.

PHIL 391. Feminism and Philosophy. 3 Hours. AE41/GE3H / H.  
A survey of the works of such principal philosophers of the modern period as Descartes, Spinoza, Leibniz, Hobbes, Locke, Berkeley, Hume, and Kant. LEC.

PHIL 399. Senior Essay. 3 Hours. AE61 / H.  
This course is required, in addition to regular major requirements, of those students wishing to work for departmental honors in Philosophy. Students wishing to enroll should first speak with the departmental adviser for
PHIL 500. Studies in Philosophy: _____, 1-6 Hours. H.
(Topic, instructor, and specific prerequisite to be announced in Schedule of Classes.) A study of particular philosophical problems or thinkers not covered by other courses. The course may be offered concurrently by different instructors under different subtitles, and may, with the consent of the chair, be taken more than once if content varies. LEC.

PHIL 504. Philosophy of Sex and Love. 3 Hours. H.
A discussion of philosophical issues such as the relation between love, autonomy, and friendship; heterosexual and homosexual relationships; marriage and adultery; rape and sexual harassment; prostitution; and pornography. LEC.

PHIL 506. Chinese Thought. 3 Hours. NW AE42/GE3H / H/W.
A survey of the principal modes of Chinese thought from their origins through the imperial period. Not open to students with credit in EALC 132. (Same as EALC 642 and HWC 524.) Prerequisite: Eastern Civilization course, or a course in Asian history, or a distribution course in Philosophy. LEC.

PHIL 508. Early Greek Philosophy. 3 Hours. H/W.
A study of the doctrines of Greek philosophy before Plato. Emphasis on the Pre-Socratic philosophers, with some attention paid to the Sophists and the Hippocratic corpus. (Same as GRK 508.) Prerequisite: PHIL 384, or GRK 301, or GRK 302, or GRK 303, or GRK 310, or GRK 312, or permission of instructor. LEC.

PHIL 555. Justice and Economic Systems. 3 Hours. H.
An examination of important representative theories of the justness of an economic system, with particular attention paid to such institutions as private property, a market economy, means and relationships of production, and principles of distribution to individuals. The theorists under consideration include Locke, Adam Smith, Marx and Engels, contemporary utilitarians, Rawls, and Nozick. Prerequisite: A course in ethics or an introductory course in economics or in business. LEC.

PHIL 557. Kant. 3 Hours. H.
A survey of the major works of Immanuel Kant, with attention to his critical method and its application to issues in theoretical philosophy, practical philosophy, aesthetics, or the philosophy of history. Prerequisite: PHIL 386. LEC.

PHIL 560. Nineteenth Century Philosophy. 3 Hours. H.
The development of philosophy in the 19th century. Special attention will be paid to such major figures as Hegel, Kierkegaard, Marx, Nietzsche, and Mill. Prerequisite: PHIL 386. LEC.

PHIL 562. Kierkegaard. 3 Hours. H.
A study of the thought of Soren Kierkegaard through examination of some of his major writings. Some attention is given to his influence on the development of existentialist philosophies. Prerequisite: PHIL 384 or PHIL 386. LEC.

PHIL 570. Nietzsche. 3 Hours. H.
A study of Nietzsche's major writings and ideas, with some attention to his philosophical influence. Prerequisite: PHIL 384 or PHIL 386 or permission of instructor. LEC.

PHIL 580. Marxism. 3 Hours. H/W.
A philosophical study of the classical texts of Marxism and of their contemporary development. Prerequisite: A course in philosophy or a course in political science. LEC.

PHIL 582. Existentialism. 3 Hours. H/W.
A study of the main themes and leading philosophers of the existentialist movement. Prerequisite: Two courses in philosophy. LEC.

PHIL 590. Phenomenology. 3 Hours. H.
A study of the main themes and leading philosophers of the phenomenological movement. Prerequisite: PHIL 386. LEC.

PHIL 592. Contemporary Continental Philosophy. 3 Hours. H.
A study of selected topics in 20th century European philosophy, such as hermeneutics, critical theory, and poststructuralism. Figures to be studied could include Heidegger, Gadamer, Adorno, Habermas, and Foucault. Prerequisite: PHIL 386. LEC.

PHIL 600. Readings in Philosophy: _____, 1-6 Hours. H.
Individual reading on topics not covered in course work. Prerequisite: Consent of instructor. IND.

PHIL 605. The Philosophy of Plato. 3 Hours. H.
A survey of the major works of Plato, with attention both to Plato's distinctive arguments and positions in the major areas of philosophy and to the distinctive literary form in which Plato presents his thinking. Prerequisite: PHIL 384. LEC.

PHIL 607. The Philosophy of Aristotle. 3 Hours. H.
A survey of the major works of Aristotle, with the aim of understanding Aristotle's distinctive formulations of central philosophical questions, the arguments he presents for his answers to those questions, and the systematic interconnections between his positions in the different areas of philosophy. Prerequisite: PHIL 384. LEC.

PHIL 608. Hellenistic Philosophy. 3 Hours. H.
Survey of Stoicism, Epicureanism, and Scepticism from their beginnings through the second century AD. Prerequisite: PHIL 384 and another course in philosophy. LEC.

PHIL 610. Symbolic Logic. 3 Hours. H.
Propositional calculus, predicate calculus, consistency, decidability of formal systems, the paradoxes and number concept will be covered. LEC.

PHIL 611. Topics in Symbolic Logic: _____, 1-3 Hours. H.
This course is a workshop in any of a variety of topics in symbolic logic of special importance to contemporary analytic philosophy, such as modal logic, tense logic, axiomatic set theory, Goedel's theorems, model theory, etc. May be repeated for credit as topics vary. Prerequisite: PHIL 310. LEC.

PHIL 620. Philosophy of Natural Science. 3 Hours. H.
An examination of conceptual and foundational issues in the natural sciences. Topics may include the methodology of science (the nature and status of laws, the precise way in which experiment contributes to theory) and puzzles concerning the content of science (the status of space and time, the problematic nature of quantum mechanics). Prerequisite: PHIL 310 or PHIL 610, or permission of instructor. LEC.

PHIL 622. Philosophy of Social Science. 3 Hours. H.
A critical examination of the methods, concepts, and practices of the social sciences. Topics to be considered may include: theories of explanation, methodological individualism vs. holism, objectivity, the role of rationality, myth and the unconscious in the explanation of behavior, and the value neutrality of science. Prerequisite: One previous course in philosophy, or permission of instructor. LEC.

PHIL 628. Philosophy of Logic. 3 Hours. H.
A systematic treatment of logical theory. Different types of logic will be studied along with their philosophical assumptions, motivations, implications, and uses. Prerequisite: PHIL 310 or PHIL 610. LEC.

PHIL 630. Philosophy of Mathematics. 3 Hours. H.
An examination of varying conceptions of the role and status of mathematical arguments. Topics may include realism/anti-realism, the consequences of Goedel's Incompleteness Theorems, the role of
mathematics in the sciences, and an examination of such historical thinkers as Plato, Frege, Russell, Wittgenstein, Goedel, and Hilbert. Prerequisite: PHIL 310 or PHIL 610, or permission of instructor. LEC.

PHIL 638. Philosophy of Language. 3 Hours. AE61 / H.
An examination of the nature of language using the methods of analytic philosophy. Topics may include meaning, truth, reference, language and thought, and the nature of linguistic rules. Prerequisite: PHIL 388 or permission of instructor. LEC.

PHIL 648. Theory of Knowledge. 3 Hours. AE61 / H.
An examination of the nature of knowledge. Topics may include the concept of knowledge, knowledge of the external world, induction, theories of justification, and scientific knowledge. Prerequisite: PHIL 384 and PHIL 386, PHIL 388 (which may be taken concurrently), or permission of instructor. LEC.

PHIL 650. Metaphysics. 3 Hours. AE61 / H.
An examination of some of the central issues in metaphysics. Topics may include causation, the mind-body problem, free will and determinism, modality, natural kinds, the nature of properties, and personal identity. Prerequisite: PHIL 384 and PHIL 386, PHIL 388 (which may be taken concurrently), or permission of instructor. LEC.

PHIL 654. Philosophy of Mind. 3 Hours. AE61 / H.
An examination of the nature of mind using the methods of analytic philosophy. Topics may include consciousness, perception, propositional attitudes, thought and language, action and intention, mind and body, the prospects for scientific psychology, and personal identity. Prerequisite: PHIL 388 or permission of instructor. LEC.

PHIL 662. Aesthetics. 3 Hours. H.
A study of some of the central themes and problems in aesthetics, such as the beautiful and the sublime in nature and the arts. Prerequisite: Two courses in philosophy or graduate standing. LEC.

PHIL 666. Rational Choice Theory. 3 Hours. H.
This course is an introduction to the philosophical issues surrounding individual decision theory, game theory, and social choice theory. This includes issues of scientific theory selection, the nature of preference, the uses of games to model social interaction, and the ethical and political implications of Arrow's impossibility theorem. Formal techniques of modeling and proof, akin to those used in logic and mathematics, will be used in much of the course. Prerequisite: Two courses in economics, a philosophy course numbered 500 or above, or consent of instructor. LEC.

PHIL 668. Political Philosophy. 3 Hours. H.
A systematic analysis of the concepts of politics, with reference to representative political theories. Prerequisite: A course in philosophy and a course in political science. LEC.

PHIL 670. Contemporary Ethical Theory. 3 Hours. AE51 / H.
An examination of some major moral philosophers and some important issues in ethical theory since the beginning of the twentieth century. Topics covered typically include intuitionism, emotivism, utilitarianism, virtue ethics, and the relationship between morality and rationality. Prerequisite: PHIL 160 or PHIL 161 or two courses in philosophy. LEC.

PHIL 671. Feminist Theories in Ethics. 3 Hours. H.
This course addresses the role (if any) that gender plays in constructing ethical theories. Topics include the impact of culture, affect, and the body on our understanding of gender differences and the importance of these differences for ethics. Prerequisite: PHIL 160 or PHIL 161, or two previous philosophy courses. LEC.

PHIL 672. History of Ethics. 3 Hours. AE51 / H.
An interpretive and critical examination of central texts in the history of moral philosophy, which may include works by Aristotle, Hume, Kant, and J.S. Mill. Prerequisite: PHIL 160 or PHIL 161 or two previous philosophy courses. LEC.

PHIL 674. Philosophy of Law. 3 Hours. H.
An examination of the concept of law and of legal reasoning. In addition, the course may consider such topics as natural law, legal excuses, the relations between law and morality, civil disobedience, civil liberties, the concept of property. Prerequisite: Two courses in philosophy or one course in philosophy and one course in law or consent of instructor. LEC.

PHIL 676. Medical Ethics: Life and Death Issues. 3 Hours. AE51 / H.
After a brief survey of techniques of moral argument and analysis especially as they pertain to the moral impermissibility of murder, particular moral and conceptual issues relating to death and dying in medical contexts will be addressed. Topics such as abortion, infanticide, suicide, euthanasia, the definition of death, and the right to refuse life-saving medical therapy will be included. Prerequisite: Two courses in biology or consent of instructor. LEC.

PHIL 677. Medical Ethics: Professional Responsibilities. 3 Hours. H.
After a brief survey of techniques of moral argument and analysis, particular moral issues related to the obligations of health care professionals and the rights of patients will be discussed. These will include such matters as confidentiality, truth-telling, informed consent, the ethics of research on human subjects, psychosurgery, the rights of the mentally ill, and the rights of the mentally retarded. Prerequisite: Two courses in biology or consent of instructor. LEC.

PHIL 684. Main Currents of Russian Thought I. 3 Hours. H/W.
A study of philosophical, theological and literary monuments designed to acquaint the student with the main cultural forces that have shaped Russian thought and manners. From the origins to Napoleonic times. (Same as SLAV 684.) LEC.

PHIL 686. Main Currents of Russian Thought II. 3 Hours. H/W.
A continuation of SLAV 684 from the age of Pushkin to the present. (Same as SLAV 686.) LEC.

PHIL 800. Tutorial. 3 Hours.
Intensive supervised training in and application of the techniques of research. Required of every graduate student seeking an advanced degree in the first or second semester of enrollment. Passing this tutorial constitutes partial fulfillment of the Ph.D. RSRS requirements. Consent of instructor required for repeating the course. Prerequisite: Graduate standing. RSH.

PHIL 805. Plato. 3 Hours.
Prerequisite: PHIL 508 or PHIL 605 or PHIL 607 or PHIL 608 or permission of instructor. LEC.

PHIL 807. Aristotle. 3 Hours.
Prerequisite: PHIL 508 or PHIL 605 or PHIL 607 or PHIL 608 or permission of instructor. LEC.

PHIL 820. Topics in the History of Philosophy: ______. 3 Hours.
This course may be offered by different instructors under different specified or permission of instructor. LEC.

PHIL 824. Hume. 3 Hours.
Prerequisite: PHIL 648 or PHIL 650 or PHIL 654 or permission of instructor. LEC.

PHIL 828. Kant. 3 Hours.
Prerequisite: PHIL 648 or PHIL 650 or PHIL 654 or permission of instructor. LEC.
PHIL 831. Hegel. 3 Hours.
Prerequisite: PHIL 560 or 500-600 level course as specified or permission of instructor. LEC.

PHIL 833. Nietzsche. 3 Hours.
A study of the philosophy of Friedrich Nietzsche. Prerequisite: PHIL 560 or PHIL 570 or permission of instructor. LEC.

PHIL 835. Frege. 3 Hours.
Gottlob Frege was the founder of the analytic movement in philosophy, having done seminal work in logic, the philosophy of language, and the philosophy of mathematics. This course will focus on his primary texts as well as his influence on present-day studies. Prerequisite: PHIL 628 or PHIL 630 or PHIL 638 or permission of instructor. LEC.

PHIL 843. Heidegger. 3 Hours.
Prerequisite: PHIL 560 or PHIL 562 or PHIL 570 or PHIL 582 or PHIL 590 or PHIL 592 or permission of instructor. LEC.

PHIL 848. Wittgenstein. 3 Hours.
Prerequisite: PHIL 638 or PHIL 650 or PHIL 654 or permission of instructor. LEC.

PHIL 850. Topics in Recent Philosophy: ____. 3 Hours.
This course may be offered by different instructors under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic, instructor, and specific prerequisite to be announced in Schedule of Classes. Prerequisite: 500-600 level as specified or permission of instructor. LEC.

PHIL 852. Quine. 3 Hours.
A systematic study of the major work of W. V. Quine and its influence on subsequent analytic philosophy. Topics will include Quine's theory of meaning, philosophical logic, and philosophy of science. Prerequisite: PHIL 638 or PHIL 648 or PHIL 650 or PHIL 654 or permission of instructor. LEC.

PHIL 855. Davidson. 3 Hours.
An examination of Donald Davidson's seminal work in philosophy of language and philosophy of mind. Among the topics to be considered will be meaning, truth, interpretation, action, and propositional attitudes. Prerequisite: PHIL 638 or PHIL 654 or permission of instructor. LEC.

PHIL 860. Topics in Philosophy of Science: ____. 3 Hours.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 620 or PHIL 622 or PHIL 648 or PHIL 650 or permission of instructor. LEC.

PHIL 862. Topics in Logic: ____. 3 Hours.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 610 or PHIL 628 or PHIL 630 or permission of instructor. LEC.

PHIL 866. Topics in Philosophy of Language: ____. 3 Hours.
This course may be offered under different subtitles and may be taken more than once if the subject matter varies sufficiently. Prerequisite: PHIL 638 or permission of instructor. LEC.

PHIL 870. Topics in Metaphysics: ____. 3 Hours.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 650 or permission of instructor. LEC.

PHIL 872. Topics in Theory of Knowledge: ____. 3 Hours.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 648 or permission of instructor. LEC.

PHIL 877. Topics in Philosophy of Mind: ____. 3 Hours.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 654 or permission of instructor. LEC.

PHIL 880. Topics in Ethics: ____. 3 Hours.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 670 or PHIL 672 or permission of instructor. LEC.

PHIL 884. Topics in Social and Political Philosophy: ____. 3 Hours.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 555 or PHIL 666 or PHIL 668 or PHIL 674 or permission of instructor. LEC.

PHIL 885. Topics in Law and Philosophy. 3 Hours.
Explores various topics at the intersection of law and philosophy. Content varies but may include: What is freedom and what role should government play in a free society? What is equality and what is the best way to achieve it? What is the relationship between law and social justice? What is the source and value of human rights? Should social and economic rights be legally guaranteed? How should government redress historical injustices such as slavery, apartheid, and the Holocaust? Students must complete a substantial seminar paper. (Same as LAW 962.) LEC.

PHIL 886. Topics in Applied Ethics: ____. 3 Hours.
This course may be offered under different subtitles, such as professional ethics or some issue in business ethics (e.g., corporate responsibility) or in medical ethics (e.g., the definition of death); it may be taken more than once if the subject matter varies sufficiently. Topic, instructor, and specific prerequisite to be announced in Schedule of Classes. Prerequisite: PHIL 670 or PHIL 672 or 500-600 level course as specified or permission of instructor. LEC.

PHIL 888. Topics in the Philosophy of the Social Sciences: ____. 3 Hours.
This course may be offered under different subtitles, such as philosophy of a particular social science (e.g., economics, psychology) or a particular issue in the social sciences (e.g., ideology, reductionism), and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 622 or permission of instructor. LEC.

PHIL 890. Topics in Continental Philosophy: ____. 3 Hours.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic, instructor, and specific prerequisites to be announced in the Schedule of Classes. LEC.

PHIL 899. Master's Thesis. 1.6 Hours.
Six hours of credit will be awarded upon completion of the master's thesis, but no more than six hours of credit may be obtained in this course altogether. Graded on a satisfactory/unsatisfactory basis. THE.
PHIL 900. Research in Philosophy: ____. 1-3 Hours.  
Intensive research in philosophy. This course may be taken through  
individual arrangement, or in connection with small research seminars  
which are offered occasionally. Students may only enroll for three hours  
in any given semester. May be repeated if content varies significantly.  
Prerequisite: Twelve hours of graduate work. RSH.

PHIL 901. Ph.D. Tutorial. 3 Hours.  
Independent research on any topic that a graduate student and a faculty  
member shall agree on. It shall result in a tightly focused 20-30 page  
paper. The student's written work will be repeatedly evaluated over the  
semester by the director, and the final product must be defended in  
an oral examination conducted by a three-member faculty committee  
(including the director). Prerequisite: Students must be admitted to the  
Ph.D. program and have successfully completed the Ph.D. core courses  
requirement. RSH.

PHIL 999. Dissertation. 1-12 Hours.  
This course may be taken more than once, but not for more than  
twelve hours of credit in any one semester. Graded on a satisfactory/  
unsatisfactory basis. THE.

Bachelor of Arts and Bachelor of  
General Studies in Philosophy

Why study philosophy?  
Because philosophy teaches you how to think about all aspects of your  
life and the world around you.

Undergraduate Admission  
Admission to KU  
All students applying for admission must send high school and college  
transcripts to the Office of Admissions. Unless they are college transfer  
students with at least 24 hours of credit, prospective students must send  
ACT or SAT scores to the Office of Admissions. Prospective first-year  
students should be aware that KU has qualified admission requirements  
that all new first-year students must meet to be admitted. Consult the  
Office of Admissions (http://admissions.ku.edu) for application deadlines  
and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://  
www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-  
level course work will transfer on the Office of Admissions (http://  
credittransfer.ku.edu) website.

Admission to the College of Liberal Arts  
and Sciences  
Admission to the College is a different process from admission to a  
major field. Some CLAS departments have admission requirements.  
See individual department/program sections for departmental admission  
requirements.

First- and Second-Year Preparation  
Although majors are not required to take courses in philosophy in their  
first 2 years, the department recommends that they do so. Prospective  
majors are encouraged to begin with one of the 100-level courses. These  
courses provide introductions to broad areas of philosophy, and students  
may apply one 100-level course toward the major requirements. PHIL  
310, PHIL 384, PHIL 386, and PHIL 388 are required prerequisites for  
upper-division work and should be taken early. Prospective majors should  
consult the director of undergraduate studies early to plan course work.

Requirements for the B.A. or B.G.S. Major  
 Philosophy Major Core Knowledge and Skills (6)  
 Majors must complete a course in each of the following areas:  
 Ancient Philosophy. Satisfied by:  
 PHIL 384 Ancient Philosophy 3  
 Modern Philosophy from Descartes to Kant. Satisfied by:  
 PHIL 386 Modern Philosophy from Descartes to Kant 3  
 Philosophy Major Required Electives (15)  
 Symbolic Logic. Satisfied by one of the following:  
 PHIL 310 Introduction to Symbolic Logic 3  
or PHIL 610 Symbolic Logic  
 Value Theory. Satisfied by completing one of the following courses:  
 PHIL 555 Justice and Economic Systems 3  
 PHIL 662 Aesthetics 3  
 PHIL 668 Political Philosophy 3  
 PHIL 670 Contemporary Ethical Theory 3  
 PHIL 672 History of Ethics 3  
 Metaphysics / Theory of Knowledge / Philosophy of Language /  
 Philosophy of Mind. Satisfied by completing one of the following  
courses:  
 PHIL 638 Philosophy of Language 3  
 PHIL 648 Theory of Knowledge 3  
 PHIL 650 Metaphysics 3  
 PHIL 654 Philosophy of Mind 3  
 19th/20th Century Philosophy. Satisfied by:  
 PHIL 388 Analytic Philosophy: Frege to Quine 3  
 1 course from those numbered PHIL 560 - PHIL 592 3  
 Additional Electives (6)  
 Satisfied by completing 6 additional hours of PHIL courses, 3 hours of  
 which must be at the at the 500-level or above.

Major Hours & Major GPA  
While completing all required courses, majors must also meet each of the  
following hour and GPA minimum standards:

Major Hours  
Satisfied by 27 hours of major courses, or 33 hours required if completing  
departmental honors course PHIL 499.

Major Hours in Residence  
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior (300+) Hours  
Satisfied by a minimum of 24 hours from junior/senior courses (300+) in  
the major.

Major Junior/Senior (500+) Hours  
Satisfied by a minimum of 12 hours from junior/senior courses (500+) in  
the major.

Major Junior/Senior (300+) Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

A sample 4-year plan for the BA degree in Philosophy can be found here: Philosophy (http://catalog.ku.edu/liberal-arts-sciences/philosophy/ba-bgs/ ba-philosophy), or by using the left-side navigation.

A sample 4-year plan for the BGS degree in Philosophy will be coming soon.

**Departmental Honors**

To graduate with departmental honors, undergraduates must take 6 hours in philosophy in addition to the 27 hours required for the B.A. or B.G.S., for a total of 33 hours. The 6 additional hours include

- An additional course numbered 500 or above for a total of at least 15 hours at that level, and
- PHIL 499 Senior Essay.

A committee of 3 faculty members reads the finished essay, gives the candidate an oral examination over the essay, and determines whether it warrants honors. This committee must consist of the instructor in PHIL 499, the departmental honors coordinator, and a third member of the philosophy faculty.

Honors are not awarded to anyone who receives a grade lower than B in PHIL 499, whose final grade-point average in philosophy is lower than 3.5, or whose final KU or cumulative grade-point average is lower than 3.25. To be eligible for departmental honors, students must file a declaration of intent with the departmental honors coordinator no later than enrollment for the final undergraduate semester.

The most important element in departmental honors is the honors essay. Once a student has determined the area in which he or she wishes to work, he or she should arrange to write the essay under the guidance of a faculty member with appropriate expertise. Ideally, this work should be completed during a single semester. However, students often find it difficult to complete the essay in one semester. Therefore, we recommend that the essay be begun in the semester before the one in which the student intends to graduate (typically, in the fall semester of the senior year).

The honors essay should be intermediate between a master’s thesis and a term paper. It should normally be at least 20 pages (6,000 words) long. It should go beyond mere exposition, whether by criticism or by comparison of different works. Interpretations of rare or difficult texts may occasionally be accepted.

**Minor Hours and Minor GPA**

While completing all required courses (above), minors must also meet each of the following hour and GPA minimum standards:

**Minor Hours**

Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**

Satisfied by a minimum of 9 junior/senior courses (300+) hours of KU resident credit in the minor.

**Minor Junior/Senior (300+) Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

**Master of Arts in Philosophy**

The philosophy department at the University of Kansas comprises of 13 faculty members and about 35 graduate students. The department has traditionally fostered teaching and research that reflects a number of different philosophical orientations and fields of philosophy. Courses are taught on a broad range of topics. Master’s theses and dissertations have had a similarly wide range of themes. The department's chief strengths are in history of philosophy (ancient, modern, 19th century), ethics, social-political philosophy, and analytic philosophy, including philosophy of language, philosophy of mind, and metaphysics. The department is in Wescoe Hall, the main humanities building.

The M.A. degree requires 30 hours of graduate course work, including a first-year graduate tutorial and at least 12 additional hours of seminar and/or thesis work. M.A. candidates must pass a comprehensive examination over their course work or must write and successfully defend an M.A. thesis.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Admission to the M.A. in Philosophy**

Apply to the graduate program via the Office of Graduate Studies online application system (http://wwwgraduate.ku.edu).

In addition to the general admission requirements (http://wwwgraduate.ku.edu/application-process) from the Office of Graduate Studies, applicants are expected to have taken the following seven courses or their equivalents as preparation for graduate work:

**Minor in Philosophy**

**Why study philosophy?**

Because philosophy teaches you how to think about all aspects of your life and the world around you.

**Requirements for the Minor**

Students selecting this option must complete at least 6 courses (18 hours) of philosophy elective courses

PHIL 384 and especially PHIL 386 are strongly recommended.
1. symbolic logic
2. history of ancient philosophy
3. history of modern philosophy
4. history of 20th-century analytic philosophy (roughly from Frege to Quine)
5. history of 19th/20th-century Continental philosophy
6. value theory
7. metaphysics/epistemology (broadly construed to include philosophy of language and philosophy of mind).

Students may be admitted without some of these courses, but they are expected to make up the deficiencies early in their graduate careers and outside of the minimum hours required for degree.

For additional information, including relevant deadlines and a list of required supplemental documentation to be submitted with the online application, please visit the graduate page of the Philosophy website (http://philosophy.ku.edu/graduate-admissions), or contact the department Graduate Program Coordinator, Cari Ann Kreienhop, ckreienhop@ku.edu.

Fast-Track M.A. (for Undergraduate Majors in Philosophy at KU)

The fast-track M.A. provides excellent KU undergraduates in Philosophy an opportunity to complete an MA in Philosophy within a year of completing the bachelor’s degree. Talented students who are planning to continue their studies at the doctoral level or to continue to law school will receive a competitive advantage by acquiring a graduate degree in less time than a traditional terminal M.A.

Admission Requirements
1. All requirements for a bachelor’s in philosophy from KU complete or in progress
2. GPA of 3.5 in philosophy
3. GRE not required, though the department will consider GRE scores as part of an application

Degree Requirements
Students must complete all of the following requirements for the Fast-Track M.A. within one calendar year post-bachelor’s:

1. 24 credit hours of graduate coursework (500-level or above) in philosophy post-bachelor’s with a grade of B or higher. At least 15 of these hours must be in courses numbered 800 or above. Students must complete two courses at the 500-level or above (or the equivalent) in each of these areas: history of philosophy, metaphysics and epistemology (broadly construed), and value theory. Courses taken during the undergraduate career may be counted toward these area requirements, but such work does not count toward the overall 24-hour graduate credit requirement unless the student took this course work for graduate credit and it has department approval.
2. PHIL 800 Tutorial with a grade of B or higher
3. An M.A. exam consisting in the oral defense of a seminar paper of the student’s choosing

Time Limits and Other Restrictions
Students must maintain a minimum GPA of 3.5 in the first semester of graduate study in order to maintain eligibility for the program. They will be subject to a formal mid-year review to ensure satisfactory progress towards completion of the degree.

A student who receives a bachelor’s degree in Spring or Summer begins the M.A. portion of the degree that Fall. The student must then complete all requirements for the Fast-Track M.A. by the first day of classes the following Fall. For example, if a student receives the bachelor’s in Spring 2014 and is accepted into this M.A. track, that student begins the additional year of coursework in Fall 2014 and must complete all requirements for the Fast-Track M.A. by the first day of classes in Fall 2015. Similarly, a student who receives the bachelor’s in the Fall begins the M.A. portion of the degree in the Spring. The student must then complete all requirements for the Fast-Track M.A. by the first day of classes the following Spring.

If a student does not complete the Fast-Track M.A. requirements within one year post-bachelor’s, the student may petition the department for admission to the standard 30-hour M.A. track. In extraordinary circumstances, for example, serious illness, students may petition the department to remain in the 24-hour track.

Application Deadlines
Students who receive a bachelor’s from KU in Spring or Summer must have a completed application with all supplemental documentation by August 1. Priority consideration is guaranteed for students whose applications are complete by April 30. Students who receive a bachelor’s in Fall must have a completed application by November 30.

Students that submit an application by January 15 may be considered for funding in the form of a graduate fellowship.

Interested students are encouraged to contact the department Director of Graduate Studies, Dr. Dale Dorsey, ddorsey@ku.edu, as early as possible during their undergraduate studies.

M.A. Degree Requirements
The department offers thesis and non-thesis M.A. options. Both require:

1. 30 credit hours of graduate work in philosophy with a grade of B- or higher, with a GPA of at least 3.0 over all courses in philosophy. At least 15 of these hours must be in courses numbered 800 or above and, for the thesis option, may include up to 6 hours of PHIL 899 Master’s Thesis. Students must complete two courses at the 500 level or above (or the equivalent) in each of these areas: history of philosophy, metaphysics and epistemology (broadly construed), and value theory. Courses taken during the undergraduate career may be counted toward these area requirements, but such work does not count toward the overall 30-hour graduate credit requirement unless the student took this course work for graduate credit and it has department approval.
2. PHIL 800 Tutorial must be taken in the first year of study
3. A final examination:
   a. For the thesis option, the student must submit an acceptable thesis and pass a 2-part oral or written examination including 1 part covering the material of the M.A. program generally and a second part devoted to a defense of the thesis.
   b. For the non-thesis option, the student must pass an oral examination covering the material of the M.A. program. The non-thesis option final exam can be satisfied by Ph.D. students who
successfully complete PHIL 901 Ph.D. Tutorial with a grade of B or higher.

Time Limits and Other Restrictions
Information on time limits may be found under Master’s Degree Requirements and Program Time Constraints in the Graduate Studies section of the online catalog. The rule for transferring credit toward the M.A. appears under General Regulations in the Graduate Studies section of the online catalog.

Juris Doctor and Master of Arts in Philosophy

Joint J.D.-M.A. Degree Program
The joint degree program leading to the J.D. and the M.A. in philosophy develops a student's understanding and appreciation of the converging disciplines of law and philosophy. The program combines into 3 years and 1 summer session the normal 3-year J.D. program offered by the School of Law and the 2-year M.A. in philosophy program offered by the Department of Philosophy in the College of Liberal Arts and Sciences. Students complete 81 credit hours in law and 21 credit hours in philosophy. Generally, students apply to the School of Law first, and then, if admitted, apply to the M.A. in Philosophy during the fall of their first year in the Law School. The J.D. and M.A. diplomas are then awarded concurrently after completion of joint degree program requirements.

Admission to Graduate Studies
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission to the Joint Program
The program is open to those who have earned baccalaureate degrees from accredited colleges or universities and whose undergraduate academic records indicate that they have the capacity to complete the program. Applicants must meet the admission requirements and prerequisites of the School of Law and the Department of Philosophy. The only exception to this is that the Law School Admission Test (LSAT) is the only required entrance examination for such applicants (GRE is not required for either program). Students must apply and be admitted to each school separately. Generally, students apply to the School of Law first, and if admitted, apply later to the M.A. in Philosophy for a start date of the following Fall semester. A student who desires to enter the program while enrolled in the first year of the J.D. or M.A. in philosophy must consult and obtain approval from the School of Law, the Department of Philosophy, and the College of Liberal Arts and Sciences. No student may enter the combined program after completing more than 30 credit hours in the School of Law or 12 hours in the Department of Philosophy.

For information about applying to the Law School, see the school website (http://www.law.ku.edu/admissions). For information about applying to the M.A. program in Philosophy, please visit the graduate program page (http://philosophy.ku.edu/graduate-admissions) of the Philosophy department website, or contact the Graduate Program Coordinator, Cari Ann Kreienhop, ckreienhop@ku.edu.

Typical Enrollment Pattern for J.D./M.A. Program

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law courses</td>
<td>29</td>
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<tr>
<td>Philosophy courses</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>29</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law courses</td>
<td>22</td>
</tr>
<tr>
<td>Philosophy courses</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>28</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law courses</td>
<td>22</td>
</tr>
<tr>
<td>Philosophy courses</td>
<td>9</td>
</tr>
<tr>
<td><strong>Summer</strong></td>
<td><strong>5</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31</strong></td>
</tr>
</tbody>
</table>

**Total Hours: 99**

Joint J.D./M.A. Degree Requirements

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law courses required of all J.D. candidates</td>
<td>44</td>
</tr>
<tr>
<td>Law courses required for joint degree candidates</td>
<td>9</td>
</tr>
<tr>
<td>Philosophy courses required for joint degree candidates</td>
<td>9</td>
</tr>
<tr>
<td>Additional law courses</td>
<td>28</td>
</tr>
<tr>
<td>Additional philosophy courses</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total minimum credit hours required (102)</strong></td>
<td><strong>102</strong></td>
</tr>
</tbody>
</table>

It is essential for the student to consult the director of graduate studies in philosophy and a representative of the School of Law about specific courses required or recommended for this program.

For additional information, see the School of Law (p. 752) and the Guidelines and Information for Graduate Students available from the Department of Philosophy (http://philosophy.ku.edu).

Doctor of Philosophy in Philosophy

The philosophy department at the University of Kansas comprises of 13 faculty members and about 35 graduate students. The department has traditionally fostered teaching and research that reflects a number of different philosophical orientations and fields of philosophy. Courses are taught on a broad range of topics. Master’s theses and dissertations have had a similarly wide range of themes. The department’s chief strengths are in history of philosophy (ancient, modern, 19th century), ethics, social-political philosophy, and analytic philosophy, including philosophy of language, philosophy of mind, and metaphysics. The department is in Wescoe Hall, the main humanities building.

The Ph.D. degree requires 39 hours of graduate course work, including a first-year graduate tutorial and a research tutorial. Ph.D. candidates
also must satisfy the University’s Research Skills and Responsible Scholarship requirement, pass both a departmental examination over the research tutorial and an oral comprehensive examination, and write and successfully defend a dissertation. The M.A./J.D. degree combines into 3 years and 1 summer session the programs for both degrees.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 23699) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Admission to the Ph.D. in Philosophy**

Apply to the graduate program via the Office of Graduate Studies online application system (http://www.graduate.ku.edu).

In addition to the general admission requirements (http://www.graduate.ku.edu/application-process) from the Office of Graduate Studies, applicants are expected to have taken the following seven courses or their equivalents as preparation for graduate work:

1. symbolic logic
2. history of ancient philosophy
3. history of modern philosophy
4. history of 20th-century analytic philosophy (roughly from Frege to Quine)
5. history of 19th/20th-century Continental philosophy
6. value theory
7. metaphysics/epistemology (broadly construed to include philosophy of language and philosophy of mind).

Students may be admitted without some of these courses, but they are expected to make up the deficiencies early in their graduate careers and outside of the minimum hours required for degree.

For additional information, including relevant deadlines and a list of required supplemental documentation to be submitted with the online application, please visit the graduate page of the Philosophy (http://www.philosophy.ku.edu) website, or contact the department Graduate Program Coordinator, Cari Ann Kreienhop, ckreienhop@ku.edu.

**Ph.D. Degree Requirements**

A student preparing for a doctorate in philosophy must meet general requirements and, before officially enrolling in PHIL 999 Dissertation, must satisfy these special requirements:

Complete at least 39 credit hours of graduate work in regular philosophy courses numbered 500 or above with grades in each course of at least B– and an overall grade-point average of at least B in all graduate philosophy courses. At least 24 of these hours must be at the 800 level or above (including PHIL 800 Tutorial and PHIL 901 Ph.D. Tutorial). Beyond the 39-hour requirement, additional hours in PHIL 999 Dissertation are required as appropriate in accordance with the rules of the Office of Graduate Studies and the Department.

1. Complete PHIL 800 **Tutorial** with a grade of B- or higher in the first year of enrollment.
2. **Formal Philosophy Requirement:** Complete PHIL 610 Symbolic Logic or PHIL 666 Rational Choice Theory with a grade of B- or higher.
3. **Ph.D. Course Distribution Requirement:**

   **Metaphysics and Epistemology (6)**
   
   Select two of the following:
   
   - PHIL 620 Philosophy of Natural Science
   - PHIL 622 Philosophy of Social Science
   - PHIL 628 Philosophy of Logic
   - PHIL 630 Philosophy of Mathematics
   - PHIL 638 Philosophy of Language
   - PHIL 648 Theory of Knowledge
   - PHIL 650 Metaphysics
   - PHIL 654 Philosophy of Mind
   - PHIL 850 Topics in Recent Philosophy: ______
   - PHIL 860 Topics in Philosophy of Science: ______
   - PHIL 862 Topics in Logic: ______
   - PHIL 868 Topics in Philosophy of Language: ______
   - PHIL 870 Topics in Metaphysics: ______
   - PHIL 872 Topics in Theory of Knowledge: ______
   - PHIL 877 Topics in Philosophy of Mind: ______
   - PHIL 888 Topics in the Philosophy of the Social Sciences: ______

   **Value Theory (6)**
   
   Select two of the following:
   
   - PHIL 504 Philosophy of Sex and Love
   - PHIL 555 Justice and Economic Systems
   - PHIL 662 Aesthetics
   - PHIL 668 Political Philosophy
   - PHIL 670 Contemporary Ethical Theory
   - PHIL 671 Feminist Theories in Ethics
   - PHIL 672 History of Ethics
   - PHIL 674 Philosophy of Law
   - PHIL 676 Medical Ethics: Life and Death Issues
   - PHIL 677 Medical Ethics: Professional Responsibilities
   - PHIL 850 Topics in Recent Philosophy: ______
   - PHIL 880 Topics in Ethics: ______
   - PHIL 884 Topics in Social and Political Philosophy: ______
   - PHIL 885 Topics in Law and Philosophy
   - PHIL 886 Topics in Applied Ethics: ______

   **Ancient Philosophy (3)**
   
   Select one of the following:
   
   - PHIL 508 Early Greek Philosophy
   - PHIL 605 The Philosophy of Plato
   - PHIL 607 The Philosophy of Aristotle
   - PHIL 608 Hellenistic Philosophy
   - PHIL 805 Plato
   - PHIL 807 Aristotle
   - PHIL 820 Topics in the History of Philosophy: ______
Reduction of Credits

University graduate credit policy (http://policy.ku.edu/graduate-studies/graduate-credit) does not allow for a direct transfer of credits toward the Ph.D.; however, the department's requirement of 39 credit hours of acceptable graduate work for the Ph.D. may be reduced by departmental petition depending on the amount and quality of equivalent graduate work completed at another institution. At minimum, 24 hours of acceptable graduate work must be taken in the Department of Philosophy at KU.

Department of Physics and Astronomy

Why study physics and astronomy?

Because understanding the physical universe starts here.

Undergraduate Programs

The astronomy curriculum offers undergraduates a survey of modern astronomy and an introduction to physical science, gives science and engineering students an introduction to astronomy and astrophysics, and prepares students majoring in astronomy for graduate study in astronomy or related fields.

The physics curriculum includes course work for those who want a sound background in physics as part of their general education, for those who study physics as part of their training in other fields, and for those whose post-graduate plans include research or employment in physics or related fields.

Courses for Nonmajors

ASTR 191 is a survey of contemporary astronomy, taught at a level using basic mathematics; ASTR 391 offers an introduction to physical astronomy at a calculus-based level. PHSX 111 provides a general introduction to important physics topics and is taught at a level using basic algebra. The department offers two introductory physics sequences that include laboratory work. PHSX 114 and PHSX 115 cover the major fields of physics without calculus. PHSX 211 and PHSX 212, with labs PHSX 216 and PHSX 236, provide a calculus-based foundation in physics for students in physical science, engineering, and mathematics. PHSX 313 and the laboratory course, PHSX 316, provide an introduction to modern physics for majors in physics and some engineering and physical science programs.

Students in biological sciences, health sciences, physical sciences, mathematics, engineering, and prospective elementary and secondary teachers should see appropriate sections of this catalog and major advisors for guidance about required physics course work. Chemistry majors should note that PHSX 211 and PHSX 212 are prerequisites to advanced work in chemistry.

For programs in engineering physics (p. 629), see the School of Engineering section of the online catalog.

Graduate Programs

At the graduate level, the Department of Physics and Astronomy offers Master of Science and Doctor of Philosophy degrees in Physics and a Master of Science degree with a subspecialty in computational physics and astronomy.

Information about admission, requirements, and graduate programs is also on the Department of Physics & Astronomy web page.

Courses

ASTR 177. First Year Seminar: _____ 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Astronomy. Course is designed to meet the critical...
thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

**ASTR 190. Astronomy and Civilization. 3 Hours. N.**
A survey course that describes the interplay between the science of astronomy and cultural beliefs. It uses, among others, examples of how religious and philosophical tenets have enhanced or conflicted with scientific principles. Not for astronomy majors. LEC.

**ASTR 191. Contemporary Astronomy. 3 Hours. NP GE3N / N.**
The structure and evolution of the universe, from nearby planets to distant quasars, are examined. Topics include recent discoveries concerning planets, stars, pulsars and black holes as well as their evolution, the structure of the universe today and how it will be in the future. The emphasis is descriptive rather than mathematical. Prerequisite: Eligibility for MATH 101. LEC.

**ASTR 293. Astronomy Bizarre. 3 Hours. GE3N / N.**
An exploration of physical phenomena found in astrophysical extremes. Topics may include the following: the most violent explosions in the Universe (supernovae and gamma ray bursts; the biggest collisions in nature (galaxy interactions; the densest and most bizarre forms of matter (white dwarfs, neutron stars); the strongest magnetic fields (magnetars, pulsars); the amazing range of exo-planetary properties; and the mysteries of black holes. Prerequisite: Eligibility for MATH 101. LEC.

**ASTR 390. Undergraduate Problems. 1-3 Hours. AE61 / N.**
Undergraduate observational or theoretical problems in astronomy. Maximum credit, six hours. Prerequisite: Permission of department. IND.

**ASTR 391. Physical Astronomy, Honors. 3 Hours. NP GE12/GE3N / N.**
An honors, calculus-based introduction to astronomy and astrophysics, required for astronomy majors. Components of the Universe - from planetary systems, stellar systems, large scale structure and cosmology - are examined to illuminate the physics principles which govern their evolution. Prerequisite: MATH 125, and either permission of instructor, or participation in the University Honors Program. LEC.

**ASTR 394. The Quest for Extraterrestrial Life. 3 Hours. NP GE11 / N.**
An introduction to the search for planets around other stars and for life in the universe beyond the earth. A discussion of the astronomical conditions under which life might form and the biological conditions of life formation and evolution. Methods of searching for extraterrestrial life. Prerequisite: An introductory course in biology, astronomy or geology. LEC.

**ASTR 400. Topics in Astronomy: , 1-3 Hours. N.**
A course on special topics in astronomy. Course may be repeated for different topics. Each section may have additional prerequisites to be determined by the instructor. LEC.

**ASTR 503. Undergraduate Research. 1-4 Hours. AE61 / N.**
This course is for students seeking to fulfill the undergraduate research requirement. Students are expected to participate in some area of ongoing research in the department, chosen with the help of their advisor. At the end of the term, students will present their results in a seminar to other students and faculty. (Same as EPHX 503 and PHSX 503.) Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics, or permission of instructor. IND.

**ASTR 591. Stellar Astronomy. 3 Hours. N.**
Fundamentals of stellar astronomy including astronomical optics and techniques, coordinate and time systems, stellar spectroscopy, properties of normal, binary and variable stars. Prerequisite: PHSX 212 and PHSX 236. An introductory astronomy course is desirable. LEC.

**ASTR 592. Galactic and Extragalactic Astronomy. 3 Hours. N.**
A study of stellar groups, the interstellar medium, galactic structure and dynamics, galaxies, and cosmology. Prerequisite: ASTR 591 or consent of instructor. LEC.

**ASTR 596. Observational Astrophysics. 2 Hours. AE61 / N.**
Students acquire practical experience with astronomical equipment and data reduction techniques used in research and educational contexts. ASTR 596, combined with an independent research experience, provides a pathway for students to demonstrate creativity and integration of background knowledge. Prerequisite or corequisite: ASTR 591. LEC.

**ASTR 597. Analysis in Astrophysics. 1-3 Hours. AE61 / N.**
Individual students work on specialized research problems in the field of observational or theoretical astrophysics. Maximum credit, six hours. Prerequisite: ASTR 592. IND.

**ASTR 691. Astrophysics I. 3 Hours. N.**
An introduction to radiation processes, thermal processes, and radiative transfer in stellar atmospheres and the interstellar medium. (Same as EPHX 691 and PHSX 691.) Prerequisite: PHSX 313 or consent of instructor. LEC.

**ASTR 692. Astrophysics II. 3 Hours. N.**
The formation and evolution of stars, nucleosynthesis of the elements, and the physical processes of high energy physics. Prerequisite: ASTR 691 or consent of instructor. LEC.

**ASTR 791. Seminar in Astrophysics. 1-3 Hours.**
Seminar designed to cover current topics in the physics of the Universe beyond the solar system. Content will vary. Graduate students engaged in or preparing for research may repeat enrollments in this course. Open to undergraduates with twelve hours of physics/astronomy courses numbered 500 or above, or consent of instructor. LEC.

**ASTR 792. Topics in Advanced Astrophysics. 3 Hours.**
This course will address one or more of the following advanced topics in astrophysics: high energy astrophysics, nuclear astrophysics, galactic and extragalactic astrophysics, space physics, cosmology, astrobioynthesis, and the interstellar and intergalactic media (ISM/IGM.) This course may be repeated for credit if topical content differs. (Same as PHSX 792.) Prerequisite: ASTR 692 or permission of instructor. LEC.

**ASTR 795. Space Plasma Physics. 3 Hours.**
The physics of fully ionized gases in magnetic fields and their application to interplanetary processes, planetary radiation belts, and the surface of the sun. The motion of charged particles in magnetic fields, magnetohydrodynamic waves, the solar wind and the magnetosphere. (Same as PHSX 795.) Prerequisite: PHSX 621. Corequisite: PHSX 631. LEC.

**ASTR 815. Computational Physics and Astronomy. 3 Hours.**
Advanced computer applications in physics and astronomy. General discussion and illustration of problem organization and solution by numerical and other methods with examples from plasma, space, solid state, elementary particle, and nuclear physics and astronomy. Students will design, write, validate, and document a computer program to solve a physical problem. (Same as PHSX 815 and CHEM 914.) Prerequisite: Six hours of computer science courses numbered 300 or above, and six hours of physics and/or astronomy courses numbered 300 or above. LEC.

**ASTR 897. Seminar in Plasma and Space Physics. 1-3 Hours.**
Graduate students engaged in or preparing for research may repeat enrollments in this course. The content will vary. (Same as PHSX 897.) LEC.
PHSX 111. Introductory Physics. 3 Hours. NP GE11/GE3N / N. A one-semester survey of classical and modern physics, designed primarily for liberal arts students. Typical subjects include the laws of motion, gravity, electricity and magnetism, sound, light, quantum mechanics, atomic and subatomic physics. Subjects are treated mainly conceptually with some use of basic data. Prerequisite: Eligibility for MATH 104. LEC.

PHSX 112. Concepts in Physics, Honors. 3 Hours. NP GE3N / N. A discussion of important concepts in physics. While basic concepts such as force, energy, and mass will be introduced as needed, the emphasis will be on an understanding and appreciation of contemporary science. Prerequisite: Eligibility for MATH 104 and participation in the University Honors Program or permission of instructor. LEC.

PHSX 114. College Physics I. 1-4 Hours. NP GE11/GE12/GE3N / N. Principles and applications of mechanics, fluids, heat, thermodynamics, and sound waves. Three class hours and one laboratory per week. This course emphasizes the development of quantitative concepts and problem solving skills for students needing a broad background in physics as part of their preparation in other major programs, and for those who wish to meet the laboratory science requirement of the College. In special circumstances, permission to enroll in less than four hours may be obtained from the department. Not open to students with credit in PHSX 211 or PHSX 216 or PHSX 236. Prerequisite: MATH 104, or three and one-half years of college-preparatory mathematics including trigonometry and a score of 25 or higher on ACT mathematics. LEC.

PHSX 115. College Physics II. 1-4 Hours. N. A continuation of PHSX 114. Principles and applications of electricity, magnetism, light, atomic physics, and nuclear physics. Three class hours and one laboratory per week. In special circumstances, permission to enroll in less than four hours may be obtained from the department. Not open to students with credit in PHSX 212 or PHSX 236. Prerequisite: PHSX 114. LEC.

PHSX 116. Introductory Physics Laboratory. 1 Hour. U. A laboratory exploring classical and modern physics, designed primarily for liberal arts students. Experiments in motion gravity, electricity and magnetism, sound, light, atomic and subatomic physics are designed to teach physics concepts and basic laboratory techniques. One two-hour lab period per week. Counts as a laboratory science when preceded or accompanied by PHSX 111. Prerequisite: Eligibility for MATH 104. Corequisite: PHSX 111. LAB.

PHSX 150. Seminar in Physics, Astronomy and Engineering Physics. 0.5 Hours. N. This course is intended for all students in physics, astronomy and engineering physics. Course content includes topics of current interest in all fields of physics and astronomy. LEC.

PHSX 177. First Year Seminar: Physics. 3 Hours. GE11 / U. A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Physics. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

PHSX 201. Transition to General Physics. 1 Hour. N. Classical mechanics and thermodynamics with calculus for students who have had a prior algebra-based course. Prerequisite: PHSX 114, either MATH 116 or 125; co-requisite MATH 126; and permission of the department. LEC.

PHSX 202. Calculus Supplement to College Physics II. 1 Hour. N. A calculus-based course in electricity and magnetism for students who have had a an algebra-based course in electricity and magnetism. This course, combined with PHSX 115, covers the content of PHSX 212. Prerequisite: PHSX 115 and permission of the department. Corequisite: MATH 126. LEC.

PHSX 210. General Physics I for Engineers. 3 Hours. GE11 / N. Introduction to classical mechanics and thermodynamics designed for students in the School of Engineering. Students not admitted to the School of Engineering must receive permission from instructor. PHSX 210 and PHSX 211 cannot both be taken for credit. Students with credit in PHSX 114 can obtain only one hour of credit. Prerequisite: MATH 121 with a grade of C or better; courses in high school physics and/or chemistry recommended. LEC.

PHSX 211. General Physics I. 1-4 Hours. NP GE11/GE12/GE3N / N. Study of electricity and magnetism, waves and sound. In special circumstances, permission to enroll for fewer than three hours credit may be obtained from the department. Students with credit in PHSX 114 can obtain only one hour of credit. Prerequisite: MATH 116 or MATH 125; co-requisite MATH 126; courses in high school physics and/or chemistry are recommended. LEC.

PHSX 212. General Physics II. 1-3 Hours. GE3N / N. An honors section of PHSX 211 and PHSX 216. Credit for fewer than five hours requires permission of the department. Recommended for students with a strong math background who are either in the University Honors Program or intending to major in a physical science. Courses in high school physics and chemistry are strongly recommended. Prerequisite: MATH 125; co-requisite MATH 126; and permission of instructor. LEC.

PHSX 214. General Physics II Honors. 1-4 Hours. N. An honors section of PHSX 212 and PHSX 236. Credit for fewer than four hours requires permission of the department. Recommended for students with a strong math background who are either in the University Honors Program or intending to major in a physical science. Prerequisite: PHSX 216 together with either PHSX 211 or PHSX 210; or PHSX 213, and permission of instructor. Co-requisite: MATH 127. LEC.

PHSX 216. General Physics I Laboratory. 1 Hour. N. Experiments in classical mechanics and thermodynamics. Counts as a laboratory science when accompanied by PHSX 210 or PHSX 211. Pre-or Corequisite: PHSX 210 or PHSX 211. LAB.

PHSX 236. General Physics II Laboratory. 1 Hour. N. Experiments in electricity and magnetism, waves and sound. Pre-or Corequisite: PHSX 212. LAB.

PHSX 313. General Physics III. 3 Hours. GE3N / N. Introduction to modern physics. Topics include special relativity, optics, and introductions to quantum mechanics and solid state physics. Prerequisite: PHSX 212 and PHSX 236 or PHSX 214 or EECS 220. Corequisite: MATH 320 or MATH 220. LEC.

PHSX 316. Intermediate Physics Laboratory I. 1 Hour. U. Experiments in optics and modern physics. Development of experimental skills, data reduction, error analysis, and technical writing. One lab meeting per week and one lecture per week on topics including error analysis and experimental design. Pre-or corequisite: PHSX 313. LAB.
PHSX 400. Topics in Physics and Astronomy: _______. 1-3 Hours. N.
A course on special topics in physics and astronomy, given as the need arises. Course may be repeated for different topics. Each section may have prerequisites to be determined by the instructor. LEC.

PHSX 500. Special Problems. 1-5 Hours. AE61 / N.
Work in some area of physics beyond the topics or material covered in other courses. For some problems, continued enrollment in consecutive semesters may be appropriate. Prerequisite: One junior-senior course in science in an area related to the problem and consent of instructor. IND.

PHSX 501. Honors Research. 1-4 Hours. AE61 / N.
This course is to enable students seeking departmental Honors in Astronomy, Engineering Physics, or Physics to fulfill the undergraduate research requirement. At the completion of the required 4 hours of total enrollment, a written and oral report of the research is required. (Same as EPHX 501.) Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics, or permission of instructor. IND.

PHSX 502. Seminar in Physics and Astronomy Instruction. 1-3 Hours. N.
One meeting per week to plan and report progress on projects which may include tutoring of students in personalized modes of study; developing, administering, and scoring test items; designing and improving demonstration and laboratory experiments. Amount of credit depends on projects contracted for and completed. (Distribution credit given for two-three hours only.) Prerequisite: Evidence of prior academic experience relevant to the student's proposed activities in the seminar and permission of instructor. LEC.

PHSX 503. Undergraduate Research. 1-4 Hours. AE61 / N.
This course is for students seeking to fulfill the undergraduate research requirement. Students are expected to participate in some area of ongoing research in the department, chosen with the help of their advisor. At the end of the term, students will present their results in a seminar to other students and faculty. (Same as ASTR 503 and EPHX 503.) Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics, or permission of instructor. IND.

PHSX 511. Introductory Quantum Mechanics. 3 Hours. N.
An introduction to quantum mechanics, emphasizing a physical overview. Topics should include the formalisms of non-relativistic quantum mechanics, the 3-dimensional Schrödinger equation with applications to the hydrogen atom; spin and angular momentum; multi-particle systems of Fermi-Dirac and Bose-Einstein particles; time-independent perturbation theory. (Same as EPHX 511.) Prerequisite: PHSX 313 and MATH 290. LEC.

PHSX 516. Physical Measurements. 4 Hours. N.
A laboratory course emphasizing experimental techniques and data analysis, as well as scientific writing and presentation skills. Experiments will explore a range of classical and modern physics topics. (Same as EPHX 516.) Prerequisite: PHSX 313, PHSX 316 and PHSX 521. (PHSX 521 may be taken concurrently.) LAB.

PHSX 518. Mathematical Physics. 3 Hours. N.
Applications of modern mathematical methods to problems in mechanics and modern physics. Techniques include application of partial differential equations and complex variables to classical field problems in continuous mechanics, unstable and chaotic systems, electrodynamics, hydrodynamics, and heat flow. Applications of elementary transformation theory and group theory, probability and statistics, and nonlinear analysis to selected problems in modern physics as well as to graphical representation of experimental data. Prerequisite: PHSX 313 and MATH 320 or permission of instructor. (Same as EPHX 518.) LEC.

PHSX 521. Mechanics I. 3 Hours. N.
Newton's laws of motion. Motions of a particle in one, two, and three dimensions. Motion of a system of particles. Moving coordinate systems. (Same as EPHX 521.) Prerequisite: PHSX 211 and PHSX 216, or PHSX 213; MATH 223; MATH 290; and MATH 220 or MATH 320. LEC.

PHSX 528. Geodynamics and Plate Tectonics. 3 Hours. N.
Study of physical processes in the solid Earth and of geophysical approaches to studying Earth systems at regional and global scales. Topics include global potential fields, thermal regime, rheology and Earth deformation, earthquakes and seismic structure, plate motions and global tectonics. (Same as GEOL 573) Prerequisite: An introductory course in geology; MATH 116 or MATH 122; and PHSX 115, PHSX 214, or PHSX 212 and PHSX 236. LEC.

PHSX 531. Electricity and Magnetism. 3 Hours. N.
The properties of electric and magnetic fields, including electrostatics, Gauss' Law, boundary value methods, electric fields in matter, electromagnetic induction, magnetic fields in matter, the properties of electric and magnetic dipoles, and of dielectric and magnetic materials. (Same as EPHX 531.) Prerequisite: PHSX 214, or PHSX 212 and PHSX 236; PHSX 521 or special permission; MATH 223; MATH 290; and MATH 220 or MATH 320. LEC.

PHSX 535. Electronic Circuit Measurement and Design. 4 Hours. N.
A laboratory course that explores the theory and experimental techniques of analog and digital electronic circuit design and measurements. Topics include transient response, transmission lines, transistors, operational amplifiers, and digital logic. (Same as EPHX 535.) Prerequisite: PHSX 214 or PHSX 212 and PHSX 236; PHSX 521 or special permission; MATH 223; MATH 290. PHSX 313 and 316 recommended. LAB.

PHSX 557. Topics in Mechanics, Properties of Materials, Thermodynamics. 1-3 Hours.
This course covers the principles and applications of classical mechanics, fluids, heat, thermodynamics and sound. Teaching of these topics is strongly emphasized. Some laboratory work is included. This course is intended for students accepted to the BS Education major in Physics. This course does not count towards Physics or Astronomy major requirements in the College of Liberal Arts and Sciences. Prerequisite: Math 115 and 116, and either PHSX 114 or PHSX 211. LEC.

PHSX 558. Topics in Electricity and Magnetism and Optics. 1-3 Hours.
This course covers the principles and applications of electricity, magnetism and optics. Teaching of these topics is strongly emphasized. Some laboratory work is included. This course is intended for students accepted to the BS Education major in physics. This course does not count towards Physics or Astronomy major requirements in the College of Liberal Arts and Sciences. Prerequisite: MATH 115 and 116, and either PHSX 115 or PHSX 212. LEC.

PHSX 559. Topics in Modern Physics. 1-3 Hours.
This course covers the principles and applications of quantum mechanics, atomic and nuclear physics. Teaching of these topics is strongly emphasized. Some laboratory work is included. This course is intended for students accepted to the BS Education major in physics. This course does not count towards Physics or Astronomy major requirements in the College of Liberal Arts and Sciences. Prerequisite: MATH 115 and 116, and either PHSX 115 or PHSX 313. LEC.

PHSX 594. Cosmology and Culture. 3 Hours. AE42 / N.
A survey of modern physical cosmology, its recent historical roots, and creation myths from many world cultures. An examination of the effects of these stories on their parent cultures. LEC.
PHSX 600. Special Topics in Physics and Astrophysics: _____. 3 Hours. N.
Different topics will be covered as needed. This course will address topics in physics and astrophysics not covered in regularly offered courses. May be repeated if topic differs. (Same as EPHX 600.) Prerequisite: Permission of instructor. LEC.

PHSX 601. Design of Physical and Electronic Systems. 4 Hours. AE61 / N.
A laboratory course emphasizing the application of physical principles to the design of systems for research, monitoring, or control. Topics include the use of microcomputers as controllers, interfacing microcomputers with measurement devices, and use of approximations and/or computer simulation to optimize design parameters, linear control systems, and noise. (Same as EPHX 601.) Prerequisite: Twelve hours of junior-senior credit in physics or engineering, including one laboratory course. LAB.

PHSX 615. Numerical and Computational Methods in Physics. 3 Hours. N.
An introduction to the use of numerical methods in the solution of problems in physics for which simplifications allowing closed-form solutions are not applicable. Examples are drawn from mechanics, electricity, magnetism, thermodynamics, and optics. (Same as EPHX 615.) Prerequisite: PHSX 313, MATH 320 or equivalent, and EECS 138 or equivalent. LEC.

PHSX 621. Mechanics II. 3 Hours. N.
Continuation of PHSX 521. Lagrange's equations and generalized coordinates. Mechanics of continuous media. Tensor algebra and rotation of a rigid body. Special relativity and relativistic dynamics. (Same as EPHX 621.) Prerequisite: PHSX 521. LEC.

PHSX 623. Physics of Fluids. 3 Hours. N.
An introduction to basic fluid mechanics in which fundamental concepts and equations are covered. Topics include hydrostatics, hydrodynamics, wave propagation in fluids, and applications in the areas such as astrophysics, atmospheric physics, and geophysics. (Same as EPHX 623.) Prerequisite: MATH 223; MATH 290; PHSX 212 and PHSX 236 (or PHSX 214 can replace PHSX 212 and PHSX 236.) LEC.

PHSX 631. Electromagnetic Theory. 3 Hours. N.
Maxwell's equations, wave propagation, optics and waveguides, radiation, relativistic transformations of fields and sources, use of covariance and invariance in relativity. Normally a continuation of PHSX 531. (Same as EPHX 631.) Prerequisite: PHSX 531. LEC.

PHSX 641. Introduction to Elementary Particle Physics. 3 Hours. N.
Experimental methods and elementary concepts in nuclear physics, including nuclear forces, alpha and beta decay, gamma radiation, nuclear structure, and reaction systematics. (Same as EPHX 641.) Prerequisite: PHSX 313 and PHSX 511. LEC.

PHSX 655. Optics. 3 Hours. N.
Geometric optics. Wave properties of light: interference, diffraction, coherence. Propagation of light through matter. Selected topics in modern optics, e.g., lasers, fibers. (Same as EPHX 655.) Prerequisite: PHSX 313 and PHSX 316. LEC.

PHSX 661. Introduction to Elementary Particle Physics. 3 Hours. N.
Properties and interactions of quarks, leptons, and other elementary particles; symmetry principles and conservation laws; broken symmetry; gauge bosons; the fundamental interactions, grand unified theories of strong, electromagnetic, and weak interactions; the cosmological implications of elementary particle physics. (Same as EPHX 661.) Prerequisite: PHSX 313 and MATH 320. LEC.

PHSX 671. Thermal Physics. 3 Hours. N.
Development of thermodynamics from statistical considerations. Techniques of calculating thermodynamic properties of systems. Application to classical problems of thermodynamics. Elementary kinetic theory of transport processes. Fermi-Dirac and Bose-Einstein systems. (Same as EPHX 671.) Prerequisite: PHSX 511. LEC.

PHSX 681. Concepts in Solids. 3 Hours. N.
Properties of common types of crystals and amorphous solids. Lattice vibrations and thermal properties of solids. Electrons and holes in energy bands of metals, semi-conductors, superconductors, and insulators. (Same as EPHX 681.) Prerequisite: PHSX 313 and PHSX 511. LEC.

PHSX 691. Astrophysics I. 3 Hours. N.
An introduction to radiation processes, thermal processes, and radiative transfer in stellar atmospheres and the interstellar medium. (Same as ASTR 691 and EPHX 691.) Prerequisite: PHSX 313 or consent of instructor. LEC.

PHSX 693. Gravitation and Cosmology. 3 Hours. N.
An overview of topics relevant to gravitation and modern cosmology: special relativity, tensor notation, the equivalence principle, the Schwarzschild solution, black holes, and Friedmann models. Cosmic black body radiation, dark matter, and the formation of large-scale structure. The idea of quantum gravity and an introduction to the current literature in cosmology. (Same as EPHX 693.) Prerequisite: PHSX 313 and MATH 320. LEC.

PHSX 700. Colloquium. 1 Hour.
Topics of current interest in physics, astronomy, and atmospheric science. Repeated enrollments are permitted. LEC.

PHSX 701. Major Experiments and Observations in Classical and Contemporary Physics. 1-3 Hours.
Critique, discussions, and interpretation of the most important discoveries and observations in physics. LEC.

PHSX 702. Introductory Physics Pedagogy. 1 Hour.
This course will address basic elements of pedagogy in specific relation to the teaching of physics and astronomy labs. It contains such elements as: peer and instructor evaluations of teaching, reading and discussion of pedagogical materials, development of online course material, and discussion of teaching methods. This course may be repeated for credit. Prerequisite: Permission of instructor. LEC.

PHSX 711. Quantum Mechanics I. 3 Hours.

PHSX 717. Graduate Seminar. 1 Hour.
First year graduate students meet to survey research opportunities in the department and develop skills in giving oral presentations in physics and related areas. Students will also learn about topics in responsible scholarship that may include: the origin of ideas and the allocation of credit, the treatment of data, scientific misconduct, intellectual property and entrepreneurship, the researcher in society, collaborative research, mentor/trainee responsibilities, and safe practices. LEC.

PHSX 718. Mathematical Methods in Physical Sciences. 3 Hours.
Review of complex variable theory; introduction to the partial differential equations of physical systems; Fourier analysis; special functions of mathematical physics; and chemistry. (Same as CHEM 718.) Prerequisite: Two semesters of junior-senior mathematics. LEC.
PHSX 721. Chaotic Dynamics. 3 Hours.
Topics covered may include the following: dynamical systems, attractors, sensitive dependence on initial conditions, chaos, one-dimensional maps, strange attractors and fractal dimensions, fat fractals, the horseshoe map, symbolic dynamics, linear stability of periodic orbits, stable and unstable manifolds, Lyapunov exponents, topological entropy, quasiperiodicity, strange nonchaotic attractors, nonattracting chaotic sets, fractal basin boundaries, renormalization group analysis, intermittency, crisis and chaotic transients. Prerequisite: Mechanics (PHSX 521, or its equivalent), ordinary differential equations (MATH 320, or its equivalent), and some computer programming knowledge. LEC.

PHSX 722. Geophysical Data Analysis. 3 Hours.
Fourier analysis, sampling theory, prediction and interpolation of geophysical data, filtering theory, correlation techniques, deconvolution. Examples will be chosen from various fields of geophysics. (Same as GEOL 772.) Prerequisite: MATH 250/AE 250/ARCE 250/CE 250/CPE 250/ECECS 250/EPHX 250/ME 250 and either GEOL 572 or GEOL 573 or PHSX 528. LEC.

PHSX 723. Seismology. 3 Hours.
General theory of seismic waves, wave field extrapolation (migration) by finite difference methods, construction of travel-time curves, reflection and attenuation coefficients, earthquake source mechanism, distribution and forecasting of earthquakes. (Same as GEOL 773.) Prerequisite: MATH 250/AE 250/ARCE 250/CE 250/CPE 250/ECECS 250/EPHX 250/ME 250 and either GEOL 572 or GEOL 573 or PHSX 528. LEC.

PHSX 724. Potential Fields in Geophysics. 3 Hours.
Reduction and interpretation of gravity and magnetic data with emphasis on exploration techniques. Spectral, analytical and modeling methods of analysis of gravity and magnetic anomalies are emphasized. Prerequisite: MATH 250/AE 250/ARCE 250/CE 250/CPE 250/ECECS 250/EPHX 250/ME 250 and either GEOL 572 or GEOL 573 or PHSX 528 or consent of instructor. LEC.

PHSX 727. Advanced Geophysics: _____. 1-3 Hours.
Topics to vary with demand and include heat flow, wave propagation, synthetic seismograms, groundwater exploration, geothermal exploration, electrical methods in exploration, rock mechanics-geotechnophysics, rock magnetism, geomagnetism, paleomagnetism, geophysical inverse theory, and others upon sufficient demand. May be repeated for different topics. (Same as GEOL 771.) Prerequisite: GEOL 572 or GEOL 573/PHSX 528 or consent of instructor. LEC.

PHSX 731. Molecular Biophysics. 3 Hours.
Methods and concepts in contemporary molecular biophysics are discussed. Particular emphasis is placed on the thermodynamics of macromolecular interactions and quantitative models of data analysis. Basic enzymology and biophysical spectroscopy will also be reviewed. Prerequisite: PHSX 212, MATH 122, and CHEM 188. LEC.

PHSX 741. Nuclear Physics I. 3 Hours.
Experimental methods in nuclear physics, elementary concepts and simple considerations about nuclear forces, alpha and beta decay, gamma radiation, nuclear structure, and reaction systematics. Prerequisite: PHSX 511. LEC.

PHSX 761. Elementary Particles I. 3 Hours.
Particle accelerators and detectors; quarks and leptons; invariance principles and conservation laws; strong, electromagnetic, and weak interactions of elementary particles; unification of electroweak and other interactions. Prerequisite: PHSX 711. LEC.

PHSX 781. Solid State Physics I. 3 Hours.
Classification of solids, structure and symmetry of crystals; lattice vibrations and thermal properties of solids; electric and magnetic properties; electron theory of metals and semiconductors; electronic and atomic transport processes; theory of ionic crystals. Prerequisite: PHSX 511 (or CHEM 648) and PHSX 671 (or CHEM 646). LEC.

PHSX 791. Seminar in Astrophysics. 1-3 Hours.
Seminar designed to cover current topics in the physics of the Universe beyond the solar system. Content will vary. Graduate students engaged in or preparing for research may repeat enrollments in this course. Open to undergraduates with twelve hours of physics/astronomy courses numbered 500 or above, or consent of instructor. LEC.

PHSX 792. Topics in Advanced Astrophysics. 3 Hours.
This course will address one or more of the following advanced topics in astrophysics: high energy astrophysics, nuclear astrophysics, galactic and extragalactic astrophysics, space physics, cosmology, astrobiophysics, and the interstellar and intergalactic media (ISM/IGM). This course may be repeated for credit if topical content differs. (Same as ASTR 792.) Prerequisite: ASTR 692 or permission of instructor. LEC.

PHSX 793. Physical Cosmology. 3 Hours.
Discussion of how fundamental laws of physics govern the evolution of the universe as a whole along with its structure. Survey of cosmogenetic clues in the observable universe, including observed structures, cosmic background radiation and evidence for dark matter. Development of the universe, including theories of initial conditions; cosmological phase transitions; generation of possible relics and dark matter; symmetry breaking; baryon asymmetry; nucleosynthesis; recombination, gravitational instability and the formation of structure; current experimental techniques. Prerequisite: PHSX 718. Recommended: PHSX 593. LEC.

PHSX 795. Space Plasma Physics. 3 Hours.
The physics of fully ionized gases in magnetic fields and their application to interplanetary processes, planetary radiation belts, and the sun. The motion of charged particles in magnetic fields, magnetohydrodynamic waves, the solar wind, the ionosphere, and the magnetosphere. (Same as ASTR 795.) Prerequisite: PHSX 621. Corequisite: PHSX 631. LEC.

PHSX 800. Graduate Problems. 1-5 Hours.
Advanced laboratory problems, special research problems, or library reading problems. Repeated enrollments are permitted. RSH.

PHSX 801. Advanced Topics. 1-3 Hours.
Lectures on advanced material not covered by regular courses. The topics are not limited but generally address recent experimental or theoretical developments in subjects such as superconductivity, nuclear physics, elementary particle physics, quantum field theory, gauge and unified theories, nonlinear or chaotic systems, space plasma physics, and astrophysics and cosmology. Repeated enrollments are permitted. LEC.

PHSX 811. Quantum Mechanics II. 3 Hours.
Time dependent perturbation theory. Gauge invariance and electromagnetic interactions. Quantization of the electromagnetic field and applications. The Dirac equation, its transformation properties and applications to relativistic problems. Scattering theory, elementary applications, and formal properties. Prerequisite: PHSX 711. LEC.

PHSX 815. Computational Methods in Physical Sciences. 3 Hours.
Advanced computer applications in physical science. General discussion and illustration of problem organization and solution by numerical and other methods with examples from physics, astronomy, and other physical sciences. Students will design, write, validate, and document a computer program to solve a physical problem. (Same as ASTR 815 and CHEM 914.) Prerequisite: Six hours of computer science courses numbered 300 or above, and six hours of physics and/or astronomy courses numbered 300 or above. LEC.
PHSX 817. Graduate Seminar. 1 Hour.
First year graduate students meet to survey research opportunities in the department and develop skills in giving oral presentations in physics and related areas. Prerequisite: Only one hour of 817 can count toward required hours for degree. LEC.

PHSX 821. Classical Mechanics. 3 Hours.
Vector and tensor notation; review of Newtonian mechanics; Lagrangian mechanics; linear vector spaces and matrix theory with applications to the theory of small oscillations; rigid bodies; Hamiltonian formalism. Special relativity. Prerequisite: Twelve hours of junior-senior courses in physics. LEC.

PHSX 831. Electrodynamics I. 3 Hours.
Electrostatics and magnetostatics; Maxwell's equations; plane waves; waveguides. Prerequisite: PHSX 718 and PHSX 821. LEC.

PHSX 841. Nuclear Physics II. 3 Hours.
Nuclear forces and the two-body problem; nuclear models; phenomenological treatment of nuclear reactions and decay processes. Prerequisite: PHSX 741 and PHSX 811. LEC.

PHSX 861. Elementary Particles II. 3 Hours.
Theoretical analysis of the standard model of strong and electroweak interactions. Applications to decay and scattering processes with comparison to experiments. Selected topics in non-perturbative physics. Examples of tests to probe beyond the standard model. Prerequisite: PHSX 761. Corequisite: PHSX 911. LEC.

PHSX 871. Statistical Physics I. 3 Hours.
Review of and advanced topics in thermodynamics; the Maxwell relations; the third law; phase transitions. Kinetic theory: the Boltzmann equation; transport phenomena. Statistical mechanics: ideal Maxwell-Boltzmann, Fermi-Dirac and Bose-Einstein gases; ensemble theory; derivation of the laws of thermodynamics. Prerequisite: PHSX 711 and PHSX 821. PHSX 671 is recommended. LEC.

PHSX 881. Solid State Physics II. 3 Hours.
More advanced topics in solid state physics that may include: diamagnetism, paramagnetism, ferromagnetism, and antiferromagnetism; electron and nuclear spin magnetic resonance; dielectric properties and ferroelectricity; photoconductivity and luminescence. Prerequisite: PHSX 631 and PHSX 711 (or CHEM 915). LEC.

PHSX 895. Plasma Physics. 3 Hours.
Magnetohydrodynamics, including discussion of shocks, waves, and stability theory; statistical mechanical foundations; kinetic theory; microstability; non-linear phenomena. Prerequisite: PHSX 795. LEC.

PHSX 897. Seminar in Plasma and Space Physics. 1-3 Hours.
Graduate students engaged in or preparing for research may repeat enrollments in this course. The content will vary. (Same as ASTR 897.) LEC.

PHSX 899. Master's Research/Thesis. 1-10 Hours.
Research work (either experimental or theoretical) in physics for students working toward the master's degree. Repeated enrollments are permitted. THE.

PHSX 911. Quantum Mechanics III. 3 Hours.
Path integral formulation of quantum mechanics. Introduction to quantum field theory using the canonical approach and using the path integral approach. Application of perturbation theory in quantum electrodynamics. Selected applications in condensed matter, nuclear, and particle physics. Prerequisite: PHSX 811. LEC.

PHSX 912. Quantum Field Theory. 3 Hours.
Survey of problems in quantum field theory. Functional methods. Renormalization and renormalization group. Role of symmetries. Gauge field theories. Symmetry breaking. Prerequisite: PHSX 911. LEC.

PHSX 915. Relativity. 3 Hours.
Reviews of special relativity, manifolds, tensors, and geometry. General coordinate covariance and general relativity. Applications to classical theory of gravitation: weak field tests, isotropic, homogeneous cosmology, Schwarzschild solution. Selected advanced topics. Prerequisite: A total of 10 hours of junior/senior work in physics and mathematics, including at least concurrent enrollment in MATH 646. LEC.

PHSX 917. Seminar in Theoretical Physics. 1-3 Hours.
Graduate students engaged in or preparing for research may repeat enrollments in this course. Content will vary. LEC.

PHSX 931. Electrodynamics II. 3 Hours.
Inhomogeneous Maxwell's equations and multipole radiation fields; special theory of relativity; radiation from accelerated charges: scattering and dispersion. Prerequisite: PHSX 831. LEC.

PHSX 947. Seminar in Nuclear Physics. 1-3 Hours.
Graduate students engaged in or preparing for research may repeat enrollments in this course. The content will vary. LEC.

PHSX 957. Seminar in Particle Physics. 1-3 Hours.
Graduate students engaged in or preparing for research may repeat enrollments in this course. The content will vary. LEC.

PHSX 971. Advanced Statistical Mechanics. 3 Hours.
Advanced equilibrium statistical mechanics and introduction to nonequilibrium statistical mechanics. Topics include: the theory of liquids, critical phenomena, linear response theory and time correlation functions, Langevin dynamics, and molecular hydrodynamics. (Same as CHEM 950.) Prerequisite: PHSX 871 or CHEM 917. LEC.

PHSX 987. Seminar in Solid State Physics. 1-3 Hours.
Graduate students engaged in or preparing for research may repeat enrollments in this course. The content will vary. LEC.

PHSX 999. Ph.D. Dissertation Research. 1-10 Hours.
Research work (either experimental or theoretical) in physics for students working toward the Ph.D. degree. Repeated enrollments are permitted. THE.

Bachelor of Arts in Astronomy

Why study astronomy?

Because understanding the physical universe starts here.

Undergraduate Programs

Astronomy programs are offered through the Department of Physics and Astronomy. The astronomy curriculum offers undergraduates a survey of modern astronomy and an introduction to physical science, gives science and engineering students an introduction to astronomy and astrophysics, and prepares students majoring in astronomy for graduate study in astronomy or related fields.

Courses for Nonmajors

ASTR 191 surveys a wide range of contemporary astronomy topics while ASTR 293 discusses a shorter list of astrophysically extreme objects in greater detail; both courses require eligibility for MATH 101. ASTR 394 is open to students with previous coursework in astronomy, geology
or biology; ASTR 391 offers an introduction to physical astronomy at a calculus-based level.

### Undergraduate Admission

#### Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

#### Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

#### Advising

Students considering a major in astronomy should confer early with a departmental representative about the selection of courses. The B.A. degree is appropriate for students who want a general education in astronomy as part of a broadly structured liberal education. The B.S. is a more specialized program with a substantial emphasis on physics content as well as astronomy. It provides preparation for a professional career or graduate work in astronomy, astrophysics, or related fields. A total of 120 credit hours is required for graduation.

### First- and Second-Year Preparation

All major programs in physics and astronomy share requirements in basic physics and mathematics including PHSX 150, a seminar course for majors. Completion of MATH 125 and MATH 126 in the first year allows students to start calculus-based physics foundation courses (PHSX 211 or PHSX 213, followed by PHSX 212 or PHSX 214, with labs PHSX 216 and PHSX 236) by the second semester. Majors are encouraged to take PHSX 213 and PHSX 214, the honors versions of PHSX 211 and PHSX 212. Students should take these courses and ASTR 391 in their first two years. B.S. astronomy majors normally complete additional course work in mathematics (MATH 223, MATH 290, and MATH 320), as well as PHSX 313 and PHSX 316, in the second year.

### Requirements for the B.A. Major in Astronomy

All students pursuing the Bachelor of Arts in Astronomy must complete the KU Core requirements and the College BA specific requirements, listed in the KU Core and College sections of the catalog.

### Additional general science requirements (22.5-34.5)

Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.

<table>
<thead>
<tr>
<th>Major Hours &amp; Major GPA</th>
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<tr>
<td><strong>Calculus I. Satisfied by one of the following:</strong></td>
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<td>Or equivalent</td>
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<tr>
<td>MATH 125</td>
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<td>or MATH 145</td>
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| **Calculus II. Satisfied by one of the following:** |
| Or equivalent |
| MATH 126  | Calculus II  | 4 |
| or MATH 146 | Calculus II, Honors |

| **Seminar in Physics, Astronomy, & Engineering Physics. Satisfied by the following:** |
| PHSX 150  | Seminar in Physics, Astronomy and Engineering Physics  | 0.5 |

| **General Physics I. Satisfied by one of the following:** |
| PHSX 211  | General Physics I  | 1-4 |
| & PHSX 216 & General Physics I Laboratory |

| **General Physics II. Satisfied by one of the following:** |
| PHSX 213  | General Physics II  | 1-5 |
| & PHSX 236 & General Physics II Laboratory |

| **General Physics II Honors** |
| PHSX 214  | General Physics II Honors  | 1-4 |

| **Foundations of Chemistry I. Satisfied by one of the following:** |
| CHEM 130  | General Chemistry I  | 5 |
| CHEM 190  | Foundations of Chemistry I, Honors  | 5 |

### Astronomy Major Requirements (11)

Majors must complete each of the four following courses:

| **ASTR 391** Physical Astronomy, Honors  | 3 |
| ASTR 591  | Stellar Astronomy  | 3 |
| ASTR 596  | Observational Astrophysics  | 2 |
| ASTR 592  | Galactic and Extragalactic Astronomy  | 3 |

### Additional astronomy, astrophysics, or physics courses required for major (5)

In addition to the above specifically required courses, Astronomy BA candidates must complete at least 5 additional credits in physics or astronomy at the 300+ level. Students may enroll in ASTR 390 for undergraduate problems for 1 or more credit hours and in ASTR 503 (501 honors) for research credit. ASTR 394 is highly recommended. Other recommended courses include ASTR 691 and 692, PHSX 594, GEOL 572, PHSX 313/316 and other PHSX courses 500 and above; most of these course have pre-requisites that may require additional preparation in mathematics and/or physics.

### Major Hours & Major GPA

While completing all required courses (above), majors must also meet each of the following hour and grade-point average minimum standards:

| **Major Hours** |
| Satisfied by 25.5 hours of major courses. |

| **Major Hours in Residence** |
| Satisfied by a minimum of 15 hours of KU resident credit in the major. |

| **Major Junior/Senior (300+) Hours** |
Satisfied by a minimum of 16 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior (300+) Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Below is a sample 4-year plan for students pursuing the BA in Astronomy. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

This degree plan assumes students will have completed MATH 104, or equivalent prior to the freshman year, fall semester.

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 (2 crs req), BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.1 Critical Thinking</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 130 or 190 (Goal 3 Natural Science, BA Lab, Major Pre-requisite)</td>
<td>5</td>
<td>MATH 126 (Major Pre-requisite)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 125 (Major Pre-requisite)</td>
<td>4</td>
<td>PHSX 211 &amp; PHSX 216 (Major Requirement), or Elective or possible minor course (Total Hours)</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 150 (Major Requirement)</td>
<td>0.5</td>
<td>PHSX 213</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>15.5</td>
</tr>
</tbody>
</table>

### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
</tr>
<tr>
<td>Goal 3 Humanities</td>
<td>3</td>
<td>ASTR 391 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 212 &amp; PHSX 236 (Major Requirement), or PHSX 214</td>
<td>4</td>
<td>Goal 3 Social Science</td>
<td>3</td>
</tr>
<tr>
<td>Elective or possible minor course (Total Hours)</td>
<td>3</td>
<td></td>
<td>15</td>
</tr>
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### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
<td>3-5</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>ASTR 592 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ASTR 591 (Major Requirement)</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 596 (Major Requirement)</td>
<td>2</td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

### Total Hours: 120.5-122.5

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. CHEM 130 requires MATH 115 eligibility for enrollment.
3. Majors are required to complete a minimum of 5 hours of 300+ level electives in Physics or Astronomy.
4. Course Timing is interchangeable between Junior and Senior years and is dependent on course offering/availability.

Please note:

All students in the College of Liberal Arts and Sciences are required to completed 120 total hours of which 45 hours must be at the Jr/Sr (300+) level, and 100 hours must be from within the College of Liberal Arts and Sciences.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### Departmental Honors in Physics and Astronomy

A student who plans to graduate with honors in physics and astronomy must file a Declaration of Intent Form with the Departmental Honors Coordinator, preferably during his/her junior year but in any case no later than enrollment for the final undergraduate semester. All of our department’s honors requirements include student research, for which results shall be presented in at least one of the following forms:

a) a written research summary, read by 3 faculty members in physics and astronomy or related fields or authorship on a peer-reviewed manuscript

b) a research-based oral presentation at an appropriate venue (e.g., Undergraduate Research symposium, a presentation in an advanced department seminar class, a discipline specific meeting)

c) presentation of a poster at an appropriate venue. Additional requirements are:
Undergraduate Programs

Astronomy programs are offered through the Department of Physics and Astronomy. The astronomy curriculum offers undergraduates a survey of modern astronomy and an introduction to physical science, gives science and engineering students an introduction to astronomy and astrophysics, and prepares students majoring in astronomy for graduate study in astronomy or related fields.

Courses for Nonmajors

ASTR 191 surveys a wide range of contemporary astronomy topics while ASTR 293 discusses a shorter list of astrophysically extreme objects in greater detail; both courses require eligibility for MATH 101. ASTR 394 is open to students with previous coursework in astronomy, geology or biology; ASTR 391 offers an introduction to physical astronomy at a calculus-based level.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-credit on the KU Core section of the catalog.

Advising

Students considering a major in astronomy should confer early with a departmental representative about the selection of courses. The B.A. degree is appropriate for students who want a general education in astronomy as part of a broadly structured liberal education. The B.S. is a more specialized program with a substantial emphasis on physics content as well as astronomy. It provides preparation for a professional career or graduate work in astronomy, astrophysics, or related fields. A total of 120 credit hours is required for graduation.

First- and Second-Year Preparation

All major programs in physics and astronomy share requirements in basic physics and mathematics including PHSX 150, a seminar course for majors. Completion of MATH 125 and MATH 126 in the first year allows students to start calculus-based physics foundation courses (PHSX 211 and PHSX 216 or PHSX 213, followed by PHSX 212 and PHSX 236 or PHSX 214) by the second semester. Majors are encouraged to take PHSX 213 and PHSX 214, the honors versions of PHSX 211/PHSX 216 and PHSX 212/PHSX 236. Students should take these courses and ASTR 391 in their first two years. B.S. astronomy majors normally complete additional course work in mathematics (MATH 223, MATH 290, and MATH 320), as well as PHSX 313 and PHSX 316, in the second year.

Requirements for the B.S. Degree in Astronomy

All students pursuing the Bachelor of Science in Astronomy must complete the KU Core requirements in addition to the degree and major requirements. For details regarding the KU Core requirements, please see the KU Core section of the catalog.

General science requirements (24.5-36.5)

Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.

Computing and Programming. Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 138</td>
<td>3</td>
</tr>
<tr>
<td>EECS 168</td>
<td>4</td>
</tr>
</tbody>
</table>

Calculus I. Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 125</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 145</td>
<td></td>
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</tbody>
</table>

Calculus II. Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 126</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 146</td>
<td></td>
</tr>
</tbody>
</table>

Seminar in Physics, Astronomy, & Engineering Physics. Satisfied by the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 150</td>
<td>0.5</td>
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</tbody>
</table>

General Physics I. Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 211</td>
<td>4</td>
</tr>
<tr>
<td>&amp; PHSX 216</td>
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</tr>
</tbody>
</table>

General Physics I Honors. Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 213</td>
<td>5</td>
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</table>

General Physics II. Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Science in Astronomy

PHSX 212 General Physics II 1-3
& PHSX 236 and General Physics II Laboratory
PHSX 241 General Physics II Honors 1-4
Foundations of Chemistry I. Satisfied by one of the following:
CHEM 130 General Chemistry I 5
CHEM 190 Foundations of Chemistry I, Honors

Advanced Mathematics Core Knowledge and Skills (11)
Vector Calculus. Satisfied by the following:
MATH 223 Vector Calculus 3
Elementary Linear Algebra. Satisfied by the following:
MATH 290 Elementary Linear Algebra 2
Elementary Differential Equations. Satisfied by the following:
MATH 320 Elementary Differential Equations 3
Math Elective. Satisfied by one of the following:
PHSX 518 Mathematical Physics
PHSX 718 Mathematical Methods in Physical Sciences
MATH 526 Applied Mathematical Statistics I
MATH 530 Mathematical Models
MATH 558 Introductory Modern Algebra
MATH 581 Numerical Methods
MATH 590 Linear Algebra
MATH 628 Mathematical Theory of Statistics
MATH 646 Complex Variable and Applications
MATH 647 Applied Partial Differential Equations
MATH 648 Calculus of Variations and Integral Equations
MATH 660 Geometry I
MATH 661 Geometry II
any 700-level MATH lecture course except MATH 701 and MATH 715.

Astronomy Requirements for Major (18-21)
Majors must complete the following seven courses:
ASTR 391 Physical Astronomy, Honors 3
ASTR 591 Stellar Astronomy 3
ASTR 592 Galactic and Extragalactic Astronomy 3
ASTR 596 Observational Astrophysics 2
ASTR 691 Astrophysics I 3
ASTR 692 Astrophysics II 3
ASTR 503 Undergraduate Research 1-4

Physics Core Knowledge and Skills (30)
Majors must complete courses as indicated in the following areas:
General Physics III. Satisfied by the following:
PHSX 313 General Physics III 3
Intermediate Physics Lab. Satisfied by the following:
PHSX 316 Intermediate Physics Laboratory I 1
Introductory Quantum Mechanics. Satisfied by the following:
PHSX 511 Introductory Quantum Mechanics 3
Physical Measurements or Electronic Circuit Measurement and Design. Satisfied by one of the following:
PHSX 516 Physical Measurements 4
PHSX 536 Electronic Circuit Measurement and Design 4
Mechanics I. Satisfied by the following:
PHSX 521 Mechanics I 3
Electricity and Magnetism. Satisfied by the following:
PHSX 531 Electricity and Magnetism 3
Thermal Physics. Satisfied by the following:
PHSX 671 Thermal Physics 3
Physics Elective. Satisfied by any PHSX lecture or laboratory course numbered 500 or higher (PHSX 693 recommended) (with the exception of PHSX 594), including:
ASTR 792 Topics in Advanced Astrophysics 3
PHSX 795 Space Plasma Physics
or PHSX 795 Space Plasma Physics
GEOL 572 Geophysics
PHSX 693 Gravitation and Cosmology (recommended)

Major Hours & Major GPA
While completing all required courses (above), majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 30 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior(300+) Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

Major Junior/Senior (300+) Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Departmental Honors in Physics and Astronomy
A student who plans to graduate with honors in physics and astronomy must file a Declaration of Intent Form with the Departmental Honors Coordinator, preferably during his/her junior year but in any case no later than enrollment for the final undergraduate semester. All of our department’s honors requirements include student research, for which results shall be presented in at least one of the following forms:

a) a written research summary, read by 3 faculty members in physics and astronomy or related fields or authorship on a peer-reviewed manuscript
b) a research-based oral presentation at an appropriate venue (e.g., Undergraduate Research symposium, a presentation in an advanced department seminar class, a discipline specific meeting)
c) presentation of a poster at an appropriate venue. Additional requirements are:
Qualified students earning either a B.A. or a B.S. degree in the College of Liberal Arts and Sciences with a major in astronomy or physics may graduate with Honors in Physics & Astronomy by fulfilling the following requirements: (1) By the end of the candidate's final semester, achieve a minimum GPA of 3.25 overall and 3.5 in the major, in all courses taken in residence and elsewhere; (2) Complete at least 24 semester hours of astronomy and physics courses numbered 500 or above, including undergraduate research represented by two hours of credit in ASTR 597, ASTR 503, PHSX 501 or PHSX 503. A grade of B or better must be earned in one of the following: ASTR 597, ASTR 503, PHSX 501 or PHSX 503.
Bachelor of Arts in Physics

Why study physics and astronomy?
Because understanding the physical universe starts here.

Undergraduate Admission

Admission to KU
All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences
Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Requirements for the B.A. Major in Physics
All students pursuing the Bachelor of Arts in Physics must complete the KU Core requirements and the College BA specific requirements, listed in the KU Core and College sections of the catalog.

Bachelor of Arts in Physics Major Course Requirements

Foundational Physics and Mathematics (17.5)
Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. All honors equivalents are also acceptable to fulfill PHSX major requirements. These hours do not contribute to the minimum number of hours required for the major.

Seminar in Physics, Astronomy, & Engineering Physics. Satisfied by:
PHSX 150 Seminar in Physics, Astronomy and Engineering Physics 0.5
General Physics I. Satisfied by one of the following:
PHSX 211 General Physics I
& PHSX 216 General Physics I Laboratory
PHSX 213 General Physics I Honors
General Physics II. Satisfied by one of the following:
PHSX 212 General Physics II
& PHSX 236 General Physics II Laboratory
PHSX 214 General Physics II Honors

Calculus I. Satisfied by:
MATH 125 Calculus I (or equivalent) 4
Calculus II. Satisfied by:
MATH 126 Calculus II (or equivalent) 4
Advanced Math Requirement (6)
MATH 127 Calculus III 4
Elementary Linear Algebra. Satisfied by:
MATH 290 Elementary Linear Algebra 2
Differential Equations. Satisfied by one of the following:
MATH 220 Applied Differential Equations
MATH 320 Elementary Differential Equations (recommended)

Advance Physics Major Requirements (17)
Majors must complete a course in each of the following areas:
General Physics III. Satisfied by:
PHSX 313 General Physics III 3
Intermediate Physics Lab. Satisfied by:
PHSX 316 Intermediate Physics Laboratory I 1
Introductory Quantum Mechanics. Satisfied by:
PHSX 511 Introductory Quantum Mechanics 3
Mechanics I. Satisfied by:
PHSX 521 Mechanics I 3
Electricity and Magnetism. Satisfied by:
PHSX 531 Electricity and Magnetism 3
Electronic Circuit Measurement and Design. Satisfied by:
PHSX 536 Electronic Circuit Measurement and Design 4
or PHSX 516 Physical Measurements

Physics Required Elective (3)
Satisfied by any lecture or laboratory course numbered 500 or higher. 3

Physics Major Hours & Major GPA
While completing all required courses (above), majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 30 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior (300+) Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

Major Junior/Senior (300+) Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Concentration in Computational Physics

Physics Prerequisite or Co-requisite Knowledge (27)
Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.

Programming I. Satisfied by:
This degree plan assumes students will have the equivalent of MATH 101 or MATH 104 prior to freshman year, fall semester.

Below is a sample 4-year plan for students pursuing the BA in Physics. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Freshman</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 (2 crs req), BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3</td>
<td>MATH 126 (Major Pre-requisite)</td>
</tr>
<tr>
<td>MATH 125 (Major Pre-requisite)</td>
<td>4</td>
<td>PHSX 211 &amp; PHSX 216 (Goal 3 Natural Science, Major Requirement), or</td>
</tr>
<tr>
<td>PHSX 150 (Major Requirement)</td>
<td>0.5</td>
<td>PHSX 213</td>
</tr>
<tr>
<td><strong>Sophomore</strong></td>
<td>15.5</td>
<td>16</td>
</tr>
<tr>
<td>Fall</td>
<td>Hours Spring</td>
<td>Hours</td>
</tr>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
</tr>
<tr>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td>Goal 3 Humanities</td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>MATH 290 (Major Pre-requisite)</td>
</tr>
<tr>
<td>PHSX 212 &amp; PHSX 236 (Major Requirement), or</td>
<td>4</td>
<td>PHSX 313 (Major Requirement)</td>
</tr>
<tr>
<td>PHSX 214</td>
<td>PHSX 316 (Major Requirement)</td>
<td>1</td>
</tr>
<tr>
<td>MATH 320 or 220 (Major Pre-requisite)</td>
<td>3</td>
<td>Elective or possible minor course (Total Hours)</td>
</tr>
<tr>
<td><strong>Junior</strong></td>
<td>16</td>
<td>15-17</td>
</tr>
<tr>
<td>Fall</td>
<td>Hours Spring</td>
<td>Hours</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>Goal 4.2 Global Awareness</td>
</tr>
<tr>
<td>PHSX 511 (Major Requirement)</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
</tr>
<tr>
<td>MATH 127 (Major Prequisite)</td>
<td>3</td>
<td>PHSX 521 (Major Requirement)</td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
</tr>
<tr>
<td><strong>Senior</strong></td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>Fall</td>
<td>Hours Spring</td>
<td>Hours</td>
</tr>
<tr>
<td>PHSX 531 (Major Requirement)</td>
<td>3</td>
<td>Goal 6 Integration &amp; Creativity</td>
</tr>
<tr>
<td>PHSX 516 or 536 (Major Requirement)</td>
<td>4</td>
<td>PHSX Lecture or Lab Elective 500+ (Major Requirement)</td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
<td>PHSX 536 or 516 (or elective (Major Requirement))</td>
</tr>
</tbody>
</table>
The University of Kansas

Bachelor of Science in Physics

Why study physics and astronomy?
Because understanding the physical universe starts here.

Undergraduate Admission

Admission to KU
All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Requirements for the B.S. Degree in Physics

Physics Bachelor of Science (B.S.) General Education Requirements

All students pursuing the Bachelor of Science in Physics must complete the KU Core requirements in addition to the degree and major requirements. For details regarding the KU Core requirements, please see the KU Core section of the catalog.

Foundational Physics and Mathematics (8.5)

Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. All honors equivalents are also acceptable to fulfill PHSX major requirements. These hours do not contribute to the minimum number of hours required for the major.

Calculus I. Satisfied by:
MATH 125 Calculus I (or equivalent) 4
Calculus II. Satisfied by:
MATH 126 Calculus II (or equivalent) 4
Seminar in Physics, Astronomy, & Engineering Physics. Satisfied by:
PHSX 150 Seminar in Physics, Astronomy and Engineering Physics 0.5
Bachelor of Science in Physics

General Physics I. Satisfied by one of the following:

- PHSX 211 General Physics I
- & PHSX 216 and General Physics I Laboratory
- PHSX 213 General Physics I Honors

General Physics II. Satisfied by one of the following:

- PHSX 212 General Physics II
- & PHSX 236 and General Physics II Laboratory
- PHSX 214 General Physics II Honors

General Science Requirements (8)

Foundations of Chemistry I. Satisfied by:

- CHEM 130 General Chemistry I

Computing and Programming. Satisfied by:

- EECS 138 Introduction to Computing: _____ excluding Fortran or C
- or EECS 168 Programming I

Advanced Mathematics (9)

Vector Calculus. Satisfied by:

- MATH 127 Calculus III

Elementary Linear Algebra. Satisfied by:

- MATH 290 Elementary Linear Algebra

Applied Differential Equations. Satisfied by:

- MATH 320 Elementary Differential Equations

Math Elective. Satisfied by one of the following: (0)

- PHSX 518 Mathematical Physics
- PHSX 718 Mathematical Methods in Physical Sciences
- MATH 526 Applied Mathematical Statistics I
- MATH 530 Mathematical Models
- MATH 558 Introductory Modern Algebra
- MATH 581 Numerical Methods
- MATH 590 Linear Algebra
- MATH 628 Mathematical Theory of Statistics
- MATH 646 Complex Variable and Applications
- MATH 647 Applied Partial Differential Equations
- MATH 648 Calculus of Variations and Integral Equations
- MATH 660 Geometry I
- MATH 661 Geometry II
- any 700-level MATH lecture course except MATH 701 and MATH 715

Advanced Physics (24-27)

Majors must complete a course in each of the following areas:

General Physics III. Satisfied by:

- PHSX 313 General Physics III

Intermediate Physics Lab. Satisfied by:

- PHSX 316 Intermediate Physics Laboratory I

Introductory Quantum Mechanics. Satisfied by:

- PHSX 511 Introductory Quantum Mechanics

Physical Measurements or Electronic Circuit Measurement and Design. Satisfied by:

- PHSX 516 Physical Measurements
- or PHSX 536 Electronic Circuit Measurement and Design

Mechanics I. Satisfied by:

- PHSX 521 Mechanics I

Electricity and Magnetism. Satisfied by:

- PHSX 531 Electricity and Magnetism

Thermal Physics. Satisfied by:

- PHSX 671 Thermal Physics

Undergraduate Research or Honors Research. Satisfied by:

- PHSX 503 Undergraduate Research
- or PHSX 501 Honors Research

Physics Elective. Satisfied by any PHSX lecture or laboratory course numbered 500 or higher and not part of the other specific requirements for the major.

Physics Required Electives (13)

Majors must complete one of the following options: 13

Preprofessional Option

Majors choosing this option must complete 13 credit hours in advanced physics as follows:

Mechanics II. Satisfied by:

- PHSX 621 Mechanics II

Electromagnetic Theory. Satisfied by:

- PHSX 631 Electromagnetic Theory

Quantum Mechanics. Satisfied by:

- PHSX 711 Quantum Mechanics I

Second Advanced Physics Lab. Satisfied by one of the following:

- PHSX 516 Physical Measurements
- or PHSX 536 Electronic Circuit Measurement and Design

Interdisciplinary Option

Majors choosing this option must complete 13 credit hours in satisfying both categories as follows:

Advanced Physics. Satisfied by two of the following:

- PHSX 621 Mechanics II
- PHSX 631 Electromagnetic Theory
- PHSX 711 Quantum Mechanics I
- PHSX 516 Physical Measurements
- PHSX 536 Electronic Circuit Measurement and Design

Allied Science Field. Satisfied by the completion of 2 advanced courses in 1 allied science field chosen from the following:

Biology. Satisfied by two of the following:

- BIOL 350 Principles of Genetics
- BIOL 400 Fundamentals of Microbiology
- BIOL 408 Physiology of Organisms
- BIOL 412 Evolutionary Biology
- BIOL 416 Cell Structure and Function
- BIOL 600 Introductory Biochemistry, Lectures
- BIOL 636 Biochemistry I
- BIOL 638 Biochemistry II

Chemistry. Satisfied by two of the following:

- CHEM 598 Research Methods (UKanTeach students only)
- CHEM 310 Fundamentals of Organic Chemistry
- CHEM 530 Physical Chemistry I

Geology. Satisfied by two of the following:

- GEOL 360 Field Investigation
- GEOL 562 Structural Geology
- GEOL 572 Geophysics
Undergraduate Programs

Astronomy programs are offered through the Department of Physics and Astronomy. The astronomy curriculum offers undergraduates a survey of modern astronomy and an introduction to physical science, gives science and engineering students an introduction to astronomy and astrophysics, and prepares students majoring in astronomy for graduate study in astronomy or related fields.

Courses for Nonmajors

ASTR 191 surveys a wide range of contemporary astronomy topics while ASTR 293 discusses a shorter list of astrophysically extreme objects in greater detail; both courses require eligibility for MATH 101. ASTR 394 is open to students with previous coursework in astronomy, geology or biology; ASTR 391 offers an introduction to physical astronomy at a calculus-based level.

Requirements for the Minor in Astrobiology

Astrobiology Minor Course Requirements

Students selecting this minor must complete courses as specified in each of the following areas:

Minor Requirements

**Principles of Molecular and Cellular Biology (4)**

Satisfied by the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
<td>4</td>
</tr>
</tbody>
</table>

**Geology (3)**

Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 101</td>
<td>The Way The Earth Works</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 105</td>
<td>History of the Earth</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 121</td>
<td>Life Through Times: DNA to Dinosaurs</td>
<td>3</td>
</tr>
</tbody>
</table>

**Physical Astronomy, Honors (3)**

Satisfied by the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 391</td>
<td>Physical Astronomy, Honors</td>
<td>3</td>
</tr>
</tbody>
</table>

**Astrobiology Core (1-4)**

Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 394</td>
<td>The Quest for Extraterrestrial Life</td>
<td>1-4</td>
</tr>
<tr>
<td>ASTR 503</td>
<td>Undergraduate Research</td>
<td>1-4</td>
</tr>
</tbody>
</table>

**Astrobiology Required Electives (6)**

Student selecting this minor must complete 6 credit hours of course work in astronomy, biology, chemistry, geology, or physics at the 300-level or higher and not in the student's major field.

Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and grade-point average minimum standards:

**Minor Hours**

Satisfied by a minimum of 19 hours of minor coursework.

**Minor Hours in Residence**

Satisfied by a minimum of 9 hours of KU resident credit in the minor.

**Minor Junior/Senior Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.
Minor Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in courses in the minor. GPA calculations include all courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Minor in Astronomy

Why study astronomy?
Because understanding the physical universe starts here.

Undergraduate Programs
Astronomy programs are offered through the Department of Physics and Astronomy. The astronomy curriculum offers undergraduates a survey of modern astronomy and an introduction to physical science, gives science and engineering students an introduction to astronomy and astrophysics, and prepares students majoring in astronomy for graduate study in astronomy or related fields.

Courses for Nonmajors
ASTR 191 surveys a wide range of contemporary astronomy topics while ASTR 293 discusses a shorter list of astrophysically extreme objects in greater detail; both courses require eligibility for MATH 101. ASTR 394 is open to students with previous coursework in astronomy, geology or biology; ASTR 391 offers an introduction to physical astronomy at a calculus-based level.

Requirements for the Minor in Astronomy

Astronomy Minor Course Requirements
Students selecting this minor must complete courses as specified in each of the following areas:

General Physics I (5)
Satisfied by one of the following:

- PHSX 211 General Physics I
- & PHSX 216 and General Physics I Laboratory
- PHSX 213 General Physics I Honors

General Physics II (4)
Satisfied by one of the following:

- PHSX 212 General Physics II
- & PHSX 236 and General Physics II Laboratory
- PHSX 214 General Physics II Honors

General Physics III and Intermediate Physics Laboratory (4)
Satisfied by the following:

- PHSX 313 General Physics III
- & PHSX 316 Intermediate Physics Laboratory I

Physical Astronomy, Honors (3)
Satisfied by the following:

- ASTR 391 Physical Astronomy, Honors

Astronomy Required Electives. Satisfied by at least 5 hours in any combination of ASTR courses numbered above 300.

Minor Hours & Minor GPA
While completing all required courses (above), minors must also meet each of the following hour and grade-point average minimum standards:

- Minor Hours: 20 hours of minor courses.
- Minor Hours in Residence: 9 junior/senior (300+) hours of KU resident credit in the minor.
- Minor Junior/Senior Hours: 12 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the minor. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Minor in Physics

Why study physics and astronomy?
Because understanding the physical universe starts here.

Requirements for the Minor in Physics

Physics Minor Course Requirements
Student selecting this minor must complete courses as specified in each of the following areas:

General Physics I. Satisfied by one of the following:

- PHSX 211 General Physics I
- & PHSX 216 General Physics I Laboratory
- PHSX 213 General Physics I Honors

General Physics II. Satisfied by one of the following:

- PHSX 212 General Physics II
- & PHSX 236 General Physics II Laboratory
- PHSX 214 General Physics II Honors

General Physics III and Intermediate Physics Laboratory. Satisfied by:

- PHSX 313 General Physics III
- & PHSX 316 Intermediate Physics Laboratory I

Mechanics I. Satisfied by:

- PHSX 521 Mechanics I

Electricity and Magnetism. Satisfied by:

- PHSX 531 Electricity and Magnetism

Physics Required Elective. Satisfied by any 3 credit hour PHSX course numbered 500 or above.

Minor Hours & Minor GPA
While completing all required courses (above), minors must also meet each of the following hour and grade-point average minimum standards:

- Minor Hours: 21 hours of major courses.
- Minor Hours in Residence: 9 junior/senior (300+) hours of KU resident credit in the major.
- Minor Junior/Senior (300+) Hours
Satisfied by a minimum of 13 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in the minor. GPA calculations include all courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

**Master of Science in Physics**

**Why study physics and astronomy?**
Because understanding the physical universe starts here.

**Admission to Graduate Studies**
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**
Ordinarily, admission requires an undergraduate grade-point average of at least B (3.0 on a 4.0 scale), overall and in the major. A baccalaureate degree with a major in physics is desirable but not required. Recommended preparation consists of courses in mechanics, electromagnetic theory, thermal physics, introductory quantum mechanics, advanced laboratory, and at least one course in mathematics beyond differential equations. Working knowledge of computers and of an advanced programming language is helpful. A student with less than the recommended preparation may enroll in these courses for graduate credit.

Submit your graduate application online (http://www.graduate.ku.edu). Send all other requested application materials to the department:

**The University of Kansas**
Department of Physics and Astronomy
Graduate Coordinator
Malott Hall
1251 Wescoe Hall Dr., Room 1082
Lawrence, KS 66045-7572

**M.S. Degree in Physics**
The departmental web page with some additional information, e.g., milestones, can be found at http://www.physics.ku.edu/~physics/graduate/about.shtml

Candidates must complete a minimum of 30 credit hours of advanced lecture courses (numbered 500 or above) in physics and related subjects within a period of 7 years. Program requirements include

1. An undergraduate knowledge of physics. This must be certified by the department to be at an advanced undergraduate level (600-level KU courses). The certification must be achieved within 12 months (extension possible with recommendation of the graduate admission committee) of entering the program and may require additional coursework. Extension is possible with recommendation of the graduate admission committee. Certification can be achieved in several ways:
   a. A GRE physics score greater than or equal to 650; or
   b. The determination by the graduate director and graduate advisor, based on the diagnostic exam given on entering the program combined with the student's undergraduate record, that the student understands all major elements of undergraduate physics; or
   c. Successful completion with grade of B or better on all undergraduate courses that the graduate director and/or advisor recommends based on the results of part b. above. The student who has not succeeded in certifying his or her undergraduate physics knowledge in 1 of the above 3 ways could, within 12 months of starting the program, petition the Graduate Committee for an oral exam on undergraduate physics. The oral exam will be administered by a committee of 6 faculty members assigned by the department.
   d. A candidate for a Master's or Ph.D. degree who has not had the equivalent of 6 credit hours of advanced undergraduate laboratory course work (Junior/Senior level) is required to take 1 of the 3 advanced laboratory courses offered in the Department.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 516</td>
<td>Physical Measurements</td>
<td>4</td>
</tr>
<tr>
<td>PHSX 536</td>
<td>Electronic Circuit Measurement and Design</td>
<td>4</td>
</tr>
<tr>
<td>PHSX 601</td>
<td>Design of Physical and Electronic Systems</td>
<td>4</td>
</tr>
</tbody>
</table>

2. 4 basic courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 711</td>
<td>Quantum Mechanics I</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 718</td>
<td>Mathematical Methods in Physical Sciences</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 821</td>
<td>Classical Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 831</td>
<td>Electrodynamics I</td>
<td>3</td>
</tr>
</tbody>
</table>

3. 2 additional courses chosen from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 721</td>
<td>Chaotic Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 731</td>
<td>Molecular Biophysics</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 741</td>
<td>Nuclear Physics I</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 761</td>
<td>Elementary Particles I</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 781</td>
<td>Solid State Physics I</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 793</td>
<td>Physical Cosmology</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 792</td>
<td>Topics in Advanced Astrophysics</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 795</td>
<td>Space Plasma Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 815</td>
<td>Computational Methods in Physical Sciences</td>
<td>3</td>
</tr>
</tbody>
</table>

4. A minimum of 2 hours in PHSX 899 Master's Research/Thesis is required, with a maximum of 6 hours that count toward the master's degree. Ordinarily no more than 2 hours will be allowed unless a thesis or written report is presented.

5. The remaining 6 to 10 hours of advanced electives must be either advanced lecture courses or advanced undergraduate laboratory courses. (This proviso excludes seminars and special problems courses.)

**Communication Skills**
All graduate students, after their first semester, will deliver at least 1 oral presentation per semester. The talk should be at least 20 minutes long. For students not yet associated with a research group, the Graduate Seminar can serve as a venue. For more advanced students the seminar
of their research group would be a natural venue. The student does not need to be enrolled in the seminar to present a talk for this purpose. Off-campus venues such as collaboration meetings and physics conferences can also serve this purpose. When giving presentations, students should fill out a form available on the department web site and have it signed by 2 witnesses, 1 of which must be a Physics or Astronomy faculty and other a Ph.D. doing research in the department. The completed form must be handed to the office staff. Faculty members who sign off on the talks are expected to provide constructive feedback to the student. The graduate advisor will monitor student compliance with the requirement.

**General Examination**

Candidates must pass a general oral examination in physics. The examination is given shortly before completion of other work for the degree. A master’s thesis is not required but may be submitted if the candidate and the director of the candidate’s research believe it to be appropriate.

**M.S. Subspecialty in Computational Physics and Astronomy**

This degree is a subspecialty program for students with a background in physics, astronomy, computer science, mathematics, or engineering who wish to become familiar with computer-based approaches to problems in these fields. Minimum preparation expected includes a year’s course in general physics, mathematics through differential equations, and a knowledge of FORTRAN, C++, or another programming language.

A total of 30 hours of graduate credit is required. The 33 hours listed below under 2 and 3 may include certain undergraduate-level electrical engineering and computer science courses. (Only courses numbered 500 and above count as graduate credit.) Students entering the program may have satisfied several of these requirements, but a total of 30 hours of graduate credit is still required. No more than the required 6 hours of PHSX 899 Master’s Research/Thesis may be counted toward the degree.

Degree requirements include:

1. An undergraduate knowledge of physics. This must be certified by the department to be at an advanced undergraduate level (600-level KU courses). The certification must be achieved within 12 months (extension possible with recommendation of the graduate admission committee) of entering the program and may require additional coursework. Extension is possible with recommendation of the graduate admission committee. Certification can be achieved in several ways:
   a. A GRE physics score greater than or equal to 650; or
   b. The determination by the graduate director and graduate advisor, based on the diagnostic exam given on entering the program combined with the student's undergraduate record, that the student understands all major elements of undergraduate physics; or
   c. Successful completion with grade of B or better on all undergraduate courses that the graduate director and/or advisor recommends based on the results of part b above. The student who has not succeeded in certifying their undergraduate physics knowledge in 1 of the above 3 ways could, within 12 months of starting the program, petition the Graduate Committee for an oral exam on undergraduate physics. The oral exam will be administered by a committee of 6 faculty members assigned by the department.

2. Required Courses (21 credit hours)

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 516</td>
<td>Physical Measurements</td>
<td>4</td>
</tr>
<tr>
<td>PHSX 536</td>
<td>Electronic Circuit Measurement and Design</td>
<td>4</td>
</tr>
<tr>
<td>PHSX 601</td>
<td>Design of Physical and Electronic Systems</td>
<td>4</td>
</tr>
</tbody>
</table>

3. 12 or more credits from the following list of courses: (Note: Double counting of courses is not allowed, e.g. a course used to fulfill a requirement under part 2. (e.g. EECS 448) may not also be counted under part 3.)

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 360</td>
<td>Signal and System Analysis</td>
<td>4</td>
</tr>
<tr>
<td>EECS 368</td>
<td>Programming Language Paradigms</td>
<td>3</td>
</tr>
<tr>
<td>EECS 388</td>
<td>Embedded Systems</td>
<td>4</td>
</tr>
<tr>
<td>EECS 448</td>
<td>Software Engineering I</td>
<td>4</td>
</tr>
<tr>
<td>EECS 560</td>
<td>Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>EECS 672</td>
<td>Introduction to Computer Graphics</td>
<td>3</td>
</tr>
</tbody>
</table>

Select 1 of the following - Special Topics: (Examples of recent topics: Mathematics of Wall Street Computer-aided, Study of Differential Geometry, Chaos and Fractals, Fractional Brownian Motion and Its Applications, Wavelet Analysis, Statistical Theory, Stochastic Differential Equations and Applications)

- MATH 596  Special Topics: _____
- MATH 696  Special Topics: _____
- MATH 796  Special Topics: _____
- MATH 611  Time Series Analysis                   | 3       |
- MATH 627  Probability                            | 3       |
- MATH 647  Applied Partial Differential Equations | 3       |
- MATH/EECS 782 Numerical Analysis II               | 3       |
- MATH 783  Applied Numerical Methods for Partial Differential Equations | 3 |

4. Communication Skills: All graduate students, after their first semester, will deliver at least 1 oral presentation per semester. The talk should be at least 20 minutes long. For students not yet associated with a research group, the Graduate Seminar can serve as a venue. For more advanced students the seminar of their research group would be a natural venue. The student does not need to be enrolled in the seminar to present a talk for this purpose. Off-campus venues such as collaboration meetings and physics conferences can also serve
this purpose. When giving presentations, students should fill out a form available on the department web site and have it signed by 2 witnesses, 1 of which must be a Physics or Astronomy faculty and another a Ph.D. doing research in the department. The completed form must be handed to the office staff. Faculty members who sign off on the talks are expected to provide constructive feedback to the student. The graduate advisor will monitor student compliance with the requirement.

5. Thesis: An important component of this degree is the completion and documentation of a successful computer project. A thesis must be presented that describes the basic physics involved in the project, the method of implementing the project, and a discussion of the results. An oral defense of the thesis is required before a committee of at least 3 members of the graduate faculty.

Please go to this website to see the University’s policy on time limits: https://documents.ku.edu/policies/Graduate_Studies/maprogramtimeconstraints.htm

Doctor of Philosophy in Physics

Why study physics and astronomy?

Because understanding the physical universe starts here.

Admission to Graduate Studies

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Graduate Admission

Ordinarily, admission requires an undergraduate grade-point average of at least B (3.0 on a 4.0 scale), overall and in the major. A baccalaureate degree with a major in physics is desirable but not required. Recommended preparation consists of courses in mechanics, electromagnetic theory, thermal physics, introductory quantum mechanics, advanced laboratory, and at least one course in mathematics beyond differential equations. Working knowledge of computers and of an advanced programming language is helpful. A student with less than the recommended preparation may enroll in these courses for graduate credit.

Submit your graduate application online (http://www.graduate.ku.edu). Send all other requested application materials to the department:

The University of Kansas
Department of Physics and Astronomy
Graduate Coordinator
Malott Hall
1251 Wescoe Hall Dr., Room 1082
Lawrence, KS 66045-7572

Ph.D. Degree Requirements

The departmental web page with some additional information, e.g., milestones, can be found online (http://www.physics.ku.edu/~physics/graduate/about.shtml).

Residence

To become a Ph.D. candidate, i.e. to take the comprehensive exam:

The student must spend at least 2 semesters, which may include 1 summer session, in resident study at the University of Kansas.

To earn a Ph.D.:

The student must spend at least the equivalent of 3 full academic years in graduate study at this or another approved institution or laboratory. During this period of residence, the student must be involved full-time in academic or professional pursuits, which may include an appointment for teaching or research if the teaching/research is directed specifically toward the student’s degree objectives.

Graduate students with half-time assistantships usually require at least 4 years to complete all requirements. Maximum enrollment for students with no other departmental obligations is 16 hours a semester. In addition to satisfying the residence requirement, a student with a half-time assistantship must be enrolled for at least 6 hours each semester. A maximum of 12 hours is permitted if the student’s duties consist of research that partially fulfills degree requirements. A fellowship holder or full-time student with private support must be enrolled for at least 9 hours.

Time Limits

See the University’s policy on time limits (https://documents.ku.edu/policies/Graduate_Studies/docprogramtimeconstraints.htm).

Graduate Teaching Assistantship Eligibility

To be eligible for teaching assistantships, all graduate students who are not native speakers of English must achieve a minimum score of 50 on the SPEAK test. International students must pass an oral examination to demonstrate English fluency. Students who fail this examination should take courses from the Applied English Center.

Every student who receives a GTA appointment will be required to complete PHSX 702 Introductory Physics Pedagogy at the first offering of the course starting with the semester of the student’s initial GTA appointment. Failure to complete this class at the first opportunity may affect consideration for subsequent GTA appointments.

Preliminary Candidacy

To be admitted to preliminary candidacy, each graduate student must satisfy department requirements:

1. Undergraduate knowledge of physics must be certified at the department undergraduate level (600-level KU courses). The ways to achieve this certification are outlined above under Course Requirements.

A candidate for a Master's or Ph.D. degree who has not had the equivalent of 6 credit hours of advanced undergraduate laboratory course work (Junior/Senior level) is required to take 1 of the 3 advanced laboratory courses offered in the department.
Doctor of Philosophy in Physics

2. Achieve a minimum core course grade point average of 3.2. The core course GPA is computed from the following 5 equally weighted elements:

a. Average grade of 2 other PHSX lecture courses numbered 700 or higher, excluding PHSX 815 (computational physics) and PHSX 717 (graduate seminar).

b. The 2 "other PHSX lecture courses numbered 700 or higher" must be taken at KU, but students entering with graduate credit from other institutions may petition the Graduate Committee for transfer credit for any of the 4 named core courses. For the purposes of the core GPA, grades (of "B" or better) from the previous institution may be used for at most 3 of the 4 named courses. For the remaining course the student must obtain written certification of "B" performance or better from the instructor of the course at KU. Such certification may be obtained by taking the course, taking the final exam of the course (if there is one), or other means which the instructor may determine. An appropriate higher-level course may also be used to obtain certification in a core course (for example for PHSX 711 or PHSX 811, PHSX 931 for PHSX 831.)

c. Graduate students are normally expected to complete all core courses by the end of their second year of enrollment. Students who are required to complete an undergraduate physics certificate have 3 years to finish their core courses. Extensive Applied English Center (AEC) courses, prolonged illness, or extended military service might provide exceptional circumstances.

Decision on Preliminary Candidacy

Once Undergraduate requirements have been certified and sufficient information has been received regarding the required courses, the Graduate Committee will decide whether or not to admit the student to preliminary candidacy. This decision will be based upon the certification and on their core course GPA. The Graduate Committee Chair will report their decision to the Graduate Faculty.

Course Requirements

What follows are the default set of requirements for all Ph.D. candidates.

1. An undergraduate knowledge of physics. This must be certified by the department to be an advanced undergraduate level (600-level KU courses). The certification must be achieved within 12 months (extension possible with recommendation of the graduate admission committee) of entering the program and may require additional coursework. Extension is possible with recommendation of the graduate admission committee. Certification can be achieved in several ways:

- Grade obtained in PHSX 711 Quantum Mechanics I
- Grade obtained in PHSX 811 Quantum Mechanics II
- Grade obtained in PHSX 821 Classical Mechanics
- Grade obtained in PHSX 831 Electrodynamics I
- Average grade of 2 other PHSX lecture courses numbered 700 or higher

2. A GRE physics score greater than or equal to 650; or

3. Successful completion with grade of B or better on all undergraduate courses that the graduate director and/or advisor recommends based on the results of (2). The student who has not succeeded in certifying their undergraduate physics knowledge in one of the above 3 ways could, within 12 months of starting the program, petition the Graduate Committee for an oral exam on undergraduate physics. The oral exam will be administered by a committee of 6 faculty members assigned by the department.

4. A candidate for a Master's or Ph.D. degree who has not had the equivalent of 6 credit hours of advanced undergraduate laboratory course work (Junior/Senior level) is required to take 1 of the 3 advanced laboratory courses offered in the Department.

- PHSX 516 Physical Measurements
- PHSX 536 Electronic Circuit Measurement and Design
- PHSX 601 Design of Physical and Electronic Systems

A total of 11 advanced lecture courses (33 hours) is required. In addition, 1 hour of PHSX 700 Colloquium, 1 hour of PHSX 717 Graduate Seminar, and (for GTAs only) one hour of PHSX 702 Introduction to Physics Pedagogy are required.

2. Core courses:

- PHSX 711 Quantum Mechanics I
- PHSX 811 Quantum Mechanics II
- PHSX 821 Classical Mechanics
- PHSX 831 Electrodynamics I

3. Other required courses:

- PHSX 718 Mathematical Methods in Physical Sciences
- PHSX 815 Computational Methods in Physical Sciences (satisfies Research Skills requirement)
- PHSX 871 Statistical Physics I
- PHSX 931 Electrodynamics II

4. 2 additional PHSX lecture courses numbered 700 or above. This excludes PHSX 815 (computational physics) and PHSX 717 (graduate seminar). The 2 courses must be in different sub-fields of physics and they may not be used to simultaneously satisfy other degree requirements in force. (For example, if PHSX 911 is being used to satisfy the PHSX 811 core requirement, it may not also be used to satisfy the requirement for 2 lecture courses at the 700 level or above.)

5. 1 additional advanced PHSX lecture course (numbered 800 or above; excluding PHSX 815)

6. 1 credit hour of Colloquium is required (PHSX 700). See "Colloquium and Graduate Seminar for an explanation."

7. All graduate students, after their first semester, will deliver at least 1 oral presentation per semester. See "Communication Skills" for an explanation.

The courses listed above comprise the Department course requirements common to all students except those pursuing a multi-disciplinary plan of study, which is described below. There is no foreign language requirement. Subsequent work, consisting of advanced courses in appropriate fields and seminars, will be selected by the student and
the advisor on the basis of the student's need and intended field of specialization. There is no prescribed minimum number of hours for the Ph.D. degree. The student's dissertation committee will determine the adequacy of the student's courses and seminars and will specify the total course requirements. Neither the Graduate School nor the Department has a requirement for a minor.

Students who wish to pursue a more multidisciplinary plan of study may incorporate coursework from up to 2 other natural science, engineering, or mathematics (SEM) departments at KU by substituting non PHSX courses at the 600 level and above from these other disciplines for the 3 additional electives described in items c) and d) above. The research advisor, or in the absence of one, the Departmental Graduate Advisor (who is the default advisor for all students without a research advisor), shall approve all such outside course choices and provide documentation for the student file on the approved courses and their rationale.

Students who wish to take courses in the social sciences, humanities, or professional schools must submit a detailed plan of study that must be approved by the Physics and Astronomy Graduate Committee. Please note that while these unique plans involving non SEM fields will be considered, there is no guarantee that the plan of study will be approved.

Suggested Course Schedule

A sample academic schedule for a student who has a half-time teaching or research assistantship during the first 4 semesters is shown below. It includes the core courses for admission to preliminary candidacy (described in a subsequent section) and a set of lecture courses that meet the Ph.D. course requirements. It is the schedule for a full-time resident student with the normal preparation described above and who is working toward the Ph.D. degree. Students admitted with less preparation should begin with less advanced courses. Courses numbered 500 and above carry graduate credit.

The electives listed below, e.g. PHSX 741, PHSX 781, PHSX 795, PHSX 911, are purely an illustrative option. Students have the freedom to choose which non-required courses satisfy their elective requirements. Note that this sample schedule may also not apply for a student pursuing a more multidisciplinary plan of study.

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Total Hours: 38

Communication Skills

All graduate students, after their first semester, will deliver at least 1 oral presentation per semester. The talk should be at least 20 minutes long.

For students not yet associated with a research group, the Graduate Seminar can serve as a venue. For more advanced students the seminar of their research group would be a natural venue. The student does not need to be enrolled in the seminar to present a talk for this purpose. Off-campus venues such as collaboration meetings and physics conferences can also serve this purpose. When giving presentations, students should fill out a form available on the department website and have it signed by 2 witnesses, 1 of which must be a Physics or Astronomy faculty and other a Ph.D. doing research in the department. The completed form must be handed to the office staff. Faculty members who sign off on the talks are expected to provide constructive feedback to the student. The graduate advisor will monitor student compliance with the requirement.

Colloquium and Graduate Seminar

All students must enroll in PHSX 700 Colloquium in the sixth semester. Students should have attended at least 75 percent of the regularly scheduled colloquia during the 6 semesters to achieve a passing grade. In Fall of the first year, each graduate student is required to enroll in and attend the graduate seminar (PHSX 717) in order to familiarize themselves with research programs in the Department and gain experience in oral presentations.

Research Skills and Responsible Scholarship

By the end of 1 year after being admitted to preliminary candidacy, the student must complete PHSX 815/ASTR 815, Computational Physics and Astronomy, with a grade of "B" or higher in order to satisfy the Research Skills requirement. Note that this course has significant prerequisites in undergraduate Computer Science. The Responsible Scholarship requirement is filled via completion of PHSX 717.

Computing Skill

Students must complete PHSX 815 Computational Methods in Physical Sciences/ASTR 815 Computational Physics and Astronomy with a grade of A or B, preferably within 1 year after admission to preliminary candidacy. This course has significant prerequisites in advanced undergraduate computer science and requires completion of a substantial computer program to solve a physical problem.

Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current policies on Doctoral Research Skills and Responsible Scholarship are listed in the KU Policy Library.

Comprehensive Examination

Graduate College requirements for the Comprehensive Examination can be found at https://documents.ku.edu/policies/Graduate_Studies/doccomprehensiveorals.htm.

After completing a major portion of the required course work and satisfying the computing skills requirement, the student must pass the comprehensive examination. The Department recommends at least 5 people for committee membership to the Graduate Division, which makes the final appointments. 1 committee member must come from outside of the Department to serve as a representative of the Graduate School. Requests to take the examination must be made to the Graduate Coordinator at least 3 weeks in advance of the date of the examination.

The student will write a 2000 to 4000 word paper on a topic in their chosen sub-field that is relevant to their thesis work. This paper must be presented to the committee at least 1 week in advance of the scheduled oral exam. The student will make a presentation at the oral examination...
based upon this paper, and will be examined on the contents of the talk, the paper, and works listed in the paper's bibliography. The bibliography must include at least 1 recent article from a peer-reviewed journal not authored by the student or the student's advisor. In addition, the committee may ask questions at the oral examination that cover the entire field of physics plus any related material (such as mathematics or chemistry) considered relevant by the examining committee.

In order to pass the comprehensive exam, the student must receive passing grades on both the written and oral components of the exam. The overall grade on this examination, determined by the examining committee, will be "Honors," "Satisfactory," or "Unsatisfactory."

Post-Comprehensive Requirements

Upon passing the comprehensive examination, the student becomes a candidate for the Ph.D. degree. The Graduate Division will then designate the candidate's dissertation committee based on the recommendation of the Department. Each candidate must complete a research project that has been approved by the committee. The committee establishes the candidate's course requirements and directs the research.

Unless granted a leave of absence, the candidate must be continuously enrolled full-time, including summer sessions, until all requirements for the degree are completed. During this time, the candidate must enroll in a minimum of 6 hours a semester and 3 hours a summer session until the completion of the degree or of 18 hours of post-comprehensive enrollment, whichever comes first. (Post-comprehensive enrollment may include the semester in which the comprehensive examination is passed.) After 18 hours of post-comprehensive enrollment, the candidate must continue to enroll each semester and each summer session until all requirements for the degree have been met. If the student petitions, they can enroll for only 1 hour of credit in spring, summer, and fall and still maintain their GTA or GRA status. For more information, see the Graduate Studies policy on GTA/GRA Certification of Eligibility to Enroll in Fewer than Six Hours (http://policy.ku.edu/graduate-studies/doctoral-GTA-eligibility-fewer-six-hours).

At least once each year after passing the comprehensive examination, the student should schedule a meeting with his or her dissertation committee to discuss progress towards the completion of the dissertation and any other concerns. A report of the committee's consensus of the meeting should be prepared by a member of the committee other than the student's advisor and placed in the student's file. Copies are to be given to the Departmental Chairman, the Graduate Committee Chair, the Graduate Advisor, the Departmental Director of Graduate Studies, and the student.

For more information, please view the Graduate Studies policy on post-comprehensive enrollment (http://policy.ku.edu/graduate-studies/doctoral-candidacy).

Final Oral Examination

The final oral examination will proceed according to the regulations of Graduate studies. These can be found at https://documents.ku.edu/policies/Graduate_Studies/docfinaloral.htm.

We refer to these requirements below, as they appeared on September 24, 2010, and we have inserted some modified requirements for those students who wish to pursue a more multidisciplinary dissertation topic.

It is the responsibility of the student to make sure that they satisfy the current university requirements.

Completion of the dissertation is the culminating academic phase of a doctoral program, climaxed by the final oral examination and defense of the dissertation. In all but the rarest cases, tentative approval of the dissertation is followed promptly by the final oral examination. When the completed dissertation has been accepted by the committee in final draft form, and all other degree requirements have been satisfied, the chair of the committee requests the Graduate Division to schedule the final oral examination. This request must be made in advance of the desired examination by at least the period specified by the Graduate Division (normally at least 3 weeks). The submission of the request must allow sufficient time to publicize the examination so that interested members of the university community may attend. At least 5 months must elapse between the successful completion of the comprehensive oral examination and the date of the final oral examination.

The committee for the final oral examination must consist of at least 5 members (the members of the dissertation committee plus other members of the Graduate Faculty recommended by the committee chair and the department and appointed by the Graduate Division). The Chair of the committee and 3 of the other 4 members must have appointments of some type within the Physics and Astronomy department. 1 member must be from a department other than the Physics and Astronomy department. The outside member represents Graduate Studies and must be a regular member of the Graduate Faculty. Before the examination, the Graduate Division provides a list of responsibilities to the Graduate Studies representative. The Graduate Studies representative is a voting member of the committee, has full right to participate in the examination, and provides a written report on any unsatisfactory or irregular aspects of the examination to the committee chair, department chair, Graduate Division, and Graduate Studies.

For students (and only those students) who are pursuing a multidisciplinary plan of study -- as defined by their substitution of courses from other departments for PHSX electives as described in the Course Requirements section -- up to 2 members of the committee, including the 1 required outside member, may be faculty from other SEM departments with regular, adjunct, or courtesy appointments at KU. The Chair must have an appointment of some type within the Physics and Astronomy department. (Exception: if the primary appointment of the Chair is outside the department, then only 1 additional committee member may be outside the Department of Physics and Astronomy.) NOTE: It is assumed that these research projects may involve interaction between physics and 1 or more other SEM disciplines; therefore, the external faculty members may come from up to 2 different departments. The Graduate Division ascertains whether all other degree requirements have been met and if reports of any previously scheduled final oral examinations have been submitted and recorded. Upon approval of the request, the final oral examination is scheduled at the time and place designated by the Graduate Division. This information must be published in a news medium as prescribed by the Graduate Faculty. Interested members of the university community are encouraged to attend these examinations. For every scheduled final oral examination, the department reports to the Graduate Division a grade of Honors, Satisfactory, or Unsatisfactory for the candidate’s performance. If an Unsatisfactory grade is reported, the candidate may be allowed to repeat the examination on the recommendation of the department.
Department of Political Science

Why study political science?

Because political science advances our understanding of politics, power, governance, and public policy in the United States and across the globe.

Undergraduate Programs

Course work is for students studying contemporary political processes as part of their general education, for students majoring in allied social sciences, for students planning to enter professions such as law and teaching, and for majors in political science.

Courses for Nonmajors

Any of the 3 introductory courses apply to College social sciences principal course requirements. Several political science courses qualify as non-Western culture courses.

Public Affairs Internship Program

The department supervises integrated internships for majors who are second-semester juniors or seniors. They are offered during the spring semester in Topeka and Washington, D.C. Programs consist of up to 12 hours in political science—an internship, participation in an intern seminar, and directed readings. Students serve as interns in Topeka or Washington at least 4 days each week and attend weekly seminars. Students also may enroll in a directed readings course with a faculty member on campus. Readings provide a theoretical and analytical study program related to the internship and the seminar. Contact the department early in the fall semester.

Graduate Programs

The department offers M.A. and Ph.D. degrees for students interested in academic work in political science leading to teaching and research careers. Political science graduates also have found careers in the public, private, and not-for-profit sectors. Ph.D. students can pursue concentrations in U.S. politics, comparative politics, international relations, political theory, and public policy.

Fields of Graduate Study

For graduate study, courses in the department are divided into the following fields:

- U.S. political institutions and processes
- Comparative politics
- International relations
- Public policy
- Political philosophy and empirical theory

Courses

POLS 102. Introduction to Political Science as a Career. 1 Hour. S.
Provides an overview of the discipline of political science; emphasizes developing an understanding of opportunities in political science at the University of Kansas and careers with a political science degree. Major sub-fields within the discipline are discussed as well as the benefits of particular tracks within the departmental coursework. The course helps students plan their goals for their education and match those goals to career goals. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Enrollment by permission of the instructor only. LEC.

POLS 110. Introduction to U.S. Politics. 3 Hours. SF GE3S / S.
An introduction to basic American governmental institutions, political processes, and policy. LEC.

POLS 111. Introduction to U.S. Politics Honors. 3 Hours. SF GE3S / S.
Open only to students in the College Honors Program or by consent of instructor. LEC.

POLS 150. Introduction to Comparative Politics. 3 Hours. SF AE42/GE3S / S.
An introduction to the comparative study of political systems emphasizing governmental structures, parties, electoral techniques, and recent trends in the field. The course also considers major differences between (1) representative and autocratic systems, and (2) developed and underdeveloped nations. LEC.

POLS 151. Introduction to Comparative Politics Honors. 3 Hours. SF AE42/GE3S / S.
Open only to students in the College Honors Program or by consent of instructor. LEC.

POLS 170. Introduction to International Politics. 3 Hours. SF AE42/GE3S / S.
A study of the nation-state system including the role of nationalism, sovereignty, and power. Patterns of state action including neutralism, collective security, war, and cooperation through international organizations are stressed. Specific examples of contemporary international problems are also analyzed and discussed. LEC.

POLS 171. Introduction to International Politics Honors. 3 Hours. SF AE42/GE3S / S.
Open only to students in the College Honors Program or by consent of instructor. LEC.

POLS 177. First Year Seminar: _____ . 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Political Science. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

POLS 249. Study Abroad Topics in Political Science: _____. 1-6 Hours. S.
This course is designed for the study of special topics in Political Science at the freshman/sophomore level. Course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

POLS 301. Introduction to Political Theory. 3 Hours. GE3S / S.
An examination of the perennial issues and major concepts in political philosophy. Ideas such as community, liberty, equality, justice, and democracy will be examined in order to understand the various meanings given to these concepts in political discourse and to understand the role to these ideas in various political theories. Prerequisite: Either POLS 110 or POLS 150 or POLS 170, or their honors equivalents. LEC.

POLS 302. Introduction to Political Theory, Honors. 3 Hours. S.
Prerequisite: Either POLS 110, POLS 150, or POLS 170, or their honors equivalents and open only to students in the College Honors Program, or by consent of instructor. LEC.

POLS 306. Political Science Methods of Inquiry. 3 Hours. GE12 / S.
An introduction to the social science methods of investigation and analysis that are used in political science as a discipline and, in many cases, in public and private sector analytical work as well. The nature of political science data sources and methods of data collection, the logic of social scientific inquiry, and key methods of data analysis are emphasized.
POLS 310. Contemporary Issues in U.S. Politics. 3 Hours. S.
An examination of issues and problems concerning government and politics in American society. This course is intended primarily for non-majors, and does not meet the junior/senior level course field distribution requirement. LEC.

POLS 320. Introduction to Public Policy. 3 Hours. GE3S / S.
Offers an introduction to the policy-making process covering policy formulation, adoption, and implementation. Overview of major theories of the policy-making process, the actors involved in the process, and the constraints and enhancements offered by the broader political environment. The theoretical frameworks are applied to several substantive policy areas. Prerequisite: POLS 110. LEC.

POLS 330. Introduction to Public Administration. 3 Hours. S.
Introduction to public administration, public policy and policy makings is the study of government workers, the organizations in which they work, how they are financed, and how government engages citizens to help form and maintain community. In various ways, the class sessions explore the three important issues of public administration: discretion, authority, and accountability. (Same as PUAD 330.) Prerequisite: POLS 110. LEC.

POLS 331. Introduction to Public Administration, Honors. 3 Hours. S.
Introduction to public administration, public policy and policy making, for honors students, is the study of government workers, the organizations in which they work, how they are financed, and how government engages citizens to help form and maintain community. In various ways, the class sessions explore the three important issues of public administration: discretion, authority, and accountability. (Same as PUAD 331.) Prerequisite: POLS 110. LEC.

POLS 340. Contemporary Issues in Comparative Politics. 3 Hours.
This course will survey selected current political issues around the globe. The focus of the course will be on understanding and analyzing the wide diversity of political phenomena that mark countries around the world. Topics may include such things as elections and electoral politics; political parties; government stability; democratization; ethnic, racial, caste, or religious conflict; protest and revolutionary movements; social movements (environmental, feminist, and others); and the politics of economic reform. This course is intended primarily for non-majors, and does not meet the junior/senior level course field distribution requirement. LEC.

POLS 350. Contemporary Issues in International Relations. 3 Hours. S.
Theoretical frameworks are applied to several substantive issues in international relations. Topics include global economic interdependence, regional conflicts and nationalism, United States military and economic policy in the post-Cold War era, the role of international organizations such as the United Nations and the European Community, global environmental problems and the contemporary role of international law. This course is intended primarily for non-majors and does not meet the junior/senior level course field distribution requirement. LEC.

POLS 355. Contemporary Issues in Political Theory. 3 Hours. S.
POLS 355 is a seminar course designed to introduce students to some of the major figures and issues in modern political theory, from Hobbes to Marx. The emphasis is on understanding major classics in western political thought. Prerequisite: POLS 301, or (for non-majors) completion of the Western Civilization requirement, or consent of instructor. LEC.

POLS 360. Politics in Literature. 3 Hours. S.
An examination and analysis of the portrayal of politics and political problems in literature. Classical and modern texts will be considered, including dramas, poems, and novels. Prerequisite: POLS 301, or (for non-majors) completion of the Western Civilization requirement, or consent of instructor. LEC.
POLS 504. Millenarian Movements. 3 Hours. S.
A historical survey of millenarian movements (the belief in imminent, total, ultimate, this-worldly, collective salvation), with particular attention to their psychological, sociological, and political dimensions. (Same as REL 504.) Prerequisite: POLS 301 or honors equivalent or for non-majors completion of Western Civilization requirement, or consent of instructor. LEC.

POLS 506. Honors Seminar in Political Research. 3 Hours. S.
Students will be exposed to a variety of topics related to the conduct of political science research. Emphasis will be on how one discerns what is known and what remains to be discovered about a research topic, the development of theories and the hypotheses about the unknown, and the collection of information for testing theories. Students will be expected to begin independent research on a topic that might eventually culminate in an honors thesis. This seminar is intended for political science majors who are in the honors or deans programs, who hold departmental scholarships, and/or who intend to write honors theses. Prerequisite: POLS 306. IND.

POLS 511. The Judicial Process. 3 Hours. S.
Covers judicial functions, organizations, personnel, and processes. Examines the goals of the law and the operations of the legal system in meeting these objectives. Focuses on norm enforcement, conflict resolution, and judicial policy-making. Prerequisite: POLS 110. LEC.

POLS 512. Latino Politics. 3 Hours. S.
An overview of the political position of Latinos/os in the United States. The focus is on the three largest Latino groups in the U.S.: Mexican-Americans, Cuban-Americans, and Puerto Ricans; as well as an examination of other South American and Central American populations in the U.S. The main topics include identity formation, the political circumstances of Latinos, relationship to the electoral process, political behavior, and the policy process. LEC.

POLS 515. American Political Parties. 3 Hours. S.
Survey of the development of the American political party system, stressing party organization, nominating systems, campaigns, elections, role of mass media, and party finances. Prerequisite: POLS 110. LEC.

POLS 516. Public Opinion and American Democracy. 3 Hours. S.
This course examines the construction, administration, and interpretation of public opinion polls. The course will also examine the role of public opinion in the democratic process and the formation of public opinion. LEC.

POLS 520. Political Communication. 3 Hours. H.
This course will focus on contemporary political communication theory and illustrate how such theories are exemplified in modern political contexts: political arguments and developing consensus, constitutional issues and hearings, the rhetorical presidency, the dissemination of political information, and political uses of definition. (Same as COMS 607.) Prerequisite: COMS 130 or COMS 150. LEC.

POLS 521. Rhetoric, Politics and the Mass Media. 3 Hours. H.
This course investigates the ways in which rhetorical strategies (persuasive and linguistic usage) permeate the relationship between politics and politicians and the mass media. We will analyze media coverage of political debates, the presidential use of radio, television and press conferences, and the network evening news coverage of political events to see how political decisions are influenced by and influence the media. (Same as COMS 335.) Prerequisite: COMS 130 or COMS 150. LEC.

POLS 528. Environmental Justice and Public Policy. 3 Hours. S.
This course provides an overview of environmental justice, both as a social movement and as a public policy initiative. Environmental justice examines the distribution of environmental externalities across different socio-economic and racial groups. We will discuss several different public policy areas that have been impacted by the environmental justice movement: hazardous waste facility siting, urban redevelopment and Brownfields, transportation policy, and Native American sovereignty. We will also touch upon international environmental policy in an environmental justice context. Throughout the course we will evaluate empirical issues in studying environmental justice. (Same as EVRN 528.) Prerequisite: POLS 306 or a statistics class or consent of instructor. LEC.

POLS 553. Comparative Environmental Politics. 3 Hours. S.
This course compares environmental politics and policies across a number of countries, including those in North America, Western Europe, East Asia, and Latin America. (Same as EVRN 553.) LEC.

POLS 561. Liberation in Southern Africa. 3 Hours. NW AE42 / S.
This course examines struggles for freedom in southern Africa and the consequences of political, economic, and social changes in the region. The end of colonial rule, the demise of white-settler domination, and the fall of the apartheid regime is discussed. As a major political event of the twentieth century, the liberation of southern Africa had both local and global consequences. The course analyzes transnational issues of liberation and resistance to consider broader regional and international perspectives. Course themes pay particular attention to gender and ethnicity and include a focus on democratization and contemporary meanings of liberation. Prior coursework in African Studies is strongly recommended, but not required. (Same as AAAS 561 and HIST 561.) LEC.

POLS 562. Women and Politics. 3 Hours. S.
This course exposes students to contemporary research on women and politics by surveying the sub-fields of political science. Topics include women's representation in the U.S., women and U.S. public policy, gender and legal theory, international women's movements, women and revolution, and women as political elites. We will examine the ways in which feminist theory and women's activism have challenged the narrow focus of the discipline as well as redefined women's place in society. (Same as WGSS 562.) Prerequisite: A 100-level POLS course or WGSS 201 or permission of instructor. LEC.

POLS 563. Comparative Political Economy. 3 Hours. S.
This course studies fiscal, monetarist, and trade policies to assess the usefulness and problems posed by these policy instruments across countries. This includes examining exchange rates, interest rates, budget deficit, trade deficit, and debt, to understand their composition and relevance to domestic economy, employment, investment, development, and international trade, the problems they pose, and how these may be overcome. We then examine when, how, and why government enacts these instruments across countries and regions. Prerequisite: POLS 150 or POLS 151. LEC.

POLS 564. Elections and Political Parties Around the World. 3 Hours. S.
An examination of the diverse forms of election rules and their consequences for political parties, politicians, and voters. The course will survey election rules in theory and practice; the design and re-design of election rules in new and established democracies; and how elections affect party strategies or governance and representation, and the types of party systems that emerge. The course will also incorporate intensive studies of election campaigns occurring during the semester that the course meets. Prerequisite: POLS 150. LEC.

POLS 565. Political Change in Asia. 3 Hours. S.
This course focuses on three periods of major political changes in Asia since 1945: independence from colonization; adoption of governance; and steps toward democratization. The focus on political change is to help students see that a) many countries initiate political reforms
domestically; b) the ability to implement changes is correlated to ability to win support; c) the constitutional process may favor some groups over others; d) the ability to mediate political stability depends on (a), (b), and (c). Prerequisite: POLS 150 or equivalent. LEC.

POLS 566. Social Welfare, Taxation, and the Citizen. 3 Hours. S.
Most developed countries provide for the basic needs of their citizens. Many provide health care, free education, and even retirement funding in exchange for taxes. The U.S. is an exception. The course presents taxation systems in most developed countries, then explores the dimensions of social welfare, and the differential roles of citizens in each country. The final section of the course outlines legislative and legal possibilities for U.S. citizens. Prerequisite: POLS 150. LEC.

POLS 600. Contemporary Feminist Political Theory. 3 Hours. S.
A detailed introduction to feminist thought post-1960. Examines feminism in relation to the categories of political theory: liberal feminism, socialist feminism, radical feminism, and postmodern feminism. Within these categories and separately, we will also consider feminism as it is influenced by women traditionally excluded from mainstream feminist thought, namely U.S. woman of color and women of post-colonial societies. (Same as WNSS 600.) Prerequisite: WNSS 201 or a 100-level POLS course or permission of instructor. LEC.

POLS 601. Political Ideologies. 3 Hours. S.
A systematic survey of the major political ideologies of the 19th and 20th centuries such as anarchism, socialism, liberalism, fascism, communism, and participatory democracy. Prerequisite: POLS 301, or (for non-majors) completion of the Western Civilization requirement, or consent of instructor. LEC.

POLS 602. American Political Ideas. 3 Hours. S.
A study of political movements and thinkers from the Puritan period to the present that have influenced the development of contemporary political ideas. Prerequisite: POLS 301, or (for non-majors) completion of the Western Civilization requirement, or consent of instructor. LEC.

POLS 603. Democratic Theory. 3 Hours. S.
Detailed study of the typical and perennial dilemmas that arise in theories of democratic governance with an emphasis on contemporary analytical investigations of democratic systems. Prerequisite: POLS 301, or (for non-majors) completion of the Western Civilization requirement, or consent of instructor. LEC.

POLS 604. Religion and Political Theory. 3 Hours. S.
An examination of the relationship between religious faith and politics in Western political thought and theory. The approach will be both historical and philosophical, beginning with Moses on the one hand, and the Greeks on the other. Texts will include biblical, Greek philosophical, Jewish and Christian philosophical and theological writings. (Same as REL 604.) Prerequisite: POLS 301, or for non-majors completion of Western Civilization requirement, or consent of instructor. LEC.

POLS 605. A Study of Political Thought in Antiquity. 3 Hours. S.
Possible authors for examination may include Homer, Hesiod, Plato, Aristotle, Cicero, and Augustine, among others. Central topics will include the problems of truth and knowledge, justice, power, human rule, and the relationship of the individual to the community. Prerequisite: POLS 301, or (for non-majors) completion of the Western Civilization requirement, or consent of the instructor. LEC.

POLS 607. Modern Political Theory. 3 Hours. S.
An analysis of works by various authors, with the intention of exploring the political ideas that emerge in conjunction with the appearance of modern science, the Enlightenment, the Industrial Revolution, and Romanticism. Topics will include the modern conceptions of the nature of being, truth, justice, and the relationship of the individual to the community. Prerequisite: POLS 301, or (for non-majors) completion of the Western Civilization requirement, or consent of instructor. LEC.

POLS 608. Social Choice and Game Theory. 3 Hours. S.
A survey of the political economic approach to individual and collective choice behavior called "rational choice." The course focuses on models of voting systems and other political institutions as seen from a game theoretic perspective. Prerequisite: Nine hours of political science and completion of the College of Liberal Arts and Sciences mathematics requirement for the B.A. degree. LEC.

POLS 609. Topics in Political Theory: ______. 3 Hours. S.
A study of selected theorists in relation to a topic in political theory. Sample topics include: revolution; authority and community; elements of political power; political elites: ideology, human nature in politics, political conflict, etc. Theorists will range from ancient to contemporary. Course is repeatable for different topics. Prerequisite: POLS 301, or (for non-majors) completion of the Western Civilization requirement, or consent of instructor. LEC.

POLS 610. Constitutional Law: Governmental Powers. 3 Hours. S.
The Supreme Court viewed as a political branch of our government. Special emphasis on the Court's role in determining powers of government and their relationships. Prerequisite: POLS 110. LEC.

POLS 611. Constitutional Law: Civil Liberties. 3 Hours. S.
The constitutional limits on governmental powers are studied with special emphasis on constitutional guarantees of individual freedoms. Prerequisite: POLS 110. POLS 610 is recommended. LEC.

POLS 612. Psychology in Politics. 3 Hours. S.
An examination of psychological perspectives on political phenomena. Topics include political personality, foreign policy decision making, international conflict and cooperation, voting behavior, and political participation and socialization. Prerequisite: Nine hours of political science, including POLS 110 and POLS 170. LEC.

POLS 613. Comparative U.S. State Politics. 3 Hours. S.
A systematic comparative analysis of structures, functions, and policies of state political systems. Prerequisite: POLS 110 or consent of instructor. LEC.

POLS 614. Urban Politics. 3 Hours. S.
A survey of the social, cultural, economic, and structural differences among cities and an investigation into how these factors affect urban politics and policies. Specific topics include leadership, governmental reform, citizen participation, inter-ethnic conflict, and economic development. Prerequisite: POLS 110. LEC.

POLS 615. Campaigns and Elections. 3 Hours. S.
This course examines the behavior of candidates, campaigns, and voters in the electoral process. Topics will include the role of media, the impact of money, the operations of political campaigns and the effect of campaign laws. LEC.

POLS 616. Interest Group Politics. 3 Hours. S.
Study of internal group organization and the politics of interests within the U.S. policy-making process. Prerequisite: POLS 110. LEC.

POLS 617. The Congress. 3 Hours. S.
Descriptive and comparative analysis of legislative institutions and processes in the United States, covering Congress and state legislatures. Prerequisite: POLS 110. LEC.

POLS 618. The Presidency. 3 Hours. S.
The office of the President of the United States, its place in the constitutional and political system. Emphasis is given to modern experience and current problems. Prerequisite: POLS 110. LEC.
POLS 619. Topics in American Politics: ______. 1-3 Hours. S.
A study of selected contemporary problems of policy or politics in the United States. Course is repeatable for different topics. Prerequisite: POLS 110. LEC.

POLS 620. Formulation of Public Policy. 3 Hours. S.
Analysis and evaluation of the structures and processes involved in the formulation of public policy at all levels of government. Prerequisite: POLS 110. LEC.

POLS 621. Public Policy Analysis. 3 Hours. S.
An introduction to the study and analysis of public policy with emphasis on the concepts and techniques of policy thinking. The methods of policy description, explanation, evaluation, and choice will be applied to a variety of policy topics, e.g., health care, defense, environmental protection, education, etc. Prerequisite: POLS 110. LEC.

POLS 622. Government and the Economy. 3 Hours. S.
An examination of the formulation and execution of government policies in the economy and the business sector; the impact of the economy and business on government policies and the impact of government policies on the economy and business. Prerequisite: POLS 110 or consent of instructor. LEC.

POLS 623. The Politics of Social Policy. 3 Hours. S.
An examination of the formulation and execution of key social policies in the United States, such as welfare policy, crime and drug control policy, disability rights policy, education policy, and social regulatory policy concerning controversial social issues such as abortion and gun control. Prerequisite: POLS 110. LEC.

POLS 624. Environmental Politics and Policy. 3 Hours. S.
Analysis of environmental politics and the formulation and implementation of environmental policy. Examines the history and development of environmental politics as well as current trends. Themes include interest groups, business interests, political institutions, and specific environmental policy issues. (Same as EVRN 620.) LEC.

POLS 625. Extremist Groups and Government Response. 3 Hours. S.
Examines left- and right-wing extremist political groups in America and how the government has developed policies and respond to these groups. Special attention will be given to the process of policy adoption and implementation and how the government might respond to extremist groups in the future. Issues and themes will include groups such as the left-wing terrorists of the 1960s and 1970s, right-wing anticommunist groups of the 1950s and 1960s, international terrorists acting in the U.S., hate crime, ecoterrorism, citizen militia groups, and pro- and anti-abortion extremist groups. Prerequisite: POLS 110. LEC.

POLS 626. Introduction to Survey Research. 3 Hours. S.
This course introduces the theory and methods used in survey research. The topics include types of surveys, type of sampling methods, questionnaire and codebook construction and analysis. Prerequisite: POLS 306. LEC.

POLS 627. Advanced Issues in Survey Research. 3 Hours. S.
This course focuses on the problems encountered while implementing surveys in specific populations (in the United States and Europe) and in developing countries. The course identifies problem areas such as in sampling and questionnaire design; and addresses how researchers overcome these problems. Prerequisite: POLS 306 and POLS 626. LEC.

POLS 628. The Politics of Public Health. 3 Hours. S.
This course examines the social, institutional and political context of public health policy in the United States. We will examine factors that shape the nation's public health, explore the role of government in reducing risk and promoting well being, and analyze the major institutions responsible for monitoring, protecting and promoting general public health. Themes include the social determinants of health, health disparities, emerging infectious diseases, food safety, transportation, and environmental health. (Same as EVRN 628.) Prerequisite: POLS 110 and POLS 306 are recommended. LEC.

POLS 629. Topics in Public Policy: _______. 1-3 Hours. S.
Examination of the U.S. political system and policy formulation and administration through intensive analysis of selected current public policy problems. Sample topics include the environment, education, and economic well-being. Course is repeatable for different topics. Prerequisite: POLS 110. LEC.

POLS 630. Politics of Identity. 3 Hours. AE41 / S.
This seminar explores the nature of identity and how identity is relevant to politics and policy with a focus on political attitudes and behavior, institutions, and public policy. Topics include individual and group identity, identities such as gender, racial, sexual orientation, and partisan, and the enduring importance of identity for understanding politics as well as the policy process. The approach is multidisciplinary but political science perspectives are relied on more heavily. (Same as WGSS 630.) Prerequisite: POLS 110 and POLS 306 are recommended. LEC.

POLS 634. Bureaucratic Politics. 3 Hours. S.
Examination of U.S. governmental agencies with special attention to their development and role in the American political system. Prerequisite: POLS 330. LEC.

POLS 640. Politics of Reproductive Policy. 3 Hours. S.
Reproductive policy has historically been a highly politicized policy arena, which has elicited attention from the political community as well as the public. This course moves beyond the popular rhetoric associated with reproductive issues, by critically investigating the history, development, implementation and the relative success of various reproductive policies in the United States. These policies are compared to, and assessed against, policies governing similar topics in various countries. (Same as WGSS 640.) Prerequisite: POLS 110 or consent of instructor. LEC.

POLS 644. Justice and Public Policy in Democratic Societies. 3 Hours. S.
Examines the ethical and philosophical choices that inform public policy in democratic societies. The guiding idea of the course is that public policies reflect underlying decisions about the nature of state authority and the just use of that authority. The theoretical focus is on modern European and American liberal democratic thought; the empirical focus is global. Among the policy issues examined in the course are public education, immigration, gender equality, same-sex marriage, and drugs. Prerequisite: POLS 150 or POLS 301. LEC.

POLS 645. Corruption, Crisis and Scandal. 3 Hours. S.
This course investigates political events and decisions that are considered illegal or illegitimate. Cases from the U.S. and around the world are considered. Issues discussed include the misuse of governmental power and funds, electoral fraud, and bribery. Conditions under which problems arise and reforms that address them are considered. Prerequisite: POLS 110 and POLS 150. LEC.

POLS 650. Palestinians and Israelis. 3 Hours. S.
Examines the international relations, political institutions, and social politics of these two ethnational communities in relation to each other. Specific topics include the historical evolution of the Israeli-Palestinian conflict, prospects for conflict resolution, electoral systems and political parties in the two nations, state-society relations, social movements, and roles of gender and religion. Prerequisite: Nine hours of Political Science, including POLS 150/POLS 151 or POLS 170/POLS 171, or permission of instructor. LEC.
POLS 651. Women and Politics in Latin America. 3 Hours. S.
This course examines the ways in which Latin American women have engaged in politics in the past two decades. Cases will draw from a variety of countries in Latin America. Students are expected to develop insights, through comparative analysis, into why women "do politics" in certain ways, the role of the State in women's politics, the (dis)advantages of various political strategies, and the ways in which political, economic, and social changes over time have affected women's political opportunities and interests. (Same as WGSS 651.) Prerequisite: Six hours of course work in Political Science and/or Women's Studies and/or Latin American Studies. LEC.

POLS 652. Politics in Europe. 3 Hours. S.
The study of the politics and government of Europe. Major countries are covered in depth, while smaller democracies are grouped according to political concepts. Prerequisite: POLS 150. LEC.

POLS 653. Gender, War, and Peace. 3 Hours. S.
This course explores ways in which militarization and warfare are gendered processes. We ask, what does war tell us about gender, and what does gender tell us about war? Though the majority of fighters are men, women are essential to war efforts. They also represent a high proportion of the casualties of war. Yet women are rarely examined in relation to war; thus we work to uncover women's experiences of war. We also look to women's contributions to the peace movement in terms of both theory and practice, asking: Is peace a feminist issue? Should feminists support women's access to combat positions or oppose the military? What if women ruled the world—would that end wars? Does militarized masculinity harm men more than benefit them? How do states mobilize citizens to war and how is the process gendered? (Same as WGSS 653.) Prerequisite: One of the following: POLS 150, POLS 151, POLS 170, POLS 171, WGSS 201, WGSS 202. LEC.

POLS 654. Politics and Government of Russia and the Central Eurasian States. 3 Hours. S/W.
The collapse of the Soviet system and the problems of transforming a central planned authoritarian state into a free market democracy. The roles of ethnic and national tensions, economic decay, and cultural factors. Prerequisite: Eight hours in the social sciences and/or history, including POLS 150, or consent of instructor. LEC.

POLS 655. Politics of East-Central Europe. 3 Hours. S/W.
This course analyzes Communist political theory in its application to the countries of East-Central Europe with consideration of their traditional backgrounds and their patterns of political, social, and economic developments. It constructs a theoretical model of the communist state and discusses its variations by description and comparison of the governments and political processes of Albania, Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, Rumania, and Yugoslavia. Prerequisite: POLS 150 and three hours in the social sciences or East European history, or consent of instructor. LEC.

POLS 656. Governments and Politics of East Asia. 3 Hours. NW AE42 / S/W.
A comparative examination of the contemporary political institutions, processes and ideas of China, Japan, and Korea. (Same as EALC 656.) Prerequisite: POLS 150 or a course in East Asian studies. LEC.

POLS 657. Government and Politics of Southeast Asia. 3 Hours. NW AE42 / S/W.
An evaluation of the traditional and contemporary political institutions, behavior and ideas of the countries of Southeast Asia. Prerequisite: POLS 150 or a course in Asian history or Southeast Asian history. LEC.

POLS 658. Theories of Politics in Latin America. 3 Hours. S/W.
This course examines how political science can be used to explain the political dynamics of Latin America. The course will be devoted to understanding different theories about politics -- many of which have been devised by political scientists whose primary focus of study is not Latin America -- and examining their uses and limitations in understanding Latin America. Among the themes we will be examining are the relationships between economic growth, political culture, and democracy, the role of the military in politics, the political impact of new social movements (such as the women's movement and religious movements), theories of revolution, and understanding the prevalence of political corruption in the region. Along the way, we will analyze how political scientists attempt to develop hypotheses, gather data, and test theories. Prerequisite: POLS 150 or a social science course in Latin American topics. LEC.

POLS 659. Political Dynamics of Latin America. 3 Hours. S/W.
Study of the institutions, processes, and special problems of selected Latin American countries. Prerequisite: POLS 150 or a course concerning Latin America in the social sciences or history. LEC.

POLS 660. The Politics and Problems of Developing Countries. 3 Hours. NW AE42 / S/W.
A focus on topics pertinent to all of the underdeveloped areas such as the role of the military, styles of political leadership, land tenure systems, the role of the middle sectors, the nature of bureaucracy, the activity of the students, and foreign policy attitudes. Prerequisite: One of the following: POLS 652, POLS 653, POLS 654, POLS 655, POLS 656, POLS 657, POLS 658, POLS 659. LEC.

POLS 661. Politics of the Middle East. 3 Hours. NW AE42 / S/W.
Survey of domestic and international political developments in the Middle East. Topics include: emergence of the modern nation-state, the role of Islam, leadership patterns, competing political ideologies, prospects for democratization, foreign policy relations, and regional conflicts. Prerequisite: Nine hours in political science, including POLS 150 and POLS 170 or their honors equivalents, or permission of instructor. LEC.

POLS 663. Protest and Revolution. 3 Hours. S.
An exploration of what happens when protesters challenge a state. The course focuses on the interactions and outcomes of dissident and state conflict. Topics include the relation between coercion and protest, strategy, violence, terrorism as adaption, civil war and regime transition. Prerequisite: POLS 150. LEC.

POLS 664. Middle East Politics, Honors. 3 Hours. S.
Honors Version of POLS 661. Survey of domestic and international political developments in the Arab countries, Iran, Turkey, and Israel. Topics include state-society relations (e.g., forms of political organization, electoral politics, opposition movements, human rights, political Islam, gender), regional and international foreign relations, and the Arab-Israeli conflict. Prerequisite: Nine hours of Political Science, including POLS 150/151 and POLS 170/171, and membership in the University Honors Program; or by permission of instructor. LEC.

POLS 665. Politics in Africa. 3 Hours. NW AE42 / S.
A survey of politics in Africa, focused on the countries of sub-Saharan or Black Africa. The course includes a historical discussion of precolonial Africa, colonization and the creation of contemporary states, and the politics of independence, before examining contemporary political systems and the forces influencing patterns of politics on the continent. (Same as AAAS 600.) Prerequisite: POLS 150 or AAAS 105 or AAAS 305 or consent of instructor. LEC.

POLS 666. Political Economy of East Asia. 3 Hours. S.
This course provides basic understanding of fiscal, monetarist, and trade politics; how governments in East Asia use them to pursue growth;
the extent to which these governments follow or controvert economics
to pursue growth; and how the performances of economies in East
Asia relate to the U.S. and global economies. (Same as EALC 666.)
Prerequisite: POLS 150. LEC.

POLS 667. Islam and Politics. 3 Hours. NW AE42/AE51 / S.
This course gives students a basic understanding of political
Islam and democratic politics, political economy in Muslim societies,
fundamentalism in Islam, gender relations, identity politics and questions
on clash of civilizations are explored. (Same as SOC 640.) Prerequisite: A
principal course in sociology, POLS 150, or consent of instructor. LEC.

POLS 668. Reform in Contemporary China. 3 Hours. NW AE42 / H/W.
Examines the epochal changes that have occurred in China from Deng
Xiaoping's rise to power in 1978 to the present. Includes a focus on the
historical background of the revolutionary period before examining the
political and economic changes that spawned the 1989 "prodemocracy"
movement at Tiananmen. The course includes an analysis of the events
of the 1990s focusing on U.S.-China political and economic relations and the
destabilizing effects of inflation, infrastructural reform, political and
economic decentralization, and leadership succession. A previous course
on China is helpful, but not mandatory. (Same as EALC 585.) LEC.

POLS 669. Topics in Comparative Politics: _____, 2-3 Hours. S.
A study of selected contemporary problems of policy or politics affecting
several countries. Course is repeatable for different topics. Prerequisite:
POLS 150. LEC.

POLS 670. United States Foreign Policy. 3 Hours. S.
An evaluation of the formulation of United States foreign policy in the post-
World War II period. Economic, military, and diplomatic dimensions of
policy; internal and external influences on policy; theories of foreign policy
decision-making. Prerequisite: Nine hours of political science, including
POLS 170. LEC.

POLS 671. International Cooperation. 3 Hours. S.
An examination of the gains possible from international cooperation and the barriers to achieving cooperation. Theoretical perspectives on international cooperation will be explored along with cases such as trade, the environment, arms control, and the European community. Prerequisite: POLS 170 or consent of instructor. LEC.

POLS 672. International Political Economy. 3 Hours. S.
Structural theories of the international political economy provide the
framework for a consideration of the nature of hegemony, the
management problem of multinational corporations, the role of
international regimes and organizations, development, and dependency. Prerequisite: Nine hours of political science, including POLS 170. LEC.

POLS 673. International Organization. 3 Hours. S.
International organizations are examined with special emphasis devoted to the United Nations. A central theme of the course rests upon the
question of whether strengthened international organization offers the
only alternative to further world wars. Prerequisite: POLS 170 and three
additional hours of political science. LEC.

POLS 674. International Ethics. 3 Hours. H.
This course reviews how philosophical perspectives elucidate the role
ethics plays in foreign policy. It covers human rights doctrines, issues of
economic and political justice, just war theory (jus ad bellum) and just
conduct of war (jus en bello) and humanitarian intervention. Prerequisite: POLS 170 or POLS 171. LEC.

POLS 675. Russian Foreign Policy. 3 Hours. S/W.
Examination of the history of Soviet and Russian foreign policy and
current issues of foreign policy in the Post-Soviet era. Analysis of foreign
policy making in Russia and the other Post-Soviet states. Emphasis on the
changed nature of international security problems after the cold war and on the role of foreign policy in economic development. Prerequisite:
Eight hours in the social sciences or history, including either POLS 170 or
a course in Russian history. LEC.

POLS 676. International Relations of Asia. 3 Hours. S/W.
An intensive study of the problems of ideological conflict, diplomatic
relations, strategic arrangements, economic cooperation, and cultural
exchange in East and Southeast Asia with special emphasis upon the
roles of major world powers. (Same as EALC 676.) Prerequisite: POLS
170 or a course in East Asian studies. LEC.

POLS 677. U.S. National Security Policy. 3 Hours. S.
An investigation into (1) how security policy is made; (2) the evolution of changing assumptions, strategies and goals since 1945; and (3) the
present policy and its alternatives. Prerequisite: Six hours of political
science, including POLS 170. LEC.

POLS 678. Chinese Foreign Policy. 3 Hours. S/W.
In-depth examination of China's changing policies toward other countries with special emphasis on policy-making process, negotiating behavior, military strategy, economic relations, and cultural diplomacy. (Same as
EALC 678.) Prerequisite: POLS 170 or a course in East Asian studies.
LEC.

POLS 679. International Conflict. 3 Hours. S.
Examination of the historical and theoretical issues surrounding the
sources and control of international conflict. Topics will include political and anthropological theories of conflict, the role of force in the
international system, international law and just war approaches, nuclear conflict, arms control, and nonviolent alternatives to conflict. Prerequisite: Nine hours of political science, including POLS 170; POLS 306 is recommended. LEC.

POLS 680. International Relations in Political Philosophy. 3 Hours. S.
A consideration of classical and modern theories of the international
system, such as the writing of Thucydides, Machiavelli, twentieth-century
realists, and others. Topics include, theories of the state, the role of ethics and normative judgments in the world order, the nature and use of power,
the relationship between domestic and international politics. Prerequisite:
POLS 301, or (for non-majors) completion of the Western Civilization
requirement, or consent of instructor. LEC.

POLS 681. Comparative Foreign Policy. 3 Hours. S.
An examination of theories that seek to explain the foreign policy behavior and decision making processes of states in international relations and a
survey of past and present foreign policies of several states in Latin
America, Western and Eastern Europe, Africa, the Middle East, and the
Far East. Prerequisite: Nine hours of political science, including POLS 150 and
POLS 170. LEC.

POLS 683. International Mediation, Honors. 3 Hours. S.
This seminar examines the theories about, research on, and the practice of international mediation and other forms of non-militarized third party
intervention used to address interstate, intrastate, and nonstate disputes. Specific topics include how mediation differs from other forms of non-
militarized peace-building and conflict resolution; the conditions for
mediation success (and how 'success' is defined; third party involvement
after protracted civil conflict; the role of third parties in the implementation
of peace agreements; the relationship between mediation, peace-building, and international law; and proactive conflict management. Prerequisite:
Nine hours of political science, including POLS 170/171 and membership in the University Honors Program, or by permission of instructor. LEC.

**POLS 684. International Law: The State and the Individual. 3 Hours. S.**

International law has assumed an increasingly significant role in international life. This course will examine major law including (but not limited to): the changing status and role of the state; rights of minorities and self-determination; the environment; and human rights. The course will examine the central questions and the relevant international legal principles associated with each issue. Prerequisite: Six hours of Political Science, including POLS 170. LEC.

**POLS 685. International Law: Laws of Armed Conflicts. 3 Hours. S.**

This course examines the principles, roles, and functions of international law in the conduct of war. As the course reviews the development and application of the basic rules of armed conflict, several current issues and conflicts are addressed including: the legitimate use of force; the proper definitions of combatants and civilians; actions that constitute war crimes, the legality of new weapons technology, and, if the laws of armed conflict apply to the current "war on terrorism." Prerequisite: Six hours of Political Science, including POLS 170. LEC.

**POLS 689. Topics in International Relations:. 2-3 Hours.**

A study of selected problems in international relations. Course is repeatable for different topics. Prerequisite: POLS 170. LEC.

**POLS 701. Political Theory. 3 Hours. S.**

This course is intended to introduce graduate and advanced undergraduate students to the kinds of activities engaged in by political theorists. Thus the course focuses on several approaches to doing political theory, such as interpreting the work of great political philosophers, clarifying political concepts, organizing and integrating political ideas, evaluating political practices, and creating new political perspectives. The course focuses on historical and contemporary treatments of both epistemological issues (the possibility and grounds for political knowledge) and selected substantive issues (e.g., the legitimacy of the state, the merits and limitations of democracy, the requirements of justice, and the nature and importance of ideologies). LEC.

**POLS 703. Social Choice and Game Theory. 3 Hours.**

A survey of the political economic approach to individual and collective choice behavior called "rational choice." The course focuses on models of voting systems and other political institutions as seen from a game theoretic perspective. Prerequisite: Nine hours of political science or admission into the M.A. or Ph.D. LEC.

**POLS 704. Quantitative Methods Primer in Political Science. 1 Hour.**

Provides an introduction of basic quantitative methods in political science to prepare graduate students for the quantitative methods sequence in the Ph.D. program; basic statistics, statistical analysis techniques, and probability are explored. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Permission of the Instructor. LEC.

**POLS 705. Research Design for Political Science. 3 Hours.**

Introduction to the discipline of political science, the philosophy of science, research design, and data acquisition. Prerequisite: Graduate standing or consent of instructor. LEC.

**POLS 706. Research Methods I. 3 Hours.**

An introduction to quantitative research methods, including probability theory, hypothesis-tests, and multiple regression. Includes regression diagnostics, the treatment of numeric and categorical predictors, interaction effects and elementary nonlinear models. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and lab sessions where computing applications are taught. LEC.

**POLS 707. Research Methods II. 3 Hours.**

This course covers basic techniques for multivariate analysis, focusing on multiple regression. Topics include interpretation of regression statistics, diagnostics for common problems, dummy variables, instrumental variables, basic time series methods including adjustment for autocorrelated error, logistic models, and nonlinear modeling; additional techniques may be covered at the discretion of the instructor. Prerequisite: POLS 706. LEC.

**POLS 708. Advanced Qualitative Research Methods. 3 Hours.**

An examination of qualitative research approaches frequently employed within political science. Topics may include the use of case studies, archival and documentary research, content analysis, interviewing and focus group techniques, ethnographic fieldwork, narrative and discourse analysis, and others. The course will examine the strengths and limitations of these methods in relation to major research traditions such as culturalist approaches, historical institutionalism, rational choice, and constructivism. Prerequisite: POLS 705 and either graduate standing or consent of instructor. LEC.

**POLS 709. Topics in Political Theory: ______. 3 Hours.**

At the discretion of the instructor, this course will select one or more important areas of political theory for in-depth analysis. Prerequisite: Six hours in Political Theory. LEC.

**POLS 710. American Public Philosophies. 3 Hours.**

Surveys scholarly attempts to describe and analyze critically the changing public philosophies that have dominated American society and politics. Liberalism, republicanism, ascriptiveism, and pluralism are examples of such public philosophies. Also considered are some philosophies that are important but have not dominated American politics. Transcendentalism, populism, communitarianism, racial nationalism, and religious fundamentalism are examples of such philosophies. Prerequisite: Graduate standing or consent of the instructor. SEM.

**POLS 711. The Psychological Base of Political Behavior. 3 Hours.**

Examination of the relations between psychological mechanisms and social milieu factors and individual political behavior. Particular attention is devoted to understanding the development of politically relevant psychological traits and dispositions, and to the methodology employed in studying the socio-psychological factors which underlie individual political behavior. Prerequisite: Twelve hours of political science and consent of instructor. LEC.

**POLS 712. The Electoral Process. 3 Hours.**

A study of the characteristics of voting behavior and the influences upon such behavior in the United States. Emphasis is placed upon relevant research findings concerning partisanship and participation in politics, and on the methodology employed in the study of political behavior. Prerequisite: Twelve hours of political science and consent of instructor. LEC.

**POLS 713. Law and Society. 3 Hours.**

A study of the province and function of law in the context of relevant social, economic, and political factors. The impact of these factors on the law will be illustrated through readings and discussions of selected case histories. Emphasis will be placed upon law as a social phenomenon rather than upon its technical aspects. Prerequisite: Twelve hours of political science and permission of instructor for undergraduates. LEC.

**POLS 716. Political Behavior. 3 Hours.**

A seminar for students interested in understanding the public opinion, voting, and other forms of political participation. This course will include a discussion of the formation, measurement of political attitudes as well as an examination of protest and other forms of extra-legal participation. Prerequisite: Graduate standing or consent of instructor. LEC.
POLS 719. Topics in the American Political Institutions: _____, 3 Hours.
A seminar to be offered as occasion demands, dealing with, but not limited to special topics in the presidency, congress, and judicial processes. Prerequisite: Graduate standing or consent of instructor. LEC.

POLS 720. The Scope of Public Policy, 3 Hours.
Introductory graduate course in the examination of public policy making. Considers institutions, basic theoretical frameworks, and standard methods, and places policy-making within a broad political context. Emphasizes American examples, but relevant comparative material is employed. Prerequisite: Twelve hours of political science. LEC.

POLS 722. Intergovernmental Relations, 3 Hours.
A survey of characteristic legal, political, and administrative relationships among different units of American government, with particular emphasis upon the role of state agencies. Prerequisite: Nine hours of political science. LEC.

POLS 726. Public Policy in Comparative Perspective, 3 Hours.
This seminar examines the application of policy theory in regional and comparative contexts. Much of the research examined focuses on comparative public policy, but select weeks focus on specific regions of the world. A key goal is to help students understand which theories of policy may be best suited for universal application. LEC.

POLS 754. Politics and Government of Russia and the Central Eurasian States, 3 Hours.
The collapse of the Soviet system and the problems of transforming a central planned authoritarian state into a free market democracy. The roles of ethnic and national tensions, economic decay, and cultural factors. Prerequisite: Eight hours in the social sciences and/or history, including POLS 150, or consent of instructor. LEC.

POLS 758. Revolutionary Politics of Latin America, 3 Hours.
Primarily a comparative analysis of the Mexican, Bolivian, and Cuban revolutions within a framework of theories of revolutions. Some attention also to revolutionary political groupings and conditions in other Latin American countries. Prerequisite: POLS 150 or a course concerning Latin America in the social sciences or history. LEC.

POLS 774. International Law, 3 Hours.
Study of topics in international law, relating these closely to the dynamics of international relations. Special emphasis will be given to regulating force, resolving disputes, the law of the sea, human rights, and emerging problem areas such as the environment, outer space, the oceanic seabed, and genocide. Prerequisite: Six hours of courses in international relations including POLS 170 and/or relevant courses in the social sciences and modern history. LEC.

POLS 789. Topics in International Relations, 2-3 Hours.
A study of selected problems in international relations. Prerequisite: Consent of instructor. RSH.

POLS 810. American Politics, 3 Hours.
A survey and critical examination of recent theoretical developments and research focusing on national institutions, electoral behavior, and policy-making processes. Emphasis is given to conceptualizing and analyzing the changing nature of the American political system. LEC.

POLS 812. Political Psychology, 3 Hours.
A critical examination of the principal areas in current literature in political psychology, including psychological perspectives on mass political behavior, elite decision making, and international relations. Attention will be given to articulating and evaluating theories, constructing research questions and programs, and comparing methodologies. LEC.

POLS 820. Policy Formulation and Adoption, 3 Hours.
Survey of the literature on the institutional, socioeconomic, and political forces influencing the formulation and adoption of public policy, as well as policy change, at all levels of government. Topics include problem definition, agenda setting, and the methods of decision-making. This is a research seminar so students will be required to conduct an original research project. LEC.

POLS 821. Policy Implementation and Analysis, 3 Hours.
An overview of the policy implementation process and the analysis of public policy. The course covers a variety of theories and methods related to the study of the implementation process, policy evaluation, policy analysis, and policy change and learning. Substantive policy areas covered include environmental regulation, education, criminal justice, public safety, and health care. LEC.

POLS 825. Urban Policy and Administration, 3 Hours.
This course explores the development, implementation and evaluation of public policy in the local government context. It examines a variety of policy tools used to address urban problems and applies theories of the policy process, intergovernmental relations, and institutions to municipal governance. (Same as PUAD 825.) LEC.

POLS 830. Advanced Research Methods for Public Policy, 3 Hours.
Research seminar organized around advanced quantitative and qualitative method skills for research on American and comparative politics and public policy. The course will combine advanced statistical estimation procedures (e.g., hazard analysis, event history analysis, hierarchical "contextual effects" models) with methods for the collection and integration of data. This course is intended to facilitate research efforts of students in the fields of American politics, comparative politics, and public policy. The course is open to Ph.D. students from other departments who have completed a course in intermediate regression analysis. Prerequisite: POLS 707 or similar graduate level course. LEC.

POLS 849. Law, Courts, and Public Policy, 3 Hours.
This course provides an overview of the role of law, litigation, and courts in the public policy process, with an emphasis on bureaucratic institutions. The course covers the main theories and empirical research on the policy effects of litigation and intervention, with a particular focus on civil rights in the areas of employment, policing, welfare, prisons, and environmental policy. (Same as PUAD 849.) Prerequisite: Graduate standing or consent of instructor. LEC.

POLS 850. Introduction to Comparative Politics, 3 Hours.
This course provides a graduate level introduction to the field of Comparative Politics. Among topics it will survey are: the history and development of the field; classic works and major founding concerns of the field; methodological and epistemological debates; competing paradigms which had characterized Comparative Politics (structural-functionalism, culturalists, state-centrists, institutionalists, rational choice, and other); theory building and the role of area studies. LEC.

POLS 851. Comparative Institutions and Government, 3 Hours.
This course provides a survey of the subfield of political institutions within Comparative Politics. Among the topics it will cover are: identifying regime types (democracy vs. non-democracy); comparative electoral systems; party systems; presidential vs. parliamentary systems; comparative legislatures; constitutional engineering and democratic transitions, and others. Prerequisite: POLS 850. LEC.

POLS 852. Comparative Political Economy, 3 Hours.
This course provides a survey of some of the major works, research traditions, and current debates in the subfield of comparative political economy. This includes such topics as: The political economy of development and underdevelopment; dependency and world systems.
theory; the relationship between economic development and democracy; capitalist development and democracy; the political economy of dual transitions; the political economy of privatization and structural adjustment; comparative welfare states; and comparative labor-business-government relations. Prerequisite: POLS 850. LEC.

POLS 853. Comparative Social Politics. 3 Hours.
This course provides a survey of some major research traditions and current debates in the subfield of political sociology. This includes such topics as: culture and politics; elites, social structures, and politics; the politics of cultural pluralism and ethnonationalism; social movements and protest; gender and politics; state-society relation; and religion and politics. Prerequisite: POLS 850. LEC.

POLS 870. International Relations. 3 Hours.
Critical evaluation of the major approaches to international relations and their application to conflict and conflict resolution, foreign policy, and international political economy. LEC.

POLS 878. Conducting and Analyzing Fieldwork in Developing Countries. 3 Hours.
An introduction to fieldwork and surveys conducted in developing and non-democratic countries. The course covers the challenges of conducting interviews and surveys in these countries. The intent is to develop the research skills necessary for data collection and fieldwork as well as evaluating an analyzing survey data collected by other researchers in developing countries. Prerequisite: POLS 705 or equivalent or consent of the instructor. SEM.

POLS 888. Contemporary China Studies. 3 Hours.
This course will review and analyze the current literature on China's social and political development, including a wide range of topics within political science. There is a rich body of literature within each topic such as civil society in China, legal reform, political culture, nationalism, gender issues, ethnicity, political behavior, elections, economic development, and inequality. This course will introduce key literature within each topic focusing on the debates among China scholars as well as how these debates fit in the general field of political science. (Same as EALC 888 and POLS 888.) Prerequisite: POLS 668 or permission of the instructor. LEC.

POLS 898. Non-Thesis Research. 1 Hour.
Research course used to fulfill continuous enrollment requirement for master's degree students. Hours cannot count toward degree. Must be graded Satisfactory/Unsatisfactory. RSH.

POLS 899. Thesis. 1-6 Hours.
Enrollment for writing thesis for master's degrees. THE.

POLS 904. Statistical Computing Foundations. 3 Hours.
This is an interdisciplinary course for social science researchers who need to develop routines to estimate and evaluate statistical models. It introduces tools for software development, primarily with the statistical programming language R (and related languages like C). Topics include code organization and optimization, concurrent version management, LaTeX document preparation, and high-performance computing on the KU Linux cluster. Examples from various fields are considered. Prerequisite: Two courses in graduate level statistics and familiarity with R. LEC.

POLS 905. Complex Adaptive Systems, Agent-Based Modeling and Computer Simulation. 3 Hours.
This seminar addresses the rapidly growing science of complex systems. Topics addressed include political, economic, ecological, and biological systems. Includes a survey of the theory of complexity and computer models that are used to study complex adaptive systems. The main focus is on agent-based models, but attention is also given to traditional cellular automata. Methods of designing, programming, and interpreting results of agent-based models are addressed. Students who have no formal training in computer programming are welcome in the course, but they should expect to do some extra work on fundamentals of programming. A preparatory course in Java, C++, Objective-C, or another object-oriented language would significantly facilitate the student's research effort. SEM.

POLS 906. Advanced Regression. 3 Hours.
Covers topics appropriate for a second course in regression analysis. The content will vary according to the interest of the instructor and students, but will generally include such topics as multiple imputation of missing data, the generalized linear model (GLM), and specialized models for longitudinal data. The course will include a review of the principles of maximum likelihood estimation and applications of matrix algebra and differential calculus in statistical applications. LEC.

POLS 907. Research Methods in International Studies. 3 Hours.
This course focuses on quantitative methods of research relevant to international relations and comparative politics. Topics will vary with the instructor and student interests, but may include time series analysis, classification algorithms, computer programming and computational modeling, simulation, event data and content analysis, and dynamic models. Prerequisite: POLS 707. LEC.

POLS 908. Individual and Collective Choice. 3 Hours.
This course surveys rational choice theories of politics as they are applied to decisions by individuals and groups. Models of individual behavior are drawn primarily from economics and decision theory. The primary approaches to collective choice are social choice theory and game theory. Prerequisite: POLS 707. LEC.

POLS 909. Topics in Methodology: ______. 3 Hours.
An intensive seminar in a method (or a variety of relevant methods) of theoretical or empirical research designed for Ph.D. students only. Emphasis is on deepening the understanding and ability to use advanced methods of analysis. Prerequisite: Admission to the Ph.D. program or consent of instructor. RSH.

POLS 910. Research Seminar in American Government. 2-3 Hours.
A faculty and advanced graduate student collegial research experience focusing on American politics, policy-making and administration, with faculty and students engaged in the production of scholarly research articles, books and conference papers. Topics will be chosen by individual students with consent of the seminar professor. LEC.

POLS 911. The U.S. Congress. 3 Hours.
This seminar employs various theoretical and methodological perspectives to explore the burgeoning post-1960 literature on Congress. Traditional subjects such as committees, parties, and elections are examined through applications of formal models, behavioral analyses, and participant observation. LEC.

POLS 912. Elections and Voting Behavior. 3 Hours.
A research seminar for students interested in theoretical and empirical approaches to the behavior of candidates, voters and contributors in campaigns and elections. The impact of campaign laws and other institutional influences will also be examined. LEC.

POLS 913. State and Local Politics. 3 Hours.
Research seminar on various aspects of state and local government, such as reformed institutions, fiscal stress, citizen participation, and various policy problems. LEC.

POLS 914. Political Behavior. 3 Hours.
Survey of various approaches to the analysis of political behavior, including an evaluation of each approach in terms of its utility in building
empirically-based political theory. Examples of the application of the various approaches will focus upon the American political process. LEC.

POLS 915. American Political Parties. 3 Hours.
A survey of the theories and research findings dealing with political parties in American politics, including third and minor parties. Topics to be covered include the development and evolution of the party system, the nature of party organization and the recruitment of party activists, the role of parties in the electoral process, the impact of parties upon public policy, and party reform. LEC.

POLS 916. Group Politics. 3 Hours.
The focus of this course is upon the theories and research findings dealing with political groups in American politics, including protest groups, movements, as well as conventional interest groups. Topics to be covered include group mobilization and maintenance, group involvement in the political party and electoral processes, methods and strengths of group influence, and the impact of political groups on the policy process. LEC.

POLS 917. The Presidency. 3 Hours.
An advanced research seminar for students interested in theoretical and empirical approaches to the American presidency. This seminar will examine the powers and organizations of the White House through a study of the literature. LEC.

POLS 919. Topics in U.S. Government and Politics: ______. 2-3 Hours.
A seminar to be offered as occasion demands, dealing with, but not limited to, bureaucracy, legislative policy, federalism, and special problems in U.S. politics. LEC.

POLS 920. Policy Analysis Research Seminar. 3 Hours.
Research seminar designed to apply public policy theory and policy analysis methods to evaluate the impact of public policies. Students will be required to design and conduct an original research project with the intention of presenting the work at a professional conference or publishing the work in a professional journal. LEC.

POLS 921. Public Law. 3 Hours.
This seminar is designed to initiate the advanced graduate student to research in judicial and jury behavior. Requirements include mastery of literature on the psychological foundations of legal judgment and research designed to test propositions derived from this literature. LEC.

POLS 929. Topics in Public Policy: ______. 1-3 Hours.
Study of selected topics in public policy. LEC.

POLS 940. Teaching Political Science. 1 Hour.
A discussion of teaching methods and approaches. Students are expected to develop a personal teaching portfolio that describes their outlook on teaching political science and provides sample teaching materials. This course must be taken by all graduate teaching assistants and assistant instructors during the first year of their appointment. Grades are issued on a pass/fail basis. LEC.

POLS 950. Research Seminar in International Studies. 2-3 Hours.
A faculty and advanced graduate student collegial research experience, focusing on comparative politics, area studies, and international relations, with faculty and students engaged in the production of scholarly research articles, books, and conference papers. Topics will be chosen by individual students with consent of the seminar professor. RSH.

POLS 951. Mobilization. 3 Hours.
A study of how politicians, interest group leaders, and dissident leaders exhort citizens to act in or preclude them from acting in politics. LEC.

POLS 952. Comparative Electoral and Party Systems. 3 Hours.
This research seminar addresses the major theoretical and empirical issues in the study of electoral and party systems. In addition to evaluating the classic works of Arrow, Duverger, Lipset and Rokkan, Rae, and Taagepera and Shugart, students will assess contemporary work on electoral and party systems that has evolved from this source material. The course will address the design and reform of electoral systems, institutional rules and the strategic environment they create for political actors, the role of institutional and social factors in the development of political party systems, and the role of election administration. Students will develop and present original research papers related to these topics. Prerequisite: POLS 850. LEC.

POLS 953. Comparative Legislatures. 3 Hours.
This research seminar addresses the major theoretical and empirical issues in the study of legislatures. Students will discuss the design of institutions, government formation, accountability, legislative process and role of committees, agenda setting, elections and parties, and representation. The course will familiarize students with the core debates in legislative studies, extend knowledge of regional variation in the design and function of representative institutions, develop skills in the analysis of legislative records, and enhance professional socialization. Prerequisite: POLS 810, POLS 850, or consent of instructor. SEM.

POLS 954. Politics in Post-Soviet States. 3 Hours.
In-depth study of the politics of Russia, Ukraine, and the other Post-Soviet states. Focus on the problems of transforming a centrally planned authoritarian system to a free market democracy. LEC.

POLS 955. Politics of Advanced Industrial Societies. 3 Hours.
Theory and research on the patterns of behavior that characterize the politics of North America, Europe, and developed regions of Asia. Topics include corporatism and alternative forms of interest intermediation, economic theories of socialization and electoral choice, and the role of the state; its finances, adaptation, and the problem of power and legitimacy. Prerequisite: POLS 850 or permission of instructor. LEC.

POLS 956. The Governments and Politics of Asia. 2-3 Hours.
A research seminar on selected subjects and issues in the governments and politics of selected Asian countries. The particular focus each year will depend upon the instructor. LEC.

POLS 957. Comparative Political Behavior. 3 Hours.
The course introduces students to the vast literature on comparative elections and comparative political parties. It pursues a twofold goal. First, the course surveys the large comparative electoral behavior literature. The themes covered in the first half include a discussion of why voters participate in elections, how voters form preferences, how psychological processes affect mass views, and how these, in turn, influence party preferences. Second, the course introduces students to the supply-side of politics and the role of political parties. This second part of the course, therefore, examines why parties form in the first place, what motives they have, what choices they offer in short, how and why parties compete. Together, the way voters form preferences and the logic of party formation illuminate a central element of the democratic process. LEC.

POLS 959. Topics in Comparative Politics: ______. 1-3 Hours.
Study of selective topics in comparative politics. LEC.

POLS 960. Politics of Developing Countries. 2-3 Hours.
LEC.

POLS 961. The Politics of Culturally Plural Societies. 3 Hours.
This is an advanced graduate seminar on the comparative study of politics in countries characterized by sub-cultural cleavages, including ethnicity, language, religion and race. The course will first survey and critique competing theoretical explanations for different patterns of conflict or peaceful cohabitation among such groups in a variety of world regions. Students will then examine the utility of these theories in individual in-depth research papers which will be presented in class and critiqued by seminar participants. LEC.
POLS 970. Foreign Policy Analysis. 3 Hours.
Designed to acquaint students with the principal theories, approaches and types of empirical analysis generally employed to explain and interpret the creation and implementation of foreign policy. Topics include rational actor models, collective and bureaucratic processes, societal influences, cognitive and psychological factors, and comparative foreign policy. Prerequisite: POLS 870. An undergraduate United States foreign policy class is recommended. LEC.

POLS 972. Theories of International Conflict. 3 Hours.
An in-depth survey of theories and research on international conflict. Topics will range from anthropological studies of conflict in primitive societies to contemporary theories of nuclear conflict. The course will also cover current empirical research methodology and results of research on international conflict, as well as models of conflict processes. Prerequisite: POLS 870. LEC.

POLS 973. International Political Economy. 3 Hours.
Provides an eclectic survey of major developments in the field. Topics include the intellectual origins of IPE; the historical evolution of the international system; North-South and Western trade, investment, and monetary relations; foreign aid, debt transfer, development, and international economic institutions (e.g., IMF, IBRD, MNCs, etc.). (Same as SOC 873.) Prerequisite: POLS 870 or consent of instructor. LEC.

POLS 974. International Mediation and Conflict Resolution. 3 Hours.
The course examines the theory and practice of international mediation and other forms of third party intervention used to resolve interstate and nonstate disputes. Topics include explanations of mediation success and failure, conditions of conflict escalation where mediation is likely to be counterproductive or resisted by recalcitrant disputants, the ethics of intervention, citizen diplomacy, and the role of international organizations such as the United Nations. Prerequisite: POLS 870. LEC.

POLS 977. Ethics in International Relations Theory. 3 Hours.
This course examines how issues of International Ethics have been treated in International Relations theory. This course begins by reviewing several theoretical perspectives of International Relations and how these perspectives have historically understood the role ethics plays in international politics. By the end of the semester, students should have a firm understanding of (1) the salient issues of international ethics in world politics and (2) whether and how IR scholars have (theoretically and methodologically) placed those issues in their research paradigms. The issue areas the course will cover include, but are not limited to, human rights doctrines, issues of economic and political justice, just war theory (jus ad bellum) and just conduct of war (jus en bello), and humanitarian intervention. The course will assess the role international law has played in stemming and/or punishing human rights abuses. Students will review several historical cases of genocide, as well as several cases of truth and reconciliation commissions. LEC.

POLS 978. Advanced Topics in International Relations Theory. 3 Hours.
Intensive examination of key theoretical debates in international relations. Topics covered will include Classical Realism and Liberalism, Neorealist/Neoliberal debate, and post-structural critiques of mainstream international relations theory. Prerequisite: POLS 870. LEC.

POLS 979. Topics in International Relations: ____. 3 Hours.
To be offered periodically when topics of special interest arise. LEC.

POLS 980. International Organizations. 3 Hours.
Considers theoretical and empirical work on international governmental and non-governmental organizations (IOs). Specifically highlights the evolving scholarly debates regarding the function, design, and delegation of authority to IOs as well as their behavior and change.

Explores these questions in depth through a wide range of cases, including comprehensive coverage of the United Nations, Bretton Woods Institutions, and the European Union, and their activities in issue areas concerning international security, trade, finance, development, humanitarian aid, and the environment. LEC.

POLS 981. Global Development. 3 Hours.
Considers the nature and problems of development and underdevelopment from a cross-regional and interdisciplinary perspective. Deals with the historical origins of the enormous disparities in wealth that exist today, both between and within countries. Considers the explanations for those differences, prescriptions for how to narrow them, and specific cases (both successes and failures) from various regions of the globe. LEC.

POLS 993. Directed Readings. 1-5 Hours.
Designed to meet the needs of graduate students whose study in political science cannot be met with present course. Prerequisite: Consent of instructor. RSH.

POLS 995. Directed Research. 2 Hours.
Designed for advanced graduate students who are concurrently enrolled or who will be enrolled in a subsequent semester in one of the Research Seminars in American Government or International Studies. Students enrolling in this course should have the prior approval of the faculty member with whom they wish to conduct the research. RSH.

POLS 997. Preparation for the Comprehensive Examination. 1-6 Hours.
An independent reading course for students preparing to take the Ph.D. comprehensive examination. May be taken for two semesters or six credits, whichever comes first. Graded on A, B, C, D, or F depending on the results of the comprehensive examination. RSH.

POLS 999. Doctoral Dissertation. 1-15 Hours.
Enrollment for writing doctoral dissertations. THE.

Bachelor of Arts and Bachelor of General Studies in Political Science

Why study political science?
Because political science advances our understanding of politics, power, governance, and public policy in the United States and across the globe.

First- and Second-Year Preparation
Students should apply for admission during semester in which major admission criteria will be completed, normally no later than 60 hours, or for transfer students, during the initial term at KU. Application to this major after completion of 60 hours, or the initial KU term for a transfer student, will likely delay graduation.

Courses Required
Introduction to U.S. Politics. Satisfied by:
POLS 110 Introduction to U.S. Politics 3
or POLS 111 Introduction to U.S. Politics Honors
Select one of the following:

Introduction to Comparative Politics. Satisfied by one of the following:
POLS 150 Introduction to Comparative Politics
or POLS 151 Introduction to Comparative Politics Honors
Introduction to International Politics. Satisfied by one of the following:
POLS 170  Introduction to International Politics
or POLS 171  Introduction to International Politics Honors

Admission GPA
• Satisfied by a minimum 2.3 GPA in required admission courses designated above.
• University Course Repeat Policy will apply.

Requirements for the B.A. or B.G.S. Major

Political Science Core Knowledge and Skills (15)
Majors must complete a course in each of the following areas:
Introduction to U.S. Politics. Satisfied by one of the following:
POLS 110  Introduction to U.S. Politics  3
or POLS 111  Introduction to U.S. Politics Honors
Introduction to Comparative or International Politics. Satisfied by one of the following:
POLS 150  Introduction to Comparative Politics  3
or POLS 151  Introduction to Comparative Politics Honors
POLS 170  Introduction to International Politics  3
or POLS 171  Introduction to International Politics Honors
Introduction to Political Theory. Satisfied by one of the following:
POLS 301  Introduction to Political Theory  3
or POLS 302  Introduction to Political Theory, Honors
Political Science Methods of Inquiry. Satisfied by:
POLS 306  Political Science Methods of Inquiry  3

Political Science Required Distribution of Electives (6)
Majors must complete an elective course from at least 2 different subfields below.

Political Philosophy & Empirical Theory
Satisfied by one of the following:
POLS 501  Contemporary Political Thought
POLS 502  History of Political Thought
POLS 503  Politics in Literature
POLS 504  Millenarian Movements
POLS 600  Contemporary Feminist Political Theory
POLS 601  Political Ideologies
POLS 602  American Political Ideas
POLS 603  Democratic Theory
POLS 604  Religion and Political Theory
POLS 605  A Study of Political Thought in Antiquity
POLS 607  Modern Political Theory
POLS 608  Social Choice and Game Theory
POLS 609  Topics in Political Theory: ______
POLS 626  Introduction to Survey Research
POLS 627  Advanced Issues in Survey Research
POLS 644  Justice and Public Policy in Democratic Societies
POLS 680  International Relations in Political Philosophy  1

U.S. Political Institutions & Processes
Satisfied by one of the following:
POLS 511  The Judicial Process

POLS 512  Latino Politics
POLS 515  American Political Parties
POLS 516  Public Opinion and American Democracy
POLS 520  Political Communication
POLS 521  Rhetoric, Politics and the Mass Media
POLS 566  Social Welfare, Taxation, and the Citizen  1
POLS 610  Constitutional Law: Governmental Powers
POLS 611  Constitutional Law: Civil Liberties
POLS 612  Psychology in Politics  1
POLS 613  Comparative U.S. State Politics
POLS 614  Urban Politics
POLS 615  Campaigns and Elections
POLS 616  Interest Group Politics
POLS 617  The Congress
POLS 618  The Presidency
POLS 619  Topics in American Politics: ______
POLS 620  Formulation of Public Policy  1
POLS 630  Politics of Identity
POLS 645  Corruption, Crisis and Scandal
POLS 667  Islam and Politics
Public Policy & Public Administration
Satisfied by one of the following:
POLS 528  Environmental Justice and Public Policy
POLS 566  Social Welfare, Taxation, and the Citizen  1
POLS 620  Formulation of Public Policy  1
POLS 621  Public Policy Analysis
POLS 622  Government and the Economy
POLS 623  The Politics of Social Policy
POLS 624  Environmental Politics and Policy
POLS 625  Extremist Groups and Government Response
POLS 628  The Politics of Public Health
POLS 629  Topics in Public Policy: ______
POLS 634  Bureaucratic Politics
POLS 640  Politics of Reproductive Policy
Foreign Governments & Comparative Politics
Satisfied by one of the following:
POLS 553  Comparative Environmental Politics
POLS 561  Liberation in Southern Africa
POLS 562  Women and Politics
POLS 563  Comparative Political Economy
POLS 564  Elections and Political Parties Around the World
POLS 565  Political Change in Asia
POLS 600  Contemporary Feminist Political Theory  1
POLS 644  Justice and Public Policy in Democratic Societies  1
POLS 650  Palestinians and Israelis
POLS 651  Women and Politics in Latin America
POLS 652  Politics in Europe
POLS 653  Gender, War, and Peace
POLS 654  Politics and Government of Russia and the Central Eurasian States
POLS 655  Politics of East-Central Europe
Minor in Public Policy in the United States

Why study political science?
Because political science advances our understanding of politics, power, governance, and public policy in the United States and across the globe.

Requirements for the Public Policy in the U.S. Minor

The Public Policy in the U.S. minor involves course work focused on domestic U.S. public policy and the political environment surrounding the making and implementation of policy.

Honors Experience
Recommended for students with a minimum grade point average of 3.5 in Political Science coursework and 3.25 overall. These averages must be achieved before the final semester.
Public Policy in U.S. Minor Electives (12)
At least 12 hours of POLS courses from approved list: 12
- POLS 528 Environmental Justice and Public Policy
- POLS 493 Directed Readings
- POLS 553 Comparative Environmental Politics
- POLS 566 Social Welfare, Taxation, and the Citizen
- POLS 613 Comparative U.S. State Politics
- POLS 614 Urban Politics
- POLS 620 Formulation of Public Policy
- POLS 621 Public Policy Analysis
- POLS 622 Government and the Economy
- POLS 623 The Politics of Social Policy
- POLS 624 Environmental Politics and Policy
- POLS 625 Extremist Groups and Government Response
- POLS 628 The Politics of Public Health
- POLS 629 Topics in Public Policy: _________
- POLS 630 Politics of Identity
- POLS 634 Bureaucratic Politics
- POLS 640 Politics of Reproductive Policy
- POLS 720 The Scope of Public Policy (graduate level)
- POLS 493 Directed Readings (if content is appropriate)

Minor Hours & Minor GPA
While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Junior/Senior Hours in Residence
Satisfied by a minimum of 12 hours of KU resident credit in the minor.

Minor Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the minor. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Master of Arts in Political Science
Why study political science?
Because political science advances our understanding of politics, power, governance, and public policy in the United States and across the globe.

Admission to Graduate Studies
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission
Admission to M.A. or Ph.D. programs is based on the applicant’s undergraduate and/or graduate record, standardized test scores, and references from instructors. All applicants must complete a bachelor’s degree. A completed application must include

1. Online graduate application (http://graduate.ku.edu/application-process),
2. Graduate Record Examination results — verbal, quantitative, and analytical,
3. A 1- to 2-page statement of goals and research interests,
4. 3 letters of recommendation, preferably from faculty members,
5. A nonrefundable application fee (see Admission in the Graduate Studies (p. 2369) section of the online catalog), and
6. 1 official transcript from each college or university attended.

An official transcript is one that is sent directly from the registrar of the applicant’s school to the department. All these materials must be received before the application can be considered.

An applicant who wishes to be considered for regular fall admission and for a graduate teaching assistantship must complete the application by January 10 for the coming academic year. A student who wishes to be considered for fall admission but not for a teaching assistantship should submit the application by April 15 but may do so earlier.

Submit your graduate application online (http://www.graduate.ku.edu). Send all other requested application materials to the department:

The University of Kansas
Department of Political Science
Graduate Coordinator
Blake Hall
1541 Lilac Lane, Room 504
Lawrence, KS 66045-3129

M.A. Degree Requirements
All candidates for the M.A. degree must complete, at a satisfactory level,

1. 30 semester hours of graduate credit, 21 of which must be earned in courses at the 700 level or above;
2. Research methods through POLS 706; and
3. A comprehensive master’s oral examination.

The student selects a principal advisor from the Graduate Faculty by the end of the first year to choose courses and prepare for the comprehensive examination. The examination is administered by a 3-person M.A. committee that includes the student’s principal advisor and 2 other members of the KU Graduate Faculty selected by the student in consultation with the principal advisor. One member of the committee may be from another department (including Special Status members of the Graduate Faculty).

Directed readings courses in excess of 5 hours cannot be counted toward the 30 hours required for the degree. With prior written approval, candidates may count up to 6 graduate hours taken outside the department (either at KU or at another institution accredited by the
North Central Association of Colleges and Schools) toward the 30 hours required for the degree.

Applicants who have not completed at least 15 undergraduate credit hours in political science may be admitted with the provision that they complete additional hours of course work.

All candidates must fulfill the requirements of either the thesis or the non-thesis option for the Master of Arts degree.

**Thesis Option**

Upon completion and certification of an acceptable thesis, candidates may count 6 credit hours of thesis enrollment toward the 30 credit hours required for the M.A. degree.

**Non-thesis Option**

Candidates may substitute a minimum of two 800- or 900-level research courses plus satisfactory performance on a comprehensive written examination administered by the three-person M.A. committee before the oral examination.

**Doctor of Philosophy in Political Science**

**Why study political science?**

Because political science advances our understanding of politics, power, governance, and public policy in the United States and across the globe.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**

Admission to M.A. or Ph.D. programs is based on the applicant’s undergraduate and/or graduate record, standardized test scores, and references from instructors. All applicants must complete a bachelor’s degree. A completed application must include

1. Online graduate application (http://graduate.ku.edu/application-process),
2. Graduate Record Examination results — verbal, quantitative, and analytical,
3. A 1- to 2-page statement of goals and research interests,
4. 3 letters of recommendation, preferably from faculty members,
5. A nonrefundable application fee (see Admission in the Graduate Studies (p. 2369) section of the online catalog), and
6. 1 official transcript from each college or university attended.

An official transcript is one that is sent directly from the registrar of the applicant’s school to the department. All these materials must be received before the application can be considered.

An applicant who wishes to be considered for regular fall admission and for a graduate teaching assistantship must complete the application by January 10 for the coming academic year. A student who wishes to be considered for fall admission but not for a teaching assistantship should submit the application by April 15 but may do so earlier.

Submit your graduate application online (http://www.graduate.ku.edu). Send all other requested application materials to the department:

**The University of Kansas**
Department of Political Science
Graduate Coordinator
Blake Hall
1541 Lilac Lane, Room 504
Lawrence, KS 66045-3129

**Ph.D. Degree Requirements**

Students who complete the Master of Arts degree may be eligible to pursue the Ph.D. degree. The Ph.D. program requires work in 2 major subfields and 1 minor subfield.

The major fields must be drawn from those offered by the division (see Fields of Graduate Study). Before their first attempt at the written preliminary examination in any subfield, all Ph.D. students must complete at least 4 courses in that field, 3 of which are at the 700 level or above. Enrollment in directed research covering a particular subfield may be substituted for one of the four courses/seminars.

The minor field may be another of the subfields, a related field from an outside department, or an interdisciplinary program. The courses for the minor field must follow the same structure as outlined above for the major fields. Courses for the minor field may not be applied to another examination field.

Students should consult their major advisors to plan a schedule of coursework and seminar preparation in each of these subfields to provide adequate preparation for the written preliminary examination. Students must complete the majority of courses in their major fields, the research skills and responsible scholarship requirement, the Ph.D. residency requirement, and resolve any grades of incomplete before registering for preliminary examinations. The research skills and responsible scholarship requirement includes

**Option 1: Research Methods**

POLS 706 Research Methods I 3
POLS 707 Research Methods II 3
Select 1 research methods course approved by the major advisor and the graduate director

**Option 2: Research Methods and Foreign Language**

POLS 706 Research Methods I 3
POLS 707 Research Methods II 3
Select 1 of the following choices in a language approved by the student’s advisor as well as the graduate director:
2 semesters of a single foreign language no more than 5 years old at the time of certification
Demonstrated reading knowledge of a single foreign language

Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current policies on Doctoral Research Skills and Responsible Scholarship are listed in the KU Policy Library.

To become a Ph.D. candidate, the student must satisfactorily complete a comprehensive oral examination. No student may attempt the comprehensive oral examination until the 2 written preliminary examinations have been passed and the requirements of the minor subfield have been completed.

After passing the comprehensive oral examination, the doctoral candidate must write a dissertation approved by a departmental dissertation committee and pass a final oral defense of the dissertation to qualify for the Ph.D. degree.

Prelaw Preparation

Preparing for Law School

For admission to law school, an applicant must complete a bachelor’s degree and take the Law School Admission Test (LSAT). No particular course of undergraduate study is recommended, this comports with the views of the American Bar Association (http://www.americanbar.org/groups/legal_education/resources/pre_law.html) (ABA). However, the program should be sufficiently rigorous to provide the skills of comprehension and analysis essential in law study.

To prepare for law school, students should take courses that challenge and interest them, but no specific courses are required or recommended. The ABA recommends the development of numerous skills (http://www.lsac.org/jd/thinking-about-law-school/lawyers-skills) in preparation for a legal education—including analytical and problem solving skills; critical reading, writing, oral communication and listening skills; general research, task organization and management skills. Fulfilling or exceeding general education and major requirements satisfies many of these objectives. Consult the Pre-Law advisor about undergraduate courses beyond general education and major requirements.

It is strongly recommended that Pre-Law students view the Pre-Law Basics session online early in their undergraduate careers for more complete Pre-Law information.

Students should submit law school applications the fall semester before entering law school. For most students, this is fall of the senior year. Admission is highly competitive, and law schools examine a number of factors. Heavy reliance is placed on the undergraduate grade-point average and score on the LSAT. All grades on the transcript, including transfer work, are reported to Law School Admission Council (LSAC) and used by them to calculate their version of the applicant’s cumulative grade point average. The LSAT tests skills in reading comprehension, logical reasoning, and analytical reasoning. It is offered 4 times during the academic year: June, September/October, December, and February. Most applicants take the June or September/October test to submit applications early. The September/October test date sometimes coincides with midterm examinations, so, many students prefer to take the LSAT in June after their junior year. Students can register for the LSAT online through the Law School Admission Council (http://www.lsac.org). Law schools also consider personal statements, letters of recommendation, extracurricular activities, and the rigor of the academic curriculum in determining admission.

Many academic policy options, such as the Credit/No Credit (http://www.policy.ku.edu) option and the course-repeat policy (http://www.policy.ku.edu), have different consequences for law school applicants. For example, LSAC doesn’t recognize the course repeat policy, and calculates both grades as part of your cumulative grade point average. Consult the Pre-Law advisor before electing such options.

View the School of Law (p. 752) section of the online catalog.

Premedical Professions

Premedical Professions Preparation

Premedical Professions Advising

Premedical, premedicine, preoptometry, and preveterinary medicine are career interests rather than majors or formal programs. Students prepare by taking courses required for entry, studying to learn concepts and perform well academically, volunteering and shadowing to get experience, taking a standardized admissions test, and applying for admission to graduate-level professional schools.

For more information, visit the website (https://medadvising.ku.edu). Call 785-864-2834 to schedule an orientation or application meeting with the premedical advisor.

Predentistry

Predentistry is a career interest rather than a major or formal program. Students prepare by taking courses to meet dental school admission requirements, studying to learn concepts and perform well academically, and shadowing or working in dental practices. They take the Dental Admission Test (http://www.ada.org/dat.aspx) (DAT) and apply for admission to dental schools, usually in the summer between the junior and senior year. Most people complete an undergraduate bachelor’s degree and major before entering dental school.

Dental schooling is 4 years of graduate-level, professional education and training. There is no dental school in Kansas, however, there is an agreement for some seats for Kansas residents at the University of Missouri—Kansas City (UMKC) School of Dentistry.

Most dental schools require:

- English Composition I. Satisfied by:
  - ENGL 101 Composition 3
  - or ENGL 105 Freshman Honors English

- English Composition II. Satisfied by:
  - ENGL 102 Critical Reading and Writing 3
  - or ENGL 205 Freshman-Sophomore Honors Proseminar: _____

- Biology with Lab. Satisfied by:
  - BIOL 150 Principles of Molecular and Cellular Biology 4
  - or BIOL 151 Principles of Molecular and Cellular Biology, Honors

- General Chemistry I with Lab. Satisfied by one of the following: 5
  - CHEM 130 General Chemistry I
  - CHEM 170 Chemistry for the Chemical Sciences I
  - CHEM 190 Foundations of Chemistry I, Honors
Summer between the junior and senior year. Most people complete an
College Admission Test (https://www.aamc.org/students/applying/mcat)
and volunteering or working in health care settings. They take the Medical
requirements, studying to learn concepts and perform well academically,

Students prepare by taking courses to meet medical school admission
Premedicine is a career interest rather than a major or formal program.
Premedical advisor.
785-864-2834 to schedule an orientation or application meeting with the
For more information, visit the website (https://medadvising.ku.edu). Call

Premedicine

Premedicine is a career interest rather than a major or formal program. Students prepare by taking courses to meet medical school admission requirements, studying to learn concepts and perform well academically, and volunteering or working in health care settings. They take the Medical College Admission Test (https://www.aamc.org/students/applying/mcat) (MCAT) and apply for admission to medical schools, usually in the summer between the junior and senior year. Most people complete an undergraduate bachelor’s degree and major before entering medical school.

Medical schooling is four years of graduate-level, professional education and training, followed by a three- to six-year residency program. The only medical school in Kansas is the KU School of Medicine.

Most medical schools require:

- English Composition I. Satisfied by:
  - ENGL 101 Composition 3
  - ENGL 105 Freshman Honors English
- English Composition II. Satisfied by:
  - ENGL 102 Critical Reading and Writing 3
  - ENGL 205 Freshman-Sophomore Honors Proseminar: ______
- Biology with Lab. Satisfied by:
  - BIOL 150 Principles of Molecular and Cellular Biology 4
  - BIOL 151 Principles of Molecular and Cellular Biology, Honors

General Chemistry I with Lab. Satisfied by one of the following:
- CHEM 130 General Chemistry I 5
  - CHEM 170 Chemistry for the Chemical Sciences I
  - CHEM 190 Foundations of Chemistry I, Honors

General Chemistry II with Lab. Satisfied by one of the following:
- CHEM 135 General Chemistry II 5
  - CHEM 175 Chemistry for the Chemical Sciences II
  - CHEM 195 Foundations of Chemistry II, Honors

Organic Chemistry I with Lab. Satisfied by one of the following:
- CHEM 330 Organic Chemistry I 5
  - CHEM 331 and Organic Chemistry I Laboratory
  - CHEM 335 Organic Chemistry II
  - CHEM 336 and Organic Chemistry II Laboratory

Some dental schools require additional mathematics, psychology, and/or biology courses.

For more information, visit the website (https://medadvising.ku.edu). Call 785-864-2834 to schedule an orientation or application meeting with the premedical advisor.

### Premedical Professions Preparation

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
<td>5</td>
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<tr>
<td>CHEM 175</td>
<td>Chemistry for the Chemical Sciences II</td>
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<tr>
<td>CHEM 195</td>
<td>Foundations of Chemistry II, Honors</td>
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<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>&amp; CHEM 331</td>
<td>Organic Chemistry II Laboratory</td>
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<tr>
<td>CHEM 380</td>
<td>Organic Chemistry I, Honors</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 331</td>
<td>Organic Chemistry I Laboratory</td>
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<tr>
<td>Organic Chemistry II with Lab. Satisfied by one of the following:</td>
<td>5</td>
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<tr>
<td>CHEM 335</td>
<td>Organic Chemistry II</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 336</td>
<td>Organic Chemistry II Laboratory</td>
<td></td>
</tr>
<tr>
<td>CHEM 385</td>
<td>Organic Chemistry II, Honors</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 336</td>
<td>Organic Chemistry II Laboratory</td>
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<td>Physics I with Lab. Satisfied by one of the following:</td>
<td>4-5</td>
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<tr>
<td>PHSX 114</td>
<td>College Physics I</td>
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<tr>
<td>PHSX 211</td>
<td>General Physics I</td>
<td></td>
</tr>
<tr>
<td>&amp; PHSX 216</td>
<td>General Physics I Laboratory</td>
<td></td>
</tr>
<tr>
<td>PHSX 213</td>
<td>General Physics I Honors</td>
<td></td>
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<tr>
<td>Physics II with Lab. Satisfied by one of the following:</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PHSX 115</td>
<td>College Physics II</td>
<td></td>
</tr>
<tr>
<td>PHSX 212</td>
<td>General Physics II</td>
<td></td>
</tr>
<tr>
<td>&amp; PHSX 236</td>
<td>General Physics II Laboratory</td>
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</tr>
<tr>
<td>PHSX 214</td>
<td>General Physics II Honors</td>
<td></td>
</tr>
<tr>
<td>The UMKC School of Dentistry also requires:</td>
<td></td>
<td></td>
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<tr>
<td>Anatomy with lab, satisfied by one of the following:</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>BIOL 240</td>
<td>Fundamentals of Human Anatomy</td>
<td></td>
</tr>
<tr>
<td>&amp; BIOL 241</td>
<td>and Human Anatomy Observation Laboratory</td>
<td></td>
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<tr>
<td>BIOL 510</td>
<td>Comparative Anatomy</td>
<td></td>
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<tr>
<td>Physiology with lab, satisfied by one of the following:</td>
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<tr>
<td>BIOL 246</td>
<td>Principles of Human Physiology</td>
<td></td>
</tr>
<tr>
<td>&amp; BIOL 247</td>
<td>and Principles of Human Physiology Laboratory</td>
<td></td>
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<tr>
<td>BIOL 646</td>
<td>Mammalian Physiology</td>
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<tr>
<td>&amp; BIOL 647</td>
<td>and Mammalian Physiology Laboratory</td>
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<tr>
<td>Cell biology: Satisfied by:</td>
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<tr>
<td>BIOL 416</td>
<td>Cell Structure and Function</td>
<td>3</td>
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<tr>
<td>Biochemistry: Satisfied by:</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>BIOL 600</td>
<td>Introductory Biochemistry, Lectures</td>
<td>3-4</td>
</tr>
<tr>
<td>or BIOL 636</td>
<td>Biochemistry I</td>
<td></td>
</tr>
</tbody>
</table>

Some dental schools require additional mathematics, psychology, and/or biology courses.

For more information, visit the website (https://medadvising.ku.edu). Call 785-864-2834 to schedule an orientation or application meeting with the premedical advisor.

2014
Most optometry schools require:

- English Composition I. Satisfied by:
  - ENGL 101 Composition
  - or ENGL 105 Freshman Honors English

- English Composition II. Satisfied by:
  - ENGL 102 Critical Reading and Writing
  - or ENGL 205 Freshman-Sophomore Honors Proseminar: ________

- Biology I with Lab. Satisfied by:
  - BIOL 150 Principles of Molecular and Cellular Biology

Genetics. Satisfied by:

- BIOL 350 Principles of Genetics
  - or BIOL 360 Principles of Genetics, Honors

Statistics. Satisfied by one of the following:

- PSYC 210 Statistics in Psychological Research
- PSYC 211 Statistics in Psychological Research, Honors
- MATH 365 Elementary Statistics
- BIOL 570 Introduction to Biostatistics

The MCAT also requires knowledge from:

- Biochemistry. Satisfied by one of the following:
  - BIOL 600 Introductory Biochemistry, Lectures
  - or BIOL 636 Biochemistry I

- Psychology. Satisfied by one of the following:
  - PSYC 104 General Psychology
  - or PSYC 105 General Psychology, Honors

- Sociology. Satisfied by one of the following:
  - SOC 104 Elements of Sociology
  - SOC 105 Elements of Sociology, Honors
  - SOC 160 Social Problems and American Values
  - SOC 161 Social Problems and American Values, Honors

For more information, visit the website (https://medadvising.ku.edu). Call 785-864-2834 to schedule an orientation or application meeting with the premedical advisor.

Preoptometry

Preoptometry is a career interest rather than a major or formal program. Students prepare by taking courses to meet optometry school admission requirements, studying to learn concepts and perform well academically, and shadowing or working in optometry practices. They take the Optometry Admission Test (https://www.ada.org/oat) (OAT) and apply for admission to optometry schools, usually in the summer between the junior and senior year. Most people complete an undergraduate bachelor’s degree and major before entering optometry school.

Optometry schooling is four years of graduate-level, professional education and training. There is no optometry school in Kansas, however, there are agreements for some seats for Kansas residents at the University of Missouri—St. Louis School of Optometry, Northeastern State University of Oklahoma College of Optometry, and the Southern College of Optometry in Tennessee.

Most optometry schools require:

- English Composition I. Satisfied by:
  - ENGL 101 Composition
  - or ENGL 105 Freshman Honors English

- English Composition II. Satisfied by:
  - ENGL 102 Critical Reading and Writing
  - or ENGL 205 Freshman-Sophomore Honors Proseminar: ________

- Biology I with Lab. Satisfied by:
  - BIOL 150 Principles of Molecular and Cellular Biology

- or BIOL 151 Principles of Molecular and Cellular Biology, Honors

- or BIOL 152 Principles of Organismal Biology
- or BIOL 153 Principles of Organismal Biology, Honors

General Chemistry I with Lab. Satisfied by one of the following:

- CHEM 130 General Chemistry I
- CHEM 170 Chemistry for the Chemical Sciences I
- CHEM 190 Foundations of Chemistry I, Honors

General Chemistry II with Lab. Satisfied by one of the following:

- CHEM 135 General Chemistry II
- CHEM 175 Chemistry for the Chemical Sciences II
- CHEM 195 Foundations of Chemistry II, Honors

- Physics I with Lab. Satisfied by one of the following: 4-5
  - PHSX 114 College Physics I
  - PHSX 211 General Physics I
  - & PHSX 216 and General Physics I Laboratory
  - PHSX 213 General Physics I Honors

- Physics II with Lab. Satisfied by one of the following: 4
  - PHSX 115 College Physics II
  - PHSX 212 General Physics II
  - & PHSX 236 and General Physics II Laboratory
  - PHSX 214 General Physics II Honors

- Calculus I: Satisfied by one of the following: 3-5
  - MATH 115 Calculus I
  - MATH 121 Calculus I
  - MATH 141 Calculus I: Honors

- Microbiology with Lab. Satisfied by one of the following: 5
  - BIOL 400 Fundamentals of Microbiology
  - & BIOL 402 and Fundamentals of Microbiology Laboratory
  - BIOL 401 Fundamentals of Microbiology, Honors
  - & BIOL 402 and Fundamentals of Microbiology Laboratory

- Organic Chemistry with Lab. Satisfied by one of the following: 5
  - CHEM 310 Fundamentals of Organic Chemistry
  - & CHEM 331 and Organic Chemistry I Laboratory
  - CHEM 330 Organic Chemistry I
  - & CHEM 331 and Organic Chemistry I Laboratory
  - CHEM 380 Organic Chemistry I, Honors
  - & CHEM 331 and Organic Chemistry I Laboratory

- Psychology. Satisfied by:
  - PSYC 104 General Psychology
  - or PSYC 105 General Psychology, Honors

- Statistics. Satisfied by: 3
  - PSYC 210 Statistics in Psychological Research
  - PSYC 211 Statistics in Psychological Research, Honors
  - MATH 365 Elementary Statistics
  - BIOL 570 Introduction to Biostatistics

Most also require or recommend:

- Anatomy with lab: Satisfied by one of the following:
  - BIOL 240 Fundamentals of Human Anatomy
  - & BIOL 241 and Human Anatomy Observation Laboratory

- Biochemistry: Satisfied by:
  - BIOL 600 Introductory Biochemistry, Lectures
The Kansas State College of Veterinary Medicine requires:

- Kansas State College of Veterinary Medicine.
- Education and training. The only veterinary school in Kansas is the Veterinary schooling is four years of graduate-level, professional school.

Undergraduate bachelor's degree and major before entering veterinary summer between the junior and senior year. Most people complete an (GRE) and apply for admission to veterinary schools, usually in the well academically, and shadowing or working in veterinary practices.

Preveterinary medicine is a career interest rather than a major or Preveterinary Medicine

Preveterinary medicine is a career interest rather than a major or formal program. Students prepare by taking courses to meet veterinary school admission requirements, studying to learn concepts and perform well academically, and shadowing or working in veterinary practices. They take the Graduate Record Examination (http://www.ets.org/gre) (GRE) and apply for admission to veterinary schools, usually in the summer between the junior and senior year. Most people complete an undergraduate bachelor's degree and major before entering veterinary school.

Veterinary schooling is four years of grade-level, professional education and training. The only veterinary school in Kansas is the Kansas State College of Veterinary Medicine.

The Kansas State College of Veterinary Medicine requires:

English Composition I. Satisfied by:

- ENGL 101 Composition 3
- or ENGL 105 Freshman Honors English

English Composition II. Satisfied by:

- ENGL 102 Critical Reading and Writing 3
- or ENGL 205 Freshman-Sophomore Honors Proseminar: __________

Public Speaking, Satisfied by:

- COMS 130 Speaker-Audience Communication 3
- or COMS 131 Speaker-Audience Communication, Honors

Chemistry I with Lab. Satisfied by one of the following: 5

- CHEM 130 General Chemistry I
- CHEM 170 Chemistry for the Chemical Sciences I
- CHEM 190 Foundations of Chemistry I, Honors

Chemistry II with Lab. Satisfied by one of the following: 5

- CHEM 135 General Chemistry II
- CHEM 175 Chemistry for the Chemical Sciences II
- CHEM 195 Foundations of Chemistry II, Honors

General Organic Chemistry with Lab. Satisfied by one of the following: 5

- CHEM 310 Fundamentals of Organic Chemistry & CHEM 331 and Organic Chemistry I Laboratory
- CHEM 330 Organic Chemistry I & CHEM 331 and Organic Chemistry I Laboratory
- CHEM 380 Organic Chemistry I, Honors & CHEM 331 and Organic Chemistry I Laboratory
- General Biochemistry. Satisfied by one of the following: 4-6
- BIOL 600 Introductory Biochemistry, Lectures

Some require additional mathematics, psychology, and/or other courses.

For more information, visit the website (https://medadvising.ku.edu). Call 785-864-2834 to schedule an orientation or application meeting with the premedical advisor.

Department of Psychology

Why study psychology?

Because the understanding of mind, behavior, and the human experience is best achieved through the rigorous application of the scientific method.

Undergraduate Programs

Undergraduate courses are designed as part of a general education, for students preparing for careers in professional fields, and for students majoring in psychology, including those anticipating graduate work.

Preparation for Graduate Study

Students who plan to apply for graduate work in psychology should supplement their beginning course in methodology (PSYC 200/PSYC 201) and statistics (PSYC 210/PSYC 211) with a laboratory course (e.g., PSYC 618, PSYC 620, PSYC 622, PSYC 624, or PSYC 625). Methods (PSYC 200/PSYC 201) and Statistics (PSYC 210/PSYC 211) should be taken as early as possible in the undergraduate education. The laboratory course should be completed during the junior or senior year.

Preparation for Graduate Study

Students who plan to apply for graduate work in psychology should supplement their beginning course in methodology (PSYC 200/PSYC 201) and statistics (PSYC 210/PSYC 211) with a laboratory course (e.g., PSYC 618, PSYC 620, PSYC 622, PSYC 624, or PSYC 625). Methods (PSYC 200/PSYC 201) and Statistics (PSYC 210/PSYC 211) should be
taken as early as possible in the undergraduate education. The laboratory course should be completed during the junior or senior year.

**Graduate Programs**

The department offers a single doctoral degree in psychology, which may be earned in social, cognitive, quantitative, developmental, or clinical psychology. Students enter with the expectation of earning the Ph.D. The department does not admit students seeking the terminal master's degree. The department cooperates with related departments in joint Ph.D. programs in clinical child psychology (http://child.ku.edu), behavioral psychology, (http://www.absc.ku.edu) and child language (http://www.clp.ku.edu).

**Dual-title Ph.D. in Psychology and Gerontology**

This dual-title degree is an option available to students who have first been admitted to the doctoral program. The dual-title degree allows the pursuit of a single degree that incorporates study within a traditional discipline and training in an interdisciplinary field; the student is awarded one degree (Ph.D.) with both titles identified on the diploma (e.g., “Ph.D. in Psychology and Gerontology”).

This option is designed to appeal to students who are strong in a traditional discipline but also motivated to study across disciplinary lines. In the course of study, students can avail themselves of disciplinary depth and interdisciplinary breadth. At the post-doctoral stage, dual-title graduates will have enhanced career and employment opportunities, able to claim expertise in one or both titles of their degree when seeking positions in education and research.

More information about this option, its admissions requirements, and plan of study can be found on the department website or the website of the Gerontology program.

**Courses**

**PSYC 102. Orientation Seminar in Psychology. 1 Hour. S.**

Provides an overview of the discipline of psychology. Emphasizes developing an understanding of opportunities in psychology at the University of Kansas, exploring service-learning options related to the major, and helping students plan goals for their education through an understanding of their personal values and options within and outside the discipline. Open to KU-degree-seeking students only. Contact the Psychology Department to enroll in the course. Non-degree-seeking and non-KU students may enroll in the course by signing up with KU Continuing Education. Graded on a satisfactory/unsatisfactory basis. LEC.

**PSYC 104. General Psychology. 3 Hours. SI GE3S / S.**

A basic introduction to the science of psychology. LEC.

**PSYC 105. General Psychology, Honors. 3 Hours. SI GE3S / S.**

Open to students in College or Departmental Honors programs or by permission of instructor. LEC.

**PSYC 120. Personality. 3 Hours. SI GE3S / S.**

An introductory survey of personality theories, development, assessment and current research. LEC.

**PSYC 121. Personality, Honors. 3 Hours. SI GE3S / S.**

Open to students in College or Departmental Honors programs or by permission of instructor. LEC.

**PSYC 177. First Year Seminar:_____ 3 Hours. SI GE11.**

A limited-enrollment, seminar course for first-time freshmen, organized around current issues in psychology. May not contribute to major requirements in psychology. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

**PSYC 200. Research Methods in Psychology. 3 Hours. S.**

An examination of the scientific "ways of knowing" employed by psychologists to discover the laws governing human behavior across a wide domain. The focus of the course is upon these methods and the statistical techniques that support them. Prerequisite: PSYC 104 and MATH 101 or equivalent placement. LEC.

**PSYC 201. Research Methods in Psychology, Honors. 3 Hours. S.**

An examination of the scientific "ways of knowing" employed by psychologists to discover the laws governing human behavior across a wide domain. The focus of the course is upon these methods and the statistical techniques that support them. Open to students in University and Departmental Honors programs or by permission of instructor. Not open to students taking PSYC 200. Prerequisite: PSYC 104 and MATH 101. LEC.

**PSYC 202. Study Abroad Topics in:_____. 1-4 Hours. S.**

This course is designed for the study of special topics in Psychology. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

**PSYC 210. Statistics in Psychological Research. 3 Hours. S.**

An introduction to statistical concepts and methods as they relate to analysis and interpretation of psychological data. Prerequisite: PSYC 104 and MATH 101 or equivalent placement. LEC.

**PSYC 211. Statistics in Psychological Research, Honors. 3 Hours. S.**

An introduction to statistical concepts and methods as they relate to analysis and interpretation of psychological data. Open only to student in University and Departmental Honors programs or by permission of instructor. Not open to students who have taken PSYC 210. Prerequisite: PSYC 104 and MATH 101 or equivalent placement. LEC.

**PSYC 318. Cognitive Psychology. 3 Hours. S.**

An introduction to contemporary research and theory in human learning and memory, relevant perceptual processes, and higher functions such as language. Prerequisite: PSYC 104 and one of the following: PSYC 200, PSYC 201, PSYC 210, PSYC 211, MATH 101, MATH 104 or equivalent placement. LEC.

**PSYC 319. Cognitive Psychology, Honors. 3 Hours. S.**

Open to students in University or Departmental Honors programs or by permission of instructor. Prerequisite: PSYC 104 and one of the following: PSYC 200, PSYC 201, PSYC 210, PSYC 211, MATH 101, MATH 104 or exemption based on ACT or SAT score. LEC.

**PSYC 333. Child Development. 3 Hours. S.**

A survey course on the science and application of child and adolescent development; including physical, motoric, social, emotional, and cognitive changes from conception through adolescence. The course covers methods and theory, genetics, and may incorporate content on aggression, morality, parenting, media, and peers. Prerequisite: PSYC 104 and one of the following: PSYC 200, PSYC 201, PSYC 210, PSYC 211, MATH 101, MATH 104 or exemption based on ACT or SAT score. LEC.

**PSYC 334. Child Development, Honors. 3 Hours. S.**

A survey course on the science and application of child and adolescent development; including physical, motoric, social, emotional, and cognitive changes from conception through adolescence. The course covers methods and theory, genetics, and may incorporate content on aggression, morality, parenting, media, and peers. Open to students in University or Departmental Honors Programs or by permission of
instructor. Prerequisite: PSYC 104 and one of the following: PSYC 200, PSYC 201, PSYC 210, PSYC 211, MATH 101, MATH 104 or exemption based on ACT or SAT score. LEC.

PSYC 350. Abnormal Psychology. 3 Hours. S.
An examination of psychopathology including anxiety disorders, psycho-physiological disorders, affective disorders, and schizophrenic disorders. Disorders are considered from psychodynamic, behavioral, cognitive, and biological perspectives. Prerequisite: PSYC 104. LEC.

PSYC 351. Abnormal Psychology, Honors. 3 Hours. S.
Open to students in College or Departmental Honors programs or by permission of instructor. Prerequisite: PSYC 104. LEC.

PSYC 360. Social Psychology. 3 Hours. S.
An introduction to the psychology of social behavior. Systematic consideration of such concepts as social influence, conformity and deviation, social attitudes and prejudice, socialization and personality, communication and propaganda, morale, and leadership. Open to students in University or Departmental Honors programs or by permission of instructor. Prerequisite: PSYC 104 and one of the following: PSYC 200, PSYC 201, PSYC 210, PSYC 211, MATH 101, MATH 104 or exemption based on ACT or SAT score. LEC.

PSYC 361. Social Psychology, Honors. 3 Hours. S.
An introduction to the psychology of social behavior. Systematic consideration of such concepts as social influence, conformity and deviation, social attitudes and prejudice, socialization and personality, communication and propaganda, morale, and leadership. Open to students in University or Departmental Honors programs or by permission of instructor. Prerequisite: PSYC 104 and one of the following: PSYC 200, PSYC 201, PSYC 210, PSYC 211, MATH 101, MATH 104 or exemption based on ACT or SAT score. LEC.

PSYC 370. Behavioral Neuroscience. 3 Hours. N.
A survey of topics related to the biological processes underlying behavior in humans and in animals, including the physiology of neuronal and synaptic transmission, neurochemistry, and neuropharmacology. Selected topics within the area of behavioral neuroscience are also covered, such as motivation, appetite, reward, homeostasis, biological rhythms, addiction, aggression, stress, emotion, and sleep. Prerequisite: An introductory course in Psychology; an introductory course in Biology; and PSYC 200 or PSYC 210 and PSYC 211. LEC.

PSYC 371. Behavior Neuroscience, Honors. 3 Hours. N.
A survey of basic topics related to the biological processes underlying behavior in humans and in animals, including the physiology of neuronal and synaptic transmission, neurochemistry, and neuropharmacology. Selected topics within the area of behavioral neuroscience are also covered, such as motivation, appetite, reward, homeostasis, biological rhythms, addiction, aggression, stress, emotion, and sleep. Open to students in University or Departmental Honors programs or by permission of instructor. Prerequisite: An introductory course in Psychology; an introductory course in Biology and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211. LEC.

PSYC 375. Cognitive Neuroscience. 3 Hours. N.
A survey of topics related to the biological processes underlying cognition in humans and in animals, including the physiology of neuronal and synaptic transmission, neurochemistry, and functional neuroanatomy. Selected topics within the area of cognitive neuroscience also covered, such as sensory processing, hearing, vision, learning and memory, attention, motor control, language, hemispheric asymmetry, executive function, and neuroplasticity. Prerequisite: An introductory course in Psychology; an introductory course in Biology; and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211. LEC.

PSYC 380. Clinical Neuroscience. 3 Hours. N.
The organization and function of the nervous system as it relates to topics of interest to psychologists, including pain, anxiety, stress, sleep, depression, schizophrenia, akinetic and dyskinetic movement disorders, and senile dementia. Prerequisite: An introductory course in Psychology, an introductory course in Biology, and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211. LEC.

PSYC 381. Clinical Neuroscience, Honors. 3 Hours. N.
The organization and function of the nervous system as it relates to topics of interest to psychologists, including pain, anxiety, stress, sleep, depression, schizophrenia, akinetic and dyskinetic movement disorders, and senile dementia. Open to students in University or Departmental Honors programs or by permission of instructor. Prerequisite: An introductory course in Psychology, an introductory course in Biology, and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211. LEC.

PSYC 402. Study Abroad Topics in: ____. 1-4 Hours. S.
This course is designed for the study of special topics in Psychology equivalent to courses at the 300 to 600 level at KU. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

PSYC 405. Children and Media. 3 Hours. H.
The applied study of child development theories and research methods on the influences and effects of television and related visual media on childhood in the contexts of families, schools, and society. (Same as ABSC 405 and THR 405.) LEC.

PSYC 406. Individual Differences. 3 Hours. S.
A survey of the nature and sources of differences in human behavior and a consideration of the consequences of these differences for society. Prerequisite: PSYC 104. LEC.

PSYC 410. Intimate Relationships. 3 Hours. S.
A social psychological perspective on adult intimate relationships, examining friendship, dating, committed relationships, and the dissolution of committed relationships. Topics include romance, jealousy, self-disclosure, power, loneliness, and social support. Discussion of heterosexual and homosexual relationships, traditional forms (e.g., marriage) of relationships as well as alternative lifestyles (e.g. cohabitation) and gender-linked differences in relationships. Prerequisite: PSYC 104. LEC.

PSYC 415. Social and Cultural Sources of Self. 3 Hours. S.
An interdisciplinary exploration of the social and cultural sources of self-experience. The first part of the course emphasizes a general process: how the development and experience of self, though it might seem essentially personal, is shaped by social interaction. The second part of the course highlights particular cases: how self-experience may be constructed differently depending on the particular social and cultural settings a person inhabits. Cases include influences of gender, socioeconomic status, and age group on the construction of self-experience within societies from around the world, and ethnic-identity groups within the USA. Prerequisite: PSYC 104. LEC.

PSYC 418. Introduction to Cognitive Science. 3 Hours. S.
Examines the data and methodologies of the disciplines that comprise Cognitive Science, an inter-disciplinary approach to studying the mind and brain. Topics may include: consciousness, artificial intelligence, linguistics, education and instruction, neural networks, philosophy, psychology, anthropology, evolutionary theory, cognitive neuroscience, human-computer interaction, and robotics. (Same as LING 418, PHIL 418, and SPLH 418.) Prerequisite: Consent of instructor. LEC.
PSYC 420. Fundamentals of Personality. 3 Hours. S.
Clinical application of personality theories; personality development and assessment research. Prerequisite: PSYC 104. LEC.

PSYC 430. Cognitive Development. 3 Hours. S.
A basic survey course in the development of thinking and understanding in normal children. The course will cover Piaget's theory and information processing theories at the advanced undergraduate level. Topics include perception, attention, learning, memory, language, problem solving, and individual differences from birth to the mid-teens. Prerequisite: PSYC 104 or ABSH/HDFL 160. LEC.

PSYC 432. Human Behavioral Genetics. 3 Hours. S.
A survey of human behavioral genetics for upper division undergraduates. Emphasis is on how the methods and theories of quantitative, population, medical, and molecular genetics can be applied to individual and group differences in humans. Both normal and abnormal behaviors are covered, including intelligence, mental retardation, language and language disorders, communication, learning, personality, and psychopathology. (Same as ANTH 447, BIOL 432, SPLH 432.) Prerequisite: Introductory courses in biology/genetics or biological anthropology and psychology are recommended. LEC.

PSYC 435. Social and Personality Development. 3 Hours. S.
An introduction to social and personality development with consideration of both classic and contemporary theoretical viewpoints. The role of social contexts is considered (e.g., family, peers, communities), as well as biological influences (e.g., behavioral genetics). Topics include parent-infant attachment, peer relationships, aggression, etc. Prerequisite: PSYC 104. LEC.

PSYC 449. Laboratory/Field Work in Human Biology. 1-3 Hours. AE61 / N.
Faculty supervised laboratory or field research for Human Biology majors. Students design and complete a research project in collaboration with a Human Biology faculty member. (Same as ANTH 449, BIOL 449, and SPLH 449.) Prerequisite: Consent of instructor and Human Biology major. FLD.

PSYC 453. Psychological Foundations of Musical Behavior. 3 Hours. S.
Study of human musical behavior, including basic psychoacoustic phenomena, musical taste, functional music, musical ability, cultural organization of musical sounds, and the affective response. Prerequisite: General Psychology, MGMT 370, or consent of instructor. LEC.

PSYC 460. Honors in Psychology. 1-2 Hours. AE61 / S.
A seminar for juniors and seniors in the Honors Program in Psychology. Students who have been admitted to the Honors Program in Psychology may enroll for one credit for one or both semesters of their junior year and are required to enroll for two credits for both semesters in their senior year. IND.

PSYC 465. Stereotyping and Prejudice Across Cultures. 3 Hours. S.
This course covers a variety of theoretical views concerning the origins of stereotypes and the factors that maintain them, as well as how and when the revision of such beliefs take place. Analysis of various stereotypes (including gender and race) and the experience of prejudice across a variety of cultural contexts is examined. Many difficult social issues are discussed in depth. Prerequisite: PSYC 360 or PSYC 361; or consent of instructor. LEC.

PSYC 468. Psychology of Women. 3 Hours. S.
A survey of the psychological theories about women; similarities and differences in behavior of women and men; the effects of biological and social factors on the behavior of women and men; and issues of concern to women of different races, sexual orientations, ages, and so forth. (Same as WGSS 468.) Prerequisite: PSYC 104 or WGSS 201. LEC.

PSYC 470. Introduction to Contemporary Psychotherapies. 3 Hours. S.
Review of current psychotherapies with special references to their underlying philosophies, theories of personality, techniques, and effectiveness. Issues concerning the use of drugs in the treatment of mental disorders are also reviewed. Prerequisite: PSYC 104. LEC.

PSYC 472. Psychology of Sleep and Dreaming. 3 Hours. S.
This course reviews recent evidence on the roles of dreaming and dreamless sleep. Psychological, developmental, personality, and social psychological aspects are considered. Prerequisite: PSYC 104. LEC.

PSYC 475. Cognitive Neuroscience. 3 Hours. S.
The neurobiology of higher mental processes such as perception, attention, learning, memory, thinking, and language, as studied by techniques such as recording from individual neurons, electrical brain stimulation, brain damage, and brain scans and measurements of regional cerebral blood flow in conscious people. Emphasis will be placed on in-class analysis of original research articles. Prerequisite: One of the following courses - PSYC 318, 319, 370, 371, 380, or 381; or consent of instructor. LEC.

PSYC 480. Independent Study. 1-5 Hours. U.
Investigation of a special research problem or directed reading in an area not covered in regular courses. No more than 3 hours of PSYC 480 may be counted toward the minimum hours required for the major. Prerequisite: Consent of instructor. IND.

PSYC 481. Research Practicum. 1-5 Hours. U.
Guided participation in ongoing research programs to augment quantitative skills through direct practicum experience. No more than 3 hours of PSYC 481 may be counted toward the Psychology minor or the Psychology, Developmental Psychology, and Behavioral Neuroscience major requirements. Prerequisite: PSYC 200 or PSYC 201 or PSYC 210 or PSYC 211 or consent of instructor. RSH.

PSYC 482. Sensation and Perception. 3 Hours. S.
Introduction to human sensory and perceptual capabilities. Topics include: sensory systems, perceptual development, and perceiving color, objects, space, movement, sound, speech, touch, smell, and taste as well as various perceptual illusions. Prerequisite: PSYC 104. LEC.

PSYC 483. Undergraduate Internship in Psychology. 1-3 Hours. U.
Students conduct psychology focused fieldwork in an organization related to their professional/career goals. Credit hours are determined on the basis of 120 clock hours for 3 credit hours, 80 clock hours for 2 credit hours, and 40 clock hours for 1 credit hour. An internship plan (contract) is developed by the student in conjunction with the student's academic adviser and signed off by the academic adviser and an authorized agent of the internship site. At the conclusion of the internship experience, the authorized agent of the internship site writes the academic adviser indicating that the student has met the goals of the internship plan and the hours required. No more than 3 hours of PSYC 483 may be counted toward the minimum hours required for the major. Prerequisite: Admission to the Psychology major. FLD.

PSYC 490. Theories and Concepts of Child Development. 3 Hours. S.
An advanced course in the theories and basic concepts of child development. Coverage includes: (a) analyses of the general logic, assumptions, and principles of the five major approaches: normative-maturational, psychoanalytic, social learning theory, cognitive-developmental, and behavior analysis; (b) historical background of developmental theory; (c) social-cultural influences on theory construction; and (d) some cross-cultural perspectives. Not open to students previously
enrolled in HDFL 290. Prerequisite: PSYC 104, or HDFL 160, HDFL 161, HDFL 432, or consent of instructor. LEC.

PSYC 492. Psychology and Social Issues. 3 Hours. S.
A study of psychological aspects of selected social issues in contemporary American society. Race relations and the civil rights movement, Political extremism, Public opinion and social change. Social psychological approaches to a variety of social problems. Prerequisite: PSYC 360 or 361, or consent of instructor. LEC.

PSYC 499. Conceptual Issues in Psychology. 3 Hours. S.
This course examines classic issues in psychology--free-will and determinism, nature and nurture, the mind-body problem, approaches to human action, cultural influences on psychological theories, the evolution of intellectual paradigms, and inductive and deductive approaches to social scientific research--from multiple perspectives within psychology and related social sciences. Prerequisite: PSYC 104 or equivalent. LEC.

PSYC 500. Intermediate Statistics in Psychological Research. 3 Hours. U.
A second course in statistics with emphasis on applications. Analysis of variance, regression, analysis, analysis of contingency tables; possibly selected further topics. Prerequisite: Grade of B- or better in PSYC 210 or PSYC 211. LEC.

PSYC 502. Human Sexuality. 3 Hours. S.
An introduction to the field of human sexuality. Topics to be covered include sexual anatomy and physiology, fertilization, pregnancy, birth and lactation, contraception, human sexual response, sexuality across the life cycle, love, marriage, alternatives to marriage, sexual orientation, sex differences in behavior, parenthood, sexually transmitted diseases, sex and the law, and sex education. Prerequisite: PSYC 104. LEC.

PSYC 511. Laboratory Research in Infant Behavior. 3 Hours. S.
Optional course for students currently enrolled in PSYC 510 or may be taken after completion of PSYC 510. Will offer students practical experience in an infant research laboratory. Students must spend a minimum of nine hours a week (on three different half days) in laboratory. They will learn to observe and record infant behavior, to handle data from experiments and participate in the planning and discussion of laboratory research. Acquaintance with and involvement in the issues of obtaining informed consent and ethical aspects of infant research will be included. Prerequisite: Current enrollment or previous enrollment in PSYC 510 and consent of instructor. LAB.

PSYC 518. Human Memory. 3 Hours. S.
In-depth coverage of human memory phenomena, including phenomena concerning acquisition, storage and retrieval, unconscious forms of memory, memory monitoring and control, and practical aspects of memory such as autobiographical memory, mnemonic techniques and eyewitness memory. Prerequisite: PSYC 104. LEC.

PSYC 520. Memory and Eyewitness Testimony in Children. 3 Hours. S.
A review of the literature on the development of memory in young children, and the implications of this research for understanding children's eyewitness testimony. The course will present current research on children's long-term memory abilities, the impact of stress on recall performance, the effectiveness of various types of interviewing techniques, and the suggestibility of children's recollections. Policy issues and potential guidelines for the elicitation and evaluation of children's memory reports in both clinical and legal arenas will be discussed. Prerequisite: PSYC 104 or ABSC/HDFL 160, or consent of instructor. LEC.

PSYC 521. Women and Violence. 3 Hours. S.
An examination of research on women and violence, including rape, domestic violence, sexual harassment, stalking, and child sexual abuse. The nature, prevalence, causes, and consequences of violence against women are discussed. (Same as WGSS 521.) Prerequisite: PSYC 104. LEC.

PSYC 531. Language Development. 3 Hours. S.
Introduction to the study of language development; emphasis on the psychological processes underlying syntactic, semantic, and pragmatic aspects of language development in children. Prerequisite: One of the following courses - PSYC 318, 319, 333, or 334; or consent of instructor. LEC.

PSYC 535. Developmental Psychopathology. 3 Hours. S.
A review of the literature on contemporary psychological and developmental disorders of children and youth. Course will present current models of psychopathology, classification systems, assessment methods, and treatment approaches designed for the individual, the family, and the community. Specific attention will be given to age, gender, and cultural differences and similarities. Topics include: anxiety disorders, oppositional behavior disorders, physical/sexual abuse, learning disabilities, and autism. (Same as ABSC 535.) Prerequisite: ABSC 160, PSYC 333, or consent of instructor. LEC.

PSYC 536. The Psychology of Language. 3 Hours. S.
A survey of recent research on psycholinguistics covering the perception, production, and comprehension of language. Topics include: the biological basis for language, the nature of comprehension processes, and memory for the syntactic, semantic, and pragmatic components of language. Prerequisite: One of the following courses - PSYC 318, 319, 333, or 334; or consent of instructor. LEC.

PSYC 545. Culture and Psychology. 3 Hours. S.
The course considers the relationship between culture and psyche. One theme throughout the course involves revealing the cultural grounding of psychological functioning. The second and complementary theme involves identifying the psychological processes involved in the phenomenon of culture. Prerequisite: PSYC 333, 334, 360 or 361 or consent of instructor. LEC.

PSYC 555. Evolutionary Psychology. 3 Hours. S.
A review of evolutionary theory and its application to human personality, cognition, interpersonal relationships, family dynamics, and development. Prerequisite: PSYC 104 and at least 3 additional hours in Psychology, or consent of instructor. LEC.

PSYC 565. Applied Developmental Psychology. 3 Hours. S.
An advanced study of the application of theories and concepts of developmental and behavioral psychology to a range of specific issues and problems of childhood and adolescence. This course will rely heavily upon the empirical research literature. Topics include contemporary social issues and child development, research in applied settings, assessment, intervention, and prevention, as well as program evaluation. (Same as ABSC 565.) Prerequisite: ABSC 160 or PSYC 333, and ABSC/PSYC 535. LEC.

PSYC 566. Psychology and the Law. 3 Hours. S.
An application of psychological processes and concepts to the American legal system. Among the topics covered are the socialization of legal attitudes, opinions about the purposes of the criminal justice system and especially of prisons, the concept of "dangerousness," the nature of jury decision making, and the rights of prisoners, patients, and children. LEC.

PSYC 570. Group Dynamics. 3 Hours. S.
A study of the processes underlying the dynamics of the group, including the observation of group phenomena and a consideration of their relation
to research findings. Prerequisite: PSYC 360 or 361, or consent of instructor. LEC.

**PSYC 572. Psychology and International Conflict. 3 Hours. S.**  
A study of psychological approaches to analysis and intervention in the field of international conflict and peace-making. Focus on major contributions and important paradigms for explanation and action. Prerequisite: PSYC 360 or consent of instructor. Background study in international relations or recent world history desirable. LEC.

**PSYC 578. Social Attitudes. 3 Hours. S.**  
An introduction to the study of attitudes focusing on problems of measurement and on empirical findings and theories of attitude acquisition and change. Prerequisite: PSYC 360, 361, or consent of instructor. LEC.

**PSYC 580. Research Lab. 1-5 Hours. S.**  
Supervised research under the guidance of a faculty member in the Department of Psychology. Students will be part of a collaborative laboratory environment, and will be involved in research design, data collection, and data analysis, and will take part in regularly scheduled laboratory meetings. Prerequisite: Permission of instructor. LEC.

**PSYC 581. Psychology of Religion. 3 Hours. S.**  
Consideration of the psychological antecedents of religious experience, the nature of religious experience, and the behavioral consequences of religion. Focus will be on psychological theory and research relevant to religious thought, feeling, belief, and behavior. (Same as REL 581.) Prerequisite: PSYC 104. LEC.

**PSYC 590. Nonverbal Communication. 3 Hours. S.**  
Examination of non-linguistic behavior in human communication, including proxemics (spacing), kinesics (movement and expression), and paralinguistics (voice quality). Includes phylogenetic and developmental perspectives, methods of analysis, applications to interpersonal problems. (Same as COMS 590.) Prerequisite: COMS 356 or PSYC 210 or PSYC 211. LEC.

**PSYC 592. Psychological Significance of Physical Illness and Disability. 3 Hours. S.**  
A lecture course to help students become more aware of and responsive to the psychological needs of persons with physical illnesses or disabilities. Emphasis is upon the meanings of such conditions in individuals' lives and the effects of treatment and rehabilitation settings on psychological adaptation. Prerequisite: PSYC 104. LEC.

**PSYC 598. Positive Psychology. 3 Hours. S.**  
An introduction to the core assumptions and research findings associated with human strengths and positive emotions. Also an exploration of interventions and applications informed by positive psychology in counseling and psychotherapy, and its application to school, work, family and other close relationships. (Same as EPSY 580.) Prerequisite: PSYC 104 or consent of instructor. LEC.

**PSYC 602. Basis and Nature of Individuality. 3 Hours. S.**  
Individuality in cognitive and personality attributes is surveyed, and analyzed by current psychological theory. The course includes topics on the structure of intellect and personality, cognitive theory, brain research and behavior genetics as relevant to the understanding of individuality. Prerequisite: An introductory course in psychology. LEC.

**PSYC 605. Health Psychology. 3 Hours. S.**  
Review of research and theory concerning the role of psychological factors in the development of physical illness and the contribution of psychologists to the treatment and prevention of physical illness. Prerequisite: PSYC 104. LEC.

**PSYC 608. Sex Role Development. 3 Hours. S.**  
An examination of the theory and literature on sex role development in childhood, adolescence, and adulthood. Particular attention is given to approaches stressing androgyny and variations on traditional roles. Processes of socialization into both traditional and non-traditional roles are stressed. Literature on females is emphasized, but male sex role development is also covered. Prerequisite: PSYC 104 or HDFL 160. LEC.

**PSYC 610. Advanced Personality. 3 Hours. S.**  
A survey of selected topics in the area of personality (e.g., defense mechanisms, aggression, interpersonal relations). Prerequisite: PSYC 120 or PSYC 420 or consent of instructor. LEC.

**PSYC 613. History and Systems in Psychology. 3 Hours. S.**  
A survey of the historical development of modern theoretical systems in psychology. Prerequisite: PSYC 104, plus twelve hours in psychology. LEC.

**PSYC 616. Foundations of Learning. 3 Hours. S.**  
A consideration of experimental findings and theories concerning classical and instrumental conditioning. Prerequisite: PSYC 104. LEC.

**PSYC 618. Experimental Psychology: Human Learning. 6 Hours. AE61 / S.**  
Lectures and laboratory research on human information processing as related to theories of word recognition, reading, and language comprehension. Major emphasis on experimental design, data analysis, interpretation, and scientific writing. Prerequisite: PSYC 104 and PSYC 210 or PSYC 211 or consent of instructor. LEC.

**PSYC 620. Experimental Psychology: Sensation, Perception, and Cognition. 6 Hours. AE61 / S.**  
Lectures and laboratory work on human sensory processes and how they result in perceptions of the environment. Experience is provided in designing and implementing research as well as in the skills necessary for statistical analysis, interpretation of data, and scientific writing. Prerequisite: PSYC 104 and PSYC 210 or PSYC 211 or consent of instructor. LEC.

**PSYC 622. Experimental Psychology: Social Behavior. 6 Hours. AE61 / S.**  
Lectures, laboratory and field work on various issues in research in social psychology (e.g., conformity, attitude change, social processes). Two two-hour periods a week and appointment for research. Prerequisite: PSYC 104, PSYC 360, and PSYC 210 or PSYC 211 or consent of instructor. LEC.

**PSYC 624. Experimental Psychology: Clinical Psychology. 6 Hours. AE61 / S.**  
Lectures and laboratory research on contemporary issues in clinical psychology. Emphasis on experimental design, data analysis, interpretation of data, and scientific writing. Prerequisite: PSYC 104 and PSYC 210 or PSYC 211 or consent of instructor. LEC.

**PSYC 625. Experimental Psychology: Methods in Neuropsychology and Psychophysiology. 6 Hours. AE61 / S.**  
Lectures and laboratory work on psychophysiology and neuropsychology research methods. Overview of psychophysiological tools to measure the central and peripheral nervous systems. Experience designing and implementing neuropsychology and psychophysiology research. Prerequisite: PSYC 104 and PSYC 210 or PSYC 211 or consent of instructor. LEC.

**PSYC 626. Psychology of Adolescence. 3 Hours. S.**  
Impact of factors of social environment and physical growth upon psychological development from puberty to young adulthood. (Same as
ABSC 626.) Prerequisite: PSYC 104, PSYC 333, or HDFL/ABSC 160. LEC.

PSYC 630. Clinical Psychology. 3 Hours. S.
The historical and empirical foundations of clinical psychology. Significant trends in theory, research, and social organization which have shaped clinical practice. A review of clinical practice. Prerequisite: PSYC 104. LEC.

PSYC 632. Advanced Child Behavior and Development. 3 Hours. S.
An advanced course in child development that includes a survey of the field's principles and theoretical approaches, and current issues in research and practice. Topics will include: prenatal development, cognition and language, social-emotional development, socialization influences in childhood, developmental psychopathology, and social policies. (Same as ABSC 632.) Prerequisite: ABSC/HD PL 160, PSYC 333, or instructor permission, and senior or graduate status. LEC.

PSYC 642. The Psychology of Families. 3 Hours. S.
Study of the family as a psychosocial system. Emphasis is placed on factors affecting contemporary families including family structures, development, communication patterns, disorders, and treatment approaches. Theory, empirical evidence, and practical principles that may lead to maximizing individual growth in the family unit are discussed. Prerequisite: PSYC 104. LEC.

PSYC 644. Behavioral Pharmacology. 3 Hours. S.
Addresses psychological and behavioral effects of drugs, including psychotropic medications. A central theme is that effects of drugs frequently cannot be characterized solely from a pharmacological perspective. Thus, emphasis is placed on examining the interaction of pharmacological and behavioral variables. For example, how do psychological factors moderate responses to drugs? The nature of this area assumes some knowledge of general psychology, research methods, biology, chemistry, neurophysiology, and the nervous system. Prerequisite: PSYC 104 or consent of instructor. LEC.

PSYC 646. Mental Health and Aging. 3 Hours. S.
Reviews recent research and application in the field of mental health and aging. Theoretical perspectives appropriate for understanding mental health issues with increased age are discussed. The epidemiology, assessment, diagnosis, and treatment methods associated with a variety of mental health conditions are surveyed. The community mental health resources available for older adults are discussed as well as practically-related issues such as evaluations of functional independence and competency among older adults. Prerequisite: PSYC 104 or consent of instructor. LEC.

PSYC 650. Statistical Methods in Behavioral and Social Science Research I. 4 Hours. S.
Elementary distribution theory; t-test; simple regression and correlation; multiple regression and multiple correlation; curvilinear regression; logistic regression; general linear model. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 790 will have different course requirements. Prerequisite: A grade of B- or better in a beginning course in statistics (e.g., PSYC 210 or PSYC 211, MATH 365, POLS 306, COMS 356, SOC 510, or equivalent) is recommended, or consent of instructor. LEC.

PSYC 651. Anova and Other Factorial Designs. 4 Hours. S.
Course covers one-way analysis of variance, linear trends, contrasts, post hoc tests; multi-way analysis of variance for crossed, blocked, nested, and incomplete designs; analysis of covariance; repeated measures analysis of variance; general linear model. Applications across the social, educational, and behavior sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 791 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor. LEC.

PSYC 652. Behavior Therapy. 3 Hours. S.
A review of the principal techniques of behavior therapy, exclusive of operant-based therapies. Emphasis upon systematic desensitization, implosion, assertion training, and modeling techniques. Special attention given to outcome research relevant to the effectiveness of these techniques. Recommended: A course in abnormal psychology. Prerequisite: PSYC 104. LEC.

PSYC 678. Drugs and Behavior. 3 Hours. S.
A survey of the methods used to study the effects of drugs on behavior, and of the effect of selected drugs on behavior, particularly the narcotics, hallucinogens, and drugs used in the treatment of mental illness. Prerequisite: PSYC 104. LEC.

PSYC 679. Applied Nonparametric Statistical Methods. 4 Hours. S.
This course covers nonparametric statistical methods for testing hypotheses. Topics include a review of parametric statistics, sampling distributions, hypothesis testing, and motivations for using nonparametric techniques. In-depth coverage is given to distribution-free procedures, goodness-of-fit tests, resampling methods, and theory underlying nonparametric methods. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 879 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor. LEC.

PSYC 685. Human Factors Psychology. 3 Hours. S.
Research techniques and methods useful in quantifying parameters of human performance that affect system functioning. Special emphasis is placed on modeling visual, auditory, and orienting systems and on human information processing. Prerequisite: PSYC 210 or PSYC 211 or consent of instructor. LEC.

PSYC 687. Factor Analysis. 4 Hours. S.
This course covers the theory behind, and application of, exploratory factor analysis. Topics include a review of multiple linear regression and matrix algebra. In-depth coverage is devoted to diagrams, model specification, goodness of fit, model selection, parameter estimation, rotation methods, scale development, and sample size and power issues. Extensions to confirmatory settings are elaborated. Both the theory underlying factor analytic techniques and hands-on application using software are emphasized. Applications across the social and behavioral sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 887 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor. LEC.

PSYC 689. Conceptual Issues in Human Sexuality. 3 Hours. S.
An examination of the social construction of sexuality and research methods and issues relevant to sexuality. These concepts are applied to various topics, such as defining and conceptualizing sex and gender, sexual dysfunction, sexual orientation, the social control of sexuality, sexual coercion and abuse, and abstinence-only sex education. The course does not cover anatomical or physiological aspects of sexuality. (Same as WGSS 689.) Prerequisite: PSYC 104 or WGSS 201. LEC.

PSYC 690. Seminar: _____ 1-5 Hours. U.
Discussion of current problems in psychological theory and research. Prerequisite: PSYC 104 and sophomore status. LEC.
PSYC 691. The Psychology of Aging. 3 Hours. S.
Social, psychological, and economic adjustments required by aging; changes in cognition, role and personality necessitated by advancing age. Prerequisite: PSYC 210 or PSYC 211 and one of the following: PSYC 318, PSYC 319, PSYC 350, PSYC 351, PSYC 360, PSYC 361, PSYC 370, PSYC 371, PSYC 380, or PSYC 381; or graduate standing; or consent of instructor. LEC.

PSYC 692. Test Theory. 4 Hours. S.
This course begins with recommendations for how to write a test, covers basics of classical test theory, and then emphasizes modern statistical methods for analyzing item data. Methods include factor analysis of categorical responses, methods for identifying measurement invariance (differential item functioning), and item response theory. Approximately one-half of the meetings are labs (primarily consisting of data analysis). The course is offered at the 600 and 800 levels with additional assignments at the 800 level. Prerequisite: PSYC 790/650 or equivalent, or consent of the instructor. LEC.

PSYC 693. Multivariate Analysis. 4 Hours. S.
Introduction to the central methods used in the analysis of multivariate data. Includes linear transformations, multivariate analysis of variance, multivariate multiple regression, discriminant analysis, canonical correlation, factor analysis, and an introduction to methods for clustering and classification. Applications across the behavior and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 893 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor. LEC.

PSYC 694. Multilevel Modeling I. 4 Hours. S.
Introduction to statistical methods for modeling multilevel (hierarchically structured) data. Topics include a review of ordinary least squares regression analysis, random effects ANOVA, intraclass correlation, multilevel regression, testing and probing interactions, maximum likelihood estimation, model assumptions, model evaluation, and the analysis of longitudinal data. Emphasis will be on the theory underlying multilevel modeling techniques and hands-on application using software. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 894 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor. LEC.

PSYC 695. Categorical Data Analysis. 4 Hours. S.
Introduction to multivariate analyses of count data, including error models, statistical inference, loglinear models, logit models, logistic regression, homogeneity, symmetry, and selected other topics. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 895 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor. LEC.

PSYC 696. Structural Equation Modeling I. 4 Hours. S.
Introduction to statistical methods for modeling latent variables. Topics include a review of latent variables, covariance structures analysis, mean structures analysis, confirmatory factor analysis (CFA), structural equation modeling (SEM), multiple group CFA, longitudinal CFA, longitudinal SEM, and hierarchical CFA. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 896 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor. LEC.

PSYC 697. Longitudinal Data Analysis. 3 Hours. S.
Reviews and contrasts various statistical models for the analysis of change. Course focuses on techniques to analyze longitudinal (repeated measures) data beyond the repeated-measures ANOVA framework. Applications across the behavioral and social sciences are emphasized. Students taking this course as PSYC 991 will have different course requirements. Prerequisite: PSYC 696 or equivalent, or consent of instructor. LEC.

PSYC 704. Research Practicum in Clinical Child Psychology. 3 Hours.
This course provides students in the Clinical Child Psychology Program with the opportunity to enhance and consolidate their research activities by fulfilling one of the elective course requirements. This practicum involves a contract with a research advisor and the program director. The contract includes definable products and dates for completion to prepare for submission for publication, develop a grant proposal, or conduct additional research project independent of other requirements in the program. The course is not to be taken as an overload, but is to be part of a full-time course schedule. May be repeated. (Same as ABSC 704, formerly HDFL 704.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. LEC.

PSYC 706. Special Topics in Clinical Child Psychology. 3 Hours.
A course offering detailed discussion of the literature and research methods of a special topic within clinical child and pediatric psychology. Topic and instructor may change by semester and will be announced in the Schedule of Classes. May be repeated. (Same as ABSC 706, formerly HDFL 706.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. LEC.

PSYC 710. Feminist Issues in Psychology. 3 Hours.
Detailed examination and discussion of psychological theory and research from a feminist perspective. Specific topics will vary. The goal of the course is to facilitate students’ ability to develop feminist critiques of existing research and theory as well as to generate nonsexist alternative approaches. Open to advanced undergraduates with consent of instructor. Prerequisite: Some familiarity with research methods in the social sciences. LEC.

PSYC 723. Advanced Cognitive Psychology. 3 Hours.
Advanced cognitive psychology reviewing theories of pattern recognition, attention, working memory, language comprehension and problem solving. Emphasis will be placed upon the application of these theories to real-life situations. Prerequisite: PSYC 104 and six additional credit hours in psychology, or permission of the instructor. LEC.

PSYC 725. Cognitive Neuroscience. 3 Hours.
A survey of the critical issues within cognitive and behavioral neuroscience. The course will provide information about neuronal physiology, functional neuroanatomy, and psychophysiological research methods. Human cognition and the neuropsychology that subserves the primary cognitive functions will be discussed. LEC.

PSYC 735. Psycholinguistics I. 3 Hours.
A detailed examination of issues in the processing of language. The course will provide a survey of research and theory in psycholinguistics, reflecting the influence of linguistic theory and experimental psychology. Spoken and written language comprehension and language production processing will be examined. (Same as LING 735.) LEC.

PSYC 737. Psycholinguistics II. 3 Hours.
An in-depth examination of selected topics in psycholinguistics. Topics may include spoken language processing, written language processing,
neurolinguistics, prosody, and syntactic processing. (Same as LING 737.) 
Prerequisite: PSYC 735/LING 735 or consent of instructor. LEC.

PSYC 750. Advanced Seminar in Gender Identity and Sexual 
Orientation. 3 Hours.
Design and execution of research on the causes and consequences of 
variations in gender identity, sexual orientation or affectional preference, 
sex roles, and sex-linked behaviors. Prerequisite: Consent of instructor. 
LEC.

PSYC 757. Theories of Perception. 3 Hours.
A consideration of the facts and theories of human perception. The 
emphasis will be on vision, although hearing, smell, pain, and other 
senses will also be discussed. Of particular concern is the question 
of perceptual modifiability and the response of the human observer to 
unusual sensory environments. Prerequisite: PSYC 104. LEC.

PSYC 774. Advanced Social Psychology I. 3 Hours.
First semester of a two-semester course. Designed to provide a thorough 
background in social psychology and to motivate a continuing exploration 
of theoretical problems and issues in the field. Combines examination 
of historical development of theories and methods in social psychology 
with analysis of theoretical and methodological approaches to a variety of 
contemporary topics. LEC.

PSYC 775. Advanced Social Psychology II. 3 Hours.
A continuation of PSYC 774. LEC.

PSYC 777. Social Psychology: Theory, Research, and Clinical 
Applications. 3 Hours.
Basic theories in social psychology, as well as their applications to the 
process of coping with life events. The focus is on the nature of each 
theory, including the history and more recent developments; however, 
where clinical applications have been made of a particular theory, these 
will be discussed. LEC.

PSYC 780. Research Lab. 1-5 Hours. S.
Supervised research under the guidance of a faculty member in the 
Department of Psychology. Students will be part of a collaborative 
laboratory environment, and will be involved in research design, data 
collection, and data analysis, and will take part in regularly scheduled 
laboratory meetings. Prerequisite: Permission of instructor. LEC.

PSYC 782. Research Methods in Child Language. 3 Hours.
A survey of methods for studying phonological, morphological, syntactic, 
and semantic change during language development. Methods include: 
diary interpretation, language sample analysis, probe elicitation tasks, and 
clinical assessment. (Same as LING 782.) LEC.

PSYC 784. Proseminar in Communication and Aging. 1 Hour.
A weekly forum for students and faculty to discuss professional issues 
and interdisciplinary research in communication and aging. May be 
repeated for credit. (Same as COMS 784.) (Same as SPLH 784.) 
Prerequisite: Consent of instructor. LEC.

PSYC 787. Gerontology Proseminar. 3 Hours.
A proseminar coordinated by the Gerontology Center. The proseminar 
explores essential areas of gerontology for researchers and practitioners, 
providing a multidisciplinary (psychology, biology, sociology, and 
communication) perspective on aging. The proseminar surveys 
contemporary basic and applied research, service programs, and policy 
and management issues in gerontology. (Same as ABSC 787, AMS 767, 
COMS 787, and SOC 767.) (Formerly HDFL 787.) LEC.

Hours.
A course emphasizing the practical application of inferential statistics to 
a variety of research designs and outcome variables. Topics will include 
both parametric and nonparametric statistical procedures, and various 
aplications of both ANOVA and multiple regressions. Prerequisite: 
Graduate standing in the Department of Psychology or consent of 
instructor. LEC.

PSYC 790. Statistical Methods in Psychology I. 4 Hours.
Elementary distribution theory; t-test; simple regression and correlation; 
multiple regression and multiple correlation; curvilinear regression; logistic 
regression; general linear model. Applications across the behavioral 
and social sciences are emphasized. Course consists of three hours of 
lecture and a required one-hour lab session where computing applications 
are taught. Prerequisite: A beginning course in statistics and graduate 
standing, or consent of instructor. LEC.

PSYC 791. Statistical Methods in Psychology II. 4 Hours.
Continuation of PSYC 790. One-way analysis of variance, linear 
trends, contrasts, post hoc tests; multi-way analysis of variance 
for crossed, blocked, nested, and incomplete designs; analysis of 
covariance; repeated measures analysis of variance; general linear 
model. Applications across the social, educational, and behavior 
sciences are emphasized. Course consists of three hours of lecture and 
a required one-hour lab session where computing applications are taught. 
Prerequisite: PSYC 790 or equivalent, or consent of instructor. LEC.

PSYC 795. Computing and Psychology. 3 Hours.
Introduction to the use of personal computers to facilitate and standardize 
administration of research protocols and to automate data collection. 
Lectures and projects emphasize direct application to research in the 
behavioral sciences. Prerequisite: Graduate standing in the Department 
of Psychology and consent of instructor. LEC.

PSYC 796. Computer Models of Brain and Behavior. 3 Hours.
An introduction to the techniques of computer modeling with applications 
in the study of brain-behavior mechanisms. Early and contemporary 
efforts to simulate the neuron, neural networks, and neural processes 
which regulate behavior, are reviewed. Application of modeling techniques 
in sample brain-behavior problem areas are used to illustrate the 
operation of thresholds, feedback, dynamic equilibrium, redundancy, 
plasticity, network structure, and similar constructs. Programming skill in 
a high-level language available on personal computers or mainframe is 
required. Prerequisite: EECS 128 or EECS 138 or PSYC 795, and PSYC 
370, or equivalent courses or experience. LEC.

PSYC 798. Introduction to Mathematical Methods in Psychology. 3 
Hours.
A first course in scaling and modeling psychological processes. 
Substantive areas treated selected from sensation, perception, learning, 
memory, preference, choice and decision processes, problem solving, 
games, social interaction, and individual differences. May be repeated 
with permission. Prerequisite: Previous course work beyond the 
introductory level in psychology or a closely related area, a course in 
statistics, and a course in calculus. LEC.

PSYC 799. Proseminar in Child Language. 2 Hours.
A review and discussion of current issues in children's language 
acquisition. May be repeated for credit. Students are graded S/F. (Same 
as ABSC 797, LING 799, and SPLH 799.) (Formerly HDFL 797.) LEC.

PSYC 800. Experimental Psychology: _____, 3 Hours.
An advanced survey of theory and research in a selected area of 
experimental psychology. Continual enrollment for four semesters is 
required of entering graduate students in experimental psychology. Open 
to other students with graduate standing in psychology or a closely related 
field. May be repeated with permission. LEC.
PSYC 802. Social-Psychological Aspects of Health, Disability, and Associated Life Stress. 3 Hours.
Disabling myths; perception of causes and effects of disease and disability; attitudes and interpersonal relations; hoping, coping, and reality issues; values; professional-client relations; public media and societal rehabilitation. A departmental core course for graduate students. LEC.

PSYC 803. Fundamentals of Psychological Assessment and Intervention with Children. 3 Hours.
Lecture and supervised experience covering the theoretical and empirical literature on assessment and intervention methods for children, adolescents, and families. Students will learn and demonstrate evidence-based clinical interviewing skills, behavioral observation techniques, risk assessment techniques, therapeutic communication approaches, strategies for providing assessment feedback to families, and ethical principles related to the provision of assessment and psychotherapy (including client file and resource management.) The course requires interaction with clinical populations and communication with referral sources. (Same as ABSC 803.) Prerequisite: Graduate student in clinical child psychology program. LEC.

PSYC 805. History of Psychology. 3 Hours.
A historical survey of basic concepts and theories in psychology with emphasis on their relationship to contemporary problems in theory. LEC.

PSYC 809. Professional Issues: Clinical Child Psychology. 1 Hour.
Consideration of special problems confronting the child and family oriented scientist-practitioner, and in the development of a professional identity. Topics include critical issues including ethical, legal, cultural, empirical, and clinical aspects of research and practice. May be repeated. (Same as ABSC 809, formerly HDFL 809.) Prerequisite: Graduate standing in clinical child psychology. LEC.

PSYC 811. Achievement and Intellectual Assessment in Clinical Child Psychology. 3 Hours.
Course covers the basic theory, research, administration, and reporting of psychological assessment of development, intelligence, and achievement for children, adolescents, and adults within cultural and developmental contexts. The range of psychological instruments examined includes, for example, WIAT, K-ABC, W-J, S-B, WISC, WAIS, and WPPSI. (Same as ABSC 811.) Prerequisite: Graduate student in clinical child psychology. LEC.

PSYC 812. Behavioral and Personality Assessment of Children. 3 Hours.
Lecture, laboratory, field work, and supervision appointment. Theory and applications in the psychological evaluation of children with standardized assessment techniques. The administration, scoring, interpretation, and reporting of behavioral and personality functioning in children. (Same as ABSC 812, formerly HDFL 812.) Prerequisite: Graduate standing in clinical child psychology. LEC.

PSYC 814. Advanced Child and Family Assessment. 3 Hours.
Lecture, laboratory, field work, and supervision appointment. Supervised experience in specialized psychological assessment approaches for children and families. Emphasis on interviewing, observation, psychometric scales, and consultation. Rationale, administration, analysis, and reporting of mental health functioning of children and families. Experience with clinical populations, and communication with referral sources. (Same as ABSC 814, formerly HDFL 814.) Prerequisite: Graduate student in clinical child psychology. LEC.

PSYC 815. Design and Analysis for Developmental Research. 3 Hours.
Coverage of the philosophy and basic principles of group-design research, with a special emphasis on designs that are appropriate for developmental studies. Designs for both experimental and quasi-experimental research are covered, and appropriate statistical procedures are presented concomitantly with the designs. Individual-difference analyses and statistical control issues are also addressed. LEC.

PSYC 816. Design and Analysis for Neuroimaging Research. 3 Hours.
Course covers research design and analysis issues for event-related potential (ERP) and functional magnetic resonance imaging (fMRI) studies. Repeated measures, statistical parametric mapping, principal components analysis, and independent components analysis techniques are covered. Both practical and theoretical aspects of these statistical techniques will be explored in Matlab environment. Matrix algebra recommended but not required. Prerequisite: PSYC 790 and 791 or equivalent are required. LEC.

PSYC 818. Experimental Research Methods in Social Psychology. 3 Hours.
Systematic discussion of the techniques of research in social psychology, with practice in the utilization of selected methods. Prerequisite: One course in social psychology in addition to introductory social psychology. LEC.

PSYC 819. Field and Evaluation Research Methods in Social Psychology. 3 Hours.
Basic principles and practices of field methods in basic and applied research in social psychology and related fields; relationships between field and laboratory studies; special emphasis on survey and evaluation research methods and study designs; client and respondent relationships; research and public policy. LEC.

PSYC 820. Advanced Child Development. 3 Hours.
A survey of the basic empirical research in the field of child development, covering intelligence, cognition, perception, attention, personality, social behavior, and socialization processes. These literatures are integrated and their implications for social application are addressed. (Same as ABSC 820, formerly HDFL 820.) Prerequisite: A course in child development or equivalent. LEC.

PSYC 821. Women and Violence. 3 Hours.
An examination of research on women and violence, including rape, domestic violence, sexual harassment, stalking, and child sexual abuse. Research on the nature, prevalence, causes, and consequences of violence against women is discussed. (Same as WGSS 821.) Prerequisite: Six hours in WGSS and/or PSYC, or permission of instructor. LEC.

PSYC 825. Social Development. 3 Hours.
A lecture and discussion course in social development. It includes such topics as theoretical approaches to the study of social development, as well as the literature on family processes, peer relations, aggression and prosocial behavior, child abuse and neglect, family violence, child care, and the media. (Formerly PSYC 880.) (Same as ABSC 825.) Prerequisite: A course in child psychology or development. LEC.

PSYC 831. Advanced Human Learning and Memory. 3 Hours.
An in-depth analysis of current research and theory. Focus will be on experimental methodology in these areas. LEC.

PSYC 832. Clinical Health Psychology I: Health Promotion and Disease Prevention. 3 Hours.
An overview of the field of health psychology as applied to health promotion and disease prevention. Content areas include history and current research regarding behavioral and psychosocial risk factors for disease, as well as empirically supported assessment and therapeutic techniques for risk factor reduction and health promotion. Prerequisite:
Graduate student in psychology or health-related fields, or permission of instructor. LEC.

PSYC 833. Clinical Health Psychology II: Acute and Chronic Illness. 3 Hours.
An overview of the field of health psychology as applied to acute and chronic illness in adult, adolescent, and child populations. Content areas include psychosocial aspects of acute and chronic illness, including relevant empirically supported assessment and intervention strategies, adherence to medical regimens, pain, and enhancement of the psychologist's role in medical settings. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor. LEC.

PSYC 834. Clinical Health Psychology III: Physical Aspects of Health and Disease. 3 Hours.
An overview of physical manifestations of health and disease. Content areas include overview of anatomy and physiology of each body system, description of how deviations form normal anatomical development and physiological function result in common disorders, methods for distinguishing psychological from organic etiologies, indications of side effects of medications for common disorders, and description of roles of key members of health care team members. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor. LEC.

PSYC 835. Clinical Practicum IV: Health. 3 Hours.
Supervised assessment and treatment of individuals and families within a medical setting, as well as multidisciplinary consultation. Inpatient and outpatient clinical health psychology rotations may include pediatrics, oncology, pain, rehabilitation, and other health psychology related fields. Emphasis in selection of and training in psychological intervention strategies is on the use of empirically supported treatments where possible. Grading on Satisfactory/Fail basis. Prerequisite: PSYC 970 and graduate student in clinical health psychology specialty. FLD.

PSYC 836. Clinical Practicum V: Health. 3 Hours.
Continuation of PSYC 835. Prerequisite: Graduate student in clinical health psychology specialty. FLD.

PSYC 838. Pain and Its Management. 3 Hours.
Focuses on biological, cognitive/affective, and social causes and effects of pain. Emphasis on basic research methods in pain, origins of pain, and how the experience of pain alters many aspects of the individual's life. Topics include anatomy and physiology of pain, impact of pain on a variety of aspects of individuals' lives, treatments for pain, and the role of various health care professionals in treating pain. Discussions also will include basic research methods in pain, tools for assessing pain, barriers to adequate pain management, and ethical/legal/public policy issues in working with pain patients. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor. LEC.

PSYC 839. Palliative Care in Health Psychology. 3 Hours.
Based on the biopsychosocial model, this course focuses on the current practice of palliative care in community and hospital settings by health care professionals. Classes will be discussion based, centered on current issues and controversies in care of the chronically ill and dying. Recent research will be highlighted, as will cultural perspectives on death. Students will be expected to identify applicable literature for presentation and class discussion, along with assigned readings. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor. LEC.

PSYC 840. Psychology of Women's Health. 3 Hours.
A seminar devoted to examination of psychosocial and behavioral factors in women's health. Content areas include women and the health care system, social roles and health, gender differences, and similarities in morbidity and mortality, gynecologic health, chronic diseases, and health-related behaviors. Prerequisite: Graduate student in psychology or health-related field, or by permission of instructor. LEC.

PSYC 841. Stress and Coping. 3 Hours.
Theories and research on conceptualization, assessment, and effects of stress. Focus on coping processes and other determinants of adjustment to stressful conditions. Discussion of psychological interventions for managing stress and trauma. Prerequisite: Graduate student in psychology or related fields. LEC.

PSYC 842. Specialized Health Psychology Practicum. 1-3 Hours.
Specialized advanced practicum in clinical health psychology, with an area of emphasis mutually defined by student and instructor. Prerequisite: Consent of instructor. FLD.

PSYC 843. Behavioral Pharmacology. 3 Hours.
Addresses psychological and behavioral effects of drugs, including psychotropic medications. A central theme is that effects of drugs frequently cannot be characterized solely from a pharmacological perspective. Thus, emphasis will be placed on examining the interaction of pharmacological and behavioral variables. For example, how do psychological factors moderate responses to drugs? The nature of this area assumes some knowledge of general psychology, research methods, biology, chemistry, neurophysiology, and the nervous system. Specific course structure will be modified to suit student interests. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor. LEC.

PSYC 844. Mental Health and Aging. 3 Hours.
Reviews recent research and application in the field of mental health and aging. Theoretical perspectives appropriate for understanding mental health issues with increased age are discussed. The epidemiology, assessment, diagnosis, and treatment methods associated with a variety of mental health conditions are surveyed. The community mental health resources available for older adults are discussed as well as practically-related issues such as evaluations of functional independence and competency among older adults. Prerequisite: Graduate student in psychology or related health field, or permission of instructor. LEC.

PSYC 845. Impression Formation and Interpersonal Behavior. 3 Hours.
Intensive investigations of the processes involved in impression formation and of the effects of established impressions upon interpersonal communications. (Same as COMS 835.) Prerequisite: PSYC 670 or COMS 535. LEC.

PSYC 846. Practicum in Clinical Child Psychology I. 1-3 Hours.
Introductory practicum experience for the Clinical Child Psychology Program. Orientation to psychological evaluation and treatment of children, adolescents, and their families and initial development of professional self-assessment skills. Students acquire specific clinical competencies through shadowing cases, assisting with interpretation of test of intelligence and academic achievement, conducting behavioral observations in field settings, and performing co-therapy of cases presenting to the KU Child and Family Services Clinic. May be taken in more than one semester. (Same as ABSC 846.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

PSYC 847. Practicum in Clinical Child Psychology II. 1-3 Hours.
Intermediate practicum experience for the Clinical Child Psychology Program. Development of specific competencies in assessment and intervention with children, adolescents, and their families through didactics, field experience, and supervision. Students acquire specific clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services
Clinic. Students develop ability to identify specific treatment goals and select therapeutic interventions that are conceptually congruent with clients’ presenting problems and are based on sound empirical evidence. Students also develop the ability to integrate and synthesize test results, interview material, and behavioral observations into coherent case conceptualizations. May be taken in more than one semester. (Same as ABSC 847.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

**PSYC 850. Assessment I: Foundations of Psychological Assessment. 3 Hours.**
Introduction to the history, methods and theory underlying psychological assessment techniques and methods. Students learn to administer, score, and interpret mental status exams and intelligence tests for children, adolescents and adults. Structured diagnostic assessments are introduced and practiced. Psychological report writing is introduced and practiced. The psychometric theory underlying the construction and validation of personality assessment instruments is reviewed. Prerequisite: Graduate student in clinical psychology or consent of instructor. FLD.

**PSYC 853. Advanced Acoustical and Psychological Aspects of Musical Behavior. 3 Hours.**
Study and experimental investigation of acoustic, psychoacoustic, and psychological phenomena as they influence music. Attention will be given to physical parameters; perception of pitch, loudness, and timbre; magnitude estimation; theories of consonance; experimental aesthetics; and measurement and prediction of musical ability. Each student will be expected to complete an experiment or quasi-experiment related to human musical behavior. (Same as MENT 953.) Prerequisite: PSYC 453 or equivalent; or consent of instructor. LEC.

**PSYC 855. Assessment II: Integrative Psychological Assessment. 3 Hours.**
Lecture, laboratory and field work. Students learn to administer, score and interpret various personality assessment instruments. Students apply skills acquired in previous coursework to write integrated psychological assessment reports based on anamnesis, structured interview data, intelligence tests, and both objective and projective personality assessment instruments. Prerequisite: PSYC 850 or consent of instructor. FLD.

**PSYC 863. Clinical Neuropsychology Across the Lifespan. 3 Hours.**
Reviews neural development and the brain-behavior relationships in intact, injured, and diseased brain systems. Details basic issues in clinical assessment and reporting of cognitive impairment resulting from developmental disorders, stroke, traumatic brain injury, and brain-disease. Selected topics include perception, speech, memory/dementia, judgment, and attention. Prerequisite: Graduate status and PSYC 961 or consent of instructor. LEC.

**PSYC 864. Clinical Neuropsychology. 3 Hours.**
Brain-behavior relationships in humans; structure and function of the brain; evaluation of function; the interpretation of neuropsychological data. Lecture and laboratory. LEC.

**PSYC 865. Advanced Psychological Assessment: Interview Based Techniques. 3 Hours.**
Lecture and fieldwork. Advanced clinical interviewing. Structured diagnostic interviewing. Coverage of specialized areas of clinical interviewing (e.g., motivational interviewing). Report writing focused on documentation of clinical and structured interviewing. Prerequisite: PSYC 855 or consent of instructor. FLD.

**PSYC 870. Cognitive Development. 3 Hours.**
A lecture/discussion course in cognitive development. The course will contrast the theory and research of Jean Piaget and his followers, with an information processing or cognitive psychology approach to issues. Topics include development of perception, attention and information getting; memory and metamemory; problem solving; discrimination learning and concept formation; and individual differences in cognitive styles and strategies. Prerequisite: A course in child psychology or development, a course in cognitive psychology, or consent of instructor. LEC.

**PSYC 872. Attention, Perception, and Learning in Infancy. 3 Hours.**
Coverage of the basic literatures on perceptual-cognitive behavior during the first three years of life, as assessed by measures of attention, perception, learning, and memory. Course material is approached from an information-processing framework. LEC.

**PSYC 875. Advanced Assessment: Integration of Assessment Techniques. 3 Hours.**
Lecture and fieldwork on selection, administration, scoring and interpretation and integration of data from personality and abilities tests. Focus on assessments includes history, theory and application in psychological assessment batteries. Emphasis on advanced training in objective personality assessment, projective personality assessment, psychometric theory and integrated report writing. Prerequisite: PSYC 855 or consent of instructor. FLD.

**PSYC 879. Applied Nonparametric Statistical Methods. 4 Hours.**
This course covers nonparametric statistical methods for testing hypotheses when the assumptions of ordinary parametric statistics are not met. Topics include a review of parametric statistics, sampling distributions, the logic of hypothesis testing, and motivations for using nonparametric techniques. In-depth coverage will be given to distribution-free procedures, sign tests, contingency tables, median tests, chi-square and other goodness-of-fit tests, rank correlations, randomness tests, Monte Carlo methods, resampling methods, tests of independence, 1-sample, 2-sample, and k-sample methods, permutation tests, and function smoothing and splines. There will be an emphasis on the theory underlying nonparametric methods. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 and 791 or equivalent, or consent of instructor. LEC.

**PSYC 881. Proseminar in Quantitative Behavioral and Social Sciences. 1 Hour.**
This course is an open forum discussion of issues, topics, and presentations in quantitative behavioral and social sciences. The course can be repeated for credit and is open to any graduate student in any discipline across the behavioral and social sciences. SEM.

**PSYC 882. Theory and Method for Research of Human Environments. 3 Hours.**
Conceptual and technical methods for analysis of behavioral environments; theory and research utilization of behavior settings and other ecobehavioral units. Prerequisite: Nine hours of social science including at least one course dealing with research methods and consent of instructor. LEC.

**PSYC 885. Altruism and Helping Behavior. 3 Hours.**
Review of contemporary research of prosocial behavior. Topics to be covered include the existence of altruism, why people do and do not help others, and the effect of institutional roles on the behavior of service professionals such as therapists, counselors, and social workers. LEC.
PSYC 886. Item Response Theory. 4 Hours.
This course covers the basic concepts and methods of item response models. Focal topics include the theory underlying IRT models and their general properties. Also covered are methods for checking model assumptions and interpreting IRT estimates. The course uses examples from the social and behavioral sciences to demonstrate how IRT methods can be used to inform and refine survey development, to assess measurement equivalence, link survey scores, and build item banks for short forms or computer-adaptive testing (CAT). Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 and 791 or equivalent, or consent of instructor. LEC.

PSYC 887. Factor Analysis. 4 Hours.
This course covers the theory behind, and application of, exploratory factor analysis. Topics include a review of multiple linear regression and matrix algebra. In-depth coverage is devoted to diagrams, model specification, goodness of fit, model selection, parameter estimation, rotation methods, scale development, and sample size and power issues. Extensions to confirmatory settings are elaborated. Both the theory underlying factor analytic techniques and hands-on application using software are emphasized. Applications across the social and behavioral sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor. LEC.

PSYC 888. Diversity Issues in Clinical Psychology. 3 Hours.
Review of individual differences pertaining to culture, ethnicity, race, gender, sexual orientation, age, etc., as these have an impact upon theory, research, assessment, and treatment issues in clinical psychology. (Same as ABSC 888.) Prerequisite: Graduate status in clinical psychology, or instructor permission. LEC.

PSYC 889. Conceptual Issues in Human Sexuality. 3 Hours.
An examination of the social construction of sexuality and research methods and issues relevant to sexuality. These concepts are applied to various topics, such as defining and conceptualizing sex and gender, sexual dysfunction, sexual orientation, the social control of sexuality, sexual coercion and abuse, and abstinence-only sex education. The course does not cover anatomical or physiological aspects of sexuality. (Same as WGSS 889.) Prerequisite: Six hours in WGSS and/or PSYC, or permission of instructor. LEC.

PSYC 891. Intelligence and Cognition. 3 Hours.
This course concerns the nature of intelligence. Theory and research on cognitive abilities, reasoning, and complex problem solving are surveyed. Special emphasis is given to contemporary cognitive ability research that applies both experimental and correlation methods to understand the nature of intelligence. LEC.

PSYC 892. Test Theory. 4 Hours.
This course begins with recommendations for how to write a test (with or without correct answers, for assessing a wide variety of constructs of interest in social and behavioral sciences), covers basics of classical test theory, and then emphasizes modern statistical methods for analyzing item data. Methods include factor analysis of categorical responses, methods for identifying measurement invariance (differential item functioning), and item response theory. Lectures and Laboratory. This course is offered at the 600 and 800 levels, with additional assignments at the 800 level. Prerequisite: PSYC 790/650 or equivalent, or consent of instructor. LEC.

PSYC 893. Multivariate Analysis. 4 Hours.
Introduction to the central methods used in the analysis of multivariate data. Includes linear transformations, multivariate analysis of variance, multivariate multiple regression, discriminant analysis, canonical correlation, factor analysis, and an introduction to methods for clustering and classification. Applications across the behavior and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor. LEC.

PSYC 894. Multilevel Modeling. 4 Hours.
Statistical methods for modeling multilevel (hierarchically structured) data. Topics include a review of ordinary least squares regression analysis, random effects ANOVA, intraclass correlation, multilevel regression, testing and probing interactions, maximum likelihood estimation, model assumptions, model evaluation, and the analysis of longitudinal data. There will be a heavy emphasis on the theory underlying multilevel modeling techniques and hands-on application using software. Applications across the social, educational, and behavioral sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor. LEC.

PSYC 895. Categorical Data Analysis. 4 Hours.
Multivariate analyses of count data. Error models, statistical inference, loglinear models, logit models, logistic regression. Homogeneity, symmetry, and selected other topics. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor. LEC.

PSYC 896. Structural Equation Modeling I. 4 Hours.
Introduction to statistical methods for modeling latent variables. Topics include a review latent variables, covariance structures analysis, mean structures analysis, confirmatory factor analysis (CFA), structural equation modeling (SEM), multiple group CFA, longitudinal CFA, longitudinal SEM, Hierarchical CFA, and Multi-trait Multi-Method SEM. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor. LEC.

PSYC 897. Master's Thesis in Clinical Child Psychology. 1-10 Hours.
Supervised research experience completing thesis leading to master's degree. (Same as ABSC 897.) RSH.

PSYC 898. Proseminar: Professional Issues in Clinical and Health Psychology. 1 Hour.
Discussion of current theoretical, empirical, and applied issues in clinical and clinical health psychology involving students, faculty, guest speakers. Prerequisite: Graduate status in clinical psychology. RSH.

PSYC 899. Thesis. 1-10 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

PSYC 902. Proseminar in Experimental Psychology. 1 Hour.
Seminar in experimental psychology to be conducted in rotation by experimental psychologist. LEC.

PSYC 903. Proseminar in Social Psychology. 1 Hour.
A series of research talks on topics relevant to social and personality psychology featuring different weekly speakers from inside and outside the university. SEM.

PSYC 905. Psychopathology in Children. 3 Hours.
Diagnosis and treatment of psychological problems in childhood and adolescence. (Same as ABSC 905.) Preference given to graduate students in child clinical psychology, school psychology, and counseling
psychology. Prerequisite: Fifteen hours of graduate credit in psychology or consent of instructor. LEC.

PSYC 921. Seminar in Early Development. 3 Hours.
A seminar devoted to factors affecting early human development with some attention to theoretical formulations and the relevant animal literature. LEC.

PSYC 923. History and Systems of Developmental Psychology: Developmental Theory. 3 Hours.
An intensive study of traditional and recent developmental theories with an emphasis upon the role of heredity, early stimulation, reinforcement, and modification as each affects the course of the development of children. LEC.

PSYC 927. Seminar in Psychobiology. 3 Hours.
A detailed study of a specific research area dealing with the biological foundations of behavior. Each week articles will be assigned from the journal literature. LEC.

PSYC 930. Research Seminar on Intimate Relationships. 3 Hours.
Consideration of current psychological theory and research on adult intimate relationships: friendship, dating, committed relationships, dissolution of committed relationships. Students will be expected to be involved in on-going empirical research in the area. Prerequisite: Graduate level courses in research design and statistics. LEC.

PSYC 933. Seminar: The Measurement of Attitudes. 3 Hours.
An examination of the concept of attitude and the methods developed to assess the various aspects of attitudes. Prerequisite: PSYC 578 or consent of instructor. LEC.

PSYC 935. Seminar in Group Dynamics. 3 Hours.
Intensive examination of selected problems in the functioning of small groups. May be taken for two semesters. LEC.

PSYC 936. Group Therapeutic Techniques. 3 Hours.
LEC.

PSYC 943. Advanced Practicum in Clinical Child Psychology III. 1-3 Hours.
Advanced practicum experience for the Clinical Child Psychology Program. Development of advanced competencies in assessment and intervention with children, adolescents, and their families through didactics, field experience, and supervision. Students acquire advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum (i.e., formal case presentation), and modeling of clinical competencies for junior students. Students will demonstrate the ability to implement empirically derived therapeutic interventions in consideration of individual differences, cultural values, and individual preferences. Students in external practicum sites will demonstrate an understanding of evidence-based models of consultation and provision of consultation to care providers in professional contexts. May be taken in more than one semester. (Same as ABSC 943.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

PSYC 944. Advanced Practicum in Clinical Child Psychology IV. 1-3 Hours.
Advanced practicum experience for the Clinical Child Psychology Program. Demonstration of advanced competencies in assessment, intervention, and consultation with children, adolescents, and their families through didactics, field experience, and supervision in the semester(s) prior to required clinical internship. Students demonstrate advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum (i.e., integrated case presentation), and modeling of clinical competencies for junior students. Course requirements include the development of portfolios for demonstration of clinical competencies and application to clinical internships. May be taken in more than one semester. (Same as ABSC 944.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

PSYC 946. Theories and Methods of Psychotherapy. 3 Hours.
Comparative examination and analysis of major theories and approaches to psychotherapeutic interventions, core principles of therapeutic change, scientific approaches to establishing treatment efficacy, current intervention issues. Prerequisite: Nine hours in graduate clinical psychology or consent of instructor. LEC.

PSYC 947. Advanced Practicum in Clinical Child Psychology V. 1-5 Hours.
Specialized practicum experience for the Clinical Child Psychology Program. Demonstration of advanced competencies related to supervision and consultation in clinical psychology. With faculty supervision, students will develop and demonstrate the ability to provide effective supervision to less advanced students in the program in selected cases appropriate to the service setting. Further development of advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum, and modeling of clinical competencies for junior students. May be taken in more than one semester. (Same as ABSC 947.) Prerequisite: Graduate standing in clinical child psychology and instructor permission. FLD.

PSYC 949. Empirically Supported Treatment. 3 Hours.
This course provides an overview of theoretical and applied issues germane to the contemporary empirically supported treatments movement in clinical psychology. The course will include an in-depth examination of several psychotherapy protocols (e.g., cognitive therapy for depression) which have been identified as “empirically supported,” with considerable attention accorded to implementation of the characteristic techniques of such interventions. LEC.

PSYC 950. Clinical Supervision and Consultation: Theory & Research. 1 Hour.
Lecture, readings, and discussion of theory and research related to the practices of clinical supervision and consultation. Developmental and competency based approaches to supervision with exposure to other approaches. Professional issues, ethics, and multicultural aspects of supervision and consultation. Prerequisite: Previous or concurrent enrollment in PSYC 969 or consent of instructor. LEC.

PSYC 951. Clinical Supervision Practicum. 1-3 Hours.
Fieldwork in supervision under direction of instructor. Practice in supervision of clinical work, assessment, psychotherapy, and documentation. Prerequisite: Previous or concurrent enrollment in PSYC 950 and PSYC 969, or consent of instructor. FLD.

PSYC 955. Close Relationships and Adult Attachment: Theory, Research, and Current Controversies. 3 Hours.
Review of attachment theory literature and the research it has generated in clinical developmental, personality, and social psychology. The course will allow discussion of a wide range of issues including the evolution of behavioral systems that underlie close human relationships, the developmental roots of relational styles and affect-regulation processes, the role of mental representations in interpersonal behavior, and some of the attachment and close relationship processes involved in good and poor mental health. Prerequisite: Graduate standing or consent of instructor. LEC.
PSYC 956. Social Neuroscience. 3 Hours.
Acquaint students with the Social Neuroscience approach as well as recent findings using this approach. The course will focus on particular social phenomena and (a) evaluate the utility of current social neuroscience research examining these phenomena and (b) consider future experimental designs using the Social Neuroscience approach to further inform our understanding of each phenomenon. After being acquainted with foundational concepts, students will analyze findings in a number of core content domains (including emotions, emotion regulation, self, stereotyping, attitudes and beliefs, social decision making, cooperation, close relationships), focusing on neuroscience's contribution beyond traditional methods. Prerequisite: Graduate standing or consent of instructor. LEC.

PSYC 960. Advanced Psychopathology. 3 Hours.
Review of current nosology of adult psychopathological syndromes emphasizing development of diagnostic skills. Critical survey of recent research and theory related to the etiology, course, prognosis, and treatment of adult psychopathological conditions. Prerequisite: Graduate student status in clinical psychology, clinical child psychology, or counseling psychology. LEC.

PSYC 961. Biological Foundations of Psychopathology. 3 Hours.
A review of fundamental topics in the neurosciences and their relevance to selected psychopathological disorders. The fundamental topics are taken from genetics, neuroanatomy, neurophysiology, and neurochemistry. The disorders include schizophrenia, depression, anxiety disorders, Alzheimer's disease, Parkinson's disease, and Huntington's disease. Prerequisite: Graduate student in clinical psychology or consent of instructor. LEC.

PSYC 962. Advanced Personality. 3 Hours.
A survey of selected advanced topics in the area of personality. Includes review of theoretical and research issues in the area of personality. Prerequisite: Consent of instructor. LEC.

PSYC 963. Clinical Child Psychology Internship. 1 Hour.
Three consecutive enrollments, covering a minimum of eleven months of experience in an approved clinical psychology field setting; supervision by qualified clinical child psychology faculty and field staff clinicians. Required of all clinical child psychology program students. An intensive guided experience in application of clinical child psychology theory, methods, and practices. Integrates scientific and clinical aspects of field. (Same as ABSC 963, formerly HDFL 963.) Prerequisite: Completion of Ph.D. comprehensive examinations and permission of clinical psychology faculty. LEC.

PSYC 964. Clinical Practicum I. 3 Hours.
Lecture, laboratory and field work, and supervision appointment. Psychological evaluation and treatment of individuals, couples, families, and groups; supervised, progressive experience in psychological treatment and in the clinical evaluation of intellectual, personality, and social functioning. Emphasis in selection of and training in psychological intervention strategies is on the use of empirically supported treatments where possible. Grading on Satisfactory/Fail basis. Prerequisite: Graduate student in clinical psychology program. LEC.

PSYC 965. Clinical Practicum II. 3 Hours.
A continuation of PSYC 964. Grading on Satisfactory/Fail basis. Prerequisite: PSYC 964. LEC.

PSYC 966. Clinical Practicum III. 3 Hours.
A continuation of PSYC 964. Grading on Satisfactory/Fail basis. Prerequisite: PSYC 964 or permission of instructor. LEC.

PSYC 967. Psychotherapy with Families. 3 Hours.
Clinical approaches to marriage and family therapy. Intensive consideration of the theoretical positions, research findings, clinical methods, and technical problems in marriage and family therapy. Prerequisite: PSYC 946. LEC.

PSYC 968. Research Methods in Clinical Psychology. 3 Hours.
Systematic consideration of research methods in clinical psychology including identification of a research problem, selection of the research design and assessment strategies, and methods of evaluating the results. The principles, pitfalls, artifacts, biases, and sources of controversy in research in this area are also covered. Prerequisite: Graduate standing in clinical or counseling psychology. LEC.

PSYC 969. Clinical Practicum IV. 3 Hours.
A continuation of PSYC 969. Grading on Satisfactory/Fail basis. Prerequisite: PSYC 969 or consent of instructor. LEC.

PSYC 970. Clinical Practicum V. 3 Hours.
A continuation of PSYC 970. Grading on Satisfactory/Fail basis. Prerequisite: PSYC 970 or consent of instructor. LFD.

PSYC 974. Clinical Psychology Internship. 1-3 Hours.
Three consecutive enrollments, covering a minimum of eleven months of experience in an approved clinical psychology field setting; supervision by clinical psychology faculty and field staff clinical psychologists. Required of all clinical psychology program students. An intensive guided experience in the application of clinical psychology theory, methods, and practices. An emphasis upon the relationships between scientific and clinical functions. Integrations between research and clinical practice. Prerequisite: Completion of Ph.D. comprehensive examinations and consent of clinical psychology faculty. LEC.

PSYC 975. Professional and Ethical Problems in Clinical Psychology. 3 Hours.
Interprofessional relationships, case security, legal aspects, ethical code of practice, clinic administration, and problems in the clinical practice of psychology. Issues involving ethics in research will also be explored. Prerequisite: Consent of instructor. LEC.

PSYC 976. Therapeutic Interventions with Children. 3-5 Hours.
Clinical approaches to the therapeutic treatment of children with special emphasis on research findings and laboratory (practicum) experience. A survey of relationship therapies, operant strategies, system approaches, parent education and play therapy by the right therapist for a specific child with a particular problem. (Same as ABSC 976.) Prerequisite: Instructor permission. LFD.

PSYC 977. Specialized Clinical Practicum. 1-4 Hours.
Lecture; laboratory and field work, and supervision appointment. Specialized psychological services for the evaluation and/or treatment of the individual client or the group or the institution. Investigation of and experience in a special practicum area not covered in regular courses. Prerequisite: Students must consult with members of the clinical faculty and propose an acceptable project in advance of enrollment. LFD.

PSYC 980. Special Problems in Psychology. 1-5 Hours.
Investigation of a special research problem or directed reading in an area not covered in regular courses. Prerequisite: Consent of instructor. RSH.
PSYC 981. Teaching Psychology. 1 Hour.
Discussion of the problems and techniques of teaching psychology at the undergraduate level. A minimum of one credit of this course must be taken by all assistant instructors during the two semesters of the first year of their appointment in the department. Only three hours may count toward the Ph.D. degree. LEC.

PSYC 982. Issues in Scientific Conduct. 3 Hours.
Lectures and discussion on issues in the conduct of a scientific career, with emphasis on practical topics of special importance in behavioral science. Topics will include the academic and scientific roles of behavioral scientists, establishing a research lab, communicating research findings, tenure processes, gender equity, ethical conduct, and good scientific citizenship. Discussions will highlight important case studies. (Same as SPLH 982.) LEC.

PSYC 983. Methodology. 3 Hours.
Inferential problems in experimental psychology. Prerequisite: PSYC 790 and PSYC 791 or consent of instructor. LEC.

PSYC 984. Missing Data Analysis. 3 Hours.
The primary goal of the course is to promote a solid understanding of the logic and implementation of modern missing data techniques. The following topics are included: missing data theory, traditional missing data techniques, maximum likelihood estimation, EM algorithm, multiple imputation, planned missing data designs, and techniques for missing not at random data. Students will learn how to implement the missing data techniques in SAS, Mplus and R. Prerequisite: PSYC 790 and PSYC 896. LEC.

PSYC 988. Modeling of Intraindividual Observations. 4 Hours.
Many statistical methods are apt for modeling cross-sectional data or growth processes. These methods are often not ideal for researchers collecting intensive intra-individual observations, such as those from diary studies, ecological momentary assessments, and physiological data, which often exhibit complex, nonlinear changes over time. This course examines methods for extracting information from intensive intra-individual observations. This class will survey methods and concepts from areas such as dynamical systems, chaos theory, time series analysis and differential equation modeling. Some prior experience with R or related language strongly encouraged. Some prior experience with R or related language strongly encouraged. Prerequisite: PSYC 790 or equivalent and a course in Structural Equation Modeling or Multilevel Modeling (Hierarchical Linear modeling, Mixed Models.) LEC.

PSYC 990. Methods for Clustering and Classification. 3 Hours.
Statistical methods for identifying classes, clusters, and taxa. Topics include k-means, discriminant analysis, hierarchical clustering algorithms, additive trees, neural network models for clustering, latent class models, finite mixture models, and models for skills/cognitive diagnosis. Applications across the social and behavioral sciences are emphasized. Prerequisite: PSYC 790 and PSYC 791 or equivalent, or consent of instructor. LEC.

PSYC 991. Longitudinal Data Analysis. 3 Hours.
Reviews and contrasts various statistical methods for the analysis of change. Course focuses on various techniques to analyze longitudinal (repeated-measures) data beyond the repeated-measures ANOVA framework. Techniques covered included latent change scores, latent difference scores, individual-differences modeling of latent residual and change scores, intra-individual differences modeling (e.g., growth curve, mixed modeling) and growth mixture modeling. Applications across the behavioral and social sciences are emphasized. Prerequisite: PSYC 896 or equivalent, or consent of instructor. LEC.

PSYC 993. Seminar: ______. 1-5 Hours.
LEC.

PSYC 996. Structural Equation Modeling II. 3 Hours.
Continuation of PSYC 896. Advanced applications of modern methods for testing hypotheses on multivariate correlational data in the behavioral and social sciences. Topics include advanced confirmatory factor analysis, mediation and moderation among latent variables, latent growth curve modeling, and other latent variable mean and covariance structures analysis techniques. Applications across the behavioral and social sciences are emphasized. Prerequisite: PSYC 896 or equivalent, or consent of instructor. LEC.

PSYC 998. Doctoral Dissertation in Clinical Child Psychology. 1-10 Hours.
Research experience making original contribution to literature in clinical child psychology. (Same as ABSC 998, formerly HDFL 998.) THE.

PSYC 999. Dissertation. 1-12 Hours.
Graded on a satisfactory/unsatisfactory basis. THE.

Bachelor of Arts and Bachelor of General Studies in Psychology

Why study psychology?
Because the understanding of mind, behavior, and the human experience is best achieved through the rigorous application of the scientific method.

Admission to the Major

Admission Requirements

Application term
Students should apply to the major during the semester in which major admission criteria will be completed; normally no later than 60 hours, or for transfer students, normally during the initial term at KU. Application to this major after completion of 60 hours, or the initial KU term for transfer students, will likely delay graduation.

Courses Required

Orientation Seminar in Psychology Satisfied by:
PSYC 102 Orientation Seminar in Psychology 1

General Psychology. Satisfied by:
PSYC 104 General Psychology 3
or PSYC 105 General Psychology, Honors 3

Research Methods in Psychology or Statistics in Psychological Research. Satisfied by one of the following:
PSYC 200 Research Methods in Psychology 3
or PSYC 201 Research Methods in Psychology, Honors 3
PSYC 210 Statistics in Psychological Research 3
or PSYC 211 Statistics in Psychological Research, Honors 3

Core Psychology Course. Satisfied by one of the following: 3
PSYC 318 Cognitive Psychology
or PSYC 319 Cognitive Psychology, Honors
PSYC 333 Child Development
or PSYC 334 Child Development, Honors
PSYC 350 Abnormal Psychology
or PSYC 351 Abnormal Psychology, Honors
PSYC 360 Social Psychology
Bachelor of Arts and Bachelor of General Studies in Psychology

Admission GPA
A minimum 2.5 GPA is required in all courses listed above that have been completed at the time of application to the major. University Course Repeat Policy will apply.

The undergraduate advisory committee evaluates applications. Students providing documentation of meeting the criteria are admitted when they apply. Faculty members are aware of the dangers associated with relying solely on grade-point average in selecting students. The department is committed to promoting cultural diversity in its programs, and the undergraduate advisory committee is guided by principles of affirmative action.

Requirements for the B.A. or B.G.S. Major
B.A. or B.G.S. Major in Psychology

Psychology Major Course Requirements

Psychology Prerequisite or Co-Requisite Knowledge (3)
Majors must complete courses as specified in each of the following area. These hours do not contribute to the minimum number of hours required for the major.

College Algebra or Pre-Calculus. Satisfied by:
MATH 101 College Algebra
or MATH 104 Precalculus Mathematics

Psychology Core Knowledge and Skills (25)
Majors must complete a course in each of the following 9 areas:
Orientation Seminar in Psychology. Satisfied by:
PSYC 102 Orientation Seminar in Psychology
General Psychology. Satisfied by:
PSYC 104 General Psychology
or PSYC 105 General Psychology, Honors
Research Methods in Psychology. Satisfied by:
PSYC 200 Research Methods in Psychology
or PSYC 201 Research Methods in Psychology, Honors
Statistics in Psychological Research. Satisfied by:
PSYC 210 Statistics in Psychological Research
or PSYC 211 Statistics in Psychological Research, Honors

Note: A student may not take more than 3 of the following core courses before being admitted to the major.

Cognitive Psychology. Satisfied by:
PSYC 318 Cognitive Psychology
or PSYC 319 Cognitive Psychology, Honors

Child Development. Satisfied by:
PSYC 333 Child Development
or PSYC 334 Child Development, Honors

Abnormal Psychology. Satisfied by:
PSYC 350 Abnormal Psychology
or PSYC 351 Abnormal Psychology, Honors

Social Psychology. Satisfied by:
PSYC 360 Social Psychology
or PSYC 361 Social Psychology, Honors

Biological Psychology. One course required:
PSYC 370 Behavioral Neuroscience
PSYC 371 Behavior Neuroscience, Honors
PSYC 375 Cognitive Neuroscience
PSYC 380 Clinical Neuroscience
PSYC 381 Clinical Neuroscience, Honors

Psychology Required Electives (12)
Majors must complete 12 hours. at least 6 of these hours must be completed with courses numbered 300 or higher.

Psychology Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 37 hours of major courses. Note: No more than 3 hours of PSYC 480, PSYC 481, or PSYC 483 may count toward the minimum hours required for the major. (No more than a 6-hour combination of these courses may be counted toward the major.)

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior (300+) Hours
Satisfied by a minimum of 21 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

A sample 4-year plan for the BA degree in Psychology can be found here: Psychology (http://catalog.ku.edu/liberal-arts-sciences/psychology/ba-bgs-psychology/ba), or by using the left-side navigation.

Sample 4-year plans for the BGS degree in Psychology and the BS in Behavioral Neuroscience will be coming soon.

Departmental Honors

Students may inquire about departmental honors as soon as they are admitted to the undergraduate major. The department website (http://psych.ku.edu) has details. Participation usually begins in the senior year. A 3.25 grade-point average overall and a 3.5 grade-point average in psychology courses are required. Students follow individualized courses of study arranged through the director. Students who complete PSYC 460, individual research, and a paper under the direction of an instructor may graduate with departmental honors.
Bachelor of Science in Behavioral Neuroscience

Why study psychology?
Because the understanding of mind, behavior, and the human experience is best achieved through the rigorous application of the scientific method.

Admission to the Major

Behavioral Neuroscience Major Admission Criteria

Application Term
Students should apply to the major during the semester in which major admission criteria will be completed; normally no later than 60 hours, or for transfer students, normally during the initial term at KU. Application to this major after completion of 60 hours, or the initial KU term for transfer students, will likely delay graduation.

Courses Required
Orientation Seminar in Psychology. Satisfied by:

PSYC 102 Orientation Seminar in Psychology 1

General Psychology. Satisfied by:

PSYC 104 General Psychology 3
or PSYC 105 General Psychology, Honors

Research Methods in Psychology or Statistics in Psychological Research. Satisfied by one of the following:

PSYC 200 Research Methods in Psychology 3
or PSYC 201 Research Methods in Psychology, Honors

PSYC 210 Statistics in Psychological Research
or PSYC 211 Statistics in Psychological Research, Honors

Core Psychology Course. Satisfied by one of the following:

PSYC 370 Behavioral Neuroscience
or PSYC 371 Behavior Neuroscience, Honors

PSYC 375 Cognitive Neuroscience

PSYC 380 Clinical Neuroscience
or PSYC 381 Clinical Neuroscience, Honors

Admission GPA
A minimum 3.0 GPA is required in all courses listed above that have been completed at the time of application to the major. University Course Repeat Policy will apply.

Requirements for the B.S. Degree

B.S. in Behavioral Neuroscience

Humanities (24 hrs.)

Written Communication - Core Skill and Critical Inquiry

Composition (0)
Satisfied by one of the following. Requirement must be completed during initial term of admission at KU.

ENGL 101 Composition

ACT English score of 27 or above or SAT English score of 600 or above

AP English Literature & Composition score of 3 or above
Equivalent transfer course

Critical Reading and Writing (0)
Satisfied by one of the following. Requirement must be completed within the first academic year at KU.

ENGL 102 Critical Reading and Writing
ENGL 105 Freshman Honors English

AP English Literature & Composition score of 4 or above
Equivalent transfer course

Sophomore Reading and Writing II (0)
Satisfied by one of the following:

ENGL 203 Topics in Reading and Writing: _____
ENGL 205 Freshman-Sophomore Honors Proseminar: _____
ENGL 209 Introduction to Fiction
ENGL 210 Introduction to Poetry
ENGL 211 Introduction to the Drama

AP English Literature & Composition score of 5 or above
Equivalent transfer course

Argument and Reason
Satisfied by one of the following: 3

COMS 130 Speaker-Audience Communication
PHIL 148 Reason and Argument
Equivalent course

Western Civilization - Exploration of One’s Own and Diverse Cultures
Advising Alert: Requires sophomore-level standing. Courses at other universities may have the same title but may not meet this requirement.

Satisfied by:

HWC 204 Western Civilization I 3
or HWC 114 Western Civilization I Honors
HWC 205 Western Civilization II 3
or HWC 115 Western Civilization II Honors

Humanities - Understanding the Human Condition
Satisfied by completing 2 courses (6 hrs.) in any of the following categories: historical studies (requirement code HT), literature and the arts (requirement code HL), philosophy and religion (requirement code HR) and humanities (requirement code H). Approved courses may be searched for availability through the Kyou portal.

Natural Science (14 hrs. minimum)
Satisfied by completing 2 of the following 4 sequences AND an extension of 1 sequence (1 additional advanced course), or an approved alternative (14 hrs. minimum).

Biology:

BIOL 150 Principles of Molecular and Cellular Biology & BIOL 152 and Principles of Organismal Biology

Chemistry:

CHEM 130 General Chemistry I & CHEM 135 and General Chemistry II

Physics:
PHSX 114 College Physics I
& PHSX 115 College Physics II

Biological Anthropology:
- ANTH 104/304 Fundamentals of Physical Anthropology
- ANTH 340 Human Variation and Evolution
  or ANTH 341 Human Evolution
  or ANTH 350 Human Adaptation
  or ANTH 442 Anthropological Genetics
  or ANTH 447 Human Behavioral Genetics

Mathematics (14 hrs. minimum)
Satisfied by completing a total of 4 mathematics courses totaling at least 14 hours, of which at least 6 hours must be calculus or calculus based. The 8 hours of calculus can be satisfied by taking at least one calculus I course (MATH 115 or 125) and one calculus II course (MATH 116 or 126). The remaining four to six hours of mathematics can be satisfied by taking a minimum of two additional math courses at any level (excluding MATH 002).

Computing (6 hrs. minimum)

Satisfied by:
- EECS 138 Introduction to Computing: _____

An additional course
The second 3 hours could either be a second semester of EECS 138 (focused on a second programming language) or be from an additional approved course that provides an opportunity to gain computing experience. This second course could be PSYC 480 or PSYC 481 if this Independent Study requires independent, original application of the student’s computing skills such as computer simulation of cognitive processes, or experience with computationally complex neuroscience techniques, such as brain imaging and mapping, or physiological data collection and analysis. (3)

The second 3 hours could either be a second semester of EECS 138 (focused on a second programming language) or be from an additional approved course that provides an opportunity to gain computing experience. This second course could be PSYC 480 or PSYC 481 if this Independent Study requires independent, original application of the student’s computing skills such as computer simulation of cognitive processes, or experience with computationally complex neuroscience techniques, such as brain imaging and mapping, or physiological data collection and analysis. (3)

Behavioral Neuroscience Major Course Requirements

Behavioral Neuroscience Prerequisite or Co-Requisite Knowledge (10)
Majors must complete courses as specified in each of the following areas. These hours do not contribute to the minimum number of hours required for the major.

Orientation Seminar in Psychology. Satisfied by:
- PSYC 102 Orientation Seminar in Psychology

General Psychology. Satisfied by:
- PSYC 104 General Psychology
  or PSYC 105 General Psychology, Honors

College Algebra or Pre-Calculus. Satisfied by:
- MATH 101 College Algebra (or equivalent)

or MATH 104 Precalculus Mathematics

Introductory Biology Course. Satisfied by
- BIOL 100 Principles of Biology
  or BIOL 150 Principles of Molecular and Cellular Biology

Behavioral Neuroscience Core Knowledge and Skills (28)
Majors must complete coursework in each of the following 4 areas:

Behavioral Neuroscience Courses (6 hours minimum). Satisfied by one of the following:
- PSYC 370 Behavioral Neuroscience
  or PSYC 371 Behavior Neuroscience, Honors
  or PSYC 375 Cognitive Neuroscience

Clinical Neuroscience
- PSYC 380 Clinical Neuroscience
  or PSYC 381 Clinical Neuroscience, Honors

Laboratory Courses (9 hours minimum). Satisfied by the following:
- PSYC 200 Research Methods in Psychology
  or PSYC 201 Research Methods in Psychology, Honors
- PSYC 625 Experimental Psychology: Methods in Neuropsychology and Psychophysiology

Quantitative Courses (9 hours minimum). Satisfied by one of the following:
- PSYC 210 Statistics in Psychological Research
  or PSYC 211 Statistics in Psychological Research, Honors

Applied Nonparametric Statistical Methods
- PSYC 687 Factor Analysis
- PSYC 692 Test Theory
- PSYC 693 Multivariate Analysis
- PSYC 694 Multilevel Modeling I
- PSYC 695 Categorical Data Analysis
- PSYC 696 Structural Equation Modeling I

Research Practicum
- PSYC 449 Laboratory/Field Work in Human Biology

Honors in Psychology
- PSYC 460 Honors in Psychology

Independent Study
- PSYC 480 Independent Study

Behavioral Neuroscience, Honors
- PSYC 481 Research Practicum

Elective Courses in Psychology or Other Disciplines (12)
Majors must complete 12 hours minimum (other electives may be accepted with permission of the B.S. director) Satisfied by:
- PSYC 418 Introduction to Cognitive Science
  or PSYC 318 Cognitive Psychology
- PSYC 432 Human Behavioral Genetics
- PSYC 482 Sensation and Perception
- PSYC 535 Developmental Psychopathology
- PSYC 555 Evolutionary Psychology
- PSYC 605 Health Psychology
- PSYC 630 Clinical Psychology
- PSYC 644 Behavioral Pharmacology
- PSYC 646 Mental Health and Aging
- PSYC 678 Drugs and Behavior
PSYC 691  The Psychology of Aging
LING 438  Neurolinguistics I
SPLH 320  The Communicating Brain: The Ultimate Personal Computer

Behavioral Neuroscience Major Hours & GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 40 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by 28 hours of junior/senior level major coursework.

Major Junior/Senior (300+) Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Departmental Honors
Students may inquire about departmental honors as soon as they are admitted to the undergraduate major. The department website (http://psych.ku.edu) has details. Participation usually begins in the senior year. A 3.25 grade-point average overall and a 3.5 grade-point average in psychology courses are required. Students follow individualized courses of study arranged through the director. Students who complete PSYC 460, individual research, and a paper under the direction of an instructor may graduate with departmental honors.

Minor in Psychology
Why study psychology?
Because the understanding of mind, behavior, and the human experience is best achieved through the rigorous application of the scientific method.

Requirements for the Minor
Students selecting this minor must complete each of the following:

General Psychology (3)
Satisfied by:
PSYC 104  General Psychology 3
or PSYC 105  General Psychology, Honors

Psychology Required Electives - Choice Electives (6)
Satisfied by 2 courses chosen from:
PSYC 318  Cognitive Psychology
or PSYC 319  Cognitive Psychology, Honors
PSYC 333  Child Development
or PSYC 334  Child Development, Honors
PSYC 350  Abnormal Psychology
or PSYC 351  Abnormal Psychology, Honors
PSYC 360  Social Psychology
or PSYC 361  Social Psychology, Honors

Psychology Minor Remaining Electives (9)
The remaining elective courses may include any undergraduate courses offered by the Department of Psychology including:

PSYC 480  Independent Study
PSYC 481  Research Practicum
PSYC 483  Undergraduate Internship in Psychology

A maximum of 3 hours of PSYC 480 or PSYC 481 or PSYC 483, or any combination of these 3 courses totaling 3 hours may count toward the minor.

Psychology Minor Hours & Minor GPA
While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the minor.

Minor Junior/Senior (300+) Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the minor. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/ Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Minor in Social and Behavioral Sciences Methodology
Why study psychology?
Because the understanding of mind, behavior, and the human experience is best achieved through the rigorous application of the scientific method.

Requirements for the Social and Behavioral Sciences Methodology Minor
Social and Behavioral Science Methodology Minor Course Requirements
Students selecting this minor must complete each of the following:

Prerequisite Knowledge for Minor
Satisfied by a course in elementary statistics with a B- or better grade (e.g., COMS 356; MATH 365, MATH 526; POLS 306; PSYC 210; PUAD 332; SOC 510). This prerequisite does not count towards the SBSM minor hours.
Minor Course Requirements (17-19)
Statistical Methods in Behavioral and Social Science Research I.
Satisfied by:
PSYC 650 Statistical Methods in Behavioral and Social Science Research I (or equivalent) 4

Guided Research. Satisfied by a minimum of 3 hours of the following:
PSYC 480 Independent Study 3
or PSYC 481 Research Practicum

Specialized Methodology. Satisfied by a minimum of two courses from the following. The specific courses to be taken should be determined based on a student's research needs and overall career objectives.
PSYC 651 Anova and Other Factorial Designs
PSYC 687 Factor Analysis
PSYC 692 Test Theory
PSYC 693 Multivariate Analysis
PSYC 694 Multilevel Modeling I
PSYC 695 Categorical Data Analysis
PSYC 696 Structural Equation Modeling I
PSYC 697 Longitudinal Data Analysis

Minor Electives. Satisfied by additional graduate-level courses or guided research experience as needed to bring total hours completed to the minimum of 18 hours required for the minor. Options include:
PSYC 480 Independent Study
PSYC 481 Research Practicum
PSYC 483 Undergraduate Internship in Psychology
PSYC 651 Anova and Other Factorial Designs
PSYC 687 Factor Analysis
PSYC 692 Test Theory
PSYC 694 Multilevel Modeling I
PSYC 695 Categorical Data Analysis
PSYC 696 Structural Equation Modeling I
PSYC 697 Longitudinal Data Analysis

Social and Behavioral Methods Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Junior/Senior (300+) Hours in Residence
Satisfied by a minimum of 9 hours of KU resident credit in the minor.

Minor Junior/Senior (300+) Hours
Satisfied by a minimum of 18 hours from junior/senior courses (300+) in the minor.

Minor Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the minor. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/ Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Sample Plan

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 650</td>
<td>Statistical Methods in Behavioral and Social Science Research I</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 480</td>
<td>Independent Study</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 481</td>
<td>Research Practicum</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 696</td>
<td>Structural Equation Modeling I</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 697</td>
<td>Longitudinal Data Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

Master of Arts in Psychology

Why study psychology?
Because the understanding of mind, behavior, and the human experience is best achieved through the rigorous application of the scientific method.

Admission to Graduate Studies
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission
Students enter the department with the expectation of earning the Ph.D. The department does not admit students seeking the terminal master’s degree.

Applicants must have earned either the bachelor’s degree or the master’s degree. Although most applicants have majored in psychology as undergraduates, this is not required. It is necessary, however, to have earned 15 credit hours in psychology, including a first course in statistics and a course in experimental psychology or psychological research methods. Admission is competitive. The Graduate Record Examination is required. The GRE subject test is preferred but not required. Prior research and relevant work experience, honors, awards, and other achievements are taken into account. The deadline for completed applications is December 1 for the following fall semester.

Submit your graduate application online (http://www.graduate.ku.edu). Have official transcripts sent to the Graduate Application Processing Center.

Send all other requested application materials to the department:
The University of Kansas
Department of Psychology
Graduate Officer
Fraser Hall
M.A. Degree Requirements

Within 2 years of first enrollment in the Ph.D. program, the student must earn at least 30 graduate credit hours, no more than 6 of which may be in courses offered by other departments. The student must complete an acceptable thesis based on an empirical study and pass an oral examination. The oral examination may cover the thesis as well as more general material. Courses required for the M.A. degree are determined in consultation with faculty of the program in which the student is enrolled as part of the process of development of an individualized program. No more than 6 thesis hours may be applied to the 30 hours required for the M.A.

Doctor of Philosophy in Psychology

Why study psychology?

Because the understanding of mind, behavior, and the human experience is best achieved through the rigorous application of the scientific method.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies section of the online catalog.

Please consult the Departments & Programs section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Students enter the department with the expectation of earning the Ph.D. The department does not admit students seeking the terminal master's degree.

Applicants must have earned either the bachelor’s degree or the master’s degree. Although most applicants have majored in psychology as undergraduates, this is not required. It is necessary, however, to have earned 15 credit hours in psychology, including a first course in statistics and a course in experimental psychology or psychological research methods. Admission is competitive. The Graduate Record Examination is required. The GRE subject test is preferred but not required. Prior research and relevant work experience, honors, awards, and other achievements are taken into account. The deadline for completed applications is December 1 for the following fall semester.

Submit your graduate application online (http://www.graduate.ku.edu). Have official transcripts sent to the Graduate Application Processing Center.

Send all other requested application materials to the department:

The University of Kansas
Department of Psychology
Graduate Officer
Fraser Hall

Dual-title Ph.D. Program in Psychology and Gerontology

KU is implementing a dual-title Ph.D. option in Psychology and Gerontology. The dual-title degree will enable students at KU to meet the challenge of undertaking graduate education in the emerging, interdisciplinary field of gerontology that is combined with training in established, traditional disciplines. Interested students apply and are admitted to the psychology Ph.D. program. After completing an M.A. in psychology, they may apply to undertake the dual-title option. The student’s diploma will carry the name of both fields.

This option is designed to appeal to students who are strong in a traditional discipline but also motivated to study across disciplinary lines. In the course of study, students can avail themselves of disciplinary depth and interdisciplinary breadth.

Ph.D. Degree Requirements

Although graduate education is offered through separate programs, each student prepares an individualized plan of study in consultation with faculty members. These plans indicate how the student proposes to fulfill the requirements for the M.A. and Ph.D. degrees, including all general requirements and conditions.

Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current policies on Doctoral Research Skills and Responsible Scholarship are listed in the KU Policy Library.

Social Psychology

Monica Biernat, Social Psychology Program Director

The social psychology program is an intensive research training experience seeking students who are committed to empirical, scholarly work. The major research interests of faculty members are stereotyping, prejudice, intergroup relations, person perception, close relationships, emotion and motivation, self and identity, culture.

In addition to course work, the central requirement of the program is continuous involvement in research. Research opportunities range from laboratory experimentation to field research. Depending on backgrounds and goals, students may move from one research setting to another or concentrate on a particular type of research throughout their training.

Requirements

Students are guided by individually tailored plans called contracts. These describe sequences of learning experiences developed by the student and a 3-member faculty committee. Beginning students are urged to enroll in basic courses in theory and research in social psychology and statistics. The contract specifies students’ long-range goals, specialties, other fields of psychology or related disciplines in which they will become proficient, proposed sequence of course work, research and teaching experiences they hope to obtain, plans for the M.A. proposal, comprehensive requirements and dissertation landmarks, and an approximate timetable. Contract details can be changed by agreement of the student and faculty committee.

The contract is a general framework that permits students’ graduate work to be adapted to their interests and abilities and provides a standard...
against which progress can be assessed. Students' contracts must specify how the research skills and responsible scholarship requirement is to be met. The research skills requirement typically is met by completion of 6 graduate courses in statistics and research design. The responsible scholarship requirement is met via coursework as specified in the contract, completion of online tutorials, and attendance at ethics proseminars. All contracts must comply with other departmental and general rules including residence and time limits.

Cognitive and Brain Sciences

Evanagelia G. Chrysikou, Cognitive and Brain Sciences Program Director

The cognitive and brain sciences program seeks students with the intellectual potential, motivation, and quantitative aptitude to engage in productive scholarship in a basic or applied area of interest.

Interdisciplinary training is also available in

- Cognitive neuroscience
- Developmental science
- Aging and cognition
- Child language
- Quantitative methods

The training program emphasizes the development of a broad-based foundation in theory, research methods, technical skills, and quantitative analysis for application in a variety of basic and applied research settings. Areas of focus of current faculty members include memory, cognitive development, language, perception, attention, aging, and cognition.

Recent graduates have found employment in academic programs, research organizations, and applied research units in industry and government. The rate of employment for graduates is high. General program requirements are listed below. Applicants are encouraged to consult the department’s website (http://psych.ku.edu) for details.

The admission process includes evaluation of submitted materials and may include additional interviews by individual faculty members, as appropriate. The program follows a mentorship model; students are admitted to work with specific faculty members rather than to the program at large. During the application process, applicants are encouraged to contact faculty members with whom they are interested in working.

General Program Requirements
(with recommended completion time)

- Research activity (continuous)
- Course requirements (before oral comprehensive examinations)
- Master’s thesis and oral defense (year 2 or 3)
- Written preliminary examination (year 3 or 4)
- Research skills and responsible scholarship requirement (year 3 or 4)
- Comprehensive oral examination (year 4 or 5)
- Dissertation and oral defense (year 5 or 6)

Course Requirements

Statistics/Methods Core (13)
(12 hours by the end of the third year)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>PSYC 790</td>
<td>Statistical Methods in Psychology I</td>
</tr>
<tr>
<td>1 additional advanced</td>
<td>quantitative psychology course</td>
</tr>
</tbody>
</table>

Content Core (9)
(9 hours by the end of the second year)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>PSYC 723</td>
<td>Advanced Cognitive Psychology</td>
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</tbody>
</table>

Plus 2 subsequent classes in spring semester; these have previously included:

<table>
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<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>PSYC 725</td>
<td>Cognitive Neuroscience</td>
</tr>
<tr>
<td>PSYC 737</td>
<td>Psycholinguistics II</td>
</tr>
<tr>
<td>PSYC 757</td>
<td>Theories of Perception</td>
</tr>
<tr>
<td>PSYC 831</td>
<td>Advanced Human Learning and Memory</td>
</tr>
<tr>
<td>PSYC 870</td>
<td>Cognitive Development</td>
</tr>
</tbody>
</table>

Breadth/Depth (12)
(12 hours before oral comprehensives)

<table>
<thead>
<tr>
<th>Category</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breadth I and II</td>
<td></td>
</tr>
<tr>
<td>Depth I and II</td>
<td></td>
</tr>
</tbody>
</table>

Breadth/depth courses may come from a number of sources, depending on student interests and advisor suggestions. Students are expected to use this requirement to gain additional specialization in 2 areas in addition to cognitive psychology. Examples include Quantitative (courses in psychology and PRE), Language (courses in linguistics or speech-language-hearing), Neuroscience (courses in psychology, biology, or pharmacology), Philosophy, or Computer Science. These courses also can be used to help meet research skills and responsible scholarship requirements with breadth goals set out by the advisor.

Seminar (continuous enrollment) (1)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>PSYC 902</td>
<td>Proseminar in Experimental Psychology</td>
</tr>
</tbody>
</table>

Quantitative Psychology

Carol Woods, Interim Quantitative Psychology Program Director

The quantitative psychology (http://crmda.ku.edu) program provides a unique doctoral training experience. Graduate students are trained as quantitative specialists who can interface quantitative methods with substantive issues across the behavioral and social sciences. Students develop a substantial background in quantitative methods. Some students pursue more depth in quantitative content areas, and some pursue complementary expertise in a nonquantitative content area (e.g., clinical, cognitive, developmental, health, social). The exact nature of a student’s nonquantitative focus depends on the interests and goals of the student and the faculty mentor. Current methodological interests include psychometric methods, item response theory, structural equation modeling, multivariate statistics, multilevel modeling, differential equation modeling and dynamical systems, nonparametric statistics, and other topics in quantitative methods as applied in the behavioral and social sciences.

Recent graduates are employed in academic programs, basic research units in academic and organizational settings, applied research, and freelance consultation. Nearly all graduates proceed directly to full-time employment. About half the positions are academic, nearly all in upper-tier universities with graduate programs. Quantitative specialists have substantial technical expertise that provides an advantage in the job market. They often earn higher starting salaries and have access to additional income-enhancing activities such as grants and departmental consulting.
The program requires a total of 58 nonthesis hours (15 courses). Requirements are as follows:

**Quantitative Training**

**Quantitative Foundations (4)**
Quantitative foundations is 1 semester of basic psychological statistics, offered yearly:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 790</td>
<td>Statistical Methods in Psychology I</td>
<td>4</td>
</tr>
</tbody>
</table>

**Area-Specific Methodology (3)**
(1 course, 3 hours minimum). e.g.:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 815</td>
<td>Design and Analysis for Developmental Research</td>
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</tr>
<tr>
<td>PSYC 816</td>
<td>Design and Analysis for Neuroimaging Research</td>
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</tr>
<tr>
<td>PSYC 818</td>
<td>Experimental Research Methods in Social Psychology</td>
<td></td>
</tr>
<tr>
<td>PSYC 819</td>
<td>Field and Evaluation Research Methods in Social Psychology</td>
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</table>

**Quantitative Core (27)**
(7 courses, 27 hours minimum). The quantitative core is a more intense series of courses in fundamental quantitative areas, currently including (other courses may be substituted with the director's consent):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 791</td>
<td>Statistical Methods in Psychology II</td>
<td>9</td>
</tr>
<tr>
<td>PSYC 887</td>
<td>Factor Analysis</td>
<td></td>
</tr>
<tr>
<td>PSYC 879</td>
<td>Applied Nonparametric Statistical Methods</td>
<td></td>
</tr>
<tr>
<td>PSYC 892</td>
<td>Test Theory</td>
<td></td>
</tr>
<tr>
<td>PSYC 893</td>
<td>Multivariate Analysis</td>
<td></td>
</tr>
<tr>
<td>PSYC 894</td>
<td>Multilevel Modeling</td>
<td></td>
</tr>
<tr>
<td>PSYC 895</td>
<td>Categorical Data Analysis</td>
<td></td>
</tr>
<tr>
<td>PSYC 896</td>
<td>Structural Equation Modeling I</td>
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</tbody>
</table>

**Quantitative Concentration (9)**
(3 courses, 9 hours minimum). The quantitative concentration focuses on a range of specialized applications, currently including:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 990</td>
<td>Methods for Clustering and Classification</td>
<td></td>
</tr>
<tr>
<td>PSYC 991</td>
<td>Longitudinal Data Analysis</td>
<td></td>
</tr>
<tr>
<td>PSYC 993</td>
<td>Seminar: _______ (Advanced Quantitative Topics)</td>
<td></td>
</tr>
<tr>
<td>PSYC 996</td>
<td>Structural Equation Modeling II</td>
<td></td>
</tr>
</tbody>
</table>

Advanced courses offered in other departments or schools also may be taken with the director's consent.

**Proseminar in Quantitative Behavioral and Social Sciences (6)**
(6 semesters, 1 hour a semester, 6 hours minimum)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 881</td>
<td>Proseminar in Quantitative Behavioral and Social Sciences</td>
<td>6</td>
</tr>
</tbody>
</table>

The quantitative proseminar is an ongoing discussion series covering advanced topics and emerging issues.

Courses will be added to these offerings. In addition, students complete at least 1 semester of a research methodology course. Methodology courses associated with the different substantive foci are available.

**Minor Concentration (9)**

(3 courses, 9 hours minimum, e.g., Cognitive Psychology, Developmental Psychology, Health Psychology, Social Psychology, Education, Mathematical Statistics). The minor concentration is fulfilled by taking 3 or more courses in a specialized area, education (e.g., testing, evaluation), mathematical statistics, or a tailored curriculum that meets the goals and objectives of the student (e.g., business).

**General Requirements**

**Research Skills and Responsible Scholarship**

- Because the quantitative training track is all about research methods and statistics, the research skills requirement is met by completion of the core requirements in statistics and research design. The responsible scholarship requirement is additionally met via attendance at ethics proseminar presentations offered each semester, and through direct mentoring with the faculty advisor.
- M.A. thesis (1-9 hours plus public defense, typically completed by the end of the second year of training, 3-person committee).
- Comprehensive oral examinations (review paper, dissertation proposal, elaborate project, or written examination plus public defense, typically completed during the fourth year of training, 5-person committee with 1 outside member).
- Dissertation (1-12 hours plus public defense, 5-person committee with 1 outside member).

**Additional Graduate Experiences**

Quantitative psychology students have opportunities for experience in teaching, statistical consulting, and data analysis through employment in various settings. Students also are expected to participate and assist with our regular summer training institutes on advanced quantitative techniques. Opportunities may include teaching undergraduate statistics in psychology, research assistantships in quantitative projects, assisting in research at an institute such as the Institute for Life Span Studies (http://www.lsi.ku.edu), or working in the Center for Research Methods and Data Analysis (http://crmda.ku.edu). Students have access to quantitative workshops and brown-bag lunches offered regularly by the quantitative training program. Workshops are conducted by national leaders in quantitative methods. Special resources for attending national workshops and conventions are also available.

**Quantitative Minor**

A minor in quantitative psychology is offered for graduate students in any of the department’s major programs and for select programs in the College of Liberal Arts and Sciences (e.g., sociology). The quantitative minor is an addition to the regular program and does not replace any existing or future requirements of the student’s major program. Students desiring a major emphasis in quantitative psychology should apply directly to the quantitative psychology program.

The minor consists of advanced course work in statistics, measurement, and methodology. The quantitative minor provides the student with elevated levels of quantitative expertise to enhance the overall quality of the research program. It gives students a competitive edge in the job market. Many faculty positions now request expertise in both a specific content area and in quantitative methods. Advanced quantitative skills also offer students additional job opportunities. The quantitative minor provides the additional credentials needed to pursue these jobs.

The minor requires 5 courses in quantitative methodology beyond the basic foundations course requirement (PSYC 790). The classes normally
are taken in the department but can come from other departments with approval. Currently available courses include Analysis of Variance, Categorical Methods, Nonparametric Statistics, Multivariate Methods, Multilevel Modeling I, Structural Equation Modeling I and II, Test Theory, Factor Analysis, and regularly offered Advanced Topics in Quantitative Psychology seminars with varying topics.

For more information, contact Carol Woods, cmw@ku.edu (yhat@ku.edu).

**Developmental Psychology**

Andrea Greenhoot, Developmental Psychology Program Director

Training in developmental psychology is interdisciplinary and collaborative. The developmental emphasis profits significantly from affiliated faculty in other academic units such as Speech-Language-Hearing: Sciences and Disorders, the School of Education, and doctoral programs in Clinical Child Psychology, Child Language, Gerontology, and Neurosciences. The developmental emphasis is substantively linked to the Schiefelbusch Institute for Life Span Studies, the Kansas Intellectual and Developmental Disabilities Research Center, and the Center for Biobehavioral Neurosciences in Communication Disorders. Many of the developmental psychology faculty have affiliations with more than one entity on campus. This breadth offers students multidisciplinary exposure and experiences that train them to conduct cutting-edge research on developmental phenomena across the life span. The program includes a number of concentrations, including cognitive, social, evolutionary, language, and quantitative. Students work with a faculty mentor to customize a concentration that suits the needs of the student and the expertise of the available faculty. The program is appropriate for students who wish to be trained in the traditional divisions of psychology (e.g., cognitive-developmental, social-developmental, quantitative-developmental) as well as those whose interests may not fall squarely within traditional divisions.

**Curriculum**

The curriculum involves 35 hours of formal developmental courses in addition to master’s, research skills and responsible scholarship, and dissertation research hours. Students are expected to enroll in a biweekly Proseminar on Developmental Science (6 semesters minimum). The program allows students to pursue their developmental research interests and accumulate academic credentials that give access to the job market of their choice. Formal course requirements are as follows:

<table>
<thead>
<tr>
<th>Statistics, Design, and Professional Issues (13 hours, minimum) (13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 790 Statistical Methods in Psychology I 4</td>
</tr>
<tr>
<td>1 additional advanced quantitative psychology course 3</td>
</tr>
<tr>
<td>PSYC 815 Design and Analysis for Developmental Research 3</td>
</tr>
<tr>
<td>PSYC 982 Issues in Scientific Conduct 3</td>
</tr>
<tr>
<td>Core Developmental Courses (12 hours) (12)</td>
</tr>
<tr>
<td>PSYC 691 The Psychology of Aging 3</td>
</tr>
<tr>
<td>PSYC 870 Cognitive Development 3</td>
</tr>
<tr>
<td>PSYC 825 Social Development 3</td>
</tr>
<tr>
<td>PSYC 923 History and Systems of Developmental Psychology: Developmental Theory 3</td>
</tr>
</tbody>
</table>

**Concentration (9 hours, minimum)**

The concentration builds expertise in an area chosen by the student in conjunction with the faculty advisor. Courses offered outside the department may count toward the concentration. The concentration can be either very focused or a uniquely tailored hybrid of courses. Some examples of concentrations that students may create are listed below. Many related courses may be substituted for the same general theme of the concentration and students can create a concentration that fits with their interests and educational objectives. Possible concentrations include:

**General Cognitive Development**

- PSYC 723 Advanced Cognitive Psychology 3
- PSYC 800 Experimental Psychology: _____ (Cognition and Aging) 3
- PSYC 872 Attention, Perception, and Learning in Infancy 3

**Social-Personality Development**

- PSYC 777 Social Psychology: Theory, Research, and Clinical Applications 3
- PSYC 962 Advanced Personality 3

**Quantitative Developmental Methods**

- PSYC 896 Structural Equation Modeling I 4
- PSYC 996 Structural Equation Modeling II 3
- PSYC 893 Multivariate Analysis 4

**Note:** Such a concentration also lends itself to completing a graduate minor in quantitative psychology and satisfying the Research Skills and Responsible Scholarship (RSRS) requirements.

**Developmental Evolutionary Psychology**

- PSYC 993 Seminar: _____ (Developmental Evolutionary Psychology) 1-5
- BIOL 625 Behavioral Ecology and Sociobiology 3
- BIOL 668 Evolutionary Ecology 3

**Developmental Cognitive Neuroscience**

- PSYC 725 Cognitive Neuroscience 3
- PSYC 800 Experimental Psychology: _____ (Neuroscience Methods) 3
- PSYC 800 Experimental Psychology: _____ (Developmental Cognitive Neuroscience) 3

**Language Development**

- PSYC 735 Psycholinguistics I 3
- PSYC 993 Seminar: _____ (Research Methods in Language Development) 1-5
- SPLH 816 Language Development 3

**Developmental Research Skills and Responsible Scholarship (8 hours, minimum)**

The RSRS requirement generally is satisfied by taking 2 additional quantitative courses and PSYC 982 Issues in Scientific Conduct.Satisfying the RSRS requirement in this way also lends itself...
to the completion of a graduate minor in quantitative psychology (6 quantitative courses total are required for the minor).

For more information, contact Andrea Greenhoot, agreenhoot@ku.edu

Clinical Psychology

Rick Ingram, Director of Clinical Training

The clinical psychology program educates students to master knowledge in the field of scientific psychology so that they can generate new scientific knowledge and theory related to the field of clinical psychology, and can make independent contributions to the evolving base of skills and scientific knowledge required for clinical practice. All students take basic course work and practica in academic/research and clinical application. Students may take electives or practica to augment either aspect of training. About half the graduates pursue academic/research-oriented careers, and the rest undertake careers emphasizing applied activities (e.g., psychotherapy in community mental health centers or hospitals). Information is available from the graduate admission secretary or online (http://psych.ku.edu/clinical).

Health and Rehabilitation Specialty

Work centers on the psychosocial and biomedical aspects of physical health, illness, and disability. Students apply the knowledge and techniques to problems of prevention, assessment, treatment, and rehabilitation. A detailed overview is available from the graduate admission secretary or online (http://psych.ku.edu/clinical).

Requirements

Individual plans of study are designed to meet the standards established by state licensing boards and professional organizations. Individualization is achieved by selecting among alternate ways of meeting specific requirements and by selected electives or choosing the health and rehabilitation emphasis. The plan of study constitutes an agreement between the student and the entire clinical faculty. Program requirements:

General Core Requirements for Clinical Psychology (13-17 credit hours)

Quantitative Analysis of Behavior (6-7)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 789</td>
<td>Psychological Statistics: Foundations and Applications</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 790</td>
<td>Statistical Methods in Psychology I</td>
<td></td>
</tr>
<tr>
<td>Select 1 of the following:</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>PSYC 791</td>
<td>Statistical Methods in Psychology II</td>
<td></td>
</tr>
<tr>
<td>PSYC 795</td>
<td>Computing and Psychology</td>
<td></td>
</tr>
<tr>
<td>EPSY 811</td>
<td>Analysis of Variance</td>
<td></td>
</tr>
<tr>
<td>PSYC 879</td>
<td>Applied Nonparametric Statistical Methods</td>
<td></td>
</tr>
<tr>
<td>PSYC 887</td>
<td>Factor Analysis</td>
<td></td>
</tr>
<tr>
<td>PSYC 892</td>
<td>Test Theory</td>
<td></td>
</tr>
<tr>
<td>PSYC 893</td>
<td>Multivariate Analysis</td>
<td></td>
</tr>
<tr>
<td>PSYC 894</td>
<td>Multilevel Modeling</td>
<td></td>
</tr>
<tr>
<td>PSYC 895</td>
<td>Categorical Data Analysis</td>
<td></td>
</tr>
<tr>
<td>PSYC 896</td>
<td>Structural Equation Modeling I</td>
<td></td>
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</tbody>
</table>

Cognitive Bases of Behavior (3)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 723</td>
<td>Advanced Cognitive Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 725</td>
<td>Cognitive Neuroscience</td>
<td></td>
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</tbody>
</table>

Social Bases of Behavior (3)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 774</td>
<td>Advanced Social Psychology I</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 775</td>
<td>Advanced Social Psychology II (Current Issues)</td>
<td></td>
</tr>
<tr>
<td>PSYC 777</td>
<td>Social Psychology: Theory, Research, and Clinical Applications</td>
<td></td>
</tr>
<tr>
<td>PSYC 825</td>
<td>Social Development</td>
<td></td>
</tr>
<tr>
<td>PSYC 956</td>
<td>Social Neuroscience (Theory and Applications)</td>
<td></td>
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</tbody>
</table>

Developmental Bases of Behavior (3)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 825</td>
<td>Social Development</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 863</td>
<td>Clinical Neuropsychology Across the Lifespan</td>
<td></td>
</tr>
<tr>
<td>PSYC 870</td>
<td>Cognitive Development</td>
<td></td>
</tr>
<tr>
<td>EPSY 705</td>
<td>Human Development through the Lifespan</td>
<td></td>
</tr>
</tbody>
</table>

Clinical Requirements (46)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPSY 998</td>
<td>Seminar in: _____</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 888</td>
<td>Diversity Issues in Clinical Psychology or EPSY 875</td>
<td></td>
</tr>
<tr>
<td>PSYC 898</td>
<td>Proseminar: Professional Issues in Counseling Psychology</td>
<td></td>
</tr>
<tr>
<td>PSYC 946</td>
<td>Theories and Methods of Psychotherapy</td>
<td></td>
</tr>
<tr>
<td>PSYC 950</td>
<td>Clinical Supervision and Consultation: Theory &amp; Research</td>
<td></td>
</tr>
<tr>
<td>PSYC 960</td>
<td>Advanced Psychopathology</td>
<td></td>
</tr>
<tr>
<td>PSYC 961</td>
<td>Biological Foundations of Psychopathology</td>
<td></td>
</tr>
<tr>
<td>PSYC 968</td>
<td>Research Methods in Clinical Psychology</td>
<td></td>
</tr>
<tr>
<td>PSYC 975</td>
<td>Professional and Ethical Problems in Clinical Psychology or EPSY 900</td>
<td></td>
</tr>
<tr>
<td>PSYC 964</td>
<td>Clinical Practicum I</td>
<td></td>
</tr>
<tr>
<td>PSYC 965</td>
<td>Clinical Practicum II</td>
<td></td>
</tr>
</tbody>
</table>

Note: Because this is an American Psychological Association-approved clinical program, the faculty expect all students to operate within the APA Code of Ethics in professional and personal behavior. Adherence to the ethical principles is part of the normal evaluation of students during the degree program.

7 Courses Covering Practicum Course Work (21 hours):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 850</td>
<td>Assessment I: Foundations of Psychological Assessment</td>
<td>21</td>
</tr>
<tr>
<td>PSYC 855</td>
<td>Assessment II: Integrative Psychological Assessment</td>
<td></td>
</tr>
<tr>
<td>PSYC 964</td>
<td>Clinical Practicum I</td>
<td></td>
</tr>
<tr>
<td>PSYC 965</td>
<td>Clinical Practicum II</td>
<td></td>
</tr>
</tbody>
</table>
Research Skills Proficiency

This requirement normally is met by completing all of the following with a grade of B or higher in each. Because these courses are required elsewhere in the curriculum, they do not represent additional required hours.

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 968 Research Methods in Clinical Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 790 Statistical Methods in Psychology I</td>
<td>4</td>
</tr>
<tr>
<td>One of the following:</td>
<td>3-4</td>
</tr>
<tr>
<td>PSYC 791 Statistical Methods in Psychology II</td>
<td></td>
</tr>
<tr>
<td>Computer Analysis of Psychological Data</td>
<td></td>
</tr>
<tr>
<td>EPSY 811 Analysis of Variance</td>
<td></td>
</tr>
<tr>
<td>PSYC 879 Applied Nonparametric Statistical Methods</td>
<td></td>
</tr>
<tr>
<td>PSYC 887 Factor Analysis</td>
<td></td>
</tr>
<tr>
<td>PSYC 892 Test Theory</td>
<td></td>
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<tr>
<td>PSYC 893 Multivariate Analysis</td>
<td></td>
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<tr>
<td>PSYC 894 Multilevel Modeling</td>
<td></td>
</tr>
<tr>
<td>PSYC 895 Categorical Data Analysis</td>
<td></td>
</tr>
<tr>
<td>PSYC 896 Structural Equation Modeling I</td>
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</tbody>
</table>

Responsible Scholarship Requirement

This is a new requirement. Satisfying this requirement will not necessitate additional credit-hour enrollments. Refer to the program website for the latest information.

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 968 Research Methods in Clinical Psychology</td>
<td>3</td>
</tr>
<tr>
<td>(minimum of 3 hours on responsible research scholarship)</td>
<td></td>
</tr>
<tr>
<td>PSYC 975 Professional and Ethical Problems in Clinical Psychology</td>
<td>3</td>
</tr>
<tr>
<td>(minimum of 6 hours on research and academic ethics)</td>
<td></td>
</tr>
</tbody>
</table>

Students must also complete:

1. Online tutorial for Responsible Scholarship from Research & Graduate Studies
2. Online tutorial for IRB (institutional Review Board)
3. Online tutorial for HiPAA data (completed annually)

Thesis and Dissertation (18 hours)

The student must complete a master’s thesis based on an empirical study (minimum of 6 hours) and an empirical doctoral dissertation (minimum of 12 hours) and defend each in separate oral examinations. The thesis should be completed by the end of the second year and written in a form suitable for journal submission.

Electives/Independent Study (6 credit hours, minimum)

Because a minimum of 86 hours of graduate credit is required for the degree, the hours not included in the requirements above may be elective courses selected by the student and his or her advisor.

Examinations: Task

Each student must propose and demonstrate competence in one task or project. This task typically is done in the third year. It may be in applied/clinical, research/methodology, or program evaluation. A complete description is available from the clinic office or online (http://psych.ku.edu/clinical).

Upon completion of all degree requirements except the dissertation and internship, the student must pass the oral comprehensive examination. This examination addresses a proposal for the dissertation as well as related, general questions in the field. It should be taken before completion of 4 calendar years for students entering with the B.A. and 3 years for students entering with the M.A. The faculty believes that the student is best served by completing the entire dissertation before the internship.

Internship (3 hours)

Students must complete a 12-month predoctoral internship at a setting approved by the clinical psychology faculty. Clinical students may complete their internships at any setting approved by the American Psychology Association.

Department of Religious Studies

Why study religious studies?

Religions have been and remain among the most powerful forces shaping human history. Their discourses and practices inform the way we perceive ourselves, those around us, and existence at large, even when we are not actively religious. They are central to understanding both what divides us and unites us. The academic study of religion is a trans-disciplinary endeavor to understand from an objective perspective how religious traditions shape the lives of their adherents, without seeking to promote or disprove any specific belief system. Religious Studies acquaints students with the diversity of religious cultures and introduces them to key methods and theories employed in their examination as “religion.”

Undergraduate Programs

The undergraduate degree in the Department of Religious Studies is a research, analysis, and writing intensive program that features close work with faculty in small classroom settings. It seeks to develop a foundational knowledge of the world’s diversity of religious cultures and critical awareness of the ways in which religion shapes how we see and act toward ourselves, others, and the environment around us. Through the study of specific religious traditions and settings, students come away with a background that is invaluable to understanding and working with people of other cultures, whether in international business or simply as an informed global citizen.

Graduate Programs

The department offers a graduate program leading to the M.A. with a major in religious studies. The program enables students to pursue specialized advanced work that builds in tandem on the interests
of the students and the specializations of the faculty. At all levels, interdepartmental and interdisciplinary cooperation is encouraged as important to a comprehensive program. Continuing research in religious studies is an indispensable and foundational element, intimately related both to teaching and to the wider exchange and advancement of knowledge.

A library of some 15,000 volumes, owned by the Friends of the Department of Religious Studies at the University of Kansas, is housed with and used by the department in Irma I. Smith Hall. The Department of Religious Studies at KU is also in the unusual position of being able to provide substantial financial support for students seeking the MA degree.

Courses

REL 104. Introduction to Religious Studies. 3 Hours. HR AE42/GE3H / H.
This course introduces students to the academic study of religions. It acquaints students with key methods and issues in religious studies, and provides an introductory survey of selected religions. Not open to students who have taken REL 105. LEC.

REL 105. Introduction to Religious Studies, Honors. 3 Hours. HR AE42/GE3H / H.
This course introduces students to the academic study of religions. It acquaints students with key methods and issues in religious studies, and provides an introductory survey of selected religions. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken REL 104. LEC.

REL 106. Living Religions of the East. 3 Hours. HR/NW AE42/GE3H / H/W.
A basic introduction to religion in India, China, and Japan with emphasis upon religions that affect the modern period. Not open to students who have taken REL 108/EALC 105. (Same as EALC 105.) LEC.

REL 107. Living Religions of the West. 3 Hours. HR GE3H / H.
A basic introduction to the major religious traditions of the Near East, Europe, and the Americas, with an emphasis on their development through the modern period and their expressions in contemporary life. Not open to students who have taken REL 109. (Same as JWSH 107.) LEC.

REL 108. Living Religions of the East, Honors. 3 Hours. HR/NW AE42/GE3H / H.
A basic introduction to religion in India, China, and Japan, with emphasis upon religions that affect the modern period. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken REL 106/EALC 105. (Same as EALC 108.) LEC.

REL 109. Living Religions of the West, Honors. 3 Hours. HR AE42/GE3H / H.
A basic introduction to the major religious traditions in the Near East, Europe, and the Americas, with an emphasis on their development through the modern period and their expressions in contemporary life. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken REL 107. LEC.

REL 124. Understanding the Bible. 3 Hours. HR AE42/GE3H / H.
An introduction to the literature of the Bible, exploring the relationships among the various types of literature present and the function of each type in the history and religious life of the people who produced and used them. Cannot be taken concurrently with REL 311 or JWSH 321 or REL 315. Not open to students who have taken REL 125 or JWSH 125. (Same as JWSH 124.) LEC.

REL 125. Understanding the Bible, Honors. 3 Hours. HR AE42/GE3H / H.
An introduction to the literature of the Bible, exploring the relationships among the various types of literature present and the function of each type in history and religious life of the people who produced and used them. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken REL 124 or JWSH 124. (Same as JWSH 125.) LEC.

REL 130. Myth, Legend, and Folk Belief in East Asia. 3 Hours. NW / H/W.
A survey of the commonly held ideas about the beginning of the world, the role of gods and spirits in daily life, and the celebrations and rituals proper to each season of the year. The purpose of the course is to present the world view of the ordinary peoples of East Asia. (Same as ANTH 293, EALC 130.) LEC.

REL 171. Religion in American Society. 3 Hours. HR AE41/GE3H / H.
A broad introduction to religion in American culture. This class emphasizes the well-established religions with large followings (viz. Judaism, Catholicism, Eastern Orthodoxy, and Protestantism). Some attention is also given to other religions active in America. Other topics covered include the relationship of church and state, religion in ethnic and racial minority groups, and women and religion. Not open to students who have taken REL 172. (Same as AMS 290.) LEC.

REL 172. Religion in American Society, Honors. 3 Hours. HR AE41/GE3H / H.
Honors version of REL 171. A broad introduction to religion in American culture. This class emphasizes the well-established religions with large followings (viz. Judaism, Catholicism, Eastern Orthodoxy, and Protestantism). Some attention is also given to other religions active in America. Other topics covered include the relationship of church and state, religion in ethnic and racial minority groups, and women and religion. Not open to students who have taken AMS 290. Open only to students in the University Honors Program or by permission of instructor. LEC.

REL 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Religious Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

REL 200. Study Abroad Introductions to: ______. 1-4 Hours. H.
This course is designed for the study of special topics in Religious Studies. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

REL 311. Religion of Ancient Israel. 3 Hours. H/W.
A study of the development of the Hebrew Bible from its earliest stages of oral tradition to its canonization with an emphasis on the relationship of the historical, intellectual, and cultural contexts shaping that development. (Same as JWSH 321.) Prerequisite: REL 124 or JWSH 124 or permission of instructor. LEC.

REL 315. History and Literature of Early Christianity. 3 Hours. H/W.
An examination of the literature produced by early Christians. In addition to New Testament texts, the course includes a broad range of diverse texts produced by early Christians, Jews, and others. Prerequisite: REL 124 or permission of instructor. LEC.

REL 325. Introduction to Judaism. 3 Hours. H.
Analyzes a selection of the core texts, teachings, and practices of Jewish religious traditions in terms of classical and contemporary understanding. (Same as JWSH 325.) LEC.
This course demystifies the Talmud, arguably the most central yet also
the most mysterious text of rabbinic Judaism. Students are introduced to
the scope, substance, styles, and major figures of the Talmud, and also
learn how the text came into being over the course of several centuries.
(Same as JWSH 326.) Prerequisite: REL 104, REL 107, or REL 124 or
REL 125, or permission of the instructor. LEC.

REL 330. Native American Religions. 3 Hours. NW AE41 / H.
A survey of religious traditions among selected Native American peoples.
Topics include religious freedom, ritual activity, cultural narrative (myth)
kinship, healing practices, ecology, government relations, impact of
colonization, impact of missionization, contact between cultures, and
secularization. Not open to students who have completed REL 331.
(Same as ISP 330.) LEC.

REL 331. Native American Religions, Honors. 3 Hours. NW AE41 / H.
A survey of religious traditions among selected Native American peoples.
Topics include religious freedom, ritual activity, cultural narrative (myth)
kinship, healing practices, ecology, government relations, impact of
colonization, impact of missionization, contact between cultures, and
secularization. Open only to students in the University Honors Program
or by permission of instructor. Not open to students who have completed
REL 330. (Same as ISP 331.) LEC.

REL 339. History of Religion in America. 3 Hours. H.
Survey of the development of religious institutions and ideas in America
from colonial times to the present. Emphasis is given to the mainstream
religious traditions (Protestant, Catholic, Jewish), but attention is also paid
to other phenomena, including nonwestern and native American religions.
LEC.

REL 341. Mysticism. 3 Hours. H.
The nature of mystical experience and reflection as expressed in selected
mystical literature of the world's religions. LEC.

REL 342. Religion and Literature. 3 Hours. H.
An examination of contemporary writings to explore the authors’
presuppositions concerning the nature of God, the nature of human
beings, the meaning of good and evil, the significance of human
existence, and the means of attaining fulfillment or salvation. LEC.

REL 345. Christianity. 3 Hours. H.
An introductory examination of the history, doctrines, and practices of
Christianity. Selected readings from the creeds, papal decrees, and major
Christian theologians. LEC.

REL 350. Islam. 3 Hours. NW AE42/GE3H / H/W.
Origins of Islam; the Prophet Muhammad; the Holy Koran; religious
symbols and moral mandates; historical developments. (Same as AAAS
349.) LEC.

REL 355. Muslim Societies. 3 Hours. H.
In this class we study Muslim societies throughout the world. We examine
variation between regions by looking at Muslim history and culture in
different countries, such as Pakistan, Indonesia, Mali, Bosnia, Egypt,
Yemen, and others. LEC.

REL 360. The Buddhist Tradition in Asia. 3 Hours. NW AE42/GE3H / H.
A historical and geographical survey of the Buddhist tradition from its
origins in India to modern day developments in the three major regional
Buddhist cultures of Southeast Asia, Tibet, and East Asia (China, Korea,
and Japan). Prerequisite: Prior coursework in Asian studies or permission
of instructor. LEC.

REL 365. Hinduism. 3 Hours. H.
An introduction to the diversity and richness of Hinduism from the Vedic
period to the present; explores Hindu practices, beliefs, and communities
using primary texts and extensive audio-visual resources. LEC.

REL 371. Religion and Society in Tension. 3 Hours. H.
Specific issues of conflict between the values of certain religious groups
and those of the larger society. Includes problems of church and state,
birth control and abortion, civil disobedience and dissent, education, war
and peace, and "civil religion. LEC.

REL 373. The Supreme Court and Religious Issues in the United
States. 3 Hours. H.
Historical study of the interpretation of the religion clauses of the First
Amendment with special reference to the questions of establishment, the
free exercise of religion, freedom of religious belief, worship, and action,
and religion and the public schools. Not open to freshmen. (Same as
HIST 373.) LEC.

REL 374. Religious Perspectives on Selfhood and Sexuality. 3 Hours.
H.
The nature of the self in its individual and social dimensions. Self
experienced and expressed in sexuality. Survey of viewpoints in religious
literature. LEC.

REL 375. The Supreme Court and Religious Issues in the United
States, Honors. 3 Hours. H.
Historical study of the interpretation of the religion clauses of the First
Amendment with special reference to the questions of establishment,
the free exercise of religion, freedom of religious belief, worship, and
action, and religion and the public schools. Open only to students in the
University Honors Program or by permission of the instructor. (Same as
HIST 375.) LEC.

REL 376. American Judaism: Life and Thought. 3 Hours. H.
A study of the conflicts between secularists and religiousists, between
Zionists and synagogue representatives, and the patterns of compromise
in American Jewish life. Questions of Americanism and Jewish survival,
support for the State of Israel, and the bureaucratic structure of rabbinical
training and philanthropy in America will be raised. LEC.

REL 377. Religious Ethics and Moral Decisions. 3 Hours. AE51 / H.
When faced with ethical dilemmas how do we decide what is the right
course of action? In what ways are our decisions affected by religious
ideas about morality? In this class we examine the ethical problems we
encounter every day in light of the solutions offered from various religious
traditions. Cases to be examined include issues of life and death, war
and peace, sexual morals, torture, the treatment of animals and the
environment. LEC.

REL 378. Religion and Moral Decisions, Honors. 3 Hours. H.
Honors version of REL 377. Introduction to religious viewpoints on
individual and social ethics. Influence of religious thought on the making
of moral decisions, and on value development. Examined in relation to
specific moral issues. Open only to students who have been admitted to
the University Honors Program or by permission of instructor. LEC.

REL 380. Philosophical Issues in Religion. 3 Hours. GE3H / H.
This course will consider, from a philosophical perspective, some of the
problems in religion which arise in the development of "Natural Theology"
broadly conceived. (Same as PHIL 350.) LEC.

REL 400. Study Abroad Special Topics: ______. 1-4 Hours. H.
This course is designed for the study of special topics in Religious Studies
equivalent to courses at the 300 to 600 level at KU. Coursework must be
arranged through the Office of KU Study Abroad. May be repeated for
credit if content varies. LEC.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
<th>Type</th>
<th>Prerequisite</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL 404</td>
<td>Undergraduate Seminar in Religion: _______ 1-3 Hours. H.</td>
<td>3</td>
<td>LEC</td>
<td>-</td>
<td>A close reading of classic texts of Asian religions in English translation, with emphasis on their construction and reception as sacred &quot;scripture&quot; in both their indigenous Asian contexts and in the post-colonial West. No prior knowledge of Asia is required, although some background is desirable. LEC.</td>
</tr>
<tr>
<td>REL 405</td>
<td>Directed Study in Religion. 1-4 Hours. AE61 / H.</td>
<td>3</td>
<td>LEC</td>
<td>-</td>
<td>Investigation of a special topic or project selected by the student with advice, approval, and supervision of an instructor. Such study may take the form of directed reading or special research. Individual reports and conferences. May be repeated, with maximum cumulative credit of four hours. Course taken for one hour of credit may not be used to fulfill College distribution requirement. Prerequisite: One previous course in religious studies at the University of Kansas and permission of instructor. IND.</td>
</tr>
<tr>
<td>REL 406</td>
<td>Reading Asian Religious Classics. 3 Hours. H.</td>
<td>3</td>
<td>H</td>
<td>-</td>
<td>Includes small group discussions and application to personal experience. Theories and elements of love in a variety of types of relationships, with attention to religious ethical traditions and social and behavioral sciences. With particular emphasis on their stylistic, geographical, social, devotional and literary contexts. Not open to students who have taken HA 361 or HA 561. Work requirements will be greater for graduate students. (Same as HWC 468.) Prerequisite: A college level introduction to Asian art history, or permission of instructor. LEC.</td>
</tr>
<tr>
<td>REL 407</td>
<td>Religion and Film. 3 Hours. H.</td>
<td>3</td>
<td>H</td>
<td>-</td>
<td>An examination of the treatment of religious themes through the medium of film and an examination of the attitudes of religious organizations toward films and film production. Selected films will be viewed and analyzed from the perspectives taken within religious studies. LEC.</td>
</tr>
<tr>
<td>REL 408</td>
<td>Islamic Law in the Digital Age. 3 Hours. H.</td>
<td>3</td>
<td>H</td>
<td>-</td>
<td>In this class we trace how Islamic law has changed in the modern era, beginning with an overview of shari'a and its traditional function in Muslim society, and then examine how the practice of Islamic law was altered by colonialism and the rise of the nation state. We mark these transformations by studying how Islamic law is used in the online environment today. LEC.</td>
</tr>
<tr>
<td>REL 409</td>
<td>Religion in the Muslim World. 3 Hours. NW / H.</td>
<td>3</td>
<td>H</td>
<td>-</td>
<td>A study of pop songs, television, comics, and other idioms of popular culture from different parts of the Muslim world, with attention to Muslims' sense of humor, tragedy, aesthetics, and pertinent issues of the day. (Same as AAAS 450.) LEC.</td>
</tr>
<tr>
<td>REL 410</td>
<td>Millenarian Movements. 3 Hours. S.</td>
<td>3</td>
<td>H</td>
<td>-</td>
<td>A historical survey of millenarian movements (the belief in imminent, total, ultimate, this-worldly, collective salvation), with particular attention to their psychological, sociological, and political dimensions. (Same as REL 504.) Prerequisite: POLS 301 or honors equivalent or for non-majors completion of Western Civilization requirement, or consent of instructor. LEC.</td>
</tr>
<tr>
<td>REL 411</td>
<td>Religion in India. 3 Hours. NW AE42/GE3H / H/W.</td>
<td>3</td>
<td>H</td>
<td>-</td>
<td>Survey of religious thought and practice in India from the Vedanta period to the present. LEC.</td>
</tr>
<tr>
<td>REL 412</td>
<td>Religion in China. 3 Hours. NW AE42/GE3H / H/W.</td>
<td>3</td>
<td>H</td>
<td>-</td>
<td>Survey of religious thought and practice in China from the Shang to the People's Republic. (Same as EALC 508.) LEC.</td>
</tr>
<tr>
<td>REL 413</td>
<td>Religion in Japan. 3 Hours. NW AE42/GE3H / H/W.</td>
<td>3</td>
<td>H</td>
<td>-</td>
<td>Survey of religious thought and practice in Japan from the Jomon period to the present. (Same as EALC 509.) LEC.</td>
</tr>
<tr>
<td>REL 414</td>
<td>Religion in Korea. 3 Hours. NW AE42/GE3H / H.</td>
<td>3</td>
<td>H</td>
<td>-</td>
<td>Survey of religious thought and practice in Korea from the Three Kingdoms period to the present. Prerequisite: REL 106/EALC 105; EALC 104; or permission of instructor. LEC.</td>
</tr>
<tr>
<td>REL 415</td>
<td>Buddhist Art of Korea. 3 Hours. H.</td>
<td>3</td>
<td>H</td>
<td>-</td>
<td>Introduction to the history of Buddhist architecture, painting, sculpture and illuminated scriptures in Korea from the 4th through the 19th centuries, with particular emphasis on their stylistic, geographical, social, devotional and literary contexts. Not open to students who have taken HA 361 or HA 561. Work requirements will be greater for graduate students. (Same as HA 561.) Prerequisite: A college level introduction to Asian art history, or consent of instructor. LEC.</td>
</tr>
<tr>
<td>REL 416</td>
<td>Studies in Early Christian Literature and History. 3 Hours. H.</td>
<td>3</td>
<td>H</td>
<td>-</td>
<td>Contemporary research in the history and literature of earliest Christianity including most of the following: (1) the use of critical method, (2) philosophical and theological contexts, (3) sociological analyses, (4)</td>
</tr>
</tbody>
</table>

The University of Kansas

1975
emphasis on the examination of primary documents. LEC.

REL 534. Studies in Ritual: ______. 3 Hours. H.
A study of ritual theory and a comparative study of ritual activity among selected religious traditions. May be taken more than once if content differs sufficiently. LEC.

REL 535. The History of Islam in Africa. 3 Hours. H/W.
A study of the history and institutions of Islam in Africa. Emphasis will be placed on the impact of Islam on African traditional religions and African civilization in general; the historiographical traditions of Islam in Africa. (Same as AAAS 542.) LEC.

REL 541. Gods and Goddesses of South Asia. 3 Hours. H.
This course explores the dynamic diversity of gods and goddesses in South Asian religious life through examination of their basic iconography, religious narratives and devotional poetry, temple images and architecture, ritual practices, performance traditions, and film. Prerequisite: An introductory course in religious studies or consent of instructor. LEC.

REL 543. Hindu Epics, Past and Present. 3 Hours. H.
This interdisciplinary course considers the roles that the two great Indian epics, the Mahabharata and the Ramayana, have played in the history of religion, literature, art, and politics in South Asia (and beyond). Prerequisite: An introductory course in religious studies or consent of instructor. LEC.

REL 545. Yoga in Theory, Practice, and History. 3 Hours. H.
Historical and thematic investigation into Yoga, including classical formulations, esoteric practices, and contemporary developments and debates. LEC.

REL 550. Gender Issues in Islam. 3 Hours. H.
Focusing on issues of gender, this course follows major religious developments in the Islamic tradition. Also examines how Muslim women have impacted those developments. LEC.

REL 551. Shari'a, Democracy, and Society. 3 Hours. H.
In this class we examine the question of whether or not democracy and shari'a can coexist. Is there a necessary opposition between democratic visions of society and the institutionalization of Islamic law? As a case study we look at changes in the modern Egyptian political system and the role religious ideals have played in these changes, especially the push for democracy. Prerequisite: An introductory course in religious studies or consent of instructor. LEC.

REL 552. Classical Islamic Literature. 3 Hours. NW / H.
An examination of major developments in classical Islamic literature in the Middle East and beyond, with attention to the poetic and prose works (in translation) that emerged from them. (Same as AAAS 552.) LEC.

REL 555. Buddhists and Buddhism in China. 3 Hours. NW AE42 / H.
A reading and media-rich survey of institutional, ritual, literary, educational, and exegetical practices that have shaped the lives of Buddhists in China, past and present. Alterities within the Buddhist tradition, and interactions with other religious options, are considered. (Same as EALC 555.) LEC.

REL 557. Modern Islamic Reform Movements. 3 Hours. H.
This course examines movements of renewal and reform in the Islamic world today. Also studies the conditions that gave rise to calls for reform throughout the Muslim majority world, as well as the impact reform movements have had on the practices and beliefs of Muslims today. LEC.
REL 558. Religion in Britain Since the Reformation: A Survey. 3 Hours. H.
This course deals analytically and synoptically with religion in Britain from the Reformation to the present with special reference to the Church of England, and focuses on the themes of ecclesiology, ecclesiastical polity, and political theology. It is essentially an examination of religious history from a perspective of history of ideas. (Same as HIST 558.) LEC.

REL 559. Religion in Britain Since the Reformation: A Survey, Honors. 3 Hours. H.
This course deals analytically and synoptically with religion in Britain from the Reformation to the present with special reference to the Church of England, and focuses on the themes of ecclesiology, ecclesiastical polity, and political theology. It is essentially an examination of religious history from a perspective of the history of ideas. Open only to students in the University Honors Program or by permission of instructor. (Same as HIST 559.) LEC.

REL 560. Classical and Contemporary Jewish Thought. 3 Hours. H.
An introduction to individual Jewish thinkers and collective projects from Philo to the present, including The Talmud and Midrash, Middle Age and Early Modern Jewish philosophical and Talmudic rationalism and mysticism. Considers such thinkers as Spinoza, Cohen, Soloveltchik, Rosenzweig, and Levinas. (Same as JWSH 560.) Prerequisite: A previous course in Religious Studies or Jewish Studies; or consent of instructor. LEC.

REL 570. Studies in Judaism. 3 Hours. H.
A study of the major intellectual sources of the Jewish tradition from the Mishna, Talmud, Midrash, prayerbook, philosophers, the Zohar, and the Shulchan Aruch. (Same as JWSH 570.) Prerequisite: A course in Religious Studies or Jewish Studies numbered 300 or above. LEC.

REL 571. Religion in Kansas. 3 Hours. H.
A survey of religions active in Kansas in the past or present. The course has a strong fieldwork component in which students, after receiving training in fieldwork methods, conduct interviews and gather information to contribute to a public archive of religion in Kansas. FLD.

REL 580. Religious Perspectives on Illness, Health, and Healing. 3 Hours. H.
An examination of the perspectives of selected religious traditions on the meaning of illness and health, methods of diagnosis and treatment, and the place of these themes and experiences within each tradition. LEC.

REL 581. Psychology of Religion. 3 Hours. S.
Consideration of the psychological antecedents of religious experience, the nature of religious experience, and the behavioral consequences of religion. Focus will be on psychological theory and research relevant to religious thought, feeling, belief, and behavior. (Same as PSYC 581.) Prerequisite: PSYC 104. LEC.

REL 585. New Religious Movements (Western). 3 Hours. H.
A survey of the beliefs, practices, and social impact of religious minorities in the United States, both contemporary and historical, rooted primarily in Christianity and Judaism. LEC.

A survey of the beliefs, practices, and social impact of religious minorities in the United States, both contemporary and historical, which have developed primarily from sources other than Christianity and Judaism. LEC.

REL 601. Approaches to the Study of Religion. 3 Hours. H.
An introduction to the various methods by which social scientists, historians, philosophers, and theologians study the meaning, influence, and significance of religion as an integral part of society and its cultural heritage. Prerequisite: REL 104 required for undergraduate students. No prerequisite for graduate students. LEC.

REL 604. Religion and Political Theory. 3 Hours. S.
An examination of the relationship between religious faith and politics in Western political thought and theory. The approach will be both historical and philosophical, beginning with Moses on the one hand, and the Greeks on the other. Texts will include biblical, Greek philosophical, Jewish and Christian philosophical and theological writings. (Same as POLS 604.) Prerequisite: POLS 201, or for non-POLS majors completion of Western Civilization requirements, or consent of instructor. LEC.

REL 650. Sufism. 3 Hours. NW / H.
A survey of developments in Sufi (Islamic Mystical) thought, poetry, and ritual throughout Muslim history and across the Muslim world. (Same as AAAS 650.) Prerequisite: AAAS 349/REL 350 or permission of instructor. LEC.

REL 657. Gender in Islam and Society. 3 Hours. NW / H.
An investigation of the relationship between Islam, and gender roles and status in religious texts (Quran and Hadith) and in societies across the Muslim world, past and present. (Same as AAAS 657.) Prerequisite: AAAS349/REL 350 or permission of instructor. LEC.

REL 665. Religious Ethics. 3 Hours. H.
Main themes and traditions in ethical thought. Religious thought as basis of systems of ethics. Contemporary approaches to methods of value organization and moral choices. Prerequisite: A basic course in religious studies. LEC.

REL 667. Religious Perspectives on War and Peace. 3 Hours. H.
Views of war and peace in various faith traditions throughout the world. Examination of teachings and action of religious groups and selected individuals, including use of war rhetoric and differing theological and social understandings of peace. Lecture, seminar discussion, and research assignment require preparation and participation by students. Prerequisite: Junior standing or above. LEC.

REL 669. Human Conflict and Peace. 3 Hours. H.
Study of religious, cultural, and social traditions toward understanding the nature and purposes of human conflict. Analysis of various meanings of peace, with emphasis on study of nonviolent approaches to management of conflict. Class discussion, readings, and individual research projects. (Same as COMS 669.) Prerequisite: Junior standing or above. LEC.

REL 671. American Communes. 3 Hours. H.
An examination of utopian communities in North America from the seventeenth century to the present. The course will survey the history, literature, and social dynamics of representative communal societies and movements including the Shakers, the Hutterites, the Oneida Community, Catholic religious communities, egalitarian communities, and other religious and secular communities. LEC.

REL 677. Women in Christianity. 3 Hours. H.
An examination of the roles, images, and status of women in Christianity from its origin to the contemporary period and in its missionary expansion from the ancient Near East through Europe, North and South America, Africa, and Asia. LEC.

REL 704. Russian Orthodoxy in Historical Perspective. 3 Hours.
This course examines Russian Orthodoxy as a religious system and the institution of the Russian Orthodox Church from its first appearance in Russia to the present. It focuses on beliefs and practices of the clergy and the laity; institutional structures; the relationships between Church and State; interaction with non-Orthodox religious communities; responses to Soviet atheist policies; Orthodox influences on political theory, philosophy, literature, and the fine arts. (Same as REES 704.) LEC.
REL 727. Seminar in Religion, Text and Textuality. 3 Hours.
This seminar explores issues surrounding the production and use of authoritative religious texts (sacred texts) in religious traditions, including such topics as scripturality and canon, scriptural hermeneutics, and material and ritual dimensions of scriptural practice. Specific case studies and content to be selected by the instructor. SEM.

REL 732. Seminar in Western Religious Texts: _____. 3 Hours.
An analysis of selected religious text or texts from Judaism, Islam, or Christianity in translation. May be taken more than once if subject matter varies sufficiently. Prerequisite: REL 512, REL 515, REL 526, REL 530, REL 532, REL 539, or REL 570 or permission of the instructor. LEC.

REL 733. Seminar in Eastern Religious Texts: _____. 3 Hours.
Analysis of a selected religious text or texts from India, China, or Japan, in translation. May be taken more than once if subject matter varies sufficiently. (Same as EALC 733.) Prerequisite: REL 507, REL 508, REL 509, or permission of the instructor. LEC.

REL 772. Seminar in Religion and Modern Social Criticism: _____. 3 Hours.
Seminar focusing on religious issues in some important texts of modern social criticism from the French Revolution to the present day. Prerequisite: An introductory course in religion. LEC.

REL 773. Seminar in Religion and National Identity: _____. 3 Hours.
Analysis of selected issues wherein religion and the formation and definition of a selected nation or nations intersect. LEC.

REL 775. Seminar in Religion and Society in the West: _____. 3 Hours.
Analysis of selected Western religions and their relationships to selected Western societies. May be taken more than once if subject matter varies sufficiently. Prerequisite: REL 512, REL 515, REL 526, REL 530, REL 532, REL 539, or REL 570 or permission of the instructor. LEC.

REL 776. Seminar in Religion and Society in Asia: _____. 3 Hours.
Analysis of selected Asian religions and their relationship to selected Asian societies. May be taken more than once if subject matter varies sufficiently. (Same as EALC 776.) Prerequisite: REL 507, REL 508, REL 509, or permission of the instructor. LEC.

REL 777. Seminar in Religion and Gender. 3 Hours.
Examination of symbols, images, scriptures, rites, teachings and scholarship regarding gender definitions and performance in various religious traditions. LEC.

REL 787. Seminar in Ethical Issues in Health Care: _____. 3 Hours.
Interdisciplinary seminar, drawing on the literature of social, medical, and professional ethics, with special attention to religious perspectives on meanings of health and the delivery of health care. Of particular interest to health-related professions. Prerequisite: Permission of instructor. LEC.

REL 800. Readings. 1-4 Hours.
RSH.

REL 839. Topics in the History and Literature of Religion: _____. 3 Hours.
Selected studies, as announced in Schedule of Classes, in the history and religious literature of Judaism, Christianity, religion in America, Islam, and Asian religions. Course may be taken more than once if the subject matter varies sufficiently. Prerequisite: Permission of instructor. LEC.

REL 864. Topics in Religious Thought and Symbol: _____. 3 Hours.
Selected studies, as announced in Schedule of Classes, in Asian, Middle Eastern, and Western religious thought, mysticism, and religious ethics. Course may be taken more than once if subject matter varies sufficiently. Prerequisite: Permission of instructor. LEC.

REL 875. Topics in Religion and Society: _____. 3 Hours.
Special topics to be announced in Schedule of Classes, according to research interests of faculty and students. A particular aspect of the study of religion and culture will be emphasized. Course may be taken more than once if the subject matter varies. Prerequisite: Permission of instructor. LEC.

REL 877. Topics in Women and Religion: _____. 3 Hours.
Selected studies, as announced in Schedule of Classes, in the history and analysis of symbols, images, scriptures, rites, and teachings defining women’s roles in various religious traditions. Course may be taken more than once if the subject matter varies sufficiently. Prerequisite: Permission of instructor. LEC.

REL 899. Thesis. 1-3 Hours.
THE.
Bachelor of Arts and Bachelor of General Studies in Religious Studies

The undergraduate degree in the Department of Religious Studies is a research, analysis, and writing intensive program that features close work with faculty in small classroom settings. It seeks to develop a foundational knowledge of the world’s diversity of religious cultures and critical awareness of the ways in which religion shapes how we see and act toward ourselves, others, and the environment around us. Through the study of specific religious traditions and settings, students come away with a background that is invaluable to understanding and working with people of other cultures, whether in international business or simply as an informed global citizen.

Career Opportunities

Religious studies majors and minors develop expertise and skills that serve them well wherever life takes them. Our graduates have been successful in many different areas. Studying religion provides a solid foundation for work in fields as diverse as journalism, law, politics, nongovernmental organizations, ministry, and education. No matter what their intended careers, students benefit from the critical reading, writing, and analytical skills that the academic study of religion instills.

Admission to the Major

Application Term

Semester in which major admission criteria will be completed, normally no later than 60 hours, or for transfer students, during the initial term at KU. Application to this major after completion of 60 hours, or the initial KU term for transfer students, will likely delay graduation.

Courses Required

- **Composition.** Satisfied by ENGL 101 (unless the student has received a waiver or, for transfer students, an equivalent course).
- **Critical Reading and Writing.** Satisfied by ENGL 102 or ENGL 105 (unless the student has received a waiver or, for transfer students, an equivalent course).
- **Introduction to Religion.** Satisfied by REL 104.
- **Additional Religious Studies Course (Elective or Requirement).** Satisfied by any course with REL prefix.

Grade-Point Average Requirements

Satisfied by a 2.30 minimum GPA in required admission courses designated above. University Course Repeat Policy will apply.

Religious Studies Program

The curriculum is organized into the basic areas of Western, Eastern, and North American religions, and method and theory in the study of religion. A core of courses provides broad exposure to the range of issues, perspectives, and methods in the study of religion. The program encourages interdepartmental and interdisciplinary cooperation as part of a comprehensive program. This cooperation is reflected at the undergraduate level in cross-listed and cross-referenced courses and in the design of the major.

Requirements for the B.A. or B.G.S. Major

The major consists of at least 27 hours in religious studies. 15 hours must be in courses numbered 300 and above, and 8 of these junior/senior hours must be completed in residence at KU. The 27 hours may include no more than 12 transfer hours, no more than 12 hours from study abroad, and no more than 15 hours in combination of the two.

Religious Studies Major Course Requirements

**Religious Studies Core Knowledge and Skills (27)**

Majors must complete a course in each of the following areas:

- **Introduction to Religion.** Satisfied by:
  - REL 104 Introduction to Religious Studies 3
  - or REL 105 Introduction to Religious Studies, Honors

- **Understanding the Bible.** Satisfied by:
  - REL 124 Understanding the Bible 3
  - or REL 125 Understanding the Bible, Honors 3

- **Overview of Judaism, Christianity, or Islam.** Satisfied by 1 course (3 hours) chosen from the following:
  - REL 107 Living Religions of the West
  - REL 109 Living Religions of the West, Honors
  - REL 311 Religion of Ancient Israel
  - REL 315 History and Literature of Early Christianity
  - REL 325 Introduction to Judaism
  - REL 345 Christianity
  - REL 350 Islam
  - REL 570 Studies in Judaism

- **Overview of Religious Tradition other than Judaism, Christianity, or Islam.** Satisfied by 1 course (3 hours) chosen from the following:
  - REL 106 Living Religions of the East
  - REL 108 Living Religions of the East, Honors
  - REL 360 The Buddhist Tradition in Asia
  - REL 365 Hinduism
  - REL 507 Religion in India
  - REL 508 Religion in China
  - REL 509 Religion in Japan
  - REL 510 Religion in Korea
  - REL 555 Buddhists and Buddhism in China

- **Religion of North America.** Satisfied by 1 course (3 hours) chosen from the following:
  - REL 171 Religion in American Society
  - REL 172 Religion in American Society, Honors
  - REL 330 Native American Religions
  - REL 339 History of Religion in America
  - REL 373 The Supreme Court and Religious Issues in the United States
  - REL 375 The Supreme Court and Religious Issues in the United States, Honors
  - REL 377 Religious Ethics and Moral Decisions
  - REL 378 Religion and Moral Decisions, Honors
  - REL 585 New Religious Movements (Western)
  - REL 586 New Religious Movements (Nonwestern)
  - REL 671 American Communes
Religious Studies Required Electives. Satisfied by 3 courses (9 hours) within, or cross-listed with, the Religious Studies Department course offerings.

Capstone Experience. Satisfied by:

REL 490 Senior Seminar in Theories and Methods 3

**Religious Studies Major Hours & Major GPA**

While completing all required courses (above), majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 27 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major, of which 9 must be at the junior/senior level (300+).

**Major Junior/Senior (300+) Hours**
Satisfied by a minimum of 15 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

A sample 4-year plan for the BA degree in Religious Studies can be found here: Religious Studies (http://catalog.ku.edu/liberal-arts-sciences/religious-studies/ba-bgs/ba-religious-studies), or by using the left-side navigation.

A sample 4-year plan for the BGS degree in Religious Studies will be coming soon.

**Departmental Honors**
To be eligible for honors in religious studies, an undergraduate student must have a minimum grade-point average of 3.25 overall and of 3.5 in the department. The student must also complete and defend an individual research project, as evidenced by completion of at least 3 hours of REL 499: Undergraduate Honors Research with a grade of B or better. Interested students should contact the Undergraduate Director for more information.

**Minor in Religious Studies**
The undergraduate minor in the Department of Religious Studies is a research, analysis, and writing intensive program that features close work with faculty in small classroom settings. It seeks to develop a foundational knowledge of the world’s diversity of religious cultures and critical awareness of the ways in which religion shapes how we see and act toward ourselves, others, and the environment around us. Through the study of specific religious traditions and settings, students come away with a background that is invaluable to understanding and working with people of other cultures, whether in international business or simply as an informed global citizen.

**Career Opportunities**
Religious studies majors and minors develop expertise and skills that serve them well wherever life takes them. Our graduates have been successful in many different areas. Studying religion provides a solid foundation for work in fields as diverse as journalism, law, politics, nongovernmental organizations, ministry, and education. No matter what their intended careers, students benefit from the critical reading, writing, and analytical skills that the academic study of religion instills.

**Requirements for the Minor**

**Religious Studies Minor Course Requirements**
Students selecting this minor must complete a course in each of the following areas:

**Introduction to Religion (3)**
Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL 104</td>
<td>Introduction to Religious Studies</td>
</tr>
<tr>
<td>or REL 105</td>
<td>Introduction to Religious Studies, Honors</td>
</tr>
</tbody>
</table>

**Overview of Judaism, Christianity, or Islam (3)**
Satisfied by 1 course (3 hours) chosen from the following:

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<tr>
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<tbody>
<tr>
<td>REL 107</td>
<td>Living Religions of the West</td>
</tr>
<tr>
<td>REL 109</td>
<td>Living Religions of the West, Honors</td>
</tr>
<tr>
<td>REL 311</td>
<td>Religion of Ancient Israel</td>
</tr>
<tr>
<td>REL 315</td>
<td>History and Literature of Early Christianity</td>
</tr>
<tr>
<td>REL 325</td>
<td>Introduction to Judaism</td>
</tr>
<tr>
<td>REL 345</td>
<td>Christianity</td>
</tr>
<tr>
<td>REL 350</td>
<td>Islam</td>
</tr>
<tr>
<td>REL 570</td>
<td>Studies in Judaism</td>
</tr>
</tbody>
</table>

**Overview of Religious Tradition other than Judaism, Christianity, or Islam (3)**
Satisfied by 1 course (3 hours) chosen from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL 106</td>
<td>Living Religions of the East</td>
</tr>
<tr>
<td>REL 108</td>
<td>Living Religions of the East, Honors</td>
</tr>
<tr>
<td>REL 360</td>
<td>The Buddhist Tradition in Asia</td>
</tr>
<tr>
<td>REL 507</td>
<td>Religion in India</td>
</tr>
<tr>
<td>REL 365</td>
<td>Hinduism</td>
</tr>
<tr>
<td>REL 508</td>
<td>Religion in China</td>
</tr>
<tr>
<td>REL 509</td>
<td>Religion in Japan</td>
</tr>
<tr>
<td>REL 510</td>
<td>Religion in Korea</td>
</tr>
<tr>
<td>REL 555</td>
<td>Buddhists and Buddhism in China</td>
</tr>
</tbody>
</table>

**Religion of North America (3)**
Satisfied by 1 course (3 hours) chosen from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL 171</td>
<td>Religion in American Society</td>
</tr>
<tr>
<td>REL 172</td>
<td>Religion in American Society, Honors</td>
</tr>
<tr>
<td>REL 330</td>
<td>Native American Religions</td>
</tr>
<tr>
<td>REL 339</td>
<td>History of Religion in America</td>
</tr>
<tr>
<td>REL 373</td>
<td>The Supreme Court and Religious Issues in the United States</td>
</tr>
<tr>
<td>REL 375</td>
<td>The Supreme Court and Religious Issues in the United States, Honors</td>
</tr>
<tr>
<td>REL 377</td>
<td>Religious Ethics and Moral Decisions</td>
</tr>
<tr>
<td>REL 378</td>
<td>Religion and Moral Decisions, Honors</td>
</tr>
<tr>
<td>REL 585</td>
<td>New Religious Movements (Western)</td>
</tr>
<tr>
<td>REL 586</td>
<td>New Religious Movements (Nonwestern)</td>
</tr>
<tr>
<td>REL 671</td>
<td>American Communes</td>
</tr>
</tbody>
</table>
Satisfied by completing 6 additional hours in REL courses at the 300 level or above.

**Religious Studies Minor Hours & Minor GPA**

While completing all required courses (above), minors must also meet each of the following hour and grade-point average minimum standards:

**Minor Hours**
Satisfied by 18 hours of major courses.

**Minor Hours in Residence**
Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the minor.

**Minor Junior/Senior (300+) Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

---

**Master of Arts in Religious Studies**

**Why study religious studies?**

Religions have been and remain among the most powerful forces shaping human history. Their discourses and practices inform the way we perceive ourselves, those around us, and existence at large, even when we are not actively religious. They are central to understanding both what divides us and what unites us. The academic study of religion is a trans-disciplinary endeavor to understand from an objective perspective how religious traditions shape the lives of their adherents, without seeking to promote or disprove any specific belief system. Religious Studies acquaints students with the diversity of religious cultures and introduces them to key methods and theories employed in their examination as "religion."

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**

A B.A. in religious studies is not required for admission, but the department expects applicants to show on their transcripts significant exposure to the humanities and social sciences.

The department requires Graduate Record Examination scores for admission. Submit your graduate application online (http://wwwgraduate.ku.edu). Send all other requested application materials to

**The University of Kansas**
**Department of Religious Studies**
**Smith Hall, Room 109A**
**1300 Oread Ave.**
**Lawrence, KS 66045-7603**

---

**M.A. Degree Requirements**

**Concentration**

In addition to developing a general competence in the larger field of religious studies, its approaches, and its methods, students craft their programs of study around an area of concentration of their own design. Concentrations particularly supported by faculty expertise include:

- Indigenous religions
- Islamic studies
- Jewish studies
- Religion in the Ancient Near East and Mediterranean
- Religion in Asia
- Religion in the United States
- Religious ethics
- Theories and methods of studying religion

**Degree Requirements with Thesis**

The thesis track in religious studies comprises 3 aspects: required course work, portfolio exam, and thesis.

1. A candidate for this degree must complete 30 graduate credit hours with the following stipulations:
   - (a) At least 18 credit hours must be in courses in religious studies and the rest in fields related to a declared concentration.
   - (b) Course work must include at least 12 hours (4 courses) in the articulated concentration.
   - (c) Upon completion of 12 hours of course work, the student articulates an area of concentration and a program of study, which will culminate in the production and oral defense of a research portfolio. The student and the advisor determine whether the student will pursue a thesis or a nonthesis track and plan the remaining course work, including the acquisition of relevant linguistic and research skills.
   - (d) Each student must complete REL 601 Approaches to the Study of Religion the first year in the program.
   - (e) Each student must complete 2 seminars (total of 6 credit hours) from the following set of theory and method-oriented seminars:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL 727</td>
<td>Seminar in Religion, Text and Textuality</td>
<td>3</td>
</tr>
<tr>
<td>REL 737</td>
<td>Seminar in Religion, Media and Performance</td>
<td>3</td>
</tr>
<tr>
<td>REL 747</td>
<td>Seminar in Religion, Society and Social Change</td>
<td>3</td>
</tr>
<tr>
<td>REL 757</td>
<td>Seminar in Religious Subjectivity, Experience, and Narrative</td>
<td>3</td>
</tr>
<tr>
<td>REL 767</td>
<td>Seminar in Theory, Method, and History in Religious Studies</td>
<td>3</td>
</tr>
</tbody>
</table>
• (f) Each student must complete one course from each of the following groups:

**A. Western Religious Traditions (33)**

Select one of the following: 33

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL 515</td>
<td>Studies in Early Christian Literature and History</td>
</tr>
<tr>
<td>REL 525</td>
<td>Jews and Christians</td>
</tr>
<tr>
<td>REL 530</td>
<td>Christian Origins: from the Beginnings to Augustine</td>
</tr>
<tr>
<td>REL 531</td>
<td>Studies in Christianity</td>
</tr>
<tr>
<td>REL 532</td>
<td>Studies in Islam</td>
</tr>
<tr>
<td>REL 557</td>
<td>Modern Islamic Reform Movements</td>
</tr>
<tr>
<td>REL 560</td>
<td>Classical and Contemporary Jewish Thought</td>
</tr>
<tr>
<td>REL 570</td>
<td>Studies in Judaism</td>
</tr>
<tr>
<td>REL 732</td>
<td>Seminar in Western Religious Texts: ______</td>
</tr>
<tr>
<td>REL 761</td>
<td>Seminar in Western Religious Thought: ____</td>
</tr>
<tr>
<td>REL 775</td>
<td>Seminar in Religion and Society in the West: ___</td>
</tr>
</tbody>
</table>

**B. Non-Western Religious Traditions (33)**

Select one of the following: 33

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL 507</td>
<td>Religion in India</td>
</tr>
<tr>
<td>REL 508</td>
<td>Religion in China</td>
</tr>
<tr>
<td>REL 509</td>
<td>Religion in Japan</td>
</tr>
<tr>
<td>REL 510</td>
<td>Religion in Korea</td>
</tr>
<tr>
<td>REL 541</td>
<td>Gods and Goddesses of South Asia</td>
</tr>
<tr>
<td>REL 543</td>
<td>Hindu Epics, Past and Present</td>
</tr>
<tr>
<td>REL 545</td>
<td>Yoga in Theory, Practice, and History</td>
</tr>
<tr>
<td>REL 555</td>
<td>Buddhists and Buddhism in China</td>
</tr>
<tr>
<td>REL 733</td>
<td>Seminar in Eastern Religious Texts: ______</td>
</tr>
<tr>
<td>REL 762</td>
<td>Seminar in Eastern Religious Thought: ____</td>
</tr>
<tr>
<td>REL 776</td>
<td>Seminar in Religion and Society in Asia: ____</td>
</tr>
</tbody>
</table>

• (g) Each student must complete 9 hours in courses numbered 700 or above, excluding REL 800 Readings and REL 899 Thesis. Courses at the 700 level in religious studies are conducted as seminars.

2. Each student must produce and give an oral defense of a research portfolio.

3. Each student must write and successfully defend a thesis that meets minimum department and general requirements. 3 hours in REL 899 Thesis may be credited toward fulfillment of the required 30 credit hours.

**Degree Requirements, Nonthesis**

The nonthesis track comprises 2 aspects: required course work and portfolio exam.

1. A candidate for this degree must complete 33 graduate credit hours with the following stipulations:

   • (a) At least 21 of the 33 graduate hours must be in courses in religious studies and the rest in fields related to an articulated concentration.

   • (b) Course work must include at least 12 hours (4 courses) in the articulated concentration.

   • (c) Upon completion of 12 hours of course work, the student articulates an area of concentration and program of study, which will culminate in the production and oral defense of a research portfolio. The student and the advisor plan the remaining course work, including the acquisition of relevant linguistic and research skills.

   • (d) Each student must complete REL 601 Approaches to the Study of Religion the first year in the program.

   • (e) Each student must complete 2 seminars (total of 6 credit hours) from the following set of theory and method-oriented seminars:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL 727</td>
<td>Seminar in Religion, Text and Textuality                           3</td>
</tr>
<tr>
<td>REL 737</td>
<td>Seminar in Religion, Media and Performance                          3</td>
</tr>
<tr>
<td>REL 747</td>
<td>Seminar in Religion, Society and Social Change                        3</td>
</tr>
<tr>
<td>REL 757</td>
<td>Seminar in Religious Subjectivity, Experience, and Narrative           3</td>
</tr>
<tr>
<td>REL 767</td>
<td>Seminar in Theory, Method, and History in Religious Studies           3</td>
</tr>
</tbody>
</table>

• (f) Each student must complete 1 course from each of these groups:

**A. Western Religious Traditions (33)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL 515</td>
<td>Studies in Early Christian Literature and History                    3</td>
</tr>
<tr>
<td>REL 525</td>
<td>Jews and Christians                                                  3</td>
</tr>
<tr>
<td>REL 530</td>
<td>Christian Origins: from the Beginnings to Augustine                 3</td>
</tr>
<tr>
<td>REL 531</td>
<td>Studies in Christianity                                              3</td>
</tr>
<tr>
<td>REL 532</td>
<td>Studies in Islam                                                     3</td>
</tr>
<tr>
<td>REL 557</td>
<td>Modern Islamic Reform Movements                                      3</td>
</tr>
<tr>
<td>REL 560</td>
<td>Classical and Contemporary Jewish Thought                            3</td>
</tr>
<tr>
<td>REL 570</td>
<td>Studies in Judaism                                                   3</td>
</tr>
<tr>
<td>REL 732</td>
<td>Seminar in Western Religious Texts: ______                           3</td>
</tr>
<tr>
<td>REL 761</td>
<td>Seminar in Western Religious Thought: ____                           3</td>
</tr>
<tr>
<td>REL 775</td>
<td>Seminar in Religion and Society in the West: ___                     3</td>
</tr>
</tbody>
</table>

**B. Non-Western Religious Traditions (33)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL 507</td>
<td>Religion in India                                                    3</td>
</tr>
<tr>
<td>REL 508</td>
<td>Religion in China                                                    3</td>
</tr>
<tr>
<td>REL 509</td>
<td>Religion in Japan                                                    3</td>
</tr>
<tr>
<td>REL 510</td>
<td>Religion in Korea                                                    3</td>
</tr>
<tr>
<td>REL 541</td>
<td>Gods and Goddesses of South Asia                                     3</td>
</tr>
<tr>
<td>REL 543</td>
<td>Hindu Epics, Past and Present                                       3</td>
</tr>
<tr>
<td>REL 545</td>
<td>Yoga in Theory, Practice, and History                               3</td>
</tr>
<tr>
<td>REL 555</td>
<td>Buddhists and Buddhism in China                                      3</td>
</tr>
<tr>
<td>REL 733</td>
<td>Seminar in Eastern Religious Texts: ______                           3</td>
</tr>
<tr>
<td>REL 762</td>
<td>Seminar in Eastern Religious Thought: ___                           3</td>
</tr>
<tr>
<td>REL 776</td>
<td>Seminar in Religion and Society in Asia: ____                        3</td>
</tr>
</tbody>
</table>

• (g) Each student must complete 9 hours in courses numbered 700 or above, excluding REL 800 Readings and REL 899 Thesis. Courses at the 700 level in religious studies are conducted as seminars.
2. Each student must produce and give an oral defense of a research portfolio.

Transfer of Credit

Transfer of graduate credit is allowed, including study abroad course credit, from other accredited institutions, up to a total of 6 hours. (View the policy on graduate credit, including transfer credit in the Graduate Studies (p. 2369) section of the online catalog.) Bachelor's degree graduates from KU are permitted to transfer 8 hours. The hours may be used only when the M.A. is completed within 6 years of the time the credit was given. Application for transfer must be made by the student and the advisor to the committee on graduate studies. Normally, such applications are not made until after 12 hours of KU course work have been completed. If the committee approves, applications are forwarded for approval.

Russian, East European, and Eurasian Studies Program

Why study Russian, East European & Eurasian Studies?

The interdisciplinary study of Russia, Eastern Europe, and Eurasia creates culturally informed citizens who can act on national and international issues. The University of Kansas Russian, East European & Eurasian Studies (REES) program covers a broad geographic region, home to rich and diverse cultures that have had an enormous impact on today's world. It is central to political, economic, cultural, and environmental issues of the present and the future.

Undergraduate Programs

The interdisciplinary bachelor's degree is available only as a co-major or minor in conjunction with a major in one of the traditional academic disciplines. The co-major or minor also can be combined with a bachelor's degree in such schools as business or journalism.

Graduate Programs

A KU masters degree in Russian, East European & Eurasian Studies (REES) offers future professionals a comprehensive and interdisciplinary knowledge of Russia, Ukraine, the South Caucasus, Central Asia, and countries of the West Slavic (Poland, Czech Republic) and South Slavic (Balkan) regions. The program develops language competency appropriate for a range of careers in the government, business, law, international development and non-profit sectors. And for those students interested in pursuing a PhD, the REES MA prepares for advanced graduate study in literature and the arts, history, political science, geography, and other disciplines.

ABOUT THE PROGRAM

The KU REES program is interdisciplinary and draws on over 60 faculty members and courses from 17 different KU departments and schools. Most REES MA students have completed an undergraduate major in the social sciences or humanities prior to beginning their graduate study, but successful REES graduate students have come from any number of other academic disciplines including business, law, and the sciences.

Our program requires advanced level competence in a REES-area language, which includes: Bosnian-Croatian-Serbian, Czech, Polish, Russian, Slovene, Tajik/Farsi, Turkish, Ukrainian, Uyghur, and Yiddish. It is recommended that incoming graduate students have at least 2 years of former language study or participate in an intensive summer or semester language program before they begin their REES MA at KU.

PROGRAM SCHEDULE

The traditional time period for a REES MA is 2 years, although 18-month and 12-month (see REES MA FAST Track) options are available. Most graduate students begin their program in a fall semester. Successful graduates of the program will complete 30 credit hours of intensive REES language and area studies. The 30 credit hours are broken down as follows: 2 methodology seminars (6 CR); 3 courses in your area of concentration (9 CR); 4 elective disciplinary courses outside of your area of concentration (12 CR); 1 second-semester advanced language course (3 CR).

METHODOLOGY SEMINARS

REES graduate students are required to take 2 methodology seminars intended to develop their advanced research skills using interdisciplinary and advanced target language resources. REES 898 is normally taken at the beginning of the degree program, and emphasizes the learning of tools and methods necessary to study the REES world area. REES 899 is taken towards the end of the degree program. In this seminar, students write an interdisciplinary capstone research paper using materials in the student’s chosen target language.

AREA CONCENTRATION AND ELECTIVE COURSES

The REES MA program offers courses in 5 thematic areas. MA students will take 3 courses in the thematic area of their choosing, determined by their personal interests and professional goals. They are then required to take one elective disciplinary course in each of the other 4 thematic areas for a full and complete understanding of the REES world area. The 5 thematic areas are: 1) Literature and the Arts; 2) History; 3) Political Science; 4) Philosophy & Religion; 5) Economics, Business & Geography.

MA PORTFOLIO AND FINAL EXAM PROCEDURE

CREES has replaced the traditional written MA exam and thesis with a progressive academic examination model known as the MA portfolio, a body of work that showcases the student’s interdisciplinary knowledge and expertise of the REES world area. At the end of the student’s final semester, the portfolio is read by a committee of 3 graduate faculty and tested through a 90-minute oral examination.

ADMISSION

While a student’s GPA and GRE scores are helpful in determining his/her overall academic potential, the department uses a holistic approach toward admissions, looking at all elements of the application packet before making a decision (language preparation, transcripts, letters of recommendation, GRE scores, statement of intent). CREES reviews applications on a rolling basis and graduate students are able to begin their program in the Fall, Spring, or Summer semesters. If you would like to be considered for priority admission and funding, please submit all materials by January 1st.

Center for Russian, East European, and Eurasian Studies

The Center for Russian, East European, and Eurasian Studies promotes language and area study in an integrated, interdisciplinary framework and in traditional academic disciplines. The center administers a co-
major and minor and M.A. degree programs in Russian, East European, and Eurasian studies and supports study abroad programs in the region, including in Croatia, Kazakhstan, and Ukraine. The center also coordinates and sponsors conferences, lectures, theatre, and outreach activities of interest to KU students, faculty members, K-12 teachers, and the community. It serves as a resource to the state, the Great Plains, and the nation.

The Center for Russian, East European & Eurasian Studies (CREES) at the University of Kansas (KU) has been a national leader for the study of the former Soviet Union and Eastern Europe since 1959. Our purpose and objectives are to:

- Promote the study of Russia, Eastern Europe, and Eurasia within an integrated, interdisciplinary framework, as well as within each of the traditional academic disciplines;
- Promote the study of languages in the Department of Slavic Languages and Literatures, at all levels of instruction and research;
- Promote better understanding of the societies and cultures of the Russian, Eastern European and Eurasian area through exchanges of students, faculty, and other forms of cooperation with universities and other institutions in those areas;
- Promote the study of Slavic languages and of Russia, Eastern Europe, and Eurasia in schools and colleges throughout Kansas and the surrounding area;
- Encourage coordinate, sponsor and support activities of interest to the students and faculty in the Russian, East European and Eurasian area;
- Serve as a local, regional, and national resource to educational, government, business, and community constituencies seeking information about the Russian, East European and Eurasian area.

HISTORY

KU first offered Russian language to its students in 1943. KU has offered credentials in some variant of Slavic or Soviet & East European Studies since 1959, and a master’s degree since 1968. It was first designated a US/ED National Resource Center in 1965. CREES Directors have included some of the top experts in Soviet and Russian history, Slavic Literature, Philosophy, and Political Science: Oswald P. Backus (1955-1965); Herb Ellison (1965-1968); Roy Laird (1969); James Scanlan (1969); William Fletcher (1970-1992); Maria Carlson (1993-2003); Paul D’Anieri (2003); Erik Herron (2003-2006); William J. Comer (2007); Edith W. Clowes (2008-2012); Mariya Y. Omelicheva (2012-present).

FACULTY

CREES has over 50 teaching faculty members, representing a broad range of cooperating departments of the KU College of Liberal Arts and Sciences and professional schools. Our faculty are internationally visible in their field and have extensive foreign experience. And our teaching faculty are supplemented by visiting foreign faculty and scholars who enhance & expand KU offerings and serve as regional resources each year.

Courses

REES 110. Understanding Russia and Eastern Europe. 3 Hours. SC AE42 / S.
A multidisciplinary introduction to the former communist states of Russia, the western Newly Independent States, Central Europe, and the Balkans. The course addresses the geography and history of the region, as well as the cultures of its peoples, as presented in literature, film, and music.

REES 184. Russian, East European, and Eurasian Studies Program

Special attention is devoted to the current political, economic, and social situations, as they are reflected by the transition from communism and the rise of nationalism. LEC.

REES 111. Understanding Russia and Eastern Europe, Honors. 3 Hours. SC AE42 / S.
A multidisciplinary introduction to the former communist states of Russia, the western Newly Independent States, Central Europe, and the Balkans. The course addresses the geography and history of the region, as well as the cultures of its peoples, as presented in literature, film, and music. Special attention is devoted to the current political, economic, and social situations, as they are affected by the transition from communism and the rise of nationalism. Prerequisite: Open only to students in the University Honors Program, or by permission of instructor. LEC.

REES 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Russian, East European, and Eurasian Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

REES 220. Societies and Cultures of Eurasia. 3 Hours. NW AE42 / S.
A broad, survey-type course that examines all the former Soviet republics-Ukraine, Belarus, Moldova, Lithuania, Latvia, Estonia, Georgia, Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan-with additional coverage of neighboring regions. The course addresses the history of the region, literature, culture, geography, religion, and the building of post-Soviet states and societies. LEC.

REES 221. Societies and Cultures of Eurasia, Honors. 3 Hours. NW AE42 / S.
Examines the unique cultures and societies of the Eurasian region (Georgia, Azerbaijan, Armenia, Kazakhstan, Uzbekistan, Kyrgyzstan, Turkmenistan, Tajikistan and to a lesser degree, Russia, Mongolia and Afghanistan). For the better part of the 20th Century, this distinct region of the world was hidden beneath the communist veneer of the Soviet Union. With the collapse of the USSR, the countries of this region are returning to their historic roots, and this course introduces students to the history, politics, economics, literature and general culture of these countries. Open only to students admitted to the University Honors Program or by permission of instructor. LEC.

REES 480. Topics in Russian and East European Studies: ____. 1-3 Hours. H.
Interdisciplinary examination of topics involving two or more disciplines in Russian, East European, and Eurasian studies. LEC.

REES 485. War and Peace in Russian Culture. 3 Hours. H/W.
Lectures, readings, oral discussion, and written analyses of selected major works of Russian writing and other modes of creative expression and discourse that treat the subject of war and peace, such as imaginative literature, works of history, memoirs, cinema, music, and painting. Reading examples are The Song of Igor's Campaign, Alexander Pushkin's The Captain's Daughter and A History of Pugachev, Leo Tolstoy's War and Peace, Nadezhda Durova's The Notes of a Girl-Cavalryman, Boris Pasternak's Doctor Zhivago, and George Kennan's Russia Leaves the War. Not open to students who have taken REES 685. LEC.

REES 492. Research Methods in Russian, East European, and Eurasian Studies. 3 Hours. AE61 / H.
Development of interdisciplinary research skills and familiarity with resources and issues in the study of Russian, East European, and Eurasian Studies. Preparation for REES 496. LEC.
REES 496. Capstone Research Seminar in Russian and East European, and Eurasian Studies. 3 Hours. AE61 / H.
Interdisciplinary original research conducted using at least one REES language and resulting in a research paper. Prerequisite: REES 492. LEC.

REES 498. Directed Readings. 1-3 Hours. H.
Individual and supervised readings in selected areas of Russian, East European, and Eurasian Studies. Prerequisite: Prior permission of instructor and either CREEES director or associate director. LEC.

REES 499. Capstone Research Seminar in Russian, East European, and Eurasian Studies, Honors. 3 Hours. AE61 / H.
Research and writing of a substantial paper, involving interdisciplinary original research and use of sources in at least one REES language, and presentation of this paper to an Honors committee of three REES faculty members. This thesis must be substantially different from any other Honors thesis. Prerequisite: REES 492. LEC.

REES 510. Understanding Central Asia. 3 Hours. NW AE42 / S/W.
An intensive, multidisciplinary survey of Central Asia, focusing on the former Soviet republics-Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan-with additional coverage of neighboring regions (the Caucasus and the Caspian basin, Afghanistan, and western China). The course addresses the history of the region (from the Silk Road to Soviet rule), geography, religion, and the building of post-Soviet states and societies. (Same as GEOG 590.) LEC.

REES 512. Siberia: Yesterday and Today. 3 Hours. NW AE42 / H/W.
An interdisciplinary course examining the development of Siberia from its beginnings to the present day. Topics to be covered are selected from the following list: topography and natural resources; conquest and exploitation by Russian and other European settlers; Siberia's role as a place of imprisonment and exile; the development of towns and transportation systems; Siberian historiography; Siberian Russian literature; and Siberia's place in Russia's economy and national defense. LEC.

REES 513. Siberia: Russia's Eastern Frontier. 3 Hours. NW AE42 / H/W.
An interdisciplinary course examining the terrain, peoples, and cultures of the vast expanse in northern Asia known as Siberia. Areas of inquiry include geology, archeology, ethnography, religions, folk culture, the arts, science and education, politics, and environmental problems. With an emphasis on the natural and social sciences, and exploration of the relationship between Siberia and its neighbors in all directions, including the United States (Alaska, "Russian America"), this course can be taken without duplication by students who have already taken REES 512 (or SLAV 512) Siberia Yesterday and Today. LEC.

REES 532. Russian Strategy and Military Power. 3 Hours. H.
Examines the central role the Russian military has played in its country's politics, society, and culture in the modern period. Treats Russia's victories and defeats in war, the course highlights the continuities in Russian strategic practices and illuminates the current and future strategic policies and military developments of the contemporary Russian state. LEC.

REES 573. Borderland Between Russia & Europe. 3 Hours. H/W.
Examines the history of relations between the governments, emerging national elites, and populations of Russia, Ukraine, Poland, and other East European countries, and the different regional perceptions and stereotypes, including the new post-Soviet states and their European neighbors. LEC.

REES 574. Ethnicity and Nationalism in Eastern Europe. 3 Hours. AE42 / H/W.
Examines the emergence and evolution of regional ethno-cultural and national identities in Eastern Europe. Discusses the theories and definitions of ethnicity, nationality, and nationalism, and offers a practical approach to understanding nationalism's and nationalist movements in Eastern Europe. LEC.

REES 646. Translation in Theory and Practice. 3 Hours. H.
Students undertake substantial work in the translation of non-technical writing. (e.g. poems, short stories, novels, essays, works of history, scientific treatises), from any REES language into English, and examine the practical and theoretical problems encountered in translation from the source to the target language. Prerequisite: BCRS 508, PLSH 508, RUSS 508, or permission of instructor. LEC.

REES 685. War and Peace in Russian Culture (in Russian). 3 Hours. H/W.
This course is taught in Russian. Lectures, readings, oral discussion, and written analyses of selected major works of Russian writing and other modes of creative expression and discourse that treat the subject of war and peace, such as imaginative literature, works of history, memoirs, cinema, music, and painting. Reading examples are Slovo o polku Igoreve. Pushkin’s Kapitanskaia dochka and Istoriiia Pugacheva, Tolstoy’s Voina i mir, Evgenii Tarle’s Napoleon, Pasternak’s Doktor Zhivago and Andrei Petukhov’s Pamiat’ o sluzhbe. Not open to students who have taken REES 485. Prerequisite: 3 years of Russian at the college level. LEC.

REES 687. Biography of a City: St. Petersburg. 3 Hours. AE42 / H.
Examination in depth of the historical, social, intellectual, and artistic development of St. Petersburg as a major urban center. LEC.

REES 704. Russian Orthodoxy in Historical Perspective. 3 Hours.
This course examines Russian Orthodoxy as a religious system and the institution of the Russian Orthodox Church from its first appearance in Russia to the present. It focuses on beliefs and practices of the clergy and laity; institutional structures; the relationships between Church and State; interactions with non-Orthodox religious communities; responses to Soviet atheist policies; Orthodox influences on political theory, philosophy, literature, and the fine arts. (Same as REL 704.) LEC.

REES 715. Seminar in the History of Russian Thought. 3 Hours.
Topics in the development of social radicalism and of philosophical positivism and materialism from Radischev through the Russian Marxists. A reading knowledge of Russian is desirable but not required. Prerequisite: REES 723 or PHIL 580. LEC.

REES 799. Directed Readings in Russian and East European Studies. 1-5 Hours.
RSH.

REES 895. Special Problems in Area Studies: _____. 3 Hours.
Interdisciplinary examination of topics involving two or more of the cooperating disciplines in Russian and East European studies. LEC.

REES 897. Research. 1 Hour.
Enrollment to fulfill Masters continuous enrollment rule. Prerequisite: Completion of all degree requirements except submission of seminar paper or comprehensive examination. RSH.

REES 898. Seminar in Russian and East European Studies. 3 Hours.
Mastery of interdisciplinary research skills, and knowledge of resources and scholarship on the study of Russian, east European, and Eurasian Studies. LEC.
REES 899. Capstone Research Seminar in Russian, East European, and Eurasian Studies. 3 Hours.
Research, write, and present a professional-quality paper, involving interdisciplinary original research, consultation with REES faculty, and substantial use of sources in at least one REES language. Prerequisite: REES 898. SEM.

Co-Major in Russian, East European, and Eurasian Studies

Why study Russian, East European & Eurasian Studies?
The interdisciplinary study of Russia, Eastern Europe, and Eurasia creates culturally informed citizens who can act on national and international issues. The University of Kansas Russian, East European & Eurasian Studies (REES) program covers a broad geographic region, home to rich and diverse cultures that have had an enormous impact on today’s world. It is central to political, economic, cultural, and environmental issues of the present and the future.

Undergraduate Admission

Admission to KU
All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences
Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Requirements for the Co-Major
Russian, East European, and Eurasian Studies Co-Major Course Requirements
Offered in conjunction with a major in another academic area; students take intensive REES language and course work to enhance their traditional disciplinary study. The most common REES co-major combinations are with Global & International Studies, Slavic Languages & Literatures, Political Science, and History.

Prerequisite Language Skills (30)
Students selecting this co-major must complete 4th semester proficiency in a Russian, Eastern European, or Eurasian language (take the courses for majors):

Bosnian-Croatian-Serbian:
- BCRS 208 Intermediate Bosnian/Croatian/Serbian II 3
Czech:
- CZCH 208 Intermediate Czech II 3
Polish:
- PLSH 208 Intermediate Polish II 3
Russian:
- RUSS 208 Intermediate Russian II 6
Slovenian:
- TAJ 210 Intermediate Tajik I 3
Turkish:
- TURK 208 Intermediate Turkish II 3
Uyghur:
- UYGR 202 Intermediate Uyghur II 3
Ukrainian:
- UKRA 208 Intermediate Ukrainian II 3
Yiddish:
- YDSH 216 Intermediate Yiddish II 3

Understanding Russia and Eastern Europe or Societies and Cultures of Eurasia (3)
Satisfied by one of the following:
- REES 110 Understanding Russia and Eastern Europe
- REES 111 Understanding Russia and Eastern Europe, Honors
- REES 220 Societies and Cultures of Eurasia
- REES 221 Societies and Cultures of Eurasia, Honors

REES language at the advanced level (0)
(6th semester)

Slavic Languages and Literatures (0)
500-level or above

REES Required Electives (0)
Satisfied by the completion of 1 course in each of the following categories:

Literature and the Arts
- ANTH 315 The Prehistory of Art
- HWC 520 Literature in Translation: _____ (Russian)
- SLAV 140 Introduction to Russian Culture
- SLAV 141 Introduction to Russian Culture, Honors
- SLAV 144 Survey of Russian Literature in Translation
- SLAV 145 Survey of Russian Literature in Translation, Honors
- SLAV 148 Introduction to Slavic Folklore
- SLAV 506 West Slavic Literature and Civilization (Polish and Czech)
- SLAV 520 Russian Phonetics, Phonology, and Inflectional Morphology
- SLAV 534 Tolstoy
- SLAV 561 Readings in Slavic Language: _____ (Slovene)
- SLAV 662 Russian Literary Modernism: 1880-1930
- SLAV 678 Readings in Slavic Linguistics
- SLAV 679 Topics in: _____ (Russian Language Pedagogy)
The University of Kansas

THR 302  Undergraduate Seminar in: _____ (Theatre and Genocide)

History

HIST 115  French Revolution to the Present: Europe 1789-Present
HIST 340  The History of the Second World War
HIST 444  Frozen in Time: Politics and Culture in the Cold War, 1945-75
HIST 510  Topics in: _____ (Siberia: Yesterday and Today)
HIST 564  Medieval Russia

American, European, & Global Studies

AMS 332  The United States in Global Context
SOC 332  The United States in Global Context
EURS 430  European Civilization in World Context: _____ (European Identity)
EURS 604  The European Union

Political Science

POLS 171  Introduction to International Politics Honors
POLS 654  Politics and Government of Russia and the Central Eurasian States
POLS 669  Topics in Comparative Politics: _____ (European Union Politics)
POLS 980  International Organizations

Economics, Geography, Business, Law

ECON 505  History of Economic Analysis
ECON 620  Elements of Mathematical Economics
EVRN 320  Environmental Policy Analysis
GEOG 379  Topics in Cultural Geography: _____ (Environmental Policy)
IBUS 701  International Business

Capstone (6)

Satisfied by the following, completed in the senior year.
Research Methods in Russian, East European, and Eurasian Studies.
Satisfied by:

REES 492  Research Methods in Russian, East European, and Eurasian Studies

Research Seminar in Russian, East European, and Eurasian Studies.
Satisfied by:

REES 496  Capstone Research Seminar in Russian and East European, and Eurasian Studies

Majors are strongly encouraged to study abroad. Please see your advisor about this opportunity.

Russian, East European, and Eurasian Co-Major Hours & GPA

While completing all required courses (above), majors must also meet each of the following hour and grade-point average minimum standards:

Co-Major Hours
Satisfied by 30 hours of co-major courses.

Co-Major Hours in Residence
Satisfied by a minimum of 9 hours of KU resident credit in the co-major.

Co-Major Junior/Senior (300+) Hours

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

Major Junior/Senior (300+) Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the co-major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/ Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Below is a sample 4-year plan for students pursuing the co-major in Russian, East European, and Eurasian Studies (REES). The REES co-major must be completed along with a full major. The co-major requires 4th-semester language proficiency in Russian, Eastern European, or Eurasian language, as well as one additional semester of an advanced language course (i.e. 5th semester language course).

To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

Freshman

Fall
ENGL 101 (Goal 2.1, (2 crs req), BA Writing I))
MATH 101
3rd Semester Language (BA Second Language)

Hours Spring
ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)
MATH 101 1st Semester Language (BA Second Language)
3
3

Major Course
3
3

REES 110 or 111 (Co-Major Requirement), or
REES Required Elective (Co-Major Requirement)
5
3

REES 220 or 221 15

LA&S 292 (Research Methods (recommended )
1

Sophomore

Fall
ENGL 101 (Goal 2.1, (2 crs req), BA Writing I))
MATH 101
3rd Semester Language (BA Second Language)

Hours Spring
ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)
MATH 101 1st Semester Language (BA Second Language)
3
3

Major Course
3
3

REES Required Elective
3
3

(Re-Major Requirement)
5

(REES Required Elective)
5

Junior

Fall
ENGL 101 (Goal 2.1, (2 crs req), BA Writing I))
MATH 101
3rd Semester Language (BA Second Language)

Hours Spring
ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)
MATH 101 1st Semester Language (BA Second Language)
3
3

Major Course
3
3

REES Required Elective
3
3

(REES Required Elective)
5

(REES Required Elective)
5

REES Advanced Level Language (5th semester, Co-Major Requirement)
3-5 Slavic Languages and Literatures 500+ (Co-Major Requirement)

REES Required Elective
3
3

(REES Required Elective)
5

(REES Required Elective)
5

REES Required Elective
3
3

(REES Required Elective)
5

(REES Required Elective)
5

Capstone (6)

Satisfied by the following, completed in the senior year.
Research Methods in Russian, East European, and Eurasian Studies.
Satisfied by:

REES 492  Research Methods in Russian, East European, and Eurasian Studies

Research Seminar in Russian, East European, and Eurasian Studies.
Satisfied by:

REES 496  Capstone Research Seminar in Russian and East European, and Eurasian Studies

Majors are strongly encouraged to study abroad. Please see your advisor about this opportunity.
Elective or possible minor course (Total Hours) 3
Senior
Fall
REES Required Elective (Co-Major Requirement) 3 REES 496 (Co-Major Requirement) 3
REES 492 (Goal 6 Integration & Creativity, Co-Major Requirement) 3 Major Course 300+ 3
Major Course 300+ 3 Major Course 300+ 3
Major Course 300+ 3 Major Course 300+ 3
Elective or possible minor course 300+ (Total Hours) 3 Elective or possible minor course 300+ (Total Hours) 3
Hours
Spring

Total Hours: 120-123

1 The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2 The BA degree requires 4th-semester language proficiency. The REES co-major requires 4th-semester language proficiency specially in a Russian, Eastern European, or Eurasian language.
3 Visit this website (http://college.ku.edu/undergrad/curriculum/ba_QR) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
4 This degree plan does not include specific major requirements as teh REES co-major can be paired with any major. Most majors are approximately 30 credit hours, of which 15 credit hours must be at the Jr/Sr (300+) level.
5 The REES co-major requires 1 elective course from each of the following categories: Literature and the Arts; History; American, European, and Global Studies; Political Science; and Economics, Geography, Business, Law. There is not a specific order these must be taken, but it is recommended to take Jr/Sr level courses when possible.

Please note:
All students in the College of Liberal Arts and Sciences are required to completed 120 total hours of which 45 hours must be at the Jr/Sr (300+) level, and 100 hours must be from within the College of Liberal Arts and Sciences.

The same course cannot be used to fulfill more than one KU Core Goal. Overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

Honors

Departmental Honors

Honors in Russian, East European, and Eurasian studies is open to REES co-majors who have earned, both at the time of entry into the program and at graduation, an overall grade-point average of 3.25 or higher, and 3.5 or higher in courses that satisfy requirements for the REES co-major.

Students must complete REES 492 Research Methods in Russian, East European, and Eurasian Studies and REES 499 (Honors) Capstone Seminar in Russian, East European, and Eurasian Studies with a grade of B or better. The research paper produced in REES 499 must demonstrate the student’s proficiency in at least one of the REES languages through the use of foreign language sources. The paper is evaluated by an honors committee of at least three REES faculty members who have read and commented on the research paper and heard its oral defense. The committee is constituted by the student in consultation with either the director or associate director of CREES.

Study Abroad

Though not required, study abroad is strongly encouraged. Courses taken abroad may count toward the co-major if approved by the REES advisor.

Consult the Center for Russian, East European, and Eurasian Studies (http://www.crees.ku.edu) or the Office of Study Abroad (http://www.studyabroad.ku.edu) for information about programs.

Minor in Russian, East European, and Eurasian Studies

Why study Russian, East European & Eurasian Studies?

The interdisciplinary study of Russia, Eastern Europe, and Eurasia creates culturally informed citizens who can act on national and international issues. The University of Kansas Russian, East European & Eurasian Studies (REES) program covers a broad geographical region, home to rich and diverse cultures that have had an enormous impact on today’s world. It is central to political, economic, cultural, and environmental issues of the present and the future. Similar to the co-major, the minor complements traditional disciplinary study with REES coursework and general area knowledge.

Requirements for the Minor

Russian, East European, and Eurasian Studies Minor Course Requirements

Students selecting this minor must complete the following:

Understanding Russia and Eastern Europe or Societies and Cultures of Eurasia (3)
Satisfied by one of the following: 3
REES 110 Understanding Russia and Eastern Europe
or REES 111 Understanding Russia and Eastern Europe, Honors
REES 220 Societies and Cultures of Eurasia
or REES 221 Societies and Cultures of Eurasia, Honors
REES Required Electives (15)
Satisfied by the completion of 1 course in each of the following 5 categories: 15
Literature and the Arts
ANTH 315 The Prehistory of Art
HWC 520 Literature in Translation: _____ (Russian)
SLAV 140 Introduction to Russian Culture
SLAV 141 Introduction to Russian Culture, Honors
SLAV 144 Survey of Russian Literature in Translation
The University of Kansas

SLAV 145  Survey of Russian Literature in Translation, Honors
SLAV 148  Introduction to Slavic Folklore
SLAV 506  West Slavic Literature and Civilization (Polish and Czech)
SLAV 520  Russian Phonetics, Phonology, and Inflectional Morphology
SLAV 534  Tolstoy
SLAV 561  Readings in Slavic Language: _____ (Slovene)
SLAV 662  Russian Literary Modernism: 1880-1930
SLAV 678  Readings in Slavic Linguistics
SLAV 679  Topics in: _____ (Russian Language Pedagogy)
THR 302  Undergraduate Seminar in: _____ (Theatre and Genocide)

History
HIST 115  French Revolution to the Present: Europe 1789-Present
HIST 340  The History of the Second World War
HIST 444  Frozen in Time: Politics and Culture in the Cold War, 1945-75
HIST 510  Topics in: _____ (Siberia: Yesterday and Today)
HIST 564  Medieval Russia

American, European, & Global Studies
AMS 332  The United States in Global Context
SOC 332  The United States in Global Context
EURS 430  European Civilization in World Context: _____
(European Identity)
EURS 604  The European Union

Political Science
POLS 171  Introduction to International Politics Honors
POLS 654  Politics and Government of Russia and the Central Eurasian States
POLS 669  Topics in Comparative Politics: _____
(European Union Politics)
POLS 980  International Organizations

Economics, Geography, Business, Law
ECON 505  History of Economic Analysis
ECON 620  Elements of Mathematical Economics
EVRN 320  Environmental Policy Analysis
GEOG 379  Topics in Cultural Geography: _____
(Environmental Policy)
IBUS 701  International Business

Minor Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the minor. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Master of Arts in Russian, East European, and Eurasian Studies

Why study Russian, East European, and Eurasian studies?
The interdisciplinary study of Russia, Eastern Europe, and Eurasia creates culturally informed citizens who can act on national and international issues.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Most applicants hold B.A. degrees in the social sciences or humanities with grade-point averages of 3.0 or higher. Students with B.S. or professional degrees are also eligible to apply. Some students may consider completing the M.A. degree in conjunction with academic or professional study in another department or school.

Students should submit the following application materials:

• Application for admission, sent to the Graduate Application Processing Center of the University of Kansas.
• A nonrefundable application fee (payable to the University of Kansas; see Admission in the Graduate Studies (p. 2369) section of the online catalog).
• 1 original transcript of all college-level work.
• Graduate Record Examination scores. International students should also submit Test of English as a Foreign Language scores.
• 3 letters of recommendation commenting on the student’s ability to succeed at graduate work. These letters should be accompanied by a signed waiver form, indicating whether the applicant has waived his or her rights to see the letter.
• A 2-page statement of the student’s educational and professional objectives.

Applications to begin the M.A. program should be submitted by January 1 for admission for the following fall semester. Applications may be accepted off-cycle; please consult with the graduate advisor.

Submit your graduate application online (http://www.graduate.ku.edu). Send all other requested application materials to the program:

Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and grade-point average minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the minor.

Minor Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.
The Foreign Affairs Studies (FASt) concentration within the existing MA in Russian, East European, and Eurasian Studies is a new concentration that will (1) emphasize REES in Global Context and (2) place a greater emphasis on social sciences within REES coursework (The required GIST 710 Interdisciplinary Methods for Global Context emphasizes social science methodology). We expect the audience for this concentration to be primarily Foreign Area officers (FAOs) and others already in the workforce who need an intensive program that can be completed in a year. An intensive area studies program will also serve career needs of former Peace Corps volunteers and others who have the required language proficiency and first-hand knowledge of the given region. To this end, the course sequences and availability will make it possible to complete the FAST concentration in 12 months. The FAST REES will run Fall (12 credit hours) – Spring (12 credit hours) – Summer (6 credit hours), not necessarily in this sequence.

Students must successfully complete 30 hours of coursework:

Concentration in 1 of the following 5 disciplinary areas: history; political science; philosophy and religion; literature and the arts; geography/economics/business (2 electives, total 6hrs)

If a student chooses political science or geography/economics/business as area of concentration, GIST 710 Interdisciplinary Methods for Global Contexts is required along with another elective in this area.

If a student chooses literature/arts, history, or philosophy/religion as an area of concentration, GIST 710 can be used to replace the distribution requirement in political science or geography/economics/business.

25% or more of coursework in GIST 898 and GIST 710 must pertain to REES geographical area.

1 course each in the remaining 4 disciplinary areas (4 electives, total 12 hrs)

The Capstone seminar sequence: REES 898 and REES 899 (6hrs)

GIST 898 Thesis/Project Writing offered in the summer (3hrs)

Advanced Language Course at 500 level or above (3hrs).

**M.A. Degree Requirements**

A Master of Arts degree is awarded in 3 tracks: Russian, East European, and Ukrainian.

**Requirements for the Degree**

1. At least 1 course in a REES-area advanced foreign language.
2. 3 courses for a total of 9 credit hours, in the department or subject group of the student's special interest; at least 2 of these courses must be area specific.
   - The 5 thematic areas are
     - Literature and the Arts
     - History

3. 1 area course in each of the other 4 subject groupings, for a total of 12 hours.
4. Successful completion of REES 898 and REES 899, an interdisciplinary M.A. seminar (6 credit hours), develops advanced research skills. REES 898, which is normally taken at the beginning of the degree program, emphasizes learning the tools and methods necessary to study this region of the world. In REES 899, students write an interdisciplinary research paper using materials in the student’s chosen target language. Before enrolling in REES 899, the student must have completed an advanced language course in the target language.
5. Pass a comprehensive examination in addition to regular course examinations. Information about opportunities and requirements for graduate work with a Russian or East European concentration in any department at KU may be obtained from the department.

Requirements may be modified in special cases with the director’s approval, particularly for students with special needs such as Experienced Teacher Fellows, Foreign Area Officers, or candidates for degrees in the professional schools. All students are encouraged to study abroad.

**Plan of Study**

The plan of study is designed by the student in consultation with the advisor.

**Graduate Certificate in Russian, East European, and Eurasian Studies**

**Why study Russian, East European, and Eurasian studies?**

The interdisciplinary study of Russia, Eastern Europe, and Eurasia creates culturally informed citizens who can act on national and international issues.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

The Russian, East European, and Eurasian Studies (REES) graduate certificate is a 12-credit hour program of study designed primarily for graduate students in CLAS and the professional schools. The program allows the students to acquire context-based interdisciplinary knowledge and expertise of the REES area. The certificate allows for that expertise
to be officially recognized on the students’ KU transcript, enhancing the graduates’ career opportunities.

The main academic objectives of the graduate certificate include introducing and training graduate students in the current methodological approaches to the study of the REES area; allowing the students to acquire a deeper knowledge of the area from different disciplinary perspectives; and guiding the students in integrating their knowledge of the area, methodology, and a REES-area language. As a part of the capstone seminar, graduate certificate students write an original research paper on a REES-area topic that utilizes research in both English and the target language.

As a prerequisite to beginning the course sequence that leads to the certificate, the student must demonstrate a working knowledge of a REES-area language equivalent of at least 2 years of university study.

The CREES graduate certificate includes a 12-credit hour course sequence (4 3-credit hour courses). Out of the 4 courses, 2 are mandatory: the methodology seminars, REES 898 and REES 899.

- REES 898 is taken during the student’s first semester, as it lays out the foundation for interdisciplinary area studies in REES.
- 2 electives must be chosen from a list of REES-themed offerings from 2 different disciplines, of which 1 can overlap with the coursework taken by the student in his or her home department. The courses must be 500-level or higher and have at least 50% REES content.
- REES 899 is taken following the completion of the elective courses. The capstone seminar, in which the student identifies an original research topic, and under the professor’s supervision, produces a capstone paper of publishable quality, a part of which is a working bibliography which includes both English and foreign-language sources. REES 899 is used to demonstrate student knowledge of area studies content and methodology, and the capstone paper is the primary outcome of this course.

REES 898 and REES 899 are taken by both REES MA students and REES graduate certificate students. These students work together on acquiring tools for researching and writing about the REES area, and then applying these tools towards individual projects.

**Department of Slavic Languages and Literatures**

The Department of Slavic Languages & Literatures offers a full array of language, culture, literature, and linguistics courses for students interested not only in Russian, but also in Polish, Bosnian/Croatian/ Serbian, Ukrainian, and Turkish languages and cultures. The department also offers occasional coursework and independent study in Slovene, Czech, Yiddish, and other East European languages.

The department offers three degrees: the B.A., the M.A., and the Ph.D. The Bachelor of Arts degree program offers fundamental training in language and culture, while graduate training at the Masters and Doctoral levels focuses on Russian literature and culture, Slavic linguistics, and/or Slavic language pedagogy. The department also offers select study abroad programs. Working closely with KU’s Center for Russian, East European, and Eurasian Studies (CREES), the department offers an array of Slavic-related events throughout the year, including visiting distinguished lecturers, exhibits, and musical and theatrical performances.

Students participate in an active Russian Club, language tables, and the Graduate Students’ Organization.

For more information about the department and its people, visit the department’s web site (http://slavic.ku.edu). Look for the Old Bridge at Mostar at the very top of the page. Commissioned by Suleiman the Magnificent in 1557, the bridge metaphorically connects the Ottoman Empire with Europe -- it is the physical expression of the concept that Russia and the Slavs link the West and the East.

**Undergraduate Programs**

The undergraduate major in Slavic languages and literatures prepares students to pursue a range of careers connected with Russia and Central Europe, including those related to international work in business, government, nonprofit organizations, etc. The undergraduate major serves equally as solid preparation for graduate study in Slavic languages and literatures and related fields and for entrance to professional schools such as law or journalism. Students learn these languages to pursue careers with international dimensions; enhance job opportunities; connect with heritage, family, and communities; explore other literatures and cultures; and pursue personal interests.

The undergraduate program gives students solid functional language skills in speaking, reading, listening, and writing. Students develop the strategies and linguistic awareness to continue language study throughout their lives. The program acquaints undergraduates with the most significant works of the literature and culture of the Slavic region and gives them the tools and frameworks necessary to understand, analyze, and critique those works and place them in their cultural context. Students work with sources in English and in the original languages.

The department strongly encourages students to plan a substantial study abroad experience (at least a summer but preferably a semester or an academic year) as part of the major. Study abroad experience contributes to mastery of the language and facilitates students’ encounters with the people, practices, and attitudes of the culture in ways that can never be replicated on an American university campus.

**Placement**

Students may establish eligibility for enrollment in the second course in Polish, Russian, or Bosnian/Croatian/Serbian by having earned college credit in the first course in that language or by having studied the language in high school. Students with previous study should contact the department to arrange a consultation about enrollment at the appropriate level.

**Retroactive Credit**

Students with no prior college or university Russian course credit are eligible for retroactive credit according to this formula:

- 3 hours of retroactive credit are awarded to a student with 2 or 3 years of high school Russian who enrolls initially at KU in a third-level Russian course (RUSS 204) and receives a grade of C or higher.
- 6 hours of retroactive credit are awarded to a student with 3 or 4 years of high school Russian who enrolls initially at KU in a fourth-level Russian course (RUSS 208) and receives a grade of C or higher.
- 9 hours of retroactive credit are awarded to a student with 4 years of high school Russian who enrolls initially at KU in a Russian course with a fourth-level course as a prerequisite and receives a grade of C or higher.
Courses for Nonmajors

Some courses in Slavic literatures and cultures are taught in English and fulfill various goals and learning outcomes related to the KU CORE, as well as existing B.A. requirements in the humanities and non-Western culture.

Students may fulfill the College language requirement for the B.A. degree by taking 2 years in one of the following languages: Russian, Polish, Bosnian/Croatian/Serbian, Ukrainian, and Turkish.

Courses are available in Russian for special purposes (Russian for Reading, Russian for the Professions). RUSS 110 Intensive Elementary Russian (10 credit hours) frequently is offered in the summer.

Graduate Programs

The department offers programs leading to Master of Arts and Doctor of Philosophy degrees in Slavic Languages and Literatures.

Master of Arts

The Master of Arts degree in Slavic Languages & Literatures provides students with foundational knowledge of the language, literature, culture, and linguistics of a region of study (Russian, Polish, Bosnian-Croatian-Serbian). Working in a collegial and supportive departmental environment, M.A. students learn the general contours and common ground of the field; read key works embedded in their historical, cultural, stylistic, and genre contexts; learn various methodological and theoretical frameworks and strategies; improve their language capacity, and develop research, writing, interpretive, and technological skills.

Doctor of Philosophy

The Doctor of Philosophy degree in Slavic Languages & Literatures builds further on the foundational knowledge and the structured classroom learning that students engaged in during MA work. Working under the close mentorship of their advisors, PhD students develop a minor in a related field, learn advanced pedagogical and interpretive strategies, continue to improve language skills, and engage in self-motivated, independent study to develop a coherent area of specialization. Students complete their graduate study.

Students pursuing doctoral study in the department of Slavic Languages & Literatures concentrate their advanced work in one of three areas: Russian literature and culture; Slavic language pedagogy; and Slavic linguistics.

Departmental Funding

While it is not guaranteed, the department does its best to provide funding in the form of Graduate Teaching Assistantship (GTA) appointments to all incoming graduate students. GTA appointments are awarded for the academic year and come with:

- a competitive academic year (9 month) salary
- a 100% tuition waiver for all courses at KU
- payment of up to 3 hours of student fees
- optional University-subsidized group health insurance

The appointments are guaranteed based on performance for up to 3 years for M.A. students, 5 years for Ph.D. students and 6 years for students who receive both an M.A. and a Ph.D. at The University of Kansas. GTAs in the department receive thorough training in language instruction, close mentoring, and the opportunity to teach at a variety of levels, providing them with a strong base of teaching experience upon entering the job market. Additional information about teaching for the department is available on the Graduate Programs overview (http://slavic.ku.edu/ma-slavic-overview) page of our departmental website.

FLAS Fellowships

Students in the graduate program may also be eligible for a Foreign Language and Area Studies (FLAS) (http://flas.ku.edu) fellowship. FLAS fellowships include:

- Summer award - up to $5,000 for tuition and a stipend of $2,500 for living expenses for summer language study equivalent to one full year of language study
- Academic Year award - full KU tuition and a $15,000 stipend for living expenses for academic year study that includes two semesters of language and six credits or more of East Asian culture courses.

Students in the are strongly encouraged to apply (http://flas.ku.edu/how-apply) for this funding.

Additional Funding

There are also university fellowships for truly outstanding students. Visit the Graduate Studies website for information about funding opportunities (http://www.graduate.ku.edu/funding-opportunities) for KU graduate students.

Courses

BCRS 104. Elementary Bosnian/Croatian/Serbian I. 5 Hours. U. First Semester. Five hours of recitation and drill in the spoken language per week. Essentials of grammar, practice in reading, writing and speaking Bosnian/Croatian/Serbian. LEC.

BCRS 105. Elementary Bosnian/Croatian/Serbian I, Honors. 5 Hours. U. Similar to BCRS 104 but with additional work aimed at accelerating the student's progress to proficiency and widening understanding of cultural context. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

BCRS 108. Elementary Bosnian/Croatian/Serbian II. 5 Hours. U. Second Semester. A continuation of BCRS 104. Prerequisite: BCRS 104. LEC.

BCRS 109. Elementary Bosnian/Croatian/Serbian II, Honors. 5 Hours. U. Continues BCRS 105. Similar to BCRS 108 but with additional work aimed at accelerating the student's progress to proficiency and widening understanding of cultural context. Prerequisite: BCRS 104 or 105. Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

BCRS 177. First Year Seminar: _____ 3 Hours. GE11 / U. A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Bosnian/Croatian/Serbian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

BCRS 204. Intermediate Bosnian/Croatian/Serbian I. 3 Hours. U. Second-year language course. Further development of communicative and cultural competencies with a content-based, interactive approach. Students develop the ability to understand and produce short written and spoken texts in BCS through engagement with a variety of authentic materials representative of cultural diversity of the studied area. They
contrast and compare features of individual BCS-speaking countries and their cultures as well as differing aspects of B/C/S and American life, culture, and values. Prerequisite: BCRS 108 or permission of the instructor. LEC.

BCRS 205. Intermediate Bosnian/Croatian/Serbian I, Honors. 3 Hours. U.
Similar to BCRS 204 but with additional work aimed at accelerating the student's progress to proficiency and widening understanding of cultural context. Prerequisite: Open only to students who have received an A in BCRS 108 or an A or B in BCRS 109, and who are admitted to the University Honors Program, or by permission of instructor. LEC.

BCRS 208. Intermediate Bosnian/Croatian/Serbian II, Honors. 3 Hours. AE42 / U.
A continuation of BCRS 204. Prerequisite: BCRS 204. LEC.

BCRS 209. Intermediate Bosnian/Croatian/Serbian II, Honors. 3 Hours. AE42 / U.
Similar to BCRS 208 but with additional work aimed at accelerating the student's progress to proficiency and widening understanding of cultural context. Prerequisite: BCRS 204 or 205. Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

BCRS 380. Intensive Croatian. 6 Hours. U.
This program consists of a six-week intensive language course in intermediate and advanced Croatian phonetics, conversation, and grammar, and is offered each summer in Croatia. In addition to the practical language work, there is a program of lectures on modern Croatian history, literature, and other cultural topics. Various excursions and tours bring the students into first-hand contact with the people, natural beauty and culture of Croatia. This program is a cooperative effort between the University of Kansas and faculty of the University of Zadar. LEC.

BCRS 504. Advanced Bosnian/Croatian/Serbian I. 3 Hours. H/W.
A practical Bosnian/Croatian/Serbian course involving the advanced study of the grammar, reading of texts on a variety of subjects, conversation and composition. Taught in Bosnian/Croatian/Serbian. Designed for students who have had two or more years of Bosnian/Croatian/Serbian language. Prerequisite: BCRS 208, or equivalent. LEC.

BCRS 508. Advanced Bosnian/Croatian/Serbian II. 3 Hours. H/W.
A practical Bosnian/Croatian/Serbian course involving the advanced study of the grammar, reading of texts on a variety of subjects, conversation and composition. Taught in Bosnian/Croatian/Serbian. Designed for students who have had two and one-half or more years of Bosnian/Croatian/Serbian language. Prerequisite: BCRS 504, or equivalent. LEC.

BCRS 675. Readings in Croatian. 1-6 Hours. H/W.
Individually tailored readings and independent work in Bosnian/Croatian/Serbian language and culture. Prerequisite: Two years of Bosnian/Croatian/Serbian, and consent of instructor. IND.

CZCH 104. Elementary Czech I. 5 Hours. U.
First semester. Essentials of grammar, practice in speaking and writing Czech. Simple readings from selected texts. LEC.

CZCH 108. Elementary Czech II. 5 Hours. U.
Second semester. A continuation of CZCH 104. Prerequisite: CZCH 104. LEC.

CZCH 177. First Year Seminar: _____ 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Czech. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

CZCH 204. Intermediate Czech I. 3 Hours. U.
Second-year course in the language with emphasis on reading, composition, and conversation. Prerequisite: CZCH 108. LEC.

CZCH 208. Intermediate Czech II. 3 Hours. U.
A continuation of CZCH 204. Prerequisite: CZCH 204. LEC.

CZCH 675. Readings in Czech. 1-6 Hours. H/W.
Prerequisite: Reading knowledge of Czech language, and consent of instructor. IND.

PLSH 104. Elementary Polish I. 5 Hours. U.
First Semester. Essentials of grammar, practice in reading, writing, and speaking Polish. LEC.

PLSH 105. Elementary Polish, Honors. 5 Hours. U.
Honors version of PLSH 104, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

PLSH 108. Elementary Polish II. 5 Hours. U.
Second semester. A continuation of PLSH 104. Prerequisite: PLSH 104. LEC.

PLSH 109. Elementary Polish II. 5 Hours. U.
A continuation of PLSH 105. Honors version of PLSH 108, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: PLSH 104 or PLSH 105. Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

PLSH 177. First Year Seminar: _____ 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Polish. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

PLSH 204. Intermediate Polish I. 3 Hours. U.
Second-year course in the language with emphasis on reading, composition, and conversation. Prerequisite: PLSH 108. LEC.

PLSH 205. Intermediate Polish I, Honors. 3 Hours. U.
Honors version of PLSH 204, with additional work aimed at accelerating students' progress to proficiency and expanding their cultural competence. Prerequisite: Open only to students who have received an A in PLSH 108 or an A or B in PLSH 109, and who are admitted to the University Honors Program; or by permission of instructor. LEC.

PLSH 208. Intermediate Polish II. 3 Hours. U.
A continuation of PLSH 204. Prerequisite: PLSH 204. LEC.

PLSH 209. Intermediate Polish II, Honors. 3 Hours. U.
Honors version of PLSH 208, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: PLSH 204 or PLSH 205. Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

PLSH 312. Polish Language and Civilization in Poland: Summer Program. 8 Hours. H/W.
Polish grammar, conversation, and composition with select aspects of Polish civilization. Available only to participants in Polonicum, Warsaw University. LEC.

PLSH 504. Advanced Polish I. 3 Hours. H/W.
A practical Polish language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Polish. Designed for students who have had two
or more years of Polish language. Prerequisite: PLSH 208 or equivalent. LEC.

PLSH 508. Advanced Polish II. 3 Hours. H/W.
A practical Polish language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Polish. Designed for students who have had two and one-half or more years of Polish. Prerequisite: PLSH 504 or equivalent. LEC.

PLSH 675. Readings in Polish Language and Literature. 1-6 Hours. H/W.
Directed individual readings on various topics concerning Polish literature and/or language. Prerequisite: Two years or four semesters of Polish, and consent of instructor. IND.

RUSS 100. Russian Reading Course I. 3 Hours. U.
A continuation of RUSS 100. Completion and review of the fundamentals of grammar, with emphasis on reading and translation of learned, scientific, or technical writing and other material of an advanced nature. Each student will also have special assignments in his or her particular field. This course does not satisfy any part of the undergraduate language requirement. Presupposes no previous study of Russian. LEC.

RUSS 101. Russian Reading Course II. 3 Hours. U.
A continuation of RUSS 100. Completion and review of the fundamentals of grammar, with emphasis on reading and translation of learned, scientific, or technical writing and other material of an advanced nature. Each student will also have special assignments in his or her particular field. This course does not satisfy any part of the undergraduate language requirement. Presupposes no previous study of Russian. LEC.

RUSS 104. Elementary Russian I. 5 Hours. U.
First semester. Five hours of basic language acquisition and oral practice per week. Essentials of grammar, practice in comprehending, speaking, reading, and writing Russian. A continuation of RUSS 104. Prerequisite: RUSS 100. LEC.

RUSS 105. Elementary Russian I, Honors. 5 Hours. U.
Honors version of RUSS 104, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

RUSS 108. Elementary Russian II. 5 Hours. U.
Second semester. Five hours of basic language acquisition and oral practice per week. Essentials of grammar, practice in comprehending, speaking, reading, and writing Russian. A continuation of RUSS 104. Prerequisite: RUSS 104. LEC.

RUSS 109. Elementary Russian II, Honors. 5 Hours. U.
A continuation of RUSS 105. Honors version of RUSS 108, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: RUSS 104 or RUSS 105. Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

RUSS 110. Intensive Elementary Russian. 10 Hours. U.
Intensive course in elementary Russian providing the student with a complete survey of Russian grammar, and proficiency in understanding, reading, and speaking basic Russian. Twenty contact hours per week. Same content as RUSS 104 and RUSS 108 combined. LEC.

RUSS 150. Beginning Russian I. 3 Hours. U.
Fundamentals of Russian grammar, reading, speaking, and writing. Course designed to accommodate the needs of students regardless of age, educational background, or occupation. No previous knowledge of Russian or other foreign languages required. LEC.

RUSS 152. Beginning Russian II. 3 Hours. U.
Continuation of RUSS 150. Does not fulfill BA foreign language requirement. Prerequisite: RUSS 150 or equivalent. LEC.

RUSS 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Russian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

RUSS 204. Intermediate Russian I. 5 Hours. U.
This course is designed to develop speaking, reading, and listening proficiency within the context of a review of grammar. Prerequisite: RUSS 108, RUSS 110, or equivalent. LEC.

RUSS 205. Intermediate Russian II, Honors. 5 Hours. U.
Honors version of RUSS 204 with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: Open only to students who have received an A in RUSS 108 or an A or B in RUSS 109, and who are admitted to the University Honors Program, or by permission of instructor. LEC.

RUSS 208. Intermediate Russian II. 5 Hours. U.
Continuation of RUSS 204. Completes the undergraduate foreign language requirement. The course is designed to develop speaking, reading, and listening proficiency within the context of detailed grammatical review. Prerequisite: RUSS 204 or equivalent. LEC.

RUSS 209. Intermediate Russian II, Honors. 5 Hours. U.
Honors version of RUSS 208, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: RUSS 204 or 205. Open only to students admitted to the University Honors Program, or by permission of instructor. LEC.

RUSS 250. Continuing Russian I. 3 Hours. U.
Fundamentals of Russian grammar, reading, speaking, and writing. Course designed to accommodate the needs of students regardless of age, educational background, or occupation. Does not count towards the fulfillment of the undergraduate language requirement. Does not count towards the undergraduate major in Slavic. Prerequisite: RUSS 152 or equivalent. LEC.

RUSS 252. Continuing Russian II. 3 Hours. U.
A continuation of RUSS 250. Does not count towards the fulfillment of the undergraduate language requirement. Does not count towards the undergraduate major in Slavic. Prerequisite: RUSS 250 or equivalent. LEC.

RUSS 504. Advanced Russian I. 3 Hours. H/W.
A practical Russian language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Russian. Designed for students who have had four semesters of Russian. Prerequisite: RUSS 208 or RUSS 216. LEC.

RUSS 508. Advanced Russian II. 3 Hours. H/W.
A practical Russian language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Russian. Designed for students who have had two and one-half or more years of Russian language. Prerequisite: RUSS 504. LEC.

RUSS 512. Russian for the Professions I. 3 Hours. U.
This course focuses on the active mastery of language structures and vocabulary needed for people using Russian in professional capacities, particularly such as business and journalism. Materials will be drawn from the current Russian press and electronic media. Designed for students
who have had basic language training and want to develop specialized language skills. Prerequisite: RUSS 208 or RUSS 216. LEC.

**RUSS 516. Russian for the Professions II. 3 Hours. U.**
A continuation of RUSS 512. Prerequisite: RUSS 504, RUSS 512, or RUSS 522. LEC.

**RUSS 522. Problems in Translating Russian into English I. 3 Hours. H/W.**
Preparation of hitherto untranslated works, possibly with the intention of submitting for publication. Training and practice in the skills of oral interpretation. Prerequisite: Two years minimum of Russian language courses. LEC.

**RUSS 526. Problems in Translating Russian into English II. 3 Hours. H/W.**
A continuation of RUSS 522. LEC.

**RUSS 550. Advanced Conversation, Composition, and Grammar in Russia: Summer Program. 6 Hours. H/W.**
Held in Russia. Twenty-four hours of class work weekly, plus lectures and excursions, for six weeks at St. Petersburg University. Prerequisite: RUSS 208 or the equivalent of twenty-two hours of Russian language courses. LEC.

**RUSS 552. Advanced Russian Language at Saint Petersburg University: Semester Program. 14 Hours. H/W.**
Sixteen weeks of intensive Russian language and literature classes held at Saint Petersburg University, Russia. Classes in advanced phonetics, conversation, and grammar as well as lectures on literary and other cultural topics. Prerequisite: Minimum of five semesters of Russian language study at the college level or its equivalent. LEC.

**RUSS 552. Advanced Russian Language at Saint Petersburg University: Summer Program. 3 Hours. H/W.**
An introduction to the various forms of folklore among the Slavic peoples, with particular emphasis on the folk literature, customs, and artifacts of Russia, Poland, and the South Slavic countries. LEC.

**RUSS 600. Classics of Russian Culture. 3 Hours. H.**
This advanced Russian language class explores the monuments of Russian culture (1700-1980) in the context of the country's history, customs, artistic traditions and literary trends. It is designed to develop reading, writing, and speaking skills of advanced language students and includes the preparation of written and oral reports in Russian. Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent. LEC.

**RUSS 604. Contemporary Russian Culture. 3 Hours. H/W.**
This advanced Russian language class explores issues in contemporary Russian culture (literature and the arts, societal trends and issues, politics, and national life) based on Russian film, television, and print materials. It is designed to develop reading, writing, and speaking skills of advanced language students who wish to develop high levels of fluency, accuracy, and idiomatic expressiveness. Includes the preparation of both written and oral reports. Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent. LEC.

**RUSS 608. Russian Phonetics and Grammar. 3 Hours. H/W.**
A survey of fundamental issues in Russian phonetics, morphology, and syntax. The course will develop reading, writing, and speaking skills necessary for discussing and analyzing the major linguistic categories of Russian. Includes the preparation of both written and oral reports. Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent. LEC.

**RUSS 612. Introduction to Russian Literature. 3 Hours. H/W.**
Readings for this advanced Russian language class will be drawn from representative prose, poetry, and drama of 19th or 20th century authors. The course will develop reading, writing, and speaking skills necessary for discussing and analyzing the major texts and literary trends of the Russian tradition. Includes the preparation of both written and oral reports. Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent. LEC.

**RUSS 616. Stylistics. 3 Hours. H/W.**
Practical examination of the features of stylistic registers available in contemporary Russian, ranging from slang to colloquial speech to educated journalistic, scientific, and literary styles. The course will develop reading, writing, and speaking skills necessary for discussing and analyzing stylistic registers. Includes the preparation of both written and oral reports. Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent. LEC.

**RUSS 675. Readings in Russian. 1-6 Hours. H/W.**
Prerequisite: Two years of Russian, and consent of instructor. IND.

**SLAV 104. Elementary Slavic Language I: _____, 5 Hours. U.**
First semester. Essentials of grammar, practice in speaking and writing a Slavic language. Simple readings from selected texts. Course may be used to teach the fundamentals of any Slavic language, for example, Slovenian, Macedonian, Slovak, etc. LEC.

**SLAV 108. Elementary Slavic Language II: _____, 5 Hours. U.**
Second semester. Essentials of grammar, practice in speaking and writing a Slavic language. A continuation of SLAV 104 in those languages whose fundamentals were being taught in SLAV 104. Prerequisite: SLAV 104 or equivalent (in same language). LEC.

**SLAV 110. Introduction to the Peoples and Cultures of Kazakhstan Through Russian. 1 Hour. U.**
This 8-week course prepares students of all majors with little or no knowledge of Russian to function effectively in the experiential internship program in Almaty, Kazakhstan, with appropriate cultural sensitivity and survival Russian-language skills. The focus is basic grammar and key vocabulary terms of Russian (e.g., reading signs, menus; understanding key conversational phrases). Weekly readings treat the history, business culture, and language politics of Kazakhstan. LEC.

**SLAV 140. Introduction to Russian Culture. 3 Hours. HT AE42/GE3H / H/W.**
An introduction to the principal achievements of Russian cultural history, with particular emphasis on literature, folklore, spirituality, and the visual arts. LEC.

**SLAV 141. Introduction to Russian Culture, Honors. 3 Hours. HT AE42/GE3H / H/W.**
An introduction to the principal achievements of Russian cultural history, with particular emphasis on literature, folklore, spirituality, and the visual arts. LEC.

**SLAV 144. Survey of Russian Literature in Translation. 3 Hours. HL AE42/GE3H / H/W.**
A survey of the principal works of Russian literature including such authors as Pushkin, Gogol, Dostoevsky, Tolstoy, Chekhov, Pasternak, Solzhenitsyn, and others. LEC.

**SLAV 145. Survey of Russian Literature in Translation, Honors. 3 Hours. HL AE42/GE3H / H/W.**
A survey of the principal works of Russian literature including such authors as Pushkin, Gogol, Dostoevsky, Tolstoy, Chekhov, Pasternak, Solzhenitsyn, and others. LEC.

**SLAV 148. Introduction to Slavic Folklore. 3 Hours. HL AE42/GE3H / H/W.**
An introduction to the various forms of folklore among the Slavic peoples, with particular emphasis on the folk literature, customs, and artifacts of Russia, Poland, and the South Slavic countries. LEC.
SLAV 149. Introduction to Slavic Folklore, Honors. 3 Hours. HL AE42/GE3H / H/W.
An introduction to the various forms of folklore among the Slavic peoples, with particular emphasis on the folk literature, customs, and artifacts of Russia, Poland, and the South Slavic countries. LEC.

SLAV 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Slavic. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

SLAV 204. Intermediate Slavic Language I: ____. 3 Hours. U.
Second-year level course in a Slavic language, for example, Slovenian, Macedonian, Slovak, with emphasis on reading, composition, and conversation. Prerequisite: SLAV 108 (in same language). LEC.

SLAV 208. Intermediate Slavic Language II: ____. 3 Hours. U.
Second-year level course in a Slavic language, for example, Slovenian, Macedonian, Slovak, with emphasis on reading, composition, and conversation. Prerequisite: SLAV 204 or equivalent (in same language). LEC.

SLAV 316. The Peoples and Cultures of Southeastern Europe Through Film. 3 Hours. HL AE42/GE3H / H.
This course presents an introduction to the study of the culture of the South Slavs and other peoples of Southeastern Europe, combining background modules in geography, linguistic culture, history, folklore and contemporary cultural criticism with critical viewings of artistic films. The course serves as an introduction to humanistic inquiry about the peoples and cultures of Southeastern Europe. LEC.

SLAV 317. The Peoples and Cultures of Southeastern Europe Through Film, Honors. 3 Hours. HL AE42/GE3H / H.
This course is similar in content to SLAV 316, but with an additional honors project. Prerequisite: Eligibility for or admission to the university Honors Program. LEC.

SLAV 318. Jews and Slavs in Eastern Europe. 3 Hours. H.
Jews and Slavs have shared territory from the Middle Ages to the present day. The contact between these culturally and linguistically distinct groups has shaped many centuries of Eastern European history - from the extreme violence of the pogroms to long periods of peaceful coexistence and cooperation. “Jews and Slavs” examines the history and cultural geography of Slavic-Jewish contact from the perspectives of both groups. Through literature, film, journalism, and folklore, students learn about the profound influence Jews and Slavs have had on each other, the uneasy feelings that accompanied their interactions, and the creative and fascinating impact their interaction had on both cultures. (Same as JWSH 318.) LEC.

SLAV 340. Introduction to the Languages and Peoples of Russia and East-Central Europe. 3 Hours. HT AE42/GE3H / H.
An overview of the languages and peoples of Russia and East-Central Europe, including the Slavic and Baltic languages, Romanian, and Albanian. Topics addressed include language prehistory, writing systems, and the relationship between language and national identity. Emphasis on language issues as a background to current events in order to impart an appreciation of the area, its uniqueness and complexity. Prerequisite: Membership in the College Honors Program or consent of instructor. LEC.

SLAV 370. War and Violence Russian Literature and Film. 3 Hours. S.
This course focuses on artistic representations of violence resulting from historical events such as World War II, Soviet collectivization, the Gulag, and political purges. We consider Soviet literature and film, including works by Isaac Babel, Andrei Platonov, Anna Akhmatova, and Alexander Solzhenitsyn. Readings in English. The course is offered at the 300 and 500 levels, with additional assignments at the 500 level. LEC.

SLAV 375. Topics in: ____. 1-3 Hours. H.
Exploration of Slavic cultural forms such as literature, film, linguistics, arts, and press. Topics vary, and course may address topics across a narrow or broad time frame. May be repeated if content varies. LEC.

SLAV 390. Slavic Folk Culture: ____. 3 Hours. H/W.
A broad exposure, both theoretical and practical, to various aspects of the traditional native culture of a particular Slavic country or ethnic group, including folk dance, song and musicianship, as well as forms of the material culture such as folk architecture, costumes and art in everyday life. Taught in the pertinent Slavic country in conjunction with the appropriate language course. LEC.

SLAV 495. Senior Capstone Seminar. 3 Hours. AE61 / H.
The Senior Capstone Seminar offers undergraduate majors an opportunity to define, design and execute a substantial research/creative project under the mentorship of a faculty member. The project integrates the knowledge and skills gained in the coursework for the major and across the undergraduate curriculum, and demonstrates the students competence in the field of Slavic studies. Prerequisite: Slavic major status, senior standing. LEC.

SLAV 499. Honors Thesis. 3 Hours. H/W.
Independent study and preparation of honors thesis. Required of all students working for a degree with honors in Slavic languages and literatures. IND.

SLAV 500. Russia Today. 3 Hours. H/W.
Study and discussion of contemporary problems in Russia and the former Soviet Union; readings in Russian, based on articles in newspapers, journals, etc. Conducted in Russian. Prerequisite: RUSS 208 or equivalent. LEC.

SLAV 502. Introduction to Russian Culture and Society: ____. 3 Hours. H/W.
An interdisciplinary course introducing the student to the principal features of Russian cultural and societal development in the modern era. Readings in English, no prerequisite for non-Russian majors. Majors and graduate students in Slavic languages and literatures will be required to do readings in Russian. LEC.

SLAV 503. Post-Soviet Communication. 3 Hours. H.
The course is designed to acquaint students with the shifting manner of public discourse in Post-Soviet Russia and help them to explore in some depth cross-cultural communication between America and Russia. In addition to contemporary and historical background on Russian communicative practices, students examine discourse in business development, mass media, marketing, and advertising. All readings in English. (Same as COMS 503). LEC.

SLAV 504. Introduction to East-Central European Culture and Society: ____. 3 Hours. H/W.
An interdisciplinary course introducing the student to the principal features of East-Central European cultural and societal development in the modern era. Countries that may be considered are: Poland, the Czech Republic,
Slovakia, Hungary, Romania, Bulgaria, the South Slavic countries, Latvia, Lithuania, Estonia, Belorussia, and Ukraine. LEC.

SLAV 505. Introduction to Czech Culture. 3 Hours. H.
This study-abroad trip offers a survey of Czech art, architecture, literature, theater, and film from the medieval period to the present with emphasis on the late 19th and 20th centuries. Combines 18 hours of lectures on campus and a ten-day trip to Prague. LEC.

SLAV 506. West Slavic Literature and Civilization (Polish and Czech). 3 Hours. H/W.
A survey of West Slavic Literature and Civilization (Polish and Czech) from its beginnings to the present with emphasis on the most important trends: Renaissance, Romanticism, Positivism/Realism, Modernism and Avant-guard; Socialist realism, and Post-modernism. The course combines lecture, discussion and small group activities. Movie clips, recordings, and slides are used to reflect various cultural dimensions of West Slavic Civilization. No knowledge of Polish or Czech is required. LEC.

SLAV 508. South Slavic Literature and Civilization. 3 Hours. NW AE42 / H/W.
An introductory survey of the literature and culture of the South Slavic peoples: the Slovenes, Croats, Bosniacs, Serbs, Montenegrins, Macedonians and Bulgarians. No language required. LEC.

SLAV 510. The Russian Literary Genius. 3 Hours. H/W.
Topics and problems in Russian cultural history as treated in the masterworks of Russian literature. Readings selected from the works of Pushkin, Tolstoy, Dostoevsky, Pasternak, Bulgakov, Solzhenitsyn, and other great Russian writers. Readings in English, no prerequisite for non-Russian majors. Russian majors will do some of the readings in Russian. LEC.

SLAV 514. Totalitarianism and Literature in Central Europe. 3 Hours. H.
This course asks how fiction written in Central Europe engaged and grappled with the totalitarian experience imposed by Nazi and Soviet forms of government. The course focuses on the works by 20th-century Polish, Czech, and Hungarian writers that deal with totalitarianism. (Same as HWC 514.) LEC.

SLAV 516. Film Adaptations of Polish and Czech Literature. 3 Hours.
A comparative study of several most representative and best works of 19th- and 20th-century Polish and Czech fiction and drama and their film adaptations. By providing a broad cultural and historical background of the works, the course offers a thorough introduction to modern culture of Poland and the Czech Republic. Readings and discussions are in English, and no knowledge of Polish or Czech is required. LEC.

SLAV 520. Russian Phonetics, Phonology, and Inflectional Morphology. 3 Hours. H/W.
An analysis of the phonological and morphological systems of contemporary standard Russian, including normative and dialectal pronunciation of speech sounds, phonemics, morphophonemic alterations, and nominal and verbal inflections. Graduate students enrolled in this course will be held to a more stringent curriculum and grading system. Prerequisite: Two years of Russian language study or the equivalent. LEC.

SLAV 522. The Grammatical Categories of Russian: Linguistic Units, Functions and Meanings. 3 Hours. H/W.
This course covers the main grammatical categories of Russian, including word formation, case, animacy, voice and reflexive verbs, imperatives, aspect, and word order. It is intended not only for linguists but anyone seeking a better understanding of the grammatical systems of Russian. Designed as a continuation of SLAV 520. Prerequisite: Two years of Russian language study or the equivalent. LEC.

SLAV 524. Russian Since the Revolution. 3 Hours. H/W.
An examination of changes in the Russian language during the course of this century. Topics covered include changes in pronunciation, morphological and syntactic variation, and the impact of foreign borrowings, particularly from English. Graduate students enrolled in this course will be held to a more stringent curriculum and grading system. Prerequisite: Two years of Russian language study or the equivalent. LEC.

SLAV 528. Comparative Study of Slavic Literatures. 3 Hours. H/W.
The course is intended as an introduction to the most significant writers and works in Slavic literatures. The emphasis will be on some of the themes and ideological concepts that have shaped the literatures of the Slavic world. Representative works of Turgenev, Dostoevsky, Mrozek, Rozewicz, Capek, Hasek, Djilas, Havel, Ivo Andric and others, will be studied. The diversity of expression and, at the same time, homogeneity of spirit in the works of these writers will be stressed. No knowledge of Slavic languages is required. LEC.

SLAV 530. Introduction to Russian Poetry. 3 Hours. H/W.
An introduction to the principles of Russian versification and to masterpieces of Russian poetry selected from the 18th, 19th, and 20th centuries. Students will learn to read, translate, and analyze poems in terms of rhyme, meter, euphony, metaphor, and other prosodic features. Emphasis will be placed upon preparing students for independent study and appreciation of Russian poetry in the original. Prerequisite: Language proficiency. LEC.

SLAV 532. Dostoevsky. 3 Hours. H/W.
A study of the life and works of Fyodor Dostoevsky. In translation. No prerequisite. LEC.

SLAV 534. Tolstoy. 3 Hours. H/W.
A study of the life and works of Leo Tolstoy. In translation. LEC.

SLAV 536. Turgenev. 3 Hours. H/W.
A study of the life and works of Ivan Turgenev. In translation; however, note that Russian majors will be required to read selected works in Russian. LEC.

SLAV 538. The Modern Polish Short Story. 3 Hours. H/W.
A study of the development of the Polish short story from Positivism to the present. Readings of major Polish writers including Prus, Sienkiewicz, Schulz, Borowski, Andrzejewski, and others. Emphasis on trends in the Polish short story within the context of West European literatures. No prerequisites. Readings in English. Students with knowledge of Polish will read some works in Polish. LEC.

SLAV 540. Language and Identity in East-Central Europe and the Former Soviet Union. 3 Hours. H.
The course treats the formation of modern nation states as defined by language, where the history of the linguistic community played a central, if mythic role. Focus is on sociolinguistic case studies of the connection between language and identity in the former USSR and Yugoslavia, as well as transnational groups defined by common language and culture. The impact of global English, EU membership, and migration on language and identity issues are also discussed. LEC.

SLAV 558. Readings in Slovene. 1-6 Hours. H.
Individually tailored coursework in Slovene, from beginning to advanced level. Can include development of all four skills depending on the needs of the student. Prerequisite: Consent of instructor. IND.
SLAV 560. Introduction to Slavic Language: ______. 3 Hours. H/W.
Basic introduction to the language, with emphasis on grammar and reading skills. Prerequisite: Two years of a different Slavic language at the college level. LEC.

SLAV 561. Readings in Slavic Language: ______. 1-6 Hours. H/W.
A course of readings and discussion of grammar in a Slavic language as a continuation of SLAV 560, for example, in Bulgarian, Macedonian, etc. Prerequisite: SLAV 560 or the equivalent. LEC.

SLAV 562. Russian Theatre and Drama from Stanislavski and Chekhov to the Present. 3 Hours. H/W.
A study of the development of Russian theatre and dramatic literature from 1898 to the present. Lectures and readings in English. (Same as THR 725.) LEC.

SLAV 564. The "Woman Question" in Nineteenth-Century Russian Literature. 3 Hours. H.
An exploration of the "woman question" in nineteenth-century Russia as treated in literary texts. Authors to be included are: Tolstoy, Turgenev, Dostoevsky, Chekhov, as well as women writers such as Karolina Pavlova and Evgenia Tur, and prominent literary and social critics. Readings in English. LEC.

SLAV 566. The Devil in Russian Literature. 3 Hours. H.
This course traces the various manifestations of the Devil through Russian and European folklore, myth, theology, culture, and literature. Although the focus is on Russian literature, classic European works are discussed, as they had a powerful impact on the modern Russian Conception of the Evil One. Readings in English. (Same as HWC 566.) LEC.

SLAV 568. Biblical Themes in Modern Russian Literature. 3 Hours. H.
An exploration of the creative process of modern Russian literature (1700 to present) through the ways in which Russian writers have responded to the Bible, the cornerstone of both Western and Eastern Christianity. LEC.

SLAV 570. War and Violence Russian Literature and Film. 3 Hours. S.
This course focuses on artistic representations of violence resulting from historical events such as World War II, Soviet collectivization, the Gulag, and political purges. We consider Soviet literature and film, including works by Isaac Babel, Andrei Platonov, Anna Akhmatova, and Alexander Solzhenitsyn. Readings in English. The course is offered at the 300 and 500 levels, with additional assignments at the 500 level. LEC.

SLAV 600. Biography of a City: ______. 3 Hours. H/W.
Examination in depth of the historical, social, intellectual, and artistic development of one or more Slavic urban centers. LEC.

SLAV 612. Introduction to Russian Literature of the Nineteenth Century. 3 Hours. H/W.
Pushkin, Dostoevsky, Tolstoy, and others with an introduction to Russian culture. Lectures and readings in Russian. Prerequisite: Three years of Russian language study or its equivalent. LEC.

SLAV 614. Russian Literature in Translation: ______. 3 Hours. H/W.
A survey of the principal Russian authors and literary works of the 19th and/or 20th century. Readings in English, no prerequisites for non-Russian majors. Students with a sound knowledge of Russian will be expected to do some of the readings in Russian. LEC.

SLAV 616. Introduction to Russian Literature of the Twentieth Century. 3 Hours. H/W.
A survey of recent Russian and Soviet literature. Lectures and readings in Russian. Prerequisite: Three years of Russian language study or its equivalent. LEC.

SLAV 626. The Cultural Impact of Ottoman Empire on the South Slavs. 3 Hours. H.
An examination of the cultural development of the South Slavs in the context of the Ottoman invasions and subsequent rule (14th-19th century), focusing on the frontier aspects of the Balkans, military culture, religion, economics and banditry, as well as other aspects of material and folk culture. No language requirement. Prerequisite: SLAV 316 or SLAV 508; or consent of instructor. LEC.

SLAV 630. Slavic Folklore. 3 Hours. H/W.
Introduction to the phenomena and problems of Slavic folklore. Prerequisite: Two years of Russian on the college level. LEC.

SLAV 635. Language, Culture and Ethnicity in Prehistoric Eastern Europe. 3 Hours. S.
The course is for students who wish to understand the prehistory of Eastern Europe with special attention to the Slavs. The interdisciplinary course examines East European prehistory from the perspectives of archaeology and linguistics, considering also how ideologies have influenced the interpretation of results. No language prerequisite. (Same as ANTH 696) LEC.

SLAV 642. Pushkin and Evgenij Onegin. 3 Hours. H/W.
Lectures, reading, and analysis of Pushkin's "novel in verse." Prerequisite: Three years of Russian language courses or the equivalent. LEC.

SLAV 650. The Russian Short Story. 3 Hours. H/W.
Readings from the short stories of major Russian writers of the 19th and/or 20th centuries, e.g., Pushkin, Gogol, Dostoevsky, Turgenev, Tolstoy, Chekhov; readings and discussion in English for non-Russian majors. Russian majors will be expected to read most stories in Russian. Prerequisite: None for non-majors in the department; two years of college-level Russian for majors. LEC.

SLAV 656. Russian Literature of the Eighteenth Century. 3 Hours. H/W.
Readings from Kantemir, Trediakovskiy, Lomonosov, Derzhavin, Karamzin, and others in their literary and intellectual contexts. Readings in Russian. Prerequisite: Three years of Russian language study or its equivalent. LEC.

SLAV 660. Nineteenth Century Russian Prose and Fiction. 3 Hours. H/W.
Readings from the prose works of Pushkin, Lermontov, Gogol, Turgeniev, Goncharov, Dostoevsky, and Tolstoy. In translation. No prerequisite for non-Russian majors. Russian majors will be required to have achieved senior standing and will read most works in Russian. LEC.

SLAV 662. Russian Literary Modernism: 1880-1930. 3 Hours. H/W.
Readings from late Tolstoy through the period of the 1920's. In translation; no prerequisites for non-Russian majors. Russian majors will be required to have achieved senior standing and will read most works in Russian. LEC.

SLAV 664. Soviet Russian Literature: 1930-1990. 3 Hours. H/W.
Readings in the period, in all genres. In translation; no prerequisites for non-Russian majors. Russian majors are required to have senior standing and read most works in Russian. LEC.

SLAV 666. Nabokov. 3 Hours. H/W.
A study of the life and works of Vladimir Nabokov. In translation. No prerequisite. LEC.
SLAV 675. Readings in Slavic Studies (English). 1-3 Hours. H.
Directed readings on Slavic culture in English. For non-majors.
Prerequisite: Instructor permission. LEC.

SLAV 678. Readings in Slavic Linguistics. 1-6 Hours. H/W.
Directed individual readings on various topics concerning Slavic
linguistics. Prerequisite: Proficiency in at least one Slavic language, and
consent of instructor. IND.

SLAV 679. Topics in: ______. 1-6 Hours. H.
Intensive study of a selected topic from Slavic languages, literatures,
linguistics, or pedagogy. IND.

SLAV 684. Main Currents of Russian Thought I. 3 Hours. H/W.
A study of philosophical, theological, and literary monuments designed to
acquaint the student with main cultural forces that have shaped Russian
thought and manners. From the origins to Peter the Great. (Same as PHIL
684.) LEC.

SLAV 686. Main Currents of Russian Thought II. 3 Hours. H/W.
A continuation of SLAV 684. From the age of Peter the Great to
revolutions of 1917. (Same as PHIL 686.) LEC.

SLAV 710. Introduction to Slavic Languages and Linguistics. 3
Hours.
The Slavic languages and peoples, including briefly: their origin,
prehistory, and early culture. Basic linguistic methodology as applied to
Slavic material from the beginnings of Slavic linguistics to the present.
LEC.

SLAV 711. Russian Poetry: Nineteenth Century. 3 Hours.
Readings from the works of the major poets, in Russian. Prerequisite:
Three years of Russian language study or the equivalent. LEC.

SLAV 712. Russian Poetry: Twentieth Century. 3 Hours.
Readings from the works of the major poets, in Russian. Prerequisite:
Language proficiency. LEC.

SLAV 714. Russian Theatre and Drama to 1900. 3 Hours.
A study of the development of Russian theatre and dramatic literature
from their beginnings to 1900. Readings in English. Students with
knowledge of Russian will read some works in Russian. LEC.

SLAV 715. Russian Drama and Theatre 1953 to the Present. 3 Hours.
A study of the development of Russian theatre and dramatic literature
from 1953 to the present. Readings in English. Students with knowledge
of Russian will read some works in Russian. LEC.

SLAV 716. History of Russian Literary Criticism: Late Eighteenth and
Nineteenth Century. 3 Hours.
A study of the various literary periods, such as sentimentalism,
romanticism, nationalism, realism, with particular reference to individual
literary critics and critical journals. LEC.

SLAV 719. Philosopihal and Aesthetic Thought of the Russian
Silver Age. 3 Hours.
A survey of the works of Solovyov, Florensky, Berdyaev, Merezhkovsky,
Ivanov, and others, and their relation to the literature and culture of the
Silver Age. LEC.

SLAV 721. Pushkin. 3 Hours.
A study of the life and works of Alexander Pushkin. Readings in Russian,
open to senior Russian majors and graduate students. Prerequisite: Three
years of Russian or the equivalent. LEC.

SLAV 726. Chekhov. 3 Hours.
A study of the life and works of Anton Chekhov. Open to senior Russian
majors and graduate students. Readings in Russian. Prerequisite: Three
years of Russian or the equivalent. LEC.
SLAV 806. East Slavic Linguistics. 3 Hours.
An examination of the linguistic phenomena and historical development of the East Slavic languages (Russian, Belorussian, and Ukrainian). Prerequisite: Graduate standing in Russian. LEC.

SLAV 808. West Slavic Linguistics. 3 Hours.
An examination of linguistic phenomena and historical development of the West Slavic languages (Polish, Czech, Slovak, and Upper and Lower Sorbian). LEC.

SLAV 810. South Slavic Linguistics. 3 Hours.
An examination of linguistic phenomena and historical development of Bulgarian, Macedonian, Croatian-Serbian, Slovene. LEC.

SLAV 820. Old Russian Literature: Beginnings to 1700. 3 Hours.
Readings of selected texts in Russian. Prerequisite: SLAV 752. LEC.

SLAV 822. Seminar in Russian Literature: Eighteenth Century. 3 Hours.
An investigation of specific themes or authors in the literature, culture, and thought of the 18th century. All readings in Russian. Prerequisite: Graduate standing and advanced Russian language. SEM.

SLAV 824. Proseminar in Methods of Teaching Slavic Languages I. 1-3 Hours.
Required for all teaching assistants, assistant instructors engaged in the teaching of Slavic languages and persons planning for careers in teaching Slavic languages. Combines discussion of theoretical teaching concepts with practical solution of problems arising concurrently in Slavic language courses. Students enrolled for two or three hours will study advanced Slavic grammar topics and stylistics as they apply to the teaching of Slavic languages. LEC.

SLAV 825. Investigation and Conference. 1-3 Hours.
Individual work in language or literature of the teaching of Slavic languages by qualified students under direction of members of the department. RSH.

SLAV 826. Proseminar in Methods of Teaching Slavic Languages II. 1-3 Hours.
Required for all teaching assistants, assistant instructors engaged in the teaching of Slavic languages and persons planning for careers in teaching Slavic languages. Combines discussion of theoretical teaching concepts with practical solution of problems arising currently in Slavic language courses. Students enrolled for two or three hours will study advanced Slavic grammar topics and stylistics as they apply to the teaching of Slavic languages. LEC.

SLAV 850. Seminar in Russian Literature: Nineteenth Century: _____ 3 Hours.
A regular seminar for graduate students, devoted to special problems in Russian literature. (Ancient Russian literature, Classicism, Romanticism, Realism, Symbolism, etc.) Designed to introduce the student to the more advanced methods in criticism, literary analysis, and research. Prerequisite: Graduate standing in Slavic Languages and Literatures, or permission of instructor. LEC.

SLAV 852. Seminar in Russian Literature: Twentieth Century. 3 Hours.
Various topics including pre- and post-Revolutionary poetry, the prose of the 1920s, the development of Socialist Realism, individual authors, etc. LEC.

SLAV 899. Ph.D. Seminar Slavic Linguistics. 3 Hours.
Topics in Slavic linguistics. Content will vary. May be repeated. Prerequisite: Ph.D. student in Slavic Languages and Literatures. LEC.

SLAV 912. Seminar: Topics in Contemporary Slavic Linguistics. 3 Hours.
Synchronic examination of specific topics, i.e., phonology, morphology, syntax, and lexicology of several Slavic languages. LEC.

SLAV 914. Seminar: Topics in Historical Slavic Linguistics. 3 Hours.
Diachronic examination of selected topics, i.e., phonology, morphology, syntax, or lexicology, of one or more Slavic languages. LEC.

SLAV 917. Seminar in Russian Culture and Society. 3 Hours.
Examination of selected topics in Russian cultural history, especially as treated in the works of Russian literature and intellectual history. Prerequisite: At least one course in Russian history, or one of the following courses—SLAV 502, SLAV 510, SLAV 684, SLAV 686, plus graduate standing. LEC.

SLAV 932. Seminar: Topics in Slavic Folklore. 3 Hours.
Investigation and concentrated study of one or more themes (e.g., mythology, demonology, life rituals, folklore and literature), figures (e.g., Baba Yaga), or genres (e.g., magic tales, bylins, riddles) of Slavic folklore. All readings in Russian. Prerequisite: SLAV 630. SEM.

SLAV 940. Seminar: Topics in Comparative Slavic Literature. 3 Hours.
Prerequisite: Graduate standing in Slavic Languages and Literatures. LEC.

SLAV 999. Dissertation. 1-6 Hours.
THE.

TURK 104. Elementary Turkish I. 5 Hours. U.
Basic language acquisition, including essentials of grammar, speaking, and writing standard (Osmanli) Turkish. LEC.

TURK 108. Elementary Turkish II. 5 Hours. U.
Continuation of TURK 104. Prerequisite: TURK 104. LEC.

TURK 177. First Year Seminar: _____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Turkish. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

TURK 204. Intermediate Turkish I. 3 Hours. U.
Second-year course in Turkish language with emphasis on reading, composition, and conversation. Prerequisite: TURK 108. LEC.

TURK 208. Intermediate Turkish II. 3 Hours. U.
Continuation of TURK 204. Prerequisite: TURK 204. LEC.

TURK 314. Turkish Culture Through Film and Literature. 3 Hours. H.
This course introduces the student to Turkish culture, with a focus on the 20th and 21st centuries, mainly through films and literature. Among the topics are Turkey's geography, politics, history, religion, feminism, poetry, music and cuisine. This interdisciplinary course does not require any previous knowledge of Turkey or the Turkish Language; it is open to both undergraduate and graduate students. Representative works of major authors and film directors will be discussed and analyzed in their historical, political and theoretical contexts. The course is offered at the 300 and 500 levels, with additional assignments at the 500-level. LEC.
of major authors and film directors will be discussed and analyzed in their historical, political and theoretical contexts. The course is offered at the 300 and 500 levels, with additional assignments at the 500-level. Prerequisite: REES 550 or permission of instructor. LEC.

TURK 675. Readings in Turkish: ______. 3 Hours. U.
Prerequisite: Two years of college-level Turkish and consent of instructor. May be repeated for credit if content varies. IND.

UKRA 104. Elementary Ukrainian I. 5 Hours. U.
First semester. Five hours per week of recitation and drill in the spoken language. Essentials of grammar, practice reading, writing and speaking Ukrainian. LEC.

UKRA 108. Elementary Ukrainian II. 5 Hours. U.
Second semester. Continuation of UKRA 104. Prerequisite: UKRA 104. LEC.

UKRA 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Ukrainian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

UKRA 204. Intermediate Ukrainian I. 3 Hours. U.
Second year course in Ukrainian language with emphasis on reading, composition, and conversation. Prerequisite: UKRA 108. LEC.

UKRA 208. Intermediate Ukrainian II. 3 Hours. U.
Second semester. Continuation of UKRA 204. Prerequisite: UKRA 204. LEC.

UKRA 512. Intensive Ukrainian Language and Culture I. 3 Hours. U.
A practical Ukrainian language course involving advanced study of the grammar, conversation, composition. Reading of texts on a variety of subjects (culture, literature, history, folklore etc.), taught in Ukrainian. Prerequisite: Three years of a Slavic language or permission of instructor. LEC.

UKRA 516. Intensive Ukrainian Language and Culture II. 3 Hours. U.
A practical Ukrainian language course involving advanced study of the grammar, conversation, composition. Reading of texts on a variety of subjects (culture, literature, history, folklore etc.), taught in Ukrainian. Prerequisite: Three years of a Slavic language or permission of instructor. LEC.

UKRA 675. Readings in Ukrainian Language. 1-6 Hours. H.
Directed individual readings on various topics concerning the Ukrainian language. Prerequisite: Two years of Ukrainian. IND.

YDSH 104. Elementary Yiddish I. 5 Hours. U.
Essentials of grammar, practice in speaking, reading, and writing Yiddish. Not open to native speakers of Yiddish. LEC.

YDSH 108. Elementary Yiddish II. 5 Hours. U.
Continuation of grammar, practice in conversation, composition, and reading. Not open to native speakers of Yiddish. Prerequisite: YDSH 104 or equivalent. LEC.

YDSH 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Yiddish. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

YDSH 212. Intermediate Yiddish I. 3 Hours. U.
Structured grammar review, composition, conversation, with readings of literary and cultural texts. Not open to native speakers of Yiddish. Prerequisite: YDSH 108 or equivalent. LEC.

YDSH 216. Intermediate Yiddish II. 3 Hours. U.
A continuation of YDSH 212. Structured grammar review, composition, conversation, with readings of literary and cultural texts. Not open to native speakers of Yiddish. Prerequisite: YDSH 212 or equivalent. LEC.

YDSH 300. Studies in Yiddish: ______. 3 Hours. H.
Examination of special topics in Yiddish. May be repeated if topic varies. LEC.

YDSH 395. Study Abroad Topics in Yiddish: ______. 3-6 Hours. H.
This course is designed for the study abroad of special topics in Yiddish at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

YDSH 490. Independent Study. 1-3 Hours. U.
Intensive reading or research under faculty supervision IND.

Bachelor of Arts in Slavic Languages and Literatures

Why study Slavic languages and literatures?

Because Russia and the Slavs link the West and the East.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Requirements for the B.A. Major

The student completes a minimum of 30 hours of study (29 hours for Russian emphasis) in one of 3 emphases: Polish, Russian, or South Slavic (Bosnian/Croatian/Serbian). The department encourages students to fulfill general education requirements from courses in the SLAV 140/SLAV 141, SLAV 144/SLAV 145, and SLAV 148/SLAV 149 series.
Beyond the minimum 27 hours, students are strongly encouraged to take additional courses in the Slavic department and appropriate background courses in the history, philosophy, and political science of the Slavic regions.

**Polish Studies Emphasis**

Majors choosing this option must complete courses as indicated in following areas:

### Prerequisite Knowledge and Skills (0)

The following courses provide fundamental skills for the major, but do not contribute to the minimum required hours for the major.

- Elementary Polish I. Satisfied by: PLSH 104
- Elementary Polish II. Satisfied by: PLSH 108
- Intermediate Polish I. Satisfied by: PLSH 204

### Polish Studies Emphasis Core Knowledge and Skills (15)

- Intermediate Polish II. Satisfied by: PLSH 208
- Advanced Polish I. Satisfied by: PLSH 504
- Advanced Polish II. Satisfied by: PLSH 508
- Readings in Polish Language and Literature. Satisfied by: PLSH 675
- West Slavic Literature and Civilization (Polish and Czech). Satisfied by: SLAV 506

### Required Electives (12)

Satisfied by 4 courses (12 hours) chosen from the following:

- SLAV 144/145: Survey of Russian Literature in Translation
- SLAV 318: Jews and Slavs in Eastern Europe
- SLAV 340/341: Introduction to the Languages and Peoples of Russia and East-Central Europe
- SLAV 504: Introduction to East-Central European Culture and Society
- SLAV 514: Totalitarianism and Literature in Central Europe
- SLAV 516: Film Adaptations of Polish and Czech Literature
- SLAV 635: Language, Culture and Ethnicity in Prehistoric Eastern Europe
- ECON 560: Economic Systems
- HIST 377: Everyday Communism in Eastern Europe
- HIST 557: Nationalism and Communism in East Central Europe from 1772 to the Present
- PHIL 580: Marxism (or other relevant course in philosophy)

**Senior Capstone Seminar. Satisfied by:** (3)

SLAV 495: Senior Capstone Seminar

Majors are strongly encouraged to study abroad. Please see your advisor about this opportunity.

**Major Hours & Major GPA**

While completing all required courses (above), majors must also meet each of the following hour and grade-point average minimum standards:

### Major Hours

Satisfied by 30 hours of major courses.

### Major Hours in Residence

Satisfied by a minimum of 15 hours of KU resident credit in the major.

### Major Junior/Senior (300+) Hours

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

### Major Junior/Senior (300+) Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

**Russian Emphasis**

Majors choosing this option must complete courses as indicated in following areas:

### Prerequisite Knowledge and Skills (15)

The following courses provide fundamental skills for the major, but do not contribute to the minimum required hours for the major.

- Elementary Russian I. Satisfied by: RUSS 104
- Elementary Russian II. Satisfied by: RUSS 108
- Intermediate Russian I. Satisfied by: RUSS 204
- Russian Linguistics. Satisfied by one one course (3 hours, 200+) chosen from:
  - SLAV 340: Introduction to the Languages and Peoples of Russia and East-Central Europe
  - SLAV 341: Introduction to the Languages and Peoples of Russia and East-Central Europe, Honors
  - SLAV 520: Russian Phonetics, Phonology, and Inflectional Morphology
  - SLAV 522: The Grammatical Categories of Russian: Linguistic Units, Functions and Meanings
  - SLAV 524: Russian Since the Revolution
  - SLAV 540: Language and Identity in East-Central Europe and the Former Soviet Union

### Russian Emphasis Core Knowledge and Skills (26)

- Intermediate Russian II. Satisfied by: RUSS 208
- Advanced Russian Language. Satisfied by one of the following: RUSS 504 & RUSS 508

- Russian for the Professions I & Russian for the Professions II

- Russian Linguistics. Satisfied by one one course (3 hours, 200+) chosen from:
  - SLAV 340: Introduction to the Languages and Peoples of Russia and East-Central Europe
  - SLAV 341: Introduction to the Languages and Peoples of Russia and East-Central Europe, Honors
  - SLAV 520: Russian Phonetics, Phonology, and Inflectional Morphology
  - SLAV 522: The Grammatical Categories of Russian: Linguistic Units, Functions and Meanings
  - SLAV 524: Russian Since the Revolution
  - SLAV 540: Language and Identity in East-Central Europe and the Former Soviet Union
Russian Literature. Satisfied by 1 course (3 hours, 400+) chosen from:

- SLAV 510 The Russian Literary Genius
- SLAV 530 Introduction to Russian Poetry
- SLAV 532 Dostoevsky
- SLAV 534 Tolstoy
- SLAV 536 Turgenev
- SLAV 562 Russian Theatre and Drama from Stanislavski and Chekhov to the Present
- SLAV 564 The “Woman Question” in Nineteenth-Century Russian Literature
- SLAV 566 The Devil in Russian Literature
- SLAV 568 Biblical Themes in Modern Russian Literature
- SLAV 612 Introduction to Russian Literature of the Nineteenth Century
- SLAV 614 Russian Literature in Translation: ______
- SLAV 616 Introduction to Russian Literature of the Twentieth Century
- SLAV 642 Pushkin and Evgenij Onegin
- SLAV 650 The Russian Short Story
- SLAV 656 Russian Literature of the Eighteenth Century
- SLAV 660 Nineteenth Century Russian Prose and Fiction
- SLAV 662 Russian Literary Modernism: 1880-1930
- SLAV 664 Soviet Russian Literature: 1930-1990
- SLAV 666 Nabokov

Required Electives
Satisfied by 3 courses (9 hours) in Russian literature, linguistics, culture, or advanced language chosen in consultation with the major advisor. Note that only one (1) 100-level course (either SLAV 140/SLAV 141, SLAV 144/SLAV 145, or SLAV 148/SLAV 149) may count as a required elective for the Russian emphasis major.

<table>
<thead>
<tr>
<th>Language</th>
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<tr>
<td>RUSS 512 Russian for the Professions I</td>
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<td>RUSS 516 Russian for the Professions II</td>
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<td>RUSS 522 Problems in Translating Russian into English I</td>
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<td>RUSS 526 Problems in Translating Russian into English II</td>
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<td>RUSS 600 Classics of Russian Culture</td>
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<td>RUSS 604 Contemporary Russian Culture</td>
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<td>RUSS 608 Russian Phonetics and Grammar</td>
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<td>RUSS 612 Introduction to Russian Literature</td>
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<td>RUSS 616 Stylistics</td>
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<td>Linguistics</td>
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<tr>
<td>SLAV 340 Introduction to the Languages and Peoples of Russia and East-Central Europe</td>
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<tr>
<td>SLAV 341 Introduction to the Languages and Peoples of Russia and East-Central Europe, Honors</td>
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<td>SLAV 520 Russian Phonetics, Phonology, and Inflectional Morphology</td>
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<td>SLAV 522 The Grammatical Categories of Russian: Linguistic Units, Functions and Meanings</td>
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<td>SLAV 524 Russian Since the Revolution</td>
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<td>SLAV 540 Language and Identity in East-Central Europe and the Former Soviet Union</td>
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Major Capstone Seminar. Satisfied by: (3)

SLAV 495 Senior Capstone Seminar 3

Majors are strongly encouraged to study abroad. Please see your advisor about this opportunity.

### Major Hours & Major GPA

While completing all required courses (above), majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 29 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior (300+) Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior (300+) Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).
South Slavic Studies Emphasis

Majors choosing this option must complete courses as indicated in following areas:

Prerequisite Knowledge and Skills (13)
The following courses provide fundamental skills for the major, but do not contribute to the minimum required hours for the major.
Elementary Bosnian/Croatian/Serbian I. Satisfied by:
BCRS 104 Elementary Bosnian/Croatian/Serbian I  5
Elementary Bosnian/Croatian/Serbian II. Satisfied by:
BCRS 108 Elementary Bosnian/Croatian/Serbian II  5
Intermediate Bosnian/Croatian/Serbian I. Satisfied by:
BCRS 204 Intermediate Bosnian/Croatian/Serbian I  3

Slavic Studies Emphasis Core Knowledge and Skills (27)
Intermediate Bosnian/Croatian/Serbian II. Satisfied by:
BCRS 208 Intermediate Bosnian/Croatian/Serbian II  3
Advanced Bosnian/Croatian/Serbian I. Satisfied by:
BCRS 504 Advanced Bosnian/Croatian/Serbian I  3
Advanced Bosnian/Croatian/Serbian II. Satisfied by:
BCRS 508 Advanced Bosnian/Croatian/Serbian II  3
South Slavic Literature and Civilization. Satisfied by:
SLAV 508 South Slavic Literature and Civilization  3

Required Electives
Satisfied by 5 courses (15 hours) chosen from the following:  15
BCRS 380 Intensive Croatian
BCRS 675 Readings in Bosnian/Croatian/Serbian
ECON 560 Economic Systems
HIST 377 Everyday Communism in Eastern Europe
HIST 557 Nationalism and Communism in East Central Europe from 1772 to the Present
PHIL 580 Marxism
SLAV 144/145 Survey of Russian Literature in Translation
SLAV 316 The Peoples and Cultures of Southeastern Europe Through Film
SLAV 340/341 Introduction to the Languages and Peoples of Russia and East-Central Europe
SLAV 558 Readings in Slovene
SLAV 626 The Cultural Impact of Ottoman Empire on the South Slavs
SLAV 630 Slavic Folklore
SLAV 635 Language, Culture and Ethnicity in Prehistoric Eastern Europe
SLAV 679 Topics in: ______
Senior Capstone Seminar. Satisfied by: (3)
SLAV 495 Senior Capstone Seminar  3

Majors are strongly encouraged to study abroad. Please see your advisor about this opportunity.

Major Hours & Major GPA

While completing all required courses (above), majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours

South Slavic Studies Emphasis

Majors choosing this option must complete courses as indicated in following areas:

Prerequisite Knowledge and Skills (13)
The following courses provide fundamental skills for the major, but do not contribute to the minimum required hours for the major.
Elementary Bosnian/Croatian/Serbian I. Satisfied by:
BCRS 104 Elementary Bosnian/Croatian/Serbian I  5
Elementary Bosnian/Croatian/Serbian II. Satisfied by:
BCRS 108 Elementary Bosnian/Croatian/Serbian II  5
Intermediate Bosnian/Croatian/Serbian I. Satisfied by:
BCRS 204 Intermediate Bosnian/Croatian/Serbian I  3

Slavic Studies Emphasis Core Knowledge and Skills (27)
Intermediate Bosnian/Croatian/Serbian II. Satisfied by:
BCRS 208 Intermediate Bosnian/Croatian/Serbian II  3
Advanced Bosnian/Croatian/Serbian I. Satisfied by:
BCRS 504 Advanced Bosnian/Croatian/Serbian I  3
Advanced Bosnian/Croatian/Serbian II. Satisfied by:
BCRS 508 Advanced Bosnian/Croatian/Serbian II  3
South Slavic Literature and Civilization. Satisfied by:
SLAV 508 South Slavic Literature and Civilization  3

Required Electives
Satisfied by 5 courses (15 hours) chosen from the following:  15
BCRS 380 Intensive Croatian
BCRS 675 Readings in Bosnian/Croatian/Serbian
ECON 560 Economic Systems
HIST 377 Everyday Communism in Eastern Europe
HIST 557 Nationalism and Communism in East Central Europe from 1772 to the Present
PHIL 580 Marxism
SLAV 144/145 Survey of Russian Literature in Translation
SLAV 316 The Peoples and Cultures of Southeastern Europe Through Film
SLAV 340/341 Introduction to the Languages and Peoples of Russia and East-Central Europe
SLAV 558 Readings in Slovene
SLAV 626 The Cultural Impact of Ottoman Empire on the South Slavs
SLAV 630 Slavic Folklore
SLAV 635 Language, Culture and Ethnicity in Prehistoric Eastern Europe
SLAV 679 Topics in: ______
Senior Capstone Seminar. Satisfied by: (3)
SLAV 495 Senior Capstone Seminar  3

Majors are strongly encouraged to study abroad. Please see your advisor about this opportunity.

Major Hours & Major GPA

While completing all required courses (above), majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours

Major Hours
Minor in Slavic Languages and Literatures

Why study Slavic languages and literatures?

Because Russia and the Slavs link the West and the East.

Requirements for the Minor

4 minor tracks are offered.

Polish Studies Track

Students choosing this minor track must complete courses as indicated in following areas:

Prerequisites (13)
The following courses provide fundamental skills for the minor, but do not contribute to the minimum required hours for the minor.

Elementary Polish I. Satisfied by:

PLSH 104 Elementary Polish I 5

Elementary Polish II. Satisfied by:

PLSH 108 Elementary Polish II 5

Intermediate Polish I. Satisfied by:

PLSH 204 Intermediate Polish I 3

Polish Studies Required Courses (15)

Intermediate Polish II. Satisfied by:

PLSH 208 Intermediate Polish II 3

West Slavic Literature and Civilization (Polish and Czech). Satisfied by:

SLAV 506 West Slavic Literature and Civilization (Polish and Czech) 3

Required Electives. Satisfied by 3 courses (9 hours) chosen from the following:

- SLAV 144/145 Survey of Russian Literature in Translation
- SLAV 340/341 Introduction to the Languages and Peoples of Russia and East-Central Europe
- SLAV 504 Introduction to East-Central European Culture and Society: _____
- SLAV 514 Totalitarianism and Literature in Central Europe
- SLAV 516 Film Adaptations of Polish and Czech Literature
- SLAV 635 Language, Culture and Ethnicity in Prehistoric Eastern Europe
- ECON 560 Economic Systems
- HIST 377 Everyday Communism in Eastern Europe
  or HIST 557 Nationalism and Communism in East Central Europe from 1772 to the Present
- PHIL 580 Marxism (or other relevant course in philosophy)

Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

Minor Hours

Satisfied by 18 hours of minor courses.

Minor Hours in Residence

Satisfied by a minimum of 9 hours of KU resident credit in the minor.

Minor Junior/Senior (300+) Hours

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Junior/Senior (300+) Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the minor. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Russian Track

Students choosing this minor track must complete courses as indicated in following areas:

Prerequisites (15)
The following courses provide fundamental skills for the minor, but do not contribute to the minimum required hours for the minor.

Elementary Russian I. Satisfied by:

RUSS 104 Elementary Russian I 5

or RUSS 110 Intensive Elementary Russian

Elementary Russian II. Satisfied by:

RUSS 108 Elementary Russian II 5

or RUSS 110 Intensive Elementary Russian

Intermediate Russian I. Satisfied by:

RUSS 204 Intermediate Russian I 5

Russian Required Courses (20)

Intermediate Russian II. Satisfied by:

RUSS 208 Intermediate Russian II 5

Russian Linguistics. Satisfied by 1 course (3 hours, 400+) chosen from:

- SLAV 340 & SLAV 341 Introduction to the Languages and Peoples of Russia and East-Central Europe and Introduction to the Languages and Peoples of Russia and East-Central Europe, Honors
- SLAV 520 Russian Phonetics, Phonology, and Inflectional Morphology
- SLAV 522 The Grammatical Categories of Russian: Linguistic Units, Functions and Meanings
- SLAV 524 Russian Since the Revolution
- SLAV 540 Language and Identity in East-Central Europe and the Former Soviet Union

Russian Literature. Satisfied by 1 course (3 hours, 400+) chosen from:

- SLAV 510 The Russian Literary Genius
- SLAV 530 Introduction to Russian Poetry
- SLAV 532 Dostoevsky
- SLAV 534 Tolstoy
- SLAV 536 Turgenev
- SLAV 562 Russian Theatre and Drama from Stanislavski and Chekhov to the Present
- SLAV 564 The “Woman Question” in Nineteenth-Century Russian Literature
- SLAV 566 The Devil in Russian Literature
- SLAV 568 Biblical Themes in Modern Russian Literature
SLAV 612  Introduction to Russian Literature of the Nineteenth Century
SLAV 614  Russian Literature in Translation: ______
SLAV 616  Introduction to Russian Literature of the Twentieth Century
SLAV 642  Pushkin and Evgenij Onegin
SLAV 650  The Russian Short Story
SLAV 656  Russian Literature of the Eighteenth Century
SLAV 660  Nineteenth Century Russian Prose and Fiction
SLAV 662  Russian Literary Modernism: 1880-1930
SLAV 664  Soviet Russian Literature: 1930-1990
SLAV 667  Post-Soviet Literature
SLAV 668  Nabokov

Required Electives. Satisfied by 3 courses (9 hours) in Russian literature, linguistics, culture, or advanced language chosen in consultation with the major advisor.

Language
RUSS 512  Russian for the Professions I
RUSS 516  Russian for the Professions II
RUSS 522  Problems in Translating Russian into English I
RUSS 526  Problems in Translating Russian into English II
RUSS 600  Classics of Russian Culture
RUSS 604  Contemporary Russian Culture
RUSS 608  Russian Phonetics and Grammar
RUSS 612  Introduction to Russian Literature
RUSS 616  Stylistics

Linguistics
SLAV 340 & SLAV 341  Introduction to the Languages and Peoples of Russia and East-Central Europe and to the Languages and Peoples of Russia and East-Central Europe, Honors
SLAV 520  Russian Phonetics, Phonology, and Inflectional Morphology
SLAV 522  The Grammatical Categories of Russian: Linguistic Units, Functions and Meanings
SLAV 524  Russian Since the Revolution
SLAV 540  Language and Identity in East-Central Europe and the Former Soviet Union

Culture
SLAV 318  Jews and Slavs in Eastern Europe
SLAV 500  Russia Today
SLAV 502  Introduction to Russian Culture and Society: ______
SLAV 503  Post-Soviet Communication
SLAV 600  Biography of a City: ______
SLAV 684  Main Currents of Russian Thought I
SLAV 686  Main Currents of Russian Thought II

Literature
SLAV 510  The Russian Literary Genius
SLAV 530  Introduction to Russian Poetry
SLAV 532  Dostoevsky
SLAV 534  Tolstoy
SLAV 536  Turgenev
SLAV 562  Russian Theatre and Drama from Stanislavski and Chekhov to the Present
SLAV 564  The "Woman Question" in Nineteenth-Century Russian Literature
SLAV 566  The Devil in Russian Literature
SLAV 568  Biblical Themes in Modern Russian Literature
SLAV 612  Introduction to Russian Literature of the Nineteenth Century
SLAV 614  Russian Literature in Translation: ______
SLAV 616  Introduction to Russian Literature of the Twentieth Century
SLAV 642  Pushkin and Evgenij Onegin
SLAV 650  The Russian Short Story
SLAV 656  Russian Literature of the Eighteenth Century
SLAV 660  Nineteenth Century Russian Prose and Fiction
SLAV 662  Russian Literary Modernism: 1880-1930
SLAV 664  Soviet Russian Literature: 1930-1990
SLAV 667  Post-Soviet Literature
SLAV 668  Nabokov

Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

Minor Hours
Satisfied by 20 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 hours of KU resident credit in the minor.

Minor Junior/Senior (300+) Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Junior/Senior (300+) Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Slavic Cultures in Translation Track

Students choosing this minor track must complete courses as indicated in following areas:

West Slavic Literature and Civilization or South Slavic Literature and Civilization. Satisfied by:
SLAV 506  West Slavic Literature and Civilization (Polish and Czech)
or SLAV 508  South Slavic Literature and Civilization

Slavic Culture. Satisfied by two of the following:
SLAV 140/141  Introduction to Russian Culture
SLAV 144/145  Survey of Russian Literature in Translation
SLAV 148/149  Introduction to Slavic Folklore
SLAV 340/341  Introduction to the Languages and Peoples of Russia and East-Central Europe

Junior/Senior Slavic Literature and Culture. Satisfied by 3 junior/senior (300+) SLAV courses (9 hours) from the following:
SLAV 318  Jews and Slavs in Eastern Europe
SLAV 510  The Russian Literary Genius
The University of Kansas

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

**Minor Hours**
Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**
Satisfied by a minimum of 9 hours of KU resident credit in the minor.

**Minor Junior/Senior Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the minor. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

**South Slavic Studies Track**

Students choosing this minor track must complete courses as indicated in the following areas:

**Prerequisites (10)**
The following courses provide fundamental skills for the minor, but do not contribute to the minimum required hours for the minor.

- Elementary Bosnian/Croatian/Serbian I. Satisfied by:
  - BCRS 104  Elementary Bosnian/Croatian/Serbian I  5

**South Slavic Studies Required Courses (18)**

- Intermediate Bosnian/Croatian/Serbian I. Satisfied by:
  - BCRS 204  Intermediate Bosnian/Croatian/Serbian I  3

- Intermediate Bosnian/Croatian/Serbian II. Satisfied by:
  - BCRS 208  Intermediate Bosnian/Croatian/Serbian II  3

- South Slavic Literature and Civilization. Satisfied by:
  - SLAV 508  South Slavic Literature and Civilization  3

9 hours in South Slavic languages, history, cultures, or literatures at the 300 level or above, chosen from courses in the South Slavic studies emphasis are required. Electives. Satisfied by 3 courses (9 hours) chosen from the following:

- Intensive Croatian (summer in Croatia)
- Readings in Bosnian/Croatian/Serbian
- Economic Systems
- Everyday Communism in Eastern Europe
- Nationalism and Communism in East Central Europe from 1772 to the Present
- Marxism (or other relevant course in philosophy)
- Survey of Russian Literature in Translation
- The Peoples and Cultures of Southeastern Europe Through Film
- Introduction to the Languages and Peoples of Russia and East-Central Europe
- Readings in Slovene
- The Cultural Impact of Ottoman Empire on the South Slavs
- Slavic Folklore
- Language, Culture and Ethnicity in Prehistoric Eastern Europe
- Topics in: _____ (Slavic Culture)

**Minor Hours & Minor GPA**
While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

**Minor Hours**
Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**
Satisfied by a minimum of 9 hours of KU resident credit in the minor.

**Minor Junior/Senior Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Junior/Senior (300+) Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Junior/Senior (300+) Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the minor. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

**Study Abroad**
The department, in conjunction with the Center for Russian, East European, and Eurasian Studies (http://www.crees.ku.edu), conducts summer institutes at universities in
to teach at a variety of levels, which provides a strong base of teaching experience upon entering the job market.

Additional Funding
There are also university fellowships for truly outstanding students. Visit the Graduate Studies website for information about funding opportunities (http://www.graduate.ku.edu/funding) for KU graduate students.

Admission to Graduate Studies
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission
Apply to the graduate program via the Graduate Studies online application system (http://graduate.ku.edu/application-process).

For additional information regarding departmental admissions requirements, deadlines and the application process, please visit the graduate page of the Slavic Languages and Literatures (http://slavic.ku.edu) website.

M.A. Degree Requirements
Prerequisites for Admission

- 30 semester hours of credit in an appropriate Slavic language and literature (of which 12 hours must have been taken on the junior/senior level), or the equivalent of such study.

Non-thesis Degree

1. At least 30 hours of graduate work in Slavic languages and literatures including SLAV 710 and SLAV 740, 3 courses in Slavic literature, 3 courses in Slavic linguistics, and 2 courses in either Slavic literature or linguistics. At least 1 of the literature or linguistics courses must be a graduate seminar.
2. A written and oral examination.

Thesis Degree

1. At least 24 hours of graduate work in Slavic languages and literatures, including SLAV 710 and SLAV 740, 3 courses in Slavic literature, and 3 courses in Slavic linguistics.
2. A thesis for which 6 credit hours may be allowed (not to be included in the 24-hour minimum).
3. A written and oral examination.

For students who plan to continue in the graduate program, the M.A. written and oral examination serves as a qualifying examination for advancement to Ph.D. work. For students who seek only the M.A. degree, successful completion of the M.A. written and oral examination signals the end of the program.
Students planning to work toward the Ph.D. may begin study of a second Slavic language during their M.A. work. Such study does not count toward M.A. degree requirements.

Students completing the M.A. degree without intent to continue to Ph.D. work have the opportunity, in consultation with the graduate advisor, to adjust their program to meet specific career goals.

**Study Abroad**

The department, in conjunction with the Center for Russian, East European, and Eurasian Studies (http://www.crees.ku.edu), conducts summer institutes at universities in

- L'viv, Ukraine; and
- Zadar, Croatia.

Arrangements can be made for students to study for one semester or a full academic year at these or other universities. Some scholarship support is available.

Consult the Slavic department (http://slavic.ku.edu) office or the Office of Study Abroad (http://www.studyabroad.ku.edu). Credit for non-KU programs is not automatic and is evaluated in consultation with the Slavic department undergraduate director.

Undergraduate and graduate students at KU are encouraged to spend a summer, semester, and/or year studying and conducting research in their country of interest.

**Slavic Language Programs in Russia and Eastern Europe**

KU students may take intermediate or advanced Bosnian/Croatian/Serbian at a 6-week summer institute in Croatia or attend a summer language program in Poland.

Graduate students at KU are encouraged to spend a summer, semester, and/or year studying and conducting research in their country of interest.

**Doctor of Philosophy in Slavic Languages and Literatures**

**Overview of Doctoral Program**

The Doctor of Philosophy degree in Slavic Languages & Literatures builds further on the foundational knowledge and the structured classroom learning that students engaged in during M.A. work. Working under the close mentorship of their advisors, Ph.D. students develop a minor in a related field, learn advanced pedagogical and interpretive strategies, continue to improve language skills, and engage in self-motivated, independent study to develop a coherent area of specialization. Students complete their graduate study.

While most KU Ph.D. students find positions as academics, some choose to pursue professional positions in academic support, digital humanities, research, and government service. See Ph.D. Alumni (http://slavic.ku.edu/doctor-philosophy-alumni-ku-slavic-department) on the Department’s website.

**Areas of Concentration**

Two concentrations are offered in the Ph.D. program:

- Russian Literature
- Slavic Linguistics

Additional information regarding academic opportunities in culture, intellectual history, folklore, or language pedagogy is available on the departmental Ph.D. Overview (http://slavic.ku.edu/phd-slavic-overview).

**Departmental Funding**

While it is not guaranteed, the department does its best to provide funding in the form of Graduate Teaching Assistantship (GTA) appointments to all incoming graduate students. GTA appointments are awarded for the academic year and come with:

- a competitive academic year (9 month) salary
- a 100% tuition waiver for all courses at KU
- payment of up to 3 hours of student fees
- optional University-subsidized group health insurance

The appointments are guaranteed based on performance for up to 3 years for M.A. students, 5 years for Ph.D. students and 6 years for students who receive both an M.A. and a Ph.D. at The University of Kansas. GTAs in the department receive thorough training in language instruction, close mentoring, and the opportunity to teach at a variety of levels, providing them with a strong base of teaching experience upon entering the job market. Additional information about teaching for the department is available on the Graduate Programs overview (http://slavic.ku.edu/phd-slavic-overview) page of our departmental website.

**FLAS Fellowships**

Students in the graduate program may also be eligible for a Foreign Language and Area Studies (FLAS) (http://flas.ku.edu) fellowship. FLAS fellowships include:

- Summer award - up to $5,000 for tuition and a stipend of $2,500 for living expenses for summer language study equivalent to one full year of language study
- Academic Year award - full KU tuition and a $15,000 stipend for living expenses for academic year study that includes two semesters of language and six credits or more of East Asian culture courses

Students in the graduate program are strongly encouraged to apply (http://flas.ku.edu/how-apply) for this funding.

**Additional Funding**

There are also university fellowships for truly outstanding students. Visit the Graduate Studies website for information about funding opportunities (http://graduate.ku.edu/funding) for KU graduate students.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.
Graduate Admission

Apply to the graduate program via the Graduate Studies online (http://graduate.ku.edu/application-process) application system (http://www.graduate.ku.edu).

For additional information regarding departmental admissions requirements, deadlines and the application process, please visit the graduate page of the Slavic Languages and Literatures (http://slavic.ku.edu) website.

Ph.D. Degree Requirements

Students admitted to Ph.D. work in Russian literature or Slavic linguistics must fulfill M.A. requirements and pass the qualifying examination. Students also must fulfill all specific requirements in the concentration, master a western European language, participate in all in departmental colloquia, complete comprehensive examinations, and write a dissertation.

All Ph.D. students are expected to enroll in courses in their concentrations numbered 500 and above offered in a given semester

1. If they have not previously had the courses or their equivalent,
2. If it is judged that the course material aids in preparation for comprehensive examinations, and
3. If it is feasible to incorporate such courses into a given semester’s program.

Requirements for Ph.D. Concentration in Russian Literature

• Detailed knowledge of the history and development of Russian literature
• Oral and written competence in Russian language plus an orientation in its structure and history
• Reading competence in at least one West or South Slavic language and a general knowledge of the history of its literature
• 9 to 12 graduate semester credit hours in a minor subject either from outside or inside the department
• An acceptable dissertation

Requirements for Ph.D. Concentration in Slavic Linguistics

• Detailed knowledge of the structure and history of two Slavic languages, one of which is considered the student’s major language, plus reading competence in a third Slavic language
• Oral and written competence in the major Slavic language
• 9 to 12 graduate semester credit hours in a minor subject, either from outside or inside the department
• Basic knowledge of general and comparative linguistics
• An acceptable dissertation

Examinations

Qualifying Examination

All students must take the qualifying examination to be admitted to Ph.D. work. For KU students, the M.A. examination serves as the qualifying examination. Students who hold the M.A. degree from another institution but begin Ph.D. work at KU are required to take the qualifying examination within 2 semesters of entry into the program.

Research Skills & Responsible Scholarship Requirement

The university requires that every doctoral student have training in responsible scholarship and research skills pertinent to the field of research and appropriate to the doctoral level. This requirement must be met before taking the comprehensive oral exam. Graduate students in Slavic Languages and Literatures must demonstrate (through course work or examination) reading competence in a western European language, preferably French or German. The student must also take part in all required graduate colloquia. These cover a variety of topics intended to promote and model responsible scholarship and professional development. Faculty and graduate students participate in three colloquia each semester. Issues of responsible scholarship are also imbedded in the curriculum.

Comprehensive Examination

Students may take written and oral comprehensive examinations after fulfilling all other requirements for the Ph.D., with the exception of the dissertation.

Dissertation Defense

Students demonstrate satisfactory completion of the Ph.D. program in their final oral defense of the dissertation and its field and by prompt submission of the thesis.

Study Abroad

The department, in conjunction with the Center for Russian, East European, and Eurasian Studies (http://www.crees.ku.edu), conducts summer institutes at universities in

• L’viv, Ukraine; and
• Zadar, Croatia.

Arrangements can be made for students to study for one semester or a full academic year at these or other universities. Some scholarship support is available.

Consult the Slavic department (http://slavic.ku.edu) office or the Office of Study Abroad (http://www.studyabroad.ku.edu). Credit for non-KU programs is not automatic and is evaluated in consultation with the Slavic department undergraduate director.

Undergraduate and graduate students at KU are encouraged to spend a summer, semester, and/or year studying and conducting research in their country of interest.

Slavic Language Programs in Russia and Eastern Europe

KU students may take intermediate or advanced Bosnian/Croatian/Serbian at a 6-week summer institute in Croatia or attend a summer language program in Poland.

Graduate students at KU are encouraged to spend a summer, semester, and/or year studying and conducting research in their country of interest.
Department of Sociology

Why study sociology?
Sociology investigates the social institutions and processes that shape human behavior, histories, and opportunities.

Undergraduate Programs
The department educates sociologists for careers in teaching, research, and some applied fields. Undergraduate course work in sociology can contribute to professional training in architecture, business, education, journalism, law, medicine, public health, and social work.

Sociology majors can earn a Bachelor of Arts (BA) or Bachelor of General Studies (BGS). Both the BA and the BGS require a generous sampling of courses in the humanities, social sciences, and natural sciences. Because of its compatibility with other majors, many of our students earn double majors. For example, many sociology undergraduates also major in history, philosophy, political science, or anthropology, or earn a second degree in journalism.

Students majoring in a wide range of disciplines will find a minor in Sociology enhances their perspective on their field. Sociology is often the minor of choice for students majoring in Psychology, Anthropology, American Studies, Economics, Applied Behavioral Science, History, Political Science, and Global and International Studies and those in professional schools such as Journalism, Business, or Education.

Graduate Programs
The department offers a full graduate program in sociology leading to the M.A. and Ph.D. degrees, educating sociologists for careers in teaching and research and for fields of practical application. It also contributes to professional education in such fields as social welfare, social policy, architecture, education, journalism, personnel administration, business, and medicine. Aside from professional interests, the department offers instruction to assist students in deepening their understanding of social relations and, hence, of the social context of their own lives.

Dual-title Ph.D. in Sociology and Gerontology
This dual-title degree is an option available to students who have first been admitted to the doctoral program. The dual-title degree allows the pursuit of a single degree that incorporates study within a traditional discipline and training in an interdisciplinary field; the student is awarded one degree (Ph.D.) with both titles identified on the diploma (e.g., “Ph.D. in Sociology and Gerontology”).

This option is designed to appeal to students who are strong in a traditional discipline but also motivated to study across disciplinary lines. In the course of study, students can avail themselves of disciplinary depth and interdisciplinary breadth. At the post-doctoral stage, dual-title graduates will have enhanced career and employment opportunities, able to claim expertise in one or both titles of their degree when seeking positions in education and research.

More information about this option, its admissions requirements, and plan of study can be found on the department website or the website of the Gerontology program.

Courses
SOC 104. Elements of Sociology. 3 Hours. SC AE41/GE11/GE3S / S.
The study of social life, including how human groups are organized, how they change, and how they influence individuals. Consideration is given to a variety of human organizations and social institutions and how these groups and institutions both determine, and are determined by, human beings. This course may not be taken for credit by those who have taken SOC 304. LEC.

SOC 105. Elements of Sociology, Honors. 3 Hours. SC AE41/GE11/GE3S / S.
The study of social life, including how human groups are organized, how they change, and how they influence individuals. Consideration is given to a variety of human organizations and social institutions and how these groups and institutions both determine, and are determined by, human beings. Open only to students on dean’s honor roll or enrolled in Honors Program, or consent of instructor. May not be taken by those who also have credit for SOC 304. LEC.

SOC 110. American Identities. 3 Hours. SC AE41/GE3S / S.
An interdisciplinary introduction to individual and group identities over time. Students explore theories and methods relating to identity from various perspectives, such as race, class, gender, sexuality, age, religion, and region. Not open to students who have taken AMS 112 or SOC 112. (Same as AMS 110.) LEC.

SOC 112. American Identities, Honors. 3 Hours. SC AE41/GE3S / S.
An interdisciplinary introduction to individual and group identities over time. Students explore theories and methods relating to identity from various perspectives, such as race, class, gender, sexuality, age, religion, and region. Not open to students who have taken AMS 110 or SOC 110. (Same as AMS 112.) Prerequisite: Membership in the University Honors Program or approval by the American Studies Program. LEC.

SOC 130. Comparative Societies. 3 Hours. NW AE42 / S/W.
Description and analysis of the culture, structure, and development of societies that are historically unrelated to the traditions of Western civilization. LEC.

SOC 131. Comparative Societies, Honors. 3 Hours. NW AE42 / S.
Description and analysis of the culture, structure, and development of societies that are historically unrelated to the traditions of Western Civilization. Open only to students enrolled in the University Honors program or by consent of instructor. May not be taken by students who have credit in SOC 130. LEC.

SOC 132. American Society, Honors. 3 Hours. SC / S.
The social structure and organization of American society with special reference to long-term and recent social changes. Not open to students who have credit for AMS 330 or SOC 330. Open to College honors students, students on the dean's honor roll, and by permission of the department. LEC.

SOC 150. Self and Society. 3 Hours. SI AE51/GE11 / S.
Discusses the way our identities, values, and behavior have been and continue to be shaped by social and situational factors. Attention is paid to the influence of factors like language, culture, social roles, specific social institutions, and broad structures of inequality and power on how we see ourselves and others. May not be taken by anyone who has completed SOC 305 or its equivalent. LEC.

SOC 151. Self and Society, Honors. 3 Hours. SI / S.
Discusses the way our identities, values, and behavior have been and continue to be shaped by social and situational factors. Attention will be paid to the influence of factors like language and culture, social roles, specific social institutions, and broad structures of inequality and power on
how we see ourselves and others. This course may not be taken for credit by those who have taken SOC 305. Open only to students admitted to the University Honors Program or by consent of instructor. LEC.

SOC 160. Social Problems and American Values. 3 Hours. SF AE41/GE41 / S.
This course is designed to explore competing explanations for the causes of, and cures for, the enduring problems of American society. The course critically analyzes dominant definitions of social problems, the political and economic roots of these problems, and the public policies aimed at reducing them. May not be taken by anyone who has already completed SOC 306 or its equivalent. LEC.

SOC 161. Social Problems and American Values, Honors. 3 Hours. SF / S.
Explores competing explanations for the causes of, and cures for, the enduring problems of American society. Critically analyzes dominant definitions of social problems, the political and economic roots of these problems, and the public policies aimed at reducing them. This course may not be taken for credit by those who have taken SOC 160 or SOC 306. Open only to students admitted to the University Honors Program or by consent of instructor. LEC.

SOC 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Sociology. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

SOC 220. Sociology of Families. 3 Hours. SC AE41/GE3S / S.
Analysis of the family as a social institution primarily in the U.S. context. Topics considered are: current and historical changes in how the family is constituted, contrasting sociological theories of family relationships, sexuality in relation to family life, the coexistence of love and hate in families, family dissolution and reformation, and the care of children. A key theme is diversity: social class, gender, race/ethnicity, and age. May not be taken by anyone who has already taken SOC 308 or its equivalent. LEC.

SOC 230. Introduction to Social Inequality in the U.S.. 3 Hours. S.
By the end of this course, students will be able to describe the major dimensions of inequality in the U.S. (including race, class, and gender), understand the structural basis of inequality, critically assess how inequality exists in major social institutions, and understand how inequalities in race, class, and gender shape social interaction. LEC.

SOC 260. America's Latinos/Latinas. 3 Hours. U.
An introduction to the Latino/a population (Mexican-Americans, Puerto Ricans, Cuban-Americans, Dominican-Americans, and Central and South Americans) in the US. Students discuss how US and Latin American societies have shaped Latino incorporation into the United States. We also discuss contemporary political, cultural and social issues that pertain to Latinos/as in the US. (Same as AMS 260) LEC.

SOC 273. Women in Society. 3 Hours. S.
A sociological exploration of the image and status of women in society, including family, work, and politics. Socialization, education, and the women's movement are also analyzed. Includes an introduction to feminist theories in sociology. LEC.

SOC 295. Study Abroad Topics in: ____. 1-6 Hours. S.
This course is designed for the study of special topics in Sociology at the freshman/sophomore level. Course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. No more than 6 hours of SOC 295 or SOC 495 may count towards the Sociology major or minor. LEC.

SOC 304. Principles of Sociology. 3 Hours. SC AE41/GE41/GE3S / S.
An introduction to sociological concepts, methods, and substantive findings more intensive than that provided in SOC 104. Students may take this course in lieu of SOC 104 to satisfy requirements for the major and the minor. This course may not be taken for credit by those who have taken SOC 104. LEC.

SOC 305. Principles of Self and Society. 3 Hours. SI GE11 / S.
Discusses the way we identify, values, and behavior have been and continue to be shaped by social and situational factors. Attention is paid to the influence of factors like language, culture, social roles, specific social institutions, and broad structures of inequality and power on how we see ourselves and others. This course provides a more intensive coverage of the subject matter than that provided in SOC 150. May not be taken by anyone who has already taken SOC 150 or its equivalent. LEC.

SOC 306. Principles of Social Problems. 3 Hours. SF / S.
This course is designed to explore competing explanations for the causes of, and cures for, the enduring problems of American society. The course critically analyzes dominant definitions of social problems, the political and economic roots of these problems, and the public policies aimed at reducing them. This course provides a more intensive coverage of the subject matter than that provided in SOC 160. May not be taken by anyone who has already completed SOC 160 or its equivalent. LEC.

SOC 308. Principles of Family Sociology. 3 Hours. SC / S.
Analysis of the family as a social institution primarily in the U.S. context. Topics considered are: current and historical changes in how the family is constituted, contrasting sociological theories of family relationships, sexuality in relation to family life, the coexistence of love and hate in families, family dissolution and reformation, and the care of children. A key theme is diversity: social class, gender, race/ethnicity, and age. This course provides a more intensive coverage of the subject matter than that provided in SOC 220. May not be taken by anyone who has already taken SOC 220 or its equivalent. LEC.

SOC 310. Introduction to Social Research. 3 Hours. S.
An introduction to the nature and methods of social research. Topics may include: hypothesis formulation and testing; how to design a research project, collect and analyze data; elementary statistical procedures; and ethical issues. Prerequisite: Six hours of Sociology credit, including Sociology 104. A minimum GPA of 2.3 in all SOC courses is strongly recommended for students planning to enroll in this course. LEC.

SOC 312. Population and Society. 3 Hours. AE41 / S.
An examination of the causes and consequences of population change in the United States and around the world with special focus on the impact of changes in populations on social institutions. We use social demographic perspectives to explore patterns of birth, illness, death, population concentration, population migration and immigration, and changes in these over time. Prerequisite: One of the following: SOC 104, SOC 110, SOC 150, SOC 160, or SOC 220. LEC.

SOC 320. Organizations in Society. 3 Hours. S.
An analysis of complex organizations in modern societies. Attention is given to the rise of bureaucracy in business and government; the way organizations influence and respond to their social cultural environments; and the various roles that individuals play in organizations. Prerequisite: A principal course in sociology. LEC.

SOC 326. Health, Gender, and Society. 3 Hours. S.
Comparative examination of the health status of men and women in relation to key elements of contemporary societies, including not only medicine and health care services, but also systems of social inequality and stratification, cultural constructions of gender, and social policies.
SOC 330. American Society. 3 Hours. AE41 / S.
The social structure and organization of American society with special reference to long-term and recent social changes. (Same as AMS 330.) Not open to students with credit for SOC 132. Prerequisite: A principal course in sociology. LEC.

SOC 332. The United States in Global Context. 3 Hours. AE42 / S.
Examines the influence abroad of US culture, policies and practices and the impact of other countries on US culture, society, and politics. Among the topics that may be examined are race, ethnicity, colonialism, imperialism, migration, technology, communications and media, popular culture, language, health, domestic and transnational organizations, as well as economic, political, religious, military and educational institutions. (Same as AMS 332). LEC.

SOC 340. The Community. 3 Hours. S.
Structures, functions, and processes of change in local communities; interrelations of towns and small cities with rural areas and metropolitan centers with their hinterlands. Prerequisite: A principal course in sociology or ANTH 108 or ANTH 308. LEC.

SOC 341. Urban Sociology. 3 Hours. S.
Examination of the process of urbanization in modern societies, including the size, growth, functions, and ecology of cities and systems of cities; such urban social institutions as the economy, politics, and the family; and major contemporary urban policies and problems. Each topic will be analyzed from several sociological perspectives. Prerequisite: A principal course in sociology. LEC.

SOC 342. Sociology of Immigration. 3 Hours. S.
International migration reshapes politics, economics, social relations, and racial/ethnic identities. Using the United States and other countries as case studies, we explore the variations among immigrant groups and their experiences in social institutions such as the family, religion, education, labor market, and government. We consider the influence of national origin, gender, class, and culture on immigration and reception experiences, as well as issues of assimilation, transnationalism and identity. Prerequisite: SOC 104. LEC.

SOC 351. Africa Today. 3 Hours. U.
An examination of Africa's social dynamics. Topics considered include: the origins of modern African societies, nations, and states; family structures and values; ethnicity, gender relations and patriarchy; social, political, economic and cultural institutions; African exceptionalism; contemporary African social dynamics; transnational migration; HIV/AIDS; political transitions; and Africa's place in the emerging global order. Prerequisite: SOC 104. LEC.

SOC 352. Sociology of Sex Roles. 3 Hours. S.
An examination of sex roles, sex stereotypes, and major issues involved in sex-role research. Emphasizes explanations of inequality between American males and females in the family and at work. The course is designed around lectures, panels, workshops, and films. LEC.

SOC 360. Sociology of Social Control. 3 Hours. S.
This course examines changing methods of social control in society. Social control can be formal (e.g., law and criminal justice system) or informal (e.g., families, peer groups). This course examines the ways that we, as a society, attempt to respond to matters such as deviance, illness, crime, and poverty. This course will survey the many varieties of formal and informal social control faced by individuals in society, and the ways in which individuals resist and conform to various disciplinary and control regimes. Prerequisite: a principal course in Sociology. LEC.

SOC 364. Society, Popular Culture, and the Media. 3 Hours. S.
An overview of sociological theory and research on culture created and distributed through the mass media and its role in shaping our common sense interpretations of our daily lives. Topics include the social organization of the media, the relation between popular culture and the media, themes communicated in various elements of popular culture, and how various groups interpret cultural messages and incorporate them in their lives. LEC.

SOC 365. Society, Popular Culture, and the Media, Honors. 3 Hours. S.
Similar in content to SOC 364. An overview of sociological theory and research on culture created and distributed through the mass media and its role in shaping our common sense interpretations of our daily lives. Topics include the social organization of the media, the relation between popular culture and the media, themes communicated in various elements of popular culture, and how various groups interpret cultural messages and incorporate them in their lives. Prerequisite: Membership in the University Honors Program or consent of instructor. LEC.

SOC 370. Conflict Resolution. 3 Hours. S.
This course is an introduction to the field of conflict resolution. Collaborative approaches to dealing with conflict will be examined from the micro, interpersonal group level to the macro, organizational level. The causes and consequences of conflict will be presented as well as problem solving techniques for the resolution of conflict in social groups. LEC.

SOC 371. Marginal Groups and Subcultures. 3 Hours. S.
The sociological study of groups that differ from the mainstream practices of their societies and of conditions affecting their careers. The primary objectives are to introduce and analytically apply sociological conceptualizations of groups, group careers, group mainstream interactions, and participant orientations. The principal cases examined are the Hutterites, the Shakers, and the Oneida Community, supplemented by briefer analyses of a variety of other groups. Questions concerning the formation, organization, processes, participants, and transformations of groups are emphasized. LEC.

SOC 385. Environmental Sociology. 3 Hours. S.
This course invites students to study society and its impact on the environment. Environmental problems are social problems. This course will address such items as social paradigms, theories, inequalities, movements, and research. (Same as EVRN 385.) LEC.

SOC 410. Sociology of Death and Dying. 3 Hours. S.
This course covers theoretical, practical, cross-cultural and historical aspects of death and dying. Social, psychological, biomedical, economic and legal issues surrounding death and dying are explored. Students examine their own ideas, feelings, and attitudes towards death and dying, and reflect on the origins and significance of those beliefs. Prerequisite: Junior or Senior Standing. LEC.

SOC 420. Armed Forces and Society. 3 Hours. U.
Examines the military as a social institution. Students analyze both the internal organization and practices of the armed forces and the relationships between the military and other social institutions. It considers the historical forces that have shaped the present. Thus, past events and policies as well as current ones are covered in the course. The primary focus of this course is on the American military and its relationship to American society, but considers the armed forces of other societies. Prerequisite: SOC 104 or permission of instructor. LEC.

SOC 424. Sociology of Health and Medicine. 3 Hours. S.
This introductory course in medical sociology examines how social factors influence health and the organization of medical services. Students explore the distribution and experiences of illnesses across key social
categories (e.g., gender, social class, etc.) The course also addresses contemporary issues in health and medicine, such as how health care systems vary cross-nationally, the training of health care workers, patient-physician relationships, and the use of medical technologies. LEC.

**SOC 427. School and Society. 3 Hours. S.**
This course examines education as a social institution and the reciprocal relationship between schools and society. It focuses particularly on the relationship between education and inequality and on education in the U.S., but also includes international comparisons. LEC.

**SOC 450. Gender and Society. 3 Hours. AE41 / S.**
An overview of sociological theory and research on the social practices constructing men and women as “opposites” and creating systematic inequality between them in class-, race-, and nation-specific ways. We consider arguments and evidence that gender is something we are, something we do, a part of every social institution, and a major aspect of how we are organized as a society. LEC.

**SOC 454. Women and Work. 3 Hours. S.**
Sociological investigation of women’s changing relationship to paid and unpaid labor in the economy and the family. Several theories are compared in these contexts: Characteristics of employed women, including occupational distribution and pay; women’s experiences in “traditional” and “nontraditional” occupations, including professions and management; socialization and education for employment; integration of marriage, housework, and child care; anti-discriminatory laws and policies. Prerequisite: A principal course in Sociology. LEC.

**SOC 490. Internship in Sociology. 3 Hours. AE61 / S.**
The purpose of this course is to encourage students to think sociologically about social issues by working as volunteer interns for non-profit community or campus organizations. Enrollment must be approved by a faculty mentor and the departmental Undergraduate Studies Committee. For additional information go to the Sociology department website. Prerequisite: 21 credits in sociology with a 3.0 GPA and permission of the instructor. FLD.

**SOC 495. Study Abroad Advanced Topics in: _____, 1-6 Hours. S.**
This course is designed for the study of special topics in Sociology at the junior/senior level. Course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. No more than 6 hours of SOC 295 or SOC 495 may count towards the Sociology major or minor. LEC.

**SOC 499. Honors Course. 3-6 Hours. AE61 / S.**
Intensive study and research under faculty direction including the writing of a thesis. Enrollment may be split between two semesters, but no grade will be given until completion of the thesis. Admission to honors candidacy is open only to majors who have shown a marked capability for independent study and have completed either SOC 310 or SOC 500. IND.

**SOC 500. Sociological Theory. 3 Hours. S.**
An introduction to the principal texts in sociological theory and the ideas that made them important. Primary materials are emphasized, ranging from medieval to the current age. The goal of the course is to show continuity and change in the theoretical tradition of sociology, and to demonstrate the continued importance of classical ideas. Prerequisite: SOC 104 or permission of instructor. LEC.

**SOC 510. Elementary Statistics and Data Analysis. 3 Hours. S.**
An introduction to social scientific data analysis, with an emphasis on descriptive and inferential statistics. Specific topics include sampling, measures of association and correlation, significance testing, the logic of causal inference, the use of computer programs for data analysis, multivariate analysis, and the critical evaluation of social science research findings. Prerequisite: SOC 310 and MATH 101, or instructor permission. LEC.

**SOC 519. Sociology of Global Food. 5 Hours. U.**
The Sociology of Global Food offers a critical examination of the global food system since the Industrial Revolution. Topics include the industrialization of agriculture, sustainable agriculture, and the role of food and agriculture in organizing society. This course discusses the emergence of current debates around food and agriculture including food activism, technological developments, human/environment relationships, and labor issues. There is a lab component to this course. (Same as EVRN 519.) Prerequisite: Junior standing. LEC.

**SOC 520. Groups and Associations. 3 Hours. S.**
A comparative study of groups, associations, and institutions as types of social systems with special attention to structural characteristics and organizational processes; the nature of membership and leadership, including recruitment, selection and training; the social position, relationship, and function of these groups in communities and societies. Prerequisite: A principal course in sociology. LEC.

**SOC 521. Wealth, Power, and Inequality. 3 Hours. AE41 / S.**
This class focuses on economic inequality and the political and social forces that create and sustain it in the United States and internationally. The variables of race, ethnicity, status, and gender are analyzed as they relate to the differences in the distribution of wealth and power, and attention is paid to how these multiple variables shape opportunities. LEC.

**SOC 522. American Racial and Ethnic Relations. 3 Hours. AE41 / S.**
Analysis of the basic sociological concepts that apply to majority/minority relations; with special emphasis on racial and ethnic interaction in the United States. (Same as AMS 522.) Prerequisite: A principal course in sociology. LEC.

**SOC 523. Sociology of Aging and the Life Course. 3 Hours. AE41 / S.**
An advanced survey of theory and research in social gerontology, giving primary attention to aging and the aged as affected by social organization, including such social institutions as familial, economic, political, and health care; organizational processes such as social stratification; and living environments including community and housing. In these contexts, certain demographic, cross-cultural, social-psychological, and physiological aspects of aging will also be considered. Prerequisite: A principal course in sociology. LEC.

**SOC 524. Sociology of the Economy. 3 Hours. S.**
An analysis of the social organization of production with attention being given to such topics as: world economic crises and their social bases, capitalist and socialist economies, primitive and advanced economic systems, multinational corporations, the nature of housework, and the transformation of economic systems. Prerequisite: A principal course in sociology. LEC.

**SOC 525. Sociology of Work. 3 Hours. S.**
A consideration of problems in the conceptual and empirical definition of occupations and professions. It will involve the examination of the process of professionalization, the differentiation and integration of labor, career patterns, the work situation, the study of leisure, and the social consequences of changes in occupations and professions. Prerequisite: A principal course in sociology. LEC.

**SOC 529. Globalization. 3 Hours. S.**
Addresses sociological aspects of the growth of transnational economic, cultural, institutional, and political interconnections, the freer and faster movement of goods, images, ideas, people, and institutional forms across national borders, and the consequences and problems of these processes. The focus is on recent (later 20th century to the
present) global restructuring in the context of historical shifts in capitalist
development. Prerequisite: SOC 104. LEC.

SOC 530. Industrial Revolution and Capitalist Development. 3 Hours. S.
Focuses on the social forces that generated industrial capitalism.
Emphasis will be on comparative social structures and their meaning
for the nature and quality of life. The transformation from medieval to
mercantilist to industrial capitalism will be analyzed in detail. Possibilities
of post-industrial society will be discussed. This course will consider
exclusively Western development. Prerequisite: A principal course in
sociology. LEC.

SOC 531. Global Social Change. 3 Hours. S.
Comparative study of social, economic, political, and ideological factors
influencing global social change, and analysis of different theoretical
orientations related to social change in various societies. Prerequisite: A
principal course in Sociology. LEC.

SOC 532. Sociology of the Middle East. 3 Hours. NW AE42/AE61 / S.
The sociological analysis of social, historical, and contemporary issues
pertaining to the Middle East and to relations between the Middle
East and other regions of the world. We use sociological theoretical
perspectives to address such topics as nationalism and identity; religion,
race and ethnicity; gender, socioeconomic development, and sociopolitical
and economic relations with the United States. Prerequisite: One of the
following: SOC 104, SOC 110, SOC 150, SOC 160, or SOC 220. LEC.

SOC 533. Industrialization in Developing Nations. 3 Hours. S.
Comparative study of problems associated with industrialization in
developing nations, including population problems, unemployment,
social and welfare problems, and various political issues. Prerequisite: A
principal course in sociology. LEC.

SOC 534. Global Ethnic and Racial Relations. 3 Hours. NW AE42 / S.
An examination of constructions of race and ethnicity around the world.
Emphasis is on the social, political, historical, cultural and economic
factors that lead to the creation of ethnic and racial identities, ethnic
conflict and accommodation, ethnic movements, and ethnic political
organization. Racial and ethnic relations in the U.S. are compared with
other countries. Major focus is placed on ethnicity in Africa, Asia, Latin
America, the Caribbean and/or the Middle East. (Same as AAAS 510 and
AMS 534.) LEC.

SOC 535. Gender in the Global Context. 3 Hours. S.
This course examines gender roles and identity in the global context and
focuses specifically on historical comparative analysis of women's participation
in--and impact on--social, political, economic, and cultural
aspects of their communities and nations. Major emphasis will be
placed on women in Africa, Asia, Latin America, and the Middle East.
Prerequisite: A principal course in Sociology. LEC.

SOC 536. Ethnicity in the United States: _____, 3 Hours. AE41 / S.
An examination of the history, sociology, and culture of U.S. ethnic
categories (e.g., American Indians, Latinos, Asian Americans, Jewish
Americans, Irish Americans). The specific group studied varies from
semester to semester. Course may be repeated for credit. (Same as AMS
536.) Prerequisite: A principal course in American Studies, Sociology, or
Anthropology, or permission of instructor. LEC.

SOC 560. Law and Criminal Justice. 3 Hours. S.
An analysis of the sources and procedures of development of the criminal
law and analysis of the practices of law enforcement, prosecution, and
judicial action, principally in the United States. Prerequisite: A principal
course in sociology. LEC.

SOC 561. Sociology of Deviance. 3 Hours. S.
General analysis of the ways in which individuals and actions come to be
defined as deviant in a society, including the political, economic, social,
and cultural processes of labeling, rulemaking, and rule breaking: Why
are some acts and groups considered deviant at some points in time
and in some places, but not in others? Prerequisite: A principal course in
sociology. LEC.

SOC 562. Sociology of Law. 3 Hours. S.
A survey of the effects of social structure, societal values, and social
change upon the creation and alteration of law. Various perspectives from
the social sciences will be employed in the introductory examination of
the general place of law in societies. The emphasis of the course will be on
the sociological analysis of law in Western history as well as the present.
Prerequisite: A principal course in sociology. LEC.

SOC 570. Social Conflict. 3 Hours. S.
The nature of social conflict, with special emphasis on the more persistent
conflict areas of modern social life such as industrial, racial, religious, and
national conflicts. Prerequisite: A principal course in sociology. LEC.

SOC 571. Collective Behavior. 3 Hours. S.
An analysis of such collective phenomena as crowd behavior, social
epidemics, fads, fashions, popular crazes, and mass movements; the
nature of the public; functional analysis of public opinion; the problems of
democracy as viewed from the standpoint of organizing collective action.
Prerequisite: A principal course in sociology. LEC.

SOC 572. Dispute Settlement. 3 Hours. S.
Processes of negotiation and mediation in settling disputes in
communities and organizations over controversial issues, policies, and
decisions. Knowledge of skills are developed through studying theories
and research findings, and by case analysis, role playing, and simulation.
LEC.

SOC 573. Sociology of Violence. 3 Hours. S.
This course will examine violence in social and political life. The causes
and consequences of various types of violence will be examined in a
variety of social settings. Examples include violence in the family, schools,
the workplace, violence in cities, and violence as a part of the political
process: assassination, revolution, coups, terrorism, and government
repression. Prerequisite: A principal course in sociology. LEC.

SOC 590. Sociology in the Community. 3 Hours. S.
The purpose of this course is to encourage students to develop their
understanding of the relationship between individual biography and social
organization while they contribute to their community by working as
volunteers in non-profit community or campus organizations. Not open to
students who have completed SOC 490. Prerequisite: SOC 310 and SOC
510. LEC.

SOC 598. Practicum in Crime and Delinquency Studies. 3-6 Hours. S.
A one- or two-semester course in which students are provided the
opportunity, as interns, to gain practical experience working in the criminal
justice system agency. A report in the format of a research paper is
required at the conclusion of the practicum. Open only to Crime and
Delinquency Studies majors. Prerequisite: Consent of the instructor. FLD.

SOC 600. Sociological Perspectives: _____, 3 Hours. S.
Analysis of various sociological perspectives and/or the application of
various perspectives to a given social phenomenon. May be repeated as
topics vary. Prerequisite: A principal course in sociology. LEC.

SOC 601. Introduction to Feminist Social Theory. 3 Hours. S.
Feminist theories accord a central role to gender and the oppression
of women in developing an analysis of social life. This course will
explore and evaluate accounts of social structure, social processes, and
consciousness developed from a feminist perspective. A broad range of theoretical models will be presented, drawing on liberal, historical materialist, psychoanalytical, cultural, and Black feminist theories. Prerequisite: A principal course in Sociology and at least junior standing. LEC.

SOC 610. Survey Research. 3 Hours. S.
Methods and techniques of collecting and analyzing data obtained by interviewing a sample of the population. Practice through field work and laboratory analysis. LEC.

SOC 615. Techniques of Demographic Analysis. 4 Hours. U.
Examines concepts of demographic measurement and analysis for the study of changes in size, composition and distribution of populations. Students learn to measure and analyze basic population components such as fertility, mortality, migration and health using rates, standardization, decomposition of differences and life tables. Provides an opportunity to develop quantitative skills in the context of human life course processes that might be extended to include the study of employment, incarceration, education and other phenomena. Involves some reliance on calculus, substantial use of statistical software and an extended research project. Course includes a laboratory component. Prerequisite: SOC 510 or equivalent, or permission of instructor. LEC.

SOC 617. Women and Health Care. 3 Hours. S.
Critical analysis of the current health status and health needs of women, exploring how lay, medical, and research assumptions have influenced both the clinical/scientific literature and the organization of health services. The course includes a focus on historical patterns in women's health issues and social change actions. (Same as HPM 620.) LEC.

SOC 619. Political Sociology. 3 Hours. S.
The study of politics and society in the United States and abroad, including power and authority-who has them, how are they acquired, when are they challenged; state formation, the expansion of central governments, and patterns of political domination; political and nationalist movements; the politics of gender, class, race, and ethnicity; political culture and ideology; ethnic and nationalist conflict; revolution and political change. Prerequisite: A principal course in sociology or consent of instructor. LEC.

SOC 620. Social Organization. 3 Hours. S.
Comparative analysis of social organization in simple and complex societies. Consideration of the process of differentiation, specialization, institutionalization, and change, with special attention given to the emergence of intergroup and interorganizational forms of social organization typical of complex societies. Prerequisite: A principal course in sociology. LEC.

SOC 621. Cross-Cultural Sociology. 3 Hours. NW AE42/GE3H/GE3S / S.
A systematic introduction to cross-cultural issues from the standpoint of sociology, designed to acquaint students with the full range of substantive and methodological issues that arise in comparative sociological inquiry, with a primary focus on non-western societies. Specific topics to be addressed may include war and peace, stratification and inequality, race and ethnicity, and political authority and power, all viewed in the light of cross-cultural research and theory. Prerequisite: A previous Sociology course or consent of instructor. LEC.

SOC 622. Sociology of Science. 3 Hours. S.
The social roles of science in relation to other institutions, to technology, and to social change; and, within the scientific community, enculturation, information-flow, creativity, decision-making, administration, and leadership. Prerequisite: A principal course in sociology. LEC.

SOC 625. Work Roles in Health and Medicine. 3 Hours. S.
A sociological examination of medical and health-care occupations and professions. The selection of careers, socialization processes, and the development of professional identities. Interactions among practitioners, health-care teams, consumers, and professional and community power structures. Control and coordination of work. The impact of increasing specialization and changes in the demographic makeup of client and professional populations. Coping with medical failure and other problems inherent in medical and health-care work. LEC.

SOC 626. Religion and Society. 3 Hours. S.
A comparative study of the nature of religion in human societies both primitive and civilized; the functioning of religion for the community and the individual; the analysis of belief, myths, rituals, sacred attitudes, cults, religious movements, and church organization. Prerequisite: A principal course in sociology or ANTH 108 or ANTH 308. LEC.

SOC 628. Families and Social Inequalities. 3 Hours. S.
This course examines families in the context of social inequalities based on race-ethnicity, social class, gender, and sexuality. It analyzes the link between family diversity and social inequalities in the U.S. and elsewhere and theorizes families using a critical lens that focuses on social policies and power relations that perpetuate social inequalities. We also explore the growing complexities of families and how they affect and are affected by other social institutions, especially the labor market. Prerequisite: SOC 220 or consent of instructor. LEC.

SOC 629. Sociology of Sport. 3 Hours. S.
Examination of organized sport as a social institution and its relation to other social institutions (e.g., political, economic, educational, and religious), with special emphasis on American society. Analysis of the social correlates of sports participation and a consideration of the role of sport in social change. (Same as AMS 629.) Prerequisite: A principal course in sociology. LEC.

SOC 630. Latin American Society. 3 Hours. S/W.
Aspects of the social organization of main Latin American nations, including, e.g., race/ethnicity, social class, gender, urbanization, socioeconomic development, revolution, and relations with the U.S. Emphasis on sociological theories of Latin American development. Prerequisite: A principal course in Sociology or ANTH 108 or ANTH 308, plus junior-senior or graduate standing. LEC.

SOC 634. The Sociology of Culture. 3 Hours. S.
An introduction to a branch of sociology, mainly European in origin, that considers the relation between social structure and "high" and "mass" culture. Specific theories of these relations will be applied to works of literature, the fine arts, or music. Some preliminary acquaintance with these subjects is desirable but not mandatory for admission to the course. LEC.

SOC 640. Political Islam. 3 Hours. NW AE42/AE51 / S.
This course gives students a basic understanding of Islam and Islamic movements, explores the economic, social, political, and cultural context in which these movements take place, and examines the impact of Islam on politics in select countries. Issues such as compatibility of political Islam and democratic politics, political economy in Muslim societies, fundamentalism in Islam, gender relations, identity politics and questions on clash of civilizations are explored. (Same as POLS 667). Prerequisite: A principal course in sociology, POLS 150, or consent of instructor. LEC.

SOC 650. Transnational Migration. 3 Hours. S.
A historically-conscious, sociological exploration of political, cultural and health issues involved in transnational migration, this course invites the student to situate current transnational migration within specific historical social processes within both postcolonial Africa and the postcolonial West.
The course examines parallels from the experience of migration in other parts of the world, specifically Asia and Latin America. The aim is an understanding and appreciation of both the interconnectedness of the world's peoples and, crucially, of the world's histories. Prerequisite: SOC 104. LEC.

SOC 660. Sociology of Mental Illness. 3 Hours. S.
The sociology of mental illness concerns itself with the study of mental disorders as social phenomena. The course will be concerned with (1) the social factors and social processes that contribute to mental disorders, (2) the social definitions of mental disorders as forms of social deviance, (3) the social facets in the treatment and care of disordered persons, and (4) the social aspects of the prevention of mental disorders. Prerequisite: A principal course in sociology. LEC.

SOC 661. Causation of Crime and Delinquency. 3 Hours. S.
The individual and social processes that produce violation of legal norms, dealing with society's responses to these violations only insofar as the responses influence the violators. Prerequisite: A principal course in sociology. LEC.

SOC 662. Corrections. 3 Hours. S.
Legal systems for handling offenders and the development of the laws creating these systems. Emphasis on the various parts (police, courts, probation, penal institutions, and parole) of the system will vary. Prerequisite: A principal course in sociology. LEC.

SOC 671. Social Movements. 3 Hours. S.
Social movements as collective action to establish forms of social organization; consideration of reform, revolutionary, sectarian and fashion movements; ideology, esprit de corps, morale and leadership as factors in development and organization. Prerequisite: A principal course in sociology. LEC.

SOC 672. Sociology of War and Peace. 3 Hours. S.
Descriptive and analytic account of cold and hot wars. The concept of enemy. Types of war. Emphasis on personal and collective action in warlike situations. War and international politics. The ideologies of war from the classics to the present. Prerequisite: A principal course in sociology. LEC.

SOC 678. Individual Undergraduate Research. 1-12 Hours. AE61 / S.
Library or field research either as part of an ongoing project or as an independent study project. One to twelve hours. May be taken from one or more faculty during one or more semesters, the total hours not to exceed 12. No more than 3 credits may be applied to satisfy requirements for the sociology major. Prerequisite: Two courses in sociology and consent of instructor. IND.

SOC 699. Capstone in Sociology. 3 Hours. AE61 / S.
In this capstone course, students synthesize the knowledge gained in their substantive courses and use the skills developed in their methodology courses to design and conduct a research project on a current social issue or meeting the research needs of a local community group. The outcome will be a professional quality research report. Prerequisite: SOC 510. LEC.

SOC 707. Seminar in Historical Sociology. 1-4 Hours.
Each seminar will explore problems at the intersection of sociology and history. Topic, instructors, and hours of credit will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics and students may take more than one topic. No prerequisite. LEC.

SOC 722. Sociology of Gender. 3 Hours.
This course will offer a range of sociological perspectives on the role of gender in society. The particular substantive focus will vary each semester to allow flexibility for in-depth analysis of gender relationships in such areas as politics, health and aging, and work. LEC.

SOC 760. Social Inequality. 3 Hours.
A comprehensive review of the major theoretical and empirical approaches used in the study of institutionalized social inequality. Reference to the origins, forms, cultural and structural variations and their changes over time, consequences and ideologies of social inequality. Prerequisite: A distribution course in sociology. LEC.

SOC 762. Seminar in Social Deviation and Control: _____. 3 Hours.
Advanced study of theory and practice relating to deviation. May be repeated as topics vary. Prerequisite: SOC 662 or SOC 661. LEC.

SOC 767. Gerontology Proseminar. 3 Hours.
A proseminar coordinated by the Gerontology Center. The proseminar explores essential areas of gerontology for researchers and practitioners, providing a multidisciplinary (psychology, biology, sociology, and communication) perspective on aging. The proseminar surveys contemporary basic and applied research, service programs, and policy and management issues in gerontology. (Same as ABSC 787, AMS 767, COMS 787, and PSYC 787.) (formerly HDFL 787.) LEC.

SOC 770. Social Systems and Social Change in the United States. 3 Hours.
Analysis of approaches to the study of sociocultural change in America, with special emphasis on a systems perspective. Seniors by consent of instructor. LEC.

SOC 771. Intergroup Relations and Conflict in American Society. 3 Hours.
Analysis of the dynamics of intergroup relations (e.g., class, religious, ethnic, racial, political) in America with special emphasis on the examination of major theoretical and empirical approaches employed in the study of societal conflict and consensus. LEC.

SOC 780. Advanced Topics in Sociology: _______. 3 Hours.
Topics will vary from semester to semester and instructor to instructor to allow flexibility for in-depth analysis of particular topics. LEC.

SOC 790. Proseminar. 3 Hours.
Introduction to major disciplinary issues, departmental research specialties, faculty research interests, interdisciplinary connections, funding sources, and professional writing. Required of M.A. students entering the graduate program in sociology. May not be taken by those who have credit for SOC 990. Graded on satisfactory/unsatisfactory basis. LEC.

SOC 801. The Rise of Social Theory. 3 Hours.
This is less a survey of intellectual history than an effort to trace the "preclassical" roots of sociological theory. We explore the rise of paradigmatic concerns in the writings of such key figures as Aristotle, Marsilius of Padua, Martin Luther, Etienne de la Boetie, Michel de Montaigne, Charles de Montesquieu, Jean-Jacques Rousseau, Immanuel Kant, G.W.F. Hegel, Flora Tristan, and Ludwig Feuerbach, among others. LEC.

SOC 802. Modern Social Theory. 3 Hours.
This seminar will focus on the later 19th and early 20th century "theories of society," addressing the origins and developmental tendencies of Western modernity and their relation to premodern social orders. Primary texts of the major theorists (eg. Marx, Durkheim, Nietzsche, Weber, Simmel, and Mead) will be studied in historical context. The tradition's analytical and critical resources and problematic features will also be explored. Finally, the connections between this tradition and contemporary sociological approaches will be explored. LEC.
SOC 803. Issues in Contemporary Theory: ______. 3 Hours.
A critical examination of recent trends and debates in sociological theory. This is a thematically oriented course in which classical as well as contemporary views will be explored. Attention will be directed to theoretical issues under discussion in fields such as symbolic interactionism, semiology, ethnmethodology, critical theory, macrosociology, and others. LEC.

SOC 804. Sociology of Knowledge. 3 Hours.
This course reviews the major sociological approaches to the study of the relationship between thought and the social context within which it arises. A central concern is an examination of the relationship between ideology and social structures, particularly as expressed in the construction of official knowledge. LEC.

SOC 808. Feminist Theories. 3 Hours.
This course will explore and evaluate accounts of social structure, social processes, and consciousness developed in the feminist literature. We will review a range of theoretical arguments, including liberal, historical, materialist, psychoanalytic, cultural, and Black feminist theories. Some of the readings will focus on limitations and distortions within mainstream social theory; others will center on the development of alternative social theory using the standpoint of women as a point of departure. LEC.

SOC 810. Sociological Inquiry. 3 Hours.
The goals of this course are to understand the characteristics of sociologically interesting and rigorous research and to design a research proposal that shares those characteristics. The focus of students' proposals will be the M.A. thesis project for students at the M.A. level and the dissertation project for students at the Ph.D. level. Students will read books and articles representing a variety of research approaches (ethnographies, surveys, interviews, document analyses, historical studies, comparative research, etc.), and will analyze those approaches in order to understand their theoretical and methodological significance. Students will also distribute their proposals to the other students in the course for comment and critique. Assignments will include a completed M.A. thesis proposal for students at the M.A. level and a completed dissertation proposal for students at the Ph.D. level. Course may be repeated for credit toward graduate degree. Prerequisites: The course is open only to students enrolled in the Sociology graduate program. LEC.

SOC 811. Sociological Research. 3 Hours.
The use of the scientific method to study social phenomena including: the formulation and testing of hypotheses; techniques for collecting data; measuring social variables; interpreting research findings; the relationship of theory and facts. Course may be repeated for credit toward graduate degree. Prerequisite: The course is open only to students enrolled in the Sociology graduate program. LEC.

SOC 812. Analytic Methods in Sociology. 3 Hours.
Consideration of quantitative methods of analysis including both parametric and non-parametric techniques. Prerequisite: A course in statistics. LEC.

SOC 813. Field Methods and Participant Observation. 3-5 Hours.
Will acquaint the student both theoretically and empirically with the procedures and logics of the research techniques employed by individuals or small research teams conducting qualitative fieldwork. Prerequisite: A distribution course in sociology. FLD.

SOC 814. Health Services Research: Epidemiology, Evaluation, and Survey Methods. 3 Hours.
Students learn the logic, assumptions, designs, and procedures involved in conducting the major types of research found in the health services field. Students develop an informed basis for critically evaluating the methodological adequacy of research studies in the areas of descriptive and analytic epidemiology, program evaluation, and health-related survey research as well as working knowledge of the research process itself. Emphasis is placed on examining basic health services issues such as measuring quality of care, understanding the role of social factors in the etiology of disease, determining the health status and health needs of populations, and incorporating health services research into organizational policy and decision-making. LEC.

SOC 820. Political Sociology. 3 Hours.
This course offers an overview of the different perspectives and key arguments comprising the field of political sociology, including both classical and contemporary readings. The issues studied in this field include the nature of power and the nature of the state, relations between state and society, and social movements, political organization and civic participation, political culture, voting behavior, comparative political systems, warfare, democracy and economic development, citizenship, nationalism, revolutions, and globalization. LEC.

SOC 824. Health and Social Behavior. 3 Hours.
This course provides students with an analytic understanding of the organization, professional, and interpersonal behavior that characterizes contemporary health and health care. Emphasis is placed on examination and integration of conceptual frameworks theories, and research findings bearing on basic behavioral/managerial issues such as authority relations in health care settings, models of illness behavior and health services utilization, the impact of organizational structure on employee and client attitudes and behavior, and the culture of professional medicine in relation to patient care. LEC.

SOC 830. Latin American Society. 3 Hours.
Aspects of the social organization of main Latin American nations, including, e.g., race/ethnicity, social class, gender, urbanization, socioeconomic development, revolution, and relations with the U.S. Emphasis on sociological theories of Latin American development. Prerequisite: A principal course in sociology or ANTH 108 or ANTH 308, plus junior-senior or graduate student standing. LEC.

SOC 873. International Political Economy. 3 Hours.
Provides a broad survey of major developments in the field. Topics include the intellectual origins of international political economy; the historical evolution of the international system; North-South and Western trade, investment, and monetary relations; foreign aid, debt technology transfer, development, international economic institutions (e.g., International Monetary Funds, World Bank, Multinational Corporations, etc.). (Same as POLS 973.) LEC.

SOC 875. The Political Economy of Globalization. 3 Hours.
The course will acquaint students with recent developments in the global economy, including its impact on politics and society. Topics include theories of globalization, the role of the nation-state and international agencies in socioeconomic development, inequality from a global perspective, immigration and citizenship, globalization and democracy, and the rise of transnational social movements. LEC.

SOC 891. Individual Master's Readings. 1-6 Hours.
Individual study of special topics or problems by students working on a master's degree. RSH.

SOC 892. Teaching Seminar. 1-3 Hours.
Seminar on sociology course design and development. Topics covered include syllabus design, exam strategies and design, course design, content of and approaches to teaching introductory and other sociology courses, student grading and evaluation. Required of all teaching assistants assigned to courses in sociology. May not be repeated for credit toward graduate degree. LEC.
Bachelor of Arts and Bachelor of General Studies in Sociology

Why study sociology?
Sociology investigates the social institutions and processes that shape human behavior, histories, and opportunities.

First- and Second-Year Preparation

Admission GPA
- Satisfied by a minimum 2.5 GPA in required admission courses designated below.
- University Course Repeat Policy will apply.

Admission to the Major

Admission Requirements

Course Requirements

Math Requirement. Satisfied by one of the following:
- MATH 101 College Algebra
- MATH 104 Precalculus Mathematics

Equivalent ACT/SAT, equivalent course, or higher course

Elements of Sociology. Satisfied by one of the following:
- SOC 104 Elements of Sociology
- SOC 105 Elements of Sociology, Honors
- SOC 304 Principles of Sociology

Sociology Admission Elective. Satisfied by sociology elective course.

Grade-Point Average Requirements
- Satisfied by a minimum 2.5 GPA in required admission courses designated above.
- University Course Repeat Policy will apply.

Application Term
Students should apply to the major during the semester in which major admission criteria will be completed, normally no later than 60 hours, or for transfer students, during the initial term at KU. Application to this major after completion of 60 hours, or the initial KU term for transfer students, will likely delay graduation.

Requirements for the B.A. or B.G.S. Major

Sociology Core Knowledge and Skills (12)

Majors must complete a course in each of the following areas:

- Elements of Sociology. Satisfied by one of the following:
  - SOC 104 Elements of Sociology
  - SOC 105 Elements of Sociology, Honors
  - SOC 304 Principles of Sociology

Introduction to Social Research. Satisfied by:
- SOC 310 Introduction to Social Research

Elementary Statistics & Data Analysis. Satisfied by:
- SOC 510 Elementary Statistics and Data Analysis

Sociology Theory. Satisfied by:
- SOC 500 Sociological Theory
Minor in Sociology

Why study sociology?
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Requirements for the Minor

Sociology Minor

Elements of Sociology (3)
Satisfied by:
SOC 104 Elements of Sociology

Sociology Minor Electives (15)
Satisfied by 15 sociology hours at the Junior/Senior (300+) level

Upper-level sociology electives. Satisfied by 15 sociology hours at the Junior/Senior (300+) level

Additional sociology electives. Satisfied by 6 additional sociology hours at the upper or lower level

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 33 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major. At least 15 credit hours at the 300+ level, including SOC 310, SOC 510, and SOC 500, must be taken at KU.

Major Junior/Senior Hours
Satisfied by a minimum of 24 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Graduation Plan

With careful planning and commitment to a full-time course load, you can graduate in 4 years (http://clas.ku.edu/undergrad). Download a sample 4-year plan (http://clas.ku.edu/undergrad/advising/plans) for sociology.

Double Majors

Sociology majors may want to consider a second major in philosophy; history; women’s studies; area studies; or one of the natural or social sciences; or a second degree in journalism or other professional disciplines.

A sample 4-year plan for a BA degree in Sociology can be found here: Sociology (http://catalog.ku.edu/liberal-arts-sciences/sociology/ba-bgs/ba-sociology), or by using the left-side navigation.

A sample 4-year plan for the BGS degree in Sociology will be coming soon.

Departmental Honors

Working under the supervision of a faculty mentor, the undergraduate student must complete 6 hours of work in SOC 499 culminating in a superior thesis. The thesis must be certified by 3 members of the College faculty, at least 2 of whom must be from sociology, nominated by the candidate and approved by the departmental honors coordinator. The student also must achieve a grade-point average of at least 3.5 in sociology and 3.25 overall.

Doctor of Philosophy in Sociology

Why study sociology?
Sociology investigates the social institutions and processes that shape human behavior, histories, and opportunities.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

The Department of Sociology at the University of Kansas offers a Ph.D. program in sociology. Upon admission, all students are enrolled as Ph.D.
students, but must complete all requirements for a M.A. degree during their progress toward the Ph.D. degree. Students are eligible to apply for the M.A. degree once these M.A. requirements are met.

To be considered for admission, applicants must have completed 15 credit hours in sociology, a course in sociological theory, and a course in statistics. Applications must include scores on the Graduate Record Examination aptitude tests. International applicants must submit scores on the GRE and either the Test of English as a Foreign Language or the academic format of the International English Language Testing System administered by the University of Cambridge ESOL Examinations.

Applications also must include:

- A statement of academic interests and professional goals,
- 3 recommendation rating forms and letters from individuals who can evaluate the applicant’s academic performance,
- 1 complete set of transcripts from all colleges and universities attended,
- A current résumé/curriculum vitae,
- A writing sample, and
- A nonrefundable application fee (see Admission in the Graduate Studies (p. 2369) section of the online catalog).

The applicant’s record should indicate considerable academic promise and a high level of motivation.

Submit your graduate application online (http://www.graduate.ku.edu).

The University of Kansas
Department of Sociology
Fraser Hall
1415 Jayhawk Blvd., Room 716
Lawrence, KS 66045-7540

Ph.D. Degree Requirements

For the Ph.D., students must complete all M.A. degree requirements and the following Ph.D. requirements:

1. Students must complete 54 total hours of graduate credits for a Ph.D. Within the first two years of the program, students must complete the following M.A. level requirements. The M.A. thesis must be supervised by a faculty member of the student’s choosing. If the students do not complete all the M.A. level requirements within the first two years of the program, the student will not become eligible for the renewal of their GTA/GRA funding.

2. a. In the first two years, the students must complete: 36 hours of graduate credit, including:

   • SOC 810 Sociological Inquiry
   • SOC 811 Sociological Research
   • SOC 812 Analytic Methods in Sociology
   • 1 additional graduate-level course in sociological methods,
   • 1 graduate-level course in sociological theory,
   • 5 graduate-level sociology seminars, and
   • 6 thesis hours in SOC 899
   • Begin compiling portfolios of their professional work.

b. Preparation and defense of an M.A. thesis

The defense of the M.A. thesis includes a general examination of sociological theory and research.

Completion of these requirements makes the student eligible to obtain the M.A. degree, and allows the student to proceed to doctoral study with the approval of the graduate committee.

Non-Thesis Terminal M.A.: Students who do not wish to continue on to the Ph.D. and who do not complete an M.A. thesis may be awarded a terminal M.A. if they fulfill all the M.A. requirements (see the section below on Non-Thesis (Terminal) M.A. Option for details).

3. After completing the requirements for a M.A. degree, students must attain the requisite levels of competence in the history and theory of sociology and in methods of sociological research by completing the courses listed below. Students must complete the following coursework requirements, totaling 18 graduate credit hours, with a minimum GPA of 3.0:

   • 1 graduate-level sociology methods course,
   • 2 graduate-level courses in sociological theory, and
   • 3 graduate-level sociology seminars

4. Complete the Research Skills and Responsible Scholarship (RSRS) requirement. The university requires that every doctoral student have training in responsible scholarship and research skills pertinent to the field of research and appropriate to the doctoral level. This requirement must be met before taking the comprehensive oral exam. Doctoral students in sociology meet this requirement by completion of the following courses: SOC 810, SOC 811, SOC 812, SOC 910. Additional information about this requirement can be found under Doctoral Degree Requirements, Doctor of Philosophy (http://catalog.dept.ku.edu/201314/schools/gs/programs/#docreqs), Research Skills in the Graduate Studies section of the online catalog.

5. Students must compile portfolios of their professional work successfully demonstrating command of 2 fields of specialization within sociology and preparation to undertake dissertation research.

6. Pass an oral comprehensive examination and defense of dissertation proposal, within the first six semesters post-M.A. degree. The oral comprehensive examination and dissertation defense occurs at the same time. The oral comprehensive examination refers to an oral examination of the student’s understanding of the two fields of specialization. The dissertation committee must consist of at least five members, four of whom are members of the Sociology Department.

7. The candidate must continue to enroll in accordance with the University post-comprehensive enrollment requirements until all PhD degree requirements have been met.

*Individual Doctoral Readings courses (SOC 991) may not be used to meet these requirements except by approved petition.

*Individual Master’s Readings courses (SOC 891) may not be used to meet these requirements except by approved petition.

b. Preparation and defense of an M.A. thesis

The defense of the M.A. thesis includes a general examination of sociological theory and research.

Completion of these requirements makes the student eligible to obtain the M.A. degree, and allows the student to proceed to doctoral study with the approval of the graduate committee.

Non-Thesis Terminal M.A.: Students who do not wish to continue on to the Ph.D. and who do not complete an M.A. thesis may be awarded a terminal M.A. if they fulfill all the M.A. requirements (see the section below on Non-Thesis (Terminal) M.A. Option for details).

3. After completing the requirements for a M.A. degree, students must attain the requisite levels of competence in the history and theory of sociology and in methods of sociological research by completing the courses listed below. Students must complete the following coursework requirements, totaling 18 graduate credit hours, with a minimum GPA of 3.0:

   • 1 graduate-level sociology methods course,
   • 2 graduate-level courses in sociological theory, and
   • 3 graduate-level sociology seminars

*Individual Doctoral Readings courses (SOC 991) may not be used to meet these requirements except by approved petition.

b. Preparation and defense of an M.A. thesis

The defense of the M.A. thesis includes a general examination of sociological theory and research.

Completion of these requirements makes the student eligible to obtain the M.A. degree, and allows the student to proceed to doctoral study with the approval of the graduate committee.

Non-Thesis Terminal M.A.: Students who do not wish to continue on to the Ph.D. and who do not complete an M.A. thesis may be awarded a terminal M.A. if they fulfill all the M.A. requirements (see the section below on Non-Thesis (Terminal) M.A. Option for details).

3. After completing the requirements for a M.A. degree, students must attain the requisite levels of competence in the history and theory of sociology and in methods of sociological research by completing the courses listed below. Students must complete the following coursework requirements, totaling 18 graduate credit hours, with a minimum GPA of 3.0:

   • 1 graduate-level sociology methods course,
   • 2 graduate-level courses in sociological theory, and
   • 3 graduate-level sociology seminars

*Individual Doctoral Readings courses (SOC 991) may not be used to meet these requirements except by approved petition.

Non-thesis (Terminal) MA Option

A student who wishes to complete the MA degree but does not wish to continue on for the Ph.D., may choose the non-thesis MA option. Non-thesis students must complete 36 hours of graduate credit including:

1. SOC 810 Sociological Inquiry
2. SOC 811 Sociological Research
3. 2 graduate-level courses in sociological methods, including SOC 812 Analytical Methods in Sociology.
4. 1 graduate-level course in sociological theory, and
5. 7 graduate-level sociology seminars.

*Individual Master’s Readings courses (SOC 891) may not be used to meet these requirements except by approved petition. Completion of these requirements leads to the M.A. degree but does not allow the student to proceed to doctoral study.

A final oral examination over course work in sociology is also required.

Handbook for Graduate Students

A more detailed account of advising procedures, degree requirements, and program options is set forth in the department’s Manual of Graduate Study in Sociology, which is available online (https://sociology.drupal.ku.edu/overview-ma).

Department of Spanish and Portuguese

Why study Spanish and Portuguese?

Because fluency in more than one language and culture and analytical understandings of literary and cultural texts create educated citizens.

Undergraduate Programs

The department offers course work for students seeking proficiency in a foreign language and for majors in Spanish or a related field.

Placement

Students who have not studied Spanish in high school should seek permission to enroll in SPAN 104. For permission to enroll in this course, a student must show his or her high school transcript to the advising specialist in the Department of Spanish and Portuguese. Students who have had limited study of Spanish (1 to 3 years in high school or 1 semester of Spanish at another institution of higher learning, equivalent to SPAN 104) and are not placed in the intermediate level should enroll in SPAN 111. Only students who complete SPAN 104 at KU are eligible to enroll in SPAN 108.

Students with 2 to 4 years of high school Spanish can be placed in the intermediate level (SPAN 212, SPAN 216, SPAN 220, or SPAN 324) by taking the placement examination and consulting the advising specialist.

Students registered with Disability Resources (http://www.disability.ku.edu) should contact them for placement advising.

Retroactive Credit

Students with no prior college or university Spanish course credit are eligible for retroactive credit according to this formula:

- 3 hours of retroactive credit are awarded to a student who enrolls initially at KU in a third-level Spanish course (SPAN 212) and receives a grade of C or higher.
- 6 hours of retroactive credit are awarded to a student who enrolls initially at KU in a fourth-level Spanish course (SPAN 216) and receives a grade of C or higher.
- 9 hours of retroactive credit are awarded to a student who enrolls initially at KU in a 3-credit-hour Spanish course with a fourth-level course as a prerequisite and receives a grade of C or higher.

Students interested in retroactive credit should consult the department before enrolling.

Students entering KU with previous study of Portuguese should take the Portuguese placement examination administered by the department.

Courses for Nonmajors

Students may fulfill the College foreign language requirement by

1. Passing the proficiency examination or
2. Completing SPAN 216 or PORT 216 or
3. Completing a course in Spanish or Portuguese that has SPAN 216 or PORT 216 as a prerequisite.

Candidates for the B.S. in education who are majoring in Spanish or minoring in Brazilian Studies should consult the School of Education.

Graduate Programs

The department offers a full graduate program leading to the M.A. and the Ph.D. degrees. Students who complete their graduate studies with the M.A. degree are well prepared to enter a variety of fields, including international business, teaching, and government. The Ph.D. program takes advantage of the literature specialties of the faculty, and Ph.D. recipients generally go on to university or college teaching.

A detailed description is available from the departmental office as well as the department’s website (http://www2.ku.edu/~spanport). This includes specific distribution requirements, fields of specialization, and information on the comprehensive examinations. Students should request information and application forms as early as possible, especially if they plan to apply for financial aid.

Courses

PORT 104. Elementary Brazilian Portuguese I. 5 Hours. U.
Five hours of class per week, plus supplementary work in language laboratory. Essentials of grammar, elementary syntax and composition, easy reading. Emphasis on conversation. LEC.

PORT 106. Elementary Brazilian Portuguese, Accelerated I. 3 Hours. U.
Three meetings weekly, plus supplementary work in language laboratory. Designed for students proficient in Spanish (or with previous work in Portuguese) to acquire proficiency in Portuguese more rapidly. Covers the same material as PORT 104. Prerequisite: SPAN 216 or equivalent. LEC.

PORT 108. Elementary Brazilian Portuguese II. 5 Hours. U.
Five hours of class per week plus supplementary work in language laboratory. A continuation of PORT 104. Prerequisite: PORT 104. LEC.
PORT 110. Elementary Brazilian Portuguese, Accelerated II. 3 Hours. U.
A continuation of PORT 106. Prerequisite: PORT 106. LEC.

PORT 177. First Year Seminar: ____, 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Portuguese. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

PORT 212. Intermediate Brazilian Portuguese I. 3 Hours. U.
A review of Brazilian Portuguese grammar, with practice in reading, composition, and conversation through the study and discussion of Brazilian prose selections. Prerequisite: PORT 108 or PORT 110. LEC.

PORT 216. Intermediate Brazilian Portuguese II. 3 Hours. U.
A continuation of PORT 212. Prerequisite: PORT 212. LEC.

PORT 220. Intensive Intermediate Brazilian Portuguese. 3-6 Hours. U.
Five hours of class and an additional hour in the language laboratory. The course is designed for students who began the study of Portuguese in PORT 106 and PORT 110, and for superior students in PORT 104 and PORT 108. The material covered is the same as in PORT 212 and PORT 216. Prerequisite: PORT 110, PORT 108 with a grade of A or B, or consent of instructor. Open only to members of the Summer Language Institute in Vitoria-Vila Velha, Brazil. LEC.

PORT 300. Brazilian Culture. 3 Hours. HT AE42 / H.
Prehistoric and colonial Portuguese origins of Brazil and its independent development in the nineteenth and twentieth centuries. Key aspects of economic, political, and social factors; special attention to intellectual history. Readings in English. LEC.

PORT 320. Introduction to Portuguese and Brazilian Literatures. 3 Hours. H/W.
A more advanced reading course serving as an introduction to the study of Luso-Brazilian literature, with discussion in Portuguese of the material read. Prerequisite: A fourth semester course in Portuguese or consent of instructor. LEC.

PORT 340. Textual Analysis and Critical Reading. 3 Hours. HL / H.
Introduction to Brazilian cultural and literary studies. Critical readings and interpretation of Brazilian cultural expressions with emphasis on acquiring the skills and vocabulary for discussing and writing critical analyses. Conducted in Portuguese. Not open to students who have taken PORT 540. Prerequisite: Grade of A or B in PORT 216 or consent of instructor. LEC.

PORT 347. Brazilian Studies: ____, 3 Hours. H.
A topics course dedicated to the study of special historical moments, topics, authors, or themes in literary and cultural history. The course may cover multiple genres and periods. Course conducted in Portuguese and may be repeated for credit as the topic varies. Not open to students who have taken PORT 547. Prerequisite: PORT 216 or consent of instructor. LEC.

PORT 348. Portuguese Language and Brazilian Culture for Business. 3 Hours. H.
Cultural studies approach to contemporary Brazilian society for students interested in business. Explores how Brazilians negotiate their place in a global cultural context and how they perceive business (negocios). Readings include selections from literature, history, journalism, social analysis, and popular culture. Exercises help English speakers develop analytical skills as well as vocabulary and communication skills related to business and professional life in Brazil. Conducted in Portuguese. Not open to students who have taken PORT 548. Prerequisite: PORT 216 or consent of instructor. LEC.

PORT 356. Studies in Brazilian Film: ____, 3 Hours. H.
A theoretical and historical approach to Brazilian film with particular attention to thematic concerns, such as cultural and national identity, and of literary discourse. Given in Portuguese or English. May be repeated for credit as topic varies. Students will be expected to attend film screenings in addition to regular class meetings. Not open to students who have taken PORT 565. Prerequisite: Consent of instructor. LEC.

PORT 388. Intermediate Brazilian Portuguese Conversation. 1 Hour. U.
Two recitations weekly. Prerequisite: PORT 104 or PORT 106. LEC.

PORT 394. Special Readings in Brazilian Studies. 1-3 Hours. H.
Direct readings in (a) fields not covered by student's course work, and/or (b) field of student's special interest approved by the department. May be repeated for credit if content varies. Prerequisite: PORT 216 and three-hours upper-division credit in Portuguese, or consent of instructor. LEC.

PORT 471. Studies in Brazilian Culture and Civilization: ____, 1-3 Hours. H.
A study of Brazilian culture with emphasis on one or more of the following aspects: history, politics, ethnology, anthropology, religious and secular traditions, issues of cultural identity, music, art, architecture, and popular culture. Available only to study-abroad participants. May be repeated for credit if content varies. LEC.

PORT 475. Studies in Brazilian Literature: ____, 1-3 Hours. H.
A study of the literature of a particular author, group of authors, period, genre, region, or theme. Available only to study-abroad participants. May be repeated for credit if content varies. LEC.

PORT 488. Advanced Brazilian Portuguese Conversation. 1 Hour. U.
Two recitations weekly. More advanced than PORT 388. Prerequisite: PORT 108, PORT 110, or PORT 388. LEC.

PORT 490. Intensive Advanced Portuguese. 3-6 Hours. H/W.
Advanced composition, conversation, and stylistics, plus an introduction to Brazilian culture. Offered only during the Summer Language Institute in Brazil. Prerequisite: Four semesters of Portuguese, or consent of instructor. Open only to members of the Summer Language Institute in Vitoria-Vila Velha, Brazil. LEC.

PORT 509. Portuguese Phonetics and Phonology. 3 Hours. H/W.
A theoretical and historical approach to Brazilian film with particular attention to thematic concerns, such as cultural and national identity, and of literary discourse. Given in Portuguese or English. May be repeated for credit as topic varies. Students will be expected to attend film screenings in addition to regular class meetings. Not open to students who have taken PORT 565. Prerequisite: Consent of instructor. LEC.

PORT 547. Brazilian Studies: ____, 3 Hours. H.
A more intensive treatment of the content of PORT 347. Not open to students who have taken PORT 347. Prerequisite: Consent of instructor. LEC.

PORT 548. Portuguese Language and Brazilian Culture for Business. 3 Hours. H.
A more intensive treatment of the content of PORT 348. Not open to students who have taken PORT 348. Prerequisite: Consent of instructor. LEC.
PORT 560. Survey of Portuguese Literature. 3 Hours. H/W.
Emphasis on Gil Vicente, Camoes, Eca de Queiroz, and Fernando Pessoa. Prerequisite: A fourth semester course in Portuguese or consent of instructor. LEC.

PORT 565. Studies in Brazilian Film: ______. 3 Hours. H.
A more intensive treatment of the content of PORT 365. Not open to students who have taken PORT 365. Prerequisite: Consent of instructor. LEC.

PORT 611. Accelerated Basic Portuguese for Spanish Speakers. 3 Hours. U.
A continuation of PORT 611, with special emphasis on reading and writing skills. Prerequisite: PORT 611. LEC.

PORT 740. Survey of Brazilian Literature. 3 Hours.
A survey of Brazilian literature from 1500 to present. Prerequisite: A fourth semester course in Portuguese or consent of instructor. LEC.

PORT 742. The Brazilian Novel. 3 Hours.
The development of the novel in Brazil and analysis of representative works of the nineteenth and twentieth centuries. Prerequisite: A fourth semester course in Portuguese or consent of instructor. LEC.

PORT 746. The Brazilian Short Story. 3 Hours.
The development of the short story in Brazil and analysis of representative works of the nineteenth and twentieth centuries. Prerequisite: A fourth semester course in Portuguese or consent of instructor. LEC.

PORT 750. Brazilian Poetry. 3 Hours.
A study of the principal movements and an analysis of representative works from the colonial period to the present. Emphasis on modernists and post-modernists. Prerequisite: A fourth semester course in Portuguese or consent of instructor. LEC.

PORT 750. Brazilian Poetry. 3 Hours.
A survey of Brazilian cultural expressions and literature in the Twentieth Century. Conducted in Portuguese. Prerequisite: PORT 216 or consent of instructor. LEC.

PORT 800. Special Readings in Portuguese and Brazilian Literature. 1-3 Hours.
May be taken more than once; total credit not to exceed five hours. Directed private readings with conferences with instructor. Prerequisite: Consent of department. RSH.

PORT 875. Special Topics in Brazilian Cultural and Literary Studies: ______. 3 Hours.
Topics vary by semester. The course may be taken more than once, with full credit, provided there is no duplication in the material covered. Conducted in Portuguese. LEC.

PORT 930. Seminar in Portuguese Literature: ______. 3 Hours.
LEC.

PORT 970. Seminar in Brazilian Literature: ______. 3 Hours.
LEC.

SPAN 100. Spanish Reading Course. 3 Hours. U.
A special course for candidates for advanced degrees designed to aid them in obtaining a reading knowledge of Spanish. Intensive study of the fundamentals of grammar, proceeding to the reading of material of medium difficulty. Open to graduate students and to seniors who are applying for entrance to a graduate school. The course does not satisfy any part of the undergraduate language requirement. This course is primarily for graduate students who are fulfilling their language requirement(s) for advanced degrees. LEC.

SPAN 101. Orientation Seminar in Spanish and Portuguese. 1 Hour. H.
Provides an overview of the field of Hispanic Studies. Emphasizes developing an understanding of opportunities in Spanish and Portuguese at KU and the Spanish and Portuguese program curricula, exploring service-learning and other extracurricular options available at KU and beyond, and helping students plan goals for their education through an understanding of their personal values and aspirations as they relate to the field. Graded on a satisfactory/unsatisfactory basis. LEC.

SPAN 104. Elementary Spanish I. 5 Hours. U.
For beginning students of Spanish. Not open to students who have had any previous study of Spanish. Active preparation and participation required. Classes conducted in Spanish. Not open to native speakers of Spanish. Offered in fall semester. LEC.

SPAN 107. Elementary Spanish Conversation. 1-4 Hours. U.
Activities to improve elementary level conversation skills. Does not fulfill any portion of the College of Liberal Arts and Sciences foreign language requirement. Available only to study abroad participants. LEC.

SPAN 108. Elementary Spanish II. 5 Hours. U.
Only for students who have completed SPAN 104 at the University of Kansas. This course prepares students for Intermediate level study of Spanish. Active preparation and participation is required. Classes conducted in Spanish. Not open to native speakers of Spanish. Offered in spring semester. Prerequisite: SPAN 104. LEC.

SPAN 110. Intensive Elementary Spanish. 5 Hours. AE41 / U.
For students who have had some previous study of Spanish, but who do not place into the Intermediate level. This course prepares students for Intermediate level study of Spanish. Active preparation and participation required. Classes conducted in Spanish. Not open to native speakers of Spanish. Prerequisite: At least one previous high school or college course in Spanish. LEC.

SPAN 170. Hispanic Language, Culture and Civilization I-A: ______. 1-3 Hours. U.
For students in their first year of language study or the equivalent. An intensive orientation to the culture of Spanish-speaking countries. Includes elements of grammar, conversation, and composition. Available only to study abroad participants. Will not count toward the Spanish major nor the language requirement. May be repeated for credit if content varies. LEC.

SPAN 171. Hispanic Language, Culture and Civilization I-B: ______. 1-3 Hours. U.
A continuation of SPAN 170. For students in their first year of language study or the equivalent. An intensive orientation to the culture of Spanish-speaking countries. Includes elements of grammar, conversation, and composition. Available only to study abroad participants. Will not count toward the Spanish major nor the language requirement. May be repeated for credit if content varies. LEC.

SPAN 177. First Year Seminar: ______. 3 Hours. HL GE11.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in Spanish. May not contribute to major
requirements in Spanish. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

SPAN 212. Intermediate Spanish I. 3 Hours. AE42 / U.
A fully integrated content-based and form-focused approach to intermediate-level Spanish. Students process and practice a wide range of vocabulary and grammatical structures in order to complete tasks that promote critical exploration of the Spanish-speaking world and the development of listening, reading, speaking, writing, and intercultural competencies. Classes conducted in Spanish. Not open to native speakers of Spanish. Prerequisite: SPAN 108 or SPAN 111 or placement. See departmental guidelines. LEC.

SPAN 213. Honors Intermediate Spanish I. 3 Hours. AE42 / U.
Not open to native speakers of Spanish. Prerequisite: SPAN 108 or SPAN 111 with grade of A, or permission of the department LEC.

SPAN 216. Intermediate Spanish II. 3 Hours. AE42 / U.
A continuation of SPAN 212. A fully integrated content-based and form-focused approach to intermediate-level Spanish. Students process and practice a wide range of vocabulary and grammatical structures in order to complete tasks that promote critical exploration of the Spanish-speaking world and the development of listening, reading, speaking, writing, and intercultural competencies. Emphasis on process writing. Classes conducted in Spanish. Not open to native speakers of Spanish. Prerequisite: SPAN 212 or placement. LEC.

SPAN 217. Honors Intermediate Spanish II. 3 Hours. AE42 / U.
Not open to native speakers of Spanish. Prerequisite: SPAN 212 or SPAN 213 with a grade of A, or permission of the department. LEC.

SPAN 220. Intensive Intermediate Spanish. 6 Hours. U.
This course is designed for students who would like to acquire proficiency in Spanish more rapidly. The material covered in the course is the same as in SPAN 212 and 216. Not open to native speakers of Spanish. Available only to study abroad participants in KU's Summer Language Institute in Barcelona, Spain. Prerequisite: SPAN 108 or SPAN 111, with a grade of A or B. LEC.

SPAN 270. Hispanic Language, Culture and Civilization II-A: _____. 1-3 Hours. U.
For students in their second year of language study or the equivalent. An intensive orientation to the culture of Spanish-speaking countries. Includes elements of grammar, conversation, and composition. Available only to study abroad participants. Will not count toward the Spanish major nor the language requirement. May be repeated for credit if content varies. LEC.

SPAN 271. Hispanic Language, Culture and Civilization II-B: _____. 1-3 Hours. U.
A continuation of SPAN 270. For students in their second year of language study or the equivalent. An intensive orientation to the culture of Spanish-speaking countries. Includes elements of grammar, conversation, and composition. Available only to study abroad participants. Will not count toward the Spanish major nor the language requirement. May be repeated for credit if content varies. LEC.

SPAN 300. Developments in Hispanic Cultures. 3 Hours. HL AE42 / H.
The development of social and cultural patterns in the Spanish-speaking world, including the intersection of those patterns with issues related to politics, economics and/or personal values. Assigned readings may be in English or in Spanish. Does not count toward the Spanish major. Prerequisite: SPAN 108, SPAN 109, or SPAN 111; or two years of high school Spanish. LEC.

SPAN 302. The Spanish Inquisition. 3 Hours. H.
A broad historical study of the Spanish Inquisition from 1478 to its afterlife in modern culture, including its use in political debates and its depiction in popular culture. Topics include anti-Semitism, the nature of the inquisitorial investigation, the use of torture, censorship and the relationship between the Inquisition, the Spanish monarchy and other religious and lay authorities. Taught in English. Will not count toward the Spanish major. (Same as HIST 325 and JWSH 315.) LEC.

SPAN 322. Spanish Grammar: Form and Meaning in Context. 3 Hours. U.
Analysis of the most important morphological and syntactic phenomena with an emphasis on their form and function through a review of salient grammatical points in preparation for advanced work in Spanish. Recommended for students who have completed Spanish 216, 217, or 220 with a grade of C or higher, or placement through examination. Course does not count toward the Major. Prerequisite: Four semesters of college-level Spanish or the equivalent. Students who have taken Spanish 324 may take this course with the permission of instructor. LEC.

SPAN 323. Spanish Composition and Cultural Analysis. 3 Hours. U.
Systematic review of writing in Spanish, intensive study of vocabulary and stylistics for formal written communication, and development of essential writing and analytical skills for advanced courses in Spanish. Prerequisite: SPAN 216, or SPAN 217, or SPAN 220, or consent of instructor. LEC.

SPAN 324. Grammar and Composition. 3 Hours. U.
Systematic grammar review and development of essential writing skills for advanced courses in Spanish. Concurrent enrollment in SPAN 328 required. Recommended for students with a grade of B or better in SPAN 216, SPAN 217, or SPAN 220. Prerequisite: SPAN 216 or SPAN 217 with a grade of "C" or higher, or SPAN 220, or SPAN 322, or consent of instructor. LEC.

SPAN 326. Spanish for Health Care Workers. 3 Hours.
This course is designed to provide students with the linguistic and cultural competencies necessary to communicate with and help treat Spanish speaking patients with limited English proficiency. Includes a general review of pertinent grammar, specific vocabulary groups relating to assessment and care of patients, vocabulary to establish rapport, and discussions leading to cultural competencies. Not open to students who have completed SPAN 424 or above. Prerequisite: Completion of Spanish 216 with a grade of C or better. LEC.

SPAN 328. Intermediate Spanish Conversation. 2 Hours. U.
Conversational reinforcement of topics presented in SPAN 324 with an emphasis on oral communication skills in a cultural context. Concurrent enrollment in SPAN 324 required. Two class meetings per week. Not available to study abroad participants. Prerequisite: SPAN 216 or SPAN 217 with a grade of C or higher; or SPAN 220; or SPAN 322; or consent of instructor. LEC.

SPAN 329. Intermediate Spanish Conversation II. 1 Hour. U.
Two class meetings per week. Continuation of SPAN 328. Not open to native speakers of Spanish. Prerequisite: SPAN 328 or consent of instructor. LEC.

SPAN 330. Service Learning Internship Spanish I. 3 Hours. U.
An opportunity for students to utilize and improve their Spanish language skills in an internship or volunteer work in business, schools, government, hospitals, churches, and various types of service organizations. Students must have approval of instructor to register and must provide written confirmation of acceptance for volunteer work in an agency that provides service to a Spanish-speaking public before the course begins. Periodic supervisor evaluations and a reflection journal in Spanish are required, in addition to other materials requested by the instructor. Class format may
be an independent internship taken for variable credit under instructor supervision. Will not count toward Spanish major. Prerequisite: Students must have completed a minimum of 12 hours of Spanish in courses at the 200-level or above, and completion of SPAN 324 with a grade of B or better. LEC.

SPAN 340. Textual Analysis and Critical Reading. 3 Hours. HL GE3H / H/W.
Critical readings and interpretation of Hispanic literatures, with emphasis on acquiring the skills and vocabulary necessary for discussing and writing literary analyses. Prerequisite: SPAN 324 and SPAN 328 with a grade of B- or higher, or consent of instructor. LEC.

SPAN 346. Transatlantic Hispanic Cultures. 3 Hours. H.
This course offers an introductory overview of Hispanic cultures, focusing on the political, economic, social, linguistic, and artistic development that shaped the historical and cultural bonds between Latin America and Spain. Enhances the cultural competence acquired in previous Spanish classes and prepare students for upper-level work in the major. Taught in Spanish. Prerequisite: SPAN 324. A grade of "C" or better in SPAN 324 is strongly recommended for students enrolling in this course. Not open to students who have already taken SPAN 370, SPAN 371, SPAN 446, SPAN 447, SPAN 470, or SPAN 471. LEC.

SPAN 370. Hispanic Language, Culture and Civilization III-A: ____. 1-3 Hours. U.
An intensive orientation to the culture of Spanish-speaking countries. Also includes elements of grammar, conversation, and composition. Available only to study-abroad participants. Will not count toward the Spanish major. May be repeated for credit if content varies. LEC.

SPAN 371. Hispanic Language, Culture and Civilization III-B: ____. 1-3 Hours. U.
A continuation of SPAN 370. An intensive orientation to the culture of Spanish-speaking countries. Also includes elements of grammar, conversation, and composition. Available only to study abroad participants. Will not count toward the Spanish major. May be repeated for credit if content varies. LEC.

SPAN 390. Interpretation of Hispanic Literature. 3 Hours. H.
A study of selected works in literary theory that are pertinent to the field of Hispanism and of selected problems in literary interpretation and comparative literature methodology, designed to examine and apply systematically basic critical principles and approaches to the field of Hispanic literature. Discussion of these approaches is related to the previous study of literature and deepened through individual papers written by participants and presented to the group. Does not count toward the major in Spanish. Prerequisite: Completion of one junior-senior course in a language and literature department. LEC.

SPAN 424. Advanced Spanish Composition and Grammar. 3 Hours. H/W.
Extensive practice in writing, with attention to vocabulary, grammar usage, and discourse structure. Thorough review of syntax and grammar. Conducted in Spanish. Concurrent enrollment in SPAN 428 is strongly recommended. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 428. Advanced Spanish Conversation. 2 Hours. U.
Emphasis on developing fluid expression of opinions, ideas, and points of view through discussion of selected texts and cultural materials. Two class meetings per week. Concurrent enrollment in SPAN 424 recommended. Prerequisite: SPAN 340 or consent of instructor. A grade of C or higher in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 429. Spanish Phonetics. 3 Hours. H/W.
An analytical and practical study of contemporary Spanish phonetics. Prerequisite: SPAN 424 and SPAN 428, or consent of instructor. LEC.

SPAN 440. Hispanic Studies: ____. 3 Hours. H/W.
A topics course dedicated to the study of special historical moments, topics, authors, or themes in literary and cultural history. Readings may include selections from both Spain and the countries of Spanish America. The course may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 441. Special Topics in Spanish Literature and Culture: ____. 1-3 Hours. H.
A topics course dedicated to the study of special historical moments, topics, authors, or themes in Spanish literary and cultural history. The course may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and may be repeated for credit as the topic varies. This course may be used to partially or fully fulfill 400-level peninsular Spanish literature requirement. Prerequisite: SPAN 340. LEC.

SPAN 442. Special Topics Latin American Literature and Cultures: ____. 1-3 Hours. H.
A topics course dedicated to the study of special historical moments, topics, authors, or themes in Latin American literary and cultural history. The course may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and may be repeated for credit as the topic varies. This course may be used to partially or fully fulfill 400-level peninsular Latin American literature requirement. Prerequisite: SPAN 340. LEC.

SPAN 446. Spanish Culture. 3 Hours. H/W.
A study of the development of Spanish culture with particular emphasis on history, customs and traditions, and literary trends and artistic tendencies that constitute Spain's specific contribution to Western civilization. Conducted in Spanish. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 447. Latin American Cultures: ____. 3 Hours. H/W.
The description and interpretation of Latin American cultures, with particular attention to history, ethnology, folklore, and the arts. The course may focus on particular countries or geographical areas. Conducted in Spanish. May be repeated for credit as topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 448. Spanish Language and Culture for Business. 3 Hours. H.
Cultural studies approach to contemporary Spanish American societies for students with an interest in business. Explores how individuals from Spanish American countries negotiate their place in a new cultural context, and how different groups in Spanish America perceive business (negocios). Readings include selections from literature, history, journalism, social analysis, and popular culture. Exercises help non-native speakers develop analytical skills as well as vocabulary and communication skills related to international business and professional life. Conducted in Spanish. Prerequisite: SPAN 323 or SPAN 324, or consent of instructor. LEC.

SPAN 450. Medieval Spanish Studies: ____. 3 Hours. H.
Reading and analysis of Spanish literature and culture to 1500. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or
better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 451. Early Modern Spanish Studies: _____, 3 Hours. H.
Reading and analysis of Spanish literature and culture from 1500 to 1800. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 452. Nineteenth Century Spanish Studies: _____, 3 Hours. H.
Reading and analysis of the literature and culture of Spain of the 1800s. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 453. Twentieth Century Spanish Studies: _____, 3 Hours. H.
Reading and analysis of the literature and culture of Spain from 1900 to the present. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 460. Colonial Spanish-American Studies: _____, 3 Hours. H.
Reading and analysis of Spanish-American literature and culture from the Conquest to Independence, organized by topic. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 461. Nineteenth Century Spanish-American Studies: _____, 3 Hours. H.
Reading and analysis of Spanish-American literature and culture from Independence to 1900, organized by topic. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 462. Twentieth Century Spanish-American Studies: _____, 3 Hours. H.
Reading and analysis of Spanish-American literature and culture from 1900 to the present, organized by topic. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 463. National Traditions in Spanish America: _____, 3 Hours. H.
Reading and analysis of Spanish-American literature and cultural history from the perspective of a selected nation or nations. The course explores the role of literature and cultural expression in constructing the modern nation and local traditions. Readings may cover selections from multiple genres, authors, and periods. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 464. Reading and Analysis of U.S. Latino/a Literatures: _____, 3 Hours. H.
The course covers multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course. LEC.

SPAN 470. Studies in Spanish Culture and Civilization: _____, 1-3 Hours. H.
A study of Spanish culture with emphasis on one or more of the following aspects: history, politics, ethnology, anthropology, religious and secular traditions, issues of cultural identity, music, art, architecture, and popular culture. Available only to study-abroad participants. Maybe repeated for credit if content varies. LEC.

SPAN 471. Studies in Spanish-American Culture and Civilization: _____, 1-3 Hours. H.
A study of Spanish American national or regional culture with emphasis on one or more of the following aspects: history, politics, ethnology, anthropology, religious and secular traditions, issues of cultural identity, music, art, architecture, and popular culture. Available only to study-abroad participants. Maybe repeated for credit if content varies. LEC.

SPAN 474. Studies in Spanish Literature and Culture: _____, 1-3 Hours. H.
A study of the literature and cultural production of a particular author, group of authors, period, genre, region, or theme. Available only to study-abroad participants. Maybe repeated for credit if content varies. LEC.

SPAN 475. Studies in Latin-American Literature and Culture: _____, 1-3 Hours. H.
A study of the literature and cultural production of a particular author, group of authors, period, genre, country, region, or theme. Available only to study-abroad participants. Maybe repeated for credit if content varies. LEC.
in the field. Prerequisite: SPAN 424 and SPAN 428, or consent of the instructor. LEC.

SPAN 522. Advanced Studies in Spanish Language: _____. 3 Hours. H/W.
Extensive language analysis and practice on one topic such as stylistics, translation, conversation/spoken discourse, or creative writing. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 424 and SPAN 428, or consent of the instructor. LEC.

SPAN 540. Colloquium on Hispanic Studies: _____. 3 Hours. AE61 / H.
An advanced course dedicated to the critical study of special historical moments, topics, authors or themes in literary and cultural history. This course is designed to provide sophistication, focus, and analytical depth in literary and cultural study through exploration of secondary sources as well as theoretical material. Reading may include selections from both Spain and the countries of Spanish America and may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 424 and six hours of 400-level Spanish literature courses. LEC.

SPAN 550. Colloquium on Spanish Film. 3 Hours. AE61 / H.
A theoretical and historical exploration of Spanish cinema with particular attention devoted to the films of Berlanga, Bunuel, Gutiérrez Aragón, Saura, Erice, and Almodóvar. Students will be expected to attend film screenings in addition to regular class meetings. Prerequisite: SPAN 424 and six hours of 400-level Spanish literature courses. LEC.

SPAN 560. Colloquium on Latin American Film. 3 Hours. AE61 / H.
An overview of Latin American cinema from its origins to the present with particular attention to thematic concerns, such as cultural and national identity, and of literary discourse. Students will be expected to attend film screenings in addition to regular class meetings. Prerequisite: SPAN 424 and six hours of 400-level Spanish literature courses. LEC.

SPAN 566. Latin American Folklore. 3 Hours. H.
An examination of Latin American folk traditions, the ways they are used to give meaning to life and to define local and national identity. Folk literature, songs, music, dance, foods, fiestas, and material culture are looked at in the light of current folklore theory. Lectures and discussion are in English; some readings may be in Spanish. Prerequisite: SPAN 424 and six hours of 400-level Spanish courses. LEC.

SPAN 568. Spanish Ballads. 3 Hours. H/W.
A study of the various types of ballads; traditional, artistic, and popular. Prerequisite: A survey of Spanish literature through the Golden Age. LEC.

SPAN 570. Studies in Hispanic Linguistics: _____. 3 Hours. U.
Theoretical and applied analysis of one or more of the following components of the Spanish language: phonology/phonetics, morphology, syntax, semantics, pragmatics. May be repeated for credit if content varies. Prerequisite: SPAN 424 and SPAN 428. LEC.

SPAN 681. Language Teaching for Oral Proficiency. 1 Hour. U.
A summer course designed principally for secondary school language teachers. Provides an orientation to proficiency-based models in foreign language instruction, national standards in the rating of foreign language proficiency, and curriculum development sessions which address issues of articulation in foreign language curricula. (Not applicable toward a major or graduate degree in Spanish.) (Same as FREN 681 and GERM 681.) LEC.

SPAN 717. History of the Spanish Language. 3 Hours.
The phonological and lexical development of the Spanish language from spoken Latin to the present; major dialectal features. Prerequisite: A course in Spanish phonetics. LEC.

SPAN 720. Syntax and Composition. 3 Hours.
Syntactical analysis of modern Spanish usage; principles of expository writing. Prerequisite: A course in advanced composition or structure, or graduate standing. LEC.

SPAN 722. Special Topics in Spanish Literature: _____. 2-3 Hours.
The content of this course will vary, and the course may be taken more than once with full credit, provided there is no duplication in the material studied. Prerequisite: A survey course in Spanish peninsular literature taught in Spanish. LEC.

SPAN 730. Topics in the Literature of 13th- and 14th-Century Iberia: _____. 3 Hours.
A theoretically informed study of representative works from 13th- and 14th-century Iberia. Course may be repeated for credit provided that the topic changes. LEC.

SPAN 733. Print Culture in Early Modern Spain. 3 Hours.
A survey of the literature produced during the period of early printed books with emphasis on the diffusion of new literary forms during the late 15th- and early 16th-centuries. LEC.

SPAN 735. Poetry and Sentimental Romance in Fifteenth-Century Castile. 3 Hours.
Survey of the poetry and prose of the fifteenth century with particular attention to the literature produced during the reign of Isabel de Castilla. LEC.

SPAN 739. Topics in Early Modern Spanish Drama: _____. 3 Hours.
Selected plays of such authors as Lope de Vega, Tirso de Molina, Calderón, and María de Zayas. Course may be repeated for credit provided that the topic changes. LEC.

SPAN 742. Topics in the Early Modern Spanish Prose: _____. 3 Hours.
From the Celestina to the middle of the seventeenth century. Course may be repeated for credit provided that the topic changes. LEC.

SPAN 744. Topics in Early Modern Spanish Poetry: _____. 3 Hours.
A theoretically informed study of selected works of poetry in Spanish from the 15th through 17th centuries. Course may be repeated for credit provided that the topic changes LEC.

SPAN 745. Don Quixote. 3 Hours.
Linguistic and literary study. Examination of traditional interpretations. The life and thought of Cervantes. Theoretical readings. LEC.

SPAN 752. Spanish Literature of the 19th Century. 3 Hours.
The neo-classic movement; the traditionalist reaction; the beginnings of Romanticism. Prerequisite: A survey course in Spanish literature from the 18th century to the present. LEC.

SPAN 754. Romanticism. 3 Hours.
The development of the Romantic movement in Spain. Prerequisite: A survey course in Spanish literature from the 18th century to the present. LEC.

SPAN 755. 19th Century Spanish Novel. 3 Hours.
The rise and development of realism. Prerequisite: A survey course in Spanish literature from the 18th century to the present. LEC.

SPAN 760. 19th Century Spanish Drama. 3 Hours.
A survey of the main currents and aesthetics in the nineteenth-century Spanish theatre: NeoClassicism, Romanticism, Costumbrismo, Realismo (Alta Comedia), NeoRomanticism, and the innovations of Galdos and Benavente. Prerequisite: A survey course in Spanish literature from the 18th century to the present. LEC.
SPAN 761. 20th Century Spanish Drama. 3 Hours.
A survey of major plays and playwrights of 20th century Spain with reference to critical theory of text as literature and performance. LEC.

SPAN 762. The Spanish Novel Since the Civil War. 3 Hours.
A study of the major works and movements occurring since the Spanish Civil War. LEC.

SPAN 764. Modern Spanish Poetry. 3 Hours.
Modern poetry of Spain, beginning with Becquer and ending with the “Generation of the 1920’s.” Close study of the works of the major poets; readings in poetic theory. Prerequisite: A general survey course of the literature of Spain of the 18th, 19th, and 20th centuries. LEC.

SPAN 765. Contemporary Spanish Poetry. 3 Hours.
Contemporary poetry of Spain, beginning with the “Generation of the 1920’s” and including the post-Civil War period. Close study of the work of several poets; readings in poetic theory. Prerequisite: A general survey course in the literature of Spain since the Golden Age. LEC.

SPAN 766. The Spanish Modernist Novel. 3 Hours.
A diachronic study of the syntax and morphology of Spanish from the thirteenth century to the present; sound change and orthography; evolution of literary styles. Prerequisite: A course in Spanish phonetics. LEC.

SPAN 770. Spanish-American Drama. 3 Hours.
Study of several exceptional plays of 20th century Spanish America in light of critical methodologies, national theatre movements, and performance aspects. LEC.

SPAN 771. Spanish-American Literature: ____. 3 Hours.
A survey by region or country (Mexican literature, Cuban literature, Argentine literature, Caribbean literature, etc.) of Spanish American literature from the beginning to the present, with emphasis on the 19th and 20th centuries. Course title will vary by country or region. Prerequisite: A survey course in Spanish American literature. LEC.

SPAN 772. The Modern Spanish-American Novel, 1900-1950. 3 Hours.
A study of selected novels in Spanish America from the 1900 to 1950. Topics may vary. Prerequisite: A course in Spanish American literature. LEC.

SPAN 773. The Modern Spanish-American Novel Since 1950. 3 Hours.
A study of selected novels in Spanish America since 1950. Topics may vary. Prerequisite: A survey course in Spanish American literature. LEC.

SPAN 774. Spanish-American Poetry. 3 Hours.
A study of the twentieth century poetic tradition in Spanish America, including major movements and a range of poets who represent the variety of writing in the genre until the 21st century. LEC.

SPAN 776. Spanish-American Short Story. 3 Hours.
A study of aspects of the short story tradition in Spanish America from its origins to the present. Topics may vary. Prerequisite: A survey course in Spanish American literature. LEC.

SPAN 781. Colonial Identities. 3 Hours.
This course centers on the dynamics of identity of Creoles, Amerindians, Blacks and members of the castes in colonial Spanish America. It concentrates on how members of these racial and ethnic groups relate to coloniality, space, place and gender. LEC.

SPAN 782. Spanish-American Prose Fiction: ____. 3 Hours.
A survey by region or country (Mexican Prose Fiction, Cuban Prose Fiction, Argentine Prose Fiction, Caribbean Prose Fiction, etc.) of Spanish American Prose Fiction from the beginning to the present, with emphasis on the 19th and 20th centuries. Course title will vary by country or region. Prerequisite: A survey course in Spanish American literature. LEC.

SPAN 784. Spanish-American Modernism and Vanguards. 3 Hours.
A study of the poetry and/or prose of modernismo and the vanguards in Spanish America. Prerequisite: One course in Spanish American literature or permission of instructor. LEC.

SPAN 785. Special Topics in Spanish-American Literature: ____. 2-3 Hours.
The content of this course will vary, and the course may be taken more than once, with full credit provided there is no duplication in the material covered. Prerequisite: A survey course in Spanish American literature. LEC.

SPAN 790. Spanish Linguistics: Theory and Application to Teaching. 3 Hours.
An introduction to linguistics and applied linguistics focused on the phonology, morphology, and syntax of Spanish, including work in tagmemics and transformational grammar. Part of the course deals with problems of language instruction, testing, and use of the language laboratory. LEC.

SPAN 792. Topics in the Picaresque Novel: ____. 3 Hours.
A theoretically informed study of the picaresque mode in Spanish and Spanish-American literature. Course may be repeated for credit provided that the topic changes. LEC.

SPAN 795. Literary Theory and Criticism. 3 Hours.
Systematic study of the development of theories of literature. Emphasis usually placed on twentieth century although scope may vary. Prerequisite: 700-level course in Spanish or concurrent enrollment. LEC.

SPAN 801. Teaching Spanish in Institutions of Higher Learning. 3 Hours.
Required of all teaching assistants who teach beginning Spanish at the University of Kansas for the first time. Instruction in classroom procedures for first year Spanish, demonstration of teaching techniques, and survey of current methodology. FLD.

SPAN 802. Colloquium in Methods of Teaching Spanish Language. 1-3 Hours.
Combines discussion of theoretical teaching concepts and development of pedagogical materials with practical solutions arising concurrently in Spanish languages courses. LEC.

SPAN 817. Spanish Historical Grammar. 3 Hours.
A diachronic study of the syntax and morphology of Spanish from the thirteenth century to the present; sound change and orthography; evolution of literary styles. Prerequisite: A course in Spanish phonetics. LEC.

SPAN 898. Investigation and Conference. 1-10 Hours.
Individually directed work to fill the student's needs not met by available organized courses. One to three hours of credit in any semester. Maximum total credit for the M.A. degree is three hours. May be taken with full credit as often as recommended by department. THE.

SPAN 922. Seminar in Spanish Literature and Culture: ____. 3 Hours.
An intensive investigation of a particular topic in Spanish Literature and Culture; content will vary in terms of topics, genres, and time periods covered. The course may be taken more than once with full credit, provided there is no duplication. Prerequisite: Graduate standing. LEC.

SPAN 940. Seminar in Trans-Atlantic Literatures and Cultures: ____. 3 Hours.
An intensive investigation of a particular topic in Spanish and Latin American Literatures and Cultures; content will vary in terms of topics,
genres, and time periods covered. The course may be taken more than once, with full credit provided there is no duplication. Prerequisite: Graduate standing. SEM.

SPAN 950. Seminar: Spanish Drama: _______. 3 Hours.
LEC.

SPAN 952. Seminar: Spanish Novel: _______. 3 Hours.
LEC.

SPAN 954. Seminar: Spanish Poetry: _______. 3 Hours.
LEC.

SPAN 956. Seminar: Spanish Short Story: _______. 3 Hours.
LEC.

SPAN 958. Seminar: Spanish Essay: _______. 3 Hours.
LEC.

SPAN 961. Seminar: Medieval Literature: _______. 3 Hours.
LEC.

SPAN 962. Seminar: Cervantes: _______. 3 Hours.
LEC.

SPAN 970. Seminar: Spanish American Drama: _______. 3 Hours.
LEC.

SPAN 972. Seminar: Spanish American Novel: _______. 3 Hours.
LEC.

SPAN 974. Seminar: Spanish American Poetry: _______. 3 Hours.
LEC.

SPAN 976. Seminar: Spanish American Short Story: _______. 3 Hours.
LEC.

LEC.

SPAN 985. Seminar in Spanish American Literature and Culture: _______. 3 Hours.
An intensive investigation of a particular topic in Spanish American Literatures and Cultures; content will vary in terms of topics, genres, and time periods covered. The course may be taken more than once, with full credit provided there is no duplication. Prerequisite: Graduate standing. SEM.

SPAN 999. Dissertation. 1-12 Hours.
THE.

Bachelor of Arts in Spanish

Why study Spanish and Portuguese?
Because fluency in more than one language and culture and analytical understandings of literary and cultural texts create educated citizens.

Undergraduate Admission

Admission to KU
All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences
Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

First- and Second-Year Preparation

Spanish Major Prerequisite or Co-Requisite Knowledge (6)

Majors must complete the following 2 courses. These hours do not contribute to the minimum number of hours required for the major. Majors must complete SPAN 324 in order to go on to advanced-level Spanish classes.

Intermediate Composition and Grammar. Satisfied by:

SPAN 324 Grammar and Composition

Intermediate Conversation. Satisfied by:

SPAN 328 Intermediate Spanish Conversation

Spanish Major Introductory Knowledge. Majors must complete the following 2 courses:

Textual Analysis and Critical Reading. Satisfied by:

SPAN 340 Textual Analysis and Critical Reading

Transatlantic Hispanic Cultures. Satisfied by:

SPAN 346 Transatlantic Hispanic Cultures

Requirements for the B.A. Major

Spanish Major Core Knowledge and Skills (26)

Majors must complete at least 1 course (3 hours) in each of following areas:

Literature: Peninsular Spanish Literary and Cultural Studies. Satisfied by 1 of the following:

SPAN 440 Hispanic Studies: _______. 3
SPAN 441 Special Topics in Spanish Literature and Culture: _______.

SPAN 450 Medieval Spanish Studies: _______.
SPAN 451 Early Modern Spanish Studies: _______.
SPAN 452 Nineteenth Century Spanish Studies: _______.
SPAN 453 Twentieth Century Spanish Studies: _______.

Literature: Latin American Literary and Cultural Studies. Satisfied by 1 of the following:

SPAN 440 Hispanic Studies: _______.
SPAN 442 Special Topics Latin American Literature and Cultures: _______.

SPAN 460 Colonial Spanish-American Studies: _______.
SPAN 461 Nineteenth Century Spanish-American Studies: _______.
SPAN 462 Twentieth Century Spanish-American Studies: _______.
SPAN 463 National Traditions in Spanish America: _______.
Language: Advanced Spanish Composition and Grammar. Satisfied by:

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<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td>SPAN 424</td>
<td>Advanced Spanish Composition and Grammar</td>
<td>3</td>
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</table>

Language: Advanced Spanish language or linguistics. Satisfied by 1 of the following:

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td>SPAN 429</td>
<td>Spanish Phonetics</td>
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<td>SPAN 448</td>
<td>Spanish Language and Culture for Business</td>
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<tr>
<td>SPAN 520</td>
<td>Structure of Spanish</td>
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<td>SPAN 522</td>
<td>Advanced Studies in Spanish Language: _____</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 570</td>
<td>Studies in Hispanic Linguistics: _____</td>
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</table>

Spanish Major Required Electives. Majors must complete 2 additional 6 courses (6 hours) from the following courses: any Spanish 400+ or 500-level course (literature, language or culture), or PORT 212 or higher (except PORT 300 and PORT 611).

Spanish Major Capstone: Literature Colloquium. Majors must complete 1 (3 hour) capstone course in literature. Satisfied by 1 of the following:

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<tr>
<th>Course</th>
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<th>Hours</th>
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<tr>
<td>SPAN 540</td>
<td>Colloquium on Hispanic Studies: _____</td>
<td>3</td>
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<tr>
<td>SPAN 550</td>
<td>Colloquium on Spanish Film</td>
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<tr>
<td>SPAN 560</td>
<td>Colloquium on Latin American Film</td>
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</tbody>
</table>

Majors are strongly encouraged to study abroad in a Spanish-speaking country. Please see your advisor about this opportunity.

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 32 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Below is a sample 4-year plan for students pursuing the BA in Spanish. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

### Freshman

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<tr>
<th>Semester</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
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<tr>
<th>Fall</th>
<th>15</th>
<th>17</th>
<th>Courses</th>
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<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 (2 crs req), BA Writing I)</td>
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<td>3</td>
<td>ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)</td>
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<tr>
<td>MATH 101 (Goal 1.2 Quantitative Reasoning)</td>
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<td>3</td>
<td>MATH 101 (Goal 1.2, BA Quantitative Reasoning)</td>
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<td>SPAN 104 or 111 (Major Pre-Requisite)</td>
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<td>3</td>
<td>SPAN 104 or 111 (Major Pre-Requisite)</td>
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<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
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<td>3</td>
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<td>SPAN 216 (Major Pre-Requisite)</td>
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### Junior

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<td>SPAN 340 (Major Requirement)</td>
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<td>SPAN 346 (Major Requirement)</td>
<td>3</td>
<td>3</td>
<td>SPAN 346 (Major Requirement)</td>
</tr>
</tbody>
</table>

### Senior

<table>
<thead>
<tr>
<th>Semester</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>15</td>
<td>15</td>
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</tr>
<tr>
<td></td>
<td>Spring</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall</th>
<th>15</th>
<th>15</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 348 (Major Requirement)</td>
<td>3</td>
<td>3</td>
<td>SPAN 348 (Major Requirement)</td>
</tr>
<tr>
<td>SPAN 350 (Major Requirement)</td>
<td>3</td>
<td>3</td>
<td>SPAN 350 (Major Requirement)</td>
</tr>
</tbody>
</table>
### Minor in Brazilian Studies

#### Why study Spanish and Portuguese?

Because fluency in more than one language and culture and analytical understandings of literary and cultural texts create educated citizens.

#### Requirements for the Brazilian Studies Minor

This program consists of 6 3-credit-hour courses (for a total of 18 credit hours) in which students pursue Brazilian studies beyond the 3 first semesters of basic language classes. In consultation with departmental advisors, students combine their course work in several academic departments.

#### Departmental Honors

Undergraduates contemplating honors work should consult their advisors. A declaration of intent form must be submitted to the department. The department notifies students of acceptance to candidacy. At graduation, the student must have a minimum grade-point average of 3.25 overall and 3.5 in Spanish. 6 hours in SPAN 496 Honors in Spanish generally are required, which may be fulfilled in a variety of ways as described here: each 3-hour SPAN 496 course will include a major research paper. While enrolled in SPAN 496, the student completes 2 courses, one in Peninsular literature and the other in Spanish American literature, from the following options:

1. Graduate courses at the 700 level;
2. Upper-division literature courses at the 500 level, including SPAN 540, SPAN 550, and SPAN 560 (only available to students who have already completed the 500-level capstone course);
3. An independent study course (may only be taken once for SPAN 496 credit).

The student attends 2 courses for SPAN 496 credit and writes 2 honors papers under the supervision of 1 or more faculty members. A committee of 3 faculty members evaluates these papers, and the student makes an oral summary of their content.

#### Study Abroad

The department offers summer programs in Barcelona, Spain; Buenos Aires, Argentina; and Salvador (Bahia), Brazil. KU offers semester/academic year programs in San José, Costa Rica; Buenos Aires, Argentina; and in Salamanca, Spain. More information is available from the Office of Study Abroad (http://www.studyabroad.ku.edu).

Graduate students have the opportunity to teach and conduct research during summer sessions in Puebla, Mexico; or Barcelona, Spain. The department also has a graduate exchange agreement with the University of Santiago de Compostela, Spain.

The department offers summer programs in Barcelona, Spain; Buenos Aires, Argentina; and Salvador (Bahia), Brazil. KU offers semester/academic year programs in San José, Costa Rica; Buenos Aires, Argentina; and in Salamanca, Spain. More information is available from the Office of Study Abroad (http://www.studyabroad.ku.edu).

Graduate students have the opportunity to teach and conduct research during summer sessions in Buenos Aires, Argentina; or Barcelona, Spain. The department also has a graduate exchange agreement with the University of Santiago de Compostela, Spain.

### Minor in Brazilian Studies

<table>
<thead>
<tr>
<th>Goal 4.1 US Diversity</th>
<th>3 SPAN 440, 441, 450, 451, 452, or 453 (Choose one) Major Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3 SPAN 428 (Major Requirement)</td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3 SPAN 424 (Major Requirement)</td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3 LA&amp;S 492 (Job Search Strategies, (or elective))</td>
</tr>
</tbody>
</table>

#### Total Hours: 120-121

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. The Spanish department recommends that students with prior Spanish experience begin with SPAN 111. Only students with no prior Spanish experience should begin in SPAN 104 and permission of an advisor is required for enrollment.
3. Visit this website (http://college.ku.edu/undergrad/curriculum/ba_QR) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
4. Spanish majors must have completed 6 credit hours of Hispanic Literature (SPAN 440 or above) coursework before taking the Spanish Capstone course.

Please note:

All students in the College of Liberal Arts and Sciences are required to completed 120 total hours of which 45 hours must be at the Jr/Sr (300+) level, and 100 hours must be from within the College of Liberal Arts and Sciences.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
areas, such as language, business, economics, film and media studies, geography, history, political science, and theatre.

**Brazilian Studies Minor Course Requirements**

Students selecting this minor must complete the following:

**Prerequisite Knowledge (0)**

Satisfied by Intermediate Brazilian Portuguese I-PORT 212 or equivalent placement.

**Requirements for the Minor (18)**

Satisfied by 3 courses from each of the following groups:

**Group I:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PORT 216</td>
<td>Intermediate Brazilian Portuguese II</td>
</tr>
<tr>
<td>PORT 220</td>
<td>Intensive Intermediate Brazilian Portuguese (Open only to students abroad)</td>
</tr>
<tr>
<td>PORT 300</td>
<td>Brazilian Culture</td>
</tr>
<tr>
<td>PORT 320</td>
<td>Introduction to Portuguese and Brazilian Literatures</td>
</tr>
<tr>
<td>PORT 340</td>
<td>Textual Analysis and Critical Reading</td>
</tr>
<tr>
<td>PORT 490</td>
<td>Intensive Advanced Portuguese (Open only to students abroad)</td>
</tr>
</tbody>
</table>

**Group II:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 597</td>
<td>Geography of Brazil</td>
</tr>
<tr>
<td>HIST 579</td>
<td>The History of Brazil</td>
</tr>
<tr>
<td>PORT 347</td>
<td>Brazilian Studies: _____</td>
</tr>
<tr>
<td>PORT 348</td>
<td>Portuguese Language and Brazilian Culture for Business</td>
</tr>
<tr>
<td>PORT 365</td>
<td>Studies in Brazilian Film: _____</td>
</tr>
<tr>
<td>PORT 394</td>
<td>Special Readings in Brazilian Studies</td>
</tr>
<tr>
<td>PORT 471</td>
<td>Studies in Brazilian Culture and Civilization: _____</td>
</tr>
<tr>
<td>PORT 475</td>
<td>Studies in Brazilian Literature: _____</td>
</tr>
<tr>
<td>PORT 565</td>
<td>Studies in Brazilian Film: _____</td>
</tr>
</tbody>
</table>

Depending on their content, the following courses may substitute for required or elective courses by petition:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 582</td>
<td>Economic Development</td>
</tr>
<tr>
<td>FMS 542</td>
<td>Latin American Film (with at least 1/3 of focus on Brazil and a paper on Brazil)</td>
</tr>
<tr>
<td>HIST 370</td>
<td>Violence and Conflict in Latin American History (with at least 1/3 of focus on Brazil and a paper on Brazil)</td>
</tr>
<tr>
<td>HIST 372</td>
<td>Violence and Conflict in Latin American History, Honors (with at least 1/3 of focus on Brazil and a paper on Brazil)</td>
</tr>
<tr>
<td>HIST 580</td>
<td>Economic History of Latin America (with at least 1/3 of focus on Brazil and a paper on Brazil)</td>
</tr>
<tr>
<td>POLS 659</td>
<td>Political Dynamics of Latin America (with at least 1/3 of focus on Brazil and a paper on Brazil)</td>
</tr>
<tr>
<td>SPAN 522</td>
<td>Advanced Studies in Spanish Language: _____ (Phonetics and Phonology of Spanish and Portuguese in Contrast. Taught in Spanish.)</td>
</tr>
</tbody>
</table>

**Minor Hours & Minor GPA**

While completing all required courses, minors must also meet each of the following hour and grade-point average minimum standards:

**Minor Hours**

Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**

Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the minor.

**Minor Junior/Senior Hours**

Satisfied by a minimum of 15 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the minor. GPA calculations include all departmental courses in the field of study including F’s and repeated courses. See the Semester/ Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

**Study Abroad**

The department offers summer programs in Barcelona, Spain; Buenos Aires, Argentina; and Salvador (Bahia), Brazil. KU offers semester/academic year programs in San José, Costa Rica; and in Ronda, Spain. More information is available from the Office of Study Abroad (http://www.studyabroad.ku.edu).

Graduate students have the opportunity to teach and conduct research during summer sessions in Puebla, Mexico; or Barcelona, Spain. The department also has a graduate exchange agreement with the University of Santiago de Compostela, Spain.

**Minor in Spanish**

**Spanish Minor**

The Spanish minor provides students the opportunity to achieve cultural and linguistic competency, and to document their study of Spanish. It complements many majors within the College as well as other degrees across the University.

**Requirements for the Spanish Minor**

The minor requires 20 hours, as well as prerequisite knowledge.

**Prerequisites**

To advance to SPAN 340 students must earn a grade of B or better in SPAN 324 and 328, or have departmental consent.

**Minor Requirements (20)**

Students must complete 20 hours of coursework, including the following required courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 101</td>
<td>Orientation Seminar in Spanish and Portuguese</td>
</tr>
<tr>
<td>SPAN 324</td>
<td>Grammar and Composition</td>
</tr>
<tr>
<td>SPAN 328</td>
<td>Intermediate Spanish Conversation</td>
</tr>
<tr>
<td>SPAN 340</td>
<td>Textual Analysis and Critical Reading</td>
</tr>
<tr>
<td>SPAN 346</td>
<td>Transatlantic Hispanic Cultures</td>
</tr>
<tr>
<td>SPAN 424</td>
<td>Advanced Spanish Composition and Grammar</td>
</tr>
<tr>
<td>SPAN 428</td>
<td>Advanced Spanish Conversation</td>
</tr>
<tr>
<td>SPAN 440</td>
<td>441, 442, 450, 451, 452, 453, 460, 461, 462, 463.</td>
</tr>
</tbody>
</table>

**Minor Hours & GPA**

While completing required courses, minors must also meet each of the following hour and grade point average minimum standards:
Minor Hours
Satisfied by 20 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 hours of junior/senior (300+) hours of KU resident credit in the minor.

Minor Junior/Senior Hours
Satisfied by a minimum of 19 hours from junior/senior courses (300+) in the major.

Minor Graduation GPA
Satisfied by a minimum of a 2.0 GPA in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including Fs and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Study Abroad
The department offers summer programs in Barcelona, Spain; Buenos Aires, Argentina; and Salvador (Bahia), Brazil. KU offers semester/academic year programs in San José, Costa Rica; and in Ronda, Spain. More information is available from the Office of Study Abroad (http://www.studyabroad.ku.edu).

Graduate students have the opportunity to teach and conduct research during summer sessions in Puebla, Mexico; or Barcelona, Spain. The department also has a graduate exchange agreement with the University of Santiago de Compostela, Spain.

Master of Arts in Spanish

Why study Spanish and Portuguese?
Because fluency in more than one language and culture and analytical understandings of literary and cultural texts create educated citizens.

Admission to Graduate Studies
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission
1. The applicant must hold (or anticipate completing by the time of admission) a B.A. or B.S. degree from an accredited U.S. college or university or the equivalent degree from a foreign university, must have 15 semester hours of literature courses at the survey level or above in Spanish or the equivalent of the undergraduate major in Spanish at KU, and must have a minimum grade-point average of 3.0 on a 4.0 scale, both in Spanish and overall.
2. The selection committee gives strong consideration to letters of recommendation, the breadth and depth of preparation, and Graduate Record Examination scores, if available. Deficiencies in preparation specified by the selection committee may be made up early in the graduate program, although the time required to complete the degree is correspondingly greater.

Submit your graduate application online (http://www.graduate.ku.edu). Send all other requested application materials to the department:

The University of Kansas
Department of Spanish and Portuguese
Wescoe Hall
1445 Jayhawk Blvd., Room 2650
Lawrence, KS 66045-7594

M.A. Degree Requirements
The department offers the M.A. degree with a concentration in literature or language/literature/culture.

Literature Concentration Requirements
1. A minimum of 30 hours of graduate credit in literature, including one seminar in Peninsular literature or in Spanish-American literature.
2. A reading knowledge of another foreign language, as approved by the department.
3. A general examination in the field of Hispanic literature, partly written and partly oral.

Language/Literature/Culture Concentration Requirements
1. A minimum of 30 hours of graduate credit, as listed below.
2. A general examination, partly written and partly oral, based on the appropriate department reading lists for this degree.
   a. Language and Culture (12 hours), including courses in phonetics and the structure of Spanish if they have not been taken at the undergraduate level.
   b. Literature (12 hours), including at least 3 credit hours of course work in each of the three major genres (fiction, theatre, poetry). One course in this category must be a seminar.
   c. One additional course in the department (3 hours) in any field. (PORT 611 counts in this category.)
   d. One graduate-level course (3 hours) in a second language (excluding PORT 611).

Study Abroad
The department offers summer programs in Barcelona, Spain; Buenos Aires, Argentina; and Salvador (Bahia), Brazil. KU offers semester/academic year programs in San José, Costa Rica; and in Ronda, Spain. More information is available from the Office of Study Abroad (http://www.studyabroad.ku.edu).

Graduate students have the opportunity to teach and conduct research during summer sessions in Puebla, Mexico; or Barcelona, Spain. The department also has a graduate exchange agreement with the University of Santiago de Compostela, Spain.

Doctor of Philosophy in Spanish

Why study Spanish and Portuguese?
Because fluency in more than one language and culture and analytical understandings of literary and cultural texts create educated citizens.
Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2369) section of the online catalog.

Please consult the Departments & Programs (p. 774) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission

1. The applicant must hold (or anticipate completing by the time of admission) an M.A. or M.S. degree from an accredited U.S. college or university or the equivalent degree from a foreign university; must have a minimum grade-point average of 3.0 on a 4.0 scale, both in Spanish and overall; and must meet general requirements.
2. Strong consideration is given to letters of recommendation, breadth and depth of preparation, and Graduate Record Examination scores, if available.

Submit your application online (http://www.graduate.ku.edu). Send all other requested application materials to

The University of Kansas
Department of Spanish and Portuguese
Wescoe Hall
1445 Jayhawk Blvd., Room 2650
Lawrence, KS 66045-7594

Ph.D. Degree Requirements

The degree of Doctor of Philosophy is offered with emphasis on Spanish or Spanish-American literature.

Requirements

Once admitted, the aspirant must

1. Present a reading knowledge of 2 foreign languages, other than Spanish, appropriate to the specialization;
2. Complete all course work prescribed by the advisory committee (this course work is to include a minimum of 5 seminars, at least 4 at KU, and a guideline of a minimum of 24 hours in Hispanic literatures at KU beyond the 30 hours required for the M.A. degree);
3. Present a minor in a field other than Spanish or Spanish-American literature;
4. Complete a minimum of 2 semesters of quarter-time teaching or 1 semester of half-time teaching in the Department of Spanish and Portuguese;
5. Research Skills and Responsible Scholarship Requirement. The university requires that every doctoral student have training in responsible scholarship and research skills pertinent to the field of research and appropriate to the doctoral level. This requirement must be met before taking the comprehensive oral exam. Please contact your advisor or the director of graduate studies for specific requirements.
6. Pass a comprehensive examination, partly written and partly oral; and
7. Write and defend a dissertation.

Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current policies on Doctoral Research Skills and Responsible Scholarship are listed in the KU Policy Library.

See also the general requirements for the Doctor of Philosophy degree in Graduate Studies (p. 2369) section of the online catalog and in the KU Policy Library.

Study Abroad

The department offers summer programs in Barcelona, Spain; Buenos Aires, Argentina; and Salvador (Bahia), Brazil. KU offers semester/academic year programs in San José, Costa Rica; and in Ronda, Spain. More information is available from the Office of Study Abroad (http://www.studyabroad.ku.edu).

Graduate students have the opportunity to teach and conduct research during summer sessions in Puebla, Mexico; or Barcelona, Spain. The department also has a graduate exchange agreement with the University of Santiago de Compostela, Spain.

Department of Speech-Language-Hearing: Sciences and Disorders

Why study speech, language, and hearing?

Because communication is central to human behavior, and the treatment of communication disorders requires specialized knowledge and skills.

Career Opportunities

Most states have laws mandating that speech-language pathologists and audiologists be licensed to practice their profession. The minimum requirement for licensure in most states is a master’s degree for speech-language pathology and the Au.D. for audiology.

Undergraduate Programs

Basic study in speech, language, and hearing is provided through B.A. and B.G.S. programs. Programs are designed for the student who seeks a career in speech, language, or hearing or is interested in normal communication development and communication disorders.

Graduate Programs

Graduate study at KU is offered through the Intercampus Program in Communicative Disorders with classes, research, and clinical work in Lawrence and at KU Medical Center in Kansas City.

Courses

SPLH 120. The Physics of Speech. 4 Hours. N.
An introduction to the acoustic structure of speech intended for nonscience majors. Emphasis will be placed on the methods and standards by which scientists measure and evaluate the physical characteristics of speech. Topics will include: simple harmonic motion, the propagation of sound waves, aerodynamic aspects of vocal fold vibration, resonance, digital speech processing, frequency analysis, and speech synthesis. Three class hours and one laboratory per week. (Same as LING 120.) Prerequisite: MATH 101 or 104 or equivalent. LEC.
SPLH 177. First Year Seminar: ______. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Speech-Language and Hearing. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

SPLH 250. Study Abroad Topics in: ______. 1-5 Hours. S.
A course designed to enhance international experience in topic areas related to speech-language-hearing at the freshman/sophomore level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission. LEC.

SPLH 261. Survey of Communication Disorders. 3 Hours. SI GE3S / S.
Provides a general understanding of normal and deviant speech, language, and hearing in adults and children. This course considers the normal development of communication behavior, the nature of communication disorders, and the interaction of speech pathology and audiology with allied fields (e.g., education, medicine, psychology, special education). LEC.

SPLH 320. The Communicating Brain: The Ultimate Personal Computer. 3 Hours. U.
This course introduces the study of human neuroscience with a particular focus on human communication. The course provides an overview of the relevant anatomical structures and function along with an introduction to the basic methods used to investigate central nervous system function. Students are introduced to the study of perceptual, motor, and language function in the nervous system through a series of examples drawn from normal function and clinical cases. The examples are selected to highlight how these systems develop and are influenced by experience, implantable devices developed to interface with the nervous system, and how computers and animals are used as models to learn about nervous system function. LEC.

SPLH 418. Introduction to Cognitive Science. 3 Hours. S.
Examines the data and methodologies of the disciplines that comprise Cognitive Science, an inter-disciplinary approach to studying the mind and brain. Topics may include: consciousness, artificial intelligence, linguistics, education and instruction, neural networks, philosophy, psychology, anthropology, evolutionary theory, cognitive neuroscience, human-computer interaction, and robotics. (Same as LING 418, PHIL 418, and PSYC 418.) Prerequisite: Consent of instructor. LEC.

SPLH 432. Human Behavioral Genetics. 3 Hours. S.
A survey of human behavioral genetics for upper division undergraduates. Emphasis is on how the methods and theories of quantitative, population, medical, and molecular genetics can be applied to individual and group differences in humans. Both normal and abnormal behaviors are covered, including intelligence, mental retardation, language and language disorders, communication, learning, personality, and psychopathology. (Same as ANTH 447, BIOL 432, PSYC 432.) Prerequisite: Introductory courses in biology/genetics or biological anthropology and psychology are recommended. LEC.

SPLH 449. Laboratory/Field Work in Human Biology. 1-3 Hours. AE61 / N.
Faculty supervised laboratory or field research for Human Biology majors. Students design and complete a research project in collaboration with a Human Biology faculty member. (Same as ANTH 449, BIOL 449, and PSYC 449.) Prerequisite: Consent of instructor and Human Biology major. FLD.

SPLH 450. Study Abroad Topics in: ______. 1-5 Hours. S.
A course designed to enhance international experience in topic areas related to speech-language-hearing at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission. LEC.

SPLH 451. Directed Study Abroad in Speech-Language-Hearing. 1-3 Hours. S.
An independent study designed to enhance international experience in topic areas related to speech-language hearing. Investigation of special topic or project selected by the student with advice, approval, and supervision by a KU SPLH instructor and an authorized agent of the study abroad site. Experience must be arranged through the Office of KU Study Abroad. Such study may take the form of directed reading and/or directed research/clinical observation. A daily journal and final report is required. A maximum of six hours of credit may be counted, with no more than three in a single area of study. Prerequisite: Consent of instructor IND.

SPLH 462. Principles of Speech Science. 3 Hours. N.
Survey of the physiology of speech production, and the physics of sound. Emphasis upon methodologies in the laboratory study of normal speech. Prerequisite: SPLH 120, or concurrent enrollment in SPLH 120 or consent of instructor. LEC.

SPLH 463. Principles of Hearing Science. 3 Hours. N.
This class discusses the concepts and principles relevant to normal hearing processing: anatomy, psychophysical methods, and basic subjective correlates of the auditory system. Prerequisite: SPLH 120, or concurrent enrollment in SPLH 120, or consent of instructor. LEC.

SPLH 464. Undergraduate Seminar in: ______. 1-3 Hours. S.
Course organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. (Distribution credit given for two-three hours only.) LEC.

SPLH 465. Fundamentals of Clinical Phonetics. 1 Hour. S.
Introduction to classification of American English speech sounds based on articulatory phonetics. Practice in phonetic transcription and analysis of normal and abnormal speech. Laboratory exercises to give students hands-on experience with selected topics from lecture. Prerequisite or Corequisite: SPLH 120. LEC.

SPLH 466. Language Science. 3 Hours. S.
Introduction to structure/function of human languages as it relates to language development and disorders; processes involved in the expression and reception of language and the methodologies employed to study these processes. LEC.

SPLH 497. Mentored Research Experience. 2-8 Hours. AE61 / S.
Study may be directed toward either reading for integration of knowledge and insight in Speech-Language-Hearing, or original research in the field. Student creates a plan of activities at the beginning of each semester under the mentor's guidance. Student and mentor review this plan at the end of each semester to evaluate progress. In the final semester of enrollment, student must complete a written report or a public oral presentation detailing the purpose, methods, results, and impact of the research. This final product partially meets the requirements for Research Experience Certification. (Eight hours maximum credit, which may be distributed through 4 semesters. No student may enroll for less than two hours credit or more than 4 hours of credit in a given semester). Prerequisite: Consent of Departmental Research Experience Coordinator. IND.
SPLH 498. Departmental Honors Research. 2-8 Hours. AE61 / S. Study may be directed toward either reading for integration of knowledge and insight in Speech-Language-Hearing, or original research in the field. Student creates a plan of activities at the beginning of each semester under the mentor’s guidance. Student and mentor review this plan at the end of each semester to evaluate progress. In the final semester of enrollment, student must complete a written report or a public oral presentation detailing the purpose, methods, results, and impact of the research. This final product partially fulfills the requirements for Departmental Honors. (Eight hours maximum credit, which may be distributed through 4 semesters. No student may enroll for less than two hours credit or more than 4 hours of credit in a given semester). Prerequisite: Consent of Departmental Honors Coordinator. IND.

SPLH 499. Directed Study in Speech-Language-Hearing. 1-3 Hours. AE61 / S. Investigation of special topic or project selected by the student with advice, approval, and supervision of an instructor. Such study may take the form of directed reading and/or directed research/clinical observation. Individual reports and conferences. (Distribution credit given for two-three hours only.) A maximum of six hours of credit may be counted, with not more than four in a single area of study.) Prerequisite: Consent of instructor. IND.

SPLH 565. Language Sample Analysis Lab. 1 Hour. S. The study of the analysis of language produced by children with respect to its phonological, lexical, morphological, syntactic, and pragmatic characteristics. Prerequisite or corequisite: SPLH 566. LAB.

SPLH 566. Language Development. 3 Hours. S GE3S / S. Study of language acquisition in children, including phonologic, morphologic, syntactic, and semantic components. Methods of language measurement, the role of comprehension, and pragmatic aspects of language use are included. May be taught in lecture or online format. LEC.

SPLH 568. Introduction to Audiological Assessment and Rehabilitation. 4 Hours. U. Introduction to methods for assessing and treating hearing disorders in adults and children, as well as conditions that result in hearing loss. Course includes clinical observation and extensive hands-on experience with clinical techniques. Prerequisite: SPLH 663. LEC.

SPLH 571. Introduction to Speech-Language Pathology. 4 Hours. U. This course provides training in clinical management of communicative disorders in children and adults. Principles of evaluation, application of diagnostic information, intervention planning, intervention process, data collection and application, report writing, and interactions with parents and other professionals are examined. Participation in observation and laboratory activities is required. LEC.

SPLH 660. Research Methods in Speech-Language-Hearing. 3 Hours. AE61. Research Methods is about the methods used to conduct, describe, and evaluate science in communication disorders. Goals for learner outcomes include: 1) evaluation of research including adequacy of research to address scientific and clinical problems, 2) reading, summarizing and describing research through a literature review, 3) describing a hypothetical research study that addresses a specific question or hypothesis identified by the student, and 4) providing constructive peer reviews of research paper drafts. Prerequisite: 9 credits of SPLH course work; English 101 and ENGL 102 (or course meeting core skill in written communication); or consent of instructor. LEC.

SPLH 670. Beginning Clinical Practice in Audiology. 1-3 Hours. N. Testing of hearing using pure tone air and bone conduction tests with both normal and hearing-impaired individuals. Prerequisite: Completion of or concurrent enrollment in SPLH 668. FLD.

SPLH 672. Clinical Practice in Speech-Language Pathology. 3 Hours. S. Clinical practice with children and adults. Group and individual conferences with staff required. Repeatable once for credit. Prerequisite: SPLH 671 and overall GPA of 3.0. FLD.

SPLH 699. Speech-Language Pathology. 3 Hours. S. Concepts and principles relevant to the perception of speech with emphasis on the auditory system; acoustics, psychophysical methods, and basic subjective correlates of speech perception. Prerequisite: SPLH 662 and SPLH 663, or consent of instructor. LEC.

SPLH 761. Aural Rehabilitation. 3 Hours. Study of the communication problems associated with hearing loss. Introduction to aural habilitative intervention related to speech, language, and academic achievement in children with early hearing loss, as well as, communication strategies training for adults with acquired hearing loss. Prerequisite: SPLH 669 or equivalent. LEC.

SPLH 764. Seminar in: _____. 1-3 Hours. The subject matter of this seminar will be special topics from speech pathology and audiology. Special prerequisite may be established for a given topic. LEC.

SPLH 784. Proseminar in Communication and Aging. 1 Hour. A weekly forum for students and faculty to discuss professional issues and interdisciplinary research in communication and aging. May be repeated for credit. (Same as COMS 784.) (Same as PSYC 784.) Prerequisite: Consent of instructor. LEC.

SPLH 799. Proseminar in Child Language. 2 Hours. A review and discussion of current issues in children's language acquisition. May be repeated for credit. Students are graded S/F. (Same as ABSC 797, LING 799 and PSYC 799.) (Formerly HDFL 797.) LEC.

SPLH 816. Language Development. 3 Hours. Study of language acquisition in children, including the morphologic, syntactic, and semantic components. Methods of language measurement, the role of comprehension, and pragmatic aspects of language use will be included. Not open to students who have credit for SPLH 566. Laboratory by appointment. LEC.

SPLH 820. Developmental Phonological Disorders. 2 Hours. Focuses on speech and non-speech characteristics of children with developmental phonological disorders. Emphasis placed on collection and phonetic transcription of speech samples, phonological analysis of transcribed data, and decision-making processes in assessment and intervention. LEC.

SPLH 822. Dysarthria/Apraxia. 2 Hours. This course describes the neuroanatomic bases of motor-speech processes, the diagnosis, classification, assessment, prognosis, and treatment of dysarthria(s) and apraxia(s). LEC.

SPLH 824. Fluency Disorders. 2 Hours. The nature of stuttering in children and adults is discussed. Theories regarding etiology, development, and maintenance of the disorder are presented. Emphasis is placed on various clinical approaches to assessment, measurement, and treatment. LEC.

SPLH 826. Phonicatory Disorders. 2 Hours. This course reviews the function of the laryngeal and respiratory mechanisms including the parameters and processes of phonation.
Primary content addresses diagnosis, description, and treatment of organic and non-organic disorders of phonation. LEC.

**SPLH 828. Speech Disorders in Special Populations. 2 Hours.**
This course reviews anatomy and physiology of the velopharyngeal mechanism. Diagnosis and management of velopharyngeal dysfunction and associated problems considered. Anatomy, physiology, and rehabilitation associated with certain oral, pharyngeal, and laryngeal abnormalities discussed. Emphasis is on the speech problems of adults following medical management. Populations include individuals with laryngectomies, glossectomies, and tracheotomies. LEC.

**SPLH 832. Dysphagia. 2 Hours.**
This course covers normal and disordered swallowing. Evaluation and treatment of swallowing disorders, the dysphagia team, and dysphagia in special populations are considered. LEC.

**SPLH 836. Genetics of Communication and Learning Disorders. 2 Hours.**
This course focuses on the description, assessment, and treatment of communication problems associated with particular genetic syndromes (e.g., Down's, Turner's syndromes). Also covered are current data about the genetic factors involved in nonsyndromic communication and learning problems, such as those commonly seen in the schools. Ethical and practical issues in these areas are discussed. LEC.

**SPLH 840. Language Disorders of Children: Infants and Toddlers. 2 Hours.**
This course examines factors relating to language disorders in the birth to three population. At-risk populations, as well as those with known etiologies, are considered. Information on assessment, intervention, and service delivery models is addressed. Issues relating to Public Law 99-457 are also examined. LEC.

**SPLH 842. Language Disorders of Children: Preschool. 2 Hours.**
This course examines language disorders of preschool-age children in the late preschool years. The course includes information on incidence, characteristics, assessment, and intervention. Theoretical issues and their implication for language intervention are also examined. LEC.

**SPLH 844. Language Disorders of Children: School Age. 2 Hours.**
This course examines language development during the school years and how problems in this development interact with school performance. Emphasis is placed on the role of the speech-language pathologist in the early identification, assessment, and remediation of language-learning problems. LEC.

**SPLH 846. Language Disorders of Adults. 2 Hours.**
Neurological aspects of language processes, classification of aphasia, and assessment of language deficits are discussed. Management approaches including intervention strategies and rehabilitation are also considered. LEC.

**SPLH 848. Language Disorders of Special Populations. 2 Hours.**
This course focuses on the unique language impairments of individuals with mental retardation, autism, cerebral palsy, hearing impairments, dual sensory impairments, and other communication disorders (e.g., ADD). Language characteristics as well as assessment and intervention strategies are studied. LEC.

**SPLH 850. Language Disorders Secondary to Closed Head Injury and Dementia. 2 Hours.**
Neuroanatomy and physiology relevant to diffuse brain injury are discussed. Characteristics and intervention strategies relating to traumatic brain injury and dementia are studied. LEC.

**SPLH 852. Augmentative and Alternative Communication. 2 Hours.**
This course describes augmentative and alternative communication (AAC) assessment and intervention issues as they apply to children and adults with both congenital and acquired speech and/or language disabilities. Areas of study include AAC systems, assessment strategies and procedures, intervention strategies, and AAC information resources. LEC.

**SPLH 854. Reading Disorders. 2 Hours.**
This course addresses the perceptual, linguistic, and cognitive processes utilized in written communication. Acquired and developmental disorders of written language are examined in relation to issues concerning characteristics, etiology, early identification, assessment, and remediation. LEC.

**SPLH 860. Evaluation of Speech and Language. 2 Hours.**
Provides a general framework for speech and language evaluations. Issues related to initiation and termination of treatment are discussed. Practice is provided in evaluating norm- and criterion-referenced information used in diagnostic, referral, and treatment decisions. LEC.

**SPLH 861. Seminar in Research Methodology in Speech Pathology and Audiology: _____, 3 Hours.**
This seminar is concerned with the design, instrumentation, execution, and reporting of research in audiology and speech pathology. SPLH 760 or its equivalent and some statistics are recommended before entering this seminar. LEC.

**SPLH 862. Clinical Processes. 1 Hour.**
Orients student to clinical procedures, policies, requirements, and expectations of program. Therapy models, planning, and philosophies are discussed along with implementation and evaluation of therapy procedures. Professional issues are also considered. May be repeated for credit. LEC.

**SPLH 864. Advanced Clinical Practice in Speech-Language Pathology. 1-6 Hours.**
Students conduct supervised clinical work in a variety of settings. May be repeated for credit. Prerequisite: Department approval. Group and individual conferences with staff required. FLD.

**SPLH 866. Field Study in Speech-Language Pathology. 5-12 Hours.**
The field study provides work experiences in clinical and/or research activities. The student takes this course near the end of the degree program. Assignments include supervised work in a variety of approved settings. May be repeated for credit. Prerequisite: Advisor's consent. FLD.

**SPLH 868. Professional Seminar. 1 Hour.**
Forum for the presentation and discussion of scientific and professional issues by faculty and advanced graduate students. May be repeated for credit. LEC.

**SPLH 874. Research Practicum. 1-3 Hours.**
Application of research methodology in a laboratory situation. Emphasis is on direct participation in designing and conducting an experimental investigation in speech, language, or hearing. May be repeated for up to a maximum of 3 credits. Prerequisite: SPLH 660 or equivalent research methods course. RSH.

**SPLH 876. Independent Study in Problems of Speech, Language, and Hearing. 1-6 Hours.**
Investigation of special topics by individual master's level students. Paper required. Prerequisite: Consent of instructor. RSH.

**SPLH 880. Seminar in Speech-Language Pathology: _____, 1-3 Hours.**
May be repeated for credit. LEC.
SPLH 898. Investigation and Conference (For Master's Candidates). 1-8 Hours.
(Limited to eight hours credit toward the M.A. degree.) Directed research and experimentation for M.A. students in some phase of speech science. RSH.

SPLH 899. Master's Thesis. 1-6 Hours.
THE.

SPLH 900. Proseminar in Communicative Disorders. 1 Hour.
A weekly forum for students and faculty to discuss professional issues and interdisciplinary research in communicative disorders and related fields. May be repeated for credit. Limited to two hours credit counted toward an MA or AuD degree. Limited to four hours credit counted toward the PhD degree. Graded on satisfactory/unsatisfactory basis. SEM.

SPLH 961. Experimental Phonetics I. 3 Hours.
This course will provide a description of the acoustic properties of the major classes of speech sounds, and will describe how these properties are utilized perceptually. It will also provide an understanding of the acoustic theory of speech production, and will discuss the implications of that theory relative to the modification of impaired speech. LEC.

SPLH 962. Experimental Phonetics II. 3 Hours.
This course will examine the current methodologies utilized in speech physiology research, and will review the findings of recent research into the movement patterns of individual speech articulators. The course will emphasize the interpretation of individual research results in terms of an overall theory of speech motor timing and control. LEC.

SPLH 963. Seminar in Hearing Science. 3 Hours.
Considers more advanced research problems in hearing science including psychoacoustics, speech perception, physiology. Prerequisite: Consent of instructor. LEC.

SPLH 964. Seminar in: ______. 1-3 Hours.
The subject matter of this seminar will be special topics from speech pathology and audiology, including those related to research methodology and research or academic careers. Special prerequisites may be established for a given topic. LEC.

SPLH 966. Seminar in Language Development. 3 Hours.
The course pertains to relevant research regarding infant speech development, vocabulary development, linguistic development, articulation development, and language retardation. (Same as ABSC 920, formerly HDFL 920.) LEC.

SPLH 967. Seminar in Articulation. 3 Hours.
Research and important clinical procedures pertaining to discrimination, structural, and physiological considerations, causal factors in defective articulation, and principal therapeutic approaches are carefully examined. LEC.

SPLH 968. Seminar in Communication Disorders. 3 Hours.
Study in depth of the communication behavior associated with brain injury and/or oral anomalies. LEC.

SPLH 969. Laboratory Instrumentation for Speech and Hearing Research. 3 Hours.
Instruments for speech and hearing research, their design and application. Experimental projects using laboratory equipment. Designing equipment for special purposes. Prerequisite: SPLH 962, FLD.

SPLH 970. Independent Study in Problems of Speech and Hearing. 1-6 Hours.
Investigation of special topics by individual students. Paper required. RSH.

SPLH 972. Extensions of Clinical Management. 3 Hours.
This course is designed to provide didactic and practical experience in methods of obtaining diagnostic information and generalization of speech and language responses away from the clinical setting. Models for effecting behavioral change and data collection will be discussed and utilized. FLD.

SPLH 974. Research Practicum. 1-6 Hours.
Application of research methodology in a laboratory situation. Emphasis is on direct participation in designing and conducting an experimental investigation in speech or hearing. FLD.

SPLH 975. Directed Teaching: Speech Pathology and Audiology. 1-3 Hours.
Provides experiences in classroom and laboratory instruction under supervision of graduate faculty. Variable credit to reflect amount of instructional responsibility assumed. May be repeated up to a maximum of six semester hours. FLD.

SPLH 976. Independent Study in Grant Writing. 1-3 Hours.
Students will identify a funding agency appropriate for their research, learn the application procedures for that agency, and draft a grant application following the identified agency's format. The faculty mentor will arrange for a review of the grant application following the agency's review criteria and format. May be repeated up to a maximum of three credits. IND.

SPLH 982. Issues in Scientific Conduct. 3 Hours.
Lectures and discussion on issues in the conduct of a scientific career, with emphasis on practical topics of special importance in behavioral science. Topics will include the academic and scientific roles of behavioral scientists, establishing a research lab, communicating research findings, tenure processes, gender equity, ethical conduct, and good scientific citizenship. Discussions will highlight important case studies. (Same as PSYC 982.) LEC.

SPLH 998. Investigation and Conference (For Doctoral Candidates). 1-8 Hours.
(Limited to eight hours credit towards the Ph.D. degree.) Directed research and experimentation for Ph.D. students in some phase of speech science. RSH.

SPLH 999. Doctoral Dissertation. 1-12 Hours.
THE.

Bachelor of Arts and Bachelor of General Studies in Speech-Language-Hearing

Why study speech, language, and hearing?

Because communication is central to human behavior, and the treatment of communication disorders requires specialized knowledge and skills.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the
Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

### Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

### First- and Second-Year Preparation

Both the B.A. and the B.G.S. aspirant should fulfill the College general education requirements. Students also should complete SPLH 120, SPLH 261, SPLH 320, SPLH 465, SPLH 466, SPLH 463, and elective courses in human physiology, psychology, and linguistics during their first 2 years. Faculty members can help students select appropriate course work.

### Requirements for the B.A. or B.G.S. Major

#### Speech-Language-Hearing Prerequisite or Co-Requisite Requirements (0)

Majors must complete this requirement, however, these hours do not contribute to the minimum number of hours required for the major.

- Mathematics. Satisfied by one of the following:
  - MATH 101 College Algebra
  - MATH 104 Precalculus Mathematics
  - Or upper-level placement
- Statistics. An introductory statistics course (PSYC 210, MATH 365) is recommended.

#### Speech-Language-Hearing Introductory Knowledge (17)

Majors must complete a course in the following areas (recommended within first and second year):

- The Physics of Speech. Satisfied by:
  - SPLH 120 The Physics of Speech
- Survey Communication Disorders. Satisfied by:
  - SPLH 261 Survey of Communication Disorders
- The Communicating Brain: The Ultimate Personal Computer. Satisfied by:
  - SPLH 320 The Communicating Brain: The Ultimate Personal Computer
- Language Science. Satisfied by:
  - SPLH 466 Language Science
- Fundamentals of Clinical Phonetics. Satisfied by:
  - SPLH 465 Fundamentals of Clinical Phonetics
- Principles of Hearing Science. Satisfied by:
  - SPLH 463 Principles of Hearing Science

#### Speech-Language-Hearing Core Knowledge and Skills (18)

Majors must complete a course in the following areas:

- Language Sample Analysis Laboratory. Satisfied by:
  - SPLH 565 Language Sample Analysis Lab
- Language Development. Satisfied by:
  - SPLH 566 Language Development
- Research Methods in Speech-Language-Hearing. Satisfied by:
  - SPLH 660 Research Methods in Speech-Language-Hearing
- Principles of Speech Science. Satisfied by:
  - SPLH 462 Principles of Speech Science
- Introduction to Audiological Assessment & Rehabilitation. Satisfied by:
  - SPLH 568 Introduction to Audiological Assessment and Rehabilitation
- Introduction to Speech-Language Pathology. Satisfied by:
  - SPLH 571 Introduction to Speech-Language Pathology

#### Further Speech-Language-Hearing Study (0)

After completing the requirements, students with grade-point averages of 3.0 or higher may enroll in any one of the following:

- SPLH 670 Beginning Clinical Practice in Audiology
- SPLH 672 Clinical Practice in Speech-Language Pathology

### Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

#### Major Hours

Satisfied by 35 hours of major courses.

#### Major Hours in Residence

Satisfied by a minimum of 15 hours of KU resident credit in the major.

#### Major Junior/Senior Hours

Satisfied by a minimum of 28 hours from junior/senior courses (300+) in the major.

#### Major Junior/Senior Graduation GPA

Satisfied by a minimum of 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

A sample 4-year plan for the BA degree in Speech-Language-Hearing can be found here: Speech-Language-Hearing (p. 2041), or by using the left-side navigation.

A sample 4-year plan for the BGS degree in Speech-Language-Hearing will be coming soon.

### Departmental Honors

The honors program offers exceptional undergraduates the opportunity to work closely with individual faculty members on scholarly projects over an extended period of time. Students are admitted to the program and matched with faculty through an application process that occurs each semester during course enrollment. Contact the Honors Coordinator for details. The following are required:

1. A grade-point average at graduation of at least 3.25 overall and of 3.5 in the major.
2. Completion of 6 to 8 credit hours in SPLH 498 Departmental Honors Research. Students work under the direction of a faculty member. Students may change areas of interest or faculty supervisors at the beginning of a semester with the consent of the honors coordinator. In the final semester of SPLH 498 enrollment, students also must...
complete a written report or public oral presentation detailing the purpose, methods, results, and impact of the research. Academic credit but no honors designation is given to students who meet the requirements for any semester but do not complete all requirements for departmental honors.

**BA in Speech-Language-Hearing**

Below is a sample 4-year plan for students pursuing the BA in Speech-Language-Hearing. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 (2 crs req) BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 (2 crs req) BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101 (Goal 1.2 Quantitative Reasoning)</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3</td>
<td>SPLH 120 (Major Requirement)</td>
<td>4</td>
</tr>
<tr>
<td>SPLH 261 (Goal 3 Social Science, Major Requirement)</td>
<td>3</td>
<td></td>
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</tr>
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Total Hours: 17

### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3-5</td>
<td>4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
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</tr>
<tr>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td>SPLH 466 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>SPLH 320 (Major Requirement)</td>
<td>3</td>
<td>SPLH 463 (Major requirement)</td>
<td>3</td>
</tr>
<tr>
<td>SPLH 485 (Major Requirement)</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Elective or possible minor course (Total Hours)</td>
<td>1-2</td>
<td>Lab Science (BA Lab Requirement)</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours: 13

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 3 Humanities</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>SPLH 660 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>SPLH 565 (Major Requirement)</td>
<td>3</td>
<td>SPLH 462 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>SPLH 566 (Goal 3 Social Science, Major Requirement)</td>
<td>3</td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
<tr>
<td>Elective or possible minor course (Total Hours)</td>
<td>3</td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 13-16

### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPLH 568 (Major Requirement)</td>
<td>4</td>
<td>SPLH 571</td>
<td>4</td>
</tr>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td>SPLH Recommended Elective, or elective</td>
<td>3</td>
</tr>
<tr>
<td>SPLH Recommended</td>
<td>3</td>
<td>SPLH Recommended Elective, or elective</td>
<td>3</td>
</tr>
<tr>
<td>Elective, or elective</td>
<td>3</td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 16-16

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Visit this website (http://college.ku.edu/undergrad/curriculum/ba_QR) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
3. SPLH 120, SPLH 320, and SPLH 463 are preq-requisites for SPLH 568.
4. SPLH majors are recommended to take SPLH 498/499, AUD 550, or SPLH 670/672. (SPLH 670 and 672 require completion of major requirements and 3.0 GPA or higher.)

Please note:

All students in the College of Liberal Arts and Sciences are required to completed 120 total hours of which 45 hours must be at the Jr/Sr (300+) level, and 100 hours must be from within the College of Liberal Arts and Sciences.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**Minor in Speech-Language-Hearing**

**Why study speech, language, and hearing?**

Because communication is central to human behavior, and the treatment of communication disorders requires specialized knowledge and skills.

**Requirements for the Minor**

**Speech-Language-Hearing Minor Course Requirements (15)**

Students selecting this minor must complete the following:

- Survey Communication Disorders. Satisfied by:
  - SPLH 261 Survey of Communication Disorders 3
Speech-Language-Hearing Required Electives. Satisfied by at least 4 12 SPLH courses (12 hours) from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPLH 120</td>
<td>The Physics of Speech</td>
</tr>
<tr>
<td>SPLH 320</td>
<td>The Communicating Brain: The Ultimate Personal Computer</td>
</tr>
<tr>
<td>SPLH 462</td>
<td>Principles of Speech Science</td>
</tr>
<tr>
<td>SPLH 463</td>
<td>Principles of Hearing Science</td>
</tr>
<tr>
<td>SPLH 464</td>
<td>Undergraduate Seminar in: _____</td>
</tr>
<tr>
<td>SPLH 465</td>
<td>Fundamentals of Clinical Phonetics</td>
</tr>
<tr>
<td>SPLH 466</td>
<td>Language Science</td>
</tr>
<tr>
<td>SPLH 499</td>
<td>Directed Study in Speech-Language-Hearing</td>
</tr>
<tr>
<td>SPLH 565</td>
<td>Language Sample Analysis Lab</td>
</tr>
<tr>
<td>SPLH 566</td>
<td>Language Development</td>
</tr>
<tr>
<td>SPLH 660</td>
<td>Research Methods in Speech-Language-Hearing</td>
</tr>
</tbody>
</table>

Courses with clinical content can be taken as directed study with the permission and support of a faculty mentor.

**Minor Hours & Minor GPA**

While completing all required courses, minors must also meet each of the following hour and grade-point average minimum standards:

**Minor Hours**

Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**

Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the minor.

**Minor Junior/Senior Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Master of Arts in Speech-Language Pathology**

**MA in SLP Overview**

The master’s degree in speech-language pathology strives to produce highly skilled clinicians seeking to enter field and is typically completed in 5 full-time semesters, including a summer semester. Exceptions may occur for the student who has a number of prerequisites to complete or one who extends his/her program for additional thesis or course work. A master’s degree from KU will, in most circumstances, satisfy the American Speech-Language Hearing Association (http://www.asha.org)’s certification standards for continuing on to the clinical fellowship year. A certificate of clinical competence in speech-language pathology is awarded upon completion of a successful clinical fellowship.

**Eligibility and Requirements**

**Undergraduate Degree**

A bachelor’s degree with a cumulative 3.0 GPA on all college courses taken is required. It is expected that students will have obtained a broad general education to serve as a background prior to graduate study. Ideally students will have completed an undergraduate degree in speech pathology or a related field that will include the prerequisite course work listed below. Alternatively, students with an undergraduate degree in an outside field can be provisionally admitted under certain circumstances, as detailed below.

**Prerequisite Course Work**

At least 34 credits in speech pathology study (or equivalent courses), with minimum 3.25 GPA, is required on the following (or similar) courses:

**Clinical Prerequisites**

Students are required to have completed 25 clock hours of directed clinical observation before beginning graduate clinical practicum. If observation hours are needed, those will be provided during the first semester of enrollment in the program.

**Graduate Record Examination**

Official scores from the Graduate Record Examination must be submitted prior to admission. The following are minimal acceptable scores: GRE Verbal: 146 (revised scoring system) or 400 (old scoring system); GRE Quantitative: 144 (revised scoring system) or 400 (old scoring system); GRE Analytical Writing: 3.5. Students should keep in mind multiple factors are considered in admissions decisions in addition to GPA and GRE scores.

**Individual Qualities**

In addition to strong academic training and achievement, the program values diversity, leadership skills, clinical experience, and interpersonal expertise. Speech-language pathologists need to work effectively with clients and other professionals and take a lead role in advocating for their clients and the discipline. The admissions committee evaluates potential in this area through review of each student’s resume, personal statement, and letters of reference.

**Additional Requirements**

**Background Check**

The Joint Commission on Accreditation of Healthcare Organizations requires all incoming students to pay for a background check (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html). This one-time fee must be paid directly to the company performing the background investigation. You will be asked to provide information and make the payment once you have been officially accepted into the program. For more information, please see the School of Health Professions Background Check Instructions. (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html) A drug screening is required of all students participating in clinical settings.

**Technical Standards and Accommodations**

Please read the program technical standards (http://www.kumc.edu/school-of-health-professions/ipcd/speech-language-pathology-%28ma%29/technical-standards.html) carefully. Signed verification will be required of students after they have been accepted. Reasonable accommodations will be made for any accepted student who has a documented disability and can meet program expectations. Applicants with documented disabilities can request reasonable accommodations if needed during the admissions process.

**International Students:**

An applicant is considered an international student if he or she requires a visa, or currently resides in the U.S. with non-immigrant status, or currently resides in the U.S. while applying for permanent residency. Additional requirements and documentation, such as proof of English language proficiency, are required for international students to become eligible for KU programs. Please visit the KU Office of International
Student Services before applying. Read more: information for international students in the School of Health Professions. (http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html)

About Provisional Admission

Individuals who have not completed undergraduate prerequisite coursework in communication sciences and disorders may apply and may be admitted on a provisional basis if he or she has exceptionally strong academic credentials. The criteria for provisional admission include the following

1. General acceptability for admission to the program
2. Minimum overall undergraduate GPA of 3.7
3. Minimum GRE scores: Verbal 153 (revised scoring system) or 500 (old scoring system), Quantitative 148 (revised scoring system) or 590 (old scoring system)

Please note: Applicants meeting the above criteria are not guaranteed acceptance into the program.

For complete admission requirements please visit the IPCD website (http://www.kumc.edu/school-of-health-professions/ipcd/phd-programs.html).

Graduate Admission

Submit your graduate application online (http://graduate.ku.edu/application-process).

Contact ipcd@ku.edu (acarrasco@kumc.edu) with any questions.

Requirements for the M.A. Degree with a Major in Speech-Language Pathology

Prerequisite

• An acceptable bachelor’s degree
• 35 hours of credit in speech-language-hearing, including SPLH 120, SPLH 261, SPLH 320, SPLH 465, SPLH 466, SPLH 565, SPLH 566, SPLH 660, SPLH 462, SPLH 463, SPLH 568, and SPLH 571, or their equivalents
• 20 hours of credit in allied fields, including courses in physiology, linguistics, and psychology

Degree Requirements

The program requires 35 credit hours of experiences for breadth and an additional 12 to 16 hours for depth.

Required Graduate Experiences for Breadth (35)

<table>
<thead>
<tr>
<th>COURSE</th>
<th>Topic</th>
<th>CREDIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPLH 764</td>
<td>Seminar in: _____ (Multicultural Issues)</td>
<td>2</td>
</tr>
<tr>
<td>SPLH 860</td>
<td>Evaluation of Speech and Language</td>
<td>2</td>
</tr>
<tr>
<td>SPLH 862</td>
<td>Clinical Processes 1</td>
<td>3</td>
</tr>
<tr>
<td>SPLH 864</td>
<td>Advanced Clinical Practice in Speech-Language Pathology 2</td>
<td>7</td>
</tr>
<tr>
<td>SPLH 868</td>
<td>Professional Seminar 3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Research experience (thesis or nonthesis option)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SPLH electives (8 seminars, 2 credit hours each)</td>
<td>16</td>
</tr>
</tbody>
</table>

Program without thesis

The non-thesis program has the same degree requirements as those described above for the M.A., except that the thesis is replaced with a minimum of 3 credits of additional research-related coursework, a research practicum experience, or an independent study course. The latter 2 options may include independent research projects or on-going laboratory activities.

Requirements for the M.S. in Education Degree with a Specialization in Deaf Education

For information, see Special Education (p. 450) in the School of Education section of the online catalog.

Doctor of Philosophy in Speech-Language Pathology or Audiology

The Intercampus Program in Communicative Disorders offers Ph.D. programs in both speech-language pathology and in audiology for post-baccalaureate study of normal and disordered aspects of communication. These programs are designed to prepare suitably qualified individuals for leadership positions in research and academia. A major focus of these programs is to advance the science of these fields, and to elucidate the scientific basis for the procedures and processes used in clinical practice.

A combined Au.D./Ph.D. track also is available. This track facilitates the completion of both degrees in a 6-year post-baccalaureate period. Students who wish to earn both Au.D. and Ph.D. degrees should contact their advisor.

Eligibility and Requirements

1. Undergraduate Degree

A bachelor’s degree with a cumulative 3.0 GPA is required. It is expected students will have obtained a broad general education to serve as a background prior to graduate study. Ideally students will have completed an undergraduate degree in speech pathology, audiology, or a related field that will prepare them for advanced study in their chosen area of focus. Students may have completed a
graduate degree in speech pathology, audiology, or related field but this is not required to pursue a Ph.D.

Degrees earned outside the United States must be evaluated for equivalency.

Please note: students may be accepted on a provisional admission basis if some requirements have not yet been met at the time of application.

2. Graduate Record Examination Score
An official score on the Graduate Record Examination (GRE) General Test is required and official results must be sent directly to the KU office. Recommended scores for the sections of the GRE are 300 combined total for Verbal and Quantitative, and 3.5 and above for Analytical Writing. For GRE information, visit www.gre.org (http://www.gre.org).

3. Grade Point Average
To pursue the PhD program, the applicant must meet the general KU requirements for admission as a graduate student. The minimum GPA requirements for admission to the Ph.D. program are as follows:

a. An undergraduate cumulative GPA of 3.0 or better is required for regular admission status.

b. Evidence of successful completion (equivalent grade of B or higher) of undergraduate or graduate course work relevant for advanced study in the student’s chosen area of focus.

4. Prior Research Engagement
The Ph.D. is a research degree where students pursue an individualized plan of study. Therefore, it is recommended students engage in research prior to applying to the Ph.D. program. Prior research engagement helps the prospective student identify the area of focus for PhD study and allows the admissions committee to evaluate potential aptitude for PhD study. A wide array of research engagement will be considered (e.g., employment on research grants, mentored research projects, research related course work).

5. PhD Program Mentor
Because PhD students pursue an individualized plan of study, a faculty mentor is a critical requirement of the program. Without a good match between the applicant’s interest and the faculty, even well-qualified applicants can be denied admission into the program.

Potential applicants should investigate by (1) reviewing faculty bio and laboratory information on this website, and (2) reading recent research articles written by KU faculty. Applicants are strongly encouraged to contact faculty who may be a good match to their interests prior to applying.

Within the guidelines established by Graduate Studies, no credit is actually transferred toward the doctorate; however, relevant prior graduate work will be taken into consideration in setting up individual programs of study leading to the Ph.D.

International Students:
An applicant is considered an international student if he or she requires a visa, or currently resides in the U.S. with non-immigrant status, or currently resides in the U.S. while applying for permanent residency. Additional requirements and documentation, such as proof of English language proficiency (http://iss.ku.edu/send-test-scores), are required for international students to become eligible for KU programs. Please visit the KU Office of International Student Services before applying.

More:
Information for international students in the School of Health Professions. (http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html)

English proficiency verification and KU’s Applied English Center (https://aec.ku.edu/english-proficiency-requirements)

For complete admission requirements please visit the IPCD website (http://www.kumc.edu/school-of-health-professions/ipcd/phd-programs.html).

Graduate Admission
Submit your graduate application online (http://graduate.ku.edu/application-process).

Contact ipcd@ku.edu (acarrasco@kumc.edu) with any questions.

Upon admission, the student and his or her adviser choose a doctoral advisory committee. The committee is responsible for guiding the student’s progress through the selected program of study.

Incoming students who have not completed a substantive graduate research project (e.g., a master’s thesis, Au.D. research project, etc.) must initiate a thesis-equivalent research project, under the direction of a three-member committee, during the first year of enrollment. This project must be completed before the comprehensive oral examination.

Acquiring a doctorate in speech-language pathology or audiology at a minimum requires the following:

- Completion of academic coursework
- Satisfactory completion of a dissertation including written and oral comprehensive examinations
- Satisfactory performance on annual reviews
- Completion of a preliminary research experience
- Satisfactory completion of a dissertation including written and oral prospectus, and written dissertation and oral defense of the dissertation
- Submission of the dissertation to the KU Office of Graduate Studies

Note that the above are the MINIMUM requirements. Each student’s plan of study will vary depending on entry skills (i.e., relevant knowledge and skills acquired through prior training, work or research experience), chosen specialization, and career aspirations.

Students in this program must meet the general requirements of the university including the research skills and responsible scholarship requirement (https://documents.ku.edu/policies/Graduate_Studies/Research_Skills_and_Responsible_Scholarship.htm) and fulfill the basic program requirements to receive the Ph.D. degree.
Different entry paths: Students with undergraduate, but not graduate, degree
Students without a master's degree have several options in pursuing the Ph.D. degree. Some decide to pursue a research emphasis plan of study. Others opt to work on clinical certification in the speech-language pathology or audiology programs while also in the Ph.D. program. This combined degree track involves a higher course load. Details may be found in the Ph.D. student handbook.

Students entering the Ph.D. program with a graduate degree will complete the Ph.D. program requirements outlined in the curriculum on this page, with some adjustments based on relevant skills acquired during prior graduate study.

Department of Women, Gender and Sexuality Studies

Why study women, gender and sexuality studies?
Because much of what people think they know about women, gender, and sex is myth.

Undergraduate Programs

Women, gender, and sexuality studies offers an interdisciplinary program of courses with primary or significant emphasis on women. Courses are offered by the department or are cross-referenced with the department.

Graduate Programs

The Department of Women, Gender and Sexuality Studies supports interdisciplinary research on topics pertaining to women, gender, and sexuality and administers an interdisciplinary program leading to a graduate certificate and a Ph.D. degree. Additional cross-referenced courses are available to complete requirements for the graduate certificate and doctoral degree. Students may pursue the graduate certificate in addition to a KU graduate degree or as a standalone program.

Courses

WGSS 101. Introduction to Women, Gender, and Sexuality Studies. 3 Hours. SC AE41/GE3S / S.
This course examines the extensive role of gender in human life and examines the ways that gender structures power relations among individuals and within economic, political, educational and other social structures, with special attention paid to women's issues and movements in the United States and globally. Through readings drawn from the fields of women's studies, gender studies, and sexuality studies, this course examines and explores alternatives to traditional and/or normative constructions of gender and sexuality, and also considers other markers of difference, such as disability, race, class, and religion, which intersect with gender identity and sexual identity. Similar in content to WGSS 201. Open only to students in the University Honors Program or by consent of the instructor. LEC.

WGSS 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Women, Gender and Sexuality Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

WGSS 196. Study Abroad Topics in: ____. 1-6 Hours. S.
This course is designed for the study of special topics in Women's Studies. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

WGSS 301. Research Methods in Women, Gender and Sexuality Studies. 3 Hours. S.
This course explores feminist epistemologies and research methods. It focuses on research design, feminist critiques of dominant theories of knowledge, and the major methodologies employed in the social sciences and humanities. Prerequisite: WGSS 101. LEC.

WGSS 317. African American Women: Colonial Era to the Present. 3 Hours. H.
This interdisciplinary course covers the history of African American women, beginning in West and Central Africa, extending across the Middle Passage into the Americas, and stretching through enslavement and freedom into the 21st century. The readings cover their experiences through secondary and tertiary source materials, as well as autobiographies and letters, plays and music, and poems, novels, and speeches. (Same as AAAS 317, AMS 317, and HIST 317.) LEC.

WGSS 320. From Goddesses to Witches: Women in Premodern Europe. 3 Hours. HT GE11/GE3H / H.
This course examines the social, cultural, and political contexts of women's spirituality and their relations to gender relations in Europe from about 30,000 B.C.E. to the 16th century Protestant Reformation. Lectures move both chronologically and topically, covering such subjects as goddess-worshipping cultures, women's roles in Christian and Jewish societies, symbols of women, and male attitudes toward women. Students will be able to participate in weekly discussions of primary and secondary source readings about women. (Same as HIST 320.) LEC.

WGSS 321. From Mystics to Feminists: Women's History in Europe 1600 to the Present. 3 Hours. HT AE42/GE11/GE3H / H.
This survey of women's history in Europe looks at changing patterns of women's economic roles and family structures in preindustrial and industrial society, the importance of women in religious life, cultural assumptions underlying gender roles, and the relationship of women to political movements, including the rise of feminism. (Same as HIST 321.) LEC.

WGSS 324. History of Women and the Body. 3 Hours. H.
This course examines different notions about women and their bodies from a historical perspective. It discusses the arguments and circumstances that have shaped women's lives in relation to their bodies, and women's responses to those arguments and circumstances. This course covers a wide geographical and chronological spectrum, from Ancient societies to the present, from Latin America and the Middle East, to North America and Western Europe. (Same as HIST 324.) LEC.
WGSS 327. Perspectives in Lesbian, Gay, Bisexual, and Transgender Studies. 3 Hours. AE41 / S.
An exploration of the experiences and histories of people who identify as lesbian, gay, bisexual, and/or transgender (LGBT); of the influences on these experiences by individuals, the state, and legal and medical discourses; and of the intersections between sexual orientation, sexuality, ethnicity, class, and religion. LEC.

WGSS 330. Women in Contemporary African Literature. 3 Hours. NW AE42/GE3H / H.
A critical study of issues and questions raised about women in contemporary African literature and implications for the larger society through the analysis of theme, language, characterization, roles and functions of women in selected works. (Same as AAAS 340.) LEC.

WGSS 333. The Politics of Physical Appearance. 3 Hours. AE41/GE11 / S.
An interdisciplinary analysis of standards of physical attractiveness and cultural conceptions of women's bodies. Includes analysis of how these standards change across time and cultural groups, and of the impact of these standards on women as individuals and on social and political outcomes. LEC.

WGSS 335. History of Jewish Women. 3 Hours. H.
This course explores the history of Jewish women from antiquity to the twentieth century. It examines the historical constructions of women's gender roles and identities in Jewish law and custom as well as the social and cultural impact of those constructions in the context of the realities of women's lives in both Jewish and non-Jewish society. There are no prerequisites for this course. (Same as HIST 335, JWSH 335.) LEC.

WGSS 345. Popular Culture in Africa: Spiritual Thrills, Romance and Sexualities. 3 Hours. H.
This course examines how the different constituents of popular culture mobilize, construct and structure gender, and spiritual and sexual identities in select contemporary African countries. Discussions also focus on how popular culture mediates the contesting spaces of indigenous local constructs and the push and pull of global forces to create geographic and contemporary specificities. (Same as AAAS 345.) LEC.

WGSS 351. Women and Leadership: The Legislative Process. 3 Hours. S.
Examines current and historical roles and impacts of women involved in legislatures. Explores what difference women make when they are public officials. Students meet with local women legislators, lobbyists and political officials. Students learn how to analyze issues, access power, lobby, and organize at the grassroots. The course is designed to prepare students for an optional legislative internship during the subsequent semester. LEC.

WGSS 363. Gendered Modernity in East Asia. 3 Hours. S.
This course explores rapidly changing gender relationships and the sense of being "modern" in East Asia by examining marriage and family systems, work, education, consumer culture, and geopolitics. The class seeks to understand how uneven state control over men and women shapes desires, practices, and norms and how men and women act upon such forces. Avoiding biological or social determinism, this course treats gender as an analytical category and examines how modern nation-states and global geopolitics are constituted and operated. (Same as ANTH 363 and EALC 363.) LEC.

WGSS 381. Feminism and Philosophy. 3 Hours. AE41/GE3H / H.
An examination of topics of philosophical interest that are important in the feminist movement such as the nature of sexism, the concept of sexual equality, the ethics of sexual behavior, the nature of love, feminist analyses of the value of marriage and family, the ethics of abortion and justifications for preferential treatment of women. (Same as PHIL 381.) LEC.

WGSS 389. The Anthropology of Gender: Female, Male, and Beyond. 3 Hours. NW AE42/GE21/GE3H/GE3S / S.
This course will introduce students to cultural constructions and performances of masculinity, femininity, and alternative genders across time and space. Topics and cases will be drawn from primarily non-Western cultures, ranging from Japanese markets to Pacific Rim gardens, and from Haitian voudou to Maya royal politics. This course uses research by anthropologists, linguists, biological anthropologists, and sociocultural anthropologists. (Same as ANTH 389.) LEC.

WGSS 396. Studies in: ______. 3 Hours. H.
The interdisciplinary study of selected and different aspects of women's studies in different semesters. LEC.

WGSS 397. Study Abroad Topic in: ______. 1-6 Hours.
This course is designed for the study of special topics in Women's Studies at the junior/senior level. Course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. LEC.

WGSS 430. Skin, Sex, and Disease. 3 Hours. H.
This course explores the complex historical relationships between gender, race, health, sickness, and oppression over time. Students examine the impact race and gender have on structuring experiences of health, sickness and health care; and examine the political activism surrounding definitions and concepts of health. LEC.

WGSS 440. Communication and Gender. 3 Hours. AE41 / S.
Focuses attention on the relationship between communication and gender, including both physical and psychological dimensions. Topics include: sex role orientations and stereotypes; perceived and actual differences in verbal and nonverbal communication behaviors; the influence of gender on communication in a variety of contexts. (Same as COMS 440.) Prerequisite: COMS 130, COMS 150, or COMS 230. LEC.

WGSS 468. Psychology of Women. 3 Hours. S.
A survey of the psychological theories about women; similarities and differences in the behavior of women and men; the effects of biological and social factors on the behavior of women and men; and issues of concern to women of different races, sexual orientations, ages, and so forth. (Same as PSYC 468.) Prerequisite: PSYC 104 or WGSS 201. LEC.

WGSS 498. Independent Study. 1-3 Hours. S.
Intensive reading or research under faculty supervision culminating in the writing of a paper or research report. IND.

WGSS 499. Honors in Women, Gender and Sexuality Studies. 3 Hours. S.
An individual research project under the direction of a specialist in the area of the student's interest. May be counted towards the total hours required for the major. Prerequisite: Majors only, with approval of the project adviser and the Women, Gender and Sexuality Studies honors coordinator. IND.

WGSS 510. History of American Women: Colonial Times to 1870. 3 Hours. H.
A survey of women's history in the United States, which will consider women's roles as housewives, mothers, consumers, workers, and citizens in pre-industrial, commercial and early industrial America. (Same as AMS 510 and HIST 530.) LEC.
WGSS 511. History of American Women: 1870 to Present. 3 Hours. AE41 / H.
A survey of women's history in the United States, which includes radical and reform movements, the impact of war and depression, professionalization, immigration, women's work, and the biographies of leading figures in women's history. (Same as AMS 511 and HIST 531.) LEC.

WGSS 512. History of Women and Work in Comparative Perspective. 3 Hours. H.
This course explores the connection between historical changes in the labor process and the occupational choices available to women in different countries. Through discussion and analyses of texts, students will evaluate the construction of a gendered division of work as shaped over time by economic, cultural, and political forces. The chronological and geographical focus may vary depending on the instructor. (Same as AMS 512 and HIST 532.) LEC.

WGSS 513. Modern American Women in Film and Literature. 3 Hours. H.
Exploration of the images both real and ideal found in twentieth century popular culture. By using popular culture as social history, it examines the connections between these images and the life experiences of women in the family, at work, in war, and in economic depression. LEC.

WGSS 515. Gender and Sexuality in Greek Culture. 3 Hours. H.
This course explores various approaches to the study of gender and sexuality in Greek antiquity. Contents will vary, and the course may focus on methodology and case studies, or on particular themes, historical periods, or artistic or literary genres. No knowledge of Greek or Latin is required. (Same as CLSX 515.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, or Women, Gender and "Sexuality Studies; or permission of instructor. LEC.

WGSS 516. Gender and Sexuality in Roman Culture. 3 Hours. H.
This course explores various approaches to the study of gender and sexuality in Roman antiquity. Contents vary, and the course may focus on methodology and case studies, or on particular themes, historical periods, or artistic or literary genres. No knowledge of Greek or Latin is required. (Same as CLSX 516.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, or Women, Gender and "Sexuality Studies; or permission of instructor. LEC.

WGSS 521. Women and Violence. 3 Hours. S.
An examination of research on women and violence, including rape, domestic violence, sexual harassment, stalking, and child sexual abuse. The nature, prevalence, causes, and consequences of violence against women are discussed. (Same as PSYC 521.) Prerequisite: PSYC 104. LEC.

WGSS 530. Sex and Gender in New Media. 3 Hours. S.
This course examines the construction of sexuality and gender in new media platforms. Students will explore how contemporary media platforms are used to rely on dominant representations, and produce new or alternative expressions of identity, culture or political engagement. LEC.

WGSS 549. History of Feminist Theory. 3 Hours. H.
This discussion course will cover the development of feminist theories from the late Middle Ages to the 1970s. Reading will include Pisan, Wollstonecraft, Mill, Freud, Woolf, Beauvoir, Friedan, Daly, Kristeva, and others. (Same as HIST 649.) LEC.

WGSS 560. Race, Gender, and Post-Colonial Discourses. 3 Hours. H.
An examination of the ways in which the concept of race, gender, and post-colonialism frame African literatures from the Caribbean, North America, and the continent itself. The course will focus on these discourses grounding them in critical frameworks within which they can be contextually analyzed and evaluated, at the same time examining their impact in literary praxis and theory. (Same as AAAS 560.) LEC.

WGSS 562. Women and Politics. 3 Hours. S.
This course exposes students to contemporary research on women and politics by surveying the sub-fields of political science. Topics include women's representation in the U.S., women and U.S. public policy, gender and legal theory, international women's movements, women and revolution, and women as political elites. We will examine the ways in which feminist theory and women's activism have challenged the narrow focus of the discipline as well as redefined women's place in society. (Same as POLS 562.) Prerequisite: A 100-level POLS course or WGSS 201 or permission of instructor. LEC.

WGSS 563. Gender, Sexuality and the Law. 3 Hours. AE41/GE11 / H.
This course provides a broad introduction to Western legal systems (especially the American legal system) and then focuses on how sex, gender, and sexuality operate in and are understood by those systems and how the law is a site of social and political struggle. Topics may include intimate relations, First Amendment law, sexual harassment and employment discrimination; reproduction policies and governance; rape and sexual assault; gender identity discrimination; and the legal understandings and constructions of equal protection and due process. No prior knowledge of legal concepts is necessary. LEC.

WGSS 565. Gender, Culture, and Migration. 3 Hours. H.
This course brings a human face to the 21st century manifestation of globalization by focusing on the issues of culture, gender and migration. How do these three aspects create the "global village" amongst both the host and donor peoples? When people move from one place to another, what do they leave behind, what do they take with them? What is gained, or lost by the host community? What is the impact of migration on a specific group's and individual's sense of identity? How has migration affected the people's construction, understanding, and practice of gender? Given their primary roles in the home and within the culture, these questions and more are posed with particular attention to women. Migration theories, interviews and personal testimonies as well as literary and dramatic works are critical to our analyses of the issues raised and enable us to hold conversations with, and listen to the stories of the ordinary people who make globalization happen and sustain it. (Same as AAAS 565 and AMS 565.) LEC.

WGSS 570. Men and Masculinities. 3 Hours. H.
An intensive examination of the history and theory of masculinities in the Western world. Students become acquainted with some of the key theories of men and masculinities, and develop research projects on a topic negotiated with the instructor. (Same as HIST 626, HWC 570.) Prerequisite: An upper-division course in HIST, HWC, or WGSS; or permission of instructor. LEC.

WGSS 575. Body, Self and Society. 3 Hours. H.
An intensive examination of the role of the human body in the creation of personal and social identities in the Western world. Students become acquainted with contemporary theories of embodiment and the senses as they are applied to a variety of historical themes, and develop research projects on a topic negotiated with the instructor. (Same as HIST 625, HWC 575.) Prerequisite: An upper-division course in HIST, HWC, or WGSS; or permission of instructor. LEC.

WGSS 580. Feminism and Anthropology. 3 Hours. S.
This seminar will introduce students to feminism in anthropology, including feminist theories, methodologies, ethnographic styles, and the history of women in the discipline since the late 1800s. Emphasis is on the social contexts for feminist theory-building since the 1960s and changing ideas about gender and power. (Same as ANTH 580.) Prerequisite: One of the
WGSS 583. Love, Sex, and Globalization. 3 Hours. S.
Escalating transnational flows of information, commodities, and people have created innumerable kinds of "intimate" contacts on a global scale, such as mail order brides, child adoption, sex tourism, commodified romance, and emotional labor. Exploring the ways that cultural artifacts of intimacy are rendered, fetishized, and reified in a free market economy, this course examines how discourses on love and sex encounter, confront, and negotiate the logics of the capitalist market, the discrepant narratives of (colonial) modernity, and the ethics of pleasure. In so doing, this course navigates the treacherous interplay among emotion-specifically love, sex, and money, seeking the potential and limits of cultural politics of emotions. (Same as ANTH 583.) LEC.

WGSS 600. Contemporary Feminist Political Theory. 3 Hours. S.
A detailed introduction to feminist thought post-1960. Examines feminism in relation to the categories of political theory: liberal feminism, socialist feminism, radical feminism, and postmodern feminism. Within these categories and separately, we will also consider feminism as it is influenced by women traditionally excluded from mainstream feminist thought, namely U.S. women of color and women of post-colonial societies. (Same as POLS 600.) Prerequisite: WGSS 201 or a 100-level POLS course or permission of instructor. LEC.

WGSS 662. Gender and Politics in Africa. 3 Hours. S.
This course is designed to explore the field of gender and African politics. We begin by paying particular attention to African women's political roles during the pre-colonial and colonial society. Next, we examine the impetus, methods, and path of liberation struggles and how gender roles were shaped, shifted, and changed during these struggles. The majority of the class focuses on current issues in African politics, including gender ideologies such as gender, racial, sexual orientation, and partisan, and the enduring importance of identity for understanding politics as well as the policy process. The approach is multidisciplinary but political science perspectives are relied on more heavily. (Same as POLS 662.) LEC.

WGSS 651. Women and Politics in Latin America. 3 Hours. S.
This course examines the ways in which Latin American women have engaged in politics in the past two decades. Cases will draw from a variety of countries in Latin America. Students are expected to develop insights, through comparative analysis, into why women "do politics" in certain ways, the role of the State in women's politics, the (dis)advantages of various political strategies, and the ways in which political, economic, and social changes over time have affected women's political opportunities and interests. (Same as POLS 651.) Prerequisite: Six hours of course work in Political Science and/or Women's Studies and/or Latin American Studies. LEC.

WGSS 652. Jazz and American Culture. 3 Hours. H.
This course considers cultural and social histories of jazz, from the 1920s through the present day, as sites for exploring ideological struggles over such fields as race, class, gender, sexuality, democracy, capitalism, freedom, community, Americaness, and globalization in the U.S. The course will explore such questions as the following: What music was called jazz at what times and places? What did it mean to whom? Who played it? Who wrote about it? Who listened to it? Who danced to it? Who policed it? Who produced it? Who used it to rebel? Who used it to survive? What did all of these practices mean to participants? The course will examine struggles over social meanings in the U.S. through a study of jazz performance, labor, representation, marketing, consumption, censorship, and historiography. Prerequisite: A course in American studies, American history, or consent of instructor. (Same as AMS 650.) LEC.

WGSS 653. Gender, War, and Peace. 3 Hours. S.
This course explores ways in which militarization and warfare are gendered processes. We ask, what does war tell us about gender, and what does gender tell us about war? Though the majority of fighters are men, women are essential to war efforts. They also represent a high proportion of the casualties of war. Yet women are rarely examined in relation to war; thus we work to uncover women's experiences of war. We also look to women's contributions to the peace movement in terms of both theory and practice, asking: Is peace a feminist issue? Should feminists support women's access to combat positions or oppose the military? What if women ruled the world—would that end wars? Does militarized masculinity harm men more than benefit them? How do states mobilize citizens to war and how is the process gendered? (Same as POLS 653.) Prerequisite: One of the following: POLS 150, POLS 151, POLS 170, POLS 171, WGSS 201, WGSS 202. LEC.

WGSS 660. Human Reproduction: Culture, Power, and Politics. 3 Hours. S.
This seminar analyzes and critiques the socially constructed nature of reproductive practices and their articulation with relations of power. Topics range from contraception to menopause, infertility to population. Cases are drawn from a wide variety of cultural contexts. This course is the second part of a two-semester sequence (beginning with ANTH 650) that examines in detail biological and cultural determinants of human reproduction. (Same as ANTH 660.) Prerequisite: ANTH 650, or 6 hours in Women's Studies, or permission of instructor. LEC.

WGSS 662. Gender and Politics in Africa. 3 Hours. S.
This course is designed to explore the field of gender and African politics. We begin by paying particular attention to African women's political roles during the pre-colonial and colonial society. Next, we examine the impetus, methods, and path of liberation struggles and how gender roles were shaped, shifted, and changed during these struggles. The majority of the class focuses on current issues in African politics, including gender

following: ANTH 389, ANTH 460, WGSS 201; or permission of instructor. LEC.

WGSS 650. Service Learning in Women's Studies. 3 Hours. S.
This course, to be taken in the senior year, is designed to give students the opportunity to apply women's studies knowledge and ideas gained through course work to real-life situations in various agencies and women's centers. Open to Women's Studies majors and others with significant Women's Studies backgrounds. Permission of instructor is required. FLD.
and development; HIV/AIDS and women’s health; gender and militarism. We also explore women’s roles in political institutions; civil society organizations; trade and labor unions; and transnational movements. We also examine contemporary constructions of masculinity and femininity in African states and explore how these constructions affect social policy and national political agendas. (Same as AAAS 662.) LEC.

WGSS 665. Women, Health, and Healing in Latin America. 3 Hours. S.
This seminar uses a life-cycle approach to examine women’s health (physical, mental, and spiritual) and their roles as healers. Special consideration is given to the effects of development programs on well-being, access to health care, and hanging roles for women as healers. Cases will be drawn from a variety of Latin American contexts. (Same as ANTH 665 and LAA 665.) Prerequisite: 6 hours coursework in Anthropology and/or Women’s Studies and/or Latin American Studies. LEC.

WGSS 689. Conceptual Issues in Human Sexuality. 3 Hours. S.
An examination of the social construction of sexuality and research methods and issues relevant to sexuality. These concepts are applied to various topics, such as defining and conceptualizing sex and gender, sexual dysfunction, sexual orientation, the social control of sexuality, sexual coercion and abuse, and abstinence-only sex education. The course does not cover anatomical or physiological aspects of sexuality. (Same as PSYC 689.) Prerequisite: PSYC 104 or WGSS 201. LEC.

WGSS 696. Studies in: _______. 3 Hours. S.
Interdisciplinary study of different aspects of women’s studies in different semesters. LEC.

WGSS 701. Seminar in: _______.3 Hours.
A research seminar in women’s studies. Instructor and topic will vary. LEC.

WGSS 789. Anthropology of Gender: Advanced Seminar in the Four Fields. 3 Hours.
This seminar is intended primarily for graduate students in anthropology or other disciplines who share an interest in any of the subdisciplines of anthropology (archaeology, linguistics, biological anthropology, and sociocultural anthropology) and/or anthropological theories and methods. Undergraduates pursuing Honors or other major research projects are also encouraged to participate. Students will receive training in the contemporary theories, research, and pedagogies informing the anthropology of gender. Class participants will explore how these materials intersect with their current thesis or research projects and develop syllabi specific to their subdiscipline. (Same as ANTH 789). Prerequisite: Permission of instructor. LEC.

WGSS 797. Directed Readings. 1-3 Hours.
Directed reading in an area of women’s studies in which there is no appropriate course in the offerings of the Women’s Studies Program, but in which there is a member of the cooperating graduate faculty competent and willing to direct the program of study. RSH.

WGSS 800. History of Women, Gender and Sexuality Studies. 3 Hours.
An introduction to the field of women, gender, and sexuality studies, paying particular attention to its development, its reception and influence on academic disciplines, and its institutionalization. Prerequisite: Graduate standing and consent of the instructor. SEM.

WGSS 801. Feminist Theory. 3 Hours.
A survey of contemporary feminist theories produced within and across disciplines (including but not limited to, eco-feminism, and liberal, cultural, materialist, psychoanalytic, radical, and black feminist thought). Prerequisite: Graduate standing and consent of the instructor. LEC.

WGSS 802. Feminist Methodologies. 3 Hours.
An introduction to the methods used in feminist research in the humanities, social sciences, and natural sciences (e.g., quantitative and qualitative research methods, archival research, and oral histories). We will consider examples of applications of each method, the strengths and limitations of each method, and how each method relates to feminist theories and principles. Prerequisite: Graduate standing and consent of the instructor. SEM.

WGSS 803. Topics in Feminist Pedagogy: _______. 0.5 Hours.
The goal of the course is to teach students to teach. By reading core texts of feminist pedagogy, understanding critical theories, and attending seminars at the Center for Teaching Excellence selected by instructor and student, students will learn how to present knowledge and stimulate learning in the classroom, as well as such practical skills as leading discussion sections, preparing and presenting class sessions, developing syllabi, devising fair grading and helpful advising, and solving pedagogical problems like maintaining civility in the classroom and coping with academic misconduct. Must be repeated twice for a total of 1 credit hour while actively teaching. Prerequisite: Must be Women, Gender, and Sexuality Studies graduate students. SEM.

WGSS 804. Topics in Professional Development: _______. 1 Hour.
The goal of this course is to train students in the skills essential to becoming effective scholars and educators, and successful members of the profession. The material to be covered by these three iterations includes 1) the ethics and practice of feminist research (e.g., protection of human subjects, conflicts of interest, confidentiality, legal strictures); 2) the practical aspects of producing knowledge (e.g., writing research papers, proper citation methods, conference presenting, responding to peer reviews); and 3) acquiring and securing a place in the work force (e.g., CV preparation, job interviews, grant writing, getting promotion [and, in the academy, tenure]). Must be repeated three times for a total of 3 credit hours. Prerequisite: Must be Women, Gender, and Sexuality Studies graduate students. SEM.

WGSS 810. Comparative Sexualities. 3 Hours.
Employing an interdisciplinary and comparative perspective, this course introduces the study of human sexuality in various disciplines. Students will also gain an understanding of the historical development and cross-cultural analysis of sexuality research, including the methodological, theoretical, and ethical issues involved in investigating sexual behavior and meanings. Prerequisite: Graduate standing and consent of the instructor. SEM.

WGSS 821. Woman and Violence. 3 Hours.
An examination of research on women and violence, including rape, domestic violence, sexual harassment, stalking, and child sexual abuse. Research on the nature, prevalence, causes, and consequences of violence against women is discussed. (Same as PSYC 821.) Prerequisite: Six hours in WGSS and/or PSYC, or permission of instructor. LEC.

WGSS 835. Colloquium in the History of Gender. 3 Hours.
This colloquium will cover theoretical and topical readings on the history of manhood, womanhood, and gender systems. (Same as AMS 835 and HIST 895.) LEC.

WGSS 836. Colloquium in United States Women’s History. 3 Hours.
This colloquium will cover theoretical and topical readings on the history of women in the United States from the pre-contact period to the present. It is designed to familiarize students with the most important and current historiography in the field. (Same as AMS 836 and HIST 896.) LEC.
WGSS 837. Comparative Colloquium in Women's History. 3 Hours.  
This colloquium will approach the history of women from a comparative  
perspective through theoretical and topical readings on women in at least  
two different cultures. (Same as AMS 837 and HIST 897.) LEC.

WGSS 873. Seminar in United States Women's History. 3 Hours.  
This research seminar will focus on the history of women in the United  
States from the pre-contact period to the present. Students will research  
and write a paper using primary sources, and present those papers to the  
seminar for evaluation. (Same as HIST 973 and AMS 973.) LEC.

WGSS 880. Advanced Feminist Anthropology: _____ 3-6 Hours.  
Intensive consideration of special problems in feminist anthropology.  
Topics for the semester to be announced. May be repeated for a total  
of six hours credit. (Same as ANTH 880.) Prerequisite: Permission of  
instructor. LEC.

WGSS 889. Conceptual Issues in Human Sexuality. 3 Hours.  
An examination of the social construction of sexuality and research  
methods and issues relevant to sexuality. These concepts are applied to  
various topics, such as defining and conceptualizing sex and gender,  
sexual dysfunction, sexual orientation, the social control of sexuality,  
sexual coercion and abuse, and abstinence-only sex education. The  
course does not cover anatomical or physiological aspects of sexuality.  
(Same as PSYC 889.) Prerequisite: Six hours in WGSS and/or PSYC, or  
permission of instructor. LEC.

WGSS 898. Research Colloquium. 3 Hours.  
This course is the "capstone" to the Women's Studies Graduate  
Certificate program. Members of the seminar will produce a major paper  
and will share their research. During the first part of the term a small  
number of visitors (professors at KU and/or visiting speakers from other  
universities) will be invited to assign readings and subsequently present  
their work on women and gender. Students will be expected to attend  
the Gender Seminar of the Hall Center for the Humanities. Prerequisite:  
WGSS 801 and at least 3 hours of other graduate work in the Women's  
Studies graduate certificate program, or by special permission. LEC.

WGSS 999. Doctoral Dissertation. 1-12 Hours.  
Original research that is to be incorporated into a PhD dissertation. THE.

Bachelor of Arts and Bachelor of General Studies in Human Sexuality

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Undergraduate Admission

Admission to KU

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transcripts to the Office of Admissions. Unless they are college transfer  
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www.iss.ku.edu) for information about international admissions.

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credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a  
major field. Some CLAS departments have admission requirements.  
See individual department/program sections for departmental admission  
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Survey - Choose one of the following: (3)  

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>HSES 489</td>
<td>Health and Human Sexuality</td>
</tr>
<tr>
<td>or PSYC 502</td>
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</tr>
<tr>
<td>or SW 303</td>
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Core Social Science - Choose one of the following: (3)  

<table>
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<td>Anthropology of Sex</td>
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<td>POLS 640</td>
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<td>Gender and Sexuality, Ancient and Modern</td>
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<td>HIST 608</td>
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<td>PHIL 504</td>
<td>Philosophy of Sex and Love</td>
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<td>REL 374</td>
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Two Additional Core Courses - chosen from the Social Science and Humanities Core courses (6)

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<tr>
<td>WGSS 601</td>
<td>Seminar in Women, Gender and Sexuality Studies</td>
<td>3</td>
</tr>
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</table>

Methods (3)

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</thead>
<tbody>
<tr>
<td>WGSS 301</td>
<td>Research Methods in Women, Gender and Sexuality Studies</td>
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Secondary Courses - choose two from the list below (or survey or core courses) (6)

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<tr>
<td>AAAS 554</td>
<td>Contemporary Health Issues in Africa</td>
<td></td>
</tr>
<tr>
<td>ABSC 268</td>
<td>Introduction to Marriage and Family Relations</td>
<td></td>
</tr>
<tr>
<td>ABSC/PSYC 626</td>
<td>Psychology of Adolescence</td>
<td></td>
</tr>
<tr>
<td>AMS/SOC 110</td>
<td>American Identities</td>
<td></td>
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<tr>
<td>or AMS 112</td>
<td>American Identities, Honors</td>
<td></td>
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<tr>
<td>or SOC 112</td>
<td>American Identities, Honors</td>
<td></td>
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<tr>
<td>AMS 344</td>
<td>Case Study in American Studies: _____</td>
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<tr>
<td>WGSS 396</td>
<td>Studies in: _____ (African American Women: Colonial to Present)</td>
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</tr>
<tr>
<td>ANTH 389</td>
<td>The Anthropology of Gender: Female, Male, and Beyond</td>
<td></td>
</tr>
<tr>
<td>WGSS 389</td>
<td>The Anthropology of Gender: Female, Male, and Beyond</td>
<td></td>
</tr>
<tr>
<td>COMS 344</td>
<td>Relational Communication</td>
<td></td>
</tr>
<tr>
<td>COMS 440</td>
<td>Communication and Gender</td>
<td></td>
</tr>
<tr>
<td>REL 475</td>
<td>Loving Relationships</td>
<td></td>
</tr>
<tr>
<td>COMS 552</td>
<td>The Rhetoric of Women’s Rights</td>
<td></td>
</tr>
<tr>
<td>HIST/WGSS 324</td>
<td>History of Women and the Body</td>
<td></td>
</tr>
<tr>
<td>HWC/WGSS 570</td>
<td>Men and Masculinities</td>
<td></td>
</tr>
<tr>
<td>HWC/WGSS 575</td>
<td>The Body, Self and Society</td>
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</tr>
<tr>
<td>PHIL 674</td>
<td>Philosophy of Law</td>
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<tr>
<td>POLS/WGSS 600</td>
<td>Contemporary Feminist Political Theory</td>
<td></td>
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<tr>
<td>POLS/WGSS 630</td>
<td>Politics of Identity</td>
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<tr>
<td>PSYC 465</td>
<td>Stereotyping and Prejudice Across Cultures</td>
<td></td>
</tr>
<tr>
<td>PSYC/WGSS 468</td>
<td>Psychology of Women</td>
<td></td>
</tr>
<tr>
<td>PSYC 642</td>
<td>The Psychology of Families</td>
<td></td>
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<tr>
<td>SOC 220</td>
<td>Sociology of Families</td>
<td></td>
</tr>
<tr>
<td>SOC 617</td>
<td>Women and Health Care</td>
<td></td>
</tr>
<tr>
<td>SOC 628</td>
<td>Families and Social Inequalities</td>
<td></td>
</tr>
<tr>
<td>WGSS 333</td>
<td>The Politics of Physical Appearance</td>
<td></td>
</tr>
<tr>
<td>WGSS 396</td>
<td>Studies in: _____ (Public Health &amp; the Human Body)</td>
<td></td>
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</tbody>
</table>

Electives - one elective course, or additional survey, core, or secondary course (3)

Special Topics Courses / Studies in ____ / Seminar in ____

Independent Study/Directed Study (e.g., WGSS 498) Internship Courses (e.g., PSYC 483: Undergraduate Internship) Honors Thesis/Senior Essay/Honors Essay Service Learning Courses (e.g., WGSS 650: Service Learning)

Human Sexuality Major Hours & Major GPA

While completing all required courses (above), majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 30 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior (300+) Hours**

Satisfied by a minimum of 18 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior (300+) Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

A sample 4-year plan for the BA degree in Women’s Studies can be found here: Human Sexuality (p. 2052), or by using the left-side navigation.

A sample 4-year plan for the BGS degree in Human Sexuality will be coming soon.

**Departmental Honors in the Women’s Studies Major**

**Summary**

- 3.25 GPA KU overall & 3.5 GPA in the WS major
- A senior honors thesis related to WGSS written over two semesters (two three-credit courses)
- Double majors: earn Honors in both majors with one thesis that is relevant to both programs.

**GPA Requirements**

Students need a 3.25 GPA overall and a 3.5 GPA in their Women’s Studies major.

**Honors Thesis**

Student write an honors thesis that is pertinent to Women, Gender and Sexuality Studies. An honors thesis is a piece of original research or other project supervised by a faculty member of any department. In most cases, the result will be a written document of some length, but this could vary depending on the topic and what the student and thesis advisor agree on. A single thesis can be submitted to WGSS and to another department for Honors in both programs, if both programs agree.

The senior honors thesis or honors project must be approved by a three-member thesis committee (the thesis advisor and two other faculty members, at least one of whom must be either in WGSS or on the WGSS Advisory Board).
Students take 6 credit hours of honors thesis work (3 hours per semester for 2 semesters, earning a A or B in the first semester and a A the second. For these 6 hours, students can enroll in:

- WGSS 499—Honors in WGSS
- WGSS 498—Independent Study in WGSS
- two Honors Research courses or two Independent Studies in any department

The last option would be especially relevant if the student plans to submit one honors thesis to both WGSS and another department in order to receive honors in both programs, or if the student’s research advisor is not a member of the WGSS core faculty.

**Typical Timeline**

**Junior Year** (or very early in the first semester of the student’s last year):
Select a topic for a thesis; talk to professors about ideas; find a professor willing to supervise the thesis. **Inform the WGSS Honors Coordinator!**

First Semester of the Last Year: Enroll in 3 credit hours of WGSS 498 or 499 or in an Independent Study of another department. Begin researching the thesis topic. The student and thesis advisor should form a three-person faculty committee (the thesis advisor and two other faculty members, at least one of whom must be either in WGSS or on the WGSS Advisory Board). **Submit an Honors Intent Form by 1 March to College Student Academic Services, 109 Strong.**

Second Semester of the Last Year: Enroll in 3 credit hours of WGSS 498 or 499 or in an Independent Study of another department. Finish the thesis. Have the thesis committee read the thesis and vote to award Honors (or not). If the thesis is passed, the thesis advisor needs to sign the **Honors Certification Form**, which can be obtained by the student in the College Student Academic Services office, 109 Strong; after the advisor signs this form, it is then submitted back to the College Student Academic Services, 109 Strong, at least a week before the end of the graduation term. The thesis advisor should also notify the Honors Coordinator of the result.

Double Majors: Students who are satisfying double majors and pursuing Honors in both majors may use one honors thesis for both majors if they get approval from both departments. The thesis must be related to both majors, and the thesis committee must include faculty members from both departments. Students must fulfill both departments’ requirements for honors.

**BA in Human Sexuality**

Below is a sample 4-year plan for students pursuing the BA in Human Sexuality. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 (2 crs req), BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 (2 crs req), BA Writing I)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MATH 101 (Goal 1.2, Quantitative Reasoning)</td>
<td>3</td>
<td>Quantitative Reasoning (Goal 1.2, BA Quantitative Reasoning)</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

| 1st Semester Language (BA Second Language) | 5 |
| Goal 1.1 Critical Thinking | 3 |
| WGSS 101 (Goal 4.1 or Goal 3S (recommended)) | 3 |
| WS 102, or SW 303 (Major Requirement) | 3 |
| Lab Science (BA Second Language) | 3 |
| Goal 3 Humanities | 3 |
| HSES 489, PSYC 502, or SW 303 (Major Requirement) | 3 |
| Additional Major Elective | 3 |
| Elective or possible minor course (Total Hours) | 3 |

<table>
<thead>
<tr>
<th>Sophomore</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
<td>3-5</td>
<td></td>
</tr>
<tr>
<td>Goal 3 Humanities (overlap with major if possible)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HSES 489, PSYC 502, or SW 303 (Major Requirement)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional Major Elective (Major Requirement)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective or possible minor course (Total Hours)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Junior</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core Social Science Elective (Major Requirement)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core Humanities Elective (Major Requirement)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Senior</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGSS 301 (Major Requirement)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Course Elective (Major Requirement)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Total Hours | 120-123 |
The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

Visit this website (http://college.ku.edu/undergrad/curriculum/ ba_QR) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

Choose one elective course from the list of approved survey, core, or secondary courses required for the major.

Choose one Core Course from each of the lists of approved Core Social Science and Core Humanities course lists.

Choose two additional Core Courses from either the Social Science or Humanities Core course list.

Choose two courses from the approved Secondary course list.

Please note:

All students in the College of Liberal Arts and Sciences are required to completed 120 total hours of which 45 hours must be at the Jr/Sr (300+) level, and 100 hours must be from within the College of Liberal Arts and Sciences.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

Bachelor of Arts and Bachelor of General Studies in Women's Studies

Why study women, gender and sexuality studies?

Because much of what people think they know about women, gender, and sex is myth.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

First- and Second-Year Preparation

It is recommended that students complete WGSS 101, the introductory course, and consult the undergraduate advisor.

Requirements for the B.A. or B.G.S. Major

Women's Studies Major Course Requirements

Women's Studies Core Knowledge and Skills (18)

Majors must complete a course in each of the following areas:

Introduction to Women, Gender, and Sexuality Studies. Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGSS 101</td>
<td>Introduction to Women, Gender, and Sexuality Studies</td>
</tr>
<tr>
<td>or WGSS 102</td>
<td>Introduction to Women, Gender, and Sexuality Studies, Honors</td>
</tr>
</tbody>
</table>

Methods

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGSS 301</td>
<td>Research Methods in Women, Gender and Sexuality Studies</td>
</tr>
</tbody>
</table>

Social Science Core. Satisfied by 1 course (3 hours) chosen from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGSS/ANTH 389</td>
<td>The Anthropology of Gender: Female, Male, and Beyond</td>
</tr>
<tr>
<td>WGSS/PSYC 468</td>
<td>Psychology of Women</td>
</tr>
<tr>
<td>WGSS 521</td>
<td>Women and Violence</td>
</tr>
<tr>
<td>WGSS/POLS 562</td>
<td>Women and Politics</td>
</tr>
<tr>
<td>WGSS/POLS 640</td>
<td>Politics of Reproductive Policy</td>
</tr>
<tr>
<td>WGSS/POLS 653</td>
<td>Gender, War, and Peace (S (Int))</td>
</tr>
<tr>
<td>WGSS/ANTH 660</td>
<td>Human Reproduction: Culture, Power, and Politics</td>
</tr>
<tr>
<td>WGSS/PSYC 689</td>
<td>Conceptual Issues in Human Sexuality</td>
</tr>
</tbody>
</table>

Humanities Core. Core satisfied by 1 course (3 hours) chosen from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGSS/AAAS/AMS/HIST 317</td>
<td>African American Women: Colonial Era to the Present</td>
</tr>
<tr>
<td>WGSS/HIST 320</td>
<td>From Goddesses to Witches: Women in Premodern Europe</td>
</tr>
<tr>
<td>WGSS/HIST 321</td>
<td>From Mystics to Feminists: Women's History in Europe 1600 to the Present</td>
</tr>
<tr>
<td>WGSS 327</td>
<td>Perspectives in Lesbian, Gay, Bisexual, and Transgender Studies</td>
</tr>
<tr>
<td>WGSS 330/AAAS 340</td>
<td>Women in Contemporary African Literature</td>
</tr>
<tr>
<td>WGSS 430</td>
<td>Skin, Sex, and Disease</td>
</tr>
</tbody>
</table>
Bachelor of Arts and Bachelor of General Studies in Women’s Studies

**WGSS/AMS 510/HIST 530** History of American Women: Colonial Times to 1870

**WGSS/AMS 511/HIST 531** History of American Women: 1870 to Present

**WGSS/PHIL 381** Feminism and Philosophy

**WGSS 549/HIST 649** History of Feminist Theory

**WGSS/AAAS 560** Race, Gender, and Post-Colonial Discourses

**WGSS/AMS 565** Gender, Culture, and Migration

**WGSS/HWC 570** Men and Masculinities

**WGSS/HWC 575** Body, Self and Society

**WGSS/HIST 646** Witches in European History and Historiography

**AAAS 434** African Women Writers

**AMS 515** American Women and World War II

**EALC 575** Love, Sexuality and Gender in Japanese Literature

**ENGL 572** Women and Literature: ______

**FMS 410** Race, Class, and Gender in Visual Culture

**FMS 620** International Women Filmmakers

**HIST 533** The History of Women and the Family in Europe, from 1500 to the Present

**REL 477** Gender and Religion

**REL 677** Women in Christianity

**Social Sciences Elective. Satisfied by any core social science course not already satisfying core requirements above or any approved social science elective.**

**WGSS/ANTH 389** The Anthropology of Gender: Female, Male, and Beyond

**WGSS/PSYC 468** Psychology of Women

**WGSS/PSYC 521** Women and Violence

**WGSS/POLS 562** Women and Politics

**WGSS/POLS 640** Politics of Reproductive Policy

**WGSS/POLS 653** Gender, War, and Peace

**WGSS/POLS 660** Human Reproduction: Culture, Power, and Politics

**WGSS/ANTH 662** Feminism and Anthropology (if not already used)

**WGSS/POLS 689** Conceptual Issues in Human Sexuality

**WGSS 333** The Politics of Physical Appearance

**WGSS 351** Women and Leadership: The Legislative Process

**WGSS/ANTH/EALC 363** Gendered Modernity in East Asia

**WGSS/ANTH 580** Feminism and Anthropology (if not already used)

**WGSS/ANTH 583** Love, Sex, and Globalization

**WGSS/POLS 600** Contemporary Feminist Political Theory (if not already used)

**WGSS/POLS 651** Women and Politics in Latin America

**WGSS/AAAS 662** Gender and Politics in Africa

**Women’s Studies Required Electives (9)**

**Humanities Elective. Satisfied by any core humanities course not already satisfying core requirement above or any of the approved humanities electives (see catalog).**

**WGSS/AAAS/AMS/HIST 317 Present**

**WGSS/ANTH 389** The Anthropology of Gender: Female, Male, and Beyond

**WGSS/PSYC 468** Psychology of Women

**WGSS/PSYC 521** Women and Violence

**WGSS/POLS 562** Women and Politics

**WGSS/POLS 640** Politics of Reproductive Policy

**WGSS/POLS 653** Gender, War, and Peace

**WGSS/ANTH 660** Human Reproduction: Culture, Power, and Politics

**WGSS/PSYC 689** Conceptual Issues in Human Sexuality

**WGSS 333** The Politics of Physical Appearance

**WGSS 351** Women and Leadership: The Legislative Process

**WGSS/ANTH/EALC 363** Gendered Modernity in East Asia

**WGSS/ANTH 580** Feminism and Anthropology (if not already used)

**WGSS/ANTH 583** Love, Sex, and Globalization

**WGSS/POLS 600** Contemporary Feminist Political Theory (if not already used)

**WGSS/POLS 651** Women and Politics in Latin America

**WGSS/AAAS 662** Gender and Politics in Africa
A sample 4-year plan for the BA degree in Women's Studies can be found here: Women's Studies (p. 2056), or by using the left-side navigation.

A sample 4-year plan for the BGS degree in Women's Studies will be coming soon.

**Departmental Honors**

**Departmental Honors in the Women's Studies Major**

**Summary**

- 3.25 GPA KU overall & 3.5 GPA in the WS major
- A senior honors thesis related to WGSS written over two semesters (two three-credit courses)
- *Double majors:* earn Honors in both majors with one thesis that is relevant to both programs.

**GPA Requirements**

Students need a 3.25 GPA overall and a 3.5 GPA in their Women's Studies major.

**Honors Thesis**

Student write an honors thesis that is pertinent to Women, Gender and Sexuality Studies. An honors thesis is a piece of original research or other project supervised by a faculty member of any department. In most cases, the result will be a written document of some length, but this could vary depending on the topic and what the student and thesis advisor agree on. A single thesis can be submitted to WGSS and to another department for Honors in both programs, if both programs agree.

The senior honors thesis or honors project must be approved by a three-member thesis committee (the thesis advisor and two other faculty members, at least one of whom must be either in WGSS or on the WGSS Advisory Board).

Students take 6 credit hours of honors thesis work (3 hours per semester for 2 semesters, earning a A or B in the first semester and a A the second. For these 6 hours, students can enroll in:

- WGSS 499—Honors in WGSS
- and/or
- WGSS 498—Independent Study in WGSS
- and/or
- two Honors Research courses or two Independent Studies in any department

The last option would be especially relevant if the student plans to submit one honors thesis to both WGSS and another department in order to receive honors in both programs, or if the student's research advisor is not a member of the WGSS core faculty.

**Typical Timeline**

Junior Year (or very early in the first semester of the student’s last year):
Select a topic for a thesis; talk to professors about ideas; find a professor willing to supervise the thesis. **Inform the WGSS Honors Coordinator!**

First Semester of the Last Year: Enroll in 3 credit hours of WGSS 498 or 499 or in an Independent Study of another department. Begin researching the thesis topic. The student and thesis advisor should form a three-person faculty committee (the thesis advisor and two other faculty members, at least one of whom must be either in WGSS or on the WGSS
BA in Women's Studies

Below is a sample 4-year plan for students pursuing the BA in Women, Gender, and Sexuality Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

### Freshman

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 (2 crs req), BA Writing I)</td>
<td>3 ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101 (Goal 1.2 Quantitative Reasoning)</td>
<td>3 Quantitative Reasoning (Goal 1.2, BA Quantitative Reasoning)</td>
<td>3</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>3 2nd Semester Language (BA Second Language)</td>
<td>5</td>
</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3 Goal 2.2 Communication</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 101 or 102 (Goal 3 S or Goal 4.1, Major Requirement)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours:</strong> 17</td>
<td><strong>14</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Sophomore

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3 4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
<td>3-5</td>
</tr>
<tr>
<td>Goal 3 Humanities</td>
<td>3 Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Social Science or Goal 4.1 US Diversity, as needed</td>
<td>3 Lab Science (BA Lab Requirement)</td>
<td>1-2</td>
</tr>
<tr>
<td>WGSS Humanities Core Elective 300+ (Major Requirement)³</td>
<td>3 WGSS Social Science Core Elective 300+ (Major Requirement)³</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours:</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Junior

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.2 Global Awareness (as needed), or elective</td>
<td>3 Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>WGSS Theory Elective 300+ (Major Requirement)³</td>
<td>3 WGSS Humanities Elective 300+ (Major Requirement)³</td>
<td>3</td>
</tr>
<tr>
<td>WGSS International Focus Elective 300+ (Major Requirement)³</td>
<td>3 WGSS Social Science Elective 300+ (Major Requirement)³</td>
<td>3</td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3 Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3 Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours:</strong> 15</td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Senior

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGSS Elective 300+ (Major Requirement)³</td>
<td>3 WGSS 601 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 301 Research Methods (Major Requirement)</td>
<td>3 Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
<tr>
<td>L&amp;S 490 (Recommended, or elective)</td>
<td>3 Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3 Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3 Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
<tr>
<td>L&amp;S 492 (Job Search Strategies, or elective)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Hours:</strong> 15</td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours: 120-123**

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Visit this website (http://college.ku.edu/undergrad/curriculum/ba QR) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
3. A list of courses that fulfill each requirement in the major can be found on the degree requirements (http://catalog.ku.edu/liberal-arts-sciences/women-gender-sexuality-studies/ba-bgs#requirementslist) tab of the catalog.

Please note:

All students in the College of Liberal Arts and Sciences are required to completed 120 total hours of which 45 hours must be at the Jr/Sr (300+) level, and 100 hours must be from within the College of Liberal Arts and Sciences.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific...
requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**Minor in Women’s Studies**

**Why study women, gender and sexuality studies?**

Because much of what people think they know about women, gender, and sex is myth.

**Requirements for the Minor**

**Women’s Studies Minor Course Requirements**

The minor requires 18 hours. At least 12 hours must be at the junior/senior (300+) level or higher.

Students selecting this minor must complete the following:

**Introduction to Women, Gender, and Sexuality Studies. Satisfied by:** (3)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGSS 101</td>
<td>Introduction to Women, Gender, and Sexuality Studies</td>
<td>3</td>
</tr>
<tr>
<td>or WGSS 102</td>
<td>Introduction to Women, Gender, and Sexuality Studies, Honors</td>
<td>3</td>
</tr>
</tbody>
</table>

**Methods (3)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGSS 301</td>
<td>Research Methods in Women, Gender and Sexuality Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

**Social Science or Humanities Core. Satisfied by 1 course (3 hours) chosen from the following:** (3)

**Social Sciences**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGSS/ANTH 389</td>
<td>The Anthropology of Gender: Female, Male, and Beyond</td>
<td>3</td>
</tr>
<tr>
<td>WGSS/PSYC 468</td>
<td>Psychology of Women</td>
<td>3</td>
</tr>
<tr>
<td>WGSS/PSYC 521</td>
<td>Women and Violence</td>
<td>3</td>
</tr>
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</table>

**Methods (3)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGSS/POLS 562</td>
<td>Women and Politics</td>
<td>3</td>
</tr>
<tr>
<td>WGSS/POLS 640</td>
<td>Politics of Reproductive Policy</td>
<td>3</td>
</tr>
<tr>
<td>WGSS/POLS 653</td>
<td>Gender, War, and Peace</td>
<td>3</td>
</tr>
<tr>
<td>WGSS/ANTH 660</td>
<td>Human Reproduction: Culture, Power, and Politics</td>
<td>3</td>
</tr>
<tr>
<td>WGSS/PSYC 689</td>
<td>Conceptual Issues in Human Sexuality</td>
<td>3</td>
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**Humanities**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGSS/AAAS/AMS/HIST 317</td>
<td>African American Women: Colonial Era to the Present</td>
<td>3</td>
</tr>
<tr>
<td>WGSS/HIST 320</td>
<td>From Goddesses to Witches: Women in Premodern Europe</td>
<td>3</td>
</tr>
<tr>
<td>WGSS/HIST 321</td>
<td>From Mystics to Feminists: Women’s History in Europe 1600 to the Present</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 327</td>
<td>Perspectives in Lesbian, Gay, Bisexual, and Transgender Studies</td>
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</table>

**Theory. Satisfied by 1 course (3 hours) chosen from the following:** (3)

<table>
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<tr>
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<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>WGSS/PHIL 381</td>
<td>Feminism and Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 549/HIST 649</td>
<td>History of Feminist Theory</td>
<td>3</td>
</tr>
<tr>
<td>WGSS/AAAS 560</td>
<td>Race, Gender, and Post-Colonial Discourses</td>
<td>3</td>
</tr>
<tr>
<td>WGSS/ANTH 580</td>
<td>Feminism and Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>WGSS/POLS 600</td>
<td>Contemporary Feminist Political Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

**Humanities Elective. Satisfied by any core humanities course not already satisfying core requirement above or any of the following approved humanities electives:** (3)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>WGSS 396</td>
<td>Studies in: _____</td>
<td>3</td>
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<tr>
<td>WGSS 498</td>
<td>Independent Study</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 499</td>
<td>Honors in Women, Gender and Sexuality Studies</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 650</td>
<td>Service Learning in Women’s Studies</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 696</td>
<td>Studies in: _____</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 701</td>
<td>Seminar in: _____</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 797</td>
<td>Directed Readings</td>
<td>3</td>
</tr>
<tr>
<td>WGSS/AAAS/AMS/HIST 317</td>
<td>African American Women: Colonial Era to the Present</td>
<td>3</td>
</tr>
<tr>
<td>WGSS/HIST 320</td>
<td>From Goddesses to Witches: Women in Premodern Europe</td>
<td>3</td>
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<tr>
<td>WGSS/HIST 321</td>
<td>From Mystics to Feminists: Women’s History in Europe 1600 to the Present</td>
<td>3</td>
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<tr>
<td>WGSS 327</td>
<td>Perspectives in Lesbian, Gay, Bisexual, and Transgender Studies</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 330/AAAS 340</td>
<td>Women in Contemporary African Literature</td>
<td>3</td>
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<tr>
<td>WGSS/AMS 510/HIST 530</td>
<td>History of American Women: Colonial Times to 1870</td>
<td>3</td>
</tr>
<tr>
<td>WGSS/AMS 511/HIST 531</td>
<td>History of American Women: 1870 to Present</td>
<td>3</td>
</tr>
<tr>
<td>WGSS/AAAS 549/HIST 649</td>
<td>History of Feminist Theory</td>
<td>3</td>
</tr>
<tr>
<td>WGSS/AAAS 560</td>
<td>Race, Gender, and Post-Colonial Discourses (if not already used)</td>
<td>3</td>
</tr>
<tr>
<td>WGSS/AAAS/AMS 565</td>
<td>Gender, Culture, and Migration</td>
<td>3</td>
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<tr>
<td>WGSS/HWC 570</td>
<td>Men and Masculinities</td>
<td>3</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>WGSS/HWC 575</td>
<td>Body, Self and Society</td>
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<tr>
<td>WGSS 646</td>
<td>Witches in European History and Historiography</td>
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<tr>
<td>AAAS 434</td>
<td>African Women Writers</td>
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<tr>
<td>AMS 515</td>
<td>American Women and World War II</td>
<td></td>
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<tr>
<td>COMS 552</td>
<td>The Rhetoric of Women's Rights</td>
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<tr>
<td>EALC 575</td>
<td>Love, Sexuality and Gender in Japanese Literature</td>
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<tr>
<td>ENGL 572</td>
<td>Women and Literature: _____</td>
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<tr>
<td>FMS 410</td>
<td>Race, Class, and Gender in Visual Culture</td>
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<tr>
<td>FMS 620</td>
<td>International Women Filmmakers</td>
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<tr>
<td>HIST 533</td>
<td>The History of Women and the Family in Europe, from 1500 to the Present</td>
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<tr>
<td>PHIL 381</td>
<td>Feminism and Philosophy (if not already used for theory requirement)</td>
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<tr>
<td>REL 477</td>
<td>Gender and Religion</td>
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<tr>
<td>ENGL 203</td>
<td>Topics in Reading and Writing: _____ (Literature of Love and Marriage)</td>
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<tr>
<td>ENGL 203</td>
<td>Topics in Reading and Writing: _____ (Women’s Writing and Autobiography)</td>
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<tr>
<td>ENGL 203</td>
<td>Topics in Reading and Writing: _____ (Major Women Writers)</td>
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<td>ENGL 570</td>
<td>Topics in American Literature: _____</td>
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<tr>
<td>HA 505</td>
<td>Special Study: _____ (Women/Modern Art)</td>
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<tr>
<td>HIST 319</td>
<td>History, Women, and Diversity in the U.S.</td>
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</table>

Social Sciences Elective. Satisfied by any core social science course not already satisfying core requirements above or any approved social science elective.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGSS/ANTH 389</td>
<td>The Anthropology of Gender: Female, Male, and Beyond</td>
</tr>
<tr>
<td>WGSS 396</td>
<td>Studies in: _____</td>
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<tr>
<td>WGSS/PSYC 468</td>
<td>Psychology of Women</td>
</tr>
<tr>
<td>WGSS 499</td>
<td>Honors in Women, Gender and Sexuality Studies</td>
</tr>
<tr>
<td>WGSS 521</td>
<td>Women and Violence</td>
</tr>
<tr>
<td>WGSS/POLS 562</td>
<td>Women and Politics</td>
</tr>
<tr>
<td>WGSS/POLS 630</td>
<td>Politics of Identity</td>
</tr>
<tr>
<td>WGSS/POLS 640</td>
<td>Politics of Reproductive Policy</td>
</tr>
<tr>
<td>WGSS 650</td>
<td>Service Learning in Women’s Studies</td>
</tr>
<tr>
<td>WGSS/POLS 653</td>
<td>Gender, War, and Peace</td>
</tr>
<tr>
<td>WGSS/ANTH 660</td>
<td>Human Reproduction: Culture, Power, and Politics</td>
</tr>
<tr>
<td>WGSS/PSYC 689</td>
<td>Conceptual Issues in Human Sexuality</td>
</tr>
<tr>
<td>WGSS 696</td>
<td>Studies in: _____</td>
</tr>
<tr>
<td>WGSS 333</td>
<td>The Politics of Physical Appearance</td>
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<tr>
<td>WGSS 351</td>
<td>Women and Leadership: The Legislative Process</td>
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<tr>
<td>WGSS/ANTH/EALC 363</td>
<td>Gendered Modesty in East Asia</td>
</tr>
<tr>
<td>WGSS/ANTH 580</td>
<td>Feminism and Anthropology (if not already used)</td>
</tr>
</tbody>
</table>

Women’s Studies Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

**Minor Hours**
Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the minor.

**Minor Junior/Senior (300+) Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

**Minor in Human Sexuality**

**Why study women, gender and sexuality studies?**

Because much of what people think they know about women, gender, and sex is myth.
Requirements for the Minor

Human Sexuality Minor Course Requirements

The minor requires 18 hours. At least 12 hours must be at the junior/senior (300+) level or higher. Students selecting this minor must complete the following:

Survey Course of Human Sexuality (3)

Satisfied by one of the following:

- SW 303  Human Sexuality in Everyday Life
- PSYC 502  Human Sexuality
- HSES 489  Health and Human Sexuality

Methods (3)

- WGSS 301  Research Methods in Women, Gender and Sexuality Studies

Human Sexuality Discipline Perspective (9)

Human Sexuality Discipline Perspective. Satisfied by 3 core courses (9 hours) with a primary focus on sexuality. Students should take at least 1 humanities course and at least 1 social or biological science course.

Humanities Perspective. Satisfied by 1 of the following approved humanities electives:

- AAAS/HIST 598  Sexuality and Gender in African History
- CLSX/HWC 374  Gender and Sexuality, Ancient and Modern
- EALC 575  Love, Sexuality and Gender in Japanese Literature
- HIST 608  History of Sexuality
- PHIL 504  Philosophy of Sex and Love
- REL 374  Religious Perspectives on Sexuality and Gender
- WGSS 327  Perspectives in Lesbian, Gay, Bisexual, and Transgender Studies
- WGSS 330  Sex and Gender in New Media

Social Science or Biological Science Perspective. Satisfied by 1 of the following approved social or biological science elective:

- ANTH 359  Anthropology of Sex
- ANTH/WGSS 660  Human Reproduction: Culture, Power, and Politics
- PSYC 410  Intimate Relationships
- PSYC 555  Evolutionary Psychology
- PSYC/WGSS 689  Conceptual Issues in Human Sexuality
- WGSS/PSYC 521  Women and Violence
- WGSS/POLS 640  Politics of Reproductive Policy

Human Sexuality Required Electives (3)

Satisfied by 1 course (3 hours) chosen from any course above not used to satisfy a requirement or any of the following:

- AAAS 554/ANTH 545  Contemporary Health Issues in Africa
- ABSC 268  Introduction to Marriage and Family Relations
- ABSC/PSYC 626  Psychology of Adolescence
- AMS 344/WGSS 396  Case Study in American Studies: _____ (Colonial Era to the Present)
- ANTH/WGSS 389  The Anthropology of Gender: Female, Male, and Beyond
- COMS 344  Relational Communication
- COMS 440  Communication and Gender
- COMS 552  The Rhetoric of Women's Rights
- HIST/WGSS 324  History of Women and the Body
- PHIL 674  Philosophy of Law
- POLS/WGSS 600  Contemporary Feminist Political Theory
- PSYC 465  Stereotyping and Prejudice Across Cultures
- PSYC/WGSS 468  Psychology of Women
- PSYC 642  The Psychology of Families
- SOC 220  Sociology of Families
- SOC 617/HP&M 620  Women and Health Care
- SOC 628  Families and Social Inequalities
- WGSS 333  The Politics of Reproductive Policy
- WGSS/HWC 570  Men and Masculinities
- WGSS/HWC 575  Body, Self and Society

Other Information

Other courses might count by petition in any of the above categories depending on their content. Such courses could include special topics courses (e.g., WGSS/ WGSS 696 Studies in: _____; ENGL 590 Studies in: _____; PSYC 690 Seminar: _____), new courses, or other courses. For more information, see the department’s website, or contact the department. 1 course overlap is allowed between major requirements and minor requirements. Courses with a blank (____) at the end of their titles are typically topics or seminar courses that may be repeated for credit. Usually these courses offer different topics each time they are taught. Students should check with the course instructor about the requirements to take the course and what the topic will be when it is offered."

Human Sexuality Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the minor.

Minor Junior/Senior (300+) Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).
Doctor of Philosophy in Women, Gender, and Sexuality Studies

Why study women, gender and sexuality studies?

Because much of what people think they know about women, gender, and sex is myth.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies section of the online catalog.

Please consult the Departments & Programs section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Admission requires a bachelor’s degree and acceptance by Graduate Studies. Submit your graduate application online (http://www.graduate.ku.edu). Send all other supporting materials to the department:

The University of Kansas Department of Women, Gender and Sexuality Studies
Bailey Hall
1440 Jayhawk Blvd., Room 213
Lawrence, KS 66045-7545

Ph.D. Program

The Ph.D. program requires completion of core and elective courses and demonstration of depth in a chosen concentration or track. Candidates must complete a minimum of 13 credit hours of required courses in WGSS and 15 credit hours of elective WGSS courses. In addition, the student must take a minimum of 18 credit hours (3 in theory, 3 in methods, and 3 in a designated field) in an approved concentration or track selected from the list below.

Students must also fulfill Research Skills and Responsible Scholarship requirement as outlined in the WGSS Graduate Handbook (available online). At the end of 30 hours of course work (21 in WGSS and 9 in a concentration), Students will take a qualifying exam in their fourth semester (administered by the instructors of WGSS 800, WGSS 801, WGSS 802). Results of this exam will determine whether or not the student is given a terminal M.A. and leaves the program or the student continues on towards the Ph.D. After completion of 31 credit hours and the Research Skills and Responsible Scholarship requirement, students take a comprehensive oral examination, the centerpiece of which is a portfolio of all major written work (exams, papers, syllabi), and a professional essay. Within 3 months of passing this exam the student defends a dissertation prospectus and enrolls in dissertation hours.

Required Graduate Courses in WGSS

<table>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>WGSS 800</td>
<td>History of Women, Gender and Sexuality Studies</td>
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</tr>
<tr>
<td>WGSS 801</td>
<td>Feminist Theory</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 802</td>
<td>Feminist Methodologies</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 803</td>
<td>Topics in Feminist Pedagogy: _____ (0.5 hour, taken 2 times)</td>
<td>1</td>
</tr>
<tr>
<td>WGSS 804</td>
<td>Topics in Professional Development: _____ (1 hour, taken 3 times)</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 999</td>
<td>Doctoral Dissertation</td>
<td>1-12</td>
</tr>
</tbody>
</table>

Concentrations


The WGSS graduate student handbook lists a selection of the approved courses in the concentrations.

Graduate Certificate in Women's Studies

Why study women, gender and sexuality studies?

Because much of what people think they know about women, gender, and sex is myth.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies section of the online catalog.

Please consult the Departments & Programs section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Admission requires a bachelor’s degree and acceptance by Graduate Studies. Submit your graduate application online (http://www.graduate.ku.edu). If you are applying to a specific M.A. or Ph.D. program, submit your application, fees, letters of recommendation, Graduate Record Examination scores, official transcripts, and any other requested materials to that program.

Students already in a KU graduate program must be in good standing with their graduate degree program in order to participate in the certificate program, must have a minimum GPA of 3.0, and must provide a letter of support from their graduate degree program. After they submit their KUGRAD form they will be asked to submit a current advising report to the Department.
Students not already in a KU graduate program will be asked (after they submit their KUGRAD form) to provide the WGSS Department with the following.

- a letter stating the student's interest in the WGSS Graduate Certificate Program;
- a copy of the student's latest college transcript (this does not need to be an official copy);
- and 2 letters of recommendation from persons familiar with the student's academic work or potential for graduate study

The University of Kansas Department of Women, Gender and Sexuality Studies
Bailey Hall
1440 Jayhawk Blvd., Room 213
Lawrence, KS 66045-7545

Graduate Certificate Requirements

The graduate certificate requires completion of 12 credit hours of graduate work, including 2 courses selected from WGSS 800 History of Women, Gender and Sexuality Studies; WGSS 801 Feminist Theory, and/or WGSS 802 Feminist Methodologies and two 3-credit electives chosen from a list of recommended graduate courses or approved by the graduate director.
School of Medicine

Founded in 1905, the KU School of Medicine is proud of its rich legacy as Kansas’ only medical school. Our mission is to enhance the quality of life and serve our community through the discovery of knowledge, the education of health professionals and by improving the health of the public.

The School of Medicine integrates excellent education, scientific discovery, outstanding clinical programs and dedication to community service. In addition to its commitment to educating the physician workforce of tomorrow, the school is an emerging leader in biomedical research and the health of the public. Graduate programs are offered in the biomedical sciences, biostatistics, public health, health policy and management, and clinical research.

Admission and degree requirements vary by program and are listed in the individual program descriptions. Requirements and course descriptions are subject to change. In most cases, use the catalog of the year student entered program. Other years’ catalogs (http://catalog.ku.edu/archives)

Doctor of Medicine (p. 2062)  Doctor of Medicine (M.D.) General Information (p. 2063)  M.D.-Ph.D. Combined Degrees (p. 2097)  M.D.-Ph.D. Physician Scientist Training Program (http://catalog.ku.edu/medicine/combined-md-phd)

Anatomy and Cell Biology (p. 2098)  Master of Science in Cell Biology and Anatomy (p. 2099)  Doctor of Philosophy in Cell Biology and Anatomy (p. 2100)

Biochemistry and Molecular Biology (p. 2103)  Master of Science in Biochemistry and Molecular Biology (p. 2103)  Doctor of Philosophy in Biochemistry and Molecular Biology (p. 2105)

Biostatistics (p. 2107)  Master of Science in Biostatistics (p. 2110)  Doctor of Philosophy in Biostatistics (p. 2112)  Statistical Applications Graduate Certificate (p. 2114)  Statistics Graduate Certificate (p. 2115)

Cancer Biology (p. 2117)  Health Informatics (p. 2264)  Master of Science of Health Informatics (p. 2292)

Health Policy and Management (p. 2117)  Master of Health Services Administration (p. 2121)  Doctor of Philosophy in Health Policy and Management (p. 2123)

History and Philosophy of Medicine (p. 2125)  Interdisciplinary Graduate Program in Biomedical Sciences (p. 2126)  Microbiology, Molecular Genetics, and Immunology (p. 2127)  Master of Science in Microbiology (p. 2128)  Doctor of Philosophy in Microbiology (p. 2129)

Molecular and Integrative Physiology (p. 2131)  Master of Science in Molecular and Integrative Physiology (p. 2133)  Doctor of Philosophy in Molecular and Integrative Physiology (p. 2134)

Neurosciences Program (p. 2136)  Master of Science in Neurosciences (p. 2137)  Doctor of Philosophy in Neurosciences (p. 2138)

Pathology and Laboratory Medicine (p. 2141)  Master of Science in Pathology (p. 2142)  Doctor of Philosophy in Pathology (p. 2144)

Pharmacology, Toxicology, and Therapeutics (p. 2146)  Master of Science in Pharmacology (p. 2148)  Doctor of Philosophy in Pharmacology (p. 2151)  Master of Science in Toxicology (p. 2149)  Doctor of Philosophy in Toxicology (p. 2153)

Preventive Medicine and Public Health (p. 2154)  Master of Public Health (p. 2162)  Graduate Certificate in Community-Based Participatory Research (p. 2161)  Master of Science in Clinical Research (p. 2168)

Therapeutic Science (p. 731)  Doctor of Philosophy in Therapeutic Science (p. 731)

Doctor of Medicine (M.D.)

At the University of Kansas School of Medicine, future doctors are welcomed into a culture of community, forming bonds with peers and mentors by learning together, not competing separately. Through this support system, students reach common goals of serving their community, unlocking the mysteries of medicine and promoting lifelong wellness.

Top rankings

Providing students with an outstanding medical education remains at the heart of the School of Medicine’s mission.

• U.S. News & World Report ranks the School of Medicine among the top programs for training primary care physicians.

Three diverse academic environments

The School of Medicine has campuses at three locations in Kansas and has gained a national reputation for educating family, primary-care and rural physicians.

• At the Kansas City campus, students train at a large academic medical center, which has attracted innovative and accomplished researchers because of a commitment to modern research facilities and state-of-the-art equipment.

• Wichita facilities provide a community-based medical education environment, where students learn through direct patient care inside three partner hospitals as well as in doctors’ offices across the state.

• The Salina program is designed for students with a strong interest in rural medicine, as well as for any student wishing to work with a small
group of peers on a rural regional campus with opportunities for early clinical experiences and for frequent interactions with the local clinical faculty.

On the left you will find links for more information about the School of Medicine including the administration, the programs offered, the campuses, and the course catalog for the School of Medicine.

Administration
The Kansas Board of Regents (http://www.kansasregents.org)
KU Administration (http://www.ku.edu/about/leadership)
KU Medical Center Administration (http://www.kumc.edu/kumc-leadership/kumc-organizational-chart.html)
KU School of Medicine Administration (http://www.kumc.edu/school-of-medicine/about-the-school/administration.html)

General Information
University Policies (http://ioa.ku.edu)
About KU (http://www.ku.edu/about)
About School of Medicine (http://www.kumc.edu/school-of-medicine.html)
History of School of Medicine
Special Programs (p. 2063)
Salina Campus
Wichita Campus (http://wichita.kumc.edu)
Admission (http://www.kumc.edu/school-of-medicine/education/admissions.html)
Student Services (http://www.kumc.edu/student-services.html)
Student Organizations and Activities (https://kumc.collegiatelink.net)
Degree Programs (p. 2064)
Medical School Requirements (p. 2064)
Awards (p. 2065)

Special Programs
KU Medical Alumni Academic Societies
As part of an effort to enhance student advising and mentoring and to develop professionalism in the students of the School of Medicine, the original seven academic societies were founded in the 1999-2000 academic year and named after past leaders of the School of Medicine. With campus expansion and the opening of the Salina campus in 2011, an eighth society, Lukert, was founded. Each society is headed by a faculty director, who also serves as an assistant dean for student affairs. Society members include School of Medicine faculty, KU Hospital physicians, and the School of Medicine students. The goals of the societies are to:

- enhance student-faculty interaction;
- enhance student interaction, particularly across classes;
- provide a structure for student advising;
- promote a sense of community for students and faculty; and
- encourage the development of professional attitudes and behaviors among students.

The KU Medical Alumni Academic Societies are a core component of the School of Medicine's Professionalism Initiative. The Societies allow for more individualized and small-group contact between students and faculty through encouraged, open discussions about professionalism in all academic settings. This atmosphere expands the formal curriculum for the teaching of Professionalism.

Societies sponsor periodic gatherings for students and faculty. These gatherings are both academic (e.g., invited speakers) and social (e.g., dinners). Faculty members serve as academic advisers for one to two students in each class. To the extent possible, students are matched with faculty based on interests. Faculty also may provide career advice for students and serve as resources for their advisees during their entire four years at the School of Medicine.

KUMC Women in Medicine and Science
The KUMC Women in Medicine and Science (WIMS) program in the Schools of Medicine, Nursing and Health Professions fosters equality in the academic community by promoting excellence through leadership, mentoring, and community involvement. The mission of the organization is to help faculty, trainees and students:

1. to be proactive and constructive in establishing and advancing the careers of women in medicine and science;
2. to educate women on relevant KU Policies and Procedures for career development and advancement;
3. to enhance and foster the professional development of all women faculty in the KUMC Schools of Medicine, Nursing and Health Professions through encouragement and mentoring, and to encourage growth, networking and quality within our KUMC community (local and national);
4. to promote the process of developing long-term, mutually beneficial relationships and cultivating new opportunities for collaboration through a supportive exchange of ideas and resources.

For information on programming and how to get involved, please contact one of their key individuals listed on http://www.kumc.edu/wims/contact-us.html

For more information, visit the WIMS website at http://www.kumc.edu/wims.html.

Medical Education Network Sites
The Medical Education Network Sites are an integral part of the School of Medicine's mission to implement rural health initiatives throughout the state. Each of the five sites represents a region of Kansas. Each region has a Medical Education Director (MED), a practicing physician who also works for the school's Office of Rural Medical Education to promote rural workforce development. MEDs help coordinate rural learning opportunities throughout Kansas. Many agencies in the state have this mission in common: the Health Policy Institute, State Data Board, Department of Health and Environment, and KUMC Offices of Admissions, Rural Health Education and Services, and Area Health Education Centers. The MEDs may work with these institutions and occasionally work with other health profession schools at KU and other Regents institutions to promote rural learning opportunities. Specific MEDs activities include:

- Support of local medical center educational programs
- Coordination of local premedical student recruitment activities
- Summer Rural Research and Practice Elective Program
- Scholars in Rural Health
- Identification and development of new health profession education sites.
Rural Track/Options

The need for rural primary care physicians continues to be critical in the majority of Kansas counties. KU-School of Medicine recently had a rural track where students spent a significant part of the clinical education in a rural setting. The rural track was in Salina which has now become a branch campus. New ways to provide rural training opportunities for students are in development.

In lieu of spending an extended period of time in one rural site, students currently have the option of receiving some of their training in Family Medicine, Surgery, Pediatrics, and Obstetrics and Gynecology in a rural site. Students can exercise this option for one of the clerkships or all of them as space permits. Students can spend from 2-6 weeks on site depending on the clerkship. Some students have spent as much as 14 weeks in rural learning sites during their 3rd year.

Nicodemus Project

Despite remarkable advances in science and health care, health disparities persist in the United States. Health disparities exist in Kansas, too, and the disparate morbidity and mortality and leading causes of death and disease for ethnic minorities in Kansas reflect those of the nation. In Kansas, African-American adults, for example, are at higher risk of death and disease due to heart disease, cancer, cerebrovascular accidents, and other chronic conditions. African-American Kansans have issues related to less access to high-quality health care and information about health promotion and disease prevention compared to nonminority Kansans.

The Nicodemus Project is a multidisciplinary, health screening, promotion of wellness, disease prevention, service learning, and community outreach project in a culturally sensitive setting. The Nicodemus Project takes place in the rural and historic African-American town of Nicodemus, Kansas, during the town’s Annual Homecoming Celebration, commemorating the exodus of former slaves to the promised land of Kansas. The Nicodemus project is coordinated and led by the School of Medicine's Office of Cultural Enhancement and Diversity. [http://www.kumc.edu/school-of-medicine/office-of-cultural-enhancement-and-diversity/nicodemus-free-health-clinic.html](http://www.kumc.edu/school-of-medicine/office-of-cultural-enhancement-and-diversity/nicodemus-free-health-clinic.html)

Scholars in Rural Health

The Scholars in Rural Health program identifies and encourages undergraduate students from rural Kansas to practice medicine in Kansas counties that are medically underserved. Using a rigorous admissions process, as many as 16 students are annually selected to participate in a two-year premedical curriculum featuring community-based primary care experiences and other activities. Selection criteria include completion of two years of undergraduate premedical education and evidence of high probability for return to a medically underserved area of Kansas. Students who successfully complete the program during their junior and senior years are assured admission to the School of Medicine. Additional information is available at [http://www.kumc.edu/school-of-medicine/education/premedical-programs/scholars-in-rural-health.html](http://www.kumc.edu/school-of-medicine/education/premedical-programs/scholars-in-rural-health.html)

Degree Programs

KU Medical Center includes the Schools of Health Professions, Medicine, Nursing, and an Office of Graduate Studies. Information about Health Professions or Nursing is available from those schools or in the appropriate sections of the KU Undergraduate Catalog and Graduate School Catalog.

Masters and Ph.D. Programs

For information about Masters and Ph.D. programs visit [http://catalog.ku.edu/](http://catalog.ku.edu/).

Combined M.D./Ph.D. Degree Programs

The purpose of the MD-PhD combined degree program is to prepare highly qualified and motivated post-baccalaureate students for careers as physician scientists in academic medicine and biomedical research. To promote a close-knit group of students, MD-PhD training at the University of Kansas Medical Center includes small group interactions with the program directors and monthly interactions with fellow students at all phases of their training. A formal peer-mentoring program allows students to advise and guide each other on issues related to research and clinical training, personal life-work balance, and professional development.

The program is conducted under the auspices of the Dean of Graduate Studies and the Executive Dean of the School of Medicine, with guidance from their MD-PhD Advisory Committee.

Information may be obtained from the MD-PhD Physician Scientist Training Program, 1123 Delp, Mail Stop 3062, KU Medical Center, 3901 Rainbow Blvd., Kansas City, KS 66160, (913) 588-5241, [http://www.kumc.edu/md-phd-program.html](http://www.kumc.edu/md-phd-program.html)

M.D./M.P.H. Program

The single M.D./Master of Public Health program is ideal for medical students interested in public health, community medicine, preventive medicine, and occupational medicine. The integrated, five-year curriculum prepares students for careers in both the public and private sectors including local, federal, and state health agencies; outcomes and disease management; research institutions; and private foundations. Candidates should demonstrate notable academic credentials and have at least one year of experience in a health-related field. Students in the dual program complete the three-semester, 42-hour M.P.H. requirements in addition to the four-year M.D. curriculum. The M.P.H. degree may be completed after years two or three of medical school. To obtain admission materials or for more information, call (913) 588-2720, or visit [http://mph.kumc.edu](http://mph.kumc.edu)

M.D./M.H.S.A. Program

The MD/MHSA program is ideal for medical students interested in practice, hospital, or health system management. Students in this program have several options for completing the MHSA requirements in addition to the four-year MD curriculum.

To obtain admission materials or for more information, call (913) 588-3763 or visit [http://www.kumc.edu/school-of-medicine/hpm.html](http://www.kumc.edu/school-of-medicine/hpm.html). To learn more about the M.D./M.H.S.A. joint degree program visit [http://www.kumc.edu/school-of-medicine/hpm/master-of-health-services-administration/joint-degree-programs/joint-mhsamd.html](http://www.kumc.edu/school-of-medicine/hpm/master-of-health-services-administration/joint-degree-programs/joint-mhsamd.html)

Medical School Requirements

Evaluation of Student Performance

Faculty members evaluate the academic achievement, acquisition of skills, and attitudes of medical students as superior, high satisfactory, satisfactory, or unsatisfactory. A 4.0 grade-point system is used to determine the student's class rank and grade-point average.
Repeating a Course
Repetition of any part of the curriculum is upon recommendation of the Academic and Professionalism Committee.

Withdrawal or Leave of Absence
Withdrawal or leave of absence may be granted by the Associate Dean of Student Affairs upon recommendation by the Academic and Professionalism Committee.

M.D. Degree Requirements
The degree of Doctor of Medicine is awarded by the medical faculty of the University of Kansas to a student who has satisfactorily completed the medical school curriculum. The student must also pass Steps 1 and 2 (Clinical Knowledge and Clinical Skills) of the United States Medical Licensing Examination (USMLE).

United States Medical Licensing
The National Board of Medical Examiners prepares and administers a three-part examination known as the United States Medical Licensing Examination. Steps 1 and 2 of the USMLE are taken while the student is enrolled in medical school. Step 3 may be taken by a physician who has passed Steps 1 and 2 and has served at least six months of an approved hospital residency. National Board certification is awarded to candidates who successfully pass all three parts of the test and satisfy the requirements of the medical licensing authorities of most states. To graduate from the University of Kansas School of Medicine, students must pass Steps 1 and 2 of the USMLE. Students must pass Step 1 to continue in the clinical program. Applications to take both Step 1 and Step 2 are available online at https://apps.nbme.org/ciw2/prod/jsp/login.jsp. Residents register for the Step 3 exam via the same website.

Private Support and Endowment
The University of Kansas School of Medicine depends on private gifts and bequests for many of its activities and functions. Grants from national foundations and agencies of the federal government are supplemented by gifts from individuals, often donated as memorials to or in honor of friends and relatives. The Kansas University Endowment Association maintains all funds separately, and many bear the names of the donors or of the persons honored or memorialized. Donations to the Endowment Association are used solely for the purposes designated by the donor without deductions for administrative costs or overhead. Endowment funds finance student loans, lectureships, scholarships, professorships, fellowships, and acquisitions for the Medical Center libraries. They also are used for general medical research and for special research in such fields as cancer, heart disease, and problems of aging. Both loan funds and scholarship funds benefit medical students. Funds received for scholarships are invested so that the income provides scholarships indefinitely. Both long-term and short-term loans are available. Long-term loans become payable one year after graduation. Short-term loans become payable within 90 days of issue. A complete list of endowment scholarships is available from the Office of Student Affairs or online at http://www.kumc.edu/school-of-medicine/osfa/scholarships-loans-and-contests.html.

Distinctions and Awards
The Academic Excellence Award is given to a senior student in recognition of outstanding academic performance.

The Advocacy Award - Kansas City is presented to a graduating student in recognition of high standards of character, conduct, and integrity and the promotion of those qualities in colleagues.

The Alpha Omega Alpha Honor Medical Society promotes scholarship and research in medical school, encourages high standards of character and conduct, and recognizes high attainment in medical science, medical practice, or related fields. Members of AOA elect new members each year as well as granting honorary memberships to those gaining recognition in fields related to medicine. Elected medical students from the Kansas Alpha Chapter, established in 1930, give promise of professional leadership and fulfillment of these ideals.

The Anesthesiology Academic Excellence Award is presented to a senior student for academic and clinical excellence in anesthesiology.

The Karl E. Becker Jr., M.D., Award is presented to a senior student from the Wichita campus for outstanding performance as a student clinician in anesthesiology. Dr. Becker was professor and chair of the Department of Anesthesiology from 1987 to 1998. This award honors his excellent teaching skills and dedication to medical education.

The Distinguished George E. “Ned” Burket, M.D., Award is presented to a senior medical student from the Wichita campus for excellence as a fourth-year student in family medicine. Dr. Burket practiced in Kingman, Kansas, for 32 years. As president of the American Academy of General Practice in 1968, he provided pivotal support in the transition of general practice to family practice. Dr. Burket was a founding member and president of the American Board of Family Practice and chair of the Residency Review Committee for Family Practice. For his distinguished efforts, he was elected to the Institutes of Medicine of the National Academy of Sciences in 1975.

The LeRoy A. Calkins Award is presented to a senior student for academic and clinical excellence in obstetrics and gynecology. The award is in memory of Dr. Calkins, who was chair of the Department of Obstetrics and Gynecology for 30 years, retiring in 1959. Dr. Calkins came to KU in 1929 from the University of Virginia, where he was department chair. He received his education and training, both M.D. and Ph.D., at the University of Minnesota. He was an outstanding teacher, a recipient of many national awards, and a leader in postgraduate and resident education. He founded many societies and groups that sought to reduce maternal-fetal mortality and morbidity in Kansas.

The Tom D.Y. Chin Preventive Medicine Excellence Award to a graduating senior who has excelled in public health or preventive medicine during their medical education in honor of Tom D.Y. Chin, M.D. Professor Emeritus Chin was Chair of the Department of Preventive Medicine from 1975 through 1989. He has a national and international reputation in infectious disease epidemiology and cancer epidemiology and has 30 years of dedicated service to the U.S. Public Health Service. He is an outstanding teacher, clinician, and leader in public health research both nationally and internationally. This award honors an individual who has some of the personal attributes and characteristics that illuminated Dr. Chin’s own distinguished career.

The Coghill Award is presented to a graduating medical student who has produced research of high quality and performed in a superior manner in courses in the Department of Anatomy and Cell Biology.

The P.G. Czarlinskly Family Award (in memory of Charley Czarlinsky, M.D.) is presented to a senior student from the Wichita campus for outstanding performance as a student clinician. The award recognizes integral development of superior skills in patient care and management,
as well as scholarly understanding and prudent application of the principles of clinical science. It also recognizes a significant contribution to the overall environment of health care and patient education.

The Daniel C. Darrow Certificate and Award are presented to a member of the graduating class who has distinguished himself or herself in pediatrics. Dr. Darrow was a professor of pediatrics at KU from 1954 until his retirement in 1962. The principles elucidated in his studies of fluid and electrolytes serve as a basis for our current management of children with body fluid disturbance. For these and many other scientific contributions, he was world famous. The members of the Department of Pediatrics give the certificate and award to an individual they believe has some of the personal attributes and characteristics that illuminated Dr. Darrow's distinguished career.

The Mahlon H. Delp Award - Kansas City is presented in memory of Dr. Delp, Professor Emeritus of Medicine, to a senior student in internal medicine who best demonstrates integrity, compassion, and dedication to the care of patients as individuals.

The Mahlon H. Delp Award - Wichita is presented in memory of Dr. Delp, Professor Emeritus of Medicine, to a senior student in internal medicine who best demonstrates the qualities of integrity, compassion, and dedication to the care of patients as individuals.

The Louise deSchweinitz Award is presented in memory of Dr. deSchweinitz to recognize the most outstanding student performance on the clinical rotation in pediatrics.

The Emergency Medicine Award is presented to a senior student for demonstrated clinical and academic excellence in emergency medicine. It is sponsored by the Society for Academic Emergency Medicine.

The Endocrine Society's Medical Student Achievement Award is presented to a senior medical student who has shown exceptional ability and interest in endocrinology. It encourages outstanding students to pursue careers in endocrinology and related fields of medicine and basic science.

James G. Price, MD, Award for Excellence in Family Medicine is presented to a graduating senior who excelled in the study of Family Medicine in memory of Dr. Price who left rural practice in Colorado to become the Chair of Family Medicine at the University of Kansas. He finished his career at KU as the Dean of the School of Medicine. During his illustrious career Dr. Price served as President of the American Academy of Family Physicians and the American Board of Family Practice. He was a member of the National Institute of Medicine and was selected as KU Honorary Alumnus in 2008. Dr. Price was an excellent teacher, valued mentor, skilled clinician, and trusted colleague. He was an iconic figure in the field of medicine and the consummate family physician.

The George J. Farha Award for Excellence in Surgery is presented to a student from the Wichita campus for excellence during the surgical clerkship. The award is given to a student who displays knowledge of surgery as well as honesty, integrity, and compassion in the care of patients. The funds for this award were collected by Dr. Farha's former residents to honor their teacher.

John D. Foret Urology Award is presented to an outstanding graduating student who has chosen to pursue a career in urologic surgery in recognition of their exemplary clinical and or research performance. The award is named in honor of Dr. John D. Foret, a native of San Diego, California, and a graduate of the University of Chicago School of Medicine. Dr. Foret came to the University of Kansas in 1953 to begin his postgraduate medical education. After completing his urology residency in 1958, Dr. Foret was appointed to the University of Kansas School of Medicine Faculty. He spent his entire career at KU, and was recognized as an outstanding clinician and educator. In 1993, Dr. Foret retired and was named Professor Emeritus of Surgery(Urology).

The Matthew Freeman Award in Social Justice is presented to a graduating medical student who has demonstrated how a commitment to social justice and equity can be combined with medicine.

Janet M. Glasgow Memorial Achievement Citations are presented to female medical students who graduate in the top 10 percent of their class.

The Janet M. Glasgow Memorial Award is presented to a female medical student who stands first in her graduating class. Sponsored by the American Medical Women's Association, this award was established by Dr. Maude Glasgow in honor of her sister, Janet M. Glasgow. Dr. Maude Glasgow was a pioneer in preventive medicine and public health. She received her degree in 1901 from Cornell University Medical College and went on to earn her degree in public health from New York University and Bellevue Medical College. Janet M. Glasgow unselfishly gave of her time and resources to see that her sister, Maude Glasgow, completed her medical education.

The Donald W. Goodwin, M.D., Award is presented to the senior student who is entering residency in psychiatry and is perceived by the faculty to be most likely to succeed in the profession. Dr. Goodwin was Chair of Psychiatry at the University of Kansas Medical Center from 1976 to 1991. Later he was University Distinguished Professor and Professor Emeritus. Dr. Goodwin embodied the inquisitive nature required of a modern academic psychiatrist who questions traditional approaches and savors empirical developments. The philosophy influenced his work in psychiatric diagnosis, alcoholism, and phobias. Dr. Goodwin's work has a lasting influence on the field and the character of psychiatry at KU Medical Center.

The Kyle Lee Gratny Memorial Award is presented in memory of Kyle Lee Gratny to a graduating medical student for distinguished performance in the neonatology division, Department of Pediatrics.

The Don Carlos Guffey Award is presented to a senior student who has demonstrated a keen interest in the history or philosophy of medicine by writing an outstanding paper in one of those disciplines. The award honors Don Guffey, M.D., the first chair of the Department of Obstetrics at KU Medical Center, who had a long-standing interest in the history of medicine.

The Donald W. Goodwin, M.D., Award is presented to the senior student who is entering residency in psychiatry and is perceived by the faculty to be most likely to succeed in the profession. Dr. Goodwin was Chair of Psychiatry at the University of Kansas Medical Center from 1976 to 1991. Later he was University Distinguished Professor and Professor Emeritus. Dr. Goodwin embodied the inquisitive nature required of a modern academic psychiatrist who questions traditional approaches and savors empirical developments. The philosophy influenced his work in psychiatric diagnosis, alcoholism, and phobias. Dr. Goodwin's work has a lasting influence on the field and the character of psychiatry at KU Medical Center.

The Kyle Lee Gratny Memorial Award is presented in memory of Kyle Lee Gratny to a graduating medical student for distinguished performance in the neonatology division, Department of Pediatrics.

The Russell F. Holcomb Award is presented for outstanding performance as a student in obstetrics and gynecology at KU Medical Center in memory of Dr. Holcomb, who was a resident in the Department of Obstetrics and Gynecology at KUMC. Dr. Holcomb served a one-year rotating internship from July 1, 1961, to June 30, 1962. He interrupted his medical career to serve three years as a medical officer in the U.S. Navy with a tour in South Vietnam. He returned to KU Medical Center on July 1, 1965, to complete his three years of residency, where he earned the respect of his peers and faculty of the department. The 1969 graduating class gave Dr. Holcomb the Resident Teaching Award. That class later initiated this award in his memory. Dr. Holcomb served as a chief resident his last year of residency plus serving a clinical fellowship with the American Cancer Society in this same year. Upon completion
of his residency, he practiced in the San Diego, California, area. Dr. Holcomb died in an automobile accident in Mexico, along with his wife and two sons, in 1973.

Honor in Medicine Award is awarded by the University of Kansas School of Medicine Honor Council to a student In recognition of their integrity, selflessness and high moral character.

The Norge W. Jerome Preventive Medicine Excellence Award is presented to an outstanding senior medical student who has excelled in public health or preventive medicine for minority populations during his or her medical education in honor of Norge W. Jerome, Ph.D., Professor Emerita, Department of Preventive Medicine. She conducted her first pioneering research more than 30 years ago, combining the fields of human nutrition and anthropology. This innovative approach launched the discipline of nutritional anthropology. Dr. Jerome has a strong record of public service and has been active in community development for close to 50 years, combining science with compassion to address the food, nutrition and health concerns of women, families, and communities in the United States and around the world. She serves as an inspiration to future generations of students.

The KAFP-Foundation Hostetter Award honors fourth year medical students who have promoted the values of Family Medicine during their medical school tenure.

The Paul C. Laybourne, M.D., Award is presented to the senior student who demonstrated the highest academic performance in the required psychiatry clerkship. Dr. Laybourne served the University of Kansas School of Medicine for more than 30 years. He was the founding director of the division of child psychiatry and served in that capacity until he retired. He was an important force in the evolution of child psychiatry in Kansas. An important early contribution was his pioneering work on the value of brief diagnostic and therapeutic general pediatric hospital evaluation for children with possible underlying emotional disturbance and overt physical symptoms. This approach helped demonstrate the critical value of integrating psychiatric evolution and management with the other aspects of general pediatric medical care.

The LMMSA Award is presented to a graduating student who has been significantly involved in the Latino Minority Medical Student Association's Kansas Chapter and the greater Kansas City hispanic community.

The Martin Award is presented to a senior student who has chosen radiology as a career for excellence in diagnostic radiology.

Dr. Ronald L. Martin Student Scholarship Fund. The KU School of Medicine-Wichita Department of Psychiatry and Behavioral Sciences established the Dr. Ronald L. Martin Student Scholarship to recognize the many years of dedicated service of Dr. Martin, Professor and Chair from 1990 to the time of his death in 1998. This fund makes three awards available to third- and fourth-year students at the University of Kansas School of Medicine-Wichita who have successfully completed the required psychiatry clerkship.

The MaryAnn McMullan Memorial Award is presented to a graduating medical student who best demonstrates the qualities of integrity, compassion and dedication to the care of the dying patient in memory of MaryAnn McMullan. Presented by the Division of Geriatric Medicine and Palliative Care, Department of Family Medicine.

Merck Manual Awards are presented to seniors who have demonstrated outstanding scholastic achievement.

The Dr. Herbert C. Miller Award is presented to a senior medical student in recognition of distinguished performance in research in the Department of Pediatrics.

The Roscoe Falls Morton, M.D., F.A.C.P., Memorial Fund Award (sponsored by the Roscoe Morton family, Arkansas City, Kansas) is presented to a graduating senior from the UKSM - Wichita campus for superior academic and clinical performance in internal medicine. The award recognizes the recipient's deep commitment to continued study of the principles of clinical science and special interest in internal medicine as a continued study and career.

The Thomas G. Orr Sr. Award is presented to the outstanding senior medical student in surgery in memory of Dr. Orr, chair of the Department of Surgery for 25 years. Dr. Orr joined the staff of the KU medical school in 1915 from Johns Hopkins and achieved national recognition as an officer in professional societies, author, teacher, and recipient of honorary Doctor of Science degrees and numerous other honors. His bibliography contained 231 published articles and two textbooks, evidence of his interest in the investigation of clinical problems, his contributions to research, and his influence on the future study of surgery.

The Conrad Osborne, M.D., Award is presented to a senior medical student from the Wichita campus for excellence as a third-year student in family medicine. This award honors Dr. Osborne, a graduate of the KU School of Medicine. Dr. Osborne was in the first group of family practice residents in the United States, graduating from the Wesley Family Practice Residency Program in 1970. Dr. Osborne embodied the principles of family practice, serving as a caring physician, talented teacher, and trusted mentor and friend to a generation of family physicians until his untimely death from lymphoma in 1993.

The Outstanding Student in Otolaryngology Award is presented to a senior student who exhibits not only an interest, but excellence, in clinical care, academic medicine and research, related to the field of Otolaryngology Head and Neck Surgery.

The Department of Ophthalmology Medical Student Award is presented to a senior student who demonstrates the most outstanding performance in the clinic, research and/or humanitarian arenas related to Ophthalmic care.

The Mary Packwood Memorial Award is presented to a graduating medical student who best demonstrates the qualities of integrity, compassion and dedication to the care of the older adult in memory of Mary Packwood. Presented by the Landon Center on Aging.

The Pride in the Profession Award is presented to a senior medical student who most appropriately characterizes the qualities of professionalism in medicine envisioned by Dean Deborah Powell, M.D., during her tenure at KUMC. The Pride in the Profession Award was established by Dr. Donald Hagen in honor of Dean Powell, who served as Executive Dean of the School of Medicine and Vice Chancellor for Clinical Affairs from 1997 to 2002. During her tenure, Dean Powell instituted programs of professionalism for students and faculty. She initiated the White Coat Ceremony to symbolize the students' entry into the medical profession. Dean Powell supported the establishment of the Academic Societies as part of her vision of the mentoring of students by practicing physicians. She continues to work with students and serves as an inspiration to future generations of students.
The Prakash Raghavan Clinical Student Award is presented to a senior from the Wichita campus in recognition of outstanding performance in clinical rotations.

The John B. Redford Distinguished Professorship Award is presented to a senior student for demonstrated academic and clinical excellence during the rehabilitation rotation.

The D. Cramer Reed Award recognizes a student who has displayed outstanding interest and aptitude in understanding health of populations and principles of effective disease prevention applied to individuals and groups. Dr. Reed was the founding dean of the KU School of Medicine - Wichita, founding dean of the College of Health Professions at Wichita State University, and founder of Wesley Medical Center's Health Strategies program, one of the first major health promotion and disease prevention programs in the United States.

The Daniel K. Roberts Medical Student Award for Excellence in Women's Health Care is presented to a medical student from the Wichita campus who exhibits excellence in clinical practice, education, and research in obstetrics and gynecology.

The Robert H. Robinson, M.D., Award is presented to a graduating student from the Wichita campus for superior academic and clinical performance in anesthesiology. Dr. Robinson was a long-time supporter of teaching medical students and residents in a clinical setting and is a former professor and the first chair of the Department of Anesthesiology at the KU School of Medicine - Wichita. This award honors the recipient's special interest in anesthesiology.

The Jack C. and Ruth M. Schroll Family Award is presented to an academically outstanding Kansan graduating senior, who has matched in either an OB-GYN or Dermatology Residency Program. This senior is of fine character and integrity with compassion for others. The Schroll family represents the following degrees from K.U.: Jack C. Schroll, 1944, MD, Residency OB-GYN, 1955; Ruth M. Prentice Schroll, BS, 1945; daughter, Kathryn Schroll Graves, MD, 1974, Residency Dermatology, 1979; son, John T. Schroll, MD, 1976, Residency OB-GYN, 1980; grandson, Jeffery Justin Graves, MD, 2007; Residency in Dermatology. The family represents a history of 55 doctors (MD and DO), including Dr. Jack Schroll's grandmother, Dr. Emma Hook Price, DO, 1901, Kirksville School of Osteopathy under Dr. A.T. Still, MD, founder of Osteopathy.

The Willard J. Smith, M.D., Award for Academic Achievement is presented to a graduating senior from the Wichita campus for superior academic performance. In recognition of Dr. Smith's contributions to the development of the clinical campus at UKSM - Wichita, the award is given to a student whose academic performance reflects a dedicated commitment to the scholarly acquisition and effective application of knowledge.

The Helmuth Sprinz Award is presented to a senior medical student whose academic achievements epitomize the spirit of Dr. Helmuth Sprinz. Dr. Sprinz was a distinguished faculty member of the KU School of Medicine from 1976 until his death in 1990. He was tireless in his effort on behalf of students, house staff, and faculty. He was particularly fond of working with, helping, and supporting students who were willing to expend extra effort to achieve their goals. Before joining the KU faculty, Dr. Sprinz enjoyed a distinguished career as a research pathologist and was Chief of Experimental Pathology at Walter Reed Army Institute of Research.

The Walter S. Sutton Prize is given annually to the medical student whose work in original research, preferably in genetics, is considered outstanding by the research committee. An honorable mention award is also made.

The W. Clarke Wescoe Award is presented to a senior student in recognition of outstanding achievement and the pursuit of excellence in the study of pharmacology and therapeutics. W. Clarke Wescoe, M.D., was a former chair and professor of pharmacology, former dean of the School of Medicine, former KU Chancellor, and former Chairman of the Board of Sterling Drug, Inc.

The Edward V. Williams Award is presented to a minority medical student who best reflects the integrity, compassion, and commitment to patient care exemplified by Edward V. Williams, M.D. Dr. Williams was the first African American to receive a medical degree from KU. He serves as an inspiration to future generations of students and countless others to achieve beyond expectations.

Curriculum

Curriculum Diagram (http://catalog.ku.edu/medicine-doctorate/curriculum/Curriculum_diagram_7-21-14.doc)


Core SOM Preclinical Phase

CORE 800. Foundations of Medicine. 0-8 Hours.
Foundations of Medicine is an 8-week, multidisciplinary course, taught by faculty members from basic science and clinical departments. This course integrates materials from the traditional disciplines of biochemistry, cell and molecular biology, histology, physiology, epidemiology, behavioral science, and preventive medicine. This course includes clinical skills instruction in medical history, physical examination, and cultural sensitivity. Patient cases are used where appropriate. Students partipate in small group discussions, problem-based learning sessions, laboratory exercises, clinical correlations, and lectures: they work collaboratively to master general principles, evaluate clinical literature, and develop tools for life-long learning. Students are evaluated by multiple-choice examination, clinical evaluation, and group activity preparation and participation.

Prerequisites: Medical School admission requirements. LEC.

CORE 805. Genetics and Neoplasia. 0-4 Hours.
This 4-week multidisciplinary course, taught by both basic science and clinical faculty, covers the molecular and chromosomal basis of human genetic disease, emphasizing the clinical significance of normal and abnormal genetic variation; single-gene and multifactorial diseases; and conditions caused by somatic mutation and epigenetic mechanisms. An emphasis is placed on neoplastic disorders. This course also examines the predictive value of genetic testing and the role of genetic counseling in clinical decision making; the principles of cancer therapeutics; and gender, ethnic, and behavioral considerations affecting prevention and treatment of cancer and other genetic diseases. This course includes clinical skills instruction in history-taking and physical examination of a standardized cancer patient. Students participate in large and small group discussion, laboratory exercises, problem based learning sessions, clinical correlations, clinical skills lab sessions, and lectures; and are evaluated by small group and clinical skills performance, and by USMLE-style objective examinations. Prerequisite: Successful completion of
Foundations of Medicine or permission of Associate Dean for Student Affairs. LEC.

CORE 810. Inflammation and Immunity. 0-4 Hours.
This 4-week multidisciplinary course, taught by faculty members from the Departments of Anatomy & Cell Biology, Microbiology, Pathology, Medicine, Family Medicine and Preventive Medicine, addresses the basic biology of the normal immune system and the basis for immunebased and inflammatory diseases. Topics will include normal lymphopoiesis and myelopoiesis, responses to infection, autoimmunity, allergy, transusions and transplantation, immune deficiencies and the appropriate therapies for these conditions. Therapies will include immunosuppressives, anti-inflammatory agents, vaccines and transplantation. The course integrates instruction on disease pathogenesis with clinical skills instruction (including history-taking and physical examination skills), considerations of epidemiological, ethical, social science aspects of medicine, disease prevention and the general approaches to therapy. Students participate in small group discussions, web-based instruction, labs, clinical skills lab sessions, and lectures. Students are evaluated based on their participation in small group discussion sessions and through standardized online summative examinations. Prerequisite: Successful completion of Foundations of Medicine, Genetics and Neoplasia, or permission of Associate Dean for Student Affairs. LEC.

CORE 815. Cardiopulmonary. 0-8 Hours.
This multidisciplinary course, taught by faculty members from Anatomy, Biochemistry, Medicine, Pathology, Pharmacology, and Physiology covers the normal/abnormal processes; principles of therapeutics; and gender, ethnic, and behavioral considerations affecting disease treatment and prevention of the cardiopulmonary system. This course also includes clinical skill instruction of patient interviewing and examination. Students participate in small group discussions, laboratory exercises, clinical correlations, clinical skills lab sessions, lectures and web-based directed self-study and are evaluated by performance in small groups and on exams. Prerequisite: Successful completion of Foundations of Medicine, Genetics and Neoplasia, Inflammation and Immunity, or permission of Associate Dean for Student Affairs. LEC.

CORE 820. Gastrointestinal System and Nutrition. 0-4 Hours.
This 4-week multidisciplinary course is taught by faculty members from the Departments of Anatomy and Cell Biology, Molecular and Integrative Physiology, and Pathology and Laboratory Medicine, Biochemistry and Molecular Biology, Pharmacology, Toxicology, and Therapeutics, Internal Medicine, Preventive Medicine, History and Philosophy of Medicine, Health Policy Management, Microbiology, Molecular Genetics, and Immunology, Family Medicine, and Surgery in the School of Medicine and the Department of Dietetics and Nutrition in the School of Allied Health. The course covers the normal/abnormal processes; principles of therapeutics; and gender, ethnic, and behavioral considerations of disease treatment and prevention of the gastrointestinal system including nutrition. This course also includes clinical skills instruction in the abdominal physical examination. Students participate in small group discussions, laboratory exercises, clinical correlations, clinical skills lab sessions, and lectures are evaluated by written tests, oral exams, and assessment of PBL and clinical skills performance. Prerequisite: Successful completion of Foundations of Medicine, Genetics and Neoplasia, Inflammation and Immunity, Cardiopulmonary, or permission of Associate Dean for Student Affairs. LEC.

CORE 825. Renal and Endocrine System. 0-4 Hours.
This 4-week multidisciplinary course, taught by faculty members from Anatomy, Biochemistry, Medicine, Pathology, Pharmacology, and Physiology covers the normal/abnormal processes; principles of therapeutics; and gender, ethnic, and behavioral considerations affecting disease treatment and prevention of the renal and endocrine systems. This course also includes clinical skill instruction of patient interviewing and examination. Students participate in small group discussions, laboratory exercises, clinical correlations, clinical skills lab sessions, lectures and web-based directed self-study and are evaluated by performance in small groups and on exams. Prerequisite: Successful completion of Foundations of Medicine, Genetics and Neoplasia, Inflammation and Immunity, Cardiopulmonary, Gastrointestinal Tract and Nutrition or permission of Associate Dean for Student Affairs. LEC.

CORE 830. Reproduction and Sexuality. 0-4 Hours.
This 4-week multidisciplinary course module is taught by faculty members from the Departments of Anatomy and Cell Biology, Pathology, Psychiatry and Behavioral Sciences, Gynecology and Obstetrics, Surgical Oncology, Urology, and Family Medicine. The course covers the normal/abnormal aspects of human reproduction and sexuality; principles of therapeutics; gender, ethnic, and behavioral considerations affecting sexual function; prevention and treatment of reproductive and sexual disorders. The course also includes clinical skill instruction in sexual history-taking and physical examination. Students participate in small group discussions, laboratory exercises, clinical correlations, patient and provider panels, clinical skills laboratory sessions, lectures, and web-based learning opportunities, and are evaluated by means of formative and summative examinations and assessment of participation in various learning activities. Prerequisite: Successful completion of Foundations of Medicine, Genetics and Neoplasia, Inflammation and Immunity, Cardiopulmonary, Gastrointestinal Tract and Nutrition, Renal and Endocrine Systems, or permission of Associate Dean for Student Affairs. LEC.

CORE 835. Musculoskeletal & Soft Tissue Systems. 0-4 Hours.
The (4-5) week multidisciplinary course, taught by faculty members from (Anatomy and Cell Biology, Orthopedic Surgery, Pathology, Pharmacology, Internal Medicine, Family Medicine, and Pediatrics departments), covers the normal/abnormal processes; principles of therapeutics (non-drug treatment will be emphasized); and gender, ethnic, and behavioral considerations affecting disease treatment and prevention of diseases of the musculoskeletel & soft tissue systems). This course also includes clinical skill instruction in an extremities physical examination. Students participate in small group discussions, laboratory exercises, clinical correlations, clinical skills lab sessions, and lectures and are evaluated by exams, attendance, participation, and professional behavior. Prerequisite: successful completion of the first year curriculum. LEC.

CORE 840. Brain and Behavior. 0-8 Hours.
This 8 week multidisciplinary course, taught by faculty members from Anatomy and Cell Biology, Molecular and integrative Physiology, Otolaryngology, Neurology, Pharmacology, Pathology, Internal Medicine, and Psychiatry, covers the normal/abnormal processes of the central and peripheral nervous system, including an introduction to the principles of therapeutics. The course combines and integrates several disciplines, including neuroanatomy, neurophysiology, neuropathology, introductory neuropharmacology, basic neurology and psychiatry. Prerequisite: Successful completion of Musculoskeletal & Soft Tissue Systems or permission of Associate Dean for Student Affairs. LEC.

CORE 845. Blood and Lymphoid System. 0-4 Hours.
This 4 week multidisciplinary course, taught by faculty members from Pathology and Laboratory Medicine, Internal Medicine, Pharmacology, and History and Philosophy of Medicine covers the normal/abnormal processes; principles of therapeutics; and gender, ethnic, and behavioral considerations affecting disease treatment and prevention of the blood and lymphoid system. The course also includes clinical skill instruction in history-taking and physical examination. Students participate in
lectures, problem-based learning sessions, and small group discussions. Students are evaluated by multiple choice examination and group activity preparation and participation. Prerequisites: Successful completion of Musculoskeletal & Soft Tissue Systems, Brain and Behavior or permission of Associate Dean for Student Affairs. LEC.

CORE 850. Infectious Diseases. 0-6 Hours.
This 6-week multidisciplinary course, taught by faculty members from the Departments of Pharmacology, Microbiology, Pathology, Internal Medicine, and Preventive Medicine, addresses the basic biology of the normal immune system and the basis for infectious and parasitic diseases. Topics will include normal immune responses to infection, immune deficiencies, bacteriologic, viral, fungal and parasitic infections, and the appropriate therapies for these conditions. Therapies discussed will include immunosuppressives, anti-microbials, and vaccines. The course integrates instruction on disease pathogenesis with clinical skills instruction (including history-taking and physical examination skills), consideration of epidemiological, ethical, social science aspects of medicine, disease prevention and the general approaches to therapy. Students participate in small group discussions, web-based instruction, labs, clinical skills lab sessions, and lectures. Students are evaluated based on their participation in small group discussions and through standardized online summative examinations. Prerequisites: Successful completion of Phase I, or permission of Associate Dean of Student Affairs. Successful completion of Musculoskeletal & Soft Tissue Systems, Brain and Behavior, Blood and Lymphoid System or permission of Associate Dean for Student Affairs. LEC.

CORE 860. Integration and Consolidation. 0-8 Hours.
This 8-week multidisciplinary module, taught primarily by faculty members from Pathology and Pharmacology, will consolidate and integrate materials from previous modules using pathophysiology and therapeutics as the focal point to highlight content required to successfully pass USMLE Step 1. The module will serve as a bridge between the basic and clinical sciences, as the students prepare to transition to clinical rotations. Faculty from Internal Medicine, Family Medicine, and School of Pharmacy will co-facilitate small group discussions. Students will be expected to participate in small group discussions, lectures and web-based self-study, and are evaluated by their overall performance in small groups and summative exams. Prerequisite: Successful completion of Musculoskeletal & Soft Tissue Systems, Brain and Behavior, Blood and Lymphoid System, Infectious Diseases, or permission of Associate Dean for Student Affairs. LEC.

Course credit hours are indicated after the course title.

Kansas City Clinical Required Course Descriptions

Third Year Requirements

FAPR 955. Family Medicine Clerkship. 0-8 Hours.
Students are introduced to the principles and practice of family medicine. They spend the majority of their time participating in the practice of a private family physician where they evaluate patients under direct supervision and recommend management. This practice experience is enhanced by case-based seminars and skills-based workshops with faculty and hospital call with family medicine residents. Evaluation is based on assessment by clinical supervisors, projects, a departmental exam, and the NBME Family Medicine Subject Exam. Prerequisites: Completion of Phase I (Years 1 and 2). CLN.

GERO 900. Geriatric Medicine Clerkship. 4 Hours.
This required 4-week Year 3 clerkship is sponsored by the Landon Center on Aging in collaboration with the Departments of Family Medicine, Internal Medicine, and Physical and Rehabilitation Medicine. The student will participate in the evaluation and care of older adults, with emphasis on the aging process and geriatric syndromes in both frail and successfully aging older adults. Students participate as a member of the health-care team in the medical practices of primary care physicians and geriatricians providing care to older adult patients. They help provide ambulatory care to older adults, as well as care in a variety of community-based long term care settings such as assisted living and nursing facilities, hospice, and home care. By the conclusion of this clerkship the students will be able to describe how to identify and address geriatric syndromes, expected decline of organ functions with aging, behavioral characteristics of the aged, special problems of drug treatment of older adults, and special strategies for providing medical care to complex older adult patients. Clinical experiences are augmented by web-based modules on geriatric topics, facilitated case discussions, and workshops. Evaluation is based on assessment of clinical performance by faculty members, an objective structured clinical exam, seminar participation, and a departmental written exam. Prerequisites: Medical Basic Science and Completion of Phase I (Years 1 and 2). CLN.

GYNO 900. OBSTETRICS/GYNECOLOGY CLERKSHIP. 0-6 Hours.
During this clerkship the student develops understanding of disease in women through history, physical examination, and laboratory studies. The clerkship includes study of biochemical, anatomical, and physiological changes of normal pregnancy and the effect of disease in altering the course of reproduction. Prerequisite: Medical Basic Sciences. FLD.

ICM 900. Issues in Clinical Medicine. 0 Hours.
This course enables students to apply the theoretical framework developed in ICM 801/802 and 850/851 to the patient care activities in which they participate during third-year clerkships. Through lectures and small group discussions students examine the ethical, legal and social aspects of medical practice and application of key principles to clinical practice. Students also explore career opportunities in medicine and factors to be considered in choosing a medical specialty. Students are evaluated through written assignments and participation in course activities. LEC.

MED 900. Internal Medicine Clerkship. 0-8 Hours.
General medicine orientation. Students will be assigned to Kansas University Medical Center, Bethany Medical Center, and Kansas City Veterans Administration Hospitals. FLD.

NEUR 900. Neurology Clerkship. 4 Hours.
The required four-week Neurology Clerkship is intended to familiarize students with the diagnosis and treatment of major neurological disorders. Effective interviewing and diagnostic skills, and competent performance of the neurological examination are emphasized. Students have an active closely supervised role in the diagnosis and treatment of both hospitalized and ambulatory patients. Clinical experience is accompanied by a didactic schedule of lectures, seminars, and practical-interactive learning sessions. Prerequisites: Completion of Phase I (Years 1 and 2). CLN.

PED 900. GENERAL PEDIATRICS CLERKSHIP. 0-6 Hours.
The student's activities will include rotations on the pediatric inpatient wards (taking histories, examining children, and making daily ward rounds with staff physicians) and the outpatient clinics and newborn nursery. Student evaluations are based primarily upon clinical performance, assessment of problem-solving skills and performance on a written multiple-choice examination given at the end of the clerkship. Offered in
modules I and II, III and IV, V and VI, VII and VIII, IX and X, XI and XII. Prerequisite: Medical Basic Sciences. FLD.

**PYCH 955. Psychiatry Clerkship. 4 Hours.**
The required four-week basic Psychiatry Clerkship is intended to familiarize students with the diagnosis and treatment of major psychiatric disorders. Effective interviewing and diagnostic skills, and competent performance of the mental status examination is emphasized. Students have an active closely supervised role in the diagnosis and treatment of both hospitalized and ambulatory patients. Clinical experience is accompanied by a didactic schedule of lectures, seminars, and practical-interactive learning sessions. Prerequisites: Completion of Phase I (Years 1 and 2). CLN.

**SURG 900. Junior Surgery Clerkship. 0-8 Hours.**
Surgical problems and diseases are studied utilizing lectures, skills laboratory experiences, study questions, clinical problem discussion and live patients. This course prepares the student to meet the pertinent aspects of the summative competencies of the University of Kansas School of Medicine during the third year of Medical School. A particularly useful goal of this course is to teach the student to identify life-threatening conditions that require urgent intervention. Although the skills of this course are necessary for an ambulatory practice, the skills that are taught in this course are most frequently seen and performed in the hospital setting. The student is expected to have a basic understanding of normal and abnormal body function. The student is expected to have completed successfully the basic course in physical diagnosis (years 1 and 2 of medical school). Prerequisite: first and second year medical years. LEC.

**Fourth Year Requirements**

**PMED 960. Population Health in Practice. 4 Hours.**
This required clerkship is designed to instruct fourth-year medical students about population-based approaches to health care and to facilitate the application of epidemiologic principles to clinical decision making. Using some of the basic concepts described under the auspices of community oriented primary care, students will learn how to define specific populations, ascertain their health care needs, formulate interventions to meet those needs and evaluate the impact of those interventions. Learning opportunities will develop and reinforce concepts related to health services organization and delivery, community dimensions of medical practice, occupational and environmental medicine, health care finances, access to medical care, and quality of medical care. This clerkship will include didactic teachings supplemented by course reading material and workshops that involve care studies and site visits. Learning experiences will allow the student to examine what it means for a physician to be part of a community and to explore the role that the community plays in the health of an individual. Practical application of course material will be emphasized. Prerequisite: Completion of third-year medical school curriculum. CLN.

**FAPR 900. Rural Preceptorship. 4 Hours.**
Since 1951 all medical students have completed, as a requirement of graduation, a rural preceptorship of at least four weeks with a practicing physician in the state of Kansas. The emphasis of the preceptorship is rural primary care (family medicine, general internal medicine and general pediatrics). Rural placements are made by the Course Administrator. The preceptor or site will provide housing while the student is on this rotation. The preceptor will expect the student to participate in all phases of professional life as a rural physician. Most sites have the student work in ambulatory clinic, hospital care, ER, nursing home, house calls, and night call. Students also are expected to participate in the civic, administrative and social activities of their preceptor. The preceptor will evaluate student performance based on school of medicine criteria. At the completion of the course the student will have: a working knowledge of the rural health care system, an understanding of the function of a physician in the context of community and an appreciation for the support systems needed for practice in rural Kansas. Offered in Modules I-XII. Prerequisite: Completion of year 3 clinical clerkships. IND.

**Subinternships (4)**
The four-week subinternship gives medical students an opportunity to become more proficient in a specific area of medicine. They provide a more comprehensive course than that of the third-year required course. Students select one of the following options to fulfill the requirement.

**FAPR 901. Subinternship in Family Medicine. 4 Hours.**
This clerkship is designed to prepare students for the responsibilities encountered as a first-year resident. Students will be required to perform the following: 1) actively participate in the management of a panel of inpatients on the Family Medicine Service, 2) participate in the care of outpatients in the Family Medicine Clinic, 3) take one in-house call weekly, and 4) take one OB call weekly. In fulfilling these responsibilities, some weekend participation will be necessary. Students will be expected to complete the same objectives listed in FAPR 950, but do so in an advanced manner incorporating a well-developed and organized approach to multifaceted clinical issues accompanied with a keen perception of non-clinical factors involved in Family Practice. A resident level examination will be administered covering both inpatient and outpatient topics. LEC.

**GYNO 901. Subinternship in Obstetrics and Gynecology. 4 Hours.**
The objective of this clerkship is to provide students with advanced experience in obstetrics and gynecology. Students will be assigned to the Obstetrics and Gynecology Service at KUMC. Students will participate in the management of common obstetrical and gynecologic conditions in a role similar to that of a resident. Clinical work will be supplemented by conferences and other educational activities. This clerkship fulfills the Subinternship Selective requirement. LEC.

**MED 908. Subinternship in Internal Medicine. 4 Hours.**
The objective of this clerkship is to provide students with advanced experience in the management of acutely ill medical patients. Students will be assigned to one of five locations: KUMC; the Kansas City VAMC; the Leavenworth VAMC; or St. Catherine’s Hospital, Garden City. Students will participate in the diagnosis and treatment of common medical conditions in a role similar to that of a resident. Clinical work will be supplemented by conferences and other educational activities. This clerkship fulfills the Subinternship Selective requirement. LEC.

**OTOR 901. Subinternship in Otolaryngology. 4 Hours.**
The objective of this clerkship is to provide students with advanced experience in otolaryngology. Students will be assigned to the Otolaryngology Service at KUMC. Students will participate in the management of common ENT conditions in a role similar to that of a resident. Clinical work will be supplemented by conferences and other educational activities. This clerkship fulfills the Subinternship Selective requirement. LEC.

**PED 910. Subinternship in Pediatrics. 4 Hours.**
This selective is an extension of the basic pediatric clerkship. It is designed to permit senior medical students to take increasing responsibility of patient care under close supervision of the faculty. Students will learn skills in patient management by active participation in the daily activities of the pediatric residency program. This selective is entirely clinical. The student will work on the Pediatric Inpatient Unit at KUMC. Student performance will be evaluated by the faculty based on factual knowledge, practical skills, problem-solving abilities, and personal
behavior and values. On the first day of the rotation, students will report to
the senior pediatric resident assigned to the pediatric floor. Prerequisite:
PED 900 or equivalent. LEC.

PED 914. Philmont Adolescent Medicine. 4-8 Hours.
The Philmont Adolescent Medicine experience is in the high altitude
environment at Philmont Scout Ranch in New Mexico. Students
learn health screening, care of sports injuries, and diagnosis and
management of pediatric, medical, surgical, gynecologic problems,
primarily of teenagers, but also of children and adults. Supervision of
students consists of faculty members from Medicine Pediatrics, Surgery,
Neurology, Family Practice, Gynecology, and Physical Medicine in an
effort to give well rounded educational guidance to the students.
National Board, Part 1, must be passed in order to receive clinical elective
credit. One four week experience only counts toward clinical electives
requirements. Permission of Instructor. Prerequisite: Physical Diagnosis,
Pathology and Pharmacology. FLD.

PED 918. Pediatric Subinternship Selective - Outpatient. 4 Hours.
This selective is an extension of the basic pediatric clerkship. It
is designed to permit senior medical students to take increasing
responsibility of patient care under close supervision of the faculty.
Students will learn skills in patient care by active participation in the daily
activities of the pediatric outpatient clinic. This selective is entirely clinical.
The student will work in the Pediatric Outpatient Clinic at KUMC in a
variety of clinics. The specific clinics will be assigned by the Chief of the
Ambulatory Pediatric Section after consultation with the student. Student
performance will be evaluated by the faculty based on factual knowledge,
practical skills, problem-solving abilities, and personal behavior and
values. This course can still be taken for elective credit even if a student
already has met the subinternship selective requirement. Prerequisite:
PED 900 or equivalent. FLD.

PYCH 901. Subinternship in Psychiatry. 4 Hours.
The student will function as an intern on the Adult and Child Psychiatric
Services at the University of Kansas Medical Center and Kansas City VA
Hospital. Each student will work closely with faculty and residents and will
have an important role in the team care of hospital patients. The course is
designed to provide a transitional experience between the predoctoral and
residency stage of medical education allowing the student the opportunity
to take more responsibility for patients with support and active teaching
provided by faculty and residents. LEC.

SURG 900. Surgery Subinternship-Neurosurgery. 4 Hours.
This course is designed to provide advanced experience to the student
in the management of neurosurgical problems. The student is assigned
to the neurosurgical service at the University hospital for four weeks.
Students will participate with the surgical team in daily rounds, diagnosis,
out-patient experience, operative experience and post-operative
management of neurosurgical patients. Emphasis is placed on an
understanding of neurologic disease with special emphasis in physical
exam and diagnosis, management of basic neurosurgical emergencies
and management of common neurosurgical problems. Accommodates
three students in Modules I-XII. Prerequisite: SURG 900 and MED 900.
LEC.

SURG 910. Surgery Subinternship-Urology. 4 Hours.
This course is designed to provide advanced experience to the student
in the diagnosis and management of genitourinary disease. The student is
assigned to the Urology Service at KUMC or the VA Hospital for 4
weeks. Students are expected to participate with the urologic patients.
It is expected that the student will participate, as possible, at a resident
level of responsibility. Ward rounds, clinical conference, seminars and
case studies supplement clinical experience. The student participates
directly in patient care on the ward, in the out-patient department, and in
the operating room. Emphasis is placed on an understanding of alterations
in physiology secondary to pathology, management of fluids and
electrolytes, basic elements of pre- and post-operative care, and diseases
amenable to surgical treatment. In addition, concepts taught during
Surgery 900 are reemphasized and considered in more detail. We can
accommodate two students at KUMC and two students at VAH. This will be offered in Modules I-XII.
Prerequisite: SURG 900 and MED 900. FLD.

SURG 915. Subinternship-Orthopaedic Surgery. 4 Hours.
This subinternship is designed to allow the student to participate in
orthopedic clinical care. The student is assigned to the orthopedic
surgical service at KUMC for four weeks. The student participates with
the orthopedic surgery team in the diagnosis, surgical treatment and
postoperative management of orthopedic patients. The student will
participate directly in care of patients in the emergency department,
operating room, intensive care unit and orthopedic ward. Emphasis is
placed on the understanding of pre-op, intra-op and postop care of the
orthopedic patient. There is a limit of 4 students per rotation. Prerequisite:
Successful completion of basic clinical clerkships. CLN.

Critical Care (4)
The four-week critical care selective presents the knowledge, skills, and
attitudes required to care for very ill hospitalized patients. This allows the
student to focus on an interest in a particular specialty and ensures that all
students have basic knowledge and skills in critical care. Students select
one of the following options to fulfill the requirement.

Critical Care (4)
ANES 911. Critical Care: Post-Anesthesia Unit. 4 Hours.
The objective of this clerkship is to provide students with experience in the management of critically ill patients. Students will participate in the diagnosis and treatment of patients in the KUMC Post-Anesthesia Unit. Clinical work will be supplemented by conferences and other educational activities. This clerkship fulfills the Critical Care Selective requirement. LEC.

MED 905. Critical Care: Coronary Care Unit. 4 Hours.
The objective of this clerkship is to provide students with experience in the management of critically ill patients with cardiovascular disorders. Students will participate in the diagnosis and treatment of patients in the KUMC or Kansas City VAMC Coronary Care Unit. Clinical work will be supplemented by conferences, formal and informal lectures and other educational activities. This clerkship fulfills the Critical Care Selective requirement. LEC.

MED 912. Critical Care: Medical Intensive Care Unit. 4 Hours.
The objective of this clerkship is to provide students with experience in the management of critically ill patients. Students will participate in the diagnosis and treatment of patients in the KUMC or Kansas City VAMC Medical Intensive Care Unit. Clinical work will be supplemented by conferences and other educational activities. This clerkship fulfills the Critical Care Selective requirement. LEC.

PED 926. Critical Care: Neonatology. 4 Hours.
The student will be actively involved in the care and management of the high-risk and acutely ill neonate. Through a clinical participation, tutorial sessions and assigned reading emphasis will be placed on modern neonatal intensive care techniques and developmental physiology and biochemistry. Students may elect additional consecutive four-week periods to pursue aspects of neonatology in more detail, engage in investigative projects or acquire first-hand experience in the operation of a regionalized program for care of high-risk or acutely ill neonates in the state. Students wishing this additional four weeks should contact the Pediatric Department. LEC.

PED 930. Critical Care: Pediatric Intensive Care Unit. 4 Hours.
Principles of ongoing assessment and management of critically ill children with single and multiple organ failure will be presented. The teaching format will be formal and informal rounds at the bedside in the KUMC Pediatric ICU by faculty members of the Pediatric Critical Care Division. Integration of history-taking, physical examination skills, and laboratory and radiological assessment with pathophysiology will be emphasized. LEC.

SURG 927. Critical Care: Burn Center. 4 Hours.
The objective of this clerkship is to provide students with experience in the management of critically ill patients. Students will participate in the diagnosis and treatment of patients in the KUMC Burn Center. Clinical work will be supplemented by conferences and other educational activities. This clerkship fulfills the Critical Care Selective requirement. LEC.

SURG 928. Critical Care: Neurosurgical Intensive Care Unit. 4 Hours.
The objective of this clerkship is to provide students with experience in the management of critically ill patients. Students will participate in the diagnosis and treatment of patients in the KUMC Neurosurgical Intensive Care Unit. Clinical work will be supplemented by conferences and other educational activities. This clerkship fulfills the Critical Care Selective requirement. LEC.

SURG 929. Critical Care: Surgical Intensive Care Unit. 4 Hours.
The objective of this clerkship is to provide students with experience in the management of critically ill patients. Students will participate in the diagnosis and treatment of patients in the KUMC Surgical Intensive Care Unit. Clinical work will be supplemented by conferences and other educational activities. This clerkship fulfills the Critical Care Selective requirement. LEC.

Clinical Electives in Kansas City

Anatomy (p. 2073)
Anesthesiology (p. 2073)
Biochemistry (p. 2074)
Cardiothoracic Surgery (p. 2074)
Diagnostic Radiology (p. 2074)
Emergency Medicine (p. 2074)
Family Practice (p. 2074)
Gynecology and Obstetrics (p. 2076)
History & Philosophy of Medicine (p. 2076)
Interdisciplinary (p. 2077)
Internal Medicine (p. 2079)
Microbiology, Molecular Genetics, and Immunology (p. 2082)
Molecular and Integrative Physiology (p. 2082)
Neurology (p. 2082)
Ophthalmology (p. 2083)
Otorhinolaryngology (p. 2083)
Pathology and Laboratory Medicine (p. 2084)
Pediatrics (p. 2085)
Pharmacology, Toxicology, and Therapeutics (p. 2086)
Preventive Medicine and Public Health (p. 2086)
Psychiatry (p. 2087)
Radiation Oncology (p. 2088)
Rehabilitation Medicine (p. 2088)
Surgery (p. 2088)

Anatomy

Chair: Dale R. Abrahamson, Ph.D.

ATMY 910. Readings in Anatomy. 1-4 Hours.
Enrollees will select an area of major personal interest and narrow their efforts to some accepted idea in that field. They will delve into the support for this idea by all means available to them, be it scientific literature, opinions of practicing physicians and other medical scientists, or chart review, to come up with an evaluation that they consider satisfactory. The selected subject of interest can deal with any area of medicine since this is to be primarily an experience that promotes motivation for self-learning. Offered in Modules I-XII. LEC.

ATMY 915. Advanced Topics. 2-4 Hours.
Special studies which allow students to further their training in one or more areas. Assignments are tailored to fulfill the needs of the individual and usually include readings and laboratory work guided by frequent conferences with an advisor. Offered in modules I-XII. Prerequisite: Permission of department. IND.

ATMY 920. Research. 4 Hours.
Original independent study of a problem approved by the student's advisor or advisory committee. Offered in modules I-XII. Prerequisite: Permission of department. IND.

Anesthesiology

Chair: Talal W. Khan, M.D., Interim

Students may enroll in an elective module in which an experience in clinical anesthesia is offered, including the administration of anesthetics
under supervision. The student becomes proficient in the placement of peripheral intravenous lines and endotracheal tubes. The opportunity to place central venous lines and intra-arterial lines, as well as other critical care procedures, may also be provided. Lectures and case conferences are presented, enabling the student to manage patients with renal failure, chronic pulmonary disease, coronary artery disease, neuromuscular diseases, and central nervous system diseases. The student also becomes familiar with the basic concepts of cardiopulmonary resuscitation and has the opportunity to participate in the treatment of patients with chronic pain.

**ANES 910. Anesthesiology. 4 Hours.**
Students will work in the operating room suite in the mornings under the direct supervision of an instructor in anesthesia and will be made to feel that they are part of the cooperative, expert team caring for each patient. In addition, the basic fundamentals of anesthesiology will be taught by means of lectures, seminars, and conferences in the afternoons, as well as through clinical situations. Offered in modules I-XII. Prerequisite: Medical Basic Sciences. LEC.

**ANES 912. Special Topics in Anesthesiology. 4 Hours.**
This elective is designed to provide the clinical and/or research experience in topics of special interest not otherwise represented in the curriculum. The student will design, in consultation with department faculty, specific objectives, reading assignments, and the mechanism for student evaluation. Prerequisite: Medical basic sciences and departmental consent. CLN.

**Biochemistry**
Chair: Gerald Carlson, Ph.D.

The Department of Biochemistry and Molecular Biology is dedicated to the advancement of knowledge of living systems at the molecular level and expanding the knowledge base of molecular medicine.

**BIOC 910. Topics in Biochemistry and Molecular Biology. 1-4 Hours.**
Special studies in a selected area of interest. Assignments may involve scholarly activity such as reading, writing, or small group discussions. Prerequisite: Permission of department chairperson. LEC.

**BIOC 913. Research in Biochemistry and Molecular Biology for Medical Students. 1-8 Hours.**
Selected research problems with emphasis on biochemistry and molecular biology. Offered in Modules I-XII. Prerequisite: Permission of department chairperson. IND.

**Cardiothoracic Surgery**

**CTSU 910. Cardiotoracic Surgery. 4 Hours.**
Stressing pre-operative assessment and post-operative management. This elective module will allow the student to develop his/her skills in diagnosis of cardiac disease, interpretation of cardiac catheterization and arteriographic data, and management of patients undergoing cardiothoracic surgery. Participation in consultations, follow-up clinics, and conferences with cardiologists will be expected. Offered in modules I-XII. Prerequisite: SURG 900 and MED 900. CLN.

**Diagnostic Radiology**
Chair: Philip Johnson, M.D.

The diagnostic radiology department actively participates in all four years of the curriculum. The first year correlates radiology with anatomy as part of the presentation of the Department of Anatomy and Cell Biology. Various types of X-rays and imaging studies including vascular studies, MRI, and CT demonstrate the necessity of a firm foundation in anatomy and illustrate how changes in anatomy form the foundation of disease processes. This brings anatomy and the patient to a meaningful manner. During the third and fourth years, the department offers educational programs in four-week modules. Students serve rotations in radiology and nuclear medicine. Students receive basic instruction in principles of radiology and its different modalities and observe the tools and methodology of imaging. Radiology conferences are given daily and weekly as part of other departmental curricula, such as neurosurgery, neurology, cardiology, pediatrics, medicine, orthopedics, and gastroenterological conferences. The student is trained and guided in accumulating knowledge and skill in the imaging diagnosis of disease.

**DIAG 910. Diagnostic Radiology. 4 Hours.**
The student will work in all phases of diagnostic radiology including gastrointestinal, neuroradiology, pediatric radiology, cardiovascular and special procedure radiology. Offered in Modules I-IV, VII-XI. Prerequisite: Medical Basic Sciences. FLD.

**DIAG 911. Nuclear Medicine-University of Kansas Medical Center or Veteran Administration Hospital, Leavenworth. 4 Hours.**
The student will participate in examination of patients and use of radioisotopes in diagnosis (scanning techniques) and treatment. Offered in modules I-XII. Prerequisite: Medical Basic Sciences. FLD.

**DIAG 913. Radiological Research. 4 Hours.**
Students may work with radiology staff in any of the following areas: radiological sciences, health physics, radiation biology, application of computers to radiology, radiological engineering, clinical research. Offered in modules I-XII. Prerequisite: Consent of instructor. IND.

**Emergency Medicine**
Chair: Dennis Allin, M.D.

**ERMD 919. Clinical Clerkship in Emergency Medicine. 4 Hours.**
This course will instruct students in the evaluation, management, and disposition of patients presenting to the Emergency Department with undifferentiated complaints. Students will be expected to evaluate patients of all groups and develop treatment plans under the direct supervision of Emergency Medicine faculty. In addition, students will actively participate in the resuscitation and stabilization of critically ill and traumatized patients. Prerequisite: SURG 900, MED 900, GYNO 900, PED 900, CLN.

**ERMD 921. Emergency Ultrasound. 4 Hours.**
Emergency ultrasound allows for rapid and accurate diagnostic information that can have significant benefits to patient outcomes. It involves performing and interpreting ultrasound at the patient’s bedside and is used to rapidly triage, diagnose, and treat medical conditions in modern emergency departments around the country. This course will instruct students interested in Emergency Medicine in the skills necessary to perform and interpret point-of-care ultrasound examinations. Students will be expected to learn the basic principles of point of care ultrasound, to recognize the indications of point of care ultrasound, and also to develop proficiency in performance and interpretation of the basic point of care ultrasound examinations performed in the Emergency Department. CLN.

**Family Practice**
Chair: Joshua Freeman, M.D.
Family practice is comprehensive, continuous medical care regardless of the age, sex, or affected organ system of the patient. It emphasizes the preventive aspects of health care and treatment of the patient in context of his or her family and community. Treatment of the whole person is a hallmark of family practice.

FAPR 905. Rural Family Medicine - Practice and Research. 4 Hours.
This elective is offered to students between the first and second years of medical school. It is designed to provide students with the opportunity to observe a rural family physician in the daily practice of medicine and to participate in the data collection involving delivery of medical care to patients seen in rural practices in Kansas. Students will spend two summer months on site with a rural family physician, observing the practice and performing data collection. At the beginning and end of the two month on site experience, students will spend eight days with faculty in the Department of Family Practice at KUMC. Prerequisite: Permission of the instructor. FLD.

FAPR 910. Clerkship in Family Medicine. 4 Hours.
The instructional objectives of the elective clerkship in family practice are to build on the skills and knowledge accumulated in the basic science areas and the other clinical specialty areas and reinforce them and apply them to the delivery of health services to the family unit and relate them to the individual, the family and the community. The clerkship, through supervised patient contact within the hospital and in the Family Practice Center and supervised teaching conferences, will amalgamate and reinforce the skills and previously gained clinical knowledge into the philosophy of primary health care delivery in breadth rather than depth. Offered in Modules I-XII. Prerequisite: Completed third year. FLD.

FAPR 915. Medicine and the Family. 2 Hours.
This elective course on medicine and the family teaches students about family dynamics as they relate to the practice of medicine. Specifically, the course focuses on the family life cycle, normal and dysfunctional families, marriage, "normal" sexual behavior, and sexual dysfunction. These concepts will be applied to an understanding of such common medical issues as: family planning, disability, health screening, risk factors, death and dying, and child safety. Students will also be encouraged to learn about their own families by completing genograms, "family circles," etc. Students will be graded via two examinations, one completed written project, and class attendance. Prerequisite: Permission of instructor. FLD.

FAPR 920. Research in Family Practice. 2-8 Hours.
Students desiring basic research experience in the context of Family Medicine may seek the sponsorship of a Family Practice faculty member and with that individual develop a written plan for the elective. The elective may vary in length from two weeks to three months and carries with it one credit hour for each sixty hours of time spent on the elective. Elective not available during July. FLD.

FAPR 925. Interdisciplinary Community Partnership. 4 Hours.
This course is designed as an interdisciplinary team approach to developing strategies for community health assessment and intervention. Students will work with a team that includes at least three other health professional students and at least one community "lay health advisor" to assess the health needs of a local neighborhood and develop and implement an appropriate intervention. The course will explore community needs and resources, assess and barriers to care, and culturally appropriate interventions. No courses currently exist which involve an equal partnership with medicine, allied health, social work and nursing.
This course is designed to give students the opportunity to learn to work as a team member with a variety of health care professionals, and to understand the valuable contribution of each group. Research has shown that students who are involved in the community during medical school continue to be actively involved in their chosen communities. This course is developed in concert with KU's Schools of Nursing, Allied Health and Social Welfare. This first year, two interdisciplinary teams will be assembled, working with 2 neighborhoods in the vicinity of KUMC. If this pilot is successful, more communities and teams will be assembled in future years. This is a year-long course that will span both fall and spring semesters. LEC.

FAPR 926. AIDS Care in the Community. 4 Hours.
This elective is a concentrated experience in AIDS medical care provided in a family practice setting. The focus is on diagnosis, treatment and psycho-social issues for men, women and children with HIV disease (including gynecologic, prenatal and delivery of infected women). Care throughout the spectrum of disease is emphasized. The course is an additional elective to be made available to clinical medical students in the fourth year of training. LEC.

FAPR 927. Palliative Care in a Community Setting. 4 Hours.
This elective is an end-of-life medical care experience including identification and treatment of medical problems associated with cancer, CHF, COPD, AIDS, and other life-shortening diseases. The course focus is on symptom management and psycho-social issues associated with dying. This course is an additional elective to be made available to clinical medicine students in the fourth year of training. LEC.

FAPR 935. PRIMARY CARE SPORTS MEDICINE. 4 Hours.
Students on this rotation will have the opportunity to learn the principles of primary care sports medicine. The rotation will be outpatient based and will include learning experiences in the sports medicine clinic, at the training room, and on the sidelines of high school and college sporting teams. Specific learning experiences will vary based on the sporting events that are available during the time of the elective. PREREQUISITE: Students must have completed all required third-year clerkships to participate in this elective. CLN.

FAPR 961. Community Based Geriatrics. 4 Hours.
Students on this rotation will have the opportunity to learn the principles of caring for older patients. The rotation will be based at the Landon Center of Aging and will include educational experiences in outpatient clinic, long-term care facilities, assisted living facilities and with hospice. This elective experience will build on the Year 3 Geriatrics clerkship by allowing the student to further develop their understanding and management skills in the care of older adults across the health care continuum. Students are invited to individualize their experience through a focus on a particular care setting or aspect of older adult care by arrangement with the clerkship director. CLN.

FAPR 962. Advanced Clinical Reasoning Skills. 2 Hours.
Clinical reasoning is a critical, often-underdeveloped skill in practicing physicians. Diagnostic errors are common among physicians and residents. In this course, you will learn to recognize common clinical reasoning errors, develop practice habits to help you improve your clinical reasoning, and develop reflective habits that help you determine why an error was made. You will learn how specific history, physical examination, and ancillary testing items make certain diagnoses more or less likely. This course will meet 10 times for 2 hours during a semester with course work between meetings. PREREQUISITE: Satisfactory completion of 6 months (4 six-week or 3 eight-week) of clinical clerkships. Concurrent clinical rotations for a minimum of 8 weeks over the semester. CLN.

FAPR 963. Cross-cultural Health Leadership Module I: Didactic. 1 Hour.
Cross-culturally competent care refers to physicians' "ability to communicate effectively and provide quality health care to patients from diverse sociocultural backgrounds." This course will train medical students in cross-cultural communication (CS) skills via interactive sessions in a student-based "learning community". In Module 1, students learn and
practice Association of American Medical Colleges (AAMC)-defined core topics for cross-culturally competent knowledge, attitude and skills. These are: 1) the definition of cultural competence, and providers' self-assessment of own relevant cultural experiences; 2) key aspects of cultural competence, including patients' healing traditions and systems, institutional cultural issues, and how these patients' explanatory illness narratives; 3) understanding how stereotyping and bias influence medical care; 4) the epidemiology of social determinants of health care disparities and collaboration with communities to address these; and 5) clinical communication skills to engage patients with different values, culture and beliefs than one's own, i.e. working with interpreters, and diagnostic, negotiating and problem-solving skills. In Module 1, we will use interactive faculty-facilitated didactic discussions, role play, case-studies, volunteer standardized patient interactions and out-of-class reading. Students will also conduct an in-depth case study with one cross-cultural patient and prepare a detailed patient narrative report describing both the patient's illness narrative and relevant cultural and social determinants of health impacting their health experience. Prerequisite: KUMC School of Medicine student. LEC.

FAPR 964. Cross-cultural Health Leadership Module 2: Service Learning Projects. 1 Hour.
Cross-culturally competent care refers to physicians' "ability to communicate effectively and provide quality health care to patients from diverse sociocultural backgrounds." This advanced course will train and mentor medical students in cross-cultural communication (C3) skills via participant-conducted service learning projects in voluntary clinical settings within a student-based "learning community". In Module 2, students will practice skills taught in Module 1, namely Association of American Medical Colleges (AAMC)-defined core topics for cross-culturally competent knowledge, attitude and skills (See Module 1 description). Participating students will collaborate to conduct service learning, quality improvement (Q1) projects to improve cross-culturally competent care in cross-cultural clinical settings in which they or their colleagues participate, e.g. (for M1/M2 students) Jaydoc, Bulldoc school-based health center, or clinical settings with permission of clinical faculty in those settings. Module 2 service learning projects will include 2 clinic-based "whole system events" to which participating students invite clinic faculty, staff and other student colleagues from students' practice settings. At the first event, students will present and discuss their proposed project to improve cross-culturally competent health care with clinic faculty and staff from the proposed setting. At the second event (at the end of the course), students will present the results of their project to their clinic faculty and student colleagues. Projects must address cross-cultural elements of clinical practice or cross-cultural communication skills; and be appropriate to the students' developmental stage of training (e.g. M1 students might conduct projects to improve M1 student skills using interpreters). Module 2 students will also participate in interactive sessions with faculty and other student participants, during which they will learn and discuss methodological approaches; and discuss challenging issues arising in their projects. Prerequisites: Prior participation in "Cross-cultural Health Leadership Module 1: Didactic" or Permission of Instructor LEC.

Gynecology and Obstetrics

Chair: Carl Weiner, M.D.

The Department of Obstetrics and Gynecology teaches anatomy, physiology, and endocrinology of reproduction in the basic science disciplines. During a clinical clerkship the student develops understanding of disease in women through history, physical examination, and laboratory studies. The clerkship includes study of biochemical, anatomical, and physiological changes of normal pregnancy and the effect of disease in altering the course of reproduction.

GYNO 914. Reproductive Endocrinology and Infertility. 4 Hours.
This clerkship will allow the medical student to develop skills in assessing and managing female patients who have complex reproductive endocrinology disorders. The student will also gain experience with diagnosis and the treatment options for female and male infertility. This clerkship will provide experience in office and operative procedures including laparoscopic procedures utilizing the laser and open procedures, which may include tubal reversal and myomectomy procedures. Prerequisite: GYNO 900, permission of instructor and clerkship director, John Calkins, M.D. FLD.

GYNO 915. Maternal Fetal Medicine. 4 Hours.
This clerkship will provide the medical student with advanced experience in high risk obstetrics. The student will be assigned to the Obstetrical Service at KUMC. The student will participate in the management of complicated obstetrical conditions in a role similar to that of a sub-intern. Prerequisite: GYNO 900; permission of instructor. LEC.

GYNO 916. Special Topics and Research. 2-4 Hours.
Offered in modules I-XII. Prerequisite: Permission of instructor. IND.

GYNO 918. Gynecologic Oncology. 4 Hours.
Subject material consists of the clinical science of oncology as applied to malignancies of the vulva, vagina, cervix, uterus, ovary and trophoblast. The student should be able to describe and define malignancies of the female genital tract in general terms and complete a clinical study in detail in the area of gynecologic oncology. The student will be evaluated by faculty judgment for general information, and a specific assessment of student projects will be performed. Offered in modules I-XII. Prerequisite: GYNO 900 and permission of instructor. LEC.

History & Philosophy of Medicine

Chair: Christopher Crenner, M.D., Ph.D.

A survey of the history and philosophy of medicine and the sciences applied to medicine from antiquity to the 20th century is offered. The changes and developments of medical theory, practice, organization, and education are traced and their relations with contemporary cultures examined. The following electives on aspects of medical history and philosophy are available.

HPMD 905. Narrative Ethics. 4 Hours.
Narative Ethics provides an essential complement to traditional philosophic ethics. Where an analytic approach to ethics reduces moral decisions to rational puzzles to be solved, a narrative approach examines a moral problem within the context of an individuals lived life, characterized by its own unique cultural and personal relationships, values, and commitments. Physicians need the narrative skills of a good reader in order to recognize and respond effectively to moral issues as they arise, to integrate concerns for values and beliefs into the routines of patient care, and to interpret patients moral choices within a framework of an individual life story. LEC.

HPMD 906. Medicine and the Movies. 0 Hours.
Utilizing film clips and video from the early 20th century to the present, the course provides a selected review of important topics in public health, medical institutions, and the professions of medicine and nursing. Consequently, students will become familiar with historical and social factors that have helped shaped medicine in the 20th century. LEC.
HPMD 908. Case Studies in Medical Ethics. 0 Hours.
Subject area to be arranged with faculty as independent study, offered only in August-December each year. IND.

HPMD 909. Ethical Issues In: _______. 4 Hours.
"Ethical Issues In__________" is a course offered to senior medical students who desire to spend a four-week block of time in the systematic examination of the set of ethical issues they are likely to encounter in their chosen post-graduate training program, e.g., ethical issues in psychiatry, ethical issues in OB/GYN, etc. The course consists of a guided literature search, regular tutorial sessions and preparation of a short research paper on a particular ethical issue or "case." The course is intended to offer the interested student a basic introduction to the reference tools and literature of contemporary medical ethics; assist the student in developing a critical perspective in ethical controversies within his/her chosen field; and, provide the student with basic analytical skills and approaches to particular ethical problems. Evaluation will be based on participation in tutorial sessions and the research paper. (Interested students should contact the Department of History and Philosophy of Medicine, (x7040) for additional information.) ALL STUDENTS ENROLLING IN THE COURSE MUST CONTACT THE DEPARTMENT AT LEAST ONE MONTH PRIOR TO ENROLLMENT DATE TO ALLOW FOR APPROPRIATE INDIVIDUALIZED PLANNING AND SCHEDULING. Prerequisite: Enrollment limited to senior medical students. (Junior medical students by special permission.) IND.

HPMD 910. Readings in the History of Medicine. 4 Hours.
Guided readings in an area chosen by the student after consultation. Weekly individual tutorials and group seminars. Offered in Modules I-XII. IND.

HPMD 911. Current Social and Ethical Problems of Medicine. 4 Hours.
Guided readings and discussion of one or more social or ethical problems currently facing medicine. Examples: Homosexuality, abortion, contraception, medical education, medicine as a social instrument, etc. Offered in modules I-XII. IND.

HPMD 914. Advanced Study in the History of Medicine. 4 Hours.
Sequel to readings in the history of medicine. Offered in Modules I-XII. Prerequisite: HPMD 910 and approval of chairperson. IND.

Interdisciplinary

IDSP 800. Special Programs. 1-8 Hours.
Electives taken during the basic science years of institutions other than KUMC or at KUMC but in departments that do not have an elective course number. These courses include, but are not limited to, a research training experience or a clinical training experience, during the summer session between the first and second years of medical school. The application form, obtained from the Office of Student Affairs, School of Medicine, must contain a written description of the educational experience, the reason for proposing such a program, and written indication of faculty or supervisory personnel of their willingness to evaluate the student's performance. Elective credit will be accrued at the rate of four credits for eight weeks, three credits for six weeks, two credits for four weeks, or one credit for two weeks. Prerequisite: Approval of student's special program mentor, special program advisor and Associate Dean for Student Affairs. FLD.

IDSP 801. Remedial Program. 0-12 Hours.
Medical students will be enrolled in this course when the Academic Committee of the School of Medicine recommends a remedial program for a student who has failed a course. Remediation may take place at KUMC or at another institution. Evaluation of the student's performance must be obtained from the remedial program director upon completion of the remedial program. Prerequisite: Approval of Associate Dean for Student Affairs. FLD.

IDSP 802. Diversity and Cultural Competency in Medicine. 3 Hours.
The primary purpose of this course is to provide medical students at the University of Kansas School of Medicine with the critical knowledge, skills, abilities and attitudes necessary for cultural competency in medicine. This course will empower student to develop the attitudes, skills, and knowledge base necessary to effectively serve diverse populations, especially the underserved, vulnerable and at-risk populations. In addition, students will learn more about diversity and diverse populations. Students will learn that diversity is each of us and all of us, and that it is necessary to treat each person as the unique individual he/she is. There are many complex issues surrounding the provision of health and social services in this state, the nation, and the world. Differences in language, age, culture, sexual orientation, life experiences, socioeconomic status, political and religious beliefs add challenging dimensions to health care delivery and education. The State of Kansas and the nation is becoming increasingly diverse. It is improbable that current medical students will become physicians who serve only those with whom they share a common background. Therefore, it is necessary that medical students learn to understand and appreciate those who differ from them so that the physician/patient relationship is one that is mutually beneficial. Those students who successfully complete this course will have the skills they need to be the world-class physician the future requires. LEC.

IDSP 803. Diversity and Cultural Competency in Medicine.. 3 Hours.
The primary purpose of this course is to provide medical students at the University of Kansas School of Medicine with the critical knowledge, skills, abilities, and attitudes necessary for cultural competency in medicine. This course will empower students to develop the attitudes, skills and knowledge base necessary to effectively serve diverse populations, especially the underserved, vulnerable, and at-risk populations. In addition, students will learn more about diversity and diverse populations. Students will learn that diversity is each of us and all of us, and that is it necessary to treat each person as the unique individual he/she is. There are many complex issues surrounding the provision of health and the world. Differences in language, age, culture, sexual orientation, life experiences, socioeconomic status, political, and religious beliefs add challenging dimensions to healthcare delivery and education. The State of Kansas and the nation is becoming increasingly diverse. It is improbable that current medical students will become physicians who serve only those with whom they share a common background. Therefore, it is necessary that medical students learn to understand and appreciate those who differ from them so that the physician/patient relationship is one that is mutually beneficial. Those students who successfully complete this course will have the skills they need to be the world class physician the future requires. FLD.

IDSP 804. Special Experience. 0 Hours.
Medical students will be enrolled in this course when the Associate Dean for Student Affairs, the Associate Dean for Academic and Student Affairs, or the Academic Committee approves a program for a student that may include a prolonged absence from the School of Medicine. The student's experience may include, but is not limited to, a fellowship, research, or Master's program. The student will not receive credit, a grade, or evaluation of their performance. LEC.

IDSP 805. Enrichment Program. 0 Hours.
Medical students will be enrolled in this course when the Associate Dean for Student Affairs, the Associate Dean for Academic and Student Affairs or the Academic Committee approves a program of study for a student who cannot enroll in the regular curriculum until a passing grade
is achieved on Step 1 or Step 2 of the USMLE. The student's experience may include, but is not limited to, a formal board preparation program. The student will not receive credit. FLD.

**IDSP 806. Personal/Professional Development. 0 Hours.**
Medical students will be enrolled in this course during the clinical years when no other rotations are scheduled for the student. IND.

**IDSP 850. Introduction to Clinical Research. 1 Hour.**
The course will provide a comprehensive overview to clinical research. The student will gain an understanding of how to develop clinical research questions including protocol design and the factors that should be considered in initiating a clinical research study. This will include biostatistical considerations, the recruitment of study participants, regulatory issues, and data management, and defining measures and instruments. Students will gain knowledge of how to define clinical research among the various institutional entities involved with clinical research at The University of Kansas Medical Center such as the Research Institute (RI), General Clinical Research Center (GCRC) and the Human Subjects Committee (HSC). Additionally, one component of the course will focus on how to apply for funding (grantsmanship), critical appraisal of research studies, and how to present research data. LEC.

**IDSP 900. Special Program. 1-12 Hours.**
A special program is any scholastic activity that departs from the required or elective modules of the curriculum at KUMC and for which the student expects to receive credit toward the M.D. degree. Any student enrolled in medical school is eligible to apply. The application form is initiated in the Office of Student Records and Registration. In addition to this form, the application must contain a written description of the type of educational experience sought and the reason for proposing such a program; written indication of faculty or supervisory personnel of their willingness to participate in the program and to evaluate the student's performance; source of scholarship, fellowship, travel, or research fund when these funds constitute support of an integral part of the program. If the special program involves study in an area identifiable by department (medicine, surgery, Gynecology-Obstetrics, etc.) approval by the chairperson of the respective department or designate must be obtained. No more than two modules may be substituted by a special program. The application must be submitted at least two months before the expected starting date of the program. Offered in Modules I-XII. Prerequisite: Approval of Dean. FLD.

**IDSP 910. Medical Spanish-Level 1. 2 Hours.**
This is an entry level Medical Spanish course for students with minimal or no Spanish language education. Student completing this course will have acquired the language skills necessary to interact at a basic level in a medical context. Students will learn how to introduce themselves, greet patients, obtain personal information, ask about symptoms, and describe medical conditions. In addition, students will be able to hold basic conversations with patients about pain, diabetes, diet, trauma, cardiac issues, depression, and anxiety. Students will also be able to use and recognize basic cultural practices such as forms of address, family structure, beliefs about medicine as well as how to work with a translator. Prerequisites: Minimal to no knowledge of Spanish language and approval from the Dean of Student Affairs. LEC.

**IDSP 911. Medical Spanish-Level 2. 2 Hours.**
This is an intermediate-low level Medical Spanish class. In Medical Spanish level 2 students build on what they have learned in the previous level. They expand their vocabulary skills to include medical specialties and procedures as well as their ability to describe medical conditions. Students begin to learn to ask about and express past actions and conditions. They also learn to give specific advice and directions to medical personnel and patients. By the end of the course, students will be able to hold conversations on STIs and reproduction, MI symptoms and anatomy, respiratory concerns, pregnancy and prenatal-care, drug and alcohol abuse, strokes, surgery procedures, pharmacy and drugs and elder care. Students will also be able to understand culturally specific approaches such as the meaning of death, modern medicine and "fatalism" among many others. CLN.

**IDSP 912. Spanish for Health Care Workers. 4 Hours.**
OBJECTIVES: The general goals of the instructional program are to provide, within one month, a functional command of the language for basic interaction between health care providers and recipients. The following objectives will be emphasized in order to meet the goals of the program. Students will: 1. Develop and/or improve oral communication skills with emphasis on General American Spanish. 2. Demonstrate the basic phonology and fundamentals of syntax of the language. 3. Practice use of the most commonly used verbs in present and past tenses. 4. Accumulate a specialized vocabulary appropriate to most health care situations. 5. Sustain a limited conversation about appropriate topics with some degree of fluency and comfort. 6. Develop an appreciation and understanding of cultural differences within Hispanic cultures and backgrounds. 7. Demonstrate basic Spanish language skills by taking a history in Spanish from Spanish speaking real or simulated patient. Prerequisite: Permission of the instructor required; one year Spanish language coursework or the equivalent recommended. FLD.

**IDSP 950. Introduction to Clinical Research. 1 Hour.**
The course will provide a comprehensive overview to clinical research. The student will gain an understanding of how to develop clinical research questions including protocol design and the factors that should be considered in initiating a clinical research study. This will include biostatistical considerations, the recruitment of study participants, regulatory issues, and data management, and defining measures and instruments. Students will gain knowledge of how to define clinical research among the various institutional entities involved with clinical research at The University of Kansas Medical Center such as Research Institute (RI), General Clinical Research Center (GCRC) and the Human Subjects Committee (HSC). Additionally, one component of the course will focus on how to apply for funding (grantsmanship), critical appraisal of research studies, and how to present research data. Must have instructor permission to enroll. LEC.

**IDSP 965. Health Data Theory and Practice. 2 Hours.**
Principles of database theory, modeling, design and manipulation will be introduced. Students will have experience using a relational database management system. Database manipulation will be explored using structured query language (SQL) to compose and execute query statements and critically evaluate the results. IND.

**IDSP 970. Introduction to Health Informatics. 2 Hours.**
This course will provide a broad survey of health informatics focused on five themes: health informatics foundations; clinical decision support; human factors/organization factors; public health informatics and current issues in health informatics including best practices. Students enrolled for the optional 3 credit offering will develop and demonstrate a practical, innovative small-group information technology (IT) project from one of the set of faculty recommended projects or from a student-proposed idea. IND.
health care system, it will be increasingly important for physicians to participate in these processes. LEC.

Internal Medicine

Chair: Amy O'Brien-Ladner, M.D., Acting Chair

Before being assigned to an inpatient medical service, all students learn techniques of obtaining a medical history and performing a physical examination as part of the required medical science course, Introduction to Clinical Medicine. Each student must then take a 12-week Basic Medicine Clerkship in internal medicine. After successful completion of this phase of education, students interested in obtaining greater mastery of the content and principles of internal medicine may choose from a variety of advanced clerkships and electives in medical subspecialties.

MED 901. General Medicine--Veterans Administration Medical Center. 4 Hours.
The student will be assigned to one of the general medical wards where the student will function in the role of subintern (e.g., the student will be assigned patients to work up and will be expected to assume partial responsibility for their diagnostic and therapeutic program). The number of patients assigned and the amount of responsibility given will vary with the student's ability. At all times the student will work closely with a staff physician or senior resident who will be responsible for the student's education. Offered in modules I-XII. Prerequisite: MED 900. FLD.

MED 902. Advanced Topics in Internal Medicine. 4 Hours.
Offered in modules I-XII. Prerequisite: MED 900 and special arrangement with department. FLD.

MED 903. Research Topics in Internal Medicine. 4 Hours.
Offered in modules I-XII. Prerequisite: Special arrangement with department. IND.

MED 906. Advanced General Medicine - Leavenworth Veterans Administration Medical Center. 4 Hours.
The student will function in the role of a sub-intern on the Medicine I Teaching Service. He/She will assume partial responsibility for the diagnostic and therapeutic program for assigned patients. The number of patients and level of responsibility will be accommodated to the individual's educational goals and ability. Emphasis will be placed on the clinical and practical approach to the patient including differential diagnosis, pathophysiology, and management strategies. At all time the student will work closely with the Chief, Medical Service who is in charge of the Teaching Unit. Evaluation of the student's performance during the clerkship will be based on faculty's assessment of the student's clinical and conference participation. Prerequisite: MED 900. FLD.

MED 907. Ambulatory Specialties Selective in Dermatology. 2 Hours.
Two week course composed of outpatient clinic experience, tutorial sessions, and audiovisual material available in the educational resource center (ERC) will enable the medical students to diagnose the most prevalent skin diseases and perform an adequate history and physical examination needed to establish these diagnoses. There will be a syllabus available from the secretaries in the dermatology office. There will be an opportunity to attend a monthly Kansas City Dermatological Society meeting on the third Thursday of most months, and attend at least twice weekly conferences given by the dermatology residents to the medical students. Some medical students will have the opportunity to spend two weeks with a dermatologist in private practice in the Kansas City area (or Topeka) instead of spending the time at the University of Kansas Medical Center Dermatology department. Those students are encouraged to attend the lectures given by the dermatology residents. LEC.

MED 909. Clinical Elective in General Medicine Consultation and Hospital Based Medicine Practice. 4 Hours.
The student(s) will be exposed to the arena of general medicine consultation and hospital based medicine practices. The students would be responsible for performing initial evaluation and work up of new general medicine and/or geriatric consultations as well as the ongoing care of the patient's medicine issues. This experience would be unique in that the attending of record is not a general internist but often a surgeon, rehab specialist, etc. The students would learn the art and science of being a consultant-from evaluating medical conditions as they arise in the surgical and rehabilitating patient communicating with referring physicians, providing concurrent care, diagnostically and therapeutically of serious ongoing medical issues. In addition, the student would become well versed in the pre-operative evaluation of patients, as this can be a substantial part of a general internist's practice. Finally, the student will gain insight to what it is like to have a hospital-based practice by working directly with two hospitalists for KUMC. One of the responsibilities of the elective would be to prepare and give a short presentation on an issue of consultative medicine that would be presented in small group format but could also be used in care-based format to present in other arenas if so desired. FLD.

MED 910. Clinical Cardiology. 4 Hours.
The clerkship in cardiology offers an experience in the clinical evaluation and treatment of patients with a variety of cardiovascular problems. The students, as sub-interns, will function on the cardiovascular service as an integral part in the care of the seriously ill patient with a wide range of problems. The students will make cardiovascular rounds with one of the members of the cardiology staff, during which time clinical skills in bedside diagnosis, auscultation and palpation will be emphasized and developed. They will have an opportunity to develop expertise in interpretation of electrocardiograms on a daily basis. The treatment of arrhythmias and heart failure will be stressed. They will also have an opportunity to evaluate in-hospital consultations as well as outpatient consultations and to see portooperative follow-up patients. They will have an opportunity to follow patients through cardiac catheterization procedures and to participate in the computation and assessment of the catheterization date. Indication for cardiovascular operations will be emphasized to weekly conferences. FLD.

MED 911. Coronary Care Unit and Electrocardiography--Veterans Administration Medical Center. 4 Hours.
The student will function as a subintern in the Coronary Care Unit with the cardiovascular fellow and cardiology subspecialty resident. The patient material consists of all the patients in the VA medical center with acute myocardial infarction, rule out acute myocardial infarction, pre-infarction syndrome and problem arrhythmias. The student will also develop expertise in electrocardiography and read a portion of the daily EKG's independently and in collaboration with the cardiovascular resident or fellow and the cardiologist. Offered in modules I-XII. Prerequisite: MED 900 or permission of instructor. FLD.

MED 915. Comprehensive Care of the Complex Adult. 4 Hours.
The objective of this four week elective is to enhance the student's ability to care for complex adult patients in various systems of care. Clinically, the student will rotate through selected clinical centers of care at the University of Kansas. There will be a focus on three facets of the care: the clinical content and context, the patient's experience and the structure of the specific systems of care. Through experience, didactic presentations on systems of care, focused observation and reflection, the student will be able to better define the organization of clinical systems of care and to recognize how to "diagnose" and to help collaborate in improving systems of care. These skills will likely be of great benefit for understanding elements of the core competency of 'systems based
surveys, and curriculum development. In addition, students will be
needs assessments, grant development, health interventions, research
a comprehensive project related to a particular need of the agency and/
professionals trained in multiple disciplines, including but not limited to"}

direct mentorship will be provided by the GI resident or fellows and can participate in special GI procedures on patients, such
as endoscopy and motility studies. The clerk is instructed in proctoscopy
until he/she has mastered this as a routine procedure. Offered in modules
MED 900 or permission of instructor. FLD.

MED 920. Advanced Gastroenterology Clerkship. 4 Hours.
This clerkship is directed toward specific problems of gastrointestinal
disease. The clinical clerk is involved in ward care and ward work,
including admission work-up of patients, their daily care, staff rounds, X-
ray interpretation, treatment of specific GI disease, long term therapy, and
follow-up in the outpatient clinic. The clerk is supervised by the GI resident
or fellows and can participate in special GI procedures on patients, such
as endoscopy and motility studies. The clerk is instructed in proctoscopy
until he/she has mastered this as a routine procedure. Offered in modules
MED 900 or permission of instructor. FLD.

MED 921. Gastroenterology Clerkship--Veterans Administration
Medical Center. 4 Hours.
The manifestations of gastrointestinal disease will be presented to
the student by participation in consultation rounds and endoscopy.
The student will be a member of a team composed of a staff
gastroenterologist, a fellow, and a medical resident. At the completion
of the course, the student will be familiar with the manifestations
of gastrointestinal diseases, their diagnostic evaluation, and their
treatment. The student will learn the indications and contraindications
of gastrointestinal procedures. The student will be evaluated on a daily basis
by the staff gastroenterologist as the student interviews and examines
patients and makes recommendations for their diagnostic and therapeutic
measures on consultation rounds. Prerequisite: MED 900 or permission
of instructor. FLD.

MED 923. Gastroenterology--Special Programs. 4 Hours.
Combination of the preceding GI electives as desired by the student upon
consultation with the senior GI staff. Offered in modules I-XII. Prerequisite:
MED 900 and MED 920 or MED 921. FLD.

MED 925. Interdisciplinary Community Partnership. 4 Hours.
This course offers an interdisciplinary eight-week experience in diverse
settings outside of the tertiary care environment, dealing with community
health issues and their impact on individual and population health. Students
will be engaged in intensive on-site internships with organizations, e.g.,
social service and public health agencies, community-based indigent-
care clinics, which provide services related to disease prevention, health
promotion, quality of life, health insurance, poverty prevention, and other
healthcare issues. The students will gain insight into the hallallenges of
specific populations within the community, as well as the gencies and
programs that serve their needs. Direct mentorship will be provided by
professionals trained in multiple disciplines, including but not limited to
medicine, nursing, allied health, and social work. Students will complete
a comprehensive project related to a particular need of the agency and/or
the population that the agency serves. Common examples include:
needs assessments, grant development, health interventions, research
surveys, and curriculum development. In addition, students will be
required to complete an oral or poster presentation describing their
project, nd a comprehensive written report of their internship experience.
The overall emphasis of the course will be to enhance awareness to
expand knowledge, and to gain experience in working with individuals
and populations on the health care challenges they confront within their
families, their community and our society. FLD.

MED 930. Clinical Hematology. 4 Hours.
This will consist of inpatient and outpatient care, dealing with all
types of hematologic disorders. The student will be given experience
and instruction in morphology of peripheral blood and bone marrow.
Weekly conferences, didactic and participating study sessions with the
hematology staff will be conducted. Offered in modules I-XII. Prerequisite:
MED 900 or permission of instructor. FLD.

MED 935. Infectious Diseases--Advanced Clerkship. 4 Hours.
The students will be given the responsibility of participating actively in
the care of patients admitted to the division of infectious diseases under
close supervision by attending physicians and house officers. Students
will also be exposed to experiences in clinical microbiology as well as
medical consultations requested by other clinical services to the division
of infectious diseases. Offered in modules I-XII. Prerequisite: MED 900 or
permission of instructor. FLD.

MED 936. Infectious Disease Elective at Kansas City Veterans
Administration Medical Center. 4 Hours.
The Infectious Disease Section at the VA medical center is responsible
for an active inpatient consult service. The student will be responsible for
seeing the consult patients with the resident and/or Infectious Disease
fellow, recommending initial diagnostic and therapeutic management,
and presentations to the Infectious Disease staff physician. The clinical
experience will be supplemented with didactic discussions and an
introduction to medical microbiology in the clinical laboratory. Offered in
modules I-XII. Prerequisite: MED 900 or permission of instructor. FLD.

MED 940. Endocrinology and Metabolism, Clinical. 4 Hours.
Introduction to endocrinology and metabolism with special emphasis on
diagnosis and management of selected patients with this category of
disease. Students will participate directly in patient evaluation. Offered in
modules I-XII. Prerequisite: MED 900 or permission of instructor. FLD.

MED 941. Research Problems in Endocrinology and Metabolism. 8
Hours.
Two consecutive four-week modules that will provide the interested
student with laboratory and research experience necessary for clinical
investigation of specific problems in endocrinology and metabolism. The
student may either pursue an independent research problem or participate
in a research project currently under investigation by a staff member. The
student will be required to submit a written report and deliver a seminar
at a Sectional Research Conference. An objective of this course will be to
obtain data suitable for publication or presentation at Student Research
Day. Offered in modules I-XII. Prerequisite: Special arrangement with
staff. IND.

MED 950. Clinical Nephrology--University of Kansas Medical Center
or Veterans Administration Medical Center. 4 Hours.
The Division of Nephrology is active in both the University of Kansas
Medical Center and the Veterans Administration Medical Center. The
activities of this division center on the diagnosis and treatment of patients
with medical diseases of the kidney. Clinical clerks are assigned patients
on the inpatient service, the outpatient clinic and in the outpatient chronic
hemodialysis unit. The clerks are expected to function at a subintern
level. Under the guidance of the house staff they provide the primary
work up, write the admitting orders and assist in performing procedures
such as peritoneal dialysis and hemodialysis. Clerks and house staff meet
regularly with the attending staff nephrologist to discuss specific topics
in renal physiology and pathogenesis. A formal nephrology conference for all housestaff and students is held weekly. The clerk is encouraged to participate in one of the ongoing research projects. Three positions are available at the University of Kansas Medical Center and two at the Veterans Administration Medical Center. Offered in modules I-XII. Prerequisite: MED 900. FLD.

MED 951. Research Problems in Basic and Clinical Nephrology. 4-8 Hours.
Investigation of specific problems in nephrology. One or two modules consecutively. Offered in modules I-XII. Prerequisite: Arrangement with staff. IND.

MED 960. Pulmonary/Critical Care. 4 Hours.
Students will be assigned to the Respiratory Intensive Care Unit. Under direct supervision of a Senior Medical Resident and a Pulmonary/Critical Care Fellow they will participate in the care of patients hospitalized in the Respiratory Intensive Care Unit. Daily attending rounds emphasize correlation of clinical, radiographic, laboratory, and invasive physiologic data in managing critically ill patients. Extensive experience in ventilator management and invasive monitoring. Students are on pager contact so they may be notified and participate in critical care decision making. Offered in modules I-XII. Prerequisite: MED 900 or permission of instructor. FLD.

MED 961. Pulmonary Medicine, Physiology. 4 Hours.
Students will be assigned to the pulmonary function laboratory to learn the technique and interpretation of pulmonary function tests. Under the immediate supervision of a pulmonary technician and a pulmonary disease fellow, students will observe, perform, and interpret the various tests of lung function. Clinical correlation will be obtained via attendance at inpatient, outpatient, and consultation rounds where clinical problems will be related to physiologic finds. Offered in modules I-XII. Prerequisite: MED 900 or permission of instructor. LAB.

MED 962. Chest Disease Medicine–Veterans Administration Medical Center. 4 Hours.
The student electing the Chest Disease Service at the Veterans Administration Medical Center will be assigned as a subintern on Ward 11 West where he or she will be assigned to primary care of a small number of selected chest disease patients. The student will be directly responsible for the patients’ diagnostic and therapeutic management under the specific supervision of the chest disease fellow and chief of chest disease section, VA medical center. There will be seminar and didactic instruction on natural history of the frequently occurring chronic chest diseases. The student will assist in procedures such as fiberoptic bronchoscopy, pneu-thorax intubation, thoracentesis and pleural biopsy and will observe and perform common procedures of pulmonary function testing with patients. He or she will assist with chest disease consultations from other services with the chest disease resident and will be expected to attend and participate in all conferences of the chest disease section. The student will participate in inhalation therapy procedures including ventilator management. He or she will be expected to complete and discuss a small required reading list from selected texts and journal articles. The objective of the elective is to give a student concentrated but comprehensive actual experience in the management of the chest disease performance section of the VA medical center in writing at the completion of the elective. Offered in modules I-XII. Prerequisite: MED 900 or permission of instructor. FLD.

MED 969. Clinical Oncology–Veterans Administration Medical Center. 4 Hours.
The student will participate in both in- and outpatient cancer management, consult rounds, and twice-weekly teaching conferences. Emphasis will be on clinical investigations of new and established anticancer drugs, and on the application of pharmacokinetic and cytokinetic studies to the treatment of cancer. Evaluation of the student's general clinical skills and acquisition of knowledge in oncology will include direct observation of clinical performance and conference participation, and a brief objective examination. Offered in modules I-XII. Prerequisite: MED 900. FLD.

MED 970. Clinical Oncology Clerkship. 4 Hours.
The student participates actively in the care of the oncology patient on an in- and outpatient basis. This includes consultation rounds. Clinical investigation with both conventional and experimental drugs will be stressed and an opportunity to treat patients by protocols will be given. Offered in modules I-XII. Prerequisite: MED 900 or permission of instructor. FLD.

MED 971. Advanced Studies in Clinical Oncology. 4 Hours.
This is an advanced course with emphasis on consultations with attending staff and fellows, investigative protocol studies and special projects, including lectures and conferences. There will be outpatient activity, but no inpatient care. Offered in modules I-XII. Prerequisite: MED 900 and MED 970 or MED 969. FLD.

MED 972. Palliative Medicine Across the Continuum of Care. 4 Hours.
This elective rotation will expose the student to palliative care patients at all stages of illness and coping with advanced disease processes, from the ICU to the inpatient and home hospice settings. The student will work with the Palliative Care Team of physicians, advanced practice nurses, Palliative Medicine fellows, and our social workers. Focus of clinical activity is on the interdisciplinary management of patient symptoms, inter-professional and interpersonal communication skills, clinical ethics in end of life decision making, and understanding health care system complexities for patients facing advanced, progressive illness. The student will spend a portion of the rotation with either Northcare Hospice or Kansas City Hospice and Palliative Care, working with their interdisciplinary team in the management of acute inpatient hospice patients and home hospice patients. Continuity for the student in care of patients who transition from the hospital to the inpatient or home hospice setting will be fostered. CLN.

MED 980. Clinical Allergy, Immunology, and Rheumatology. 4 Hours.
Students will participate in the weekly KUMC allergy and rheumatology outpatient clinics, as well as assist in subspecialty inpatient consultations. They will perform medical evaluations, select appropriate diagnostic procedures and define specific therapy on assigned patients under the supervision of the staff. They will receive orientation to clinical immunologic tests in current use and be expected to interpret the results of these appropriately. Regular lectures by the staff are given in areas of clinical immunology. With guidance they will choose a topic appropriate for seminar presentation at the end of this clerkship. Offered in modules I-XII. Prerequisite: MED 900 or permission of Instructor. FLD.

MED 981. Advanced Allergy, Immunology, and Rheumatology. 4 Hours.
The activities outlined in MED 980 will be continued, but the student will have more responsibility for patient evaluation and management. With guidance, another topic will be chosen for seminar presentation at the end of this clerkship. Offered in modules I-XII. Prerequisite: MED 900 and MED 980. FLD.

MED 982. Research Problems in Allergy, Immunology, and Rheumatology. 4 Hours.
Three consecutive modules are necessary to give the student adequate time to pursue an independent research problem or a project currently under investigation by a staff member. The student will be required to submit a written report and give a seminar at a division research
conference during the final module. Offered in modules I-XII. Prerequisite: Special arrangement with division. FLD.

MED 990. Geriatric Medicine - Leavenworth Veterans Administration Medical Center. 4 Hours.
The student will function in the role of a sub-intern, with supervised responsibility for management of patients in a special assessment unit for the elderly, a nursing home, and an outpatient clinic. In addition to daily teaching rounds, students will participate in seminars covering physiology of aging, altered presentation of illness in the elderly. Evaluation of the student’s performance during the clerkship will be based on faculty’s assessment of the student’s clinical skills and conference participation. Prerequisite: MED 900. FLD.

MED 995. Dermatology. 4 Hours.
This course is composed of outpatient clinic experience, tutorial sessions utilizing audiovisual aids extensively, and inpatient teaching rounds, as well as frequent review of pertinent aspects of dermatological allergy, microbiology, and histopathology. There will be opportunities to attend special weekly dermatological basic science lectures and grand rounds. Acquired skills in dermatological diagnosis (disease recognition, as well as analytical reasoning, or "problem solving") and in dermatological therapy will be evaluated by such means as oral quizzes and a written examination, but the final appraisal of each student will always be individualized. Offered in modules I-XII. Prerequisite: Medical Basic Sciences. FLD.

MED 996. Research Problems in Dermatology. 4 Hours.
A four-week research elective in which the student undertakes an original investigation in dermatology or participates in an ongoing project, in either case under the direct supervision of a dermatology faculty member. A written report at the end of the module summarizing the student’s findings will be required. Modules I-XII, limited to one student per module. Prerequisite: Medical Basic Sciences and by special arrangement with staff. FLD.

MED 998. Advanced Studies in Geriatric Medicine. 4-12 Hours.
An advanced course of one to three months specially arranged for each student to encompass a clinical research project. There will be participation in clinics and consultations as appropriate. Offered in modules I-XII. Prerequisite: MED 900. RSH.

Microbiology, Molecular Genetics, and Immunology
Chair: Michael J. Parmely, Ph.D.

Presentations in bacteriology, virology, immunology, microbial genetics, microbial physiology, and mycology with emphasis on cell biology and pathophysiology of infectious diseases of humans.

MBIO 850. Microbiology. 9 Hours.
The course presents microbial physiology and microbial genetics with emphasis on the molecular biology of microorganisms; Immunology with emphasis on the defense mechanism, immune regulation and immunogenetics and selected coverage of etiologic agents of infection in bacteriology, parasitology, mycology, and virology. Lectures, small group conferences and tutorials. (Same as MICR 850.) Prerequisite: ATMY 820, cell and tissue biology, BIQC 800, and PHYS 800. LEC.

MBIO 910. Advanced Topics in Microbiology. 4 Hours.
Students will work with individual instructors in directed study or laboratory work. Offered in modules I-VIII. IND.

MBIO 911. Research in Microbiology, Molecular Genetics, and Immunology, 3-16 Hours.
Students will participate in research projects supervised by faculty members of the Department. Participants will be expected to conduct an individual research project, compile and interpret data, and communicate results and conclusions in a written or oral form. Student evaluations will be based on the supervisor's assessment of written and/or oral research reports. Offered in modules I-XII. Prerequisite: MBIO 850. IND.

Molecular and Integrative Physiology
Chair: Paul Cheney, Ph.D.
The Department of Molecular and Integrative Physiology approaches physiology on many levels, ranging from analysis of integrated body functions of the intact organism to study of the organ at molecular and cellular levels. The student is expected to become competent in examining such diverse physiological problems as analyzing the multiple adjustments to exercise in laboratory animals or humans or analyzing factors influencing the transport of molecules across cell boundaries. Students are encouraged to think in physiological terms, that is, in terms of cause and effect as determined by basic physical and chemical laws.

PHYS 910. Advanced Topics. 1-10 Hours.
Special studies designed and arranged on an individual basis to allow a student to pursue a particular subject through reading, special laboratory work, and conferences with a senior staff member. Offered in modules I-XII. Prerequisite: Medical Basic Sciences. IND.

PHYS 911. Research. 4 Hours.
Original laboratory investigation conducted under the supervision of a senior staff member. Offered in modules I-XII. Prerequisite: Medical Basic Sciences. LAB.

PHYS 912. Fundamentals of Biomedical Imaging. 2-4 Hours.
This is a multidisciplinary course designed to introduce 2nd, 3rd, and 4th year medical students to the fundamentals of existing imaging modalities for anatomy, structure and functioning biomedical sciences. The course will also be offered to Junior and Senior level undergraduate students as well as graduate students from other interdisciplinary areas including engineering, science, biology and biomedicine. Students must be in good academic standing. LEC.

Neurology
Chair: Richard Barohn, M.D.
The Department of Neurology is introduced to medical students in the first year that clinical correlation is offered in connection with the neuroanatomy courses. During the clinical modules, clinical neurology electives allow students to participate in the management of inpatients and outpatients on the neurological service and in the educational conferences that are part of the neurology department. Conferences include pediatric neurology, neuropathology, and neuroradiology. Students obtain some familiarity with interpretation of electroencephalograms and electromyograms and supervised experience in the evaluation of patients with neurological problems seen in consultation. Students are accepted into these electives only after at least one previous clinical module.
NEUR 931. Neurology Clinical Clerkship--University of Kansas Medical Center. 4 Hours.
The Neurology Section provides clinical experience and exposure to common neurological problems. The department is staffed by one full-time and three part-time neurologists. Students will be assigned to cases which have teaching value. He/She will be expected to carry out a detailed examination of the patients assigned and present them to the staff. The student is expected to take an active part in complete diagnostic evaluation and the management of patients. The main focus will be to develop skills of neurological examinations, interpretation of findings and clinical and anatomic correlation. The student can also take part in specialty clinics such as Movement Disorder, Memory, Cerebrovascular.

NEUR 932. Clinical Neurology--Veterans Administration Medical Center. 4 Hours.
The student will be assigned patients selected on the basis of their teaching value. He/she will be expected to carry out complete detailed examinations of each patient and assume responsibility for assisting in all phases of the patient's diagnostic evaluation. Emphasis will be on developing skills in examination, interpretation on findings and neuroanatomic correlation. During this elective, the student will participate actively in all teaching conferences held both at this hospital and at KUMC. In exceptional cases, by prior arrangement and if an opening is available, a student may split time between neurology services at KUMC and the VAMC. Offered in modules I-XII. Prerequisite: One clinical module or permission of instructor. FLD.

NEUR 933. Neurology--Advanced Topics. 4 Hours.
The Neurology Section provides clinical experience and exposure to common neurological problems. The department is staffed by one full-time and three part-time neurologists. Students will be assigned to cases which have teaching value. He/She will be expected to carry out a detailed examination of the patients assigned and present them to the staff. The student is expected to take an active part in complete diagnostic evaluation and the management of patients. The main focus will be to develop skills of neurological examinations, interpretation of findings and clinical and anatomic correlation. The student can also take part in specialty clinics such as Movement Disorder, Memory, Cerebrovascular.

NEUR 934. Advanced Clinical Neurology--Veterans Administration Medical Center. 4 Hours.
This course will consist of assumption of more responsibility concerning diagnostic formulation and management of the patient on clinical neurology. Offered in modules I-XII. Prerequisite: NEUR 931 or NEUR 932. FLD.

NEUR 935. Advanced Clinical Neurology - Veterans Administration Medical Center, Leavenworth. 4 Hours.
The Neurology Section provides clinical experience and exposure to common neurological problems. The department is staffed by one full-time and three part-time neurologists. Students will be assigned to cases which have teaching value. He/She will be expected to carry out a detailed examination of the patients assigned and present them to the staff. The student is expected to take an active part in complete diagnostic evaluation and the management of patients. The main focus will be to develop skills of neurologic examinations, interpretation of findings and clinical and anatomic correlation. The student can also take part in specialty clinics such as Movement Disorder, Memory and/or Cerebrovascular.

NEUR 936. Research Problems in Ophthalmology. 4 Hours.
Prerequisite: Medical Basic Sciences. FLD.

NEUR 930. Ophthalmology Outpatient Clinic. 4 Hours.
The number of openings in this course will depend upon the number of students registered for OPTH 910. If OPTH 910 is full there will be no openings in OPTH 911. Offered in modules I-XII. Prerequisite: Medical Basic Sciences. FLD.

OPTH 910. General Ophthalmology. 4 Hours.
The program will be tailored to the interest of the individual student. Students will be given a program in Ophthalmology Outpatient Department and Surgery according to their interest. The student will be given instruction in the use of audio-visual aids in the department and reference readings. All departmental conferences and seminars are open to students. In the Outpatient Clinic the student will be instructed in the use of all special instruments and patient examination. Offered in modules I-VI and IX-XII. Prerequisite: Medical Basic Sciences. FLD.

OPTH 911. General Ophthalmology. 2 Hours.
The student will spend five mornings a week working in the Ophthalmology Outpatient Department and participating in the individual work-up of patients. The number of openings in this course will depend upon the number of students registered for OPTH 910. Offered in modules I-XII. Prerequisite: Medical Basic Sciences. FLD.

OPTH 915. Research Problems in Ophthalmology. 4 Hours.
A 4 week course research elective in which the student has an opportunity to be exposed to vision research methods and to participate in ongoing research projects. In some circumstances this can be the introduction for continued part-time research. A written report will be due describing the project and the student's participation in the project. Prerequisite: Approval of chairperson and faculty mentor. LEC.

OPTH 916. Ambulatory Specialty Selective in Ophthalmology. 2 Hours.
Terms and abbreviations used in ophthalmology are not routinely used in other areas of medicine nor are they usually taught in year 1 or 2 of medical school. Knowledge of ophthalmic terms will allow better understanding of ophthalmology consults and notes. The student will be able to write more precise consult requests. Ocular anatomy, although taught in basic anatomy, is only reinforced in other areas of medicine at a superficial level. Better understanding of ocular conditions will allow the primary care physician to feel more comfortable treating certain common ocular conditions and know when to make appropriate referrals. LEC.

Ophthalmology
Chair: John E. Sulphin, M.D.
The Department of Ophthalmology teaches undergraduates primarily in conjunction with other departments. The goal is to stress the importance of the ocular examination as a part of the complete physical examination and the role of ocular changes in general disease. In addition, all students learn the diagnosis and management of specific ocular problems that any physician should know. An elective is available to the student at any level of training. This experience is a completely flexible, individual program planned with each student. The experience is designed not only for the student interested in ophthalmology but to provide in-depth experience in any aspect of the specialty for the undergraduate student.

Otorhinolaryngology
Chair: Daniel Bruegger, M.D., Interim
Diseases of the ear, nose, throat, head, and neck are presented in inpatient and outpatient otorhinolaryngology. The importance of understanding the anatomical structures for comprehension of examination, diagnosis, and treatment is emphasized.
70% of all medical decisions are based on data generated by biopsies to supervising clinical laboratory testing. It has been estimated that Pathologists play many roles in medicine, from interpreting surgical examinations using a CD-ROM computer program generated by the project will consist of a list of skills and procedures to be observed. The questions will be open-ended and will consist of 75 to 100 of hearing and in basic principles of acoustics, the vestibular system and psychoacoustics. Instruction will be provided in those areas where the interaction of the otolaryngologist and the general physician can best be utilized to the advantage of the patient. The objectives of this course are to acquaint the student with basic clinical otolaryngology and, in addition, the surgical aspect of the specialty. Participation in the operating room is emphasized along with inpatient and outpatient experience. Offered in modules I-XII. Prerequisite: Medical Basic Sciences. FLD. OTOR 915. Research Problems in Otorhinolaryngology. 4 Hours. One or more modules that provide the interested student with laboratory or clinical research experience necessary for investigation of research problems related to otorhinolaryngology. The student may pursue an independent research problem or participate in a project currently under investigation by a staff member. In either case, a faculty mentor must be identified. All projects must be reviewed and approved by the mentor at least one month in advance of the intended start date. Students will be required to submit a written report at the conclusion of the module. One objective of this course will be to generate data suitable for publication or presentation at the Student Research Forum. Prerequisite: Special arrangement with faculty mentor. LEC. OTOR 916. Ambulatory Specialties Selective in Otolaryngology. 2 Hours. The objectives of this two week selective course will be to expose the fourth year medical student to clinical and surgical aspects of otolaryngology head and neck surgery. This will be done in the form of three projects. The first project will consist of a pre test rotation at the Kansas Hospital. They receive hands-on exposure to pathology technical methodology in the surgical pathology suite, microbiology laboratory, and cytogenetics laboratory.

Pathology and Laboratory Medicine

Chair: Lowell Tilzer, M.D., Ph.D.

Pathologists play many roles in medicine, from interpreting surgical biopsies to supervising clinical laboratory testing. It has been estimated that 70% of all medical decisions are based on data generated by pathology departments. The department of Pathology and Laboratory Medicine at KUMC plays an integral role in the core curriculum and also offers elective courses to medical students interested in learning more about laboratory practice. Students in elective rotations participate in daily teaching conferences and specimen "sign-out" at the University of Kansas Hospital. They receive hands-on exposure to pathology technical methodology in the surgical pathology suite, microbiology laboratory, and cytogenetics laboratory.

PAON 920. Introduction to Molecular Medicine. 2 Hours. Introduction to Molecular Medicine is a two semester course for first year MD-PhD students taught by the Director of the MD-PhD Program, with other faculty from the basic science and clinical departments. Through lectures, small group discussion, evaluation of primary literature, and presentations/discussions with current KUMC faculty, students will be introduced to the process of investigating the molecular and cellular derangements that underlie human disease. Order of topics mirror, to some extent, the subjects of first-year modules. There will be particular emphasis on the diverse research methods and models systems used to investigate the molecular basis of disease and understanding how such investigations can be translated to answer clinically relevant questions. Students are evaluated by both group activity and individual preparation and participation. Prerequisites: Enrollment in the MD-PhD Program. LEC.

PAON 921. Diagnostic Pathology. 4 Hours. This elective is designed to introduce the student to the practice of pathology and the role of the pathologist in diagnosis and management, and will provide exposure to several subspecialty areas within the pathology department. An effort will be made to tailor the elective experience to the needs and interests of the individual student, including those interested in pathology as a career, and those interested in broadening their understanding of pathology in general, or in relation to their chosen field. The course consists of a two-week rotation in surgical pathology'autopsy, a one-week rotation in hematopathology, and a one-week rotation in cytopathology. The student will work closely with the pathology residents, fellows and faculty on service. In surgical pathology, students will have the opportunity to participate in a range of experiences, including supervised prosection of surgical specimens, microscopic evaluations, frozen section evaluations, ancillary techniques, and participation in the "sign-out" of surgical cases with the attending staff. Participation in autopsy procedures will take place as available. In hematopathology, the student will participate in the diagnosis of blood and bone marrow disorders and take part in daily sign-out of bone marrow biopsy specimens. In cytology, the student will assist in the work up and sign out of gynecologic and non-gynecologic cytologic specimens and participate in FNA procedures. At the end of the rotation, each student will present an interesting case they encounter during a formal PowerPoint presentation to faculty and residents. Final grade is based on attendance, participation in daily activities, knowledge of general concepts and practice of pathology, and final case presentation. Prerequisites: Completion of core clinical clerkships. LEC.

PAON 922. Special Topics in Pathology. 4 Hours. This rotation affords the student the opportunity to spend four weeks focused on a particular subspecialty of pathology or a pathology-based research elective. The department has subspecialists in dermatopathology, neuropathology, renal pathology, breast and hepatic pathology. The rotation consists of daily interpretation of subspecialty biopsies, participation in subspecialty conferences, slide set study, and assigned readings. Students participate in their own learning by setting their rotation objectives with faculty at the start of their elective and following through with a schedule of clinical, laboratory and core lecture conferences. Students will need to obtain the appropriate staff members'
permission for the rotation as follows: dermatopathology (Garth Fraga); neuropathology (Kathy Newell); renal pathology (Timothy Fields); breast pathology (Fang Fan); hepatic pathology (Maura O’Neil). Prerequisites: Completion of the core clinical clerkships and permission of the faculty. LEC.

Pediatrics

Chair: Michael Artman, M.D.

The Department of Pediatrics gives the student a comprehensive exposure to primary care and subspecialty pediatrics. The experience ranges from exposure to a sick newborn to care of an adolescent patient. Inpatient and outpatient services are available. Student participation includes history-taking and examination of pediatric patients, making daily ward rounds with the staff physician, and rotation through general and subspecialty outpatient clinics and the full-term nursery. Electives are available in the Children’s Rehabilitation Unit, Behavioral Pediatrics, and all other subspecialties in pediatrics. Research electives are also available with department faculty members.

PED 915. Pediatric Cardiology. 4 Hours.
Inpatient and outpatient clinical experience in children with cardiac disease will be provided. Daily pediatric cardiology ward rounds are conducted by the senior staff. Active participation in the pediatric cardiology clinics each week highlight the outpatient experience. Personal instruction will be given in cardiac physical diagnosis with stress on cardiovascular hemodynamics, evaluation of heart sounds and murmurs, electrocardiograms, and cardiac radiology. Significant responsibility in patient management will be delegated to the student who will function as a member of the pediatric cardiology team. The student will attend the various pediatric cardiology conferences and will follow children through the cardiac catheterization laboratory and the operative procedures. Opportunity will be available for participation in clinical investigative projects if the student so desires. Teaching conferences, seminar, and patient rounds will be made on the scheduled basis by a member of the senior pediatric cardiology staff. Offered in modules I-XII. Prerequisite: PED 900. FLD.

PED 916. Pediatric Subinternship Selective-Inpatient/Outpatient-Distant Site. 4 Hours.
This selective is an extension of the basic pediatric clerkship. It is designed to permit senior medical students to take increasing responsibility of patient care and management by active participation in the daily activities of a private pediatric practice. This selective is entirely clinical. The student will work with clinical faculty at a distant site. Most of the experience will likely be in an outpatient setting with some inpatient experience. Student performance will be evaluated by the faculty based on factual knowledge, practical skills, problem-solving abilities and personal behavior and values. Offered in all modules if sites are available. Prerequisite: PED 900 or equivalent and permission of the Pediatric Clerkship Director. LEC.

PED 917. Pediatric Hematology-Oncology. 4 Hours.
This course will include involvement in the diagnosis and care of children with hematologic and oncologic diseases. The student will be involved directly with these patients under the supervision of the pediatric hematology fellows. During this time, he or she should become conversant with the general area of pediatric hematology and be trained in the diagnostic procedures including bone marrow examination and other routine and special procedures used in this subspecialty area. The special emphasis placed on the psychological aspects of these diseases for the child and the family will be part of the training experience. The complications that commonly occur in patients on chemotherapy make these patients particularly appropriate for a broad experience. Offered in Modules I-XII. Prerequisite: PED 900. FLD.

PED 919. Developmental and Behavioral Pediatrics Elective. 4 Hours.
This course is designed to provide students with an in-depth understanding of children and their families. Students will learn about normal and atypical child development, behavioral and emotional problems commonly seen in Pediatrics (e.g., ADHD, depression, anxiety, oppositional behavior), and helping children cope with acute and chronic illnesses. Students will observe/participate in outpatient clinics in the Developmental Disabilities Center and Behavioral Pediatrics section (e.g., autism assessment, developmental medicine, telemedicine, feeding team, and behavioral pediatrics clinic), as well as in medical inpatient consultations. Within the curriculum there is ample opportunity to pursue individual interests related to children with developmental and behavioral problems. Expected to be offered in most Modules. One student per module. Prerequisite: PED 900 and permission of instructor. FLD.

PED 920. Pediatric SubInternship Selective-Inpatient. 4 Hours.
Students will participate in the evaluation and management of children with infectious diseases. Laboratory aspects of infectious diseases will be emphasized. Students will attend teaching conferences and seminars on various aspects of infectious diseases. Offered in modules I-XII. Prerequisite: PED 900 and permission of instructor. FLD.

PED 921. Pediatric Neurology. 4 Hours.
This module will serve to acquaint the student with the wide spectrum of neurological diseases of infancy, childhood, and adolescence. The student will become familiar with the neurological examination of the newborn, as well as assessment of the infant and child. During the elective rotation the student will become actively involved in the diagnosis and treatment of seizure disorders. The student will be exposed to routine laboratory procedures, such as lumbar puncture, EEG and brain scan, as well as special procedures, such as arteriography and pneumoencephalography. The student will be supervised by pediatric residents rotating through the pediatric neurology service and by staff physicians throughout all aspects of the module. Offered in modules I-XII. Prerequisite: PED 900. FLD.

PED 922. Pediatric Gastroenterology. 4 Hours.
The Pediatric Gastroenterology course will provide exposure to diseases of the gastrointestinal tract, liver and pancreas in infants and children. The student will obtain histories, physicals, and present cases on all Pediatric Gastrointestinal clinic and in-patients brought in for consultations. During endoscope, motility, and biopsy of the small bowel and liver, the student will obtain histories, physicals, and present cases on all Pediatric Gastrointestinal clinic and in-patients brought in for consultations. During endoscopy, motility, and biopsy of the small bowel and liver, the student will learn the indications and technique as applies to patients they have worked up. Each student will be required to present a 30-45 minute paper on a specific Pediatric Gastrointestinal subject at the end of the course. Evaluation for the course will be based on assessment of performance of patient care and oral presentation and knowledge of literature. Prerequisite: Completion of third year. LEC.

PED 923. Developmental or Behavioral Pediatrics Elective. 2 Hours.
This 2-week course is designed to provide students with a streamlined introductions to childhood developmental, emotional, and behavioral problems. Students will also learn about normal and atypical child development. Students participate in outpatient clinics, telemedicine, and medical inpatient consultations with faculty from developmental pediatrics, psychology, speech-language, physical therapy, and occupational therapy. Expected to be offered in most Modules. One student per module. Prerequisite: PED 900 and permission of instructor. CLN.

PED 924. Pulmonology. 4 Hours.
Students will participate in the evaluation and management of infants, children, and adolescents with chronic and acute pulmonary diseases in
the out-patient setting as well as performing in-patient consultations. The students will be involved directly with these patients under the supervision of the pediatric pulmonology faculty. CLN.

PED 925. Research in Pediatrics. 4-8 Hours.
Students will work on research programs arranged between them and the instructor. The purpose of the elective is to provide the student an opportunity to become familiar with clinical research involving children and pediatric problems, and to learn about research protocols and methods. Available areas of research include the newborn, cardiology, hematology, allergy, nephrology, neurology, endocrinology, infectious disease. Offered in modules I-XII. Prerequisite: Permission of instructor. IND.

PED 927. Pediatric Endocrinology and Metabolism. 4 Hours.
Students will participate in the diagnosis and management of pediatric-age patients with endocrine-metabolic problems. Emphasis is placed on the clinical problems that are unique to pediatric-age patients such as puberty, abnormalities of growth, and juvenile diabetes mellitus. Students are encouraged to become involved in patient management by participating in rounds, clinic, conferences, consultative evaluation and care of the inpatients, and other functions of the endocrinology-metabolism staff. Offered in modules I-XII. Prerequisite: PED 900. FLD.

PED 929. Allergy, Immunology, and Rheumatology. 4 Hours.
The Pediatric Immunology course will provide exposure to children with allergies, asthma, immunodeficiencies, autoimmune disease and arthritis. The approach to children with these disorders and the management of children with multisystem disease and chronic disease are emphasized. Students will be involved in the clinic and with consultations. The students will have exposure to ongoing research in these areas and will attend teaching conferences. Offered in modules I-XII. Prerequisite: PED 900. FLD.

PED 931. Nephrology. 4 Hours.
Students will participate in the evaluation and management of children with urinary tract diseases and fluid and electrolyte disorders. This elective will give the students the opportunity to develop clinical skills in assessing a child's hydration status and in assessing the effect of the child's kidney disease or metabolic disorder on other organ systems. Students will also have the opportunity to review radiologic imaging studies of the urinary tract, to perform urinalyses, and to participate in the care of patients who require acute hemodialysis, peritoneal dialysis, or continuous arterio-venous hemofiltration. Prerequisite: PED 900. FLD.

Pharmacology, Toxicology, & Therapeutics

Chair: Hartmut Jaeschke, Ph.D.

The medical pharmacology courses teach pharmacological principles and the essential facts necessary to select and prescribe appropriate medications to maximize the desirable and minimize the undesirable effects. Moreover, students are prepared to incorporate new information and the use of new drugs into their practice. The courses give students a variety of instructional aids to master the material, exposing them to concepts, facts, and therapeutic applications. Group discussions cultivate the ability to interpret, integrate, and synthesize essential information

PHRM 910. Research in Pharmacology. 4 Hours.
Selected research problems may be investigated under the direction of individual staff members. A description of current staff research projects is available from the department. Offered in modules I-XII. Prerequisite: Permission of department. IND.

PHRM 911. Readings in Pharmacology. 2-10 Hours.
Selected topics for reading in advanced texts and original papers in pharmacology. A paper and Journal Club presentation of the selected topic are required. Offered in modules I-XII. Prerequisite: Permission of department. IND.

Preventive Medicine and Public Health

Chair: Edward Ellerbeck, M.D., M.P.H

The multidisciplinary Department of Preventive Medicine and Public Health uses epidemiological methods to solve individual and population health problems. We are dedicated to the development of education, research, and service that emphasizes health promotion, disease prevention, health services, and public health science to improve health. We place special emphasis on a population health perspective that encompasses the ability to assess the health needs of a specific population; implements and evaluates interventions to improve the health of that population; and provides care for individual patients in the context of the culture, health status, and health needs of the population of which that patient is a member. Through required and elective courses, the department emphasizes the following content areas: evidence-based medicine; social and behavioral determinants of health (at an individual and population level); ethics; organization and financing of U.S. health care; the principles, practice, and financing of preventive care; cost-analytic approaches and information in prioritizing the use of resources; and describing population demographics.

PMED 910. Special Topics in Community Health. 4 Hours.
Independent study of community health issues and their implications for or impact on the health of society. Examples include infectious disease control, immunization programs, nutrition, air pollution, over-population, wellness, health promotion and life-style change programs, cancer epidemiology, care of disabled persons, mental health programs, the terminally ill or the elderly, poverty, sports, physical fitness programs, etc. Specific content will be defined primarily by interest, background, and wishes of the student. Emphasis will be placed on the methodology used in gaining information and the means by which a health professional can translate and channel such information effectively into educational processes of the community. Prerequisite: Permission of instructor. IND.

PMED 922. Advanced Selected Topics. 4 Hours.
Special studies tailored to the interests of students wishing to further their training in one or more areas concerning clinical medicine, environmental health or delivery of health care. Epidemiologic evaluation of a disease or health related problem is encouraged. This sequence will include readings, clinical studies, and field work when appropriate, guided by frequent conferences with an advisor. The objectives of the individual student will be dissected and declared at the initiation of the sequence and the attainment measured through a terminal seminar for elective credit or brief paper designed to fulfill the communication requirement. Prerequisite: Permission of instructor. IND.

PMED 925. Public Health Experience--Kansas City, Missouri, Health Department. 4-8 Hours.
Opportunities will be presented for students to work with a state or local health department either in studying public health problems in the community (e.g. teenage pregnancy, VC, lead poisoning) or through participation to health services under the supervision of the staff. Specific assignments will be developed individually for each student, who will meet
with the instructor once per week and present a seminar at the conclusion of this experience. IND.

**PMED 950. International Health Experience. 4-8 Hours.**
Within this elective are presented opportunities for the student to gain clinical and community health experiences in an international setting. The country selected is to be prearranged by the student with the assistance of faculty. Two modules are recommended for this elective. Prerequisite: Permission of instructor. LEC.

**PMED 956. Special Experiences--Environmental/Occupational Health. 4 Hours.**
Placements will be made to provide clinical or field experiences to study the health effects of both air and water pollution and environmental hazards as these relate to occupation. Arrangements will be made with local, state, or federal agencies (e.g. the Environmental Protection Agency or the Occupational Safety and Health Administration), private clinics, hospitals, industries, unions, or other organizations. Specific assignments will be developed individually for each student, who will meet with the instructor once per week and present a seminar at the conclusion of this experience. Offered in modules I-XII. Prerequisite: Permission of instructor. LEC.

**PMED 970. Principles of Epidemiology. 2 Hours.**
Basic concepts of epidemiology and methods for identification of factors influencing health and disease in human populations. Considerations are centered on physical, biological, psychosocial and cultural factors in relation to infectious and non-infectious diseases; interactions between agent, host, and environmental factors as determinants of health and disease; application of the epidemiologic approach to health services; retrospective and prospective analysis of morbidity and mortality data. LEC.

**Psychiatry**

Chair: William F. Gabrielli Jr., M.D., Ph.D.

Through participation of the Department of Psychiatry in the interdisciplinary clinical process course, first-year students are introduced via formal presentations and follow-up small-group discussions to the following relevant topics: the medical interview; the disturbed family; death, dying and loss; childhood growth and development; human sexuality; aging; addiction; anxiety; depression; and psychosis. Clinical training includes supervised experience in the treatment of hospitalized patients and clinic outpatients, using chemotherapy, other somatic treatments, interview techniques demonstrated in regularly held seminars using videotaped case material, and in weekly case conferences. The clerkship offers a thorough didactic review of such topics as psychopharmacology, child development and psychopathology, all major psychiatric syndromes, drug abuse and alcoholism, human sexuality and sexual dysfunction, and consultative psychiatric services.

**PYCH 911. Child Psychiatry. 4 Hours.**
Normal and abnormal growth and development. Clinical assessment of children and early adolescents. Interview and play therapy. Family counseling. Group work with parents. Offered in modules I-XII. Prerequisite: PYCH 955. FLD.

**PYCH 912. Emergency Psychiatry. 4 Hours.**
Exposure to patients with acute psychiatric disturbances. Students will learn how to assess psychiatric emergencies and provide initial treatment. The course involves exposure to community resources, multidisciplinary treatment and interaction with law enforcement and the court system. Clinical experience working with physicians caring for patients in the Emergency Department. Readings in emergency patient care and discussions with the attending physician are part of the course. Patient contact with patients in the Crisis Stabilization Center of the Emergency Department. Prerequisite: PYCH 955. LEC.

**PYCH 913. Ambulatory Psychiatry. 4 Hours.**
This course involves exposure to patients followed in an ambulatory psychiatry setting. Students will have the opportunity to learn to evaluate and manage a cross section of patients with psychiatric complaints. Clinical evaluations and exposure to actual patients. Students will first observe and later lead evaluation of patients and formulate treatment plans with attending physicians. Readings in ambulatory patient care and diagnosis interviewing are a part of the course. Patients will be ambulatory clinic patients at the KUMC outpatient clinic, the Kansas City-VA Hospital Mental Hygiene Clinic, a facility clinic location, or the community mental health centers. Prerequisite: PYCH 955. LEC.

**PYCH 914. Psychiatry in Medicine and Surgery. 4 Hours.**
Experience with psychiatric consultations to the medicine and surgery services. Evaluation of psychiatric problems in medical and surgical inpatients. Students will demonstrate effective interview technique and explain the basis for diagnosis and management. Supervisors will evaluate clinical skills. Offered in modules I-XII. Prerequisite: PYCH 955. FLD.

**PYCH 915. Psychiatry in Pediatrics. 4 Hours.**
Experience with psychiatric consultations to the pediatric services. Evaluation of psychiatric problems in pediatric inpatients and outpatients. Students will demonstrate effective interview technique and explain the basis for diagnosis and management. Faculty supervisors will evaluate clinical skills. Offered in modules I-XII. Prerequisite: PYCH 955. FLD.

**PYCH 916. Introduction to Psychotherapy. 4 Hours.**
The student will observe and participate in individual and group psychotherapy sessions in outpatient as well as inpatient settings. Child and adolescent patients as well as adult patients will be involved. These psychotherapy experiences will include: 1) Inpatient group psychotherapy for adult patients with an affective disorder 2) Inpatient group psychotherapy for adult patients with a substance use disorder 3) Inpatient group psychotherapy with acting-out adolescents 4) Family psychotherapy with parents of psychiatric child inpatients 5) Outpatient adult group psychotherapy with patients suffering from panic disorder 6) Outpatient adult group psychotherapy with patients suffering from a schizoaffective disorder 7) Outpatient adult individual cognitive therapy in a family practice setting 8) Outpatient adult interpersonal psychotherapy with less psychiatrically ill patients 9) Outpatient individual diagnosis specific psychotherapy. In addition, the student will provide brief, problem-focused individual psychotherapy three times weekly to at least one patient hospitalized on the adult inpatient service under the immediate supervision of Dr. Elizabeth C. Penick that will include a review of audiotaped psychotherapy sessions. The student will be provided a list of readings which he will discuss on a weekly basis with Dr. Penick. At the completion of the program, the student will have received a broad comprehensive introduction to the more commonly used approaches to psychotherapy. LEC.

**PYCH 918. Inpatient Psychiatry. 4 Hours.**
Advanced full-time experience in hospital treatment. Includes training in individual and milieu therapy, chemotherapy, etc. The student will function as a first-year resident insofar as the student is able to assume the required responsibilities of that position. Students electing this module will be evaluated by faculty supervisors on the basis of their clinical performance and the growth of their fund of psychiatric knowledge during the module. Offered in modules I-XII. Prerequisite: PYCH 955. FLD.
PYCH 919. Continuation of Inpatient Psychiatry. 4 Hours.
Students electing this module will be evaluated by faculty supervisors on the basis of their clinical performance and the growth of their fund of psychiatric knowledge during the module. Offered in modules I-XII. Prerequisite: PYCH 900 and PYCH 918. FLD.

PYCH 920. Research in Psychiatry. 4 Hours.
An approved psychiatric research project in an area of special interest to the student may be undertaken with the individual supervision of a faculty member within the sphere of whose own professional interests the student's topic of study lies. This elective experience will include the writing of a paper or presentation of a seminar reporting on the student's investigation and findings. Offered in modules I-XII. Prerequisite: PYCH 900. IND.

Radiation Oncology

Chair: Parvesh Kumar, M.D.

Students are introduced to the diagnosis, staging, and management of patients with cancer. The rationale and techniques of radiation therapy are emphasized.

RADO 910. Research in Radiation Oncology. 4 Hours.
The student will engage in original research in an aspect of Radiation Oncology: clinical radiation therapy, radiation biology, or radiation physics. The exact area will depend upon the background and interest of the student, and the availability of an appropriate faculty mentor. In consultation with faculty, the student will develop a research project addressing a topic in Radiation Oncology. The student will then perform the indicated research project. At the conclusion of the project, the student will prepare a document describing the research and the findings, and will present a research seminar to the department. Student achievement will be evaluated by three endpoints. There will be a faculty assessment of the conduct of the student during the project period. Secondly, the manuscript produced by the student will be evaluated as an indication of the student's accomplishments. Finally, the student will be evaluated by his or her performance during the research seminar and/or other scheduled presentations of the results. Prerequisite: Permission of instructor. LEC.

RADO 912. Radiation Oncology. 4 Hours.
Students will see consultations, follow up patients and on-treatment patients along with the staff. They will participate along with the faculty in simulation of patients, surgical procedures, brachytherapy procedures and other procedures that require physician participation. Students will attend conferences in radiotherapy, radiobiology, radiation physics and treatment planning conferences. They will attend site-specific multi-disciplinary and general multi-disciplinary conferences and present cases if required of these conferences. Students will be required at the end of their rotation to present to faculty, residents and staff in the department a topic in depth that involves radiation as a treatment modality. Students will be evaluated by their performance and conduct during their rotation with the faculty and by the quality of their presentation toward the end of the rotation. Offered in Modules I-XII. Prerequisite: Medical Basic Sciences and permission of instructor. FLD.

Rehabilitation Medicine

Chair: Raj Mitra, M.D.

Rehabilitation medicine is concerned with the evaluation and treatment of physical impairment and disability. It is an interdisciplinary field where the physiatrist (rehabilitation physician specialist) works with a team of health professionals (rehabilitation psychologists, physical therapists, occupational therapists, speech therapists) to develop and manage individualized treatment plans to maximize the functional recovery of the disabled individual following a catastrophic illness or injury. Rehabilitation embodies the concept of adding quality to longevity, and emphasizes a holistic approach to the patient with respect to psychological, social, vocational, and avocational adaptation to disability. Students interested in experiencing first hand the interdisciplinary approach learn which patients can benefit from rehabilitation and have the opportunity to participate in patient evaluation and team management of appropriate inpatients and outpatients on a regular basis. Students who desire this type of experience find the skills and knowledge thus gained useful in many aspects of medical practice. First-year students may participate in patient evaluation and clinical discussions of patients in this department as part of the clinical process.

REHB 910. Clerkship in Rehabilitation Medicine. 4 Hours.
The student will have the opportunity to participate in the traditional evaluation and management of disease and disability as well as being oriented toward the impaired performance of function as a result of these conditions. The student will obtain histories from and perform physical examinations on inpatients with particular emphasis on evaluation of function, e.g., neurologic, kinesiologic and self-care function. He/she will be involved in the analysis and management of musculoskeletal disorders common to many situations encountered in internal medicine, family practice, neurology, psychiatry, orthopedic surgery, and neurosurgery. In addition, the student will demonstrate an understanding of methods for function restoration. Evaluation in the course will be based upon at least five (5) case work ups in which the student will present his/her evaluation of function and make recommendations regarding restoration of function. The team approach to the management of these cases will be emphasized. Offered in modules I-XII. Prerequisite: Medical Basic Sciences; 1 required clinical clerkship. FLD.

Surgery

Chair: Romano Delcore, M.D., M.B.A., F.A.C.S., Interim

The Department of Surgery offers an introduction to surgical diseases as part of the required medical science course, Junior Surgery Clerkship. After successful completion of this phase of education, electives are offered in the surgical specialties and other surgical disciplines. These courses offer more specific and in-depth exposure than the basic core course.

SURG 911. Clinical Clerkship in General Surgery--Veterans Administration Medical Center. 4 Hours.
This is a clerkship at VA Medical Center (Kansas City or Leavenworth) in which the basic principals of patient evaluation and care are emphasized. Students practice the skills of history taking, physical examination, diagnostic procedures and of direct observation of the pathologic processes in assigned patients in the clinic, wards and operating room. Students participate in appropriate surgical and multidisciplinary conferences in which clinical problems are related to basic sciences and in which the expectations and the limitations of surgical treatment are discussed in clinical situations. Evaluation is based on clinical performance. Offered in Modules I-XII. Prerequisite: SURG 900 FLD.

SURG 913. Clinical Clerkship in Plastic Surgery. 4 Hours.
The medical student participates as an intern, functioning in the clinics, wards and operating room as an integral part of the service. Evaluation is based on clinical performance. Offered in Modules I-XII. Prerequisite: SURG 900. FLD.
SURG 914. Clinical Clerkship in Orthopedic Surgery. 4 Hours.
The principles of orthopedic evaluation and care are emphasized. Responsibility is to function as an extern in the clinics, wards and the operating room. Evaluation is based on clinical performance. Offered in Modules I-XII. Prerequisite: SURG 900. FLD.

SURG 916. Surgical Oncology. 4 Hours.
This rotation for medical students at a clinical level is designed to expose the student to procedures and techniques of modern surgical oncology. This experience includes: (1) Seeing all surgical oncology inpatient and outpatient consultations with the staff, (2) Operating room observation and participation with major cancer ablative procedures; e.g., radical lymphadenectomies, pelvic exenteration, major organ resections etc., (3) Clinical and laboratory exposure to immunotherapy and basic cancer immunology, (4) Exposure to special chemotherapeutic procedures; e.g., arterial infusion and perfusion, (5) Attendance at the combined medical surgical conference. The specific duties for each individual student is defined at the beginning of each module and will be changed to fit the specific needs and desires of each student. Evaluation is based on clinical performance. Offered in Modules I-XII. Prerequisite: SURG 900. FLD.

SURG 917. Clinical Clerkship in Urologic Surgery. 4 Hours.
This course is limited to one medical student at a time who has completed the Basic Surgery Clerkship, Surgery 900. Experience consists of care and evaluation of outpatients and inpatients requiring urologic diagnosis. Tutorial instruction and conferences are the prevalent means of instruction. Evaluation is based on clinical performance. Offered in modules I-XII. Prerequisite: SURG 900. FLD.

SURG 918. Clinical Clerkship in Neurologic Surgery. 4 Hours.
The principles of patient care and the physiological basis of neurological diagnosis are stressed. Experience consists of care and evaluation of outpatients and inpatients requiring neurosurgical diagnosis and treatment. Evaluation is based on clinical performance. Offered in Modules I-XII. Prerequisite: SURG 900. FLD.

SURG 921. Special Surgical Elective. 4 Hours.
Special clerkships or assignments not included in other elective courses which may be prearranged with and must be approved by the Course Director, Surgery 900, the Education Council, and the Department of Surgery. Evaluation is based on performance as determined by the sponsoring faculty member. Offered in Modules I-XII. Prerequisite: SURG 900 and by special arrangement with the section chief. FLD.

SURG 923. Care of Critically Ill Surgical Patient. 4 Hours.
The basic purpose of this clerkship is to provide the student with an opportunity to observe the management of the critically ill surgical patient. A physiological approach to the management of the surgical patient with shock, sepsis, renal failure, respiratory and cardiac failure is stressed. The student participates in the management and care of critically ill patients by assisting in the interpretation of physical the laboratory findings and proposing management responses to these findings. The student is encouraged to participate in ongoing clinical studies. An adjacent fully equipped laboratory is available for student use. Evaluation will be based upon clinical performance. Offered in Modules I-XII. FLD.

SURG 925. Ambulatory Specialties Selective in Urological Surgery. 2 Hours.
To optimize the health of men, women, and children, physicians must be able to diagnose, manage, and provide preventive advice concerning a wide range of conditions and symptoms pertaining to the genitourinary tract. The process depends on adequate patient assessment and appreciation of the epidemiology and pathophysiology of individual conditions, and the appropriate use of medical, surgical, and other interventions. Students will be on service in two week blocks. During that time they will participate in the following activities: Observe procedures in-patient and out-patient, out-patient experience at KUMC at the KC-VA, tutorial sessions, conferences, and in-patient rounds. SURG 926. Musculoskeletal Medicine. 4 Hours.
Clinical experience in the evaluation of common orthopedic disorders such as osteoarthritis, osteoporosis, sports injuries, and fractures; students will be involved in out-patient orthopedic clinics, orthopedic clinical conferences, and a directed, individualized study program. Prerequisite: All clinical rotations. CLN.

SURG 930. Orthopedic Advanced Clerkship. 4 Hours.
The principles of orthopedic evaluation and treatment are emphasized, through participation in the clinics, in-patient wards, and operating room. In addition, the student will learn relevant anatomy and surgical approaches by functioning as a prosector in the anatomy laboratory. Evaluation is based on clinical performance and participation in the dissections. Prerequisite: Surgery 900 CLN.

SURG 931. Rural Orthopedic Rotation. 4 Hours.
A rural orthopedic rotation in Garden City, Kansas. Students enrolled in this orthopedic rotation can expect to receive room and board from St. Catherine Hospital. The student will be expected to conduct themselves appropriately in a professional office. The student would be expected to form for the dress code of the office. The educational experience involves a clinical and surgical experience of general orthopedic practice with an emphasis on joint replacement, sports medicine, and hand surgery. The student could be expected to see patients with the attending physician in the office. The patient would be expected to participate in emergency room evaluations of orthopedic patients. The student would be expected to participate in the operating room with the attending physician. The scope of instruction would include musculoskeletal examination, instruction on the pathophysiology of musculoskeletal disease. A comprehensive written and video library is available for the student's use to aid in their education. The student can expect to learn aspects about radiology interpretation of musculoskeletal pathology. The student may also get experience with rehabilitation. The student will have an exposure to issues pertaining to worker's compensation including the opportunity to observe at depositions. Prerequisite: This course is appropriate for third and fourth year medical students with an interest in learning musculoskeletal diagnosis and treatment. CLN.

Clinical Electives in Wichita

Anesthesiology (p. 2089)
Emergency Medicine (p. 2090)
Family and Community Medicine (p. 2090)
Internal Medicine (p. 2091)
Obstetrics and Gynecology (p. 2092)
Ophthalmology (p. 2092)
Otorhinolaryngology (p. 2093)
Pathology (p. 2093)
Pediatrics (p. 2094)
Preventive Medicine and Public Health (p. 2095)
Psychiatry and Behavioral Sciences (p. 2095)
Radiology (p. 2096)
Special Programs (p. 2096)
Surgery (p. 2096)

Anesthesiology

Chair: Robert McKay, M.D.
ANSL 976. Anesthesiology. 4 Hours.
This course will acquaint students with various aspects of Anesthesiology. Students will learn essentials of the pharmacology of the various potent anesthetic agents, narcotics, barbiturates, tranquilizers, muscle relaxants and local anesthetics. They will acquire knowledge of pharmacology, physiology, anatomy, and biochemistry as they relate to anesthesia and some knowledge in the mechanics and physics of anesthesias machines and gas physiology in general. Student will receive training in Acute Care Medicine and Pulmonary Medicine. Student will be exposed to intensive and respiratory care, learn mechanics of ventilators and indications for use of ventilatory support. Students will be exposed to intensive and respiratory care, learn mechanics of ventilators and indications for use of ventilatory support. Students will learn pulmonary physiology and the use of diuretics and cardiotonic agents as they pertain to respiratory support to the patient in acute respiratory failure. Students will also be exposed to regional and spinal anesthesia, learning drug doses, techniques and indications for use. Prerequisite: Medical Basic Sciences. CLN.

ANSL 995. Special Topics in Anesthesia. 1-4 Hours.
This elective is designed to provide the clinical and/or research experience in topics of special interest not otherwise represented in the curriculum. The student will design, in consultation with department faculty, specific objectives, reading assignments, and the mechanism for course evaluation. Prerequisite: Medical Basic Sciences and departmental consent. CLN.

Emergency Medicine

EMRM 976. Emergency Medicine. 2-4 Hours.
This rotation will introduce the student to the clinical practice of Emergency Medicine. The student will observe and participate as a member of the Emergency Department team, in handling a variety of patient problems and complaints, under the direct supervision of the full time Emergency physician. The student will develop patient evaluation skills, examining unscreened patients under faculty supervision. The information gained from performance of this history and physical exam will aid in the selective use of ancillary services to achieve the most efficient and effective emergency assessment in management of patients seen in the Emergency Department setting. The student will develop and improve skills in suturing, interpretation of radiographs and electrocardiograms, establishing IV lines, and other diagnostic studies and procedures commonly performed in the Emergency Department setting. The student will have clinical exposure to resuscitation techniques and problems. The student will develop an understanding of how Emergency Medicine Services relates to other departments and services. The student will assume appropriate responsibility for management of patient problems under the direct supervision of the Emergency Medicine faculty. The student's evaluation will consist of performance observed by assigned preceptor and director of Emergency Medicine Education. Prerequisite: Medical Basic Sciences and any two of the following four: SGRY 975, INMD 975, PDRC 975, or OBGN 975. CLN.

Family and Community Medicine

Chair: Rick Kellerman, M.D.

FCMD 976. Advanced Family Medicine-Greater Wichita Region. 4-8 Hours.
This course is tailored to the individual learning objectives of the student. Experiences include evaluation of outpatients and performance of procedures under direct supervision of volunteer faculty in the Wichita metro area. Assignments for call and case presentations are directed by the individual faculty. Evaluation is based on assessment of clinical performance and case presentations. Prerequisite: FCMD 950. CLN.

FCMD 977. Advanced Family Medicine-Rural Kansas. 4-8 Hours.
This course is tailored to the individual learning objectives of the student with interest in exploration of family medicine in a rural setting. Experiences include evaluation of outpatients and inpatients and performance of procedures under direct supervision of volunteer faculty in rural Kansas. Assignments for call and case presentations are directed by individual faculty. Evaluation is based on assessment of clinical performance and case presentations. Prerequisite: FCMD 950 and RLMD 976. CLN.

FCMD 978. Clinical Problems--A Community Perspective. 4 Hours.
This course is designed to provide an opportunity for the student to define and analyze clinical problems in community terms rather than individual terms. The student is assisted in developing a population-based study, including literature review, data collection and analysis, and procedures for submitting the work for scientific publication. Evaluation is based on assessment of community research skills. Prerequisite: Medical Basic Sciences. CLN.

FCMD 979. Ambulatory Care of the Elderly. 4 Hours.
This course is tailored to the individual learning objectives of the student with interest in geriatric care. Experiences include evaluation of patients under direct supervision of volunteer faculty in a variety of settings including inpatient, outpatient, nursing home and home visits. Assignments for call and case presentations are directed by the individual faculty. Evaluation is based on assessment of clinical performance and case presentations. Prerequisite: FCMD 950 and GERI 950. CLN.

FCMD 980. Advanced Family Medicine - A Residency Perspective. 4 Hours.
This course is tailored to the individual learning objectives of the student. However, it is designed for the student to function as a subintern at one of the three KUSM-W sponsored family practice residences - Via Christi or Wesley in Wichita or Smoky Hill in Salina. Experiences include evaluation of outpatients and inpatients and performance of procedures under direct supervision of residents and faculty. The individual residency directs assignments for in hospital call and case presentations. Evaluation is based on assessment of clinical performance and case presentations. Prerequisite: FCMD 950. CLN.

FCMD 981. Addiction Medicine. 2-4 Hours.
This elective will assist students to learn: 1) Diagnostic skills relevant to the identification of alcohol/drug dependency in patients of all ages whatever the presenting complaints 2) Management techniques including confrontation, inpatient and outpatient models of treatment, prognosis and aftercare including the role of community resources for patient and family 3) Preventive skills including an understanding of the epidemiology of addictive diseases and resources to identify and intervene with individuals and families at risk. The course will emphasize direct patient contact supported by required readings and didactic sessions with faculty members. Evaluation will be based on competence in this specialty at the end of the rotation, performance during the elective and completion of assignments. Prerequisite: FCMD 950. CLN.

FCMD 982. Sports Medicine. 2-4 Hours.
This course exposes medical students to the primary care/non-operative aspects of sports medicine. During this course, students will develop skills in the evaluation and management of athletes of all ages and athletic abilities who participate in a variety of sporting activities. The Sports Medicine course is offered at the KUSM-Wichita Family Medicine Residency at Via Christi Regional Medical Center in the Sports Medicine Center (located on the St. Joseph campus). The clinical component of the program includes examination and treatment of athletes in the clinic, at
the training room, and on the field. The student will be exposed to high
school, college, and professional athletes. They will become familiar with
the injuries and illnesses commonly seen by a team physician. Upon
completion of the course, students will have a basic understanding of
the skills to: * Conduct a preparticipation sports exam * Prevent sports-
specific injuries * Evaluate and treat injuries and illnesses in athletes *
Design home rehabilitation programs for sports injuries * Design criteria
for safe return to sports * Order appropriate diagnostic laboratory and
radiologic tests and interpret the findings * Apply casts and splints * Work
effectively with athletic trainers, personal trainers, physical therapists and
other health care professionals involved in the care of athletes * Advise
athletes on strength training, cardiovascular fitness, exercise prescription,
and sports nutrition. Medical students will be expected to participate in
small group discussions on aspects of Sports Medicine by doing selected
readings assigned by the course director. Students will also participate in
patient care along with physicians (including residents), athletic trainers,
and physical therapists in the clinic, in training rooms, and at athletic
events. Prerequisite: Senior Standing. CLN.

FCMD 983. In-Patient Maternal Care. 2 Hours.
This course is designed for fourth-year students who desire further
experience in maternal care in a Family Medicine setting. The student will
be assigned shifts three nights per week. During these shifts, the student
will attend rounds and lectures and will be involved in the management of
labor and delivery patients with Family Medicine residents and attending
physicians. The student will also attend Maternal Care lectures and will
complete readings assigned by course director. The course is offered
October, November, December and January. Prerequisites: FCMD 950
and senior standing. CLN.

FCMD 984. Care of the Underserved, Sedgwick County. 2-4 Hours.
This course exposes medical students to the primary care of patients in
Sedgwick County who are generally regarded as underserved due to
low socioeconomic level, minority status, culture and/or homelessness.
Clinically, the student will increase awareness, apply knowledge
and practice problem-solving skills in the care of patients who are
underserved. Most have limited socioeconomic resources and support
systems. The student will develop an understanding of health care
disparities and the role of the medical home in reducing disparities of
care. The rotation is conducted at GraceMed, a federally qualified health
center in Wichita. CLN.

FCMD 995. Special Topics in Family and Community Medicine. 2-8
Hours.
This elective provides an opportunity for clinical and/or research
experience in topics of special interest not otherwise represented in the
curriculum. Examples include Occupational Medicine, and Ambulatory
Procedures. The student, in consultation with departmental faculty,
will design specific objectives, activities, reading assignments, and the
mechanism for course evaluation. Prerequisite: Departmental consent.
CLN.

Internal Medicine

Chair: Jon P. Schrage, M.D.

INMD 977. Pulmonary Medicine. 4 Hours.
Students will work at a subintern level with pulmonary disease patients
on the service of the assigned pulmonary specialist, participate
in consultations, work in the Intensive Care Unit, and by special
arrangement in the Pulmonary Function Laboratory. Prerequisite: INMD
975. CLN.

INMD 979. Endocrinology. 4 Hours.
Student will learn to appreciate the normal physiology and
pathophysiology of selected diseases of the endocrine glands. In this
brief encounter he or she will study in particular thyroid abnormalities as a
model of the altered homeostasis occurring in endocrinopathies. Patients
with diabetes mellitus will be encountered and the reference to metabolic
perturbation of the acute and chronic complications of the same. Less
common problems will be assigned when patients are available. The
student will be expected to attend and participate in two seminars weekly
along with the resident on the endocrinology rotation. There are two
to four new work-ups weekly among hospital patients and selected
outpatients with individual patient follow-ups as required. Performance
will be evaluated by the faculty on written departmental forms. Critical
review of clinical ward and outpatient activities will equal 100 percent of
the grade. An in-depth topical summary may be submitted for extra credit
consideration (not required). Prerequisite: INMD 975. CLN.

INMD 981. Rheumatology. 4 Hours.
Medical students completing a four-week elective in Rheumatology should
be able to: 1) Perform a complete history and physical, with emphasis
on the those items (e.g., skin, joints) related to rheumatic diseases; 2)
Aspirate the knee; 3) Identify urate and calcium pyrophosphate dihydrate
crystals in synovial fluid; 4) List: a) historical and physical findings; b) X-
ray findings; c) modes of therapy for rheumatoid arthritis, degenerative
joint disease, gout, lupus and ankylosing spondylitis. Outpatient
and inpatient clinical performance - 100% of grade. Students will be evaluated
on the basis of meeting objectives 1-4 listed above. Prerequisite: INMD
975. CLN.

INMD 982. Hematology/Oncology. 4 Hours.
The student will learn the "team approach" to patient care, involving
the patient and family and other caregivers. Students will learn to
examine and interpret a peripheral smear. Students will also learn: the
fundamentals of bone marrow examination, the approach to evaluation
of anemia, the approach to patients with suspected malignancy and
the rationale behind chemotherapy, the evaluation of coagulopathies,
thrombotic states, bleeding disorders, nutritional deficiencies, and blood
therapy. Students will learn the natural history of common malignancies,
to perform therapeutic phlebotomy, bone marrow aspiration, and how
to interpret biopsy, bleeding time, and bone marrow pathology. Student
will perform patient work-ups, attend conferences, and rounds, including
interaction with the team (nurses, chaplains, social workers, occupational
therapists, volunteers). Prerequisite: INMD 975. CLN.

INMD 984. Nephrology. 4 Hours.
Students will be assigned patients at a sub-intern level from the inpatient
renal consultation services and the inpatient and outpatient hemodialysis
services. Renal physiology and pathophysiology will be emphasized plus
complicated fluid and electrolyte problems. Prerequisite: INMD 975. CLN.

INMD 985. Infectious Disease. 4 Hours.
The student will: 1) Learn about management of postoperative infection,
CNS infection, pulmonary infection, sepsis, fungal infection, etc. 2)
Learn data analysis techniques of infectious diseases specialist and
how (generally) microbiology laboratories work. 3) Learn principles
of antibiotic, antifungal, and antiviral therapy. Students are to attend
infectious diseases conferences. Students will see patients primarily
admitted to the Infectious Disease Office and work with selected
educational consultants. They will attend noon medicine conferences
and grand rounds at the assigned hospital. They will be supervised by
one physician. Students will have contact with 3 to 5 new patients a week
plus follow-up 3 to 4 patients. Clinical ward performance =100% of grade.
Student performance will be evaluated by faculty on written departmental
forms to assess: history-taking ability, expertise in performing physical
under the supervision of the Clerkship Director in Internal Medicine.

The student may elect an office practice experience in ambulatory cardiology and sharpening skills. Student will work with 3 to 5 patients per week. Clinical ward performance = 100% of grade. Student performance will be evaluated by faculty on written departmental forms to assess:

- Proficiency in physical diagnostic techniques,
- Introduction to non-invasive cardiology, including EKG, stress testing both exercise treadmill and nuclear procedures, M-Mode, and two dimensional echocardiography,
- Direct hands-on invasive procedures on patients that the attending works up, as well as other selected patients,
- Intensive care experience, including management and proficiency in dealing with acutely ill cardiac patients, and ascertaining the ability to use hemodynamic monitoring and intensive care treatment such as drugs, intra-aortic balloon, etc. Experience with both in-patients and outpatients will be offered. Primary emphasis will be placed on learning basic cardiology and sharpening skills. Student will work with 3 to 5 patients per week. Clinical ward performance = 100% of grade. Student performance will be evaluated by faculty on written departmental forms to assess: history-taking ability, expertise in performing physical exam, formulation of clinical judgment, diagnostic approach, rapport with nursing staff and fellow physicians. Prerequisite: INMD 975. CLN.

INMD 994. Ambulatory Care in Internal Medicine. 4 Hours.

The student may elect an office practice experience in ambulatory medicine with available faculty as arranged by Academic and Student Affairs and the department of Internal Medicine. The specific goals and objectives and the scope and type of clinical experience are constructed under the supervision of the Clerkship Director in Internal Medicine.

The office experience may be in general medicine or specialty practice. Prerequisite: INMD 975. CLN.

INMD 995. Special Topics in Internal Medicine. 2-8 Hours.

This elective is designed to provide clinical and/or research experience in general medicine or topics of special interest. The student will design, in consultation with the clerkship director and department faculty, specific objectives, reading assignments, and the mechanism for course evaluation. Prerequisite: INMD 975 and departmental consent. CLN.

Obstetrics and Gynecology

Chair: David A. Grainger, M.D., M.P.H.

OBGN 976. General Obstetrics and Gynecology. 4-8 Hours.

Supervised experience in labor and delivery, gynecologic surgery, and in-hospital management of the OB-GYN patient will be given. Scheduled conferences include weekly case conference and didactic lectures on Wednesday morning. Daily teaching and working rounds with attending staff will likewise be a very important part of the clerkship. Clinics meet daily. Deliveries/month: 325 (60 clinic); operations/month: 500 (60 clinic). Prerequisite: OBGN 975. CLN.

OBGN 977. Maternal-Fetal Medicine. 4 Hours.

The student will develop skills in assessment of high-risk obstetric and neonatal patients and will be a participating member of the perinatal transport team. Through development of a scientific paper on perinatal medicine (the specific subject to be determined in advance by the course director and student), the student will be able to illustrate his or her expanded knowledge in this subspecialty. The student on this elective will attend a weekly high-risk follow-up clinic, make rounds in the neonatal intensive care and intermediate nurseries with the assigned staff and resident physicians. The student will be on call for the perinatal transports team of obstetric and neonatal transports by ground and air, be on twenty-four hour birth room call every fourth night, devoting this call time to the delivery rooms. The student will attend all obstetric and neonatal conferences, attend a weekly conference with perinatologists and neonatologists, be invited on outreach education programs, and effort will be made to follow high-risk patients through labor-delivery-postpartum and neonatal care. The student will be evaluated by the supervising staff physician on patient care and on the completed paper on perinatal subject. Prerequisite: OBGN 975 and PDRC 975. CLN.

OBGN 979. Gynecologic Oncology. 4 Hours.

The objectives of this course for a senior medical student are as follows:
1) to introduce the student to gynecologic malignancies, their presenting symptoms, their evaluation, and treatment thereof; 2) management of treatment complications including management of chemotherapy problems and radiation problems; 3) management of medical problems associated with progressive malignancies. Prerequisite: OBGN 975. CLN.

OBGN 995. Special Topics in Obstetrics. 2-8 Hours.

This elective is designed to provide clinical and/or research experience in topics of special interest not otherwise represented in the curriculum. The student will design, in consultation with department faculty, specific objectives, reading assignments, and the mechanism for course evaluation. Prerequisite: Departmental consent. CLN.

Ophthalmology

OTHO 976. Ophthalmology. 2 Hours.

The rotation is designed to familiarize the student with the private office and surgical procedures of a practicing ophthalmologist. Students will learn proper use of an ophthalmoscope and how to perform the ocular procedures.
exam. Students will observe surgical procedures, and participate in hospital rounds and private office visits. The student will be directly involved in all patient care as provided by the assigned ophthalmologist. Prerequisite: Medical basic sciences. CLN.

Otorhinolaryngology

OHIN 976. Otolaryngology--Ears, Nose, Throat. 2 Hours.
Students will observe the activities of a practicing otorhinolaryngologist and participate in the management of patients with ENT disorders. Students will observe and perform the examination of the anatomical areas and cavities of the head and neck. Students will accompany the assigned physician on all hospital rounds during office hours and when possible, observe surgical procedures. Prerequisite: Medical basic sciences. CLN.

Pathology

Chair: Thomas Kluzak, M.D.

PALO 976. Introduction to Clinical Pathology - St. Joseph. 4-6 Hours.
This elective serves to enhance the student's awareness of the role of the clinical laboratory in patient management. At the end of the elective, the student will be able to: 1) Describe the general methodology, interpretation and clinical implication of commonly ordered laboratory tests. 2) Suggest a planned approach to laboratory test, when given a patient's problem. An effort will be made to tailor the elective experience to the needs and interests of the individual student. If no specific interests are identified, a general elective will be arranged consisting of short rotations in the several clinical laboratory sections under the tutelage of supervisors, instructors, and pathologists. In each section, the student will observe testing procedures and may perform selected analyses at the discretion of the supervisor. Details of methodology will not be stressed, rather the emphasis will be on general principles, sampling, and interpretation. The student will attend daily departmental gross anatomic pathology conferences and didactic presentations in both anatomic and clinical pathology. The student will be encouraged, but not required to attend extra departmental conferences, such as the daily faculty practice noon conference. (Observation and participation in autopsies is also optional, but encouraged. The student may choose to spend time in surgical pathology or cytopathology.) The student will be required to make a formal presentation during the last week of the elective. This may consist of a case presentation with discussion of pertinent laboratory findings or the student may elect to present an analysis of a particular laboratory testing procedure, theory, or problem. Evaluation will be based upon the student's knowledge, acquisition, interest, and participation. Prerequisite: Medical Basic Sciences. CLN.

PALO 977. Laboratory Medicine. 4 Hours.
Several options are offered to the student within the Department of Laboratories as follows: 1) A general survey of Laboratory Medicine, including opportunities to view and assist in autopsies, a study of surgical pathology, some exposure to interpretation of immunoelectrophoretic studies, bone marrows, and other laboratory parameters of interest to medical students. 2) More selective and deeper evaluations such as the entire time in anatomic pathology including autopsy and surgical pathology. 3) Programmed courses of experience in chemistry, hematology, or microbiology. It is anticipated that the student will make preliminary contact with a member of the department indicating his or her interest and type of program he or she would like to be exposed to. The student will have the opportunity to attend the morning and afternoon conferences offered daily by the department together with the noon conferences offered by the general medical staff. It is hoped that the experience will be a pleasant and informative one and the student, as a possible pathology resident, will have the opportunity to survey the general field of pathology in a large institution primarily devoted to service and developmental pathology. Students are evaluated by the pathologist or medical technologist in the area which they are working and a report of the student's performance is submitted to the Medical School. Prerequisite: Medical Basic Sciences. CLN.

PALO 978. Introduction to Surgical Pathology. 4-6 Hours.
The student will understand and be able to describe orally, the role of the surgical pathologist in the diagnosis and treatment of common disorders, including: 1) breast masses, 2) suspicious mammographic lesions, 3) mass lesions of the lung, 4) enlarged lymph nodes, and 5) thyroid nodules. Differential diagnosis will be discussed. Using microscopic slides, the student will correctly identify major common surgical lesions of the breast, lung, lymph nodes, thyroid and colon. The student will describe how an intraoperative consultation is conducted, including the frozen section evaluation of resected tissue. The student will be assigned to work with a particular surgical pathologist in two-day blocks. On day 1 the student and pathologist will be in the operating room, performing intraoperative consultations, frozen sections and dissecting tissues removed at surgery. On day 2 they will examine the microscopic slides from selected cases received on the previous day. Depending upon the individual student's areas of major interest, he/she will accompany pathologists who perform fine needle aspiration biopsies and assist in their evaluation. The student will attend departmental conferences. Students will be evaluated according to the objectives above. Prerequisite: SGRY 975 or OBGN 975. CLN.

PALO 979. Introduction to Clinical Pathology - Wesley. 4 Hours.
Given a description of history and physical findings, the student will be able to select from a panel of tests those which, in the opinion of the faculty, would be most suitable for diagnosis management. The student will list no less than 5 legitimate reasons for performing laboratory tests and will discuss each of these using specific examples. The student will list not less than 4 conceptual definitions of "normal" and discuss the implications of each using specific examples. The student, using his/her understanding of the statistical nature of laboratory data, will discuss concepts of accuracy, precision, errors and clinical significance in 5 common laboratory tests of the student's choice. An effort will be made to tailor the elective experiences to the needs and interests of the individual student. In general, students will rotate through most areas of the clinical laboratory, and will gain experience in specimen collections, processing, test methodologies, and clinical interpretation. Students will report to their assigned areas by 7:30 a.m. and carry out assigned tasks then meet a member of the faculty in the late afternoon to go over the day's work and to discuss the clinical correlation of the tests reviewed that day. Students will attend the Departmental Teaching Conferences. Attendance at other clinical conferences, usually held at noon, is encouraged, but not required. Students will attend Medicine Morning Report with the Staff Pathologist each day at 8:00 a.m. Students will make one presentation at a Clinical Pathology Conference during their last week of rotation which may consist of a short lecture and a particular test or a patient presentation. The quality of the presentation will be evaluated and will form 50% of the grade. The other 50% will be determined from questions asked at the end of the presentation as determined by the objective given above. Prerequisite: INMD 975 or SGRY 975 or PDRC 975 or OBGN 975. CLN.

PALO 980. Introduction to Forensic Pathology. 2-4 Hours.
The student will understand and be able to describe orally, the basic principles of the medicolegal autopsy through observation of postmortem dissections and assisting the forensic pathologist. The student will learn the principles of death scene investigation. The student will appreciate the importance of toxicology in the correct determination of cause and manner
of death through the interpretation of toxicology reports and consultations with the chief forensic toxicologist. The student will understand the role of physical evidence collected at the scene and autopsy as it pertains to the determination of cause and manner of death. The student will be assigned to the autopsy suite and will be supervised by the on-duty designated forensic pathologist. As time permits the student will accompany the coroner or deputy coroner to court to observe trial testimony. Students will be evaluated according to the objectives listed above. Prerequisite: Medical basic sciences. CLN.

Pediatrics

Chair: Brian M. Pate, M.D.

PDRC 976. General Pediatrics. 4 Hours.
This is a four-week continuation of the basic pediatric clerkship for those students interested in additional pediatric experience. The program is flexible and should be arranged individually with the departmental chair. The experience may be either an inpatient or ambulatory experience or a combination of both. This experience carries with it increased responsibilities for patient care in areas selected by the student and arranged with the pediatric staff. Prerequisite: PDRC 975. CLN.

PDRC 977. Neonatology. 2-4 Hours.
The student will learn overview of neonatal medicine and develop skills and conceptual knowledge of newborns and premature infants. The student will attend X-ray conferences weekly, daily literature review, service rounds twice daily, pediatric grand rounds weekly and neonatal mortality review, as well as care for infants with special emphasis on NBICU. Prerequisite: PDRC 975. CLN.

PDRC 978. Ambulatory Pediatrics. 2-4 Hours.
This elective involves increased exposure to community and ambulatory pediatrics utilizing community resources including the pediatrician's office, the Public Health Department, Wesley Pediatric Clinic, Institute of Logopedics and other community resources. The program is flexible and can be broadly based in several areas or strictly confined to one area such as a continuous experience in the office of a community pediatrician. The program will be individually arranged with the department chairperson and the pediatric staff. The standard Elective Evaluation form will be utilized for the course. Prerequisite: PDRC 975. CLN.

PDRC 979. Medical Genetics. 2-4 Hours.
This elective is designed to give the medical student the opportunity to participate in the genetic evaluation of children with developmental delay, mental retardation, dysmorphic features or autism. By the end of the rotation the student will be familiar with common pediatric genetic syndromes and appropriate genetic testing strategy. The student will also get the opportunity to participate in telemedicine genetic clinics. Prerequisite: PDRC 975 or INMD 975. CLN.

PDRC 980. Pediatric Endocrinology. 2-4 Hours.
During the elective the student will learn diagnosis and management of endocrine problems in children. The student will participate in inpatient management, hospital and office consultation, and in a weekly endocrine clinic. Emphasis will be on the management of diabetes in children. Additional experience may be arranged through the Pediatric Department with other endocrinologists in the community. Prerequisite: PDRC 975. CLN.

PDRC 981. Diabetes. 2-4 Hours.
The student will learn to recognize and manage simple inpatient and outpatient problems related to controlling blood glucose levels in children and adults, discuss the psychosocial adaptation to their chronic illness, and perform as well as educate others in specific procedures involved in self care. The student will see patients with diabetes mellitus in the hospital clinic, attend team meetings, attend counseling staffing, do assigned readings, and report to the faculty. Evaluation of this clerkship will be based on rounds, conferences, lectures and performance on patient workups in hospital and in the clinic. Prerequisite: INMD 975 and PDRC 975. CLN.

PDRC 982. Pediatric Hematology/Oncology. 2-4 Hours.
The student will obtain histories, do physical examinations, write progress notes, conduct in-depth consultations regarding pediatric hematology and oncology problems, and will develop skills in diagnosis and therapy of pediatric oncology patients. The student will demonstrate knowledge of various procedures, such as bone marrow aspiration, administration of chemotherapy, and intrathecal medication. Prerequisite: PDRC 975. CLN.

PDRC 983. Pediatric Critical Care. 4 Hours.
This elective experience has been designed as a one-month rotation in the pediatric intensive care unit at Wesley Medical Center. Care will be provided to critically ill patients from the neonatal period through adolescence. Availability of the elective will be limited to one student per month, with possible exceptions based on the student's own objectives and educational needs. During this rotation the student will receive exposure to pediatric critical care subjects, and will be expected to convey an understanding of these processes during bedside rounds, in lectures, and during actual patient care. The student will participate in the educational endeavors of the critical care service, including lectures to other students and allied critical care staff such as nurses and respiratory therapists. The student will be expected to give brief presentations on topics which are identified during patient care. The student's final evaluation will be based primarily on the expression of an increased understanding of and confidence in the management of the diseases encountered in the PICU. Prerequisite: PDRC 975 and approval of instructor. CLN.

PDRC 984. Pediatric Allergy. 2-4 Hours.
Primarily a private office experience under the supervision of the physician, emphasizing an immunologic approach to allergy problems in pediatric patients. Prerequisite: PDRC 975. CLN.

PDRC 985. Pediatric Cardiology. 2-4 Hours.
Extensive clinical experience in children with cardiac disease will be provided. Daily pediatric cardiology ward rounds are conducted by the senior staff. Personal instruction will be given in cardiac physical diagnosis with stress on cardiovascular hemodynamics, evaluation of heart sounds and murmurs, electrocardiograms and cardiac radiology. Significant responsibility in patient management will be delegated to the student who will function as a member of the pediatric cardiology team. Ample opportunity will be available for participation in clinical investigative projects if the student so desires. Prerequisite: PDRC 975. CLN.

PDRC 986. Pediatric Neurology. 2-4 Hours.
The purpose of this elective is to acquaint the student with the wide spectrum of neurological diseases of infancy, childhood, and adolescence. The student will become familiar with the neurological examination of the newborn as well as the assessment of the infant and child. During the elective course the student will become actively involved in the diagnosis and treatment of seizure disorders. He or she will be exposed to routine laboratory procedures such as lumbar puncture, EEG and brain scan, as well as special procedures such as arteriography and pneumoencephalography. The student will be supervised by staff physicians and pediatric residents. Prerequisite: PDRC 975. CLN.

PDRC 987. Developmental Pediatrics. 2-4 Hours.
Students will become familiar with normal developmental patterns and will demonstrate the ability to perform and interpret developmental screening tests. Students will be able to recognize aberrant patterns of
development in an individual child and gain understanding of intervention services that are available for children with developmental delays. Students will be involved in the Development Clinic, Neonatal Follow-up Clinic, Heartspring (residential school for children with disabilities), and Rainbows United (early intervention provider for children under 5 years of age). These sites will allow the student exposure to a variety of children, with both normal development and those with behavioral and/or developmental problems. CLN.

PDRC 988. Pediatric Infectious Disease. 2-4 Hours.
This course is designed to familiarize students with infectious diseases of pediatric patients. Students will learn the rational selection of antimicrobials and their appropriate uses and recognize the reasons for failure of antimicrobial therapy. Students will learn basic immunology and both active and passive immunization. Students will learn the pathogenesis of fever and to recognize the common pediatric pathogens causing meningitis, bacteremia, respiratory tract infections, enteric infections, and skin infections. Students will attend outpatient clinics, daily hospital rounds on in-patients and new consultations, and daily meetings to discuss infectious disease topics. *Recommendation: Candidates for Med/Peds residency should enroll in 2 weeks of this course and 2 weeks INMD 986, (Adult) Infectious Disease. CLN.

PDRC 989. Pediatric Emergency Care. 2-4 Hours.
The student will spend time at the Pediatric Emergency Department, working closely with the faculty. Teaching and supervision is provided by board certified emergency medicine physicians and internal medicine/pediatrics physicians with faculty positions in the Department of Pediatrics. Expectations include participation in didactic instruction and patient care, literature searches of material as assigned or necessary for management of patients, understanding of evidence-based medicine in the care pediatric emergencies and participation in emergency department procedures under the guidance of the attending. The goals are for the student to become familiar with various pediatric emergencies, as well as understanding other situations in which children are brought into the ED. Prerequisite: PDRC 975. CLN.

PDRC 990. Pediatric Nephrology. 2-4 Hours.
During this elective, the student will learn to recognize and manage inpatient and outpatient problems related to pediatric nephrology. Participation in clinic, as well as hospital consultations will be involved, as well as reading assignments/discussions with faculty. Teaching and supervision is provided by a full-time, board certified pediatric nephrologist. A basic understanding of pediatric nephrology is essential to the pediatrician in general practice who will need to recognize a child suffering from a renal condition, manage those that generally do not require referral, and initiate management of those that will need the intervention of a nephrologist. Expectations include participation in daily instruction and patient care, literature searches of material as assigned or necessary for management of patients, and understanding of evidence-based medicine in the care of the nephrology patient. Prerequisite: PRDC 975. CLN.

PDRC 995. Special Topics in Pediatrics. 2-8 Hours.
This elective is designed to provide clinical and/or research experience in topics of special interest not otherwise represented in the curriculum. This elective is designed to provide clinical and/or research experience in topics of special interest not otherwise represented in the curriculum. Prerequisites: Medical Basic Sciences and Departmental consent. CLN.

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**Preventive Medicine and Public Health**

Chair: Tracie Collins, M.D., M.P.H.

PVMD 976. CLARION. 2-4 Hours.
Students who participate in CLARION will develop a deeper understanding of healthcare as a system that requires highly performing interprofessional teams to achieve the six aims outlined by the Institute of Medicine. These aims include care that is safe, timely, equitable, effective, efficient and patient centered. Students will study with other students from other health professions disciplines under the direction of interprofessional course faculty and invited members of the community who will guide discussions each week to prepare students for analyzing and developing solutions to a fictional healthcare sentinel event. CLN.

PVMD 995. Special Topics in Preventive Medicine. 2-8 Hours.
This elective is designed to provide clinical and/or research experience in topics of special interest not otherwise represented in the curriculum. The student will design, in consultation with Departmental faculty, specific objectives, reading assignments and the mechanism for course evaluation. CLN.

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**Psychiatry and Behavioral Sciences**

Chair: Lyle Baade, Ph.D., Interim

PSCR 978. Child Psychiatry/Adolescent Psychiatry. 2-4 Hours.
The course will familiarize students with common psychiatric diagnoses and therapies for children and adolescents. Students will observe and participate in the evaluation and treatment of children and adolescents in inpatient, outpatient, and residential settings. They will attend staffings, family meetings, and relevant conferences. Faculty will provide supervision. Prerequisite: PSCR 950. CLN.

PSCR 979. Advanced Studies in Psychiatry. 2-8 Hours.
This course allows students to expand their knowledge and experience in Psychiatry with rotations of their own choosing. Experience can be modified to fit the individual's interests and needs. All students will have the core experience (attendance at Grand Rounds, Journal Club and readings assigned by Clinical supervisor). Students may choose one training site for four to eight weeks, subject to availability of supervision. Scheduling should be arranged with the Psychiatry Clerkship Director. Written evaluation by supervisor at the end of the course. Supervisor's evaluation comprises 100% of the grade. Prerequisite: PSCR 950. CLN.

PSCR 980. Geriatric Psychiatry. 2-4 Hours.
The student will experience caring for elderly and often medically ill patients with psychiatric symptoms and diagnoses on an acute geropsychiatry hospital unit, in outpatient settings, and in the nursing home and assisted living environment. Experience will be gained in assessing and managing complex medical and psychiatric conditions in elders. Objectives include: 1) Increase awareness of the common psychiatric conditions in elders. 2) Improve ability to assess, diagnose and treat common psychiatric conditions in elders who commonly have co morbid medical conditions. 3) Understand the impact of the elder's environment on psychiatric symptoms, and the necessity of managing the elder within the context of the psychosocial environment, especially the family unit. 4) Improve ability to manage complex pharmacotherapy. Teaching Methodology includes bedside clinical rounds, geropsychiatry small group discussions, lectures and assigned readings. Patient contact
would include elderly patients with common psychiatric conditions - affective disorders, dementias, anxiety disorders, psychotic disorders and comorbid medical conditions, acute care hospital geropsychiatry unit, outpatient clinic, and long term care facilities. Evaluation will be completed by supervisor. Prerequisite: PSCR 950 and INMD 975. CLN.

PSCR 981. Consultation/Liaison Psychiatry. 2-8 Hours.
The objective of this course is to increase the student’s knowledge and skills in evaluating patients with both psychiatric and medical illnesses in inpatient and outpatient settings, making recommendations, and communicating with referring physicians. These objectives will be met by direct patient contact, individual supervision, assigned readings, and attendance at conferences. Prerequisite: PSCR 950 and INMD 975. CLN.

PSCR 985. Clinical Psychopharmacology. 2-8 Hours.
The purpose of this elective is to obtain intensive and in-depth experience with the medical management of a variety of psychiatric disorders. During this rotation, the student will come in contact with patients suffering from a variety of psychiatric disorders and will gain further experience with a medical model approach to the management of these disorders. The student will learn basic pharmacokinetics principles which are broadly applicable to the pharmacologic management of patients with both psychiatric and non-psychiatric disorders. The student will learn pharmacodynamic principles and clinical neuroscience principles which are of special relevance to clinical psychopharmacology. Effort will be made to tailor the elective to maximize the exposure to a particular area or diagnosis, based on student interest. The student may choose to be involved in ongoing clinical psychopharmacology research, including an exposure to drug development and testing. Prerequisite: Pharmacology (2nd year) and PSCR 950. CLN.

PSCR 987. Outpatient Psychiatry. 2-8 Hours.
The objective of this course is to increase the student’s depth of knowledge regarding psychiatric disorders as they present in an outpatient setting. Emphasis will be on clinical skills including the psychiatric interview and diagnostic process and gaining a longitudinal perspective on psychiatric illness. In addition, the student will be introduced to psychotherapy theory and skills. Students will attend departmental academic events, teaching conferences and participate in intake evaluations performed by psychiatry residents. They will also participate in observing a selected number of ongoing cases in conjunction with residents. Students will evaluate patients for intake early in their rotation and follow these cases throughout their rotation. Prerequisite: PSCR 950. CLN.

PSCR 995. Special Topics in Psychiatry. 2-8 Hours.
This elective is designed to provide clinical experience in topics of special interest not otherwise represented in the curriculum. The student will design, in consultation with department faculty, specific objectives, reading assignments, and the mechanism for course evaluation. Prerequisite: Medical Basic Sciences and departmental consent. CLN.

Radiology

Chair: Charles McGuire, M.D.

RAD 976. Radiology. 4 Hours.
An elective in radiology will consist of four weeks, time to be spent in the hospital of the student’s choice. Most of the time spent by the student during the elective will be in diagnostic radiology but if the student so desires time may be spent in radiation therapy as well as nuclear medicine. The student will be expected to attend all the radiology conferences as well as the other appropriate conferences at which the radiology department contributes. Prerequisite: Medical Basic Sciences. CLN.

RAD 995. Special Topics in Radiology. 4 Hours.
This elective is designed to provide clinical experience in topics of special interest not otherwise represented in the curriculum. The student will design, in consultation with department faculty, specific objectives, reading assignments, and the mechanism for course evaluation. Prerequisite: Basic Science and Department Consent. CLN.

Special Programs

SPCP 974. Medical Research. 2-12 Hours.
This elective is available for pursuit of research efforts by students. Arrangements for time and facilities will be on an individual basis. Evaluation of Student performance will depend on the particular research project. Prerequisite: Approval of faculty supervisor, departmental chairperson, and Associate Dean for Academic and Student Affairs. CLN.

SPCP 976. Special Program: Domestic Off-Campus. 1-8 Hours.
The student will enroll in this rotation when desiring elective credit for an educational experience at an LCME accredited medical school other than KU, within the United States. Application process is initiated through the office of Academic & Student Affairs. A student may receive no more than 8 units of elective credit for off campus experience(s), which count toward the M.D. degree. Applications and information are available on the Academic and Student Affairs website. Prerequisite: Approval of the chair of the respective department and the Associate Dean for Academic and Student Affairs. CLN.

SPCP 977. Special Program: International. 4-8 Hours.
The student will enroll in this rotation when desiring elective credit for an educational experience at KU which is not otherwise defined by a current elective offering. Application process is initiated through the office of Academic & Student Affairs. A student may receive no more than 8 units of Special Program elective credit, which count toward the M.D. degree. Prerequisite: Approval of the chair of the respective department and the Associate Dean for Academic and Student Affairs. CLN.

SPCP 978. Special Program: On-Campus. 1-8 Hours.
The student will enroll in this rotation when desiring elective credit for an educational experience at KU which is not otherwise defined by a current elective offering. Application process is initiated through the office of Academic & Student Affairs. A student may receive no more than 8 units of Special Program elective credit, which count toward the M.D. degree. Prerequisite: Approval of the chair of the respective department and the Associate Dean for Academic and Student Affairs. CLN.

Surgery

Chair: Alex Ammar, M.D.

SGRY 972. Urological Surgery. 2-4 Hours.
Students will experience urologic surgery patient care during clinics in the office setting. Students will be assigned to the Urological service and perform history and physical and urological diagnosis examinations. Students will attend surgical conferences. Students will see both pre- and post-operative patients and assist with minor out-patient surgeries. CLN.

SGRY 977. Plastic Surgery. 2-4 Hours.
All student participation will be under the direct supervision of the staff. This clerkship is directed toward providing a variety of experiences in the field of plastic surgery. The student will participate in evaluating and treating outpatients and inpatients in a private office and hospital setting. The student will be involved with history taking, physical examination,
and evaluation of patients preoperatively. Attendance in the operating room will be emphasized as well as postoperative management of plastic surgery problems. The student will be introduced to the basic concepts of hand surgery ranging from acute surgical problems to that of congenital abnormalities. Complete care of the burn patient will be stressed. Tumors of the skin, head and neck, and congenital anomalies of the hands and face will be covered. Facial trauma and esthetic surgery will also be included in the curriculum. Prerequisite: SGRY 975. CLN.

SGRY 978. Orthopedic Surgery. 2-4 Hours.
Emphasis will be placed on the principles of orthopedic evaluation and care through obtaining a history, performing a physical examination, and outlining management on assigned orthopedic patients. The student's responsibilities will include rounds with attending orthopedic surgeon or the resident, clinic or office rotation and several orthopedic conferences and assigned lectures. Prerequisite: SGRY 975. CLN.

SGRY 979. Cardiothoracic Surgery. 2-4 Hours.
This clerkship is designed to give the student familiarity and basic understanding of cardiopulmonary disease entities with emphasis on pathophysiology, diagnosis, and management. Conferences as well as rounds with attending surgeons and resident staff comprise the essential part of this clerkship. Patients will be assigned to students for workup on a regular basis not to exceed three patients a week. Prerequisite: SGRY 975. CLN.

SGRY 980. Burn and Critical Care. 2-4 Hours.
This course will provide hands-on experience in burn management and critical care. The student will be assigned to the Burn Unit at Via Christi Regional Medical Center - St. Francis Campus. He/She will make daily rounds, assist in surgery, and participate in preoperative and postoperative care of patients admitted to the Burn Unit. He/She will be supervised by faculty and surgery residents. Patient Contact: 5-10 patients/day (inpatient and outpatient). Evaluation: Use form for clinical assessment and personal skills (Department of Surgery form currently being used). Prerequisite: SGRY 975. CLN.

SGRY 981. Neurosurgery. 2-4 Hours.
This elective will provide an in-depth exposure to neurosurgery. Student will have daily rounds, patient work-ups, surgery and office experience. He/she will be supervised by faculty and surgery residents assigned to neurosurgery. Patient contact is variable. Students will be evaluated on form for clinical assessment and interpersonal skills currently in use by the Department of Surgery. Prerequisite: SGRY 975. CLN.

SGRY 983. General Surgery Preceptorial. 2-4 Hours.
The clerkship provides in-depth exposure to hospital and office practice in general surgery. The student will make daily rounds, assist in office, perform patient work-ups, scrub on all surgical procedures on his/her patients, and attend conferences on consultant rounds, surgical grand rounds, and tumor and X-ray. Evaluation will be based on patient work-ups, technical skills, rapport with patients, paramedical personnel, and surgical team. Prerequisite: SGRY 975 and INMD 975. CLN.

SGRY 985. Pediatric Surgery. 2-4 Hours.
This course provides an introduction to common problems in pediatric surgery. The student will attend three to four conferences per week, make daily rounds, perform patient work-ups, and assist in surgery and office experience—both preoperatively and postoperatively. The student will have contact with approximately twenty-five patients per week and will be supervised by a faculty member. Evaluation will be based on clinical assessment and interpersonal skills. Prerequisite: SGRY 975 and PDRC 975. CLN.

SGRY 986. Peripheral Vascular Surgery. 2-4 Hours.
The objective is to learn to care for patients with peripheral vascular disease emphasizing diagnosis, examination, appropriate testing, including ultrasounds, vascular lab, angiography, and CT scans. Students will also be familiar with the natural history of peripheral vascular disease and the role of surgical and non-surgical treatments. In addition the student will gain knowledge of venous disease to include management and treatment of deep vein thrombosis and pulmonary embolism. The student will be expected to see patients on rounds, assist in surgery, and perform preoperative evaluation of patients with vascular disease. The student will see patients both as in-patients and out-patients. Prerequisite: SGRY 975. CLN.

SGRY 987. Senior Elective in Surgery. 4 Hours.
The student will be assigned to a teaching panel and will work closely with the attending surgeons and residents. The student will participate in the preoperative, intraoperative, and postoperative management of surgical patients. Exposure to acutely injured patients and acute surgical conditions in the emergency department will be an important aspect of this elective. As a result of these experiences the student will be able to: recognize acute surgical conditions and institute initial management, develop skills in surgical diagnosis, participate and assist in surgical procedures, elicit and perform an H & P on patients in an ambulatory care setting, and develop diagnostic skills in the ambulatory care setting. Prerequisite: SGRY 975. CLN.

SGRY 995. Special Topics in Surgery. 2-8 Hours.
This elective is designed to provide clinical and/or research experience in topics of special interest not otherwise represented in the curriculum. The student will design, in consultation with department faculty, specific objectives, reading assignments, and the mechanism for course evaluation. Prerequisite: Medical Basic Science and departmental consent. CLN.

SGRY 997. Sports Medicine. 2-4 Hours.
The student will experience Sports Medicine Care in the ambulatory setting. The student will evaluate sports related injuries in the office setting and also have the opportunity to observe surgical treatment in the arthroscopic surgery suite. The student will have the opportunity to participate in the on-site evaluation of athletic injuries through outreach sports medicine programming. Additional exposure to athletic training services will also be utilized. Prerequisite: Senior standing. CLN.

Postgraduate Training Programs

The KU School of Medicine provides two distinct residency and fellowship programs. Both programs are comprehensive in their training. One program is at the KU School of Medicine and Medical Center in Kansas City. The second program is at the KU School of Medicine — Wichita.

Kansas City Postgraduate Training Programs (http://www.kumc.edu/school-of-medicine/gme.html)
Wichita Postgraduate Training Programs (http://wichita.kumc.edu/education/graduate-medical-education.html)
Continuing Medical Education (http://kumcce.ku.edu)
Institute for Community Engagement (http://www.kumc.edu/community-engagement.html)

Masters and Ph.D. Programs

Founded in 1905, the KU School of Medicine is proud of its rich legacy as Kansas’ only medical school. Our mission is to enhance the quality of life and serve our community through the discovery of knowledge,
the education of health professionals and by improving the health of the public.

The School of Medicine integrates excellent education, scientific discovery, outstanding clinical programs and dedication to community service. In addition to its commitment to educating the physician workforce of tomorrow, the school is an emerging leader in biomedical research and the health of the public. Graduate programs are offered in the biomedical sciences, biostatistics, public health, health policy and management, and clinical research.

Admission and degree requirements vary by program and are listed in the individual program descriptions. Requirements and course descriptions are subject to change. In most cases, use the catalog of the year student entered program. Other years’ catalogs (http://catalog.ku.edu/archives)».

Click on the list of programs (p. 2062) link for a list of the programs offered.

Department of Anatomy and Cell Biology

The Anatomy and Cell Biology Graduate Program is designed to prepare the student for a career in independent research and/or teaching with concentrations in the following areas:

- Cell Biology
- Developmental Biology
- Neuroscience
- Renal Biology
- Reproductive Biology

The graduate program emphasizes acquiring the skills and knowledge required to perform and communicate the results of laboratory research. Individual research programs within the Department of Anatomy and Cell Biology are largely complementary and focus on understanding the biological processes that contribute to human health and disease. Experimental systems include the use of cell and tissue culture, as well as animal models such as hydra, sea urchin, frog, chick, zebrafish, and transgenic mice.

In 2014, the Department of Anatomy and Cell Biology brought in over $8 million in grant funding from the National Institutes of Health, placing it at the top of all departments within KUMC and 17th (out of 78) among all Anatomy and Cell Biology departments in the country. Faculty members and trainees also received funding from the American Heart Association, the Cystic Fibrosis Foundation, and various other agencies. Graduates of this program have obtained positions in industry, government, and consulting, as well as faculty positions at the college, university, and medical/graduate school level.

Courses

**ANAT 832. Electron Microscopy Techniques. 3 Hours.**
Basic methods in preparation of tissues and cells for ultrastructural studies; use of electron microscopy in specific research problems; interpretation of biological ultrastructure; reading assignments and discussion sessions. Prerequisite: ANAT 830, or consent of course instructor. LEC.

**ANAT 845. Graduate Histology. 2 Hours.**
This course will bridge student knowledge of systems/organs with cellular histology and is designed as an accelerated introduction to histological techniques, microscopy/optics, and histology. Classes meet once a week and the format includes a 1 hour lecture on individual tissues within related organ systems followed by 1 hour of microscopic observation. Prerequisite: Completion of the IGPBS core curriculum or consent of instructor. LEC.

**ANAT 846. Advanced Neuroscience. 5 Hours.**
Team taught, in-depth neuroscience course focusing on normal and diseased brain function at the molecular, cellular and systems levels. Lectures and discussions will emphasize current issues in neuroscience research. (Same as PHCL 846, PHSL 846 and NURO 846). Prerequisite: Permission of course director. LEC.

**ANAT 847. Developmental Neurobiology. 2 Hours.**
Development of the nervous system from early induction to the development of learning and memory. Topics include: Induction; Cellular Differentiation; Axon Growth and Guidance; Target Selection; Cell Survival and Growth; Synapse Formation; Synapse Elimination; and Development of Behavior. (Same as NURO 847 and PHSL 847.) Prerequisite: Advanced Neuroscience (ANAT 846; NURO 846; PHSL 846) or consent of instructor. LEC.

**ANAT 848. Molecular Mechanisms of Neurological Disorders. 3 Hours.**
An in-depth coverage of pathogenic mechanisms in neurological diseases; cellular and molecular responses to brain injury and disease, neuroinflammatory diseases (e.g., multiple sclerosis), neurodegenerative diseases (e.g., Alzheimer's, Parkinson's, Huntington's, amyotrophic lateral sclerosis, and prion diseases), neurogenetic diseases (e.g., lysosomal and peroxisomal disorders, Down's syndrome and fragile X), trauma, stroke, and viral diseases (e.g., HIV encephalitis). (Same as NURO 848, PHCL 848, PHSL 848.) Prerequisite: Advanced Neuroscience (ANAT 846, PHCL 846 or PHSL 846) or an equivalent course and consent of instructor. LEC.

**ANAT 868. Advanced Developmental Biology. 2 Hours.**
In-depth exposure to the classically important aspects of development using several different animal systems. The course addresses a selected number of topics and brings students up to date with regard to cutting edge research accomplishments in each topic. The materials selected are designed to qualify students for future teaching assignments in Developmental Biology and enhance their research capabilities. Prerequisite: IGPBS Core Curriculum or consent of instructor. LEC.

**ANAT 869. Grant Writing. 3 Hours.**
All aspects of preparing grant applications are covered. This includes writing an actual grant application containing all the usual elements of grants - budgets, biosketches, resources, and scientific text. In addition, different funding agencies, building research teams, the review process, responding to reviewers, and resubmitting grants will be covered. (Same as HPM 878 and NRSG 889.) Prerequisite: Appropriate research methods and statistics courses in student's current graduate program; and permission of the instructor. For students in the Outcomes Management and Research concentration, HPM 821. LEC.

**ANAT 870. Techniques in Anatomy and Cell Biology. 1-3 Hours.**
Advanced study allowing a student to pursue a particular research or educational skill through directed laboratory work. Prerequisite: Consent of instructor. LEC.

**ANAT 880. Advanced Topics: _____. 1-5 Hours.**
Special study allowing a student to pursue a particular subject through readings, laboratory work, and conferences with a faculty member. Prerequisite: Consent of instructor. IND.
ANAT 885. Seminar. 1 Hour.
Research-oriented presentations in a seminar format by students, faculty, and guests. LEC.

ANAT 890. Master's Research. 1-10 Hours.
Independent laboratory investigation approved by and under the supervision of the student's advisor, and in partial fulfillment of the requirements for the M.A. degree. Prerequisite: Consent of advisor. RSH.

ANAT 899. Master's Thesis. 1-6 Hours.
Preparation of the formal thesis based upon independent research and in partial fulfillment of the requirements for the M.A. degree. Credits will be given only after the thesis has been accepted by the department. Prerequisite: Consent of advisor. THE.

ANAT 900. Analysis of Scientific Papers. 1 Hour.
Research articles are analyzed by the student with the guidance of an instructor in terms of quality of scientific content and mechanics of the presentation. One or more articles are discussed in each tutorial session. The research topics and the instructor are chosen in accordance with the research interest of the student. LAB.

ANAT 990. Doctoral Research. 1-12 Hours.
Original and independent laboratory investigation, approved by and conducted under the supervision of the students' advisor and advisory committee, in partial fulfillment of the requirements for the Ph.D. degree. Prerequisite: Consent of advisor. LEC.

ANAT 999. Doctoral Dissertation. 1-12 Hours.
Preparation of the dissertation based upon original research and in partial fulfillment of the requirements for the Ph.D. degree. Credits will be given only after the dissertation has been accepted by the student's dissertation committee. Prerequisite: Consent of advisor. THE.

Master of Science in Cell Biology and Anatomy

The Master of Science (M.S.) program in Anatomy and Cell Biology prepares the student for a career at the advanced technical level in academia, industry, or government. Graduating students may also find teaching positions at the secondary or junior college level. Incoming students may not directly enroll in the M.S. program; entry will only be granted by the Departmental Director of Graduate Education upon the recommendation of the student's Research Advisory Committee.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

Admission Requirements:

• Bachelor's degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.
  Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
  • A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor's degree.

• Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395).

• A background check (p. 2395) is required during the admission process; it may affect the student's eligibility to enter the program.

• An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895.

• Three letters of recommendation.

• Prerequisite coursework:
  • One year of general chemistry
  • One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  • One year of biological sciences
  • One semester of calculus
  • One semester of physics

• Research experience (beyond labs associated with lecture courses) is strongly suggested.

Applicants will be assessed based on a combination of GPA, research experience, and GRE scores. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer the applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs». 

Degree Requirements:

• Degree requirements are normally completed within 3 years of admission to the degree program although a maximum of 7 years is allowed.

• Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.

• Completion of a minimum of 30 credit hours.

• Enrollment in a minimum of one (1) credit hour the semester the student will graduate.

• Successful completion of either a thesis defense or general examination (p. 2398) the semester the student will graduate.

• If thesis option is chosen, then enrollment in a minimum of one (1) credit hour of ANAT 899 Master's Thesis and successful thesis submission and publication (p. 2398) (according to Office of Graduate Studies policy.)

• Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2126) courses (or their equivalent):

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<td>2</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>Introduction to Research Ethics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 857</td>
<td>Biographics</td>
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</tbody>
</table>
Doctor of Philosophy in Cell Biology and Anatomy

Students that obtain a Ph.D. in Anatomy and Cell Biology are required to achieve the following expectations:

- Become knowledgeable in the areas of study included in the IGPBS (Interdisciplinary Graduate Program in the Biomedical Sciences) core curriculum.
- Obtain in-depth and up-to-date expertise in a specialized area of knowledge that is appropriate for the field of your dissertation research project.
- Make original and high quality contributions to the scientific literature in your chosen research field.
- To become familiar with the scientific literature through general and specialized journals in biological research, and to develop the ability to critically evaluate the original research in your own and related fields.
- Become skilled in organizing and communicating information in oral presentations, and to respond to critical questioning.
• Develop clarity, conciseness, and precision in writing, to aid in grant application writing and publication of your original research results.
• To learn how to ask incisive scientific questions and gain experience in the design, performance and interpretation of laboratory experiments and observations.
• To gain familiarity with the preparation and writing of grant applications.
• To prepare for the teaching as well as the research aspects of an academic career.
• To obtain instruction in research skills and responsible scholarship.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2126) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

**Admission Requirements:**

- Bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.
  - Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
  - A cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale for the bachelor’s degree.
  - Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395).
  - A background check (p. 2395) is required during the admission process; it may affect the student’s eligibility to enter the program.
  - An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895.
  - Three letters of recommendation.
  - Prerequisite coursework:
    - One year of general chemistry
    - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
    - One year of biological sciences
    - One semester of calculus
    - One semester of physics
  - Research experience (beyond labs associated with lecture courses) is strongly suggested.

Applicants will be assessed based on a combination of GPA, research experience, and GRE scores. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which the time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs may be found on the Interdisciplinary Graduate Program in Biomedical Sciences website.

The program consists of coursework, research experience, and the successful completion of a doctoral dissertation. Dissertation research culminates in a final dissertation examination consisting of an oral presentation by the candidate and an examination by the faculty. Relevant prior graduate work is taken into consideration in setting up individual programs of study leading to the Ph.D.

**Degree requirements:**

- Degree requirements are normally completed within 5 years of admission to the program although a maximum of 8 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Successful completion of the University’s Research Skills and Responsible Scholarship (p. 2398) requirement prior to the semester the Oral Comprehensive Examination is scheduled.
  - Successful completion of GSMC 857 Biographics, GSMC 852 and GSMC 855 Introduction to Biomedical Research I and II (or equivalent) meets the Research Skills requirement.
  - Successful completion of GSMC 856 Introduction to Research Ethics (or equivalent) meets the Responsible Scholarship requirement.
- Successful completion of the Residence Requirement (p. 2398) prior to the semester the Oral Comprehensive Examination is scheduled. The requirement is met by enrollment in full-time status a minimum of two semesters.
- Successful completion of the Oral Comprehensive Examination (p. 2398). Students are recognized as formal doctoral candidates after they have passed the comprehensive examination.
- Successful completion of the Post-Comprehensive Enrollment (p. 2398) requirement.
- Enrollment in a minimum of one (1) credit hour of ANAT 999 Doctoral Dissertation the semester the student will defend dissertation and graduate.
- Successful completion of the Final Oral Examination (p. 2398) (dissertation defense.)
- Successful Dissertation Submission and Publication (p. 2398) (according to Office of Graduate Studies policy.)
- Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2126) courses (or their equivalent):

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<tr>
<td>GSMC 858</td>
<td>Introduction to Faculty Research</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 859</td>
<td>Research Rotations</td>
<td>1-4</td>
</tr>
</tbody>
</table>

- Successful completion of the following Anatomy and Cell Biology courses:

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<td>Graduate Histology</td>
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<tr>
<td>ANAT 885</td>
<td>Seminar</td>
<td>1</td>
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<tr>
<td>ANAT 900</td>
<td>Analysis of Scientific Papers</td>
<td>1</td>
</tr>
<tr>
<td>ANAT 990</td>
<td>Doctoral Research</td>
<td>1-12</td>
</tr>
<tr>
<td>ANAT 999</td>
<td>Doctoral Dissertation</td>
<td>1-12</td>
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Other years’ catalogs may be found on the Interdisciplinary Graduate Program in Biomedical Sciences website.
• Students must be continually enrolled in ANAT 885 and ANAT 900 each fall and spring semester beginning with fall semester of their second year. These two courses may be waived for one semester after the student has completed all departmental requirements other than the dissertation defense.

• Successful completion of a minimum of two (2) credit hours of elective coursework related to specialized interests. Electives are chosen in consultation with the student’s advisor. Electives may be chosen from this list or students may select electives from courses offered by other departments.

- ANAT 846 Advanced Neuroscience 5
- ANAT 847 Developmental Neurobiology 2
- ANAT 848 Molecular Mechanisms of Neurological Disorders 3
- ANAT 868 Advanced Developmental Biology 2
- ANAT 869 Grant Writing 3
- ANAT 870 Techniques in Anatomy and Cell Biology 1-3
- ANAT 880 Advanced Topics: _____ 1-5

• Successful completion of two hour-long presentations in the regular departmental seminar series (or an equivalent seminar approved by the graduate education director) are to be given in two separate semesters, not including the one in which the student defends.

• Gain teaching experience by assisting in selected courses that are chosen in consultation with the student’s advisor and the graduate education director.

Students enrolled in the MD-PhD Physician Scientist Training Program should review the Degree Requirements (http://catalog.ku.edu/medicine/combined-md-phd/#degreerequirementstext) section of this catalog for that program.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program.

**Typical Plan of Study**

**Year 1**

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
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<td>2</td>
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</tr>
<tr>
<td>GSMC 851</td>
<td>2 GSMC 854</td>
<td>2</td>
<td>May take an elective course from the student’s chosen degree program in consultation with the student’s advisor.</td>
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<tr>
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<tr>
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**Year 2**

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<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
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<tbody>
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</tr>
<tr>
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<td>1</td>
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</tbody>
</table>

Form and schedule first meeting with Research Advisory Committee.

**Year 3**

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ANAT 885</td>
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<td>ANAT 900</td>
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<td>ANAT 900</td>
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<td>1-6 ANAT 900</td>
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</tbody>
</table>

Oral Comprehensive Exam must be completed by December 31. First hour-long seminar presented.

**Year 4**

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
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<td>ANAT 900</td>
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<td>1-6 ANAT 900</td>
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<td></td>
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</tbody>
</table>

18 hour postdoctoral enrollment completed Summer Year 3 if Oral Comp passed Summer Year 2 - begin reduced enrollment Fall Year 4. Second hour-long seminar presented.

**Year 5**

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 885</td>
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<td>ANAT 900</td>
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<td>ANAT 900</td>
<td>1 ANAT 900</td>
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<tr>
<td>ANAT 900</td>
<td>1 ANAT 999</td>
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</tbody>
</table>

**Total Hours:** 19-30
The mission of the Department of Biochemistry and Molecular Biology is to:

- provide a dynamic research environment with programs in the disciplines of biochemistry and molecular biology
- provide a superior educational experience for graduate students and medical students
- provide a rich training environment for postdoctoral fellows
- provide service to our institution and community

Our areas of research strength include:

- Regulation of gene expression, emphasizing but not limited to transcription regulation.
- Protein folding and structure determination.
- Allosteric regulation of protein function.
- Signal transduction

Our faculty members are associated with a variety of cross-disciplinary centers within the university, including The Kidney Institute (http://www.kumc.edu/school-of-medicine/kidney-institute.html), the COBRE for Protein Structure and Function (http://psf.cobre.ku.edu), the COBRE for Novel Approaches for Control of Microbial Pathogens (http://www.kumc.edu/school-of-medicine/microbiology-molecular-genetics-and-immunology/cobre.html), the COBRE for Molecular Regulation of Cell Development and Differentiation (http://www.kumc.edu/school-of-medicine/anatomy-and-cell-biology/nih-center-of-biomedical-research-excellence-(cobre).html), the Cancer Center and the Institute for Reproductive Health and Regenerative Medicine (http://www.kumc.edu/school-of-medicine/irhrm.html).

Core services are available, which includes: a transgenic mouse facility; a biotechnology support center that offers DNA synthesis, sequencing, and microchip analysis; a state-of-the-art mass spectrometry facility (http://www.kumc.edu/mspc.html); in-house x-ray crystallographic equipment; and a variety of spectroscopy and calorimetry instruments, including advanced fluorescence equipment.

### Courses

**BCHM 801. Research in Biochemistry. 1-10 Hours.**
LEC.

**BCHM 802. Biochemistry Seminar. 1 Hour.**
Weekly meetings. LEC.

**BCHM 808. Methods for Analyzing Biomolecules. 3 Hours.**
Application of physical techniques to the study of biological macromolecules in solution. Emphasis on utilization of data obtained from such studies in interpreting biological processes at the molecular level. Course will be taught in the spring. Prerequisite: Consent of instructor. LEC.

**BCHM 850. Topics in Biochemistry. 1-3 Hours.**
Selected topics in biochemistry with varying subject matter. Students should inquire before enrolling. Topics are in-depth studies of current research areas. The course may consist of formal lectures and/or directed readings and studies. IND.

**BCHM 862. Biochemical Research-Literature Seminar. 1 Hour.**
Students and faculty meet once weekly to discuss the research of students or the current biochemical literature. The student is required to make one presentation. Prerequisite: Consent of instructor. LEC.

**BCHM 890. Master's Research. 1-15 Hours.**
Research for the M.A. degree. RSH.

**BCHM 899. Master's Thesis. 1-15 Hours.**
Restricted to the writing of the master's thesis. THE.

**BCHM 922. Advanced Molecular Genetics. 3 Hours.**
An in-depth analysis of the structure and function of gene regulatory proteins and the mechanisms of gene transcription, and DNA replication and repair. Lectures and discussion of current literature. Prerequisite: Consent of instructor. Course will be presented in the fall semester and will include several faculty leading discussions in their area of research interests. LEC.

**BCHM 923. Protein Structure and Function. 3 Hours.**
The relationship between protein structure, binding, and physiological function. Emphasis is on proteins as enzymes, structural components, and regulators. Course will be taught in the spring. Prerequisite: consent of instructor. LEC.

**BCHM 990. Doctoral Research. 1-15 Hours.**
Research for the doctoral degree. RSH.

**BCHM 999. Doctoral Dissertation. 1-15 Hours.**
Restricted to the writing of the doctoral dissertation. THE.

### Master of Science in Biochemistry and Molecular Biology

The M.S. in biochemistry and molecular biology normally leads to positions at the advanced technical level in academic research, industry, or government. It may lead to teaching positions at the secondary or junior college level.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2126) Detailed instructions on how to
apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

Admission Requirements:

- Bachelor's degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.
  
  Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor's degree.

- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395).

- A background check (p. 2395) is required during the admission process; it may affect the student's eligibility to enter the program.

- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895.

- Three letters of recommendation.

- Prerequisite coursework:

  - One year of general chemistry
  
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  
  - One year of biological sciences
  
  - One semester of calculus
  
  - One semester of physics

- Research experience (beyond labs associated with lecture courses) is strongly suggested.

Applicants will be assessed based on a combination of GPA, research experience, and GRE scores. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs». Degree requirements:

- Degree requirements are normally completed within 3 years of admission to the program although a maximum of 7 years is allowed.

- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.

- Completion of a minimum of 30 credit hours.

- Successful completion of either a thesis defense or general examination (p. 2398) the semester the student will graduate. The option will be decided by the student’s advisor and must be approved by the departmental Graduate Committee.

If the thesis option is chosen, then enrollment in a minimum of one (1) credit hour of BCHM 899 Master’s Thesis is required and successful thesis submission and publication (p. 2398) (according to Office of Graduate Studies policy.)

If the general examination option is chosen, then enrollment in a minimum of one (1) credit hour the semester the student will graduate is required.

- Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2126) courses (or their equivalent):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>Proteins and Metabolism</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>Molecular Genetics</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 853</td>
<td>Cellular Structure</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 854</td>
<td>Cell Communication</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 855</td>
<td>Introduction to Biomedical Research II</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>Introduction to Research Ethics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 857</td>
<td>Biographics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 858</td>
<td>Introduction to Faculty Research</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 859</td>
<td>Research Rotations</td>
<td>1-4</td>
</tr>
</tbody>
</table>

- Successful completion of the following Biochemistry and Molecular Biology courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCHM 862</td>
<td>Biochemical Research-Literature Seminar</td>
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</tr>
<tr>
<td>BCHM 890</td>
<td>Master’s Research</td>
<td>1-6</td>
</tr>
<tr>
<td>BCHM 899</td>
<td>Master’s Thesis (if thesis option chosen)</td>
<td>1-6</td>
</tr>
</tbody>
</table>

- As determined in consultation with the student’s advisor, students who have not previously mastered undergraduate biochemistry will strengthen any areas of weakness by taking BCHM 850 Topics in Biochemistry.

- Successful completion of elective coursework as determined in consultation with the student’s advisor.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program.

Typical Plan of Study

Year 1

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Summer</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>2 GSMC 853</td>
<td>2 GSMC 859</td>
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</tr>
<tr>
<td>GSMC 851</td>
<td>2 GSMC 854</td>
<td>2 May take</td>
<td>1-3</td>
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<tr>
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<tr>
<td>GSMC 856</td>
<td>1 GSMC 859</td>
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<tr>
<td>GSMC 857</td>
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</tr>
<tr>
<td>GSMC 858</td>
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</tbody>
</table>
### Doctor of Philosophy in Biochemistry and Molecular Biology

The Ph.D. is required for careers in independent research in biochemistry and molecular biology. The Ph.D. most often is followed by one or more years of postdoctoral training in a specific area of research. Ph.D. degree holders in biochemistry and molecular biology may find positions in industry or government and, with some postdoctoral experience, may obtain faculty positions at the college or university level.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website [http://www.kumc.edu/igpbs/how-to-apply.html](http://www.kumc.edu/igpbs/how-to-apply.html).

### Admission Requirements:
- Bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.
- Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
  - A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor’s degree.
  - Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395).
  - A background check (p. 2395) is required during the admission process; it may affect the student's eligibility to enter the program.
  - An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895.
  - Three letters of recommendation.
  - Prerequisite coursework:
    - One year of general chemistry
    - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
    - One year of biological sciences
    - One semester of calculus
    - One semester of physics
  - Research experience (beyond labs associated with lecture courses) is strongly suggested.

Applicants will be assessed based on a combination of GPA, research experience, and GRE scores. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. [Other years' catalogs »](http://www.kumc.edu/igpbs/how-to-apply.html).

The program consists of coursework, research experience, and the successful completion of a doctoral dissertation. Dissertation research culminates in a final dissertation examination consisting of an oral presentation by the candidate and an examination by the faculty. Relevant prior graduate work is taken into consideration in setting up individual programs of study leading to the Ph.D.

### Degree requirements:
- Degree requirements are normally completed within 5-6 years of admission to the program although a maximum of 8 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Successful completion of the University’s Research Skills and Responsible Scholarship (p. 2398) requirement prior to the semester the Oral Comprehensive Examination is scheduled.
  - Successful completion of GSMC 857 Biographics, GSMC 852 and GSMC 855 Introduction to Biomedical Research I and II (or equivalent) meets the Research Skills requirement.
  - Successful completion of GSMC 856 Introduction to Research Ethics (or equivalent) meets the Responsible Scholarship requirement.
- Successful completion of the Residence Requirement (p. 2398) prior to the semester the Oral Comprehensive Examination is scheduled.
The requirement is met by enrollment in full-time status a minimum of two semesters.

- Successful completion of the Oral Comprehensive Examination (p. 2398). This will comprise (i) a written grant proposal that conforms to the NIH R01 guidelines; and (ii) oral examination that centers around material in the written proposal, as well as broader aspects of biochemistry and molecular biology. The topic may be broadly related to the student’s research area, but hypotheses should be developed independently by the student. Students are expected to complete the Oral Comprehensive Exam by the end of year 2. Students are recognized as formal doctoral candidates after they have passed the comprehensive examination.

- Successful completion of Post-Comprehensive Enrollment (p. 2398) requirement.

- Enrollment in a minimum of one (1) credit hour of BCHM 999 Doctoral Dissertation the semester the student will defend dissertation and graduate.

- Successful completion of the Final Oral Examination (p. 2398) (dissertation defense.)

- Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2126) courses (or their equivalent):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>Proteins and Metabolism</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>Molecular Genetics</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>Introduction to Biomedical Research</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 853</td>
<td>Cellular Structure</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 854</td>
<td>Cell Communication</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 855</td>
<td>Introduction to Biomedical Research II</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>Introduction to Research Ethics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 857</td>
<td>Biographics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 858</td>
<td>Introduction to Faculty Research</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 859</td>
<td>Research Rotations</td>
<td>1-4</td>
</tr>
</tbody>
</table>

- As determined in consultation with the student’s advisor, students who have not previously mastered undergraduate biochemistry will strengthen any areas of weakness by taking BCHM 850 Topics in Biochemistry.

- Successful completion of the following Biochemistry core courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCHM 802</td>
<td>Biochemistry Seminar</td>
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<tr>
<td>BCHM 808</td>
<td>Methods for Analyzing Biomolecules</td>
<td>3</td>
</tr>
<tr>
<td>BCHM 862</td>
<td>Biochemical Research-Literature Seminar</td>
<td>1</td>
</tr>
<tr>
<td>BCHM 890</td>
<td>Master's Research</td>
<td>1-15</td>
</tr>
<tr>
<td>BCHM 922</td>
<td>Advanced Molecular Genetics</td>
<td>3</td>
</tr>
<tr>
<td>BCHM 923</td>
<td>Protein Structure and Function</td>
<td>3</td>
</tr>
<tr>
<td>BCHM 990</td>
<td>Doctoral Research</td>
<td>1-15</td>
</tr>
<tr>
<td>BCHM 999</td>
<td>Doctoral Dissertation</td>
<td>1-15</td>
</tr>
</tbody>
</table>

- Successful completion of additional elective coursework as determined in consultation with the student’s advisor. These electives may be substituted for a required course on a case-by-case basis. Suggested elective courses include:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCHM 850</td>
<td>Topics in Biochemistry</td>
<td>1-3</td>
</tr>
<tr>
<td>ANAT 868</td>
<td>Advanced Developmental Biology</td>
<td>2</td>
</tr>
<tr>
<td>PATH 803</td>
<td>Stem Cell Biology</td>
<td>2</td>
</tr>
</tbody>
</table>

Students enrolled in the MD-PhD Physician Scientist Training Program should review the Degree Requirements (http://catalog.ku.edu/medicine/combined-md-phd/#degreerequirmentstext) section of this catalog for that program.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program.

### Typical Plan of Study

#### Year 1

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<td>GSMC 851</td>
<td>Molecular Genetics</td>
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</tr>
<tr>
<td>GSMC 852</td>
<td>Introduction to Biomedical Research</td>
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</tr>
<tr>
<td>GSMC 853</td>
<td>Cellular Structure</td>
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<td>GSMC 854</td>
<td>Cell Communication</td>
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</tr>
<tr>
<td>GSMC 855</td>
<td>Introduction to Biomedical Research II</td>
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<td>GSMC 856</td>
<td>Introduction to Research Ethics</td>
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</tr>
<tr>
<td>GSMC 857</td>
<td>Biographics</td>
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</tr>
<tr>
<td>GSMC 858</td>
<td>Introduction to Faculty Research</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 859</td>
<td>Research Rotations</td>
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**Total Hours:** 19-30

#### Year 2

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<td>BCHM 850</td>
<td>Topics in Biochemistry</td>
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<tr>
<td>ANAT 868</td>
<td>Advanced Developmental Biology</td>
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<tr>
<td>PATH 803</td>
<td>Stem Cell Biology</td>
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**Total Hours:** 30-45
The mission of the Department of Biostatistics is to provide an infrastructure of biostatistical and informatics expertise to support and enhance the research, service, and educational needs of the University of Kansas Medical Center and its affiliates. The global objectives of the department are as follows:

- To provide a leadership role in biostatistical and informatics research initiatives across the medical center.
- To provide the biostatistics and informatics cores for major initiatives.
- To ensure that researchers have ready access to biostatistical and informatics resources and support.
- To provide the infrastructure and expertise for centralized and project specific database development, management and analysis.
- To consolidate resources pertaining to biostatistics and informatics.

The biostatistics M.S. and Ph.D. programs were created to help meet the ever-increasing demand for biostatisticians to take leadership roles in careers as researchers and educators in academia, government, and industry. Faculty members are active researchers collaborating and consulting in research projects and initiatives at the Medical Center, in addition to pursuing their own research agendas and participating in curricular instruction. Expertise in the department includes linear, nonlinear, and longitudinal modeling; clinical trial and experimental design; survival analysis; categorical data analysis; robust statistics; psychometric methods; and Bayesian methodology.

The Department of Biostatistics is currently developing a Master of Science in Applied Statistics degree program. Program specifics and application details will be posted to our website once the program has been approved by the Kansas Board of Regents.

Courses

BIOS 704. Principles of Statistics in Public Health. 3 Hours.
Introductory course concerning the concepts of statistical reasoning and the role of statistical principles as the scientific basis for public health research and practice. Prerequisite: Permission of instructor. LEC.

BIOS 714. Fundamentals of Biostatistics I. 3 Hours.
First-semester course of a two-semester introductory statistics course that provides an understanding of the proper application of statistical methods to scientific research with emphasis on the application of statistical methodology to public health practice and research. This course focuses on basic principles of statistical inference with emphasis on one or two sample methods for continuous and categorical data. This course fulfills the core biostatistics requirement. Prerequisite: Calculus or Permission of Instructor. LEC.

BIOS 715. Introduction to Data Management using RedCap and SAS. 3 Hours.
This course will cover the utilization of Redcap and SAS for data management. Data collection and management using Redcap will be covered. Data cleaning and preparation for analysis will be covered using SAS. In addition, some of the basic descriptive analysis procedures will be covered in SAS. Pre-/Co-requisites: BIOS 704 or BIOS 714 or equivalent with permission of instructor. LEC.

BIOS 717. Fundamentals of Biostatistics II. 3 Hours.
Second level statistics course that provides an understanding of more advanced statistical methods to scientific research with an emphasis on the application of statistical methodology to public health practice, public health research, and clinical research. Special focus will be upon the utilization of regression methodology and computer applications of such methodology. Prerequisite: BIOS 714 or equivalent. LEC.

BIOS 720. Analysis of Variance. 3 Hours.
Methods for designed experiments including one-way analysis of variance (ANOVA), two-way ANOVA, repeated measures ANOVA, and analysis

Department of Biostatistics

The mission of the Department of Biostatistics is to provide an infrastructure of biostatistical and informatics expertise to support and enhance the research, service, and educational needs of the University...
of covariance are emphasized. Post- ANOVA tests, power and testing assumptions required in NOVA are discussed and applied. Outlier detection using robust estimators also are incorporated. Boxplots, histograms and scatterplots are used to display data. Prerequisite: PRE 710/711 or BIOS 714/717 or equivalent. Preferred: BIOS 715. Knowledge of statistical software, basic statistical plotting methods, p-values, two-sample t-test and simple linear regression is assumed. LEC.

BIOS 725. Applied Nonparametric Statistics. 3 Hours.
This course will study nonparametric methods in many situations as highlighted by the following topics: Students will learn how nonparametric methods provide exact p-values for tests, exact coverage probabilities for confidence intervals, exact experimentwise error rates for multiple comparison procedures, and exact coverage probabilities for confidence bands. This course will be using EXCEL and SAS to conduct various procedures. Prerequisite: Fundamentals of Biostatistics I (BIOS 714) or the equivalent or consent of instructor. LEC.

BIOS 730. Applied Linear Regression. 3 Hours.
Simple linear regression, multiple regression, logistic regression, nonlinear regression, neural networks, autocorrelation, interactions, and residual diagnostics. Applications of the methods will focus on health related data. Prerequisite: 1) Fundamentals of Biostatistics I (BIOS 714) or the equivalent and 2) Fundamentals of Biostatistics II (BIOS 717) or Analysis of Variance (BIOS 720) or Permission of the Instructor. LEC.

BIOS 735. Categorical Data and Survival Analysis. 3 Hours.
An intermediate level statistics course that provides an understanding of the more advanced statistical methods to scientific research with emphasis on the application of statistical methodology to clinical research, public health practice, public health research and epidemiology. Prerequisite: BIOS 714, BIOS 715, and BIOS 717 or permission of the instructor. LEC.

BIOS 740. Applied Multivariate Methods. 3 Hours.
This course is an advanced statistical course for students who have had fundamental biostatistics and linear regression. Topics to be covered include Hotelling’s T-squared test, MANOVA, principal components, factor analysis, discriminant analysis, canonical analysis, and cluster analysis. More advanced topics such as Multidimensional Scaling or Structural Equation Modeling might be introduced if time allows. Computers will be extensively used through the whole course, and students are suggested to be familiar with some statistical software before taking this course. Although students are allowed to use the software they are comfortable with, SAS will be the primary statistical package used to demonstrate examples in this course. PREREQUISITES: BIOS 730 Applied Linear Regression or equivalents or permission of instructor. LEC.

BIOS 799. Introduction to Statistical Genomics. 3 Hours.
This survey course will provide a high-level introduction to various statistical and bioinformatics methods involved in the study of biological systems. In particular, this course will provide an overview of the analytical aspects involved in: the study DNA, RNA, and DNA methylation data measured from both microarray and next-generation sequencing (NGS) technologies. This course will be held in a block format with 4 hours of lectures a day for two weeks (one week in June and one week in July), with readings and homework assignments assigned throughout the summer semester. Prerequisites: BIOS 714 Fundamentals of Biostatistics I and BIOS 717 Fundamentals of Biostatistics II; Experience with a higher level programming language is preferred. LEC.

BIOS 805. Professionalism, Ethics and Leadership in the Statistical Sciences. 3 Hours.
This web-based course addresses issues in professionalism, leadership and ethics that are specific to students training to become statisticians, biostatisticians, and data scientists. Topics include use of sound statistical methodology, common threats to valid inference, effective communication and collaboration with content-area experts, maintaining transparency and independence, reproducible research, the publishing process (including authorship guidelines, plagiarism, peer review, intellectual property, etc.), conflict of interest, data security, and properties of effective leaders, among others. Prerequisite: Department consent. LEC.

BIOS 806. Special Topics in Biostatistics. 1-3 Hours.
This course allows exploration of special topics that are not routinely a part of the curriculum. Prerequisite: Permission of the instructor. LEC.

BIOS 810. Clinical Trials. 3 Hours.
The design, implementations, analysis, and assessment of controlled clinical trials. Basic biostatistical concepts and models will be emphasized. Issues of current concern to trialists will be explored. Prerequisite: By permission of instructor. LEC.

BIOS 820. Statistical Computing/SAS Base L1. 3 Hours.
This is a graduate level course preparing a student for the SAS base programming certification exam. We will cover the topics required for a student to pass the SAS base programming certification exam given by SAS. To this end, topics we will study include, referencing files and setting options, creating list reports, understanding data step processing, creating and managing variables, reading and combining SAS data sets, do loops, arrays, and reading raw data from files. After the completion of the course the student should be able to create SAS programs to read data from external files, manipulate the data into variables to be used in an analysis, generate basic reports showing the results. Prerequisite: Permission of the Instructor LEC.

BIOS 821. Statistical Computing II. 3 Hours.
This is a graduate level course preparing a student for the SAS advanced programming certification exam. We will cover the topics required for a student to pass the SAS advanced programming certification exam given by SAS. To this end, topics we will study include array processing, use of data step views, using the data step to write SAS programs, efficient use of the sort procedure, introduction to the macro language in SAS, and accessing data using SAS PROC SQL. After the completion of the course the student should be able to create SAS programs to read data from external files, manipulate the data into variables to be used in an analysis, generate basic reports showing the results. Prerequisites: BIOS 820 or equivalent (SAS Certified BASE programmer for SAS or at least one year of experience as a data analyst/programmer). LEC.

BIOS 823. Introduction to Programming and Applied Statistics in R. 3 Hours.
This course will provide students with the opportunity to learn advanced statistical programming. The development of new statistical or computational methods often implies the development of programming codes to support its application. Much of this type of development is currently carried out in the R (or S-Plus) language. Indeed much of the recent development of statistical genetics is based on the R programming language and environment. This course provides an introduction to programming in the R language and it's applications to applied statistical problems. Prequisites: Some previous exposure to computer programming. Some basic statistics at the Applied Regression or Applied Design level and permission of instructor. LEC.

BIOS 825. Nonparametric Methods. 3 Hours.
This course is an introduction to nonparametric statistical methods for data that do not satisfy the normality or other usual distributional assumptions. We will cover most of the popular nonparametric methods used for different scenarios, such as a single sample, two independent or related samples, three or more independent or related samples, goodness-of-fit tests, and measures of association. Power and sample size topics will also be covered. The course will cover the theoretical
basis of the methods at an intermediate mathematical level, and will also present applications using real world data and statistical software. Prerequisite: Permission of instructor. LEC.

BIOS 830. Experimental Design. 3 Hours.
The emphasis of this course is on learning the basics of experimental design and the appropriate application and interpretation of statistical analysis of variance techniques. Prerequisite: Permission of instructor, BIOS 820 recommended. LEC.

BIOS 833. Sampling Methods. 3 Hours.
Students will be introduced to the design and analysis techniques when sampling from finite populations using simple, stratified, multistage, systematic, and complex sampling designs. Prerequisites: BIOS 830 and BIOS 872 or by permission of instructor. LEC.

BIOS 835. Categorical Data Analysis. 3 Hours.
This course provides an understanding of both the mathematical theory and practical applications for the analysis of data for response measures that are ordinal or nominal categorical variables. This includes univariate analysis, contingency tables, and generalized linear models for categorical response measures. Regression techniques covered for categorical response variables, such as logistic regression and Poisson regression methods, will include those categorical and/or continuous explanatory variables, both with and without interaction effects. Prerequisite: By permission of instructor; BIOS 820 and BIOS 840 are recommended. LEC.

BIOS 840. Linear Regression. 3 Hours.
This course is an introduction to model building using regression techniques. We will cover many of the popular topics in Linear Regression including: simple linear regression, multiple regression, model selection and validation, diagnostics and remedial measures. Throughout the semester, we will be utilizing primarily SAS. Prerequisite: By permission of the instructor. LEC.

BIOS 845. Survival Analysis. 3 Hours.
This course provides an understanding of both the mathematical theory and practical applications for the analysis of time to event data with censoring. This includes univariate analysis, group comparisons, and regression techniques for survival analysis. Parametric and semi-parametric regression techniques covered will include those with categorical and/or continuous explanatory variables, both with and without interaction effects. Prerequisites: BIOS 820, 835, 840, and 871, or by permission of instructor. LEC.

BIOS 850. Multivariate Statistics. 3 Hours.
This course will introduce the theory and methods of applied multivariate analysis. As the field of multivariate analysis is very wide and well developed, the course will focus on those methods that are more frequently used in biostatistical applications. Some knowledge of basic matrix algebra is necessary and will be reviewed as the course progresses. Theoretical exercises and analysis of data sets will be assigned to the student. Emphasis will be on biostatistical applications. Prerequisites: BIOS 820 Statistical Computing, BIOS 830 Experimental Design, BIOS 840 Linear Regression. LEC.

BIOS 855. Statistical Methods in Genomics Research. 3 Hours.
This survey course will provide a high-level introduction to various statistical and bioinformatics methods involved in the study of biological systems. In particular, this course will provide an overview of the analytical aspects involved in: the study DNA, RNA, and DNA methylation data measured from both microarray and next-generation sequencing (NGS) technologies. This course will be held in a block format with 4 hours of lectures a day for two weeks (one week in June and one week in July), with readings and homework assignments assigned throughout the summer semester. During the last week of the summer semester, students will be required to participate in a group seminar session in which they will present the results from their assigned genomics projects. Prerequisite: BIOS 820 Statistical Computing OR experience programming in a higher level programming language; BIOS 840 Linear Regression; OR by permission of the instructor. LEC.

BIOS 871. Mathematical Statistics. 3 Hours.
This course introduces the fundamentals of probability theory, random variables, distribution and density functions, expectations, transformations of random variables, moment generating functions, convergence concepts, sampling distributions, and order statistics. Prerequisite: By permission of instructor. LEC.

BIOS 872. Mathematical Statistics II. 3 Hours.
This course introduces the fundamentals of statistical estimation and hypothesis testing, including point and interval estimation, likelihood and sufficiency principles, properties of estimators, loss functions, Bayesian analysis, and asymptotic convergence. Prerequisite: BIOS 871 or by permission of instructor. LEC.

BIOS 880. Data Mining and Analytics. 3 Hours.
Students will be introduced to common steps used in data mining, such as accessing and assaying prepared data; pattern discovery; predictive modeling using decision trees, regression, and neural networks; and model assessment methods. Prerequisites: BIOS 820, 830, 835, 840, and 871, or by permission of instructor. BIOS 821 and 850 recommended. LEC.

BIOS 898. Collaborative Research Experience. 3 Hours.
This course provides students with experience in collaborative research under the supervision of an experienced researcher. The student will spend one semester working under an investigator or faculty member, making independent contributions to a research project. Prerequisites: BIOS 820, 830, 835, 840, 871, and 872, or by permission of instructor. LEC.

BIOS 899. MSCR Thesis. 3 Hours.
This course involves preparation of a formal thesis based on the research conducted by a student working toward the MS in Clinical Research and directed by a faculty member in the Department of Biostatistics. After the thesis has been completed, the student will be given an oral examination of the research methods and content. Prerequisites: Department of Biostatistics approval. LEC.

BIOS 900. Linear Models. 3 Hours.
This course introduces the theory and methods of linear models for data analysis. The course includes the theory of general linear models including regression models, experimental design models, and variance component models. Least squares estimation, the Gauss-Markov theorem, and less than full rank hypotheses will be covered. Prerequisites: BIOS 871 and BIOS 872 or by permission of instructor; BIOS 820 recommended. LEC.

BIOS 902. Bayesian Statistics. 3 Hours.
This course introduces Bayesian theory and methods for data analysis. The course includes an overview of the Bayesian approach to statistical inference, performance of Bayesian procedures, Bayesian computational issues, model criticism, and model selection. Case studies from a variety of fields are incorporated into the course. Implementation of models using Markov chain Monte Carlo methods is emphasized. Prerequisites: BIOS 871 and 872 or by permissions of instructor; BIOS 820 recommended. LEC.

BIOS 905. Theory of Statistical Inference. 3 Hours.
This course covers advanced aspects of statistical inference. It is aimed at preparing Ph.D. BIOS students for the Ph.D. comprehensive exam.
and will emphasize advanced biostatistical ideas as well as problem solving techniques. Prerequisites: Mathematical Statistics I, Mathematical Statistics II. By permission of instructor. LEC.

BIOS 906. Advanced Special Topics in Biostatistics. 1-3 Hours. This course allows exploration of special topics that are not routinely a part of the Biostatistics PhD curriculum. Prerequisite: Passing grade on the PhD Qualifying exam. Permission of the instructor. LEC.

BIOS 908. Advanced Clinical Trials. 3 Hours. This course provides an introduction to recent innovations in clinical trial designs and analysis methods. Topics include concepts of controls, randomization; common trial designs by phase of clinical development; sample size calculations; interim analysis; and adaptive clinical trials. Traditional frequentist and likelihood approaches to trial design and analysis will be covered in the first half of the course; the Bayesian approach (including adaptive clinical trial designs) will be emphasized in the second half of the course. Prerequisites: BIOS 810, BIOS 820, BIOS 830, BIOS 835, BIOS 840. BIOS 821 recommended. Permission of the Instructor. LEC.

BIOS 910. Generalized Linear Models. 3 Hours. This course on Generalized Linear Models (GLM) is designed for both the applied and theoretical statistician. In this course we introduce the theoretical foundations and key applications of generalized linear models. Prerequisites: BIOS 835 Categorical Data Analysis, BIOS 840 Linear Regression, BIOS 890 Linear Models or by permission of instructor. LEC.

BIOS 911. Nonlinear Models. 3 Hours. This course will involve both theory and applications of nonlinear models, with emphasis in biological, medical, and pharmaceutical research. Applications to dose-response studies, bioassay studies and clinical pharmacokinetics and pharmacodynamics studies will be discussed. Nonlinear mixed effects models will also be examined, as well as criteria for optimal experimental designs based on nonlinear models. This course will cover the theoretical basis of the methods at an intermediate mathematical level, and will also present applications using real world data and statistical software. Prerequisite: BIOS 890 Linear Models. LEC.

BIOS 915. Longitudinal Data Analysis. 3 Hours. A longitudinal study is a research study that involves repeated observations of the same individuals and events over extended periods of time. It is typically a type of observational study, though may have design components. In medical settings these studies and related models are used to observe the developmental path of a disease or treatment through time. Often this is in the context of follow-up and long-term study of both progress and potential side-effects. As the study involves the same individuals (subject to drop-out) through several time points, statistical methods must employ random effects or “mixed models” incorporating various correlation structures. This is typically done using generalized estimating equations and marginal model approaches. Bayesian methods may also be appropriate here. Students will, after completing this course, be able to design and analyze longitudinal studies. The computer package to be employed is SAS. Prerequisites: BIOS 820, BIOS 830, BIOS 840, BIOS 871, BIOS 872, and BIOS 890 or by permission of instructor. LEC.

BIOS 920. Latent Variable Analysis. 3 Hours. Latent variables refer to random variables whose realization values are not observable or cannot be measured without error, and their inferences rely on statistical models connecting latent and other observed variables. This course aims to introduce a family of such statistical models and their applications in biomedical and public health research. The course is designed as an elective course for students in the Biostatistics graduate program. We will use the statistical packages of M-plus, R, and/or SAS for the course. Prerequisite: BIOS 835 and BIOS 890, or by permission of instructor. Familiarity with vectors and matrices is strongly encouraged. LEC.

BIOS 999. Doctoral Dissertation. 1-9 Hours. Preparation of the doctoral dissertation based upon original research and in partial fulfillment of the requirements for the Ph.D. degree. Credits will be given only after the dissertation has been accepted by the student’s dissertation committee. Prerequisite: Successful completion of the Department of Biostatistics Ph.D. Comprehensive Exam and consent of advisor. LEC.

Master of Science in Biostatistics

The Biostatistics M.S. and Ph.D. programs were created to help meet the ever-increasing demand for biostatisticians to take leadership roles in careers as researchers and educators in academia, government, and industry. Faculty members are active researchers collaborating and consulting in research projects and initiatives at the Medical Center, in addition to pursuing their own research agendas and participating in curricular instruction. Expertise in the department includes linear, nonlinear, and longitudinal modeling; clinical trial and experimental design; survival analysis; categorical data analysis; robust statistics; psychometric methods; and Bayesian methodology.

The master's program in Biostatistics produces graduates that are prepared to function as biostatisticians or biostatistical consultants. Therefore, graduates gain an extensive understanding of biostatistical theory and practice and should be proficient in the application of statistical methods to one or more areas in the health sciences. At the completion of the M.S. degree in Biostatistics the graduate should be able to:

1. Demonstrate a broad knowledge and understanding of statistical theory and practice as applicable in the health sciences.
2. Function as a collaborator on a research team.
3. Take a leadership role in the design and implementation of a health science project.
4. Assume responsibility for the design and implementation of analyses for health science investigations.
5. Assist with the design and implementation of data management systems for large health science studies.
6. Prepare reports and publications resulting from health science studies.
7. Serve as an advocate for good statistical design in health science investigations.

The application process for the M.S. in Biostatistics is an online process. Detailed instructions on how to apply are posted on the Department of Biostatistics (http://www.kumc.edu/school-of-medicine/department-of-biostatistics/biostatistics-graduate-program/prospective-students/admissions-procedure.html) website. Students are admitted for the fall semester only. Applications for the fall semester must be received by February 1st for consideration.

Admission requirements:

- A bachelor's degree in statistics, biostatistics, mathematics or applied mathematics from a regionally accredited institution documented by submission of an official transcript indicating the degree has
Degree requirements:

- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor's degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement.
- A background check is required during the admission process; it may affect the student's eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional 6895.
- Letter grade of "B" or better in Calculus I, II, & III (or the equivalent.)
- Successful completion of at least one of the following courses: linear algebra, differential equations, numerical analysis.
- Successful completion of a course in any computer programming language.
- Research experience (beyond labs associated with lecture courses) is strongly suggested.
- A current resume or curriculum vitae.
- A personal statement regarding your interest in biostatistics and in biomedical research.
- A personal interview is required of all applicants who meet the minimum admissions standards. If travel to the area is impossible, a telephone or on-line interview may be substituted.

Applicants will be assessed based on these requirements. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs ».

The M.S. in Biostatistics degree program consists of 36 credit hours including collaborative research experience, annual evaluations, and the successful completion of the master's general examination. The course plan consists of 27 credit hours from required biostatistics core courses which includes 3 credit hours of Collaborative Research Experience. This requirement ensures the completion of a research component through collaborative effort within or external to the department. Students also complete 9 credit hours of elective coursework.

Degree requirements:

- Degree requirements are normally completed within 2 years of admission to the program although a maximum of 7 years is allowed.
- Completion of a minimum of 36 credit hours.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Enrollment in a minimum of one credit hour the semester the student will graduate.
- Successful completion of a general examination (p. 2398) the semester the student will graduate. The general examination is given upon completion of the following courses: BIOS 820, BIOS 830, BIOS 835, BIOS 840, BIOS 871 and BIOS 872. The examination has three purposes: to assess the student's strengths and weaknesses; to determine whether the student should be awarded the M.S. degree; and, if it is a degree goal, to determine whether the student is prepared to continue into the Ph.D. program (p. 2112).

- Successful completion of the following Biostatistics courses:
  - BIOS 810 Clinical Trials 3
  - BIOS 820 Statistical Computing/SAS Base L1 3
  - BIOS 830 Experimental Design 3
  - BIOS 835 Categorical Data Analysis 3
  - BIOS 840 Linear Regression 3
  - BIOS 871 Mathematical Statistics 3
  - BIOS 872 Mathematical Statistics II 3
  - BIOS 898 Collaborative Research Experience 3
  - BIOS 900 Linear Models 3

- Successful completion of a minimum of 9 credit hours of elective coursework. Specific courses are determined in consultation with the student's advisor.
  - Successful completion of a minimum of 3 credit hours (maximum of 6) of elective coursework from courses offered by the department.
  - Successful completion of a minimum of 3 credit hours (maximum of 6) of elective coursework from courses offered outside the department.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program.

Annual Evaluations:

Students are evaluated each May by their graduate advisors and the director of the graduate program. These evaluations provide feedback to the student regarding the progress they are making in meeting program requirements, classroom performance, and research performance.

Typical Plan of Study

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Doctor of Philosophy in Biostatistics

The biostatistics M.S. and Ph.D. programs were created to help meet the ever-increasing demand for biostatisticians to take leadership roles in careers as researchers and educators in academia, government, and industry. Faculty members are active researchers collaborating and consulting in research projects and initiatives at the Medical Center, in addition to pursuing their own research agendas and participating in curricular instruction. Expertise in the department includes linear, nonlinear, and longitudinal modeling; clinical trial and experimental design; survival analysis; categorical data analysis; robust statistics; psychometric methods; and Bayesian methodology.

The Ph.D. program produces biostatisticians who can develop biostatistical methodology that can be used to solve problems in public health and the biomedical sciences. In addition, graduates are prepared to apply biostatistical and epidemiology methodology for the design and analysis of public health and biomedical research investigations. Finally, graduates are well suited to function as collaborators or team leaders on research projects in the biomedical and public health sciences.

In addition to the characteristics outlined in the M.S. section of this proposal, graduates of the Ph.D. program in Biostatistics will have:

1. The ability to develop careers in academia, research institutes, government, and industry;
2. A broad understanding of current statistical methods and practices in the health sciences;
3. A solid theoretical training necessary for the development and study of new statistical methods;
4. The ability to assume all responsibilities of a statistician in collaborative health science research; in particular, the graduate will have experience in the design, data management, analysis, and interpretation of a variety of experimental and observational studies;

Experience in writing reports and giving oral presentations describing health science studies.

The application process for the Ph.D. in Biostatistics is an online process. Detailed instructions on how to apply are posted on the Department of Biostatistics (http://www.kumc.edu/school-of-medicine/department-of-biostatistics/biostatistics-graduate-program/prospective-students/admissions-procedure.html) website. Students are admitted for the fall semester only. Applications for the fall semester must be received by February 1st for consideration.

Admission requirements:

- A master's degree in statistics, biostatistics, mathematics or applied mathematics from a regionally accredited institution or a terminal degree (M.D., Ph.D.) in another field with approval from the program. Students not meeting this criteria should apply to the M.S. program (p. 2110).

Completion of degree is documented by submission of an official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.

Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor's degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement.
- A background check is required during the admission process; it may affect the student's eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional 6895.
- A letter grade of a B or better in Calculus I through III (or equivalent.)
- Successful completion of at least one of the following courses: linear algebra, differential equations, numerical analysis.
- Successful completion of a course in any computer programming language.
- Research experience (beyond labs associated with lecture courses) is strongly suggested.
- Three letters of recommendation.
- A personal statement regarding your interest in biostatistics and in biomedical research.
- A current resume or curriculum vitae.
- A personal interview is required of all applicants who meet the minimum admissions standards. If travel to the area is impossible, a telephone or on-line interview may be substituted.

Applicants will be assessed based on these requirements. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs ».

The typical program consists of 63 credit hours including collaborative research experience, annual evaluations, graduate examinations, and the successful completion of a doctoral dissertation. Dissertation research culminates in a final dissertation examination consisting of an oral presentation by the candidate and an examination by the faculty.

Relevant prior graduate work is taken into consideration in setting up individual programs of study leading to the Ph.D. The typical course plan consisting of 63 credit hours is designed for students who have not previously completed a M.S. in biostatistics or directly relevant area. The course plan for a student who has previously completed a M.S. in biostatistics or directly relevant area is customized to account for master's-level courses already taken; therefore the total credit hours required will vary.
Degree requirements:

- Degree requirements are normally completed within 4 years of admission to the program although a maximum of 8 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Successful completion of the Qualifying Examination. The qualifying examination is given upon completion of the following courses (or equivalent): BIOS 820, BIOS 830, BIOS 835, BIOS 840, BIOS 871 and BIOS 872. The examination has two purposes 1) to assess the student’s strengths and weaknesses and 2) determine whether the student is sufficiently prepared to continue in the Ph.D. program.
- Successful completion of the University’s Research Skills and Responsible Scholarship (p. 2398) requirement prior to the semester the Oral Comprehensive Examination is scheduled.
  - Successful completion of BIOS 898 (or equivalent) meets the Research Skills requirement.
  - Successful completion of BIOS 810 and/or documented participation in the Biostatistics Graduate Students Association Seminar Series and completion of the KUMC Human Subjects Protection training module meets this requirement. Student must keep their certification current throughout their tenure in the Ph.D. program.
- Successful completion of the Residence Requirement (p. 2398) prior to the semester the Oral Comprehensive Examination is scheduled. The requirement is met by enrollment in full-time status a minimum of two semesters.
- Successful completion of the Oral Comprehensive Examination (p. 2398). The comprehensive examination is typically given when a doctoral aspirant has completed the major portion of the course work at a satisfactory level and met all other prerequisites to the comprehensive examination. The examination assesses the student’s strengths and weaknesses and determines whether the student should continue in the Ph.D. program. There is both a written component to the exam and a subsequent presentation and defense of a dissertation proposal. Students are recognized as formal candidates for the Ph.D. only after they have passed the comprehensive examination.
- Successful completion of Post-Comprehensive Enrollment (p. 2398) requirement.
- Enrollment in a minimum of one credit hour of dissertation BIOS 999 Doctoral Dissertation the semester the student will defend dissertation and graduate.
- Successful completion of the Final Oral Examination (p. 2398) (dissertation defense.) The candidate must present a dissertation showing the planning, conduct, and results of original research and scholarly activity. The purpose of the dissertation is to encourage and ensure the development of broad intellectual capabilities as well as to demonstrate an intensive focus on a problem or research area. This work is carried out under the guidance of a dissertation advisor. When the completed dissertation has been accepted by the dissertation committee in final draft form and all other degree requirements have been satisfied the chair of the committee requests (at least 3 weeks before the date of the examination) Graduate Studies approval to proceed with the final oral examination.
- Successful Dissertation Submission and Publication (p. 2398) (according to Office of Graduate Studies policy.)
- Successful completion of the following Biostatistics courses (or equivalent):
  - BIOS 810 Clinical Trials 3
  - BIOS 820 Statistical Computing/SAS Base L1 3
  - BIOS 825 Nonparametric Methods 3
  - BIOS 830 Experimental Design 3
  - BIOS 835 Categorical Data Analysis 3
  - BIOS 840 Linear Regression 3
  - BIOS 845 Survival Analysis 3
  - BIOS 871 Mathematical Statistics 3
  - BIOS 872 Mathematical Statistics II 3
  - BIOS 898 Collaborative Research Experience 3
  - BIOS 900 Linear Models 3
  - BIOS 902 Bayesian Statistics 3
  - BIOS 910 Generalized Linear Models 3
  - BIOS 999 Doctoral Dissertation 1-6
- Successful completion of any elective coursework as determined in consultation with the student's advisor.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program.

**Annual Evaluations:**

Students are evaluated each May by their graduate advisors and the director of the graduate program. These evaluations provide feedback to the student regarding the progress they are making in meeting program requirements, classroom performance, and research performance.

**Typical Plan of Study**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<tr>
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<td><strong>6</strong></td>
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<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
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<tbody>
<tr>
<td>BIOS 835</td>
<td>3</td>
<td>BIOS 825</td>
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<td>BIOS 905</td>
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<td>BIOS 900</td>
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<tr>
<td><strong>Qualifying Examination given in this semester.</strong></td>
<td></td>
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<td><strong>Total</strong></td>
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<td><strong>9</strong></td>
<td><strong>3</strong></td>
<td></td>
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</tbody>
</table>

The University of Kansas 2113
Upon completion of the Graduate Certificate in Statistical Applications, the student should be prepared to apply many of the common statistical methods to compliment his or her every day job duties. Course work in this proposal is designed with this purpose in mind:

1. Becoming familiar with statistical methods in research, business, and industry.
2. Function as a collaborator on a research team.
3. Critically evaluate the literature where statistical applications are used.
4. Take a leadership role in the implementation of a research project.
5. Prepare reports and publications resulting from research studies.
6. Serve as an advocate for proper statistical application and interpretation of results in his or her field.

The application for the Statistical Applications Graduate Certificate is an online process. Detailed instructions on how to apply are posted on the Department of Biostatistics (http://www.kumc.edu/school-of-medicine/department-of-biostatistics/biostatistics-graduate-program/prospective-students/admissions-procedure.html) website.

Admission requirements:

- A bachelor's degree from a regionally accredited institution documented by submission of an official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.
- Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor's degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395).
- A background check (p. 2395) is required during the admission process; it may affect the student's eligibility to enter the program.
- A letter grade of B or better in calculus I (or equivalent), or a quantitative GRE score in the 70th percentile or higher.
- A letter grade B or better in a graduate-level introductory statistics course (e.g., BIOS 717 Fundamentals of Biostatistics II or equivalent.)

Note: Students not meeting this requirement may fulfill the requirement with completion of BIOS 717.

- Students currently enrolled in graduate programs at KUMC or KU must be in good standing (3.0 or higher GPA) and have a letter of approval from their current graduate program director and/or department chair indicating support to enroll in the certificate program.
- Students not meeting the above requirements may be eligible for provisional admission. Applicants will be assessed based on these requirements. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Total Hours: 62-78

Statistical Applications Graduate Certificate

The Statistical Applications Graduate Certificate is awarded to those who have demonstrated specialized knowledge in a scientific field, but not to the level required by a postgraduate master's degree. The Graduate Certificate in Statistical Applications requires individuals to acquire sufficient knowledge and expertise to permit them to work at the frontier of their field through:

1. Becoming familiar with statistical methods in research, business, and industry.
2. Function as a collaborator on a research team.
3. Critically evaluate the literature where statistical applications are used.
4. Take a leadership role in the implementation of a research project.
5. Prepare reports and publications resulting from research studies.
6. Serve as an advocate for proper statistical application and interpretation of results in his or her field.

The application for the Statistical Applications Graduate Certificate is an online process. Detailed instructions on how to apply are posted on the Department of Biostatistics (http://www.kumc.edu/school-of-medicine/department-of-biostatistics/biostatistics-graduate-program/prospective-students/admissions-procedure.html) website.

Admission requirements:

- A bachelor's degree from a regionally accredited institution documented by submission of an official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.
- Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor's degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395).
- A background check (p. 2395) is required during the admission process; it may affect the student's eligibility to enter the program.
- A letter grade of B or better in calculus I (or equivalent), or a quantitative GRE score in the 70th percentile or higher.
- A letter grade B or better in a graduate-level introductory statistics course (e.g., BIOS 717 Fundamentals of Biostatistics II or equivalent.)

Note: Students not meeting this requirement may fulfill the requirement with completion of BIOS 717.

- Students currently enrolled in graduate programs at KUMC or KU must be in good standing (3.0 or higher GPA) and have a letter of approval from their current graduate program director and/or department chair indicating support to enroll in the certificate program.
- Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs«.

Certificate Program Information:

No student may work toward a graduate certificate without being accepted as a graduate certificate student in a specific graduate certificate program. Graduate certificates are not granted retroactively. An individual who is not currently a degree-seeking graduate student at KU must apply and may be admitted directly to a graduate certificate program.

The graduate certificate program is not a means of entry into a graduate degree program. If students admitted to a graduate certificate program are later admitted to a graduate degree program as degree-seeking,
applicable courses taken for the graduate certificate program may, upon recommendation of the department and within general guidelines, be approved by the Office of Graduate Studies to be counted toward the degree.

While the courses comprising a graduate certificate may be used as evidence in support of a student’s application for admission to a graduate degree program, the certificate itself is not considered to be a prerequisite and does not guarantee admission into any graduate degree program. The certificate program is not intended to serve as a default system for students in a degree program who find that they are not able to complete the degree for academic or other reasons. Should a student drop out of a degree program and seek admission to a certificate program, all certificate admission requirements must be followed for admission and conferment.

Graduate credit from another institution may not be transferred to a graduate certificate program.

The Statistical Applications Graduate Certificate requirements vary depending on whether the certificate student is currently seeking a post-graduate degree at any of the KU campuses or not. The certificate program consists of a minimum of 12 credit hours of coursework in statistical applications.

**Certificate requirements:**

- Certificate requirements are normally completed within one (1) year of admission to the program although a maximum of 4 years is allowed.
- Cumulative grade-point average (GPA) of at least 3.0 for all KU graduate certificate coursework.
- Enrollment in a minimum of one (1) credit hour the semester program is completed. Graduate certificates may not be granted retroactively.
- Completion of a minimum of 12 credit hours. Note: A prolonged plan of study will occur for students without the prerequisite graduate-level introductory statistics course prior to enrolling in the certificate program (see Admissions [http://catalog.ku.edu/medicine/biostatistics/statappgradcert/#admissionstext]).
- Current KU post-graduate students must complete four (4) courses from the following list:
  - BIOS 715 Introduction to Data Management using RedCap and SAS
  - BIOS 720 Analysis of Variance
  - BIOS 725 Applied Nonparametric Statistics
  - BIOS 730 Applied Linear Regression
  - BIOS 735 Categorical Data and Survival Analysis
  - BIOS 740 Applied Multivariate Methods
  - BIOS 799 Introduction to Statistical Genomics

- Certificate students not currently seeking a KU post-graduate degree must complete the following two (2) courses:
  - BIOS 720 Analysis of Variance
  - BIOS 730 Applied Linear Regression

- Certificate students not currently seeking a KU post-graduate degree must complete two (2) elective courses from the following list:
  - BIOS 715 Introduction to Data Management using RedCap and SAS
  - BIOS 725 Applied Nonparametric Statistics
  - BIOS 735 Categorical Data and Survival Analysis

| BIOS 740 | Applied Multivariate Methods | 3 |
| BIOS 799 | Introduction to Statistical Genomics | 3 |

Graduate credit from another institution may not be transferred to a graduate certificate program.

Certificate requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program.

**Typical Plan of Study - for current KU post-graduate student**

**Year 1**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 715</td>
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<td>Choose two courses from the following list:</td>
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<tr>
<td>BIOS 740</td>
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<td></td>
</tr>
<tr>
<td>BIOS 799</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Hours: 12

**Typical Plan of Study - for students not currently seeking a KU post-graduate degree**

**Year 1**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 730 (required course)</td>
<td>3</td>
<td>BIOS 720 (required course)</td>
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</tr>
<tr>
<td>Choose one course from the following list:</td>
<td>3</td>
<td>Choose one course from the following list:</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 715 (elective course)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>BIOS 735 (elective course)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOS 799 (elective course)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Hours: 12

**Statistics Graduate Certificate**

The Statistics Graduate Certificate is awarded to those who have demonstrated specialized knowledge in a scientific field, but not to the level required by a postgraduate master’s degree. The certificate program requires individuals to acquire focused knowledge in statistical theory, with an emphasis on application.

Upon completion of the Graduate Certificate in Statistics, the student should be prepared to apply many of the common statistical methods to compliment his or her every day job duties. Therefore the student must have a basic understanding of the statistical theory and practice and should be proficient in the application of common statistical methods to one or more areas application. At the completion of the Graduate Certificate in Statistics the student should be able to:
1. Demonstrate a basic knowledge and understanding of the statistical theory and practice as applicable to his or her field.
2. Function as a collaborator on a research team.
3. Critically evaluate the literature where statistical applications are used.
4. Take a leadership role in the design and implementation of a research project.
5. Assume responsibility for the design and implementation of analyses for a research project.
6. Prepare reports and publications resulting from research studies.
7. Serve as an advocate for proper statistical design and interpretation of results in his or her field.

The application for the Statistics Graduate Certificate is an online process. Detailed instructions on how to apply are posted on the Department of Biostatistics (http://www.kumc.edu/school-of-medicine/department-of-biostatistics/biostatistics-graduate-program/prospective-students/admissions-procedure.html) website.

**Admission requirements:**

- A bachelor's degree from a regionally accredited institution documented by submission of an official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.

Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor's degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395).
- A background check (p. 2395) is required during the admission process; it may affect the student's eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional 6895.
- Letter grade of B or better in calculus I – III (or equivalent.)
- Successful completion of at least one of the following courses: linear algebra, differential equations, numerical analysis.
- Successful completion of a course in any computer programming language.
- Three letters of recommendation.
- Students currently enrolled in graduate programs at KUMC or KU must be in good standing (3.0 or higher GPA) and have a letter of approval from their current graduate program director and/or department chair indicating support to enroll in the certificate program.

Applicants will be assessed based on these requirements. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs».

**Certificate Program Information:**

No student may work toward a graduate certificate without being accepted as a graduate certificate student in a specific graduate certificate program. Graduate certificates are not granted retroactively. An individual who is not currently a degree-seeking graduate student at KU must apply and may be admitted directly to a graduate certificate program.

The graduate certificate program is not a means of entry into a graduate degree program. If students admitted to a graduate certificate program are later admitted to a graduate degree program as degree-seeking, applicable courses taken for the graduate certificate program may, upon recommendation of the department and within general guidelines, be approved by the Office of Graduate Studies to be counted toward the degree.

While the courses comprising a graduate certificate may be used as evidence in support of a student's application for admission to a graduate degree program, the certificate itself is not considered to be a prerequisite and does not guarantee admission into any graduate degree program. The certificate program is not intended to serve as a default system for students in a degree program who find that they are not able to complete the degree for academic or other reasons. Should a student drop out of a degree program and seek admission to a certificate program, all certificate admission requirements must be followed for admission and conferral.

Graduate credit from another institution may not be transferred to a graduate certificate program.

The Statistics Graduate Certificate program consists of a minimum of 15 credit hours of statistical coursework that is comprised of 9 credit hours of required coursework and 6 credit hours of elective coursework.

**Certificate requirements:**

- Certificate requirements are normally completed within one (1) year of admission to the program although a maximum of 4 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate certificate coursework.
- Enrollment in a minimum of (1) credit hour the semester program is completed. Graduate certificates may not be granted retroactively.
- Completion of a minimum of 15 credit hours.
- Successful completion of the following courses:
  - BIOS 830 Experimental Design 3
  - BIOS 840 Linear Regression 3
  - BIOS 871 Mathematical Statistics 3
- Successful completion of two (2) elective courses from the following list:
  - BIOS 820 Statistical Computing/SAS Base L1 3
  - BIOS 821 Statistical Computing II 3
  - BIOS 823 Introduction to Programming and Applied Statistics in R 3
  - BIOS 825 Nonparametric Methods 3
  - BIOS 833 Sampling Methods 3
  - BIOS 835 Categorical Data Analysis 3
  - BIOS 845 Survival Analysis 3
  - BIOS 850 Multivariate Statistics 3
  - BIOS 855 Statistical Methods in Genomics Research 3
Graduate credit from another institution may not be transferred to a graduate certificate program.

Certificate requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program.

Typical Plan of Study

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<td></td>
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<td>BIOS 830 (required course)</td>
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<td></td>
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<td>BIOS 821 (elective course)</td>
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<td>BIOS 835 (elective course)</td>
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<td>BIOS 850 (elective course)</td>
<td>BIOS 880 (elective course)</td>
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</tbody>
</table>

Total Hours: 9

This Plan of Study shows which semester a specific elective is offered. Select two (2) elective courses to meet the minimum requirements for certificate completion.

Department of Cancer Biology

The Department of Cancer Biology is a newly developed basic science department in the School of Medicine at the University of Kansas Medical Center. The missions of our department are:

1. To build a strong team of basic researchers with a collaborative and translational mindset who will discover fundamental characteristics of cancer cells that can lead to novel therapeutic and preventive approaches which reduce cancer incidence, morbidities and mortality;
2. To understand the molecular genetic and epigenetic, biochemical, cellular and physiologic bases of cancer etiology and progression;
3. To understand the interactions between tumor cells and the microenvironments in which they find themselves;
4. To educate the next generation of cancer researchers, clinicians and patients.

Our department is funded by grants from the National Cancer Institute, National Institutes of Health, American Cancer Society, Susan G. Komen for the Cure, the National Foundation for Cancer Research and from generous donations from patients, family and friends of the KU Cancer Center.

The department is currently developing a master’s degree program (Master of Science) and a doctoral (Ph.D.) program in Cancer Biology. The program specifics and application details will be posted to our website (http://www.kumc.edu/school-of-medicine/cancer-biology.html) once the program has been approved by the Kansas Board of Regents. Although no graduate program in Cancer Biology is offered at this time, we do offer a growing number of Cancer Biology (CBIO) courses that may be taken for graduate credit.

Courses

CBIO 800. Mechanisms of Tumor Development and Progression: Colloquium Format. 3 Hours.

Elective course. This upper level course examines the genetic alterations and cellular phenotypes involving cancer development in a practical manner. The course discusses the underlying molecular and biological principles that result from these genetic alterations and the methods/approaches to examine cancer phenotypes. By the end of the course, students should understand how cancer develops and how to design experiments to address the scientific hypothesis. In addition, students are expected to learn key points to give scientific presentation. The class will involve two, 1.5-hour lecture per week: one consists of didactic lecture and the other is student-led journal club related to the lecture topic. Prerequisite: College level biology. LEC.

CBIO 900. Carcinogenesis and Cancer Biology. 3 Hours.

This is a semester long course that presents a survey of core topics in cancer biology and builds upon core IGPBS courses. The survey includes topics of etiology, genetics, signaling, biochemistry, tumor progression, metastasis, major treatment modalities and overviews of major cancer types. Students are assessed based upon class participation, presentations and examinations. Prerequisites: Completion of GSMC 850, GSMC 851, GSMC 853 and GSMC 854 or the equivalent or permission of instructor. LEC.

Department of Health Policy and Management

The Department of Health Policy and Management prepares health services leaders and researchers who will advance systems of care delivery, promote effective health policy, and foster innovation and scholarly inquiry to improve and serve the health needs of Kansas citizens and beyond.

Teaching

The Department offers the following degree programs:

Masters of Health Services Administration (p. 2121)
PhD in Health Policy and Management (p. 2123)

Research

HP&M has an interdisciplinary faculty representing a variety of academic disciplines and teaching and research interests.

Service
Learn more about our faculty's outreach and service at local, state and national levels here (http://www.kumc.edu/school-of-medicine/hpm/faculty.html).

Courses

HP&M 610. The Health Care System. 4 Hours.
This course introduces students to the health care system of the United States. The course stresses the system's historical development, distinguishing features, financing, management, resources, and politics. Requirements include position papers, class discussions, examinations, and site visits to health care facilities LEC.

HP&M 620. Women and Health Care. 3 Hours.
A gender analysis of the organization of health care in the United States, using sociohistorical and sociological perspectives. Considers the health status and health care problems of women in relation to cultural aspects of medicine and health care; the roles of both informal and professional health care providers; the political economy of health care systems; and the relationship between gender and the state. (Same as SOC 617.) Prerequisite: HPM 601 or permission of instructor. LEC.

HP&M 810. The Health Care System. 3 Hours.
The structure and function of the components of the U.S. healthcare system are introduced in the context of the history, values and social forces that influenced its development and evolution. Students gain exposure to the concepts and vocabulary associated with aspects of the system, including delivery (providers, institutions, services), resources (finance, payment, insurance), population and public health, and outcomes (cost, access, quality). Healthcare outcomes from consumer, clinical, and societal perspectives are explored. LEC.

HP&M 819. Research for Health Care Leaders. 3 Hours.
Introduces epidemiology, survey research, and evaluation research. Examines quantitative and qualitative methods. Focuses on role of research in health policy and health management. Incorporates lecture, discussion, papers and presentations. LEC.

HP&M 822. Health Care Economics. 3 Hours.
This course introduces the core concepts from economics to healthcare with a focus on helping healthcare managers use economic tools in making sound decisions. The demand for healthcare products, the structure of insurance, and the supply of healthcare products are examined. Students will apply a variety of economic analyses to health policy and health system issues. LEC.

HP&M 825. Financial Concepts in Healthcare Management. 3 Hours.
Financial accountability is a critical responsibility of health services administrators. This course presents basic concepts and techniques for effective decision-making and stewardship, including financial statement analysis; strategic financial planning; capital formation; responsibility and cost accounting; operational, capital and cash budgeting; capital project analysis; and working capital management. LEC.

HP&M 827. Financial Applications in Healthcare Management. 3 Hours.
Administrative applications of economic and financial concepts are applied to support strategic and financial goals. The concept of integrating operational and strategic planning into a strategic financial plan is developed. This course will foster integration and confidence in performing and applying financial analytical procedures such as financial statement ratio analysis; revenue and expense forecasting (budgeting); credit worthiness determination; break-even analysis and working capital management in a variety of healthcare settings including long-term care and public health. Prerequisite: HPM 825, Financial Concepts in Healthcare Management. LEC.

HP&M 830. Health Care Management. 3 Hours.
This course introduces key concepts and skills for health care managers. Emphasizing self-discovery and professional development, the course examines how to become an informed employee, an effective team member, and a successful manager. Course topics include interpersonal skills, delegation, leadership, performance management, and organizational change. Learning methods include lectures, case analyses, experiential exercises, and discussion. Prerequisites: HPM 810 or permission of instructor. LEC.

HP&M 831. Reimbursement and Fiscal Policy. 2 Hours.
Reimbursement and fiscal policy practices impact the success and the economic well-being of healthcare institutions, payers and patients. This course develops the student's understanding of complex reimbursement methodologies from the perspective of providers and payers. Students will explore the strengths and weaknesses of the major methods of third party reimbursement, the types of managed care organizations and the payment methodologies employed. Students are also prepared to approach reimbursement policy issues both from the payer and the provider viewpoint. LEC.

HP&M 832. Governance and Health Law. 2 Hours.
A survey course of the law as it affects governance, health care administration and health care generally. This course will develop the student's understanding of health law and its impact on many aspects of health care governance and administration. The student should be able to identify and understand various legal issues they may encounter and when to engage legal counsel's advice. Prerequisite: HPM 810. LEC.

HP&M 833. Ethics. 2 Hours.
An introduction to the principles and concepts in the ethics of health services administration. The course will help students further develop their skills to recognize and analyze ethical dilemmas, and to explain, justify and evaluate the decisions they make in response to such dilemmas. LEC.

HP&M 837. Health Policy. 3 Hours.
This course examines the development, implementation, and evaluation of federal, state, and local health policy in the United States. Particular attention will be given to (1) the development of public institutions and policy goals; and (2) current policy problems such as cost controls, reimbursement, health services utilization, program assessment and evaluation, public health, and public/private investment and resource planning. Students will be expected to synthesize and integrate knowledge to apply theory and principles in ways consistent with professional practice as a health policy analyst. LEC.

HP&M 838. Rural Health Care. 3 Hours.
Provides students with (a) an understanding of major issues in rural health and the rural environment in which health care providers and administrators provide service; (b) an understanding of the demographics, economics, services and challenges associated with the health care delivery systems in rural America and (c) an overview of federal and state health policy and its effect on rural health systems. Special emphasis will be placed on identifying, understanding, and addressing rural health challenges from administrative and policy perspectives. Prerequisites: None. LEC.

HP&M 840. Organizational Foundations for Leading Change. 3 Hours.
Self-discovery as a foundation for professional development while exploring the concepts of leader, manager, and follower is emphasized. Analysis and prediction of an organization's stages of development and its capacity for linear and social change are introduced through the lens of complexity science. Political, legal, ethical, and other issues that constrain
and destabilize organizations and strategies to restore equilibrium are explored. (Same as NRSG 880). LEC LEC.

**HP&M 842. Roles, Functions and Care Models. 2 Hours.**
This course examines the nature and characteristics of the healthcare workforce needed to deliver direct, indirect, and support services. Healthcare worker roles are analyzed through the lens of key organizational functions and care delivery modalities. Common care delivery models, such as primary, team, and patient-centered care approaches to organizing care delivery are explored in various clinical settings, including acute and long-term care and community and public health entities. Administrative challenges and opportunities for managing a diverse workforce are presented. LEC LEC.

**HP&M 844. Communication for the Healthcare Executive. 2 Hours.**
This course focuses on attaining proficient communication skills to deliver high impact messages to stakeholders ranging from board members, to diverse communities of interest, to policymakers and regulators. Verbal and written skill development addresses executive presence to perform communication functions such as conducting an ‘ask’ from a policymaker or potential benefactor, using storytelling and data to shape critical messages to the media, and communicating value-driven memoranda to internal audiences. The use of emerging technologies to aid in communication effectiveness will also be presented. LEC LEC.

**HP&M 846. Managing Information Systems and Technology. 3 Hours.**
This course covers fundamental concepts of management information systems; current and developing health and business information systems of interest to managers in health services organizations; healthcare information system architecture; security and privacy issues; uses of healthcare information for clinical and strategic analysis and decision support; techniques required to develop and evaluate a technological request for proposal; and thoughts on the future of healthcare information systems including bio-informatics, community health systems and web-based access to health information. The course will also cover current information and issues regarding the latest technology applications. LEC LEC.

**HP&M 848. Designing Health Care Organizations. 2 Hours.**
This class examines how design affects a broad range of health care organizations. It considers designs for jobs, processes, equipment, buildings, and organizations, and explores implications for safety, customer satisfaction, worker satisfaction, productivity, effectiveness, and profitability. Students analyze varied cases that approach design as a management decision-making process. LEC.

**HP&M 850. Introduction to Operations. 3 Hours.**
Examines performance of health care organizations, sources of variation, methods of measurement, and strategies for improving performance. Considers several approaches to performance improvement and examines tools widely used in operations management. Incorporates lecture, discussion, and fieldwork. (Same as NRS 882.) LEC.

**HP&M 852. Strategic Marketing. 2 Hours.**
Provides students with a framework for executive-level, strategic market planning and analysis. Topics covered include: the strategic marketing organization; the impact of organizational culture on strategy development; environmental assignments and competitor analysis; market research; and the impact of the marketing fours (price, positioning, promotion, and product) in health care. LEC.

**HP&M 853. Strategic Management. 2 Hours.**
Explores internal and external analysis for health care organizations. Examines development, analysis, execution, and monitoring of strategies. Application of critical thinking skills to strategy. Lecture and discussion.

Prerequisites: Completion of HPM Level I courses or permission of instructor. LEC.

**HP&M 854. Human Resources and Workforce Development. 3 Hours.**
The focus of this course is to understand the leadership functions of human resource management in organizations to create a competitive edge through employee empowerment. Core human resource concepts are introduced and applied to optimize human capital within a variety of healthcare settings, including compensation and benefits, employee recognition, and employee/labor relations. National, regional and local strategies and workforce trends are discussed related to best practices for the selection, retention, and management as a healthcare employer of choice. (Same as NRSG 891). LEC LEC.

**HP&M 857. Evaluating Outcomes of Healthcare. 3 Hours.**
This course will trace the development of the outcomes research movement and provide examples of methodologies, assessment instruments and issues that guide outcomes research. It will also review the methods for linking research findings with clinical practice (i.e., clinical practice guidelines). Obstacles to acceptance of practice guidelines will be discussed. Finally, the translation of outcomes research methodology into programs to improve health quality will be presented. Prerequisite: Permission of instructor. LEC.

**HP&M 858. Health and Social Behavior. 3 Hours.**
Healthcare as a cultural and socio-behavioral system is presented. Using research and theory, students explore alternative perspectives on the nature of medicine and healing within comparative health systems, both U.S. and abroad. Students examine at an advanced level how healthcare organizational structures contribute to patient health outcomes and influence employee behaviors. The course reinforces the nature and characteristics of the health professions, particularly medicine and nursing perceptions, and the complex behavioral dynamics of health professionals with organizational leaders. LEC LEC.

**HP&M 859. Professional Development. 1 Hour.**
Prepares students for an initial professional job search. Explores professional networking, search strategies, resume construction, and interviewing. Reviews professional communication. Incorporates lecture, discussion, and fieldwork. Prerequisite: Permission of instructor. LEC.

**HP&M 860. Graduate Internship in Healthcare Services Administration. 1-3 Hours.**
Novice and experienced health services administrators function in applied settings. The internship is designed to meet the needs of individual students to advance their career functioning and set in motion a professional development plan. The inexperienced administrator will use the internship as a mid-curriculum opportunity to apply and synthesize in the practice setting knowledge, skills, and abilities. Students who come to the program with mid-level to advanced experience use the practicum to advance their career through exposure to additional experiences that extend their knowledge, skills, and abilities and demonstrates synthesis of program competencies. FLD FLD.

**HP&M 861. Capstone Seminar. 2 Hours.**
The knowledge, skills, and abilities learned throughout the program are validated in capstone experience. A case study approach will be used to synthesize and apply principles including, but not limited to, change theory and quality improvement, research and information technologies, strategy and communication tools, human resource management, financial and economic analysis, and advanced decision-making and management of organizational behavior. Students will present their cases to peers, faculty, and external reviewers for dialogue, critique, and a plan for professional skills development. IND RSH.
HP&M 862. Research Practicum in Health Services Administration. 3 Hours.
A course to explore applied research topics associated with specific health services delivery of management problems. Prerequisites: HPM 821 and HPM 830. RSH RSH.

HP&M 863. Independent Study. 1-3 Hours.
This course is designed to meet the needs of students who have a special interest that cannot be met by existing courses. IND IND.

HP&M 868. Field Immersion in Health Systems Issues and Trends. 1 Hour.
This field-based experience exposes students to a range of issues and trends in health care organizations - public and private, profit and non-profit. The aim is to engage students in the realities of health system challenges and problems, which can be informed by health services research. Site visits and contacts with executives and policy leaders serve as the basis for scholarly analysis. Prerequisite: Permission of the instructor. FL.

HP&M 869. Field Immersion in Health Systems Data Management. 1 Hour.
This field-based experience exposes students to current managerial realities and trends in information technology and data management within health care and policy settings. The aim is to engage students in information technology roles and functions, data set and performance metrics, available systems of technology support, and the scope of data collection, organization and management issues faced by health systems. Prerequisites: HPM 868 or permission of the instructor. FL.

HP&M 870. Research Inquiry I: Defining and Supporting the Research Problem. 1 Hour.
Students select a problem area, critically review and analyze the research literature related to it and develop a research question(s) and working hypotheses. The analysis of the problem integrates field experiences with relevant literature, and translates ideas from the practice and/or policy setting into the context of scholarly inquiry. Prerequisite: Permission of the instructor. FL.

HP&M 871. Research Inquiry II: Research Design. 1 Hour.
Students build on a problem area of interest with potential benefit to the health care field and examine methodologies that would support a hypothesis or significant research question. The course guides students in translating their questions into a credible, methodologically defensible research design, including overall strategy, measurement, study population and/or sample. Focus will be placed on critical analysis of design trade-offs and limitations. Prerequisites: HPM 870 or permission of the instructor. FL.

HP&M 872. Research Inquiry III: Data Analysis Techniques and Strategies. 1 Hour.
Students learn to assess and choose appropriate analytic techniques, whether qualitative or quantitative, and develop a data analysis and presentation plan. Emphasis is placed on evaluating the relative advantages and disadvantages of various analytic strategies in the context of a specific question and research design. Prerequisites: HPM 871 or permission of the instructor. FL.

HP&M 873. Statistical Applications Using Large Data Bases. 3 Hours.
The management of large data sets is a critical analytic skill for health policy and management research. This course exposes students to the various types and configurations of large data sets and provides hands-on analytic experience using an array of statistical techniques and procedures. Attention is placed on the criteria for designing and evaluating, including the trade-offs in selecting one plan over another. Students actually carry out an analysis plan for a variety of data types. Prerequisites: HPM 819, or permission of the instructor. LEC.

HP&M 874. Statistics for Decision Making. 3 Hours.
Elementary statistical techniques to include descriptive statistics, probability, sampling, and statistical inference of means and proportions; advanced statistical techniques include multivariate analysis of qualitative and quantitative variables using multiple linear and logistic regression. LEC LEC.

HP&M 875. Modeling in Health Services Research. 3 Hours.
Provides an opportunity for students to use a number of common analysis models in health services research. Emphasizes a conceptual understanding of appropriate modeling techniques and use of statistical software packages. The course focuses on application of methods to health services research questions, with emphasis on regression design and interpretation. Prerequisites: HPM 874 or permission of the instructor. LEC.

HP&M 876. Medicare and Medicaid. 3 Hours.
Provides students with an in-depth understanding of the three publicly financed health programs that impact virtually all aspects of the American healthcare system - Medicare, Medicaid and Children's Health Insurance Programs (CHIP). Explores history and evolution of each program, plus specific operational issues such as eligibility, financing, management reporting, state/federal coordination, quality of care and outcomes management and influence of recent legislation. Prerequisite: Permission of the instructor. LEC LEC.

HP&M 877. Women and Healthcare. 3 Hours.
A gender analysis of the organization of healthcare in the United States, using sociohistorical and sociological perspectives. Considers the health status and healthcare problems of women in relation to cultural aspects of medicine and healthcare; the roles of both informal and professional healthcare providers; the political economy of healthcare systems; and the relationship between gender and state. Prerequisite: HPM 810, or permission of instructor. LEC LEC.

HP&M 878. Grant Writing. 3 Hours.
The course is designed to take the principles and mechanics learned in introductory epidemiology and biostatistics and apply them in the design of epidemiologic studies. The strategy and data collection for studies will be emphasized rather than the methods of statistical analysis. The student will learn how to develop a proposal/grant that addresses the entire array of concerns regarding such studies and propose a realistic, scientifically justified study. (Same as ANAT 869 and NRSG 889.) Prerequisite: HPM 819 or HPM 821, and NRSG 886. LEC.

HP&M 879. Comparative Healthcare Systems. 3 Hours.
Critical examination of the structure and function of healthcare systems in major, advanced, capitalist countries (e.g., Canada, Japan, United Kingdom, France, Germany, and Sweden) in comparison to each other and to the healthcare system of the United States. Patterns in control and financing will be studied in relation to issues of cost, quality, access, and in relation to cultural values. Special attention will be placed on comparative analysis of reform efforts. Prerequisite: HPM 810 or permission of instructor. LEC LEC.

HP&M 880. Health Care and Social Policies in Sweden. 3 Hours.
Sweden leads the world in major health outcomes despite spending significantly less than the U.S. This course provides students the opportunity to visit Sweden and see the operation of its health care and social welfare system firsthand. Learn about Swedish history and culture as you re-examine many commonly held assumptions about both the U.S. and Sweden. An intensive schedule of site visits and lectures in the Stockholm-Uppsala area, assigned readings, and a major paper. LEC.
HP&M 882. Health Services Research Using Public Payer Data. 3 Hours.
Several contemporary health reforms have rendered analyses of public payer data more feasible and valuable for population health, health services research, and quality improvement. The addition of an outpatient drug benefit to standard inpatient and outpatient service coverage for Medicare, for example, has stimulated a growth industry in comparative effectiveness research and expanded policy research across the health care system. Pending expansion of States’ Medicaid programs under the Affordable Care Act will undoubtedly create the largest public health care insurance program in the United States. The Centers for Medicare Medicaid Services (CMS) have streamlined researchers’ access to national Medicare and Medicaid populations for health services and quality improvement projects through contracts with the Research Data Center at the University of Minnesota and the Chronic Condition Warehouse. In addition, Kansas Medicaid has invested in a Data Analytic Interface that offers ready access to the state’s employees, Medicaid beneficiaries, and private health insurance claims data for enterprising researchers including tremendous opportunities for state of the art, contemporary policy analyses. This is indeed an exciting and opportune time for students embarking on careers in health services, policy, and population health research. This course is designed to prepare students for real world analyses using standard public payer claims data. LEC.

HP&M 883. Cost-Effectiveness and Decision Analysis. 3 Hours.
This course examines techniques that are used in making clinical and management decisions when outcomes are uncertain. The course begins with a review of probabilistic decision making, then explores methods of analyzing choices with uncertain outcomes, stressing the use of decision trees and sensitivity analysis. The course examines cost minimization analysis, cost-effectiveness analysis, and cost benefit analysis. (SAME as PRVM 878). LEC LEC.

HP&M 884. Clinical and Administrative Data Analysis. 3 Hours.
This course presents advanced techniques in statistical analysis and information management to help understand, process, and use health services data. The three broad areas of health services data will be used: clinical, program, and population-based. Ways in which these data can be used as both management and research tools will be discussed. Implications for improving patient care and delivery of health services will be emphasized. Labs will stress the use of both manipulative techniques such as merging, matching, sorting, and file construction, as well as focus on analysis, using univariate, bivariate, and multivariate techniques. Recent methodology related to outcomes, case-mix, and performance assessment will be presented, and their application to health services administration demonstrated. LEC LEC.

HP&M 885. Instructional Methods in Health Services Education. 1 Hour.
An overview of pedagogical approaches and learning strategies for higher education courses in health policy and management. Content will include course organization, syllabus design, techniques for teaching in the classroom and online, learning styles, strategies for classroom management, and evaluation/grading methods. Prerequisites: HPM 868 or permission of the instructor. LEC.

HP&M 886. Applied Health Services Research. 3 Hours.
Students in this course apply the full spectrum of the research process to a specific hypothesis or research question, drawn from practical health systems observations and/or supported by critical analysis of the health services research literature. Moving step by step through the research process, students work to develop a complete research plan and proposal suitable to investigate their chosen question. Group discussion and guest researchers provide elaboration for each stage of research plan development. Prerequisites: HPM 872 and HPM 873 or permission of the instructor. RSC.

HP&M 887. Practicum in Health Services Education. 2 Hours.
Application of the approaches and methods described in HPM 885. Students will serve as a teaching assistant for one semester, working with a teaching mentor. In addition to assisting with the class, students will meet regularly with the mentor to critique and analyze content and classroom processes, plan and develop teaching activities, and evaluate learning and performance in the classroom. Prerequisite: HPM 868 or permission of the instructor. HPM 887 may be taken concurrently with HPM 885. LEC.

HP&M 890. Topics in Health Policy and Management. 1-3 Hours.
This course allows exploration of special topics that are not routinely a part of the curriculum. Prerequisite: Consent of the instructor. IND LEC.

HP&M 901. Doctoral Seminar in Health Policy. 3 Hours.
Students will investigate, review, and critically analyze major concepts, theoretical and methodological approaches and sub-areas in the field of health policy research. The course will cover comparative health policy analyses as well as both micro and macro system perspectives. Prerequisite: Permission of the instructor. SEM.

HP&M 903. Doctoral Seminar in Health Management. 3 Hours.
Students will investigate, review and critically examine major concepts, theories, issues, methodological approaches and sub-areas in the health services management research literature. Special attention will be placed on using research to develop evidence-based practice and suggesting interventional strategies for complex problems, both micro- and macro-organizational. Prerequisite: Permission of the instructor. SEM.

HP&M 990. Advanced Topics in Health Policy and Management. 1-3 Hours.
This course allows exploration of special topics that are not routinely a part of the curriculum. Prerequisite: Admission to a PhD program and consent of the instructor. IND. LEC.

HP&M 991. Individual Doctoral Readings. 1-3 Hours.
Individual study of special topics or problems by students working on a doctorate. Prerequisite: Admission to a PHD program and consent of the instructor. LEC.

HP&M 999. Dissertation. 1-12 Hours.
THE.

Master of Health Services Administration

The Master of Health Services Administration degree prepares students for leadership roles in the health care sector, including positions in hospitals, health care systems, long-term care facilities, clinics, insurance firms, health departments, and government agencies. The MHSA Program offers a systemic overview of the health care system, a clear perspective on contemporary health policy, a mastery of analytic methods, and a broad exposure to the practice of health care management. Classes are taught on the KUMC campus and offered in the late afternoon and evening.

Joint Degree Programs

The Department of Health Policy and Management offers 4 joint programs in conjunction with the Schools of Law, Nursing, and Medicine (MD program). Please contact the respective schools for complete information.
**JD/MHSA**

The JD/MHSA joint degree program combines into 4 years of full-time study the Juris Doctor (p. 768) (JD) program offered by the School of Law (http://www.law.ku.edu) and the Master of Health Services Administration (MHSA) program offered by the Department of Health Policy and Management. The program offers students who plan to practice health law or health services management a thorough academic grounding in both disciplines. Students must be admitted to each program to pursue the joint degree.

**MS in Nursing (Organizational Leadership)/MHSA**

The joint Master of Science in Nursing (Organizational Leadership)/MHSA degree program combines the MHSA degree offered by the Department of Health Policy and Management and the Master of Science (p. 2290) degree with the specialization in Organizational Leadership offered by the School of Nursing. This program gives students the opportunity to acquire training in the convergent fields of nursing and health services administration. The program combines course work, allowing the two degrees to be completed in 8 semesters. Students must be admitted to each program to pursue the joint degree.

**MD/MHSA**

The joint MD/MHSA degree program prepares students to enter careers as physician executives or to provide administrative support for their medical practice. As the health care environment becomes more complex and competitive, administrative skills can be extremely important to individuals starting careers in medicine or those seeking to enhance their current careers. The MSHA portion of the curriculum combines social science and business content in the context of health care and prepares students for management and executive positions in health care organizations. Students complete requirements for the MD degree as specified by the School of Medicine. MD programs are described in the School of Medicine Catalog (p. 2062). Both programs can be completed in 5 years. Students must be admitted to each program to pursue the joint degree.

**BSHIM/MHSA**

The joint Bachelor of Science in Health Information Management (p. 704) and Master of Health Services Administration program is offered through the Department of Health Policy and Management in association with the Department of Health Information Management. By participating in this intensive, full-time bridge program, students can achieve both degrees in five years. Students pursuing the BSHIM/MHSA will be prepared to assume management and executive positions in health-related organizations and to bring their expertise in health information management to these positions.

The application is an on-line process. Detailed instructions on how to apply and application deadlines are posted on the Health Policy and Management website (http://www.kumc.edu/school-of-medicine/hpm/master-of-health-services-administration.html). Students are admitted for the fall semester only.

**Admission requirements:**

- Bachelor’s degree from a regionally accredited institution, documented by submission of official transcript(s). The bachelor’s degree must be attained prior to entering the program. Official transcripts from institutions attended post-baccalaureate are also required.

Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

- A cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale for the bachelor’s degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395).
- A background check (p. 2395) is required during the admission process; it may affect the student’s eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score not more than approximately five (5) years old sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional 6895. An alternative graduate level examination score may be substituted on a case-by-case basis.
- A statement of goals/purpose. This brief essay should outline the applicant’s reasons for wanting to pursue graduate education in health administration and career objectives.
- Three letters of recommendation.
- Applicants must also have completed a prerequisite three (3) credit hour course in statistics.
- A personal interview is also required of all applicants who meet the minimum admissions standards. If travel to the area is impossible, a telephone or on-line interview may be substituted.

Applicants will be assessed based on these requirements. After an applicant has been admitted, the program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. To verify admissions requirements for past years, use the catalog of the year student entered the program. Other years’ catalogs (http://catalog.ku.edu/archives). The MHSA program is a 56 credit-hour graduate professional degree program and is accredited by the Commission on Accreditation of Healthcare Management Education (CAHME). (http://www.cahme.org)

**Degree requirements:**

- Degree requirements are normally completed within two (2) years of admission to the program although a maximum of seven (7) years is allowed. Part-time students normally complete requirements within four to five (4-5) years of admission to the program.
- Cumulative grade-point average (GPA) of at least a 3.0 for all program coursework.
- Completion of a minimum of 56 credit hours.
- Enrollment in a minimum of one (1) credit hour the semester the student will graduate.
- Successful completion of the following required courses (or equivalents):

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>HP&amp;M 810</td>
<td>The Health Care System</td>
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<tr>
<td>HP&amp;M 819</td>
<td>Research for Health Care Leaders</td>
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<tr>
<td>HP&amp;M 822</td>
<td>Health Care Economics</td>
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<td>HP&amp;M 831</td>
<td>Reimbursement and Fiscal Policy</td>
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Doctor of Philosophy in Health Policy and Management

Our PhD in Health Policy and Management prepares high-level health services researchers for careers in academic settings or in public and private organizations where advanced research, leadership and analytic skills are required.

Health services research is a multidisciplinary field that examines the uses, costs, quality, accessibility, delivery, organization, financing and health outcomes of healthcare systems in the U.S. and elsewhere. Health Services researchers investigate, compare and interpret the complexities of healthcare systems, including how social factors, financing systems, organizational structures and processes, health technologies, and individual and group behaviors affect access, cost and quality of care. The program is offered on a full-time basis only with course work at the KU Medical Center campus.

The application process is done online. Detailed instructions on how to apply and the application deadlines are posted on the Health Policy and Management website (http://www.kumc.edu/school-of-medicine/hpm/phd-in-health-policy-and-management/phd-admissions-criteria-process-and-timeline.html).

Admission requirements:

- A master's degree in health services administration or a related field (e.g. public health, public administration, business, social sciences, biological sciences, nursing) from a regionally accredited institution and documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from all other institutions attended post-baccalaureate are also required.
- A cumulative grade-point average (GPA) of at least a 3.5 on a 4.0 scale for all post-baccalaureate course work.

Students with degrees from outside the U.S. may be subject to transcript evaluation to determine that the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395) and additionally for this specific program, a minimum score of 50 on the TSE or SPEAK tests, a minimum iBT speaking score of 24, or a minimum IELTS speaking score of 8.
- A background check (p. 2395) is required during the admission process; it may affect the student's eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score not more than approximately 5 years old sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional 6895.
- Successful completion of a graduate level statistics course.
- Successful completion of a minimum of three (3) credit hours of graduate-level course work in each of these areas:
  - Health delivery systems
  - Health economics
  - Health care finance
  - Health care management

Degree requirements and course descriptions are subject to change. In most cases use the catalog of the year the student entered the program to determine requirements. Any courses taken as equivalents must be approved by the Graduate Director and the Office of Graduate Studies.

Typical Plan of Study

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<th>Year 1</th>
<th>Fall</th>
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Total Hours: 56
• Health behavior/organizations
• Health policy

• Three letters of recommendation from individuals who can assess your academic background and potential for success in a doctoral program.
• A personal statement regarding your career objectives and purpose.
• A current resume or curriculum vitae.
• A copy of the applicant’s master’s thesis, graduate-level research paper or other example of the applicant’s scholarly research writing.

Applicants will be assessed based on these requirements. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, students should refer to the catalog content of the year they entered the program. Other years’ catalogs ».

The doctoral program is a post-master’s, competency-based program in health services research consisting of 3 stages. Relevant prior graduate work is taken into consideration in setting up individual programs of study leading to the Ph.D. The program, including dissertation, is designed to be completed in a minimum of 4-5 academic years (see Degree Plan tab.) Students are expected to maintain continuous, full-time enrollment.

**Stage 1** consists of basic courses in health policy, health systems and health care management, research and quantitative and qualitative research methods. A notable feature of this stage is that students begin to participate in the research process immediately upon beginning the program through a series of 1-credit-hour immersion courses, taken within the first 2 semesters along with other basic courses.

**Stage 2** involves specialization in a specific substantive area of either policy or management-related research or a combination, as well as advanced statistical analysis and research methods. Students also complete a teaching seminar and practicum.

**Stage 3** consists of the doctoral dissertation demonstrating the development, execution, and results of original research. Students work primarily with their dissertation advisor and doctoral committee at this stage in order to prepare and defend their dissertation proposal and to carry out and complete their dissertation research project. There are two options for the written dissertation, the traditional book format or a three publishable articles format. The written dissertation is formatted and published according to university guidelines.

**Degree requirements:**

• Degree requirements are normally completed within 4-5 years of admission to the program although a maximum of 8 years is allowed.
• Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
• Successful completion of the University’s Research Skills and Responsible Scholarship (p. 2398) requirement prior to the semester the Oral Comprehensive Examination is scheduled.
• Successful completion of the required sequence of health services research methods courses (HP&M 819 (or equivalent), HP&M 870, HP&M 871, HP&M 872, HP&M 873, HP&M 875, HP&M 886 and HP&M 819) with a 3.0 grade point average meets the Research Skills requirement.

• Successful completion of the research ethics modules within HP&M 819 (or equivalent), HP&M 870 and HP&M 886 meets the Responsible Scholarship requirement.
• Successful completion of the KUMC Human Subjects Projection training module during the first semester of enrollment and annual training renewal until completion of the program.
• Successful completion of preliminary examinations in quantitative analysis, general health policy and management research, and a specialization area.
• Successful completion of the Residence Requirement (p. 2398) by enrollment in full-time status a minimum of two semesters prior to the semester the Oral Comprehensive Examination is scheduled.
• Successful completion of the Oral Comprehensive Examination (p. 2398). Students are recognized as formal doctoral candidates after they have passed the comprehensive examination.
• Successful completion of the Post-Comprehensive Enrollment (p. 2398) requirement.
• Enrollment in a minimum of one (1) credit of HP&M 999 Dissertation the semester the student will defend dissertation and graduate.
• Successful completion of the Final Oral Examination (p. 2398) (dissertation defense.)
• Successful Dissertation Submission and Publication (p. 2398) (according to Office of Graduate Studies policy.)
• Successful completion of the following Health Policy and Management core courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>HP&amp;M 819</td>
<td>Research for Health Care Leaders (or equivalent)</td>
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<tr>
<td>HP&amp;M 868</td>
<td>Field Immersion in Health Systems Issues and Trends</td>
<td>1</td>
</tr>
<tr>
<td>HP&amp;M 869</td>
<td>Field Immersion in Health Systems Data Management</td>
<td>1</td>
</tr>
<tr>
<td>HP&amp;M 870</td>
<td>Research Inquiry I: Defining and Supporting the</td>
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<td>Research Problem</td>
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<tr>
<td>HP&amp;M 871</td>
<td>Research Inquiry II: Research Design</td>
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</tr>
<tr>
<td>HP&amp;M 872</td>
<td>Research Inquiry III: Data Analysis Techniques and</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Strategies</td>
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<td>HP&amp;M 873</td>
<td>Statistical Applications Using Large Data Bases</td>
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</tr>
<tr>
<td>HP&amp;M 875</td>
<td>Modeling in Health Services Research</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 885</td>
<td>Instructional Methods in Health Services Education</td>
<td>1</td>
</tr>
<tr>
<td>HP&amp;M 886</td>
<td>Applied Health Services Research</td>
<td>3</td>
</tr>
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<td>HP&amp;M 887</td>
<td>Practicum in Health Services Education</td>
<td>2</td>
</tr>
<tr>
<td>HP&amp;M 901</td>
<td>Doctoral Seminar in Health Policy</td>
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</tr>
<tr>
<td>HP&amp;M 903</td>
<td>Doctoral Seminar in Health Management</td>
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<tr>
<td>HP&amp;M 999</td>
<td>Dissertation</td>
<td>1-12</td>
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• Successful completion of an additional three (3) credit hour quantitative course. Specific course must be approved by the student’s advisor.
• Successful completion of a three (3) credit hour course in qualitative methods. Specific course must be approved by the student’s advisor.
• Successful completion of nine (9) credit hours of elective coursework determined in consultation with the student’s advisor.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate
Typical Plan of Study

Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
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<td>3 HP&amp;M 869</td>
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<td>(first half of semester)</td>
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<td>HP&amp;M 873</td>
<td>3 Qualitative</td>
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Year 2

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Year 3

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<th>Summer</th>
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</thead>
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<td>3 HP&amp;M 991</td>
<td></td>
<td>1-3 HP&amp;M 999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(or other course in consultation with advisor)</td>
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<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3 Oral Comprehensive Exam may be scheduled during this semester if approved by committee.</td>
<td>3</td>
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Year 4

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<tr>
<td>HP&amp;M 999</td>
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Department of History and Philosophy of Medicine

The Programs and Mission

The Department of History and Philosophy of Medicine consists of four major units: the Academic Programs, the Clendening Library, the Clendening Museum, and the KU Medical Center Archives. The Department unites these programs in its mission to advance understanding and application of ethical, historical and social analysis of health, medicine and healing.

Using the combined resources of the department we strive to teach students and colleagues how historical and social factors influence health and health care; and we inform our teaching through scholarship in the history and philosophy of medicine that merits national recognition.

The Library and Archives act as careful stewards of the extensive historical collections and promote their use and appreciation; while seeking to add some color to the often drab aesthetic of medical practice.

Finally, through our ethics programs we seek to deepen a moral appreciation of medicine's role in healing through ethics education and scholarship in the medical school and ethics consultation in the University of Kansas Hospital.

Explore our featured resources:

- University of Kansas Medical Center Archives (http://www.kumc.edu/school-of-medicine/history-and-philosophy-of-medicine/kumc-archives.html)
- Writing Consult Center (http://www.kumc.edu/school-of-medicine/history-and-philosophy-of-medicine/education/writing-consult-center.html)

Although no graduate program is offered in this area, H&PM course work may be taken for graduate credit. Graduate level courses taught by History and Philosophy Medicine faculty are available through the Department of Health Policy and Management and the Department of
Preventive Medicine and Public Health on the medical center campus and the Department of History on the Lawrence campus.

Courses

H&PM 853. Responsible Conduct of Research. 1 Hour.
The purpose of this course is to engage research trainees in reading about, considering, and discussing the responsible conduct of science. The course is designed as an option for meeting current federal regulations, which require that all NIH training grants provide training in the responsible conduct of research. This course provides a concise overview of key subject areas in the responsible conduct of research. It is designed to make students aware of relevant guidelines, policies and codes relating to ethical research, as well as to provide the skills for identifying and resolving ethical conflicts that may arise in research. Cross-linked with PRVM 853. LEC.

Interdisciplinary Graduate Program in Biomedical Sciences

Graduate research at the University of Kansas Medical Center covers a rich and diverse range of topics in both basic and translational research. Basic research is geared toward understanding the basic biological systems that control life. By understanding these systems, rationale treatments to treat disease can be devised. The discovery and refinement of these rationale treatments is translational research. With such a range of research topics, it is often difficult to choose the best lab. The interdisciplinary program allows the student to make an informed choice of labs to enter. IGPBS students hear from every researcher who is able to take a new student into their lab during the Faculty Research Series. The student then selects 3 research rotations. At the end of the 3 rotations the student will choose the lab that is the best fit for their research goals. Once a lab is chosen, the student enters the chosen mentor’s department to complete the Ph.D.

The interdisciplinary program covers the first 2 semesters of graduate study. Students take a core group of courses that cover all aspects of cell biology, biochemistry, and cell signaling. Courses are both lecture based and discussion based. Students receive introductions to critical research techniques, work on problem sets, and critically evaluate our current knowledge base. In addition, students take courses in scientific ethics and scientific communication. Scientific communication covers graphic presentation of data and both written and oral communication.

At the end of the first year, students have built a considerable knowledge base and have skills in scientific communication, critical thinking, and problem solving. Students expand their knowledge base and skills by taking advanced courses in their chosen departments or programs. Our graduate program prepares students for successful careers in research.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

Admission Requirements:

- Bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.

Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

- A cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale for the bachelor’s degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395).
- A background check (p. 2395) is required during the admission process; it may affect the student’s eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895.
- Three letters of recommendation.
- Prerequisite coursework:
  - One year of general chemistry
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  - One year of biological sciences
  - One semester of calculus
  - One semester of physics
- Research experience (beyond labs associated with lecture courses) is strongly suggested.

Applicants will be assessed based on a combination of GPA, research experience, and GRE scores. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs are.

Typical Plan of Study

Year 1

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<th></th>
<th>Fall Hours</th>
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<td>GSMC 859</td>
<td>10-13</td>
<td>7-10</td>
<td>2-7</td>
<td>19-30</td>
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</table>

Beginning with the Fall semester of year two, the student enters the Ph.D. program their faculty mentor is associated with and completes the degree requirements listed in the catalog for that specific program.
Department of Microbiology, Molecular Genetics, and Immunology

The mission of the Department of Microbiology, Molecular Genetics and Immunology is to conduct high impact research that is relevant to human health and train the next generation of biomedical scientists and physicians who will advance our understanding of infection and immunity in ways that benefit humankind.

Our nationally recognized research programs, highly supported by NIH research funding (http://www.brimr.org/NIH_Awards/2010/NIH_Awards_2010.htm), cover a variety of topics within the following themes:

- microbial physiology and pathogenesis
- virology
- immunology and host defense

Funding also provides support for pre- and postdoctoral trainees and visiting scientists, as well as for hosting national and international researchers in the Microbiology seminar series.

Courses

MICR 801. Principles of Immunology. 1 Hour.
An introductory course in immunology; cells and tissues of the immune system; B and T cells and their receptors; major histocompatibility complex; antigen presentation; regulation of immune responses; immunity and vaccination. Prerequisite: IGPBS courses or permission of instructor. LEC.

MICR 802. Principles of Virology. 1 Hour.
An introductory course in virology; replication of RNA and DNA viruses; viral RNA processing and translation; reverse transcription; virus assembly; viral pathogenesis; viruses as vectors. Prerequisite: MICR 801 or permission of instructor. LEC.

MICR 803. Principles of Bacterial Genetics and Pathogenesis. 1 Hour.
An introductory course in bacteriology; cell structure and function; chromosome and plasmid replication; genetic engineering; bacteriophage; gene regulation; quorum sensing; antibiotics; protein secretion; bacterial pathogenesis. Prerequisite: MICR 801 MICR 802 or permission of instructor. LEC.

MICR 805. Teaching in Higher Education. 3 Hours.
Theoretical and practical aspects of teaching in a graduate degree program with emphasis on program and curriculum design, student assessment, communicating learning expectations, selecting optimal teaching methods aligned with expectations, understanding diverse learning styles, apprenticeship teaching, developing as a teacher and applying contemporary educational theory to the classroom or research laboratory. Prerequisite: Any graduate degree or current enrollment in a graduate degree program or permission of instructor. LEC.

MICR 808. Immunology. 3 Hours.
Molecular and cellular aspects of immunity. Specific topics will include immunoglobulin and receptor structure/function, attributes of antigenicity, antigen-antibody reactions, immunocompetent cells, cellular interactions, soluble mediators of immune responses and normal and abnormal immune regulation. Prerequisite: Permission of course director. LEC.

MICR 809. Tumor Immunology. 3 Hours.
Immune system and tumor growth; tumor immunotherapy. Analysis and applications of experimental systems and discussion of contemporary as well as classical primary literature in the field. Collaborative learning and communication skills emphasized. Prerequisite: IGPBS core curriculum or equivalent, or permission of instructor. LEC.

MICR 810. Fundamentals of Immunology. 2 Hours.
Immunee cells and soluble mediators of the innate and adaptive systems, antigen and pattern recognition, lymphocyte development and activation, immune effector mechanisms, mechanisms of immune-based diseases. Analysis and applications of experimental systems and discussion of contemporary as well as classical primary literature in the field. Collaborative learning and communication skills emphasized. Prerequisite: Introductory course work in cell and molecular biology; biochemistry and genetics. LEC.

MICR 811. Molecular Genetics of Bacteria and Phages. 2 Hours.
This 2-credit course is designed for students pursuing a graduate degree in a biomedical field. The goal of the course is to introduce the fundamental concepts of modern microbial genetics and to expose the students to commonly used experimental procedures in microbial and molecular genetics. Students will study both textbook and literature sources and will learn to apply research methods to understand the problems associated with the bacterial physiology and genetics. Active learning approaches in the classroom will require that students work collaboratively with others. Both written and oral communication will be emphasized as important learning outcomes in this course. Prerequisite: An introductory course in biology, genetics, chemistry or biochemistry. LEC.

MICR 812. Molecular Virology and Pathogenesis. 2 Hours.
This Virology course is aimed at graduate students who are pursuing a graduate degree in a biomedical field. It provides a contemporary understanding of how viruses are built, how they infect and replicate in host cells, how they spread and evolve, how they interact with host cells, how they eventually cause diseases, and how infection of a host can be prevented. Prerequisite: Introductory course work in cell and molecular biology, biochemistry and genetics. LEC.

MICR 820. Bacterial Genetics and Pathogenesis. 3 Hours.
Genetics of bacteria with emphasis on bacterial pathogens. Topics include: gene regulation, recombination, bacteriophages, transposons, genetic exchange, plasmids, genetics of virulence, bacterial adherence and colonization, immune evasion mechanisms, bacterial toxins, vaccines and antimicrobials, re-emerging bacterial diseases. Prerequisite: Introductory course work in cell and molecular biology, biochemistry and genetics or permission of instructor. LEC.

MICR 825. Virology. 3 Hours.
Molecular biology of animal viruses. Aspects of various virus groups to be covered include structure, replication, and host cell responses. Lectures and student seminars. Prerequisite: Permission of the course director. LEC.

MICR 830. Seminar in Microbiology. 1 Hour.
Reports on research and literature. LEC.

MICR 835. Research in Microbiology. 1-6 Hours.
This course is specifically designed to provide supervised research experience in various laboratories in the department. LEC.

MICR 855. Host-Pathogen Interactions. 3 Hours.
This course is designed for students pursuing a graduate degree in a biomedical field. Topics include host-pathogen interactions; pathogen adhesion; invasion and intracellular survival; cell death pathways; innate immunity; role of extracellular matrices. The course will cover various
bacterial and viral pathogens as well as eukaryotic pathogens such as fungus. Prerequisites: Introductory course work in cell and molecular biology, biochemistry and genetics or permission of instructor. LEC.

**MICR 890. Master's Research in Microbiology. 1-10 Hours.**
This course is designated for research leading to the master's degree. LEC.

**MICR 899. Master's Thesis in Microbiology. 1-10 Hours.**
This course is designated for thesis writing leading to a master's degree in Microbiology. THE.

**MICR 930. Advanced Topics in Microbiology. 1-8 Hours.**
An advanced approach to selected topics in any of the major disciplines in microbiology. Readings and conferences, or advanced laboratory techniques. LEC.

**MICR 990. Research for Ph.D. in Microbiology. 1-10 Hours.**
This course is restricted entirely to dissertation research. RSH.

**MICR 999. Dissertation for Ph.D. in Microbiology. 1-10 Hours.**
Restricted to actual writing of dissertation. THE.

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**Master of Science in Microbiology**

M.S. degrees may be earned with a major emphasis in bacteriology, virology or immunology. M.S. program is designed to prepare for a diverse workforce of scientists, teachers and administrators who fill the broad science and engineering employment needs of the private and government sectors. It may also lead to teaching positions at the secondary or junior college level.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2126) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

**Admission Requirements:**

- Bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.

  Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor’s degree.

- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395).

- A background check (p. 2395) is required during the admission process; it may affect the student's eligibility to enter the program.

- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895. 

- Three letters of recommendation.

- Prerequisite coursework:
  - One year of general chemistry
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry

- One year of biological sciences
- One semester of calculus
- One semester of physics

- Research experience (beyond labs associated with lecture courses) is strongly suggested.

Applicants will be assessed based on a combination of GPA, research experience, and GRE scores. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs ».

**Degree Requirements:**

- Degree requirements are normally completed within 3 years of admission to the degree program although a maximum of 7 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Completion of a minimum of 30 credit hours.
- Enrollment in a minimum of one (1) credit hour the semester the student will graduate.
- Successful completion of either a thesis defense or general examination (p. 2398) the semester the student will graduate.
- If thesis option chosen, then enrollment in a minimum of one (1) credit hour of MICR 899 Master’s Thesis and successful thesis submission and publication (p. 2398) (according to Office of Graduate Studies policy.)
- Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2126) courses (or their equivalent):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>Proteins and Metabolism</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>Molecular Genetics</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 853</td>
<td>Cellular Structure</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 854</td>
<td>Cell Communication</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 855</td>
<td>Introduction to Biomedical Research II</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>Introduction to Research Ethics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 857</td>
<td>Biographics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 858</td>
<td>Introduction to Faculty Research</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 859</td>
<td>Research Rotations</td>
<td>1-4</td>
</tr>
</tbody>
</table>

- Successful completion of the following Microbiology courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICR 801</td>
<td>Principles of Immunology</td>
</tr>
<tr>
<td>MICR 802</td>
<td>Principles of Virology</td>
</tr>
<tr>
<td>MICR 803</td>
<td>Principles of Bacterial Genetics and Pathogenesis</td>
</tr>
<tr>
<td>MICR 890</td>
<td>Master’s Research in Microbiology</td>
</tr>
<tr>
<td>MICR 899</td>
<td>Master’s Thesis in Microbiology (if thesis option chosen)</td>
</tr>
</tbody>
</table>

- Successful completion of additional elective coursework as determined in consultation with the student's advisor or research committee. Electives may include the Microbiology courses listed below or courses from other departments.
Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program.

**Typical Plan of Study**

### Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>2</td>
<td>GSMC 853</td>
<td>2</td>
<td>GSMC 859</td>
<td>1-4</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>2</td>
<td>GSMC 854</td>
<td>2</td>
<td>May take an elective course from the student’s chosen degree program in consultation with the student’s advisor.</td>
<td>1-3</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>2</td>
<td>GSMC 855</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSMC 856</td>
<td>1</td>
<td>GSMC 859</td>
<td>1-4</td>
<td></td>
<td></td>
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<td>GSMC 857</td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td>GSMC 858</td>
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<td></td>
</tr>
<tr>
<td>GSMC 859</td>
<td>1-4</td>
<td></td>
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</table>

**Total Hours: 19-30**

### Year 2

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICR 801</td>
<td>1 MICR 890</td>
<td>1-6 MICR 890</td>
<td>1-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MICR 802</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MICR 803</td>
<td>1</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>MICR 890</td>
<td>1-6</td>
<td></td>
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</table>

**Total Hours: 4-9**

### Year 3

<table>
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<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICR 899 or 890</td>
<td>1-6 MICR 899 or 890</td>
<td>1-6 MICR 899 or 890</td>
<td>1-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MICR 899 if thesis option chosen, otherwise MICR 890</td>
<td>MICR 899 if thesis option chosen, otherwise MICR 890</td>
<td>MICR 899 if thesis option chosen, otherwise MICR 890</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours: 9-33**

### Doctor of Philosophy in Microbiology

A Ph.D. is required for careers in independent academic research in microbiology and immunology. The Ph.D. degree is most often followed by two or more years of postdoctoral training in a specific area of research. Ph.D. graduates in microbiology, with appropriate postdoctoral experience, are ready to compete effectively for faculty positions at a college or university, senior level positions in biotech industry and government.

The faculty in this program have diverse research interests ranging from the molecular pathogenesis of infectious agents (bacteria and viruses) to the understanding of immune function. Students with undergraduate degrees in microbiology, biochemistry or other similar disciplines are encouraged to apply.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website [http://www.kumc.edu/igpbs/how-to-apply.html](http://www.kumc.edu/igpbs/how-to-apply.html).

**Admission Requirements:**

- Bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required. Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

- A cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale for the bachelor’s degree.

- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395).

- A background check (p. 2395) is required during the admission process; it may affect the student’s eligibility to enter the program.

- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895.

- Three letters of recommendation.

- Prerequisite coursework:
  - One year of general chemistry
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
Degree requirements:

- One year of biological sciences
- One semester of calculus
- One semester of physics
- Research experience (beyond labs associated with lecture courses) is strongly suggested.

Applicants will be assessed based on a combination of GPA, research experience, and GRE scores. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs».

The program consists of coursework, research experience, and the successful completion of a doctoral dissertation. Dissertation research culminates in a final dissertation examination consisting of an oral presentation by the candidate and an examination by the faculty. Relevant prior graduate work is taken into consideration in setting up individual programs of study leading to the Ph.D.

Degree requirements:

- Degree requirements are normally completed within 5 years of admission to the program although a maximum of 8 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Successful completion of the University’s Research Skills and Responsible Scholarship (p. 2398) requirement prior to the semester the Oral Comprehensive Examination is scheduled.
  - Successful completion of GSMC 857 Biographics, GSMC 852 and GSMC 855 Introduction to Biomedical Research I and II (or equivalent) meets the Research Skills requirement.
  - Successful completion of GSMC 856 Introduction to Research Ethics (or equivalent) meets the Responsible Scholarship requirement.
- Successful completion of the Residence Requirement (p. 2398) prior to the semester the Oral Comprehensive Examination is scheduled. The requirement is met by enrollment in full-time status a minimum of two semesters.
- Successful completion of the Oral Comprehensive Examination (p. 2398). This examination evaluates the student's ability to write and defend an original research proposal, design experiments, and interpret results in a sound and critical manner. Students are recognized as formal doctoral candidates after they have passed the comprehensive examination.
- Successful completion of the Post-Comprehensive Enrollment (p. 2398) requirement.
  - Enrolment in a minimum of one (1) credit hour of MICR 999 Doctoral Dissertation the semester the student will defend dissertation and graduate.
- Successful completion of the Final Oral Examination (p. 2398) (dissertation defense.) The doctoral candidate prepares a written dissertation detailing the results of their original research.
- Successful Dissertation Submission and Publication (p. 2398) (according to Office of Graduate Studies policy.)
- Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2126) courses (or their equivalent):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>Proteins and Metabolism</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>Molecular Genetics</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 853</td>
<td>Cellular Structure</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 854</td>
<td>Cell Communication</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 855</td>
<td>Introduction to Biomedical Research II</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>Introduction to Research Ethics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 857</td>
<td>Biographics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 858</td>
<td>Introduction to Faculty Research</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 859</td>
<td>Research Rotations</td>
<td>1-4</td>
</tr>
</tbody>
</table>

- Successful completion of two of the following elective courses, one of which must be an advanced course in the student's research area. Courses are selected in consultation with the student's advisor. One of these courses must be completed prior to scheduling the oral comprehensive exam.
  - MICR 801 Principles of Immunology          | 1
  - MICR 802 Principles of Virology            | 1
  - MICR 803 Principles of Bacterial Genetics and Pathogenesis | 1
  - MICR 830 Seminar in Microbiology           | 1
  - MICR 835 Research in Microbiology          | 1-6          
  - MICR 990 Research for Ph.D. in Microbiology| 1-10         |
  - MICR 999 Dissertation for Ph.D. in Microbiology | 1-10      |

- Successful completion of additional elective coursework as determined in consultation with the student’s advisor or research committee. Electives may include the Microbiology courses listed below or courses from other departments.
  - MICR 805 Teaching in Higher Education      | 1
  - MICR 810 Fundamentals of Immunology        | 2
  - MICR 811 Molecular Genetics of Bacteria and Phages | 2
  - MICR 812 Molecular Virology and Pathogenesis| 2

- Successful presentation of a literature seminar.
- Participation in the Work in Progress series (meets monthly.)

Students enrolled in the MD-PhD Physician Scientist Training Program should review the Degree Requirements (http://catalog.ku.edu/medicine/combined-md-phd/#degreerequirementstext) section of this catalog for that program.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program.
### Typical Plan of Study

#### Year 1

<table>
<thead>
<tr>
<th></th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Summer Hours</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>2</td>
<td>2 GSCM 859</td>
<td>1-4</td>
<td>10-13</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>2</td>
<td>2 GSCM 854</td>
<td>1-3</td>
<td>7-10</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>2</td>
<td>2 GSCM 855</td>
<td>1-4</td>
<td>2-7</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>1</td>
<td>1 GSCM 859</td>
<td>1-4</td>
<td></td>
</tr>
<tr>
<td>GSMC 857</td>
<td>1</td>
<td>1 GSCM 856</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>GSMC 858</td>
<td>1</td>
<td>1 GSCM 859</td>
<td>1-4</td>
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<tr>
<td>GSMC 859</td>
<td>1-4</td>
<td>1-4</td>
<td>1-4</td>
<td>10-13</td>
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#### Year 2

<table>
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<tr>
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<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Summer Hours</th>
<th>Total Hours</th>
</tr>
</thead>
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<tr>
<td>MICR 801</td>
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<td>1 MICR 803</td>
<td>1-3</td>
<td>7-12</td>
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<tr>
<td>MICR 802</td>
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<td>1 MICR 808</td>
<td>3</td>
<td>12-17</td>
</tr>
<tr>
<td>MICR 830</td>
<td>1</td>
<td>1 MICR 820</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>MICR 835</td>
<td>1-6</td>
<td>1-6 MICR 825</td>
<td>3</td>
<td>20-23</td>
</tr>
<tr>
<td>MICR 855</td>
<td>3</td>
<td>3 MICR 830</td>
<td>1</td>
<td>3-13</td>
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</tbody>
</table>

#### Year 3

<table>
<thead>
<tr>
<th></th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Summer Hours</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICR 830</td>
<td>1</td>
<td>1 MICR 990</td>
<td>1-3</td>
<td>3-13</td>
</tr>
<tr>
<td>MICR 835</td>
<td>1-6</td>
<td>1-6 Electives</td>
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<td>3-13</td>
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</table>

#### Year 4

<table>
<thead>
<tr>
<th></th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Summer Hours</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICR 990</td>
<td>1-6</td>
<td>1-6 MICR 990</td>
<td>1-3</td>
<td>1-6</td>
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</table>

#### Year 5

<table>
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<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Summer Hours</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICR 999</td>
<td>1</td>
<td>1 MICR 999</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Department of Molecular and Integrative Physiology

Research programs in the Department of Molecular and Integrative Physiology cover the range from analysis of genes to analysis of whole organisms and fall into three broad categories:

  - This area includes the investigation of physiology and pathophysiology in experimental models ranging from cellular preparations to intact animals and humans. Current research is directed at studies of the microvascular system, cardiac system, hypoxia and oxygen transport in the respiratory system, and plasma membrane and fluid transport within the renal system. Research also encompasses various aspects of cancer biology including both *in vitro* and *in vivo* approaches.

  - This area includes the investigation of neural function in normal and disease states, and addresses problems at different levels ranging from the regulation of nervous system genes to central nervous system mechanisms controlling arm movement in the intact animal. Current research includes the study of development, transplantation, demyelinating diseases, recovery of function following peripheral and central nervous system injury and stroke, motor and cognitive defects associated with HIV, neurophysiological, behavioral and molecular measures of early development, central mechanisms of hearing, neurotransmitters and plasticity.

  - This area includes the investigation of the hypothalamic-pituitary-gonadal axis, as well as uterine and placental function. Current studies are directed at mechanisms of hormone action, cell motility, cell-cell communication, cell and tissue differentiation and growth, cytokines and growth factors, gene expression...
and control of enzyme regulation in ovary, testis, sperm, hypothalamic-pituitary axis, preimplantation embryo, trophoblast/placenta and uterus. Mammalian and invertebrate reproductive models including transgenic and gene knockout mice provide fundamental information related to cell biology, endocrinology, and developmental biology.

The common thread is that all programs endeavor to understand biological function in health and disease. Nearly all faculty members have served on national advisory committees to major funding agencies such as the National Institutes of Health and as reviewers and editors to major scientific publications. The program provides outstanding didactic instruction and laboratory experiences that enable students to become effective teachers and independent investigators. The department offers the Ph.D. degree, and the combined M.D./Ph.D.degrees in conjunction with the School of Medicine. An M.S. degree may be granted in appropriate circumstances.

The faculty and graduate students participate in a variety of graduate level teaching programs in the Schools of Medicine and Health Professions. Extramural research support for fiscal year 2014 was 4.7 million dollars from the NIH. The Department of Molecular and Integrative Physiology ranks in the upper third of all physiology departments at public universities in the U.S. with respect to NIH funding.

Courses

PHSL 784. Faculty Research Programs. 1 Hour.
The new student will be introduced to the faculty research programs. Each faculty member will present his/her research interests using one or more of the following formats: laboratory demonstrations, computer simulations and lectures. The objectives are to assist the new student in selecting his/her area of dissertation research and acquainting the new student with the department research resources. LEC.

PHSL 834. Reproductive Physiology. 5 Hours.
All aspects of reproductive physiology including an in depth study of ovarian and testicular development/function, neuroendocrine development/function, implantation, placentation, puberty, pregnancy and fertility regulation are covered. Historical and current scientific literature will be used to support a graduate level text and didactic lectures. Prerequisite: a general endocrinology/physiology course, an equivalent course and/or consent of instructor. LEC.

PHSL 835. Integrative Physiology of Exercise. 3 Hours.
To understand how the major physiological systems of the body respond to exercise with an emphasis on integration and function. Historical and current scientific literature will be used to generate discussion and support didactic material. Fundamentals of exercise physiology will be covered, but a background in exercise physiology is not required. Prerequisite: a general physiology course, an equivalent course and/or consent of instructor. LEC.

PHSL 838. Advanced Topics. 1-3 Hours.
Special studies designed and arranged on an individual basis to allow a student to pursue a particular subject through reading, special laboratory work, and conferences with a senior staff member. LEC.

PHSL 840. Advanced Genetic Analysis. 3 Hours.
This course will focus on principles that underlie genetic analysis, including mutation, complementation, recombination, segregation, and regulation. The genetics of commonly used model organisms such as yeast, flies, worms and mice will be examined, classic genetic screens performed to study phage assembly, cell cycle regulation, sex determination and X-chromosome inactivation will be discussed and modern-day techniques used to study inheritance and gene function in various systems will be analyzed. Human genetic analysis will also be covered, including population genetics, techniques for gene mapping, inherited diseases, genetic testing and gene therapy. Through reading and discussion of scientific literature and problem-based homework and exams, students will learn how to evaluate and interpret genetic data as well as develop and design genetic strategies to solve current biological problems. Prerequisite: Completion of IGPBS Core Curriculum or equivalent, or permission of Course Director. LEC.

PHSL 842. Comprehensive Human Physiology. 5 Hours.
Advanced course on modern human physiology. The course focuses on organ systems of the human body including nervous, cardiovascular, endocrine, digestive, respiratory, reproductive and urinary systems. This course emphasizes the use of modern experimental approaches that take advantage of cellular and molecular technologies. Prerequisite: NONE LEC.

PHSL 844. Neurophysiology. 3 Hours.
Somatosensory, motor and cognitive function of the brain will be discussed using a combination of lecture and student presentation formats. Current issues and evidence underlying accepted concepts and mechanisms will be emphasized. (Same as NURO 844.) Prerequisite: Introductory course in neuroscience and consent of instructor. LEC.

PHSL 846. Advanced Neuroscience. 5 Hours.
Team taught, in-depth neuroscience course focusing on normal and diseased brain function at the molecular, cellular and systems levels. Lectures and discussions will emphasize current issues in neuroscience research. (Same as ANAT 846, PHCL 846 and NURO 846). Prerequisite: Permission of course director. LEC.

PHSL 847. Developmental Neurobiology. 2 Hours.
Development of the nervous system from early induction to the development of learning and memory. Topics include: Induction; Cellular Differentiation; Axon Growth and Guidance; Target Selection; Cell Survival and Growth; Synapse Formation; Synapse Elimination; and Development of Behavior. (Same as ANAT 847 and NURO 847.) Prerequisite: Advanced Neuroscience (ANAT 846; NURO 846; PHSL 846) or consent of instructor. LEC.

PHSL 848. Molecular Mechanisms of Neurological Disorders. 3 Hours.
An in-depth coverage of pathogenic mechanisms in neurological diseases: cellular and molecular responses to brain injury and disease, neuroinflammatory diseases (e.g., multiple sclerosis), neurodegenerative diseases (e.g., Alzheimer’s, Parkinson’s, Huntington’s, amyotrophic lateral sclerosis, and prion diseases), neurogenetic diseases (e.g., lysosomal and peroxisomal disorders, Down’s syndrome and fragile X), trauma, stroke, and viral diseases (e.g., HIV encephalitis). (Same as ANAT 848, NURO 848, and PHCL 848.) Prerequisite: Advanced Neuroscience (ANAT 846, PHCL 846 or PHSL 846) or an equivalent course and consent of instructor. LEC.

PHSL 850. Research. 1-10 Hours.
Original laboratory investigation conducted under the supervision of a senior staff member. RSH.

PHSL 851. Seminar. 1 Hour.
Student participation (attendance and presentation) in weekly Departmental seminar series. The topics examined in these seminars are dictated by the interests of students and staff. Prerequisite: student must have passed their oral comprehensive exam. LEC.

PHSL 899. Master’s Thesis. 1-5 Hours.
Preparation of the formal thesis based on library research or independent research and in partial fulfillment of the requirements for the master's
degree. Credits will be given only after the thesis has been accepted by the student's thesis committee. THE.

**PHSL 999. Doctoral Dissertation. 1-10 Hours.**
Preparation of the Dissertation based on original research and in partial fulfillment of the requirements for the Ph.D. degree. Credits will be given only after the dissertation has been accepted by the student's dissertation committee. THE.

**Master of Science in Molecular and Integrative Physiology**

The Master of Science (M.S.) in Molecular and Integrative Physiology prepares the student for a career at the advanced technical level in academia, industry or government. It may also lead to teaching positions at the secondary or junior college level.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2126) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

**Admission Requirements:**

- Bachelor's degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.
  Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor's degree.

- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395).

- A background check (p. 2395) is required during the admission process; it may affect the student's eligibility to enter the program.

- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895.

- Three letters of recommendation.

- Prerequisite coursework:

  - One year of general chemistry
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  - One year of biological sciences
  - One semester of calculus
  - One semester of physics

  Research experience (beyond labs associated with lecture courses) is strongly suggested.

Applicants will be assessed based on a combination of GPA, research experience, and GRE scores. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs».

**Degree requirements:**

- Degree requirements are normally completed within 3 years of admission to the program although a maximum of 7 years is allowed.

- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.

- Completion of a minimum of 30 credit hours.

- Enrollment in a minimum of one (1) credit hour of PHSL 899 Master's Thesis the semester the student will defend thesis and graduate.

- Successful completion of the thesis defense (p. 2398).

- Successful thesis submission and publication (p. 2398) (according to Office of Graduate Studies policy.)

- Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2126) courses (or their equivalent):

  - GSMC 850 Proteins and Metabolism 2
  - GSMC 851 Molecular Genetics 2
  - GSMC 852 Introduction to Biomedical Research I 2
  - GSMC 853 Cellular Structure 2
  - GSMC 854 Cell Communication 2
  - GSMC 855 Introduction to Biomedical Research II 2
  - GSMC 856 Introduction to Research Ethics 1
  - GSMC 857 Biographics 1
  - GSMC 858 Introduction to Faculty Research 1
  - GSMC 859 Research Rotations 1-4

- Successful completion of the following Physiology courses:

  - PHSL 842 Comprehensive Human Physiology (or equivalent) 5
  - PHSL 850 Research 1-10
  - PHSL 899 Master's Thesis 1-5

- Successful completion of elective coursework as determined in consultation with the student's advisor.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program.

**Typical Plan of Study**

**Year 1**

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<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
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Doctor of Philosophy in Molecular and Integrative Physiology

The Ph.D. in Molecular and Integrative Physiology prepares the student for a career in independent research in the broad area of Physiology. The Ph.D. is most often followed by one or more years of postdoctoral training in a specific area of research. Acquisition of a Ph.D. in Molecular and Integrative Physiology allows the individual to pursue positions in industry or government and following postdoctoral experience opportunities are available at the college or university level.

Upon acceptance into the graduate program in Molecular and Integrative Physiology, the student will select a research track for their subsequent studies. There are three different tracks available to the student:

- Cellular & Integrative Physiology
- Neuroscience
- Reproduction & Development

Each track has specialized curriculum requirements that must be followed for degree completion.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2126) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

Admission Requirements:

- Bachelor's degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.
- A cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale for the bachelor's degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395).
- A background check (p. 2395) is required during the admission process; it may affect the student's eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895.
- Three letters of recommendation.
- Prerequisite coursework:
  - One year of general chemistry
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  - One year of biological sciences
  - One semester of calculus
  - One semester of physics
- Research experience (beyond labs associated with lecture courses) is strongly suggested.

Applicants will be assessed based on a combination of GPA, research experience, and GRE scores. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs can be found here.

The program consists of coursework, research experience, and the successful completion of a doctoral dissertation. Dissertation research culminates in a final dissertation examination consisting of an oral presentation by the candidate and an examination by the faculty. Relevant prior graduate work is taken into consideration in setting up individual programs of study leading to the Ph.D.

Degree Requirements:

- Degree requirements are normally completed within 6 years of admission to the program although a maximum of 8 years is allowed.
- Cumulative grade-point average (GPA) of at least 3.0 for all KU graduate coursework.
- Successful completion of the University's Research Skills and Responsible Scholarship (p. 2398) requirement prior to the semester the Oral Comprehensive Examination is scheduled.
  - Successful completion of GSMC 852 Biographics, GSMC 852 and GSMC 855 Introduction to Biomedical Research I and II (or equivalent) meets the Research Skills requirement.
  - Successful completion of GSMC 856 Introduction to Research Ethics (or equivalent) meets the Responsible Scholarship requirement.
- Successful completion of the Residence Requirement (p. 2398) by enrollment in full-time status a minimum of two semesters prior to the semester the Oral Comprehensive Examination is scheduled.
• Successful completion of the Oral Comprehensive Examination (p. 2398). Students are recognized as formal doctoral candidates after they have passed the comprehensive examination.

• Successful completion of the Post-Comprehensive Enrollment (p. 2398) requirement.

• Enrollment in a minimum of one (1) credit hour of PHSL 999 Doctoral Dissertation the semester the student will defend dissertation and graduate.

• Successful completion of the Final Oral Examination (dissertation defense.)

• Successful completion of the Final Oral Examination (p. 2398).

• Successful Dissertation Submission and Publication (p. 2398) (according to Office of Graduate Studies policy.)

• Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2126) courses (or their equivalent):

  GSMC 850 Proteins and Metabolism 2
  GSMC 851 Molecular Genetics 2
  GSMC 852 Introduction to Biomedical Research I 2
  GSMC 853 Cellular Structure 2
  GSMC 854 Cell Communication 2
  GSMC 855 Introduction to Biomedical Research II 2
  GSMC 856 Introduction to Research Ethics 1
  GSMC 857 Biographics 1
  GSMC 858 Introduction to Faculty Research 1
  GSMC 859 Research Rotations 1-4

• Successful completion of the following Physiology courses:

  PHSL 842 Comprehensive Human Physiology (or equivalent) 5
  PHSL 850 Research 1-10
  PHSL 851 Seminar 1
  PHSL 999 Doctoral Dissertation 1-10

• Successful completion of track-specific requirements. Choose from one of the three tracks: Cellular & Integrative Physiology, Neuroscience or Reproduction & Development in consultation with the student's advisor.

  • Cellular & Integrative Physiology
    • Minimum of six (6) credit hours of electives. Choose from the following courses:
      PHSL 835 Integrative Physiology of Exercise 3
      or PHSL 838 Advanced Topics
      or PHSL 840 Advanced Genetic Analysis
      or CBIO 800 Mechanisms of Tumor Development and Progression: Colloquium Format
      or CBIO 900 Carcinogenesis and Cancer Biology
      or other electives with approval by Graduate Director

  • Neuroscience
    • Minimum of six (6) credit hours of electives. Choose from the following courses:
      PHSL 844 Neurophysiology 3
      or PHSL 846 Advanced Neuroscience
      or PHSL 847 Developmental Neurobiology

or PHSL 848 Molecular Mechanisms of Neurological Disorders or other electives with approval by Graduate Director

• Reproduction & Development
  • Minimum of six (6) credit hours of electives. Choose from the following courses:
    PHSL 834 Reproductive Physiology 5
    and other electives with approval by Graduate Director

Students enrolled in the MD-PhD Physician Scientist Training Program should review the Degree Requirements (http://catalog.ku.edu/medicine/combined-md-phd/#degreerequirementstext) section of this catalog for that program.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program.

**Typical Plan of Study**

**Year 1**

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<th>Year 1</th>
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Neurosciences Program

The KU-L/KUMC bicampus Neuroscience Graduate Program (http://www.neuroscience.ku.edu) is designed to prepare the student for a research and/or teaching career with concentrations in neuroscience. The program emphasizes research and the skills and knowledge required to perform and communicate the results of research. Modern neuroscience researchers/educators must be versed in a number of areas: affecting these processes and current research on receptor isolation and receptor mechanisms will be discussed from a chemical viewpoint. A detailed study of the molecular aspects of nerve transmission will be covered with special emphasis on the uptake, storage, release, biosynthesis, and metabolism of specific neurotransmitters. Drugs affecting these processes and current research on receptor isolation and receptor mechanisms will be discussed from a chemical viewpoint. (Same as BIOL 775, CHEM 775, MDCM 775, PTX 775, and PHCH 775.) Prerequisite: BIOL 435 (Introduction to Neurobiology), or consent of instructor. LEC.

NURO 775. Chemistry of the Nervous System. 3 Hours.

The course will build an in depth knowledge about basic mechanisms of synaptic communication among nerve cells and their targets, and the structure and function of nervous systems. Topics will include nervous system development and synapse formation, structure and function of neurons, physiological and molecular basis of synaptic communication between neurons, mechanisms of synaptic plasticity involved in learning and memory, sensory systems (vision, auditory, vestibular, motor reflexes and pain), processing of neural information at cellular and system levels, synapse regeneration and diseases of the nervous system. Prerequisite: BIOL 435 (Introduction to Neurobiology), or consent of instructor. LEC.

NURO 799. Neuroscience Seminar Series. 2 Hours.

Presentations of research papers by faculty, post-doctoral research associates, and graduate students. All graduate students in the Neuroscience program participate in this seminar series throughout their period of training. Each student has to present a seminar once every semester. Presentations by students are evaluated by other graduate students and faculty at the end of each seminar. Prerequisite: Graduate standing in the Neuroscience program. LEC.
NURO 800. Neuroscience Teaching Principles. 2 Hours.
This course is to be used by graduate students fulfilling the teaching requirements for the Ph.D. in Neuroscience. The student will function as a discussion leader and lecturer in a limited number of class sessions. Each student will meet with faculty whom he or she is assisting in preparation of presentation materials and tests. Each student will be evaluated by the faculty mentor and by the students in the class taught. Prerequisite: Graduate standing in Neuroscience. LEC.

NURO 801. Issues in Scientific Integrity. 1 Hour.
Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis on practical topics of special importance in molecular-level research in the chemical, biological, and pharmaceutical sciences. Topics will include the nature of ethics, the scientist in the laboratory, the scientist as author, grantee, reviewer, employer/employee, teacher, student, and citizen. Discussions will focus on case histories. Graded on a satisfactory/unsatisfactory basis. (Same as MDCM 801, PTX 801, PHCH 801 and PHCH 802.) Prerequisite: Graduate standing in the Neuroscience program. LEC.

NURO 825. Research in Neuroscience. 1-10 Hours.
Original investigations at an advanced level in the areas of neuroscience. The research by each student will be performed in the laboratory of one of the faculty mentors of the graduate program in Neuroscience. Prerequisite: Graduate standing in the Neuroscience program. LEC.

NURO 844. Neurophysiology. 3 Hours.
Somatosensory, motor and cognitive function of the brain will be discussed using a combination of lecture and student presentation formats. Current issues and evidence underlying accepted concepts and mechanisms will be emphasized. (Same as PHSL 844.) Prerequisite: PHSL 846 or equivalent and consent of instructor. LEC.

NURO 846. Advanced Neuroscience. 5 Hours.
Team-taught, in-depth neuroscience course focusing on normal and diseased brain function at the molecular, cellular and systems levels. Lectures and discussions will emphasize current issues in neuroscience research. (Same as ANAT 846, PHCL 846, and PHSL 846.) Prerequisite: Permission of the course instructor. LEC.

NURO 847. Developmental Neurobiology. 2 Hours.
Development of the nervous system from early induction to the development of learning and memory. Topics include: Induction; Cellular Differentiation; Axon Growth and Guidance; Target Selection; Cell Survival and Growth; Synapse Formation; Synapse Elimination; and Development of Behavior. (Same as ANAT 847 and PHSL 847.) Prerequisite: Advanced Neuroscience (ANAT 846; NURO 846; PHSL 846) or consent of instructor. LEC.

NURO 848. Molecular Mechanisms of Neurological Disorders. 3 Hours.
An in-depth coverage of pathogenic mechanisms in neurological diseases; cellular and molecular responses to brain injury and disease, neuroinflammatory diseases (e.g., multiple sclerosis), neurodegenerative diseases (e.g., Alzheimer's, Parkinson's, Huntington's, amyotrophic lateral sclerosis, and prion diseases), neurogenetic diseases (e.g., lysosomal and peroxisomal disorders, Down's syndrome and fragile X), trauma, stroke, and viral diseases (e.g., HIV encephalitis). (Same as ANAT 848, PHCL 848, and PHSL 848.) Prerequisite: Advanced Neuroscience (ANAT 846, PHCL 846 or PHSL 846) or an equivalent course and consent of instructor. LEC.

Hours and credit for this course to be arranged with the mentor. Independent investigation of a research problem in neuroscience, but of limited scope. Prerequisite: Graduate standing in the Neuroscience program and consent of mentor/instructor. THE.

Hours and credit for this course to be arranged with the mentor. Conduct of original investigation in neurosciences. Prerequisite: Graduate standing in the Neuroscience program post-oral comprehensive examination and consent of mentor/instructor. THE.

Master of Science in Neurosciences

The Neuroscience Master's program is a bi-campus graduate program that incorporates neuroscience faculty at the KU main campus in Lawrence and the KU Medical Center (KUMC). Neuroscience graduate students that matriculate at KUMC participate in the integrated IGPBS graduate program their first year and have the option of taking selected courses on the main campus after their first year. Students on the Lawrence campus take neuroscience courses on the Lawrence campus, but also participate in courses offered on the KUMC campus. Students and faculty from both campuses participate regularly via the Neuroscience Seminar series, which is conducted by video conference.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2126) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

Admission Requirements:

• Bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.

Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

• A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor’s degree.

• Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395).

• A background check (p. 2395) is required during the admission process; it may affect the student's eligibility to enter the program.

• An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895.

• Three letters of recommendation.

• Prerequisite coursework:

  • One year of general chemistry

  • One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry

  • One year of biological sciences

  • One semester of calculus

  • One semester of physics

• Research experience (beyond labs associated with lecture courses) is strongly suggested.
Applicants will be assessed based on a combination of GPA, research experience, and GRE scores. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs ».

**Degree Requirements:**

- Degree requirements are normally completed within 3 years of admission to the program although a maximum of 7 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Completion of a minimum of 30 credit hours.
- Enrollment in a minimum of one (1) credit hour the semester the student will graduate.
- Successful completion of either a thesis defense or general examination (p. 2398) the semester the student will graduate.
- If thesis option is chosen, then enrollment in a minimum of one (1) credit hour of NURO 899 Neuroscience Master's Thesis and successful thesis submission and publication (p. 2398) (according to Office of Graduate Studies policy.)
- Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2126) courses (or their equivalent):
  - GSMC 850 Proteins and Metabolism 2
  - GSMC 851 Molecular Genetics 2
  - GSMC 852 Introduction to Biomedical Research I 2
  - GSMC 853 Cellular Structure 2
  - GSMC 854 Cell Communication 2
  - GSMC 855 Introduction to Biomedical Research II 2
  - GSMC 856 Introduction to Research Ethics 1
  - GSMC 857 Biographics 1
  - GSMC 858 Introduction to Faculty Research 1
  - GSMC 859 Research Rotations 1-4
- Successful completion of the following Neuroscience courses:
  - NURO 799 Neuroscience Seminar Series 2
  - NURO 899 Neuroscience Master's Thesis (if thesis option chosen) 1-11
  - ANAT 990 Doctoral Research 1-12
- Optional elective course as determined in consultation with the student’s advisor
  - ANAT 846 Advanced Neuroscience 5

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program.

**Typical Plan of Study**

**Year 1**

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<th>Semester</th>
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**Year 3**

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Thesis defense or general examination scheduled semester approved by committee to graduate.
Enroll in NURO 899 if thesis option chosen otherwise enroll in NURO 990.

| 1-6 | 1-6 | 1-6 |

**Total Hours: 11-59**

**Doctor of Philosophy in Neurosciences**

The KU-L/KUMC bicampus Neuroscience Graduate Program (http://www.neuroscience.ku.edu) is designed to prepare the student for a research and/or teaching career with concentrations in neuroscience. The program emphasizes research and the skills and knowledge required to perform and communicate the results of research. Modern neuroscience researchers/educators must be versed in a number of areas of neural research, spanning from molecular neuroscience to systems neuroscience. As such, the course of study in the program is broadly based; you are encouraged to enroll in courses offered by other programs.
or departments. The research opportunities in the program are widely varied and will accommodate many interests.

Nearly all Ph.D. students in the Neuroscience Graduate Program at the KU School of Medicine are admitted into the Interdisciplinary Graduate Program in the Biomedical Sciences (IGPBS). After the initial year of course work, students choose a neuroscience research mentor and then join the laboratory of the mentor. Coursework for the Neuroscience Graduate Program is offered at the KU Medical Center campus in Kansas City, Kansas as well as the University of Kansas in Lawrence. Several courses are taught on both campuses via videoconferencing. Comprehensive Exams for all students must be completed by the fall of the 3rd year in Graduate School. The program on the KUMC campus is directed by the KUMC Neuroscience Graduate Studies Committee consisting of the following faculty:

**KUMC Graduate Studies Committee Members:**
- Douglas Wright, PhD
- Dianne Durham, PhD
- John Stanford, PhD

Applications may be made online at: Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS) (http://www.kumc.edu/igpbs.html).

Inquires related to the KUMC portion of the program may be directed to the Program Director:
- Douglas Wright, Ph.D.
- Professor
- Director, Neuroscience Graduate Program, KUMC Campus
- Department of Anatomy & Cell Biology
- University of Kansas Medical Center
- Kansas City, KS 66160
- 913-588-2713 (office)
- 913-588-2710 (fax)
- dwright@kumc.edu (mpetroff@kumc.edu)

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

### Admission Requirements:

- Bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.
  - Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor’s degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395).
- A background check (p. 2395) is required during the admission process; it may affect the student’s eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895.
- Three letters of recommendation.
- Prerequisite coursework:
  - One year of general chemistry
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  - One year of biological sciences
  - One semester of calculus
  - One semester of physics
- Research experience (beyond labs associated with lecture courses) is strongly suggested.

Applicants will be assessed based on a combination of GPA, research experience, and GRE scores. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. *Other years’ catalogs*.

The program consists of coursework, research experience, and the successful completion of a doctoral dissertation. Dissertation research culminates in a final dissertation examination consisting of an oral presentation by the candidate and an examination by the faculty. Relevant prior graduate work is taken into consideration in setting up individual programs of study leading to the Ph.D.

### Degree Requirements:

- Degree requirements normally are completed within 5 years of admission to the program although a maximum of 8 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Successful completion of the University’s Research Skills and Responsible Scholarship (p. 2398) requirement prior to the semester the Oral Comprehensive Examination is scheduled.
  - Successful completion of GSMC 857 Biographics, GSMC 852 and GSMC 855 Introduction to Biomedical Research I and II (or equivalent) meets the Research Skills requirement.
- Successful completion of GSMC 856 Introduction to Research Ethics (or equivalent) meets the Responsible Scholarship requirement.
- Successful completion of the Residence Requirement (p. 2398) prior to the semester the Oral Comprehensive Examination is scheduled. The requirement is met by enrollment in full-time status a minimum of two semesters.
- Successful completion of the Oral Comprehensive Examination (p. 2398). Students are recognized as formal doctoral candidates after they have passed the comprehensive examination.
- Successful completion of Post-Comprehensive Enrollment (p. 2398) requirement.
• Enrollment in a minimum of one (1) credit hour of dissertation NURO 999 Neuroscience Doctoral Dissertation the semester the student will defend dissertation and graduate.

• Successful completion of the Final Oral Examination (p. 2398) (dissertation defense.)

• Successful Dissertation Submission and Publication (p. 2398) (according to Office of Graduate Studies policy.)

• Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS (p. 2126)) courses (or their equivalent):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>Proteins and Metabolism</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>Molecular Genetics</td>
<td>2</td>
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<tr>
<td>GSMC 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 853</td>
<td>Cellular Structure</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 854</td>
<td>Cell Communication</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 855</td>
<td>Introduction to Biomedical Research II</td>
<td>2</td>
</tr>
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<td>GSMC 856</td>
<td>Introduction to Research Ethics</td>
<td>1</td>
</tr>
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<td>GSMC 857</td>
<td>Biographics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 858</td>
<td>Introduction to Faculty Research</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 859</td>
<td>Research Rotations</td>
<td>1-4</td>
</tr>
</tbody>
</table>

• Successful completion of the following Neuroscience courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURO 799</td>
<td>Neuroscience Seminar Series</td>
<td>2</td>
</tr>
<tr>
<td>ANAT 990</td>
<td>Doctoral Research</td>
<td>1-12</td>
</tr>
<tr>
<td>NURO 999</td>
<td>Neuroscience Doctoral Dissertation</td>
<td>1-11</td>
</tr>
</tbody>
</table>

• Successful completion of neuroscience related elective coursework as determined in consultation with the student's advisor and the graduate director. Options include the courses listed below as well as several neuroscience courses offered on the Lawrence campus.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 846</td>
<td>Advanced Neuroscience</td>
<td>5</td>
</tr>
<tr>
<td>ANAT 847</td>
<td>Developmental Neurobiology</td>
<td>2</td>
</tr>
<tr>
<td>PHSL 844</td>
<td>Neurophysiology</td>
<td>3</td>
</tr>
<tr>
<td>PHSL 848</td>
<td>Molecular Mechanisms of Neurological Disorders</td>
<td>3</td>
</tr>
</tbody>
</table>

Students enrolled in the MD-PhD Physician Scientist Training Program should review the Degree Requirements (http://catalog.ku.edu/medicine/combined-md-phd/#degreerequirementstext) section of this catalog for that program.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program.

Typical Plan of Study

Year 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GSMC 850</td>
<td>2</td>
<td>GSMC 853</td>
<td>2</td>
<td>GSMC 859</td>
<td>1-4</td>
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</table>

Total Hours: 19-30

Year 2

<table>
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<tr>
<th>Year</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>NURO 799</td>
<td>2</td>
<td>NURO 799</td>
<td>2</td>
<td>NURO 799</td>
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<td>ANAT 990</td>
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<td>ANAT 846</td>
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</table>

Oral Comprehensive Exam may be scheduled as early as this semester if approved by committee to proceed.

Year 3

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ANAT 990</td>
<td>1-12</td>
<td>ANAT 990</td>
<td>1-12</td>
<td>ANAT 990</td>
<td>1-12</td>
</tr>
</tbody>
</table>

Year 4

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<tbody>
<tr>
<td></td>
<td>ANAT 990</td>
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<td>ANAT 990</td>
<td>1-12</td>
<td>ANAT 990</td>
<td>1-12</td>
</tr>
</tbody>
</table>

Year 5

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NURO 999</td>
<td>1</td>
<td>NURO 999</td>
<td>1</td>
<td>NURO 999</td>
<td>1</td>
</tr>
</tbody>
</table>

Final Oral Exam (dissertation defense) scheduled semester approved by committee to defend and graduate.

Total Hours: 23-122
Department of Pathology & Laboratory Medicine

The Department of Pathology & Laboratory Medicine crosses the bridge between basic science and clinical practice and involves the study and diagnosis of disease. We emphasize innovative, service-oriented programs that encompass a full spectrum of medical practice. Our Mission is to provide excellent teaching, research, patient care and community service and to meet the health needs of Kansas and the community at large. Our Aim is to provide a supportive work environment so that each individual can excel and pursue avenues that lead to recognition within the medical community and benefit healthcare at large.

The Department provides vital patient services to the Hospital, Greater Kansas City Metropolitan Area and outlying medical facilities through our clinical laboratory (http://www.kumc.edu/school-of-medicine/pathology/clinical-services.html) and anatomic (surgical) services (http://www.kumc.edu/school-of-medicine/pathology/anatomicsurgical-services.html). Faculty are board-accredited and the department provides a full spectrum of subspecialized expertise. The clinical laboratory processes over 3 million samples per year including the services of robotic automation and is accredited by the American Association of Blood Banks (AABB) (http://www.aabb.org/Pages/Homepage.aspx), College of American Pathologists (CAP) (http://www.cap.org/apps/cap.portal) and Foundation for the Accreditation of Cellular Therapy (FACT) (http://www.factwebsite.org). The core laboratory reviews over 30,000 surgical accessions and 10,000 surgical specimens per year, reflecting 9% year over year case growth; cytopathologists review 12,500 accessions per year. 2,300 bone marrow accessions are reviewed per year. The Department provides material to the University of Kansas Cancer Center’s Biospecimen Tissue Laboratory towards ongoing research and development of new and improved treatment modalities.

Basic Science research is conducted through our Division of Cancer & Developmental Biology (http://www.kumc.edu/school-of-medicine/pathology/researchbasic-science.html) and includes cancer biology, developmental biology and cell differentiation, stem cell biology and microbial and viral pathogenesis. Our laboratories are supported by external funding from sources including the NIH (http://www.nih.gov) as well as private resources; faculty and laboratories reside on both sides of the state line at the KUMC (http://www.kumc.edu) and Stowers Institute (http://www.stowers.org) campuses. Faculty numbers have increased dramatically since 2004, from 3 (2 at Stowers) in 2004 to 24 (5 at Stowers) in 2014.

The Department is committed to education (http://www.kumc.edu/school-of-medicine/pathology/education-programs.html) through its basic science research, medical and continuing medical education programs. Basic Science education is sponsored through our Graduate Program (http://www.kumc.edu/school-of-medicine/pathology/basic-science-graduate-program.html) and Postdoctoral programs and has grown commensurate with division laboratory expansion; there are currently 19 graduate students and 16 postdoctoral fellows enrolled in basic science programs and labs. Medical education is supported by our clinical and anatomic faculty and includes residency and postdoctoral hematopathology, surgical and cytopathology fellowships, post-sophomore fellowships, phase II elective rotations and phase I teaching services to the University of Kansas’ School of Medicine. Board accredited Continuing Medical Education is supported through a monthly Grand Rounds series that emphasizes current, applicable clinical and research topics; the department as well provides endowed subspecialty lectureships. Both

our research and clinical/anatomic divisions provide regularly scheduled programs targeting cutting-edge basic science, subspecialized pathology topics and translational research, encouraging advancement of patient care.

Please refer to pages included in this catalog on both Master of Science and Doctor of Philosophy in Pathology for additional information regarding each program.

Courses

PATH 800. General Pathology. 7 Hours.
The basic mechanisms of human disease, including cellular pathology, inflammation, diseases of immunity, neoplasia, infectious and circulatory diseases and aging are considered through the mechanisms of lectures, small-group problem based care study and autopsy demonstration. Prerequisite: Courses in cell biology, biochemistry, and physiology, or equivalents. LEC.

PATH 801. Systemic Pathology. 9 Hours.
Human disease is studied by organ systems to include cardiovascular, hematologic, renal, respiratory, gastrointestinal, genitourinary, musculoskeletal, endocrine, and nervous system diseases. The pathobiology of all major diseases occurring within each organ system are considered by lectures, problem based case study and autopsy participation. Since final comprehensive examination at the end of Pathology II will include material from both Pathology I and Pathology II. Prerequisite: Successful completion of Pathology LEC.

PATH 802. Special Pathology. 6 Hours.
A detailed study of diseases involving the endocrine, genitourinary, neuromuscular, and skeletal systems. Prerequisite: PATH 800 and courses in histology, biochemistry, and physiology, or equivalent. LEC.

PATH 803. Stem Cell Biology. 2 Hours.
Current concepts in the study of stem cells and the clinical potential in modern disease treatment. Students will learn concepts of stem cells: origin, regulation of pluripotency, and differentiative potential; experimental isolation and manipulation; and clinical application of isolated stem cells. Current scientific literature will be used to highlight recent advances in stem cell biology. Special emphasis will be placed on the ethical and legal issues surrounding the use of stem cells of both adult and embryonic origin. Prerequisite: Course in cell biology; consent of instructor. LEC.

PATH 804. Selected Topics in Signal Transduction. 1 Hour.
A survey of the basic principles and contemporary literature of signal transduction pathways involved in cancer development and developmental biology. Faculty lecture and student presentations will address selected topics in cellular signal transduction. Student seminars will focus on the scientific content of the publication with emphasis on appropriate presentation of background information, experimental methods, results and potential future directions. Critical discussion of papers will be provided by participating students and faculty. Prerequisite: Course in Molecular Biology. LEC.

PATH 805. Seminars in Pathology. 1 Hour.
Presentation of Pathology Department graduate student research-in-progress. Students will conduct a one-hour seminar in which updates of their current research project(s) in pathology will be reported. The seminars are interactive and students are encouraged to participate in discussion of the presented work. Prerequisite: Completion of the IGPBS core curriculum and status as a second-year graduate student; consent of instructor. RSC.
PATH 899. Master’s Thesis. 1-7 Hours.
THE.

PATH 903. Pathology Techniques Laboratory. 1-3 Hours.
A laboratory course in which students may select no more than three of the following: electron microscopy, fluorescence microscopy, cell typing, morphometrics, immunohistochemistry, flow cytometry, DNA probe, autopsy technique. LAB.

PATH 905. Cellular Biology and Pathophysiology of Bone. 3-5 Hours.
Normal bone development, ultrastructure of bone, and the calcification mechanism. Developmental and genetic abnormalities of bone including dwarfism and osteogenesis imperfecta. Metabolic bone diseases including osteoporosis, Paget's disease and osteomalacia. Methods of diagnosis by morphometry of undecalcified bone biopsy. Common primary bone tumors, and the mechanism of bone loss or bone over growth caused by metastatic malignant tumors. There will be practical laboratory portion. Prerequisite: PATH 800 or permission of instructor. LAB.

PATH 907. Infection and Immunity. 1 Hour.
Microbial factors, host reaction, and disease. Emphasis on recovery from infection, response to reinfection, the resultant clearance of microbes, or the development of chronic infection. Hypersensitivity phenomena will also be considered in the light of data from transplantation immunity. Prerequisite: PATH 800. LAB.

PATH 911. Research in Pathology. 1-10 Hours.
RSH.

PATH 912. Advanced Topics. 1-3 Hours.
Offered by arrangement. Prerequisite: Approval of the instructor and completion of the IGPBS core curriculum or its equivalent. IND.

PATH 913. Introduction to Grant Proposal Writing. 1 Hour.
This course will teach the fundamentals of writing a grant proposal with an emphasis on NIH proposals. This course is open to any graduate students interested in applying for pre-doctoral fellowships, and especially to graduate students in the Department of Pathology who will be conducting their comprehensive qualifying exams in the upcoming year. This course involves a combination of didactic lectures, student coursework and discussion. This course will include different principal investigators from the Pathology Department as guest speakers. Topics will include different sources of funding, grant submission and post-submission review process. However, the core component of this course will involve teaching the basic framework and components of an NIH R01 application. This course is designed to give practical structural guidance in scientific writing at a professional level and does not give guidance on specific research projects. Prerequisites: IGPBS coursework or equivalent, permission of instructor. LEC.

PATH 915. Advanced Pathology. 3 Hours.
A lecture and literature review course in which molecular, subcellular, and supracellular organization and function are considered in normal and disease states. Prerequisite: PATH 800. LEC.

PATH 939. Carcinogenesis and Cancer Biology. 3 Hours.

PATH 999. Doctoral Dissertation. 1-7 Hours.
THE.

Master of Science in Pathology

The Master of Science in Pathology provides comprehensive training in understanding the molecular basis of disease and the fundamental mechanisms of cell growth and differentiation. It prepares the student for either a career in advanced academia or lays the base for continued terminal education. It may also lead to teaching positions at the secondary or junior college level.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2126) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

Admission Requirements:

- Bachelor's degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.
- Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor's degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395).
- A background check (p. 2395) is required during the admission process; it may affect the student's eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895.
- Three letters of recommendation.
- Prerequisite coursework:
  - One year of general chemistry
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  - One year of biological sciences
  - One semester of calculus
  - One semester of physics
• Research experience (beyond labs associated with lecture courses) is strongly suggested.

Applicants will be assessed based on a combination of GPA, research experience, and GRE scores. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. *Other years’ catalogs*. 

### Degree requirements:

- Degree requirements are normally completed within 3 years of admission to the degree program although a maximum of 7 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Completion of a minimum of 30 credit hours.
- Enrollment in a minimum of one (1) credit hour of PATH 899 Master’s Thesis the semester the student will defend and graduate.
- Successful completion of a thesis defense (p. 2398).
- Successful thesis submission and publication (p. 2398) (according to Office of Graduate Studies policy.)
- Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2126) courses (or their equivalent):
  - GSMC 850 Proteins and Metabolism 2
  - GSMC 851 Molecular Genetics 2
  - GSMC 852 Introduction to Biomedical Research I 2
  - GSMC 853 Cellular Structure 2
  - GSMC 854 Cell Communication 2
  - GSMC 855 Introduction to Biomedical Research II 2
  - GSMC 856 Introduction to Research Ethics 1
  - GSMC 857 Biographies 1
  - GSMC 858 Introduction to Faculty Research 1
  - GSMC 859 Research Rotations 1-4

- Successful completion of the following Pathology courses:
  - PATH 804 Selected Topics in Signal Transduction 1
  - PATH 805 Seminars in Pathology 1
  - PATH 911 Research in Pathology 1-10
  - PATH 899 Master’s Thesis 1-7

- Successful completion of a minimum of four (4) credit hours of advanced graduate coursework in fields related to molecular and cellular biology and experimental pathology. Specific courses determined in consultation with the student’s mentor. Recommended courses include but are not limited to:
  - PATH 803 Stem Cell Biology 2
  - PATH 806 Epigenetics 2
  - PATH 912 Advanced Topics 1-3
  - PATH 913 Introduction to Grant Proposal Writing 1
  - ANAT 868 Advanced Developmental Biology 2
  - BCHM 922 Advanced Molecular Genetics 3

- Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2126) courses (or their equivalent):
  - CBIO 900 Carcinogenesis and Cancer Biology 3
  - PHSL 834 Reproductive Physiology 5

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program.

### Typical Plan of Study

#### Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>2</td>
<td>GSMC 853</td>
<td>2</td>
<td>GSMC 859</td>
<td>1-4</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>2</td>
<td>GSMC 854</td>
<td>2</td>
<td>May take an elective course from the student's chosen degree program in consultation with the student's advisor.</td>
<td></td>
</tr>
<tr>
<td>GSMC 852</td>
<td>2</td>
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<td>1-3</td>
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<td>GSMC 859</td>
<td>1-4</td>
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**Total Hours: 19-30**

#### Year 2

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<tr>
<th>Fall</th>
<th>Hours</th>
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<th>Hours</th>
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<td>PATH 805 (required)</td>
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<td>PATH 911 (required)</td>
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<td>1-10 PATH 912 (elective)</td>
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<td>Electives</td>
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**Year: 3-10**

#### Year 3

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<th>Hours</th>
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<tbody>
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<td>PATH 805 (required)</td>
<td>1</td>
</tr>
<tr>
<td>PATH 899 or 911 (required)</td>
<td>1-6 PATH 899 (required)</td>
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<td>Electives</td>
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</tr>
</tbody>
</table>

**Year: 3-14**

**Total: 2-6**
Doctor of Philosophy in Pathology

The Department of Pathology and Laboratory Medicine offers a graduate program leading to the PhD degree including research opportunities with emphasis on developmental biology and cell differentiation, cancer biology, stem cell biology, microbial and viral pathogenesis, gene regulation and experimental pathology. This curriculum is designed for advanced research study in molecular and cellular biology and experimental pathology.

The course requirements of the Pathology Department Graduate Program are designed to provide maximum flexibility for the student's specialized needs. Students enrolled in the program are required to take graduate coursework in fields related to molecular and experimental pathology and to choose electives from either Pathology or other Medical Center departments related to their major dissertation work. After passing the Comprehensive Examination, students will devote most of their time to laboratory experimentation and developing a research project. Substantial portions of the research efforts should result in published works in peer-reviewed scientific journals.

The Doctorate of Philosophy in Pathology and Laboratory Medicine provides comprehensive training in understanding the molecular basis of disease and the fundamental mechanisms of cell growth and differentiation. Subspecialized research interests in the arenas of cancer biology, stem cell biology and microbial and viral pathogenesis are supported through required and elective coursework and laboratory activities. A Pathology PhD will afford the student the flexibility of tailoring a course of study towards specific research interests and goals, and prepare the student for a career in advanced academia or positions in industry.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2126) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

Admission Requirements:

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- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor’s degree.

- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395).

- A background check (p. 2395) is required during the admission process; it may affect the student's eligibility to enter the program.

- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895.

- Three letters of recommendation.

- Prerequisite coursework:
  - One year of general chemistry
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  - One year of biological sciences
  - One semester of calculus
  - One semester of physics

- Research experience (beyond labs associated with lecture courses) is strongly suggested.

Applicants will be assessed based on a combination of GPA, research experience, and GRE scores. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs ».

The program consists of coursework, research experience, and the successful completion of a doctoral dissertation. Dissertation research culminates in a final dissertation examination consisting of an oral presentation by the candidate and an examination by the faculty. Relevant prior graduate work is taken into consideration in setting up individual programs of study leading to the PhD.

Degree requirements:

- Degree requirements are normally completed within 5 years of admission to the program although a maximum of 8 years is allowed.

- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.

- Successful completion of the University’s Research Skills and Responsible Scholarship (p. 2398) requirement prior to the semester the Oral Comprehensive Examination is scheduled.

- Successful completion of GSMC 857 Biographics, GSMC 852 and GSMC 855 Introduction to Biomedical Research 1 and II (or equivalent) meets the Research Skills requirement.

- Successful completion of GSMC 856 Introduction to Research Ethics (or equivalent) meets the Responsible Scholarship requirement.

- Successful completion of the Residence Requirement (p. 2398) prior to the semester the Oral Comprehensive Examination is scheduled. The requirement is met by enrollment in full-time status a minimum of two semesters.
• Successful completion of the Oral Comprehensive Examination (p. 2398). Students are recognized as formal doctoral candidates after they have passed the comprehensive examination.

• Successful completion of the Post-Comprehensive Enrollment (p. 2398) requirement.

• Enrollment in a minimum of one (1) credit hour of PATH 999 Doctoral Dissertation the semester the student will defend dissertation and graduate.

• Successful completion of the Final Oral Examination (p. 2398) (dissertation defense.)

• Successful Dissertation Submission and Publication (p. 2398) (according to Office of Graduate Studies policy.)

• Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2126) courses (or their equivalent):
  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>Proteins and Metabolism</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>Molecular Genetics</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 853</td>
<td>Cellular Structure</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 854</td>
<td>Cell Communication</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 855</td>
<td>Introduction to Biomedical Research II</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>Introduction to Research Ethics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 857</td>
<td>Biographics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 858</td>
<td>Introduction to Faculty Research</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 859</td>
<td>Research Rotations</td>
<td>1-4</td>
</tr>
</tbody>
</table>

• Successful completion of the following Pathology courses:
  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATH 804</td>
<td>Selected Topics in Signal Transduction</td>
<td>1</td>
</tr>
<tr>
<td>PATH 805</td>
<td>Seminars in Pathology</td>
<td>1</td>
</tr>
<tr>
<td>PATH 911</td>
<td>Research in Pathology</td>
<td>1-10</td>
</tr>
<tr>
<td>PATH 999</td>
<td>Doctoral Dissertation</td>
<td>1-7</td>
</tr>
</tbody>
</table>

• Successful completion of a minimum of four (4) credit hours of advanced graduate coursework in fields related to molecular and cellular biology and experimental pathology. Specific courses determined in consultation with the student’s advisor. Recommended courses include but are not limited to:
  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATH 803</td>
<td>Stem Cell Biology</td>
<td>2</td>
</tr>
<tr>
<td>PATH 806</td>
<td>Epigenetics</td>
<td>2</td>
</tr>
<tr>
<td>PATH 912</td>
<td>Advanced Topics</td>
<td>1-3</td>
</tr>
<tr>
<td>PATH 913</td>
<td>Introduction to Grant Proposal Writing (or equivalent)</td>
<td>1</td>
</tr>
<tr>
<td>ANAT 868</td>
<td>Advanced Developmental Biology</td>
<td>2</td>
</tr>
<tr>
<td>BCHM 922</td>
<td>Advanced Molecular Genetics</td>
<td>3</td>
</tr>
<tr>
<td>CBIO 900</td>
<td>Carcinogenesis and Cancer Biology</td>
<td>3</td>
</tr>
<tr>
<td>PHSL 834</td>
<td>Reproductive Physiology</td>
<td>5</td>
</tr>
</tbody>
</table>

• Successful publication in a peer-reviewed scientific journal before completion of the degree. The journal and its impact factor is subject to the approval of the student’s mentor.

Students enrolled in the MD-PhD Physician Scientist Training Program should review the Degree Requirements (http://catalog.ku.edu/medicine/combined-md-phd/#degreerequirementstext) section of this catalog for that program.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program.

### Typical Plan of Study

#### Year 1

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>GSMC 850</td>
<td>Proteins and Metabolism</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>GSMC 851</td>
<td>Molecular Genetics</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>GSMC 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>GSMC 853</td>
<td>Cellular Structure</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>GSMC 854</td>
<td>Cell Communication</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>GSMC 855</td>
<td>Introduction to Biomedical Research II</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>GSMC 856</td>
<td>Introduction to Research Ethics</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>GSMC 857</td>
<td>Biographics</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>GSMC 858</td>
<td>Introduction to Faculty Research</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>GSMC 859</td>
<td>Research Rotations</td>
<td>1-4</td>
</tr>
</tbody>
</table>

Total Hours: 19-30

#### Year 2

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>PATH 804</td>
<td>Selected Topics in Signal Transduction</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>PATH 805</td>
<td>Seminars in Pathology</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>PATH 911</td>
<td>Research in Pathology</td>
<td>1-10</td>
</tr>
<tr>
<td></td>
<td>PATH 999</td>
<td>Doctoral Dissertation</td>
<td>1-7</td>
</tr>
</tbody>
</table>

Total Hours: 3-10

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>PATH 804</td>
<td>Selected Topics in Signal Transduction</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>PATH 805</td>
<td>Seminars in Pathology</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>PATH 911</td>
<td>Research in Pathology</td>
<td>1-6</td>
</tr>
</tbody>
</table>

Elective coursework: 1-3

Total Hours: 3-10

#### Year 3

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>PATH 804</td>
<td>Selected Topics in Signal Transduction</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>PATH 805</td>
<td>Seminars in Pathology</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>PATH 911</td>
<td>Research in Pathology</td>
<td>1-6</td>
</tr>
</tbody>
</table>

Elective coursework: 1-3

Total Hours: 3-10
Comprehensive Oral Examination may be taken during the third year with the approval and recommendation of the student’s advisory committee (normally after the 30th month in the program.)

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATH 804 (not required but recommended)</td>
<td>1 PATH 805 (required)</td>
<td>1 PATH 911 (required)</td>
<td>3-6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PATH 911 (required)</td>
<td>1-6 PATH 911 (required)</td>
<td>1-6</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Year 5</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATH 804 (not required but recommended)</td>
<td>1 PATH 805 (required)</td>
<td>1 PATH 999 (required)</td>
<td>1-6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PATH 999 (required)</td>
<td>1-6 PATH 999 (required)</td>
<td>1-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Final Oral Exam (dissertation defense) scheduled as early as this semester if approved by committee to defend and graduate. Continued enrollment required until graduate.

Total Hours: 30-92

Department of Pharmacology, Toxicology, and Therapeutics

Pharmacology and Toxicology together form a discipline that examines the interactions of chemical substances with living systems. Pharmacology focuses on the properties of drugs, including their sites of action, processing by the human body, and therapeutic uses. Toxicology studies the adverse effects of chemicals such as environmental agents and synthetic compounds, including drugs and their metabolites, and the means to prevent or treat their effects. Because the study of chemicals requires an intimate knowledge of the biological systems affected.

Pharmacology and Toxicology are by necessity an integrative discipline that studies the effects of chemicals at the molecular, cellular, organ, organismal, and population levels.

Faculty members in the Department of Pharmacology, Toxicology & Therapeutics at KUMC have diverse research interests. These research topics are essential for developing new drugs and are fundamental to determining the safety of all chemicals. Thus, our students obtain a broad educational background that prepares them for a career in research and scholarly work in a variety of settings, including academia, the pharmaceutical or biotechnology industries, or governmental agencies. Our department faculty has an excellent record of training students, and our graduates have become scientific leaders in academia, government and industry.

During the last five years, the Department faculty has undergone major changes with the addition of several tenure-track and research-track faculty, with a major focus in liver pathobiology and toxicology. This was facilitated in part by a Center of Biomedical Research Excellence (COBRE) grant from the National Institutes of Health, and has been accompanied by major new equipment purchases. The Department is been housed in state-of-the-art research space in the Hemenway Life Science Innovation Center. These resources provide an exciting environment that fosters personal and professional development in an atmosphere with ample opportunities for independent scholarship and strong collaborative activities.

Research opportunities are available for graduate students in the laboratories of faculty members throughout the department. Pharmacology faculty members have research interests in molecular and cellular neuropharmacology, neurotrauma, and the role of hormones and diet constituents on brain function. In addition, department faculty members study pharmacokinetics of drugs (absorption, distribution, biotransformation and excretion) and the biology and functional significance of drug transporters such as organic anion transporting polypeptides (OATPs), organic cation transporters (OCTs), and ATP binding cassette transporters. Our faculty members’ research interests in Toxicology include the toxicity of environmental chemicals, mechanisms of drug- and chemical-induced hepatotoxicity (necrosis, apoptosis, autophagy, inflammation, fibrosis) and liver regeneration. Furthermore, they study the pathogenesis of hepatocellular carcinoma, alcoholic hepatitis, steatohepatitis and cholestatic liver disease, and the role of nuclear receptors in these disease processes. Likewise, in Therapeutics, faculty members use metabolomics approaches to study herbal medicines’ ability to cause drug interactions with prescribed drugs. In addition, studies are being performed to understand which drugs enter the liver by specific transporters, and how genetics determine why the response to drugs can vary between individual patients (pharmacogenomics).

Courses

PHCL 761. General Principles of Pharmacology. 1 Hour.
General principles of pharmacology, including pharmacokinetics, pharmacodynamics, adverse effects, pharmacotherapeutics plus miscellaneous agents (antacids, cathartics, biologicals). Open to advanced B.S. students and graduate students in Nursing, Allied Health, and other health related programs. Independent study program with use of computer assisted instruction, textbooks, syllabi, consultation with staff and exams as primary teaching instruments. Students are encouraged to complete this course the semester they enroll. If this course is not completed, students will receive an Incomplete grade. Prerequisite: An Enrollment Permission Form must be signed by the student and
the instructor. In addition, the enrollment card must be stamped by the instructor. LEC.

PHCL 762. Pharmacology of the Autonomic Nervous System. 1 Hour.
General principles of the autonomic nervous system, cholinergics, muscarinics, nicotinics, neuromuscular blockers, beta adrenergics, alpha adrenergics, and miscellaneous ANS agents. Students are encouraged to complete this course the semester they enroll. If this course is not completed, students will receive an incomplete grade. Prerequisite: PHCL 761 and an Enrollment Permission Form must be signed by the student and the instructor. In addition, the enrollment card must be stamped by the instructor. LEC.

PHCL 763. Cardiovascular-Renal Pharmacology. 1 Hour.
Antihypertensives, antiarrhythmics, vasodilators, cardiac glycosides, serotonin, histamine, polypeptides, diuretics, antilipidemics. Students are encouraged to complete this course the semester they enroll. If this course is not completed, students will receive an incomplete grade. Prerequisite: PHCL 761 and an Enrollment Permission Form must be signed by the student and the instructor. In addition, the enrollment card must be stamped by the instructor. LEC.

PHCL 764. Pharmacology of the Central Nervous System. 1 Hour.
General principles of the central nervous system, stimulants, hallucinogens, depressants (hypnotics and sedatives), general and local anesthesia, antiparkinson agents, tranquilizers, analgesics and anticonvulsants. Students are encouraged to complete this course the semester they enroll. If this course is not completed, students will receive an Incomplete grade. Prerequisite: PHCL 761 and an Enrollment Permission Form must be signed by the student and the instructor. In addition, the enrollment card must be stamped by the instructor. LEC.

PHCL 765. Chemotherapy. 1 Hour.
Principles of chemotherapy, sulfonamides, penicillins, aminoglycosides, anticancer and antifungal agents, antimalariais, broad spectrum antibiotics, antiparasitic agents, and antiseptics. Students are encouraged to complete this course the semester they enroll. If this course is not completed, students will receive an Incomplete grade. Prerequisite: PHCL 761 and an Enrollment Permission Form must be signed by the student and the instructor. In addition, the enrollment card must be stamped by the instructor. LEC.

PHCL 766. Blood-Endocrine Pharmacology. 1 Hour.
General principles of endocrine function and use, thyroid drugs, insulin, sex hormones, oxytocics, adrenal steroids, antinfiammatory agents, blood drugs, anticoagulants and vitamins. Students are encouraged to complete this course the semester they enroll. If this course is not completed, students will receive an Incomplete grade. Prerequisite: PHCL 761 and an Enrollment Permission Form must be signed by the student and the instructor. In addition, the enrollment card must be stamped by the instructor. LEC.

PHCL 767. Toxicology. 1 Hour.
General principles of toxicology, clinical toxicology, solvents, metals, gases and dusts, corrosives, plant and animal toxins, pesticides, radiation, miscellaneous. Students are encouraged to complete this course the semester they enroll. If this course is not completed, students will receive an Incomplete grade. Prerequisite: PHCL 761 and an Enrollment Permission Form must be signed by the student and the instructor. In addition, the enrollment card must be stamped by the instructor. LEC.

PHCL 809. Seminar in Pharmacology. 1 Hour.
Weekly meetings. LEC.

PHCL 846. Advanced Neuroscience. 5 Hours.
Team taught, in-depth neuroscience course focusing on normal and diseased brain function at the molecular, cellular and systems levels. Lectures and discussions will emphasize current issues in neuroscience research. (Same as ANAT 846, PHSL 846 and NURO 846). Prerequisite: Permission of course director. LEC.

PHCL 848. Molecular Mechanisms of Neurological Disorders. 3 Hours.
An in-depth coverage of pathogenic mechanisms in neurological diseases; cellular and molecular responses to brain injury and disease, neuroinflammatory diseases (e.g., multiple sclerosis), neurodegenerative diseases (e.g., Alzheimer's, Parkinson's, Huntington's, amyotrophic lateral sclerosis, and prion diseases), neurogenic diseases (e.g., lysosomal and peroxisomal disorders, Down's syndrome and fragile X), trauma, stroke, and viral diseases (e.g., HIV encephalitis). (Same as ANAT 848, NURO 848, and PHSL 848.) Prerequisite: Advanced Neuroscience (ANAT 846, PHCL 846 or PHSL 846) or an equivalent course and consent of instructor. LEC.

PHCL 880. Essentials of Pharmacology. 4 Hours.
Introduction to Pharmacology for Graduate Students. Autonomic, Cardiovascular and Renal, Endocrine, Neuro, Antivirals Pharmacology. Autacoids; Workshop; Historical and Contemporary Methods used to Elucidate Mechanisms of Drug Action. Prerequisite: Successful completion of the Interdisciplinary Program in Biomedical Sciences or permission of the Instructor. LEC.

PHCL 890. Research in Pharmacology. 1-10 Hours.
For graduate students beginning their research training. RSH.

PHCL 898. Principles of Pharmacology. 1 Hour.
Chemical fundamentals in structure, actions and metabolism of drugs and toxicants. Included are molecular features of drugs and toxicants, steroisomerism, receptor theory, dose-response relationships, agonists and antagonists, absorption, pharmacokinetics and structure-activity relationships. LEC.

PHCL 899. Thesis in Pharmacology. 1-10 Hours.
For students in a master's program in pharmacology. THE.

PHCL 924. Clinical Pharmacology. 5 Hours.
Designed to give practical and theoretical experience with drug trials in humans. Includes animal experimentation when warranted. Clinical principles of drug therapy will be emphasized. IND.

PHCL 939. Carcinogenesis and Cancer Biology. 3 Hours.
Multidisciplinary approach. Cancer pathlogy. Mutagenesis, Genetics, Carcinogen metabolism. Signal Transduction, Apoptosis, Initiation and promotion. Tumor Immunology. Cell proliferation. Protooncogenes and suppressor genes. Hormonal carcinogenesis. Cancer epidemiology. Dietary and environmental causation and prevention. Cancer in various organ systems. (Same as PATH 939 and PTOX 939.) Prerequisite: Completion of one of the following: IGPBS modules 1-4 or equivalent or permission of instructor. LEC.

PHCL 990. Research for Dissertation in Pharmacology. 1-10 Hours.
Prerequisite: PHCL 890. RSH.

PHCL 999. Dissertation in Pharmacology. 1-10 Hours.
Prerequisite: Open to students of advanced standing enrolled in the doctoral program in Pharmacology. THE.

PTOX 830. Introduction to Clinical and Translational Cancer Research. 3 Hours.
Instruct students in developmental steps used in translating a basic science experiment with clinical applications into a proof of concept application and human trial. Multidisciplinary approach; lectures from faculty in Pharmacology, KU Cancer Ctr, KUMCRI. Curriculum: Levels of evidence-clinical impact, Pre-Clinical modeling, In-Vitro studies Animal models, Cancer Drug Development-pharmacokinetics toxicity, Pre-
Clinical Proof of Concept FDA, Creating a Pilot Study, Biostatistics 101, Phases of Clinical Trials, Data Collection, Support Staff, Regulatory and DSMBs, IRB and HIPPA, Funding Study: Grants Parma, Advertising study meeting accrual goals, Goals of Phase I study, Goals Objectives of Phase II Efficacy study, Phase 3 Multicenter Study: Value of Numbers Utilizing Cooperative Groups. Prerequisite: Completion of first 2 years of Med School or graduate school, or enrollment in MD/PhD program. Students no meeting one of these criteria will require permission from course instructor. LEC.

PTOX 887. Toxicologic Pathology. 4 Hours.
Introductory pathology course for graduate students preparing for a career in basic toxicology research. Topics to be presented and discussed include: cell injury, inflammation, repair and regeneration, immunopathology, neoplasia, tumor pathology, respiratory pathology, liver pathology, neuropathology, miscellaneous organ pathology, and lab animal clinical chemistry. LEC.

PTOX 889. Research in Toxicology. 1-10 Hours.
Introductory pathology course for planning on being research toxicologists. Topics to be presented and discussed: cell injury, inflammation, repair and regeneration, immunopath, neoplasia, tumor pathology, respiratory pathology, liver pathology, neuropathology, miscellaneous organ pathology, and lab animal clinical chemistry. LEC.

PTOX 989. Principles of Toxicology. 1 Hour.
Chemical fundamentals in structure, actions and metabolism of toxicants and drugs. Included are molecular features of toxicants and drugs, stereoisomerism, receptor theory, dose-response relationships, agonists and antagonists, absorption, pharmacokinetics, and structure-activity relationships. LEC.

PTOX 899. Thesis in Toxicology. 1-10 Hours.
For students in a master's program in toxicology. THE.

PTOX 917. Disposition of Xenobiotics. 2 Hours.
Principles of absorption, biotransformation, and excretion of xenobiotics. Prerequisite: PHCL 888 or departmental permission. LEC.

PTOX 918. Toxicology. 4 Hours.
Selected topics in environmental, forensic, and industrial toxicology. LEC.

PTOX 939. Carcinogenesis and Cancer Biology. 3 Hours.

PTOX 940. Techniques in Industrial Toxicology. 2 Hours.
A unique course where students are exposed to and have practical experience in techniques used for risk-assessment of chemicals. The course is taught with extensive input by industrial toxicologists who use these techniques on a daily basis. This course is offered at a local industrial setting. Prerequisite: PHCL 888; PTOX 917, PTOX 918, and PTOX 938, or departmental permission. LEC.

PTOX 990. Research for Dissertation in Toxicology. 1-10 Hours.
Prerequisite: PTOX 889. RSH.

PTOX 999. Dissertation in Toxicology. 1-10 Hours.
Prerequisite: Open to students of advanced standing enrolled in the doctoral program in toxicology. THE.

Master of Science in Pharmacology

Pharmacology and Toxicology both require an understanding of basic properties and actions of chemicals and the biological systems they affect. Pharmacology though, focuses more on the therapeutic actions of chemicals (particularly drugs) in the health sciences, the use of drugs as therapeutic agents in medicine or as tools in scientific research, and the development and regulation of pharmaceuticals. Pharmacologists perform many different duties including research and teaching in academic, nonprofit and industrial settings, and in consulting and public service.

The Master of Science (M.S.) in Pharmacology degree program provides an academic experience that emphasizes research skills and prepares students for a range of careers in varied employment settings or more advanced academic study. The M.S. curriculum provides a foundation of core concepts and skills through required coursework, but allows considerable flexibility for individualization through advanced electives and mentored research experiences.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2126) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

Admission Requirements:

- Bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.
  Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor’s degree.

- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395).
  A background check (p. 2395) is required during the admission process; it may affect the student’s eligibility to enter the program.

- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895.

- Three letters of recommendation.

- Prerequisite coursework:
  - One year of general chemistry
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  - One year of biological sciences
  - One semester of calculus
  - One semester of physics

- Research experience (beyond labs associated with lecture courses) is strongly suggested.

Applicants will be assessed based on a combination of GPA, research experience, and GRE scores. Students not meeting the above
requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs ».

Degree Requirements:

- Degree requirements are normally completed within 3 years of admission to the degree program although a maximum of 7 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Completion of a minimum of 30 credit hours.
- Enrollment in a minimum of one (1) credit hour the semester the student will graduate.
- Successful completion of either a thesis defense or general examination (p. 2398) the semester the student will graduate.
- If thesis option chosen, then enrollment in a minimum of one (1) credit hour of PHCL 899 Thesis in Pharmacology and successful thesis submission and publication (p. 2398) (according to Office of Graduate Studies policy.)
- Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2126) courses (or their equivalent):
  - GSMC 850 Proteins and Metabolism 2
  - GSMC 851 Molecular Genetics 2
  - GSMC 852 Introduction to Biomedical Research I 2
  - GSMC 853 Cellular Structure 2
  - GSMC 854 Cell Communication 2
  - GSMC 855 Introduction to Biomedical Research II 2
  - GSMC 856 Introduction to Research Ethics 1
  - GSMC 857 Biographics 1
  - GSMC 858 Introduction to Faculty Research 1
  - GSMC 859 Research Rotations 1-4

- Successful completion of the following Pharmacology courses:
  - PHCL 890 Research in Pharmacology 1-10
  - PHCL 898 Principles of Pharmacology 1
  - PHCL 899 Thesis in Pharmacology (if thesis option chosen) 1-10

- Successful completion of elective coursework as determined in consultation with the student’s advisor.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program.

Typical Plan of Study

### Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>GSMC 850</td>
<td>2 GSCM 853</td>
<td>2 GSCM 859</td>
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### Year 2

<table>
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<th>Hours</th>
<th>Summer</th>
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<table>
<thead>
<tr>
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<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<table>
<thead>
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<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<td>PHCL 899 if thesis option chosen, otherwise PHCL 890</td>
<td>PHCL 899 if thesis option chosen, otherwise PHCL 890</td>
<td>1-6</td>
<td>1-6</td>
<td>1-3</td>
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</tbody>
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Thesis defense or general examination scheduled semester approved by committee to graduate.

Total Hours: 19-30

### Year 3

<table>
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<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
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<table>
<thead>
<tr>
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<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHCL 899 if thesis option chosen, otherwise PHCL 890</td>
<td>PHCL 899 if thesis option chosen, otherwise PHCL 890</td>
<td>PHCL 899 if thesis option chosen, otherwise PHCL 890</td>
<td>1-6</td>
<td>1-6</td>
<td>1-3</td>
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</tbody>
</table>

Total Hours: 7-31

### Master of Science in Toxicology

Pharmacology and Toxicology both require an understanding of basic properties and actions of chemicals and the biological systems they affect. Toxicology is, more specifically, the study of adverse effects of chemicals on living systems, the extent of damage they produce, the relationship between dose and effect, routes of exposure, and potential treatments. Toxicologists not only identify toxins, but also contribute to risk assessment, safety evaluation, and establishment of legal regulations. Toxicologists perform many different duties including research in academic, nonprofit and industrial settings, and in consulting and public service.

The Master of Science (M.S.) in Toxicology degree program provides an academic experience that emphasizes research skills and prepares students for a range of careers in varied employment settings or more
advanced academic study. The M.S. curriculum provides a foundation of core concepts and skills through required coursework, but allows considerable flexibility for individualization through advanced electives and mentored research experiences.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2126) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

Admission Requirements:

- Bachelor's degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.
- Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale for the bachelor's degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395).
- A background check (p. 2395) is required during the admission process; it may affect the student's eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895.
- Three letters of recommendation.
- Prerequisite coursework:
  - One year of general chemistry
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  - One year of biological sciences
  - One semester of calculus
  - One semester of physics
- Research experience (beyond labs associated with lecture courses) is strongly suggested.

Applicants will be assessed based on a combination of GPA, research experience, and GRE scores. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs». Degree Requirements:

- Degree requirements are normally completed within 3 years of admission to the degree program although a maximum of 7 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Completion of a minimum of 30 credit hours.
- Enrollment in a minimum of one (1) credit hour the semester the student will graduate.
- Successful completion of either a thesis defense or general examination (p. 2398) the semester the student will graduate.
- If thesis option chosen, then enrollment in a minimum of one (1) credit hour of PTOX 899 Thesis in Toxicology and successful thesis submission and publication (p. 2398) (according to Office of Graduate Studies policy.)
- Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2126) courses (or their equivalent):
  - GSMC 850 Proteins and Metabolism 2
  - GSMC 851 Molecular Genetics 2
  - GSMC 852 Introduction to Biomedical Research I 2
  - GSMC 853 Cellular Structure 2
  - GSMC 854 Cell Communication 2
  - GSMC 855 Introduction to Biomedical Research II 2
  - GSMC 856 Introduction to Research Ethics 1
  - GSMC 857 Biographics 1
  - GSMC 858 Introduction to Faculty Research 1
  - GSMC 859 Research Rotations 1-4
- Successful completion of the following Toxicology courses:
  - PTOX 889 Research in Toxicology 1-10
  - PTOX 898 Principles of Toxicology 1
  - PTOX 899 Thesis in Toxicology (if thesis option chosen) 1-10
- Successful completion of elective coursework as determined in consultation with the student's advisor.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program.

Typical Plan of Study

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
<th>Total Hours: 19-30</th>
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</thead>
<tbody>
<tr>
<td>GSMC 850</td>
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<td>GSMC 853</td>
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</tr>
<tr>
<td>GSMC 851</td>
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<td>GSMC 854</td>
<td>2</td>
<td>May take</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>an elective course from the student's chosen degree program in consultation with the student's advisor.</td>
<td></td>
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<tr>
<td>GSMC 852</td>
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<td>GSMC 855</td>
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<td>GSMC 856</td>
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<td>GSMC 859</td>
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<td></td>
<td></td>
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<tr>
<td>GSMC 857</td>
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<tr>
<td>GSMC 858</td>
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<td>GSMC 859</td>
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</tr>
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<td>10-13</td>
<td>7-10</td>
<td>2-7</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Admission Requirements:

- Bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree is conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.

- Successful completion of the Residence Requirement (p. 2398) prior to the semester the Oral Comprehensive Examination is scheduled.

- Responsible Scholarship (p. 2398) requirement prior to the semester the Oral Comprehensive Examination is scheduled.

- Successful completion of the University’s Research Skills and Ethics (or equivalent) meets the Responsible Scholarship requirement.

- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor’s degree.

- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395).

- A background check (p. 2395) is required during the admission process; it may affect the student’s eligibility to enter the program.

- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895.

- Three letters of recommendation.

- Prerequisite coursework:
  - One year of general chemistry
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  - One year of biological sciences
  - One semester of calculus
  - One semester of physics

- Research experience (beyond labs associated with lecture courses) is strongly suggested.

Applicants will be assessed based on a combination of GPA, research experience, and GRE scores. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs ».

The program consists of coursework, research experience, and the successful completion of a doctoral dissertation. Dissertation research culminates in a final dissertation examination consisting of an oral presentation by the candidate and an examination by the faculty. Relevant prior graduate work is taken into consideration in setting up individual programs of study leading to the Ph.D.

Degree requirements:

- Degree requirements are normally completed within 6 years of admission to the program although a maximum of 8 years is allowed.

- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.

- Successful completion of the University’s Research Skills and Responsible Scholarship (p. 2398) requirement prior to the semester the Oral Comprehensive Examination is scheduled.

- Successful completion of GSMC 857 Biographics, GSMC 852 and GSMC 855 Introduction to Biomedical Research I and II (or equivalent) meets the Research Skills requirement.

- Successful completion of GSMC 856 Introduction to Research Ethics (or equivalent) meets the Responsible Scholarship requirement.

- Successful completion of the Residence Requirement (p. 2398) prior to the semester the Oral Comprehensive Examination is scheduled. The requirement is met by enrollment in full-time status a minimum of two semesters.
• Successful completion of the Oral Comprehensive Examination (p. 2398). Students are recognized as formal doctoral candidates after they have passed the comprehensive examination.

• Successful completion of the Post-Comprehensive Enrollment (p. 2398) requirement.

• Enrollment in a minimum of one (1) credit hour of PHCL 999 Dissertation in Pharmacology the semester the student will defend dissertation and graduate.

• Successful completion of the Final Oral Examination (dissertation defense.)

• Successful completion of the Final Oral Examination (dissertation defense.)

• Successful completion of the Final Oral Examination (dissertation defense.)

• Successful Dissertation Submission and Publication (according to Office of Graduate Studies policy.)

• Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) courses (or their equivalent):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>Proteins and Metabolism</td>
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</tr>
<tr>
<td>GSMC 851</td>
<td>Molecular Genetics</td>
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<td>GSMC 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 853</td>
<td>Cellular Structure</td>
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<td>GSMC 854</td>
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<td>GSMC 855</td>
<td>Introduction to Biomedical Research II</td>
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</tr>
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<td>GSMC 856</td>
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<td>GSMC 858</td>
<td>Introduction to Faculty Research</td>
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<tr>
<td>GSMC 859</td>
<td>Research Rotations</td>
<td>1-4</td>
</tr>
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• Successful completion of the following Pharmacology courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tr>
<td>PHCL 880</td>
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<td>PHCL 890</td>
<td>Research in Pharmacology</td>
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<tr>
<td>PHCL 898</td>
<td>Principles of Pharmacology</td>
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<td>PTOX 917</td>
<td>Disposition of Xenobiotics</td>
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<td>PTOX 918</td>
<td>Toxicology</td>
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<td>PHCL 990</td>
<td>Research for Dissertation in Pharmacology</td>
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<tr>
<td>PHCL 999</td>
<td>Dissertation in Pharmacology</td>
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</table>

Students enrolled in the MD-PhD Physician Scientist Training Program should review the Degree Requirements (http://catalog.ku.edu/medicine/combined-md-phd/#degerequirementstext) section of this catalog for that program.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program.

**Typical Plan of Study**

**Year 1**

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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**Year 2**

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<th>Spring</th>
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<td>1-6 PHCL 890</td>
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<tr>
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**Total Hours: 19-30**

**Year 3**

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<th>Spring</th>
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</table>

Oral Comprehensive Exam scheduled as early as this semester if approved by committee to proceed.

<table>
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<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<td>1-6 Electives</td>
<td>1-6</td>
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**Total Hours: 22-30**

**Year 4**

<table>
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<th>Spring</th>
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<td>PHCL 990</td>
<td>1-6 PHCL 990</td>
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</table>

**Total Hours: 22-30**

**Year 5**

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<th>Spring</th>
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</thead>
<tbody>
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<td>PHCL 999</td>
<td>1-6 PTOX 999</td>
<td>1-3</td>
<td></td>
</tr>
</tbody>
</table>

Final Oral Exam (dissertation defense) scheduled semester approved by committee to defend and graduate.

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<td>1-6</td>
<td>PHCL 999</td>
<td>1-6 PTOX 999</td>
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</tbody>
</table>

**Total Hours: 25-83**
Doctor of Philosophy in Toxicology

Pharmacology and Toxicology both require an understanding of basic properties and actions of chemicals and the biological systems they affect. Toxicology is, more specifically, the study of adverse effects of chemicals on living systems, the extent of damage they produce, the relationship between dose and effect, routes of exposure, and potential treatments. Toxicologists not only identify toxins, but also contribute to risk assessment, safety evaluation, and establishment of legal regulations. Toxicologists perform many different duties including research in academic, nonprofit and industrial settings, and in consulting and public service.

The Doctor of Philosophy (Ph.D.) in Toxicology degree program prepares students for careers as independent scientists in academia, industry, or government through a broad-based curriculum and development of strong research design and communication skills. The Ph.D. didactic curriculum consists of a core of required discipline-based coursework, but is significantly individualized through advanced electives, seminars, extensive mentored research experiences, and consultation with the student’s selected advisory committee.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS) (p. 2126) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

Admission Requirements:

• Bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.
  
  Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

• A cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale for the bachelor’s degree.

• Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395).

• A background check (p. 2395) is required during the admission process; it may affect the student’s eligibility to enter the program.

• An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895.

• Three letters of recommendation.

• Prerequisite coursework:
  
  • One year of general chemistry
  • One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  • One year of biological sciences
  • One semester of calculus
  • One semester of physics

• Research experience (beyond labs associated with lecture courses) is strongly suggested.

Applicants will be assessed based on a combination of GPA, research experience, and GRE scores. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs.

The program consists of coursework, research experience, and the successful completion of a doctoral dissertation. Dissertation research culminates in a final dissertation examination consisting of an oral presentation by the candidate and an examination by the faculty. Relevant prior graduate work is taken into consideration in setting up individual programs of study leading to the Ph.D.

Degree requirements:

• Degree requirements are normally completed within 6 years of admission to the program although a maximum of 8 years is allowed.

• Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.

• Successful completion of the University’s Research Skills and Responsible Scholarship (p. 2398) requirement prior to the semester the Oral Comprehensive Examination is scheduled.

• Successful completion of GSMC 857 Biographics, GSMC 855 Introduction to Biomedical Research 1 and II (or equivalent) meets the Research Skills requirement.

• Successful completion of GSMC 856 Introduction to Research Ethics (or equivalent) meets the Responsible Scholarship requirement.

• Successful completion of the Residence Requirement (p. 2398) prior to the semester the Oral Comprehensive Examination is scheduled. The requirement is met by enrollment in full-time status a minimum of two semesters.

• Successful completion of the Oral Comprehensive Examination (p. 2398). Students are recognized as formal doctoral candidates after they have passed the comprehensive examination.

• Successful completion of the Post-Comprehensive Enrollment (p. 2398) requirement.

• Enrollment in a minimum of one (1) credit hour of PTOX 999 Dissertation in Toxicology the semester the student will defend dissertation and graduate.

• Successful completion of the Final Oral Examination (p. 2398) (dissertation defense.)

• Successful Dissertation Submission and Publication (p. 2398) (according to Office of Graduate Studies policy.)

• Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2126) courses (or their equivalent):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GSMD 850</td>
<td>Proteins and Metabolism</td>
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<tr>
<td>GSMD 851</td>
<td>Molecular Genetics</td>
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<tr>
<td>GSMD 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
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<tr>
<td>GSMD 853</td>
<td>Cellular Structure</td>
<td>2</td>
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<td>GSMD 854</td>
<td>Cell Communication</td>
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<td>GSMD 855</td>
<td>Introduction to Biomedical Research II</td>
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<tr>
<td>GSMD 856</td>
<td>Introduction to Research Ethics</td>
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Year 3

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<td>Fall</td>
<td>Hours</td>
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<tr>
<td>PTOX 889</td>
<td>1-6</td>
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<tr>
<td>Electives</td>
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Oral Comprehensive Exam scheduled as early as this semester if approved by committee to proceed.

Year 4

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Total: 1-6

Year 5

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<td>Hours</td>
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<tr>
<td>PTOX 999</td>
<td>1-6</td>
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Final Oral Exam (dissertation defense) scheduled semester approved by committee to defend and graduate.

Total Hours: 27-85

Department of Preventive Medicine and Public Health

The Departments of Preventive Medicine and Public Health in Kansas City and Wichita are passionate about healthy communities and are committed to improving the health of people through teaching, research, and service. Our faculty, which includes physicians, epidemiologists, social scientists, and research scientists, conduct research and work in the community to harness public health and scientific discoveries for the benefit of all of our citizens.

TEACHING

Faculty and staff in the Departments of Preventive Medicine and Public Health are dedicated to offering degree programs to future public health practitioners as well as clinical researchers.

- Masters in Public Health program (http://mph.kumc.edu)
RESEARCH

- Health Disparity/Equity Research
- Obesity, Physical Activity and Nutrition
- Tobacco Control
- Cancer Screening and Prevention
- Health Services Research
- Epidemiology and Disease Surveillance
- Community Development and Leadership

SERVICE

Our faculty are committed to serving the public health community and serve as collaborative partners with local, state and national public health agencies. Learn more > (http://kansasmedical.edu/school-of-medicine/preventive-medicine-and-public-health/faculty-and-staff/faculty.html)

Courses

PRVM 800. Principles of Epidemiology. 3 Hours.
Basic concepts of epidemiology and methods for identification of factors influencing health and disease in human populations. Considerations are centered on physical, biological, psychosocial and cultural factors in relation to infectious and non-infectious diseases; interactions between agent, host, and environmental factors as determinants of health and disease; application of the epidemiologic approach to health services; retrospective and prospective analysis of morbidity and mortality data. LEC.

PRVM 803. Introduction to Clinical Research. 1 Hour.
Course will provide a comprehensive overview to clinical research. The student will gain an understanding of how to develop clinical research questions including protocol design and the factors that should be considered in initiating a clinical research study. This will include biostatistical considerations, the recruitment of study participants, regulatory issues, and data management, and defining measures and instruments. Students will gain knowledge of how to define clinical research among the various institutional entities involved with clinical research at the University of Kansas Medical Center such as the Research Institute (RI), General Clinical Research Center (GCRC) and the Human Subjects Committee (HSC). Additionally, one component of the course will focus on how to apply for funding (grantsmanship), critical appraisal of research studies, and how to present research data. Prerequisite: Consent of Instructor. LEC.

PRVM 805. Public Health Seminar. 1 Hour.
This course will focus on public health practice. Guest lectures from national, state, and local public health agencies will present problems and how these problems are being addressed. Topics are expected to vary somewhat from year to year, depending on the priorities of the agencies. However, topics might include such issues as smoking prevention, automobile accidents, foodborne outbreaks, cryptosporidium outbreaks, lead poisoning in children, asthma in children, sexually transmitted diseases, diabetes, cancer control, nutrition, cardiovascular diseases, bioterrorism, legal issues and administration of public health. This course is the same as Public Health Grand Rounds. FLD.

PRVM 806. Special Topics.. 1-4 Hours.
In-depth, individualized investigation of special problems in community health. Designed especially for students with limited background in community health. Prerequisite: Permission of instructor. RSH.

PRVM 807. Introduction to Field Epidemiology. 3 Hours.
This course presents an overview of the methods used in epidemiologic field investigations. It provides students with a comprehensive review of the basic components of an outbreak investigation, an introduction to public health surveillance, and an overview of specific types of investigations in which a field epidemiologist might become involved, including traceback studies, environmental health assessments, noninfectious health event investigations, contact tracing, and forensic epidemiology. In addition, resources that often come into play in outbreak investigations are presented, such as public health laboratories, the incident command system, and geographic information systems. Prerequisite: PRVM 800. RSH.

PRVM 808. Clinical and Translational Research Seminar. 1 Hour.
This seminar will present locally and nationally recognized clinicians and researchers to discuss various areas of clinical research. The course is designed to expose students to a variety of ongoing research and features speakers from a variety of disciplines including physicians, epidemiologists, biostatisticians behavioral scientists, nursing faculty, nursing students, medical students, allied health faculty and others. Prerequisite: Permission of instructor. LEC.

PRVM 809. Introduction to Public Health. 3 Hours.
This course provides an introduction to the basic principles of public health practice, including an overview of the history, philosophy, and scope of public health in the United States and globally. It will provide an overview of the primary disciplines within public health: biostatistics, demography, environmental health sciences, epidemiology, global health, health policy and management, social and behavioral health, and the analytical tools employed to measure public health indicators. Prerequisite: None. LEC.

PRVM 810. Cardiovascular Disease Epidemiology. 3 Hours.
This will be a study of Cardiovascular Disease risk factors, expression, treatment, and prevention from a population-based standpoint. Participants will gain knowledge of cardiovascular disease prevalence, incidence, risk factors, outcomes, and prevention strategies. The goal of this course is to understand major aspects of cardiovascular epidemiology and current strategies for primary and secondary prevention of major cardiovascular diseases. Attention will be given to physiologic mechanisms leading to atherosclerosis; traditional and novel coronary heart disease risk factors; prevention methodologies for cardiovascular disease, and the role of lifestyle, dietary, and genetic factors in the development of cardiac and vascular diseases. The course will be evidence- and outcomes-based, with reference to landmark studies and major publications. Relevant historical breakthroughs and current controversies in CVD will be discussed using recent publications from the lay press and peer-reviewed journals. Emphasis will be placed on coronary artery disease and its clinical manifestations. Participants will learn to critically assess public health measures undertaken to recognize, manage, and treat atherosclerotic disease processes. LEC.

PRVM 811. Introduction to Pharmacoepidemiology. 3 Hours.
Pharmacoepidemiology is the application of the principles of epidemiology to the study of medications and their effects on health. Evaluating a drug's effects commences when a chemical entity becomes a drug candidate, intensifies through clinical trials, and continues after products reach the market. These studies are critical for supporting the proper use of medications in terms of efficacy, effectiveness, and cost-effectiveness. This course provides a broad introduction to the principles of pharmacoepidemiology with a focus on applications in the medical literature. Prerequisite: PRVM 800. LEC.

PRVM 812. Introduction To One Health. 2 Hours.
“One Health” encompasses the complex interrelationships among humans and animals, humans and the environment, and animals and the environment. Incorporates original videos of leading subject matter experts and researchers, case studies, and scientific readings. It addresses zoonotic diseases (those that may be transferred between people and animals) and the need to coordinate efforts among veterinarians, public health professionals, and other stakeholders to improve health outcomes for people, animals, and the environment. Prerequisite: PRVM 800. LEC.
humans and animals) and environmental issues that impact human, animal, and ecosystem health. Topics include disease surveillance, the human-animal bond, the built environment, disaster response, sanitation, rural/suburban/urban interface, and food safety and security. Prerequisites: Two courses in the biological sciences. Course Format: This is an interactive online course led by the instructor. LEC.

PRVM 813. Chronic Disease Epidemiology. 3 Hours.
This course is required for students on the Epidemiology track but is open to other MPH students as well. It extends the methods and concepts of basic epidemiology to the prevention and control of major chronic diseases. Topics will include surveillance, risk factors, high risk populations, pathophysiology, and consequences. Students will also gain experience developing a proposal to conduct a screening, etiologic, or prevention study of selected chronic diseases. Prerequisite: PRVM 800 Principles of Epidemiology. LEC.

PRVM 814. Health Literacy. 3 Hours.
This is a graduate-level course designed to teach students about literacy and its implications on public health practice and research in the United States, with a focus on health literacy. Students will be introduced to the different types of literacy, including health, prose, quantitative, document, and computer, and how to evaluate them. In addition, students will learn how to lower literacy levels of health education materials for practical application. Cultural competency in literacy will also be discussed, with a focus on culturally competent health communication and education. LEC.

PRVM 815. Infectious Disease Epidemiology. 3 Hours.
This course emphasizes the underlying concepts of the epidemiologic approach as it relates to infectious diseases. Students will be introduced to principles and methods of disease surveillance and outbreak investigations using case studies. Essential concepts relating to vaccine efficacy and effectiveness in preventing infectious diseases, barriers to achieving adequate vaccine coverage, and how ongoing vaccine controversies relate to the scientific literature base will be covered. The evolving public health concerns of bioterrorism and antibiotic resistance will also be addressed. Characteristics of the agent, host, and environment that influence disease transmission will be examined in the context of control strategy identification. Instruction is primarily by online learning tools, with limited short lectures. Prerequisite: PRVM 800 Principles of Epidemiology. LEC.

PRVM 816. International Health. 3 Hours.
This course is divided into seven sections: 1) Global health introduction, 2) Health inequalities and the socio-economic context of disease, 3) Maternal and child health, the health of special populations, 4) The spread of infectious diseases, and HIV/AIDS, malaria, TB, 5) Globalizations and emerging infectious diseases, and nutrition, 6) Environmental health, and the health of effects of environmental change, 7) Global health payers and players, and global health priorities. Prerequisite: PRVM 800 Principles of Epidemiology or permission of the department/instructor. LEC.

PRVM 817. Gender, Race, Class, and Health. 3 Hours.
This graduate-level course examines the intersection of gender, race, and class and its effects on individual and public health. The theoretical orientation of this course is informed by Black feminist scholarship on intersectionality: that is, the intersecting oppressions of gender, sexuality, race, class, and nation. This theory is extended to contemporary public health and social problems through an examination of applied public health studies and interventions. Students' work will be grounded in theory, but they will learn to apply theory in fieldwork-based exercises and critical analysis of public health problems. LEC.

PRVM 818. Social and Behavioral Aspects of Public Health. 3 Hours.
The course provides an overview of social and behavioral aspects of public health including the relevance of psychological and social factors for health, the principles of health behavior change, the application of these principles in various health domains, and an introduction to health behavior and health promotion interventions. The course begins with the rationale for studying social and behavioral aspects of health and examines select social and behavioral factors (e.g., gender, socioeconomic status, race/ethnicity) as they relate to physical well-being. The course also focuses on well-established theories of health behavior and examines the role of psychological and social factors in specific health topics (e.g., obesity, cancer, cardiovascular disease, smoking). Prerequisite: None. LEC.

PRVM 819. An Introduction to Geographic Information Systems (GIS) for Health. 2 Hours.
This course will provide students with an overview of Geographical Information Systems (GIS) applied in the context of health (public health, allied health and health care). Students will be introduced to GIS and health applications used locally, nationally and internationally. They will learn about pertinent data, how to visualize the data, how to design maps that represent the data, how to use spatial data, how to geocode data, and how to prepare and analyze data. Real-life examples will be used throughout the course and students will gain hands-on experience using a GIS application. Students will also be kept abreast of any new GIS resources and trends or developments in GIS as relates to health. Prerequisite: Basic computer skills. LEC.

PRVM 820. Introduction to Oral Public Health. 3 Hours.
This course is a comprehensive introduction to oral public health in general as it relates to public health in general, within the context of the U.S. healthcare system. Course content includes: Basic organizational arrangements of health services in the U.S., concepts of public health and dental public health, public health problems and oral public health problems in the context of social and community factors and social determinants of health behavior, oral public health developments from a historical perspective, oral health/dental care financing and decision making; assessments of oral health status and need for care; population-based programs for oral disease prevention/health promotion, oral/dental public health research methodology and the practice of oral public health. LEC.

PRVM 821. Research Methods in Public Health. 3 Hours.
This is an introductory behavioral research methods, course. Students will learn about research designs, hypothesis formation, measurement, sampling, ethical issues in research, and pragmatic and research issues with evaluating behavioral interventions. Students will also learn how to critically evaluate and develop behavioral randomized clinical trials. Prerequisites: None. Social and Behavioral Aspects of Health and an Introductory statistics course are recommended but not required. LEC.

PRVM 823. Field Experience in Community Health Education. 1-3 Hours.
Internships with community agencies, community preceptors in areas of concentration. Prerequisite: Permission of instructor. FLD.

PRVM 825. Child and Family Health. 3 Hours.
Family, maternal, and child health problems will be addressed. Topics will include prenatal care (maternal health and habits); fetal growth factors, well baby care (immunizations, nutrition, growth, development, behavior); developmental disabilities; adoption; adolescence; child abuse; family as a support system; long-term medical and social outcomes of chronic illness/disability in children. Subjects are covered through lecture, discussion and field visits under the supervision of a pediatrician. Prerequisite: Permission of instructor. LEC.

PRVM 826. Epidemiology for Advanced Nursing Practice. 3 Hours.
Epidemiology for Advanced Nursing Practice is a 3 credit hour graduate level course designed to synthesize basic epidemiology with clinical
nursing concepts. The course is a core course for the Doctor of Nursing Practice degree in which basic concepts of epidemiology and methods for identification of factors influencing health and disease in human populations are discussed. Considerations are centered on: 1) Physical, biological psychosocial and cultural factors in relation to infectious and non-infectious diseases; 2) Interactions between agent, host, and environmental factors as determinants of health and disease; 3) Application of the epidemiologic approach to clinical nursing; and 4) Measures of disease occurrence and risk. Prerequisites: None. LEC.

PRVM 827. Public Health Administration. 3 Hours.
This course provides students with an overview of the core functions of public health: assessment, policy development, and assurance together with an introduction to the leadership and management skills necessary to provide leadership in public health. It uses both theoretical and practical material to develop basic administrative competencies necessary for practice in community and public health. Assignments are designed to provide practice in applying course materials. LEC.

PRVM 828. Public Health Program Development and Management. 3 Hours.
Framed within the context of the core public health functions, assessment, policy development, and assurance, this course provides students with an overview of the planning process within a community setting. This course will use both theoretical and practical material to develop basic competencies in planning, implementing, and evaluating health programs; however, the predominant focus will involve the planning process and operations of a public health program. Assignments are designed to provide practice in applying course materials. Prerequisites: PRVM 818 Social and Behavioral Aspects of Public Health, PRVM 800 Principles of Epidemiology, PRVM 827 Public Health Administration. LEC.

PRVM 830. Environmental Health. 3 Hours.
This course will identify specific health effects of environmental contaminants and discuss principles of prevention. Specific problem areas will include air and water pollution, solid waste disposal, food preservation, radiation, industrial hygiene, occupational skin and lung diseases, chemical carcinogens accidents, an agricultural health and safety. A number of guest lecturers and field trips will be utilized. LEC.

PRVM 832. Environmental and Occupational Epidemiology. 3 Hours.
Epidemiological concepts applied to problems in environmental and occupational health will be discussed. This course will focus on studies of workplace and environmental exposures, exposure assessment and monitoring, hazardous exposures and adverse health effects, and approaches to prevention. Specific health effects of exposure to toxic chemical and physical agents will be discussed, as well as reading, evaluating, and interpreting epidemiologic studies. Prerequisites: PRVM 800 Principles of Epidemiology and PRVM 830 Environmental Health or permission of instructor. LEC.

PRVM 834. Community Health Education and Promotion. 3 Hours.
Designed to teach students the core concepts in community health education and promotion, students will be introduced to the scientific and practical knowledge necessary to develop successful research and implement programs. Students will learn models of analysis, management of health promotion in the workplace, health education diagnosis, planning, and evaluation. A variety of examples will be used, including the Centers for Disease Control model, and other commonly recognized approaches to community health promotion. Prerequisites: PRVM 818 Social and Behavioral Aspects of Public Health or permission of instructor. LEC.

PRVM 835. Evaluation Methods in Public Health. 3 Hours.
Principles and procedures to evaluate health promotion and disease prevention programs. Includes data collection methods, instrument scale development, measurement, and evaluation designs. Case studies of disease prevention literature on evaluation will be analyzed. Prerequisite: Permission of instructor. LEC.

PRVM 836. Epidemiology in Aging. 3 Hours.
An overview of the aging process, review of current knowledge of epidemiology of selected diseases, such as dementia and osteoporosis, and falls that primarily affect aging individuals. Emphasis on epidemiologic designs, methods, and issues (e.g., low response rate and measurements) that are pertinent to research on aging individuals. Prerequisite: PRVM 800, BMTR 811/PRVM 804, or permission of instructor. LEC.

PRVM 838. Reproductive Epidemiology. 3 Hours.
Epidemiologic concepts applied to problems in reproductive health of men and women. Critical analysis of epidemiologic studies on sociocultural, individual and pregnancy-specific risk factors to reproduction. Field trips will be used to explore methods to reduce adverse reproductive health outcomes in populations (worksites, managed care organizations, local health departments). Literature synthesis skills are used in a project focused on preventing adverse reproductive outcomes in a defined population. LEC.

PRVM 841. Advanced Epidemiology I: Methods in Cross-Sectional and Case-Control Studies. 3 Hours.
This course will concentrate on concepts and application of various statistical techniques in the analysis of epidemiological data. Students will be oriented toward application of SAS in data analysis and interpretation of data from cross-sectional and case-control studies. Prerequisite: Principles of Epidemiology (PRVM 800), Fundamentals of Biostatistics I (BIOS 714), and Management of Public Health Data (PRVM 875) or Statistical Computing SAS Base (BIOS 820.) LEC.

PRVM 842. Advanced Epidemiology II: Methods in Longitudinal Studies. 3 Hours.
This course will concentrate on concepts and application of various statistical techniques in the analysis of epidemiological data. Students will be oriented toward application of SAS in data analysis and interpretation of data from longitudinal studies and controlled clinical trials. Prerequisite: Principles of Epidemiology (PRVM 800), Fundamentals of Biostatistics I (BIOS 714), Advanced Epidemiology (PRVM 841), and Management of Public Health Data (PRVM 875) or Statistical Computing SAS Base (BIOS 820.) LEC.

PRVM 843. Obesity and Public Health. 3 Hours.
Obesity is becoming epidemic and pandemic throughout the world. What are the personal public health consequences of this phenomenon? Are we as focused as we should be on the effects of this growing problem? This course reviews the basic definition of obesity and defines its known personal and public health effects: including issues of bias and stigmatization. The course further examines the epidemiology, and future predicated consequences of obesity and then examines personal models of treatment followed by examination of public health efforts to date. Finally, proposed interventions and areas for research are discussed and evaluated. Students apply principles of behavioral change and communication to develop proposed public health approaches to ameliorating the obesity problem in children and adults. Prerequisite: PRVM 800: Principles of Epidemiology and PRVM 818: Social and Behavioral Aspects of Public Health, or permission of instructor. LEC.

PRVM 844. Organization, Financing and Delivery of Health Care,. 3 Hours.
This course will demonstrate an understanding of the difference between health care and medical care and the place of medical care in the economic system; the role of social values and economic principles in societal decision making and the utilization of health care services;
the role of NEED in the utilization of health care services; the public and private financing of the health care system; the organization of resources and types of managed care systems; the unique payment and the reimbursement mechanisms in the health care system; and the role of government in the health care system. LEC.

PRVM 845. Cultural Competency in Public Health. 3 Hours.
This course provides students with a broad range of contemporary research and writings in the area of cultural competence in public health as it relates to health disparities and health interventions. Specific attention will be paid to examining self-awareness, developing cross-cultural competence, and identifying and utilizing culturally appropriate strategies in health promotion and prevention. Students emerge from this course with an understanding of how culture operates as a critical variable in health behaviors, planning health promotion and disease prevention strategies, and in addressing health disparities. LEC.

PRVM 846. Health Economics. 3 Hours.
This course is designed to explore the application of economic theories, principles and concepts to the U.S. medical care system. Students will demonstrate an understanding of: the difference between health care and medical care and the place of medical care in the economic system; the role of social values in economic principles and societal decision making; the determinants of supply and demand of medical care services with particular attention to the relationship between supplier and demand and need and demand; complements and substitutes as they apply to medical care services; the unique nature of the medical care product; the interrelatedness of markets; the principles of and demand for health insurance and its role in the demand for medical care services; the role of government in the medical care system. LEC.

PRVM 847. Seminar in American Indian Health Disparities. 1 Hour.
This is a graduate-level course designed to teach students about current research being done around the country to address health disparities faced by American Indian communities. Students will attend a weekly one-hour seminar on-line and will be given readings to accompany each lecture. Lectures will be done by faculty at various universities, as well as members of community organizations and/or tribes who are conducting research. Students may take the course multiple times; each seminar will be unique in terms of topics and accompanying readings, as well as lecturers. Some seminars may focus on a particular health topic for the full semester, e.g. - cancer or diabetes. This course is designed to be a seminar series that changes each time it is taught. Prerequisite: Permission of instructor. SEM.

PRVM 849. Qualitative Methods in Public Health. 3 Hours.
Qualitative research has diverged from its anthropology roots to become commonplace in marketing, business, clinical and public health settings. This course is focused on basic qualitative methodologies with applications in public health, health services research, health behavior, and quality improvement. This course reviews and gives real practice with strategic planning, choice of methods, logistics, and integration with quantitative methods. Students will receive hands-on experience with logistics and actual data collection using several methods. Students will present and discuss recent journal articles reporting qualitative studies in weekly "journal club" fashion. Students will present the results of their qualitative research in an oral class presentation and poster, and in an abstract submitted to a local, regional or national conference. Prerequisite: PRVM 800 or permission of instructor. LEC.

PRVM 851. Public Health Policy and Law. 3 Hours.
This course is designed to prepare public health leaders to live and work in a world of laws, and to play an active and effective role in policy making and analysis. Students will understand the source of national, state, and local statutes and regulations and understand the role of common law. Students will understand the policy process at the national, state, and local level, and develop skills analyzing legislation and influencing policy decisions. Students will understand the rule making process at the national and state level. LEC.

PRVM 853. Responsible Conduct of Research. 1 Hour.
The purpose of this course is to engage research trainees in reading about, considering, and discussing the responsible conduct of science. The course is designed as an option for meeting current federal regulations, which require that all NIH training grants provide training in the responsible conduct of research. This course provides a concise overview of key subject areas in the responsible conduct of research. It is designed to make students aware of relevant guidelines, policies and codes relating to ethical research, as well as to provide the skills for identifying and resolving ethical conflicts that may arise in research. LEC.

PRVM 855. Seminar in Women’s Health. 3 Hours.
Seminar in Women's Health is a 3 credit elective, graduate level course focusing on gender issues that are relevant in treatment approaches to various health issues, the differing health status of minority women, the involvement of women's health to include the entire life span and areas other than reproduction, the changing implications of health care and policy and men in women's health. No prerequisite. LEC.

PRVM 856. Community-Based Participatory Research. 3 Hours.
This is a graduate-level course designed to teach students the basic methods of conducting and evaluating community-based participatory research (CBPR). Students will be introduced to the five phases of CBPR, including partnership formation and maintenance, community assessment and diagnosis, defining the issue, documentation and evaluation of partnerships, and feedback, interpretation, and evaluation of partnerships. In addition, students will learn how to find funding mechanisms and journals that are appropriate for CBPR, as well as some of the key factors in writing about CBPR. Students will be introduced to a variety of examples of well-done CBPR and will learn what makes it different from other types of research done in community settings. PREREQUISITES: Social and Behavioral Aspects of Public Health or permission of instructor. LEC.

PRVM 857. Motivational Interviewing in Public Health Settings. 1 Hour.
The course is designed to introduce participants to Motivational Interviewing, its concepts, and to the subsequent skills required for helping people to change. This course will be cross-listed with DN 857. LEC.

PRVM 858. Public Health in Film. 2 Hours.
The Public Health in Film course will allow students the opportunity to address multiple public health issues throughout time via educational films and public health documentaries and discussion. Specific issues will include, but will not be limited to: polio, leprosy, cholera, tuberculosis, the bubonic plague, influenza, bioterrorism and natural disasters. LEC.

PRVM 859. Tobacco and Public Health. 3 Hours.
This course will provide an overview of tobacco as a public health problem and tobacco politics. Students will learn about the pharmacology of nicotine, the mechanisms leading to tobacco addiction and biologic factors that affect pharmacology and tobacco use such as the menstrual cycle and comorbid illnesses such as depression and others. Public health approaches to preventing tobacco use initiation will be studied, including which initiatives are most effective. State-of-the-art methods to assist smokers to quit will be reviewed, including pharmacologic interventions, counseling by health professionals and education/motivation support. Barriers to obtaining services will be explored, such as educational needs among various types of health professionals, and access to care in rural areas or among clients with certain types of health insurance. LEC.
PRVM 860. Community Nutrition. 3 Hours.
Comparative analysis of the demographic, geographic, and economic structure of various types of communities in Western and non-Western societies. Relationships between these compositional elements of a given community, its food and nutrition resources and services, and the nutritional status of its members. Development of alternative strategies for resource expansion and/or for delivering appropriate nutritional services to target communities. Prerequisite: Permission of instructor. LEC.

PRVM 861. Leadership in Public Health. 3 Hours.
This course is designed to enhance and develop leadership knowledge, skills, and competencies vital to develop change strategies, which will impact public health workforce in Kansas. This will also be achieved by specifically addressing the core functions (assessment, policy and assurance) of public health workers as well as the national Healthy People 2010 objectives. LEC.

PRVM 862. Terrorism, Emergency Preparedness and Response. 3 Hours.
Through lectures, tabletop exercises, and invited speakers, the course content will include the following topics: terminology and core competencies, public health infrastructure, collaboration and communication, roles and responsibilities, psychological effects of terrorism, agricultural and zoonotic bioterrorism, law enforcements and public health, epidemiology of BT diseases (including agent specific lectures), burn injuries, risk communication, Strategic National Stockpile (SNS), National Incident Management System (NIMS), public health law as related to bioterrorism, and public health laboratory response related to bioterrorism. LEC.

PRVM 863. Health Disparities in Public Health. 3 Hours.
This course is designed to enhance students’ understanding of the biopsychosocial factors that contribute to disparities in health and health care. This course will also review strategies developed to reduce health disparities. Prerequisite: PRVM 818 Social and Behavioral Aspects of Public Health is recommended. LEC.

PRVM 864. Global Public Health Impact of HIV/AIDS. 3 Hours.
Historically reviews the HIV pandemic to evaluate lessons learned in prevention and treatment of the disease and successes and failures of public policies to reduce the impact of HIV in various countries. Critically analyzes HIV prevention interventions (voluntary counseling and testing, prevention of mother-to-child transmission, promotion of safer sex practices, clean needle exchange, methadone or buprenorphine programs, treatment with antiretroviral therapy, pre- and post-exposure prophylaxis, vaccine and microbicide development) and challenges with their implementation. LEC.

PRVM 865. Ethical Issues in Public Health. 3 Hours.
Lectures and small group discussions explore public health ethics, social justice and autonomy as they relate to public health practice and health policy. Current issues in health policy are discussed including: the right to health and health care, bioterrorism, and health inequalities, poverty and power. Weekly small group discussions include cases on MCHP, obesity and “fat taxes,” resource allocation, and disparities in infant mortality. Student evaluation is based on class participation, a small group project, and a final paper based upon a case study addressing ethical issues relevant to the student's area of public health specialization. LEC.

PRVM 870. Environmental Health Law and Policy. 3 Hours.
This is a survey course that will provide a broad, practical understanding of some important local, state, and federal environmental statutes, regulations, and case law. This course will cover the fundamentals of environmental law, examining the history, development, and current status of environmental law and federalism in the United States.
PRVM 875. Management of Public Health Data. 3 Hours.
A 3 credit hour graduate level course concerning basic computing skills necessary for any advanced epidemiologic or administrative quantitative methods. This course covers basics of variable and dataset creation, building, maintenance and basic descriptive (not interpretive) analysis. The course is designed to be of use to students entering a variety of research, administrative and public health settings in public health, clinical and other fields. Software covered will include SAS, SPSS, Epi Info, KPHS, Microsoft-EXCEL and ACCESS. The course can stand alone, or prepare students for Biostatistics and Epidemiology courses. Public data presentations will be stressed to prepare students to communicate about data with the lay public. LEC.

PRVM 876. Health Services Research Using Public Payer Data. 3 Hours.
Several contemporary health reforms have rendered analyses of public payer data more feasible and valuable for population health, health services research, and quality improvement. The addition of an outpatient drug benefit to standard inpatient and outpatient service coverage for Medicare, for example, has stimulated a growth industry in comparative effectiveness research and expanded policy research across the health care system. Pending expansion of States’ Medicaid programs under the Affordable Care Act will undoubtedly create the largest public health care insurance program in the United States. The Centers for Medicare Medicaid Services (CMS) have streamlined researchers’ access to national Medicare and Medicaid populations for health services and quality improvement projects through contracts with the Research Data Center at the University of Minnesota and the Chronic Condition Warehouse. In addition, Kansas Medicaid has invested in a Data Analytic Interface that offers ready access to our state’s employees, Medicaid beneficiaries, and private health insurance claims data for entering researchers including tremendous opportunities for state of the art, contemporary policy analyses. This is indeed an exciting and opportune time for students embarking on careers in health services, policy, and population health research. This course is designed to prepare students for real world analyses using standard public payer data claims. LEC.

PRVM 877. Health Communication. 3 Hours.
This course is focused on community health education and promotion, especially designing and evaluating health communication programs for populations with shared risks, exposures or behaviors. Ways in which the general public receives and assigns meaning to health messages will be reviewed. The styles and weaknesses of specific health communication initiatives will be analyzed in terms of theoretical constructs, costs and outcomes. Students apply public health principles by designing a substantive health communication piece or educational material. Prerequisite: PRVM 800: Principles of Epidemiology and PRVM 818: Social and Behavioral Aspects of Public Health. Permission of instructor may be granted in lieu of these prerequisites. LEC.

PRVM 878. Cost-effectiveness and Decision Analysis. 3 Hours.
This course examines techniques that are used in making clinical and management decisions when outcomes are uncertain. The course begins with a review of probabilistic decision making, then explores methods of analyzing choices with uncertain outcomes, stressing the use of decision trees and sensitivity analysis. The course examines cost minimization analysis, cost effectiveness analysis, and cost benefit analysis. (Same as HPM 872) LEC.

PRVM 879. Financial and Human Resource Management. 3 Hours.
This graduate-level course covers principles and skills for financial and human resource management within public health organizations. It focuses on non-profit and public settings. Financial management topics include the principles and purposes of accounting, concepts related to finance, and financial strategic planning. Human resource management topics include job design and hiring, performance management, retention, compensation/benefits, legal issues, and termination. The focus of the course is twofold: 1) understanding the concepts behind financing and in gaining skills in interpreting and using financial information; 2) gaining skills in human resources management and resource development. The course is designed for people who are interested in public health administration, but should be useful to anyone with an interest in public health leadership in any setting. Prerequisite: Departmental permission.

PRVM 880. Seminar in American Indian Health. 3 Hours.
This is a graduate-level course designed to teach students about current issues in American Indian health, as well as provide a basic historic context for understanding these issues. Students will read current literature from the academic journals and will be exposed to research being done today in American Indian communities, some of which has not yet been published. In addition, students will gain an understanding of what health disparities exist in American Indian communities and some of the reasons why they exist, including access issues and other barriers to care, from both Western and Native points of view. Students will be exposed to some of the difficulties in conducting health research in Native communities and some of the more successful techniques to overcome barriers. Prerequisites: None. LEC.

PRVM 881. Performance Improvement in Public Health. 3 Hours.
This course provides students with an overview of performance improvement and management integrated within the core public health functions: assessment, policy development and assurance. It uses both theoretical and practical material to develop basic competencies necessary for performance management in community and public health settings. Key topics will include assessment tools and models, continuous quality improvement, evidence-based practice, performance improvement methods (epidemiologic measurement, measures of central tendency, problem identification and analysis, control charts) and the development of team-based problem solving and resolution. Prerequisite: PRVM 800 Principles of Epidemiology, PRVM 875 Management of Public Data; PRVM 827 Public Health Administration is preferred. LEC.

PRVM 891. Public Health Internship. 1-3 Hours.
Students will complete a 192 hour internship in a community setting (12 hours/week for the 16 week semester) during PRVM 891 Public Health Internship. The internship is a service-learning experience for which students should consider the contribution their activities will make to the internship setting as well as activities that will be undertaken to meet the student’s learning objectives. Prerequisites: MPH core and required courses. One of the MPH core courses may be taken concurrently with PRVM 891. LEC.

PRVM 893. Public Health Capstone. 1-3 Hours.
The public health capstone is a 192 hour (12 hours/week for the 16 week semester) culminating experience that requires students to synthesize and integrate knowledge and/or apply theories and principles learned to an area of public health. The capstone is meant to be taken at the end of the student’s degree program, and is designed to give the student an opportunity to apply their skills to a variety of problems or issues in public health. The capstone should be primarily focused on addressing concentration specific competencies. While the exact activities and outcomes of the capstone will differ across concentrations all capstones, regardless of concentration, must include a written report and an oral defense. Prerequisites: All MPH core and required courses, nine of the 12 concentration credits completed, PRVM 891 Public Health Internship, last semester of enrollment. LEC.
The University of Kansas

PRVM 899. Thesis. 1-3 Hours.
Preparation of a formal thesis based on the research conducted on a community health problem. After the thesis has been completed, the student will be given an oral examination on the research methods and content. Prerequisites: All MS-CR core and required courses completed or in progress in the student's final semester (This course may be repeated for a maximum of 6 credit hours). THE.

Graduate Certificate in Community-Based Participatory Research

The Department of Preventive Medicine and Public Health is passionate about healthy communities and is committed to improving the health of people through our teaching, research and service. Faculty, students and staff work closely with members of the community on a wide variety of public health topics that are driven by the needs of our community: tobacco control, cancer screening and prevention in underserved rural and minority communities, obesity, health care access and utilization, and health outcomes.

The Certificate Program in Community-Based Participatory Research offered by the Department of Preventive Medicine and Public Health on the Kansas City campus is designed to provide students and scholars with a strong foundation in community-based participatory research principles and methods. Formal training in community-based participatory research, epidemiology, health literacy, qualitative methods, and grant writing will allow scholars to enhance their current research skills.

Students may apply to the Certificate in Community-Based Participatory Research program on the Kansas City campus. The students that will participate in this certificate program can be from a broad spectrum of backgrounds including graduate students, residents, fellows and faculty working in the area of health disparities and underserved communities.

The application process is an online process. For detailed instructions on how to apply and the application deadlines contact Tanya Honderick (913) 588-2720. Admission to the Community-Based Participatory Research Graduate Certificate program is competitive. The program is offered on the Kansas City campus only.

Admission Requirements:
• A bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.
  Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

• A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor’s degree.

• Applicants, who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395).

• A background check (p. 2395) is required during the admission process; it may affect the student's eligibility to enter the program.

• Submission of official scores on the Graduate Record Examination (GRE) or other professional test scores (such as the Graduate Management Admission Test, Medical College Admission Test, Law School Aptitude Test) that are not more than five years old. Official copy of scores should be sent from the Educational Testing Service (ETS) to the University of Kansas Medical Center - ETS institutional code 6895. Applicants who have earned a doctoral degree in the United States are exempt from this requirement.

• Three letters of recommendation from employers, instructors, or other persons who can assess the applicant’s aptitude for the program. Letters submitted per instructions for the online application process.

• A résumé or curriculum vitae.

• A personal written statement that describes the applicant’s career goals and motivation for seeking the certificate in community-based participatory research.

• One semester of college algebra.

• Students currently enrolled in graduate programs at KUMC or KU must be in good standing (3.0 or higher GPA) and have a letter of approval from their current graduate program director and/or department chair indicating support to enroll in the certificate program.

After an applicant has been admitted, the program may defer an applicant’s admission for one semester after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs →.

Certificate Program Information:
No student may work toward a graduate certificate without being accepted as a graduate certificate student in a specific graduate certificate program. Graduate certificates are not granted retroactively. An individual who is not currently a degree-seeking graduate student at KU must apply and may be admitted directly to a graduate certificate program.

The graduate certificate program is not a means of entry into a graduate degree program. If students admitted to a graduate certificate program are later admitted to a graduate degree program as degree-seeking, applicable courses taken for the graduate certificate program may, upon recommendation of the department and within general guidelines, be approved by the Office of Graduate Studies to be counted toward the degree.

While the courses comprising a graduate certificate may be used as evidence in support of a student’s application for admission to a graduate degree program, the certificate itself is not considered to be a prerequisite and does not guarantee admission into any graduate degree program. The certificate program is not intended to serve as a default system for students in a degree program who find that they are not able to complete the degree for academic or other reasons. Should a student drop out of a degree program and seek admission to a certificate program, all certificate admission requirements must be followed for admission and referral.

Graduate credit from another institution may not be transferred to a graduate certificate program.

Certificate requirements:
• Certificate requirements are normally completed within one (1) year of admission to the program although a maximum of 4 years is allowed.

• Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate certificate coursework.

• Enrollment in a minimum of one (1) credit hour the semester the program is completed. Graduate certificates may not be granted retroactively.
• Successful completion of a minimum of 16 credit hours.
• Successful completion of the following courses:
  PRVM 800  Principles of Epidemiology  3
  PRVM 814  Health Literacy  3
  PRVM 853  Responsible Conduct of Research  1
  PRVM 856  Community-Based Participatory Research  3
  PRVM 872  Grant Writing  3

  **Total Hours: 13**

- Successful completion of a minimum of three (3) credit hours of elective coursework in health disparities. Specific courses determined in consultation with the student's advisor.
- Successful completion of the Human Subjects Tutorial.
- Successful completion of the ePortfolio Requirement.

Graduate credit from another institution may not be transferred to a graduate certificate program.

Certificate requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program.

**Typical Plan of Study**

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<th>Year 1</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td></td>
<td>PRVM 800</td>
<td>3</td>
<td>PRVM 814</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PRVM 853</td>
<td>1</td>
<td>PRVM 856</td>
<td>3</td>
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<tr>
<td></td>
<td>PRVM 872</td>
<td>3</td>
<td>Elective course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Complete Human Subjects Tutorial</td>
<td></td>
<td>Complete ePortfolio Requirement</td>
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<td><strong>Total Hours: 16</strong></td>
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</tbody>
</table>

**Master of Public Health**

The University of Kansas Master of Public Health program (KU-MPH) is a fully accredited, 42 credit hour graduate program with concentrations in Epidemiology, Social and Behavioral Health, Environmental Health Sciences and Public Health Management. The program has been accredited by the Council on (http://ceph.org) Education for Public Health (CEPH) since 1998 and is offered through the Departments of Preventive Medicine and Public Health at the University of Kansas Medical Center in Kansas City and the University of Kansas School of Medicine-Wichita in Wichita. KU-MPH is also the only fully accredited MPH program in the state to become member of the Association of Schools and Programs of Public Health (ASPPH).

Our program mission is to provide teaching, research and service activities that prepare public health practitioners, health care providers and researchers to develop and apply population-based and individual approaches to maintaining and improving the public's health in the Heartland and the nation.

KU-MPH graduates serve in a wide variety of public health fields, including clinical medicine, research, health education.

The application process is an online process. Detailed instructions on how to apply and the application deadlines are posted on the Master of Public Health (http://www.kumc.edu/school-of-medicine/mph/admissions.html) website. Admission to the M.P.H. program is competitive. Students may apply in either Kansas City or Wichita and indicate their preference of campus choice as well as their choice for concentration on the application itself.

**Admission requirements:**

- A bachelor's degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.
  - Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale for the bachelor's degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395).
- A background check (p. 2395) is required during the admission process; it may affect the student's eligibility to enter the program.
- Submission of official scores on the Graduate Record Examination (GRE) or other professional test scores (such as the Graduate Management Admission Test, Medical College Admission Test, Law School Aptitude Test) that are not more than five years old. Official copy of scores should be sent from the Educational Testing Service (ETS) to the University of Kansas Medical Center - ETS institutional code 6895. Applicants who have earned a doctoral degree in the United States are exempt from this requirement.
- Three letters of recommendation from employers, instructors, or other persons who can assess the applicant's academic and professional potential. Letters are submitted per instructions provided for the online application process.
- A résumé or curriculum vitae. Demonstration of one or more years of responsible work experience in the health field or a degree in a recognized health profession or other evidence of training or experience that indicates adequate preparation for the M.P.H. curriculum is preferred.
- A personal written statement that describes the applicant's career goals and motivation for seeking post-graduate training in public health.
- Responses to three short-answer questions that are part of the online application itself.
- One semester of college algebra or calculus is required to enter the social and behavioral health concentration, the public health management concentration, or the environmental health sciences concentration.
- Completion of one semester of calculus is required to enter the epidemiology concentration.
- Applicants to the environmental health concentration must also have completed at least one semester of undergraduate biology and one additional semester of biology or another physical science course.

After an applicant has been admitted, the program may defer an applicant's admission for one year after which time the applicant must submit a new application.
Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs.

The Master of Public Health program consists of at least 42 credit hours. Students complete credit hours in specified core courses in epidemiology, environmental health, public health administration, biostatistics, and the social and behavioral sciences along with an elective course. The specific degree requirements vary by the choice of concentration. The four concentrations are epidemiology, social and behavioral health, environmental health sciences, or public health management. All students complete a public health internship and capstone project as described below.

**Degree Requirements:**

- Degree requirements are normally completed within 2 years of admission to the program although a maximum of 7 years is allowed. Part-time students normally complete requirements within 4 years of admission to the program.

- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.

- Enrollment in a minimum of one (1) credit hour the semester the student will graduate.

- Completion of a minimum of 42 hours.

- Successful completion of the following core courses (21 credit hours) regardless of concentration:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRVM 800</td>
<td>Principles of Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 809</td>
<td>Introduction to Public Health</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 818</td>
<td>Social and Behavioral Aspects of Public Health</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 827</td>
<td>Public Health Administration</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 830</td>
<td>Environmental Health</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 704</td>
<td>Principles of Statistics in Public Health</td>
<td>3</td>
</tr>
<tr>
<td>or BIOS 714</td>
<td>Fundamentals of Biostatistics I</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 875</td>
<td>Management of Public Health Data</td>
<td>3</td>
</tr>
<tr>
<td>or BIOS 715</td>
<td>Introduction to Data Management using RedCap and SAS</td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours** 21

- Successful completion of a minimum of three (3) credit hours of elective coursework. Specific courses determined in consultation with the student’s advisor.

- Successful completion of three (3) credit hours of internship in a public health agency or similar organization.

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<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PRVM 891</td>
<td>Public Health Internship</td>
<td>3</td>
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</table>

- Successful completion of three (3) credit hours of capstone including preparation and defense of a written project report developed from the capstone experience.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRVM 893</td>
<td>Public Health Capstone</td>
<td>3</td>
</tr>
</tbody>
</table>

- Successful completion of a concentration (minimum 12 credit hours.) Choose from Epidemiology, Social and Behavioral Health, Environmental Health Sciences or Public Health concentrations.

  - **Epidemiology concentration** - complete the following courses:

    | Course Code | Course Name                        | Credits |
    |-------------|------------------------------------|---------|
    | PRVM 813    | Chronic Disease Epidemiology       | 3       |
    | PRVM 815    | Infectious Disease Epidemiology    | 3       |

    **Total Hours** 12

    **Environmental Health Sciences concentration** - complete the following courses:

    | Course Code | Course Name                        | Credits |
    |-------------|------------------------------------|---------|
    | PRVM 832    | Environmental and Occupational Epidemiology | 3 |
    | PRVM 870    | Environmental Health Law and Policy | 3       |
    | PRVM 871    | Environmental Monitoring and Exposure Assessment | 3 |
    | PRVM 874    | Toxicology and Risk Assessment      | 3       |

    **Total Hours** 12

    **Public Health Management concentration** - complete the following courses:

    | Course Code | Course Name                        | Credits |
    |-------------|------------------------------------|---------|
    | PRVM 828    | Public Health Program Development and Management | 3 |
    | PRVM 851    | Public Health Policy and Law       | 3       |
    | PRVM 861    | Leadership in Public Health        | 3       |
    | PRVM 879    | Financial and Human Resource Management | 3 |

    **Total Hours** 12

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program.
**Typical Plan of Study (Kansas City campus):**

Full-Time MPH in Epidemiology (Kansas City) (p. )

Part-Time MPH in Epidemiology (Kansas City) (p. )

Full-Time MPH in Social and Behavioral Health (Kansas City) (p. )

Part-Time MPH in Social and Behavioral Health (Kansas City) (p. )

Full-Time MPH in Environmental Health Sciences (Kansas City) (p. )

Part-Time MPH in Environmental Health Sciences (Kansas City) (p. )

Full-Time MPH in Public Health in Public Health Management (Kansas City) (p. )

Part-Time MPH in Public Health in Public Health Management (Kansas City) (p. )

**Typical Plan of Study (Wichita campus)**

Full-Time MPH in Epidemiology (Wichita) (p. )

Part-Time MPH in Epidemiology (Wichita) (p. )

Full-Time MPH in Social and Behavioral Health (Wichita) (p. )

Part-Time MPH in Social and Behavioral Health (Wichita) (p. )

Full-Time MPH in Environmental Health Sciences (Wichita) (p. )

Part-Time MPH in Environmental Health Sciences (Wichita) (p. )

Full-Time in Public Health Management (Wichita) (p. )

Part-Time in Public Health Management (Wichita) (p. )

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### Typical Full-Time Plan of Study: MPH in Epidemiology (Kansas City)

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Hours Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Fall</td>
<td>PRVM 800</td>
<td>3 PRVM 818</td>
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<tr>
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<td>PRVM 809</td>
<td>3 PRVM 830</td>
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<tr>
<td></td>
<td>BIOS 714</td>
<td>3 PRVM 815 (concentration)</td>
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<tr>
<td></td>
<td>BIOS 715</td>
<td>3 PRVM 841 (concentration)</td>
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### Year 2

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<tbody>
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<td>3 PRVM 893</td>
<td>3</td>
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<tr>
<td>PRVM 813 (concentration)</td>
<td>3 PRVM Elective</td>
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<tr>
<td>PRVM 842 (concentration)</td>
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**Total Hours: 42**

### Typical Part-Time Plan of Study: MPH in Epidemiology (Kansas City)

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<tr>
<th>Year 1</th>
<th>Hours Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Fall</td>
<td>PRVM 800</td>
<td>3 PRVM 818</td>
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<td>3 PRVM 830</td>
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<td></td>
<td>BIOS 714</td>
<td>3 PRVM 815 (concentration)</td>
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<tr>
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<td>BIOS 715</td>
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### Year 2

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<th>Fall</th>
<th>Hours Spring</th>
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<td>PRVM 827</td>
<td>3 PRVM 841 (concentration)</td>
<td>3</td>
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**Total Hours: 42**

### Typical Full-Time Plan of Study: MPH in Social and Behavioral Health (Kansas City)

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<tr>
<td>Fall</td>
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**Total Hours: 42**

### Typical Part-Time Plan of Study: MPH in Social and Behavioral Health (Kansas City)

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<td>3 BIOS 704</td>
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<td>PRVM 842 (concentration)</td>
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**Total Hours: 42**

**Typical Full-Time of Study: MPH in Environmental Health Sciences (Kansas City)**

**Year 1**

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**Total Hours: 42**

**Typical Part-Time Plan of Study: MPH in Environmental Health Sciences (Kansas City)**

**Year 2**

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**Total Hours: 42**

**Typical Full-Time Plan of Study: MPH in Public Health Management (Kansas City)**

**Year 1**

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**Total Hours: 42**

**Typical Part-Time Plan of Study: MPH in Public Health Management (Kansas City)**

**Year 2**

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**Year 3**

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Typical Full-Time Plan of Study: MPH in Epidemiology (Wichita)

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Typical Part-Time Plan of Study: MPH in Epidemiology (Wichita)

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Typical Part-Time Plan of Study: MPH in Environmental Health Sciences (Wichita)

Year 1
Fall | Hours | Spring | Hours | Summer | Hours
--- | --- | --- | --- | --- | ---
PRVM 809 | 3 | BIOS 704 | 3 | PRVM 871 | 3
PRVM 830 | 3 | PRVM 827 | 3 | 6 | 6 | 3

Year 2
Fall | Hours | Spring | Hours | Summer | Hours
--- | --- | --- | --- | --- | ---
PRVM 818 | 3 | PRVM 800 | 3 | 6 | 6 | 3
PRVM Elective | 3 | PRVM 875 | 3 | 6 | 6 | 3

Year 3
Fall | Hours | Spring | Hours | Summer | Hours
--- | --- | --- | --- | --- | ---
PRVM 832 | 3 | PRVM 870 | 3 | PRVM 851 | 3
PRVM 874 | 3 | 6 | 3

Year 4
Fall | Hours | Spring | Hours | Summer | Hours
--- | --- | --- | --- | --- | ---
PRVM 891 | 3 | PRVM 893 | 3 | 3 | 3

Total Hours: 42

Typical Full-Time Plan of Study: MPH in Environmental Health Sciences (Wichita)

Year 1
Fall | Hours | Spring | Hours | Summer | Hours
--- | --- | --- | --- | --- | ---
PRVM 809 | 3 | BIOS 704 | 3 | PRVM 871 | 3
PRVM 818 | 3 | PRVM 800 | 3 | 6 | 6 | 3
PRVM 830 | 3 | PRVM 875 | 3 | 6 | 6 | 3

Year 2
Fall | Hours | Spring | Hours | Summer | Hours
--- | --- | --- | --- | --- | ---
PRVM 832 | 3 | PRVM 870 | 3 | PRVM 851 | 3
PRVM 874 | 3 | 6 | 3

Year 3
Fall | Hours | Spring | Hours | Summer | Hours
--- | --- | --- | --- | --- | ---
PRVM 879 | 3 | PRVM 851 | 3 | 6 | 3
PRVM Elective | 3 | 6 | 3

Year 4
Fall | Hours | Spring | Hours | Summer | Hours
--- | --- | --- | --- | --- | ---
PRVM 891 | 3 | PRVM 893 | 3 | 3 | 3

Dual M.D.-M.P.H. Program
This is a five year program in which the medical student completes the requirements for the M.P.H. degree in one year. This can be accomplished either between the second and third, or between the third and fourth years of medical school. Students must complete all degree requirements for both the M.D. and the M.P.H. programs. They complete the M.P.H. concentration (either in Social and Behavioral Health or Public Health Management), in three semesters, beginning in the summer (June), and proceeding through fall (August) and spring (January), and finishing by the end of May. Please contact the respective academic units offering the degree for more information. The M.D. degree (p. 2062) is offered by the School of Medicine.

Joint Ph.D. in Behavioral Psychology-M.P.H. Program
The Department of Applied Behavioral Science on the Lawrence campus offers a 72-credit-hour doctoral program in behavioral psychology (p. 1459). Students learn about an array of content areas and theoretical perspectives and achieve proficiency in behavioral analysis,
developmental studies, or behavioral intervention. Both the departments of Applied Behavioral Science (http://www.absc.ku.edu) and of Preventive Medicine and Public Health (http://ph.kumc.edu) promote community/public health and development through collaborative research, teaching, and service.

The joint Ph.D./M.P.H. is ideal for students interested in prevention through community and public health. Students must apply for admission to the M.P.H. and Ph.D. programs separately. Applications are reviewed by the admissions committees of both programs. Students admitted to the joint program complete the 42-hour M.P.H. requirements as listed in the chart below in addition to the Ph.D. requirements. See the Doctor of Philosophy in Behavioral Psychology (p. 1459) section of this catalog for the Ph.D. degree requirements. Completion of ABSC 710, ABSC 875, and ABSC 876 also qualifies a student for a Graduate Certificate in Community Health and Development (p. 1461) offered by the Department of Applied Behavioral Science. Additional details about the certificate program may be found on their website (http://absc.ku.edu/graduate-certificate-community-health-and-development/#requirements).

M.P.H. Course Requirements for the Ph.D. in Behavioral Psychology-M.P.H. Program

<table>
<thead>
<tr>
<th>Required Core Courses (21)</th>
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<tr>
<td>PRVM 800 Principles of Epidemiology</td>
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<tr>
<td>PRVM 809 Introduction to Public Health</td>
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<td>PRVM 818 Social and Behavioral Aspects of Public Health</td>
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<td>PRVM 875 Management of Public Health Data</td>
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<td>BIOS 704 Principles of Statistics in Public Health</td>
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<td>or BIOS 714 Fundamentals of Biostatistics</td>
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<th>Shared Ph.D. Courses satisfies requirements for the MPH Concentration in Social and Behavioral Health (12)</th>
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<tr>
<td>ABSC 710 Community Health and Development</td>
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<td>ABSC 735 Within Subjects Research Methodology and Direct Observation</td>
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<td>ABSC 796 Laboratory in Behavioral Development and Modification: The Analysis of Behavior I</td>
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<td>ABSC 861 Applied Behavior Analysis</td>
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<td>PRVM 893 Public Health Capstone</td>
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| Total Hours | 42 |

Master of Science in Clinical Research

The University of Kansas Master of Science in Clinical Research program (MS-CR) is a 33 credit hour graduate program with the student’s thesis serving as their culminating project. The program is offered through the Departments of Preventive Medicine and Public Health at the University of Kansas Medical Center in Kansas City and the University of Kansas School of Medicine-Wichita in Wichita.

The MS-CR program provides students with formal training in clinical research, biostatistics, and epidemiology that will allow clinical scholars to enhance their current research skills. Graduates from the Master of Science in Clinical Research (MS-CR) program serve in a wide variety of fields, including clinical medicine, research, education, disease surveillance and academic settings. The University of Kansas MS-CR degree is designed to provide clinical scholars with a strong foundation in patient-oriented research principles and methods.

Admission and degree requirements are detailed in this section of the catalog. Other program information and application details may be found at our website. The application process is an online process. Detailed instructions on how to apply and the application deadlines are posted on the Clinical Research program (http://www.kumc.edu/school-of-medicine/preventive-medicine-and-public-health/education-and-training/ms-cr/admission-requirements.html) website. Admission to the M.S. in Clinical Research degree program is competitive. Students may apply in either Kansas City or Wichita and should indicate their preference of campus on the application itself.

Admission requirements:

- A bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.
- Students with degrees from outside the U.S. are required to submit an evaluation of their academic credentials performed by one of the established companies providing this service for a fee. The MS-CR program will accept evaluations from the World Education Service (http://www.wes.org) (WES) or Educational Credential Evaluators (http://www.ece.org) (ECE) and other companies on a case by case basis. The evaluation must be course by course and include degree equivalency and grade point average. The evaluation should be sent directly from the company to the MS-CR program.
- A cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale for the bachelor’s degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395). The Educational Commission for Foreign Medical Graduates (ECFMG) certificate is accepted in lieu of a TOEFL/IELTS score for applicants with a Medical Degree applying to this program.
- A background check (p. 2395) is required during the admission process; it may affect the student’s eligibility to enter the program.
- Submission of official scores on the Graduate Record Examination (GRE) or other professional test scores (such as the Graduate Management Admission Test, Medical College Admission Test, Law School Aptitude Test) that are not more than five years old. Official copy of scores should be sent from the Educational Testing Service (ETS) to the University of Kansas Medical Center - ETS institutional code 6895. Applicants who have earned a doctoral degree in the United States are exempt from this requirement.
- Completion of at least one semester of calculus is required.
- Three letters of recommendation from employers, instructors, or other persons who can assess the applicant’s academic and professional potential. Letters are submitted per instructions provided for the online application process.
- A résumé or curriculum vitae. Demonstration of one or more years of responsible work experience in the health field or a degree in a recognized health profession or other evidence of training or
experience that indicates adequate preparation for the M.S. in Clinical Research curriculum is preferred.

- A personal written statement that describes the applicant's career goals and motivation for seeking post-graduate training in clinical research.

Applicants not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. *Other years' catalogs*. The M.S. in Clinical Research program consists of 33 credit hours. Students are required to complete six core courses: epidemiology, biostatistics, statistical computing (or data management), advanced epidemiologic methods, grant writing and responsible conduct of research for a total of 22 credit hours of core courses; 8 additional credit hours consist of electives. The final three credit hours are devoted to the student's thesis.

**Degree requirements:**

- Degree requirements are normally completed within 2 years of admission to the program although a maximum of 7 years is allowed. Part-time students normally complete requirements within 5 years of admission to the program.

- Completion of a minimum of 33 credit hours.

- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.

- Enrollment in a minimum of one (1) credit hour the semester the student will graduate.

- Enrollment in PRVM 899 Thesis the semester the student defends their thesis.

- Successful completion of a thesis defense (p. 2398).

- Successful thesis submission (p. 2398) (according to Office of Graduate Studies policy.)

- Successful completion of the following core courses (22 credit hours):

  - PRVM 800 Principles of Epidemiology
  - PRVM 841 Advanced Epidemiology I: Methods in Cross-Sectional and Case-Control Studies
  - PRVM 853 Responsible Conduct of Research
  - PRVM 872 Grant Writing
  - BIOS 714 Fundamentals of Biostatistics I
  - BIOS 717 Fundamentals of Biostatistics II
  - BIOS 810 Clinical Trials
  - BIOS 815 Introduction to Data Management using RedCap and SAS (Kansas City campus only)
  - PRVM 875 Management of Public Health Data (Wichita campus only)

- Successful completion of elective courses (minimum of eight (8) credit hours). Specific courses determined in consultation with the student's advisor.

- Successful completion of a minimum of three (3) credit hours of thesis:

  - PRVM 899 Thesis

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program.

### Typical Plan of Study - Kansas City campus

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**Total Hours: 33**

### Typical Plan of Study - Wichita campus

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**Total Hours: 33**

*These are sample plans, and may be subject to change. Students should meet with their advisors once per semester to discuss course plans.*
Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your advisor for details). Other years’ catalogs (http://catalog.ku.edu/archives).

Bachelor of Arts in Fine Arts in Music (p. 2205)
Bachelor of Fine Arts in Theatre-Voice Program (p. 2210)
Bachelor of Music (p. 2212)
Bachelor of Music in Musicology (p. 2212)
Bachelor of Music in Music Theory and Composition (p. 2214)
Bachelor of Music in Music Therapy (p. 2216)
Bachelor of Music in Music Performance: Piano (p. 2219)
Bachelor of Music in Music Performance: Organ and Church Music (p. 2221)
Bachelor of Music in Music Performance: Strings and Harp (p. 2222)
Bachelor of Music in Music Performance: Voice (p. 2224)
Bachelor of Music in Music Performance: Brass and Percussion (p. 2226)
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Music Education B.M.E. Program (p. 2229)
Master of Music in Conducting (p. 2233)
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Master of Music in Music Performance: Brass and Percussion (p. 2236)
Master of Music in Music Performance: Organ, Church Music, and Carillon (p. 2237)
Master of Music in Music Performance: Piano (p. 2239)
Master of Music in Music Performance: Strings (p. 2240)
Master of Music in Music Performance: Voice and Opera (p. 2241)
Master of Music in Music Performance: Woodwinds (p. 2242)
Music Education M.M.E. Program (p. 2244)
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Doctor of Musical Arts (p. 2246)
Doctor of Musical Arts in Composition (p. 2246)
Doctor of Musical Arts in Conducting (p. 2248)
Doctor of Musical Arts in Music Performance: Organ and Church Music (p. 2252)
Doctor of Musical Arts in Music Performance: Brass and Percussion (p. 2250)
Doctor of Musical Arts in Music Performance: Piano (p. 2254)
Doctor of Musical Arts in Music Performance: Strings (p. 2256)
Doctor of Musical Arts in Music Performance: Voice (p. 2257)
Doctor of Musical Arts in Music Performance: Woodwinds (p. 2259)
Doctor of Philosophy (p. 2261)
Doctor of Philosophy in Music (p. 2261)
Doctor of Philosophy in Music Education (p. 2262)

The School of Music

The School of Music at the University of Kansas ranks among the finest in America, offering comprehensive programs at the bachelor’s, master’s, and doctoral levels.

The school nurtures and advances the art of music through creation, performance, scholarly inquiry, entrepreneurship, and enhancement of the artistic skills and experiences of the university and regional cultural communities.

The school is a major contributor to the arts community through the student, faculty, and professional performances in the Swarthout Recital Hall (remodeled in 2015), Bales Organ Recital Hall, the Robert Baustian Theatre, and the Lied Center of Kansas.

The School of Music is an accredited institutional member of the National Association of Schools of Music (http://nasm.arts-accredit.org). The entrance and graduation requirements in this catalog conform to the published guidelines of that organization.

Degrees

Undergraduate Degree Programs

The degree of Bachelor of Music is granted with majors in bassoon, clarinet, double bass, euphonium, flute, French horn, harp, musicology, music therapy, oboe, organ and church music, percussion, piano, saxophone, theory, composition, trombone, trumpet, tuba, viola, violin, violoncello, and voice.

The degree of Bachelor of Arts in Fine Arts is granted with concentrations in applied music (on an instrumental or voice), jazz studies, musicology, and music theory.

The degree of Bachelor of Fine Arts is granted with a major in theatre and voice.

The degree of Bachelor of Music Education is granted with a major in music education.
Requirements for Graduation

Degrees from the School of Music are conferred on candidates who have satisfactorily completed a minimum of 120 credit hours for the B.A., B.M., B.F.A., and B.M.E. degrees, including required subjects. 45 credit hours must be in junior/senior-level courses, numbered 300 and above. A minimum 2.0 grade-point average, both cumulative and in KU courses, is required for graduation. 4 hours of the total in each case except the B.M.E. degree may be in physical education activity courses.

Remedial Courses

Remedial courses listed in the catalog and Schedule of Classes (https://classes.ku.edu/Classes/ExternalDisplay.action) are numbered below 100. Such courses include, but are not limited to, MATH 2 and MTHC 99. Such courses do not count toward graduation in the School of Music and may not be counted as distribution courses or electives.

Graduate Degree Programs

The School of Music offers these degree programs:

Master of Music

• Composition
• Conducting
• Musicology
• Music theory
• Performance

Master of Music Education

• Music education
• Music therapy

Doctor of Musical Arts

• Composition
• Conducting
• Performance

Doctor of Philosophy

• Music with an emphasis in musicology or music theory
• Music Education with an emphasis in music education or music therapy

The Kansas Board of Regents (http://www.kansasregents.org) has designated KU as the sole institution in the Regents system authorized to grant doctoral degrees in music.

Contact the school (http://music.ku.edu) for specific admission requirements. See also Admission in the Graduate Studies section of the online catalog.

View the list of School of Music academic programs (p. 2170).

Facilities

Murphy Hall

Murphy Hall, named for former KU Chancellor Franklin D. Murphy, houses the School of Music (http://music.ku.edu). It is a 5-level facility with offices for faculty members in applied music, music theory and composition, musicology, opera, music education, music therapy, and ensembles. Designed for music and theater, it contains 4 performance areas.

• Crafton-Preyer Theater provides a venue for plays, operas, musical theater shows, and concerts. It is a fully equipped, 1,188-seat proscenium stage facility.
• William Inge Memorial Theater is an intimate black-box facility with seating for up to 125, suitable for plays and small opera productions.
• Swarthout Recital Hall, a 340-seat facility with exceptional acoustics, is dedicated to faculty and student solo and chamber music presentations and occasional opera productions. Swarthout Recital Hall has been fully remodeled and re-opens to public performances in April, 2015.
• The Baustian Theater, a black-box facility for opera and musical theater productions, seats 125 and has a dressing room and wardrobe area, set construction and storage area, and office and performance control areas.

Murphy Hall also houses classrooms, practice rooms, rehearsal halls, and storage facilities for instruments and sheet music. The Electronic Music Studio contains a digital workstation for the recording and production of electronic music and video.

The Kansas Center for Music Technology in Murphy Hall promotes the development and application of current technologies in music instruction, research, and creative projects. Its Computer Center contains 32 fully networked multimedia workstations. KCMT has a library of commercially available software for evaluation, experimentation, and integration into existing courses. The lab also contains 3 high-end workstations for professional-quality digital audio, digital video, and DVD authoring. The library includes basic productivity and Internet software; music notation and sequencing, ear-training, CD-ROMs, and drill design software; and digital editing software for audio, video, multimedia, and Web authoring. Through workshops and music technology courses, KCMT helps faculty members and students develop innovative new software.

The Thomas Gorton Music and Dance Library in Murphy Hall houses more than 111,000 scores, books, sound recordings, videos, microforms, and serials, and has the leading music collection in the Great Plains. It features digital workstations; study carrels; comfortable seating; and public display of new acquisitions, current periodicals, and special exhibitions. Students can make full use of music and dance information resources. The Joe and Joyce Hale Media System allows remote listening and viewing from 30 locations in the library, including 328 media carrels, the seminar room, and the group study room. Media carrels have remote controls, MIDI music keyboards, mini-disk recorders, computers, and video monitors.

The Music Education and Music Therapy Complex in Murphy Hall contains a model music education classroom, a general music instruction classroom, large and small therapy clinical spaces, three research spaces, faculty offices, the Psychology and Acoustics of Music Laboratory, and the Music Therapy Clinic, a clinical training and research facility. In addition, the complex houses a Vocology Laboratory, which affords excellent resources for research-based understanding of singing voice phenomena. The stationary lab facilitates acquisition and analysis of voice data in a controlled environment. It also provides mobile configurations of resources for field-based research and pedagogy in voice studios, choir rehearsal areas, classrooms, and music therapy clinics. A Polycom system enables interactive distance delivery of music education and music therapy graduate courses throughout Kansas and anywhere in the world.
Lied Center

The Lied Center of Kansas (http://www.lied.ku.edu) is a 2,020-seat performing arts hall. On KU’s west campus at Irving Hill Road and Constant Avenue, it is the venue for the Lied Center Series. It also presents School of Music (http://music.ku.edu) productions, Student Union Activities (https://rockchalkcentral.ku.edu/?q=Student_9347) shows, and university and community events. The performing arts hall offers excellent acoustic quality and technical production capabilities. The stage features a 56-foot-wide proscenium opening, resilient wood floor, counterweighted rigging system, and ample wing space. There is a full complement of backstage support areas including seven dressing rooms, dance rehearsal studio, two warm-up rooms, a Greenroom, and a production office.

The Dane and Polly Bales Organ Recital Hall is acoustically designed for the teaching and performance of organ music. It has seating for 200 and is attached to the Lied Center main lobbies at two levels. It houses a 45-stop mechanical key-action (electric stop-action) organ built by Hellmuth Wolff et Associés, one of the finest builders of organs in the world. The hall is available to organ students for practice, lessons, and recitals. Its aesthetics are enhanced by three magnificent stained glass windows designed by Peter Thompson, former dean of Fine Arts.

Undergraduate Programs

The school acquaints undergraduates with music as an important field of a liberal culture, either as members of a discriminating public or as trained practitioners. It prepares students for careers in music and promotes scholarship and research. It offers curricula for teachers of music in public schools and institutions of higher education and special degree curricula for training music therapists.

View the list of School of Music academic programs (p. 2170).

Applied Music Lessons

All majors and nonmajors (as space permits) who wish to take lessons must first pass an audition. All music majors enroll in 121-level applied music courses until they have accumulated 4 credits (6 credits for performance majors) at which time they may enroll in the 221 level. Music majors who are not performance majors must accumulate 8 applied music credits before enrolling in the 321 level and 12 applied music credits before enrolling in the 421 level (or 422 level for the B.M.E.). Performance majors must accumulate 12 credits at the 121 and 221 levels before they enroll in 622 level.

Music majors pursuing the performance degrees, B.M. and B.F.A., are required to enroll in 3 credits of lessons to receive 50-minutes per week of studio instruction. Music majors pursuing the Music Education B.M.E., some Music B.A. degrees and the following B.M. degrees: Music Composition, Music Theory, Musicology and Music Therapy are required to enroll in 2 credits of lessons to receive 50-minutes per week of studio instruction. Music minors, some Music B.A. majors, non-music majors and students in music with a secondary area may enroll in 1 credit of lessons to receive 30-minutes per week of studio instruction. See degrees listed on the Programs page for specific credit-hour and recital requirements. The summer session limit on all music major lessons is 1 to 3 credit hours.

Students may state their preferences as to teachers for private lessons, but final authority rests with the director of the division. The minimum acceptable grade to remain in applied music lessons is a B-. A grade of B- or higher must be earned in each semester of lessons.

Courses for Nonmajors

Students in other KU schools may enroll in music courses for credit, subject to the availability of instructional time and as space permits. Most musicology courses and all ensembles are open to all KU students.

Students in the College of Liberal Arts and Sciences not majoring in music may elect an appropriate introductory course (MUSC 298, MUSC 305, MUSC 308, MUSC 309, MUSC 310, MUSC 312, MUSC 313, MUSC 336, MUSC 560 or MUSC 650). Minors in music are offered for students in other disciplines. Most degree programs accept up to 6 hours of electives in music ensembles and performance.

Junior/senior credit in applied music involves a prerequisite of 4 hours of university credit in sequence in the field concerned.

University Honors Program

The school encourages qualified students to participate in the University Honors Program (http://www.honors.ku.edu).

Ensembles

The University Symphony Orchestra performs works from the standard symphonic repertoire on campus and occasionally on tours. It combines with choral ensembles to present oratorios or other large works and assists in musical theatre productions and opera. In addition, the orchestra reads new orchestral works submitted by KU composers for the George Lawner Prize, an annual adjudicated competition co-sponsored by Music Theory and Composition and the KU Symphony Orchestra.

The Wind Ensemble presents 4 or more concerts annually and tours nationally and internationally. The Symphonic and University Bands perform 2 concerts each semester. The KU Jazz program includes 3 jazz ensembles, 2 jazz choirs, and several combos.

The Marching Jayhawks are part of the pageantry at football games. The Basketball Bands (Men’s and Women’s) and pep bands also perform for sports events.


The Bales Chorale, Chamber Choir, Concert Choir, Men’s Glee Club, University Singers, and Women’s Chorale perform concerts on campus, tour, and participate in combined choral and orchestral presentations such as the annual Holiday Vespers. All KU students are eligible through audition for placement in a choir.

The Collegium Musicum specializes in early music, both vocal and instrumental, using KU’s collection of replicas of early instruments. Helianthus is the performing arm of KU’s New Music Ensemble. Each semester it performs the finest available contemporary chamber music.

Recitals of music by KU student composers are presented each semester by the KU Composers Guild, a student organization. The Kansas Brass Quintet, Kansas Woodwinds, and Kansas String Quartet are faculty groups that present numerous concerts.
Visit the School of Music (http://music.ku.edu) for current information about recitals, concerts, and performances.

**Graduate Programs**

The School of Music offers Master of Music programs in composition, conducting, musicology, music theory, and areas of performance and Master of Music Education degree programs in music education or music therapy.

The Doctor of Musical Arts degree is offered in composition, conducting, and areas of performance. We offer the Doctor of Philosophy degree in music education with an emphasis in music education or music therapy and the Doctor of Philosophy degree in music with an emphasis in musicology or music theory.

View the list of School of Music academic programs (p. 2170).

The Kansas Board of Regents (http://www.kansasregents.org) has designated KU as the sole institution in the Regents system authorized to grant doctoral degrees in music.

**Graduate Credit for Nonmajors**

**Performance**

Permission to enroll for graduate credit in applied music is determined by audition. This audition should be scheduled with the major division faculty at the beginning of each semester.

**Music Education or Music Therapy**

Permission to enroll for graduate credit in music education or music therapy is determined by the information in the MERM Graduate Application Procedure (http://music.ku.edu/programs/memt/prospective/graduate/admissions.shtml) document.

**Ensembles**

The University Symphony Orchestra performs works from the standard symphonic repertoire on campus and occasionally on tours. It combines with choral ensembles to present oratorios or other large works and assists in musical theater and opera productions. In addition, the orchestra reads new orchestral works submitted by KU composers for the George Lawner Prize, an annual adjudicated competition co-sponsored by Music Theory and Composition and the KU Symphony Orchestra.

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Visit the School of Music (http://music.ku.edu) for current information about recitals, concerts, and performances.

**Undergraduate Advising**

Music students are advised by music faculty members from their major area of study as well as from the School of Music Student Services office. Students in Music Education and Music Therapy are each assigned a specific faculty advisor.

Each entering first-year student is encouraged to attend KU’s summer First-Year Experience Orientation. At the summer orientation program, students are advised on course selection for the fall semester and given the opportunity to enroll.

Each semester before enrollment, students see their advisors to plan schedules and discuss academic and career interests. Students are encouraged to call on their advisors any time during the school year if they wish to change their schedules or discuss other matters. Consultation with an advisor is recommended before making schedule changes.

Music students should direct questions to the School of Music (http://music.ku.edu) Office of Student Services.

**Graduate Advising**

Graduate advising is handled by the student’s major professor.

**Undergraduate Scholarships**

**Academic Scholarships**, as well as grants, loans, and need-based financial aid, are available through Financial Aid and Scholarships (http://affordability.ku.edu/steps/index.shtml).

**Merit Scholarships in Music** are also available. Audition application and information is available on the school’s website (http://music.ku.edu/applyaudition).

**Tuition and Fees**

Information about KU tuition and fees is available from the Office of the University Registrar (http://www.registrar.ku.edu). Tuition and fees are set by the Board of Regents and are subject to change.

**Graduate Fellowships and Assistantships**

For information about graduate assistantships, contact the School of Music.

Visit the Graduate Studies website for information about funding opportunities for graduate students at KU.
Financial Aid and Scholarships (http://financialaid.ku.edu) administers grants, loans, and need-based financial aid.

Tuition and Fees
Information about KU tuition and fees is available from the Office of the University Registrar (http://www.registrar.ku.edu). Tuition and fees are set by the Board of Regents and are subject to change.

Undergraduate University Regulations
For information about all university regulations, see Regulations (p. 12) or visit the University of Kansas Policy Library (http://www.policy.ku.edu). A few examples specific to the School of Music are shown below.

Absences
The school defines excessive absence as absence in excess of the number of credit hours in the course. A student with excessive absences may be withdrawn from the course by the dean.

Change of School
To change from one school to another, the student must submit a Change of School form in the dean’s office of the school the student plans to enter. Deadlines are provided on the form.

Admission is competitive. Students must have minimum cumulative grade-point averages of 2.75 on a 4.0 scale from all colleges or universities including KU. Music admission is contingent upon a successful audition. Change-of-school applicants must meet the same requirements as transfer applicants.

Credit/No Credit
A Credit/No Credit option is available to all degree-seeking undergraduates. You may enroll in one course a semester under the option, if the course is not in your major or minor. For more information, visit the KU Policy Library (https://documents.ku.edu/policies/governance/USRR.html#Art2sect2).

Warning: Certain undesirable consequences may result from exercising the option. Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of No Credit to F when computing grade-point averages.

Graduation with Distinction and Highest Distinction
Students who rank in the upper 10 percent of their graduating class graduate with distinction. The upper third of those awarded distinction graduate with highest distinction. The list is compiled each spring and includes July, December, and May graduates.

Honor Roll
Students with grade-point averages of 3.6 who have completed at least 12 hours with letter grades are recognized on the honor roll or dean’s list in fall and spring. An Honor Roll notation appears on the transcript.

Incompletes
The letter I should not be used when a definite grade can be assigned for the work done. It is not given for the work of a student in any course except to indicate that some part of the work has, for reasons beyond the student’s control, not been done, while the rest has been satisfactorily completed. At the time an I is reported on the electronic roster, the character and amount of work needed, as well as the date required for completion and lapse grade if further work is not completed by this date, should be indicated.

If the instructor specifies that repetition of a portion of the classroom work is required, the student may attend classes but should not officially enroll in that course again.

A student who has an I posted for a course must make up the work by the date determined by the instructor, in consultation with the student, which may not exceed one calendar year, or the last day of the term of graduation, whichever comes first. An I not removed according to this rule shall automatically convert to a grade of F or U, or the lapse grade assigned by the course instructor, and shall be indicated on the student’s record.

Extensions to the time limit may be granted by the dean’s representative upon submission of a petition from the student containing the endorsement of the course instructor who assigned the I grade, or the department chairperson if the instructor is unavailable. After the I grade is converted to a grade of F or U, the grade may only be changed in accordance with USRR Article II, Section 3 (https://documents.ku.edu/policies/governance/USRR.html#Art2sect3).

Maximum and Minimum Semester Enrollment
The normal maximum enrollment is 20 hours during fall or spring semesters or 9 hours during the summer session. Students may exceed the normal maximum enrollment only with the permission of the dean.

Probation
Students may be dismissed at any time by the dean for excessive absences or for failure to make satisfactory progress in their studies.

A student not on probation who fails to earn a grade-point average of at least 2.0 in any semester is placed on probation for the following semester.

At the end of the semester in which the student has been on probation, he or she is removed from probation if the grade-point average for the semester is at least 2.0, with a minimum course load of 12 hours and a cumulative grade-point average of 2.0. A student whose course load is fewer than 12 hours or whose cumulative grade-point average is below 2.0 continues on probation even if the semester grade-point average is 2.0 or above.

At the end of the semester in which the student has been on probation, he or she is dismissed for poor scholarship if the grade-point average for the semester is below 2.0.

A student who has been dismissed for poor scholarship is not eligible to enroll again at any time, except with the special permission of the dean. A reinstated student is placed on final probation. If the student fails to achieve a minimum grade-point average of 2.0 for the semester, he or she is dismissed, and readmission is not granted.
Students who take courses at other institutions during the suspension may receive credit for such work only if it meets the approval of the dean.

**Required Work in Residence**

6 of the final 30 hours may be taken for nonresident credit, with advance permission. Nonresident credit may fill only elective requirements not in the major field of study.

**Transfer of Credit**

CredTran (http://credittransfer.ku.edu) is a transfer course equivalency system that lists more than 2,200 colleges and universities from which KU has accepted transfer courses in the past. If your school or course is not listed, your evaluation will be completed when you are admitted to KU.

Only grades of C or higher are accepted as transfer credit toward degrees.

**Graduate University Regulations**

For information about all university regulations, see Regulations (p. 12) or visit the University of Kansas Policy Library (http://www.policy.ku.edu). A few examples specific to the School of Music are shown below.

**Absences**

A leave of absence may be granted on request. View the Graduate Studies policy on leaves of absence (https://documents.ku.edu/policies/Graduate_Studies/leaveofabsence.htm).

**Credit/No Credit**

The Credit/No Credit option is authorized, as of spring 2012, for graduate students (USRR Article II, 2.2.7). The full explanation can be found in the KU Policy Library under University Senate Rules and Regulations (http://catalog.dept.ku.edu/wrong/schools/gs/regulations).

**Incompletes**

The letters W and I may be given. The letter I indicates incomplete work that may be completed without re-enrollment in the course. The letter W indicates withdrawal for which no credit or grade point is assigned. For more information, see USRR Article II, Section 3 (https://documents.ku.edu/policies/governance/USRR.htm#art2sect3).

**Maximum and Minimum Semester Enrollment**

The normal maximum enrollment is 16 hours during fall or spring semesters or 6 hours during the summer session. Students may exceed the normal maximum enrollment only with the permission of the dean. International students must comply with the credit requirements for their visa status.

**Probation and Dismissal**

Upon falling below a cumulative graduate grade-point average of B (3.0), computed with the inclusion of grades earned at KU for all courses acceptable for graduate credit, the student is placed on probation by the Graduate Division of the school or college. The grades of P, S, U, and I, for which no numerical equivalents are defined, are excluded from the computation. If the student's overall graduate average has been raised to B by the end of the next semester of enrollment after being placed on probation, the student may be returned to regular status. If not, the student is not permitted to re-enroll unless the Graduate Division acts favorably on a departmental recommendation for the student to continue study.

For more information regarding Probation and Dismissal, see the Graduate Studies Policy library (http://www.graduate.ku.edu/policies-processes).

**Required Work in Residence**

For information about the doctoral residence requirement, see the Graduate Studies (p. 2369) section of the online catalog.

**Transfer of Credit**

View the Graduate Studies policy on graduate credit, including transfer credit, in the Graduate Studies section of the online catalog or the KU Policy Library (http://catalog.dept.ku.edu/201314/schools/gs/regulations/#12).

**Courses**

ACMP 527. Accompanying. 1-4 Hours.
Individual instruction in vocal and/or instrumental accompanying. Open to junior, senior, and graduate pianists with permission of instructor. IND.

ACMP 529. Performance Class in Accompanying. 1 Hour.
A class in the performance of vocal and instrumental accompaniment. Prerequisite: Completion of ACMP 527 or permission of instructor. IND.

ACMP 727. Accompanying. 1-4 Hours.
Individual instruction in vocal and or instrumental accompanying. Prerequisite: Consent of instructor. IND.

ACMP 811. Advanced Accompanying. 2-4 Hours.
For graduate students majoring in accompanying. May be repeated for credit. Summer session limit one to three hours. IND.

ACMP 822. The Accompanist's Literature. 3 Hours.
A course in which major vocal and instrumental works are studied with vocal or instrumental participants. LEC.

BAND 202. Wind Ensemble. 0-1 Hours.
Study and performance of literature written for wind ensembles using an instrumentation somewhat smaller than the traditional concert band. Literature ranges from early wind and band music to contemporary avant-garde wind ensemble literature. May be repeated for credit. Prerequisite: Audition and permission of instructor. LAB.

BAND 204. Symphonic Band. 0-1 Hours.
For freshmen and sophomores. Performances include concerts on campus and tours throughout the area. Literature includes wind music, transcriptions, and other standard concert band literature. May be repeated for credit. Prerequisite: Permission of director. ACT.

BAND 206. University Band. 0-1 Hours.
For freshmen and sophomores. This concert organization performs on campus as well as in other area concerts. The band studies and performs music from the standard band repertoire. May be repeated for credit. Prerequisite: Permission of director. ACT.

BAND 210. University Marching Band. 0-1 Hours.
For freshmen and sophomores. Open to all qualified University students, regardless of major. Public performances include presentation of maneuvers and pageantry at all home football games as well as several trips each season. Three two-hour rehearsals per week. Offered fall semester only. Membership by audition. May be repeated for credit. ACT.
BAND 301. Workshop in: _____. 0-3 Hours.
May be repeated for credit. IND.

BAND 404. Symphonic Band. 0-1 Hours.
For junior and seniors. Performances include concerts on campus and
tours throughout the area. Literature includes wind music, transcriptions,
and other standard concert band literature. May be repeated for credit.
Prerequisite: Permission of director. ACT.

BAND 406. University Band. 0-1 Hours.
For juniors and seniors. This concert organization performs on campus
as well as in other area concerts. The band studies and performs music
from the standard concert band repertoire. May be repeated for credit.
Prerequisite: Permission of director. ACT.

BAND 410. University Marching Band. 0-1 Hours.
For juniors and seniors. Open to all qualified University students
regardless of major. Public performances include presentation of
marching maneuvers and pageantry at all home football games as well as
several trips each season. Membership by audition. May be repeated for
credit. ACT.

BAND 459. Scoring for Field Band. 2 Hours.
Primary voicings and textural possibilities for wind and percussion
instruments will be stressed as these resources relate to the arranging
of music for marching and pep bands at the secondary level. (Same as
MTHC 459.) Prerequisite: MTHC 214. LEC.

BAND 466. Directed Study: _____. 1-3 Hours.
May be repeated for credit. Prerequisite: Permission of instructor. IND.

BAND 559. Scoring for Concert Band. 2 Hours.
Curriculum includes idiomatic writing, tonal balance, scoring for large
percussion sections, and analysis of wind colors and instrumental
combinations found in music of Holst, Vaughan Williams, Grainger,
Stravinsky, Hindemith, and C. Williams. (Same as MTHC 559.)
Prerequisite: MTHC 214 and MTHC 459. IND.

BAND 602. Wind Ensemble. 0-1 Hours.
Study and performance of literature written for wind ensembles using
an instrumentation somewhat smaller than the traditional concert band.
Literature ranges from early wind and band music to contemporary avant-
garde wind ensemble literature. May be repeated for credit. Prerequisite:
Audition and permission of instructor. LAB.

BAND 604. Symphonic Band. 0-1 Hours.
For graduate students. Performances include concerts on campus and
tours throughout the area. Literature includes wind music, transcriptions,
and other standard concert band literature. May be repeated for credit.
Prerequisite: Permission of director. LEC.

BAND 630. Band Repertoire. 2 Hours.
A survey of selected band works from the standard repertoire. The
works are to be analyzed in terms of style and form, and in terms of the
rehearsal and performance problems inherent in the work. Also a study
of the standard band repertoire from an educational viewpoint as well as
from a programming viewpoint. LEC.

BAND 701. Workshop in: _____. 1-3 Hours.
May be repeated for credit. LEC.

BAND 803. Interpretation of Band Music. 1 Hour.
A study of the essential factors necessary for the understanding and
subsequent interpretation of various compositions of advanced band
music. In addition to the regular course work, students must participate in
one of the university concerts bands, attend all rehearsals each week and
play in concerts. May be repeated for credit. Prerequisite: Permission of
instructor. LAB.

BAND 866. Directed Study in: _____. 1-3 Hours.
May be repeated for credit. Prerequisite: Permission of instructor. LEC.

BASN 100. Bassoon. 1-2 Hours.
Applied music lessons for freshmen and sophomores not majoring in
music. May be repeated for credit. IND.

BASN 101. Bassoon Reed Making. 0-1 Hours.
The principles of bassoon reed making, including profiling and shaping of
bassoon cane and scraping of bassoon reeds. Open only to freshmen and
sophomores. May be repeated for credit. LAB.

BASN 121. Bassoon. 1-4 Hours.
Applied music lessons for freshmen majoring in music. May be repeated
for credit. IND.

BASN 221. Bassoon. 1-4 Hours.
Applied music lessons for sophomores majoring in music. May be
repeated for credit. Prerequisite: 121-level until the music major has
accumulated 4 credits (8 for performance majors). IND.

BASN 300. Bassoon. 1-2 Hours.
Applied music lessons for juniors and seniors not majoring in music. May
be repeated for credit. IND.

BASN 301. Bassoon Reed Making. 0-1 Hours.
The principles of bassoon reed making, including profiling and shaping of
bassoon cane and scraping of bassoon reeds. Open only to juniors and
seniors. May be repeated for credit. LAB.

BASN 321. Bassoon. 1-2 Hours.
Applied music lessons for juniors majoring in music. Not for performance
majors. May be repeated for credit. Prerequisite: 221-level until the music
major has accumulated 8 credits. IND.

BASN 421. Bassoon. 1-2 Hours.
Applied music lessons for seniors majoring in music. Not for performance
majors. May be repeated for credit. Prerequisite: 321-level until the music
major has accumulated 12 credits. IND.

BASN 422. Bassoon. 1-2 Hours. AE61.
Applied music lessons. Must be taken in the semester a recital is being
performed and as required by the degree program. Not for performance
majors. IND.

BASN 622. Bassoon. 1-4 Hours. AE61.
Applied music lessons for juniors and seniors majoring in performance.
May be repeated for credit. Prerequisite: Performance majors must
accumulate 16 credits at the 121/221 levels. IND.

BASN 623. Senior Recital. 1 Hour.
Applied music lessons for undergraduate performance majors (Bachelor
of Music). Must be taken in the semester the senior recital is being performed
and as required by the degree program. Corequisite: BASN 622. LEC.

BASN 711. Bassoon. 1-4 Hours.
For graduate students not majoring in bassoon. May be repeated for
credit. Summer session limit one to three hours. IND.

BASN 811. Bassoon. 2-4 Hours.
For graduate students majoring in bassoon. May be repeated for credit.
Summer session limit one to three hours. IND.

BASN 921. Seminar in Performance. 3 Hours.
A study of repertoire and performance practice relating to the bassoon
during the seventeenth and eighteenth centuries. LEC.

BASN 922. Seminar in Performance. 3 Hours.
A study of repertoire and extended performance techniques of the
twentieth century. LEC.
BASN 961. Directed Performance. 2-4 Hours.
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in bassoon. May be repeated for credit. Summer session limit one to three hours. IND.

BASN 965. Doctoral Recitals. 1 Hour.
Maximum seven hours credit. May be repeated for credit. THE.

BASN 970. D.M.A. Lecture-Recital. 1-4 Hours.
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor. RSH.

A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor. THE.

BRSS 252. Brass Choir. 0-1 Hours.
For freshmen and sophomores. Study and performance of large brass ensemble literature. May be repeated for credit. IND.

BRSS 652. Brass Choir. 0-1 Hours.
For juniors, seniors, and graduate students. Study and performance of large brass ensemble literature. May be repeated for credit. IND.

BRSS 921. Seminar in Performance and Pedagogy: brass. 3 Hours.
Repertoire, performance practice, pedagogical, and stylistic concerns relating to the music for brass instruments throughout their history. Topics will include the physical development of the instruments, their usage as solo, chamber, and large ensemble instruments in both sacred and secular literature, and a survey of historical and modern bibliographic materials. May be repeated for credit when topics vary. IND.

CARI 100. Carillon. 1-2 Hours.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. IND.

CARI 300. Carillon. 1-2 Hours.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. IND.

CARI 621. Carillon. 1-4 Hours.
One or two lessons per week. For graduate students not majoring in carillon performance. May be repeated for credit. IND.

CARI 711. Carillon. 1-4 Hours.
May be repeated for credit. IND.

CARI 804. History of Carillon Literature and Design. 3 Hours.
A survey of carillon literature and design. Prerequisite: Permission of instructor. LEC.

CARI 811. Carillon. 2-4 Hours.
For graduate students majoring in carillon. May be repeated for credit. Prerequisite: Permission of instructor. IND.

CARI 820. Studio Class in Carillon. 0 Hours.
Studio performance of repertoire for students enrolled in carillon. May be repeated . Prerequisite: Permission of instructor. IND.

CHAM 215. University Camerata. 0-1 Hours.
For freshmen and sophomores. Rehearsal and performance of string chamber music repertoire. May be repeated for credit. Prerequisite: Permission of instructor. LEC.

CHAM 216. Chamber Music. 0-1 Hours.
For freshmen and sophomores. The study of works for various combinations of instruments. May be repeated for credit. LAB.

CHAM 220. Baroque Ensemble. 0-1 Hours.
For freshmen and sophomores. Study and performance of seventeenth and eighteenth century chamber music using replicas of period instruments. May be repeated for credit. LAB.

CHAM 254. New Music Ensemble. 0-2 Hours.
The performance of music in the most recent styles as well as masterworks of the 20th century. May be repeated for credit. Prerequisite: Permission of the instructor. ACT.

CHAM 320. Baroque Ensemble. 0-1 Hours.
For juniors and seniors. Study and performance of seventeenth and eighteenth century chamber music using replicas of period instruments. May be repeated for credit. LAB.

CHAM 336. Chamber Music. 0-2 Hours.
For juniors and seniors. The study of standard chamber music literature with or without piano. May be repeated for credit. LAB.

CHAM 615. University Camerata. 0-1 Hours.
For juniors, seniors, and graduate students. Rehearsal and performance of string chamber music repertoire. May be repeated for credit. Prerequisite: Permission of instructor. LEC.

CHAM 654. New Music Ensemble. 0-2 Hours.
The performance of music in the most recent styles as well as masterworks of the 20th century. May be repeated for credit. Prerequisite: Permission of the instructor. ACT.

CHAM 820. Baroque Ensemble. 0-2 Hours.
Study and performance of seventeenth and eighteenth century chamber music, using replicas of period instruments. Primarily for woodwinds, strings, and keyboards. May be repeated for credit. IND.

CHAM 829. Advanced Chamber Music. 0-2 Hours.
A special study of chamber music works, with or without piano, with emphasis on problems of style and interpretation. May be repeated for credit. IND.

CHAM 929. Advanced Chamber Music. 0-2 Hours.
May be repeated for credit. IND.

CHOR 214. University Singers. 0-1 Hours.
Open through audition. Study and performance of significant choral music from the major periods of music history. For freshmen and sophomores. May be repeated for credit. LAB.

CHOR 216. Concert Choir. 0-1 Hours.
Open through audition. Study and public performance of significant choral music from the major periods of music history. For freshmen and sophomores. May be repeated for credit. LAB.

CHOR 218. KU Men's Glee Club. 0-1 Hours.
A choral ensemble for male singers. The group will study, rehearse, and perform traditional and contemporary choral music for men's chorus. A formal audition is not required. May be repeated for credit. ACT.

CHOR 220. Oread Consort. 0-1 Hours.
A select choral ensemble of 16-20 singers specializing in challenging music of all periods. Open by audition to experienced sight readers and ensemble singers. Concurrent membership in another choir encouraged. For freshmen and sophomores. May be repeated for credit. LAB.

CHOR 226. Women's Chorale. 0-1 Hours.
A choral ensemble for women singers. The group will study, rehearse, and perform traditional and contemporary choral music for women's chorus. For freshmen and sophomores. May be repeated for credit. ACT.

CHOR 228. Summer Chorus. 0-1 Hours.
A choral ensemble that meets during the summer term. May be repeated for credit. ACT.
CHOR 242. Chamber Choir. 0-1 Hours.
Intensive study and public performance of significant choral literature.
Membership by audition. For freshmen and sophomores. May be repeated for credit. LAB.

CHOR 254. Collegium Musicum, Vocal. 0-1 Hours.
May be repeated for credit. (Same as MUSC 254.) Prerequisite: Permission of instructor. ACT.

CHOR 410. Choral Practicum. 1 Hour.
A choral ensemble directed by student conductors under the supervision of the choral faculty. May be repeated for credit. ACT.

CHOR 414. University Singers. 0-1 Hours.
Open through audition. Study and performance of significant choral music from the major periods of music history. For juniors and seniors. May be repeated for credit. LAB.

CHOR 416. Concert Choir. 0-1 Hours.
Open through audition. Study and public performance of significant choral music from the major periods of music history. For juniors and seniors. May be repeated for credit. LAB.

CHOR 418. KU Men's Glee Club. 0-1 Hours.
A choral ensemble for male singers. The group will study, rehearse, and perform traditional and contemporary choral music for men's chorus. A formal audition is not required. May be repeated for credit. ACT.

CHOR 424. Opera Chorus. 1 Hour.
A chorus for opera or musical theatre productions. Open by audition in conjunction with the theatre department. May be repeated for credit. LAB.

CHOR 446. Women's Chorale. 0-1 Hours.
A choral ensemble for women singers. The group will study, rehearse, and perform traditional and contemporary choral music for women's chorus. For juniors and seniors. May be repeated for credit. LAB.

CHOR 620. Oread Consort. 0-1 Hours.
A select choral ensemble of 16-20 singers specializing in challenging music of all periods. Open by audition to experienced sight readers and ensemble singers. Concurrent membership in another choir encouraged. For juniors, seniors, and graduate students. May be repeated for credit. LAB.

CHOR 628. Summer Chorus. 0-1 Hours.
A choral ensemble that meets during the summer term. May be repeated for credit. ACT.

CHOR 630. Choral Repertoire. 2 Hours.
A survey of selected choral repertoire available for the high school choral conductor. Both sacred and secular choral literature from the major periods of music history will be studied and analyzed in terms of the problems therein which may be encountered by high school choral conductors. Fall semester and summer only. May be repeated for credit. Prerequisite: MECT 246, MECT 330, MECT 700, and/or consent of instructor. LEC.

CHOR 642. Chamber Choir. 0-1 Hours.
Intensive study and public performance of significant choral literature. Membership by audition. For juniors, seniors, and graduate students. May be repeated for credit. LAB.

CHOR 654. Collegium Musicum, Vocal. 0-1 Hours.
May be repeated for credit. (Same as MUSC 654.) Prerequisite: Permission of instructor. ACT.

CHOR 701. Workshop in: _____. 0.5-3 Hours.
May be repeated for credit. LEC.

CHOR 805. Interpretation of Choral Music. 1 Hour.
A study of the essential factors necessary for the understanding and subsequent interpretation of various compositions of advanced choral music. Offered in the summer session only. LEC.

CHOR 820. Orchestral Bowing Techniques for Choral Conductors. 1 Hour.
Stylistic, expressive, and technical considerations essential for making effective bowing decisions. Prerequisite: A course in conducting. LAB.

CHOR 825. Choral Diction. 3 Hours.
Study of methods to teach and learn diction in choral music contexts. Attention to International Phonetic Alphabet, acoustic implications of particular phonemes, and contributions of emerging technologies. Application of various languages, including English, Latin, Italian, French, German, and Spanish. (Same as MECT 825.) LEC.

CHOR 826. Adolescent Changing Voices. 3 Hours.
Scientific approaches to the pedagogy of adolescent male and female voices during voice change. (Same as MECT 826.) LEC.

CHOR 827. Children's Voices. 3 Hours.
Scientific approaches to understanding and working with unchanged children's voices. (Same as MECT 827.) LEC.

CHOR 828. Science-based Voice Education. 3-6 Hours.
Comprehensive examination of vocal anatomy, respiration, phonation, resonance, articulation, and voice development, with particular attention to research-based vocal/choral pedagogies for working with child through senior adult voices. (Same as MECT 828.) Prerequisite: Permission of instructor. LEC.

CHOR 830. Sacred Choral Repertoire. 2 Hours.
A study of anthems for Lectionary years A, B, and C. For church choir directors and church music majors. May be repeated for credit. Prerequisite: Consent of instructor. LAB.

CHOR 850. Choral Arranging. 2 Hours.
Techniques of arranging for large and small choral groups, with and without accompaniment. Prerequisite: MTHC 253 or consent of instructor. LEC.

CHOR 910. Research Methodologies in Choral Music. 3 Hours.
This course will provide the student with an overview of historical, analytical, qualitative, and quantitative approaches used in the research of choral music and issues related to teaching and conducting in the choral field. LEC.

CHUR 222. Bales Chorale. 0-1 Hours.
A choral ensemble directed by student conductors in the Division of Organ and Church Music under the supervision of faculty. May be repeated for credit. ACT.

CHUR 320. Church Music Practicum. 0 Hours.
Methods and materials of church music. May be repeated. LAB.

CHUR 622. Bales Chorale. 0-1 Hours.
A choral ensemble directed by student conductors in the Division of Organ and Church Music under the supervision of faculty. May be repeated for credit. ACT.

CHUR 801. Church Music Seminar I. 3 Hours.
History of Jewish music; history of church music and the thought about church music through the Middle Ages. LEC.

CHUR 802. Church Music Seminar II. 3 Hours.
History of church music and the thought about church music from the period of the Renaissance/Reformations through the Baroque era with special emphasis on hymnology, and anthem literature. LEC.
CHUR 803. Church Music Seminar III. 3 Hours.
History of church music and the thought about church music from the 19th century to the present with special emphasis on hymnology, and anthem literature. LEC.

CHUR 804. Church Music Seminar IV. 3 Hours.
A survey of sacred choral literature focusing on the development of the motet, the mass, and the cantata. Prerequisite: Permission of instructor. LEC.

CHUR 805. Selected Topics in Church Music: ______. 1-3 Hours.
Topics vary by semester. May be repeated for credit. LEC.

CHUR 806. Service Playing and Improvisation I. 3 Hours.
Hymn playing, service playing techniques, anthem accompaniment, conducting from the console and improvisation. Prerequisite: Permission of instructor. LEC.

CHUR 807. Service Playing and Improvisation II. 3 Hours.
Continuation of CHUR 806. Prerequisite: Permission of instructor. LEC.

CHUR 808. History of Liturgy. 3 Hours.
The history of liturgy in Jewish and Christian traditions as well as historical criticism and interpretation of liturgy. LEC.

CHUR 809. The Judeo-Christian Tradition and the Arts. 3 Hours.
Readings, discussion and projects concerning architecture, visual art, literature, drama, poetry, dance, and film as they have developed in the Judeo-Christian tradition. LEC.

CHUR 810. Religion and the Arts. 3 Hours.
Issues in the relationship between religion and the arts. LEC.

CHUR 821. Church Music Colloquium I: Anthem Literature. 1 Hour.
A survey of significant anthem literature. Prerequisite: Permission of instructor. LEC.

CHUR 822. Church Music Colloquium II: Handbells. 1 Hour.
Handbell history, literature, performance, and rehearsal techniques. Prerequisite: Permission of instructor. LEC.

CHUR 823. Church Music Colloquium III: Children’s Choirs. 1 Hour.
A study of the history and literature of children’s choirs, vocal characteristics of children, and rehearsal procedures with the children’s choir. Prerequisite: Permission of instructor. LEC.

CHUR 824. Church Music Colloquium IV: Hymnology. 1 Hour.
A study of the historical development of hymnody. Prerequisite: Permission of instructor. LEC.

CHUR 862. Improvisation. 2 Hours.
Applied study in improvisation at the organ. Prerequisite: Permission of instructor. LEC.

CLAR 100. Clarinet. 1-2 Hours.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. IND.

CLAR 121. Clarinet. 1-4 Hours.
Applied music lessons for freshmen majoring in music. May be repeated for credit. IND.

CLAR 221. Clarinet. 1-4 Hours.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors). IND.

CLAR 300. Clarinet. 1-2 Hours.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. IND.

CLAR 321. Clarinet. 1-2 Hours.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits. IND.

CLAR 421. Clarinet. 1-2 Hours.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits. IND.

CLAR 422. Clarinet. 1-2 Hours. AE61.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors. IND.

CLAR 622. Clarinet. 1-4 Hours. AE61.
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 16 credits at the 121/221 levels. IND.

CLAR 623. Senior Recital. 1 Hour.
For graduate students not majoring in clarinet. May be repeated for credit. Summer session limit one to three hours. IND.

CLAR 811. Clarinet. 2-4 Hours.
For graduate students majoring in clarinet. May be repeated for credit. Summer session limit one to three hours. IND.

CLAR 921. Seminar. 3 Hours.
A study of clarinet repertoire and performance techniques from 1900 to the present. LEC.

CLAR 922. Seminar. 3 Hours.
A study of clarinet repertoire and performance techniques from 1900 to the present. LEC.

CLAR 923. Seminar. 3 Hours.
A study of clarinet repertoire and performance techniques from 1900 to the present. LEC.

CLAR 961. Directed Performance. 2-4 Hours.
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor. RSH.

CLAR 970. D.M.A. Lecture-Recital. 1-4 Hours.
A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor. RSH.

COND 245. Conducting I. 2 Hours.
An introduction to the principles of conducting through exercises and musical examples designed to develop a specific technical skill. A study of the basic conducting patterns and their application. IND.

COND 345. Conducting II. 2 Hours.
A continuation of COND 245. Prerequisite: COND 245. IND.

COND 711. Choral Conducting I. 1-3 Hours.
Conducting technique, choral musicianship, and choral methods. Prerequisite: MEMT 246, MEMT 330, and/or consent of instructor. RSH.
COND 712. Choral Conducting II. 1-3 Hours.
Continuation of COND 711. RSH.

COND 745. Instrumental Conducting. 2 Hours.
A study of conducting techniques and problems in rehearsal and performance. Score analysis and repertoire development. May be repeated for credit. Prerequisite: Consent of instructor. RSH.

COND 791. Score Reading. 2 Hours.
Development of skills in the reading of all clefs and the most common transpositions. Simultaneous reading of multiple lines and their practical rendition at the piano. May be repeated for credit. RSH.

COND 811. Advanced Choral Conducting. 2-4 Hours.
A study of conducting techniques as they pertain to developing an expressive and precise choral ensemble. Participating in rehearsals under the supervision of instructor. May involve conducting in public performance. May be repeated for credit. Summer semester limited to three hours. Prerequisite: Four hours of conducting and/or consent of instructor. IND.

COND 820. Advanced Choral Conducting and Rehearsal Techniques. 3 Hours.
Refinement of conducting and teaching skills in a choral setting. Focus on relationships between gesture and choral sound, rehearsal structure and optimal learning, and age-appropriate choral literature and development of musicality. (Same as MGMT 820.) LAB.

COND 821. Advanced Score Reading. 2 Hours.
Development of fluency in reading full scores at the piano. May be repeated for credit. Prerequisite: Two semesters of COND 791 or consent of instructor. RSH.

COND 822. Choral Literature - Late Baroque Era to Classical Era. 3 Hours.
LEC.

COND 823. Choral Literature - Romantic Era. 3 Hours.
LEC.

COND 824. Choral Literature - Contemporary Era. 3 Hours.
LEC.

COND 825. Choral Literature - Renaissance. 3 Hours.
The study of literature from the Renaissance to the Early Baroque period. LEC.

COND 845. Advanced Instrumental Conducting. 3 Hours.
A study of techniques needed to project the conductor's concept in rehearsal and performance. Participating in rehearsals under the supervision of the instructor. May involve conducting in public performance. May be repeated for credit. Prerequisite: Consent of instructor. RSH.

COND 921. Seminar. 3 Hours.
Choral literature from 1450 to 1650. LEC.

COND 931. Seminar. 3 Hours.
Symphonic repertoire. LEC.

COND 932. Seminar. 3 Hours.
Operatic repertoire. LEC.

COND 933. Seminar. 3 Hours.
Solo repertoire with orchestra. LEC.

COND 941. Seminar: Band Literature ______. 3 Hours.
A study of literature for wind band including original works and transcriptions. May be repeated for credit when topic varies. LEC.

COND 946. Directed Performance. 2-4 Hours.
Open only to students who have been admitted to the D.M.A. program in conducting. May be repeated for credit. Summer semester limited to three hours. IND.

COND 965. Doctoral Recitals. 1 Hour.
Maximum credit, four hours. May be repeated for credit. THE.

COND 970. D.M.A. Lecture-Recital. 1-4 Hours.
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in conducting. May be repeated for credit. Prerequisite: Consent of instructor. RSH.

A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor. THE.

DBBS 100. Double Bass. 1-2 Hours.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. IND.

DBBS 120. Double Bass Performance Class. 0-1 Hours.
Studio performance of solo, ensemble, and orchestral audition repertoire for students concurrently enrolled in double bass, viola, violin, and violoncello study. May be repeated. LEC.

DBBS 121. Double Bass. 1-4 Hours.
Applied music lessons for freshmen majoring in music. May be repeated for credit. IND.

DBBS 221. Double Bass. 1-4 Hours.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors). IND.

DBBS 300. Double Bass. 1-2 Hours.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. IND.

DBBS 320. Double Bass Performance Class. 0-1 Hours.
Studio performance of solo, ensemble, and orchestral audition repertoire for students concurrently enrolled in double bass, viola, violin and violoncello study. May be repeated. LEC.

Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits. IND.

DBBS 421. Double Bass. 1-2 Hours.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits. IND.

Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors. IND.

Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: Performance majors must accumulate 16 credits at the 121/221 levels. IND.

DBBS 623. Senior Recital. 1 Hour.
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in the semester the senior recital is being performed and as required by the degree program. Corequisite: DBBS 622. LEC.
DBBS 711. Double Bass. 1-4 Hours.
For graduate students not majoring in double bass. May be repeated for credit. Summer session limit one to three hours. IND.

DBBS 720. Double Bass Performance Class. 0-1 Hours.
Studio performance of solo, ensemble, and orchestral audition repertoire for students concurrently enrolled in double bass, viola, violin and violoncello study. May be repeated. LEC.

DBBS 811. Double Bass. 2-4 Hours.
For graduate students majoring in double bass. May be repeated for credit. IND.

EUPH 100. Euphonium. 1-2 Hours.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. IND.

EUPH 121. Euphonium. 1-4 Hours.
Applied music lessons for freshmen majoring in music. May be repeated for credit. IND.

EUPH 221. Euphonium. 1-4 Hours.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors). IND.

EUPH 300. Euphonium. 1-2 Hours.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. IND.

EUPH 321. Euphonium. 1-2 Hours.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits. IND.

EUPH 421. Euphonium. 1-2 Hours.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits. IND.

EUPH 422. Euphonium. 1-2 Hours. AE61.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors. IND.

EUPH 622. Euphonium. 1-4 Hours. AE61.
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 16 credits at the 121/221 levels. IND.

EUPH 623. Senior Recital. 1 Hour.
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Corequisite: EUPH 622. LEC.

EUPH 711. Euphonium. 1-4 Hours.
For graduate students not majoring in euphonium. May be repeated for credit. Summer session limit one to three hours. IND.

EUPH 811. Euphonium. 2-4 Hours.
For graduate students majoring in euphonium. May be repeated for credit. IND.

FLUT 100. Flute. 1-2 Hours.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. IND.

FLUT 121. Flute. 1-4 Hours.
Applied music lessons for freshmen majoring in music. May be repeated for credit. IND.

FLUT 131. Baroque Flute. 1-4 Hours.
One or two lessons per week. For freshmen and sophomores. May be repeated for credit. IND.

FLUT 221. Flute. 1-4 Hours.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors). IND.

FLUT 300. Flute. 1-2 Hours.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. IND.

FLUT 321. Flute. 1-2 Hours.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits. IND.

FLUT 331. Baroque Flute. 1-4 Hours.
One or two lessons per week. For juniors and seniors. May be repeated for credit. IND.

FLUT 421. Flute. 1-2 Hours.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits. IND.

FLUT 422. Flute. 1-2 Hours. AE61.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors. IND.

FLUT 622. Flute. 1-4 Hours. AE61.
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 16 credits at the 121/221 levels. IND.

FLUT 623. Senior Recital. 1 Hour.
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Corequisite: FLUT 622. LEC.

FLUT 711. Flute. 1-4 Hours.
For graduate students not majoring in flute. May be repeated for credit. Summer session limit one to three hours. IND.

FLUT 731. Baroque Flute. 1-4 Hours.
May be repeated for credit. IND.

FLUT 811. Flute. 2-4 Hours.
For graduate students majoring in flute. May be repeated for credit. Summer session limit one to three credits. IND.

FLUT 921. Seminar in Performance. 3 Hours.
A study of repertoire and performance practice relating to the baroque flute and recorder during the seventeenth and eighteenth centuries. LEC.

FLUT 922. Seminar in Performance. 3 Hours.
A study of repertoire and extended performance techniques of the twentieth century. LEC.

FLUT 961. Directed Performance. 2-4 Hours.
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in flute. May be repeated for credit. Summer session limit one to three hours. IND.

FLUT 965. Doctoral Recitals. 1 Hour.
Maximum seven hours credit. May be repeated for credit. THE.
FLUT 970. D.M.A. Lecture-Recital. 1-4 Hours.
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor. RSH.

A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor. THE.

FRHN 100. French Horn. 1-2 Hours.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. IND.

FRHN 121. French Horn. 1-4 Hours.
Applied music lessons for freshmen majoring in music. May be repeated for credit. IND.

FRHN 221. French Horn. 1-4 Hours.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors). IND.

FRHN 252. Horn Ensemble. 0-1 Hours.
For freshmen and sophomores. Study and performance of ensemble literature for the horn. May be repeated for credit. IND.

FRHN 300. French Horn. 1-2 Hours.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. IND.

FRHN 321. French Horn. 1-2 Hours.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits. IND.

FRHN 421. French Horn. 1-2 Hours.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits. IND.

FRHN 422. French Horn. 1-2 Hours. AE61.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors. IND.

FRHN 622. French Horn. 1-4 Hours. AE61.
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 16 credits at the 121/221 levels. IND.

FRHN 623. Senior Recital. 1 Hour.
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Corequisite: FRHN 622. LEC.

FRHN 652. Horn Ensemble. 0-1 Hours.
For juniors, seniors, and graduate students. Study and performance of ensemble literature for the horn. May be repeated for credit. IND.

FRHN 711. French Horn. 1-4 Hours.
For graduate students not majoring in French horn. May be repeated for credit. Summer session limit one to three hours. IND.

FRHN 811. French Horn. 2-4 Hours.
For graduate students majoring in French horn. May be repeated for credit. Summer session limit one to three credits. IND.

FRHN 961. Directed Performance. 2-4 Hours.
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in French Horn. May be repeated for credit. Summer session limit one to two hours. IND.

FRHN 965. Doctoral Recitals. 1 Hour.
May be repeated for credit. THE.

FRHN 970. D.M.A. Lecture-Recital. 1-4 Hours.
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor. RSH.

A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor. THE.

GUIT 100. Beginning Group Guitar I. 1-2 Hours.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. IND.

GUIT 102. Beginning Group Guitar II. 1 Hour.
A continuation of GUIT 100 or for beginning students with considerable music experience. Emphasis on guitar basics, using easy exercises, etudes, chord structure and scales, sight reading, including lead sheets. IND.

GUIT 120. Intermediate Group Guitar. 2 Hours.
A pedagogical approach to guitar literature of medium difficulty. A survey of standard methods, etudes, and literature through group performance and individual assignments. IND.

GUIT 121. Guitar. 1-4 Hours.
Applied music lessons for freshmen majoring in music. May be repeated for credit. IND.

GUIT 122. Advanced Group Guitar. 2 Hours.
A survey of intermediate and advanced etudes as they apply to the representative and corresponding literature. Advanced technical studies. IND.

GUIT 221. Guitar. 1-4 Hours.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors). IND.

GUIT 300. Guitar. 1-2 Hours.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. IND.

GUIT 321. Guitar. 1-2 Hours.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits. IND.

GUIT 421. Guitar. 1-2 Hours.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits. IND.

GUIT 422. Guitar. 1-2 Hours. AE61.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performing majors. IND.

GUIT 622. Guitar. 1-4 Hours.
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 16 credits at the 121/221 levels. IND.
HARP 100. Harp. 1-2 Hours.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. IND.

HARP 120. Harp Performance Class. 1 Hour.
Studio performance of solo, ensemble, and orchestral audition repertoire for students concurrently enrolled in violin (viola, etc.) study. For freshman and sophomores (120); juniors and seniors (320); graduate student (720) (as appropriate). May be repeated for credit. LEC.

HARP 121. Harp. 1-4 Hours.
Applied music lessons for freshmen majoring in music. May be repeated for credit. IND.

HARP 211. Harp. 1-4 Hours.
Applied music lessons for freshmen majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors). IND.

Applied music lessons for introductory music majors and non-majors. IND.

HARP 211. Harp. 1-4 Hours.
Applied music lessons for freshmen majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors). IND.

HARP 212. Harp. 1-2 Hours.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 8 credits. IND.

HARP 311. Harp. 1-2 Hours.
Applied music lessons for sophomores majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 211-level until the music major has accumulated 12 credits. IND.

HARP 312. Harp. 1-2 Hours.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 311-level until the music major has accumulated 12 credits. IND.

HARP 312. Harp. 1-2 Hours.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 311-level until the music major has accumulated 12 credits. IND.

HARP 411. Harp. 1-2 Hours.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 311-level until the music major has accumulated 12 credits. IND.

HARP 412. Harp. 1-2 Hours.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors. IND.

HARP 421. Harp. 1-2 Hours.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 311-level until the music major has accumulated 12 credits. IND.

HARP 422. Harp. 1-2 Hours.
Applied music lessons for graduate students majoring in music. One or two lessons per week. For graduate students. May be repeated for credit. IND.

HARP 511. Harp. 1-4 Hours.
For graduate students not majoring in harp. May be repeated for credit. Summer session limit one to three hours. IND.

HARP 520. Harp Performance Class. 1 Hour.
Studio performance of solo, ensemble, and orchestral audition repertoire for students concurrently enrolled in violin (viola, etc.) study. For freshman and sophomores (120); juniors and seniors (320); graduate student (720) (as appropriate). May be repeated for credit. LEC.

HARP 581. Harp. 2-4 Hours.
For graduate students majoring in harp. May be repeated for credit. Summer session limit one to three hours. IND.

HPCD 100. Harpsichord. 1-2 Hours.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. IND.

HPCD 300. Harpsichord. 1-2 Hours.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. IND.

HPCD 621. Harpsichord. 1-4 Hours.
One or two lessons per week. For graduate students. May be repeated for credit. IND.

HPCD 711. Harpsichord. 1-4 Hours.
Summer session limit one to two credits. May be repeated for credit. IND.

JAZZ 105. Jazz Theory. 2 Hours.
An introduction to jazz harmony: Scales, modes, chord symbols, chord voicing practices, analysis, reharmonization practices, scale choices for improvisation, creation of bass lines. Prerequisite: MTHC 105 or consent of instructor. ACT.

JAZZ 208. Jazz Ensemble. 0-1 Hours.
For freshmen and sophomores. A performance laboratory specializing in the preparation and presentation of jazz compositions and arrangements. Designed to provide today's student musician with the background and skills necessary to function successfully as a professional studio musician, or as a teacher of popular jazz music. May be repeated for credit. Prerequisite: Consent of director. ACT.

JAZZ 209. Jazz Combo. 0-1 Hours.
Study and performance of music designed for the small jazz combo. Emphasis placed on jazz improvisation, and a survey of a wide variety of styles for this medium. May be repeated for credit. Prerequisite: Permission of director. ACT.

JAZZ 212. Vocal Jazz Ensemble. 0-1 Hours.
Study and performance of vocal jazz compositions and arrangements with emphasis on vocal jazz improvisation. Membership by audition. May be repeated for credit. ACT.

JAZZ 224. Jazz Improvisation I. 2 Hours.
Study of techniques involved in jazz improvisation, including application of chord/scale relationships to basic blues and II-V-I chord progressions; transcriptions of recorded jazz solos; and memorization of jazz standards and patterns. Prerequisite: JAZZ 105 or JAZZ 305 or permission of instructor. ACT.

JAZZ 225. Jazz Improvisation II. 2 Hours.
Study of advanced techniques in jazz improvisation, including third relationships, Coltrane changes, advanced reharmonization and altered pentatonic patterns and scales. Continuation of solo transcriptions, patterns and jazz standard memorization from Jazz Improvisation I. Prerequisite: JAZZ 224 or JAZZ 624 or permission of instructor. ACT.

JAZZ 230. Introduction to Jazz Piano. 2 Hours.
Study of common jazz piano chord voicings, including two hand block chordal voicings and left hand-only voicings. Prerequisite: JAZZ 105 or JAZZ 305 or permission of instructor. ACT.

JAZZ 305. Jazz Theory. 2 Hours.
An introduction to jazz harmony: Scales, modes, chord symbols, chord voicing practices, analysis, reharmonization practices, scale choices for improvisation, creation of bass lines. Prerequisite: MTHC 105 or consent of instructor. ACT.

JAZZ 409. Jazz Combo. 0-1 Hours.
Study and performance of music designed for the small jazz combo. Emphasis placed on jazz improvisation, and a survey of a wide variety of styles for this medium. May be repeated for credit. Prerequisite: Permission of director. ACT.
**JAZZ 459. Jazz Arranging. 2 Hours.**  
Study of techniques and practices involved in arranging for the contemporary jazz ensemble (big band) and jazz combo, including voicings, counterpoint, nomenclature and writing for jazz rhythm sections. Prerequisite: JAZZ 105 or JAZZ 305 and JAZZ 230 or permission of instructor. ACT.

**JAZZ 608. Jazz Ensemble. 0-1 Hours.**  
For juniors, seniors, and graduate students. May be repeated for credit. ACT.

**JAZZ 612. Vocal Jazz Ensemble. 0-1 Hours.**  
Study and performance of vocal jazz compositions and arrangements with emphasis on vocal jazz improvisation. Membership by audition. For juniors, seniors, and graduate students. May be repeated for credit. ACT.

**JAZZ 624. Jazz Improvisation I. 2 Hours.**  
Study of techniques involved in jazz improvisation, including application of chord/scale relationships to basic blues and II-V-I chord progressions; transcriptions of recorded jazz solos; and memorization of jazz standards and patterns. Prerequisite: JAZZ 105 or JAZZ 305 or permission of instructor. LAB.

**JAZZ 625. Jazz Improvisation II. 2 Hours.**  
Study of advanced techniques in jazz improvisation, including third relationships, Coltrane changes, advanced reharmonization and altered pentatonic patterns and scales. Continuation of solo transcriptions, patterns and jazz standard memorization from Jazz Improvisation I. Prerequisite: JAZZ 224 or JAZZ 624 or permission of instructor. ACT.

**JAZZ 630. Introduction to Jazz Piano. 2 Hours.**  
Study of common jazz piano chord voicings, including two hand block choral voicings and left hand-only voicings. Prerequisite: JAZZ 105 or JAZZ 305 or permission of instructor. ACT.

**JAZZ 659. Jazz Arranging. 2 Hours.**  
Study of techniques and practices involved in arranging for the contemporary jazz ensemble (big band) and jazz combo, including voicings, counterpoint, nomenclature and writing for jazz rhythm sections. Prerequisite: JAZZ 105 or JAZZ 305 and JAZZ 230 or permission of instructor. ACT.

**MEMT 111. Class Guitar for Nonmajors. 2 Hours.**  
Common chords, major and minor triads and major-minor sevenths, and fundamentals of music notation for guitar. Strumming and rudimentary finger picking. Performance of simple melodies on all six strings from standard notation. May be repeated for credit. IND.

**MEMT 112. Performance Media: _____ 0.5-1 Hours.**  
Laboratory class lessons in pedagogy and performance. May be repeated for credit in different specific media. LAB.

**MEMT 113. Performance Media: Brass. 1 Hour.**  
Knowledge and skills needed to teach brass instruments in music education settings. LAB.

**MEMT 114. Performance Media: Woodwinds. 1 Hour.**  
Knowledge and skills needed to teach woodwind instruments in music education settings. LAB.

**MEMT 115. Performance Media: Percussion. 1 Hour.**  
Knowledge and skills needed to teach and use percussion instruments in music education settings. LAB.

**MEMT 116. Performance Media: Computers, Synthesizers, and Electronics. 1 Hour.**  
Knowledge and skills needed to teach and use computers, synthesizers, and electronics. LAB.

**MEMT 118. Performance Media: Strings. 1 Hour.**  
Knowledge and skills needed to teach string instruments in music education settings. LAB.

**MEMT 119. Performance Media: Guitar. 1 Hour.**  
Knowledge and skills needed to teach and use guitar functionally in music education and music therapy settings. LAB.

**MEMT 120. Vocal Performance in English. 0-1 Hours.**  
Fundamentals of solo vocal performance with an emphasis on American diction and communicating the English language. IND.

**MEMT 150. Introduction to Music Therapy. 3 Hours.**  
An overview of the music therapy profession including, but not limited to, history, philosophy, areas of clinical practice, necessary skills and competencies, and career opportunities. LEC.

**MEMT 160. Principles of Music Education. 1 Hour.**  
An overview of the music education field. History, philosophy, curricula, necessary skills and competencies for music educators, and alternative careers in music. LEC.

**MEMT 196. Group Leadership Skills in Music Therapy. 2 Hours.**  
Music therapy group leadership skills; leading group singing, playing accompanying instruments, and developing effective delivery skills. Prerequisite: MEMT 150 Introduction to Music Therapy/MEMT 760 Principles of Music Therapy. LEC.

**MEMT 229. Performance Clinic: _____ 1 Hour.**  
Designed to provide students with opportunities to sing and play instruments other than their principal instrument in ensembles. Materials chosen for suitability for secondary school ensembles. Techniques for care and maintenance of the voice and instruments. May be repeated for credit. Prerequisite: Permission of instructor. LAB.

**MEMT 230. Performance Clinic: Band. 1 Hour.**  
Continued development of the knowledge and skills needed to teach band in music education settings. Prerequisite: MEMT 113 and MEMT 114, or MEMT 113 and MEMT 115, or MEMT 114 and MEMT 115, or permission of the instructor. LAB.

**MEMT 231. Performance Clinic: Choral. 1 Hour.**  
Continued development of the knowledge and skills needed to teach and use the singing voice in music education and music therapy settings. LAB.

**MEMT 232. Performance Clinic: Orchestra. 1 Hour.**  
Continued development of the knowledge and skills needed to teach string instruments in music education settings. Prerequisite: MEMT 118 or permission of the instructor. LAB.

**MEMT 246. Fundamentals of Conducting. 1 Hour.**  
This course deals with the techniques of the baton, with gestures, signs, and cures as generally used in conducting choral and instrumental organizations. It includes the essentials of conducting techniques in both the choral and instrumental types of ensemble performance. LAB.

**MEMT 250. Human Musical Learning and Development. 2 Hours.**  
Music learning and development from infancy through adulthood. Development of musical perception, cognition, performance skills, attitudes, and affective/aesthetic responses. Use of theoretical, knowledge-based rationale for building music instruction systems. LEC.

**MEMT 251. Clinical Techniques for Children. 3 Hours.**  
Music therapy treatment techniques (setting goals, selecting/applying treatment, monitoring/evaluating results) for children in a variety of settings. Clinical observation and application of techniques will be course components. Prerequisite: MEMT 250. Corequisite: SPED 326. LEC.
MEMT 296. Clinical Techniques for Adults. 3 Hours.
Music therapy treatment techniques (setting goals, selecting/applying treatment, monitoring/evaluating results) for adults in a variety of settings. Clinical observation and application of techniques will be course components. FLD.

MEMT 311. Intermediate Class Guitar. 2 Hours.
Instruction in playing barre chords, blues and Latin strums, major and minor scales, position studies, and special effects such as the Travis pick, hammer on, and slurring techniques. Prerequisite: MEMT 116-Guitar; or MEMT 111; or permission of instructor. IND.

MEMT 329. Rehearsal/Conducting Clinic: ____. 1 Hour.
Rehearsing and conducting ensembles appropriate for music education and music therapy. May be repeated for credit. Prerequisite: Permission of instructor. LAB.

MEMT 330. Rehearsal/Conducting Clinic: Band. 1 Hour. GE22.
Knowledge and skills needed to rehearse and conduct band ensembles. Prerequisite: MEMT 230 and MEMT 246 and admission into the Music Education Professional Sequence; or with permission of the MEMT division. LAB.

MEMT 331. Rehearsal/Conducting Clinic: Choral. 1 Hour. GE22.
Knowledge and skills needed to rehearse and conduct choral ensembles. Prerequisite: MEMT 231 and MEMT 246 for Music Education majors or MEMT 231. Corequisite: MEMT 246 for Music Therapy majors or permission of the instructor. LAB.

MEMT 332. Rehearsal/Conducting Clinic: Orchestra. 1 Hour. GE22.
Knowledge and skills needed to rehearse and conduct orchestral ensembles. Prerequisite: MEMT 232 and MEMT 246, and admission into the Music Education Professional Sequence; or with permission of the MEMT division. LAB.

MEMT 341. Instructional Strategies in Music for Elementary Classroom Teachers. 2 Hours.
Child growth and development in music. Materials as they relate to a sequential music education curriculum in the elementary school. Prerequisite: Admission to the School of Education or the education division of the graduate school. LEC.

MEMT 349. Advanced Rehearsal/Conducting Clinic: ____. 1 Hour.
Advanced knowledge and skills needed to rehearse and conduct ensembles, including attention to more difficult literature with ensembles exhibiting increasing sophistication. May be repeated for credit. Prerequisite: Admission into Music Education Professional Sequence and with permission of the MEMT division. LAB.

MEMT 350. Advanced Rehearsal/Conducting Clinic: Band. 1 Hour.
Advanced knowledge and skills needed to rehearse and conduct band ensembles, including attention to more difficult concert band literature with ensembles exhibiting increasing sophistication. Prerequisite: MEMT 330 and admission into the Music Education Professional Sequence; or with permission of the MEMT division. LAB.

MEMT 351. Advanced Rehearsal/Conducting Clinic: Choral. 1 Hour.
Advanced knowledge and skills needed to rehearse and conduct choral ensembles, including attention to more difficult choral literature with ensembles exhibiting increasing sophistication. Prerequisite: MEMT 331 and admission into the Music Education Professional Sequence; or with permission of the MEMT division. LAB.

MEMT 352. Advanced Rehearsal/Conducting Clinic: Orchestra. 1 Hour.
Advanced knowledge and skills needed to rehearse and conduct string orchestra ensembles, including attention to more difficult string orchestra literature with ensembles exhibiting increasing sophistication.

Prerequisite: MEMT 332 and admission into Music Education Professional Sequence; or with permission of the MEMT division. LAB.

MEMT 366. Introduction to Research in Music Therapy and Music Education. 2 Hours.
Investigative techniques in music therapy and music education with emphasis on small group and case study design and analysis. Prerequisite: Admission to the professional sequence in music education or music therapy or with permission from the MEMT division. LEC.

Theories and techniques for managing the music classroom and clinic setting for best professional practice. Understanding the self and environment as management factors. Field practice of management techniques. Prerequisite: MEMT 250 and admission into the Music Education Professional Sequence or Music Therapy Professional Sequence; or with permission from the MEMT Division. LEC.

MEMT 396. Clinical Practicum. 1-3 Hours.
Supervised clinical practice in on-campus or other approved setting. May be repeated for credit. Prerequisite: Admission to the professional sequence in music education or music therapy or with permission from the MEMT division. FLD.

MEMT 407. The Exceptional Child in Music Education. 2 Hours.
Knowledge and knowledge needed to facilitate appropriate and productive integration of exceptional children and youth into music classroom settings. Prerequisite: MEMT 367, SPED 326, and admission into the Music Education Professional Sequence; or with permission of the MEMT division. LEC.

MEMT 408. Vocal Pedagogy. 1 Hour.
Knowledge and skills needed to teach voice, with particular attention to lifespan voice anatomy, physiology, and acoustics, diagnosis and correction of vocal inefficiencies, teaching styles, repertoire choice, professional development, and acquaintance with current research in voice science and vocal pedagogy. Includes a voice teaching practicum. (Same as VOIC 408.) Prerequisite: MEMT 160, MEMT 231, MEMT 331 and admission into the Music Education Professional Sequence or the Music Therapy Professional Sequence; or with permission from the MEMT division. LEC.

MEMT 420. Teaching Elementary and Secondary General Music. 3 Hours.
Methods and materials for teaching music through singing, playing instruments, moving, listening, and creative activities to students in early childhood through adulthood, including those with disabilities. The course will also deal with music in diverse cultures and integrating music into the general curriculum. Prerequisite: MEMT 367 and admission into the Music Education Professional Sequence; or with permission of the MEMT division. LEC.

MEMT 421. Advanced General Music Teaching. 1 Hour.
Enhanced methodology and pedagogy course for the general music classroom; advanced instruction in teaching children to improvise, sing, play classroom instruments, listen, move, and create music based on specific pedagogies; advanced instruction in assessment strategies. This course is for undergraduate music majors in their senior year. Prerequisite: MEMT 420 and admission to the Music Education Professional Sequence. LEC.

MEMT 431. Choral Diction for Music Educators. 1 Hour.
Knowledge and skills needed to teach choral diction in music education settings. Prerequisite: Admission into the Music Education Professional Sequence; or with permission of the MEMT division. LEC.
MEMT 432. Approaches to String Pedagogy. 1 Hour.
An examination of the concepts and skills associated with the most influential past and current pedagogical approaches to string education. Prerequisite: Admission to the Music Education Professional Sequence. LEC.

MEMT 433. Jazz Techniques. 1 Hour.
Knowledge and skills needed to teach jazz techniques in music education settings. Prerequisite: Admission to the Music Education Professional Sequence. LEC.

MEMT 435. Marching Band Techniques. 1 Hour.
Knowledge and skills needed to teach and administer marching bands in music education settings. Prerequisite: Admission into the Music Education Professional Sequence; or with permission of the MEMT division. LEC.

MEMT 450. Teaching Choral Music. 2 Hours.
Application of research-based skills for curriculum development, content selection, and development of teaching strategies for choral music programs to students in early childhood through adulthood including those with disabilities. Prerequisite: MEMT 331, MEMT 420, and admission into the Music Education Professional Sequence; or with permission of the MEMT division. LEC.

MEMT 451. Teaching Instrumental Music. 2 Hours.
Application of research-based skills for curriculum development, content selection, and development of teaching strategies for instrumental music programs to students in early childhood through adulthood including those with disabilities. Prerequisite: MEMT 330, MEMT 420, and admission into the Music Education Professional Sequence; or with permission of the MEMT division. LEC.

MEMT 454. Psychological Foundations of Musical Behavior II. 2 Hours.
Laboratory and field research in psychology of music. Prerequisite: MEMT 453 or concurrent enrollment. LEC.

MEMT 455. Psychology of Music. 3 Hours.
Psychological bases of music and human musical behavior. Study of musical sound perception, cognition, response, reproduction, and creation. Room Acoustics are studied. Research projects required. Prerequisite: MEMT 367, MEMT 420 (music education majors); and admission into the Music Education Professional Sequence or the Music Therapy Professional Sequence; or with permission of the MEMT division. LEC.

MEMT 463. Approaches to String Pedagogy. 1 Hour.
This seminar style course will focus on supervision, Ethics, and Professional Involvement in AMTA. Prerequisite: MEMT 586. LEC.

MEMT 472. Music Education and Music Therapy Research Project. 1-3 Hours.
Clinical, laboratory, field, or historical research in music education or music therapy. May be repeated for credit. Prerequisite: MEMT 366 or equivalent, and permission of instructor. RSH.

MEMT 497. Independent Study in: _____. 1-4 Hours.
Only one enrollment permitted each semester; a maximum of four hours will apply toward the bachelor's degree. May be repeated for credit. Prerequisite: Recommendation of advisor and consent of instructor. IND.

MEMT 498. Student Teaching. 2-4 Hours. AE61.
A supervised teaching experience in an approved school setting, with level and subject area to be selected from either elementary general music or a secondary teaching area not covered in MEMT 496. This experience is a minimum of five weeks full time experience. It will begin the spring of the Senior Year right after the new year. Prerequisite: Admission into the Music Education Professional Sequence and MEMT 496. LEC.

MEMT 499. Internship in Teaching Music. 4-8 Hours. AE61.
A supervised internship experience leading to initial music teacher certification. The student assumes the total professional role as a teacher of music in an approved school setting with level and subject area to be the remaining area not experienced in MEMT 496 or MEMT 498. This experience is a minimum of twelve weeks full time experience. Prerequisite: Admission into the Music Education Professional Sequence and either completion of or concurrent enrollment with MEMT 498. LEC.

MEMT 500. Student Teaching in: _____. 1-6 Hours.
A supervised teaching experience in an approved school setting, with level and subject area to be selected according to the teaching field. May be repeated for credit. Prerequisite: Admission to the Student Teaching program. FLD.

MEMT 586. Seminar in Music Therapy Professional Development I. 1 Hour.
This seminar style course will focus on Internship Placement, Board Certification, and Professional Advocacy. Undergraduate Prerequisite: MEMT 463 and MEMT 464. Graduate Corequisite: MEMT 763 and MEMT 764. LEC.

MEMT 587. Seminar in Music Therapy Professional Development II. 1 Hour.
This seminar style course will focus on supervision, Ethics, and Professional Involvement in AMTA. Prerequisite: MEMT 586. LEC.

Successful completion of six months of full-time clinical experience (minimum of 1,040 hours) as a music therapy intern in an approved setting. May be repeated for credit. Prerequisite: Completion of senior year in music therapy or its equivalent at the graduate level. FLD.

MEMT 597. Individual Study in: _____. 1-15 Hours.
Successful completion of six months of full time clinical experience (minimum of 1040 hours) as a music therapy intern in an approved setting. May be repeated for credit. Prerequisite: Completion of senior year in music therapy or its equivalent at the graduate level. IND.

MEMT 598. Special Course: _____. 1-5 Hours.
A special course of study to meet current needs of education students -- primarily for undergraduates. May be repeated for credit. LEC.

MEMT 616. Advanced Pedagogy and Materials: _____. 1 Hour.
(FS) Techniques and materials appropriate for instruction in musical media. May be repeated for credit in different specific media. LAB.
MEMT 651. Sociocultural Influences on Musical Behavior. 3 Hours.
Cultural and social determinants of musical behavior. Musical value systems in contemporary cultures. Prerequisite: MTHC 214 or MEMT 341 or permission of instructor. LEC.

MEMT 670. Acoustics of Music. 3 Hours.
Study of physical aspects of sound, stressing the production, reproduction, transmission, and reception of musical sounds. Acoustics of musical instruments and auditoria, systems of tuning, wave phenomena in musical environments, behavior of the ear, and electrical analysis, synthesis, and recording are included. Laboratory. LEC.

MEMT 695. Developing Theoretical Framework for Evidence-Based Practice. 3 Hours.
The purpose of this course is to provide music therapy majors with the tools to read, evaluate, understand, and facilitate research in order to develop a theoretical framework for decision making in evidence based clinical practice. Prerequisite: MEMT 464 Music in Therapy or MEMT 764 Music in Therapy and admission to the Music Therapy Professional Sequence. LEC.

MEMT 707. Mainstreaming/Inclusion in Music Education. 2 Hours.
Skills and knowledge needed to facilitate appropriate and productive integration of children and youth with disabilities into music classroom settings. Prerequisite: MEMT 500 and SPED 431. LEC.

MEMT 710. Professional Development. 1 Hour.
Participation in approved professional development conferences. Requires documentation of attendance, an annotated time log of activities, and a short paper. May be repeated for up to 3 credit hours. FLD.

MEMT 711. Emerging Technologies for Choral Teaching and Learning. 2-3 Hours.
Applications of current digital and electronic technologies to choral ensemble teaching and learning. LEC.

MEMT 750. Measurement in Music Education Professional Practice. 3 Hours.
Skills and knowledge needed by professional music educators to assess and evaluate students, learning, instruction, curriculum, and programs. Measurement and evaluation techniques for cognitive, affective, and psychomotor learning in music. Criterion and norm reference measures in formative and summative evaluation. Use of evaluation data for improving instruction, curriculum, and program. Standardized tests. Reporting and interpreting evaluation results. LEC.

MEMT 753. Psychology and Acoustics of Music. 5 Hours.
Psychological and acoustical bases of music and human musical behavior. Study of musical sound production, transmission, perception, cognition, response, and reproduction. Laboratory component and research project required. LEC.

MEMT 760. Principles of Music Therapy. 3 Hours.
An overview of the music therapy profession including, but not limited to, history, philosophy, areas of clinical practice, necessary skills and competencies, and career opportunities. LEC.

MEMT 761. Clinical Techniques for Children. 3 Hours.
Music therapy treatment techniques (setting goals, selecting/applying treatment, monitoring, evaluating results) for children in a variety of settings. Clinical observation and application of techniques will be course components. FLD.

MEMT 762. Clinical Techniques for Adults. 3 Hours.
Music therapy treatment techniques (setting goals, selecting/applying treatment, monitoring, evaluating results) for adults in a variety of settings. Clinical observation and application of techniques will be course components. FLD.

MEMT 763. The Influence of Music on Behavior I. 3 Hours.
A study of the various effects of music. The place of functional music in music education. Investigation of effective media and musical patterns. The relation of music to health. Prerequisite: Admission to the professional sequence in music education or music therapy or with permission from the MEMT division. LEC.

MEMT 764. Music In Therapy. 3 Hours.
Issues examined include music therapy concepts in the development of program applications, professional marketing, and job proposals. These applications are based on theoretical constructs concerning the physiological, psychological, and social responses of persons to music. In addition, this course includes current trends in the field along with regulatory guidelines concerning practice design, implementation, and evaluation, ethics, and standards of clinical practice. Prerequisite: Admission to the professional sequence in music education or music therapy or with permission from the MEMT division. LEC.

MEMT 770. Measurement/Inclusion in Music Education. 2 Hours.
Skills and knowledge needed to facilitate appropriate and productive integration of children and youth with disabilities into music classroom settings. Prerequisite: MEMT 500 and SPED 431. LEC.

MEMT 711. Emerging Technologies for Choral Teaching and Learning. 2-3 Hours.
Applications of current digital and electronic technologies to choral ensemble teaching and learning. LEC.

MEMT 750. Measurement in Music Education Professional Practice. 3 Hours.
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MEMT 764. Music In Therapy. 3 Hours.
Issues examined include music therapy concepts in the development of program applications, professional marketing, and job proposals. These applications are based on theoretical constructs concerning the physiological, psychological, and social responses of persons to music. In addition, this course includes current trends in the field along with regulatory guidelines concerning practice design, implementation, and evaluation, ethics, and standards of clinical practice. Prerequisite: Admission to the professional sequence in music education or music therapy or with permission from the MEMT division. LEC.
MEMT 816. Current Trends in Music Education. 3 Hours.
A comprehensive study of the elements that contribute to current practice and successful music programs (many of all of these may be anticipated dependent upon the class participants' needs): curriculum, standards, assessment, classroom management, pedagogy, leadership, organizational structure, budget and finance, scheduling, federal mandates, and administrative practices. LEC.

MEMT 817. Methodologies in Music Education. 3 Hours.
A survey of music methodologies (general, vocal, instrumental) used by teachers at the pre-school, elementary, middle/junior high, and high school levels. LEC.

MEMT 818. Behavior Management in Music. 3 Hours.
A study of behavioral theories and techniques as applied to classroom and clinical settings for music professionals. Emphasis on a conceptual framework for human behavior and the ameliorative aspects of music. LEC.

MEMT 819. Music in Early Childhood. 2 Hours.
Child development as related to musical development, including implications for participation in music from birth through age seven. Current trends in goals, objectives, materials, equipment, facilities, training and evaluation will be discussed. LEC.

MEMT 820. Advanced Choral Conducting and Rehearsal Techniques. 3 Hours.
Refinement of conducting and teaching skills in a choral setting. Focus on relationships between gesture and choral sound, rehearsal structure and optimal learning, and age-appropriate choral literature and development of musicality. (Same as COND 820.) LAB.

MEMT 823. Seminar in: ____. 1-3 Hours.
May be repeated for credit. LEC.

MEMT 825. Choral Diction. 3 Hours.
Study of methods to teach and learn diction in choral music contexts. Attention to International Phonetic Alphabet, acoustic implications of particular phonemes, and contributions of emerging technologies. Application of various languages, including English, Latin, Italian, French, German, and Spanish. (Same as CHOR 825.) LEC.

MEMT 826. Adolescent Changing Voices. 3 Hours.
Scientific approaches to the pedagogy of adolescent male and female voices during voice change. (Same as CHOR 826.) LEC.

MEMT 827. Children's Voices. 3 Hours.
Scientific approaches to understanding and working with unchanged children's voices. (Same as CHOR 827.) LEC.

MEMT 828. Science-based Voice Education. 3-6 Hours.
Comprehensive examination of vocal anatomy, respiration, phonation, resonance, articulation, and voice development, with particular attention to research-based vocal/choral pedagogies for working with child through senior adult voices. (Same as CHOR 828.) Prerequisite: Permission of instructor. LEC.

MEMT 830. Leadership and Program Development in Music Education. 2-3 Hours.
A comprehensive study of the elements of management, leadership, organizational structure, budget and finance, federal mandates, and administrative practices. LEC.

MEMT 835. Practical Applications of Advanced Methodology in the Music Classroom. 2-3 Hours.
A comprehensive study and application of the elements that contribute to current practice in methodology and pedagogy in the music classroom, encompassing elementary general, choral, orchestral, and band music. LEC.

MEMT 838. Orff Applications in Music Education and Music Therapy. 2 Hours.
The use of the Orff-Shulwerk approach in music education and music therapy. Course includes historical background, philosophical approach and practical application of the process. Prerequisite: Admission to professional sequence or permission from MEMT division. LEC.

MEMT 840. Development and Application of Improvisation Skills. 2-3 Hours.
Development of individual and group improvisation skills and their applications in professional practice. LEC.

MEMT 845. Curriculum Development in Music Education. 3 Hours.
Developing a practical and useful music curriculum that aligns theoretical/philosophical position, program goals, course objectives, instructional materials, learning activities, and assessments. LEC.

MEMT 850. Measurement of Musical Behavior. 3 Hours.
Measurement theory applied to the development and administration of measures of musical ability, achievement, attitude, and performance for the use in individual and program evaluation. Classical and innovative methods for establishing reliability and validity. Each student will develop and evaluate a measure of some type of musical behavior appropriate for an educational or therapeutic setting. LEC.

MEMT 854. Music Therapy in Pediatrics. 2 Hours.
The use of music therapy in individual and group pediatric settings. Course includes an overview of childhood illnesses, associated medical terminology, and therapy techniques used as contextual and procedural support. Prerequisite: Admission to professional sequence or permission from MEMT division. LEC.

MEMT 855. Music Therapy in Hospice and Bereavement. 2 Hours.
The use of music therapy for hospice patients and their families, as well as clients who are grieving due to death of a loved one. Course includes historical, theoretical and practical perspectives. Prerequisite: Admission to professional sequence or permission from MEMT division. LEC.

MEMT 856. Neurologic Music Therapy. 2 Hours.
The scientific basis for the neurological influence of music on behaviors in physical functioning and cognitive functioning will be explored in rehabilitation and learning models. Clinical experience will be included. Prerequisite: Admission to the graduate program in music therapy or permission of the instructor. FLD.

MEMT 857. Music Therapy in Gerontology. 2 Hours.
The theories and clinical applications of music therapy across the life span of older adults, including the young old, the middle old, and the old old. Special considerations will be given to persons with debilitating conditions including dementia, and to older persons' professional and family caregivers. Prerequisite: Admission to the graduate program in music therapy or permission of the instructor. FLD.

MEMT 858. Music Therapy in Medical Care and Wellness of Adult Persons. 2 Hours.
The theories and practice of music therapy as enhancement to health and wellness and to medical interventions for adults will include applications within the medical setting and in the home setting. Interventions will include, among others, approaches for stress management, medical procedural support, pre-operative and post-operative support, follow-up care in catastrophic illness, interventions in post-traumatic stress disorder, and others. Prerequisite: Admission to the graduate program in music therapy or permission of the instructor. FLD.
MEMT 860. Assessment in Music Therapy Professional Practice. 2 Hours.
Skills and knowledge needed to assess and evaluate clients, goals, treatments and their effectiveness, program outcomes, program quality, and quality of care. LEC.

MEMT 861. Current Trends in Music Therapy. 2 Hours.
A comprehensive study of the elements that contribute to current practice in music therapy, but not limited to, professional competencies, code of ethics, assessment and implementation of interventions, leadership, organizational structure, budget and finance, scheduling and management of contracts, grant writing, and other administrative practices. FLD.

MEMT 863. The Influence of Music on Behavior II. 2 Hours.
A laboratory and research course to accompany or follow MEMT 763. LAB.

MEMT 864. Philosophy and Theory of Music Therapy. 3 Hours.
Concentrated, interdisciplinary study of conceptual foundations for music therapy. LEC.

MEMT 890. Practicum in Music Therapy. 1-16 Hours.
Advanced music therapy practice including clinical work with a population of the student's choice which incorporates music therapy program design, implementation, and evaluation. The student will work in consultation with qualified Music Therapy staff. May be repeated for credit. FLD.

MEMT 891. Advanced Clinical Techniques. 3 Hours.
The student will articulate, test and refine music therapy clinical practice protocol(s) with a clientele(s) of choice. Students will work in consultation with qualified Music Therapy staff. FLD.

MEMT 892. Supervision in Music Therapy I. 3 Hours.
Study and application of theoretical models and supervisory roles applicable to music therapy clinical supervision. Students will review developmental levels for supervisors and practicum students. Supervision of music therapy clinical practicum students will be required. LEC.

MEMT 893. Supervision in Music Therapy II. 3 Hours.
A model of practicum supervision will be applied in music therapy clinical practicum supervision. Video and/or tape recordings of supervision conferences with practicum students will be reviewed in consultation with qualified music therapy staff. LEC.

MEMT 895. Master's Project. 1-3 Hours.
May be repeated for credit. RSH.

MEMT 897. Independent Study: ______. 1-4 Hours.
May be repeated for credit. Graded on satisfactory/unsatisfactory basis. Prerequisite: Consent of advisor and instructor. RSH.

MEMT 898. Comprehensive Examination. 1 Hour.
An independent course in preparation for the non-thesis M.M.E. degree final examination. The grade will be S or U as determined by performance on the examination. Graded on satisfactory/unsatisfactory basis. Prerequisite: Permission of the instructor. IN.

MEMT 899. Master's Thesis. 1-6 Hours.
May be repeated for credit. THE.

MEMT 900. Learning Theories and Music Education. 3 Hours.
(V) A broad survey of formal learning theories and other approaches to the teaching-learning situation, accenting implications for, applications to, and research needs in music education. LEC.

MEMT 911. Administration of Music Education Programs. 3 Hours.
A study of the administration of music education programs at all school levels; topics will include personnel, finance, curriculum, supervision, and articulation of the music program with other segments of the school and community. LEC.

MEMT 915. Teaching Music in Higher Education. 3 Hours.
Knowledge, skills, and dispositions for graduate students in music who are preparing to teach at the college level. This course is directed toward the end of developing competencies and understandings that will contribute to one's becoming an effective college/university teacher. LEC.

MEMT 920. Doctoral Seminar in Music Education and Music Therapy. 0-1 Hours.
This course will emphasize strategies and skills for successful completion of the doctoral program, as well as strategies and skills to prepare doctoral students to contribute to the profession as college teachers, researchers, master teachers, and arts administrators. Course may be repeated for zero credit. LEC.

MEMT 923. Seminar in ______. 1-3 Hours.
Graded on a satisfactory/unsatisfactory basis. May be repeated for credit.

MEMT 935. Advanced Acoustical and Psychological Aspects of Musical Behavior. 3 Hours.
Study and experimental investigation of acoustical, psychoacoustical, and psychological phenomena as they influence music. Attention will be given to physical parameters; estimation of pitch, loudness, and timbre; magnitude estimation; theories of consonance; experimental aesthetics; and measurement and prediction of musical ability. Each student will be expected to complete an experiment or quasi-experiment related to human musical behavior. (Same as PSYC 853.) Prerequisite: MEMT 453 or equivalent, or permission of instructor. LEC.

MEMT 956. Advanced Methods in Experimental and Descriptive Research in Music. 3 Hours.
An advanced study of experimental and descriptive research techniques with careful investigation of research design, experimental control, analysis and manuscript composition. Consideration of recent trends in research methods and their place in the scholarly schemata will be reviewed. Prerequisite: MEMT 812 or permission of instructor. LEC.

MEMT 972. Research in Music Education. 2-5 Hours.
For students who are sufficiently qualified to conduct original investigations in this field. Consent of instructor necessary. May be repeated for credit. IND.

MEMT 980. Advanced Topics: ______. 1-3 Hours.
A special course of study to meet current needs of education professionals -- primarily for post-master's level students. May be repeated for credit. IND.

MEMT 995. Field Experience in: ______. 1-5 Hours.
Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experiences will be prepared independently by the student, a representative of the cooperating agency, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours. May be repeated for credit. FLD.

MEMT 996. Practicum in College Teaching. 1-3 Hours.
College teaching experience, guided by a major professor in the department. Open only to doctoral aspirants or candidates. FLD.

MEMT 997. Individual Study: ______. 1-4 Hours.
May be repeated for credit. Graded on satisfactory/unsatisfactory basis. Prerequisite: Prior graduate course work in the area of study and consent of Instructor. IND.
MEMT 998. Seminar in: _____. 1-4 Hours.
May be repeated for credit. Graded on satisfactory/unsatisfactory basis. LEC.

MEMT 999. Doctoral Dissertation. 1-15 Hours.
May be repeated for credit. THE.

MTHC 99. Fundamentals of Music. 2 Hours.
An intensive study of music fundamentals. Open to music majors only. LEC.

MTHC 105. Theory I. 4 Hours.
The first semester of an integrated two-year theory sequence that examines the harmonic, melodic, rhythmic, and formal organization of music while developing critical listening and keyboard skills. Prerequisite: Music major or consent of instructor. LEC.

MTHC 115. Theory II. 4 Hours. GE11.
The second semester of an integrated two-year theory sequence that examines the harmonic, rhythmic, and formal organization of music while developing critical listening and keyboard skills. Prerequisite: MTHC 105. LEC.

MTHC 150. Introduction to Music Theory: Reading, Listening, Composing. 3 Hours.
An introductory course for non-music majors, emphasizing western art and vernacular styles of music. Students will participate in and interact with various parameters of music through the acquisition of basic musical skills. For freshmen and sophomores. LEC.

MTHC 205. Theory III. 4 Hours. GE11.
The third semester of an integrated two-year theory sequence that examines the harmonic, melodic, rhythmic, and formal organization of music while developing critical listening and keyboard skills. Prerequisite: MTHC 115. LEC.

MTHC 253. Composition. 2 Hours.
For music theory and composition majors. Creative writing using basic concepts in harmony, melody, and form. May be repeated for credit. Prerequisite: MTHC 115. IND.

MTHC 315. Theory IV. 4 Hours.
The fourth semester of an integrated two-year theory sequence that examines the harmonic, melodic, rhythmic, and formal organization of music while developing critical listening and keyboard skills. Prerequisite: MTHC 205. LEC.

MTHC 316. Tonal Form and Post-Tonal Techniques. 4 Hours.
A study of musical forms from the common practice period through the present day and analytical techniques for post-tonal music. The class is designed for music education and music therapy majors. Prerequisite: MTHC 205, music education, or music therapy major. LEC.

MTHC 350. Introduction to Music Theory: Reading, Listening, Composing. 3 Hours.
An introductory course for non-music majors, emphasizing western art and vernacular styles of music. Students will participate in and interact with various parameters of music through the acquisition of basic musical skills. For juniors and seniors. LEC.

MTHC 355. Readings in Music Theory: _____. 1-4 Hours.
Investigation of a subject by means of directed readings using primary scholarly sources. May be repeated for credit. Prerequisite: Consent of instructor. LEC.

MTHC 400. Graduate Review: Written Theory. 1 Hour.
A review of basic harmonic and voice-leading principles relevant to the common-practice period. For graduate students deficient in undergraduate harmonic theory. LEC.

MTHC 402. Graduate Review: Aural Skills. 1 Hour.
A review of aural and sight-reading skills relevant to the common-practice period. For graduate students deficient in undergraduate aural theory. LEC.

MTHC 410. Tonal Forms. 3 Hours.
Phrase structure and formal design in common-practice tonal music. Structural analysis of binary, ternary, rondo, sonata, variations, and contrapuntal, and multi-movement forms. Prerequisite: MTHC 205. LEC.

MTHC 432. Introduction to the Analysis Contemporary Music. 3 Hours.
Introductory course in the sequence, presenting the basic tools of post-tonal and 20th century composition, including, serial techniques, set theory, extended tertian harmony, minimalist techniques, contemporary tonality and other trends. Exploration of form and complex rhythmic structures as well as aural skills appropriate to the subject matter. Prerequisite: MTHC 315. LEC.

MTHC 433. Advanced Analysis of Contemporary Music. 3 Hours.
Analysis seminar, emphasizing intense study of larger contemporary works, using techniques learned in the first course (MTHC 732). Further content will vary according to the instructor. Includes aural skills work appropriate to the subject matter. Prerequisite: MTHC 432. LEC.

MTHC 459. Scoring for Field Band. 2 Hours.
Primary voicings and textural possibilities for wind and percussion instruments will be stressed as these resources relate to the arranging of music for marching and pep bands at the secondary level. (Same as BAND 459.) Prerequisite: MTHC 205. LEC.

MTHC 485. Composing and Arranging for Educational Ensembles. 2 Hours.
For music majors interested in learning to write for primary and secondary educational performing groups. Emphasizes conventional tonal practices and idiomatic, accessible writing for young players. Prerequisite: MTHC 205, MTHC 484, and MTHC 459. IND.

MTHC 498. Undergraduate Recital. 1 Hour. AE61.
Composition recital for undergraduate music composition majors. Prerequisite: Permission of instructor. IND.

MTHC 499. Senior Research Project. 1-4 Hours. AE61.
For seniors majoring in music theory who will normally enroll for two credits in each of the last two semesters. Students will write a scholarly paper on an approved topic. May be repeated for credit. IND.

MTHC 541. Eighteenth-Century Counterpoint. 3 Hours.
A study of eighteenth century style with analysis and original work. Prerequisite: MTHC 205. LEC.

MTHC 542. Sixteenth-Century Counterpoint. 3 Hours.
A study of sixteenth-century style with analysis and original work. Prerequisite: MTHC 541. LEC.

MTHC 543. Advanced Analysis of Contemporary Music. 3 Hours.
Analysis seminar, emphasizing intense study of larger contemporary works, using techniques learned in the first course (MTHC 732). Further content will vary according to the instructor. Includes aural skills work appropriate to the subject matter. Prerequisite: MTHC 432. LEC.

MTHC 559. Scoring for Concert Band. 2 Hours.
Curriculum includes idiomatic writing, tonal balance, scoring for large percussion sections, and analysis of wind colors and instrumental combinations found in music of Holst, Vaughan Williams, Grainger, Stravinsky, Hindemith, and C. Williams. (Same as BAND 559.) Prerequisite: MTHC 205 and MTHC 459. IND.

MTHC 563. Survey in Jazz Composition and Arranging. 3 Hours.
Analysis of jazz composition and orchestration, beginning with early procedures (Louis Armstrong through the “Big Band Era”) and culminating with analysis of scores by Gil Evans and Bob Brookmeyer. Prerequisite: Permission of instructor required. LEC.
MTHC 583. Composition. 2 Hours.
Advanced composition including larger forms in a variety of media. Composition majors will present a public recital of original works during the fourth semester of enrollment. May be repeated for credit. Prerequisite: MTHC 253 or consent of instructor. IND.

MTHC 610. Tonal Forms. 3 Hours.
Phrase structure and formal design in common-practice tonal music. Structural analysis of binary, ternary, rondo, sonata, variations and contrapuntal, multi-movement forms. LEC.

MTHC 655. Readings in Music Theory: ____. 1-4 Hours.
Investigation of a subject by means of directed readings of primary scholarly sources. May be repeated for credit. Prerequisite: MTHC 410 and consent of instructor. IND.

MTHC 670. Scoring for Voice. 3 Hours.
Composing and arranging for voice, including solo voice, choral and operatic settings. Prerequisite: Six hours of MTHC 253 and MTHC 541 and consent of instructor. LEC.

MTHC 674. Orchestration I. 3 Hours.
A study of the four families of orchestral instruments (woodwinds, brass, percussion, and strings) concentrating on ranges, transpositions, timbres, and techniques of the various instruments. Scoring projects concentrate on voicing and balance within the individual choirs of the orchestra. Prerequisite: MTHC 205. LEC.

MTHC 676. Orchestration II. 3 Hours.
A continuation of MTHC 674. Emphasis on scoring for full symphony orchestra and the large wind ensemble. Prerequisite: MTHC 674. LEC.

MTHC 678. Electro-Acoustic Composition I. 3 Hours.
Survey of concepts and practices of electronic sound synthesis. Required of music theory and composition majors, and open to other music majors by consent of department. Prerequisite: MTHC 315 or MTHC 316. LEC.

MTHC 680. Electro-Acoustic Composition II. 3 Hours.
Basic concepts and techniques of electronic composition. For majors in music theory and composition. Prerequisite: MTHC 678 and consent of division. LEC.

MTHC 732. Introduction to the Analysis of Contemporary Music. 3 Hours.
Introductory course in the sequence, presenting the basic tools of post-tonal and 20th century composition, including, serial techniques, set theory, extended tertian harmony, minimalist techniques, contemporary tonality and other trends. Exploration of form and complex rhythmic structures as well as aural skills appropriate to the subject matter. Prerequisite: MTHC 315 or MTHC 316. LEC.

MTHC 733. Advanced Analysis I. 3 Hours.
Analytical seminar, emphasizing intense study of larger contemporary works, using techniques learned in the first course (MTHC 732). Further content will vary according to the instructor. Includes aural skills work appropriate to the subject matter. Prerequisite: MTHC 732. LEC.

MTHC 732. Advanced Analysis of Contemporary Music. 3 Hours.
A historical survey of music theory, both practical and speculative, from the ancient Greeks to the late twentieth century. (Same as MUSC 778.) LEC.

MTHC 789. Seminar on Selected Topics: ____. 0.5-3 Hours.
Topics vary by semester. May be repeated for credit. LEC.

MTHC 801. Advanced Analysis I. 3 Hours.
A bibliographic survey intended to explore aspects of both structure (rhythm, texture and timber) and methodology (semiotics, gesture and cognition) that variously complement the pitch-based approaches to musical interpretation associated with Schenkerian tonal analysis and pitch-class theory. Prerequisite: MTHC 732 Introduction to the Analysis of Contemporary Music or permission of instructor. LEC.

MTHC 802. Advanced Analysis II. 3 Hours.
A bibliographic survey intended to explore in depth the pitch grammars developed by composers of Western Art Music since circa 1910, and the various methodologies assembled to codify them. Prerequisite: MTHC 732 Introduction to the Analysis of Contemporary Music or permission of instructor. LEC.

MTHC 810. Advanced Tonal Form. 3 Hours.
An investigation of formal types, processes and functions in the instrumental tonal music of the eighteenth and nineteenth centuries. Prerequisite: Permission of instructor. LEC.

MTHC 820. Seminar in Schenkerian Analysis. 3 Hours.
A study of the theories and analytical methodologies developed by the Austrian theorist Heinrich Schenker. Prerequisite: MTHC 410 or permission of the instructor. LEC.

MTHC 825. Computers in Music and Music Research. 3 Hours.
A seminar designed to develop and explore the use and programming of microcomputers as an aid in research and the production of music. Topics will include composition and production tools for music, structured program design, data representation, and basic computer-assisted instruction models. Prerequisite: EECS 138 or equivalent or permission of the instructor. LEC.

MTHC 830. Pedagogy of Music Theory. 1-3 Hours.
Procedures for teaching theoretical concepts and skills. Survey of available texts and related materials. Three credits when offered during a full academic term; one-two credits when offered as a short-term institute. Prerequisite: MTHC 315 or MTHC 316 or permission of instructor. LEC.

MTHC 853. Advanced Composition. 1-6 Hours.
Essentially for theory and composition majors on the master’s level. May be repeated for credit. Summer session limit one to three hours. RSH.

MTHC 887. Advanced Orchestration. 3 Hours.
Prerequisite: MTHC 676, or consent of department. May be repeated for credit. RSH.

MTHC 889. Seminar on Selected Topics: ____. 0.5-3 Hours.
Topics vary by semester. May be repeated for credit. LEC.

MTHC 898. Recital. 1 Hour.
Recorded grade for MM Composition recital. LEC.

MTHC 899. Thesis. 1-6 Hours.
May be repeated for credit. THE.

MTHC 953. Advanced Composition. 1-6 Hours.
Essentially for theory and composition majors on the doctoral level. May be repeated for credit. Summer session limit one to three hours. RSH.

MTHC 965. Doctoral Composition Recital. 2 Hours.
May be repeated for credit. RSH.

MTHC 970. D.M.A. Lecture-Recital. 1-4 Hours.
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor. RSH.
A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor. THE.

MTHC 999. Dissertation. 1-12 Hours.
May be repeated for credit. THE.

MUS 100. Directed Study: _____. 1-4 Hours.
This is an all-purpose fill in the blank course for freshmen and sophomores. It can be used when need arises. May be repeated for credit. IND.

MUS 140. Encounter with Music and Musicians. 3 Hours. H.
A study of concert and recital music as it relates to the performer and listener. Students will have interaction with professional musicians through live performances and discussions with the performers. Music performed on the concert and chamber music series and on concerts of music department faculty will be carefully examined. Baroque through modern music, jazz, and music of other cultures are the basic units in the course. Written research projects and reviews of performances are required. LEC.

A team-taught, performance-based survey for wind and string students of musical styles from the Baroque to present. Students will examine music from their perspective literature from several different perspectives including: historical, theoretical, technical, and expressive. The integration of these perspectives into the students' performance is the ultimate goal of the course. May be repeated for credit. Prerequisite: Approval of applied instrumental instructor. IND.

MUS 300. Directed Studies: _____. 1-4 Hours.
This is an all-purpose fill in the blank course for juniors and seniors. It can be used when need arises. May be repeated for credit. IND.

MUS 340. Encounter with Music and Musicians. 3 Hours. H.
A study of concert and recital music as it relates to the performer and listener. Students will have interaction with professional musicians through live performances and discussions with the performers. Music performed on the concert and chamber music series and on concerts of music department faculty will be carefully examined. Baroque through modern music, jazz, and music of other cultures are the basic units in the course. Written research projects and reviews of performances are required. LEC.

MUS 388. Curriculum and Pedagogy in: _____. 1 Hour.
Independent study. Prerequisite: Permission of instructor. LEC.

A team-taught, performance-based survey for wind and string students of musical styles from the Baroque to present. Students will examine music from their perspective literature from several different perspectives including: historical, theoretical, technical, and expressive. The integration of these perspectives into the students' performance is the ultimate goal of the course. May be repeated for credit. Prerequisite: Approval of applied instrumental instructor. IND.

MUS 586. The Business of Music. 3 Hours.
A course covering commercial aspects of the music business, including publishing, copyright law, recording, live performance, the motion picture and radio business, composition, teaching, and music merchandising. Prerequisite: Consent of the instructor. LEC.

MUS 686. Arts Administration: Presenting the Performing Arts. 3 Hours.
Considerations involved in booking, scheduling, and presenting music, theatre, and dance events. Locating and selecting artists, reading and negotiating contracts, fund raising, grant writing, working with support groups, marketing techniques, publicity, personnel, and finance management. LEC.

MUS 732. Twentieth Century Techniques before 1945. 3 Hours.
A study and analysis of music from the turn of the century to World War II. For non-music majors. Prerequisite: Permission of instructor. LEC.

MUS 733. Twentieth Century Techniques after 1945. 3 Hours.
A study and analysis of music from World War II to the present. For non-music majors. Prerequisite: Permission of instructor. LEC.

MUS 800. Directed Study: _____. 1-4 Hours.
This is an all-purpose fill in the blank course for graduate students. It can be used when need arises. May be repeated for credit. LEC.

MUS 888. Curriculum and Pedagogy in: _____. 1 Hour.
Independent study. Prerequisite: Permission of instructor. LEC.

MUSC 135. Masterworks of Music. 3 Hours.
Honors version of MUSC 136/MUSC 336. Open only to students in the University Honors Program or by permission of instructor. Designed to aid non-music majors in developing skills needed for listening to music. Emphasis on masterworks of Western music. A student may receive credit for only one of the four courses numbers: MUSC 135, MUSC 335, MUSC 136, MUSC 336. LEC.

MUSC 136. Masterworks of Music. 3 Hours. HT / H.
Designed to aid non-music majors in developing the skills needed for listening to music. Emphasis on masterworks of Western music. Open only to freshman and sophomore non-music majors. A student may receive credit in either MUSC 136 or MUSC 336, but not both. LEC.

MUSC 139. Introduction to Music in World Cultures. 3 Hours. NW AE42.
Addresses music as a social and cultural phenomenon shaping broader patterns of human activity. It examines the ideas, behaviors and beliefs people have about their music based on selected case studies of traditional and popular music from North America, Africa, Asia, and Latin America. The main goal of this course is to understand why people from different parts of the world do music the way they do. LEC.

MUSC 254. Collegium Musicum, Vocal. 0-1 Hours.
May be repeated for credit. (Same as CHOR 254.) Prerequisite: Permission of instructor. ACT.

MUSC 256. Collegium Musicum, Instrumental. 0-1 Hours.
May be repeated for credit. Prerequisite: Permission of instructor. ACT.

MUSC 298. Introduction to Jazz. 3 Hours. HT AE41 / H/W.
A survey of the history of jazz from its beginnings in the early twentieth century to the present. Open to music and non-music majors. LEC.

MUSC 299. American Popular Song. 3 Hours. H.
A survey of the American popular song in the twentieth century, with an emphasis on the composer's lyricists, and performers who made them popular. LEC.

MUSC 300. Jazz Styles, 1920-1980. 3 Hours. H.
A detailed study of the major styles of jazz that developed between 1920 and 1980, with an emphasis on aural recognition of their characteristics. LEC.

MUSC 301. Great Innovators of Jazz. 3 Hours. H.
A detailed study of the most innovative and influential figures in the history of jazz. LEC.

MUSC 302. The Broadway Musical. 3 Hours. AE41/GE3H / H.
A survey of the Broadway Musical from the early twentieth century to the present. LEC.
MUSC 303. The Film Musical. 3 Hours.
A survey of the film musical from the 1920s through the 1980s. LEC.

MUSC 305. Music of Latin America. 3 Hours. AE42 / H.
Designed for non-music majors, the course surveys the geographical and ethnographical sources of the many forms of music in Latin America. The various forms of music will be examined from historical, cultural, and stylistic perspectives. LEC.

MUSC 306. Introduction to Contemporary Music. 3 Hours. H.
A survey of concert music in Europe and the United States in the twentieth century. Not open to music majors. LEC.

MUSC 307. Music of Africa and the Middle East. 3 Hours.
Survey of the many musical traditions of Black Africa and the Middle East, emphasizing their cultural and social context. Open to both majors and non-majors. LEC.

MUSC 308. Music in East Asia. 3 Hours. AE42.
Study of musical cultures in China, Korea, and Mongolia, with a special focus on court music, musical theater, popular music, and the influence of East Asian music on the Western art music and vice-versa. LEC.

MUSC 309. History of Rock and Roll. 3 Hours. H.
Survey of the history of rock and roll, starting with its origins in rhythm and blues and continuing to the present day. Open to both majors and non-majors. LEC.

MUSC 310. History of Film Music. 3 Hours. HT.
A survey course for non-majors on the history of film music from silent films to the present. Students will use written texts, website materials such as streaming video and audio, and regular screening in an auditorium setting for assignments and papers. LEC.

MUSC 311. History of African American Music. 3 Hours.
This course examines the richness and diversity of African American music and its influence on the entire American musical landscape. Beginning with African retentions in African American music, the course will trace the history and development of both written and oral traditions from 1700 to the present day. LEC.

MUSC 312. Music in the Andes. 3 Hours. AE42.
This course examines the history, culture, and musical traditions of the Andean region: Peru, Ecuador, Bolivia, Chile, Columbia, and Venezuela. It focuses on a selection of indigenous rituals and popular music of mestizo and African American origin. By the end of the semester students will be acquainted with particular genres, instruments, and the social contexts with which they are associated. LEC.

MUSC 313. Music in Mexico and the Caribbean. 3 Hours. AE42.
This course examines the history, culture, and musical traditions of Mexico and the Caribbean. It focuses on a selection of rituals and traditional and popular music of the region. By the end of the semester students will be acquainted with various musical genres, instruments, and the social contexts with which they are associated. LEC.

MUSC 315. History of Country Music. 3 Hours.
Study of country music in the U.S. from the early 1920's to the present, including performers, styles, historical context, and technology. LEC.

MUSC 320. Music History I. 2 Hours. AE42.
Introduction to world music; and Western music to 1400. Prerequisite: One year of music theory. LEC.

MUSC 335. Masterworks of Music. 3 Hours.
Honors version of MUSC 136/MUSC 336. Open only to students in the University Honors Program or by permission of instructor. Designed to aid non-music majors in developing skills needed for listening to music. Emphasis on masterworks of Western music. A student may receive credit for only one of the four course numbers: MUSC 135, MUSC 335, MUSC 136, MUSC 336. LEC.

MUSC 336. Masterworks of Music. 3 Hours. HT / H.
Designed to aid non-music majors in developing the skills needed for listening to music. Emphasis on masterworks of Western music and writing about music. Open only to junior and senior non-music majors. A student may receive credit for either MUSC 136 or MUSC 336, but not both. LEC.

MUSC 337. Selected Topic in Music: ______. 1-3 Hours. HT / H.
A selected topic in music or an interdisciplinary topic in the fine arts. The course may be repeated for credit when topic varies. Open only to non-music majors. LEC.

MUSC 338. Selected Topic in Music: ______. 1-3 Hours.
The course may be repeated for credit when topic varies. Open only to music majors. Prerequisite: MUSC 320 or permission of instructor. LEC.

MUSC 339. Introduction to Music in World Cultures. 3 Hours. NW AE42.
Addresses music as a social and cultural phenomenon shaping broader patterns of human activity. It examines the ideas, behaviors and beliefs people have about their music based on selected case studies of traditional and popular music from North America, Africa, Asia, and Latin America. The main goal of this course is to understand why people from different parts of the world do music the way they do. LEC.

MUSC 340. Music History II. 3 Hours. GE3H.
Western Music from 1400 to 1750. Prerequisite: MUSC 320. LEC.

MUSC 394. Readings in Jazz and American Popular Music. 1-3 Hours.
Investigation of a subject by means of directed study of primary sources. Prerequisite: A grade of "A" or "B" in MUSC 298, or equivalent, and permission of instructor. IND.

MUSC 440. Music History III. 3 Hours. GE3H.
Western Music from 1750 to 1900. Prerequisite: MUSC 340. LEC.

MUSC 474. Graduate Review: Medieval. 1 Hour.
A review of the practice of Western art music composed between c. 437 and 1420. It examines the genres, forms, styles, and performance practice of representative works by a variety of composers. LEC.

MUSC 475. Graduate Review: Renaissance. 1 Hour.
A review of the practice of Western art music composed between c. 1420 and 1600. It examines the genres, forms, styles, and performance practice of representative works by a variety of composers. LEC.

MUSC 476. Graduate Review: Baroque. 1 Hour.
A review of the practice of Western art music composed between c. 1600 and 1750. It examines the genres, forms, styles, and performance practice of representative works by a variety of composers. LEC.

MUSC 477. Graduate Review: Classic. 1 Hour.
A review of the practice of Western art music composed between c. 1750 and 1815. It examines the genres, forms, styles, and performance practice of representative works by a variety of composers. LEC.

MUSC 478. Graduate Review: Romantic. 1 Hour.
A review of the practice of Western art music composed between c. 1815 and 1900. It examines the genres, forms, styles, and performance practice of representative works by a variety of composers. LEC.

MUSC 479. Graduate Review: 20th-21st Centuries. 1 Hour.
A review of the practice of Western art music composed between c. 1900 and the present day. It examines the genres, forms, styles, and performance practice of representative works by a variety of composers. LEC.
MUSC 480. Music History IV. 2 Hours. AE41.
Western music since 1900, classical and vernacular. Prerequisite: MUSC 440. LEC.

MUSC 481. Music of the Middle Ages. 3 Hours.
A concentrated survey of Western music from about 500 to 1400. Prerequisite: MUSC 320. LEC.

MUSC 482. Music of the Renaissance. 3 Hours.
A concentrated survey of Western music from about 1400 to 1600. Prerequisite: MUSC 340. LEC.

MUSC 483. Music of the Baroque Era. 3 Hours.
A concentrated survey of Western music from about 1600 to 1750. Prerequisite: MUSC 340 and MUSC 440. LEC.

MUSC 484. Music of the Classical Era. 3 Hours.
A concentrated survey of Western music from about 1750 to 1815. Prerequisite: MUSC 440. LEC.

MUSC 485. Music of the Romantic Era. 3 Hours.
A concentrated survey of Western music from about 1815 to 1900. Prerequisite: MUSC 440 and MUSC 480. LEC.

MUSC 486. Music of the Twentieth Century. 3 Hours.
A concentrated survey of Western music during the twentieth century. Prerequisite: MUSC 480. LEC.

MUSC 487. Music in America. 3 Hours.
A concentrated survey of music in the United States. Prerequisite: One course in the field of musicology or permission of the instructor. LEC.

MUSC 488. History of Opera. 3 Hours.
A concentrated survey of the history of opera. Prerequisite: MUSC 340, MUSC 440, and MUSC 480. LEC.

MUSC 489. History of Chamber Music. 3 Hours.
A concentrated survey of the history of chamber music. Prerequisite: MUSC 440 and MUSC 480. LEC.

MUSC 490. History of the Concerto. 3 Hours.
A concentrated survey of the history of the concerto. Prerequisite: MUSC 440 and MUSC 480. LEC.

MUSC 491. History of the Symphony. 3 Hours.
A concentrated survey of the history of the symphony. Prerequisite: MUSC 440 and MUSC 480. LEC.

MUSC 492. History of Wind Band Music. 3 Hours.
A chronological survey of the development of the wind band/ensemble and its music, using standard musical works from each historical period. Prerequisite: MUSC 440 and MUSC 480 or permission of the instructor. LEC.

MUSC 493. History of Music Theory. 3 Hours.
A historical survey of music theory, both practical and speculative, from the ancient Greeks to the late twentieth century. Prerequisite: MUSC 240, MUSC 340, MUSC 440, and MUSC 480. LEC.

MUSC 494. Readings in Musicology: _____. 1-3 Hours.
May be repeated for credit. Prerequisite: Minimum average of B in MUSC 320, MUSC 340, MUSC 440, MUSC 480 or equivalent, and permission of instructor. IND.

MUSC 499. Senior Thesis. 2 Hours. AE61.
An original research project that will result in a scholarly paper of moderate size. May be repeated once for credit. IND.

MUSC 560. Music in World Cultures. 3 Hours. NW AE42 / W.
An introduction to music as part of the cultural experience in India, Southeast Asia, the Orient, and Africa, with comparisons to Western traditions and influences on contemporary music. LEC.

MUSC 565. Collegium Musicum, Vocal. 0-1 Hours.
May be repeated for credit. (Same as CHOR 654.) Prerequisite: Permission of instructor. ACT.

MUSC 566. Collegium Musicum, Instrumental. 0-1 Hours.
May be repeated for credit. Prerequisite: Permission of instructor. ACT.

MUSC 744. Readings in Jazz and American Popular Music. 1-3 Hours.
Investigation of a subject by means of directed study using primary scholarly sources. May be repeated for credit. Prerequisite: MTHC 410 and consent of instructor. LEC.

MUSC 748. Readings in Musical Instruments. 3 Hours.
Investigation of a subject by means of directed readings using primary scholarly sources. May be repeated for credit. Prerequisite: MTHC 410 and consent of instructor. LEC.

MUSC 749. Readings in Jazz and American Popular Music. 1-3 Hours.
Investigation of a subject by means of directed study of primary resources. Prerequisite: Permission of instructor. IND.

MUSC 753. Music of the Renaissance. 3 Hours.
Prerequisite: MUSC 340. LEC.

MUSC 754. Music of the Baroque Era. 3 Hours.
Prerequisite: MUSC 340 and MUSC 440. LEC.

MUSC 755. Music of the Classical Era. 3 Hours.
Prerequisite: MUSC 440. LEC.

MUSC 756. Music of the Romantic Era. 3 Hours.
Prerequisite: MUSC 440 and MUSC 480. LEC.

MUSC 757. Music of the Twentieth Century. 3 Hours.
Prerequisite: MUSC 440 and MUSC 480. LEC.

MUSC 758. History of Musical Instruments. 3 Hours.
Prerequisite: MUSC 340 or MUSC 440 or permission of instructor. LEC.

MUSC 759. Music in America. 3 Hours.
A survey of historical developments from the Pilgrims to the present. (Same as AMS 737.) Prerequisite: One course in the field of music history or permission of the instructor. LEC.

MUSC 760. History of Opera. 3 Hours.
Prerequisite: MUSC 340, MUSC 440, and MUSC 480. LEC.

MUSC 761. History of the Mass. 3 Hours.
Prerequisite: MUSC 340 and MUSC 440, or permission of instructor. LEC.

MUSC 765. History of Chamber Music. 3 Hours.
Prerequisite: MUSC 440 and MUSC 480, or permission of instructor. LEC.

MUSC 766. History of the Concerto. 3 Hours.
Prerequisite: MUSC 440 and MUSC 480, or permission of instructor. LEC.

MUSC 767. History of the Symphony. 3 Hours.
Prerequisite: MUSC 440 and MUSC 480, or permission of instructor. LEC.

MUSC 768. History of Wind Band Music. 3 Hours.
A chronological survey of the development of the wind band/ensemble and its music, using standard musical works from each historical period. Prerequisite: MUSC 440, MUSC 480, or permission of instructor. LEC.

MUSC 775. History of Keyboard Music. 3 Hours.
Prerequisite: MUSC 340, MUSC 440, and MUSC 480. LEC.

MUSC 777. History of Solo Vocal Music. 3 Hours.
Prerequisite: MUSC 340, MUSC 440, and MUSC 480. LEC.
MUSC 778. History of Music Theory. 3 Hours.
A historical survey of music theory, both practical and speculative, from
the ancient Greeks to the late twentieth century. (Same as MTHC 778.)
LEC.

MUSC 794. Readings in Musicology: _____. 1-3 Hours.
Investigation of a subject by means of directed reading of primary literary
sources. May be repeated for credit. Prerequisite: A grade average of
"B" in two musicology courses numbered 500 or above and consent of
instructor. IND.

MUSC 801. Music Bibliography and Research. 3 Hours.
Bibliography, research methods, and scholarly writing in music for
entering graduate students. Prerequisite: Permission of instructor. LEC.

MUSC 802. Advanced Music Bibliography and Research. 3 Hours.
Advanced bibliography and writing of research papers. Prerequisite:
MUSC 801. LEC.

MUSC 899. Thesis. 1-6 Hours.
May be repeated for credit. THE.

MUSC 902. Seminar in Musicology. 3 Hours.
A research course designed primarily for doctoral students in musicology.
Prerequisite: MUSC 801, or its equivalent. LEC.

MUSC 903. Seminar in Performance Practices. 3 Hours.
Primary and secondary sources in performance practices dealing mainly
with the seventeenth through nineteenth centuries, with implications
applicable to student's performance medium. LEC.

MUSC 940. Seminar on Selected Topics in Musicology: _____. 3
Hours.
Each semester a topic (to be inserted in the blank) will be the basis for
discussion, reports, and a research paper. May be repeated for credit
provided no course duplication takes place. LEC.

MUSC 970. D.M.A. Lecture-Recital. 1-4 Hours.
A lecture-recital and scholarly paper on a subject pertinent to the student's
major field. Open only to candidates for the D.M.A. in performance. May
be repeated for credit. Prerequisite: Consent of instructor. RSH.

A scholarly paper on a subject pertinent to the student's major field. Open
only to candidates for the D.M.A. in performance and conducting. May be
repeated for credit. Prerequisite: Consent of instructor. RSH.

MUSC 999. Dissertation. 1-12 Hours.
May be repeated for credit. THE.

OBOE 100. Oboe. 1-2 Hours.
Applied music lessons for freshmen and sophomores not majoring in
music. May be repeated for credit. IND.

OBOE 101. Oboe Reed Making. 0-1 Hours.
The principles of oboe reed making, including tube cane selection, pre-
gouging, gouging, shaping, tying and scraping reeds. Knife sharpening
and tool maintenance will also be covered. Open only to freshmen and
sophomores. May be repeated for credit. LAB.

OBOE 121. Oboe. 1-4 Hours.
Applied music lessons for freshmen majoring in music. May be repeated
for credit. IND.

OBOE 131. Baroque Oboe. 1-4 Hours.
One or two lessons per week. For freshmen and sophomores. May be
repeated for credit. IND.

OBOE 221. Oboe. 1-4 Hours.
Applied music lessons for sophomores majoring in music. May be
repeated for credit. Prerequisite: 121-level until the music major has
accumulated 4 credits (8 for performance majors). IND.

OBOE 300. Oboe. 1-2 Hours.
Applied music lessons for juniors and seniors not majoring in music. May
be repeated for credit. IND.

OBOE 301. Oboe Reed Making. 0-1 Hours.
The principles of oboe reed making, including tube cane selection, pre-
gouging, gouging, shaping, tying and scraping reeds. Knife sharpening
and tool maintenance will also be covered. Open only to juniors and
seniors. May be repeated for credit. LAB.

OBOE 321. Oboe. 1-2 Hours.
Applied music lessons for juniors majoring in music. Not for performance
majors. May be repeated for credit. Prerequisite: 221-level until the music
major has accumulated 8 credits. IND.

OBOE 331. Baroque Oboe. 1-4 Hours.
One or two lessons per week. For juniors and seniors. May be repeated
for credit. IND.

OBOE 421. Oboe. 1-2 Hours.
Applied music lessons for seniors majoring in music. Not for performance
majors. May be repeated for credit. Prerequisite: 321-level until the music
major has accumulated 12 credits. IND.

OBOE 422. Oboe. 1-2 Hours. AE61.
Applied music lessons. Must be taken in the semester a recital is being
performed and as required by the degree program. Not for performance
majors. IND.

OBOE 622. Oboe. 1-4 Hours. AE61.
Applied music lessons for juniors and seniors majoring in performance.
May be repeated for credit. Prerequisite: Performance majors must
accumulate 16 credits at the 121/221 levels. IND.

OBOE 623. Senior Recital. 1 Hour.
Applied music lessons for undergraduate performance majors (Bachelor
of Music). Must be taken in semester the senior recital is being performed
and as required by the degree program. Corequisite: OBOE 622. LEC.

OBOE 711. Oboe. 1-4 Hours.
For graduate students not majoring in oboe. May be repeated for credit.
Summer session limit one to three hours. IND.

OBOE 731. Baroque Oboe. 1-4 Hours.
May be repeated for credit. IND.

OBOE 811. Oboe. 2-4 Hours.
For graduate students majoring in oboe. May be repeated for credit. IND.

OBOE 921. Seminar in Performance. 3 Hours.
A study of repertoire and performance practice relating to the baroque
obo during the seventeenth and eighteenth centuries. LEC.

OBOE 922. Seminar in Performance. 3 Hours.
A study of repertoire and extended performance techniques of the
twentieth century. LEC.

OBOE 961. Directed Performance. 2-4 Hours.
Individual instruction. Open only to students who have been admitted
to the D.M.A. curriculum in oboe. May be repeated for credit. Summer
session limit one to three hours. IND.

OBOE 965. Doctoral Recitals. 1 Hour.
Maximum seven hours credit. May be repeated for credit. THE.
OBOE 970. D.M.A. Lecture-Recital. 1-4 Hours.
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Summer session limit one to three credits. Prerequisite: Consent of instructor. RSH.

A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor. THE.

ORCH 200. University Symphony Orchestra. 0-1 Hours.
For freshmen and sophomores. Four hours full rehearsal and one hour sectional (string only) rehearsal each week throughout the school year. An intensive study of the symphonic repertoire, instrumental and vocal accompaniments, and complete major opera. Two public concerts each semester and numerous out-of-town concerts, radio broadcasts, and local vespers performances. Acceptance for membership and playing positions is determined by tryout. May be repeated for credit. LAB.

ORCH 201. University Chamber Orchestra. 1 Hour.
Two hours of rehearsal per week. May be repeated for credit. Audition required. LAB.

ORCH 210. Repertory Orchestra. 1 Hour.
A reading orchestra, emphasizing standard orchestral works from Baroque through modern periods. Open to string, wind, and percussion instrument players of the community and university. (Does not count toward ensemble requirement for students with stringed instruments emphasis.) May be repeated for credit. LAB.

ORCH 600. University Symphony Orchestra. 0-1 Hours.
For juniors, seniors, and graduate students. May be repeated for credit. LAB.

ORCH 601. University Chamber Orchestra. 1 Hour.
Two hours rehearsal per week. May be repeated for credit. Audition required. LAB.

ORCH 701. Workshop in: ____. 0.5-3 Hours.
May be repeated for credit. LEC.

ORGN 100. Organ. 1-2 Hours.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. IND.

ORGN 121. Organ. 1-4 Hours.
Applied music lessons for freshmen majoring in music. May be repeated for credit. IND.

ORGN 221. Organ. 1-4 Hours.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors). IND.

ORGN 300. Organ. 1-2 Hours.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. IND.

ORGN 320. Studio Class in Organ - Lab. 0 Hours.
Studio performance of works prepared under individual instruction. May be repeated. LAB.

ORGN 321. Organ. 1-2 Hours.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits. IND.

ORGN 421. Organ. 1-2 Hours.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits. IND.

ORGN 422. Organ. 1-2 Hours. AE61.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors. IND.

ORGN 502. Master Class in Organ - Lab. 0 Hours.
A class in the performance of advanced organ repertoire. For organ majors only or by consent of instructor. May be repeated. LAB.

ORGN 603. Institute for Organ and Church Music. 1-2 Hours.
A one-week intensive study program in performance, practice, and literature, advanced pedagogy, and church music. Normally offered during the summer session. May be repeated for credit. Graded S (satisfactory) or U (unsatisfactory). IND.

ORGN 608. Organ Pedagogy. 2 Hours.
For seniors and graduate students majoring in organ or by permission of instructor. May be repeated for credit. Materials and methods of pedagogy. Lectures, discussion, demonstration teaching, planning, and evaluation. One beginning or lower level organ student assigned to each class member with teaching done under supervision of class instructor. LEC.

ORGN 622. Organ. 1-4 Hours. AE61.
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 16 credits at the 121/221 levels. IND.

ORGN 623. Senior Recital. 1 Hour.
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Corequisite: ORGN 622. LEC.

ORGN 702. Master Class in Organ - Lab. 0 Hours.
A class in the performance of advanced organ repertoire. For organ majors only or by consent of instructor. May be repeated. LAB.

ORGN 711. Organ. 1-4 Hours.
For graduate students not majoring in organ. May be repeated for credit. Summer session limit one to three hours. IND.

ORGN 720. Studio Class in Organ-Lab. 0 Hours.
Studio performance of works prepared under individual instruction. May be repeated for credit. IND.

ORGN 800. Organ Building and Design. 3 Hours.
Acoustics; design, construction, and maintenance of organs; organ consulting, examination of organs. LEC.

ORGN 801. History of Organ Literature and Organ Design I. 3 Hours.
Organ literature and organ design from the Middle Ages, the Renaissance, and the Spanish, Italian, and English Baroque. LEC.

ORGN 802. History of Organ Literature and Organ Design II. 3 Hours.
Organ literature and organ design in the Dutch and German Baroque with special emphasis on J.S. Bach. Prerequisite: Permission of instructor. LEC.

ORGN 803. History of Organ Literature and Organ Design III. 3 Hours.
French organ literature and organ design from the 17th century to the present. LEC.
ORGN 804. History of Organ Literature and Organ Design IV. 3 Hours.
German, North American, British, Scandinavian and Eastern European organ literature and organ design from the Classic era to the present. Prerequisite: Permission of instructor. LEC.

ORGN 805. Selected Topics in Organ. 1-3 Hours.
An exploration of selected topics in organ design and literature. Topics change by semester. May be repeated for credit. LEC.

ORGN 806. Organ Pedagogy. 3 Hours.
Philosophy, methods, and materials of organ pedagogy. Prerequisite: Permission of instructor. LEC.

ORGN 807. Organ Study Tour. 1-3 Hours.
Study of European or North American organs through reading and site visits to instruments. LEC.

ORGN 811. Organ. 2-4 Hours.
For graduate students majoring in organ. May be repeated for credit. Summer session limit one to three hours. IND.

ORGN 921. Seminar in Performance: ______, 3 Hours.
A detailed study of organ repertoire, performance practice, the history of organ building as it affects the performance of a particular body of literature, liturgical or other extra-musical contexts, and other influences on musical style. May be repeated for credit when topics vary. LEC.

ORGN 961. Directed Performance. 2-4 Hours.
Individual instruction. Open only to students who have been admitted to the D.M.A. program in organ. May be repeated for credit. Summer session limit one to three hours. IND.

ORGN 965. Doctoral Recitals. 1 Hour.
Maximum credit, seven hours. May be repeated for credit. THE.

ORGN 970. D.M.A. Lecture-Recital. 1-4 Hours.
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor. RSH.

A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor. THE.

PCUS 100. Percussion. 1-2 Hours.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. IND.

PCUS 120. Drum Set Technique. 1 Hour.
One lesson per week. Small group instruction. For freshmen and sophomores. A course designed to develop drum set technique, with emphasis placed on understanding the various styles of music to perform on the set: swing, jazz, rock, ethnic, Broadway shows. May be repeated for credit. IND.

PCUS 121. Percussion. 1-4 Hours.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. IND.

PCUS 221. Percussion. 1-4 Hours.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors). IND.

PCUS 300. Percussion. 1-2 Hours.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. IND.

PCUS 320. Drum Set Technique. 1 Hour.
One lesson per week. Small group instruction. For juniors and seniors. A course designed to develop drum set technique, with emphasis placed on understanding the various styles of music to perform on the set: swing, jazz, rock, ethnic, Broadway shows. May be repeated for credit. IND.

PCUS 321. Percussion. 1-2 Hours.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits. IND.

PCUS 421. Percussion. 1-2 Hours.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits. IND.

PCUS 422. Percussion. 1-2 Hours. AE61.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors. IND.

PCUS 622. Percussion. 1-4 Hours. AE61.
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 16 credits at the 121/221 levels. IND.

PCUS 623. Senior Recital. 1 Hour.
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Corequisite: PCUS 622. LEC.

PCUS 711. Percussion. 1-4 Hours.
For graduate students not majoring in percussion. May be repeated for credit. Summer session limit one to three hours. IND.

PCUS 811. Percussion. 2-4 Hours.
For graduate students majoring in percussion. May be repeated for credit. Summer session limit one to three credits. IND.

PCUS 921. Seminar in Performance and Pedagogy. 3 Hours.
A study of the interpretive problems encountered in percussion music from the various historical periods, and a study of the performance practices in orchestral, band, chamber ensemble, and solo literature. LEC.

PCUS 961. Directed Performance. 2-4 Hours.
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in percussion. May be repeated for credit. Summer session limit one to three hours. IND.

PCUS 965. Doctoral Recitals. 1 Hour.
May be repeated for credit. THE.

PCUS 970. D.M.A. Lecture-Recital. 1-4 Hours.
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor. RSH.

PCUS 972. D.M.A. Document. 1-4 Hours.
A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor. THE.

PENS 252. Percussion Ensemble. 0-1 Hours.
For freshmen and sophomores. Study and performance of works for various percussion instrument combinations. May be repeated for credit. LAB.

PENS 652. Percussion Ensemble. 0-1 Hours.
For juniors, seniors, and graduate students. Study and performance of works for various percussion instrument combinations. May be repeated for credit. LAB.
PIAN 100. Piano. 1-2 Hours.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. IND.

PIAN 111. Elementary Keyboard Musicianship. 2 Hours.
The development of keyboard skills in sightreading, transposition, harmonization, improvisation, score reading, and playing by ear. Open to all students not majoring in music who have little or no music training. IND.

PIAN 121. Piano. 1-4 Hours.
Applied music lessons for freshmen majoring in music. May be repeated for credit. IND.

PIAN 125. Piano. 1-4 Hours.
Small group instruction for the development of performance abilities encouraging exploration of creative potentials and self-directed study. For freshmen and sophomores. May be repeated for credit. Prerequisite: Permission of instructor. IND.

PIAN 144. Elementary Keyboard Skills I. 1 Hour.
The development of keyboard skills in sightreading, transposition, harmonization, improvisation, score reading, and playing by ear. Open to all music majors with little or no piano background. IND.

PIAN 148. Elementary Keyboard Skills II. 1 Hour.
A continuation of PIAN 144. IND.

PIAN 216. Chamber Music for Pianists. 1-2 Hours.
For freshmen and sophomores majoring in piano. The study of chamber music literature for piano and various instrumental combinations. Development of rehearsal conducting techniques and leadership skills through collaboration with other musicians. May be repeated for credit. LEC.

PIAN 221. Piano. 1-4 Hours.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors). IND.

PIAN 227. Two-Piano and Four-Hand Literature. 2 Hours.
Instruction in two-piano and duet repertoire for performance and sight-reading by advanced keyboard performers. IND.

PIAN 229. Performance Class in Accompanying. 1 Hour.
A class in the performance of vocal and instrumental accompaniment. Prerequisite: May be repeated for credit. IND.

PIAN 230. Creative Jazz Piano I. 1 Hour.
Group instruction in techniques of playing jazz. Prerequisite: Permission of instructor. IND.

PIAN 237. Accompanying for Dance. 1-3 Hours.
Instruction in dance accompanying. Open to freshman and sophomore pianists with permission of instructor. IND.

PIAN 284. Intermediate Keyboard Skills I. 2 Hours.
Continuation of PIAN 148. Prerequisite: Permission of instructor. IND.

PIAN 288. Intermediate Keyboard Skills II. 2 Hours.
Continuation of PIAN 284. Prerequisite: Permission of instructor. IND.

PIAN 300. Piano. 1-2 Hours.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. IND.

PIAN 310. Advanced Keyboard Skills. 2 Hours.
The development of functional keyboard skills in sight reading, transposition, harmonization, improvisation, score reading, and playing by ear. Prerequisite: MTHC 115 or permission of instructor. IND.

PIAN 320. Piano Performance Class. 1 Hour.
Performances, lectures, and discussions of all aspects of performance. May be repeated for credit. Prerequisite: Consent of instructor. LAB.

PIAN 321. Piano. 1-2 Hours.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits. IND.

PIAN 325. Piano. 1-4 Hours.
For juniors and seniors. Small group instruction for the development of performance abilities, encouraging exploration of creative potentials, and self-directed study. May be repeated for credit. Prerequisite: Permission of instructor. IND.

PIAN 336. Chamber Music for Pianists. 1-2 Hours.
For juniors and seniors majoring in piano. The study of chamber music literature for piano and various instrumental combinations. Development of rehearsal conducting techniques and leadership skills through collaboration with other musicians. May be repeated for credit. LEC.

PIAN 402. Master Class. 1 Hour.
A class in the performance of advanced piano repertoire. Enrollment by permission of the department. IND.

PIAN 421. Piano. 1-2 Hours.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits. IND.

PIAN 422. Piano. 1-2 Hours. AE61.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors. IND.

PIAN 429. Performance Class Accompanying. 1 Hour.
A class in the performance of vocal and instrumental accompaniment. May be repeated for credit. LEC.

PIAN 430. Creative Jazz Piano II. 1 Hour.
Group instruction in advanced techniques of jazz improvisation with emphasis on various styles and interpretation of leading jazz performers. Prerequisite: Permission of instructor. IND.

PIAN 437. Accompanying for Dance. 1-3 Hours.
Instruction in dance accompanying. Open to junior and senior pianists with permission of instructor. IND.

PIAN 522. Piano Technology I. 1 Hour.
An introduction to the principles of design, theory of operation, maintenance, and tuning of the piano. Lecture and laboratory. Open to junior, senior, and graduate students. LEC.

PIAN 523. Piano Technology II. 1 Hour.
A continuation of PIAN 522, Piano Technology I. Application of principles of design, theory of operation, maintenance, and tuning of the piano. Prerequisite: PIAN 522. LEC.

PIAN 540. Piano Pedagogy I. 2-3 Hours.
Observation and research of the techniques and materials relevant to piano instruction at the elementary to intermediate levels. Additional topics pertinent to music education to include child development, learning, communication, and group dynamics. Prerequisite: Permission of instructor. LEC.

PIAN 546. Piano Pedagogy II. 2-3 Hours.
Observation and research of the techniques and materials relevant to piano instruction at the elementary to intermediate levels. Additional topics pertinent to music education to include child development,
learning, communication, and group dynamics. Prerequisite: PIAN 540 or permission of instructor. LEC.

PIAN 622. Piano. 1-4 Hours. AE61. Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 16 credits at the 121/221 levels. IND.

PIAN 623. Senior Recital. 1 Hour. Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Corequisite: PIAN 622. LEC.

PIAN 624. Piano Workshop. 1-3 Hours. A short term course covering a piano-related topic. May be repeated for credit. LEC.

PIAN 640. Piano Pedagogy III. 2 Hours. Practicum in piano instruction at the elementary to intermediate levels. Students enrolled for this course are expected to participate in the Children's Piano Laboratory Program or the Campus Community Program. Prerequisite: PIAN 546 or permission of instructor. FLD.

PIAN 643. Piano Repertoire I. 3 Hours. Study and analysis of keyboard repertoire from its beginning through the Classical period. LEC.

PIAN 644. Piano Repertoire 2. 3 Hours. Study and analysis of keyboard repertoire of the Romantic and Modern periods. LEC.

PIAN 646. Piano Pedagogy IV. 1-2 Hours. Practicum in piano instruction at the elementary to intermediate levels. Prerequisite: PIAN 640 or permission of instructor. FLD.

PIAN 711. Piano. 1-4 Hours. For graduate students not majoring in piano. May be repeated for credit. Summer session limit one to three hours. IND.

PIAN 720. Piano Performance Class. 1 Hour. Performances, lectures, and discussion of all aspects of performance. May be repeated for credit. Prerequisite: Consent of instructor. IND.

PIAN 802. Master Class. 1 Hour. A class in the performance of advanced piano repertoire. Enrollment by permission of the department. Graded on satisfactory/unsatisfactory basis. IND.

PIAN 811. Piano. 2-6 Hours. For graduate students majoring in piano. May be repeated for credit. Summer session limit one to three hours. IND.

PIAN 840. Advanced Piano Pedagogy I: Group and Class Instruction. 3 Hours. The techniques and materials for the development of keyboard literacy at the elementary and intermediate levels. LEC.

PIAN 846. Advanced Piano Pedagogy II: Group and Class Instruction. 3 Hours. The techniques and materials for the development of keyboard literacy at the elementary and intermediate levels. Prerequisite: PIAN 840. LEC.

PIAN 921. Seminar in Performance and Pedagogy: ______. 3 Hours. A detailed study of repertoire, performance practice, pedagogical, and stylistic problems relating to keyboard music. May be repeated for credit when topics vary. LEC.

PIAN 961. Directed Performance. 2-4 Hours. Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in piano. May be repeated for credit. Summer session limit one to three hours. IND.

PIAN 965. Doctoral Recitals. 1 Hour. Maximum credit, seven hours. May be repeated for credit. THE.

PIAN 970. D.M.A. Lecture-Recital. 1-4 Hours. A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor. RSH.

PIAN 972. D.M.A. Document. 1-4 Hours. A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor. THE.

REC 100. Laboratory in Music Performance. 0 Hours. This course deals with the performance of music. The goal is to increase the understanding of music and music performance through exposure to a wide variety of repertory and performance styles, mediums, techniques, and related issues. May be repeated. LAB.

RECO 119. Recorder. 1-4 Hours. For freshmen and sophomores. Group instruction at the beginning level, two hours per week. Thirty minutes per day practice expected. May not be repeated for credit. Prerequisite: Student must read music and own an alto recorder. IND.

RECO 319. Recorder. 1-4 Hours. For juniors and seniors. Group instruction at the beginning level, two hours per week. Thirty minutes per day practice expected. May not be repeated for credit. Prerequisite: Student must read music and own an alto recorder. IND.

SAXO 100. Saxophone. 1-2 Hours. Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. IND.

SAXO 121. Saxophone. 1-4 Hours. Applied music lessons for freshmen majoring in music. May be repeated for credit. IND.

SAXO 221. Saxophone. 1-4 Hours. Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors). IND.

SAXO 300. Saxophone. 1-2 Hours. Applied music lessons for seniors majoring in music. May be repeated for credit. IND.

SAXO 321. Saxophone. 1-2 Hours. Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. IND.

SAXO 421. Saxophone. 1-2 Hours. Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits. IND.

SAXO 422. Saxophone. 1-2 Hours. AE61. Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors. IND.

SAXO 622. Saxophone. 1-4 Hours. AE61. Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 16 credits at the 121/221 levels. IND.
SAXO 623. Senior Recital. 1 Hour.
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Corequisite: SAXO 622. LEC.

SAXO 711. Saxophone. 1-4 Hours.
For graduate students not majoring in saxophone. May be repeated for credit. Summer session limit one to three hours. IND.

SAXO 811. Saxophone. 2-4 Hours.
For graduate students majoring in saxophone. May be repeated for credit. Summer session limit one to three hours. IND.

SAXO 921. Seminar in Performance. 3 Hours.
A study of repertoire and performance techniques from the saxophone's inception to 1950. LEC.

SAXO 922. Seminar in Performance. 3 Hours.
A study of repertoire and extended performance techniques from 1950 to the present. LEC.

SAXO 961. Directed Performance. 2-4 Hours.
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in saxophone. May be repeated for credit. Summer session limit one to three hours. IND.

SAXO 965. Doctoral Recitals. 1 Hour.
Maximum seven hours credit. May be repeated for credit. THE.

SAXO 970. D.M.A. Lecture-Recital. 1-4 Hours.
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor. RSH.

A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor. THE.

TROM 100. Trombone. 1-2 Hours.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. IND.

TROM 121. Trombone. 1-4 Hours.
Applied music lessons for freshmen majoring in music. May be repeated for credit. IND.

TROM 221. Trombone. 1-4 Hours.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors). IND.

TROM 252. Trombone Choir. 0-1 Hours.
For freshmen and sophomores. Study and performance of ensemble literature for the trombone. May be repeated for credit. IND.

TROM 300. Trombone. 1-2 Hours.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. IND.

TROM 321. Trombone. 1-2 Hours.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits. IND.

TROM 421. Trombone. 1-2 Hours.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits. IND.

TROM 422. Trombone. 1-2 Hours. AE61.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors. IND.

TROM 622. Trombone. 1-4 Hours. AE61.
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 16 credits at the 121/221 levels. IND.

TROM 623. Senior Recital. 1 Hour.
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Corequisite: TROM 622. LEC.

TROM 652. Trombone Choir. 0-1 Hours.
For juniors, seniors, and graduate students. Study and performance of ensemble literature for the trombone. May be repeated for credit. IND.

TROM 711. Trombone. 1-4 Hours.
For graduate students not majoring in trombone. May be repeated for credit. Summer session limit one to three hours. IND.

TROM 811. Trombone. 2-4 Hours.
For graduate students majoring in music. May be repeated for credit. IND.

TROM 961. Directed Performance. 2-4 Hours.
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in trombone. May be repeated for credit. Summer session limit one to three hours. IND.

TROM 965. Doctoral Recitals. 1 Hour.
May be repeated for credit. THE.

TROM 970. D.M.A. Lecture-Recital. 1-4 Hours.
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor. RSH.
A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor. THE.

TRUM 100. Trumpet. 1-2 Hours.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. IND.

TRUM 121. Trumpet. 1-4 Hours.
Applied music lessons for freshmen majoring in music. May be repeated for credit. IND.

TRUM 221. Trumpet. 1-4 Hours.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors). IND.

TRUM 252. Trumpet Ensemble. 0-1 Hours.
For freshmen and sophomores. Study and performance of ensemble literature for the trumpet. May be repeated for credit. IND.

TRUM 300. Trumpet. 1-2 Hours.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. IND.

TRUM 321. Trumpet. 1-2 Hours.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits. IND.

TRUM 421. Trumpet. 1-2 Hours.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits. IND.

TRUM 422. Trumpet. 1-2 Hours. AE61.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors. IND.

TRUM 622. Trumpet. 1-4 Hours. AE61.
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 16 credits at the 121/221 levels. IND.

TRUM 623. Senior Recital. 1 Hour.
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Corequisite: TRUM 622. LEC.

TRUM 652. Trumpet Ensemble. 0-1 Hours.
For juniors, seniors, and graduate students. Study and performance of ensemble literature for the trumpet. May be repeated for credit. IND.

TRUM 711. Trumpet. 1-4 Hours.
For graduate students not majoring in trumpet. May be repeated for credit. Summer session limit one to three hours. IND.

TRUM 811. Trumpet. 2-4 Hours.
For graduate students majoring in trumpet. May be repeated for credit. Summer session limit one to three hours. IND.

TRUM 961. Directed Performance. 2-4 Hours.
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in trumpet. May be repeated for credit. Summer session limit one to three hours. IND.

TRUM 965. Doctoral Recitals. 1 Hour.
Maximum credit, seven hours. May be repeated for credit. THE.

TRUM 970. D.M.A. Lecture-Recital. 1-4 Hours.
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor. RSH.

TUBA 100. Tuba. 1-2 Hours.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. IND.

TUBA 121. Tuba. 1-4 Hours.
Applied music lessons for freshmen majoring in music. May be repeated for credit. IND.

TUBA 221. Tuba. 1-4 Hours.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors). IND.

TUBA 300. Tuba. 1-2 Hours.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. IND.

TUBA 321. Tuba. 1-2 Hours.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits. IND.

TUBA 421. Tuba. 1-2 Hours.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits. IND.

TUBA 422. Tuba. 1-2 Hours. AE61.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors. IND.

TUBA 622. Tuba. 1-4 Hours. AE61.
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 16 credits at the 121/221 levels. IND.

TUBA 623. Senior Recital. 1 Hour.
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Corequisite: TUBA 622. LEC.

TUBA 711. Tuba. 1-4 Hours.
For graduate students not majoring in tuba. May be repeated for credit. Summer session limit one to three hours. IND.

TUBA 811. Tuba. 2-4 Hours.
For graduate students majoring in tuba. May be repeated for credit. Summer session limit one to three hours. IND.

TUBA 961. Directed Performance. 2-4 Hours.
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in tuba. May be repeated for credit. Summer session limit one to three hours. IND.

TUBA 965. Doctoral Recitals. 1 Hour.
May be repeated for credit. THE.
TUBA 970. D.M.A. Lecture-Recital. 1-4 Hours.
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor. RSH.

A scholarly paper on a topic pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor. THE.

TUEU 252. Tuba-Euphonium Consort. 0-1 Hours.
For freshmen and sophomores. Study and performance of ensemble literature for the tuba and euphonium. May be repeated for credit. IND.

TUEU 652. Tuba-Euphonium Consort. 0-1 Hours.
For juniors, seniors, and graduate students. Study and performance of ensemble literature for the tuba and euphonium. May be repeated for credit. IND.

VIOA 100. Viola. 1-2 Hours.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. IND.

VIOA 120. Viola Performance Class. 0-1 Hours.
Studio performance of solo, ensemble, and orchestral audition repertoire for students concurrently enrolled in double bass, viola, violin and violoncello study. May be repeated. LEC.

VIOA 121. Viola. 1-4 Hours.
Applied music lessons for freshmen majoring in music. May be repeated for credit. IND.

VIOA 221. Viola. 1-4 Hours.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors). IND.

VIOA 300. Viola. 1-2 Hours.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. IND.

VIOA 320. Viola Performance Class. 0-1 Hours.
Studio performance of solo, ensemble, and orchestral audition repertoire for students concurrently enrolled in double bass, viola, violin and violoncello study. May be repeated. LEC.

VIOA 321. Viola. 1-2 Hours.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits. IND.

VIOA 421. Viola. 1-2 Hours.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits. IND.

VIOA 422. Viola. 1-2 Hours. AE61.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors. IND.

VIOA 622. Viola. 1-4 Hours. AE61.
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Corequisite: VIOA 622. LEC.

VIOA 711. Viola. 1-4 Hours.
For graduate students not majoring in viola. May be repeated for credit. Summer session limit one to three hours. IND.

VIOA 720. Viola Performance Class. 0-1 Hours.
Studio performance of solo, ensemble, and orchestral audition repertoire for students concurrently enrolled in viola (viola, etc.) study. For freshman and sophomores (120); juniors and seniors (320); graduate student (720) (as appropriate). May be repeated for credit. LEC.

VIOA 811. Viola. 2-4 Hours.
For graduate students majoring in viola. May be repeated for credit. Summer session limit one to three hours. IND.

VIOA 961. Directed Performance. 2-4 Hours.
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in viola. May be repeated for credit. Summer session limit one to three hours. IND.

VIOA 965. Doctoral Recitals. 1 Hour.
May be repeated for credit to a maximum of seven hours. THE.

VION 100. Violin. 1-2 Hours.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. IND.

VION 120. Violin Performance Class. 0-1 Hours.
Studio performance of solo, ensemble, and orchestral audition repertoire for students concurrently enrolled in double bass, viola, violin and violoncello study. May be repeated. LEC.

VION 121. Violin. 1-4 Hours.
Applied music lessons for freshmen majoring in music. May be repeated for credit. IND.

VION 221. Violin. 1-4 Hours.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors). IND.

VION 300. Violin. 1-2 Hours.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. IND.

VION 320. Violin Performance Class. 0-1 Hours.
Studio performance of solo, ensemble, and orchestral audition repertoire for students concurrently enrolled in double bass, viola, violin and violoncello study. May be repeated. LEC.

VION 321. Violin. 1-2 Hours.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits. IND.

VION 421. Violin. 1-2 Hours.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits. IND.

VION 422. Violin. 1-2 Hours. AE61.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors. IND.

VIOA 720. Viola Performance Class. 0-1 Hours.
Studio performance of solo, ensemble, and orchestral audition repertoire for students concurrently enrolled in viola (viola, etc.) study. For freshman and sophomores (120); juniors and seniors (320); graduate student (720) (as appropriate). May be repeated for credit. LEC.

VIOA 811. Viola. 2-4 Hours.
For graduate students majoring in viola. May be repeated for credit. Summer session limit one to three hours. IND.

VION 100. Violin. 1-2 Hours.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. IND.

VION 120. Violin Performance Class. 0-1 Hours.
Studio performance of solo, ensemble, and orchestral audition repertoire for students concurrently enrolled in double bass, viola, violin and violoncello study. May be repeated. LEC.

VION 121. Violin. 1-4 Hours.
Applied music lessons for freshmen majoring in music. May be repeated for credit. IND.

VION 221. Violin. 1-4 Hours.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors). IND.

VION 300. Violin. 1-2 Hours.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. IND.

VION 320. Violin Performance Class. 0-1 Hours.
Studio performance of solo, ensemble, and orchestral audition repertoire for students concurrently enrolled in double bass, viola, violin and violoncello study. May be repeated. LEC.

VION 321. Violin. 1-2 Hours.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits. IND.

VION 331. Baroque Violin. 1-4 Hours.
One or two lessons per week. For freshmen and sophomores. May be repeated for credit. IND.

VION 221. Violin. 1-4 Hours.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors). IND.

VION 300. Violin. 1-2 Hours.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. IND.

VION 320. Violin Performance Class. 0-1 Hours.
Studio performance of solo, ensemble, and orchestral audition repertoire for students concurrently enrolled in double bass, viola, violin and violoncello study. May be repeated. LEC.

VION 321. Violin. 1-2 Hours.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits. IND.

VION 331. Baroque Violin. 1-4 Hours.
One or two lessons per week. For juniors and seniors. May be repeated for credit. IND.

VION 421. Violin. 1-2 Hours.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits. IND.

VION 422. Violin. 1-2 Hours. AE61.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors. IND.
VION 511. Workshop in Stringed Instrument Care and Repair. 2 Hours.
Students will perform repairs such as gluing cracks, applying tailpiece gut, setting and adjusting sound posts, and rehairing bows. Proper care and maintenance of the instrument will be stressed. Prerequisite: Junior standing with a background of stringed instrument study meriting departmental approval. LAB.

VION 622. Violin. 1-4 Hours. AE61.
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 16 credits at the 121/221 levels. IND.

VION 623. Senior Recital. 1 Hour.
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Corequisite: VION 622. LEC.

VION 711. Violin. 1-4 Hours.
For graduate students not majoring in violin. May be repeated for credit. Summer session limit one to three hours. IND.

VION 720. Violin Performance Class. 0-1 Hours.
Studio performance of solo, ensemble, and orchestral audition repertoire for students concurrently enrolled in double bass, viola, violin and violoncello study. May be repeated. LEC.

VION 731. Baroque Violin. 1-4 Hours.
May be repeated for credit. IND.

VION 811. Violin. 2-4 Hours.
For graduate students majoring in violin. May be repeated for credit. Summer session limit one to three hours. IND.

VION 961. Directed Performance. 2-4 Hours.
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in violin. May be repeated for credit. Summer session limit one to three hours. IND.

VION 965. Doctoral Recitals. 1 Hour.
Maximum of seven hours credit. May be repeated for credit. THE.

VNCL 100. Violoncello. 1-2 Hours.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. IND.

VNCL 120. Cello Performance Class. 0-1 Hours.
Studio performance of solo, ensemble, and orchestral audition repertoire for students concurrently enrolled in double bass, viola, violin and violoncello study. May be repeated. LEC.

VNCL 121. Violoncello. 1-4 Hours.
Applied music lessons for freshmen majoring in music. May be repeated for credit. IND.

VNCL 221. Violoncello. 1-4 Hours.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors). IND.

VNCL 300. Violoncello. 1-2 Hours.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. IND.

VNCL 320. Cello Performance Class. 0-1 Hours.
Studio performance of solo, ensemble, and orchestral audition repertoire for students concurrently enrolled in double bass, viola, violin and violoncello study. May be repeated. LEC.

VNCL 321. Violoncello. 1-2 Hours.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits. IND.

VNCL 421. Violoncello. 1-2 Hours.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits. IND.

VNCL 422. Violoncello. 1-2 Hours. AE61.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors. IND.

VNCL 622. Violoncello. 1-4 Hours. AE61.
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 16 credits at the 121/221 levels. IND.

VNCL 623. Senior Recital. 1 Hour.
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Corequisite: VNCL 622. LEC.

VNCL 711. Violoncello. 1-4 Hours.
For graduate students not majoring in violoncello. May be repeated for credit. Summer session limit one to three hours. IND.

VNCL 720. Cello Performance Class. 0-1 Hours.
Studio performance of solo, ensemble, and orchestral audition repertoire for students concurrently enrolled in double bass, viola, violin and violoncello study. May be repeated. LEC.

VNCL 811. Violoncello. 2-4 Hours.
For graduate students majoring in violoncello. May be repeated for credit. Summer session limit one to three hours. IND.

VNCL 961. Directed Performance. 2-4 Hours.
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in violoncello. May be repeated for credit. Summer session limit one to three hours. IND.

VNCL 965. Doctoral Recitals. 1 Hour.
May be repeated for credit to a maximum of seven hours. THE.

VOIC 100. Voice. 1-2 Hours.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. IND.

VOIC 104. Class Voice. 1 Hour.
A study of the fundamentals of singing; performance of songs; an approach to voice instruction in a group situation. May be repeated for credit. IND.

VOIC 120. Vocal Performance in English. 1 Hour.
Fundamentals of solo vocal performance with an emphasis on English diction and communicating the English language. IND.

VOIC 121. Voice. 1-4 Hours.
Applied music lessons for freshmen majoring in music. May be repeated for credit. IND.

VOIC 221. Voice. 1-4 Hours.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (6 for performance majors). IND.

VOIC 270. Lyric Diction for Singers: ____. 1 Hour.
Pronunciation in a specific language to be chosen from Italian, French, English, German, or other languages pertinent to the singer. Open to
voice and theatre/voice majors, and to others with approval of instructor.
May be repeated for credit as language varies. LEC.

**VOIC 300. Voice. 1-2 Hours.**
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. IND.

**VOIC 302. Repertoire for the High School Singer. 1 Hour.**
Designed for future educators of young voices. Vocal literature and issues related to students aged thirteen to eighteen. May substitute for one semester of the studio voice requirements for Music Education majors with vocal/choral emphasis. Prerequisite: Four semesters of private voice. LEC.

**VOIC 320. Vocal Performance Class II. 1 Hour.**
Solo vocal performance in a class situation with emphasis including the preparation, planning of repertoire, and interpretive skills appropriate to a recital. Designed for junior/senior voice and theatre-voice majors. Prerequisite: Permission of instructor. Eligibility for VOIC 622. IND.

**VOIC 321. Voice. 1-2 Hours.**
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits. IND.

**VOIC 405. Vocal Literature I. 2 Hours.**
A survey of English song. LEC.

**VOIC 406. Vocal Literature II. 2 Hours.**
A survey of German song. LEC.

**VOIC 408. Vocal Pedagogy. 1 Hour.**
Knowledge and skills needed to teach voice, with particular attention to lifespan voice anatomy, physiology, and acoustics, diagnosis and correction of vocal inefficiencies, teaching styles, repertoire choice, professional development, and acquaintance with current research in voice science and vocal pedagogy. Includes a voice teaching practicum. (Same as MENT 408.) LEC.

**VOIC 412. Vocal Pedagogy and Advanced Repertoire II. 1 Hour.**
Continuation of VOIC 408. LEC.

**VOIC 421. Voice. 1-2 Hours.**
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits. IND.

**VOIC 422. Voice. 1-2 Hours. AE61.**
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors. IND.

**VOIC 440. Vocal Performance. 1 Hour.**
A class in the performance of vocal repertoire. IND.

**VOIC 470. Lyric Diction for Singers: ____, 1 Hour.**
Pronunciation in a specific language to be chosen from Italian, French, English, German, or other languages pertinent to the singer. Open to voice and theatre/voice majors, and to others with approval of instructor. May be repeated for credit as language varies. LEC.

**VOIC 490. Opera Workshop. 0-4 Hours.**
The study of various aspects of opera, such as character development, aria, chorus, and opera scene study, staging, body movement, and audition techniques. May be repeated for credit. ACT.

**VOIC 492. Opera Production. 1-4 Hours.**
The preparation and performance of an opera role. May be repeated for credit. ACT.

**VOIC 500. Directed Study in: ____. 1-3 Hours.**
Investigation of a special topic or project. May be repeated for credit. Prerequisite: Consent of instructor. IND.

**VOIC 520. Vocal Coaching. 1 Hour.**
In-depth investigation of elements of vocal performance such as language, musical style, tradition, and dramatic content and the communication thereof in preparation for the senior recital. Open to undergraduates majoring in voice and theatre/voice in the senior year, with consent of instructor. May be repeated for credit. IND.

**VOIC 622. Voice. 1-4 Hours. AE61.**
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 12 credits at the 121/221 levels. IND.

**VOIC 623. Senior Recital. 1 Hour.**
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Corequisite: VOIC 622. LEC.

**VOIC 670. Advanced Lyric Diction for Singers: ____, 1 Hour.**
Pronunciation in a specific language to be chosen from Italian, French, English, German, or other languages pertinent to the singer. Open to graduate students in voice and opera performance, and to others with approval of instructor. May be repeated for credit as language varies. LEC.

**VOIC 704. Vocal Repertoire: ____. 2 Hours.**
A survey of selected topics in vocal repertoire to be chosen from categories such as: Italian, German, French, and English songs, oratorio literature, and art songs by women composers. The course may be repeated for credit when topic varies. LEC.

**VOIC 705. Advanced Vocal Literature I. 3 Hours.**
An investigation of the development of French melodie. The course will include directed readings, writing, and performance. LEC.

**VOIC 706. Advanced Vocal Literature II. 3 Hours.**
An investigation of the development of German lieder. The course will include directed readings, writing, and performance. LEC.

**VOIC 707. Advanced Vocal Literature III. 3 Hours.**
An investigation of the development of songs in English. The course will include directed readings, writing, and performance. LEC.

**VOIC 711. Voice. 1-4 Hours.**
For graduate students not majoring in voice. May be repeated for credit. Summer session limit one to three hours. IND.

**VOIC 720. Vocal Performance Class II. 1 Hour.**
Solo vocal performance in a class situation with emphasis including the preparation, planning of repertoire, and interpretive skills appropriate to a recital. Advanced repertoire and appropriate level of vocal and musical comprehension shall be expected from the graduate student. Prerequisite: Consent of instructor. IND.

**VOIC 740. Vocal Performance. 1 Hour.**
A class in the performance of vocal repertoire. IND.

**VOIC 770. Special Studies in Voice: English Lyric Diction for the Choral Singer and Soloist. 1 Hour.**
A graduate level course designed for the choral director, public school music teacher and voice teacher. Techniques for achieving a distinct, unlabored English pronunciation will be studied. The International Phonetetic Alphabet will be employed. IND.

**VOIC 808. Vocal Pedagogy. 1 Hour.**
A course offering performers and beginning teachers of classical singing a basic overview of vocal production. The class will explore the empirical
and scientific principles of breathing, resonance, timbre, and other vocal features. Discussions of repertoire choices, vocal health, teaching styles, career development and other topics pertaining to the training of singers will be included. Added emphasis will be placed on historical and contemporary pedagogues through original research. LEC.

** VOIC 811. Voice. 2-4 Hours.**
For graduate students majoring in voice. May be repeated for credit. Summer session limit one to three hours. IND.

** VOIC 820. Vocal Coaching. 1-4 Hours.**
In-depth investigation of elements of vocal performance such as: language, musical style, tradition, dramatic content and the communication thereof. Open to graduate voice majors with consent of instructor. May be repeated for credit. ACT.

** VOIC 890. Opera Workshop. 0-4 Hours.**
The study of various aspects of opera, such as character development, aria, chorus, and opera scene study, staging, body movement, and audition techniques. May be repeated for credit. ACT.

** VOIC 892. Opera Production. 1-4 Hours.**
The preparation and performance of an opera role. May be repeated for credit. ACT.

** VOIC 900. Directed Study in: _______. 1-3 Hours.**
Investigation of a special topic or project. May be repeated for credit. Prerequisite: Consent of instructor. LEC.

** VOIC 921. Seminar in Performance: _______. 3 Hours.**
A detailed study of vocal repertoire, performance practice, and stylistic problems on a selected topic from areas such as oratorio, cantata, song cycles, vocal chamber music, song, or opera of specific composers (i.e., Verdi, Wagner, Mozart, Debussy, Poulenc, Wolf, Strauss), or twentieth century song. May be repeated for credit. LEC.

** VOIC 960. Vocal Pedagogy. 2 Hours.**
A study of the problems encountered in the teaching of vocal technique, such as breathing, resonance, tone color, dynamic control, and diction, and including sessions of supervised teaching. LEC.

** VOIC 961. Directed Performance. 2-4 Hours.**
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in voice. May be repeated for credit. Summer session limit one to three hours. IND.

** VOIC 965. Doctoral Recitals. 1 Hour.**
Maximum seven hours credit. May be repeated for credit. THE.

** VOIC 970. D.M.A. Lecture-Recital. 1-4 Hours.**
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor. LEC.

** VOIC 972. D.M.A. Document. 1-4 Hours.**
A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor. THE.

** W&P 125. Wind and Percussion Pedagogy. 1 Hour.**
For freshmen and sophomores. Materials and concepts for teaching beginning and intermediate instrumental students; instrument repair, adjustments and modification; reed making and adjustment where appropriate; solo and ensemble repertoire. May be repeated for credit. Corequisite: Applied instruction for the appropriate instrument. (e.g. FRHN 121, PCUS 221). IND.

** W&P 130. Orchestral Repertoire. 1 Hour.**
For freshmen and sophomores. Weekly reading sessions for wind, percussion and harp students with the objective of acquainting the student with important orchestral passages for his or her particular instrument. May be repeated for credit. Enrollment controlled by the instructor in charge. IND.

** W&P 325. Wind and Percussion Pedagogy. 1 Hour.**
For freshmen and sophomores. Continuation of WP 125. May be repeated for credit. Corequisite: Applied instruction for the appropriate instrument. (e.g. FRHN 321, PCUS 622). IND.

** W&P 630. Orchestral Repertoire. 1 Hour.**
The study of orchestral literature for wind and percussion instruments. May be repeated for credit. Permission of instructor. IND.

** W&P 655. Independent Study in: _______. 1-4 Hours.**
May be repeated for credit. Prerequisite: Consent of advisor and instructor. IND.

** W&P 702. Special Studies in Woodwind Instrument Pedagogy. 1-3 Hours.**
Physiological factors of woodwind playing, teaching materials and techniques, practice methods, solo and chamber music repertoire, mouthpieces and reeds, discography, techniques of tone production, articulation, embouchure, and intonation. May be repeated for credit to a maximum of five hours. LEC.

** W&P 704. Special Studies in Brass Instrumental Pedagogy. 1 Hour.**
Physiological factors of brass playing, teaching materials and techniques, practice methods, solo and chamber music repertoire, mouthpieces, discography, techniques of tone production, articulation, embouchure, and intonation. May be repeated for credit to a maximum of five hours. LEC.

** W&P 706. Advanced Pedagogy Workshops in Orchestral Instruments. 0.5 Hours.**
Methods and materials of teaching fundamentals of the instruments. Lecture, class performance, class discussion, teaching demonstration, and library research. Summer session only. Prerequisite: Teaching experience or undergraduate instruction in the instrument, or permission of the instructor. LEC.

** W&P 708. Special Studies in Percussion Instrument Pedagogy. 1-3 Hours.**
The study of percussion pedagogy of Membrane Percussion; Keyboard Percussion; and Jazz/Rock/Commercial Drum Set, Marching and World Percussion. Study will include but not limited to such areas as teaching materials and techniques, repertoire, performance practice, and discography. Course may concentrate on one of the three areas listed above, or be taught as a survey course covering all three topics. May be repeated for credit to a maximum of five hours. LEC.

** WENS 252. Wind Ensemble. 0-1 Hours.**
For freshmen and sophomores. Study and performance of original works for various wind instrument combinations. May be repeated for credit. LAB.

** WENS 652. Wind Ensemble. 0-1 Hours.**
For juniors, seniors, and graduate students. Study and performance of original works for various wind instrument combinations. May be repeated for credit. LAB.

## Bachelor of Arts in Fine Arts in Music

### B.A. in Fine Arts in Music Degree Requirements

The B.A. in Fine Arts in Music is offered with a concentration in
• Jazz studies,
• Musicology,
• Music theory,
• Piano/organ/orchestral instruments, or
• Voice.

A total of 120 credit hours is required. To graduate, a student must earn a minimum grade-point average of 3.0 in all major courses and a minimum average of 2.0 in all course work.

Students will gain knowledge in a variety of areas while pursuing the B.A. and may include any approved KU minor without adding extra credit hours to their degree program. Students will be studying with faculty members who are nationally and internationally recognized. Courses in music theory and musicology are part of the exploration of music as are private instruction, ensemble and chamber music opportunities, as well as a senior performance recital.

With this degree, students will be well-rounded prospects for nearly any employer upon graduation. Students can also go on to pursue graduate studies in music, establish private studios, audition for music ensembles, or create their own paths in music or music-related endeavors.

The School of Music

The School of Music at the University of Kansas ranks among the finest in America, offering comprehensive programs at the bachelor's, master's, and doctoral levels.

The school nurtures and advances the art of music through creation, performance, scholarly inquiry, entrepreneurship, and enhancement of the artistic skills and experiences of the university and regional cultural communities.

The school is a major contributor to the arts community through the student, faculty, and professional performances in Swarthout Recital Hall, Bales Organ Recital Hall, the Robert Baustian Theatre, and the Lied Center of Kansas.

The School of Music is an accredited institutional member of the National Association of Schools of Music (http://nasm.arts-accredit.org). The entrance and graduation requirements in this catalog conform to the published guidelines of that organization.

Ensemble Policy

In order to remain enrolled in studio instruction (lessons), all undergraduate (B.A. & B.M.) and M.M. students who enroll in any level of studio instruction (including nonmajor levels) in band and orchestral instruments must audition for and perform as assigned in a major instrumental ensemble

1 each semester in which they are enrolled. For music majors, 1 ensemble taken for credit each semester is required for graduation. Exceptions to this policy are allowed on a case-by-case basis and only by the ensemble conductor in consultation with the faculty member in the studio area or the faculty advisor in music therapy as appropriate.

1 KU Symphony Orchestra, Wind Ensemble, Symphonic Band, Marching Band, or Jazz Ensemble I.

Undergraduate Admission to the School of Music

First-year students should enter the school directly. Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale) and are eligible to return to the college or university last attended in addition to completing a successful audition. Other students can be admitted only with the permission of the dean. Send applications to the Office of Admissions (http://admissions.ku.edu). Visit the Office of International Recruitment and Undergraduate Admissions (http://admissions.ku.edu/international/welcome) for information about international admissions.

Students who wish to major in music must audition. All music students academically approved for admission to the School of Music are admitted contingent upon demonstration by audition of satisfactory level proficiency in their areas of applied music. Music audition information and application forms are available online (http://music.ku.edu/applyaudition). There is a limit of two times a prospective student may request an audition for entrance into one of the School's undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Transfer Students

Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale), are eligible to return to the college or university last attended, and complete a successful audition. Only grades of C or higher are accepted in transfer credit toward degrees offered by the School of Music. Students who wish to transfer performance credit from another institution toward any music degree at KU must validate this credit by audition. Music audition information and application forms are available online (http://music.ku.edu/applyaudition). There is a limit of two times a prospective student may request an audition for entrance into one of the School's undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Music Theory Placement

The music theory placement examination is required of all undergraduate transfer students who have not completed a 4-semester theory sequence with an accredited NASM school. It is administered as announced on the School of Music website (http://music.ku.edu/placement-exams) each semester.

B.A. in Fine Arts in Music Degree Requirements

The B.A. in Fine Arts in music is offered with a concentration in

• Jazz studies (p. 2207),
• Musicology (p. 2208),
• Music theory (p. 2208)
• Piano/organ/orchestral instruments (p. 2209), or
• Voice (p. 2209).

A total of 120 credit hours is required. To graduate, a student must earn a minimum grade-point average of 3.0 in all major courses and a minimum
average of 2.0 in all course work. Click a concentration above to be taken to that degree plan.

Basic Courses (21-41)

ENGL 101 Composition 3  
ENGL 102 Critical Reading and Writing 3  
MATH 101 College Algebra 3  
COMS 130 Speaker-Audience Communication 3  

Foreign language (0-20 hours): 0-20  
Jazz studies concentration: no foreign language  
Musicology, Music Theory and Piano, Organ or Orchestral Instrument concentration: 16 hours in same language  
Voice concentration: 10 hours of Italian and 10 hours of French or German  

Natural Science: any course that fulfills GE3N 3  
Social Science: any course that fulfills GE3S 3  
Social/Ethics: any course that fulfills AE51 or AE52 3  

Minor or non-music electives (18) 18  
Any KU approved minor. Must be declared in the department that houses your minor and completed with your music major.

Music Core (27)

MTHC 105 Theory I 4  
MTHC 115 Theory II 4  
MTHC 205 Theory III 4  
MTHC 315 Theory IV 4  
MUSC 320 Music History I 2  
MUSC 340 Music History II 3  
MUSC 440 Music History III 3  
MUSC 480 Music History IV 2  
MEMT 116 Performance Media: Computers, Synthesizers, and Electronics 1  
REC 100 Laboratory in Music Performance (2 to 4 semesters depending on your concentration) 0  

Concentrations

Choose 1 of the following concentrations:

Jazz Studies Concentration (54)

JAZZ 105/305 Jazz Theory 2  
JAZZ 224/624 Jazz Improvisation I 2  
JAZZ 225/625 Jazz Improvisation II 2  
JAZZ 230/630 Introduction to Jazz Piano 2  
JAZZ 459/659 Jazz Arranging 2  
Applied music lessons (8 semesters each for credit, includes senior recital) 8  
Jazz ensembles (4 semesters for credit) 4  
Jazz combo (4 semesters for credit) 4  
REC 100 Laboratory in Music Performance (2 semesters) 0  
Additional non-music electives required. Remember 45 total credits must be in courses numbered at the 300 level or above.

Musicology Concentration (38)

9 hours selected from courses numbered 602-778 9  
Applied music lessons (4 semesters each for credit) 4  
MUSC 499 Senior Thesis 2  

Ensembles (at least 2 semesters of Collegium Musicum each for credit) 4  
REC 100 Laboratory in Music Performance (4 semesters) 0  
Music electives 6  
Additional non-music electives. Remember 45 total credits must be in courses numbered at the 300 level or above.

Music Theory Concentration (38)

Upper-division music theory courses (MTHC courses numbered 300 and above) 9  
Applied music lessons (8 semesters for credit, includes senior recital) 8  
MTHC 499 Senior Research Project 2  
Ensembles (8 semesters each for credit) 8  
REC 100 Laboratory in Music Performance (4 semesters) 0  
Additional non-music electives. Remember 45 total credits must be in courses numbered at the 300 level or above.

Piano/Organ/Orchestral Instruments Concentration (34-42)

Applied music lessons (8 semesters each for 2 credits, includes senior recital) 16  
MUS 586 The Business of Music 3  
REC 100 Laboratory in Music Performance (4 semesters) 0  
Ensembles: 4-8  
Orchestral Instruments (8 semesters each for credit)  
Piano and Organ (4 semesters each for credit)  
Music electives: Piano and Organ only 0-4  
Additional non-music electives. Remember 45 total credits must be in courses numbered at the 300 level or above.

Voice Concentration (34)

Applied music lessons (8 semesters each for 2 credits, includes senior recital) 16  
Senior recital 0  
VOIC 120 Vocal Performance in English 1  
Vocal diction (2 semesters of VOIC 470) 2  
Vocal repertoire (VOIC 405 or VOIC 406) 2  
Ensembles (4 semesters each for credit) 4  
REC 100 Laboratory in Music Performance (4 semesters) 0  
Piano (Proficiency level of PIAN 284) 2  
Additional non-music electives. Remember 45 total credits must be in courses numbered at the 300 level or above.

B.A. in Fine Arts in Music with concentration in Jazz Studies

Freshman

Fall | Hours | Spring | Hours
--- | --- | --- | ---
ENGL 101 | 3 | ENGL 102 | 3
MTHC 105 | 4 | MTHC 115 | 4
REC 100 | 0 | REC 100 | 0
121 Studio lessons | 1 | 121 Studio lessons | 1
### B.A. in Fine Arts in Music with concentration in Musicology

**Freshman**

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<th>Fall</th>
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<th>Hours</th>
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**Sophomore**

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**Junior**

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<td>JAZZ 608 ens. or 409 combo</td>
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**Senior**

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**Total Hours: 120**

### B.A. in Fine Arts in Music with concentration in Music Theory

**Freshman**

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**Sophomore**

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**Junior**

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**Senior**

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**Total Hours: 120**

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B.A. in Fine Arts in Music with concentration in Music Theory

**Freshman**

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B.A. in Fine Arts in Music with concentration in Music Theory

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<td>Hours</td>
<td>Spring</td>
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| Total Hours: | 120 |

**B.A. in Fine Arts in Music with concentration in Piano/Organ/Orchestral Instruments**

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| Total Hours: | 120 |

**B.A. in Fine Arts in Music with concentration in Voice**
### Bachelor of Fine Arts in Theatre-Voice Program

#### Theatre and Voice

The Division of Voice offers 2 programs (Bachelor of Fine Arts and Bachelor of Music (p. 2224)) for singers interested in art song, opera, oratorio, concert, other classical pieces or vocal teaching. Students receive training in vocal technique, languages and diction, vocal repertoire, acting and the theatrical arts. Performance opportunities range from workshops to fully staged productions, allowing students to develop their talents at the most beneficial pace.

The Bachelor of Fine Arts (B.F.A.) in Theatre and Voice degree requires 124 credits. Students will be studying with faculty members who are nationally and internationally recognized. Courses in music theory and musicology are part of the in-depth exploration of music as well as performing a junior recital and a senior recital.

With this degree, students can go on to pursue graduate studies in music, establish private studios, audition for theatre/musical productions, or create their own path in music or music-related endeavors.

#### The School of Music

The School of Music at the University of Kansas ranks among the finest in America, offering comprehensive programs at the bachelor’s, master’s, and doctoral levels.

The school nurtures and advances the art of music through creation, performance, scholarly inquiry, entrepreneurship, and enhancement of the artistic skills and experiences of the university and regional cultural communities.

The school is a major contributor to the arts community through the student, faculty, and professional performances in Swarthout Recital Hall, Bales Organ Recital Hall, the Robert Baustian Theatre, and the Lied Center of Kansas.

The School of Music is an accredited institutional member of the National Association of Schools of Music (http://nasm.arts-accredit.org). The entrance and graduation requirements in this catalog conform to the published guidelines of that organization.

#### Undergraduate Admission to the School of Music

First-year students should enter the school directly. Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale) and are eligible to return to the college or university last attended in addition to completing a successful audition. Other students can be admitted only with the permission of the dean. Send applications to the Office of Admissions (http://admissions.ku.edu). Visit the Office of International Recruitment and Undergraduate Admissions (http://admissions.ku.edu/international/welcome) for information about international admissions.

Students who wish to major in music must audition. All music students academically approved for admission to the School of Music are admitted contingent upon demonstration by audition of satisfactory level proficiency in their areas of applied music. Music audition information and application forms are available online (http://music.ku.edu/applyaudition). There is a limit of two times a prospective student may request an audition for

### Freshman

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<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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### Sophomore

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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Junior

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 440</td>
<td>3 MUSC 480</td>
<td>2</td>
<td>VOIC 405 (or VOIC 406 next semester)</td>
<td>2 VOIC 406 (if did not take VOIC 405 last semester)</td>
</tr>
<tr>
<td>VOIC 470 (or next semester)</td>
<td>1 VOIC 470 (if did not take VOIC 470 last semester)</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 101</td>
<td>3 300+ Social Science: any course that fulfills GE3S</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Science: any course that fulfills GE3N</td>
<td>3 Social/Ethics: any course that fulfills AE51 or AE52</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minor or non-music elective</td>
<td>3 Minor or non-music elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Senior

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOIC 421</td>
<td>2 VOIC 422 (senior recital)</td>
<td>2</td>
<td>MEMT 116</td>
<td>1 300+ Minor or non-music elective</td>
</tr>
<tr>
<td>300+ Minor or non-music elective</td>
<td>3 300+ Non-music elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>300+ Non-music elective</td>
<td>3 300+ Non-music elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>300+ Non-music elective</td>
<td>3 Non-music elective</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Hours: 125
transfer credit toward degrees offered by the School of Music. Students who wish to transfer performance credit from another institution toward any music degree at KU must validate this credit by audition. Music audition information and application forms are available online (http://music.ku.edu/applyaudition). There is a limit of two times a prospective student may request an audition for entrance into one of the School's undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Transfer Students

Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale), are eligible to return to the college or university last attended, and complete a successful audition. Only grades of C or higher are accepted in transfer credit toward degrees offered by the School of Music. It is administered as announced on the School of Music website (http://music.ku.edu/placement-exams) each year.

Music Theory Placement

The music theory placement examination is required of all undergraduate students who have not completed a 4-semester theory sequence within the previous 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

B.F.A. Degree Requirements for the Theatre and Voice Major

A total of 124 hours is required, distributed as follows:

### Music Theory (16)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 105</td>
<td>Theory I</td>
</tr>
<tr>
<td>MTHC 115</td>
<td>Theory II</td>
</tr>
<tr>
<td>MTHC 205</td>
<td>Theory III</td>
</tr>
<tr>
<td>MTHC 315</td>
<td>Theory IV</td>
</tr>
</tbody>
</table>

### Musicology (10)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 320</td>
<td>Music History I</td>
</tr>
<tr>
<td>MUSC 340</td>
<td>Music History II</td>
</tr>
<tr>
<td>MUSC 440</td>
<td>Music History III</td>
</tr>
<tr>
<td>MUSC 480</td>
<td>Music History IV</td>
</tr>
</tbody>
</table>

### Theatre and Voice Major Courses (65)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOIC 120</td>
<td>Vocal Performance in English</td>
</tr>
<tr>
<td>VOIC 270</td>
<td>Lyric Diction for Singers: _____</td>
</tr>
<tr>
<td>VOIC 470</td>
<td>Lyric Diction for Singers: _____</td>
</tr>
<tr>
<td>VOIC 405</td>
<td>Vocal Literature I</td>
</tr>
<tr>
<td>or VOIC 406</td>
<td>Vocal Literature II</td>
</tr>
<tr>
<td>THR 106</td>
<td>Acting I</td>
</tr>
<tr>
<td>THR 206</td>
<td>Acting II</td>
</tr>
<tr>
<td>THR 210</td>
<td>Musical Performance for the Actor I</td>
</tr>
<tr>
<td>THR 212</td>
<td>Beginning Voice and Speech for Actors</td>
</tr>
<tr>
<td>THR 213</td>
<td>Movement I: The Acting Instrument</td>
</tr>
<tr>
<td>THR 310</td>
<td>Musical Performance for the Actor II</td>
</tr>
</tbody>
</table>

### Theatre elective from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THR 313</td>
<td>Movement II: Physical Characterization</td>
</tr>
<tr>
<td>THR 306</td>
<td>Acting III</td>
</tr>
<tr>
<td>THR 380</td>
<td>Popular Culture: _____</td>
</tr>
<tr>
<td>THR 406</td>
<td>Audition Techniques</td>
</tr>
<tr>
<td>THR 410</td>
<td>Musical Performance for the Actor III</td>
</tr>
<tr>
<td>THR 508</td>
<td>Fundamentals of Directing</td>
</tr>
<tr>
<td>THR 512</td>
<td>A Vocal Approach to the Classics</td>
</tr>
</tbody>
</table>

Ensembles: 4 semesters each for credit

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piano</td>
<td>(proficiency level of PIAN 284)</td>
</tr>
<tr>
<td>MMENT 116</td>
<td>Performance Media: Computers, Synthesizers, and Electronics</td>
</tr>
<tr>
<td>COND 245</td>
<td>Conducting I</td>
</tr>
<tr>
<td>REC 100</td>
<td>Laboratory in Music Performance (4 semesters)</td>
</tr>
</tbody>
</table>

### Basic Courses (33)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication</td>
</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra</td>
</tr>
<tr>
<td>FREN, GERM or ITAL, 2 semesters required</td>
<td></td>
</tr>
<tr>
<td>VOIC 121</td>
<td>3 VOIC 121</td>
</tr>
<tr>
<td>VOIC 120</td>
<td>1 MMENT 116</td>
</tr>
<tr>
<td>GERMT 104 or ITAL 110:2 semesters required same language</td>
<td></td>
</tr>
<tr>
<td>REC 100</td>
<td>0 REC 100</td>
</tr>
<tr>
<td>PIAN 144</td>
<td>1 PIAN 148</td>
</tr>
<tr>
<td>REC 100</td>
<td>0 REC 100</td>
</tr>
<tr>
<td>VOIC 121</td>
<td>3 VOIC 121</td>
</tr>
<tr>
<td>MUSC 320</td>
<td>2 REC 100</td>
</tr>
<tr>
<td>MUSC 340</td>
<td>4 MTHC 115</td>
</tr>
<tr>
<td>MUSC 440</td>
<td>3 MUSC 320</td>
</tr>
<tr>
<td>MUSC 480</td>
<td>3 PIAN 284</td>
</tr>
<tr>
<td>MUSC 480</td>
<td>3 PIAN 284</td>
</tr>
<tr>
<td>VOIC 120</td>
<td>1 MMENT 116</td>
</tr>
<tr>
<td>VOIC 121</td>
<td>3 VOIC 121</td>
</tr>
<tr>
<td>VOIC 120</td>
<td>1 MMENT 116</td>
</tr>
<tr>
<td>GERMT 104 or ITAL 110:2 semesters required same language</td>
<td></td>
</tr>
<tr>
<td>GRMT 104 or ITAL 110:2 semesters required same language</td>
<td></td>
</tr>
</tbody>
</table>

### Total Hours

124

View the requirements for the Bachelor of Music (p. 2224) program in voice.

### Freshman

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>3 ENGL 102</td>
</tr>
<tr>
<td>MTHC 105</td>
<td>4 MTHC 115</td>
</tr>
<tr>
<td>PIAN 144</td>
<td>1 PIAN 148</td>
</tr>
<tr>
<td>Rec 100</td>
<td>0 REC 100</td>
</tr>
<tr>
<td>VOIC 121</td>
<td>3 VOIC 121</td>
</tr>
<tr>
<td>VOIC 120</td>
<td>1 MMENT 116</td>
</tr>
<tr>
<td>GERM 104 or ITAL 110:2 semesters required same language</td>
<td></td>
</tr>
<tr>
<td>MEMT 116</td>
<td>5 GERM 108 or ITAL 120: continue same language</td>
</tr>
</tbody>
</table>

Ensemble 1 Ensemble 1

18 18

#### Sophomore

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 130</td>
<td>3 MTHC 315</td>
</tr>
<tr>
<td>MTHC 205</td>
<td>4 MUSC 340</td>
</tr>
<tr>
<td>MUSC 320</td>
<td>2 REC 100</td>
</tr>
<tr>
<td>PIAN 284</td>
<td>2 VOIC 221</td>
</tr>
<tr>
<td>REC 100</td>
<td>0 VOIC 470</td>
</tr>
<tr>
<td>VOIC 221</td>
<td>3 FREN, GERM or ITAL, 2 of 3 req’d</td>
</tr>
</tbody>
</table>

Ensemble 1 Ensemble 1

15 15

THR 106 3
The School of Music

The School of Music at the University of Kansas ranks among the finest in America, offering comprehensive programs at the bachelor's, master's, and doctoral levels.

The school nurtures and advances the art of music through creation, performance, scholarly inquiry, entrepreneurship, and enhancement of the artistic skills and experiences of the university and regional cultural communities.

The school is a major contributor to the arts community through the student, faculty, and professional performances in Swarthout Recital Hall, Bales Organ Recital Hall, the Robert Baustian Theatre, and the Lied Center of Kansas.

The School of Music is an accredited institutional member of the National Association of Schools of Music (http://nasm.arts-accredit.org). The entrance and graduation requirements in this catalog conform to the published guidelines of that organization.

Bachelor of Music in Musicology

A total of 120 credit hours is required and is designed to further the student's knowledge, practice, and experience in musicology. To graduate, a student must earn a minimum grade-point average of 3.0 in all major courses and a minimum average of 2.0 in all course work.

Students will be studying with faculty members who are nationally and internationally recognized. Courses in music theory and musicology are part of the exploration of music as are private instruction, ensemble and chamber music opportunities. All students pursuing the B.M. degree will perform a senior recital on their primary instrument/voice.

With this degree, students can go on to pursue graduate studies in music, or create their own paths in music or music-related endeavors.

Ensemble Policy

In order to remain enrolled in studio instruction (lessons), all undergraduate (B.A. & B.M.) and M.M. students who enroll in any level of studio instruction (including nonmajor levels) in band and orchestral instruments must audition for and perform as assigned in a major instrumental ensemble in each semester in which they are enrolled. For music majors, 1 ensemble taken for credit each semester is required for graduation. Exceptions to this policy are allowed on a case-by-case basis and only by the ensemble conductor in consultation with the faculty member in the studio area or the faculty advisor in music therapy as appropriate.

Undergraduate Admission to the School of Music

First-year students should enter the school directly. Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale) and are eligible to return to the college or university last attended in addition to completing a successful audition. Other students can be admitted only with the permission of the dean. Send applications to the Office of Admissions (http://admissions.ku.edu). Visit the Office of International Recruitment...
and Undergraduate Admissions (http://admissions.ku.edu/international/welcome) for information about international admissions.

Students who wish to major in music must audition. All music students academically approved for admission to the School of Music are admitted contingent upon demonstration by audition of satisfactory level proficiency in their areas of applied music. Music audition information and application forms are available online (http://music.ku.edu/applyaudition). There is a limit of two times a prospective student may request an audition for entrance into one of the School’s undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Transfer Students

Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale), are eligible to return to the college or university last attended, and complete a successful audition. Only grades of C or higher are accepted in transfer credit toward degrees offered by the School of Music. Students who wish to transfer performance credit from another institution toward any music degree at KU must validate this credit by audition. Music audition information and application forms are available online (http://music.ku.edu/applyaudition). There is a limit of two times a prospective student may request an audition for entrance into one of the School’s undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Music Theory Placement

The music theory placement examination is required of all undergraduate transfer students who have not completed a 4-semester theory sequence with an accredited NASM school. It is administered as announced on the School of Music website (http://music.ku.edu/placement-exams) each semester.

B.M. Degree Requirements for Musicology Majors

To graduate, the student must attain a minimum grade-point average of 3.0 in 12 credit hours chosen from MUSC 320, MUSC 340, MUSC 440, MUSC 480 and MUSC courses numbered 602-778. A total of 120 hours is required, distributed as follows:

Musicology (28-30)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 320</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 340</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 440</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 480</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 499</td>
<td>2-4</td>
</tr>
<tr>
<td>Plus 12 hours selected from courses numbered 602-778</td>
<td>12</td>
</tr>
<tr>
<td>MUSC 654 Collegium Musicum, Vocal and/or MUSC 656 Collegium Musicum, Instrumental (4 semesters each for credit)</td>
<td>4</td>
</tr>
</tbody>
</table>

Music Theory and Composition (25)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 105</td>
<td>4</td>
</tr>
<tr>
<td>MTHC 115</td>
<td>4</td>
</tr>
<tr>
<td>MTHC 205</td>
<td>4</td>
</tr>
<tr>
<td>MTHC 315</td>
<td>4</td>
</tr>
<tr>
<td>MTHC 320</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 340</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 440</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 480</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 541</td>
<td>3</td>
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<tr>
<td>MTHC 542</td>
<td>3</td>
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Music Courses (27)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensembles: 8 semesters each for credit</td>
<td>8</td>
</tr>
<tr>
<td>Applied music lessons: 8 semesters for 2 credits each, plus senior recital</td>
<td>16</td>
</tr>
<tr>
<td>MEMENT 116 Performance Media: Computers, Synthesizers, and Electronics</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 125 Conducting I</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 126 Laboratory in Music Performance (4 semesters)</td>
<td>0</td>
</tr>
</tbody>
</table>

Basic Courses (40-42)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102 Critical Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>COMS 130 Speaker-Audience Communication</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101 College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>Natural Science: any course that fulfills GE3N</td>
<td>3</td>
</tr>
<tr>
<td>Social Science: any course that fulfills GE3S</td>
<td>3</td>
</tr>
<tr>
<td>Social/Ethics: any course that fulfills AE51 or AE52</td>
<td>3</td>
</tr>
<tr>
<td>GERM, FREN, ITAL, or SPAN: 13 credits in same language</td>
<td>13</td>
</tr>
<tr>
<td>Choose from the following for an additional 6 credits in non-music courses:</td>
<td>6</td>
</tr>
<tr>
<td>4th semester of foreign language (3)</td>
<td>3</td>
</tr>
<tr>
<td>History elective (3-6)</td>
<td>3</td>
</tr>
<tr>
<td>History of art elective (3-6)</td>
<td>3</td>
</tr>
<tr>
<td>PIAN 284 (2) Piano proficiency not counted toward graduation, but must be met.</td>
<td>0-2</td>
</tr>
</tbody>
</table>

Total Hours 120-124

Freshman

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>3 ENGL 102</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 105</td>
<td>4 MTHC 115</td>
<td>4</td>
</tr>
<tr>
<td>PIAN 144</td>
<td>1 PIAN 148</td>
<td>1</td>
</tr>
<tr>
<td>REC 100</td>
<td>0 REC 100</td>
<td>0</td>
</tr>
<tr>
<td>MEMENT 116</td>
<td>1 121 Studio lessons</td>
<td>2</td>
</tr>
<tr>
<td>121 Studio lessons</td>
<td>2 Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>Ensemble</td>
<td>1 FREN, GERM, ITAL or SPAN: continue in same language</td>
<td>5</td>
</tr>
</tbody>
</table>

Sophomore

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 130</td>
<td>3 MTHC 315</td>
<td>4</td>
</tr>
<tr>
<td>MTHC 205</td>
<td>4 MUSC 340</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 320</td>
<td>2 REC 100</td>
<td>0</td>
</tr>
<tr>
<td>PIAN 284</td>
<td>2 221 Studio lessons</td>
<td>2</td>
</tr>
<tr>
<td>REC 100</td>
<td>0 Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>221 Studio lessons</td>
<td>2 Non-music elective (continue same language or HIST or HA)</td>
<td>3</td>
</tr>
<tr>
<td>Ensemble</td>
<td>1 MATH 101</td>
<td>3</td>
</tr>
</tbody>
</table>
Bachelor of Music in Music Theory and Composition

A total of 120 credit hours is required and is designed to further the student’s knowledge, practice, and experience in music theory or music composition. To graduate, a student must earn a minimum grade-point average of 3.0 in all major courses and a minimum average of 2.0 in all course work.

Students will be studying with faculty members who are nationally and internationally recognized. Courses in music theory and musicology are part of the exploration of music as are private instruction, ensemble and chamber music opportunities. All students pursuing the B.M. degree will perform a senior recital on their primary instrument/voice.

With this degree, students can go on to pursue graduate studies in music, or create their own paths in music or music-related endeavors.

Ensemble Policy

In order to remain enrolled in studio instruction (lessons), all undergraduate (B.A. & B.M.) and M.M. students who enroll in any level of studio instruction (including nonmajor levels) in band and orchestral instruments must audition for and perform as assigned in a major instrumental ensemble\(^1\) each semester in which they are enrolled. For music majors, 1 ensemble taken for credit each semester is required for graduation. Exceptions to this policy are allowed on a case-by-case basis and only by the ensemble conductor in consultation with the faculty member in the studio area or the faculty advisor in music therapy as appropriate.

\(^1\) KU Symphony Orchestra, Wind Ensemble, Symphonic Band, Marching Band, or Jazz Ensemble I.

Undergraduate Admission to the School of Music

First-year students should enter the school directly. Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale) and are eligible to return to the college or university last attended in addition to completing a successful audition. Other students can be admitted only with the permission of the dean. Send applications to the Office of Admissions (http://admissions.ku.edu). Visit the Office of International Recruitment and Undergraduate Admissions (http://admissions.ku.edu/international/welcome) for information about international admissions.

Students who wish to major in music must audition. All music students academically approved for admission to the School of Music are admitted contingent upon demonstration by audition of satisfactory level proficiency in their areas of applied music. Music audition information and application forms are available online (http://music.ku.edu/audition). There is a limit of two times a prospective student may request an audition for entrance into one of the School’s undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Transfer Students

Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale), are eligible to return to the college or university last attended, and complete a successful audition. Only grades of C or higher are accepted in transfer credit toward degrees offered by the School of Music. Students who wish to transfer performance credit from another institution toward any music degree at KU must validate this credit by audition. Music audition information and application forms are available online (http://music.ku.edu/audition). There is a limit of two times a prospective student may request an audition for entrance into one of the School’s undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Music Theory Placement

The music theory placement examination is required of all undergraduate transfer students who have not completed a 4-semester theory sequence with an accredited NASM school. It is administered as announced on the School of Music website (http://music.ku.edu/placement-exams) each semester.

Music Theory and Composition

To graduate, the student must maintain a minimum grade-point average of 3.0 in music theory and composition courses on both the first- and second-year and the junior/senior levels.

Students majoring in music theory (B.A. or B.M.) or music composition (B.M.) must complete MTHC 105, MTHC 115, and MTHC 205 before
preparing a portfolio of their work for application to the professional sequence. The earliest a student may submit a portfolio is the fourth semester. Transfer students must be in residence for at least 1 semester before they can submit a portfolio.

This portfolio must include recent work (scholarly papers for music theory and musical compositions for composers), 2 letters of recommendation (1 from the student’s major instrument instructor and 1 from a MTHC professor who has had the student in a class), and a minimum grade-point average of 3.0 in MTHC courses. The student may be asked to provide a demonstration of musicality on his or her major instrument.

Portfolios are accepted once each semester for admission to the professional sequence the following semester. The portfolio is assessed by the MTHC faculty with one of 3 recommendations: admit, revise and resubmit next semester, or denied. Students in music theory are not allowed to enroll in MTHC 499 Senior Research Project. Students in composition are not allowed to enroll in MTHC 583 Composition and MTHC 498 Undergraduate Recital without a favorable recommendation from the faculty.

B.M. Degree Requirements for the Music Theory Major

A total of 120 hours is required for the degree in Music Theory, distributed as follows:

Music Theory (40)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 105</td>
<td>Theory I</td>
</tr>
<tr>
<td>MTHC 115</td>
<td>Theory II</td>
</tr>
<tr>
<td>MTHC 205</td>
<td>Theory III</td>
</tr>
<tr>
<td>MTHC 410</td>
<td>Tonal Forms</td>
</tr>
<tr>
<td>MTHC 541</td>
<td>Eighteenth-Century Counterpoint</td>
</tr>
<tr>
<td>MTHC 542</td>
<td>Sixteenth-Century Counterpoint</td>
</tr>
<tr>
<td>MTHC 432</td>
<td>Introduction to the Analysis Contemporary Music</td>
</tr>
<tr>
<td>MTHC 433</td>
<td>Advanced Analysis of Contemporary Music</td>
</tr>
<tr>
<td>MTHC 499</td>
<td>Senior Research Project</td>
</tr>
<tr>
<td>MTHC 674</td>
<td>Orchestration I</td>
</tr>
<tr>
<td>MTHC 676</td>
<td>Orchestration II</td>
</tr>
<tr>
<td>MTHC 678</td>
<td>Electro-Acoustic Composition I</td>
</tr>
</tbody>
</table>

Music Composition (4)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 253 Composition</td>
<td>2 semesters each for 2 credits</td>
</tr>
</tbody>
</table>

Musicology (10)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 320</td>
<td>Music History I</td>
</tr>
<tr>
<td>MUSC 340</td>
<td>Music History II</td>
</tr>
<tr>
<td>MUSC 440</td>
<td>Music History III</td>
</tr>
<tr>
<td>MUSC 480</td>
<td>Music History IV</td>
</tr>
</tbody>
</table>

Music Courses (35)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIAN 144</td>
<td>(Not required for pianists and organists in Comp)</td>
</tr>
<tr>
<td>REC 100</td>
<td>0 PIAN 148 (Not required for pianists and organists in Comp)</td>
</tr>
<tr>
<td>MEMT 116</td>
<td>Performance Media: Computers, Synthesizers, and Electronics</td>
</tr>
<tr>
<td>COND 245</td>
<td>Conducting I</td>
</tr>
<tr>
<td>REC 100</td>
<td>Laboratory in Music Performance (4 semesters)</td>
</tr>
<tr>
<td>Ensemble</td>
<td>8 semesters for credit each semester</td>
</tr>
</tbody>
</table>

B.M. Degree Requirements for the Composition Major

A total of 120 hours is required for the degree. Courses should be distributed as described for the major in music theory with the following exceptions:

- Students with a major in composition must offer in partial fulfillment of the degree requirements a recital of approximately 45 minutes duration consisting of original works in various media. This is MTHC 498, listed below.
- Pianists and organists take 16 credits of lessons and do not take the additional 8 credits of piano, organ and/or harpsichord lessons while all other instrumentalists or vocalists take only 8 credits of lessons and the additional 8 credits of piano, organ and/or harpsichord lessons.
- MTHC 499 is not required.

Music Composition (12)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 583 Composition</td>
<td>3 semesters each for 2 credits</td>
</tr>
<tr>
<td>MTHC 498</td>
<td>Undergraduate Recital</td>
</tr>
<tr>
<td>MTHC 680</td>
<td>Electro-Acoustic Composition II</td>
</tr>
<tr>
<td>MTHC or MUSC elective</td>
<td>2</td>
</tr>
</tbody>
</table>

Freshman

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>3</td>
<td>ENGL 102</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTHC 105</td>
<td>4</td>
<td>MTHC 115</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PIAN 144</td>
<td>1 MTHC 253 (Comp majors only)</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REC 100</td>
<td>0 PIAN 148 (Not required for pianists and organists in Comp)</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEMT 116</td>
<td>1</td>
<td>REC 100</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>121 Studio lessons</td>
<td>1-2 121 Studio lessons</td>
<td>1-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ensemble</td>
<td>1 Ensemble</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FREN, GERM or ITAL</td>
<td>5 FREN, GERM or ITAL (continue the same language)</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sophomore

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 130</td>
<td>3 MTHC 542</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTHC 205</td>
<td>4 MUSC 340</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Hours: 120
Bachelor of Music in Music Therapy

Music Therapy

The program helps students develop competence for entry into the music therapy profession. The interdisciplinary curriculum emphasizes understanding of human behavior, musical and otherwise. It includes extensive work in music, behavioral science, biological science, and liberal arts, in addition to specific academic, clinical, and research studies in music therapy.

Music Therapy Program

The undergraduate music therapy program provides full preparation for entry into the profession. It culminates in the degree of Bachelor of Music with a major in music therapy. Graduates are prepared for general music therapy practice in a variety of settings, which may include, but are not limited to hospitals, schools, community health programs, wellness centers, and private and group settings across the age span. The KU music therapy program is approved by the American Music Therapy Association. Individuals who complete the program are eligible to take the national music therapy board certification examination. The music therapy major does not lead to licensure to teach music in public schools.

Advising

Students admitted to music therapy will be assigned an appropriate faculty advisor to work with the student throughout his or her academic career. The undergraduate handbook is available online (http://music.ku.edu/BM/requirements) and from the MEMT office, 448 Murphy Hall, and provides detailed procedures, suggestions, and specifications.

Regardless of applied performance medium, each entering student should be able to sing independently, in tune, and with acceptable tone quality. Functional keyboard skills (accompanying, playing by ear, improvising, and transposing) are helpful. Experience working with others is helpful. Well-developed interpersonal skills are an asset.

Admission

Students must meet or exceed the School of Music academic admission requirements and successfully complete a major performance medium audition to be admitted. Students should declare the B.M. in music therapy as the major on the KU application for admission. Music therapy majors are in plan MTPPS-BM in the School of Music.

Students pursuing the B.M. in music therapy degree should apply for admission to the professional sequence upon completion of the second semester of the sophomore year with 50 or more KU hours. Transfer students with more than 45 hours of transfer credit must complete this application the first semester of classes at KU. Students may not enroll in courses in the professional sequence before formal approval by the director of music therapy. Music therapy majors who have been admitted to the professional sequence are in plan MTPPS-BM in the School of Music.

Students must be admitted to the music therapy professional sequence to enroll in upper-division music therapy courses. See the Music Therapy Undergraduate Program Handbook online (http://music.ku.edu/BM/requirements) for details.

Candidates are reviewed for admission periodically. No student may be admitted to the professional sequence for a semester during which he or she will be on academic probation. Application forms for music therapy professional sequence admission are available online (http://music.ku.edu/memt/documents/#undergrad).

Ensemble Policy

In order to remain enrolled in studio instruction (lessons), all undergraduate (B.A. & B.M.) and M.M. students who enroll in any level of studio instruction (including nonmajor levels) in band and orchestral
instruments must audition for and perform as assigned in a major instrumental ensemble\(^1\) each semester in which they are enrolled. For music majors, 1 ensemble taken for credit each semester is required for graduation. Exceptions to this policy are allowed on a case-by-case basis and only by the ensemble conductor in consultation with the faculty member in the studio area or the faculty advisor in music therapy as appropriate.

\(^{1}\) KU Symphony Orchestra, Wind Ensemble, Symphonic Band, Marching Band, or Jazz Ensemble I.

**Undergraduate Admission to the School of Music**

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**Transfer Students**

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**Music Theory Placement**

The music theory placement examination is required of all undergraduate transfer students who have not completed a 4-semester theory sequence with an accredited NASM school. It is administered as announced on the School of Music website (http://music.ku.edu/placement-exams) each semester.

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**Requirements for the B.M. with a Major in Music Therapy**

The degree requires a minimum of 126 semester hours of credit appropriately distributed among general studies, the major, and supporting music areas and behavioral sciences. With careful planning, the program can be completed in about 4½ years. Four academic years of study and clinical work on campus are followed by a full-time, 6-month internship in an approved clinical institution.

The degree requires at least a 2.75 cumulative grade-point average in all course work and a minimum of 2.75 in all MEMT courses. All music therapy majors must demonstrate proficiency in the major applied performance medium and in other performance areas.

All students must demonstrate functional vocal skills and ability to perform accompaniments on a portable chordal instrument, such as accordion, autoharp, guitar, or electric piano. These skills are assessed periodically throughout the program.

**General Education Requirements (31 hours)**

**Language Arts and Communication (9)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing (or other approved options: ENGL 105, ENGL 203, ENGL 205, ENGL 209, ENGL 210, ENGL 211.)</td>
<td>3</td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

**Behavioral Sciences (12)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 104</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 350</td>
<td>Abnormal Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Behavioral science electives (6 semester credit hours chosen with consent of advisor from fields such as psychology, sociology, anthropology, special education, human development, speech and audiology, motor/psychomotor development and behavior, educational psychology)</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

**Biological Sciences and Mathematics (10)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 101</td>
<td>College Algebra (or higher)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 100</td>
<td>Principles of Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 102</td>
<td>Principles of Biology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 240</td>
<td>Fundamentals of Human Anatomy</td>
<td>3</td>
</tr>
</tbody>
</table>

**Performance Requirements (34-37 hours)**

**Major Instrument (16)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>121</td>
<td>Applied music lessons (2 semesters)</td>
<td>4</td>
</tr>
<tr>
<td>221</td>
<td>Applied music lessons (2 semesters)</td>
<td>4</td>
</tr>
<tr>
<td>321</td>
<td>Applied music lessons (2 semesters)</td>
<td>4</td>
</tr>
<tr>
<td>421</td>
<td>Applied music lessons (1 semester)</td>
<td>2</td>
</tr>
<tr>
<td>422</td>
<td>Senior project lessons (1 semester)</td>
<td>2</td>
</tr>
</tbody>
</table>

**Ensemble: Band, Orchestra, Chorus, etc. (8)**

8 semesters of participation for 8 credits total, including experience in small ensembles. Five should be large ensembles.

**Piano Skills (2-5)**

An audition is required. If skills are insufficient, remedial course work is necessary. Students with a major performance medium of piano or organ take only PIAN 310.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIAN 148</td>
<td>Elementary Keyboard Skills II</td>
<td></td>
</tr>
<tr>
<td>PIAN 284</td>
<td>Intermediate Keyboard Skills I</td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Music in Music Therapy

PIAN 288 Intermediate Keyboard Skills II
PIAN 310 Advanced Keyboard Skills

Performance Techniques (4)
MEMT 115 Performance Media: Percussion 1
MEMT 116 Performance Media: Computers, Synthesizers, and Electronics 1
MEMT 119 Performance Media: Guitar 1
MEMT 408 Vocal Pedagogy 1

Conducting/Rehearsing Skills (4)
MEMT 231 Performance Clinic: Choral 1
MEMT 246 Fundamentals of Conducting 1
MEMT 329 Rehearsal/Conducting Clinic: _____ (Nontraditional Ensemble) 1
MEMT 331 Rehearsal/Conducting Clinic: Choral 1

Musicianship and Music Therapy Requirements (61-71 hours)

MEMT Professional Core (26)
MEMT 150 Introduction to Music Therapy 3
MEMT 196 Group Leadership Skills in Music Therapy 2
MEMT 250 Human Musical Learning and Development 2
MEMT 251 Clinical Techniques for Children 3
MEMT 296 Clinical Techniques for Adults 3
MEMT 367 Managing Behavior in the Musical Environment 2
MEMT 455 Psychology of Music 3
MEMT 463 The Influence of Music on Behavior I 3
MEMT 464 Music in Therapy 3
MEMT 586 Seminar in Music Therapy Professional Development I 1
MEMT 587 Seminar in Music Therapy Professional Development II 1
MEMT Clinical Experience (8 hours minimum) (8-18)
MEMT 396 Clinical Practicum (1 hour/2 semesters and 2 hours/2 semesters) 6
MEMT 596 Clinical Internship 2-12

Music Theory and Composition (16)
MTHC 105 Theory I 4
MTHC 115 Theory II 4
MTHC 205 Theory III 4
MTHC 316 Tonal Form and Post-Tonal Techniques 4

Recital Attendance (0)
REC 100 Laboratory in Music Performance (4 semesters) 0

Musicology and Music Literature (7)
MUSC 320 Music History I 2
MUSC 440 Music History III 3
MUSC 480 Music History IV 2

Music Electives (4)
Music electives 4

Music Therapy 4.5 Year Plan
Students with no prior piano experience should take the keyboard skills sequence (PIAN 144 - PIAN 288). Students whose major performance medium is piano or organ and those with appreciable prior piano experience should take PIAN 310 after completing 2 semesters of music theory.

• F = Fall only
• S = Spring only
• B = Both semesters

Freshman

Fall Hours Spring Hours
MEMT 150 (F) 3 MEMT 196 (S) 2
MEMT 116 (B) 1 MEMT 250 (S) 2
MEMT 119 (B) 1 MEMT 115 (B) 1
MTHC 105 (F) 4 MTHC 115 (S) 4
121 Studio lessons 2 121 Studio lessons 2
Ensemble 1 Ensemble 1
REC 100 0 REC 100 0
PIAN 144 (if needed) (F) 1 PIAN 148 (S) 1
ENGL 101 (B) 3 ENGL 102 (or other approved options: ENGL 105, ENGL 203, ENGL 205, ENGL 209, ENGL 210, ENGL 211. (B )

Total Hours: 32

Sophomore

Fall Hours Spring Hours
MEMT 251 (F) 3 MEMT 296 (S) 3
MEMT 231 (B) 1 MEMT 246 (B) 1
MTHC 205 (F) 4 MTHC 331 (B) 1
REC 100 0 MTHC 316 (S) 4
PIAN 284 or 310 (310 only for piano or organ applied students) (F) 2 REC 100 0
221 Studio lessons 2 PIAN 288 (S) 2
Ensemble 1 221 Studio lessons 2
MATH 101 (B) 3 Ensemble 1
Music elective (4 credits total) 2

Total Hours: 32

Professional Sequence

Professional Sequence Admission Requirements
Students should apply for admission to the Professional Sequence as early as possible and must be admitted before beginning the first semester of the junior year. Admission requirements:

1. Cumulative grade-point average of 2.75 or higher.
2. Grade-point average of 2.75 or higher in MEMT courses.
3. A grade of C or higher in each of the following courses:
MEMT 150  Introduction to Music Therapy  3
MEMT 196  Group Leadership Skills in Music Therapy  2
MEMT 250  Human Musical Learning and Development  2
MEMT 251  Clinical Techniques for Children  3
MEMT 296  Clinical Techniques for Adults  3

4. At least 50 hours of college credit.
5. A signed applied music recommendation form verifying successful completion of the first semester of sophomore-level lessons.
6. Successful completion of the application form.
   • Students must successfully complete Pre-Practicum Quiz Out #2 before entering their first MEMT 396 Clinical Practicum.
   • Students must successfully complete Practicum Quiz Out #3 before entering their second MEMT 396 Clinical Practicum.

Junior
Fall  |  Hours  | Spring  | Hours
--- | --- | --- | ---
MEMT 396 (4 semesters total) 1 | 1 | MMENT 329 (Nontraditional Ensemble) (S) 1 | 1
MEMT 463 (F) 1 | 3 | MEMT 396 (4 semesters total) 1 | 1
Ensemble | 1 | MMENT 464 (S) 1 | 3
321 Studio lessons | 2 | Ensemble | 1
MUSC 320 (F) 2 | 2 | 321 Studio lessons | 2
BIOL 102 | 1 | COMS 130 | 3
BIOL 100 | 3 | PSYC 350 (B) | 3
PSYC 104 (B) | 3 | Behavioral science elective (6 credits total as directed by advisor) | 3

Total Hours: 33

1  Students must achieve admission to the music therapy professional sequence prior to enrolling in these courses.
2  Music Theory I and II should be taken before Music History I or higher.

Senior
Fall  |  Hours  | Spring  | Hours
--- | --- | --- | ---
MEMT 367 (F) 1 | 2 | MEMT 396 (4 semesters total) 1 | 2
MEMT 396 (4 semesters total) 1 | 2 | MEMT 587 (S) 1 | 1
MEMT 408 (F) 1 | 1 | MUSC 480 (S) | 2
MEMT 455 (F) 1 | 3 | 422 Senior project lessons | 2
MEMT 586 (F) 1 | 1 | Ensemble | 1
MUSC 440 (F) | 3 | BIOL 240 (B) | 3
Ensemble | 1 | Behavioral science elective (6 credits total as directed by advisor) | 3
421 Studio lessons | 2 | Music elective (4 credits total) | 2

Total Hours: 2-12

1  Students must achieve admission to the music therapy professional sequence prior to enrolling in these courses.

Bachelor of Music in Music Performance: Piano

A total of 120 credit hours is required and is designed to further the student's knowledge, practice, and experience of piano. To graduate, a student must earn a minimum grade-point average of 3.0 in all major courses and a minimum average of 2.0 in all course work.

Students will be studying with faculty members who are nationally and internationally recognized. Courses in music theory and musicology are part of the exploration of music as are private instruction, ensemble and chamber music opportunities. All students pursuing the B.M. degree will perform a senior recital on their primary instrument/voice. In
addition, performance majors will also complete a junior recital and music composition majors will also give a music composition recital.

With this degree, students can go on to pursue graduate studies in music, establish private studios, audition for music ensembles, or create their own paths in music or music-related endeavors.

**Undergraduate Admission to the School of Music**

First-year students should enter the school directly. Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale) and are eligible to return to the college or university last attended in addition to completing a successful audition. Other students can be admitted only with the permission of the dean. Send applications to the Office of Admissions (http://admissions.ku.edu). Visit the Office of International Recruitment and Undergraduate Admissions (http://admissions.ku.edu/international/welcome) for information about international admissions. Students who wish to major in music must audition. All music students academically approved for admission to the School of Music are admitted contingent upon demonstration by audition of satisfactory level proficiency in their areas of applied music. Music audition information and application forms are available online (http://music.ku.edu/applyaudition). There is a limit of two times a prospective student may request an audition for entrance into one of the School's undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

**Transfer Students**

Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale), are eligible to return to the college or university last attended, and complete a successful audition. Only grades of C or higher are accepted in transfer credit toward degrees offered by the School of Music. Students who wish to transfer performance credit from another institution toward any music degree at KU must validate this credit by audition. Music audition information and application forms are available online (http://music.ku.edu/applyaudition). There is a limit of two times a prospective student may request an audition for entrance into one of the School's undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

**Music Theory Placement**

The music theory placement examination is required of all undergraduate transfer students who have not completed a 4-semester theory sequence with an accredited NASM school. It is administered as announced on the School of Music website (http://music.ku.edu/placement-exams) each semester.

**B.M. Degree Requirements for the Piano Major**

A total of 120 hours is required, distributed as follows:

**Music Theory (22)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 105</td>
<td>Theory I</td>
<td>4</td>
</tr>
</tbody>
</table>

**Music Theory Placement**

- MTHC 115: Theory II 4 hours
- MTHC 205: Theory III 4 hours
- MTHC 315: Theory IV 4 hours
- MTHC 410: Tonal Forms 3 hours
- MTHC 541: Eighteenth-Century Counterpoint 3 hours

**Musicology (10)**

- MUSC 320: Music History I 2 hours
- MUSC 340: Music History II 3 hours
- MUSC 440: Music History III 3 hours
- MUSC 480: Music History IV 2 hours

**Music Courses (57)**

- PIAN 310: Advanced Keyboard Skills 2 hours
- PIAN 229/429: 6 semesters each for credit 6 hours
- PIAN 540: Piano Pedagogy I 3 hours
- PIAN 546: Piano Pedagogy II 3 hours
- PIAN 643: Piano Repertoire I 3 hours
- PIAN 644: Piano Repertoire 2 3 hours
- PIAN 216/336: Chamber music: 2 semesters each for credit 2 hours
- MEMT 116: Performance Media: Computers, Synthesizers, and Electronics 1 hour
- REC 100: Laboratory in Music Performance (4 semesters) 0 hours
- COND 245: Conducting I 2 hours
- Ensembles: 4 semesters each for credit 4 hours
- Music electives 3 hours

**Total Hours: 120**

**Freshman**

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>3</td>
<td>ENGL 102</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTHC 105</td>
<td>4</td>
<td>MTHC 115</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>REC 100</td>
<td>0</td>
<td>REC 100</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>PIAN 121</td>
<td>3</td>
<td>PIAN 121</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PIAN 229</td>
<td>1</td>
<td>PIAN 229</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Ensemble</td>
<td>1</td>
<td>MEMT 116</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Foreign Language (2 semesters of same language)</td>
<td>5</td>
<td>Foreign Language (continue the same language)</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

**Sophomore**

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 205</td>
<td>4</td>
<td>MTHC 315</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MUSC 320</td>
<td>2</td>
<td>MUSC 340</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
Transfer Students

Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale) and are eligible to return to the college or university last attended in addition to completing a successful audition. Other students can be admitted only with the permission of the dean. Send applications to the Office of Admissions (http://admissions.ku.edu). Visit the Office of International Recruitment and Undergraduate Admissions (http://admissions.ku.edu/international/welcome) for information about international admissions.

Students who wish to major in music must audition. All music students academically approved for admission to the School of Music are admitted contingent upon demonstration by audition of satisfactory level proficiency in their areas of applied music. Music audition information and application forms are available online (http://music.ku.edu/applyaudition). There is a limit of two times a prospective student may request an audition for entrance into one of the School’s undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Music Theory Placement

The music theory placement examination is required of all undergraduate transfer students who have not completed a 4-semester theory sequence with an accredited NASM school. It is administered as announced on the School of Music website (http://music.ku.edu/placement-exams) each semester.

B.M. Degree Requirements for the Organ and Church Music Major

A total of 124 hours is required for the degree in Organ and Church Music, distributed as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music Theory (22)</td>
<td></td>
</tr>
<tr>
<td>MTHC 105</td>
<td>Theory I</td>
</tr>
<tr>
<td>MTHC 115</td>
<td>Theory II</td>
</tr>
<tr>
<td>MTHC 205</td>
<td>Theory III</td>
</tr>
<tr>
<td>MTHC 315</td>
<td>Theory IV</td>
</tr>
<tr>
<td>MTHC 410</td>
<td>Tonal Forms</td>
</tr>
<tr>
<td>MTHC 541</td>
<td>Eighteenth-Century Counterpoint</td>
</tr>
<tr>
<td>Musicology (10)</td>
<td></td>
</tr>
<tr>
<td>MUSC 320</td>
<td>Music History I</td>
</tr>
<tr>
<td>MUSC 340</td>
<td>Music History II</td>
</tr>
<tr>
<td>MUSC 440</td>
<td>Music History III</td>
</tr>
</tbody>
</table>
MUSC 480  Music History IV  2

Music Courses (49)

Applied music lessons: 8 semesters each for 3 credits, plus junior and 24 senior recitals

COND 245  Conducting I  2
COND 345  Conducting II  2

Piano lessons PIAN100/300 (2 to 4 semesters)  4

Voice lessons VOIC100/300 (1 to 2 semesters)  2

MEMT 116  Performance Media: Computers, Synthesizers, and Electronics

REC 100  Laboratory in Music Performance (4 semesters)  0

Music electives  6

ORGN 320, ORGN 502 and CHUR 320 (8 semesters each for 0 credit)  0

Basic Courses (43)

ENGL 101  Composition  3
ENGL 102  Critical Reading and Writing  3
COMS 130  Speaker-Audience Communication  3
MATH 101  College Algebra  3

HWC 204  Western Civilization I  3
HWC 205  Western Civilization II  3

FREN or GERM (2 semesters of same language)  10

Natural Science: any course that fulfills GE3N  3

Social Science: any course that fulfills GE3S  3

Social/Ethics: any course that fulfills AE51 or AE52  3

Non-music electives  6

Total Hours: 124

Note: All B.M. organ and church music majors must enroll in ORGN 320 Studio Class in Organ — Lab and ORGN 502 Master Class in Organ — Lab and CHUR 320 Church Music Practicum — Lab each semester of residence.

Freshman

Fall  Hours  Spring  Hours
ENGL 101  3 ENGL 102  3
MTHC 105  4 MTHC 115  4
PIAN 100/300 lessons  1 PIAN 100/300 lessons  1
REC 100  0 REC 100  0
ORGN 121  3 ORGN 121  3
ORGN 320, ORGN 502 & CHUR 320  0 ORGN 320, ORGN 502 & CHUR 320  0

Ensemble (4 of 8 = CHUR 222/622)  1 Ensemble (4 of 8 = CHUR 222/622)  1

FREN or GERM  5 FREN or GERM (continue same language)  5

Sophomore

Fall  Hours  Spring  Hours
COMS 130  3 MATH 101  3
MTHC 205  4 MTHC 315  4

Bachelor of Music in Music Performance: Strings and Harp

A total of 120 credit hours is required and is designed to further the student’s knowledge, practice, and experience on their major instrument in strings. To graduate, a student must earn a minimum grade-point average of 3.0 in all major courses and a minimum average of 2.0 in all course work.

Students will be studying with faculty members who are nationally and internationally recognized. Courses in music theory and musicology are part of the exploration of music as are private instruction, ensemble and chamber music opportunities. All students pursuing the B.M. degree will perform a senior recital on their primary instrument/voice. In
addition, performance majors will also complete a junior recital and music composition majors will also give a music composition recital.

With this degree, students can go on to pursue graduate studies in music, establish private studios, audition for music ensembles, or create their own paths in music or music-related endeavors.

Ensemble Policy

In order to remain enrolled in studio instruction (lessons), all undergraduate (B.A. & B.M.) and M.M. students who enroll in any level of studio instruction (including nonmajor levels) in band and orchestral instruments must audition for and perform as assigned in a major instrumental ensemble each semester in which they are enrolled. For music majors, 1 ensemble taken for credit each semester is required for graduation. Other students can be admitted only with the permission of the dean. Send applications to the Office of Admissions (http://admissions.ku.edu). Visit the Office of International Recruitment and Undergraduate Admissions (http://admissions.ku.edu/international/welcome) for information about international admissions.

Students who wish to major in music must audition. All music students academically approved for admission to the School of Music are admitted contingent upon demonstration by audition of satisfactory level proficiency in their areas of applied music. Music audition information and application forms are available online (http://music.ku.edu/applyaudition). There is a limit of two times a prospective student may request an audition for entrance into one of the School’s undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Transfer Students

Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale) and are eligible to return to the college or university last attended in addition to completing a successful audition. Other students can be admitted only with the permission of the dean. Send applications to the Office of Admissions (http://admissions.ku.edu). Visit the Office of International Recruitment and Undergraduate Admissions (http://admissions.ku.edu/international/welcome) for information about international admissions.

Music Theory Placement

The music theory placement examination is required of all undergraduate transfer students who have not completed a 4-semester theory sequence with an accredited NASM school. It is administered as announced on the School of Music website (http://music.ku.edu/placement-exams) each semester.

B.M. Degree Requirements for the Strings Major

A total of 120 hours is required for the degree in strings, distributed as follows:

Music Theory (22)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 105</td>
<td>Theory I  4</td>
</tr>
<tr>
<td>MTHC 115</td>
<td>Theory II 4</td>
</tr>
<tr>
<td>MTHC 205</td>
<td>Theory III 4</td>
</tr>
<tr>
<td>MTHC 315</td>
<td>Theory IV 4</td>
</tr>
<tr>
<td>MTHC 410</td>
<td>Tonal Forms 3</td>
</tr>
</tbody>
</table>

Upper division theory course (MTHC numbered 300 or above) 3

Musicology (10)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 320</td>
<td>Music History I 2</td>
</tr>
<tr>
<td>MUSC 340</td>
<td>Music History II 3</td>
</tr>
<tr>
<td>MUSC 440</td>
<td>Music History III 3</td>
</tr>
<tr>
<td>MUSC 480</td>
<td>Music History IV 2</td>
</tr>
</tbody>
</table>

Music Courses (48)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COND 245</td>
<td>Conducting I 2</td>
</tr>
<tr>
<td>Piano</td>
<td>proficiency level of PIAN 284 3</td>
</tr>
<tr>
<td>Orchestra</td>
<td>8 semesters each for credit 8</td>
</tr>
<tr>
<td>Chamber music</td>
<td>8 semesters each for credit 8</td>
</tr>
<tr>
<td>Performance class</td>
<td>120/320 (8 semesters each for 0 credit) 0</td>
</tr>
<tr>
<td>MMEM 116</td>
<td>Performance Media: Computers, Synthesizers, and Electronics 1</td>
</tr>
<tr>
<td>REC 100</td>
<td>Laboratory in Music Performance (4 semesters) 0</td>
</tr>
<tr>
<td>STRG 424</td>
<td>String Pedagogy: ______ 1</td>
</tr>
</tbody>
</table>

Basic Courses (21)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition 3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing 3</td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication 3</td>
</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra 3</td>
</tr>
<tr>
<td>Natural Science: any course that fulfills GE3N 3</td>
<td></td>
</tr>
<tr>
<td>Social Science: any course that fulfills GE3S 3</td>
<td></td>
</tr>
<tr>
<td>Social/Ethics: any course that fulfills AE51 or AE52 3</td>
<td></td>
</tr>
</tbody>
</table>

Electives: 12 credits minimum must be in nonmusic courses (19) 19

Violin majors must take 2 credits of viola lessons (VIOA 300) towards the 19 electives

Total Hours 120

Freshman

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Fall 3 ENGL 102 3</td>
</tr>
<tr>
<td>MTHC 105</td>
<td>Spring 4 MTHC 115 4</td>
</tr>
</tbody>
</table>
### Bachelor of Music in Music Performance: Voice

The Division of Voice offers 2 programs (Bachelor of Music and Bachelor of Fine Arts) for singers interested in art song, opera, oratorio, concert, other classical pieces or vocal teaching. Students receive training in vocal technique, languages and diction, vocal repertoire, acting and the theatrical arts. Performance opportunities range from workshops to fully staged productions, allowing students to develop their talents at the most beneficial pace.

A total of 125 credit hours is required and is designed to further the student's knowledge, practice, and experience in voice. To graduate, a student must earn a minimum grade-point average of 3.0 in all major courses and a minimum average of 2.0 in all course work.

Students will be studying with faculty members who are nationally and internationally recognized. Courses in music theory and musicology are part of the exploration of music as art courses in instruction, ensemble and chamber music opportunities. All students pursuing the B.M. degree will perform a senior recital on their primary instrument/voice. In addition, performance majors will also complete a junior recital and music composition majors will also give a music composition recital.

With this degree, students can go on to pursue graduate studies in music, establish private studios, audition for music ensembles, or create their own paths in music or music-related endeavors.

### Undergraduate Admission to the School of Music

First-year students should enter the school directly. Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale) and are eligible to return to the college or university last attended in addition to completing a successful audition. Other students can be admitted only with the permission of the dean. Send applications to the Office of Admissions (http://admissions.ku.edu). Visit the Office of International Recruitment and Undergraduate Admissions (http://admissions.ku.edu/international/welcome) for information about international admissions.

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### Transfer Students

Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale), are eligible to return to the college or university last attended, and complete a successful audition. Only grades of C or higher are accepted in transfer credit toward degrees offered by the School of Music. Students who wish to transfer performance credit from another institution toward any music degree at KU must validate this credit by audition. Music audition information and application forms are available online (http://

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<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIAN 144 (considered remedial-does not count towards degree)</td>
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<td>1</td>
<td>1</td>
<td>1</td>
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<tr>
<td>REC 100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>121 Studio lessons</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
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<tr>
<td>120 Performance class</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>ORCH 200</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<td>CHAM 216</td>
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<td>1</td>
<td>1</td>
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<td>MATH 101</td>
<td>3</td>
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</table>

### Sophomore

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
</tbody>
</table>

### Junior

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
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<td>16</td>
<td>16</td>
<td>15</td>
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<td>15</td>
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</tbody>
</table>

### Senior

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>15</td>
<td>12</td>
<td>12</td>
<td>12</td>
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</tbody>
</table>

Total Hours: 121
music.ku.edu/applyaudition). There is a limit of two times a prospective
student may request an audition for entrance into one of the School's
undergraduate degree programs. The second request must be within
12 months of the first and may be as early as 1 month following the
first audition. The limitation also applies to students within the School
auditioning from one program into another.

Music Theory Placement
The music theory placement examination is required of all undergraduate
transfer students who have not completed a 4-semester theory sequence
with an accredited NASM school. It is administered as announced on the
School of Music website (http://music.ku.edu/placement-exams) each
semester.

B.M. Degree Requirements for the Voice
Major
A total of 125 hours is required, distributed as follows:

Music Theory (19)
- MTHC 105 Theory I 4
- MTHC 115 Theory II 4
- MTHC 205 Theory III 4
- MTHC 315 Theory IV 4
- MTHC 410 Tonal Forms 3

Musicology (10)
- MUSC 320 Music History I 2
- MUSC 340 Music History II 3
- MUSC 440 Music History III 3
- MUSC 480 Music History IV 2

Music Courses (52)
- VOIC 120 Vocal Performance in English 2
- VOIC 320 Vocal Performance Class II

Applied music lessons: 8 semesters each for 3 credits, plus junior and
senior recitals
- VOIC 405 Vocal Literature I 2
- VOIC 406 Vocal Literature II 2
- VOIC 408 Vocal Pedagogy 1
- Ensembles: 8 semesters each for credit 8
- Piano (proficiency level of PIAN 288) 4
- MEMT 116 Performance Media: Computers, Synthesizers, and 1
  Electronics
- COND 245 Conducting I 2
- REC 100 Laboratory in Music Performance (4 semesters) 0
- VOIC 270 Lyric Diction for Singers: ______ and Lyric Diction for Singers: ______

Music electives 2

Basic Courses (44)
- THR 106 Acting I 3
- GERM and ITAL (2 semesters of each) 20
- ENGL 101 Composition 3
- ENGL 102 Critical Reading and Writing 3
- COMS 130 Speaker-Audience Communication 3
- MATH 101 College Algebra 3
- Natural Science: any course that fulfills GE3N 3
- Social Science: any course that fulfills GE3S 3

Social/Ethics: any course that fulfills AE51 or AE52 3

Total Hours 125

Freshman
Fall Hours Spring Hours
ENGL 101 3 ENGL 102 3
MTHC 105 4 MTHC 115 4
PIAN 144 (considered remedial-does not count towards degree) 1 PIAN 148 1
REC 100 0 REC 100 0
VOIC 121 3 MENT 116 1
VOIC 120 1 VOIC 121 3
Ensemble 1 Ensemble 1
GERM 104 or ITAL 110 5 GERM 108 or ITAL 120: 5
continue same language

18 18

Sophomore
Fall Hours Spring Hours
COMS 130 3 MTHC 315 4
MTHC 205 4 MUSC 340 3
MUSC 320 2 PIAN 288 2
PIAN 284 2 REC 100 0
REC 100 0 VOIC 470 1
VOIC 408 1 FREN, GERM or ITAL, all 3 req'd
VOIC 221 3 VOIC 221 3
Ensemble 1 Ensemble 1
THR 106 3

16 17

Junior
Fall Hours Spring Hours
MTHC 410 3 MUSC 480 2
MUSC 440 3 VOIC 470 1
VOIC 320 1 FREN, GERM or ITAL, all 3 req'd
VOIC 470 1 VOIC 622 3
FREN, GERM or ITAL, all 1 Ensemble 1

VOIC 622 3 GERM 108 or ITAL 120 5
(continue same language)
Ensemble 1 MATH 101 3
GERM 104 or ITAL 110 5

17 15

Senior
Fall Hours Spring Hours
VOIC 622 3 VOIC 622 3
Ensemble 1 Ensemble 1
VOIC 405 2 VOIC 406 2
COND 245 2 Natural Science: any course 3
that fulfills GE3N
Social/Ethics: any course 3 Socical Science: any course 3
that fulfills GE3S
Bachelor of Music in Music Performance: Brass and Percussion

A total of 120 credit hours is required and is designed to further the student’s knowledge, practice, and experience on their major instrument. To graduate, a student must earn a minimum grade-point average of 3.0 in all major courses and a minimum average of 2.0 in all course work.

Students will be studying with faculty members who are nationally and internationally recognized. Courses in music theory and musicology are part of the exploration of music as are private instruction, ensemble and chamber music opportunities. All students pursuing the B.M. degree will perform a senior recital on their primary instrument/voice. In addition, performance majors will also complete a junior recital and music composition majors will also give a music composition recital.

With this degree, students can go on to pursue graduate studies in music, establish private studios, audition for music ensembles, or create their own paths in music or music-related endeavors.

Ensemble Policy

In order to remain enrolled in studio instruction (lessons), all undergraduate (B.A. & B.M.) and M.M. students who enroll in any level of studio instruction (including nonmajor levels) in band and orchestral instruments must audition for and perform as assigned in a major instrumental ensemble\(^1\) each semester in which they are enrolled. For music majors, 1 ensemble taken for credit each semester is required for graduation. Exceptions to this policy are allowed on a case-by-case basis and only by the ensemble conductor in consultation with the faculty member in the studio area or the faculty advisor in music therapy as appropriate.

\(^1\) KU Symphony Orchestra, Wind Ensemble, Symphonic Band, Marching Band, or Jazz Ensemble I.

Undergraduate Admission to the School of Music

First-year students should enter the school directly. Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale) and are eligible to return to the college or university last attended in addition to completing a successful audition. Other students can be admitted only with the permission of the dean. Send applications to the Office of Admissions (http://admissions.ku.edu). Visit the Office of International Recruitment and Undergraduate Admissions (http://admissions.ku.edu/international/welcome) for information about international admissions.

Students who wish to major in music must audition. All music students academically approved for admission to the School of Music are admitted contingent upon demonstration by audition of satisfactory level proficiency in their areas of applied music. Music audition information and application forms are available online (http://music.ku.edu/applyaudition). There is a limit of two times a prospective student may request an audition for entrance into one of the School's undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Transfer Students

Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale), are eligible to return to the college or university last attended, and complete a successful audition. Only grades of C or higher are accepted in transfer credit toward degrees offered by the School of Music. Students who wish to transfer performance credit from another institution toward any music degree at KU must validate this credit by audition. Music audition information and application forms are available online (http://music.ku.edu/applyaudition). There is a limit of two times a prospective student may request an audition for entrance into one of the School's undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Music Theory Placement

The music theory placement examination is required of all undergraduate transfer students who have not completed a 4-semester theory sequence with an accredited NASM school. It is administered as announced on the School of Music website (http://music.ku.edu/placement-exams) each semester.

B.M. Degree Requirements for the Brass and Percussion Major

A total of 120 hours is required for the degree in brass and percussion, distributed as follows:

**Music Theory (25)**
- MTHC 105 Theory I 4
- MTHC 115 Theory II 4
- MTHC 205 Theory III 4
- MTHC 315 Theory IV 4
- MTHC 410 Tonal Forms 3
- Two upper-division theory courses (MTHC numbered 300 or above) 6

**Musicology (10)**
- MUSC 320 Music History I 2
- MUSC 340 Music History II 3
- MUSC 440 Music History III 3
- MUSC 480 Music History IV 2

**Music Courses (51)**
- Applied music lessons: 8 semesters each for 3 credits, plus junior and senior recitals 25
- Piano (proficiency level of PIAN 284) 3
- Ensembles: 8 semesters each for credit 8
- Chamber music: 8 semesters each for credit 8
- MEMT 116 Performance Media: Computers, Synthesizers, and Electronics 1
- REC 100 Laboratory in Music Performance (4 semesters) 0
- W&P 325 Wind and Percussion Pedagogy (2 semesters) 2
- COND 245 Conducting I 2
- W&P 630 Orchestral Repertoire (2 semesters) 2

Total Hours: 127
Bachelor of Music in Music Performance: Woodwinds

A total of 120 credit hours is required and is designed to further the student's knowledge, practice, and experience on their major instrument. To graduate, a student must earn a minimum grade-point average of 3.0 in all major courses and a minimum average of 2.0 in all course work.

Students will be studying with faculty members who are nationally and internationally recognized. Courses in music theory and musicology are part of the exploration of music as are private instruction, ensemble and chamber music opportunities. All students pursuing the B.M. degree will perform a senior recital on their primary instrument/voice. In addition, performance majors will also complete a junior recital and music composition majors will also give a music composition recital.

With this degree, students can go on to pursue graduate studies in music, establish private studios, audition for music ensembles, or create their own paths in music or music-related endeavors.

Ensemble Policy

In order to remain enrolled in studio instruction (lessons), all undergraduate (B.A. & B.M.) and M.M. students who enroll in any level of studio instruction (including nonmajor levels) in band and orchestral instruments must audition for and perform as assigned in a major instrumental ensemble1 each semester in which they are enrolled. For music majors, 1 ensemble taken for credit each semester is required for graduation. Exceptions to this policy are allowed on a case-by-case basis and only by the ensemble conductor in consultation with the faculty member in the studio area or the faculty advisor in music therapy as appropriate.

Undergraduate Admission to the School of Music

First-year students should enter the school directly. Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale) and are eligible to return to the college or university last attended in addition to completing a successful audition. Other students can be admitted only with the permission of the dean. Send applications to the Office of Admissions (http://admissions.ku.edu). Visit the Office of International Recruitment for more information.

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1 KU Symphony Orchestra, Wind Ensemble, Symphonic Band, Marching Band, or Jazz Ensemble I.
and Undergraduate Admissions (http://admissions.ku.edu/international/welcome) for information about international admissions.

Students who wish to major in music must audition. All music students academically approved for admission to the School of Music are admitted contingent upon demonstration by audition of satisfactory level proficiency in their areas of applied music. Music audition information and application forms are available online (http://music.ku.edu/applyaudition). There is a limit of two times a prospective student may request an audition for entrance into one of the School's undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Transfer Students

Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale), are eligible to return to the college or university last attended, and complete a successful audition. Only grades of C or higher are accepted in transfer credit toward degrees offered by the School of Music. Students who wish to transfer performance credit from another institution toward any music degree at KU must validate this credit by audition. Music audition information and application forms are available online (http://music.ku.edu/applyaudition). There is a limit of two times a prospective student may request an audition for entrance into one of the School's undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Music Theory Placement

The music theory placement examination is required of all undergraduate transfer students who have not completed a 4-semester theory sequence with an accredited NASM school. It is administered as announced on the School of Music website (http://music.ku.edu/placement-exams) each semester.

B.M. Degree Requirements for the Woodwind Major

A total of 120 hours is required for the degree in woodwinds, distributed as follows:

<table>
<thead>
<tr>
<th>Music Theory (25)</th>
<th>Hours</th>
<th>Music Electives (10)</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 105 Theory I</td>
<td>4</td>
<td>Piano (proficiency level of PIAN 284)</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 115 Theory II</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTHC 205 Theory III</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTHC 315 Theory IV</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTHC 410 Tonal Forms</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two upper-division theory courses (MTHC numbered 300 or above)</td>
<td>6</td>
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<table>
<thead>
<tr>
<th>Musicology (10)</th>
<th>Hours</th>
<th>Basic Courses (31)</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 320 Music History I</td>
<td>2</td>
<td>ENGL 101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 340 Music History II</td>
<td>3</td>
<td>ENGL 102 Critical Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 440 Music History III</td>
<td>3</td>
<td>COMS 130 Speaker-Audience Communication</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 480 Music History IV</td>
<td>2</td>
<td>MATH 101 College Algebra</td>
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<table>
<thead>
<tr>
<th>Music Courses (44)</th>
<th>Hours</th>
<th>Freshman</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Applied music lessons: 8 semesters each for credit, plus junior and senior recitals</td>
<td>25</td>
<td>Fall</td>
<td>Hours</td>
</tr>
<tr>
<td>Piano (proficiency level of PIAN 284)</td>
<td>3</td>
<td>ENGL 101 3 ENGL 102</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MTHC 105 4 MTHC 115</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PIAN 144 (considered remedial-does not count towards degree)</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>REC 100 0 REC 100</td>
<td>0</td>
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<tr>
<td></td>
<td></td>
<td>MEMT 116 1 121 Studio lessons</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>121 Studio lessons 3 Ensemble</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ensemble 1 BASN/OBOE 101 or music elective</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BASN/OBOE 301 or music elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MATH 101</td>
<td>3</td>
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<thead>
<tr>
<th>Sophomore</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMS 130</td>
<td>3</td>
<td>MTHC 315</td>
<td>4</td>
</tr>
<tr>
<td>MTHC 105</td>
<td>4</td>
<td>MUSC 340</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 320</td>
<td>2</td>
<td>REC 100</td>
<td>0</td>
</tr>
<tr>
<td>PIAN 284</td>
<td>2</td>
<td>0 221 Studio lessons</td>
<td>3</td>
</tr>
<tr>
<td>REC 100</td>
<td>0</td>
<td>Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>221 Studio lessons</td>
<td>3</td>
<td>Ensemble 1 252 or CHAM 216</td>
<td>1</td>
</tr>
<tr>
<td>Ensemble 1 252 or CHAM 216</td>
<td>1</td>
<td>Social Science: any course that fulfills GE3S</td>
<td>3</td>
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<table>
<thead>
<tr>
<th>Junior</th>
<th>Hours</th>
<th>Fall</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 410</td>
<td>3</td>
<td>MTHC upper division elective (300+)</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 440</td>
<td>3</td>
<td>MUSC 480</td>
<td>2</td>
</tr>
</tbody>
</table>
The program helps students develop specific skills in planning and delivering instruction in all types of music education classrooms. The curriculum emphasizes both the theoretical and practical elements of human behavior, musical and otherwise, and integrates with this core a variety of learning experiences that prepare the pre-service teacher for the classroom medium. Among these is a broad spectrum of learning experiences both at KU and in area classrooms. These include planning and delivering instruction, classroom management, conducting, assessment, and curriculum design. Within the curriculum, individual emphases are reflected in the choice of major performance medium and performance ensembles. The goal of the music education curriculum is to prepare the student for success in the profession.

Music Education B.M.E. Program

The program helps students develop specific skills in planning and delivering instruction in all types of music education classrooms. The curriculum emphasizes both the theoretical and practical elements of human behavior, musical and otherwise, and integrates with this core a variety of learning experiences that prepare the pre-service teacher for the classroom medium. Among these is a broad spectrum of learning experiences both at KU and in area classrooms. These include planning and delivering instruction, classroom management, conducting, assessment, and curriculum design. Within the curriculum, individual emphases are reflected in the choice of major performance medium and performance ensembles. The goal of the music education curriculum is to prepare the student for success in the profession.

Bachelor of Music Education in Music Education

Music Education

The program helps students develop specific skills in planning and delivering instruction in all types of music education classrooms. The curriculum emphasizes both the theoretical and practical elements of human behavior, musical and otherwise, and integrates with this core a variety of learning experiences that prepare the pre-service teacher for the classroom medium. Among these is a broad spectrum of learning experiences both at KU and in area classrooms. These include planning and delivering instruction, classroom management, conducting, assessment, and curriculum design. Within the curriculum, individual emphases are reflected in the choice of major performance medium and performance ensembles. The goal of the music education curriculum is to prepare the student for success in the profession.

Advising

Students admitted to music education will be assigned an appropriate academic faculty advisor to work with the student throughout his or her academic career. The undergraduate handbook is available online (http://music.ku.edu/BME/requirements) and from the MEMT office, 448 Murphy Hall and provides detailed procedures, suggestions, and specifications.

Regardless of applied performance medium, each entering student should be able to sing independently, in tune, and with acceptable tone quality. Functional keyboard skills (accompanying, playing by ear, improvising, and transposing) are helpful. Experience working with others is also beneficial as well. Well-developed interpersonal skills are an asset.

Music Education Program

This program provides full preparation for entry into the profession. It leads to the Bachelor of Music Education and eligibility for licensure to teach vocal, instrumental, and general music in grades pre-K through 12 in the state of Kansas. The program typically requires eight semesters of full-time work, which includes a semester of student teaching and internship in the public schools.

Music Teacher Licensure Program

Teacher licensure in Kansas is a function of the Kansas State Board of Education. Individuals who complete an approved music teacher licensure program are recommended to the state for licensure in music for grades pre-K through 12. Students must meet additional state requirements, such as passing specified standardized tests, before licenses are granted. Contact the licensure officer, 211 J.R. Pearson Hall, 785-864-9602, for information.

Admission

Students must meet or exceed the School of Music academic admission requirements and successfully complete a major performance medium audition to be admitted. Students should declare the B.M.E. in music education as the major on the KU application for admission. Music education majors are in plan ME-BME in the School of Music.

Students pursuing the music education B.M.E. must apply for admission to the professional sequence by February 1 of the sophomore year. Transfer students with more than 45 hours of transfer credit must complete this application the first semester of classes at KU. Students may not enroll in courses in the professional sequence before formal approval by the director of music education. Music education majors who have been admitted to the professional sequence are in plan MEPS-BME in the School of Music.

Students must be admitted to the music education professional sequence to enroll in upper-division music education courses. See the Music Education Undergraduate Program Handbook online (http://music.ku.edu/BME/requirements) for details.

No student may be admitted to the music education professional sequence for a semester during which he or she is on academic probation. The application form for music education professional sequence admission is available on the MEMT website (http://music.ku.edu/memt/documents).

Ensemble Policy

In order to remain enrolled in studio instruction (lessons), all undergraduate (B.A. & B.M.) and M.M. students who enroll in any level
of studio instruction (including nonmajor levels) in band and orchestral instruments must audition for and perform as assigned in a major instrumental ensemble each semester in which they are enrolled. For music majors, 1 ensemble taken for credit each semester is required for graduation. Exceptions to this policy are allowed on a case-by-case basis and only by the ensemble conductor in consultation with the faculty member in the studio area or the faculty advisor in music therapy as appropriate.

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Music Theory Placement

The music theory placement examination is required of all undergraduate transfer students who have not completed a 4-semester theory sequence with an accredited NASM school. It is administered as announced on the School of Music website (http://music.ku.edu/placement-exams) each semester.

The Music Education Teacher Licensure Curriculum

The B.M.E. degree requires a minimum of 120 semester credit hours distributed among general studies, the major, professional education class work, and student teaching and internship. The degree requires at least a 2.75 cumulative grade-point average in all course work. Each student must participate in appropriate performing ensembles and demonstrate proficiency in a major applied performance medium and in other performance areas.

General Education Requirements (28 hours)

<table>
<thead>
<tr>
<th>Language Arts and Communication (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 Composition</td>
</tr>
<tr>
<td>ENGL 102 Critical Reading and Writing (or other approved options: ENGL 105, ENGL 203, ENGL 205, ENGL 209, ENGL 210, ENGL 211)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Behavioral and Social Sciences (12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 104 General Psychology</td>
</tr>
<tr>
<td>CLAS elective (SOC/ANTH elective recommended)</td>
</tr>
<tr>
<td>CLAS elective</td>
</tr>
<tr>
<td>CLAS elective</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Natural Sciences and Mathematics (10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 100 Principles of Biology</td>
</tr>
<tr>
<td>BIOL 102 Principles of Biology Laboratory</td>
</tr>
<tr>
<td>MATH 101 College Algebra</td>
</tr>
<tr>
<td>Mathematics elective (MATH 101 prerequisite; MATH 105, MATH 115, MATH 365 are approved options)</td>
</tr>
</tbody>
</table>

Professional Education/Music Education (23 hours)

| MEMT 160 Principles of Music Education | 1 |
| MEMT 250 Human Musical Learning and Development | 2 |
| SPED 326 Teaching Exceptional Children and Youth in General Education | 3 |
| C&T 359 Literacy in the Content Areas | 1 |
| MEMT 367 Managing Behavior in the Musical Environment | 2 |
| MEMT 407 The Exceptional Child in Music Education | 2 |
| MEMT 420 Teaching Elementary and Secondary General Music | 3 |

Select one of the following as appropriate:

| MEMT 421 Advanced General Music Teaching | 1 |
| MEMT 431 Choral Diction for Music Educators | |
| MEMT 432 Approaches to String Pedagogy | |
| MEMT 435 Marching Band Techniques | |
| MEMT 433 Jazz Techniques | 1 |
| MEMT 450 Teaching Choral Music | 2 |
| MEMT 451 Teaching Instrumental Music | 2 |
| MEMT 455 Psychology of Music | 3 |

Student Teaching and Internship (6-12 hours)

| MEMT 498 Student Teaching | 2-4 |
| MEMT 499 Internship in Teaching Music | 4-8 |
Performance Requirements (38-41 hours)

Major Instrument (14)
- 121 Applied music lessons (2 semesters) 4
- 221 Applied music lessons (2 semesters) 4
- 321 Applied music lessons (2 semesters) 4
- 422 Senior project lessons (1 semester) 2

Ensemble (7 semesters, 7 hours) (7)
- 7 hours of credit representing 7 semesters of participation, including experience in small ensembles wind and percussion: 1 semester/1 credit marching band required. Vocal: 6 semesters/6 credits major ensemble and 1 semester/1 credit small ensemble required.

Piano Skills (2-5)
- An audition is required. If skills are insufficient, remedial course work (PIAN 144) is necessary. Students with a major performance medium of piano or organ take only PIAN 310.

Performance Techniques (6)
- MEMT 113 Performance Media: Brass
- MEMT 114 Performance Media: Woodwinds
- MEMT 115 Performance Media: Percussion
- MEMT 118 Performance Media: Strings
- MEMT 408 Vocal Pedagogy
  Select one of the following:
  - MEMT 116 Performance Media: Computers, Synthesizers, and Electronics
  - MEMT 119 Performance Media: Guitar

Conducting/Rehearsal Skills (8)
- MEMT 230 Performance Clinic: Band 1
- MEMT 231 Performance Clinic: Choral 1
- MEMT 232 Performance Clinic: Orchestra 1
- MEMT 236 Fundamentals of Conducting 1
- MEMT 330 Rehearsal/Conducting Clinic: Band 1
- MEMT 331 Rehearsal/Conducting Clinic: Choral 1
- MEMT 332 Rehearsal/Conducting Clinic: Orchestra 1
  Select one of the following:
  - MEMT 350 Advanced Rehearsal/Conducting Clinic: Band
  - MEMT 351 Advanced Rehearsal/Conducting Clinic: Choral
  - MEMT 352 Advanced Rehearsal/Conducting Clinic: Orchestra

Basic Musicianship Requirements (26 hours)

Music Theory and Composition (16)
- MTHC 105 Theory I 4
- MTHC 115 Theory II 4
- MTHC 205 Theory III 4
- MTHC 316 Tonal Form and Post-Tonal Techniques 4

Musicology (10)
- MUSC 320 Music History I 2
- MUSC 340 Music History II 3
- MUSC 440 Music History III 3
- MUSC 480 Music History IV 2

Recital Attendance (0)
- PIAN 148 Elementary Keyboard Skills II
- PIAN 284 Intermediate Keyboard Skills I
- PIAN 288 Intermediate Keyboard Skills II
- or PIAN 310 Advanced Keyboard Skills

Music Education 4 Year Plan

Music Education majors are strongly encouraged to adhere to this sequence of courses.

Students with no prior piano experience should take the keyboard skills sequence (PIAN 144-PIAN 288). Demonstration of skills is needed to pass or test out of PIAN 144-PIAN 288. Students whose major performance medium is piano or organ should take PIAN 310 after completing 2 semesters of music theory (this course is only taken once in the fall term of the sophomore year).

- F = Fall only
- S = Spring only
- B = Both semesters

Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 105 (F)</td>
<td>4</td>
<td>MTHC 115 (S)</td>
<td>4</td>
</tr>
<tr>
<td>MTHC 115 (B)</td>
<td>1</td>
<td>MTHC 205 (S)</td>
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</tr>
<tr>
<td>MTHC 205 (B)</td>
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<td>MTHC 316 (S)</td>
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</tr>
<tr>
<td>MEMT 113 (B)</td>
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<td>MEMT 114 (B)</td>
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<tr>
<td>MEMT 115 (B)</td>
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<td>MEMT 116 (B)</td>
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<td>MEMT 116 (B)</td>
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<td>MEMT 231 (B)</td>
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<tr>
<td>MEMT 232 (F)</td>
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<td>MEMT 232 (F)</td>
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<tr>
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<td>MEMT 332 (B)</td>
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<tr>
<td>MEMT 334 (B)</td>
<td>1</td>
<td>MEMT 334 (B)</td>
<td>1</td>
</tr>
<tr>
<td>MEMT 335 (B)</td>
<td>1</td>
<td>MEMT 335 (B)</td>
<td>1</td>
</tr>
<tr>
<td>MEMT 336 (B)</td>
<td>1</td>
<td>MEMT 336 (B)</td>
<td>1</td>
</tr>
<tr>
<td>MEMT 337 (B)</td>
<td>1</td>
<td>MEMT 337 (B)</td>
<td>1</td>
</tr>
<tr>
<td>REC 100</td>
<td>0</td>
<td>REC 100</td>
<td>0</td>
</tr>
<tr>
<td>ENGL 101 (B)</td>
<td>3</td>
<td>ENGL 101 (B)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101 (or higher) (B)</td>
<td>3</td>
<td>MATH 101 (or higher) (B)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>17</td>
<td><strong>Total</strong></td>
<td>17</td>
</tr>
</tbody>
</table>

Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 205 (F)</td>
<td>4</td>
<td>MTHC 316 (S)</td>
<td>4</td>
</tr>
<tr>
<td>MEMT 114 (B)</td>
<td>1</td>
<td>MEMT 115 (B)</td>
<td>1</td>
</tr>
<tr>
<td>MEMT 230 (B)</td>
<td>1</td>
<td>MEMT 230 (B)</td>
<td>1</td>
</tr>
<tr>
<td>MEMT 231 (B)</td>
<td>1</td>
<td>MEMT 231 (B)</td>
<td>1</td>
</tr>
<tr>
<td>MEMT 232 (F)</td>
<td>1</td>
<td>MEMT 232 (F)</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 320 (F)</td>
<td>2</td>
<td>MUSC 320 (F)</td>
<td>2</td>
</tr>
<tr>
<td>REC 100</td>
<td>0</td>
<td>REC 100</td>
<td>0</td>
</tr>
<tr>
<td>PIAN 284 (or 310 which is only for piano or organ applied students, both F)</td>
<td>2</td>
<td>PIAN 284 (or 310 which is only for piano or organ applied students, both F)</td>
<td>2</td>
</tr>
</tbody>
</table>
### Professional Sequence

#### Professional Sequence Admission Requirements

1. Cumulative grade-point average of 2.75 or higher.
2. Grades of C or higher in MATH 101 and 6 hours of English as listed on the application.
3. Satisfactory completion of "Criteria for Admission" courses as shown in the Application for Music Education Professional Sequence Admission.
4. The student must write and attach a one-page essay (12-point font, double-spaced) to the application form that answers the following question: **How will you advocate for school music programs in the community at large when you enter the classroom?**
5. A fully completed application form and associated documents must be submitted to the MEMT office in 448 Murphy Hall.

- Transfer students with more than 45 hours of transfer credit must complete the professional sequence application during the first semester of classes at KU.

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEMT 330 (F)</td>
<td>1</td>
<td>Select of the following:</td>
<td>1</td>
</tr>
<tr>
<td>MEMT 332 (F)</td>
<td>1</td>
<td>MEMT 116 (B)</td>
<td></td>
</tr>
<tr>
<td>MEMT 367 (F)</td>
<td>2</td>
<td>MEMT 119 (B)</td>
<td></td>
</tr>
<tr>
<td>Ensemble</td>
<td>1</td>
<td>MEMT 331 (B)</td>
<td>1</td>
</tr>
<tr>
<td>321 Studio lessons</td>
<td>2</td>
<td>MEMT 433 (S)</td>
<td></td>
</tr>
<tr>
<td>MUSC 440 (F)</td>
<td>3</td>
<td>MEMT 350 (Wind and Percussion) (S)</td>
<td>1-2</td>
</tr>
<tr>
<td>BIOL 100 (B)</td>
<td>3</td>
<td>MEMT 350 (Wind and Percussion) (S)</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 102 (B)</td>
<td>1</td>
<td>MEMT 431 (Choral) (S)</td>
<td></td>
</tr>
<tr>
<td>SPED 326 (B)</td>
<td>3</td>
<td>MEMT 352 (Strings) (S)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MEMT 432 (Strings) (S)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MEMT 420 (S)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ensemble</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>321 Studio lessons</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MUSC 480 (S)</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total Hours: 33-34**

- Choose, only 1 of 4 required (MEMT 421, 431, 432, 435).
- Choose, only 1 of 3 required (MEMT 350, 351, 352).
- If taking MEMT 350 must also take MEMT 435; if taking MEMT 351 must either take MEMT 421 or MEMT 431; if taking MEMT 352 must also take MEMT 432.

### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEMT 407 (F)</td>
<td>1</td>
<td>MEMT 498 (B)</td>
<td>2-4</td>
</tr>
<tr>
<td>MEMT 408 (F)</td>
<td>1</td>
<td>MEMT 499 (B)</td>
<td>4-8</td>
</tr>
<tr>
<td>MEMT 450 (F)</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEMT 451 (F)</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEMT 455 (F)</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ensemble</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>422 Senior Project lessons</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLAS elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours: 23-29**

- Students must achieve admission to the Music Education Professional Sequence prior to enrolling in these courses.
- Students must do the following during the final semester:
  - register to take the PLT (Principles of Learning and Teaching) test
  - register to take the Praxis II Music Content test during the final semester
  - check their degree requirement check sheet to see that they have met all of the graduation requirements
- Students must do the following before graduation:
  - submit an application for graduation online through Enroll and Pay at the beginning of their last semester
  - successfully complete their major applied instrument (422) including the senior 1/2 recital
### Minor in Music

#### The School of Music

The School of Music at the University of Kansas ranks among the finest in America, offering comprehensive programs at the bachelor's, master's, and doctoral levels.

The school nurtures and advances the art of music through creation, performance, scholarly inquiry, entrepreneurship, and enhancement of the artistic skills and experiences of the university and regional cultural communities.

The school is a major contributor to the arts community through the student, faculty, and professional performances in Swarthout Recital Hall, Bales Organ Recital Hall, the Robert Baustian Theatre, and the Lied Center of Kansas.

The School of Music is an accredited institutional member of the National Association of Schools of Music (http://nasm.arts-accredit.org). The entrance and graduation requirements in this catalog conform to the published guidelines of that organization.

#### Requirements for the Minor in Music

**Open to All KU Students**

Students must first audition to be accepted as music minors, then may earn a minor in music by taking 24 hours in the courses listed below. At least 12 hours must be junior/senior-level courses, numbered 300 and above. A minimum grade-point average of 2.0 in the minor is required.

- **MTHC 105** Theory I 4
- **MTHC 115** Theory II 4
- Applied music lessons: 4 semesters at the 100 level each for credit (all on same instrument or voice) 4
- **MUSC 336** Masterworks of Music 3

Nine junior/senior music credits numbered 300 and above to be chosen from:

- Lessons on same instrument or voice at 300 level, ensembles, and/or music classes (most MUSC, music history, courses are open to all KU students) 9

### Master of Music

#### View requirements for:

- Master of Music in Conducting (p. 2233)
- Master of Music in Musicology (p. 2234)
- Master of Music in Music Theory or Composition (p. 2235)
- Master of Music in Music Performance: Brass and Percussion (p. 2236)
- Master of Music in Music Performance: Organ, Church Music, and Carillon (p. 2237)
- Master of Music in Music Performance: Piano (p. 2239)
- Master of Music in Music Performance: Strings (p. 2240)
- Master of Music in Music Performance: Voice and Opera (p. 2241)
- Master of Music in Music Performance: Woodwinds (p. 2242)

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### Master of Music in Conducting

#### Master of Music in Conducting Degree Programs

M.M. degree programs in conducting:

- Choral conducting
- Orchestral conducting
- Wind conducting

#### M.M. in Conducting Admission

Applicants are expected to have educational backgrounds equivalent to the B.M. or B.M.E. degree (including a course in form and analysis) from KU. They should have one or two years of experience in conducting. Such experience may include work in public school, college, or with other amateur or professional ensembles. Applicants normally are expected to have a high level of performing ability on an instrument or in voice. Applicants must complete audition-interviews successfully before the divisional faculty and should provide a résumé of their conducting experience, including programs of public appearances.

### Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (http://music.ku.edu/applyaudition/#graduate) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

#### Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in
thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

Diagnostic Examinations

All entering graduate students (except music education, music therapy, and opera performance majors) must take written diagnostic examinations in musicology and music theory. These are given the week before the start of classes in the Fall and Spring semesters to determine whether a need exists for remedial work in those areas prior to enrolling in graduate coursework. Students who show the need for remediation must complete the prescribed review courses or show mastery of the material by re-examination. Graduate students entering programs in piano must take additional tests in piano literature given before the start of classes. A student is exempt if he or she received a bachelor’s or master’s degree in music from the University of Kansas within the previous 4 years.

M.M. in Conducting Degree Requirements

The conducting degree candidate must present a final concert-length recital consisting of a public choral or instrumental program. A recital preview is left to the discretion of the faculty members of each division. In divisions with no preview requirement, the option is still available to students and faculty members. Divisions must approve the recital content well in advance but no less than three weeks before the recital date. The Master’s recital must be given before the final oral exam can occur.

Final Oral Exam

Master’s degree students must schedule and pass a final oral examination. The student’s 3-member Graduate Advisory Committee consists of the student’s major professor, one member from the student’s major division and one musicology or music theory professor. This committee administers the final oral exam.

A program of study in band and orchestral conducting (minimum of 30 hours) is as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced conducting and score-reading</td>
<td>10-12</td>
</tr>
<tr>
<td>MUSC 801 Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>Advanced courses in musicology and music theory</td>
<td>11-12</td>
</tr>
<tr>
<td>Electives</td>
<td>3-6</td>
</tr>
<tr>
<td>Recital</td>
<td>0</td>
</tr>
</tbody>
</table>

- Band and orchestral conducting majors must enroll in an ensemble for a minimum of 2 semesters.

A program of study in choral conducting (minimum of 30 hours) is as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choral conducting/score reading (must include COND 811)</td>
<td>6-8</td>
</tr>
<tr>
<td>MUSC 801 Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>Advanced courses in musicology and music theory</td>
<td>11-12</td>
</tr>
<tr>
<td>Choral literature</td>
<td>6</td>
</tr>
<tr>
<td>Seminar conducting/rehearsal</td>
<td>3-6</td>
</tr>
<tr>
<td>Electives</td>
<td>1-3</td>
</tr>
<tr>
<td>Recital</td>
<td>0</td>
</tr>
</tbody>
</table>

- Choral conducting majors must enroll in an ensemble for a minimum of 2 semesters.

View a check sheet (http://music.ku.edu/resources/checksheets.shtml) for this degree program.

Master of Music in Musicology

Master of Music in Musicology Degree Program

The Master of Music (M.M.) degree in musicology requires a minimum of 30 credits and is designed to further the student’s knowledge and in-depth exploration of musicology (music history) at the post-baccalaureate level.

M.M. in Musicology Admission

Applicants are expected to have educational backgrounds equivalent to the B.A. or B.M. in musicology from KU. Applicants are expected to have a reading knowledge of German, French, Italian, or Spanish. A language deficiency may be satisfied after entrance into the program. Proficiency at the piano is encouraged. Applicants must submit samples of original scholarly writing. In addition to the required course work, students are encouraged to continue study of performance or composition.

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (http://music.ku.edu/applyaudition/#graduate) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/ music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.
Diagnostic Examinations

All entering graduate students (except music education, music therapy, and opera performance majors) must take written diagnostic examinations in musicology and music theory. These are given the week before the start of classes in the Fall and Spring semesters to determine whether a need exists for remedial work in those areas prior to enrolling in graduate coursework. Students who show the need for remediation must complete the prescribed review courses or show mastery of the material by re-examination. Graduate students entering programs in piano must take additional tests in piano literature given before the start of classes. A student is exempt if he or she received a bachelor’s or master’s degree in music from the University of Kansas within the previous 4 years.

M.M. in Musicology Degree Requirements

Final Oral Exam

Master’s degree students must schedule and pass a final oral exam. For the Master’s degree in musicology, the final oral exam is a defense of the student’s thesis.

The musicology student’s 3-member Graduate Advisory Committee consists of the student’s major professor, one member from the student’s major division and one music theory professor. This committee administers the final oral exam.

The course work for the M.M. degree in musicology (minimum of 30 credits) is as follows:

- Musicology courses in the MUSC 650 - MUSC 794 sequence: 9 credits
- MUSC 654 Collegium Musicum, Vocal: 2 credits
- or MUSC 656 Collegium Musicum, Instrumental: 2 credits
- Advanced music theory courses: 3 credits
- MUSC 801 Music Bibliography and Research: 3 credits
- MUSC 940 Seminar on Selected Topics in Musicology: _____ credits
- Electives in music performance: 4 credits
- MUSC 899 Thesis: 6 credits

View a check sheet (http://music.ku.edu/resources/checksheets.shtml) for this degree program.

Master of Music in Music Theory or Composition

Master of Music in Music Theory or Composition Degree Programs

The Master of Music (M.M.) degrees in theory or composition require a minimum of 30 credits and are designed to further the student’s knowledge and in-depth exploration of music theory or composition at the post-baccalaureate level.

M.M. in Music Theory or Composition Admission

Applicants are expected to have educational backgrounds equivalent to the B.A., the B.M. in music theory, or the B.M. in composition from KU. Composition applicants should submit scores and recordings (if available) of original compositions; theory applicants should submit research papers in music theory. Applicants are expected to have a reading knowledge of German, French, Italian, or Spanish. A language deficiency may be satisfied after entrance into the program. In addition to the required course work, students are encouraged to continue study of performance and participate in ensembles on their major instruments.

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (http://music.ku.edu/applyaudition/#graduate) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

Diagnostic Examinations

All entering graduate students (except music education, music therapy, and opera performance majors) must take written diagnostic examinations in musicology and music theory. These are given the week before the start of classes in the Fall and Spring semesters to determine whether a need exists for remedial work in those areas prior to enrolling in graduate coursework. Students who show the need for remediation must complete the prescribed review courses or show mastery of the material by re-examination. Graduate students entering programs in piano must take additional tests in piano literature given before the start of classes. A student is exempt if he or she received a bachelor’s or master’s degree in music from the University of Kansas within the previous 4 years.
M.M. in Music Theory or Composition
Degree Requirements

Final Oral Exam

Master's degree students must schedule and pass a final oral exam. The student's 3-member Graduate Advisory Committee consists of the student's major professor, one member from the student's major division and one musicology or music theory professor. This committee administers the final oral exam.

Programs of study are as follows:

Music Theory (minimum of 30 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced music theory</td>
<td>9</td>
</tr>
<tr>
<td>Advanced musicology and/or advanced composition</td>
<td>9</td>
</tr>
<tr>
<td>MUSC 801 Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 778 History of Music Theory</td>
<td>3</td>
</tr>
<tr>
<td>Thesis</td>
<td>6</td>
</tr>
</tbody>
</table>

Composition (minimum of 30 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced composition</td>
<td>9</td>
</tr>
<tr>
<td>Advanced musicology and music theory</td>
<td>12</td>
</tr>
<tr>
<td>MUSC 801 Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>Recital</td>
<td>1</td>
</tr>
<tr>
<td>Thesis</td>
<td>5</td>
</tr>
</tbody>
</table>

Composition/Jazz Emphasis (minimum of 30 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced composition</td>
<td>9</td>
</tr>
<tr>
<td>Elective</td>
<td>4</td>
</tr>
<tr>
<td>JAZZ 659 Jazz Arranging</td>
<td>2</td>
</tr>
<tr>
<td>MTHC 563 Survey in Jazz Composition and Arranging</td>
<td>3</td>
</tr>
<tr>
<td>American Studies Course</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 801 Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>Recital</td>
<td>1</td>
</tr>
<tr>
<td>Thesis</td>
<td>5</td>
</tr>
</tbody>
</table>

View a check sheet (http://music.ku.edu/resources/checksheets.shtml) for this degree program.

The master's thesis in theory or composition shall consist of either a 20-minute work for large ensemble or a 30-minute chamber work, either of which may include electronic media. All thesis proposals must be approved by the MTHC faculty before the student begins work on the thesis.

M.M. in Performance Admission

The applicant must perform an audition before the faculty of the major performance division. In some cases, an audio recording may be submitted in lieu of a live performance. A complete list of repertoire studied should be submitted with the graduate application. A prescreening audition is required for voice and piano applicants. View School of Music audition requirements and procedures (http://music.ku.edu/prospective/auditions.shtml).

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (http://music.ku.edu/applyaudition/#graduate) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.
Program Areas
Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

Diagnostic Examinations
All entering graduate students (except music education, music therapy, and opera performance majors) must take written diagnostic examinations in musicology and music theory. These are given the week before the start of classes in the Fall and Spring semesters to determine whether a need exists for remedial work in those areas prior to enrolling in graduate coursework. Students who show the need for remediation must complete the prescribed review courses or show mastery of the material by re-examination. Graduate students entering programs in piano must take additional tests in piano literature given before the start of classes. A student is exempt if he or she received a bachelor’s or master’s degree in music from the University of Kansas within the previous 4 years.

M.M. in Performance Degree Requirements
A final solo recital is required for all master’s degrees in performance. A recital preview is left to the discretion of the faculty members of each division. In divisions with no preview requirement, the option to have a preview is still available to students and faculty members. Divisions must approve recital content well in advance but no less than 3 weeks before the recital date. The candidate must file a professional-quality CD recording of the final recital with the School of Music before the final oral examination is scheduled.

Students in the Master of Music program who play band or orchestral instruments must enroll in a major ensemble for a minimum of 2 semesters.

A program of study in brass and percussion is as follows:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>Advanced courses in musicology and music theory</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>W&amp;P 704</td>
<td>Special Studies in Brass Instrumental Pedagogy (brass majors)</td>
</tr>
<tr>
<td>W&amp;P 708</td>
<td>Special Studies in Percussion Instrument Pedagogy (percussion majors)</td>
</tr>
</tbody>
</table>

Major Ensemble 2

View a check sheet (http://music.ku.edu/resources/checksheets.shtml) for this degree program.

Master of Music in Music Performance: Organ, Church Music, and Carillon

Master of Music in Performance Degree Programs

M.M. degree programs in music performance:

- Bassoon
- Carillon
- Cello
- Church music
- Clarinet
- Collaborative Piano
- Double bass
- Euphonium
- Flute
- French horn
- Harp
- Oboe
- Opera performance
- Organ
- Percussion
- Piano
- Saxophone
- Trumpet
- Trombone
- Tuba
- Viola
- Violin
- Voice

M.M. in Performance Admission

The applicant must perform an audition before at least two members of the faculty of the major performance division. In some cases, a video recording may be submitted in lieu of a live performance. A complete list of repertoire studied, including past recital programs, should be included with the graduate application. A pre-screening audition is required for voice and piano applicants. View School of Music audition requirements and procedures (http://music.ku.edu/prospective/auditions.shtml).

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (http://music.ku.edu/applyaudition/#graduate) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and...
Master of Music in Music Performance: Organ, Church Music, and Carillon

Program Areas
Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

Diagnostic Examinations
All entering graduate students (except music education, music therapy, and opera performance majors) must take written diagnostic examinations in musicology and music theory. These are given the week before the start of classes in the Fall and Spring semesters to determine whether a need exists for remedial work in those areas prior to enrolling in graduate coursework. Students who show the need for remediation must complete the prescribed review courses or show mastery of the material by re-examination. Graduate students entering programs in piano must take additional tests in piano literature given before the start of classes. A student is exempt if he or she received a bachelor’s or master’s degree in music from the University of Kansas within the previous 4 years.

M.M. in Performance Degree Requirements
A final solo recital is required for all master’s degrees in performance. A recital preview is left to the discretion of the faculty members of each division. In divisions with no preview requirement, the option to have a preview is still available to students and faculty members. Divisions must approve recital content well in advance but no less than 3 weeks before the recital date. The Master’s recital must be given before the final oral exam can occur.

Final Oral Exam
Master’s degree students must schedule and pass a final oral exam. The student’s 3-member Graduate Advisory Committee consists of the student’s major professor, one member from the student’s major division and one musicology or music theory professor. This committee administers the final oral exam.

View a check sheet (http://music.ku.edu/resources/checksheets.shtml) for these degree programs.

A program of study in church music/choral conducting emphasis (minimum of 30 credits) is as follows:

Advanced conducting and score reading 10
MUSC 801 Music Bibliography and Research 3
Advanced courses in musicology and music theory 6
Advanced courses in church music 9
Voice 2

- Students must enroll in a minimum of 4 semesters of choral ensemble.

A program of study in church music/organ emphasis (minimum of 30 credits) is as follows:

Advanced applied music (organ) 12
MUSC 801 Music Bibliography and Research 3
Advanced courses in musicology and music theory 6
CHUR Music courses (CHUR 801-CHUR 810, CHUR 821-CHUR 824, CHUR 921, CHUR 962) 6
ORGN 702 Master Class in Organ - Lab (4 semesters) 0
ORGN 720 Studio Class in Organ-Lab (4 semesters) 0
CHUR 806 Service Playing and Improvisation I 3
CHUR 807 Service Playing and Improvisation II 3
Advanced conducting 6
CHUR 622 Bales Chorale (4 semesters minimum) 0

- Church music majors must take 2 semesters of voice, if not previously taken.

A program of study in organ (minimum of 30 credits) is as follows:

MUSC 801 Music Bibliography and Research 3
ORGN 811 Organ 12
Advanced courses in musicology and music theory 9
Advanced academic courses in organ (ORGN 800-ORGN 807, ORGN 921) 12
ORGN 702 Master Class in Organ - Lab (4 semesters) 0
ORGN 720 Studio Class in Organ-Lab (4 semesters) 0
CHUR 622 Bales Chorale (2 semesters minimum) 0

A program of study in carillon (minimum of 30 credits) is as follows:

CARI 811 Carillon 12
MUSC 801 Music Bibliography and Research 3
Advanced courses in musicology and music theory 9-12
CARI 804 History of Carillon Literature and Design 3
CARI 820 Studio Class in Carillon 0
Electives 0-3
Master of Music in Music Performance: Piano

Master of Music in Performance Degree Programs

M.M. degree programs in music performance:

- Bassoon
- Carillon
- Cello
- Church music
- Clarinet
- Collaborative Piano
- Double bass
- Euphonium
- Flute
- French horn
- Harp
- Oboe
- Opera performance
- Organ
- Percussion
- Piano
- Saxophone
- Trumpet
- Trombone
- Tuba
- Viola
- Violin
- Voice

M.M. in Performance Admission

The applicant must perform an audition before at least two members of the faculty of the major performance division. In some cases, a video recording may be submitted in lieu of a live performance. A complete list of repertoire studied, including past recital programs, should be included with the graduate application. A pre-screening audition is required for voice and piano applicants. View School of Music audition requirements and procedures (http://music.ku.edu/prospective/auditions.shtml).

Graduate Admission to the School of Music

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

Diagnostic Examinations

All entering graduate students (except music education, music therapy, and opera performance majors) must take written diagnostic examinations in musicology and music theory. These are given the week before the start of classes in the Fall and Spring semesters to determine whether a need exists for remedial work in those areas prior to enrolling in graduate coursework. Students who show the need for remediation must complete the prescribed review courses or show mastery of the material by re-examination. Graduate students entering programs in piano must take additional tests in piano literature given before the start of classes. A student is exempt if he or she received a bachelor’s or master’s degree in music from the University of Kansas within the previous 4 years.

M.M. in Performance Degree Requirements

A final solo recital is required for all master’s degrees in performance. A recital preview is left to the discretion of the faculty members of each division. In divisions with no preview requirement, the option to have a preview is still available to students and faculty members. Divisions must approve recital content well in advance but no less than 3 weeks before the recital date. The Master's recital must be given before the final oral exam can occur.

Final Oral Exam

Master's degree students must schedule and pass a final oral exam. The student's 3-member Graduate Advisory Committee consists of the student's major professor, one member from the student's major division and one musicology or music theory professor. This committee administers the final oral exam.
A program of study in collaborative piano is as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced accompanying</td>
<td>12</td>
</tr>
<tr>
<td>MUSC 801 Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>Advanced courses in musicology, music theory, and conducting</td>
<td>9-12</td>
</tr>
<tr>
<td>ACMP 822 The Accompanist's Literature</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>0-3</td>
</tr>
</tbody>
</table>

A student may emphasize vocal or instrumental accompanying. The vocal accompanying emphasis requires entering graduate students to take diction examinations in Italian, French, and German. Students found deficient in an area of diction must enroll in the specific course in which they are deficient and pass it with at least a grade of C.

A program of study in piano performance is as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIAN 811 Piano (Applied lessons)</td>
<td>12</td>
</tr>
<tr>
<td>MUSC 801 Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>Advanced courses in musicology and music theory</td>
<td>9</td>
</tr>
<tr>
<td>Advanced piano pedagogy/piano literature</td>
<td>2-3</td>
</tr>
<tr>
<td>Electives</td>
<td>3-4</td>
</tr>
<tr>
<td>Chamber Music/Concerto recital</td>
<td>0</td>
</tr>
<tr>
<td>Recital</td>
<td>0</td>
</tr>
</tbody>
</table>

View a check sheet (http://music.ku.edu/resources/checksheets.shtml) for this degree program.

Master of Music in Music Performance: Strings

Master of Music in Performance Degree Programs

M.M. degree programs in music performance:

- Bassoon
- Carillon
- Cello
- Church music
- Clarinet
- Collaborative piano
- Double bass
- Euphonium
- Flute
- French horn
- Harp
- Oboe
- Opera performance
- Organ
- Percussion
- Piano
- Saxophone
- Trumpet
- Trombone
- Tuba
- Viola
- Violin
- Voice

M.M. in Performance Admission

The applicant must perform an audition before at least two members of the faculty of the major performance division. In some cases, a video recording may be submitted in lieu of a live performance. A complete list of repertoire studied, including past recital programs, should be included with the graduate application. A pre-screening audition is required for voice and piano applicants. View School of Music audition requirements and procedures (http://music.ku.edu/prospective/auditions.shtml).

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (http://music.ku.edu/applyaudition/#graduate) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

Diagnostic Examinations

All entering graduate students (except music education, music therapy, and opera performance majors) must take written diagnostic examinations in musicology and music theory. These are given the week before the start of classes in the Fall and Spring semesters to determine whether a need exists for remedial work in those areas prior to enrolling in graduate
coursework. Students who show the need for remediation must complete
the prescribed review courses or show mastery of the material by re-
examination. Graduate students entering programs in piano must take
additional tests in piano literature given before the start of classes. A
student is exempt if he or she received a bachelor’s or master’s degree in
music from the University of Kansas within the previous 4 years.

M.M. in Performance Degree
Requirements
A final solo recital is required for all master's degrees in performance.
A recital preview is left to the discretion of the faculty members of each
division. In divisions with no preview requirement, the option to have a
preview is still available to students and faculty members. Divisions must
approve recital content well in advance but no less than 3 weeks before
the recital date. The Master's recital must be given before the final oral
exam can occur.

Final Oral Exam
Master's degree students must schedule and pass a final oral exam.
The student's 3-member Graduate Advisory Committee consists of
the student's major professor, one member from the student's major
division and one musicology or music theory professor. This committee
administers the final oral exam.

A program of study for students in cello, double
bass, harp, viola, and violin (minimum of 30
credits) is as follows:

Advanced applied music 12
MUSC 801 Music Bibliography and Research 3
Advanced courses in musicology and music theory 9-12
Electives 1-4
Ensemble (2 semesters) 2

View a check sheet (http://music.ku.edu/resources/checksheets.shtml) for
this degree program.

Master of Music in Music
Performance: Voice and Opera

Master of Music in Performance Degree
Programs
M.M. degree programs in music performance:

- Bassoon
- Carillon
- Cello
- Church music
- Clarinet
- Collaborative piano
- Double bass
- Euphonium
- Flute
- French horn
- Harp
- Oboe
- Opera performance
- Organ
- Percussion
- Piano
- Saxophone
- Trumpet
- Trombone
- Tuba
- Viola
- Violin
- Voice

M.M. in Performance Admission
The applicant must perform an audition before at least two members of
the faculty of the major performance division. In some cases, a video
recording may be submitted in lieu of a live performance. A complete list
of repertoire studied, including past recital programs, should be included
with the graduate application. A pre-screening audition is required for
voice and piano applicants. View School of Music audition requirements
and procedures (http://music.ku.edu/prospective/auditions.shtml).

Students in opera performance must take a minimum of 1 year each in
French, German, and Italian before entering graduate studies or before
completing the M.M. degree. For the master's degree program in voice,
the language requirement is 1 year of 2 of the following: French, German,
or Italian. Both programs have prerequisites in French, German, and
Italian diction. Students found deficient in a particular area of diction must
enroll in the specific course in which they are deficient and pass it with
a minimum grade of C or demonstrate proficiency by passing a diction
diagnostic examination. A student whose transcript shows she or he
has passed a particular language diction course normally is considered
proficient in the diction of that language.

Graduate Admission to the School of
Music

Application procedures and program requirements can change. Please
visit the School of Music Admissions webpage (http://music.ku.edu/
applyaudition/#graduate) for current information.

Graduate programs in the School of Music are open to students with
acceptable baccalaureate degrees, as specified by the admitting areas,
whose academic records indicate that they can do successful work at
the graduate level. Regular admission requires a bachelor's degree and
a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or
from another regionally accredited institution or foreign university with
substantially equivalent bachelor's degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of
Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor
of Philosophy (Ph.D.) are offered through the School of Music. Specific
admission procedures and degree requirements for the M.M. and M.M.E.
programs are described under division headings. Specific admission
procedures and degree requirements for the D.M.A., Ph.D. (musicology/
music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

**Program Areas**

Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

**Diagnostic Examinations**

All entering graduate students (except music education, music therapy, and opera performance majors) must take written diagnostic examinations in musicology and music theory. These are given the week before the start of classes in the Fall and Spring semesters to determine whether a need exists for remedial work in those areas prior to enrolling in graduate coursework. Students who show the need for remediation must complete the prescribed review courses or show mastery of the material by re-examination. Graduate students entering programs in piano must take additional tests in piano literature given before the start of classes. A student is exempt if he or she received a bachelor’s or master’s degree in music from the University of Kansas within the previous 4 years.

**M.M. in Performance Degree Requirements**

A final solo recital is required for all master’s degrees in performance. A recital preview is left to the discretion of the faculty members of each division. In divisions with no preview requirement, the option to have a preview is still available to students and faculty members. Divisions must approve recital content well in advance but no less than 3 weeks before the recital date. The Master's recital must be given before the final oral exam can occur.

**Final Oral Exam**

Master’s degree students must schedule and pass a final oral exam. The student’s 3-member Graduate Advisory Committee consists of the student’s major professor, one member from the student’s major division and one musicology or music theory professor. This committee administers the final oral exam.

**Language and Diction Requirements**

Students in opera performance must take a minimum of 1 year each in French, German, and Italian before entering graduate studies or before completing the M.M. degree. For the master’s degree program in voice, the language requirement is 1 year of 2 of the following: French, German, or Italian. Both programs have prerequisites in French, German, and Italian diction. Students found deficient in a particular area of diction must enroll in the specific course in which they are deficient and pass it with a minimum grade of C or demonstrate proficiency by passing a diction diagnostic examination. A student whose transcript shows she or he has passed a particular language diction course normally is considered proficient in the diction of that language.

**A program of study in opera performance (minimum of 30 credits) as follows:**

- **VOIC 811** Voice 9
- **Vocal coaching** 3
- **MUSC 801** Music Bibliography and Research 3
- **Advanced course in music theory or musicology** 3
- **Opera workshop and opera production** 9
- **Electives** 3
- **Significant role in a fully staged opera production with orchestra** 0

The written diagnostic examinations in musicology and music theory are not required in the opera performance program.

**A program of study in voice (minimum of 30 credits) as follows:**

- **VOIC 811** Voice 12
- **MUSC 801** Music Bibliography and Research 3
- **Advanced courses in musicology and music theory** 9-12
- **Advanced vocal repertoire** 2-4
- **Electives** 2-3

View a check sheet (http://music.ku.edu/resources/checksheets.shtml) for these degree programs.

**Master of Music in Music Performance: Woodwinds**

**Master of Music in Performance Degree Programs**

M.M. degree programs in music performance:

- Bassoon
- Carillon
- Cello
- Church music
- Clarinet
- Collaborative piano
- Double bass
- Euphonium
- Flute
- French horn
- Harp
- Oboe
- Opera performance
- Organ
- Percussion
- Piano
- Saxophone
- Trumpet
- Trombone
M.M. in Performance Admission

The applicant must perform an audition before at least two members of the faculty of the major performance division. In some cases, a video recording may be submitted in lieu of a live performance. A complete list of repertoire studied, including past recital programs, should be included with the graduate application. A pre-screening audition is required for voice and piano applicants. View School of Music audition requirements and procedures (http://music.ku.edu/prospective/auditions.shtml).

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (http://music.ku.edu/applyaudition/#graduate) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

Diagnostic Examinations

All entering graduate students (except music education, music therapy, and opera performance majors) must take written diagnostic examinations in musicology and music theory. These are given the week before the start of classes in the Fall and Spring semesters to determine whether a need exists for remedial work in those areas prior to enrolling in graduate coursework. Students who show the need for remediation must complete the prescribed review courses or show mastery of the material by re-examination. Graduate students entering programs in piano must take additional tests in piano literature given before the start of classes. A student is exempt if he or she received a bachelor’s or master’s degree in music from the University of Kansas within the previous 4 years.

M.M. in Performance Degree Requirements

A final solo recital is required for all master’s degrees in performance. A recital preview is left to the discretion of the faculty members of each division. In divisions with no preview requirement, the option to have a preview is still available to students and faculty members. Divisions must approve recital content well in advance but no less than 3 weeks before the recital date. The Master's recital must be given before the final oral exam can occur.

Final Oral Exam

Master's degree students must schedule and pass a final oral exam. The student's 3-member Graduate Advisory Committee consists of the student's major professor, one member from the student's major division and one musicology or music theory professor. This committee administers the final oral exam. Students in the Master of Music program who play band or orchestral instruments must enroll in a major ensemble for a minimum of 2 semesters.

A program of study for students in bassoon, clarinet, flute, oboe, and saxophone (minimum of 30 credits) is as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced applied music</td>
<td>12</td>
</tr>
<tr>
<td>MUSC 801 Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>Advanced courses in musicology and music theory</td>
<td>9-12</td>
</tr>
<tr>
<td>Electives</td>
<td>1-4</td>
</tr>
<tr>
<td>Ensemble (2 semesters)</td>
<td>2</td>
</tr>
</tbody>
</table>

View a check sheet (http://music.ku.edu/resources/checksheets.shtml) for this degree program.

Master of Music Education in Music Education or Music Therapy

Master of Music Education

With a Major in Music Education or Music Therapy

The division's graduate programs include advanced professional and scholarly study for music educators and music therapists, licensure/certification programs for those with baccalaureate degrees in other fields who plan to enter the music education or music therapy professions (these initial licensure/certification programs typically also require collateral undergraduate study), and advanced study for individuals in related disciplines. Areas of emphasis, curricula, examinations, and regulations and procedures are described in the MEMT Master's
Handbook available in the division office and online (http://music.ku.edu/MME/requirements).

**Music Education M.M.E. Program**

**Master of Music Education**

**With a Major in Music Education**

The division’s graduate programs include advanced professional and scholarly study for music educators and music therapists, licensure/certification programs for those with baccalaureate degrees in other fields who plan to enter the music education or music therapy professions (these initial licensure/certification programs typically also require collateral undergraduate study), and advanced study for individuals in related disciplines. Areas of emphasis, curricula, examinations, and regulations and procedures are described in the MEMT Master’s Handbook available in the division office and online (http://music.ku.edu/MME/requirements).

**M.M.E. in Music Education or M.M.E. in Music Therapy Admission**

Admission requirements are as follows:

1. Undergraduate grade-point average of 3.0 or higher on a 4.0 scale.
2. An appropriate baccalaureate degree to support the individual’s goals for master’s study. Students seeking entrance into the graduate initial certification program in music education or the graduate equivalency program in music therapy should have substantial backgrounds in music regardless of undergraduate major.
3. Scores on the Graduate Record Examination (verbal, quantitative, analytical writing).
4. 3 letters of recommendation regarding applicant’s qualifications for graduate study in their selected program.
5. Submission of a video recording appropriate to degree of application.
6. Other supporting materials are required.

Additional detailed admission requirements and information are found online (http://music.ku.edu/memt/documents/#graduate) in the MEMT Graduate Application Procedure document.

**Graduate Admission to the School of Music**

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (http://music.ku.edu/applyaudition/#graduate) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor’s degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or the graduate level. Regular admission requires a bachelor’s degree and whose academic records indicate that they can do successful work at acceptable baccalaureate degrees, as specified by the admitting areas.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

**Program Areas**

Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in a thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

**Diagnostic Examinations**

All entering graduate students (except music education, music therapy, and opera performance majors) must take written diagnostic examinations in musicology and music theory. These are given the week before the start of classes in the Fall and Spring semesters to determine whether a need exists for remedial work in those areas prior to enrolling in graduate coursework. Students who show the need for remediation must complete the prescribed review courses or show mastery of the material by re-examination. Graduate students entering programs in piano must take additional tests in piano literature given before the start of classes. A student is exempt if he or she received a bachelor’s or master’s degree in music from the University of Kansas within the previous 4 years.

**M.M.E. with a Major in Music Education**

**Course and Proficiency Requirements**

The degree requires a minimum of 30 hours of graduate credit. At least one-half of the required credit hours must be in courses open only to graduate students. At least 20 of the hours must be in regularly scheduled classes excluding directed study, research, and thesis.

**Course Distribution**

- At least 17 hours in MEMT including MEMT 812 Research in Music Education and Music Therapy (3 hours), MEMT 899 Master’s Thesis (3-5 hours if thesis option) or MEMT 898 Comprehensive Examination (1 hour if nonthesis option), and additional hours to reach the minimum elected from 700- and 800-level MEMT courses, subject to the advisor’s approval. At least 2 courses must be at the 800 level.

- At least 10 graduate hours outside of MEMT, including:

  - at least 2 hours of applied music or conducting;
  - at least 3 hours in musicology, theory, or composition;
  - at least 3 hours in a supportive elective area; and
  - additional non-MEMT hours necessary to reach the minimum.

All of these selections are subject to the advisor’s approval.
Admission requirements are as follows:

Music Therapy Admission

M.M.E. in Music Education or M.M.E. in music.ku.edu/MME/requirements) and regulations and procedures are described in the MEMT Master's in related disciplines. Areas of emphasis, curricula, examinations, collateral undergraduate study), and advanced study for individuals (these initial licensure/certification programs typically also require substantial backgrounds in music regardless of undergraduate major.

Students seeking entrance into the graduate initial certification program in music education or the graduate equivalency program in music therapy should have substantial backgrounds in music. Music education or music therapy professions (these initial licensure/certification programs typically also require substantial backgrounds in music regardless of undergraduate major).

Scoring on the Graduate Record Examination (verbal, quantitative, analytical writing).

3 letters of recommendation regarding applicant's qualifications for graduate study in their selected program.

Submission of a video recording appropriate to degree of application.

Other supporting materials are required.

Additional detailed admission requirements and information are found online (http://music.ku.edu/memt/documents/#graduate) in the MEMT Graduate Application Procedure document.

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (http://music.ku.edu/apply#graduate) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

Final Master's Examination (Thesis)

The student must be enrolled at the time the final master's exam is held. The exam will be scheduled for a period of 2 hours. The examination committee shall be comprised of the student's major advisor and 2 other graduate faculty members jointly selected by the student and major advisor. It is the student's responsibility to present the final thesis copy to each committee member 2 weeks in advance of the scheduled exam date.

The candidate will begin by giving a twenty-minute oral presentation on his or her thesis, but the exam is not confined to that topic. Thereafter, the candidate will address questions posed by the committee arising from the candidate's presentation and the thesis document.

Final Master's Examination (Non-Thesis)

The non-thesis option typically functions as a terminal degree and the work must be distributed as indicated in the categories shown on the appropriate Degree Planning Outline. This option culminates with a 1-credit hour comprehensive final examination (MEMT 898 Comprehensive Examination).

The student must be enrolled at the time the final non-thesis master's exam is held. The non-thesis master's exam includes presenting a portfolio and will be scheduled for a period of 2 hours. The examination committee shall be comprised of the student's major advisor and 2 other graduate faculty members jointly selected by the student and major advisor. It is the student's responsibility to present the final portfolio to each committee member 2 weeks in advance of the scheduled examination date.

More information about the thesis or non-thesis option is available online (http://music.ku.edu/MME/requirements) in the MEMT Graduate Handbook.

Plan of Study

The Master of Music Education with a major in music education program plan is available online (http://music.ku.edu/MME/requirements).

Music Therapy M.M.E. Program

Master of Music Education

With a Major in Music Therapy

The division's graduate programs include advanced professional and scholarly study for music educators and music therapists, licensure/certification programs for those with baccalaureate degrees in other fields who plan to enter the music education or music therapy professions (these initial licensure/certification programs typically also require collateral undergraduate study), and advanced study for individuals in related disciplines. Areas of emphasis, curricula, examinations, and regulations and procedures are described in the MEMT Master's Graduate Handbook available in the division office and online (http://music.ku.edu/MME/requirements).

M.M.E. in Music Education or M.M.E. in Music Therapy Admission

Admission requirements are as follows:

1. Undergraduate grade-point average of 3.0 or higher on a 4.0 scale.
2. An appropriate baccalaureate degree to support the individual's goals for master's study. Students seeking entrance into the graduate initial certification program in music education or the graduate equivalency program in music therapy should have substantial backgrounds in music regardless of undergraduate major.
3. Scores on the Graduate Record Examination (verbal, quantitative, analytical writing).
4. 3 letters of recommendation regarding applicant's qualifications for graduate study in their selected program.
5. Submission of a video recording appropriate to degree of application.
6. Other supporting materials are required.

Additional detailed admission requirements and information are found online (http://music.ku.edu/memt/documents/#graduate) in the MEMT Graduate Application Procedure document.

School of Music
Diagnostic Examinations

All entering graduate students (except music education, music therapy, and opera performance majors) must take written diagnostic examinations in musicology and music theory. These are given the week before the start of classes in the Fall and Spring semesters to determine whether a need exists for remedial work in those areas prior to enrolling in graduate coursework. Students who show the need for remediation must complete the prescribed review courses or show mastery of the material by re-examination. Graduate students entering programs in piano must take additional tests in piano literature given before the start of classes. A student is exempt if he or she received a bachelor’s or master’s degree in music from the University of Kansas within the previous 4 years.

M.M.E. with a Major in Music Therapy

Course and Proficiency Requirements

The degree requires a minimum of 30 hours of graduate credit. At least one half of the required credit hours must be in courses open only to graduate students. At least 20 of the hours must be in regularly scheduled classes excluding directed study, research, and thesis.

Course Distribution

- The program must include at least 14 hours of graduate work in the division, including MEMT 812 Research in Music Education and Music Therapy (3 hours), MEMT 864 Philosophy and Theory of Music Therapy (3 hours), MEMT 890 Practicum in Music Therapy (2 hours), MEMT 899 Master’s Thesis (3 hours if thesis option) or MEMT 898 Comprehensive Examination (1 hour if nonthesis option), and additional hours to reach the minimum elected from 700- and 800-level MEMT courses, subject to the advisor’s approval. At least 2 courses must be at the 800 level. At least 9 of these hours must be in regularly scheduled courses.
- At least 10 hours in supportive studies outside MEMT.
- Proficiency as a performing musician must be demonstrated before the degree may be awarded.

The work is distributed as indicated in the categories on the appropriate Degree Planning Outline found online (http://music.ku.edu/MME/requirements). All of these selections are subject to the advisor’s approval.

The M.M.E. with a major in music therapy may be earned only by individuals eligible to sit for the national examination offered by the Certification Board for Music Therapists (CBMT).

Final Master’s Examination (Thesis)

The student must be enrolled at the time the final master’s exam is held. The exam will be scheduled for a period of 2 hours. The examination committee shall be comprised of the student’s major advisor and 2 other graduate faculty members jointly selected by the student and major advisor. It is the student’s responsibility to present the final thesis copy to each committee member 2 weeks in advance of the scheduled exam date.

The candidate will begin by giving a twenty-minute oral presentation on his or her thesis, but the exam is not confined to that topic. Thereafter, the candidate will address questions posed by the committee arising from the candidate’s presentation and the thesis document.

Final Master's Examination (Non-Thesis)

The non-thesis option typically functions as a terminal degree and the work must be distributed as indicated in the categories shown on the appropriate Degree Planning Outline. This option culminates with a 1-credit hour comprehensive final examination (MEMT 898 Comprehensive Examination).

The student must be enrolled at the time the final non-thesis master’s exam is held. The non-thesis master’s exam includes presenting a portfolio and will be scheduled for a period of 2 hours. The examination committee shall be comprised of the student’s major advisor and 2 other graduate faculty members jointly selected by the student and major advisor. It is the student’s responsibility to present the final portfolio to each committee member 2 weeks in advance of the scheduled examination date.

More information about the thesis or non-thesis option is available online (http://music.ku.edu/MME/requirements) in the MEMT Graduate Handbook.

Plan of Study

The Master of Music Education with a major in music therapy program plan is available online (http://music.ku.edu/MME/requirements).

Doctor of Musical Arts

Programs

View requirements for:

- Doctor of Musical Arts in Composition (p. 2246)
- Doctor of Musical Arts in Conducting (p. 2248)
- Doctor of Musical Arts in Music Performance: Brass and Percussion (p. 2250)
- Doctor of Musical Arts in Music Performance: Organ and Church Music (p. 2252)
- Doctor of Musical Arts in Music Performance: Piano (p. 2254)
- Doctor of Musical Arts in Music Performance: Strings (p. 2256)
- Doctor of Musical Arts in Music Performance: Voice (p. 2257)
- Doctor of Musical Arts in Music Performance: Woodwinds (p. 2259)

Doctor of Musical Arts in Composition

The Doctor of Musical Arts (DMA) degree is a professional degree program that recognizes exceptional student academic and music qualifications in preparation for professional careers, including teaching at the university level. The DMA student has the opportunity to collaborate with music scholars, theorists, and other performers to attain a broad and well-rounded foundation for advanced careers in music. The degree of Doctor of Musical Arts is offered in

- Church music (organ or choral conducting emphasis),
- Composition,
- Conducting (choral, orchestral, or wind), and
- Areas of performance
D.M.A. Admission

The applicant is expected to have a master's degree, or its demonstrated equivalent, in the proposed field. In addition to official transcripts and letters of recommendation, all applicants should submit résumés of their training and experience in teaching and performing.

For general information on academic requirements, residence, tenure, and enrollment, see the Graduate Studies (p. 2369) section of the online catalog. Further admission requirements are listed below.

Composition

Applicants should submit scores of original works (including master's thesis), recordings, and lists of past performances.

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (http://music.ku.edu/applyaudition/#graduate) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

Diagnostic Examinations

All entering graduate students (except music education, music therapy, and opera performance majors) must take written diagnostic examinations in musicology and music theory. These are given the week before the start of classes in the Fall and Spring semesters to determine whether a need exists for remedial work in those areas prior to enrolling in graduate coursework. Students who show the need for remediation must complete the prescribed review courses or show mastery of the material by re-examination. Graduate students entering programs in piano must take additional tests in piano literature given before the start of classes. A student is exempt if he or she received a bachelor's or master's degree in music from the University of Kansas within the previous 4 years.

D.M.A. Degree Requirements

Research Skills

Every doctoral student is required to have training in responsible scholarship and research skills pertinent to the doctoral level of research in their field of study.

To meet both components, D.M.A. students in performance or composition and Ph.D. students in Musicology or Music Theory must complete MUSC 801 Music Bibliography and Research (or its equivalent) and, if available, participate in advanced performance seminars.

Advisory Committee

Each graduate student selects a faculty advisory committee, in consultation with the major advisor, subject to the consent of the faculty members involved, and approved by the associate dean. The committee consists of 5 faculty members: at least 2 faculty members from the major division, 1 from musicology or music theory (at least 1 from musicology for D.M.A. composition), and 1 from outside the MUSIC department. This committee administers the comprehensive and final oral examinations.

Recitals

Composition students must present a public program of original compositions approximately 45 minutes in length and participate in at least one work as either a performer or conductor.

All recitals and public appearances required for the D.M.A. are graded by the performance members of the student's graduate advisory committee. The student must achieve at least a grade of B on each recital for satisfactory completion of degree requirements.

Written and Oral Comprehensive Examinations

Composition doctoral students must take written examinations in music theory and musicology when most of the course work has been completed and the research skills/responsible scholarship requirements have been fulfilled. All diagnostic deficiencies must be satisfied before taking the written and oral comprehensive exams. After successful completion of the written examinations, the student is eligible to schedule the oral comprehensive examination administered by the student's graduate advisory committee.

Large-Scale Composition

No later than the end of the semester after successful completion of the comprehensive examination, candidates in performance, conducting, and composition must submit to the graduate advisory committee a proposal for a D.M.A. document or D.M.A. lecture-recital. A candidate in composition must submit a proposal for a large-scale composition. The composition proposal should outline a large-scale work for orchestra, with or without soloists, a work for chorus and orchestra, or an opera, and should include a preliminary analysis.
Upon satisfactory completion of all other degree requirements, candidates must schedule a final oral examination. For students in composition, the examination is primarily a defense of the large-scale composition.

The student must receive at least a grade of B on the composition for satisfactory completion of degree requirements.

Examinations
At least 3 months must elapse between the successful completion of the comprehensive oral examination and the date of the final oral examination for candidates for the D.M.A. degree.

Composition Program

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 953</td>
<td>Advanced Composition</td>
<td>16</td>
</tr>
<tr>
<td>Advanced theory or score reading</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>Advanced courses in musicology</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>MTHC 965</td>
<td>Doctoral Composition Recital</td>
<td>2</td>
</tr>
<tr>
<td>MTHC 999</td>
<td>Dissertation</td>
<td>16</td>
</tr>
</tbody>
</table>

(A work for large ensemble, a major concerto, a work for chorus and orchestra or an opera, or a major work involving live performers and electronic media. A written analysis of the work must be included after the title page in the full score.)

Electives 6

Composition majors must present a public program of original compositions approximately 45 minutes in duration before being admitted to the comprehensive examination.

View a check sheet (http://music.ku.edu/resources/checksheets.shtml) for this degree program.

Doctor of Musical Arts in Conducting

Doctor of Musical Arts

The Doctor of Musical Arts (DMA) degree is a professional degree program that recognizes exceptional student academic and music qualifications in preparation for professional careers, including teaching at the university level. The DMA student has the opportunity to collaborate with music scholars, theorists, and other performers to attain a broad and well-rounded foundation for advanced careers in music. The degree of Doctor of Musical Arts is offered in:

- Church music (organ or choral conducting emphasis),
- Composition,
- Conducting (choral, orchestral, or wind), and
- Areas of performance.

D.M.A. Admission

The applicant is expected to have a master’s degree, or its demonstrated equivalent, in the proposed field. In addition to official transcripts and letters of recommendation, all applicants should submit résumés of their training and experience in teaching and performing.

For general information on academic requirements, residence, tenure, and enrollment, see the Graduate Studies (p. 2369) section of the online catalog. Further admission requirements are listed below.

Conducting

Applicants are expected to have had experience in conducting that spans a period of not less than 2 years. This may include work in public school, college, or with other amateur or professional ensembles. Applicants normally are expected to have a high level of performing ability on an instrument or in voice. Applicants are expected to submit preliminary audition materials that include a DVD recording of the applicant conducting in performance and in rehearsal, a CD recording of an ensemble trained and conducted by the applicant, and a prescribed formal analysis project. Details can be found at the band, choral, and orchestral links on the School of Music’s website (http://music.ku.edu). An entrance interview-audition is required for admission. The audition is heard by a committee composed of the Graduate Faculty of the conducting divisions. Approval by a majority of the committee is required for acceptance into the program. The audition may include:

1. Harmonic and melodic dictation and/or sight-singing;
2. Score identification;
3. Score reading at the keyboard; and
4. Conducting from a band, choral, or orchestral score to be selected by the examiners.

International students may submit a DVD. The Graduate Faculty in the ensemble divisions will review this recording.

Students applying to the D.M.A. program in choral conducting must display a working knowledge of 2 of the following 4 languages: French, German, Spanish, and Italian. A working knowledge normally implies at least 2 semesters of undergraduate study.

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (http://music.ku.edu/applyaudition/#graduate) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:
• Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
• Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

Diagnostic Examinations
All entering graduate students (except music education, music therapy, and opera performance majors) must take written diagnostic examinations in musicology and music theory. These are given the week before the start of classes in the Fall and Spring semesters to determine whether a need exists for remedial work in those areas prior to enrolling in graduate coursework. Students who show the need for remediation must complete the prescribed review courses or show mastery of the material by re-examination. Graduate students entering programs in piano must take additional tests in piano literature given before the start of classes. A student is exempt if he or she received a bachelor’s or master’s degree in music from the University of Kansas within the previous 4 years.

D.M.A. Degree Requirements

Research Skills
Every doctoral student is required to have training in responsible scholarship and research skills pertinent to the doctoral level of research in their field of study.

To meet both components, D.M.A. students in performance or composition and Ph.D. students in Musicology or Music Theory must complete MUSC 801 Music Bibliography and Research (or its equivalent) and, if available, participate in advanced performance seminars.

Advisory Committee
Each graduate student selects a faculty advisory committee, in consultation with the major advisor, subject to the consent of the faculty members involved, and approved by the associate dean. The committee consists of 5 faculty members: at least 2 faculty members from the major division, 1 from musicology or music theory (at least 1 from musicology for D.M.A. composition), and 1 from outside the MUSIC department. This committee administers the comprehensive and final doctoral oral examinations. Performance members of the committee will evaluate and grade the student’s doctoral recitals.

Recitals
All students in performance and in choral, orchestral, and instrumental conducting must perform a total of 3 doctoral recitals. This number does not include the D.M.A. lecture-recital if the student selects a lecture-recital as a final project. Each recital program should be approved by the faculty in the major area before the recital is performed. The first of the doctoral recitals is considered to be a qualifying recital for remaining in the doctoral program. Doctoral conducting students are expected to perform 3 public, concert-length recitals. Up to 2 recitals may consist of the combination of works conducted with various official university ensembles over the course of several semesters. The third recital must be a single program with a major ensemble assigned as part of course work or teaching duties and presented as a regular program in that ensemble’s performance schedule. The third recital may include a complete performance of an opera, ballet/dance, or musical. A student who wishes to use an ensemble other than an official university ensemble must obtain permission to do so from the directors of ensembles.

For the first 2 required recitals in the D.M.A. program in performance and conducting, a recital preview is left to the discretion of the faculty members of each division. In divisions with no preview requirement, the option to have a preview is still available to students and faculty members. Divisions must approve the recital content well in advance but no less than 3 weeks before the recital date. Normally, there is no recital preview for the final recital.

All recitals and public appearances required for the D.M.A. are graded by the performance members of the student’s graduate advisory committee. The student must achieve at least a grade of B on each recital for satisfactory completion of degree requirements.

Written and Oral Comprehensive Examinations
Students must take written examinations in musicology when most of the course work has been completed and the research skills/responsible scholarship requirements have been fulfilled. All diagnostic deficiencies must be satisfied before taking the written and oral comprehensive exams. After successful completion of the written examinations, the student is eligible to schedule the oral comprehensive examination administered by the student’s graduate advisory committee.

Document or Lecture-Recital
No later than the end of the semester after successful completion of the comprehensive examination, candidates in performance, conducting, and composition must submit to the graduate advisory committee a proposal for a D.M.A. lecture-recital document or a longer D.M.A. document only. The proposal for a document or lecture-recital document should include a preliminary bibliography and an outline of the content. The lecture-recital is a public presentation based on a paper written in scholarly form.

Upon satisfactory completion of all other degree requirements, candidates must schedule a final oral examination. For students in performance and conducting, the examination covers the lecture-recital and the research reported in the lecture-recital document. The student must receive at least a grade of B on the document, lecture-recital, or composition for satisfactory completion of degree requirements. A recording of the final lecture-recital must be on file with the Graduate Division of the School of Music.

Examinations
At least 3 months must elapse between the successful completion of the comprehensive oral examination and the date of the final oral examination for candidates for the D.M.A. degree.

Cognate
Each D.M.A. student (not including Composition) may choose a defined cognate area of 12 credits with the approval of the student’s advisory committee.
Doctor of Musical Arts in Music Performance: Brass and Percussion

Doctor of Musical Arts

The Doctor of Musical Arts (DMA) degree is a professional degree program that recognizes exceptional student academic and music qualifications in preparation for professional careers, including teaching at the university level. The DMA student has the opportunity to collaborate with music scholars, theorists, and other performers to attain a broad and well-rounded foundation for advanced careers in music. The degree of Doctor of Musical Arts is offered in

- Church music (organ or choral conducting emphasis),
- Composition,
- Conducting (choral, orchestral, or wind), and
- Areas of performance.

D.M.A. Admission

The applicant is expected to have a master’s degree, or its demonstrated equivalent, in the proposed field. In addition to official transcripts and letters of recommendation, all applicants should submit résumés of their training and experience in teaching and performing.

For general information on academic requirements, residence, tenure, and enrollment, see the Graduate Studies (p. 2369) section of the online catalog. Further admission requirements are listed below.

Performance

The applicant must be prepared to perform the equivalent of a full master’s recital as deemed appropriate by the major performance division. The audition is heard by at least two members of the major division Graduate Faculty. The applicant should consult the major performance division for specific memory and repertoire requirements.

The applicant also should submit with the application a comprehensive repertoire list indicating work studied, memorized, performed in public, or ready for immediate performance. In the case of international students, acceptance may be achieved by submitting a video tape (DVD) to be reviewed by the Graduate Faculty in the major division. A pre-screening audition is required for voice and piano applicants. View School of Music audition requirements and procedures (http://music.ku.edu/prospective/auditions.shtml).

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (http://music.ku.edu/applyaudition/#graduate) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor’s degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor’s degree requirements.
Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas
Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all coursework counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document, or dissertation, and on each recital for satisfactory completion of degree requirements.

Diagnostic Examinations
All entering graduate students (except music education, music therapy, and opera performance majors) must take written diagnostic examinations in musicology and music theory. These are given the week before the start of classes in the Fall and Spring semesters to determine whether a need exists for remedial work in those areas prior to enrolling in graduate coursework. Students who show the need for remediation must complete the prescribed review courses or show mastery of the material by re-examination. Graduate students entering programs in piano must take additional tests in piano literature given before the start of classes. A student is exempt if he or she received a bachelor’s or master’s degree in music from the University of Kansas within the previous 4 years.

D.M.A. Degree Requirements
Research Skills
Every doctoral student is required to have training in both responsible scholarship and research skills pertinent to the doctoral level of research in their field of study.

To meet both components, D.M.A. students in performance or composition and Ph.D. students in Musicology or Music Theory must complete MUSC 801 Music Bibliography and Research (or its equivalent) and, if available, participate in advanced performance seminars.

Advisory Committee
Each graduate student selects a faculty advisory committee, in consultation with the major advisor, subject to the consent of the faculty members involved, and approved by the associate dean. The committee consists of 5 faculty members: at least 2 faculty members from the major division, 1 from musicology or music theory (at least 1 from musicology for D.M.A. composition), and 1 from outside the MUSIC department. This committee administers the comprehensive and final doctoral oral examinations. Performance members of the committee will evaluate and grade the student's doctoral recitals.

Recitals
All students in performance and in choral, orchestral, and instrumental conducting must perform a total of 3 public doctoral recitals. This number does not include the D.M.A. lecture-recital if the student selects a lecture-recital as a final project. Each recital program should be approved by the faculty in the major area before the recital is performed. One of the three required recitals must be a full solo recital. The other two may be a full solo recital, concerto performance, chamber music program, or a second lecture-recital.

For the first 2 required recitals in the D.M.A. program in performance and conducting, a recital preview is left to the discretion of the faculty members of each division. In divisions with no preview requirement, the option to have a preview is still available to students and faculty members. Divisions must approve the recital content well in advance but no less than 3 weeks before the recital date. Normally, there is no recital preview for the final recital.

All recitals and public appearances required for the D.M.A. are graded by the performance members of the student’s graduate advisory committee. The student must achieve at least a grade of B on each recital for satisfactory completion of degree requirements.

Written and Oral Comprehensive Examinations
Students must take written examinations in musicology when most of the course work has been completed and the research skills/responsible scholarship requirements have been fulfilled. All diagnostic deficiencies must be satisfied before taking the written and oral comprehensive exams. After successful completion of the written examinations, the student is eligible to schedule the oral comprehensive examination administered by the student’s graduate advisory committee.

Document or Lecture-Recital
No later than the end of the semester after successful completion of the comprehensive examination, candidates in performance, conducting, and composition must submit to the student’s graduate advisory committee a proposal for a D.M.A. lecture-recital document or a longer D.M.A. document only. The proposal for a document or lecture-recital document should include a preliminary bibliography and an outline of the content. The lecture-recital is a public presentation based on a paper written in scholarly form.

Upon satisfactory completion of all other degree requirements, candidates must schedule a final oral examination. For students in performance and conducting, the examination covers the lecture-recital and the research reported in the lecture-recital document. The student must receive at least a grade of B on the document, lecture-recital, or composition for satisfactory completion of degree requirements. A recording of the final lecture-recital must be on file with the Graduate Division of the School of Music.

Examinations
At least 3 months must elapse between the successful completion of the comprehensive oral examination and the date of the final oral examination for candidates for the D.M.A. degree.
Cognate

Each D.M.A. student (not including Composition) may choose a defined cognate area of 12 credits with the approval of the student’s advisory committee.

Hours taken to fulfill the Musicology, Music Theory and elective requirements may be used to meet the optional 12 credit Cognate.

Percussion Program

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Applied music</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Seminar in percussion</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Advanced courses in musicology and music theory</td>
<td>12</td>
</tr>
<tr>
<td>PCUS 965</td>
<td>Doctoral Recitals</td>
<td>3</td>
</tr>
<tr>
<td>W&amp;P 708</td>
<td>Special Studies in Percussion Instrument Pedagogy</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>D.M.A. document or lecture-recital</td>
<td>4</td>
</tr>
</tbody>
</table>

* Credits may be used to fulfill the 12 optional Cognate credits.

View a check sheet (http://music.ku.edu/resources/checksheets.shtml) for this degree program.

French Horn, Trombone, Trumpet, and Tuba Program

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Applied music</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Seminar in trombone, trumpet, or tuba</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Recitals</td>
<td>3</td>
</tr>
<tr>
<td>W&amp;P 704</td>
<td>Special Studies in Brass Instrument Pedagogy</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Advanced courses in musicology and music theory</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>D.M.A. document or lecture-recital</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>9</td>
</tr>
</tbody>
</table>

* Credits may be used to fulfill the 12 optional Cognate credits.

View a check sheet (http://music.ku.edu/resources/checksheets.shtml) for this degree program.

Doctor of Musical Arts in Music Performance: Organ and Church Music

Doctor of Musical Arts

The Doctor of Musical Arts (DMA) degree is a professional degree program that recognizes exceptional student academic and music qualifications in preparation for professional careers, including teaching at the university level. The DMA student has the opportunity to collaborate with music scholars, theorists, and other performers to attain a broad and well-rounded foundation for advanced careers in music. The degree of Doctor of Musical Arts is offered in

- Church music (organ or choral conducting emphasis),
- Composition,
- Conducting (choral, orchestral, or wind), and
- Areas of performance.

D.M.A. Admission

The applicant is expected to have a master’s degree, or its demonstrated equivalent, in the proposed field. In addition to official transcripts and letters of recommendation, all applicants should submit résumés of their training and experience in teaching and performing.

For general information on academic requirements, residence, tenure, and enrollment, see the Graduate Studies (p. 2369) section of the online catalog. Further admission requirements are listed below.

Performance

The applicant must be prepared to perform the equivalent of a full master’s recital as deemed appropriate by the major performance division. The audition is heard by at least two members of the major division Graduate Faculty. The applicant should consult the major performance division for specific memory and repertoire requirements. The applicant also should submit with the application a comprehensive repertoire list indicating work studied, memorized, performed in public, or ready for immediate performance. In the case of international students, acceptance may be achieved by submitting a video tape (DVD) to be reviewed by the Graduate Faculty in the major division. A pre-screening audition is required for voice and piano applicants. View School of Music audition requirements and procedures (http://music.ku.edu/prospective/auditions.shtml).

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (http://music.ku.edu/applyaudition/#graduate) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor’s degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor’s degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.
At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in a thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

**Diagnostic Examinations**

All entering graduate students (except music education, music therapy, and opera performance majors) must take written diagnostic examinations in musicology and music theory. These are given the week before the start of classes in the Fall and Spring semesters to determine whether a need exists for remedial work in those areas prior to enrolling in graduate coursework. Students who show the need for remediation must complete the prescribed review courses or show mastery of the material by re-examination. Graduate students entering programs in piano must take additional tests in piano literature given before the start of classes. A student is exempt if he or she received a bachelor’s or master’s degree in music from the University of Kansas within the previous 4 years.

**D.M.A. Degree Requirements**

**Research Skills**

Every doctoral student is required to have training in both responsible scholarship and research skills pertinent to the doctoral level of research in their field of study.

To satisfy both components, D.M.A. students in performance or composition and Ph.D. students in Musicology or Music Theory must complete MUSC 801 Music Bibliography and Research (or its equivalent) and, if available, participate in advanced performance seminars.

**Language Requirement**

All organ and church music doctoral students are required to demonstrate competence in one foreign language prior to taking their comprehensive oral examination.

**Advisory Committee**

Each graduate student, in consultation with the major advisor, selects a Graduate Advisory Committee subject to the consent of the faculty members involved, and approval of the School of Music Graduate office. The committee consists of 5 faculty members: at least 2 faculty members from the major division, 1 from musicology or music theory (at least 1 from musicology for D.M.A. composition), 1 from the School of Music at large and 1 from outside the MUSIC department. This committee administers the comprehensive and final oral examinations. Performance members of the advisory committee grade the required degree recitals.

**Recitals**

All students in performance and conducting must perform a total of 3 public recitals. This does not include the D.M.A. lecture-recital if the student selects a lecture-recital as a final project. Each recital program should be approved by the faculty in the major area before the recital is performed. At least two of the three degree recitals must be performed before the oral comprehensive examination. The first of the doctoral recitals is considered to be a qualifying recital for determining whether the student can remain in the doctoral program.

All recitals required for the D.M.A. are graded by the performance area members of the student’s advisory committee. The student must achieve at least a grade of B on each recital for satisfactory completion of degree requirements. Recordings of all recitals are kept in the School of Music. Programs for all recitals must be submitted to the School of Music Graduate office.

Church Music with Choral Conducting emphasis must present 2 choral recitals and 1 organ or voice recital. Church Music with Organ emphasis must present 2 organ recitals and 1 choral recital.

**Written and Oral Comprehensive Examinations**

Students must take written examinations in musicology when most of the course work has been completed and the research skills/responsible scholarship requirements have been fulfilled. If all diagnostic deficiencies must be satisfied before taking the written and oral comprehensive exams. After successful completion of the written examinations, the student is eligible to schedule the oral comprehensive examination administered by the student’s graduate advisory committee. Majors in performance and conducting must have presented 2 of the 3 required recitals before taking the examinations.

**Document or Lecture-Recital**

No later than the end of the semester after successful completion of the comprehensive examination, candidates in performance, conducting, and composition must submit to the graduate advisory committee a proposal for a D.M.A. lecture-recital document or D.M.A. document. The research proposal for a document or lecture-recital should include a preliminary bibliography and an outline of the content. The lecture-recital is a public presentation based on a paper written in scholarly form.

Upon satisfactory completion of all other degree requirements, candidates must schedule a final oral examination (defense). For students in performance and conducting, the examination covers the third recital and the research reported in the document or lecture-recital. The student must receive at least a grade of B on the document and lecture-recital for satisfactory completion of degree requirements.

**Examinations**

At least 3 months must elapse between the successful completion of the comprehensive oral examination and the date of the final oral examination/defense for candidates for the D.M.A. degree.

**Cognate**

Each D.M.A. student (not including Composition) may choose a defined cognate area of 12 credits with the approval of the student's advisory committee.

Hours taken to fulfill the Musicology, Music Theory and elective requirements may be used to meet the optional 12 credit Cognate.

**Church Music (Choral Conducting Emphasis) Program**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 801</td>
<td>3</td>
</tr>
<tr>
<td>Advanced choral conducting</td>
<td>12</td>
</tr>
<tr>
<td>Instrumental conducting</td>
<td>4</td>
</tr>
<tr>
<td>Advanced courses in church music</td>
<td>12</td>
</tr>
<tr>
<td>Recitals (2 choral recitals, 1 organ or voice recital)</td>
<td>3</td>
</tr>
</tbody>
</table>
Advanced courses in musicology and music theory* 12
Secondary applied area (organ or voice) 6
Advanced courses in secondary applied area (organ or voice) 6
D.M.A. document or lecture-recital 4
Electives* 5

* Credits may be used to fulfill the 12 optional Cognate credits.

• D.M.A. church music majors (choral conducting emphasis) who have not studied voice for a minimum of 2 semesters before entering this program must enroll in voice for 2 semesters.
• Students also must be enrolled in a choral ensemble for a minimum of 2 semesters.

View a check sheet (http://music.ku.edu/resources/checksheets.shtml) for this degree program.

Church Music (Organ Emphasis) Program

MUSC 801 Music Bibliography and Research 3
ORGN 961 Directed Performance 18
Advanced courses in organ 6
Advanced courses in church music 12
Advanced courses in musicology and music theory* 12
Recitals (2 organ recitals, 1 choral recital) 3
Secondary applied area (choral conducting) 6
CHUR 622 Bales Chorale (Minimum of 4 semesters) 0
ORGN 702 Master Class in Organ - Lab (Minimum of 4 semesters) 0
ORGN 720 Studio Class in Organ-Lab (Minimum of 4 semesters) 0
D.M.A. document or lecture-recital 4

* Credits may be used to fulfill the 12 optional Cognate credits.

• D.M.A. church music majors (organ emphasis) who have not studied voice for a minimum of 2 semesters before entering this program must enroll for 2 semesters.
• Students must take 2 credits of Service Playing and Improv, if not previously taken.

View a check sheet (http://music.ku.edu/resources/checksheets.shtml) for this degree program.

Organ Program

MUSC 801 Music Bibliography and Research 3
ORGN 961 Directed Performance 18
Advanced courses in organ 6
Advanced courses in church music 12
Advanced courses in musicology and music theory* 12
ORGN 965 Doctoral Recitals (3 organ recitals, 1 credit each) 3
CHUR 622 Bales Chorale (Minimum of 2 semesters) 0-1
ORGN 702 Master Class in Organ - Lab (Minimum of 4 semesters) 0
ORGN 720 Studio Class in Organ-Lab (Minimum of 4 semesters) 0
D.M.A. document or lecture-recital 4

* Credits may be used to fulfill the 12 optional Cognate credits.

View a check sheet (http://music.ku.edu/resources/checksheets.shtml) for this degree program.

Doctor of Musical Arts in Music Performance: Piano

Doctor of Musical Arts

The Doctor of Musical Arts (DMA) degree is a professional degree program that recognizes exceptional student academic and music qualifications in preparation for professional careers, including teaching at the university level. The DMA student has the opportunity to collaborate with music scholars, theorists, and other performers to attain a broad and well-rounded foundation for advanced careers in music. The degree of Doctor of Musical Arts is offered in:

• Church music (organ or choral conducting emphasis),
• Composition,
• Conducting (choral, orchestral, or wind), and
• Areas of performance.

D.M.A. Admission

The applicant is expected to have a master’s degree, or its demonstrated equivalent, in the proposed field. In addition to official transcripts and letters of recommendation, all applicants should submit résumés of their training and experience in teaching and performing.

For general information on academic requirements, residence, tenure, and enrollment, see the Graduate Studies (p. 2369) section of the online catalog. Further admission requirements are listed below.

Performance

The applicant must be prepared to perform the equivalent of a full master’s recital as deemed appropriate by the major performance division. The audition is heard by at least two members of the major division Graduate Faculty. The applicant should consult the major performance division for specific memory and repertoire requirements. The applicant also should submit with the application a comprehensive repertoire list indicating work studied, memorized, performed in public, or ready for immediate performance. In the case of international students, acceptance may be achieved by submitting a video tape (DVD) to be reviewed by the Graduate Faculty in the major division. A pre-screening audition is required for voice and piano applicants. View School of Music audition requirements and procedures (http://music.ku.edu/prospective/auditions.shtml).

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (http://music.ku.edu/applyaudition/#graduate) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor’s degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or
Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas
Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

Diagnostic Examinations
All entering graduate students (except music education, music therapy, and opera performance majors) must take written diagnostic examinations in musicology and music theory. These are given the week before the start of classes in the Fall and Spring semesters to determine whether a need exists for remedial work in those areas prior to enrolling in graduate coursework. Students who show the need for remediation must complete the prescribed review courses or show mastery of the material by re-examination. Graduate students entering programs in piano must take additional tests in piano literature given before the start of classes. A student is exempt if he or she received a bachelor’s or master’s degree in music from the University of Kansas within the previous 4 years.

D.M.A. Degree Requirements
Research Skills
Doctoral students are required to have training in both responsible scholarship and research skills pertinent to the doctoral level of research in their field of study.

To satisfy both components, D.M.A. students in performance or composition and Ph.D. students in Musicology or Music Theory must complete MUSC 801 Music Bibliography and Research (or its equivalent) and, if available, participate in advanced performance seminars.

Advisory Committee
Each graduate student, in consultation with the major advisor, selects a Graduate Advisory Committee subject to the consent of the faculty members involved, and approval of the School of Music Graduate office. The committee consists of 5 faculty members: at least 2 faculty members from the major division, 1 from musicology or music theory (at least 1 from musicology for D.M.A. composition), 1 from the School of Music at large and 1 from outside the MUSIC department. This committee administers the comprehensive and final oral examinations. Performance members of the advisory committee grade the required degree recitals.

Recitals
All students in performance and conducting must perform a total of 3 public recitals. This does not include the D.M.A. lecture-recital if the student selects a lecture-recital as a final project. Each recital program should be approved by the faculty in the major area before the recital is performed. At least two of the three degree recitals must be performed before the oral comprehensive examination. The first of the doctoral recitals is considered to be a qualifying recital for determining whether the student can remain in the doctoral program.

All recitals required for the D.M.A. are graded by the performance area members of the student’s advisory committee. The student must achieve at least a grade of B on each recital for satisfactory completion of degree requirements. Recordings of all recitals are kept in the School of Music. Programs for all recitals must be submitted to the School of Music Graduate office.

Written and Oral Comprehensive Examinations
Students must take written examinations in musicology when most of the course work has been completed and the research skills/responsible scholarship requirements have been fulfilled. All diagnostic deficiencies must be satisfied before taking the written and oral comprehensive exams. After successful completion of the written examinations, the student is eligible to schedule the oral comprehensive examination administered by the student’s graduate advisory committee. Majors in performance and conducting must have presented 2 of the 3 required recitals before taking the examinations.

Document or Lecture-Recital
No later than the end of the semester after successful completion of the comprehensive examination, candidates in performance, conducting, and composition must submit to the graduate advisory committee a proposal for a D.M.A. lecture-recital document or D.M.A. document. The research proposal for a document or lecture-recital should include a preliminary bibliography and an outline of the content. The lecture-recital is a public presentation based on a paper written in scholarly form.

Upon satisfactory completion of all other degree requirements, candidates must schedule a final oral examination (defense). For students in performance and conducting, the examination covers the third recital and the research reported in the document or lecture-recital. The student must receive at least a grade of B on the document and lecture-recital for satisfactory completion of degree requirements.

Examinations
At least 3 months must elapse between the successful completion of the comprehensive oral examination and the date of the final oral examination/defense for candidates for the D.M.A. degree.

Cognate
Each D.M.A. student (not including Composition) may choose a defined cognate area of 12 credits with the approval of the student’s advisory committee.
Piano Performance, Literature, and Pedagogy Program

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>PIAN 961</td>
<td>Directed Performance (Applied lessons)</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Seminars in piano</td>
<td>9</td>
</tr>
<tr>
<td>PIAN 965</td>
<td>Doctoral Recitals (1 credit each)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Advanced courses in musicology and music theory*</td>
<td>12</td>
</tr>
<tr>
<td>D.M.A. document or lecture-recital</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Minor concentration (pedagogy or accompanying)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Electives*</td>
<td></td>
<td>0-3</td>
</tr>
</tbody>
</table>

* Credits may be used to fulfill the 12 optional Cognate credits.

All teaching assistants must enroll in 1 semester of PIAN 840 for 3 credit hours.

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (http://music.ku.edu/applyaudition/graduate) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor’s degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor’s degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

Diagnostic Examinations

All entering graduate students (except music education, music therapy, and opera performance majors) must take written diagnostic examinations in musicology and music theory. These are given the week before the start of classes in the Fall and Spring semesters to determine whether a need exists for remedial work in those areas prior to enrolling in graduate coursework. Students who show the need for remediation must complete the prescribed review courses or show mastery of the material by re-examination. Graduate students entering programs in piano must take additional tests in piano literature given before the start of classes. A student is exempt if he or she received a bachelor’s or master’s degree in music from the University of Kansas within the previous 4 years.
D.M.A. Degree Requirements

Research Skills

Doctoral students are required to have training in both responsible scholarship and research skills pertinent to the doctoral level of research in their field of study.

To satisfy both components, D.M.A. students in performance or composition and Ph.D. students in Musicology or Music Theory must complete MUSC 801 Music Bibliography and Research (or its equivalent) and, if available, participate in advanced performance seminars.

Advisory Committee

Each graduate student, in consultation with the major advisor, selects a Graduate Advisory Committee subject to the consent of the faculty members involved, and approval of the School of Music Graduate office. The committee consists of 5 faculty members: at least 2 faculty members from the major division, 1 from musicology or music theory (at least 1 from musicology for D.M.A. composition), 1 from the School of Music at large and 1 from outside the MUSIC department. This committee administers the comprehensive and final oral examinations. Performance members of the advisory committee grade the required degree recitals.

Recitals

All students in performance and conducting must perform a total of 3 public recitals. This does not include the D.M.A. lecture-recital if the student selects a lecture-recital as a final project. Each recital program should be approved by the faculty in the major area before the recital is performed. At least two of the three degree recitals must be performed before the oral comprehensive examination. The first of the doctoral recitals is considered to be a qualifying recital for determining whether the student can remain in the doctoral program.

All recitals required for the D.M.A. are graded by the performance area members of the student’s advisory committee. The student must achieve at least a grade of B on each recital for satisfactory completion of degree requirements. Recordings of all recitals are kept in the School of Music. Programs for all recitals must be submitted to the School of Music Graduate office.

Written and Oral Comprehensive Examinations

Students must take written examinations in musicology when most of the course work has been completed and the research skills/responsible scholarship requirements have been fulfilled. All diagnostic deficiencies must be satisfied before taking the written and oral comprehensive exams. After successful completion of the written examinations, the student is eligible to schedule the oral comprehensive examination administered by the student’s graduate advisory committee. Majors in performance and conducting must have presented 2 of the 3 required recitals before taking the examinations.

Document or Lecture-Recital

No later than the end of the semester after successful completion of the comprehensive examination, candidates in performance, conducting, and composition must submit to the graduate advisory committee a proposal for a D.M.A. lecture-recital document or D.M.A. document. The research proposal for a document or lecture-recital should include a preliminary bibliography and an outline of the content. The lecture-recital is a public presentation based on a paper written in scholarly form.

Upon satisfactory completion of all other degree requirements, candidates must schedule a final oral examination (defense). For students in performance and conducting, the examination covers the third recital and the research reported in the document or lecture-recital. The student must receive at least a grade of B on the document and lecture-recital for satisfactory completion of degree requirements.

Examinations

At least 3 months must elapse between the successful completion of the comprehensive oral examination and the date of the final oral examination/defense for candidates for the D.M.A. degree.

Cognate

Each D.M.A. student (not including Composition) may choose a defined cognate area of 12 credits with the approval of the student’s advisory committee.

Hours taken to fulfill the Musicology, Music Theory and elective requirements may be used to meet the optional 12 credit Cognate.

Strings Program

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>Applied music</td>
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<td>18</td>
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<tr>
<td>Seminars</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Recitals (1 credit each)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Advanced courses in musicology and music theory*</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>D.M.A. document or lecture-recital</td>
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<td>4</td>
</tr>
<tr>
<td>Electives*</td>
<td></td>
<td>6</td>
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</tbody>
</table>

* Credits may be used to fulfill the 12 optional Cognate credits.

View a check sheet (http://music.ku.edu/resources/checksheets.shtml) for this degree program.

Doctor of Musical Arts in Music Performance: Voice

Doctor of Musical Arts

The Doctor of Musical Arts (DMA) degree is a professional degree program that recognizes exceptional student academic and music qualifications in preparation for professional careers, including teaching at the university level. The DMA student has the opportunity to collaborate with music scholars, theorists, and other performers to attain a broad and well-rounded foundation for advanced careers in music. The degree of Doctor of Musical Arts is offered in

- Church music (organ or choral conducting emphasis),
- Composition,
- Conducting (choral, orchestral, or wind), and
- Areas of performance.

D.M.A. Admission

The applicant is expected to have a master’s degree, or its demonstrated equivalent, in the proposed field. In addition to official transcripts and
letters of recommendation, all applicants should submit résumés of their training and experience in teaching and performing.

For general information on academic requirements, residence, tenure, and enrollment, see the Graduate Studies (p. 2369) section of the online catalog. Further admission requirements are listed below.

Performance

The applicant must be prepared to perform the equivalent of a full master’s recital as deemed appropriate by the major performance division. The audition is heard by at least two members of the major division Graduate Faculty. The applicant should consult the major performance division for specific memory and repertoire requirements. The applicant also should submit with the application a comprehensive repertoire list indicating work studied, memorized, performed in public, or ready for immediate performance. In the case of international students, acceptance may be achieved by submitting a video tape (DVD) to be reviewed by the Graduate Faculty in the major division. A pre-screening audition is required for voice and piano applicants. View School of Music audition requirements and procedures (http://music.ku.edu/prospective/auditions.shtml).

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (http://music.ku.edu/applyaudition/#graduate) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor’s degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor’s degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

Diagnostic Examinations

All entering graduate students (except music education, music therapy, and opera performance majors) must take written diagnostic examinations in musicology and music theory. These are given the week before the start of classes in the Fall and Spring semesters to determine whether a need exists for remedial work in those areas prior to enrolling in graduate coursework. Students who show the need for remediation must complete the prescribed review courses or show mastery of the material by re-examination. Graduate students entering programs in piano must take additional tests in piano literature given before the start of classes. A student is exempt if he or she received a bachelor’s or master’s degree in music from the University of Kansas within the previous 4 years.

D.M.A. Degree Requirements

Research Skills

Doctoral students are required to have training in both responsible scholarship and research skills pertinent to the doctoral level of research in their field of study.

To satisfy both components, D.M.A. students in performance or composition and Ph.D. students in Musicology or Music Theory must complete MUSC 801 Music Bibliography and Research (or its equivalent) and, if available, participate in advanced performance seminars.

Advisory Committee

Each graduate student, in consultation with the major advisor, selects a Graduate Advisory Committee subject to the consent of the faculty members involved, and approval of the School of Music Graduate office. The committee consists of 5 faculty members: at least 2 faculty members from the major division, 1 from musicology or music theory (at least 1 from musicology for D.M.A. composition), 1 from the School of Music at large and 1 from outside the MUSIC department. This committee administers the comprehensive and final oral examinations. Performance members of the advisory committee grade the required degree recitals.

Recitals

All students in performance and conducting must perform a total of 3 public recitals. This does not include the D.M.A. lecture-recital if the student selects a lecture-recital as a final project. Each recital program should be approved by the faculty in the major area before the recital is performed. At least two of the three degree recitals must be performed before the oral comprehensive examination. The first of the doctoral recitals is considered to be a qualifying recital for determining whether the student can remain in the doctoral program.

All recitals required for the D.M.A. are graded by the performance area members of the student’s advisory committee. The student must achieve at least a grade of B on each recital for satisfactory completion of degree requirements. Recordings of all recitals are kept in the School of Music. Programs for all recitals must be submitted to the School of Music Graduate office.

Written and Oral Comprehensive Examinations

Students must take written examinations in musicology when most of the course work has been completed and the research skills/responsible
scholarship requirements have been fulfilled. All diagnostic deficiencies must be satisfied before taking the written and oral comprehensive exams. After successful completion of the written examinations, the student is eligible to schedule the oral comprehensive examination administered by the student’s graduate advisory committee. Majors in performance and conducting must have presented 2 of the 3 required recitals before taking the examinations.

**Document or Lecture-Recital**

No later than the end of the semester after successful completion of the comprehensive examination, candidates in performance, conducting, and composition must submit to the graduate advisory committee a proposal for a D.M.A. lecture-recital document or D.M.A. document. The research proposal for a document or lecture-recital should include a preliminary bibliography and an outline of the content. The lecture-recital is a public presentation based on a paper written in scholarly form.

Upon satisfactory completion of all other degree requirements, candidates must schedule a final oral examination (defense). For students in performance and conducting, the examination covers the third recital and the research reported in the document or lecture-recital. The student must receive at least a grade of B on the document and lecture-recital for satisfactory completion of degree requirements.

**Language and Diction**

Students in the D.M.A. program in voice must take or have taken a minimum of 1 year each of French, German, and Italian, and courses in English, French, Italian, and German diction before completing the D.M.A. program. If deficient in any language or diction coursework, as determined either through transcript evaluations or during the audition when selections from each language have been performed, the student must enroll in the specific course for that deficiency and pass with a grade of C or better. All deficiencies must be satisfied before the oral comprehensive exam can be scheduled.

**Examinations**

At least 3 months must elapse between the successful completion of the comprehensive oral examination and the date of the final oral examination/defense for candidates for the D.M.A. degree.

**Cognate**

Each D.M.A. student (not including Composition) may choose a defined cognate area of 12 credits with the approval of the student’s advisory committee.

Hours taken to fulfill the Musicology, Music Theory and elective requirements may be used to meet the optional 12 credit Cognate.

**Voice Program**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>VOIC 961</td>
<td>Directed Performance (Applied lessons)</td>
<td>18</td>
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<td></td>
<td>Seminars</td>
<td>9</td>
</tr>
<tr>
<td>VOIC 965</td>
<td>Doctoral Recitals (1 credit each)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Advanced courses in musicology and music theory*</td>
<td>12</td>
</tr>
<tr>
<td>Electives*</td>
<td></td>
<td>7-10</td>
</tr>
<tr>
<td>D.M.A. document or lecture-recital</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

* Credits may be used to fulfill the 12 optional Cognate credits.

View a check sheet (http://music.ku.edu/resources/checksheets.shtml) for this degree program.

**Doctor of Musical Arts in Music Performance: Woodwinds**

**Doctor of Musical Arts**

The Doctor of Musical Arts (DMA) degree is a professional degree program that recognizes exceptional student academic and music qualifications in preparation for professional careers, including teaching at the university level. The DMA student has the opportunity to collaborate with music scholars, theorists, and other performers to attain a broad and well-rounded foundation for advanced careers in music. The degree of Doctor of Musical Arts is offered in:

- Church music (organ or choral conducting emphasis),
- Composition,
- Conducting (choral, orchestral, or wind), and
- Areas of performance.

**D.M.A. Admission**

The applicant is expected to have a master’s degree, or its demonstrated equivalent, in the proposed field. In addition to official transcripts and letters of recommendation, all applicants should submit résumés of their training and experience in teaching and performing.

For general information on academic requirements, residence, tenure, and enrollment, see the Graduate Studies (p. 2369) section of the online catalog. Further admission requirements are listed below.

**Performance**

The applicant must be prepared to perform the equivalent of a full master’s recital as deemed appropriate by the major performance division. The audition is heard by at least two members of the major division Graduate Faculty. The applicant should consult the major performance division for specific memory and repertoire requirements. The applicant also should submit with the application a comprehensive repertoire list indicating work studied, memorized, performed in public, or ready for immediate performance. In the case of international students, acceptance may be achieved by submitting a video tape (DVD) to be reviewed by the Graduate Faculty in the major division. A pre-screening audition is required for voice and piano applicants. View School of Music audition requirements and procedures (http://music.ku.edu/prospective/auditions.shtml).

**Graduate Admission to the School of Music**

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (http://music.ku.edu/applyaudition/#graduate) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor’s degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or
Program Areas
Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

Diagnostic Examinations
All entering graduate students (except music education, music therapy, and opera performance majors) must take written diagnostic examinations in musicology and music theory. These are given the week before the start of classes in the Fall and Spring semesters to determine whether a need exists for remedial work in those areas prior to enrolling in graduate coursework. Students who show the need for remediation must complete the prescribed review courses or show mastery of the material by re-examination. Graduate students entering programs in piano must take additional tests in piano literature given the week before the start of classes. A student is exempt if he or she received a bachelor’s or master’s degree in music from the University of Kansas within the previous 4 years.

D.M.A. Degree Requirements
Research Skills
Doctoral students are required to have training in both responsible scholarship and research skills pertinent to the doctoral level of research in their field of study.

To satisfy both components, D.M.A. students in performance or composition and Ph.D. students in Musicology or Music Theory must complete MUSC 801 Music Bibliography and Research (or its equivalent) and, if available, participate in advanced performance seminars.

Advisory Committee
Each graduate student, in consultation with the major advisor, selects a Graduate Advisory Committee subject to the consent of the faculty members involved, and approval of the School of Music Graduate office. The committee consists of 5 faculty members: at least 2 faculty members from the major division, 1 from musicology or music theory (at least 1 from musicology for D.M.A. composition), 1 from the School of Music at large and 1 from outside the MUSIC department. This committee administers the comprehensive and final oral examinations. Performance members of the advisory committee grade the required recitals.

Recitals
All students in performance and conducting must perform a total of 3 public recitals. This does not include the D.M.A. lecture-recital if the student selects a lecture-recital as a final project. Each recital program should be approved by the faculty in the major area before the recital is performed. At least two of the three degree recitals must be performed before the oral comprehensive examination. The first of the doctoral recitals is considered to be a qualifying recital for determining whether the student can remain in the doctoral program.

All recitals required for the D.M.A. are graded by the performance area members of the student’s advisory committee. The student must achieve at least a grade of B on each recital for satisfactory completion of degree requirements. Recordings of all recitals are kept in the School of Music. Programs for all recitals must be submitted to the School of Music Graduate office.

Written and Oral Comprehensive Examinations
Students must take written examinations in musicology when most of the course work has been completed and the research skills/responsible scholarship requirements have been fulfilled. All diagnostic deficiencies must be satisfied before taking the written and oral comprehensive exams. After successful completion of the written examinations, the student is eligible to schedule the oral comprehensive examination administered by the student’s graduate advisory committee. Majors in performance and conducting must have presented 2 of the 3 required recitals before taking the examinations.

Document or Lecture-Recital
No later than the end of the semester after successful completion of the comprehensive examination, candidates in performance, conducting, and composition must submit to the graduate advisory committee a proposal for a D.M.A. lecture-recital document or D.M.A. document. The research proposal for a document or lecture-recital should include a preliminary bibliography and an outline of the content. The lecture-recital is a public presentation based on a paper written in scholarly form.

Upon satisfactory completion of all other degree requirements, candidates must schedule a final oral examination (defense). For students in performance and conducting, the examination covers the third recital and the research reported in the document or lecture-recital. The student must receive at least a grade of B on the document and lecture-recital for satisfactory completion of degree requirements.

Examinations
At least 3 months must elapse between the successful completion of the comprehensive oral examination and the date of the final oral examination for candidates for the D.M.A. degree.

Cognate
Each D.M.A. student (not including Composition) may choose a defined cognate area of 12 credits with the approval of the student’s advisory committee.
Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (http://music.ku.edu/applyaudition/graduate) for current information.

Graduate programs in the School of Music are organized into program areas. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

Diagnostic Examinations

All entering graduate students (except music education, music therapy, and opera performance majors) must take written diagnostic examinations in musicology and music theory. These are given the week before the start of classes in the Fall and Spring semesters to determine whether a need exists for remedial work in those areas prior to enrolling in graduate coursework. Students who show the need for remediation must complete the prescribed review courses or show mastery of the material by re-examination. Graduate students entering programs in piano must take additional tests in piano literature given before the start of classes. A student is exempt if he or she received a bachelor's or master's degree in music from the University of Kansas within the previous 4 years.

Doctor of Philosophy in Music Degree Requirements

Foreign Language Requirements

Aspirants to the Ph.D. degree in music theory and musicology are expected to demonstrate reading knowledge of German and a Romance language chosen from French, Italian, Portuguese, or Spanish. Reading proficiency must be demonstrated before scheduling the oral comprehensive examination. The student also may be advised to develop reading proficiency in another language or languages in order to pursue research for the dissertation.

Course of Study

Specific course work for each student is arranged individually in consultation with the student's advisor. The Ph.D. program normally requires 4 years of full-time study beyond the master's degree, with the first 2 years devoted to course work. A minimum of 18 credit hours is devoted to the dissertation, an original contribution to knowledge in the student's research area.

Students in musicology must complete at least 2 semesters of MUSC 654 or MUSC 656 Collegium Musicum, and 2 semesters of MUSC 940 Seminar on Selected Topics in Musicology. In addition, students must
complete at least 3 more 3-credit-hour courses in advanced musicology and at least 3 more 3-credit-hour courses in advanced music theory.

Although the Ph.D. program does not include a minor area, students are encouraged to continue their study of performance and/or composition, and may be advised to take nonmusic courses that are directly applicable to their fields of research for the dissertation.

For general information on academic requirements, residence, tenure, and enrollment, see the Graduate Studies (p. 2369) section of the online catalog.

**Research Skills and Responsible Scholarship**

Doctoral students are required to have training in both responsible scholarship and research skills pertinent to the doctoral level of research in their field of study.

To satisfy both components, D.M.A. students in performance or composition and Ph.D. students in Musicology or Music Theory must complete MUSC 801 Music Bibliography and Research (or its equivalent) and, if available, participate in advanced performance seminars.

**Scholarly Presentation**

Each candidate for the Ph.D. degree in musicology and music theory must make a public presentation of no less than 20 minutes on a scholarly topic. This requirement may be fulfilled by reading a paper at a national or regional meeting of a society in the student's discipline or in a colloquium at KU.

**Written and Oral Comprehensive Examinations**

Students must take written examinations in music theory and musicology when most of the course work has been completed and research skills/responsible scholarship requirements have been fulfilled. Some major divisions also may require a written examination in the major area. Upon successful completion of all written examinations, the student is eligible to schedule the oral comprehensive examination administered by the graduate advisory committee. With the satisfactory completion of both written and oral comprehensive examinations the aspirant is admitted to candidacy for the degree of Doctor of Philosophy.

**Dissertation Proposal**

No later than the end of the semester after successful completion of the written and oral comprehensive examinations, the candidate, in consultation with the faculty dissertation committee, must submit a dissertation proposal of several pages with a preliminary bibliography, outline, and description of the project and research plan.

**Final Oral Examination**

Following completion of the dissertation, a final oral examination is scheduled in which the candidate presents and defends the results of dissertation research and is expected to respond to questions from the faculty committee. A grade of at least B must be achieved on the dissertation for satisfactory completion of the degree requirements.

**Doctor of Philosophy in Music Education**

**Ph.D. in Music Education**

The Doctor of Philosophy with an emphasis in either music education or music therapy focuses on research and scholarship. It is often sought by those who aspire to careers in research and graduate-level teaching. The requirements help the student develop broad and profound understanding of musical behavior, sophisticated skill and extensive experience in pursuing new knowledge of such behavior, and a rational system for evaluating the relationships between the specialty and other areas of human understanding. The program culminates with completion of a substantial piece of original research.

Detailed information about admission processes in Music Education and Music Therapy can be found online (http://music.ku.edu/memt/documents/#graduate) in the MEMT Graduate Application Procedure document.

**Ph.D. in Music Education Admission**

**Requirements for Regular Admission**

1. Master's grade point average of at least 3.5 on a 4.0 scale.
2. Appropriate baccalaureate and master's degrees to support the individual's goals for doctoral study.
3. Scores on the Graduate Record Examination (verbal, quantitative, and analytical writing).
4. 3 letters of recommendation estimating the applicant's potential for success in doctoral study.
5. Documentation of at least 18 months successful full time experience, or its equivalent, as a professional music educator if seeking an emphasis in music education, or at least 5 years successful full-time experience as a professional music therapist, or its equivalent, if seeking an emphasis in music therapy.
6. Submission of a video recording appropriate to the degree emphasis.
7. A reasoned statement of professional goals and research interests.
8. An interview with the appropriate faculty for area of emphasis.
9. Other supporting materials may be required.
10. Passing score on the music education and music therapy division diagnostic examination to be taken at the end of the first semester.

*Additional detailed admission requirements and information are found online (http://music.ku.edu/memt/documents/#graduate) in the MEMT Graduate Application Procedure document.*

**Graduate Admission to the School of Music**

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (http://music.ku.edu/applyaudition/#graduate) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.
Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

Diagnostic Examinations

All entering graduate students (except music education, music therapy, and opera performance majors) must take written diagnostic examinations in musicology and music theory. These are given the week before the start of classes in the Fall and Spring semesters to determine whether a need exists for remedial work in those areas prior to enrolling in graduate coursework. Students who show the need for remediation must complete the prescribed review courses or show mastery of the material by re-examination. Graduate students entering programs in piano must take additional tests in piano literature given before the start of classes. A student is exempt if he or she received a bachelor’s or master’s degree in music from the University of Kansas within the previous 4 years.

Ph.D. in Music Education Degree Requirements

Research Skills

Doctoral students in music education and music therapy at KU must demonstrate research skills by completing 3 research projects suitable for publication. These may be developed and completed independently or in consultation with appropriate doctoral faculty members. There must be a project of each of the following types: descriptive, experimental, and historical (including the history and logic of ideas). The descriptive and experimental research articles should be presented in APA style. The historical research article may be presented in Turabian, MLA, or APA style.

Each completed project is reviewed by the student’s doctoral committee, which rules in the majority whether the project is of sufficient quality for publication in a national, refereed research journal in music education or music therapy. Single-author studies that have been published or accepted for publication in such journals may be used to demonstrate these skills.

Completion of each of the 3 research projects must be certified by the student’s mentor/advisor in music education or music therapy on the MEMT Doctoral Check list in the student’s file in the MEMT office. The mentor/advisor must submit an appropriate MEMT Do-All form after the completion of each project.

Responsible scholarship requirements are met by satisfactory completion of courses MEMT 812 Research in Music Education and Music Therapy and MEMT 920 Doctoral Seminar in Music Education and Music Therapy.

Preliminary and Comprehensive Examinations

The student must pass a series of examinations, culminating with the comprehensive oral examination.

The music education and music therapy Ph.D. handbook is available online (http://music.ku.edu/PHD/requirements) and in the MEMT office, and includes information about patterns of course work, the Ph.D. minor, examinations, and the dissertation.

Plan of Study

Course requirements for the doctoral degree are flexible. The Ph.D. program requires a minor. Each student’s program is planned specifically in light of his or her background and to meet the needs of the anticipated academic and professional career. However, each student is expected to achieve a broad understanding of human musical behavior and to become skilled in research. Professional competence, not hours of credit per se, is the underlying requisite for conferring the degree.

The student works with her or his faculty advisor to complete a Degree Requirement Program Plan. The advisor submits the completed program plan with the MEMT Do-All form.
Nursing

Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your advisor for details). Other years’ catalogs (http://catalog.ku.edu/archives) »

School of Nursing Programs

Bachelor of Science in Nursing (p. 2286)
Master of Science in Nursing (p. 2290)
Doctor of Philosophy in Nursing (p. 2293)
Doctor of Nursing Practice (p. 2295)
Post-Master’s Certificate Programs in Nursing (p. 2296)

Interprofessional Programs

Master of Science in Health Informatics (p. 2292)
Doctor of Philosophy in Therapeutic Sciences (p. 731)

The School of Nursing

The School of Nursing is one of 3 schools at the University of Kansas Medical Center (http://www.kumc.edu) in Kansas City, Kansas. Academic programs at KU Medical Center are offered through the Schools of Health Professions, Medicine, and Nursing. The Office of Graduate Studies at KUMC (http://www.kumc.edu/academic-affairs/graduate-studies.html) handles matters related to graduate programs in Health Professions, Medicine, and Nursing.

The KU School of Nursing’s baccalaureate, master’s, and doctor of nursing practice (DNP) programs are accredited by the Commission on Collegiate Nursing Education (http://www.aacn.nche.edu), One Dupont Circle, NW, Suite 530, Washington, DC 20036, (202) 887-6791. This organization is a nationally recognized professional accrediting body for collegiate nursing programs. The baccalaureate, master’s, and D.N.P. programs also are approved by the Kansas State Board of Nursing (http://www.ksbn.org). The Nurse Midwifery Program is accredited by the Accreditation Division of the American College of Nurse-Midwives (http://www.midwife.org), 818 Connecticut Ave., NW, Suite 900, Washington, DC 20006, (202) 728-9860. The Nurse Anesthesia program is accredited by the Council on Accreditation of Nurse Anesthesia Programs, 222 S. Prospect Ave., Park Ridge, IL 60068-4001, (847) 655-1160.

Undergraduate Programs

The Bachelor of Science in Nursing (BSN) program prepares baccalaureate generalist nurses for professional nursing practice. The American Association of Colleges of Nursing’s Essentials of Baccalaureate Education for Professional Nursing Practice provide the framework for this first step in professional nursing education (AACN. 2008). The roles of the baccalaureate generalist include: provider of care, designer/manager/coordinator of care, and member of a profession. Baccalaureate generalist education provides the foundation for all graduate nursing education.

High School Preparation

High school students planning to enter the baccalaureate program in nursing are encouraged to follow a general college preparatory course of study. Such a course usually emphasizes basic preparation in English, a foreign language, mathematics, natural science, and social sciences.

Graduate Programs

Basic admission requirements are listed in the Graduate Studies (p. 2369) section of the online catalog. Individual graduate programs may have additional specific requirements including prerequisite undergraduate courses. These are listed or referenced in program descriptions. Combined degree options are available.

The School of Nursing offers the following graduate degrees:

- Bachelor of Science in Nursing (p. 2290)
- Doctor of Nursing Practice (p. 2295)
- Doctor of Philosophy (p. 2293)
- Post-Master’s Certificate Programs (p. 2296)

For online information about graduate programs, visit the school’s website (http://nursing.kumc.edu).

Undergraduate University Regulations

For information about university regulations, see Regulations (p. 12) or visit the University of Kansas Policy Library (http://www.policy.ku.edu).

Academic Forgiveness

Academic forgiveness does not apply in the School of Nursing.

Change of School

To change from one school to another, you must submit a Change of School form in the dean’s office of the school you plan to enter. Follow the deadlines on the form.

Admission is competitive and occurs once each year for the traditional BSN program, in the fall semester. Applications are due by October 15 of the year before beginning classes.

Credit/No Credit

A Credit/No Credit option is available to all degree-seeking undergraduates. You may enroll in one course a semester under the option, if the course is not in your major or minor. For more information, visit the KU Policy Library (https://documents.ku.edu/policies/governance/USRR.htm#art2sect2).

Warning: Certain undesirable consequences may result from exercising the option. Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of No Credit to F when computing grade-point averages.

Grading

Courses in which grades of D and F are earned do not count toward graduation.

Graduation with Distinction and Highest Distinction

Students who rank in the upper 10 percent of their graduating class may graduate with distinction. The upper third of those awarded distinction may graduate with highest distinction. The list is compiled each spring and includes July, December, and May graduates.
Honor Roll

Students with grade-point averages of 3.5 who have completed at least 12 hours are recognized on the honor roll or dean’s list in fall and spring. An Honor Roll notation appears on the transcript.

Honors Graduates

For students who complete the school’s honors program, designation of honors appears on the transcript.

Independent Study Through KU Continuing Education

Students may complete up to 31 hours of Independent Study through KU Continuing Education, credit-by-examination, and/or extension courses.

Probation

Probation

Students whose grade-point averages fall below 2.0 for the semester are placed on probation. The associate dean of student affairs notifies the student by letter. It is the student’s responsibility to seek a conference with the student affairs advisor. The student and the student affairs advisor assess the situation jointly and make appropriate recommendations.

Return to Good Standing

A student remains on probation until completion of the next term in which the student is enrolled full time. (Full-time enrollment is 12 hours or more; full-time summer session enrollment is 6 hours or more.) To be removed from probation, a part-time student must maintain a 2.0 grade-point average in the next 12 semester hours of enrollment. Only courses required for the nursing major (junior/senior course work) apply toward the required grade-point average for removal from probation. If the student attains a grade-point average higher than 2.0 in the probationary semester, the student is removed from probation. No student may graduate with a nursing grade-point average lower than 2.0 or an overall grade-point average lower than 2.0.

Dismissal

If the student does not attain a grade-point average higher than 2.0 in the probationary semester, the student is dismissed for academic reasons. One nursing course may be repeated one time only if necessary to earn the minimum grade of C or S. Failure to achieve a minimum grade of C or S in two nursing courses or one repeated nursing course results in the student’s dismissal.

Repetition of Courses

For admission to the school, grades in all courses taken and retaken are included in the grade-point average. All grades are considered for calculation of honors and awards.

Transfer of Credit

CredTran (http://credittransfer.ku.edu) is a transfer course equivalency system that lists more than 2,200 colleges and universities from which KU has accepted transfer courses in the past. If your school or course is not listed, your evaluation will be completed when you are admitted to KU. Only transfer grades of C or higher apply toward graduation at KU.

Graduate University Regulations

For information about university regulations, see Regulations (p. 12). For Graduate Studies regulations, see Office of Graduate Studies, Medical Center Campus (p. 2395) section of this catalog.

Academic Forgiveness

Academic forgiveness does not apply in the School of Nursing.

Credit/No Credit

Graduate students may select the Credit/No Credit option for courses that do not fulfill a degree requirement, but this option may be limited in certain programs. Students should follow the policy outlined in the University Senate Rules and Regulations, Section 2, article 2.27, and contact the department or program for more information.

Center for Health Informatics Courses

IPHI 850. Introduction to Health Informatics. 2-3 Hours.
This course will provide an overview of health informatics focused on five themes: health informatics foundations; clinical decision support; human factors/organization factors; public health informatics and current issues in health informatics including best practices. Students enrolled for 3 credits will develop and demonstrate a practical, innovative small-group information technology (IT) project from one of a set of faculty recommended projects or from a student-proposed idea. Prerequisite: Consent of Instructor LEC.

IPHI 851. Transforming Health Care through Use of Information Systems and Technology. 3 Hours.
Includes 2 credit hour lecture and 1 credit hour practicum. The application of the information system development life cycle in the design, selection, and implementation of health information technology applications will be examined. Human computer interactions and emerging technologies will be explored for their impact on patient care and safety. The role of legal, regulatory, ethical and security issues will be discussed as they apply to clinical and consumer information technologies. PREREQUISITE(S): Consent of Instructor LEC.

IPHI 852. Health Data: Theory and Practice. 3-4 Hours.
Includes 2 credit hour lecture and 1-2 credit hour practicum. Principles of database theory, modeling, design and manipulation will be introduced. Students will have experience using a relational database management system. Database manipulation will be explored using structured query language (SQL) to compose and execute query statements and critically evaluate the results. Prerequisites: None. LEC.

IPHI 853. Abstraction and Modeling of Healthcare Information. 3 Hours.
Includes 2 credit hour lecture and 1 credit hour practicum. The information system development life cycle process is presented with emphasis on determination and analysis of information system requirements and system design that meet the identified health care information requirements. Object-oriented techniques will be introduced, including Unified Modeling Language and Unified Modeling Methodology, to facilitate process analysis and design proposal development. Prerequisites: NRSG 820 and consent of instructor. LEC.

IPHI 854. Knowledge Management in Healthcare. 3 Hours.
Includes 2 credit hour lecture and 1 credit hour practicum. Knowledge management is the creation, communication, and leveraging of a healthcare organization's knowledge assets. Defining knowledge, describing the knowledge creation cycle, and the identification of the knowledge worker and his/her impact on the organization are discussed.
Information technology and communities of practice are presented in a balanced approach supporting a systematic viewpoint of the knowledge management process. Knowledge management theory is enhanced with the performance of a knowledge audit and the development of knowledge management tools. Prerequisite: NRSG 820 and consent of instructor. LEC.

IPHI 856. Health Informatics Practicum. 1-3 Hours.
In collaboration with healthcare information faculty, preceptors, students design an experience to facilitate application of theories and research related to health care informatics. Emphasis is on the application of the information system development life cycle. Students analyze the leadership and technical behaviors of various informatics roles and negotiate an informatics project to be completed within the practicum. Prerequisite: All Specialty Core, Leadership Core, IPHI 853, Abstraction and Modeling of Health Care Information, IPHI 852, Health Data: Theory Practice. Prerequisite or Co-require: IPHI 854, Knowledge Management in Healthcare, IPHI 851, Topics in Health Care Informatics, IPHI 860, Research Project in Nursing, or consent of instructor. LEC LEC.

IPHI 860. Research Project. 2 Hours.
Students will conduct a health informatics research project. A research report, designed artifact, or other appropriate deliverable will be developed. Prerequisite(s): A research course and two informatics core courses, or consent of instructor. The research project must meet research guidelines for the MS Informatics program. LEC.

Nursing (Graduate) Courses

NRSG 520. Medical Spanish I. 2 Hours.
This is an entry level Medical Spanish course for students with minimal or no Spanish language education. Students completing this course will have acquired the language skills necessary to interact at a basic level in a medical context. Prerequisites: None. LEC.

NRSG 521. Medical Spanish II. 2 Hours.
This is an intermediate-low level Medical Spanish class. In Medical Spanish level 2 students build on what they have learned in the prerequisite level. Students expand their vocabulary skills to include medical specialties and procedures as well as their ability to describe medical conditions. Prerequisite: Medical Spanish I or equivalent. LEC.

NRSG 550. Research Coordinator: Pre-Study Activities. 3 Hours.
This course is designed as an introduction to the Research Coordinator role and provides in-depth knowledge of Pre-Clinical Trials Study activities. Regulatory, administrative, and ethical issues will be presented as well as the daily operational requirements (study design, financial aspects, protocols, hiring of personnel, subject recruitment, etc.) to begin a study. Prerequisites: Senior status, RN licensure, Graduate level, or consent of instructor. LEC.

NRSG 551. Research Clinical Trial Coordinator: During Study Activities. 3 Hours.
This course is designed as an introduction to the research clinical trial coordinator role and provides in-depth knowledge of during-Clinical Trial Study activities. The process of conducting the 'day-to-day' operations of a research study; subject recruitment, data collecting forms and documenting subjects’ responses to the interventions, audits, inspections, budget monitoring, ethical/liability situations that may occur during the study, etc. will be addressed. PREREQUISITE: NRSG 550 or consent of instructor. LEC.

NRSG 552. Research Clinical Trial Coordinator: Post-Study Activities & Practicum Experience. 3 Hours.
This course is designed as an introduction to the research coordinator role and provides in-depth knowledge of Post-Clinical Trial Study activities. The process of conducting the 'day-to-day' operations of a research study; preparing for final sponsor and FDA visits; preparing final reports to the sponsor and IRB; evaluating sponsor, site, and team members' performance; management of data and preparing summary reports; etc will be addressed. The course is also designed to provide the student with a Research Coordinator practicum experience in selected research settings. Opportunities are provided to utilize learned details related to the role of a Research Coordinator during key phases of a Clinical Trial Study: pre-study, during-study, and at the end-study activities. PREREQUISITE: NRSG 551 or consent of instructor. LEC.

NRSG 564. Health Care of Persons with Patterns of Addiction. 1-2 Hours.
Health care implications for client systems with problems related to alcohol and other commonly abused chemicals are examined. Both acute and chronic responses will be presented as effects upon the psychosocial, biological, cognitive/perceptual and spiritual/belief dimensions of the client systems. Ethical and legal considerations will be explored in conjunction with current research findings. Prerequisite: Senior status, RN licensure, Graduate level, or consent of instructor. LEC.

NRSG 565. Nursing Care of Persons with Patterns of Chemical Dependency: Practicum. 2 Hours.
Clinical application of the nursing process for complex client systems with problems related to alcohol and other drug abuse is the primary purpose of the course. Assessing clients and planning interventions to restore system balance will be emphasized. Resources appropriate for these clients within the community will be investigated. This course is designed to complement the didactic course NRSG 564 Health Care of Persons with Patterns of Addiction by affording students opportunities for building experiential skills. Prerequisite or Corequisite: NRSG 564, Senior status, RN licensure, Graduate level, or consent of instructor. LEC.

NRSG 572. Topics for Health Professional Educators. 2-3 Hours.
This topics course is designed to develop the health professional's role as educator and to promote a skill set to enhance teaching and learning for diverse populations. Experiences are gained assessing the learning needs of a target population and developing educational topics. Participants apply current learning theories and effective teaching strategies to design, implement and evaluate educational experiences. Technological advances, as well as current and future issues in teaching and learning are considered. Content, specific to the topic, includes role development issues, assessment and planning strategies, teaching/learning concepts, technology implications, and evaluation concepts. Prerequisite/Co-require: Senior Level Nursing/Allied Health, Admission to Graduate program or consent of instructor. LEC.

NRSG 720. Introduction to Nursing Informatics. 2 Hours.
This course will provide an overview of hospital information systems, nursing information systems, artificial intelligence, and micro and mainframe computers. Interactive laboratory experiences will examine microcomputer uses for problem solving in nursing education, nursing research, nursing practice, or nursing administration. Prerequisites: Admission to the graduate nursing program, or consent of instructor. LEC.

NRSG 721. Understanding and Changing Health Behavior. 3 Hours.
The student is introduced to theories, research, and issues related to health behavior. Health behavior includes actions or activities undertaken for the purpose of promoting, preserving, or restoring wellness, and actions or activities that endanger wellness or cause illness. Internal and external influences are considered. The problems encountered by persons who are attempting to alter their own health behavior are addressed. The role of nurses in changing health behaviors in individuals, families, communities, and the larger society are examined. Prerequisite: Consent of instructor. LEC.
NRSG 722. Scholarly Writing for the Health Professional. 3 Hours.
Development of scholarly writing skills is emphasized to promote professional communication and to enhance professional image. Students enrolled in this interdisciplinary course analyze their own and others' writing to improve their written communications. Writing skills are practiced and developed by critiquing published articles, and by preparing written memorandums, letters, abstracts, and a manuscript. Legal and ethical issues related to the publication process are explored. Prerequisites: Admission to the graduate program, or consent of instructor. LEC.

NRSG 723. Advanced Practice Geriatric Nursing of the Frail Older Adult. 2-3 Hours.
The knowledge and skills necessary to provide holistic care for the frail elderly client are emphasized in the advanced practice nursing course. Physical and multidimensional functional assessments are discussed as a basis for establishing functional approaches to care and planning effective therapeutic interventions in various long-term care settings. Strategies for coordination of services and collaboration with an interdisciplinary team for comprehensive health care are integrated throughout the course. Prerequisites: Admission to the graduate program or consent of instructor (excludes students in the Adult/Geriatric Nursing track). LEC.

NRSG 731. Pharmacokinetics and Pharmacodynamics for Advanced Practice Nursing. 1 Hour.
General principles of pharmacology, including pharmacokinetics and pharmacodynamics, are discussed in preparation to prescribe. The principles for decision making about drug selection, use and monitoring are examined. Prerequisites/Corequisites: Admission to the graduate program, or consent of instructor. LEC.

NRSG 742. Pediatric Hematology/Oncology Essentials for Advanced Nursing Practice. 3 Hours.
An understanding of pathophysiological and psychosocial changes that occur within the internal environment of the child in the presence of malignant disease, and effects on the family unit, are provided as a rationale for therapeutic interventions. The course covers the most common pediatric cancer diagnoses, related treatments, side effects of treatment, supportive care, psychosocial issues, patient and family education, late effects, and care during end of life. The principles of advanced pediatric hematology/oncology nursing, standards of evidence-based practice, and research are discussed. Prerequisite(s): Advanced Pathophysiology, Graduate Research Course, or consent of instructor. LEC.

NRSG 748. Theories for Practice and Research. 3 Hours.
Theory development and analysis techniques provide the framework for the study of concepts and theories from nursing and related disciplines. Particular emphasis will be placed on the relationship of theory and research in the development of nursing knowledge to support evidence-based practice. This course will enhance the decision-making skills for choosing and using concepts and theories that guide practice. Prerequisites: Admission to the graduate nursing program, or consent of instructor. LEC.

NRSG 754. Health Care Research. 3 Hours.
This course will enable the student to synthesize nursing knowledge and make recommendations to translate research findings into practice within diverse health care settings. Research methods, processes and findings for use in practice will be critically evaluated. Emphasis will be placed on formulating relevant research questions from theory and practice. Prerequisites: Admission to the graduate nursing program, Graduate Statistics, or consent of instructor. LEC.

NRSG 755. Professionalism in Advanced Nursing Practice. 3 Hours.
An analysis of economic, political, legal, ethical, professional, societal and cultural issues is conducted within the context of advanced nursing practice. Application of concepts essential to understanding, influencing and leading change in health care delivery specific to advanced nursing practice is emphasized. Prerequisites: Admission to the graduate nursing program, or consent of instructor. LEC.

NRSG 801. Advanced Health Assessment and Clinical Reasoning. 5 Hours.
The purpose of this course is to develop knowledge and skills for advanced clinical practice. Included will be comprehensive history and physical, psychological assessment of signs and symptoms, pathophysiologic changes and psychosocial variation of the patient (individual, family or community). Content on special populations, communication with patients and care teams, cultural considerations, health promotion and prevention, use of electronic medical/health records will be discussed with opportunity for application. The advanced clinical content will be applied in directed laboratory and selected application experiences. Prerequisite/Corequisite: NRSG 812, or consent of instructor. LEC.

NRSG 802. Methods for Qualitative Research. 3 Hours.
The naturalistic paradigm and various qualitative research approaches such as ethnography, phenomenology/hermeneutics, historiography, grounded theory and/or others are explored. Emphasis is placed on the appropriateness of each approach for description and explanation of phenomena encountered in clinical, organizational, and educational settings. Experience is provided in problem formulation and development of qualitative research proposal. Prerequisites: NRSG 804 or NRSG 945, or consent of the instructor. LEC.

NRSG 803. Introduction to Clinical Research. 1 Hour.
This course will provide a comprehensive overview to clinical research. The student will gain an understanding of how to develop clinical research questions including protocol design and the factors that should be considered in initiating a clinical research study. This will include biostatistical considerations, the recruitment of study participants, regulatory issues, and data management, and defining measures and instruments. Students will gain knowledge of how to define clinical research among the various institutional entities involved with clinical research at the University of Kansas Medical Center such as the Research Institute (RI), General Clinical Research Center (GCRC) and the Human Subjects Committee (HSC). Additionally, one component of the course will focus on how to apply for funding (grantsmanship), critical appraisal of research studies, and how to present research data. Prerequisite: Consent of instructor. LEC.

NRSG 804. Interpreting Research for Applied Science. 3 Hours.
Research relevant to therapeutic intervention comes from a variety of disciplines involving varied research designs and analysis strategies. Students in this course will examine selected research studies and gain skill in analyzing methods and results as well as in applying research findings to practical problems. Students also will design their own research project reflecting their area of interest. Prerequisite/Corequisite: NRSG 748, 754, and 755 or consent of instructor. RSC.

NRSG 805. Caring for People with a Disability. 2 Hours.
This course will provide an opportunity for students to learn how to effectively care for a person with a disability in a health care or public health setting. This will include learning to effectively communicate and partner with people with disabilities. This course will address disability civil rights and provide a basic understanding of a variety of disability conditions and options/resources available for independent living. Through effective partnerships, providers and health professionals can
support people with disabilities to achieve independent, healthy lives. Prerequisite: Consent of instructor. LEC.

NRSG 806. Advanced Physiology. 4 Hours.
This course is designed to lead to an advanced comprehension of the physiology of organ systems in the human in both cellular and organ processes. Physiology subject matter relevant to clinical health sciences include membrane transport, muscle, cardiovascular, respiratory, renal, water and electrolyte balance, gastrointestinal, and endocrine physiology as well as neurophysiology. Cellular mechanisms include the structure and function of ion channels and pumps, mechanisms of calcium regulation, excitation-coupling processes and mechanisms of oxidative cell damage and apoptosis. Prerequisites: Admission to the Graduate Nursing Program or Consent of Instructor. LEC.

NRSG 807. Genetics in Primary Care. 2 Hours.
This course is designed to give the primary care nurse practitioner and other graduate nursing students a foundation in medical genetics. The basics of genetics, common genetic disorders and genetic testing are discussed. The application of this knowledge to counsel individuals at risk for genetic disorders is emphasized through the use of case studies. Ethical, legal and clinical practice issues and perspectives of primary care counseling in genetics are addressed. Prerequisites: Admission to the Graduate Nursing Program or Consent of Instructor. LEC.

NRSG 808. The Social Context for Health Care Policy. 2 Hours.
Using a local/single case issue students examine ways to abstract this issue into a social policy context. Local exemplars are used throughout the course to demonstrate the leadership and structural systems required to effect change in policy. Strategies to identify constituencies and build coalitions are studied. Prerequisites: NRSG 755, or consent of instructor. LEC.

NRSG 809. Health Promotion and Complementary Therapeutics. 3 Hours.
Current trends in health promotion and clinical preventive care across the lifespan are examined. Specific guidelines for assisting clients to maintain/improve health and/or prevent illness are reviewed. Attention is given to the roles of the health care provider and care recipient in screening, communication, and counseling. The use of complementary (non-pharmacological) therapeutics in assisting clients to achieve goals of health promotion is examined. The recommendation and use of non-pharmacological interventions will be evaluated based on research findings related to selection of therapeutics and measurement of expected outcomes following use of a particular intervention. Prerequisites: Admission to the graduate nursing program, or consent of instructor. LEC.

NRSG 810. Advanced Health Assessment and Physical Diagnosis. 5 Hours.
Building upon basic health assessment, knowledge and skills for advanced clinical practice are discussed, described and demonstrated. The advanced clinical practice content is then applied in multiple clinical settings (120 hours of clinical practice is required). Content on special populations that cover the lifespan is presented (i.e. geriatrics, pediatrics, women’s health) followed by directed laboratory and simulated experiences. The concept of clinical decision making for differential diagnosis is introduced and applied to patient-focused data. Prerequisite/ Corequisite: Consent of Instructor. LEC.

NRSG 812. Advanced Pathophysiology. 3 Hours.
An in-depth scientific knowledge base relevant to selected pathophysiological states confronted in primary care is explored. This information provides a basis for the formulation of clinical decisions related to diagnostic tests and the initiation of therapeutic regimens. Age specific and developmental alterations are correlated with clinical diagnosis and management. Application is made through age appropriate examples. Prerequisites: NURA 806/NRSG 806, or consent of instructor. LEC.

NRSG 813. Applied Drug Therapy. 3 Hours.
The clinical application of specific categories of drugs, commonly encountered in primary care settings is discussed. The use of protocols, prescription writing, and the ethical/legal, and economic issues surrounding the advanced nurses’ role in prescribing and monitoring pharmacologic therapies in the ambulatory setting are explained. Factors such as age-appropriate content related to pharmacokinetics, dosages, expected outcomes, and side effects of the drugs are discussed. First line versus second line drugs, alternate drugs, drug interactions, adjusting drug dosages, patient education, and compliance issues related to drug therapy are addressed. The nurse’s role and responsibility related to data collection, problem identification, and consultation with the physician is explored. Application is made through age-appropriate case studies. Prerequisites: NRSG 731, NRSG 812, or consent of instructor. LEC.

NRSG 814. Primary Care I: Management of Common Health Problems Throughout the Life Span. 3 Hours.
Management of Common health problems seen in individuals and families throughout the life span are discussed in this first of two sequential courses. Applications of current research and theory-based interventions appropriate for protocol based management by advanced registered nurse practitioners are analyzed. Strategies to manage common health problems in urban and rural patients are explored. Interventions to restore individual and family level of pre-illness health, and positive lifestyle behaviors are emphasized. Prerequisites: NRSG 748, NRSG 755, NRSG 809, NRSG 801, NRSG 812 or Consent of Instructor. Prerequisite/ Corequisite: NRSG 813. LEC.

NRSG 815. Primary Care I Practicum: Management of Common Health Problems Throughout the Life Span. 2 Hours.
Opportunities to develop beginning skills as advanced practice nurses in a primary care setting are provided. Emphasis is on assessment, clinical decision making, and management of clients/client systems of all ages/stages who are experiencing common health problems. Internal and external environmental factors as well as legal, ethical and economic concerns related to the presenting common health problems are explored. Current research outcomes and theory-based interventions appropriate for management by advanced practice nurses are stressed. Collaboration and consultation (including referrals) with appropriate health providers is emphasized. Prerequisite: NRSG 814, NRSG 816 or Consent of Instructor. LEC.

NRSG 816. Primary Care II: Management of Complex Health Problems Throughout the Life Span. 3 Hours.
Complex health problems seen in individuals and families throughout the life span are discussed in this second sequential course. Applications of current research and theory-based interventions appropriate for management by advanced registered nurse practitioners are analyzed. Strategies and protocols to manage complex patient problems, in urban and rural patients, are explored. Interventions to restore individual and family levels of pre-illness health, including secondary and tertiary prevention, are emphasized. Prerequisites: NRSG 813, NRSG 814 or Consent of Instructor. LEC.

NRSG 817. Primary Care II Practicum: Management of Complex Health Problems Throughout the Life Span. 4 Hours.
Opportunities to develop intermediate skills as advanced practice nurses in a primary care setting are provided. Emphasis is on assessment, clinical decision making, and management of clients/client systems of all ages/stages who are experiencing complex health problems. Internal and external environmental factors as well as legal, ethical and economic concerns related to the presenting complex health problems are explored.
Current research outcomes and theory based interventions appropriate for management by advanced practice nurse are stressed. Collaboration and consultation (including referrals) with appropriate health providers is emphasized. Prerequisites: NRSG 815 or Consent of Instructor. LEC.

NRSG 818. Primary Care III: Preceptorship. 3-5 Hours.
The theoretical, clinical, and role components of care as delivered by the nurse practitioner are implemented through an intensive supervised clinical practicum with seminar sessions. An opportunity is provided to apply advanced clinical decision making skills and research to the assessment, management, and evaluation of complex health care problems in the primary care setting. The client system for this experience include individuals and families throughout the life span within the context of community. Emphasis is on increased independence and decision making in a multi-disciplinary environment. Internal and external environmental factors, ethical, legal, and health policy issues related to the nurse practitioner role in the practice setting are analyzed. Prerequisites: NRSG 816, NRSG 817, or consent of instructor. LEC.

NRSG 820. Program, Project, and Communication Planning. 2 Hours.
Strategies to promote program, project, and communication planning are presented and applied by the student. Communication strategies for informing, guiding, and persuading clients, health care providers, payers, and other stakeholders to advance program and project development are discussed. The use of evolving information technologies to improve program, project and communication planning is emphasized. Prerequisites/Corequisites: NRSG 880, or consent of instructor. LEC.

NRSG 821. Clinical Dynamics and Interventions in Diabetology. 3 Hours.
A complexity science framework is used to discuss current and innovative concepts and trends in the care of person with diabetes. The disease process of diabetes, preventive measures, complications, pharmacologic, technologic, lifestyle interventions and self-management techniques based on current evidence are presented and analyzed in relations to care of persons with diabetes across age groups and in different settings. Consideration is given the complexity of the co-morbidities that accompany diabetes as well as the special approaches to age appropriate treatment and cultural diversity factors that influence care. External barriers that contribute to decrease in quality outcomes are analyzed and innovative solutions are proposed. Prerequisites: NRSG 801, NRSG 813, or Consent of Instructor. SEM.

NRSG 823. Research Clinical Trial Management: Pre-Study Activities. 3 Hours.
This course is designed as an introduction to the research clinical trial manager role and provides in-depth knowledge of Pre-Clinical Trials Study activities. Regulatory, administrative, and ethical issues will be presented as well as the daily operational requirements (study design, financial aspects, protocols, hiring of personnel, subject recruitment, etc.) to begin a study. Included is the development of training skills for the Clinical Trial manager for critiquing sample protocols and for assessing adequate resources for implementation of protocol. Prerequisites: RN Licensure, graduate level, or consent of instructor. LEC.

NRSG 824. Research Clinical Trial Management: During Study Activities. 3 Hours.
This course is designed as an introduction to the research clinical trial manager role and provides in-depth knowledge of During-Clinical Trial Study activities. The process of conducting the 'day-to-day' operations of a research study; subject recruitment, data collection forms and documenting subjects' responses to the interventions, audits, inspections, budget monitoring, ethical/liability situations that may occur during the study, etc. will be addressed. Included is the development of training skills for the Clinical Trial Manager that is involved in conducting the 'day-to-day' operations of the research study. Prerequisites: NRSG 823, or consent of instructor. LEC.

NRSG 825. Research Clinical Trial Management: Post-Study Activities and Practicum Experience. 3 Hours.
This course provides an introduction to the research manager role and provides in-depth knowledge of Post-Clinical Trial Study activities. The process of conducting the 'day-to-day' operations of a research study; preparing for final sponsor and FDA visits; preparing final reports to the sponsor and IRB; evaluating sponsor, site and team members' performance; management of data and preparing summary reports, etc. will be addressed. The course provides the student with a Research Manager practicum experience in selected research setting. Opportunities are provided to utilize learned details related to the role of a Research Manager during key phases of a Clinical Trial Study; pre-study, during-study, and at the end-study activities. Prerequisites: NRSG 824, or consent of instructor. PRA.

NRSG 826. Global Perspective and Diversity in Healthcare. 2 Hours.
Cultural receptivity is integrated into the collaboration, development, and implementation of health programs at the local, national, and international level. Frameworks that emphasize the meanings of health and healthcare; prevention and management; and related ethical, economic, and social justice concerns are introduced. Students partner with a community of interest to understand their health and illness beliefs, identify barriers to healthcare access, integrate the historical, social, political and economic forces that impact healthcare. Together they plan and implement appropriate strategies to influence positive community outcomes. Prerequisites: NRSG 880, or consent of instructor. LEC.

NRSG 827. Advanced Concepts Public Health Nursing. 2 Hours.
Public health is addressed in terms of common values and interests as well as particular client populations (vulnerable and at risk groups) across the lifespan. Health promotion and disease prevention for whole communities and selected vulnerable and at risk aggregates are emphasized. Ethical and social justice concerns as well as public policy and legislative issues in population-focused health care are discussed. Selected models, concepts, theories, and research in public health provide the framework for identifying, exploring, prioritizing and planning interventions for public health concerns. Ultimately, a grant proposal is developed to support the action plan. Prerequisites: NRSG 754, NRSG 755, NRSG 809, NRSG 820, NRSG 880, NRSG 885, PRVM 800. Prerequisite/Corequisite: NRSG 808, NRSG 826 PRVM 830. Corequisite: NRSG 828, or consent of instructor. LEC.

Students are provided with an opportunity to explore advanced practice roles within the context of public health needs. Based on each student's goals and interests, health related needs of an identified population are assessed, analyzed, and synthesized; and a plan of action proposed. Corequisites: NRSG 827, or consent of instructor. LEC.

NRSG 829. Public Health Practicum. 3 Hours.
Students will complete an intensive practicum in a community/public health setting. Prerequisites: NRSG 827, NRSG 828 or Consent of Instructor. LEC.

NRSG 830. Care of Women in the Antepartal Period. 3 Hours.
Care during the antepartal period in healthy pregnant women is presented and analyzed. Strategies focusing on risk reduction and early identification of deviation from normal during pregnancy are examined. Biopsychosocial and cultural aspects of pregnancy within the family structure are presented. Concepts of research, ethics, legal and political issues, nutrition, genetics, pharmacotherapeutics, health promotion, and selected deviations from normal are included. Prerequisites: NRSG 801, NRSG
NRSG 831. Care of Women in The Antepartal Period Practicum. 2 Hours.
This clinical practicum focuses on competencies for management of pregnant women in various health care environments. Health promotion and risk reduction in pregnant women are emphasized. Management experiences in the advanced practice role include antepartal risk-assessment, consultation, collaboration, and referral when medically necessary. Prerequisites: NRSG 830, NRSG 832, NRSG 835, NRSG 836, NRSG 841, or Consent of Instructor. Corequisites: NRSG 838, or Consent of Instructor. LEC.

NRSG 832. Nurse Midwifery in the Postpartum and Newborn Period. 2 Hours.
Synthesis of the nurse-midwifery philosophy for postpartum and newborn periods is conceptualized. Health maintenance for mothers and infants is explored. Research, ethics, legal and political issues, nutrition, pharmacotherapeutics, health promotion, and selected deviations from normal are included. The nurse-midwifery role in consultation, collaboration, and referral are addressed. Prerequisite: NRSG 830, NRSG 835, or Consent of Instructor. Corequisite: NRSG 836. LEC.

NRSG 833. Managing Clinical Research Projects. 3 Hours.
This course is designed to help nurses develop in-depth knowledge of good clinical practices and federal regulations, as well as to develop a strong foundation for the management of clinical research program. Regulatory, administrative, and ethical issues will be presented as well as the daily operational requirements of managing a clinical research office. Completion of this course prepares one for clinical research professional national certification. Prerequisites: NRSG 825 or Consent of Instructor. LEC.

NRSG 835. Primary Care of Women Across the Lifespan. 2 Hours.
The knowledge and skills necessary to promote health, prevent illness, and manage the primary care needs of women across the lifespan will be provided. Theory- and research-based therapeutic management of acute, episodic and chronic conditions that occur in women across the lifespan will be explored. Professional values including standards of practice, cultural, legal and ethical issues and professional roles will be addressed. The health care delivery system will be analyzed for cost effectiveness and sensitivity to women. Prerequisite: NRSG 801, NRSG 809, NRSG 812, NRSG 813, NRSG 841, or Consent of Instructor. LEC.

NRSG 836. Nurse Midwifery in the Intrapartum Period. 3 Hours.
Nurse-midwifery care of uncomplicated women in the intrapartum period is presented and analyzed. Intrapartum and immediate postpartum complications and emergency events are addressed. Concepts of research, ethics, legal and political issues, nutrition, pharmacotherapeutics, health promotion, and selected deviations from normal are included. Prerequisite: NRSG 830, NRSG 835, NRSG 841, or Consent of Instructor. Corequisite: NRSG 832. LEC.

NRSG 837. Childbearing Family Practicum: Intrapartum, Postpartum, and Newborn. 3 Hours.
Competencies for nurse-midwifery management according to national standards of practice for the care of healthy women during labor, birth, and postpartum are demonstrated; additionally, competencies for nurse-midwifery management according to national standards of practice for the care of newborns are demonstrated. The development of a skill base for intrapartum, postpartum, and newborn emergencies is addressed. Nurse-midwifery management practice provides experience in the role of care provider during normal labor, delivery, postpartum, and newborn periods. This care may include consultation, collaboration, and referral when medically necessary. Prerequisite: NRSG 831, NRSG 832, NRSG 836, NRSG 838, Completion of Intermediate or Advanced Fetal Heart Monitoring Course within past 3 years, Up to date Neonatal Resuscitation Program (NRP) certification, or Consent of Instructor. LEC.

NRSG 838. Primary Care of Women Across the Lifespan Practicum. 2 Hours.
This practicum focuses on clinical competencies for the advanced practice nurse providing primary care and gynecologic management of women throughout the lifespan. Health promotion, complementary therapies, and evidence-based models of health care delivery are incorporated in the care of women. Clinical management experiences in the advanced practice role include but are not limited to: family planning, gynecologic health, and primary care for women from adolescence through menopause. Clinical experiences will include consultation, collaboration, and/or referral when medically necessary. Prerequisite: NRSG 830, NRSG 832, NRSG 835, NRSG 836, NRSG 841, or Consent of Instructor. Corequisite: NRSG 831, or Consent of Instructor. LEC.

NRSG 839. Global Perspectives and Diversity in Healthcare: Practicum. 2 Hours.
Students will have the opportunity to integrate concepts and theories of global health and diversity by direct program planning, delivery, and evaluation of care activities with a vulnerable population. Students will partner with a community of interest to provide directed advanced nursing care and or leadership activities via individual/population/organizational assessment, intervention, and evaluation. Emphasis will be placed on building cultural competence with an understanding of the historical, social, political, and economic forces of health within a specific community setting or geographic area. The worldview of the individual/population/organization will be respected and integrated into all aspects of health care delivery. PREREQUISITE(S): NRSG 826 or consent of instructor. LEC.

NRSG 840. Nurse-Midwifery Integration Practicum. 4 Hours.
The theoretical, clinical and role components of care as delivered by the advanced nurse-midwife student are implemented through an intensive supervised clinical practicum. Advanced professional clinical skills and evidence-based practice in the assessment, management and care of women and newborns are applied. Emphasis is on increased independence and decision-making embracing the function, scope and practice of nurse-midwifery practice. Prerequisite: NRSG 831, NRSG 837, NRSG 838, or Consent of Instructor. LEC.

NRSG 841. Reproductive Endocrinology. 2 Hours.
In-depth examination of the anatomy and physiologic processes of reproduction are studied, and will include normal growth and development, as well as clinical genetics. Essential information will be focused on understanding of the reproductive hormones and regulation of the menstrual cycle. With a complete understanding of menstrual hormone regulation, students will be better prepared to apply concepts to alterations that are encountered with maturation/development, puberty, pregnancy, lactation, menopause, and management of common gynecological needs (such as contraception). Prerequisites: NRSG 812 or Consent of Instructor. LEC.

NRSG 842. Topics in Mental Health Nursing. 1-5 Hours.
Investigation of issues and psychiatric mental health problems relevant to a selected population in mental health nursing. Prerequisites: Consent of instructor. LEC.

NRSG 844. Advanced Psychiatric Assessment. 3 Hours.
Advanced psychiatric assessment of children, adults and the elderly will be covered, including conducting patient-centered, culturally competent interviews in simulated situations. Epidemiology of psychiatric disorder is addressed. Assessment for psychiatric diagnoses of substance abuse, mood and anxiety disturbances, psychosis, dementia and disorders...
arising in childhood and adolescence are emphasized. Assessment of
dangerous behaviors and crisis intervention is covered. Prerequisites/
Corequisites: NRSG 801, or consent of instructor. LEC.

NRSG 845. Psychotherapeutics I: Psychiatric Mental Health Nurse
Practitioner. 3 Hours.
Focus is placed on assessing vulnerabilities, social determinants and
resilience as they relate to health promotion, disease prevention,
symptom management, and behavior change. Mental health and common
psychiatric disorders such as depression and anxiety throughout the life
span are discussed. Evidence-based brief psychotherapeutic intervention
frameworks including psychotherapy are applied to individuals, groups
and families across the life span. Professional issues that commonly
occur in implementing the advanced practice role in psychiatric and
mental health care are emphasized. Prerequisites: NRSG 748, NRSG
754, NRSG 755, NRSG 801, NRSG 809, NRSG 812, NRSG 813, NRSG
844, NRSG 850, or Consent of Instructor. Prerequisite/Corequisite: NRSG
851. LEC.

NRSG 846. Psychotherapeutics I: Psychiatric Mental Health Nurse
Practitioner Practicum. 2 Hours.
The focus of this clinical course is to apply theories and evidence-based
findings in a clinical setting serving culturally diverse individuals, groups,
and families. Students will have opportunities to conduct comprehensive
psychiatric assessments, formulate diagnoses, and conduct therapy
in conjunction with an interdisciplinary team. Prerequisite: NRSG 845,
NRSG 847, NRSG 851, or Consent of Instructor. LEC.

NRSG 847. Psychotherapeutic Interventions II: Psychiatric Mental
Health Nurse Practitioner. 3 Hours.
This theory course focuses on recovery-oriented, person-centered
approaches for individuals, families, and populations with complex and
persistent alterations in mental health functioning. Factors that affect
mental health functioning will be explored with a focus on interventions
that facilitate recovery including psychopharmacology. In addition, policies
and socioeconomic factors that influence the delivery of mental health
services will be analyzed. Emphasis is placed on identifying the unique
role of the psychiatric mental health nurse practitioner (PMHNP) within an
integrated, client-centered delivery system. Prerequisites: NRSG 845 or
Consent of Instructor. LEC.

NRSG 848. Psychotherapeutics II: Psychiatric Mental Health Nurse
Practitioner Practicum. 4 Hours.
In this practicum students will apply recovery oriented, evidence-based
frameworks such as biobehavioral, pharmacologic and psychoeducational
to individuals and groups across the lifespan with complex alterations
in functioning. The psychiatric mental health nurse practitioner
in collaboration with interdisciplinary team members and families
coordinates person-centered culturally sensitive care. Ethical principles
and legal issues are identified and integrated into care. Prerequisite:
NRSG 846 or Consent of Instructor. LEC.

NRSG 849. Psychotherapeutics III: Practicum. 3-4 Hours.
In this clinical practicum students will demonstrate integration of
knowledge from previous courses in implementing the psychiatric mental
health nurse practitioner role. This includes using diagnostic reasoning,
evidence-based therapy, biobehavioral, and psychoeducational
interventions with culturally diverse clients from different age groups.
Students will implement care within interdisciplinary teams using
consultation and referral as needed to deliver person-centered culturally
sensitive care. Students will work with age groups needed to meet the role
of psychiatric nurse practitioner across the lifespan. Prerequisites: NRSG
847, or consent of instructor. LEC.

NRSG 850. Mental Health Assessment of Infants, Children and
Adolescents. 3 Hours.
This is an advanced course in infant, child and adolescent mental
health assessment development for those individuals who desire to gain
greater knowledge and understanding of complex mental health issues
in children, adolescents and their families. The course focus is to identify
deviations between normal and abnormal development. Identification of
environmental and social determinates will be examined. Recognition of
pre-born risk factors affecting children and protective measure that
promote positive growth and development will be discussed. Assessment
tools and strategies for effective assessment will be reviewed. Emphasis
on the legal and ethical issues regarding safety and well-being of children
and families will be addressed. Prerequisites: NRSG 748, or consent of
instructor. LEC.

NRSG 851. Psychopharmacology for Advanced Nursing Practice. 3
Hours.
Understanding of the neuron, neurotransmitter and receptor functioning
as the basis for psychopharmacotherapy is emphasized in developing the
knowledge for prescribing and monitoring psychotropic medications
for clients diagnosed with psychiatric disorders. The major classes of
psychotherapeutic drugs, their mechanism of action, metabolism,
interaction, adverse and side effects are discussed. Drug development
is reviewed and ethical and legal issues involved in prescribing across the
lifespan are covered. Knowledge is applied to case studies that include
differentiating drugs, dosages and response to clients’ internal
environment, racial/ethnic background, and age. Prerequisite: NRSG 844
or equivalent; or consent of instructor. LEC.

NRSG 853. Abstraction and Modeling of Healthcare Information. 3
Hours.
Includes 2 credit hour lecture and 1 credit hour practicum. The information
system development life cycle process is presented with emphasis
on determination and analysis of information system requirements
and system design that meet the identified health care information
requirements. Object-oriented techniques will be introduced, including
Unified Modeling Language and Unified Modeling Methodology,
to facilitate process analysis and design proposal development.
Prerequisites: NRSG 820 or Consent of Instructor. LEC.

NRSG 854. Knowledge Management in Healthcare. 3 Hours.
Includes 2 credit hour lecture and 1 credit hour practicum. Knowledge
management is the creation, communication, and leveraging of a
healthcare organization's knowledge assets. Defining knowledge,
describing the knowledge creation cycle, and the identification of
the knowledge worker and his/her impact on the organization are discussed.
Information technology and communities of practice are presented in a
balanced approach supporting a systematic viewpoint of the knowledge
management process. Knowledge management theory is enhanced with
the performance of a knowledge audit and the development of knowledge
management tools. Prerequisite: NRSG 820 or Consent of Instructor.
LEC.

NRSG 855. Topics in Health Informatics. 3 Hours.
Investigation of current futuristic issues and trends relevant to healthcare
informatics. Prerequisites: One graduate course in information, or consent
of instructor. LEC.

NRSG 856. Health Informatics Practicum. 1-3 Hours.
In collaboration with healthcare information faculty and preceptors,
students design an experience to facilitate application of theories and
research related to health care informatics. Emphasis is on the application
of the information system development life cycle. Students analyze
the leadership and technical behaviors of various informatics roles and
negotiate an informatics project to be completed within the practicum.
NRSG 858. Adult/Gerontological Health Care I. 3 Hours.
Knowledge and skills necessary to provide holistic care for the culturally-diverse adult in multiple care settings are emphasized in the first of two sequential didactic courses for the Adult/Gerontological advanced practice registered nurse. The course covers acute and common health problems experienced across the life span from adolescence to advanced age. Physical and multidimensional functional assessments are emphasized as a basis for establishing differential diagnosis and planning effective therapeutic, patient-centered interventions. Evidence-based management strategies to manage care are emphasized. Coordination of services and collaboration with interprofessional and intraprofessional teams for comprehensive health care are integrated throughout the course. Prerequisites: NRSG 748, NRSG 755, NRSG 809, NRSG 801, or Consent of Instructor. Prerequisite/Corequisite: NRSG 813. LEC.

NRSG 863. Adult/Gerontological Health Care I: Practicum - CNS. 2 Hours.
Management of the primary, acute, and chronic health care needs of a culturally-diverse population of adults across the lifespan with specific system dysfunction are explored. Clinical practice will include multidisciplinary coordination of comprehensive, managed care. Consultative, patient education, quality improvement, and project development activities will be major focuses. Prerequisite: NRSG 862, NRSG 865, or Consent of Instructor. LEC.

NRSG 864. Adult/Gerontological Health Care II: Practicum - NP. 2 Hours.
Assessment of adults across the lifespan and the management of common acute and chronic health problems are executed in consultation with the appropriate provider. Opportunities to manage pharmacological and medical therapeutics will be provided. Nursing therapeutics and case management based on theory and research are applied in a variety of community and institutional practice settings. Emphasis is on health promotion and health maintenance for culturally diverse adult individuals and groups. Prerequisite: NRSG 862, NRSG 865, or Consent of Instructor. LEC.

NRSG 865. Adult/Gerontological Health Care II. 3 Hours.
Knowledge and skills necessary to provide holistic care for adults from diverse cultures in multiple care settings are emphasized in the second of two sequential didactic courses for the Adult/Gerontological advanced practice registered nurse. The course covers chronic and complex health problems experienced by adults across the life span from adolescence to advanced age. Physical and multidimensional functional assessments are emphasized as a basis for establishing differential diagnosis and planning effective therapeutic, patient centered interventions. Evidence-based strategies to manage care are emphasized. Coordination of services and collaboration with interprofessional and intraprofessional teams for comprehensive health care are integrated throughout the course. Prerequisites: NRSG 813, NRSG 862 or Consent of Instructor. LEC.

NRSG 866. Adult/Gerontological Health Care III: Preceptorship - CNS. 4 Hours.
Management of the primary, acute and chronic health care needs of a culturally-diverse population of adults across the lifespan with specific system dysfunction are explored. Clinical practice will include interdisciplinary coordination for comprehensive, managed care. Consultative, patient education, quality improvement, and project development activities will be major focuses. Prerequisites: NRSG 863 or Consent of Instructor. LEC.

NRSG 867. Adult/Gerontological Health Care III: Practicum - NP. 4 Hours.
Assessment of adults across the life span and the management of common acute and chronic health problems are executed in consultation with the appropriate provider. Opportunities to manage pharmacological and medical therapeutics will be provided. Nursing therapeutics and care management based on theory and research are applied in a variety of community and institutional practice settings. Emphasis is on health promotion and health maintenance for culturally diverse adult individuals and groups. Prerequisite: NRSG 864 or Consent of Instructor. LEC.

NRSG 868. Adult/Gerontological Health Care III: Preceptorship - CNS. 3-5 Hours.
The theoretical, clinical, and research role components of care as delivered by the adult/gerontological CNS are implemented. Opportunities are provided to utilize diagnostic reasoning, nursing therapeutics, pharmacological therapeutics, interdisciplinary treatment plans, project development, consultation, referral, and research findings in the management and evaluation of culturally diverse clients experiencing specific system dysfunction. The client system for this preceptorship includes adults (and their families) experiencing a selected system dysfunction. Emphasis is on stabilization of the client, minimization of complications, and promotion of optimal level of health through an interdisciplinary approach. Prerequisites: NRSG 866 or Consent of Instructor. LEC.

NRSG 869. Adult/Gerontological Health Care III: Preceptorship - NP. 3-5 Hours.
The theoretical, clinical, and research role components of care as delivered by the Adult/Geriatric nurse practitioner are implemented. Opportunities are provided to individualize the student's clinical acumen in utilizing diagnostic reasoning, nursing therapeutics, pharmacological therapeutics, interdisciplinary treatment plans, consultation, referral, and research findings in the management and evaluation of culturally diverse adult/geriatric clients with common ambulatory care problems. The client system for this preceptorship includes adults (and their families)
across the life span. Emphasis is on preventing illness, promoting health and an optimal functional level. Stabilizing the ill client, and minimizing complications through an interdisciplinary approach. Prerequisites: NRSG 867 or Consent of Instructor. LEC.

NRSG 870. Designing a Student Learning Environment. 3 Hours.
The roles of both the educator and student in designing a learning environment provide the framework for analyzing pedagogical philosophies, theories, ethical/legal issues, and research related to teaching strategies and education. The focus is on best practices and research-based strategies to promote various learning styles and create an active learning environment that increases student retention and learning success for diverse, multicultural student populations. Attention will be given to the relationship between the setting, methodologies of clinical teaching, and the assessment of competencies. Prerequisites: NRSG 748, NRSG 754, or consent of instructor. LEC.

NRSG 871. Curriculum/Program Planning and Evaluation. 3 Hours.
Philosophies, methods, and processes of curriculum and instruction in nursing education provide the framework for discussing curricular and program planning theories/models, resources for decision making, research, and evaluation methods that create a learner-centered environment. Attention is given to frameworks for program evaluation, methods of data collection, and the ethics and standards of evaluation practice. The influence of societal trends, and current health professions issues relevant to curriculum planning are addressed. Emphasis is on strategies for anticipating future societal needs and developing educational curriculum to meet those needs. Matters of diversity, workforce development, ethics/legal issues in curriculum planning and education also are included. Prerequisites: NRSG 748, NRSG 754, or consent of instructor. LEC.

NRSG 872. Topics in Nursing Education. 1-5 Hours.
Investigation of special issues or problems relevant to appropriate client systems (client, family, and student or health care professional) in Nursing Education. Prerequisite: Consent of instructor. LEC.

NRSG 873. Teaching with Technologies. 3 Hours.
Theories and trends that support the use of merging and emerging technologies for the enhancement of teaching and learning are explored. The focus is on assisting educators to gain skills in choosing appropriate instructional technologies to enhance learning. Learning variables, the environment context, financial-political issues, and the influence of those variables on technologies are examined. The evaluation and impact of current technology on the delivery of education are examined along with strategies for considering/anticipating future technologies to meet educational needs. Prerequisite: NRSG 748, NRSG 754 or Consent of Instructor. LEC.

NRSG 874. Nurse Educator Preceptorship. 3 Hours.
The role components of the nurse educator are implemented with a preceptor in selected educational settings. Opportunities are provided to utilize teaching and learning strategies, research findings, and evaluation methods with diverse students. Professional issues, educational trends, changing role of the educator, and self-assessment are incorporated in accompanying modules. Prerequisites: NRSG 870, NRSG 871, NRSG 873. LEC.

NRSG 877. Foundations in Education and Learning. 3 Hours.
Foundations and applications of education and evaluation strategies for teaching and learning in academic, clinical, research, and organizational settings are explored. Scholarly evidence from a variety of sources is used to develop educational processes, products, and evaluation strategies. Students acquire knowledge to support professional development and employ research skills as educators in diverse teaching environments with diverse learners. Prerequisites: Admission to the Doctoral Program, or Consent of Instructor. LEC.

NRSG 878. Clinical Radiology for the Advanced Practice Nurse. 2 Hours.
A complexity science framework is used to present the basic and advanced technical aspects of radiological tests used in the care of adult and pediatric patients in the diagnostic work up of the etiology of the health problem. The science that forms the basis for all plain (cathode) films as well as computerized scanning and magnetic resonance imaging tests is covered in the course. The emphasis is on the appropriate choice of radiological tests in the work-up of the patient’s health problem. Also, advanced practice nurses will learn a framework for evaluating the findings of the radiological test, and the clinical implications of the findings. Prerequisites/Corequisites: NRSG 818, or NRSG 866, or NRSG 869, or NRSG 849, or NRSG 840, or consent of instructor. SEM.

NRSG 880. Organizational Foundations for Leading Change. 3 Hours.
Self-discovery as a foundation for professional development while exploring the concepts of leader, manager and follower is emphasized. Analysis and prediction of an organization’s stages of development and its capacity for linear and social change are introduced through the lens of complexity science. Political, legal, ethical and other issues that constrain and destabilize organizations and strategies to restore equilibrium are explored. Same as HPM 840. Prerequisites: NRSG 748, or consent of instructor. Prerequisite/Corequisite: NRSG 755. LEC.

NRSG 881. Applied Budgeting and Finance. 3 Hours.
Leaders apply basic principles associated with program, project and service-line fiscal management, price setting, budget preparation, cost-benefit/break-even analysis, managed-care contracting, and interpreting financial ratios while concurrently acquiring a financial vocabulary to communicate with various stakeholders. Financial reports such as balance sheets, budget forms and expense reports are studied and formulated related to government agencies, small clinical operations, grant-funded projects, and start-up programs. Staffing models and the staffing-quality equation are analyzed for the purpose of projecting human resource requirements. Prerequisites: NRSG 880, HPM 822, or Consent of Instructor. LEC.

NRSG 882. Introduction to Operations. 3 Hours.
Examines performance of health care organizations, sources of variation, methods of measurement, and strategies for improving performance. Considers several approaches to performance improvement and examines tools widely used in operations management. Incorporates lecture, discussion, and fieldwork. (Same as HPM 850.) Prerequisite(s): NRSG 754 or NRSG 880 or equivalent course; or consent of instructor. LEC.

NRSG 883. Complexity Science Approaches to Improve Organizational Effectiveness. 3 Hours.
This course introduces complexity science principles with the aim of improving the quality and effectiveness of healthcare organizations. Traditional approaches to quality improvement will be contrasted with tools and metrics that can be applied in complex organizations. Principles that relate to embeddedness, diversity, distributed control, co-existence of order and disorder, nonlinearity, inability to predict, emergence, and functioning at the edge of chaos will be introduced. Prerequisites: NRSG 880, or consent of instructor. LEC.

NRSG 884. Topics in Organizational Leadership. 3 Hours.
Investigation of current and futuristic issues and trends relevant to organizational leadership. Prerequisites: One graduate course in organizational leadership track, or consent of instructor. LEC.
NRSG 885. Evaluation and Analysis for Healthcare Effectiveness. 2 Hours.
Systematic approaches for analyzing and evaluation processes of care delivery and their impact on client populations, organizational processes, and communities are considered. Research concepts and methods are used in a systems context. Program evaluation, performance improvement, and other methods of measuring outcomes are examined for their utility within the health care setting. Linkages between program evaluation and regulatory policy are studied. Prerequisite: NRSG 754. Prerequisite/Corequisite: NRSG 880 or Consent of Instructor. LEC.

NRSG 886. Organizational Leadership Practicum. 1-3 Hours.
The knowledge, skills, and abilities learned throughout the course of study are integrated in this practicum experience designed to develop further specialized knowledge. The faculty and preceptor provide support and guidance to help interpret experiences, and gain a broader worldview within organizational leadership. Students design an experience to facilitate application of theories and research related to organizational leadership. Emphasis is on expanding the capacity of the emerging leader in leading change, facilitating advanced communication skills, and demonstrating one or more areas of leadership expertise. Students negotiate a leadership project to be completed within the practicum. Prerequisites/Corequisites: NRSG 808, 820, 826, 881, 882 or 883, 885, 891 HPM 822, or consent of instructor. CLN.

NRSG 889. Grant Writing. 3 Hours.
All aspects of preparing grant applications are covered. This includes writing an actual grant application containing all the usual elements of grants—budgets, biosketches, resources, and scientific text. In addition, different funding agencies, building research teams, the review process, responding to reviewers, and resubmitting grants will be covered. Prerequisites: Appropriate research methods and statistics courses in student's current graduate program (at least 2 statistics courses, one including content of multiple regression), and permission of instructor. For students in the Outcomes Management and Research Concentration: prerequisites: HPM 821 or PRVM 800. Same as ANAT 869 and HPM 788. LEC.

NRSG 890. Independent Study in Nursing. 1-5 Hours.
Intensive study in an area of interest with experiences selected according to the student's written purposes, conceptual framework, objectives and evaluation (1-5 credit hours). Appropriate prerequisite courses, as determined by the Independent Study faculty advisor, must be completed. LEC.

NRSG 891. Human Resources and Workforce Development. 3 Hours.
The focus of this course is to understand the leadership functions of human resource management in organizations to create a competitive edge through employee empowerment. Core human resource concepts are introduced and applied to optimize human capital within a variety of healthcare settings, including compensation and benefits, employee recognition, and employee/labor relations. National, regional and local strategies and workforce trends are discussed related to best practices for the selection, retention, and management as a healthcare employer of choice. Prerequisites: All Leadership Core Courses, or consent of instructor. Same as HPM 854. LEC.

NRSG 892. Independent Study in Nursing Practicum. 1-5 Hours.
Intensive practicum in a specified area of interest with experiences selected according to aims that are mutually agreed upon by faculty and student. Prerequisite: None IND.

NRSG 898. Research Project in Nursing. 2 Hours.
 Portions of the research process in an area of nursing are implemented. Emphasis is placed on experiential knowledge of the actual conduct of research. The student selects one of several research activities and reports on the project. Prerequisites: NRSG 754 plus either one advanced practice or one administration track course, or consent of instructor. LEC.

NRSG 899. Thesis. 1-6 Hours.
Prerequisites: NRSG 754, and one core track course. THE.

NRSG 909. NEXus Topics. 1-9 Hours.
This course is used for enrollment in the Nursing Education Xchange program (NEXus). NEXus is a collaboration of doctoral programs in nursing that offer distance-accessible graduate courses. KU School of Nursing is an academic collaborator in NEXus. Students in NEXus schools may enroll in online doctoral courses offered by other NEXus academic collaborators. The student's transcript will reflect the course title, under the home school course number. Students select appropriate NEXus courses to fit with their plans of study. Courses are selected by the student in consultation with his/her academic advisor. Prerequisite(s): Admission to a doctoral program in nursing and completion of course-specific prerequisites. LEC.

NRSG 911. Tools for Practice Doctorate Scholarship. 3 Hours.
Foundations and applications of tools and methods to develop advanced practice project proposals across diverse settings are explored. Scholarly evidence from a variety of sources is used to develop project proposals that enhance patient care, staff development, and organizational leadership. Relevant practice theories such as quality improvement and evaluation models serve as project proposal guides. Students acquire knowledge and skills to support professional development, to write advanced practice project proposals, and to advance doctoral scholarship. Prerequisites: NRSG 804, or consent of instructor. LEC.

NRSG 919. Foundations for Leading & Communicating. 3 Hours.
Theoretical foundations in organizational decision making and communication will enhance students' development of expertise in assessing organizations, identifying systems issues, and facilitating organization- and system-wide improvements in healthcare. Traditional approaches to organizing and communicating are contrasted with emerging approaches that promote sensitivity to diverse organizational cultures and populations. Through examination of theoretical perspectives, the student will develop an ability to integrate the contributions of different points of view and ways of thinking crucial to accurately assess, design and lead high performing healthcare organizations in a dynamic world. Prerequisites/Corequisites: NRSG 829 or 833 or 856 or 886, and NRSG 941, or consent of instructor. LEC.

NRSG 920. Microsystems in Healthcare Operations. 3 Hours.
Competencies necessary for studying clinical Microsystems and examining their influence on patient safety, satisfaction, and other clinical outcomes are developed in this course. Microsystems will be determined, deconstructed, analyzed for best practice, and re-constituted for the purpose of improved organizational performance. The roots of quality improvement are traced and quality improvement application within a microsystem environment is explored. Key topics include: assessment tools and models, continuous quality improvement theory, evidence-based practice, performance improvement methods (measurement, statistics, problem identification and analysis, control charts) and the development of team-based problem solving and resolution. Students examine productivity and cost indicators, strategic and operational planning, healthcare finance, relationship-building, collaboration techniques, and leadership principles. Prerequisites/Corequisites: NRSG 829 or 833 or 856 or 886, and NRSG 941, or consent of instructor. LEC.

NRSG 935. Professionalism and Scholarship Workshop. 1 Hour.
Building a foundation for advanced study is explored in the context of professionalism and scholarship. Strategies for promoting professional development while preparing for future roles as nurse scholars and nurse scientists are examined. Students are introduced to a model of
NRSG 935. Synthesis Workshop I. 1 Hour. Leadership development and technologic applications are integrated with theoretical, statistical, and research methods. Doctoral leadership skills are refined and tested through case study simulations of theory and research applications in diverse practice settings. A qualifying examination concludes the Workshop consisting of a written and oral case study simulation. Prerequisites: BIOS 730 and BIOS 740 or equivalent, NRSG 941, NRSG 942, NRSG 946, or Consent of Instructor. Prerequisite/Corequisite: NRSG 877. LEC.

NRSG 948. Advancing Organizational and Clinical Quality. 2 Hours. The roles of nursing leaders in the design, measurement, and evaluation of the discipline within a variety of organizational settings are analyzed. The nuances of measurement and statistics are compared and related to the quality science paradigm, applying incremental measurement techniques to foster continuous improvement. Process design, standards development and adaptation, regulatory requirements, and consumer expectations for quality are integrated into a quality plan that aligns with the student's career trajectory. Prerequisites: NRSG 804 or either [NRSG 944 or NRSG 947], or Consent of Instructor. LEC.

NRSG 958. Knowledge Representation and Interoperability. 3 Hours. Includes 2 credit hour lecture and 1 credit hour practicum. The use of information systems including medical devices is paramount in achieving patient safety. Students will attain an inclusive understanding of how human factors and ergonomic principles can be used to improve patient safety in the design, implementation, and evaluation of information systems and medical devices. Additionally, health care professionals will acquire skills to appropriately apply error reduction strategies developed in high reliability organizations. Prerequisites(s): Admission to a doctoral program in nursing, NRSG 857 or consent of instructor. LEC.

NRSG 957. Health Informatics, Human Factors, and Ergonomics as Applied to Patient Safety. 3 Hours. Includes 2 credit hour lecture and 1 credit hour practicum. The need to exchange clinical information consistently between health care providers, care settings, researchers and other requires syntactic and semantic interoperability. Requirements and approaches to meet interoperability will be explored. Standards for messaging, terminology, and knowledge...
representation will be investigated. Prerequisites: Admission to a doctoral program in nursing, NRSG 853 or consent of instructor. LEC.

**NRSG 995. Research Experience. 2 Hours.**
This practicum is an intensive research experience with a specific faculty mentor. It involves working on part of the faculty mentor's current research or on a subject closely related to the mentor's work. The student submits a proposal for this research experience to the faculty mentor. Once the project is complete, the student presents the research orally in a structured forum and, if appropriate, develops a publishable manuscript. Prerequisite: Consent of instructor. FLD.

**NRSG 963. Advanced Leadership Residency. 1-9 Hours.**
The advanced leadership residency is designed to expand the DNP student's breadth and depth of leadership knowledge and skills in an area of practice at the aggregate/systems/organization level. Students will have the opportunity to enhance their existing advanced leadership skills in one or more of the following areas: organizational and systems leadership for enhancing healthcare outcomes; quality improvement strategies to support decision-making; prediction and evaluation of practice outcomes; patient safety initiatives; health care policy; creating and sustaining change at organizational and policy levels; or ethics related to healthcare systems; information technology; knowledge management; or population health. Prerequisite/Corequisite(s): NRSG 919 and NRSG 941, or consent of instructor. PRA.

**NRSG 964. Advanced Clinical Residency. 1-9 Hours.**
The advanced clinical residency is designed to expand the DNP student's breadth and depth of clinical knowledge and skills in an area of practice. The focus can be either on the delivery of sub-specialty care services or full spectrum primary care services. Students will have the opportunity to enhance their existing advanced clinical practice skills in one or more of the following areas: the diagnosis and management of ambulatory patients with complex diagnoses and comorbid conditions in the context of family, community and culture; the diagnosis and management of patients with complex diagnoses and/or comorbid conditions who present with acute changes in health status requiring interventions available only in an acute care setting; and the diagnosis and management of patients who are unable to function independently due to age related alteration in mental and physical status, developmental, perceptual and physical disability and chronic, degenerative illness. Students will synthesize clinical knowledge and use evidence-based decision making to construct symptom-based assessments, advanced differential diagnoses, independent therapeutic interventions, and outcome evaluation of the care of clients. Prerequisites/Corequisites: Post-BSN students: NRSG 818, or NRSG 868, or NRSG 869, or NRSG 849, or NRSG 840, or consent of instructor. Post-Master's students: A minimum of 1000 clinical hours in your current or previous work following graduation from an accredited Master's in Nursing program; National certification in your area of expertise (e.g. family, adult, psych, pediatric, CNM, etc.) CLN.

**NRSG 965. Special Topics: ______. 2 Hours.**
Students participate in advanced study that provides theoretical, methodological, and clinical perspectives to facilitate their pursuit of research interests in an identified specialty area. Methods include directed readings, discussions, and the interpretation of data-based literature. Examples of topics are theory and research issues related to health systems, symptom management, or health behavior; topic for any given semester to be announced. Prerequisite: Consent of instructor. IND.

**NRSG 970. Synthesis of Minor Area of Study. 1 Hour.**
This course provides an opportunity for the PhD student to synthesize work in their selected minor. After completion of minor coursework, students will focus on synthesizing content across these minor courses. The synthesis experience culminates in a written synthesis paper in the minor area to assure the student's competency in the minor area of study. Typically, the minor coursework and the minor synthesis paper contribute directly to the student's dissertation. Prerequisites: Completion of Minor Coursework (at least 10 credit hours) and NRSG 945, or consent of instructor. LEC.

**NRSG 980. Doctorate of Nursing Practice Capstone Project. 1-6 Hours.**
The capstone project is an amalgamation of the student's field of inquiry in his/her doctoral course of study. As such, the capstone requires that a practice-focused problem be identified and examined in depth. For most students the capstone project will include application of an evidence-based intervention suitable to their area of focus (e.g. organizational leadership, clinical practice, education, etc.) that involves the appropriate metric (or sets of metrics)/evaluation, and dissemination of the project findings to a targeted audience. The capstone project must meet capstone guidelines for the DNP program. Prerequisites: NRSG 911 and completion of 2 doctoral level specialty courses, or consent of instructor. FLD.

**NRSG 990. Doctoral Research. 1-12 Hours.**
Original and independent investigation approved by and conducted under the supervision of the student's advisor or advisory committee and in partial fulfillment of the requirements for the Ph.D. degree. Prerequisite: Consent of Advisor. RSH.

**NRSG 997. Independent Study. 1-4 Hours.**
Having chosen an appropriate mentor, the student selects an area of advanced study. Specific objectives and credit hours are jointly determined by the student and selected faculty member. Prerequisites: Prior graduate course work in the area of study and consent of instructor. IND.

**NRSG 999. Dissertation. 1-12 Hours.**
Preparation of the dissertation based upon original research and in partial fulfillment of the requirements for the Ph.D. degree. Credit is given only after the dissertation proposal has been accepted by the student's dissertation committee. Prerequisites/Corequisites: NRSG 990, and consent of adviser. THE.

**Nursing Courses**

**NURS 50. Research Clinical Trial Coordinator Certificate Program. 0 Hours.**
The Research Clinical Trial Coordinator Certificate Program targets the interdisciplinary Health Professions and is designed to meet the training needs for individuals to become Clinical Trial Coordinators. The series of three courses over eighteen months provides an introduction to the research coordinator role and provides in-depth knowledge of pre-, during-, and post-clinical trial study activities. Regulatory, administrative, and ethical issues will be presented as well as the daily operational requirements (e.g. study design, financial and monitoring, protocols and documentation, subject recruitment and retention, audits, etc.). A practicum experience in selected research settings provides opportunities to utilize learned competencies related to the role of a Research Coordinator during key phases of a clinical trial study: pre-study, during-study, and post-study activities. Minimum educational requirements are a high school diploma. LEC.

**NURS 301. Techniques for Therapeutic Interventions I. 1 Hour.**
Skills necessary to perform fundamental techniques relating to therapeutic interventions are discussed and demonstrated. The emphasis is on drug calculation and psychomotor skills. Concepts of time management, prioritization of nursing care, team building, cost effectiveness and resource utilization are introduced through scenarios and demonstrations
in a laboratory setting. Prerequisite: Admission to the School of Nursing. LEC.

NURS 302. Techniques for Therapeutic Interventions II. 1 Hour. Therapeutic interventions pertaining to care of the client experiencing acute, chronic, and complex health deficiencies are discussed and demonstrated. Case scenarios and demonstrations are used to apply the concepts of time management, prioritization of nursing care, delegation, team building, cost effectiveness, and resource utilization in a laboratory setting. Prerequisite: NURS 301. Prerequisites or Corequisites: NURS 322, NURS 325, or consent of instructor. Corequisites: NURS 366 and NURS 376. LEC.

NURS 306. Nursing Care of the Adult Experiencing Surgery. 2 Hours. This course is designed to assist undergraduate students to acquire a scientific knowledge base necessary for delivering quality nursing care to adult surgical patients. The course will include an in-depth study of content relevant to the pre-operative, intra-operative, and post-operative phases, using Maslow's hierarchy of needs as a basis for the content. Opportunities will be provided for students to increase their skills in the use of the nursing process. Prerequisites: NURS 340 and NURS 341. LEC.

NURS 310. Information Technology For Healthcare Professionals. 1 Hour. Beginning theory and practical applications of various uses and results of computer technologies are explored in order to provide the basic skills and current infrastructure for information management in health care delivery. These concepts and skills are essential for curriculum related activities, as well as for providing therapeutic nursing interventions and communications with faculty, client systems, and other health care participants. Learners are encouraged to be cognizant of emerging legal and ethical issues related to electronic communications. Knowledge and skills presented in this course will be developed and expanded in future nursing courses. Prerequisites: Admission to the School of Nursing or consent of instructor. LEC.

NURS 312. Adult Trauma Management. 2 Hours. Basic concepts related to the care of the traumatically injured adult are discussed. Emphasis is placed on the initial management and stabilization of the adult trauma client. The nursing process is utilized to assist the individual client to restore system balance and prevent further system imbalance. Basic trauma stabilization skills are demonstrated. Ethical, legal, and societal issues, as well as current research on trauma management will be explored. Prerequisites: NURS 340, NURS 341, NURS 350, or consent of instructor. LEC.

NURS 313. Integrating Nutrition in Nursing. 2 Hours. Knowledge from the basic sciences is applied to explore the relationship between nutrition and body function. Nutrition requirements for the different phases of the life cycle are described. The application of nutritional concepts necessary for the maintenance of health, prevention of illness, and minimization of the complications of acute and chronic illness will be discussed. A framework to counsel clients regarding healthful dietary habits, costs and governmental programs will be explored. Prerequisite: Completion of two Level II courses. LEC.

NURS 314. Psychosocial Aspects of Nursing Seminar. 2 Hours. Psychosocial issues that relate to nursing care across the wellness-illness continuum for client systems across the lifespan will be explored in this course. Relevant topics such as death and dying, disfiguring conditions, infertility, and coping with chronic illnesses will be investigated. Ethical and legal considerations as well as current research will be discussed. Prerequisite: Completion of two Level II courses. LEC.

NURS 316. Psychosocial Aspects of Nursing Seminar. 2 Hours. Psychosocial issues that relate to nursing care across the wellness-illness continuum for client systems across the lifespan will be explored in this course. Relevant topics such as death and dying, disfiguring conditions, infertility, and coping with chronic illnesses will be investigated. Ethical and legal considerations as well as current research will be discussed. Prerequisite: Completion of two Level II courses. LEC.

NURS 317. Stress Management for Nurses. 2 Hours. This course is designed to acquaint students with the concept of stress as it occurs in our society and to introduce them to effective ways of dealing with stress in themselves and in their clients. The course will examine socio-cultural, physiological, and psychological components of stress. Students will be exposed to effective stress management techniques through the utilization of small group experiential exercises as a teaching methodology. LEC.

NURS 318. Advanced Concepts in Intravenous Therapy. 2 Hours. Advanced concepts in intravenous therapy that are relevant to practice in acute, ambulatory, long term and home settings will be presented. All venous access devices and types of intravenous therapies will be studied. Emphasis will be placed on client assessment, client teaching, early recognition of complications and research-based implications as they relate to intravenous therapy and care of clients across the life span. Hands-on opportunities to work with the various intravenous access devices and therapies will be provided in non-clinical and clinical laboratory settings. Prerequisite: Completion of two Level II courses. LEC.

NURS 320. Pathophysiology for the Practicing Nurse. 3 Hours. This course is designed to provide students with a basic understanding of pathophysiological changes that occur within the internal environment of the individual. Understanding these alterations is basic to providing quality nursing care. System variations across the lifespan are addressed. Prerequisites: Admission to the School of Nursing and RN to BSN program or consent of instructor. Exams will be scheduled as in class proctored experiences. LEC.

NURS 321. Alterations in Physiological Functioning I. 3 Hours. Basic mechanisms underlying illness and disease are stressed as a basis for the understanding of health promotion and disease prevention in this first of two sequential courses. Pathophysiological changes that occur within the internal environment of individuals in the presence of dysfunction of disease of selected systems are presented as a rationale for nursing diagnoses and therapeutic interventions. System variations across the life span are addressed. Prerequisite: Admission to the School of Nursing. LEC.

NURS 322. Alterations in Physiological Functioning II. 2 Hours. In this second sequential course, an understanding of pathophysiological changes that occur within the internal environment of the individual in the presence of dysfunction or disease of selected systems are provided as a rationale for nursing diagnoses and therapeutic interventions. The most common alterations in selected body systems are presented, with relevant risk factors and epidemiology, pathophysiologic mechanisms, and clinical manifestations. System variations across the life span are discussed. Prerequisite: NURS 321. Prerequisites or corequisites: NURS 325 or consent of instructor. LEC.

NURS 325. Pharmacology. 3 Hours. Pharmacodynamics and pharmacokinetics of drug therapy are discussed in order to provide a basic understanding of the client's reaction to a drug both therapeutically and adversely, and to predict potential drug interactions. Internal and external environmental factors affecting drug therapy are assessed in order to provide a comprehensive data base for therapeutic nursing interventions. Specific prototypes of selected drug classifications provide the framework for understanding the action, use, side effects and nursing implications of drugs. The nurse's role in drug administration, assessment of drug effects, and client system education are emphasized. Legal and ethical responsibilities for administering drugs are considered. Prerequisites: Admission to the School of Nursing or consent of instructor. Prerequisites or Corequisites: NURS 322 or consent of instructor. LEC.
NURS 326. Pharmacology for the Practicing Nurse. 3 Hours.
Pharmacodynamics and pharmacokinetics of drug therapy are discussed in order to provide a basic understanding of the client's reaction to a drug, both therapeutically and adversely, and to predict potential drug interactions. Internal and external environmental factors affecting drug therapy are assessed in order to provide a comprehensive database for therapeutic nursing interventions. Specific prototypes of selected drug classifications provide the framework for understanding the action, use, side effects and nursing implications of drugs. The nurse's role in drug administration, assessment of drug effects, and client system education are emphasized. Legal and ethical responsibilities for administering drugs are considered. Prerequisites: Admission to the School of Nursing or consent of instructor. Prerequisites/Corequisites: NURS 322 or consent of instructor. LEC.

NURS 327. Communicating and Managing Healthcare Information. 3 Hours.
Basic theories of interpersonal communication and information technologies are explored. Use of these skills and technologies to develop therapeutic relationships with patients and the interdisciplinary healthcare team is emphasized. Legal and ethical issues related to health information technology and health information exchanges will be examined. Prerequisites: Admission to the School of Nursing or consent of instructor. Prerequisites/Corequisites: NURS 321, NURS 328, NURS 329, NURS 330, NURS 332, NURS 333 or consent of instructor. LEC.

NURS 328. Professional Development I: Introduction to the Profession. 2 Hours.
Students are introduced to the evolution of the profession of nursing. Focus is on professional and personal accountability. Students will have opportunities to establish personal and professional boundaries, examine their own beliefs and values, and develop their personal philosophy of nursing. Students will explore how their lived experience will impact their professional practice. Prerequisites: Admission to the School of Nursing or consent of instructor. Prerequisites/Corequisites: NURS 327, NURS 331, NURS 329, NURS 330, NURS 332, NURS 333 or consent of instructor. LEC.

NURS 329. Alterations in Physiological Functioning I. 2 Hours.
Basic mechanisms underlying illness and disease are stressed as a basis for the understanding of health promotion and disease prevention in this first of two sequential courses. Pathophysiological changes that occur within the environments of individuals in the presence of dysfunction or disease of selected systems are presented as a rationale for nursing diagnoses and therapeutic interventions. System variations across the lifespan (fetuses, children, pregnant women, adults, and older adults) are addressed. Prerequisites: Admission to the School of Nursing or consent of instructor. Prerequisites/Corequisites: NURS 327, NURS 331, NURS 329, NURS 330, NURS 332, NURS 333 or consent of instructor. LEC.

NURS 330. Pharmacology I. 2 Hours.
Pharmacodynamics and pharmacokinetics of drug therapy across the lifespan are discussed in order to provide a basic understanding of the patient's reaction to a drug both therapeutically and adversely, and to predict potential drug interactions. Personal, genetic, and environmental factors affecting drug therapy are assessed in order to provide a comprehensive data base for therapeutic nursing interventions. Specific prototypes of selected drug classifications provide the framework for understanding the action, use, adverse effects and nursing implications of drugs. The nurse's role in drug administration, assessment of drug effects, and patient education are emphasized. Legal and ethical responsibilities for administering drugs are considered. Prerequisites: Admission to the School of Nursing or consent of instructor. Prerequisites/Corequisites: NURS 327, NURS 331, NURS 328, NURS 329, NURS 332, NURS 333 or consent of instructor. LEC.

NURS 331. Basic Assessment and Therapeutic Interventions. 3 Hours.
Skills necessary to perform basic patient assessment and therapeutic interventions are discussed and demonstrated. Opportunities are provided in a laboratory setting for students to demonstrate cognitive and psychomotor competencies of therapeutic interventions and assessment of the individual patient across the life span. The emphasis is on interviewing techniques, physical examination, and psychomotor skills. Developmental factors and risk factors, including genetic and environmental, that affect the patient's health will be explored. Case studies and simulation are used to apply the concepts of safe quality care. Prerequisites: Admission to the School of Nursing or consent of instructor. Prerequisites/Corequisites: NURS 327, NURS 328, NURS 329, NURS 330 or consent of instructor. LEC.

NURS 332. Health and Illness: Foundations of Nursing. 3 Hours.
Concepts basic to the art and science of nursing are introduced as a foundation for safe, quality patient care. Emphasis is placed on the patient and/or designee as the source of control and full partner in providing compassionate and coordinated care. Evidence-based principles of nursing and health promotion are integrated to prepare the student to meet the health-related needs of a patient. The nurse's role as a member of the interdisciplinary team will be examined. Principles of information management and communication are integrated into the care of the patient with health care needs. Prerequisites: NURS 331, or consent of instructor. Prerequisites/Corequisites: NURS 327, NURS 328, NURS 330, NURS 333, or consent of instructor. LEC.

NURS 333. Health and Illness: Foundations of Nursing Practicum. 1 Hour.
Evidence-based clinical reasoning is applied in the care of individual patients with acute and chronic illness to ensure safe and quality outcomes. Emphasis is placed on the patient and/or designee as the source of control and full partner in providing compassionate and coordinated care. Tools of communication and technology are utilized in the delivery and documentation of care. The role of the nurse within the interdisciplinary team is demonstrated. Prerequisites: NURS 331, or consent of instructor. Prerequisites/Corequisites: NURS 327, NURS 328, NURS 329, NURS 330, NURS 332, or consent of instructor. LEC.

NURS 334. Professional Development II: Image, Roles, and Ethics. 3 Hours.
Ethical principles of patient care are applied. Team building and group process skills are explored to facilitate students working within healthcare teams. The role of the nurse as a member of the interprofessional health care team is examined using concepts and theories of organizational design, quality, group process, and team building. The professional responsibilities and roles of advocacy will be explored. Regulatory agency influence on the microsystem will be investigated. Prerequisites: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, or consent of instructor. Prerequisites/Corequisites: NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, or consent of instructor. LEC.

NURS 335. Quality Improvement. 2 Hours.
Continuous quality improvement is introduced as a foundation for quality care and patient safety. Data to monitor the processes and outcomes of care are discussed. Methods to design and test changes to continuously improve the quality and safety of healthcare systems are explored. Prerequisites: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, or consent of instructor. Prerequisites/Corequisites: NURS 334, NURS 336, NURS 337, NURS 338, NURS 339, or consent of instructor. LEC.
NURS 336. Alterations in Physiological Functioning II. 3 Hours.
Building on NURS 321, this course expands knowledge of pathophysiological changes that occur within the environments of the individual in the presence of dysfunction or disease. The most common alterations in selected physiological systems are presented as a framework for clinical reasoning. Relevant risk factors, epidemiology, pathophysiologic mechanisms, and clinical manifestations across the life span (fetuses, children, pregnant women, adults, and older adults) are discussed. PREREQUISITES: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, or consent of instructor. COREQUISITES: NURS 334, NURS 335, NURS 337, NURS 338, or consent of instructor. LEC.

NURS 337. Pharmacology II. 2 Hours.
In this second sequential course, students continue their study of pharmacology across the lifespan. Specific prototypes of selected drug classifications provide the framework for understanding the action, use, adverse effects and nursing implications of drugs. The nurse’s role in drug administration, assessment of drugs’ effects, and patient education are emphasized. Legal and ethical responsibilities for administering drugs are considered. PREREQUISITES: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, or consent of instructor. COREQUISITES: NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, or consent of instructor. LEC.

NURS 338. Health and Illness: Nursing Across the Lifespan. 3 Hours.
A greater sophistication of clinical reasoning is developed to achieve safe and quality outcomes using multiple ways of knowing including nursing knowledge. Emphasis is placed on managing the care of patients experiencing acute and chronic illnesses and promoting health across the lifespan. Strategies to empower and engage patients/designees in all aspects of the health care process are examined. Evidenced-based therapeutic nursing interventions that meet a patient’s holistic health needs will be expanded. Perspectives of other health care members will be recognized in order to collaborate and work effectively as a team to provide interdisciplinary care. Technology and communication skills are integrated as methods to support safe processes of care. PREREQUISITES: NURS 331, NURS 332, NURS 333, NURS 328, NURS 329, NURS 330, or consent of instructor. COREQUISITES: NURS 334, NURS 335, NURS 336, NURS 337, NURS 339, or consent of instructor. LEC.

NURS 339. Health and Illness: Nursing Across the Lifespan Practicum. 3 Hours.
Students engage patients in active partnerships to manage acute and chronic illness and promote health across the lifespan. Multiple sources of evidence are incorporated into the planning, implementation and evaluation of nursing care including nurse sensitive quality indicators. Coordination, integration and continuity of care for multiple patients will be applied in the healthcare microenvironment. Emphasis is placed on interdisciplinary collaboration to ensure safe and quality outcomes. Technology and information management tools are utilized to support safe processes of care. PREREQUISITES: NURS 331, NURS 332, NURS 333, NURS 327, NURS 328, NURS 329, NURS 330, or consent of instructor. COREQUISITES: NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, or consent of instructor. LEC.

NURS 340. Foundations of Nursing and Health Promotion. 3 Hours.
Four concepts basic to the art and science of nursing (client systems, environment, health, and nursing) are introduced as a foundation for professional practice. The influence of nursing values and standards (ANA), client characteristics, and the evolving health care system on nursing practice are explored. Principles of nursing are integrated with concepts of health promotion to prepare the student to meet the fundamental health-related needs of individual and family client systems across the life span. Prerequisites/Corequisites: Admission to the School of Nursing, NURS 301, NURS 341, NURS 350. LEC.

NURS 341. Foundations of Nursing Health Promotion: Clinical Laboratory. 2 Hours.
The four concepts basic to the art and science of nursing (client systems, environment, health and nursing) in providing care to healthy clients across the life span are demonstrated in a clinical laboratory setting. Students develop beginning skill in applying the nursing process and planning care for healthy individuals and families. Prerequisites/Corequisites: Admission to the School of Nursing or consent of the instructor, NURS 301, NURS 340, NURS 350. LAB.

NURS 344. The Pediatric Surgical Client. 2 Hours.
Introduces students to concepts and theories of pediatric operating room nursing. Factors in the client's internal and external environment that contribute to alterations in system balance resulting in the need for surgical intervention are explored. Components of the role of the OR Nurse during preoperative, intraoperative, and postoperative phases are emphasized. Physiological and psychological alterations are identified. Nursing interventions used to maintain or restore system balance and prevent further system imbalance are investigated. Ethical and legal issues, as well as current research involving the practice of pediatric operating room nursing, are discussed. Prerequisites: NURS 375 and NURS 376. LEC.

NURS 345. Nursing of Children: Practicum. 2 Hours.
Evidenced based clinical reasoning is applied in the care of children with acute and chronic illness to ensure safe and quality outcomes. Emphasis is placed on the patient and/or designee as the source of control and full partner in providing compassionate and coordinated care. Tools of communication and technology are utilized in the delivery and documentation of care. The role of the nurse within the interdisciplinary team is demonstrated. Prerequisite: NURS 333, NURS 339, or consent of instructor. CLN.

NURS 346. Nursing of Adults: Practicum. 2 Hours.
Evidenced based clinical reasoning is applied in the care of adults with acute and chronic illness to ensure safe and quality outcomes. Emphasis is placed on the patient and/or designee as the source of control and full partner in providing compassionate and coordinated care. Tools of communication and technology are utilized in the delivery and documentation of care. The role of the nurse within the interdisciplinary team is demonstrated. Prerequisite: NURS 333, NURS 339, or consent of instructor. CLN.

NURS 350. Client Assessment. 3 Hours.
Opportunities are provided in a laboratory setting to demonstrate cognitive and psychomotor competencies related to assessment of the individual client system across the life span. The emphasis is on physical examination and historical data collection. Developmental factors and environmental stressors that influence health status are explored. The four basic methods of physical examination (inspection, palpation, percussion and auscultation) are presented. Prerequisites: Admission to the School of Nursing or consent of instructor. LEC.

NURS 352. Client Assessment for the Practicing Nurse. 3 Hours.
Opportunities are provided, in a laboratory setting and with simulations, to demonstrate competencies in assessment of the individual client system across the life span. Historical data collection and psychological and physical assessment are reviewed. Interviewing techniques and the four basic methods of physical examination (inspection, percussion, palpation, and auscultation) are presented. Critical thinking is emphasized to cluster data to select and support nursing diagnoses. Prerequisites: Admission to the School of Nursing and RN licensure, or consent of instructor. LEC.
NURS 353. Pathophysiology for the Baccalaureate Nurse. 3 Hours.
This course is designed to provide students with a basic understanding of pathophysiological changes that occur within the internal environment of the individual. Understanding these alterations is basic to providing quality nursing care. System variations across the life span are addressed. Prerequisite: Admission to the School of Nursing. LEC.

NURS 354. Nursing Pharmacology. 3 Hours.
Pharmacodynamics and pharmacokinetics of drug therapy are discussed in order to provide a basic understanding of the client’s reaction to a drug, both therapeutically and adversely, and to predict potential drug interactions. Internal and external environmental factors affecting drug therapy are assessed in order to provide a comprehensive database for therapeutic nursing interventions. Specific prototypes of selected drug classifications provide the framework for understanding the action, use, side effects and nursing implications of drugs. The nurse’s role in drug administration, assessment of drug effects, and client system education are emphasized. Legal and ethical responsibilities for administering drugs are considered. Prerequisite: Admission to the School of Nursing. LEC.

NURS 355. Assessment for the Precensure Nurse. 3 Hours.
Opportunities are provided for students to demonstrate competencies in assessment of the individual patient across the life span. Historical data collection and psychological and physical assessment are reviewed. Interviewing techniques and the four basic methods of physical examination are presented. Identification of risk factors, including genetic and environmental, that affect the patient’s health will be explored. Prerequisite: Admission to the School of Nursing. LEC.

NURS 356. Using Technology and Informatics to Improve Patient Safety. 3 Hours.
Beginning theory and practical applications of various uses and results of computer technologies, including electronic health records, are explored in order to provide the basic skills and current infrastructure for information management in healthcare delivery. These concepts and skills are essential for curriculum related activities, as well as for providing therapeutic nursing interventions and communications with faculty, client systems, and other healthcare participants. Built-in safeguards, and legal and ethical issues related to electronic communications and health records are emphasized using 21st century tools of communication and collaboration. Knowledge and skills presented in this course will be expanded in future nursing courses related to the baccalaureate completion program. Prerequisite: Admission to the School of Nursing or consent of instructor, Satisfactory completion of a statistics course. LEC.

NURS 357. Introduction to the Baccalaureate Nurse Role. 3 Hours.
Contemporary issues confronting the nursing profession are discussed. Personal accountability, professional boundaries, and group process skills are explored to facilitate students working within interprofessional health care teams. Students will examine their own beliefs and values, establish personal and professional boundaries, and develop their personal philosophy of nursing. Students will explore how their lived experience will impact their professional practice. Prerequisite: Admission to the School of Nursing or consent of instructor. LEC.

NURS 360. Mental Health Nursing. 3 Hours.
Principles of communication as an intervention in developing therapeutic relationships with clients from varying age groups in psychiatric settings are discussed. Mental health concepts and selected theoretical frameworks are used to understand adaptive and maladaptive coping behaviors in response to alterations in psychological functioning. These theoretical frameworks, as well as designated diagnostic classification systems, are discussed in relation to the implementation of the nursing process. Students engage in critical thinking to examine the role of the nurse in psychiatric-mental health nursing, exploring it in relation to health promotion, disease prevention, community resources, historical perspectives, and economic, legal and ethical issues. Prerequisite: Level I courses. Prerequisites or Corequisites: NURS 302, NURS 322 and NURS 325, or consent of instructor. Corequisite: NURS 361. LEC.

NURS 361. Mental Health Nursing: Clinical Laboratory, 2 Hours.
Theoretical concepts from NURS 360 and nursing therapeutics are applied in the care of clients who have alterations in psychological functioning. Acute care and community-based clinical experiences provide opportunities for students to participate in interdisciplinary team planning, interventions, and therapeutic group meetings. Corequisite: NURS 360. LAB.

NURS 362. Depression in Children and Adolescents: Assessment & Treatment. 2-3 Hours.
This course will offer a detailed overview of the assessment and treatment of depression in children and adolescents and will present national depression management guidelines. Emphasis will be placed on the role of the nurse in depression management, including collaboration across healthcare professionals/teams. Acute and chronic depression presentations across diverse children and adolescents will be examined. The course will explore current pharmacological and psychosocial treatments, with an emphasis on the outpatient setting. The course will address commonly occurring co-morbid health concerns and psychosocial issues. The course will include analysis of the impact of environmental factors that relate to health promotion, disease prevention, symptom management, and behavior change related to depression in children and adolescents. Admission into the School of Nursing or consent of the instructor for RN-to-BSN students; N360 LEC.

NURS 365. Nursing of Adults. 3 Hours.
Use of the nursing process in the care of adult clients in a variety of settings with acute and chronic illness is discussed. The role of the nurse in the use of clinical pathways to guide the interdisciplinary care of the client in the evolving health care environment is explored. Emphasis is placed on therapeutic nursing interventions that will successfully manipulate environmental factors to promote, maintain, and restore system balance and to prevent further system imbalance. Legal, ethical, economic and cultural considerations associated with the management of adults with acute and chronic illness are investigated. Prerequisite: Level I courses. Prerequisites or Corequisites: NURS 302, NURS 322, NURS 325, or consent of instructor. Corequisite: NURS 366. LEC.

NURS 366. Nursing of Adults: Clinical Laboratory. 2 Hours.
Theoretical concepts from NURS 365 and the nursing process are applied in the care of adult clients with acute and chronic illness in a variety of acute care and community settings. The student demonstrates the role of the nurse in interdisciplinary care including clinical pathways. Selected cultural, legal ethical and economic principles pertinent to the clinical practicum are applied. Corequisite: NURS 365. LAB.

NURS 375. Nursing of Children. 3 Hours.
Acute and chronic alterations in physiological and psychological functioning of the child and family are introduced. Emphasis is placed on changes within the internal and external environments which relate to the child’s acute and chronic illness experience. Therapeutic nursing interventions are explored in the context of research findings, holistic perspectives and outcome measures as related to the dynamics of system balance, growth and development, health promotion and client system values. The role of the nurse in an evolving health care system of managed care is examined. Holistic and caring approaches to human functioning are explored. Legal, ethical, cultural, economic and social principles which affect decision-making, interdisciplinary collaboration and outcomes of care are identified. Prerequisite: Level I courses.
Prerequisites or corequisites: NURS 302, NURS 322, NURS 325, or consent of instructor. Corequisite: NURS 376. LEC.

**NURS 376. Nursing of Children: Clinical Laboratory. 2 Hours.**
Theoretical concepts from NURS 375 are applied in the care of children with acute and chronic health problems and their families. Research-based nursing therapeutics, managed care, interdisciplinary collaboration and outcome measures are emphasized in the care of children with acute and chronic health problems. Hospital, clinic, community and home based settings provide opportunities for holistic and caring approaches to children and families from culturally and economically diverse backgrounds. Corequisite: NURS 375, LAB.

**NURS 377. Care of the Childbearing Family. 2 Hours.**
Emphasis is placed upon meeting the needs of mother, infant, and family as the pregnancy progresses from conception through postpartum period. Students will explore the concepts of health promotion and disease prevention related to women and the newborn infant. Common problems of pregnancy, labor, postpartum and specific needs of the newborn infant are included. Management and planning of the Nursing Process will include concepts from the art and science (client systems, environment, health, and nursing). Prerequisites/Corequisites: Admission to the School of Nursing, NURS 301, NURS 340, NURS 350 or consent of instructor. LEC.

**NURS 378. Care of the Childbearing Family: Clinical Lab. 1 Hour.**
Meeting the needs of mother, infant, and family as the pregnancy progresses from conception through the postpartum period is demonstrated in a clinical laboratory setting. Care of families during the normal childbearing experience is an integral part of this course. Students develop beginning skills in applying the nursing process and planning care for women and newborn infants. Prerequisites/Corequisites: Admission to the school of Nursing or consent of instructor, NURS 340, NURS 301, NURS 350. LBN.

**NURS 382. Honors Seminar. 1 Hour.**
This seminar provides the Honors nursing student the opportunity to explore topics of interest and begin reviewing the current research literature on a given topic. Emphasis is placed on interaction with active nurse researchers to enable the student to identify available research opportunities in ongoing studies. Students are introduced to the application of various methods used to address nursing questions. Prerequisite: Admission to the Nursing Honors Program. LEC.

**NURS 383. At Risk Childbearing Family. 2 Hours.**
Alterations in physiological and psychological functioning of the client system as it relates to at risk clients during antepartum, intrapartum, and postpartum periods will be explored. Theoretical concepts related to the dynamics of individual and family systems balance and the application of nursing process during pregnancy, birth, and early parenting will be examined. Care of women and childbearing families will include interaction with clients and their families in hospital and community settings. Prerequisites: Completion of two Level II core courses (NURS 360/NURS 361, NURS 365/NURS 366, or NURS 375/NURS 376) or senior status. LEC.

**NURS 384. Mentor/Doula. 2 Hours.**
The mentor/doula role and its benefit to the pregnant/postpartum client will be explored. The learner will enhance positive health behaviors in an assigned pregnant teenage client during the antepartum, intrapartum, postpartum, as well as the early parenting period as the mentor/doula. The student functioning as a mentor/doula will educate and coach the pregnant teenager during the birthing/postpartum process. Prerequisite: Application to the St. Luke's Hospital Mentor/Doula Program. LEC.

**NURS 401. Basic Spanish for Nurses. 2 Hours.**
This is an entry level Medical Spanish course for students with minimal or no Spanish language education. Students will develop working language skills, learning techniques for optimal communication, phonetics, morphology, grammar, understanding sentence structure, conjugation and cultural aspects applicable to the current health care environment. The goal is to achieve proficiency and confidence when using the Spanish language with Hispanic patients. Prerequisite / Corequisite: Minimal to no knowledge of Spanish language and approval from the Dean of Student Affairs. LEC.

**NURS 402. Health Care of the Older Adult. 2-3 Hours.**
Students will explore concepts and theories to increase their knowledge base of the complex challenges that face older adults and their families. Emphasis will be on promotion, maintenance and restoration of health and wellness, and the prevention of disease. Internal and external environmental factors will be assessed including biophysical, psychological, behavioral, sociocultural, economic and political. Students will utilize case examples and discussion to practice integrating communication and clinical skills into the role of the nurse as a client advocate and professional health team member. A clinical experience option for one-credit hour is offered for students to provide direct care to older adults in a variety of settings. Prerequisites: NURS 360, NURS 420, NURS 434 or consent of instructor. LEC.

**NURS 404. Concepts of Professional Nursing and Health Promotion. 3 Hours.**
Concepts and skills required for the transition to the professional nurse's role and application of the nursing process with client systems through the life span are explored. The four concepts basic to the art and science of nursing (client systems, environment, health, and nursing) are demonstrated. Internal and external environmental factors are examined that promote, maintain, or restore client system balance with emphasis on different ages and developmental stages. The concepts of health promotion and illness prevention are emphasized, including the use of health teaching, screening, and community referrals for culturally diverse clients across the life span. Prerequisite: RN licensure, and admission to the School of Nursing. LEC.

**NURS 407. The Camper Experience For Healthy and Chronically Ill Youth. 2 Hours.**
Nursing concepts and their application in a camp setting that are relevant to the day to day activities of youths in camp is the focus of the course. Emphasis is placed on individual and small group teaching, promotion of self care, and role of the nurse in a camp environment. Nursing care functions will be practiced in a residential, outdoor environment in a relaxed atmosphere. The nursing process is the organizing framework for content to enable the student nurse to assist in orientation to the initial camper experience and to promote self care in the camper, whether for general health or a chronic illness. Overnight experiences may be required. Prerequisite or Corequisite: NURS 375 or consent of instructor. LEC.

**NURS 410. Primary Women's Health Care Across the Lifespan. 3 Hours.**
Psychological, sociological, and physiological issues of health and human functioning of the female client systems across the life span are explored. Theory and research-based therapeutic management of acute, episodic, and chronic conditions that occur in community based women and their families will be planned. Professional values including standards of practice, certification, cultural, legal and ethical issues, and professional roles will be addressed. The health care delivery system will be analyzed for cost effectiveness and sensitivity to women. Corequisite: RN-BSN student or consent of instructor. LEC.
NURS 411. Population-Based Nursing. 3 Hours.
Concepts and theories related to providing health care to complex systems and aggregates in the community, state, nation and world are explored. Emphasis is placed on the promotion, maintenance and restoration of health and wellness, and the prevention of disease. Environmental components including historical, political, social, cultural, and economic factors are presented. The role of the health care provider in identifying, prioritizing and meeting the health and life participation needs of populations is discussed. Prerequisite: Admission to the School of Nursing. LEC.

NURS 412. Nursing in Healthcare Microsystems. 3 Hours.
Nursing practice in an evolving health care system is addressed with emphasis on the unique challenges in micro-environments of health care delivery. The microsystem is the structural unit responsible for delivering care to specific patient populations or the front-line places where patients, families, and care teams meet. This environment is where the nurse participates in a broad mixture of direct and indirect patient care delivery. Findings of current research related to nursing leadership are discussed. Professional, organizational, historical, and social factors that affect health care delivery within a clinical micro system are considered. Prerequisite: Admission to the School of Nursing or consent of instructor. LEC.

NURS 413. Teamwork and Collaboration in Healthcare. 3 Hours.
Ethical principles of patient care are applied. Team building and group process skills are explored to facilitate working within the interprofessional healthcare team. The role of the nurse as a member of the healthcare team is examined using concepts and theories of communication, group process, team building, and advocacy. Skills to continue professional growth and support excellence in nursing practice are investigated. Prerequisite: Admission to the School of Nursing or consent of instructor. LEC.

NURS 414. Organizational Influences on Nursing Practice. 3 Hours.
The impact that nursing departments and organizational decision making has on the achievement of quality patient outcomes will be explored. Nursing practice in an evolving health care system is addressed with emphasis on the unique challenges in the meso-environment of health care delivery. The role of the nurse as leader in achieving organizational goals addressing socio-cultural, economic, legal, and political environmental factors is examined. Prerequisite: Admission to the School of Nursing or consent of instructor. LEC.

NURS 415. Improving Healthcare Quality. 3 Hours.
Skills of inquiry and information literacy are developed to locate and evaluate information to improve healthcare quality. Continuous quality improvement is introduced as a foundation for quality care and patient safety. Data to monitor the processes and outcomes of care are discussed. Methods to design and test changes to continuously improve the quality and safety of healthcare systems are explored. Prerequisite: Admission to the School of Nursing or consent of instructor. Satisfactory completion of a statistics course. LEC.

NURS 416. Evidence-Based Nursing Practice. 3 Hours.
Searching, critiquing and synthesizing sources of evidence as it applies to the nurse's clinical practice will be emphasized. Fundamental principles of the research process and models for applying evidence to clinical practice will be explored. Strategies for implementation of evidence into clinical practice will be discussed. Prerequisite: Admission to the School of Nursing or consent of instructor, Satisfactory completion of a Statistics course. LEC.

NURS 417. Influences of the Healthcare Macro-System on Nursing Practice. 3 Hours.
Nursing practice in an evolving health care system is addressed with emphasis on the unique challenges in the macro-environment of health care delivery. The role of the nurse as a provider of direct and indirect care is expanded to include local, state, national and international regulatory, legal, and professional associations’ interactions that impact the ability of the nurse to deliver patient care. Prerequisite: Admission to the School of Nursing. LEC.

NURS 418. Senior Nursing Project. 3 Hours.
Synthesis of knowledge for professional practice will guide development of a small test of change project to meet an identified need in an area of interest. The student will select an area associated with a patient safety initiative, patient education need or agency educational need for project implementation. Prerequisite: NURS 353, NURS 354, NURS 355, NURS 356, NURS 357, NURS 411, NURS 412, NURS 413, NURS 414, NURS 415, NURS 416, NURS 417, or consent of instructor. LEC.

NURS 421. Nursing of The Client With Complex Acute Needs: Clinical Laboratory. 1.5 Hour.
Theoretical concepts from NURS 420 are applied in a clinical laboratory setting. Critical thinking and the nursing process are used to provide therapeutic nursing interventions with client systems experiencing complex acute alterations in physiological and psychological functioning. Emphasis is on mastery of advanced assessment techniques and interdisciplinary communication. Opportunities are provided for application of the concepts for using technically advanced therapeutics which support physiological functioning and maintain hemodynamic stability. Corequisite: NURS 420. LAB.

NURS 430. Population Based Health Care. 2 Hours.
Concepts and theories related to providing health care to complex systems and aggregates in the community, state, nation and world are explored. Emphasis is placed on the promotion, maintenance and restoration of health and wellness and the prevention of disease. Internal and external environmental components which include historical, political, social, cultural and economic factors are presented. The role of the health care provider in identifying, prioritizing and meeting the health needs of aggregates is discussed. Prerequisite: Level II courses. Corequisite: NURS 431. LEC.

NURS 431. Population Based Health Care: Clinical Laboratory. 1.5 Hour.
Concepts and theories from NURS 430 are applied to the health care of aggregates in the community. Students are given opportunities for interdisciplinary collaboration in the provision of health care for culturally diverse populations. Prerequisite: Level II courses. Corequisite: NURS 430. LAB.

NURS 432. Perioperative Nursing. 2 Hours.
The perioperative nursing course focus is on the role and practice of the professional perioperative nurse and the basic skills and knowledge involved in operating room nursing. A technological orientation will be used to apply the nursing process in assisting the patient in adapting to the surgical experience; to demonstrate skill in applying knowledge in motor and manipulative activities; and to facilitate therapeutic relationships between the nurse and the patient. It is anticipated that upon completion of the course, the registered nurse will be able to assume responsibilities at the beginning staff nurse level in the operating room. Prerequisite: Current R.N. licensure in Kansas and graduate of an N.L.N. accredited School of Nursing. LEC.

NURS 433. Introduction to the Professional Nurse Role. 4 Hours.
Concepts and skills required for the transition to the professional nurse’s role and the application of the nursing process with client systems through
the life span are explored. Metaparadigms foundational to the art and science of nursing (client systems, environment, health, and nursing) are explored. Environmental factors are examined that promote, maintain, or restore client system balance with emphasis on the adult client. Communication, clinical leadership and evidence-based practice skills that enhance the student's ability to perform in a complex organizational system are emphasized. Prerequisite / Corequisite: Admission to the School of Nursing LEC.

NURS 434. Technology to Enhance Client Safety. 2 Hours. Beginng theory and practical applications of various uses and results of computer technologies, including electronic health records, are explored in order to provide the basic skills and current infrastructure for information management in healthcare delivery. These concepts and skills are essential for curriculum related activities, as well as for providing therapeutic nursing interventions and communications with faculty, client systems, and other healthcare participants. Built-in safeguards, and legal and ethical issues related to electronic communications and health records are emphasized using 21st century tools of communication and collaboration. Knowledge and skills presented in this course will be expanded in future nursing courses related to the baccalaureate completion program. Prerequisite / Corequisite: Admission to the School of Nursing. LEC.

NURS 435. Leading and Managing in Healthcare Micro-Environments. 6 Hours. Nursing practice in an evolving health care system in addressed with emphasis on the unique challenges in micro-environments of health care delivery (sub-units, units, departments, divisions). The role of the nurse as leader and manager of a health care team is examined using concepts and theories of organization, management, leadership, quality, decision-making and group process. Findings of current research related to nursing management and leadership are discussed. Professional, organizational, historical, and social factors that affect health care delivery within an organization are considered. Prerequisite: NURS 433 LEC.

NURS 437. Population Based Health Care for the Professional Nurse. 3 Hours. Concepts and theories related to providing health care to complex systems and aggregates in the community, state, nation and world are explored. Emphasis is placed on the promotion, maintenance and restoration of health and wellness and the prevention of disease. Environmental components including historical, political, social, cultural, and economic factors are presented. The role of the health care provider in identifying, prioritizing and meeting the health and life participation needs of populations is discussed. Prerequisite / Corequisite: NURS 434 LEC.

NURS 438. Population Based Healthcare for the Professional Nurse: Clinical Laboratory. 1 Hour. Concepts and theories from NURS 437 are applied to the health care of aggregates in the community. Students are given opportunities for multidisciplinary collaboration in the provision of health care for culturally diverse populations. Prerequisite / Corequisite: NURS 437 LAB.

NURS 439. Leading and Managing in the Macro-Environment of Health Care. 6 Hours. Nursing practice in an evolving health care system is addressed with emphasis on the unique challenges in the macro-environment of health care delivery (organization as part of Health Care Delivery System). The role of the nurse as leader and manager of an organization that exists in a unique sociopolitical, cultural, economic, technological, and psychographic environment is examined. Findings of current research related to nursing management and leadership are discussed. The student uses 21st century tools of collaboration and communication to address professional, organizational, historical, and social factors that affect a healthcare organization's role and function in society. Prerequisite: NURS 435 LEC.

NURS 440. Leadership and Management in Nursing. 3 Hours. Nursing practice in an evolving health care system is addressed as well as the implications of a managed care environment on health care delivery. The role of the nurse as leader and manager of a health care team is examined using concepts and theories of organization, management, leadership, change, decision making, and group process. Findings of current research related to nursing management and leadership are discussed. Historical, political, economic, social, and cultural factors that affect health care delivery within an organization are considered. Prerequisite: Level II courses. LEC.

NURS 441. Nursing Research in an Evidence-Based Practice Setting. 3 Hours. Searching, critiquing and synthesizing sources of evidence as it applies to the nurse's clinical practice will be emphasized. Fundamental principles of the research process and models for applying evidence to clinical practice will be explored. Strategies for implementation of evidence into clinical practice will be discussed. Prerequisite: Admission to the RN to BSN program, course in statistics. LEC.

NURS 442. Critical Inquiry for Nursing Practice. 2-3 Hours. This course is designed to develop the health professional's role as a critical thinker and to promote a skill set to enhance decision making for a diverse multicultural patient population. Students apply problem solving skills to a variety of clinical case scenarios in order to develop logical solutions to the clinical problems demonstrated. Students provide rationale for their decisions in order to critique their own clinical decision making process. Prerequisites / Corequisites: NURS 420, NURS 421 or consent of instructor. LEC.

NURS 443. Developing the Baccalaureate Nurse Role. 3 Hours. Contemporary issues confronting the nursing profession are discussed and methods to advocate for patients and the profession are investigated. Communication, clinical leadership, and evidence-based practice skills that enhance the student's ability to perform in a complex organizational system are emphasized. Personal accountability, professional boundaries, team building, and group process skills are explored to facilitate students working within interprofessional health care teams. Students will examine their own beliefs and values and develop their personal philosophy of nursing. Prerequisite: Admission to the RN to BSN program. LEC.

NURS 444. Using Technology to Enhance Client Safety. 3 Hours. Beginning theory and practical applications of various uses and results of computer technologies, including electronic health records, are explored in order to provide the basic skills and current infrastructure for information management in healthcare delivery. These concepts and skills are essential for curriculum related activities, as well as for providing therapeutic nursing interventions and communications with faculty, client systems, and other healthcare participants. Built-in safeguards, and legal and ethical issues related to electronic communications and health records are emphasized using 21st century tools of communication and collaboration. Knowledge and skills presented in this course will be expanded in future nursing courses related to the baccalaureate completion program. Prerequisite: Admission to the RN to BSN program. LEC.

NURS 445. International/Global Health Care Elective: A Clinical Experience. 2 Hours. This course is designed to enlighten students to new cultures, provide the opportunity to see how these cultures deal with health care, and assess the clients’ internal and external environment that impact health care. Various roles and responsibilities of nurses participating in international
health are examined. A short term immersion experience provides an opportunity to incorporate the nursing process in clinic and community settings and to function as members of a health care team. Prerequisite: NURS 333, NURS 339, or consent of instructor. LEC.

**NURS 446. Population Based Health Care for the Practicing Nurse. 3 Hours.**

Concepts and theories important to providing health care to aggregates, communities, and populations are explored. Health promotion and prevention of disease and injury as essential elements of baccalaureate nursing practice are emphasized. Determinants of health are identified to allow students to construct methodologies that address health care disparities. The role of individuals within the interprofessional healthcare team is examined to determine the contributions of each to the achievement of healthy populations. Prerequisite: Admission to the RN to BSN program. LEC.

**NURS 447. Nursing Practice within the Clinical Health Care Micro System. 3 Hours.**

Nursing practice in an evolving health care system is addressed with emphasis on the unique challenges in micro-environments of health care delivery. The microsystem is the structural unit responsible for delivering care to specific patient populations or the frontline places where patients, families, and care teams meet (2008 AACN Essentials, p. 38). This environment is where the nurse participates in a broad mixture of direct and indirect care patient care delivery. Findings of current research related to nursing leadership are discussed. Professional, organizational, historical, and social factors that affect health care delivery within a clinical micro system are considered. Prerequisite: Admission to the RN to BSN program. LEC.

**NURS 448. Scholarly Inquiry for Quality Improvement. 3 Hours.**

Skills of inquiry and information literacy are developed to locate and evaluate information to improve healthcare quality. Continuous quality improvement is introduced as a foundation for quality care and patient safety. Data to monitor the processes and outcomes of care are discussed. Methods to design and test changes to continuously improve the quality and safety of healthcare systems are explored. Prerequisite: Admission to the RN to BSN program. LEC.

**NURS 449. Nursing Practice within the Healthcare Organization. 3 Hours.**

The impact that nursing departments and organizational decision making has on the achievement of quality patient outcomes will be explored. Nursing practice in an evolving health care system is addressed with emphasis on the unique challenges in the meso-environment of health care delivery. The role of the nurse as leader in achieving organizational goals addressing socio-cultural, economic, legal, and political environmental factors is examined. Prerequisite: Admission to the RN to BSN program. LEC.

**NURS 450. Nursing Practice within the Clinical Health Care Macro-Environment. 3 Hours.**

Nursing practice in an evolving health care system is addressed with emphasis on the unique challenges in the macro-environment of health care delivery. The role of the nurse as a provider of direct and indirect care is expanded to include local, state, national and international regulatory, legal, and professional association interactions that impact the ability of the nurse to deliver patient care. Prerequisite: Admission to the RN to BSN program. LEC.

**NURS 451. Navigating the Influences of the Health Care Macro-Environment. 3 Hours.**

This course provides the student with an introduction to children with developmental disabilities and their families is examined. The ability of children and their families to maintain a state of well-being and the nurse's role in promoting a maximum state of well-being is explored. Information about children with developmental disabilities and their families is based on understanding of nurse-client interactions that can assist in identifying and meeting the needs of children and their families. Prerequisites: NURS 375, NURS 376 concurrently; or permission of instructor. LEC.

**NURS 455. Legal/Ethical Foundation for Professional Nursing Practice. 3 Hours.**

Legal and ethical issues related to nursing practice are discussed. Laws and ethical principles that guide professional nursing practice in the current health care delivery system are emphasized. Information on the law, legal system, malpractice, negligence, and standards of care is provided. Distinctions between legal and ethical bases for nursing actions are identified in order to provide guidance in the decision making process. Critical thinking is used to analyze the impact of personal, professional, societal, and client system values on ethical decision making. Prerequisite: NURS 340. LEC.

**NURS 456. Psychiatric Mental Health Nursing of Children & Adolescents. 2-3 Hours.**

This course focuses on mental health issues and psychiatric disorders common to children and adolescents and their family such as acute, short term mental health problems and ongoing psychiatric disorders whose onset are in childhood or adolescence. Developmental, biobehavioral, crisis theories, and psychoeducational frameworks and supporting outcome research are analyzed as they apply to children/adolescents/ families who meet the criteria for specific psychiatric disorders or who are exhibiting high risk behaviors. Analysis of the impact of environmental factors that relate to health promotion, disease prevention, symptom management, and behavior change in this population will be examined. The nursing process is applied to this population by means of case studies directed projects, and active on-line class participation. Professional issues that commonly occur in implementing the psychiatric mental health generalist nurse role while working with this patient population are emphasized. Prerequisites / Corequisites: Admission into the School of Nursing or consent of instructor for RN-BSN student. Successful completion of NURS 360, NURS 361 for the BSN student. LEC.

**NURS 460. Nursing Research. 2 Hours.**

The history of nursing research, terminology, and steps in the research process are explored. Research as a basis for assessment of outcomes of health promotion and health care interventions including therapeutic nursing interventions is emphasized. Research questions relevant to clinical practice are identified. Interpretation of research for use in nursing practice is emphasized. The role of theory and ethical issues involved in the conduct of research is addressed. Prerequisite: Level II courses or consent of instructor. LEC.

**NURS 464. Scholarly Inquiry for Quality Improvement. 3 Hours.**

Skills of inquiry and information literacy are developed to locate and evaluate information to improve healthcare quality. Continuous quality improvement is introduced as a foundation for quality care and patient safety. Data to monitor the processes and outcomes of care are discussed. Methods to design and test changes to continuously improve the quality and safety of healthcare systems are explored. Prerequisite: Admission to the RN to BSN program. LEC.

**NURS 465. Psychiatric Mental Health Nursing of Children & Adolescents. 2-3 Hours.**

This course focuses on mental health issues and psychiatric disorders common to children and adolescents and their family such as acute, short term mental health problems and ongoing psychiatric disorders whose onset are in childhood or adolescence. Developmental, biobehavioral, crisis theories, and psychoeducational frameworks and supporting outcome research are analyzed as they apply to children/adolescents/ families who meet the criteria for specific psychiatric disorders or who are exhibiting high risk behaviors. Analysis of the impact of environmental factors that relate to health promotion, disease prevention, symptom management, and behavior change in this population will be examined. The nursing process is applied to this population by means of case studies directed projects, and active on-line class participation. Professional issues that commonly occur in implementing the psychiatric mental health generalist nurse role while working with this patient population are emphasized. Prerequisites / Corequisites: Admission into the School of Nursing or consent of instructor for RN-BSN student. Successful completion of NURS 360, NURS 361 for the BSN student. LEC.

**NURS 466. Serum Laboratory Data: From Theory to Clinical Application. 2 Hours.**

The usefulness of common serum laboratory tests in identifying potential or actual needs of individuals is the primary purpose of this course. Alterations in serum laboratory data associated with imbalances in the internal environment due to common pathological states of individuals across the life span will be discussed. The focus will be on utilizing this knowledge in the identification of nursing diagnoses and interventions. Prerequisites: Completion of two of the four Level II courses or permission of instructor. LEC.

**NURS 467. Independent Study in Nursing. 0.5-5 Hours.**

Intensive study in an area of interest with experiences selected according to the student's written purposes, conceptual framework, objectives and evaluation (1-5 credit hours). Appropriate prerequisite courses, as
determined by the Independent Study faculty advisor, must be completed.

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NURS 471. Development of a Microsystem Leader. 4 Hours.
The microsystem is the structural unit responsible for delivering care to specific patient populations or the frontline places where patients, families, and care teams meet (2008 AACN Essentials, p. 38). This environment is where the nurse participates in a broad mixture of direct and indirect care patient care delivery. Students will be given the opportunity to apply principles of leadership and management to recognize how changing delivery patterns, organizational, regulatory, care, and association processes impact the care provided to specific patient populations.
PREREQUISITES: NURS 327, NURS 329, NURS 331, NURS 332, NURS 333, NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339 or consent of instructor. COREQUISITES: NURS 472, NURS 473, NURS 474, NURS 475, or consent of instructor. LEC.

NURS 472. Evidence-Based Practice: Translating Research to Practice. 2 Hours.
Concepts of evidence-based practice (EBP) and healthcare research are explored. Methods to critically appraise healthcare research will be applied. Critical appraisal of evidence will be employed to inform the delivery of safe and quality nursing care. Prerequisites: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, or consent of instructor. Corequisites: NURS 471, NURS 473, NURS 474, NURS 475, or consent of instructor. LEC.

NURS 473. Professional Development III: Navigating the Profession. 2 Hours.
Contemporary issues confronting the nursing profession are discussed and methods to advocate for patients and the profession are investigated. The dynamic and ever present evolution of healthcare will be emphasized. Professional skills, such as job interviewing, portfolio development, and examination of advanced roles in nursing, will be emphasized. Prerequisites: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, or consent of instructor. Corequisites: NURS 471, NURS 473, NURS 474, NURS 475, or consent of instructor. LEC.

NURS 474. Health and Illness: Nursing with Diverse Populations. 4 Hours.
Comprehensive and focused evidence-based care of patients in diverse populations with complex health conditions will be examined. The nurse's role in assuring coordination, integration, and continuity of care is investigated. Integration of the physical, behavioral, psychological, spiritual, socioeconomic and environmental factors that influence patient centered care is explored. Collaboration with other health care team members to provide safe and quality care for diverse patients in a variety of complex settings is analyzed. Information management tools to monitor outcomes of care are evaluated. Prerequisites: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, NURS 334, NURS 336, NURS 337, NURS 338, NURS 339, or consent of instructor. Corequisites: NURS 471, NURS 472, NURS 473, NURS 475, or consent of instructor. LEC.

NURS 475. Health and Illness: Nursing with Diverse Populations Practicum. 3 Hours.
Coordination, integration, and continuity of care for diverse patients with multiple/complex problems will be applied in the dynamic microenvironments such as: maternity, pediatrics, mental health, and critical care. Patients/designees are engaged in active partnerships that promote health, safety, well-being, and self-care management. Synthesis of evidence and collaboration with other members of the health care team are used to plan, implement, and evaluate safe and quality care for patients. Technologies that support clinical decision-making, error prevention, and care coordination are emphasized. Prerequisites: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, or consent of instructor. Corequisites: NURS 471, NURS 472, NURS 473, NURS 474, or consent of instructor. LEC.

NURS 476. Nursing in an Evolving Healthcare System. 4 Hours.
Nursing practice in an evolving health care system is addressed with emphasis on the unique challenges presented to the nurse. The role of the nurse as provider of direct and indirect patient care is expanded to include the external influences of the health care organization, the regulatory environment, and the professional association. The development of the nurse as a member of a profession is expected. Inherent is a developing knowledge and appreciation for the diversity of opinions and organizations that exist to provide assistance in the delivery of direct patient care. Prerequisites: NURS 327, NURS 328, NURS 329, NURS 330, NURS 332, NURS 333, NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, NURS 471, NURS 472, NURS 474, NURS 475, or consent of instructor. Corequisites: NURS 477, NURS 478, NURS 479, NURS 480, or consent of instructor. LEC.

NURS 477. Capstone. 3 Hours.
A preceptor model of learning professional nursing practice provides opportunities to synthesize and integrate previous learning experiences. Emphasis is placed on the roles of the nurse as provider of indirect and direct care; designer, manager and coordinator of care; and member of the profession. The focus is on individual transition to the professional nursing role, recognizing the organizational, social, political, economic, ethical, and legal context in which interdisciplinary health care is delivered in a selected clinical setting. Prerequisites: NURS 327, NURS 328, NURS 329, NURS 330, NURS 332, NURS 333, NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, NURS 472, NURS 474, NURS 475, or consent of instructor. Corequisites: NURS 476, NURS 478, NURS 479, NURS 480, or consent of instructor. LEC.

NURS 478. Integration Seminar. 1 Hour.
The seminar provides students with an opportunity to apply concepts discussed in the classroom with observations from the clinical setting to enhance knowledge of how nurses meet multiple responsibilities. Through the use of small group guided discussion, students begin building a skill set that shows knowledge of and appreciation for the roles of direct care provider, designer, manager and coordinator of care; and member of profession. Prerequisites: NURS 327, NURS 328, NURS 329, NURS 330, NURS 332, NURS 333, NURS 334, NURS 336, NURS 337, NURS 338, NURS 339, NURS 471, NURS 472, NURS 474, NURS 475, or consent of instructor. Corequisites: NURS 476, NURS 477, NURS 479, NURS 480, or consent of instructor. LEC.

NURS 479. Population Based Healthcare. 3 Hours.
Concepts and theories related to improving health of entire populations are explored. Focus is placed on risk reduction, protective and predictive factors within the environments which influence the health of individuals, families, aggregates, and entire populations, including global communities. Considering the determinants of health, students will learn methods to facilitate collaboration to provide quality and safe health interventions for populations. Prerequisites: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, NURS 471, NURS 472, NURS 473, NURS 474, or consent of instructor. Corequisites: NURS 476, NURS 477, NURS 478, NURS 479, NURS 480, or consent of instructor. LEC.
NURS 480. Population Based Healthcare Practicum. 2 Hours.
Concepts and theories from Population Based Healthcare are applied to the health care of multiple patients; individuals, groups, communities and populations in the community. There is a concentrated focus on health promotion and disease prevention that provides safe, effective, and efficient care. Students are provided opportunities for inter-professional collaboration in the planning of health care and promotion of quality outcomes for culturally diverse populations. PREREQUISITES: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, NURS 471, NURS 472, NURS 473, NURS 474, NURS 475, or consent of instructor. COREQUISITES: NURS 476, NURS 478, NURS 479, or consent of instructor. LEC.

NURS 481. Honors Evidence-Based Practice: Translating Research to Practice. 2 Hours.
Concepts of evidence-based practice (EBP) and health care research are explored to inform the delivery of safe and quality nursing care. Prerequisites: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, NURS 382, or consent of instructor. Corequisites: NURS 471, NURS 473, NURS 474, NURS 475, or consent of instructor. This course is for Honors students only. LEC.

NURS 482. Honors Practicum I. 2 Hours.
Under the mentorship of an active nurse researcher the student designs and conducts a research project and participates as a member of a research project team. Students apply principles of research learned in NURS 460 to design and critique their own research project while providing feedback to peers. Through seminar activities they critically analyze the issues, rewards, and challenges of conduction research. LEC.

NURS 483. Honors Practicum II. 2 Hours.
Under the mentorship of an active nurse researcher the student designs and conducts a research project and participates as a member of a research project team. Students apply principles of research learned in NURS 460 to design and critique their own research project while providing feedback to peers. Through seminar activities they critically analyze the issues, rewards, and challenges of conduction research. LEC.

NURS 485. Populations Based Healthcare I. 1 Hour.
Concepts and theories related to improving health of entire populations are explored. Focus is placed on risk reduction, protective and predictive factors within the environments which influence the health of individuals, families, aggregates, and entire populations, and the identification of core public health functions and essential of service that impacts population health. Considering the multiple determinants of health, students will learn methods to facilitate collaboration to provide quality and safe health interventions for populations. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339 LEC.

NURS 486. Populations Based Healthcare II. 2 Hours.
Building upon the concepts and theories taught in NURS 486: Population Based Healthcare I, emphasis is placed on behavioral change techniques to promote health and manage disease that influence the health of individuals, families, communities, and entire populations. Considering the multiple determinants of health, students will learn methods to facilitate collaboration to provide quality and safe population health interventions through program planning to meet the needs of aggregate populations. Principles of disaster management and emergency preparedness will be explored at the individual, community, and population level. Prerequisite: NURS 485. LEC.

NURS 490. Professional Practicum. 2-5 Hours.
A preceptor model of learning professional nursing practice provides opportunities to synthesize and integrate previous learning experiences. Concepts of leadership and management, change, and therapeutic nursing interventions are integrated into practice. The focus is on individualized transition to the professional nursing role as an employee, recognizing the organizational, social, political, economic, ethical, and legal context in which interdisciplinary health care is delivered in a selected clinical setting. Prerequisites: NURS 420, NURS 421, NURS 430, NURS 431, NURS 455 and NURS 460. Prerequisites or Corequisites: NURS 440, NURS 450. LEC.

NURS 491. Practicum for the Professional Nurse. 1 Hour.
A preceptor model of learning professional nursing leadership and/or management provides the RN student opportunities to synthesize and integrate previous learning experiences. Concepts of leadership and management, change, and evidence-based practice are integrated into professional practice. The focus is on individualized transition to the professional nursing role as a leader, recognizing the organizational, social, political, economic, ethical, and legal context in which interdisciplinary health care is delivered in a selected clinical setting. Prerequisites: NURS 433, NURS 434, NURS 320, NURS 325, NURS 437, NURS 438, NURS 435, Prerequisites / Corequisites: NURS 326, NURS 441, NURS 439. PRA.

NURS 492. Senior Project. 2-3 Hours.
Synthesis of knowledge for professional practice will guide development of a project to meet an identified need in an area of interest. The student will select one of three areas (management, clinical practice, education for patients and families, staff, or agency personnel) for project implementation. Prerequisites: NURS 320, NURS 352, NURS 433, NURS 434, NURS 435, and NURS 437. Corequisites: NURS 326, NURS 439, and NURS 441. LEC.

NURS 520. Medical Spanish I. 2 Hours.
This is an entry level Medical Spanish course for students with minimal or no Spanish language education. Students completing this course will have acquired the language skills necessary to interact at a basic level in a medical context. LEC.

NURS 521. Medical Spanish II. 2 Hours.
This is an intermediate-low level Medical Spanish class. In Medical Spanish level 2 students build on what they have learned in the prerequisite level. Students expand their vocabulary skills to include medical specialties and procedures as well as their ability to describe medical conditions. LEC.

Bachelor of Science in Nursing

With a Bachelor of Science in Nursing (BSN) from the University of Kansas School of Nursing, graduates are prepared for success in any health care setting. KU graduates are ready to work in hospitals, community health agencies, industrial or long-term care facilities, as travel nurses, or flight nurses, as well as in other clinical settings.

Graduates of the KU School of Nursing baccalaureate program, begun in 1929, go on to become charge nurses and move into other leadership positions in Kansas and across the country. They are well-prepared for continuing their education through master's and doctoral programs in nursing.

School of Nursing alumni are hired by renown hospitals all over the country, including Johns Hopkins and Mayo Clinic and find excellent
starting positions closer to home at The University of Kansas Hospital and Children’s Mercy Hospitals and Clinics.

The School of Nursing is one of three schools at the University of Kansas Medical Center (http://www.kumc.edu) in Kansas City, Kansas. Academic programs at KU Medical Center are offered through the Schools of Health Professions, Medicine, and Nursing. The Office of the Dean of Graduate Studies at KUMC handles matters related to graduate programs in Health Professions, Medicine, and Nursing.

The KU School of Nursing’s baccalaureate, master’s, and doctor of nursing practice (DNP) programs are accredited by the Commission on Collegiate Nursing Education (http://www.nccne.edu). One Dupont Circle, NW, Suite 530, Washington, DC 20036, (202) 887-6791. This organization is a nationally recognized professional accrediting body for collegiate nursing programs. The baccalaureate, master’s, and DNP programs also are approved by the Kansas State Board of Nursing (http://www.ksbn.org). The Nurse Midwifery Program is accredited by the Accreditation Division of the American College of Nurse-Midwives (http://www.acnmi.org), 818 Connecticut Ave., NW, Suite 900, Washington, DC 20006, (202) 728-9860. The Nurse Anesthesia program is accredited by the Council on Accreditation of Nurse Anesthesia Programs, 222 S. Prospect Ave., Park Ridge, IL 60068-4001, (847) 655-1160.

**Undergraduate Admission to the School of Nursing**

**Pre-licensure BSN Program**

Students enter the BSN Program after taking 62 semester credit hours of prerequisite work in an accredited college or university. Admission to the school is competitive. A minimum grade-point average of 2.5 is required to apply.

**Pre-nursing Advising**

A pre-nursing advisor is available by appointment during the fall and spring semesters in the University Advising Center, 126 Strong Hall, on the Lawrence campus and year-round on the Kansas University Medical Center campus in Kansas City. The advisor provides students with information about the nursing profession, help with course selection in preparation for nursing application, and guidance in the admission process. For an appointment, current Lawrence campus students can call (202) 864-2834. All other students can call (913) 588-1619 for an appointment in Kansas City.

**Admission Procedure**

The application for the pre-licensure BSN program is available from July 1st to October 15th of the year before beginning work in the School of Nursing. Applications are available on the School of Nursing website.

**Criteria for Admission**

The school endeavors to meet the changing needs of society by selecting applicants who, in the judgment of the Student Admission and Progression Committee, demonstrate the academic achievement, maturity, integrity, and motivation necessary for the successful study and practice of nursing, and who will best meet the needs of the citizenry. Students are selected on the basis of college scholastic achievement, interest in and commitment to nursing, letters of reference, extracurricular activities, personal characteristics, and health-related work and volunteer experience. Applicants will not be discriminated against based on creed, color, age, disability, sex, national origin, or sexual orientation.

**Pre-licensure BSN Prerequisite Course Requirements**

Within the 62 hours required for admission to the basic BSN program, the following must be included:

**Humanities and Social Sciences**

Courses in English composition and literature, public speech, general sociology, general psychology, theories of child or human development, global perspectives, and humanities are required. Students who complete these general education requirements through the KU College of Liberal Arts and Sciences meet these requirements by taking the following courses:

| English (6) | 0 |
| ENGL 101 | Composition |
| ENGL 102 | Critical Reading and Writing |
| ENGL 105 | Freshman Honors English |

| Social Sciences (9) | |
| PSYC 104 | General Psychology |
| SOC 104 | Elements of Sociology |
| or SOC 160 | Social Problems and American Values |
| ABSC 160 | Introduction to Child Behavior and Development |
| or PSYC 333 | Child Development |

| Humanities (3) | |
| 1 course designated B in this catalog | 3 |

| Oral Communication (3) | |
| Select one of the following: |
| COMS 130 | Speaker-Audience Communication |
| or JOUR 150 | Stand and Deliver |
| or THR 120 | Public Speaking as Performance |

Or Exemption for current KU students only

| Global Awareness class (3) | 3 |

| 1 course designated Advanced Education 4.2 in this catalog | 2 |

1 View course list
2 View course list

**Natural Sciences and Mathematics**

Courses in general chemistry, microbiology, biology or zoology, and human anatomy are required. These courses must include laboratory experience. Courses in college algebra, statistics, physiology, and nutrition are also required but do not require a laboratory experience.

**Natural Sciences (25-26)**

Select one of the following:

| BIOL 100 | Principles of Biology |
| or BIOL 102 | and Principles of Biology Laboratory |
| or BIOL 150 | Principles of Molecular and Cellular Biology |
| BIOL 200 | Basic Microbiology |
| BIOL 203 | Introductory Microbiology Laboratory |
| BIOL 240 | Fundamentals of Human Anatomy |
BIOL 241 Human Anatomy Observation Laboratory 2
BIOL 246 Principles of Human Physiology 3
CHEM 110 Introductory Chemistry 5
or CHEM 130 General Chemistry I
HSES 330 Principles of Nutrition and Health 3-4
or ANTH 542 Biology of Human Nutrition

Mathematics and Statistics (6)
MATH 101 College Algebra (or exemption) 3
PSYC 210 Statistics in Psychological Research 3
or MATH 365 Elementary Statistics

Electives
Electives can be chosen according to the student’s particular interests or needs. Examples of such elective areas of study are foreign language, philosophy, literature, creative writing, history, physics, mathematics, political science, western civilization, biological sciences, economics, etc.

A maximum of 8 non-liberal-arts credit hours can be accepted in the 62 credit hours required for admission. These 8 credit hours may be in physical education courses, activity courses, first-aid courses, health education courses, applied courses, and technique courses in art, music, and professional fields other than nursing.

RN to BSN Program
Students enter the RN to BSN program after taking 60 semester credit hours of prerequisite work in an accredited college or university.

Admission to the school is competitive. A minimum grade-point average of 2.5 is required to apply.

Admission Procedure
The application for the RN to BSN program is open at all times, with the following deadline dates: March 1st for summer semester, June 1st for fall semester, and October 1st for spring semester.

Applications are available through the link on the School of Nursing website.

Criteria for Admission
The school endeavors to meet the changing needs of society by selecting applicants who, in the judgment of the student admission and progression committee, demonstrate the academic achievement, maturity, integrity, and motivation necessary for the successful study and practice of nursing, and who will best meet the needs of the citizenry. Students are selected on the basis of college scholastic achievement, interest in and commitment to nursing, letters of reference, extracurricular activities, personal characteristics, and health-related work and volunteer experience. Applicants will not be discriminated against based on creed, color, age, disability, sex, national origin, or sexual orientation.

RN to BSN Prerequisite Course Requirements
Within the 60 hours required for admission to the RN to BSN program, the following must be included:

Humanities and Social Sciences
Courses in English composition and literature, speech or interpersonal communication, general sociology, general psychology, theories of child or human development, global perspectives, and humanities are required. Students who complete these general education requirements through the KU College of Liberal Arts and Sciences meet these requirements by taking the following courses:

English (3)
ENGL 101 Composition 3
Select one of the following:
ENGL 102 Critical Reading and Writing 3
ENGL 105 Freshman Honors English 3

Exemption

Social Sciences (9)
PSYC 104 General Psychology 3
SOC 104 Elements of Sociology 3
or SOC 160 Social Problems and American Values 3
ABSC 160 Introduction to Child Behavior and Development 3
or PSYC 333 Child Development 3

Humanities (3)
1 course designated H in this catalog 1 3

Oral Communication (9)
Select one of the following: 3
COMS 130 Speaker-Audience Communication 3
JOUR 150 Stand and Deliver 3

Exemption

1 View principal course list

Natural Sciences and Mathematics
Courses in general chemistry, microbiology, and human anatomy are required. These courses must include laboratory experience. Courses in college algebra, statistics, physiology, and nutrition are also required but do not require a laboratory experience.

Natural Sciences (21-23)
BIOL 200 Basic Microbiology 3
BIOL 203 Introductory Microbiology Laboratory 2
BIOL 240 Fundamentals of Human Anatomy 3
BIOL 241 Human Anatomy Observation Laboratory 2-3
or BIOL 242 Human Anatomy Dissection Laboratory 2
BIOL 246 Principles of Human Physiology 3
CHEM 130 General Chemistry I 5
HSES 330 Principles of Nutrition and Health 3-4
or ANTH 542 Biology of Human Nutrition 3

Mathematics and Statistics (6)
MATH 101 College Algebra (or exemption) 3
PSYC 210 Statistics in Psychological Research 3
or MATH 365 Elementary Statistics 3

Electives
Electives can be chosen according to the student’s particular interests or needs. Examples of such elective areas of study are foreign language, philosophy, literature, creative writing, history, oral communication, physics, mathematics, political science, western civilization, biological sciences, economics, etc.
A maximum of eight non-liberal-arts credit hours can be accepted in the 62 credit hours required for admission. These eight credit hours may be in physical education courses, activity courses, first-aid courses, health education courses, applied courses, and technique courses in art, music, and professional fields other than nursing.

The BSN degree is granted to candidates recommended by the School of Nursing as having successfully fulfilled all prescribed requirements, including the courses listed below. A total of 124 credit hours is required for the RN to BSN degree, with a cumulative grade-point average of at least 2.0. Only courses in which a grade of C or higher is earned are required for the RN to BSN degree, with a cumulative grade-point average for the pre-licensure BSN degree, and a total of 120 credit hours is needed for students to graduate. The last 30 hours completed for the degree must have been taken in residence at KU. A portion of total hours applied toward graduation may be earned through credit by examination.

**Nursing Major: RN–BSN Option**

The RN to BSN program provides registered nurses a way to complete their bachelor's degrees in a flexible online format. The program can be completed in as little as one calendar year of full-time study or up to five years of part-time study. A total of 120 semester credit hours are required for the degree, comprised of 60 credit hours of liberal arts prerequisite courses and 60 credit hours of nursing courses. Nursing course content may be transferred via portfolio from the associate degree nursing program. The last 30 hours completed for the degree must be taken at KU.

**KU BSN Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>NURS 320</td>
<td>Pathophysiology for the Practicing Nurse</td>
<td>3</td>
</tr>
<tr>
<td>NURS 326</td>
<td>Pharmacology for the Practicing Nurse</td>
<td>3</td>
</tr>
<tr>
<td>NURS 352</td>
<td>Client Assessment for the Practicing Nurse</td>
<td>3</td>
</tr>
<tr>
<td>NURS 441</td>
<td>Nursing Research in an Evidence-Based Practice Setting</td>
<td>3</td>
</tr>
<tr>
<td>NURS 443</td>
<td>Developing the Baccalaureate Nurse Role</td>
<td>3</td>
</tr>
<tr>
<td>NURS 444</td>
<td>Using Technology to Enhance Client Safety</td>
<td>3</td>
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<td>NURS 446</td>
<td>Population Based Health Care for the Practicing Nurse</td>
<td>3</td>
</tr>
<tr>
<td>NURS 447</td>
<td>Nursing Practice within the Clinical Health Care Micro System</td>
<td>3</td>
</tr>
<tr>
<td>NURS 448</td>
<td>Scholarly Inquiry for Quality Improvement</td>
<td>3</td>
</tr>
<tr>
<td>NURS 449</td>
<td>Nursing Practice within the Healthcare Organization</td>
<td>3</td>
</tr>
<tr>
<td>NURS 451</td>
<td>Navigating the Influences of the Health Care Macro-Environment</td>
<td>3</td>
</tr>
<tr>
<td>NURS 492</td>
<td>Senior Project</td>
<td>2-3</td>
</tr>
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</table>

**Total Hours**: 35-36

**Portfolio/Transfer Credits**

<table>
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</tr>
<tr>
<td>NURS 492</td>
<td>Senior Project</td>
<td>2-3</td>
</tr>
</tbody>
</table>

**Total Hours**: 25-34

**Sample Schedule for Prenursing Students**

**Freshman**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 100</td>
<td>3 CHEM 110 (offered in spring semester only)</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 102</td>
<td>1 ENGL 102</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>3 SOC 104 or 160</td>
<td>3</td>
</tr>
</tbody>
</table>

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 477</td>
<td>Capstone</td>
<td>3</td>
</tr>
<tr>
<td>NURS 478</td>
<td>Integration Seminar</td>
<td>1</td>
</tr>
<tr>
<td>NURS 480</td>
<td>Population Based Healthcare Practicum</td>
<td>2</td>
</tr>
<tr>
<td>NURS 481</td>
<td>Honors Evidence-Based Practice: Translating Research to Practice</td>
<td>2</td>
</tr>
<tr>
<td>NURS 482</td>
<td>Honors Practicum I</td>
<td>2</td>
</tr>
</tbody>
</table>
The honors curriculum comprises the following courses:

- Research findings certified.
- The Nursing Honors Program, and have their oral and written reports of grades in all clinical practicum courses, complete all required courses in the School of Nursing, the student must attain an overall grade-point average of 3.25 or higher contingent on earning a nursing grade-point average of 3.5 or higher at the end of the fall semester (exceptions are considered on an individual basis).
- However, to graduate with departmental honors from the Nursing Honors Program to take honors courses. Once admitted to the program, students may use departmental honors courses to help meet the requirements of the University Honors Program.
- Students who successfully complete the Nursing Honors Program are recognized in the following ways:
  - The notation of Departmental Honors on the official university transcript
  - An official certificate indicating graduation with BSN Honors
  - Listing in the School of Nursing Recognition Ceremony program
  - Formal recognition at the School of Nursing Recognition Ceremony
  - Listing in the University of Kansas Commencement Program
  - Formal recognition at the Cordingle Ceremony on the Lawrence campus for students also completing the University Honors Program.

For more information, contact the School of Nursing Office of Student Affairs.

### University Honors Program

The School of Nursing encourages all qualified pre-licensure BSN undergraduates to participate in the University Honors Program (http://www.honors.ku.edu).

### Departmental Honors Program

The School of Nursing’s Departmental Honors Program offers enhanced educational opportunities for the most academically talented, promising, and motivated baccalaureate students while providing a foundation for leadership development and articulation into graduate education.

Students in the School of Nursing Honors Program develop and complete a research project under the guidance of a faculty research mentor. Students must make formal application and be admitted to the Honors Program to take honors courses. Once admitted to the program, students may use departmental honors courses to help meet the requirements of the University Honors Program.

Selection criteria for the Nursing Honors Program are as follows:

- Enrollment in the pre-licensure BSN program
- Full-time status
- Overall grade-point average of 3.25 or higher contingent on earning a nursing grade-point average of 3.5 or higher at the end of the fall semester (exceptions are considered on an individual basis)
- Completion of Nursing Honors Program application

Academic progression through the honors curriculum is evaluated on an individual basis. However, to graduate with departmental honors from the School of Nursing, the student must attain an overall grade-point average of 3.25 with a nursing grade-point average of 3.5 and satisfactory grades in all clinical practicum courses, complete all required courses in the Nursing Honors Program, and have their oral and written reports of research findings certified.

The honors curriculum comprises the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 240</td>
<td>3 ABSC 160 or PSYC 333</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 241</td>
<td>2 BIOL 200 (offered in spring semester only)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 246</td>
<td>3 BIOL 203 (offered in spring semester only)</td>
<td>2</td>
</tr>
<tr>
<td>MATH 365 or PSYC 210</td>
<td>3 HSES 330</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3 Humanities course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Hours: 62-64</td>
<td></td>
</tr>
</tbody>
</table>

### Master of Science in Nursing

The Master of Science degree in nursing enlarges the focus of nursing, using as its foundation the basic baccalaureate nursing program.

The program’s goals are directed toward educating the nurse leader. Leadership specializations include organizational leadership, public health nursing, clinical research management, and nursing informatics.

The KU School of Nursing’s baccalaureate, master’s, and doctor of nursing practice (DNP) programs are accredited by the Commission on Collegiate Nursing Education (http://www.aacn.nche.edu), One Dupont Circle, NW, Suite 530, Washington, DC 20036, (202) 887-6791. This organization is a nationally recognized professional accrediting body for collegiate nursing programs. The baccalaureate, master’s, and DNP programs also are approved by the Kansas State Board of Nursing (http://www.kbsn.org). The Nurse Midwifery Program is accredited by the Accreditation Division of the American College of Nurse-Midwives (http://www.midwife.org), 818 Connecticut Ave., NW, Suite 900, Washington, DC 20006, (202) 728-9860. The Nurse Anesthesia program is accredited by the Council on Accreditation of Nurse Anesthesia Programs, 222 S. Prospect Ave., Park Ridge, IL 60068-4001, (847) 655-1160.

### MS Admission

Applications to the Master of Science in Nursing program are accepted twice a year. April 1st and September 1st are the respective deadlines for fall and spring semesters. Prospective students can apply using the KU Medical Center online application (https://www.applyweb.com/apply/kumc).

Application eligibility requirements include the following:

- Bachelor of Science in Nursing (BSN) degree from a nationally accredited program (NLNAC or CCNE)
- Current registered nurse licensure in at least one state in the United States
- Minimum of one year of clinical work experience as a registered nurse
- Minimum cumulative undergraduate GPA of 3.0 on a 4.0 scale.
- Completion of a graduate-level statistics course either prior to admission or during first semester of graduate study
- Satisfactory criminal background check
- For international applicants whose native language is not English, a satisfactory score on the Test of English as a Foreign Language or

### Elective Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 382</td>
<td>Honors Seminar (spring of junior year)</td>
<td>1</td>
</tr>
<tr>
<td>NURS 481</td>
<td>Honors Evidence-Based Practice: Translating Research to Practice (summer between junior and senior year)</td>
<td>2</td>
</tr>
</tbody>
</table>

NURS 482 Honors Practicum I (fall of senior year) 2
NURS 483 Honors Practicum II (spring of senior year) 2
the International English Language Testing System taken within the last 2 years is required. Visit KUMC Graduate Studies (p. 2395) for more information.

**MS Degree Requirements**

The Master of Science degree in nursing requires completion of an approved curriculum with a grade-point average of 3.0 or above, a written thesis or project, and a comprehensive oral examination. The program’s goals are directed toward educating the nurse leader. Leadership specializations include:

- The **organizational leadership (OL) specialization** prepares nurses to assume leadership positions in hospitals and other health agencies.
- The **public health (PH) specialization** prepares nurses to develop advanced community-based interventions and determine outcomes with emphasis on health promotion and disease prevention strategies for a targeted population.
- The **clinical research management (CRM) specialization** prepares the nurse to plan and implement clinical research trials.
- The **nursing informatics (NI) specialization** prepares the nurse with skills in analysis, design, implementation, and evaluation of information systems that support a full range of clinical and patient care functions.

**Joint Degree**

Students may combine the Master of Science in Nursing (specialization in organizational leadership) with the Master of Health Services Administration. By combining some course work, the two degrees may be completed in fewer hours than if pursued independently.

**Program Components**

The leadership major presents a theoretical base specific to each specialization. Specialization courses are accompanied by practical experience that allows students to apply theory in a health care setting.

The MS in Nursing curriculum includes four core components: common, leadership, research and specialty. Organizational Leadership and Nursing Informatics specializations each require 37 credit hours. Public Health requires 39 credit hours. Clinical Research Management (CRM) requires 41 credit hours.

**Common Core**

Common core nursing courses provide the core knowledge and skills essential to nurses practicing in any advanced area of nursing. Courses in this area are NRSG 748, NRSG 754, and NRSG 755.

**Leadership Core**

Courses in the leadership core provide the theoretical basis for the specializations in organizational leadership, public health nursing, and nursing informatics. Courses in this category are NRSG 808, NRSG 820, NRSG 826, NRSG 880, and NRSG 885. CRM requires NRSG 820, NRSG 826, and NRSG 880 from the leadership core and NRSG 731, NRSG 813, NRSG 806, and NRSG 812 from the advanced practice core (see DNP section).

**Research Core**

Nursing research courses focus on enhancing the nurse’s ability to use research and participate in the development of new knowledge in nursing and health care. Courses in this category are NRSG 754 and NRSG 898 (project) or NRSG 899 (thesis).

**Specialty Core**

Courses in this category provide curriculum essential to nursing practice at the graduate degree level within each of the specialty areas. The core courses by specialty are:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 881</td>
<td>Applied Budgeting and Finance</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 882</td>
<td>Introduction to Operations</td>
<td>3</td>
</tr>
<tr>
<td>or NRSG 883</td>
<td>Complexity Science Approaches to Improve Organizational Effectiveness</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 886</td>
<td>Organizational Leadership Practicum</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 891</td>
<td>Health Promotion and Complementary Therapeutics</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 800</td>
<td>Principles of Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 830</td>
<td>Environmental Health</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 809</td>
<td>Research Clinical Trial Management: Pre-Study Activities</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 823</td>
<td>Research Clinical Trial Management: During Study Activities</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 825</td>
<td>Research Clinical Trial Management: Post-Study Activities and Practicum Experience</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 833</td>
<td>Managing Clinical Research Projects</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 731</td>
<td>Pharmacokinetics and Pharmacodynamics for Advanced Practice Nursing</td>
<td>1</td>
</tr>
<tr>
<td>NRSG 806</td>
<td>Advanced Physiology</td>
<td>4</td>
</tr>
<tr>
<td>NRSG 812</td>
<td>Advanced Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 813</td>
<td>Applied Drug Therapy</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 853</td>
<td>Abstraction and Modeling of Healthcare Information</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 854</td>
<td>Knowledge Management in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 856</td>
<td>Health Informatics Practicum</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 857</td>
<td>Transforming Health Care through Use of Information Systems and Technology</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 858</td>
<td>Health Data: Theory and Practice</td>
<td>3-4</td>
</tr>
</tbody>
</table>

**Thesis/Project Option**

The student may choose to complete a thesis for six credit hours (NRSG 899) or to complete a project for two credit hours (NRSG 898). The project involves applying aspects of the research process to the student’s area of nursing practice. A number of options are available for the project. Both thesis and project involve completion of a formal paper. The area of study
from either thesis or project comprises a part of the comprehensive oral examination, which takes place at the end of the MS program.

**Flexible Scheduling**

The majority of students in the MS program are part-time students and many students are employed. To accommodate student need and preference, many courses are offered online. Online classes typically include both asynchronous and synchronous learning activities.

**Master of Science in Health Informatics**

Professionals in health informatics have skills in analysis, design, implementation and evaluation of information systems that support a full range of clinical and patient care functions. Working as a translation specialist, the graduate will be prepared for entry and mid-level positions with informatics departments, medical practice departments, advanced nursing departments, public health organizations, and as consultants and/or staff in organizations that specialize in computer operations and knowledge management. Graduates also have the skills to enter the growing field of health information exchange, which includes regional health information organizations and the emerging personal health records. In addition to a foundation in information technology, special skills will be acquired in organizational change, project management and impact evaluation.

This is an interprofessional degree offered through the Office of Graduate Studies (http://www.kumc.edu/academic-affairs/graduate-studies.html), with oversight by the University of Kansas Center for Health Informatics (http://www.kumc.edu/health-informatics.html) through its advisory council. The program is designed for health professionals or information technology specialists who want a specialty focus in health informatics. The advisory council of this program reflects this commitment to interprofessional collaboration. Faculty with foundations in nursing, health policy and management, preventive medicine and public health, and health information management partner to create this master's degree in health informatics.

The M.S. in Health Informatics program endeavors to fulfill its responsibilities to the changing needs of society by selecting applicants who, in the judgment of the admissions committee, demonstrate the academic achievement, maturity, integrity, and motivation necessary for successful advancement. In addition, the committee looks for applicants who will contribute academic, nonacademic, and socioeconomic diversity to the class. The committee is interested in evidence of capacity for mature and independent scholarship.

The application process is an online process. Detailed instructions on how to apply and the application deadlines are posted on the Master of Science in Health Informatics (http://www.kumc.edu/health-informatics/master-in-health-informatics/prospective-students.html) website.

**Admission requirements:**

- A bachelor's degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.

  Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

- A cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale for the bachelor's degree.

- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2395).

- A background check (p. 2395) is required during the admission process; it may affect the student's eligibility to enter the program.

- An official copy of the Graduate Record Examination (GRE) score. Scores are sent directly from the Educational Testing Service (ETS) to the University of Kansas Medical Center - ETS institutional code 6895.

- Three letters of recommendation preferably from employers, instructors, or other persons who can assess the applicant's academic and professional potential. Letters are submitted per instructions provided for the online application process.

- A graduate level statistics course (may be completed prior to admission or during the first semester of enrollment.)

- A current resume or curriculum vitae.

- A personal written statement that describes the applicant's career goals and motivation for seeking post-graduate training in health informatics.

- An informational telephone interview with a Center for Health Informatics representative. To schedule, call 913-588-3362.

Applicants not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

**Degree requirements:**

- Degree requirements are normally completed within 2 years of admission to the program although a maximum of 7 years is allowed. Part-time students normally complete requirements within 5 years of admission to the program.

- Completion of a minimum of 40 credit hours.

- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.

- Successful completion of a general examination (p. 2398) the semester the student will graduate.

- Enrollment in a minimum of one (1) credit hour the semester the student will graduate.

- Successful completion of the Health Informatics Core (minimum 17 credit hours.) These courses provide the core knowledge and skills essential to the practice of health informatics.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPHI 850</td>
<td>Introduction to Health Informatics</td>
<td>2-3</td>
</tr>
<tr>
<td>IPHI 851</td>
<td>Transforming Health Care through Use of</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Information Systems and Technology</td>
<td></td>
</tr>
<tr>
<td>IPHI 852</td>
<td>Health Data: Theory and Practice</td>
<td>3-4</td>
</tr>
</tbody>
</table>
Successful completion of the **Leadership Core** (minimum 9 credit hours.) This includes a minimum of one health policy (HP&M) course. Choose from:
- NRSG 808  The Social Context for Health Care Policy  2
- NRSG 820  Program, Project, and Communication Planning  2
- NRSG 880  Organizational Foundations for Leading Change  3
- NRSG 882  Introduction to Operations  3
- NRSG 885  Evaluation and Analysis for Healthcare Effectiveness  2
- HP&M 832  Governance and Health Law  2
- HP&M 833  Ethics  2
- HP&M 837  Health Policy  3
- HP&M 840  Organizational Foundations for Leading Change  3
- HP&M 850  Introduction to Operations  3

Successful completion of the **Research Component** (minimum 5 credit hours.) This component includes a research project that involves applying aspects of the research process to the student’s area of health informatics practice.
- NRSG 754  Health Care Research  3
or HP&M 819  Research for Health Care Leaders  3
- IPHI 860  Research Project  2

Successful completion of the **Discipline-Specific Core** (minimum 9 credit hours.) The Discipline-Specific Core (Clinical, Health Policy or Preventive Medicine) and the courses within the core are selected in consultation with the student’s advisor based on the student’s background and career goals.

**Clinical Core** (minimum 9 credit hours.) Choose from:
- NRSG 748  Theories for Practice and Research  3
- NRSG 755  Professionalism in Advanced Nursing Practice  3
- NRSG 826  Global Perspective and Diversity in Healthcare  2
- NRSG 883  Complexity Science Approaches to Improve Organizational Effectiveness  3
- NRSG 891  Human Resources and Workforce Development  3

**Health Policy and Management Core** (minimum 9 credit hours). Choose from:
- HP&M 810  The Health Care System  3
- HP&M 822  Health Care Economics  3
- HP&M 825  Financial Concepts in Healthcare Management  3
- HP&M 846  Managing Information Systems and Technology  3
- HP&M 850  Introduction to Operations  3
- HP&M 854  Human Resources and Workforce Development  3

**Preventive Medicine Core** (minimum 9 credit hours). Choose from:
- PRVM 800  Principles of Epidemiology  3
- PRVM 809  Introduction to Public Health  3
- PRVM 815  Infectious Disease Epidemiology  3
- PRVM 875  Management of Public Health Data  3
- PRVM 877  Health Communication  3

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program.

### Typical Plan of Study for Part-time Students

#### Year 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 754 or HP&amp;M 860</td>
<td>3</td>
</tr>
<tr>
<td>or HP&amp;M 819</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 860</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Year 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPHI 851 (Fall only)</td>
<td>1-3</td>
</tr>
<tr>
<td>IPHI 860</td>
<td>1-3</td>
</tr>
</tbody>
</table>

#### Year 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPHI 853 (Fall only)</td>
<td>1-3</td>
</tr>
<tr>
<td>1-3 Dinner Core</td>
<td>1-3</td>
</tr>
</tbody>
</table>

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**Total Hours: 27-45**

### Doctor of Philosophy in Nursing

The PhD program prepares graduates to function in faculty positions in college and university settings; conduct independent research and scholarly endeavors in nursing; generate and expand the theoretical, empirical, and philosophical bases for nursing practice; provide leadership to the profession; and interpret nursing to society. Students have opportunities to expand their theoretical knowledge and research skills in a minor area; develop expertise in nursing theory development; expand research skills; and gain a historical and philosophical perspective that broadens their professional orientation and provides a basis for understanding changing social expectations, cultural perspectives, and economic and political trends.
Nurses engaged in doctoral study are adult learners with unique perspectives gained from personal, professional, and educational experiences. These individuals tend to be self-directed, goal-oriented, highly motivated and capable of abstract, original thinking. Individual interests are explored through study in a related discipline, i.e., minor area of study. Learning is achieved through independent study and research, as well as instructed courses.

The KU School of Nursing’s baccalaureate, master’s, and doctor of nursing practice (DNP) programs are accredited by the Commission on Collegiate Nursing Education (http://www.aacn.nche.edu), One Dupont Circle, NW, Suite 530, Washington, DC 20036, (202) 887-6791. This organization is a nationally recognized professional accrediting body for collegiate nursing programs. The baccalaureate, master’s, and DNP programs also are approved by the Kansas State Board of Nursing (http://www.ksbn.org). The Nurse Midwifery Program is accredited by the Accreditation Division of the American College of Nurse-Midwives (http://www.midwife.org), 818 Connecticut Ave., NW, Suite 900, Washington, DC 20006, (202) 728-9860. The Nurse Anesthesia program is accredited by the Council on Accreditation of Nurse Anesthesia Programs, 22 S. Prospect Ave., Park Ridge, IL 60068-4001, (847) 655-1160.

**PhD Admission**

**Admission Criteria**

New students are accepted to the PhD degree program once a year, for instruction that begins in June during the summer semester. The application deadline is December 1st for the following summer. Prospective students can apply using the KU Medical Center online application at https://www.applyweb.com/apply/kumc/

1. Completion of a Bachelor of Science in Nursing (BSN) or Master of Science (MS) in Nursing degree from a nationally accredited program is required. Prerequisite preparation must include the following courses:
   - Basic Graduate Statistics - 3 credit hours
   - Analysis of Variance - 3 credit hours
2. Preference is given to students with a Master’s Degree GPA of 3.25 for the master’s degree in nursing.
3. Expected Graduate Record Examination (GRE) scores are 1,000 on the verbal and quantitative sections and at least five on the analytical writing section (or a score of 1,500 on the three-part GRE taken before October 2002).
4. Potential for leadership and scholarship in nursing should be demonstrated.
5. A background check is required during the admission process; it may affect the student’s eligibility to enter the program.
6. For international applicants, a satisfactory score on the Test of English as a Foreign Language or the International English Language Testing System taken within the last two years is required. See KUMC Graduate Studies (p. 2395) for information.

Applicants who do not meet the admission criteria for regular admission status may be considered on an individual basis for provisional admission status as either degree-seeking or nondegree-seeking students.

See also Admission in the Graduate Studies (p. 2395) section of the online catalog.

### PhD Requirements

**Program Options**

Students may apply to the doctoral program after completing the master’s degree in nursing or the baccalaureate degree with a major in nursing. The post-baccalaureate entry option is for exceptionally well-qualified BSN graduates whose career goals are research-oriented and who wish to progress as rapidly as possible toward the research doctorate in nursing.

**Course Requirements**

The PhD program is offered in a combination of ways, including: three on-campus, one-week summer intensives, online coursework throughout the year, and e-mentoring by faculty for research and career advisement.

The nursing portion of the doctoral program has 3 major components:

- Theory
- Empirics
- Leadership

A total of 50 coursework credit hours and 15 dissertation credit hours are required, for a total of 65 credit hours.

#### Theory (6)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 940</td>
<td>Knowledge and Theory Development in Nursing Science</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 942</td>
<td>Theory Application in Nursing Science</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Empirics (14)

<table>
<thead>
<tr>
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<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 943</td>
<td>Methods for Quantitative Research</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 944</td>
<td>Quantitative Research Application</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 946</td>
<td>Measurement Principles and Practice</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 947</td>
<td>Qualitative Research Application</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 802</td>
<td>Methods for Qualitative Research</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Leadership (13)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 935</td>
<td>Professionalism and Scholarship Workshop</td>
<td>1</td>
</tr>
<tr>
<td>NRSG 938</td>
<td>Informatics and Technology Applications</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 941</td>
<td>Preparing for Doctoral Leadership</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 945</td>
<td>Synthesis Workshop I</td>
<td>1</td>
</tr>
<tr>
<td>NRSG 948</td>
<td>Advancing Organizational and Clinical Quality</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 949</td>
<td>Synthesis Workshop II</td>
<td>1</td>
</tr>
<tr>
<td>NRSG 877</td>
<td>Foundations in Education and Learning</td>
<td>3</td>
</tr>
</tbody>
</table>

**Minor**

The Minor includes 11 coursework credit hours in the student’s area of choice. Minor courses must support the student’s research interest area; e.g., American studies, anatomy, anthropology, biochemistry, business, child development, communication, economics, education, history, pathology, pharmacology, philosophy, physiology, political science, psychology, sociology, or any other graduate area offered by KU. One of the 11 Minor credit hours is taken through enrollment in NRSG 970, Minor Synthesis. NRSG 970 is taken after completion of other minor coursework and entails completion of a scholarly paper synthesizing content taken throughout the minor course sequence.

**Support Courses**

This area requires these courses:
Statistics (6)
Regression Analysis 3
Multivariate Analysis 3

Dissertation
Each PhD student must complete a study that shows the planning, conduct, and results of original research. See Doctoral Degree Requirements, Dissertation, in the Graduate Studies (p. 2398) section of the online catalog. The minimum number of post-comprehensive dissertation credit hours is 15.

The program also requires satisfactory completion of the university’s research skills and responsible scholarship requirement (p. 2398), and two qualifying examinations: comprehensive oral (dissertation proposal defense) and final oral (dissertation defense).

Doctor of Nursing Practice

The Doctor of Nursing Practice (DNP) degree prepares graduates for nursing practice at the highest level. The DNP offers sophisticated, cutting-edge experiences that help nurses actively engage in a complex, dynamic and demanding health care field. Skills in collaboration, innovation, and evaluation — complemented by advanced nursing practice skills — prepare nurses to shape the future of health care. Graduates of the DNP program provide patient-centered care that is evidence-based, contribute to the development of evidence-based practice, and pursue leadership roles in a variety of health care and educational settings. All DNP graduates must have completed at least 1,000 hours of supervised, post-baccalaureate, practice experiences.

The School of Nursing is one of 3 schools at the University of Kansas Medical Center (http://www.kumc.edu) in Kansas City, Kansas. Academic programs at KU Medical Center are offered through the Schools of Health Professions, Medicine, and Nursing. The Office of Graduate Studies at KUMC (http://www.kumc.edu/academic-affairs/graduate-studies.html) handles matters related to graduate programs in Health Professions, Medicine, and Nursing.

The KU School of Nursing’s baccalaureate, master’s, and doctor of nursing practice (DNP) programs are accredited by the Commission on Collegiate Nursing Education (http://www.aacn.nche.edu), One Dupont Circle, NW, Suite 530, Washington, DC 20036, (202) 887-6791. This organization is a nationally recognized professional accrediting body for collegiate nursing programs. The baccalaureate, master’s, and DNP programs also are approved by the Kansas State Board of Nursing (http://www.ksbn.org). The Nurse Midwifery Program is accredited by the Accreditation Division of the American College of Nurse-Midwives (http://www.midwife.org), 818 Connecticut Ave., NW, Suite 900, Washington, DC 20006, (202) 728-9860. The Nurse Anesthesia program is accredited by the Council on Accreditation of Nurse Anesthesia Programs, 222 S. Prospect Ave., Park Ridge, IL 60068-4001, (847) 655-1160.

DNP Admission
New students are accepted to the DNP degree program once a year, for study that begins during the summer semester. The application deadline is December 1st for the following summer (June). Prospective students can apply using the KU Medical Center online application at https://www.applyweb.com/apply/kumc/

DNP Program Admission Criteria
1. Completion of a bachelor of science in nursing (BSN) degree (for BSN to DNP), or completion of a master’s degree in nursing (for post-master’s DNP) from a nationally accredited program.
2. Minimum cumulative undergraduate GPA of 3.0 for BSN-DNP application, for post-MS DNP, preference is given to applicants with a 3.25 graduate GPA in the master’s program.
3. Potential for leadership and application of scholarship in nursing.
4. Potential to provide expert advanced clinical care or expert service in functional area.
5. Current registered nurse licensure in at least one state in the United States; upon admission, advanced practice e students are required to be licensed in both Kansas and Missouri prior to enrollment.
6. Minimum of one year of clinical work experience as a registered nurse
7. National certification in specialty area (post-master’s DNP)
8. A graduate-level statistics course
9. A background check (http://www.kumc.edu/student-services/vice-chancellor-of-student-services/criminal-background-checks-for-students.html) and drug screen are required during the admission process and may affect the student’s eligibility to enter the program.
10. For international applicants, a satisfactory score on the Test of English as a Foreign Language or the International English Language Testing System taken within the last 2 years is required. Visit KUMC Graduate Studies (p. 2395) for information.

Admission Process
Application deadlines are:

- Post-master’s entry: December 1st for summer semester
- Post-baccalaureate entry: December 1st for summer semester

All applicants must submit the following:

- Completed application for graduate study;
- Official transcripts of all academic work toward the bachelor’s and master’s degrees in nursing (KUMC provides the University of Kansas record);
- 3 references from advanced-practice nurses, nurse leaders, nursing faculty, or physicians who are able to attest to the applicant’s potential ability to practice at the highest level of advanced nursing practice and to engage in scholarly activity and leadership roles;
- A statement of career goals and practice interests;
- A résumé;
- Evidence of current licensure as a professional nurse in 1 state;
- Nonrefundable application fee. See the School of Nursing website (http://nursing.kumc.edu) for the fee.

The admissions committee of the School of Nursing reviews application materials. Specialty area faculty may request an interview with a student.

See also Admission in the Graduate Studies (p. 2395) section of the online catalog.

BSN-DNP
The post-baccalaureate DNP curriculum is designed for registered nurses with a BSN degree. DNP graduates will have knowledge, skills and
expertise to become clinical scholars and transformational leaders. The BSN to DNP program offers nurses a variety of specializations in two majors: Advanced Practice and Leadership.

**Advanced-Practice Major**

The advanced-practice nursing major prepares nurses for clinical nurse specialist, nurse practitioner, nurse-midwife, or nurse anesthesia role specializations.

- The **clinical nurse specialist specialization** includes adult/gerontological nursing. It prepares nurses to perform in the expanded role of caring for a particular kind of patient/client or to function in a particular kind of setting. (75 credit hours)
- The **nurse practitioner specialization** prepares nurses to provide primary health care to clients and families across the life span. Family nurse practitioner, adult/gerontological nurse practitioner, and psychiatric/mental health nurse practitioner options are available. The nurse practitioner is prepared to provide primary health care in a variety of settings. (75 - 79 credit hours)
- The **nurse-midwife specialization** focuses on the support and management of well-women’s primary and reproductive health care needs throughout the life span. (76 credit hours)
- The **nurse anesthesia specialization** prepares nurses to perform as nurse anesthetists. Admission to this specialization is through the Department of Nurse Anesthesia Education, KU School of Health Professions. (81 credit hours)

**Leadership Major**

- Clinical Research Management (74 total credit hours)
- Nursing Informatics (71 total credit hours)
- Organizational Leadership (74 total credit hours)
- Public Health Nursing (74 total credit hours)

**Curriculum**

The post-baccalaureate DNP program requires the following:

- 22-24 credit hours of post-baccalaureate common core courses
- A minimum of 6 credit hours of doctoral capstone project
- 12-23 credit hours of Advanced-Practice or Leadership core
- 12-23 credit hours of specialization courses
- 11 credit hours of specialty area support courses and practicum courses
- Satisfactory completion of the university's research skills and responsible scholarship requirement (p. 2398)

Total required DNP program credit hours vary from 71 to 81, depending on the specialization. Although curricular changes may occur, some examples of core courses include:

- Common Core (NRSG 748, 754, 755)
- Advanced Practice Core (NRSG 731, 801, 806, 809, 812, 813)
- Leadership Core (NRSG 808, 820, 826, 880, 885)
- DNP Core (PRVM 800, NRSG 804, 911, 941)
- DNP Specialty Area (NRSG 857, 919, 920)
- Adult/Genontological Nurse Practitioner Specialty Core (NRSG 862, 864, 865, 867, 869)
- Adult/Genontological Clinical Nurse Specialist Specialty Core (NRSG 862, 863, 865, 866, 868)

- Family Nurse Practitioner Specialty Core (NRSG 814, 815, 816, 817, 818)
- Nurse Midwifery Specialty Core (NRSG 830, 831, 832, 833, 835, 836, 837, 838, 840, 841)
- Psychiatric Mental Health Nurse Practitioner Specialty Core (NRSG 842, 844, 845, 846, 847, 848, 849, 850, 851)
- Organizational Leadership Specialty Core (HP&M 822, NRSG 881, 882 or 883, 886, 891)
- Public Health Nursing Specialty Core (NRSG 809, 827, 828, 829, PRVM 830)
- Nursing Informatics Specialty Core (NRSG 853, 854, 856, 857, 858)
- Clinical Research Management Specialty Core (NRSG 823, 824, 825, 833)

**The post-master’s DNP program requires the following:**

- 15 credit hours of post-master’s common core courses
- A minimum of 6 credit hours of doctoral capstone project
- 11 credit hours of specialty courses
- Satisfactory completion of the university's Research Skills and Responsible Scholarship requirement

The post-master’s DNP curriculum is designed for nurses who have already earned a Master of Science in Nursing degree. The DNP degree allows nurses to serve at a higher level as an advanced practice nurse or leader in their specialty. Two majors are offered in the post-master's DNP program: 1) Advanced Practice and 2) Leadership. A total of 32 credit hours is required for the post-master’s DNP.

For further information, visit the Doctor of Nursing Practice (http://nursing.kumc.edu/academics/doctor-of-nursing-practice.html) section of the school's website (http://nursing.kumc.edu).

**Post-Master's Certificate Programs in Nursing**

**Graduate Certificate Programs in Nursing**

The School of Nursing offers Post-Master's Certificate programs in three areas: Health Professions Educator, Leadership, and Advanced Practice. In the Leadership and Advanced Practice categories, some prerequisite courses and other requirements are required beyond simply holding the MS degree in nursing.

Information about costs for Title IV-Federal Student Financial Aid eligible certificates, Nurse Midwifery and Psychiatric/Mental Health, are available at http://www.kumc.edu/allied/GEDT/Midwife-Gedt.html and http://www.kumc.edu/allied/GEDT/PMH-Gedt.html, respectively.

**Health Professions Educator**

This interdisciplinary certificate (12 credit hours) affords graduate-prepared nurses and other health professionals broader opportunities and the necessary skill to find positions in education at the various levels and become leaders in their field. Paired with faculty mentors throughout the program, students complete applied teaching projects in each educator course, including a final student teaching capstone. Students may
complete the health professions educator certificate within their master's program or as post-master's study. All courses are online.

NRSG 870 Designing a Student Learning Environment 3
NRSG 871 Curriculum/Program Planning and Evaluation 3
NRSG 873 Teaching with Technologies 3
NRSG 874 Nurse Educator Preceptorship 3

Leadership
Students choose one course from the Leadership core, as part of their course requirements for each program.

Prerequisite Leadership Core (11)
Select one of the following:

NRSG 808 The Social Context for Health Care Policy 2
NRSG 820 Program, Project, and Communication Planning 2
NRSG 826 Global Perspective and Diversity in Healthcare 2
NRSG 880 Organizational Foundations for Leading Change 3
NRSG 885 Evaluation and Analysis for Healthcare Effectiveness 2

Organizational Leadership
This certificate (17 to 18 credit hours) prepares clinicians with skills in organizational behavior, clinical operations and system design, quality measurement and risk management, fiscal operations and systemic change and project management. It prepares the organizational leader for entry- to mid-level clinical leadership and management positions, with the possibility of future promotions to a higher executive level. All NRSG courses are online.

Prerequisite: Leadership Core elective course (2 or 3 credit hours) 2-3
HP&M 822 Health Care Economics 3
NRSG 881 Applied Budgeting and Finance 3
NRSG 883 Complexity Science Approaches to Improve Organizational Effectiveness 3
NRSG 886 Organizational Leadership Practicum 3
NRSG 891 Human Resources and Workforce Development 3

Healthcare Informatics
This certificate (17 to 18 credit hours) prepares clinicians and health care managers with skills in analysis, design, implementation, and evaluation of information systems that support a full range of clinical and patient care functions. The graduate is prepared for entry- to mid-level positions in IT departments, advanced clinical departments, and as consultants and/or staff in organizations that specialize in computer operations and knowledge management. All NRSG courses are online.

Prerequisite: Leadership Core elective course (2 or 3 credit hours) 2-3
NRSG 853 Abstraction and Modeling of Healthcare Information 3
NRSG 854 Knowledge Management in Healthcare 3
NRSG 856 Health Informatics Practicum 3
NRSG 857 Transforming Health Care through Use of Information Systems and Technology 3
NRSG 858 Health Data: Theory and Practice 3

Public Health Nursing
Nurses in this program (16 to 19 credit hours) acquire skills in advanced community-based interventions and outcomes measurement, with emphasis on health promotion and disease prevention strategies for a targeted population. Public health nurses find employment in state and county health departments, national and regional agencies that focus on specialized client populations, or as leaders in community-based clinical and advocacy agencies. All courses are online.

Prerequisite: Leadership Core elective course (2 or 3 credit hours) 2-3
PRVM 800 Principles of Epidemiology 3
PRVM 830 Environmental Health 3
NRSG 827 Advanced Concepts Public Health Nursing 2
NRSG 828 Public Health Nursing: Practicum I 3
NRSG 829 Public Health Practicum 3
NRSG 892 Independent Study in Nursing Practicum 1 2

1 Students who do not have enough clinical hours to meet national certification eligibility may need to take additional credit hours of practicum work.

Clinical Research Management
No Leadership Core prerequisite is required.

The Post-Master's Certificate (12 credit hours) in Clinical Research Management prepares graduates for entry- to mid-level clinical management positions, working as research leaders with potential for promotion to executive-level positions in a variety of research settings. This program is suited for novice or advanced beginner managers and advanced practice clinicians who have potential for clinical research leadership at the advanced level.

The University of Kansas School of Nursing's Clinical Research Management specialty within the Master of Science in Nursing program is a certificate program that prepares clinical research professionals with competencies and skills related to Good Clinical Practice (GCP) standards and research related to conducting clinical trials, institutional review boards and regulations, and ethical issues. The Clinical Research Management Certificate program is available to post-master's students.

NRSG 823 Research Clinical Trial Management: Pre-Study Activities 3
NRSG 824 Research Clinical Trial Management: During Study Activities 3
NRSG 825 Research Clinical Trial Management: Post-Study Activities and Practicum Experience 3
NRSG 833 Managing Clinical Research Projects 3

Advanced Practice
The Psychiatric/Mental Health Nurse Practitioner, Nurse Midwife, Family Nurse Practitioner, Adult/Gerontological Nurse Practitioner, and Adult/Gerontological Clinical Nurse Specialist certificate programs require that students have earned a master's degree in nursing from a nationally accredited school of nursing. More specifically, the AP certificates require that students have completed an advanced practice registered nurse (APRN educational program from a nationally accredited school of nursing. Applicants must also have completed the following AP prerequisite courses, either as part of their previous graduate degree or as post-graduate study through an accredited university: advanced health
assessment, advanced pathophysiology, advanced pharmacology, and health promotion. Additional eligibility requirements may include licensure as an advanced practice registered nurse.

**Prerequisites** include the following courses or their equivalents from another institution:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 801</td>
<td>Advanced Health Assessment and Clinical Reasoning</td>
<td>5</td>
</tr>
<tr>
<td>NRSG 809</td>
<td>Health Promotion and Complementary Therapeutics</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 812</td>
<td>Advanced Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 813</td>
<td>Applied Drug Therapy</td>
<td>3</td>
</tr>
</tbody>
</table>

**Psychiatric/Mental Health Nurse Practitioner**

This certificate (24 credit hours) program prepares advanced practice nurses to diagnose and treat common mental health conditions in general medical settings and to deliver more effective psychiatric care in mental health settings. Students are prepared to apply knowledge and skills in interpersonal, psychotherapeutic, and psychopharmacologic interventions for individuals, groups, and families with psychiatric disorders. All courses are online and offered in sequence every other year. Spring 2016 begins the next available course sequence.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 844</td>
<td>Advanced Psychiatric Assessment</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 845</td>
<td>Psychotherapeutics I: Psychiatric Mental Health Nurse Practitioner</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 846</td>
<td>Psychotherapeutics I: Psychiatric Mental Health Nurse Practitioner Practicum</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 847</td>
<td>Psychotherapeutic Interventions II: Psychiatric Mental Health Nurse Practitioner</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 848</td>
<td>Psychotherapeutics II: Psychiatric Mental Health Nurse Practitioner Practicum</td>
<td>4</td>
</tr>
<tr>
<td>NRSG 849</td>
<td>Psychotherapeutics III: Practicum</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 850</td>
<td>Mental Health Assessment of Infants, Children and Adolescents</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 851</td>
<td>Psychopharmacology for Advanced Nursing Practice</td>
<td>3</td>
</tr>
</tbody>
</table>

**Nurse Midwifery**

This certificate (19 credit hours) prepares advanced practice nurses to focus on the care and management of well women’s primary and reproductive health care needs throughout the life span. The program content is family-centered, respectful of individual and cultural variations, and promotes health through individual choice and participation. Courses are offered online and on the KU Medical Center campus.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 830</td>
<td>Care of Women in the Antepartal Period</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 831</td>
<td>Care of Women in The Antepartal Period Practicum</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 832</td>
<td>Nurse Midwifery in the Postpartum and Newborn Period</td>
<td>1</td>
</tr>
<tr>
<td>NRSG 835</td>
<td>Primary Care of Women Across the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 836</td>
<td>Nurse Midwifery in the Intrapartum Period</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 837</td>
<td>Childbearing Family Practicum: Intrapartum, Postpartum, and Newborn</td>
<td>2</td>
</tr>
</tbody>
</table>

**Admission Criteria**

The Advanced Practice Clinical Certificate Programs require that students have completed an advanced practice registered nurse (APRN) educational program from a nationally accredited school of nursing. Applicants must also have completed the following advanced practice prerequisite courses, either as part of their previous graduate degree or as post-graduate study through an accredited university: advanced health assessment, advanced pathophysiology, advanced pharmacology, and health promotion.

- Adult/Gerontological Clinical Nurse Specialist Certificate
- Adult/Gerontological Nurse Practitioner Certificate
- Nurse-Midwifery Certificate
- Psychiatric/Mental Health Nurse Practitioner Certificate

The Leadership Certificate Programs require applicants to have earned a master's in nursing or DNP degree, or a graduate degree in a health-related discipline.
• Clinical Research Management
• Healthcare Informatics Certificate
• Organizational Leadership Certificate
• Public Health Nursing Certificate

The Health Professions Educator Certificate can be completed as additional hours within a student's graduate program or as post-master's study.

All post-MS certificate programs require a minimum 3.0 grade-point average in both undergraduate and graduate programs.

For KU programs to maintain accreditation status, all persons, employees, volunteers and students involved in patient care activities must have background checks. This status is very important to healthcare organizations to demonstrate to patients and professionals that they meet the highest of standards for patient care. The background check will be done at the applicant's expense after provisional acceptance has been granted. The information from this report is held in confidence by the school. More information regarding background checks for students

Contact the School of Nursing at soninfo@kumc.edu for additional application information.
Pharmacy

Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your advisor (http://www.advising.ku.edu) for details). Other years’ catalogs (http://catalog.ku.edu/archives)

Doctor of Pharmacy (p. 2300) Doctor of Pharmacy (p. 2314)
Medicinal Chemistry (p. 2317) Master of Science in Medicinal Chemistry (p. 2320)
Pharmaceutical Chemistry (p. 2320)
Neurosciences (p. 2321) Master of Science in Neurosciences (p. 2321)
Pharmaceutical Chemistry (p. 2321)
Pharmacology and Toxicology (p. 2329) Master of Science in Pharmacology and Toxicology (p. 2332)
Pharmacy Practice (p. 2334) Master of Science in Pharmacy Practice (p. 2338)

The School of Pharmacy

Since its founding in 1885, the University of Kansas School of Pharmacy (http://pharmacy.ku.edu) has been a leader in pharmacy education. Since 1996, the school has only offered the Doctor of Pharmacy degree as the entry-level practice degree. The curriculum gives the student the knowledge, skills, and ability required of the pharmacy practitioner; it is comprehensive and produces a highly competent general practitioner.

Approximately 60 full-time faculty members teach in the undergraduate professional Doctor of Pharmacy and graduate programs. Three departments (Pharmacology and Toxicology, Medicinal Chemistry, and Pharmaceutical Chemistry) offer Master of Science and Doctor of Philosophy degrees. The Department of Pharmacy Practice offers the master’s degree.

Both the undergraduate and graduate divisions have outstanding national and international reputations based on the excellence and productivity of the faculty. KU is consistently ranked in the top 5 among colleges/schools of pharmacy that receive National Institutes of Health research funding. KU’s School of Pharmacy was awarded more than $22 million in research grants and contracts from the NIH in fiscal year 2011.

The School of Pharmacy is fully accredited by the Accreditation Council for Pharmacy Education (https://www.acpe-accredit.org), 135 S. LaSalle St, Suite 4100, Chicago, IL 60603-4810, (312) 664-3575, info@acpe-accredit.org, the official accrediting body for American schools of pharmacy.

Professional Program

The School of Pharmacy offers a 6-year Doctor of Pharmacy (p. 2314) program. The 2-year pre-pharmacy portion of the program may be taken at any accredited 2- or 4-year college.

After acceptance into the School of Pharmacy students completing the first 2 years of the Doctor of Pharmacy professional degree program (3rd and 4th year of college) are awarded a Bachelor of Science in Pharmaceutical Studies. Students completing the remaining 5th and 6th professional years are awarded the Doctor of Pharmacy (Pharm.D.) degree. These degree programs are available to students on both the Lawrence and Wichita campuses.

University Honors Program

The school encourages qualified students entering KU as freshman to participate in the University Honors Program (http://www.honors.ku.edu).

Graduate Programs

The School of Pharmacy offers graduate programs through the departments of

• Medicinal Chemistry (p. 2317),
• Pharmaceutical Chemistry (p. 2323),
• Pharmacology and Toxicology (p. 2329), and
• Pharmacy Practice (p. 2334).

The Department of Pharmacy Practice offers the Master of Science degree. The other 3 departments offer both the M.S. and the Ph.D. with majors in their respective disciplines. Programs in Neurosciences (p. 2321) are offered in cooperation with KU Medical Center.

Requirements for admission and baccalaureate preparation vary with each department and are discussed separately. Address inquiries and correspondence about graduate studies to the program or department of interest.

Undergraduate Scholarships and Financial Aid

Financial Aid and Scholarships (http://affordability.ku.edu/steps/index.shtml), located at the KU Visitor Center at 1502 Iowa St, Lawrence, KS 66045-7518, 785-864-4700, financialaid@ku.edu, administers grants, loans, and other need-based financial aid. In recent years, about $29 million has been processed annually through the office, including about $2 million annually in short-term loans. Prospective students should contact Financial Aid and Scholarships. Some financial aid programs have application deadlines as early as January 15. The earlier an application is received and the student’s file is completed, the better the chance of obtaining financial aid.

For information about scholarships from KU and various outside agencies based on academic merit, diversity, major, and residence, visit Scholarship Information for KU Students (http://affordability.ku.edu/cs/index.shtml).

School of Pharmacy Financial Aid

The School of Pharmacy, in cooperation with Financial Aid and Scholarships (http://affordability.ku.edu/steps/index.shtml), offers financial assistance to pharmacy students. Applications are received in the dean’s office according to an announced schedule each year. Awards are
based on merit and need. Assistance is available for both entering and continuing students.

**Graduate Fellowships and Assistantships**

For information about graduate assistantships, contact the School of Pharmacy (http://pharmacy.ku.edu). Visit the Graduate Studies website for information about funding opportunities (http://www.graduate.ku.edu/funding-opportunities) for graduate students at KU. Financial Aid and Scholarships (http://affordability.ku.edu/steps/index.shtml) administers grants, loans, and need-based financial aid.

**Undergraduate University Regulations**

For information about university regulations, see Regulations (p. 12) or visit the University of Kansas Policy Library (http://www.policy.ku.edu).

**Academic Misconduct**

Instructors detecting academic misconduct must act in accordance with the School of Pharmacy (http://www.policy.ku.edu/Pharmacy/academic_and_professional_conduct_policy) and Faculty Senate Rules and Regulations (http://www.policy.ku.edu).

Students experiencing difficulties or problems with a particular course or having complaints or grievances about a particular instructor are urged to discuss the problem in a timely fashion with the instructor. If the student feels awkward or uncomfortable doing this, he or she should see the chair of the instructor's department, or if necessary, an associate dean. The chair or dean brings the matter to the instructor's attention, preserving the student's anonymity, if so requested.

**Credit/No Credit**

A Credit/No Credit option is available to all degree-seeking undergraduates. You may enroll in one course a semester under the option, if the course is not in your major or minor. For more information, visit the KU Policy Library (https://documents.ku.edu/policies/governance/USRPPart2Section2).

**Warning:** Certain undesirable consequences may result from exercising the option. Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of No Credit to F when computing grade-point averages.

**Exemptions and Petitions**

A student may gain an exemption from introductory pre-pharmacy courses by successfully completing the Advanced Placement or College Level Examination Program examinations or by other recognized means. Only the exemption is allowed. A total of 208 credit hours of college-level course work is still required for the PharmD degree. Students who have completed high school physics with a grade of B or higher need not take college-level physics. In meritorious cases, the department offering a specific course may waive course prerequisites. Students whose educational goals would be better served by courses other than those prescribed in the normal curriculum may petition the academic standing committee for permission to make appropriate course substitutions.

**Graduation with Distinction and Highest Distinction**

Students who rank in the upper 10 percent of their graduating class graduate with distinction. The upper third of those awarded distinction graduate with highest distinction. Grade-point averages are determined on the basis of credit hours taken while enrolled in the School of Pharmacy. The list is compiled each spring and includes July, December, and May graduates.

**Health Insurance and Immunizations**

The School of Pharmacy requires students to provide proof of health insurance and professional insurance coverage and immunizations for MMR, hepatitis B, varicella, and tetanus, and a current TB skin test.

**Honor Roll**

Students with grade-point averages of 3.5 who have completed at least 12 professional hours are recognized on the honor roll or dean's list in fall and spring. An Honor Roll notation appears on the transcript.

**Maximum Community College Credit Allowed**

The School of Pharmacy allows a maximum of 68 credit hours from any accredited college or university toward completion of the PharmD degree.

**Prerequisites and Corequisites**

In meritorious cases, course prerequisites may be waived by the department offering the course. Waiver is not granted if the prerequisite course was taken and failed.

**Probation**

**Probation**

A student will be placed on academic probation if they:

1. fail to attain a 2.5 grade point average (2.25 for the class of 2016) of professional coursework in any semester, or whose overall professional course grade-point average falls below 2.5.
   a. A student falling below the minimum grade point average of 2.5* will be required to develop and submit an individualized remediation plan to their Academic Faculty Advisor and the Chair of the Academic Standing Committee, Senior Associate Dean Gene Hotchkiss.

2. fail an introductory or advanced pharmacy practice experience.
   a. A student falling either an IPPE or APPE will be required to develop an individualized remediation plan with the Assistant Dean for Experiential Education and the Associate Deans for Administration and Academic Affairs.

3. fails to comply with programmatic requirements in a timely manner.

**Suspension**

A student who fails or does not make timely progress in a course or courses while a student in the School of Pharmacy may be placed on suspension. Additionally, a student who fails to comply with the School conduct policy, or academic and/or programmatic requirements may be placed on suspension.

**Dismissal**

Students will be dismissed from school if they:

1. fail to attain a 2.5 grade-point-average (2.25 for graduating class of 2016) in all courses or in professional courses for any semester while on probation.
2. receive a grade of “F” in 40 percent or more of the courses taken during any semester (including semesters in which they are enrolled in only one course).
3. fail an individual course twice.
4. fail two advanced pharmacy practice experiences (APPEs).
5. are placed on probation or suspended for a second academic semester for failure to comply with programmatic requirements.

Petitions
Students dismissed for poor scholarship may file a written petition with the academic standing committee for reinstatement. The committee’s decision is final. The committee normally takes one of the following actions:

1. The student is allowed to enroll, often with specific recommendations regarding strategies for restoring good academic standing.
2. The committee may deny the petition.

Courses Taken Outside the School
Students on probation or in nondegree-student status may take courses outside the School of Pharmacy, or at other institutions, to improve the grade-point average. Prior approval is required, and in general, only courses that count toward graduation are honored.

Return to Good Standing
Students are returned to good standing when the overall pharmacy grade-point average reaches 2.5 (2.25 for graduating class of 2016).

Required Work in Residence
Of the last 30 hours preceding graduation, 24 hours must be in residence at the KU School of Pharmacy.

Terminal-Year Courses
A student cannot enroll in the principal terminal-year pharmacy practice experiential rotations unless he or she has a grade-point average in professional courses of at least 2.5 (2.25 for graduating classes of 2015 and 2016) and has completed all didactic course work required for the degree.

Graduate University Regulations
For information about university regulations, see Regulations (p. 12) or visit the University of Kansas Policy Library (http://www.policy.ku.edu).

Academic Forgiveness
The school does not participate in academic forgiveness.

Academic Misconduct
Students experiencing difficulties or problems with a particular course or having complaints or grievances about a particular instructor are urged to discuss the problem in a timely fashion with the instructor. If the student feels awkward or uncomfortable doing this, he or she should see the chair of the instructor’s department, or if necessary, the dean. The chair or dean brings the matter to the instructor’s attention, preserving the student’s anonymity, if so requested.

Instructors detecting academic misconduct must act in accordance with the School of Pharmacy and Faculty Senate Rules and Regulations (http://www.policy.ku.edu).

Credit/No Credit
The Credit/No Credit option is not authorized for graduate students’ enrollments, including, but not limited to, courses taken to fulfill the research skills requirements, undergraduate deficiencies, etc.

Graduation with Distinction and Highest Distinction
Students who rank in the upper 10 percent of their graduating class graduate with distinction. The upper third of those awarded distinction graduate with highest distinction. Grade-point averages are determined on the basis of credit hours taken while enrolled in the School of Pharmacy. The list is compiled each spring and includes July, December, and May graduates.

Health Insurance and Immunizations
The School of Pharmacy requires students to provide proof of health insurance and professional insurance coverage and immunizations for MMR, hepatitis B, varicella, and tetanus, and a current TB skin test.

Requirements to Practice Pharmacy in Kansas
A license is required to practice pharmacy. State boards of pharmacy grant licenses to students who successfully pass board examinations. In all states, eligibility to take board examinations requires graduation from an accredited school of pharmacy and completion of required experiential training. The Kansas State Board of Pharmacy (http://www.kansas.gov/pharmacy) requires graduates of schools of pharmacy to indicate any current, pending, or previous convictions, fines, violations, or disciplinary action that may affect their eligibility to take the licensing examination. Pharmacists generally may transfer their licenses from a state in which they completed the entire examination to another state, provided the 2 states had similar practical experience requirements at the time the pharmacist was licensed by examination. Most pharmacists find it useful to maintain a license in the state where they were licensed by examination. By doing so, they can preserve their eligibility to transfer to another state.

Pharmacists in Kansas must renew their licenses biennially by paying the required fee and providing proof that they have completed the required 30 clock hours of continuing education.

The Kansas Board of Pharmacy requires completion of an appropriate degree from an accredited school of pharmacy plus 1,500 hours of practical experience in pharmacy. At the conclusion of the program, students are certified to the Kansas State Board of Pharmacy as having completed the entire externship requirement (1,500 hours) and are therefore eligible to take the Kansas licensure examination. Students must register as interns with the board at matriculation in the School of Pharmacy. Students desiring to compile an official record of pharmacy experience obtained on their own initiative may do so by submitting this information to the Kansas State Board of Pharmacy. Practical experience above and beyond the 1,500 required hours may be gained by working as a licensed pharmacy student intern in Kansas, then transferring the hours to another state.
Medicinal Chemistry Courses

MDCM 599. Clinical Application of Basic Science. 1 Hour.
This course is an inter-departmental, team-based, technology-centric elective course. Concomitantly, instructors from the basic and clinical science departments within the school of pharmacy will promote deeper student understanding of the path a drug takes from discovery, development and ultimately clinical use. Instructors will collaborate in course content development to integrate basic and clinical science concepts. The course will utilize a blended learning method, incorporating out of class podcasts, online group collaborative projects, cloud-based file sharing, and readiness quizzes and exams. (Same as PTX 599 and PHCH 599.) Prerequisite: 4th or 5th professional year standing (4P/5P) in the School of Pharmacy and concomitant enrollment in PHPR 599 is required. LEC.

MDCM 601. Medicinal Biochemistry I. 3 Hours.
A study of the biochemical principles of macromolecular structure and function, molecular communication, and the metabolism of nutrients and xenobiotics as applied to problems of medicinal and pharmacological significance. Prerequisite: Concurrent enrollment in MDCM 602 Lab. LEC.

MDCM 602. Medicinal Biochemistry Laboratory. 1 Hour.
Laboratory exercises illustrating the application of chemical principles to biochemical processes of medicinal, pharmacological, and clinical significance. Prerequisite: Concurrent enrollment in MDCM 601. LAB.

MDCM 603. Medicinal Biochemistry II. 3 Hours.
A study of the biochemical principles of macromolecular structure and function, biosynthesis, molecular communication, and the metabolism of nutrients and xenobiotics as applied to problems of medicinal and pharmacological significance. Prerequisite: MDCM 601. LEC.

MDCM 606. Phytomedicinal Agents. 1 Hour.
This course will acquaint the pharmacy students with the current status of botanical use in the United States. A basic foundation will be provided so that the pharmacist can properly assess the appropriateness and usefulness of various phytomedicines and combinations in managing certain ailments with regard to efficacy, safety, potential toxicity, and potential herb-drug interactions. Prerequisite: MDCM 626 or instructor permission. LEC.

MDCM 607. Clinical Pharmacognosy. 1 Hour.
The course will provide a technical background for understanding the scientific basis underlying the use of herbal medicines. This will be followed by practical information about the pharmacological and chemical properties as well as clinical uses of herbal medicines. Active student participation in discussing the properties of these non-prescription medicinals is expected. Prerequisite: MDCM 601. LEC.

MDCM 625. Medicinal Chemistry I: Neuroeffector Agents. 3 Hours.
A study, from the molecular viewpoint, of the organic substances used as medicinal agents, including consideration of their origins, chemical properties, structure-activity relationships, metabolism and mechanisms of action; this course emphasizes drugs affecting the central nervous system. Prerequisite: CHEM 626 and MDCM 601. LEC.

MDCM 626. Medicinal Chemistry II: Homeostatic Agents. 3 Hours.
A continuation of MDCM 625 with emphasis on autonomic and cardiovascular agents and peripherally-acting hormones. Prerequisite: MDCM 626. LEC.

MDCM 627. Medicinal Chemistry III: Chemotherapeutic Agents. 3 Hours.
A continuation of MDCM 625 and MDCM 626 with special emphasis on anticancer, antiviral, antibacterial, antifungal and non-steroidal anti-inflammatory drugs. Prerequisite: MDCM 625. LEC.

MDCM 690. Undergraduate Research. 1-5 Hours.
Research in medicinal chemistry. Students will be assigned to a laboratory research problem. Prerequisite: Consent of instructor. IND.

MDCM 692. Problems in Medicinal Chemistry. 1-5 Hours.
This course encompasses original work on a laboratory problem of limited scope, honors reading assignments from medicinal chemistry literature, or in-depth discussions of assigned topics. Prerequisite: Consent of instructor. IND.

MDCM 701. Biomedical Chemistry. 3 Hours.
A study of the principles of macromolecular structure and function, biosignaling, bioenergetics and metabolism, with an emphasis on the relationship between biochemistry and medicine. Prerequisite: Graduate standing or permission of instructor. LEC.

MDCM 703. Advanced Biomedical Chemistry. 3 Hours.
A study of the principles of basic enzymology, including chemical reactions, biosynthesis, and metabolism. In addition, the course will cover lipids, hormones, vitamins, and minerals. Prerequisite: Graduate standing or permission of instructor. LEC.

MDCM 710. Physiological Aspects of Medicinal Chemistry. 1 Hour.
The goal of this one-credit-hour course is to provide an overview of physiological mechanisms and disease processes as a background for intermediate level courses in medicinal chemistry, drug discovery and drug development. Prerequisite: One college-level course in biology. LEC.

MDCM 725. Medicinal Chemistry I. 2 Hours.
A study, from the molecular viewpoint, of the organic substances used as medicinal agents, including consideration of their origins, chemical properties, structure-activity relationships, metabolism and mechanisms of action; this course emphasizes drugs affecting the central nervous system. Prerequisite: CHEM 626 and MDCM 621. LEC.

MDCM 726. Medicinal Chemistry II. 2 Hours.
A continuation of MDCM 725 with emphasis on autonomic and cardiovascular agents and peripherally-acting hormones. Prerequisite: MDCM 725. LEC.

MDCM 727. Medicinal Chemistry III. 2 Hours.
A continuation of MDCM 725 and MDCM 726 with special emphasis on anticancer, antiviral, antibacterial, antifungal and non-steroidal anti-inflammatory drugs. Prerequisite: MDCM 725. LEC.

MDCM 766. Organic Chemistry of Biological Pathways. 2 Hours.
An introductory graduate level course in bioorganic and medicinal chemistry, in which the principles of organic reaction mechanisms in biological systems are discussed. This course discusses the organic chemistry of metabolic transformations of biomolecules and their associated cofactors, both organic coenzymes and metal ions. LEC.

MDCM 775. Chemistry of the Nervous System. 3 Hours.
A detailed study of the molecular aspects of nerve transmission will be covered with special emphasis on the uptake, storage, release, biosynthesis, and metabolism of specific neurotransmitters. Drugs affecting these processes and current research on receptor isolation and receptor mechanisms will be discussed from a chemical viewpoint. (Same as BIOL 775, CHEM 775, NURO 775, PTX 775, and PHCH 775.) Prerequisite: Consent of instructor. LEC.

MDCM 785. Natural Products of Medicinal Significance. 2 Hours.
A discussion of bioassay-directed screening, the isolation, structure determination, biosynthesis, partial synthesis and total chemical synthesis of organic natural products of medicinal significance. Examples of the classes of compounds to be considered include steroid hormones, cardiac glycosides, alkaloids, antibiotics, terpenes, and the like. Prerequisite: Graduate standing or consent of instructor. LEC.
MDCM 790. Principles of Drug Design. 3 Hours.
A discussion of the principles of contemporary drug design with specific examples chosen from the original literature. Prodrugs; bioisosteres; Kcat inhibitors; active site directed reversible and irreversible inhibitors; quantitative SAR; modulation of drug absorption, distribution, metabolism and excretion; molecular dissection; rigid analogs; pharmacophores; etc., will be treated. Prerequisite: Graduate standing or completion of MDCM 624 and MDCM 627. LEC.

MDCM 791. Principles of Drug Disposition. 1 Hour.
An introduction to the chemical and biochemical principles which govern the interaction of drugs and chemicals with cells and organisms. Topics include absorption, distribution, metabolism, and excretion; passive vs. active processes; pharmacokinetics; bioactivation vs. detoxication; and applications in drug design and improvement. Prerequisite: One year of organic chemistry and one course in biochemistry. LEC.

A discussion of the principles of contemporary drug design with specific examples chosen from the original literature. Drug-like properties; conformational constraint; structure-based drug design; library generation; HTS hit optimization, will be treated. LEC.

MDCM 799. Seminar in Medicinal Chemistry. 1 Hour.
Reports by research students and discussions of developments in the field not covered in formal courses. LEC.

MDCM 801. Issues in Scientific Integrity. 1 Hour.
Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis in the conduct of a scientific career, with emphasis on practical topics of special importance in molecular-level research in the chemical, biological, and pharmaceutical sciences. Topics will include the nature of ethics, the scientists in the laboratory, the scientist as author, grantee, reviewer, employer/employee, teacher, student, and citizen. Discussions will focus on case histories. Graded on a satisfactory/unsatisfactory basis. (Same as MDCM 801, NURO 801, PTX 801, PHCH 801 and PHCH 802.) LEC.

MDCM 816. Careers in Chemical Biology. 1 Hour.
Advanced course examining current research topics in chemical biology. An emphasis will be placed on career options open to PhD scientists in Chemical Biology, and preparation for the different career paths. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. This course will be graded satisfactory/unsatisfactory. (Same as BIOL 816, CHEM 816, and MDCM 816.) Prerequisite: Permission of instructor. SEM.

MDCM 860. Principles and Practice of Chemical Biology. 3 Hours.
A survey of topics investigated by chemical biology methods including: transcription and translation, cell signaling, genetic and genomics, biochemical pathways, macromolecular structure, and the biosynthesis of peptides, carbohydrates, natural products, and nucleic acids. Concepts of thermodynamics and kinetics, bioconjugations and bioorthogonal chemistry will also be presented. (Same as BIOL 860, CHEM 860 and PHCH 860.) Prerequisite: Permission of instructor. LEC.

MDCM 861. Drug Metabolism Laboratory. 1-3 Hours.
A laboratory course exemplifying various techniques used in studying the metabolism of foreign organic compounds in mammalian systems. In addition, enzymatic reactions in other plant and microbial systems are studied. Prerequisite: Consent of instructor. LAB.

MDCM 895. Research in Medicinal Chemistry. 1-12 Hours.
Hours and credit to be arranged. RSH.

MDCM 899. Master's Thesis. 1-12 Hours.
Hours and credit to be arranged. Independent investigation of a research problem of limited scope. Prerequisite: Consent of instructor. THE.

MDCM 950. Advanced Topics: ______. 1-3 Hours.
An in-depth discussion of topics of current interest to medicinal chemists. Prerequisite: Consent of instructor. LEC.

MDCM 952. Introduction to Molecular Modeling. 3 Hours.
Theory and practice of contemporary molecular modeling: real-time computer graphics, model-building routines, use of structural databases, molecular mechanics and molecular dynamics calculations. The laboratory section places emphasis on drug design; work on own problems is welcome. (Same as BIOL 952.) Prerequisite: Graduate standing or consent of instructor. LAB.

MDCM 980. Original Research Proposal. 2 Hours.
Preparation of an original research proposal concerning contemporary problems in medicinal chemistry. Prerequisite: Consent of instructor. LAB.

MDCM 990. Postdoctoral Research in Medicinal Chemistry. 1-12 Hours.
Advanced level research in collaboration with a faculty member, which may involve projects in one or more of the following areas: organic synthesis, isolation and structure elucidation, metabolism, biochemical mechanisms of drug action. Prerequisite: Doctoral degree or equivalent in an appropriate related area, and consent of instructor. RSH.

MDCM 999. Doctoral Dissertation. 1-12 Hours.
Hours and credit to be arranged. Original chemical research in the synthesis and development of medicinal agents, elucidation of the chemical mechanisms of drug action, drug metabolism, and drug toxicities. THE.

Neuroscience Courses

NURO 710. Advanced Neurobiology. 3 Hours.
The course will build an in depth knowledge about basic mechanisms of synaptic communication among nerve cells and their targets, and the structure and function of nervous systems. Topics will include nervous system development and synapse formation, structure and function of neurons, physiological and molecular basis of synaptic communication between neurons, mechanisms of synaptic plasticity involved in learning and memory, sensory systems (vision, audition, vestibular, motor reflexes and pain), processing of neural information at cellular and system levels, synapse regeneration and diseases of the nervous system. Prerequisite: BIOL 435 (Introduction to Neurobiology), or consent of instructor. LEC.

NURO 775. Chemistry of the Nervous System. 3 Hours.
A detailed study of the molecular aspects of nerve transmission will be covered with special emphasis on the uptake, storage, release, biosynthesis, and metabolism of specific neurotransmitters. Drugs affecting these processes and current research on receptor isolation and receptor mechanisms will be discussed from a chemical viewpoint. (Same as BIOL 775, CHEM 775, MDCM 775, PTX 775, and PHCH 775.) Prerequisite: BIOL 600 or equivalent. LEC.

NURO 799. Neuroscience Seminar Series. 2 Hours.
Presentations of research papers by faculty, post-doctoral research associates, and graduate students. All graduate students in the Neuroscience program participate in this seminar series throughout their period of training. Each student has to present a seminar once every semester. Presentations by students are evaluated by other graduate students and faculty at the end of each seminar. Prerequisite: Graduate standing in the Neuroscience program. LEC.
NURO 800. Neuroscience Teaching Principles. 2 Hours.
This course is to be used by graduate students fulfilling the teaching requirements for the Ph.D. in Neuroscience. The student will function as a discussion leader and lecturer in a limited number of class sessions. Each student will meet with faculty whom he or she is assisting in preparation of presentation materials and tests. Each student will be evaluated by the faculty mentor and by the students in the class taught. Prerequisite: Graduate standing in Neuroscience. LEC.

NURO 801. Issues in Scientific Integrity. 1 Hour.
Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis on practical topics of special importance in molecular-level research in the chemical, biological, and pharmaceutical sciences. Topics will include the nature of ethics, the scientist in the laboratory, the scientist as author, grantee, reviewer, employer/employee, teacher, student, and citizen. Discussions will focus on case histories. Graded on a satisfactory/unsatisfactory basis. (Same as MDCM 801, PTX 801, PHCH 801 and PHCH 802.) Prerequisite: Graduate standing in the Neuroscience program. LEC.

NURO 802. Research in Neuroscience. 1-10 Hours.
Original investigations at an advanced level in the areas of neuroscience. The research by each student will be performed in the laboratory of one of the faculty mentors of the graduate program in Neuroscience. Prerequisite: Graduate standing in the Neuroscience program. LEC.

NURO 844. Neurophysiology. 3 Hours.
Somatosensory, motor and cognitive function of the brain will be discussed using a combination of lecture and student presentation formats. Current issues and evidence underlying accepted concepts and mechanisms will be emphasized. (Same as PHSL 844.) Prerequisite: PHSL 846 or equivalent and consent of instructor. LEC.

NURO 846. Advanced Neuroscience. 5 Hours.
Team-taught, in-depth neuroscience course focusing on normal and diseased brain function at the molecular, cellular and systems levels. Lectures and discussions will emphasize current issues in neuroscience research. (Same as ANAT 846, PHCL 846, and PHSL 846.) Prerequisite: Permission of the course instructor. LEC.

NURO 847. Developmental Neurobiology. 2 Hours.
Development of the nervous system from early induction to the development of learning and memory. Topics include: Induction; Cellular Differentiation; Axon Growth and Guidance; Target Selection; Cell Survival and Growth; Synapse Formation; Synapse Elimination; and Development of Behavior. (Same as ANAT 847 and PHSL 847.) Prerequisite: Advanced Neuroscience (ANAT 846; NURO 846; PHSL 846) or consent of instructor. LEC.

NURO 848. Molecular Mechanisms of Neurological Disorders. 3 Hours.
An in-depth coverage of pathogenic mechanisms in neurological diseases; cellular and molecular responses to brain injury and disease, neuroinflammatory diseases (e.g., multiple sclerosis), neurodegenerative diseases (e.g., Alzheimer's, Parkinson's, Huntington's, amyotrophic lateral sclerosis, and prion diseases), neurogenetic diseases (e.g., lysosomal and peroxisomal disorders, Down's syndrome and fragile X), trauma, stroke, and viral diseases (e.g., HIV encephalitis). (Same as ANAT 848, PHCL 848, and PHSL 848.) Prerequisite: Advanced Neuroscience (ANAT 846, PHCL 846 or PHSL 846) or an equivalent course and consent of instructor. LEC.

Hours and credit for this course to be arranged with the mentor. Independent investigation of a research problem in neuroscience, but of limited scope. Prerequisite: Graduate standing in the Neuroscience program and consent of mentor/instructor. THE.

Hours and credit for this course to be arranged with the mentor. Conduct of original investigation in neurosciences. Prerequisite: Graduate standing in the Neuroscience program post-oral comprehensive examination and consent of mentor/instructor. THE.

Pharmacology and Toxicology Courses

P&TX 599. Clinical Application of Basic Science. 1 Hour.
This course is an inter-departmental, team-based, technology-centric elective course. Concomitantly, instructors from the basic and clinical science departments within the school of pharmacy will promote deeper student understanding of the path a drug takes from discovery, development and ultimately clinical use. Instructors will collaborate in course content development to integrate basic and clinical science concepts. The course will utilize a blended learning method, incorporating out of class podcasts, online group collaborative projects, and readiness quizzes and exams. (Same as MDCM 599 and PHCH 599.) Prerequisite: 4th or 5th professional year standing (4P/5P) in the school of pharmacy and concomitant enrollment in PHPR 599 is required. LEC.

P&TX 630. Pharmacology I. 4 Hours.
The pharmacology series covers the mechanisms by which drugs interact with living organisms. An integrative emphasis will be placed on understanding the molecular basis of drug action with respect to modifying the pathophysiology of specific disease states. Topics in PTX 630 include, general principles of cell biology, molecular biology, pharmacogenomics, immunology and principles of drug metabolism and disposition. Prerequisite: BIOL 646 or equivalent. LEC.

P&TX 631. Pharmacology II. 4 Hours.
The pharmacology series covers the mechanisms by which drugs interact with living organisms. An integrative emphasis will be placed on understanding the molecular basis of drug action with respect to modifying the pathophysiology of specific disease states. Topics in PTX 631 include, hematology, cancer biology and therapeutics, immunopharmacology, infectious diseases and respiratory disease. Prerequisite: PTX 630 and BIOL 400 or equivalent. LEC.

P&TX 632. Pharmacology III. 4 Hours.
The pharmacology series covers the mechanisms by which drugs interact with living organisms. An integrative emphasis will be placed on understanding the molecular basis of drug action with respect to modifying the pathophysiology of specific disease states. Topics in PTX 632 include, cardiovascular diseases, diuretics, autonomic pharmacology and drugs regulating central nervous system function. Prerequisite: PTX 630 and PTX 631. LEC.

P&TX 633. Pharmacology IV. 3 Hours.
The pharmacology series covers the mechanisms by which drugs interact with living organisms. An integrative emphasis will be placed on understanding the molecular basis of drug action with respect to modifying the pathophysiology of specific disease states. Topics in PTX 633 include endocrine disorders, diabetes and obesity, and gastrointestinal pharmacology. Prerequisite: PTX 630, PTX 631 and PTX 632. LEC.

P&TX 640. Toxicology. 2 Hours.
General principles of toxicology, treatment, and management of accidental poisoning, and current topics of interest. Prerequisite: PTX 630, PTX 631, and PTX 632. LEC.
P&TX 641. Antibiotics: Benefits and Risks. 1 Hour.
Students will read about and discuss the latest research on new antibiotic targets, therapeutic potential, disease prevention, and the emergence of antibiotic resistance. LEC.

P&TX 642. Obesity, Diabetes, and Metabolic Syndrome: Current Concepts. 1 Hour.
The objective of this course is to provide students with an opportunity to read, examine, and report on a broad array of topics relevant to diabetes and obesity. Students will be given broad latitude to propose topics of interest to them within the area of diabetes and obesity. The format of the course will be group presentations. Groups of 3 students will identify a topic of interest to them in the field of diabetes and obesity, prepare a 30 min presentation and deliver it to the class for discussion. Prerequisite: PTX 630. LEC.

P&TX 643. Current Concepts of Neurodegenerative Disease. 1 Hour.
Neurodegenerative diseases, such as Alzheimer's and Parkinson's diseases, are associated with older age and/or enhanced oxidative stress. The possible causes for the development and progression of these diseases with relation to current research in the field will be discussed. Additionally, a summary of available and suggested future treatments will be given. Prerequisite: PTX 630. LEC.

P&TX 644. Adverse Drug Events. 1 Hour.
The objective of this course is to alerts students to common and preventable adverse drug events. This course will provide students with an opportunity to read, examine, and report on a broad array of topics relevant to adverse drug events. Students will be given broad latitude to propose topics of interest to them within the area of adverse drug events. In addition students can report on common and preventable food-drug, herb-drug, and disease-drug interactions. The format of the course will be group presentations. Groups of 3 students will identify a topic of interest to them among a list of provided topics, prepare a 30 minute presentation and deliver it to the class for discussion. Prerequisite: PTX 630. LEC.

P&TX 645. Neurobiological Basis of Addiction: Physiological, Biochemical, Pharmacological & Treatment Concepts. 1 Hour.
Several addictions will be discussed including addictions to alcohol, cocaine, methamphetamine, gambling, and others as time permits. The physiology, biochemistry, pharmacology and available treatments for these addictions will be reviewed. The role of pharmacotherapies will be discussed, particularly as they relate to the molecular basis of addiction. Behavioral and psychological approaches also will be examined. Prerequisite: Completion of PTX 632 or special permission from faculty. LEC.

P&TX 646. Undergraduate Laboratory: Research in Pharmacology and Toxicology. 1-5 Hours.
Original research on a laboratory problem of limited scope. This course cannot count toward pharmacology and toxicology requirements in the School of Pharmacy. Prerequisite: Consent of instructor. IND.

P&TX 648. Library Problems in Pharmacology and Toxicology. 1-5 Hours.
Original library review of a limited special topic in pharmacology and toxicology. The student will write a review in his or her report. This course may count toward pharmacology and toxicology requirements in the School of Pharmacy. Prerequisite: PTX 635 and consent of instructor. IND.

P&TX 700. Professional Issues in the Biomedical Sciences. 2 Hours.
A course designed to assist doctoral students in the biomedical sciences in their professional development by providing presentations, discussions, and practical experiences related to career planning. Topics include diverse career opportunities and expectations of each, preparation of vitae/resumes and other elements of a successful job search, writing scientific papers and dealing with editors, developing programmatic research programs, balancing professional obligations, advancing through promotions, and related topics. Prerequisite: Graduate standing in pharmacology and toxicology. LEC.

P&TX 730. Advanced Pharmacology I - CNS and ANS. 2 Hours.
A detailed study of the fundamentals of autonomic nervous system, central nervous system, and their pharmacology. The student will attend PTX 632 lectures and meet separately with the faculty for additional discussions of advanced material on the topics. The students will be examined on the advanced material. Prerequisite: Graduate standing in Pharmacology and Toxicology Program. LEC.

P&TX 731. Advanced Pharmacology II - Cardiovascular and Renal System. 2 Hours.
A detailed study of the fundamentals of cardiovascular system, renal system and their pharmacology. The student will attend PTX 632 lectures and meet separately with the faculty for additional discussions of advanced material on the topics. The students will be examined on the advanced material. Prerequisite: Graduate standing in Pharmacology and Toxicology Program. LEC.

P&TX 732. Advanced Pharmacology III - Cancer Biology and Inflammatory Diseases. 2 Hours.
A detailed study of the fundamentals of inflammation, cancer biology and their pharmacology. The student will attend PTX 631 lectures and meet separately with the faculty for additional discussions of advanced material on the topics. The students will be examined on the advanced material. Prerequisite: Graduate standing in Pharmacology and Toxicology Program. LEC.

P&TX 733. Advanced Pharmacology IV - Endocrinology. 2 Hours.
A detailed study of the fundamentals of endocrinology and associated pharmacology. The student will attend PTX 633 lectures and meet separately with the faculty for additional discussions of advanced material on the topics. The students will be examined on the advanced material. Prerequisite: Graduate standing in Pharmacology and Toxicology Program. LEC.

P&TX 740. Advanced Biotechnology. 3 Hours.
An examination of basic principles of molecular biology, immunology, and protein chemistry as they apply to the identification, production, stability, delivery, and monitoring of new therapeutic agents provided by the expanding biotechnology industry. Students will attend lectures in PTX 633 and meet separately with faculty for additional discussions of more advanced material on these topics. The students will be examined on the advanced material. Prerequisite: Graduate standing in Pharmacology and Toxicology Program. LAB.

P&TX 741. Biomedical Statistics. 3 Hours.
This course is primarily intended for students concerned with the analysis of experimental and observational data, with an emphasis on biomedical and pharmaceutical applications. The topics covered by the course include the design of experimental studies, data collection, probability theory, descriptive statistics, probability distribution, hypothesis testing, T-test, analyses of variance for factorial designs, linear and multiple regression, analysis of covariance and non-parametric methods. Prerequisite: PTX graduate student status in good academic standing. LEC.

P&TX 742. Experimental Pharmacology. 4 Hours.
Experimental approaches to understanding mechanism of drug action. Use of drugs as tools to understand functioning of biological systems will also be stressed. Historically important experiments will
be discussed along with experiments which are currently used to define drug mechanisms. Topics will include: dose-response, drug receptors, drug metabolism, chemotherapy as well as autonomic CNS, cardiovascular and renal pharmacology. Prerequisite: Graduate standing in Pharmacology and Toxicology Program. LEC.

**P&TX 747. Molecular Toxicology. 4 Hours.**
A detailed study of the fundamentals of the experimental methods used in a modern toxicology laboratory. The student will attend PTX 640 lectures and meet separately with the faculty for additional discussions of advanced material on the topics. The students will be examined on the advanced material. Prerequisite: Graduate standing in Pharmacology and Toxicology Program. LEC.

**P&TX 755. Principles of Animal Experimentation. 2 Hours.**
An overview of animal care and use, this course is designed for graduate students currently engaged in animal based research or that anticipate work with live animals. Topics covered include regulatory framework for animal research; animal facility operations; biology, husbandry, and care of common laboratory animal species; and experimental manipulation of laboratory animals. Emphasis is placed on practical experience with live animals. LEC.

**P&TX 775. Chemistry of the Nervous System. 3 Hours.**
A detailed study of the molecular aspects of nerve transmission will be covered with special emphasis on the uptake, storage, release, biosynthesis, and metabolism of specific neurotransmitters. Drugs affecting these processes and current research on receptor isolation and receptor mechanisms will be discussed from a chemical viewpoint. (Same as BIOL 775, CHEM 775, MDCM 775, NURO 775, and PHCH 775.) Prerequisite: BIOL 600 or equivalent. LEC.

**P&TX 799. Pharmacology and Toxicology Seminar. 1-2 Hours.**
A review of current literature and research in pharmacology and toxicology. Required of all graduate students in the department every fall and spring semester. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Graduate standing in PTX. LEC.

**P&TX 800. Pharmacology and Toxicology Teaching Principles. 2 Hours.**
This course is to be used by graduate students fulfilling the teaching requirements for the Ph.D. in pharmacology and toxicology. The student will function as a discussion leader and lecturer in a limited number of class sessions. Each student will meet with the faculty whom he or she is assisting. Prerequisite: Graduate standing in pharmacology and toxicology program. RSH.

**P&TX 801. Issues in Scientific Integrity. 1-3 Hours.**
Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis on practical topics of special importance in molecular-level research in the chemical, biological, and pharmaceutical sciences. Topics will include the nature of ethics, the scientist in the laboratory, the scientist as author, grantee, reviewer, employer/employee, teacher, student, and citizen. Discussions will focus on case histories. Graded on a satisfactory/unsatisfactory basis. (Same as MDCM 801, NURO 801, PHCH 801 and PHCH 802.) LEC.

**P&TX 803. Pharmacology Literature Review I. 1 Hour.**
This course is designed for graduate students and will fulfill the first written exam requirement for the Ph.D. in pharmacology and Toxicology. The student will research and write a six page literature review by choosing a topic provided by the faculty. Prerequisite: Graduate standing in Pharmacology and Toxicology Program. LEC.

**P&TX 805. Pharmacology Literature Review II. 1 Hour.**
This course is designed for graduate students and will fulfill the second written exam requirement for the Ph.D. in pharmacology and Toxicology. The student will research and write a twelve page literature review by choosing a topic provided by the faculty. Prerequisite: Graduate standing in Pharmacology and Toxicology Program. LEC.

**P&TX 825. Research in Pharmacology and Toxicology. 1-10 Hours.**
Original investigations at an advanced level in the areas of pharmacology or toxicology or related fields. This research will be performed by graduate students in collaboration with a faculty member. Prerequisite: Graduate standing and consent of instructor. RSH.

**P&TX 899. Master's Thesis. 1-11 Hours.**
Hours and credit to be arranged. Independent investigation of a research problem of limited scope. Prerequisite: Graduate standing in PTX and consent of instructor. THE.

**P&TX 990. Postdoctoral Research. 1-11 Hours.**
Advanced level research in collaboration with a faculty member in the department. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Doctoral degree or equivalent in an appropriate related area, and consent of instructor. RSH.

**P&TX 999. Doctoral Dissertation. 1-11 Hours.**
Hours and credit to be arranged. Original investigation in pharmacology and toxicology. Prerequisite: Consent of instructor. THE.

### Pharmacy Courses

**PHAR 500. Introduction to Pharmacy. 1 Hour.**
This course is designed to introduce pharmacy students to the profession of pharmacy, potential career pathways, and available academic and post-doctoral educational opportunities. Additionally, topics such as professionalism, leadership, professional advocacy, empathy, cultural competency, self-directed learning, interprofessional education, and professional communication will be discussed. Students will receive instruction and fulfill the prerequisites for their Introductory Pharmacy Practice Experiences (IPPE) occurring in the summer semesters of the PharmD program. LEC.

**PHAR 503. Pharmacy Practice III Health-System Pharmacy Practice Fundamentals. 3 Hours.**
Introduction to the prescription dispensing process within health-system pharmacies (hospital, nursing home, home health, HMO) with an emphasis on distribution systems, parenteral, and sterile products. Incorporates lectures, case studies, pharmacy visits and laboratory experience. Prerequisite: PHPR 502. LEC.

**PHAR 505. Immunization Theory and Practice. 1 Hour.**
This course will provide students with the training and resources/materials necessary to: a) identify at-risk patient populations needing immunizations, b) work with other health-care professionals to establish and promote a successful pharmacy-based immunization service, c) act as either vaccine advocate or immunizer when appropriate, and d) promote public health by helping the patients they serve avoid vaccine-preventable communicable diseases. LEC.

**PHAR 509. History of Pharmacy Elective. 1 Hour.**
This course is comprised of a survey of historical highlights of the development of Pharmacy as a discipline. The course will cover early antecedents of pharmacy, development of the discipline in Europe and the United States, the development of professional organizations, standards, education, and literature, economic development, and the pharmacists' contributions to community service, science, and the industry. There will be a mix of some lectures, discussion, assigned readings, and short papers. Prerequisite: Must be accepted to the Pharmacy Program. LEC.
PHAR 510. Pharmacy Skills Laboratory I. 2 Hours.
Exercises that reinforce the concepts taught in pharmacy practice, pharmaceutical chemistry, medicinal chemistry, and pharmacology courses. Includes exercises in compounding, dispensing and patient counseling. LAB.

PHAR 515. Pharmacy Skills Laboratory II. 1 Hour.
Exercises that reinforce the concepts taught in pharmacy practice, pharmaceutical chemistry, medicinal chemistry, and pharmacology courses. Includes exercises in compounding, dispensing, and patient counseling. LAB.

PHAR 520. Pharmacy Skills Laboratory III. 1 Hour.
Exercises that reinforce the concepts taught in pharmacy practice, pharmaceutical chemistry, medicinal chemistry, and pharmacology courses. Includes exercises in compounding, dispensing, and patient counseling. LAB.

PHAR 525. Pharmacy Skills Laboratory IV. 1 Hour.
Exercises that reinforce the concepts taught in pharmacy practice, pharmaceutical chemistry, medicinal chemistry, and pharmacology courses. Includes exercises in compounding, dispensing, and patient counseling. LAB.

PHAR 530. Pharmacy Skills Laboratory V. 1 Hour.
Exercises that reinforce the concepts taught in pharmacy practice, pharmaceutical chemistry, medicinal chemistry, and pharmacology courses. Includes exercises in compounding, dispensing, and patient counseling. LAB.

PHAR 550. Introductory Pharmacy Practice Experience - Community. 4 Hours. AE52.
A required four credit hour experiential course involving 160 hours of on-site experiential education. The course is designed to provide the student pharmacist with exposure to the practice of pharmacy in either an independent community or chain pharmacy in either a rural or urban setting within the state of Kansas. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Completion of PHAR 500 or instructor consent. FLD.

PHAR 560. Introductory Pharmacy Practice Experience - Institutional. 4 Hours.
A required four credit hour experiential course years involving 160 hours of on-site experiential education. The course is designed to provide the student pharmacist with exposure to the practice of pharmacy in an institutional health-system (hospital) environment in either a rural or urban setting within the state of Kansas. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Completion of PHAR 502 or instructor consent. FLD.

PHAR 599. Clinical Applications of Basic Science. 2 Hours.
This course is an inter-departmental, team-based, technology-centric elective course. Concomitantly, instructors from the basic and clinical science departments within the school of pharmacy will promote deeper student understanding of the path a drug takes from discovery, development and ultimately clinical use. Instructors will collaborate in course content development to integrate basic and clinical science concepts. The course will utilize a blended learning method, incorporating out of class podcasts, online group collaborative projects, and readiness quizzes and exams. Prerequisite: 4th or 5th professional year standing (2nd year Professional and 3rd year Professional standing) in the school of pharmacy. LEC.

Pharmaceutical Chemistry Courses

This elective class will explore emerging areas of research currently impacting the pharmaceutical industry. Potential topics include: biologicals as therapeutics, drug targeting, prodrugs, nanotechnology, biological barriers, gene therapy, transporters, vaccines, intracellular drug trafficking, controlled release drug delivery, cancer therapy, analytical biotechnology and many others. The class will be team taught by PHCH faculty and guest speakers. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Must be accepted to the Pharmacy Program. LEC.

PHCH 512. Roadmap to Drug Development. 1 Hour.
This special topics course will cover key steps in developing and bringing a new drug through pharmaceutical development and regulatory approval and into commercial use. Development of both traditional small-molecule chemical drugs and biotechnology-based protein drugs will be discussed. Example topics include: (1) how does a drug candidate move from its discovery at the lab bench into clinical trials? (2) what are the key hurdles in developing a new medicine that can be produced at large-scale in a manufacturing facility? (3) why are patents and venture capital so important in drug development? Guest lecturers will provide real world perspectives including case studies. This is a two-hour class that meets 8 times during the semester. Prerequisite: 1st, 2nd or 3rd professional year standing in the School of Pharmacy. LEC.

PHCH 514. Scientific Writing for the Health Professional. 1 Hour.
Communicating research plans and experimental findings is a critical skill for health care professionals working in a research environment, and successful communication depends on clarity of thought and careful use of language. This course is intended for 5th professional (5P) year students who are seeking residency and will need to write research proposals and abstracts, as well as prepare effective posters and presentations. It is an intensive course with multiple writing assignments. Students are expected to participate fully, and individual feedback and guidance on writing will be provided by the instructor. Graded on a satisfactory/fail. Prerequisite: 5th professional (5P) year students who plan to complete post-doctoral residency training. LEC.

PHCH 517. Pharmacy Calculations. 2 Hours.
An introduction to the mathematics involved in filling prescriptions and in manufacturing pharmaceuticals. Includes an introduction to standard prescription notation and familiarization with pharmaceutical weights and measures. LEC.

PHCH 518. Physical-Chemical Principles of Solution Dosage Forms. 3 Hours.
Physical properties of pharmaceutical solutions and their physiological compatibility will be discussed (intermolecular interactions, energetics, colligative properties, isotonicity, pH buffers and drug solubility). Kinetics and mechanisms of drug degradation in solution will also be introduced. Prerequisite: PHCH 517. LEC.

PHCH 599. Clinical Application of Basic Science. 1 Hour.
This course is an inter-departmental, team-based, technology-centric elective course. Concomitantly, instructors from the basic and clinical science departments within the school of pharmacy will promote deeper student understanding of the path a drug takes from discovery, development and ultimately clinical use. Instructors will collaborate in course content development to integrate basic and clinical science concepts. The course will utilize a blended learning method, incorporating out of class podcasts, online group collaborative projects, and readiness quizzes and exams. (Same as MDCM 599 and PTX 599.) Prerequisite: 4th or 5th professional year standing (4P/5P) in the school of pharmacy and concomitant enrollment in PHPR 599 is required. LEC.

PHCH 605. Vaccines. 1 Hour.
Vaccines are currently the most powerful therapeutic approach available for infectious disease and promise to become of increasing importance for a wide variety of other pathologies including cancer. This course discusses the immunological basis of vaccinology, types of vaccines currently available and in development and the process by which vaccines
PHCH 625. Pharmacokinetics. 3 Hours.
A discussion of the basic concepts, and some clinical applications, of pharmacokinetics, clearance concepts, extravascular dosing, and the use of pharmacokinetics in dosage regimen design and adjustment. Prerequisite: PHCH 517 and PHCH 518. LEC.

PHCH 626. Biopharmaceutics and Drug Delivery. 3 Hours.
A study of biological barriers to drug delivery, conventional dosage forms, and new and future drug delivery strategies. Prerequisite: PHCH 517, PHCH 518, and PHCH 625. LEC.

PHCH 667. Introduction to Clinical Chemistry. 2 Hours.
A lecture-discussion course concerned with identification of the contents of physiological fluids, changes in physiological fluid content induced by disease and drugs, and therapeutic drug monitoring: case studies are presented. Prerequisite: Must be accepted to the Pharmacy Program. LEC.

PHCH 690. Undergraduate Research in Pharmaceutical Chemistry. 1-5 Hours.
Student will be assigned a suitable research project in the area of pharmaceutical analysis or pharmaceutics. Prerequisite: Consent of instructor. IND.

PHCH 693. Clinical Pharmacokinetics. 2 Hours.
This course presents discussions on physiological and disease state variables in pharmacokinetics for selected drugs and drug classes, and instructs students in the use of physiological and disease state pharmacokinetic information to develop individualized therapeutic regimens. Prerequisite: PHCH 625 and PHCH 626. LEC.

PHCH 694. Problems in Pharmaceutical Chemistry. 1-5 Hours.
A student will be assigned a suitable research project in an area of pharmaceutical analysis or pharmaceutics. This course is offered regularly by the Department of Pharmaceutical Chemistry to meet the special needs of selected students, usually for one of the following two situations: (1) This course may be taken when a student has a special interest in a problem or area of limited scope and desires to pursue that study in depth under supervision of a member of the faculty. (2) This course is sometimes used as a remedial class to provide a mechanism of intensive review and study in an area of weakness. Prerequisite: Consent of instructor. IND.

PHCH 700. Experimental Methods in Pharmaceutical Chemistry. 1-5 Hours.
Discussions, lectures, and laboratory work designed to acquaint and provide hands on experiences to advanced undergraduate and graduate students with experimental design, methods, and approaches relevant to modern research in pharmaceutical chemistry. Prerequisite: Consent of instructor. LEC.

PHCH 705. Writing and Communicating Science for Graduate Students. 3 Hours.
Communicating research proposals and experimental findings is a critical skill for scientists. Successful communication depends on clarity of thought and careful use of language. This course will use class discussions with examples and homework assignments to help prepare the graduate student to successfully communicate in both academia and industry settings. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Graduate standing in PHCH or consent of the instructor. LEC.

PHCH 712. Roadmap to the Development. 1 Hour.
This special topics course will cover key steps in developing and bringing a new drug through pharmaceutical development and regulatory approval and into commercial use. Development of both traditional small-molecule chemical drugs and biotechnology-based protein drugs will be discussed. Example topics include: (1) how does a drug candidate move from its discovery at the lab bench into clinical trials? (2) what are the key hurdles in developing a new medicine that can be produced at large-scale in a manufacturing facility? (3) why are patents and venture capital so important in drug development? Guest lecturers will provide real world perspectives including case studies. This is two-hour class that meets 8 times during the semester. Prerequisite: Graduate standing in Pharmaceutical Chemistry or a trainee of the NIH Biotech Training Grant. LEC.

PHCH 715. Drug Delivery. 3 Hours.
The course will survey the latest technology for delivering pharmaceuticals and biologicals to reduce side effects and enhance drug efficacy. The course will survey the latest research in this area and examine more classical delivery methods. A qualitative and quantitative understanding of drug delivery practice and theory is the goal. Prerequisite: Master's or PhD candidate in Engineering, Chemistry, Medicinal Chemistry, or Pharmaceutical Chemistry (by appointment for seniors or graduate students in departments not listed). LEC.

PHCH 716. Drug Delivery. 3 Hours.
The course will survey the latest technology for delivering pharmaceuticals and biologicals to reduce side effects and enhance drug efficacy. The course will survey the latest research in this area and examine more classical delivery methods. A qualitative and quantitative understanding of drug delivery practice and theory is the goal. Prerequisite: This course is only open to distance education students. LEC.

PHCH 718. Physical-Chemical Principles of Solution Dosage Forms. 3 Hours.
Physical properties of pharmaceutical solutions and their physiological compatibility will be discussed (intermolecular interactions, energetics, colligative properties, isotonicity, pH, buffers and drug solubility). Kinetics and mechanisms of drug degradation in solution will also be introduced. Prerequisite: Graduate standing. LEC.

PHCH 719. Physical-Chemical Principles of Solution Dosage Forms. 3 Hours.
Physical properties of pharmaceutical solutions and their physiological compatibility will be discussed (intermolecular interactions, energetics, colligative properties, isotonicity, pH, buffers and drug solubility). Kinetics and mechanisms of drug degradation in solution will also be introduced. This course is only open to distance education students. Prerequisite: Graduate standing. LEC.

PHCH 725. Molecular Cell Biology. 3 Hours.
Fundamental and advanced concepts in cell biology and the molecular interactions responsible for cell function, homeostasis and disease will be presented. Current analytical methods for examining cells and their molecular components will be discussed. Emphasis will be placed on the chemical and physical properties of individual proteins, nucleic acids and lipids and their assembly into cellular and subcellular structures. (Same as CPE 725) LEC.

PHCH 730. Biopharmaceutics&Pharmacokinetics. 3 Hours.
A quantitative treatment of the processes involved with drug absorption, distribution, metabolism, and excretion in living systems. This course open only to distance education students. LEC.
PHCH 731. Biopharmaceutics and Pharmacokinetics. 3 Hours.
A quantitative treatment of the processes involved with drug absorption, distribution, metabolism, and excretion in living systems. This course open only to on-campus students. LEC.

PHCH 744. Organic Chemistry for Pharmaceutical Scientists. 3 Hours.
A consideration of the structural features and driving forces that control the course of chemical reactions. Topics will include functional group chemistry: electronic structure, acid/base properties: molecular structure and properties (dipole, strain, and steric effects, inductive and resonance effects); dynamics of reactions (the major organic reaction mechanism, kinetics, energy profiles, isotope effects, linear free energy relationships), solvency effects, stereochemistry and conformation, an introduction to orbital symmetry control; basic thermodynamic and kinetic concepts; and an overview of important classes of mechanisms. This course is only open to distance education students. Prerequisite: CHEM 624 and CHEM 626. LEC.

PHCH 775. Chemistry of the Nervous System. 3 Hours.
A detailed study of the molecular aspects of nerve transmission will be covered with special emphasis on the uptake, storage, release, biosynthesis, and metabolism of specific neurotransmitters. Drugs affecting these processes and current research on receptor isolation and receptor mechanisms will be discussed from a chemical viewpoint. (Same as PTX 775, BIOL 775, MDCM 775 and NURO 775.) Prerequisite: BIOL 600 or equivalent. LEC.

PHCH 801. Issues in Scientific Integrity. 1 Hour.
Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis on practical topics of special importance in molecular-level research in the chemical, biological, and pharmaceutical sciences. Topics will include the nature of ethics, the scientists in the laboratory, the scientist as author, grantee, reviewer, employer/employee, teacher/student, and citizen. Discussions will focus on case histories. Graded on a satisfactory/unsatisfactory basis. (Same as MDCM 801, NURO 801, PTX 801 and PHCH 802.) LEC.

PHCH 802. Issues of Scientific Integrity. 1 Hour.
Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis on practical topics of special importance in molecular-level research in the chemical, biological, and pharmaceutical sciences. Topics will include the nature of ethics, the scientist in the laboratory, as author, grantee, reviewer, employer/employee, teacher/student, and citizen. Discussions will focus on case histories. Graded on a satisfactory/unsatisfactory basis. This course is open only to distance education students. (Same as PHCH 801, MDCM 801, NURO 801, and PTX 801.) LEC.

PHCH 816. Careers in Chemical Biology. 1 Hour.
Advanced course examining current research topics in chemical biology. An emphasis will be placed on career options open to PhD scientists in Chemical Biology, and preparation for the different career paths. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. This course will be graded satisfactory/unsatisfactory. (Same as BIOL 816, CHEM 816 and MDCM 816.) Prerequisite: Permission of instructor. SEM.

PHCH 826. Molecular Cell Biology. 3 Hours.
Fundamental and advanced concepts in cell biology and the molecular interactions responsible for cell function, homeostasis and disease will be presented. Current analytical methods for examining cells and their molecular components will be discussed. Emphasis will be placed on the chemical and physical properties of individual proteins, nucleic acids and lipids and their assembly into cellular and subcellular structures. This course is only open to distance education students. LEC.

PHCH 850. Solid State Stability and Formulation. 3 Hours.
This course is designed to provide an understanding of the formulation and stability of small and large drug candidates in the solid state. The first two-thirds of the course will focus on small molecules, with the last third being devoted to proteins. Prerequisite: Graduate standing in PHCH or consent of the instructor. LEC.

PHCH 851. Solid State Stability and Formulation. 3 Hours.
This course is designed to provide an understanding of the formulation and stability of small and large drug candidates in the solid state. The first two-thirds of the course will focus on small molecules, with the last third being devoted to proteins. This course is open only to distance education students. Prerequisite: Graduate standing in Pharmaceutical Chemistry or consent of the instructor. LEC.

PHCH 860. Principles and Practices of Chemical Biology. 3 Hours.
A survey of topics investigated by chemical biology methods including: transcription and translation, cell signaling, genetic and genomics, biochemical pathways, macromolecular structure, and the biosynthesis of peptides, carbohydrates, natural products, and nucleic acids. Concepts of thermodynamics and kinetics, bioconjugations and bioorthogonal chemistry will also be presented. (Same as BIOL 860, CHEM 860 and MDCM 860.) Prerequisite: Permission of instructor. LEC.

PHCH 862. Pharmaceutical Equilibrium. 3 Hours.
A course on equilibria in aqueous and non-aqueous systems with emphasis on solutions of interest to pharmaceutical technology. Included are association-dissociation equilibria, complexation, protein binding calculation of species concentrations, estimation of solubility and ionization constants. Methods for the determination of chemical potential in solution are presented. LEC.

PHCH 863. Pharmaceutical Equilibria. 3 Hours.
A course on equilibria in aqueous and non-aqueous systems with emphasis on solutions of interest to pharmaceutical technology. Included are association-dissociation equilibria, complexation, protein binding calculation of species concentrations, estimation of solubility and ionization constants. Methods for the determination of chemical potential in solution are presented. This course is open only to distance education students. LEC.

PHCH 864. Pharmaceutical Analysis. 4 Hours.
This course is intended to be a comprehensive treatment of contemporary techniques used to validate analytical methods for the determination of drugs in the bulk form, pharmaceutical formulations, biological samples and other relevant media. The emphasis will be on chromatographic techniques reflecting the preeminent position that those techniques occupy in the field of pharmaceutical and biomedical analysis. Prerequisite: Previous or concurrent enrollment in PHCH 684. LEC.

PHCH 865. Pharmaceutical Analysis. 4 Hours.
Advanced course on pharmaceutical analysis. This course is only open to distance education students. LEC.

PHCH 870. Advanced Pharmaceutical Biotechnology. 4 Hours.
A course designed to emphasize the important facets of recombinant proteins and vaccines as pharmaceutical agents. Basics of protein structure and analysis will be introduced, and methods for production, isolation, and purification of recombinant proteins will be described. Potential chemical and physical degradation processes and strategies for circumventing these difficulties will be discussed. An overview of the development and formulation of vaccines and their immunological basis will be presented. Prerequisite: BIOL 600 or consent of instructor. LEC.
PHCH 871. Advanced Pharmaceutical Biotechnology. 4 Hours.
A course designed to emphasize the important facets of recombinant proteins and vaccines as pharmaceutical agents. Basics of protein structure and analysis will be introduced, and methods for production, isolation, and purification of recombinant proteins will be described. Potential chemical and physical degradation processes and strategies for circumventing these difficulties will be discussed. This course is only open to distance education students. An overview of the development and formulation of vaccines and their immunological basis will be presented. Prerequisite: BIOL 600 or consent of instructor. LEC.

PHCH 895. Research in Pharmaceutical Chemistry. 1-11 Hours.
Advanced level research in collaboration with a faculty member in pharmaceutical chemistry or related areas. This course is limited to students who are doing research, but not necessarily working toward either a master's or a doctoral degree. RSH.

PHCH 898. Master's Thesis. 1-10 Hours.
Master's Thesis. This course is open only to distance education students. THE.

PHCH 899. Master's Thesis. 1-11 Hours.
Graded on a Satisfactory/Fail basis. THE.

PHCH 920. Chemical Kinetics. 2 Hours.
This course provides the principles of kinetic data analysis as applied to problems in pharmaceutical chemistry. Topics include the setup and solution of rate equations related to chemical reactions; simplifications and approximations in complex equation systems; isotope, solvent and salt rate effects; and diffusion and activation controlled reactions. LEC.

PHCH 921. Chemical Kinetics. 2 Hours.
This course provides the principles of kinetic data analysis as applied to problems in pharmaceutical chemistry. Topics include the setup and solution of rate equations related to chemical reactions; simplifications and approximations in complex equation systems; isotope, solvent and salt rate effects; and diffusion and activation controlled reactions. This course is only open to distance education students. LEC.

PHCH 972. Mechanisms of Drug Deterioration and Stabilization. 3 Hours.
A course dealing with mechanisms and chemical kinetics of drug deterioration and stabilization. LEC.

PHCH 973. Mechanisms of Drug Deterioration and Stabilization. 3 Hours.
A course dealing with mechanisms and chemical kinetics of drug deterioration and stabilization. This course is only open to distance education students. LEC.

PHCH 974. Advanced Special Topics in Pharmaceutical Chemistry. 1-3 Hours.
Various topics pertinent to the area of pharmaceutical chemistry will be explored. Graded on a satisfactory/unsatisfactory basis. LEC.

PHCH 978. Pharmaceutical Chemistry Seminar. 1 Hour.
A seminar on the chemistry of pharmaceutical systems. LEC.

This course is open only to distance education students. THE.

THE.

Pharmacy Practice Courses

PHPR 502. Pharmacy Practice II Pharmaceutical Care Fundamentals. 4 Hours.
Drug interactions will be presented with an emphasis on evaluating the risk of the interaction in a particular patient. Patient counseling and communication techniques will be covered. Approximately half the class time will be spent covering non-prescription drugs and herbs. Prerequisite: PHAR 500. LEC.

PHPR 508. Oncology Elective. 1 Hour.
This course is designed to extend the students’ understanding of Oncology diseases and treatments beyond what is covered in the Pharmacotherapy series in the School of Pharmacy. Prerequisite: PHPR 646. LEC.

PHPR 509. Medicare Part D. 1 Hour.
This elective course will focus on the understanding and active enrollment of patients into Medicare prescription drug benefit (Part D). Students will mainly focus on the understanding of Medicare eligibility, benefits, formulary requirements, and the administration of benefits. Students will also participate in community outreach which may focus on underserved patients. Prerequisite: 2nd or 3rd professional year standing in the School of Pharmacy. LEC.

PHPR 510. Medical Terminology Elective. 1 Hour.
This course provides the fundamentals for developing a medical vocabulary. The student will develop the ability to understand, define and utilize medical terminology and abbreviations used in patient care. LEC.

PHPR 511. Service-Learning Elective. 1 Hour.
Students will work at a health-related community center and participate in structured learning exercises. The objectives are to: 1) enable students to learn appropriate strategies to communicate and provide services to people with varying languages, cultures, social, and economic backgrounds, disabilities, illnesses, or impairments, 2) increase social interaction and citizenship, 3) heighten social awareness and understanding of ethical issues, and 4) acknowledge social responsibility and realize personal values. FLD.

PHPR 512. Nuclear Pharmacy. 1 Hour.
This course is designed for students interested in learning about nuclear pharmacy practice as a specialty practice in pharmacy. Students will learn about the application of radiopharmaceuticals used in the diagnosis of various diseases or identifying patient therapeutic issues. The course will cover principles of radiation, radiation safety, preparation of and handling of radiopharmaceuticals, their appropriate use, and the training requirements for a nuclear pharmacist. At the conclusion of the course the student will have an insight into this specialty practice in nuclear pharmacy as a potential career. Prerequisite: Students must be admitted to the School of Pharmacy. LEC.

PHPR 513. Chemical Dependency Elective. 1 Hour.
This elective course will enhance the pharmacy student's knowledge and understanding of the current theories behind the addiction process, frequently abused drugs and/or chemicals and the treatment and recovery process. Prerequisite: Must be accepted to the Pharmacy Program. LEC.

PHPR 514. Communication and Counseling. 1 Hour.
An elective course designed to help students improve professional communication skills. Prerequisite: PHAR 500. LEC.

PHPR 515. The Aging Patient. 1 Hour.
This elective course is designed for the learner to explore many of the clinical considerations employed when caring for the aging patient within our health care system. The course will be devoted to exploring generational perceptions, learning how the aging process can impact...
patient care, and identifying the role of the pharmacist in enhancing this care. Prerequisite: Open to four-year Pharmacy and fifth-year Pharmacy students only. LEC.

PHPR 516. Pharmacy in Public Health. 1 Hour.
Public health is more than providing treatment for an illness; it is a concern for the health of an entire population. The ideal is to ensure the health of all. This course will focus on providing students with a solid foundational understanding of what public health is and how pharmacists play a role as a public health provider. The course will cover the concepts and tools used in public health including issues such as: determining health, cultural competence, health promotion, disease prevention, epidemiology and disease, describing populations and community health. Lastly, the course will provide students with specific pharmacist models of public health. Successful models include tobacco cessation programs, community vaccination programs, obesity prevention, tuberculosis monitoring, emergency preparedness and domestic violence. Prerequisite: Must be accepted to the Pharmacy Program. LEC.

PHPR 517. Medication Safety and Error Prevention. 1 Hour.
This course introduces the student to medication safety and the technology as well as the tools used in error prevention. The student will also learn about adverse drug events including both medication errors and adverse drug reactions in hospital and retail pharmacy settings. Prerequisite: 4th or 5th professional year standing in the School of Pharmacy. LEC.

PHPR 518. Cultural Competency in Pharmacy Practice. 1 Hour.
The United States becomes more culturally diverse every year. This course is designed to help student pharmacists excel in today’s multicultural environment by improving their cultural competency skills. Students will explore their own culture and those belonging to other diverse cultures. Students are expected to learn of the beliefs, needs and tendencies of those with cultures much different than themselves. Prerequisite: Must be admitted to the School of Pharmacy. LEC.

PHPR 519. Business Planning for Pharmacy. 1 Hour.
This course is designed for students interested in developing a business plan. Most pharmacists will have an opportunity to develop a new service, product line or even start a new business venture in their careers. Students need to know how to create a formal business plan and how to present the plan to decision makers. The course will cover the basic components and rationale of creating a formal business plan. When finished students will be expected to have created a written business plan and will present their creation to the class. In this manner, students will gain experience in developing an idea into a plan. Prerequisite: Students must be admitted to the school of Pharmacy. LEC.

PHPR 599. Clinical Application of Basic Science. 1 Hour.
This course is an inter-departmental, team-based, technology-centric elective course. Concomitantly, instructors from the basic and clinical science departments within the school of pharmacy will promote deeper student understanding of the path a drug takes from discovery, development and ultimately clinical use. Instructors will collaborate in course content development to integrate basic and clinical science competencies. The course will utilize a blended learning method, incorporating out of class podcasts, online group collaborative projects, and readiness quizzes and exams. Prerequisite: 4th or 5th professional year standing (4P/5P) in the school of pharmacy and concomitant enrollment in either PTX 599, MDCM 599, or PHCH 599 is required. LEC.

PHPR 601. Advanced Pharmacy Practice Experience 1. 4 Hours.
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. FLD.

PHPR 602. Advanced Pharmacy Practice Experience 2. 4 Hours.
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. FLD.

PHPR 603. Advanced Pharmacy Practice Experience 3. 4 Hours.
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. FLD.

PHPR 604. Advanced Pharmacy Practice Experience 4. 4 Hours.
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. FLD.

PHPR 605. Advanced Pharmacy Practice Experience 5. 4 Hours.
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model
is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. FLD.

PHPR 606. Advanced Pharmacy Practice Experience 6. 4 Hours.
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. FLD.

PHPR 607. Advanced Pharmacy Practice Experience 7. 4 Hours.
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. FLD.

PHPR 608. Advanced Pharmacy Practice Experience 8. 4 Hours.
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. FLD.

PHPR 609. Advanced Pharmacy Practice Experience 9. 4 Hours.
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. FLD.

PHPR 610. Advanced Pharmacy Practice Experience 10. 4 Hours.
The final year of the Doctor of Pharmacy program is spent participating in nine pharmacy practice experience rotations (PHPR 601-609). PHPR 610 is reserved for students requiring a remedial experiential rotation. FLD.

PHPR 613. Pharmacoeconomics and Health Outcomes. 2 Hours.
A course to foster an understanding of economic, financial and outcome principles that drive the demand and supply of medical care in the US. Economic logic behind decisions made by patients, physicians, hospitals, managed care organizations, and governments will be covered. Students completing this course should be able to identify the drivers of the health economy, identify different types of pharmacoeconomic evaluations, critically analyze pharmacoeconomic and outcome literature, and apply economic principles to pharmaceutical care. Prerequisite: Students must be admitted to the school of Pharmacy to enroll in this class. LEC.

PHPR 614. Pharmacy Management. 3 Hours.
A course designed to provide knowledge and skills to effect efficient and effective pharmacy management. This will include foundations in financial management, inventory control, purchasing, cost-effective drug utilization, quality management, pharmacoeconomics, and human resource management. LEC.

PHPR 615. Nuclear Pharmacy Practice. 2 Hours.
This introductory course in nuclear pharmacy practice provides a basic understanding of radiation, radiation dosimetry, radiopharmaceuticals, and clinical application of radiopharmaceuticals in diagnosis and treatment. The course includes both didactic material as well as laboratory experience. LEC.

PHPR 619. Health Care Systems. 3 Hours.
This course is an introduction to the organization, financing, and delivery of health care services with a focus on the U.S. health care system. Course content addresses the following questions: how do we evaluate the health care sector, where is health care provided, how is health care financed, what are the characteristics of health care providers (individuals and institutions), what influences the performance of the health care sector, and what lies in the future for health care delivery. The purpose of the course is to prepare pharmacy students for non-clinical aspects of their practice sites. Enrollment limited to pharmacy majors. LEC.

PHPR 620. Ethical, Legal, and Cultural Issues in Patient Care. 2 Hours.
This course provides an introduction to the fundamentals of law and ethics as they apply to the practice of pharmacy. Course sessions will focus on ethical expectations of the profession, principles and issues in medical and pharmacy ethics, and laws that govern medication dispensing. LEC.

PHPR 621. Pharmacy Law. 2 Hours.
A course developed to increase students' knowledge and understanding of laws that regulate the pharmacy profession. Prerequisite: Fifth year standing. LEC.

PHPR 630. Drug Information/Biostatistics and Med Lit Evaluation. 3 Hours.
An introduction to the principles of drug information analysis, storage, and retrieval as well as biostatistics as applied to understanding and interpreting biomedical literature. Advantages and disadvantages of several commercial and manual drug information systems will be considered. The course includes practical experiences in drug information services. The biostatistical emphasis of the course will be on the application of statistical tests commonly used and the interpretation of their results. Prerequisite: Fifth year standing. LEC.
PHPR 635. Problems in Pharmacy Practice. 1-5 Hours.
A course designed for the study of special topics in pharmacy practice. A research paper will be required. Prerequisite: Consent of instructor. IND.

PHPR 646. Pharmacotherapy I. 4 Hours.
A course dealing with the clinical applications of drug knowledge to patient care. Disease and drug knowledge will be applied to the design and monitoring of therapeutic treatment plans for patients. Incorporates three credit hours of lecture and one credit hour of case studies and off-campus professional experience. Prerequisite: Successful completion of Pharmacy Practice II (PHAR 502). LEC.

PHPR 647. Pharmacotherapy II. 4 Hours.
A course dealing with the clinical applications of drug knowledge to patient care. Disease and drug knowledge will be applied to the design and monitoring of therapeutic treatment plans for patients. Incorporates three credit hours of lecture and one credit hour of case studies and off-campus professional experience. This course is graded A,B,C,F. Prerequisite: Fifth year standing and successful completion of Pharmacotherapy I, PHPR 646. LEC.

PHPR 648. Pharmacotherapy III. 4 Hours.
A course dealing with the clinical applications of drug knowledge to patient care. Disease and drug knowledge will be applied to the design and monitoring of therapeutic treatment plans for patients. Incorporates three credit hours of lecture and one credit hour of case studies and off-campus professional experience. This course is graded A,B,C,F. Prerequisite: Fifth year standing and successful completion of Pharmacotherapy II, PHPR 647 with a C or above. LEC.

PHPR 670. Clinical Assessment. 2 Hours.
This laboratory course will allow students to develop clinical assessment skills necessary in the provision of pharmaceutical care to patients with a variety of disease states. Students will combine physical assessment skills, patient counseling skills, and pharmacotherapy knowledge and apply this information to patient care related activities in various clinical settings. Students will apply their skills using various practice models that include medication therapy management, collaborative drug therapy management, and interprofessional healthcare teams. The lab component will require students to meet for one hour between 1:00 to 5:00 PM on either Monday, Tuesday, or Wednesdays. Perquisite: Students must be admitted to the School of Pharmacy to enroll in this class. A detailed schedule of lab meeting dates and times will be provided in the syllabus. LAB.

PHPR 845. Professional Communications. 2 Hours.
A course designed to give the graduate student a practical experience in areas of professional communications such as administrative proposals, grants, letters, memos, poster presentations, and written papers. The course focuses on the different kinds of communications required to relate to other health care professionals. Prerequisite: Consent of instructor. LEC.

PHPR 850. Introduction to Pharmacoepidemiology. 3 Hours.
Pharmacoepidemiology is the application of the principles of epidemiology to the study of medications and their effects on health. Evaluating a drug’s effects commences when a chemical entity becomes a drug candidate, intensifies through clinical trials, and continues after products reach the market. These studies are critical for supporting the proper use of medications in terms of efficacy, effectiveness, and cost-effectiveness. This course provides a broad introduction to the principles of pharmacoepidemiology with a focus on applications in the medical literature. LEC.

PHPR 855. Economic Evaluation of Health Care Programs and Services. 3 Hours.
The course will provide students with an overview and appraisal of the “state-of-the-art” in the evaluation of health care programs and services (with a special emphasis on pharmaceutical programs, services, and products). The purpose of the course is to provide the student with the tools to conduct economic rather than general evaluation of health care programs and services. There will be some discussion of theoretical concepts, but the major emphasis will be on practical methodological issues in economic evaluation of pharmaceutical programs. The course integrates the perspectives of pharmaceutical and health care technology assessment, managed care, outcomes research, and public health. The main topics covered in the course include: cost, cost-minimization, cost-effectiveness, cost-utility, and cost-benefit analyses. LEC.

PHPR 860. Seminar in Pharmacy Practice. 1 Hour.
Research reports, reviews, and/or presentations on the current status of various aspects of pharmacy practice. Prerequisite: Consent of instructor. LEC.

PHPR 865. Advanced Institutional Pharmacy Services. 3 Hours.
A course dealing with the planning, justification, implementation, management, and coordination of a progressive, comprehensive institutional pharmacy service. Seminar presentations and case studies are used to analyze recent advances and to apply data from the research literature. Prerequisite: Consent of instructor. LEC.

PHPR 875. Health Care Delivery Systems. 3 Hours.
A continuation of PHPR 865 dealing with the current status of health care delivery systems and the impact of changes in this area on pharmacy practice. Prerequisite: PHPR 865 and consent of instructor. LEC.

PHPR 885. Human Resource Management in Institutional Pharmacy Practice. 3 Hours.
A course dealing with recruitment, training, motivation, monitoring of performance, and disciplining of personnel. Seminars, case studies, and role playing are used to apply the information to specific human resource management situations in institutional pharmacy practice. Prerequisite: PHPR 865 and consent of instructor. LEC.

PHPR 899. Research in Pharmacy Practice. 1-6 Hours.
Original investigation in the area of pharmacy practice. Prerequisite: Consent of instructor. RSH.

Doctor of Pharmacy

The School of Pharmacy

Since its founding in 1885, the University of Kansas School of Pharmacy (http://pharmacy.ku.edu) has been a leader in pharmacy education. Since 1996, the school has offered only the Doctor of Pharmacy degree as the entry-level practice degree. The curriculum gives the student the knowledge, skills, and ability required of the pharmacy practitioner; it is comprehensive and produces a highly competent general practitioner.

About 60 full-time faculty members teach in the undergraduate professional Doctor of Pharmacy program and in the graduate programs. 3 departments (Pharmacology and Toxicology, Medicinal Chemistry, and Pharmaceutical Chemistry) offer Master of Science and Doctor of Philosophy degrees. Pharmacy Practice offers the master’s degree.

Both the undergraduate and graduate divisions have outstanding national and international reputations based on the excellence and productivity of the faculty. KU is consistently ranked in the top 5 among colleges/schools of pharmacy that receive National Institutes of Health research funding.
The University of Kansas

KU’s School of Pharmacy was awarded more than $22 million in research grants and contracts from the NIH in fiscal year 2011.

The School of Pharmacy is fully accredited by the Accreditation Council for Pharmacy Education (https://www.acpe-accredit.org), 135 S. LaSalle St, Suite 4100, Chicago, IL 60603-4810, (312) 664-3575, info@acpe-accredit.org, the official accrediting body for American schools of pharmacy.

Undergraduate Advising

On admission to the school, undergraduates are assigned faculty members as their advisors. The advisor serves continuously during the student’s tenure in the school. Students are expected to meet with their advisors at least once each semester and are encouraged to meet more often to discuss academic issues and career and professional development.

Undergraduate Admission to KU

To qualify for undergraduate admission to KU, Kansas resident first-year applicants must meet 1 of the following requirements:

• Complete the Kansas Board of Regents’ Qualified Admission curriculum (http://admissions.ku.edu/regents-curriculum) with at least a 2.0 grade-point average on a 4.0 scale or
• Achieve an ACT score of 21 or above or an SAT score of 980 or above or
• Rank in the top 1/3 of your high school graduating class.

To qualify for admission to KU, out-of-state first-year applicants must meet 1 of the following requirements:

• Complete the Kansas Board of Regents’ Qualified Admission curriculum (http://admissions.ku.edu/regents-curriculum) with at least a 2.5 grade-point average on a 4.0 scale or
• Achieve an ACT score of 24 or above or an SAT score of 1090 or above with a cumulative 2.0 or higher grade-point average on a 4.0 scale or
• Rank in the top 1/3 of your high school graduating class.

Prospective students should request applications from the University of Kansas Office of Admissions (http://admissions.ku.edu), KU Visitor Center, 1502 Iowa St., Lawrence, KS 66044-7576, 785-864-3911, adm@ku.edu. Return completed applications to that office with necessary transcripts and records. Prospective pharmacy students should declare prepharmacy as the major field of study. Visit the Office of Admissions (http://admissions.ku.edu) for further information. Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu) for information about international admissions.

Pre-pharmacy students are advised by faculty members from the College of Liberal Arts and Sciences while they complete their pre-pharmacy course work. All pre-pharmacy students are strongly encouraged to make appointments in the office of the dean of the School of Pharmacy, 2010 Becker Drive, Room 2050, for co-advising services and when they have questions concerning specific course requirements or appropriate electives or any other concerns about their preparation for pharmacy admission. Pre-pharmacy students are also encouraged to participate in the pre-pharmacy club. Email pharmacy@ku.edu to request to be added to the club’s e-mail distribution list.

Undergraduate Admission to the School of Pharmacy

Students should apply to the School of Pharmacy during the application period (October 1 through February 1) for admission the following fall semester. When they apply, they should have completed, or be about to complete, the 68 credit hours of required pre-pharmacy courses. The required pre-pharmacy curriculum may be completed at accredited schools other than KU. KU students should submit a change of school form. Students transferring from other schools should submit an application for transfer student undergraduate admission.

Requirements

Applying students should meet the following requirements:

• Complete the required pre-pharmacy courses and provide the required transcripts as documentation of the course work. One official copy of your transcript should be sent to the Office of Admissions.
• Take the Pharmacy College Admissions Test (http://www.pearsonassessments.com/haiweb/Cultures/en-US/site/Community/PostSecondary/Products/pcat/pcathome.htm), preferably in October. January test results also are accepted and considered. Have the results of the PCAT sent to KU.
• Complete and return the Applicant Profile Form (http://pharmacy.ku.edu/supplemental-application-forms) to the School of Pharmacy with a $75 nonrefundable application fee.
• Maintain a grade-point average of 2.5 or higher overall and in the sciences. This is the minimum grade-point average acceptable for admission; the average is generally much higher.
• Arrange for 3 letters of recommendation, including the school’s standard reference forms, to be sent to the School of Pharmacy by the persons serving as your references.
• An interview is held with selected applicants.

Procedures

The School of Pharmacy admissions committee, consisting of at least 2 faculty members from each department and representation from the office of the dean, determines admissions. A file consisting of the required documentation is created for each applicant when the application is received. Consideration is given to a student’s grade-point average overall and in all science courses in the pre-pharmacy curriculum. The average grade point of previous entering classes has been 3.5 or higher.

Good scholarship is considered a predictor of success in the pharmacy curriculum. However, good communication skills, emotional maturity, leadership ability, professional attitude, an understanding of the pharmacy profession, work experience in a pharmacy, and interest in service to the community are also important. These additional skills may outweigh very high grades or choice of pre-pharmacy courses. Applicant PCAT scores also are considered in the admission process. Admission is highly competitive and depends on the number of applications received and the qualifications of the applicants.

The admissions committee begins to consider applications in January each year. The application deadline is February 1, and most decisions are made by April. As a condition of matriculation into the KU School of Pharmacy, all admitted students must successfully clear an investigative criminal background check and successfully obtain pharmacy intern status (http://www.pharmacy.ks.gov/licensing-registration/pharmacy-interns) with the Kansas Board of Pharmacy. Successful clearance of the background check and attainment of pharmacy intern status with the
Board of Pharmacy is required to enroll in the School of Pharmacy and to participate in curricular and extracurricular curricular activities including interacting with patients. Instructions for completing the background check are provided with the letter of acceptance.

**Doctor of Pharmacy Degree Requirements**

**Prepharmacy Requirements**

The Doctor of Pharmacy degree requires completion of all of the required pre-pharmacy and professional courses and a total of 208 credit hours with an overall and professional grade-point average of at least 2.5.

The pre-pharmacy requirements of 68 credit hours include a year each of English, general chemistry, and organic chemistry. Other required courses include calculus, interpersonal communication, molecular and cellular biology, microbiology, human anatomy, physiology, statistics; and 15 credit hours of general studies that satisfy the following KU Core Curriculum requirements: goal 1 outcome 1; goal 3 humanities; goal 3 social science; goal 4 outcome 1; and goal 4 outcome 2. The KU Core Curriculum goals 1 through 4 must be satisfied during the completion of the pre-pharmacy curriculum requirements. KU Core goals 5 and 6 are satisfied during the professional curriculum. A course in college physics is required if the student did not complete physics in high school with a grade of B or higher. The college physics credit hours, if required, do not count toward the 208 credit hours required for the degree.

Students are expected to have or to develop basic competence with personal computers, including word processing and spreadsheet software. All students are required to own an Apple iPad capable of running the most current operating system (iOS). These skills and equipment are necessary for some class assignments as well as for professional work assignments.

Courses in other professional schools (e.g., engineering, education) may not be counted toward the degree unless the student can show that such courses are directly relevant to pharmacy. For example, a course in business law taken in the business school may count (consult with the office of the dean in the school of pharmacy).

**Prepharmacy Curriculum**

<table>
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<th>Year 1</th>
<th>Hours Spring</th>
<th>Hours</th>
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<tr>
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<td>5 CHEM 135 (formerly CHEM 188)</td>
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<td>BION 150</td>
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<tr>
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<td>3 CHEM 335 (formerly CHEM 626)</td>
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<td></td>
<td>CHEM 331 (formerly CHEM 625)</td>
<td>2 CHEM 336 (formerly CHEM 627)</td>
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<td>BION 400</td>
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<td>COMS 130</td>
<td>3 General studies¹</td>
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¹ Select a course that satisfies KU Core Curriculum requirements: goal 1 outcome 1; goal 3 humanities; goal 3 social science; goal 4 outcome 1; or goal 4 outcome 2. All of the above need completed.

**Professional Requirements**

The Doctor of Pharmacy degree requires completion of all the required pre-pharmacy and professional courses and a total of 208 credit hours with an overall and professional grade-point averages of 2.5.

The curriculum includes instruction in the 3 basic sciences: medicinal chemistry, pharmaceutical chemistry, and pharmacology and toxicology. It also includes courses in the various aspects of pharmacy practice, including the health care system, law, and emerging roles for pharmacy practitioners. The curriculum integrates course material among departments. Assignments within the curriculum foster development of independent learning, communication skills, problem solving and professional motivation. The professional curriculum includes a requirement that each student must complete a minimum of 4 elective credit hours within School of Pharmacy. One credit hour must be completed from the pharmacy practice department, 1 credit hour must be completed from a basic science department (either medicinal chemistry, pharmaceutical chemistry, and pharmacology and toxicology) and the remaining two credit hours are left to the students discretion.

Students enroll in introductory pharmacy practice experiences during the summer following the first and second years. These experiences are located throughout the state of Kansas and vary in the type of professional setting.

The final year of the curriculum consists of nine 4-week advanced experiential practice rotations with faculty preceptors at pharmacy practice sites throughout Kansas. Students must have their own transportation to reach their assigned sites. Housing at these sites is also the student’s responsibility.

**Professional Program**

The following curriculum is applicable to the graduating class of 2019 (matriculating in the fall of 2015) and later. See http://pharmacy.ku.edu/academics for the curriculum for the graduating classes of 2016, 2017, and 2018.

<table>
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<td>PHPR 620</td>
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**Department of Medicinal Chemistry**

**Medicinal Chemistry Graduate Programs**

Medicinal chemistry is an interdisciplinary field at the interface of chemistry and biology. It approaches important biological and health-related problems through application of fundamental principles of organic chemistry, biochemistry, natural product chemistry, and molecular pharmacology. Graduates are expected to be thoroughly familiar with the chemistry of organic compounds, including their synthesis and biosynthesis, their reactivity, and their interactions with and alteration by living systems. Research is at the heart of the program, and the department’s research activities encompass many areas of modern medicinal chemistry. Graduate students may choose the organic chemistry track or the biochemistry track.

Currently, the department has 12 full-time faculty members, about 45 graduate students, more than 30 postdoctoral associates, numerous undergraduate researchers, and an outstanding technical staff. The department is recognized nationally and internationally, and most graduates have gone on to successful careers in the pharmaceutical industry and in academia. Medicinal chemistry faculty members are directors of 2 Centers for Biomedical Research Excellence (COBRE) — Cancer Experimental Therapeutics (http://ccet.cobre.ku.edu) and Protein Structure and Function (http://psf.cobre.ku.edu) — as well as the Center for Chemical Methodologies and Library Development (http://www.cmld.ku.edu) (CMLD) and the Specialized Chemistry Center (http://www.scc.ku.edu) (SCC), all funded by the National Institutes of Health.

**Facilities**

The department is well equipped for both chemical and biochemical research and has research facilities for about 70 graduate students, postdoctoral associates, and research technicians. Malott Hall, where most of the medicinal chemistry laboratories are located, also houses the departments of Chemistry (http://www.chem.ku.edu) and Pharmacology and Toxicology (http://www.pharmtox.pharm.ku.edu). Anschatz Library is adjacent to the building. Much of the laboratory space in the department has recently undergone renovation and provides exceptional research instrumentation is available through cooperative arrangements with other departments.

Advanced instrumentation and facilities are available through KU’s Molecular Structures Group (http://msg.dept.ku.edu/webs/msg). MSG laboratories include the Biochemical Research Service Laboratory, the Mass Spectrometry Laboratory, the Nuclear Magnetic Resonance Laboratory, the Molecular Graphics and Modeling Laboratory, the X-ray Crystallography Laboratory, and the Protein Structure Laboratory (dedicated to macromolecular X-ray crystallography) with more than $10 million in instrumentation.

The Shankel Structural Biology Center, on KU’s west campus, offers new research opportunities for medicinal chemists interested in protein and nucleic acid structure and combinatorial synthesis; it also houses the new 800-MHz NMR. The Analytical Proteomics Laboratory, which combines activities of the Mass Spectrometry Lab and BRSL to create a collaborative environment for protein handling, protein mass spectrometry, and bioinformatics, is in the Shankel Structural Biology Center. In the
the High Throughput Screening Laboratory (http://www.hts.ku.edu) has integrated and automated robotics equipment for carrying out biochemical and cell-based assays and a chemical library of more than 100,000 compounds with diverse structures and drug-like properties for biological screening. The service laboratories have professional staff that provides training in specialized research techniques in addition to their service functions.

Department of Medicinal Chemistry

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Courses

MDCM 599. Clinical Application of Basic Science. 1 Hour.
This course is an inter-departmental, team-based, technology-centric elective course. Concomitantly, instructors from the basic and clinical science departments within the school of pharmacy will promote deeper student understanding of the path a drug takes from discovery, development and ultimately clinical use. Instructors will collaborate in course content development to integrate basic and clinical science concepts. The course will utilize a blended learning method, incorporating out of class podcasts, online group collaborative projects, cloud-based file sharing, and readiness quizzes and exams. (Same as PTX 599 and PHCH 599.) Prerequisite: 4th or 5th professional year standing (4P/SP) in the School of Pharmacy and concomitant enrollment in PHPR 599 is required. LEC.

MDCM 601. Medicinal Biochemistry I. 3 Hours.
A study of the biochemical principles of macromolecular structure and function, molecular communication, and the metabolism of nutrients and xenobiotics as applied to problems of medicinal and pharmacological significance. Prerequisite: Concurrent enrollment in MDCM 602 Lab. LEC.

MDCM 602. Medicinal Biochemistry Laboratory. 1 Hour.
Laboratory exercises illustrating the application of chemical principles to biochemical processes of medicinal, pharmacological, and clinical significance. Prerequisite: Concurrent enrollment in MDCM 601. LAB.

MDCM 603. Medicinal Biochemistry II. 3 Hours.
A study of the biochemical principles of macromolecular structure and function, biosynthesis, molecular communication, and the metabolism of nutrients and xenobiotics as applied to problems of medicinal and pharmacological significance. Prerequisite: MDCM 601. LEC.

MDCM 606. Phytomedicinal Agents. 1 Hour.
This course will acquaint the pharmacy students with the current status of botanical use in the United States. A basic foundation will be provided so that the pharmacist can properly assess the appropriateness and usefulness of various phytomedicines and combinations in managing certain ailments with regard to efficacy, safety, potential toxicity, and potential herb-drug interactions. Prerequisite: MDCM 626 or instructor permission. LEC.

MDCM 607. Clinical Pharmacognosy. 1 Hour.
The course will provide a technical background for understanding the scientific basis underlying the use of herbal medicines. This will be followed by practical information about the pharmaceutical and chemical properties as well as clinical uses of herbal medicines. Active student participation in discussing the properties of these non-prescription medicinals is expected. Prerequisite: MDCM 601. LEC.

MDCM 625. Medicinal Chemistry I: Neuroeffector Agents. 3 Hours.
A study, from the molecular viewpoint, of the organic substances used as medicinal agents, including consideration of their origins, chemical properties, structure-activity relationships, metabolism and mechanisms of action; this course emphasizes drugs affecting the central nervous system. Prerequisite: CHEM 626 and MDCM 601. LEC.

MDCM 626. Medicinal Chemistry II: Homeostatic Agents. 3 Hours.
A continuation of MDCM 625 with emphasis on autonomic and cardiovascular agents and peripherally-acting hormones. Prerequisite: MDCM 625. LEC.

MDCM 627. Medicinal Chemistry III: Chemotherapeutic Agents. 3 Hours.
A continuation of MDCM 625 and MDCM 626 with special emphasis on antineoplastic, antiviral, antibacterial, antifungal and non-steroidal anti-inflammatory drugs. Prerequisite: MDCM 625. LEC.

MDCM 690. Undergraduate Research. 1-5 Hours.
Research in medicinal chemistry. Students will be assigned to a laboratory research problem. Prerequisite: Consent of instructor. IND.

MDCM 692. Problems in Medicinal Chemistry. 1-5 Hours.
This course encompasses original work on a laboratory problem of limited scope, honors reading assignments from medicinal chemistry literature, or in-depth discussions of assigned topics. Prerequisite: Consent of instructor. IND.

MDCM 701. Biomedical Chemistry. 3 Hours.
A study of the principles of macromolecular structure and function, biosignaling, bioenergetics and metabolism, with an emphasis on the relationship between biochemistry and medicine. Prerequisite: Graduate standing or permission of instructor. LEC.

MDCM 703. Advanced Biomedical Chemistry. 3 Hours.
A study of the principles of basic enzymology, including chemical reactions, biosynthesis, and metabolism. In addition, the course will cover lipids, hormones, vitamins, and minerals. Prerequisite: Graduate standing or permission of instructor. LEC.

MDCM 710. Physiological Aspects of Medicinal Chemistry. 1 Hour.
The goal of this one-credit-hour course is to provide an overview of physiological mechanisms and disease processes as a background for intermediate level courses in medicinal chemistry, drug discovery and drug development. Prerequisite: One college-level course in biology. LEC.

MDCM 725. Medicinal Chemistry I. 2 Hours.
A study, from the molecular viewpoint, of the organic substances used as medicinal agents, including consideration of their origins, chemical properties, structure-activity relationships, metabolism and mechanisms of action; this course emphasizes drugs affecting the central nervous system. Prerequisite: CHEM 626 and MDCM 621. LEC.

MDCM 726. Medicinal Chemistry II. 2 Hours.
A continuation of MDCM 725 with emphasis on autonomic and cardiovascular agents and peripherally-acting hormones. Prerequisite: MDCM 725. LEC.
MDCM 727. Medicinal Chemistry III. 2 Hours.
A continuation of MDCM 725 and MDCM 726 with special emphasis on anticancer, antiviral, antibacterial, antifungal and non-steroidal anti-inflammatory drugs. Prerequisite: MDCM 725. LEC.

MDCM 766. Organic Chemistry of Biological Pathways. 2 Hours.
An introductory graduate level course in bioorganic and medicinal chemistry, in which the principles of organic reaction mechanisms in biological systems are discussed. This course discusses the organic chemistry of metabolic transformations of biomolecules and their associated cofactors, both organic coenzymes and metal ions. LEC.

MDCM 775. Chemistry of the Nervous System. 3 Hours.
A detailed study of the molecular aspects of nerve transmission will be covered with special emphasis on the uptake, storage, release, biosynthesis, and metabolism of specific neurotransmitters. Drugs affecting these processes and current research on receptor isolation and receptor mechanisms will be discussed from a chemical viewpoint. (Same as BIOL 775, CHEM 775, NURO 775, PTX 775, and PHCH 775.) Prerequisite: Consent of instructor. LEC.

MDCM 785. Natural Products of Medicinal Significance. 2 Hours.
A discussion of bioassay-directed screening, the isolation, structure determination, biosynthesis, partial synthesis and total chemical synthesis of organic natural products of medicinal significance. Examples of the classes of compounds to be considered include steroid hormones, cardiac glycosides, alkaloids, antibiotics, terpenes, and the like. Prerequisite: Graduate standing or consent of instructor. LEC.

MDCM 790. Principles of Drug Design. 3 Hours.
A discussion of the principles of contemporary drug design with specific examples chosen from the original literature. Prodrugs; biosossteres; Kcat inhibitors; active site directed reversible and irreversible inhibitors; quantitative SAR; modulation of drug absorption, distribution, metabolism and excretion; molecular dissection; rigid analogs; pharmacophores; etc., will be treated. Prerequisite: Graduate standing or completion of MDCM 624 and MDCM 627. LEC.

MDCM 791. Principles of Drug Disposition. 1 Hour.
An introduction to the chemical and biochemical principles which govern the interaction of drugs and chemicals with cells and organisms. Topics include absorption, distribution, metabolism, and excretion; passive vs. active processes; pharmacokinetics; bioactivation vs. detoxication; and applications in drug design and improvement. Prerequisite: One year of organic chemistry and one course in biochemistry. LEC.

A discussion of the principles of contemporary drug design with specific examples chosen from the original literature. Drug-like properties; conformational constraint; structure-based drug design; library generation; HTS hit optimization, will be treated. LEC.

MDCM 799. Seminar in Medicinal Chemistry. 1 Hour.
Reports by research students and discussions of developments in the field not covered in formal courses. LEC.

MDCM 801. Issues in Scientific Integrity. 1 Hour.
Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis in the conduct of a scientific career, with emphasis on practical topics of special importance in molecular-level research in the chemical, biological, and pharmaceutical sciences. Topics will include the nature of ethics, the scientists in the laboratory, the scientist as author, grantee, reviewer, employer/employee, teacher, student, and citizen. Discussions will focus on case histories. Graded on a satisfactory/unsatisfactory basis. (Same as MDCM 801, NURO 801, PTX 801, PHCH 801 and PHCH 802.) LEC.

MDCM 816. Careers in Chemical Biology. 1 Hour.
An advanced course examining current research topics in chemical biology. An emphasis will be placed on career options open to PhD scientists in Chemical Biology, and preparation for the different career paths. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. This course will be graded satisfactory/unsatisfactory. (Same as BIOL 816, CHEM 816, and MDCM 816.) Prerequisite: Permission of instructor. SEM.

MDCM 860. Principles and Practice of Chemical Biology. 3 Hours.
A survey of topics investigated by chemical biology methods including: transcription and translation, cell signaling, genetic and genomics, biochemical pathways, macromolecular structure, and the biosynthesis of peptides, carbohydrates, natural products, and nucleic acids. Concepts of thermodynamics and kinetics, bioconjugations and bioorthogonal chemistry will also be presented. (Same as BIOL 860, CHEM 860 and PHCH 860.) Prerequisite: Permission of instructor. LEC.

MDCM 861. Drug Metabolism Laboratory. 1-3 Hours.
A laboratory course exemplifying various techniques used in studying the metabolism of foreign organic compounds in mammalian systems. In addition, enzymatic reactions in other plant and microbial systems are studied. Prerequisite: Consent of instructor. LAB.

MDCM 895. Research in Medicinal Chemistry. 1-12 Hours.
Hours and credit to be arranged. RSH.

MDCM 899. Master’s Thesis. 1-12 Hours.
Hours and credit to be arranged. Independent investigation of a research problem of limited scope. Prerequisite: Consent of instructor. THE.

MDCM 950. Advanced Topics: ____. 1-3 Hours.
An in-depth discussion of topics of current interest to medicinal chemists. Prerequisite: Consent of instructor. LEC.

MDCM 952. Introduction to Molecular Modeling. 3 Hours.
Theory and practice of contemporary molecular modeling: real-time computer graphics, model-building routines, use of structural databases, molecular mechanics and molecular dynamics calculations. The laboratory section places emphasis on drug design; work on own problems is welcome. (Same as BIOL 952.) Prerequisite: Graduate standing or consent of instructor. LAB.

MDCM 980. Original Research Proposal. 2 Hours.
Preparation of an original research proposal concerning contemporary problems in medicinal chemistry. Prerequisite: Consent of instructor. LAB.

MDCM 990. Postdoctoral Research in Medicinal Chemistry. 1-12 Hours.
Advanced level research in collaboration with a faculty member, which may involve projects in one or more of the following areas: organic synthesis, isolation and structure elucidation, metabolism, biochemical mechanisms of drug action. Prerequisite: Doctoral degree or equivalent in an appropriate related area, and consent of instructor. RSH.

MDCM 999. Doctoral Dissertation. 1-12 Hours.
Hours and credit to be arranged. Original chemical research in the synthesis and development of medicinal agents, elucidation of the chemical mechanisms of drug action, drug metabolism, and drug toxicities. THE.
Master of Science in Medicinal Chemistry

Medicinal Chemistry Graduate Programs

Medicinal chemistry is an interdisciplinary field at the interface of chemistry and biology. It approaches important biological and health-related problems through application of fundamental principles of organic chemistry, biochemistry, natural product chemistry, and molecular pharmacology. Graduates are expected to be thoroughly familiar with the chemistry of organic compounds, including their synthesis and biosynthesis, their reactivity, and their interactions with and alteration by living systems. Research is at the heart of the program, and the department’s research activities encompass many areas of modern medicinal chemistry. Graduate students may choose the organic chemistry track or the biochemistry track.

Currently, the department has 12 full-time faculty members, about 45 graduate students, more than 30 postdoctoral associates, numerous undergraduate researchers, and an outstanding technical staff. The department is recognized nationally and internationally, and most graduates have gone on to successful careers in the pharmaceutical industry and in academia. Medicinal chemistry faculty members are directors of 2 Centers for Biomedical Research Excellence (COBRE) — Cancer Experimental Therapeutics (http://ccet.cobre.ku.edu) and Protein Structure and Function (http://psf.cobre.ku.edu) — as well as the Center for Chemical Methodologies and Library Development (http://www.cmld.ku.edu) (CMLD) and the Specialized Chemistry Center (http://www.scc.ku.edu) (SCC), all funded by the National Institutes of Health.

Graduate Admission

Graduate students are primarily admitted to the department to pursue the Ph.D. degree. The M.S. degree and postdoctoral training are also available. An applicant wishing to enter the graduate program must have earned a bachelor’s or master’s degree in pharmacy, medicinal chemistry, chemistry, biochemistry, or a closely related field, and must have completed 1 year of organic chemistry with laboratory (equivalent to CHEM 330, CHEM 331, CHEM 335, and CHEM 336). In all cases, general admission requirements must be met.

Applications are evaluated by the graduate selection committee. Applications must be supported by 1 copy of official transcripts of all previous college and university work, both undergraduate and graduate. In addition, a resume, a statement of purpose, and 3 letters of recommendation from current or former teachers, advisors, or employers must be submitted. Students from non-English-speaking countries also must furnish proof of proficiency in English. Graduate Record Examination (GRE) general test scores are required, and applicants are strongly encouraged to take the subject test in chemistry as well.

The graduate selection committee makes admission decisions based on grade-point averages for previous college work (particularly in the relevant science areas), letters of recommendation, previous research or employment experience relevant to the graduate training being sought, GRE scores, etc. The number of applicants who can be admitted at any time varies, depending on the availability of laboratory space, research facilities, and financial support for research activities, but it is usually about 10 a year.

Graduate applications (http://www.graduate.ku.edu) and all other requested application materials (transcripts, résumé, statement of purpose, recommendation letters, etc.) must be submitted online:

The University of Kansas
Department of Medicinal Chemistry
Malott Hall
1251 Wescoe Hall Drive, Room 4070
Lawrence, KS 66045-7572

M.S. Degree Requirements

Candidates for this degree must satisfy general requirements as well as those of 1 of the following options:

- Students who are proceeding toward the Ph.D. degree at KU receive the master’s degree after satisfactorily completing the course work requirement for the Ph.D. and passing a comprehensive oral examination.
- Students who wish to earn only the M.S. degree must complete a prescribed subset of the course work requirements for the Ph.D. degree and a thesis representing at least 10 credit hours of research and pass a thesis defense.

Doctor of Philosophy in Medicinal Chemistry

Medicinal Chemistry Graduate Programs

Medicinal chemistry is an interdisciplinary field at the interface of chemistry and biology. It approaches important biological and health-related problems through application of fundamental principles of organic chemistry, biochemistry, natural product chemistry, and molecular pharmacology. Graduates are expected to be thoroughly familiar with the chemistry of organic compounds, including their synthesis and biosynthesis, their reactivity, and their interactions with and alteration by living systems. Research is at the heart of the program, and the department’s research activities encompass many areas of modern medicinal chemistry. Graduate students may choose the organic chemistry track or the biochemistry track.

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The University of Kansas
Department of Medicinal Chemistry
Malott Hall
1251 Wescoe Hall Drive, Room 4070
Lawrence, KS 66045-7572

Ph.D. Degree Requirements

If credit has not already been obtained in the courses below or their equivalents, students must complete the following courses as early as is practical in the graduate program: 1 semester of physical chemistry (CHEM 510 or CHEM 530), and biochemistry (MDCM 701). Satisfactory completion of qualifying examinations in organic chemistry and biochemistry also is required.

A series of monthly written cumulative examinations is used to assess students’ knowledge of medicinal chemistry, organic chemistry, and biochemistry. These examinations must be passed at an accelerating rate during the second and third years. After completing the cumulative examinations, the major part of the course work, and other requirements, the student takes an oral comprehensive examination. After completing this examination, the student prepares an original research proposal for presentation to the faculty. The final requirement for the Ph.D. is the preparation and defense of a dissertation based on original laboratory research conducted by the candidate.

Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current Lawrence and Edwards Campus policies on Doctoral Research Skills and Responsible Scholarship are listed in the KU Policy Library.

General requirements, such as those related to the comprehensive oral examination, the dissertation, and the dissertation defense, are listed in the Graduate Studies (p. 2369) section of the online catalog.

Neurosciences Programs

Neurosciences Graduate Programs

The neurosciences program admits students directly for study on the Lawrence campus, with strengths in behavioral, biological, chemical, and pharmaceutical sciences, and the KU Medical Center (http://www.kumc.edu) campus in Kansas City, with strengths in all the biomedical and clinical sciences. Each student is asked which campus he or she would prefer. Students earn a Ph.D. degree in the neurosciences. In exceptional circumstances, the program also offers an M.S. degree in neurosciences.

Graduates can pursue careers in university teaching and research or conduct and supervise research in a pharmaceutical/biotechnology company or government laboratory.

Programs

Neuroscience is a truly multidisciplinary research field. All students are expected to be able to understand the fundamental principles and contributions of each of the major disciplines of the neurosciences core. New students receive training in biochemistry and molecular biology, cell biology, and physiology before proceeding with more focused courses.

Neurosciences Program

Smissman Research Laboratories
2099 Constant Ave.
Lawrence, KS 66047-3729
785-864-4504
http://www.neuroscience.ku.edu/

Elias K. Michaelis, Co-Director, Lawrence
785-864-7339
e michaelis@ku.edu

Douglas E. Wright, Co-Director, KU Medical Center
913-588-2713
dwright@kumc.edu

Master of Science in Neurosciences

Neurosciences Graduate Programs

The neurosciences program admits students directly for study on the Lawrence campus, with strengths in behavioral, biological, chemical, and pharmaceutical sciences, and the KU Medical Center (http://www.kumc.edu) campus in Kansas City, with strengths in all the biomedical and clinical sciences. Each student is asked which campus he or she would prefer. Students earn a Ph.D. degree in the neurosciences. In exceptional circumstances, the program also offers an M.S. degree in neurosciences.

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Neuroscience is a truly multidisciplinary research field. All students are expected to be able to understand the fundamental principles and contributions of each of the major disciplines of the neurosciences core.
New students receive training in biochemistry and molecular biology, cell biology, and physiology before proceeding with more focused courses.

**Graduate Admission**

All application materials are reviewed by faculty committees in Lawrence and Kansas City. Students should have B.A. or B.S. degrees in anthropology, behavioral sciences, biology, chemistry, engineering, neuroscience, or pharmacological sciences. Preference is given to students who have completed courses in introductory and organic chemistry, calculus, physics, introductory biology, and at least 1 course in advanced biology topics such as biochemistry, physiology, microbiology, or molecular biology. Students who do not have sufficient training complete appropriate courses before admission. The program requires standard Graduate Record Examination scores with all applications, 3 letters of recommendation, and an essay by the applicant about his or her career goals. Selection is based on grade-point average, GRE scores, letters of recommendation, and evidence of previous experience in research. The minimum standard is a grade-point average of 3.0 on a 4.0 scale.

Submit your graduate application online (http://www.graduate.ku.edu). Forward all requested supporting application documents to the program:

**The University of Kansas**
**Neurosciences Graduate Program**
**Malott Hall**
**1251 Wescoe Hall Drive, Room 5064**
**Lawrence, KS 66045-7572**

**M.S. Degree Requirements**

The M.S. is offered in rare cases where attainment of the Ph.D. is inappropriate. A student may earn the M.S. by completing these minimum requirements:

- The courses in the curriculum of the first year of the Ph.D. training program.
- The course in advanced neuroscience.
- A thesis based on either original research or library research.
- The total credit hours of graduate-level courses required for the M.S. degree.

**Ph.D. Degree Requirements**

The neuroscience curriculum is subdivided into core courses that all students must complete and electives representing the 2 major specializations,

- Cell and Molecular Neuroscience and
- Cognitive and Systems Neuroscience.

The core curriculum includes research rotations in 2 laboratories of the student’s choice during the first year. Laboratory rotations offer first-hand research experience. Students complete 2 rotations in faculty research laboratories in the first year. Laboratories are selected by the student and the co-directors. After the rotations, each student chooses a research advisor and begins an independent research project.

Students also receive training in the responsible conduct of research and teaching in the neurosciences. For the Ph.D., the student completes the core curriculum as well as research skills training, comprehensive oral examination, preparation of a dissertation, and final oral examination and defense of the dissertation.

**Doctor of Philosophy in Neurosciences**

Graduates can pursue careers in university teaching and research or conduct and supervise research in a pharmaceutical/biotechnology company or government laboratory.

**Programs**

Neuroscience is a truly multidisciplinary research field. All students are expected to be able to understand the fundamental principles and contributions of each of the major disciplines of the neurosciences core. New students receive training in biochemistry and molecular biology, cell biology, and physiology before proceeding with more focused courses.

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**Note:** Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current Lawrence and Edwards Campus policies on Doctoral Research Skills and Responsible Scholarship are listed in the KU Policy Library.
Core Curriculum for the Ph.D. in Neurosciences

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
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<tbody>
<tr>
<td>BIOL 750</td>
<td>3</td>
<td>PHSL 846</td>
</tr>
<tr>
<td>Cognitive and Systems</td>
<td>3</td>
<td>BIOL 646</td>
</tr>
<tr>
<td>Neuroscience course</td>
<td>3</td>
<td>NURO 800</td>
</tr>
<tr>
<td>NURO 799</td>
<td>2</td>
<td>Research skill: 1 lecture course or 1 laboratory course</td>
</tr>
<tr>
<td>NURO 799</td>
<td>2</td>
<td>NURO 800</td>
</tr>
<tr>
<td></td>
<td><strong>11</strong></td>
<td><strong>16</strong></td>
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<table>
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<tr>
<th>Year 2</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURO 801 (offered in the fall every odd-numbered year)</td>
<td>1 Completion of written and oral comprehensive examination</td>
<td></td>
</tr>
<tr>
<td>Cell and Molecular Neuroscience course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>First elective for Cell and Molecular Neuroscience or Cognitive and Systems Neuroscience</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second elective for Cell and Molecular Neuroscience or Cognitive and Systems Neuroscience</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>NURO 799</td>
<td>2</td>
<td>NURO 799</td>
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<th>Year 3</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
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<tbody>
<tr>
<td>NURO 999</td>
<td>1-11 NURO 999</td>
<td>1-11</td>
</tr>
<tr>
<td></td>
<td><strong>1-11</strong></td>
<td><strong>1-11</strong></td>
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<tr>
<th>Year 4</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
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</thead>
<tbody>
<tr>
<td>NURO 999</td>
<td>1-11 NURO 999</td>
<td>1-11</td>
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<td></td>
<td><strong>1-11</strong></td>
<td><strong>1-11</strong></td>
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</tbody>
</table>

Total Hours: 43-83

Students must

- Complete 1 core course from Cognitive and Systems Neuroscience;
- Complete 1 core course from Cell and Molecular Neuroscience;
- Complete 1 core course from General Neurobiology;
- Take Bioethics or NURO 801 Issues in Scientific Integrity; and
- Receive training in effective oral communication and teaching by enrolling in 1 semester of NURO 800 Neuroscience Teaching Principles, which includes a teaching experience.

Neuroscience Courses

<table>
<thead>
<tr>
<th>Cognitive and Systems Neuroscience (9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 701</td>
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</table>

<table>
<thead>
<tr>
<th>Cell and Molecular Neuroscience (9)</th>
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<tbody>
<tr>
<td>BIOL 673</td>
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<tr>
<td>NURO 775</td>
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<td>NURO 848</td>
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<table>
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<tr>
<th>General Neurobiology (10)</th>
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<tbody>
<tr>
<td>NURO 846</td>
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<tr>
<td>NURO 710</td>
</tr>
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<td>NURO 847</td>
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</table>

<table>
<thead>
<tr>
<th>Neuroscience Seminar (2)</th>
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</thead>
<tbody>
<tr>
<td>NURO 799</td>
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</table>

<table>
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<tr>
<th>Scientific Integrity (1)</th>
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<tbody>
<tr>
<td>NURO 801</td>
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</table>

<table>
<thead>
<tr>
<th>Teaching Experience (2)</th>
</tr>
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<tbody>
<tr>
<td>NURO 800</td>
</tr>
</tbody>
</table>

Continued enrollment in the neuroscience seminar is required, and students present at least 2 seminars during their graduate careers. In consultation with a 5-member faculty advisory committee including at least 3 members of the neuroscience program, each student chooses electives that provide training relevant to the research goals.

All students must complete a research skill. Commonly used areas are radiation biology and radiation safety, cell culture methodology, techniques of electron and confocal microscopy, molecular biology laboratory training, computer science training, statistics, and training in electronics and instrumentation.

After the first 2 years, students take the comprehensive oral examination. This consists of a research proposal in the general area of the doctoral research, written in NIH format, and an oral examination on the proposal and on general knowledge in neuroscience and related fields.

Department of Pharmaceutical Chemistry

Pharmaceutical Chemistry Graduate Programs

The Department of Pharmaceutical Chemistry offers a number of core courses designed to hone the student’s skills in aspects of physical/organic chemistry, chemical kinetics, and equilibrium phenomena, which we consider essential in understanding problems of any origin, including biological processes, on a molecular level. Every student entering the program is expected to complete these core courses successfully during the first year.

Research has become increasingly multidisciplinary; students have the option to focus their didactic training in 2 unique areas of specialization or tracks:

- Pharmaceutical biotechnology and
- Physical/analytical pharmaceutical chemistry.

In addition, students can choose from a variety of elective courses that allow them to gain knowledge and skills in areas specific to individual research project interests.
The department places emphasis on excellence in research, making every effort to ensure that students can maximize efforts on their research projects toward earning the Ph.D. degree in a timely fashion. The core courses are taught every year and can be completed in just 2 semesters. Students are fully supported by the department their entire time in the program and are not burdened with time-consuming teaching responsibilities.

**Facilities**

The department is located on KU’s west campus in Simons Biosciences Research Laboratories and the Multidisciplinary Research Building (MRB). Simons is a modern, well-equipped 30,000-square-foot, 2-story research facility. MRB houses researchers from our department and a variety of disciplines to encourage interaction and collaboration. These facilities house research and specialty laboratories, including an experimental cancer chemotherapeutic-agent testing laboratory, a radiosotope handling room, a molecular biology laboratory, a natural products extraction laboratory, and a liquid chromatography mass spectrometry laboratory. There are facilities for cell culture, several advanced fluorescence microscopes, NMR spectrometers, and numerous components and software for proteomic analysis. Within our department faculty have established the Macromolecule and Vaccine Stabilization Center (MVSC) and Kansas Vaccine Institute (KVI), which contain an extensive array of instrumentation for the characterization of both small and macromolecules. Examples of analytical instrumentation include circular dichroism spectrophotometers, FTIR, capillary LC-QTof mass spectrometry, and particulate analysis instrumentation.

State of the art equipment and service facilities help with nearly any aspect of research. For example, the Molecular Structures Group (MSG) is a campus-wide facility encompassing NMR, MS, X-ray Crystallography, Protein Production, Fragment-based Drug Discovery, and Molecular Graphics and Modeling Laboratories available to all campus members for a nominal fee. Near the Simons building, the structural biology wing of the MSG houses an 800-mHz NMR along with many other instruments and services.

**Department of Pharmaceutical Chemistry**

McCollum Laboratories  
2095 Constant Ave., Room 236C  
Lawrence, KS 66047-3729  
Phone: 785-864-4880  
Fax: 785-864-5736  
http://www.pharmchem.ku.edu/  

Christian Schöneich, Chair  
785-864-4880  
schoneic@ku.edu  

John Stobaugh, Graduate Advisor  
785-864-3996  
stobaugh@ku.edu (krise@ku.edu)

**Courses**

**PHCH 510. Emerging Trends in Pharmaceutical Chemistry I. 1 Hour.**  
This elective class will explore emerging areas of research currently impacting the pharmaceutical industry. Potential topics include: biologicals as therapeutics, drug targeting, prodrugs, nanotechnology, biological barriers, gene therapy, transporters, vaccines, intracellular drug trafficking, controlled release drug delivery, cancer therapy, analytical biotechnology and many others. The class will be team taught by PHCH faculty and guest speakers. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Must be accepted to the Pharmacy Program. LEC.

**PHCH 512. Roadmap to Drug Development. 1 Hour.**  
This special topics course will cover key steps in developing and bringing a new drug through pharmaceutical development and regulatory approval and into commercial use. Development of both traditional small-molecule chemical drugs and biotechnology-based protein drugs will be discussed. Example topics include: (1) how does a drug candidate move from its discovery at the lab bench into clinical trials? (2) what are the key hurdles in developing a new medicine that can be produced at large-scale in a manufacturing facility? (3) why are patents and venture capital so important in drug development? Guest lecturers will provide real world perspectives including case studies. This is two-hour class that meets 8 times during the semester. Prerequisite: 1st, 2nd or 3rd professional year standing in the School of Pharmacy. LEC.

**PHCH 514. Scientific Writing for the Health Professional. 1 Hour.**  
Communicating research plans and experimental findings is a critical skill for health care professionals working in a research environment, and successful communication depends on clarity of thought and careful use of language. This course is intended for 5th professional (5P) year students who are seeking residency and will need to write research proposals and abstracts, as well as prepare effective posters and presentations. It is an intensive course with multiple writing assignments. Students are expected to participate fully, and individual feedback and guidance on writing will be provided by the instructor. Graded on a satisfactory/fail. Prerequisite: 5th professional (5P) year students who plan to complete post-doctoral residency training. LEC.

**PHCH 517. Pharmacy Calculations. 2 Hours.**  
An introduction to the mathematics involved in filling prescriptions and in manufacturing pharmaceuticals. Includes an introduction to standard prescription notation and familiarization with pharmaceutical weights and measures. LEC.

**PHCH 518. Physical-Chemical Principles of Solution Dosage Forms. 3 Hours.**  
Physical properties of pharmaceutical solutions and their physiological compatibility will be discussed (intermolecular interactions, energetics, colligative properties, isotonicity, pH, buffers and drug solubility). Kinetics and mechanisms of drug degradation in solution will also be introduced. Prerequisite: PHCH 517. LEC.

**PHCH 599. Clinical Application of Basic Science. 1 Hour.**  
This course is an inter-departmental, team-based, technology-centric elective course. Concomitantly, instructors from the basic and clinical science departments within the school of pharmacy will promote deeper student understanding of the path a drug takes from discovery, development and ultimately clinical use. Instructors will collaborate in course content development to integrate basic and clinical science concepts. The course will utilize a blended learning method, incorporating out of class podcasts, online group collaborative projects, and readiness quizzes and exams. (Same as MDCM 599 and PTX 599.) Prerequisite: 4th or 5th professional year standing (4P/5P) in the school of pharmacy and concomitant enrollment in PHPR 599 is required. LEC.

**PHCH 605. Vaccines. 1 Hour.**  
Vaccines are currently the most powerful therapeutic approach available for infectious disease and promise to become of increasing importance for a wide variety of other pathologies including cancer. This course discusses the immunological basis of vaccinology, types of vaccines currently available and in development and the process by which vaccines are made from the basic research stage through their pharmaceutical development and marketing. Ethical aspects of vaccine use will also be considered. Course graded on a satisfactory/fail basis. LEC.
PHCH 625. Pharmacokinetics. 3 Hours.
A discussion of the basic concepts, and some clinical applications, of pharmacokinetics, clearance concepts, extravascular dosing, and the use of pharmacokinetics in dosage regimen design and adjustment. Prerequisite: PHCH 517 and PHCH 518. LEC.

PHCH 626. Biopharmaceutics and Drug Delivery. 3 Hours.
A study of biological barriers to drug delivery, conventional dosage forms, and new and future drug delivery strategies. Prerequisite: PHCH 517, PHCH 518, and PHCH 625. LEC.

PHCH 667. Introduction to Clinical Chemistry. 2 Hours.
A lecture-discussion course concerned with identification of the contents of physiological fluids, changes in physiological fluid content induced by disease and drugs, and therapeutic drug monitoring: case studies are presented. Prerequisite: Must be accepted to the Pharmacy Program. LEC.

PHCH 690. Undergraduate Research in Pharmaceutical Chemistry. 1-5 Hours.
Student will be assigned a suitable research project in the area of pharmaceutical analysis or pharmaceutics. Prerequisite: Consent of instructor. IND.

PHCH 693. Clinical Pharmacokinetics. 2 Hours.
This course presents discussions on physiological and disease state variables in pharmacokinetics for selected drugs and drug classes, and instructs students in the use of physiological and disease state pharmacokinetic information to develop individualized therapeutic regimens. Prerequisite: PHCH 625 and PHCH 626. LEC.

PHCH 694. Problems in Pharmaceutical Chemistry. 1-5 Hours.
A student will be assigned a suitable research project in an area of pharmaceutical analysis or pharmaceutics. This course is offered regularly by the Department of Pharmaceutical Chemistry to meet the special needs of selected students, usually for one of the following two situations: (1) This course may be taken when a student has a special interest in a problem or area of limited scope and desires to pursue that study in depth under supervision of a member of the faculty. (2) This course is sometimes used as a remedial class to provide a mechanism of intensive review and study in an area of weakness. Prerequisite: Consent of instructor. IND.

PHCH 700. Experimental Methods in Pharmaceutical Chemistry. 1-5 Hours.
Discussions, lectures, and laboratory work designed to acquaint and provide hands on experiences to advanced undergraduate and graduate students with experimental design, methods, and approaches relevant to modern research in pharmaceutical chemistry. Prerequisite: Consent of instructor. LEC.

PHCH 705. Writing and Communicating Science for Graduate Students. 3 Hours.
Communicating research proposals and experimental findings is a critical skill for scientists. Successful communication depends on clarity of thought and careful use of language. This course will use class discussions with examples and homework assignments to help prepare the graduate student to successfully communicate in both academia and industry settings. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Graduate standing in PHCH or consent of the instructor. LEC.

PHCH 712. Roadmap to the Development. 1 Hour.
This special topics course will cover key steps in developing and bringing a new drug through pharmaceutical development and regulatory approval and into commercial use. Development of both traditional small-molecule chemical drugs and biotechnology-based protein drugs will be discussed. Example topics include: (1) how does a drug candidate move from its discovery at the lab bench into clinical trials? (2) what are the key hurdles in developing a new medicine that can be produced at large-scale in a manufacturing facility? (3) why are patents and venture capital so important in drug development? Guest lecturers will provide real world perspectives including case studies. This is two-hour class that meets 8 times during the semester. Prerequisite: Graduate standing in Pharmaceutical Chemistry or a trainee of the NIH Biotech Training Grant. LEC.

PHCH 715. Drug Delivery. 3 Hours.
The course will survey the latest technology for delivering pharmaceuticals and biologicals to reduce side effects and enhance drug efficacy. The course will survey the latest research in this area and examine more classical delivery methods. A qualitative and quantitative understanding of drug delivery practice and theory is the goal. Prerequisite: Master's or PhD candidate in Engineering, Chemistry, Medicinal Chemistry, or Pharmaceutical Chemistry (by appointment for seniors or graduate students in departments not listed). LEC.

PHCH 716. Drug Delivery. 3 Hours.
The course will survey the latest technology for delivering pharmaceuticals and biologicals to reduce side effects and enhance drug efficacy. The course will survey the latest research in this area and examine more classical delivery methods. A qualitative and quantitative understanding of drug delivery practice and theory is the goal. Prerequisite: This course is only open to distance education students. LEC.

PHCH 718. Physical-Chemical Principles of Solution Dosage Forms. 3 Hours.
Physical properties of pharmaceutical solutions and their physiological compatibility will be discussed (intermolecular interactions, energetics, colligative properties, isotonicity, pH, buffers and drug solubility). Kinetics and mechanisms of drug degradation in solution will also be introduced. Prerequisite: Graduate standing. LEC.

PHCH 719. Physical-Chemical Principles of Solution Dosage Forms. 3 Hours.
Physical properties of pharmaceutical solutions and their physiological compatibility will be discussed (intermolecular interactions, energetics, colligative properties, isotonicity, pH, buffers and drug solubility). Kinetics and mechanisms of drug degradation in solution will also be introduced. This course is only open to distance education students. Prerequisite: Graduate standing. LEC.

PHCH 725. Molecular Cell Biology. 3 Hours.
Fundamental and advanced concepts in cell biology and the molecular interactions responsible for cell function, homeostasis and disease will be presented. Current analytical methods for examining cells and their molecular components will be discussed. Emphasis will be placed on the chemical and physical properties of individual proteins, nucleic acids and lipids and their assembly into cellular and subcellular structures. (Same as CPE 725) LEC.

PHCH 730. Biopharmaceutics&Pharmacokinetics. 3 Hours.
A quantitative treatment of the processes involved with drug absorption, distribution, metabolism, and excretion in living systems. This course open only to distance education students. LEC.

PHCH 731. Biopharmaceutics and Pharmacokinetics. 3 Hours.
A quantitative treatment of the processes involved with drug absorption, distribution, metabolism, and excretion in living systems. This course open only to on-campus students. LEC.
PHCH 744. Organic Chemistry for Pharmaceutical Scientists. 3 Hours.
A consideration of the structural features and driving forces that control the course of chemical reactions. Topics will include functional group chemistry: electronic structure, acid/base properties: molecular structure and properties (dipole, strain, and steric effects, inductive and resonance effects); dynamics of reactions (the major organic reaction mechanism, kinetics, energy profiles, isotope effects, linear free energy relationships), solvent effects, stereochemistry and conformation, an introduction to orbital symmetry control; basic thermodynamic and kinetic concepts; and an overview of important classes of mechanisms. This course is only open to distance education students. Prerequisite: CHEM 624 and CHEM 626. LEC.

PHCH 775. Chemistry of the Nervous System. 3 Hours.
A detailed study of the molecular aspects of nerve transmission will be covered with special emphasis on the uptake, storage, release, biosynthesis, and metabolism of specific neurotransmitters. Drugs affecting these processes and current research on receptor isolation and receptor mechanisms will be discussed from a chemical viewpoint. Prerequisite: BIOL 775, CHEM 775, MDCM 775 and NURO 775. (Same as PTX 775, BIOL 775, CHEM 775, MDCM 775 and NURO 775.) Prerequisite: BIOL 600 or equivalent. LEC.

PHCH 801. Issues in Scientific Integrity. 1 Hour.
Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis on practical topics of special importance in molecular-level research in the chemical, biological, and pharmaceutical sciences. Topics will include the nature of ethics, the scientist in the laboratory, the scientist as author, grantee, reviewer, employer/employee, teacher/student, and citizen. Discussions will focus on case histories. Graded on a satisfactory/unsatisfactory basis. (Same as MDCM 801, NURO 801, PTX 801 and PHCH 802.) LEC.

PHCH 802. Issues of Scientific Integrity. 1 Hour.
Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis on practical topics of special importance in molecular-level research in the chemical, biological, and pharmaceutical sciences. Topics will include the nature of ethics, the scientist in the laboratory, as author, grantee, reviewer, employer/employee, teacher/student, and citizen. Discussions will focus on case histories. Graded on a satisfactory/unsatisfactory basis. This course is open only to distance education students. (Same as MDCM 801, NURO 801, PTX 801 and PHCH 802.) LEC.

PHCH 816. Careers in Chemical Biology. 1 Hour.
Advanced course examining current research topics in chemical biology. An emphasis will be placed on career options open to PhD scientists in Chemical Biology, and preparation for the different career paths. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. This course will be graded satisfactory/unsatisfactory. Prerequisite: Permission of instructor. SEM.

PHCH 826. Molecular Cell Biology. 3 Hours.
Fundamental and advanced concepts in cell biology and the molecular interactions responsible for cell function, homeostasis and disease will be presented. Current analytical methods for examining cells and their molecular components will be discussed. Emphasis will be placed on the chemical and physical properties of individual proteins, nucleic acids and lipids and their assembly into cellular and subcellular structures. This course is only open to distance education students. LEC.

PHCH 850. Solid State Stability and Formulation. 3 Hours.
This course is designed to provide an understanding of the formulation and stability of small and large drug candidates in the solid state. The first two-thirds of the course will focus on small molecules, with the last third being devoted to proteins. Prerequisite: Graduate standing in PHCH or consent of the instructor. LEC.

PHCH 851. Solid State Stability and Formulation. 3 Hours.
This course is designed to provide an understanding of the formulation and stability of small and large drug candidates in the solid state. The first two-thirds of the course will focus on small molecules, with the last third being devoted to proteins. This course is open only to distance education students. Prerequisite: Graduate standing in Pharmaceutical Chemistry or consent of the instructor. LEC.

PHCH 860. Principles and Practices of Chemical Biology. 3 Hours.
A survey of topics investigated by chemical biology methods including: transcription and translation, cell signaling, genetic and genomics, biochemical pathways, macromolecular structure, and the biosynthesis of peptides, carbohydrates, natural products, and nucleic acids. Concepts of thermodynamics and kinetics, bioconjunctions and bioorthogonal chemistry will also be presented. (Same as BIOL 860, CHEM 860 and MDCM 860.) Prerequisite: Permission of instructor. LEC.

PHCH 862. Pharmaceutical Equilibrium. 3 Hours.
A course on equilibria in aqueous and non-aqueous systems with emphasis on solutions of interest to pharmaceutical technology. Included are association-dissociation equilibria, complexation, protein binding calculation of species concentrations, estimation of solubility and ionization constants. Methods for the determination of chemical potential in solution are presented. LEC.

PHCH 863. Pharmaceutical Equilibrium. 3 Hours.
A course on equilibria in aqueous and non-aqueous systems with emphasis on solutions of interest to pharmaceutical technology. Included are association-dissociation equilibria, complexation, protein binding calculation of species concentrations, estimation of solubility and ionization constants. Methods for the determination of chemical potential in solution are presented. This course is open only to distance education students. LEC.

PHCH 864. Pharmaceutical Analysis. 4 Hours.
This course is intended to be a comprehensive treatment of contemporary techniques used to validate analytical methods for the determination of drugs in the bulk form, pharmaceutical formulations, biological samples and other relevant media. The emphasis will be on chromatographic techniques reflecting the preeminent position that these techniques occupy in the field of pharmaceutical and biomedical analysis. Prerequisite: Previous or concurrent enrollment in PHCH 684. LEC.

PHCH 865. Pharmaceutical Analysis. 4 Hours.
Advanced course on pharmaceutical analysis. This course is only open to distance education students. LEC.

PHCH 870. Advanced Pharmaceutical Biotechnology. 4 Hours.
A course designed to emphasize the important facets of recombinant proteins and vaccines as pharmaceutical agents. Basics of protein structure and analysis will be introduced, and methods for production, isolation, and purification of recombinant proteins will be described. Potential chemical and physical degradation processes and strategies for circumventing these difficulties will be discussed. An overview of the development and formulation of vaccines and their immunological basis will be presented. Prerequisite: BIOL 600 or consent of instructor. LEC.

PHCH 871. Advanced Pharmaceutical Biotechnology. 4 Hours.
A course designed to emphasize the important facets of recombinant proteins and vaccines as pharmaceutical agents. Basics of protein structure and analysis will be introduced, and methods for production, isolation, and purification of recombinant proteins will be described. Potential chemical and physical degradation processes and strategies
for circumventing these difficulties will be discussed. This course is only open to distance education students. An overview of the development and formulation of vaccines and their immunological basis will be presented. Prerequisite: BIOL 600 or consent of instructor. LEC.

**PHCH 895. Research in Pharmaceutical Chemistry. 1-11 Hours.**
Advanced level research in collaboration with a faculty member in pharmaceutical chemistry or related areas. This course is limited to students who are doing research, but not necessarily working toward either a master's or a doctoral degree. RSH.

**PHCH 898. Master's Thesis. 1-10 Hours.**
Master's Thesis. This course is open only to distance education students. THE.

**PHCH 899. Master's Thesis. 1-11 Hours.**
Graded on a Satisfactory/Fail basis. THE.

**PHCH 920. Chemical Kinetics. 2 Hours.**
This course provides the principles of kinetic data analysis as applied to problems in pharmaceutical chemistry. Topics include the setup and solution of rate equations related to chemical reactions; simplifications and approximations in complex equation systems; isotope, solvent and salt rate effects; and diffusion and activation controlled reactions. This course is open only to distance education students. LEC.

**PHCH 921. Chemical Kinetics. 2 Hours.**
This course provides the principles of kinetic data analysis as applied to problems in pharmaceutical chemistry. Topics include the setup and solution of rate equations related to chemical reactions; simplifications and approximations in complex equation systems; isotope, solvent and salt rate effects; and diffusion and activation controlled reactions. This course is open only to distance education students. LEC.

**PHCH 972. Mechanisms of Drug Deterioration and Stabilization. 3 Hours.**
A course dealing with mechanisms and chemical kinetics of drug deterioration and stabilization. LEC.

**PHCH 973. Mechanisms of Drug Deterioration and Stabilization. 3 Hours.**
A course dealing with mechanisms and chemical kinetics of drug deterioration and stabilization. This course is open only to distance education students. LEC.

**PHCH 974. Advanced Special Topics in Pharmaceutical Chemistry. 1-3 Hours.**
Various topics pertinent to the area of pharmaceutical chemistry will be explored. Graded on a satisfactory/unsatisfactory basis. LEC.

**PHCH 978. Pharmaceutical Chemistry Seminar. 1 Hour.**
A seminar on the chemistry of pharmaceutical systems. LEC.

**PHCH 998. Doctoral Dissertation in Pharmaceutical Chemistry. 1-11 Hours.**
This course is open only to distance education students. THE.

**PHCH 999. Doctoral Dissertation in Pharmaceutical Chemistry. 1-11 Hours.**
THE.

### Master of Science in Pharmaceutical Chemistry

#### Pharmaceutical Chemistry Graduate Programs

The Department of Pharmaceutical Chemistry offers a number of core courses designed to hone the student's skills in aspects of physical/organic chemistry, chemical kinetics, and equilibrium phenomena, which we consider essential in understanding problems of any origin, including biological processes, on a molecular level. Every student entering the program is expected to complete these core courses successfully during the first year. In addition, students can choose from a variety of elective courses that allow them to gain knowledge and skills in areas specific to individual research project interests.

The department places emphasis on excellence in research, making every effort to ensure that students can maximize efforts on their research projects toward earning the M.S. degree in a timely fashion. The core courses are taught every year and can be completed in just 2 semesters. Students are fully supported by the department their entire time in the program and do not have teaching responsibilities.

### Graduate Admission

Students with bachelor's or master's degrees in chemistry, pharmacy, the biological sciences, material sciences, chemical engineering or related disciplines are encouraged to seek admission. Except under unusual circumstances, we review and accept candidates for admission to fall semester only. All required materials must be received before the department can begin to consider an application.

Required materials to be sent to the Department of Pharmaceutical Chemistry include the following:

1. Graduate Record Examination results (not more than 5 years old) forwarded directly to Graduate Studies/Department of Pharmaceutical Chemistry from the Educational Testing Service. Photocopies of results are not permissible. The institution code for the University of Kansas is R6871. The Department of Pharmaceutical Chemistry’s code is R0305.

2. Test of English as a Foreign Language results if applicable. These may not be required if you have completed a degree in an English-speaking country. The current list is limited to the U.S., England, Australia, and New Zealand. Contact the Office of Graduate Studies to learn if your institution is recognized.

3. Official transcripts from all universities/institutions in which the applicant has studied.

4. KU's graduate application (http://www.graduate.ku.edu).

5. The application processing fee (amount varies).

6. A brief personal statement (about one page) that helps us understand why you are interested in graduate studies and specifically why KU’s department.

7. An updated copy of your resume indicating relevant experience, including educational and research experience, if applicable.

8. 3 letters of recommendation from people you believe are best qualified to comment on your potential to succeed in graduate studies. There is no template for letters of recommendation, but please make sure they are on official letterhead.

All of these items should be sent to the department:

**The University of Kansas**
Department of Pharmaceutical Chemistry
Attn: Nancy Helm
McCollum Laboratories
2095 Constant Ave.
Lawrence, KS 66047-3729

Telephone: 785-864-4822, fax: 785-864-5736, nhelm@ku.edu.
Although the department does not have a formal application deadline, the faculty begins evaluations of applications around January 15 each year. To ensure full consideration, it is highly recommended that complete applications be in the department far in advance of January 15.

Admitted students receive a competitive stipend, tuition, and basic health insurance. Students also can be selected to participate in the Takeru Higuchi and Nigel Manning Ph.D. Intersearch Program, allowing them to conduct a portion of their research at the Victorian College of Pharmacy (www.vcp.monash.edu.au) at Monash University in Melbourne, Australia. In addition, students are encouraged to participate in other industrial and/or academic internship programs the department offers.

A number of fellowship awards are offered to recognize academic superiority and to assist meritorious students in the timely completion of their degree programs. The number of fellowships awarded each year depends upon available funds. For a description of funding opportunities for KU graduate students, visit the Graduate Studies website (http://www.graduate.ku.edu/funding-opportunities). Students with particularly outstanding undergraduate records may be special awards. The Department of Pharmaceutical Chemistry is a Madison and Lila Self Graduate Fellowship Program (http://selfgraduate.ku.edu) partner at KU. The program provides a generous stipend and tuition to outstanding students for 4 years of graduate study.

At the department level, the Higuchi, Lindenbaum, Rytting, Stella, and Waugh Fellowships are awarded each year to incoming graduate students with high promise.

M.S. Degree Requirements

Except under unusual circumstances, the Department of Pharmaceutical Chemistry does not recruit students seeking the M.S. degree. However, all students who pass the comprehensive qualifying examinations for the Ph.D. degree receive a nonthesis M.S. degree. Students who wish to earn the terminal M.S. degree must complete satisfactorily the core curriculum recommended for the Ph.D. degree, present a thesis based on original research or a suitable technical report based on the review of published research in a particular area, and pass a final Master’s thesis defense.

Distance Master’s Degree Program

The department also offers a distance master’s program. See the website (http://pharmchem.ku.edu/admission-requirements-2) for details. This program features the same high-quality lectures and courses offered in the on-campus M.S./Ph.D. program but allows students to complete the degree while working at a remote location. Students typically take 1 course a semester. All courses offered by the department can be taken this way. For questions, contact the director of the distance master’s program, John Stobaugh, 785-864-3996, stobaugh@ku.edu.

Doctor of Philosophy in Pharmaceutical Chemistry

Pharmaceutical Chemistry Graduate Programs

The Department of Pharmaceutical Chemistry offers a number of core courses designed to hone the student’s skills in aspects of physical/organic chemistry, chemical kinetics, and equilibrium phenomena, which we consider essential in understanding problems of any origin, including biological processes, on a molecular level. Every student entering the program is expected to complete these core courses successfully during the first year. In addition, students can choose from a variety of elective courses that allow them to gain knowledge and skills in areas specific to individual research project interests.

The department places emphasis on excellence in research, making every effort to ensure that students can maximize efforts on their research projects toward earning the Ph.D. degree in a timely fashion. The core courses are taught every year and can be completed in just 2 semesters. Students are fully supported by the department their entire time in the program and are not burdened with time-consuming teaching responsibilities.

Graduate Admission

Students with bachelor’s or master’s degrees in chemistry, pharmacy, the biological sciences, material sciences, chemical engineering or related disciplines are encouraged to seek admission. Except under unusual circumstances, we review and accept candidates for admission to fall semester only. All required materials must be received before the department can begin to consider an application.

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3. Official transcripts from all universities/institutions in which the applicant has studied.
4. KU’s graduate application (http://www.graduate.ku.edu).
5. The application processing fee (amount varies).
6. A brief personal statement (about one page) that helps us understand why you are interested in graduate studies and specifically why KU’s department.
7. An updated copy of your resume indicating relevant experience, including educational and research experience, if applicable.
8. 3 letters of recommendation from people you believe are best qualified to comment on your potential to succeed in graduate studies. There is no template for letters of recommendation, but please make sure they are on official letterhead.

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At the department level, the Higuchi, Lindenbaum, Rytting, Stella, and Waugh Fellowships are awarded each year to incoming graduate students with high promise.

**Ph.D. Degree Requirements**

**Entering Background**

Students entering the program are expected to be competent in basic principles of physical/organic chemistry and mathematics. These requirements are typically satisfied by most degrees in the basic or pharmaceutical sciences. One year of organic chemistry for majors, a physical chemistry course that includes classical thermodynamics, and two semesters of calculus equivalent to MATH 121/122.

**Core Courses**

All students participating in the Pharmaceutical Chemistry Ph.D. program are required to take a series of core courses, which are designed to ensure that graduates maintain the department's long-standing reputation for strength in the physical-chemical sciences as they relate to modern research in Pharmaceutical Chemistry (Pharmaceutics). The department requires that each student take seven core courses in which they must receive a grade of B or better in order to be eligible to take the Core Competency Exam, which is offered the week following completion of the spring semester of their first year in the program. These courses are offered every year and must be completed in the first two semesters in the program.

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<th>Year 1</th>
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<td>PHCH 862</td>
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**Research Skills (RS2) Requirement**

Graduate students must take one elective course in addition to the previously listed courses. This may be from the courses offered by the Department of Pharmaceutical Chemistry or from other science and engineering departments on campus with prior approval from the graduate director. This requirement must be completed prior to undertaking the comprehensive examination at the end of year 2.

**Post-core Examination Requirements**

- **PHCH 870 Advanced Pharmaceutical Biotechnology**, PHCH 864 Pharmaceutical Analysis and an additional elective course chosen from a wide variety of the scientific disciplines are post-core required courses that must be completed prior to the end of year 3.

**Seminar Requirements**

All graduate students must attend the weekly departmental seminar. Seminars consist of presentations by guest speakers, faculty members, and students. Typically, graduate students are required to present at least two departmental seminars during their time in the program. The seminar may be based on progress in their research or on a literature review of work related to their research.

**Dissertation**

Each Ph.D. candidate must submit and defend a dissertation resulting from research of sufficient originality and quality for publication in peer-reviewed scientific journals. The research is conducted under the supervision and guidance of the student’s advisor, with input from the dissertation committee as needed. The department strives for students to complete the Ph.D. degree within 4-5 years time.

**Distance Ph.D. Degree Program**

The department also offers a distance Ph.D. program. Admittance is offered to a limited number of highly qualified students who excel while completing the Distance M.S. degree program. Interested students should inquire with their M.S. advisor, onsite advisor and the graduate director for details. This program features the same didactic coursework and research requirements as in the onsite Ph.D. program but allows students to complete the degree while working at a remote location. For questions, contact the graduate director, John Stobaugh, 785-864-3996, stobaugh@ku.edu.

**Department of Pharmacology and Toxicology**

**Pharmacology and Toxicology Graduate Programs**

The Department of Pharmacology and Toxicology has research strengths in neuropharmacology — especially in neurodegeneration, psychiatric disorders, and addiction — and control of energy metabolism and effects of diabetes on the nervous system. The research program is founded on strong Ph.D. and M.S. graduate programs.

Doctoral students are prepared to teach and do research in a university, pharmaceutical, biotechnology, or government laboratory setting. New Ph.D. students can look forward to personal development in
an atmosphere that fosters strong collaborative activities as well as independent scholarship. The department recruits 4 to 5 Ph.D. students each year and offers stipends and tuition coverage.

The major aim of the MS degree program is to provide qualified graduates to institutions in academia, industry, and government. The Master of Science in Pharmacology and Toxicology program emphasizes student's research skills in molecular and neuro-pharmacology and toxicology. In addition to the didactic component of our training, we view hands-on training in laboratory research critical to the master’s thesis experience.

The department’s research programs and faculty place it at the leading edge of research in the pharmacological and toxicological neurosciences. The School of Pharmacy is ranked third in the nation for the NIH funding.

Facilities

Research facilities offer a range of modern instrumentation and many research support services. Major instruments include tissue culture rooms, ultracentrifuges, scintillation counters, high-pressure liquid chromatography systems, a patch-clamp electrophysiology system with Nikon fluorescent microscope, microprocessor-controlled spectrophotometers and fluorometers including a dual excitation wavelength instrument for intracellular measurements and a time-resolved luminescence and fluorescence microplate reader with dual dispensing capabilities, a Seahorse Extracellular Flux Analyzer for measuring cell metabolism and major energy-producing pathways of the cell, a dark room with a film processor, and real-time PCR equipment.

University research support facilities also contribute to the high quality of research and training for graduate students. These facilities are fully staffed by professionals and include the Electron Microscopy Lab with transmission and scanning scopes; the Biochemical Research Services Lab for Illumina RNAseq, protein and DNA sequencing, amino acid analysis, and oligonucleotide and peptide syntheses; a High Throughput Laboratory for screening compounds as potential tools and drug development, and the Molecular Graphics and Modeling Lab with VAX computers, extensive databases for protein structures, and multiple molecular modeling programs an NMR facility; an X-ray Crystallography Laboratory; a Mass Spectrometry Laboratory; and an Instrumentation Design Laboratory. All labs have current computer technology, including hardware and extensive software for imaging, data analysis, data reduction, protein and gene analysis, and statistical tests.

Department of Pharmacology and Toxicology

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Lawrence, KS 66045-7572
785-844-4001
http://www.pharmtox.pharm.ku.edu/

Nancy Muma, Chair
785-844-4001
nmuma@ku.edu

Honglian Shi, Graduate Advisor
785-864-6192
hshi@ku.edu

Courses

P&TX 599. Clinical Application of Basic Science. 1 Hour.
This course is an inter-departmental, team-based, technology-centric elective course. Concomitantly, instructors from the basic and clinical science departments within the school of pharmacy will promote deeper student understanding of the path a drug takes from discovery, development and ultimately clinical use. Instructors will collaborate in course content development to integrate basic and clinical science concepts. The course will utilize a blended learning method, incorporating out of class podcasts, online group collaborative projects, and readiness quizzes and exams. (Same as MDCM 599 and PHCH 599.) Prerequisite: 4th or 5th professional year standing (4P/5P) in the school of pharmacy and concomitant enrollment in PHPR 599 is required. LEC.

P&TX 630. Pharmacology I. 4 Hours.
The pharmacology series covers the mechanisms by which drugs interact with living organisms. An integrative emphasis will be placed on understanding the molecular basis of drug action with respect to modifying the pathophysiology of specific disease states. Topics in PTX 630 include, general principles of cell biology, molecular biology, pharmacogenomics, immunology and principles of drug metabolism and disposition. Prerequisite: BIOL 646 or equivalent. LEC.

P&TX 631. Pharmacology II. 4 Hours.
The pharmacology series covers the mechanisms by which drugs interact with living organisms. An integrative emphasis will be placed on understanding the molecular basis of drug action with respect to modifying the pathophysiology of specific disease states. Topics in PTX 631 include, hematology, cancer biology and therapeutics, immunopharmacology, infectious diseases and respiratory disease. Prerequisite: PTX 630 and BIOL 400 or equivalent. LEC.

P&TX 632. Pharmacology III. 4 Hours.
The pharmacology series covers the mechanisms by which drugs interact with living organisms. An integrative emphasis will be placed on understanding the molecular basis of drug action with respect to modifying the pathophysiology of specific disease states. Topics in PTX 632 include, cardiovascular diseases, diuretics, autonomic pharmacology and drugs regulating central nervous system function. Prerequisite: PTX 630 and PTX 631. LEC.

P&TX 633. Pharmacology IV. 3 Hours.
The pharmacology series covers the mechanisms by which drugs interact with living organisms. An integrative emphasis will be placed on understanding the molecular basis of drug action with respect to modifying the pathophysiology of specific disease states. Topics in PTX 633 include endocrine disorders, diabetes and obesity, and gastrointestinal pharmacology. Prerequisite: PTX 630, PTX 631 and PTX 632. LEC.

P&TX 640. Toxicology. 2 Hours.
General principles of toxicology, treatment, and management of accidental poisoning, and current topics of interest. Prerequisite: PTX 630, PTX 631, and PTX 632. LEC.

P&TX 641. Antibiotics: Benefits and Risks. 1 Hour.
Students will read about and discuss the latest research on new antibiotic targets, therapeutic potential, disease prevention, and the emergence of antibiotic resistance. LEC.

P&TX 642. Obesity, Diabetes, and Metabolic Syndrome: Current Concepts. 1 Hour.
The objective of this course is to provide students with an opportunity to read, examine, and report on a broad array of topics relevant to diabetes and obesity. Students will be given broad latitude to propose topics of interest to them within the area of diabetes and obesity. The format of the course will be group presentations. Groups of 3 students will identify a
topic of interest to them in the field of diabetes and obesity, prepare a 30 min presentation and deliver it to the class for discussion. Prerequisite: PTX 630. LEC.

P&TX 643. Current Concepts of Neurodegenerative Disease. 1 Hour. Neurodegenerative diseases, such as Alzheimer’s and Parkinson’s diseases, are associated with older age and/or enhanced oxidative stress. The possible causes for the development and progression of these diseases with relation to current research in the field will be discussed. Additionally, a summary of available and suggested future treatments will be given. Prerequisite: PTX 630. LEC.

P&TX 644. Adverse Drug Events. 1 Hour. The objective of this course is to alerts students to common and preventable adverse drug events. This course will provide students with an opportunity to read, examine, and report on a broad array of topics relevant to adverse drug events. Students will be given broad latitude to propose topics of interest to them within the area of adverse drug events. In addition students can report on common and preventable food-drug, herb-drug, and disease-drug interactions. The format of the course will be group presentations. Groups of 3 students will identify a topic of interest to them among a list of provided topics, prepare a 30 minute presentation and deliver it to the class for discussion. Prerequisite: 3rd, 4th, or 5th professional year standing in the School of Pharmacy. LEC.

P&TX 645. Neurobiological Basis of Addiction: Physiological, Biochemical, Pharmacological & Treatment Concepts. 1 Hour. Several addictions will be discussed including additions to alcohol, cocaine, methamphetamine, gambling, and others as time permits. The physiology, biochemistry, pharmacology and available treatments for these addictions will be reviewed. The role of pharmacotherapies will be discussed, particularly as they relate to the molecular basis of addiction. Behavioral and psychological approaches also will be examined. Prerequisite: Completion of PTX 632 or special permission from faculty. LEC.

P&TX 694. Undergraduate Laboratory: Research in Pharmacology and Toxicology. 1-5 Hours. Original research on a laboratory problem of limited scope. This course cannot count toward pharmacology and toxicology requirements in the School of Pharmacy. Prerequisite: Consent of instructor. IND.

P&TX 698. Library Problems in Pharmacology and Toxicology. 1-5 Hours. Original library review of a limited special topic in pharmacology and toxicology. The student will write a review in his or her report. This course may count toward pharmacology and toxicology requirements in the School of Pharmacy. Prerequisite: PTX 635 and consent of instructor. IND.

P&TX 700. Professional Issues in the Biomedical Sciences. 2 Hours. A course designed to assist doctoral students in the biomedical sciences in their professional development by providing presentations, discussions, and practical experiences related to career planning. Topics include diverse career opportunities and expectations of each, preparation of vita/resumes and other elements of a successful job search, writing scientific papers and dealing with editors, developing programmatic research programs, balancing professional obligations, advancing through promotions, and related topics. Prerequisite: Graduate standing in pharmacology and toxicology. LEC.

P&TX 730. Advanced Pharmacology I - CNS and ANS. 2 Hours. A detailed study of the fundamentals of autonomic nervous system, central nervous system, and their pharmacology. The student will attend PTX 632 lectures and meet separately with the faculty for additional discussions of advanced material on the topics. The students will be examined on the advanced material. Prerequisite: Graduate standing in Pharmacology and Toxicology Program. LEC.

P&TX 731. Advanced Pharmacology II - Cardiovascular and Renal System. 2 Hours. A detailed study of the fundamentals of cardiovascular system, renal system and their pharmacology. The student will attend PTX 632 lectures and meet separately with the faculty for additional discussions of advanced material on the topics. The students will be examined on the advanced material. Prerequisite: Graduate standing in Pharmacology and Toxicology Program. LEC.

P&TX 732. Advanced Pharmacology III - Cancer Biology and Inflammatory Diseases. 2 Hours. A detailed study of the fundamentals of inflammation, cancer biology and their pharmacology. The student will attend PTX 632 lectures and meet separately with the faculty for additional discussions of advanced material on the topics. The students will be examined on the advanced material. Prerequisite: Graduate standing in Pharmacology and Toxicology Program. LEC.

P&TX 733. Advanced Pharmacology IV - Endocrinology. 2 Hours. A detailed study of the fundamentals of endocrinology and associated pharmacology. The student will attend PTX 632 lectures and meet separately with the faculty for additional discussions of advanced material on the topics. The students will be examined on the advanced material. Prerequisite: Graduate standing in Pharmacology and Toxicology Program. LEC.

P&TX 740. Advanced Biotechnology. 3 Hours. An examination of basic principles of molecular biology, immunology, and protein chemistry as they apply to the identification, production, stability, delivery, and monitoring of new therapeutic agents provided by the expanding biotechnology industry. Students will attend lectures in PTX 632 and meet separately with faculty for additional discussions of more advanced material on these topics. The students will be examined on the advanced material. Prerequisite: Graduate standing in Pharmacology and Toxicology. LAB.

P&TX 741. Biomedical Statistics. 3 Hours. This course is primarily intended for students concerned with the analysis of experimental and observational data, with an emphasis on biomedical and pharmacological applications. The topics covered by the course include the design of experimental studies, data collection, probability theory, descriptive statistics, probability distribution, hypothesis testing, T-test, analyses of variance for factorial designs, linear and multiple regression, analysis of covariance and non-parametric methods. Prerequisite: PTX graduate student status in good academic standing. LEC.

P&TX 742. Experimental Pharmacology. 4 Hours. Experimental approaches to understanding mechanism of drug action. Use of drugs as tools to understand functioning of biological systems will also be stressed. Historically important experiments will be discussed along with experiments which are currently used to define drug mechanisms. Topics will include: dose-response, drug receptors, drug metabolism, chemotherapy as well as autonomic CNS, cardiovascular and renal pharmacology. Prerequisite: Graduate standing in Pharmacology and Toxicology Program. LEC.

P&TX 747. Molecular Toxicology. 4 Hours. A detailed study of the fundamentals of the experimental methods used in a modern toxicology laboratory. The student will attend PTX 640 lectures and meet separately with the faculty for additional discussions of advanced material on the topics. The students will be examined on the
advanced material. Prerequisite: Graduate standing in Pharmacology and Toxicology Program. LEC.

**P&TX 755. Principles of Animal Experimentation. 2 Hours.**
An overview of animal care and use, this course is designed for graduate students currently engaged in animal based research or that anticipate work with live animals. Topics covered include regulatory framework for animal research; animal facility operations; biology, husbandry, and care of common laboratory animal species; and experimental manipulation of laboratory animals. Emphasis is placed on practical experience with live animals. LEC.

**P&TX 775. Chemistry of the Nervous System. 3 Hours.**
A detailed study of the molecular aspects of nerve transmission will be covered with special emphasis on the uptake, storage, release, biosynthesis, and metabolism of specific neurotransmitters. Drugs affecting these processes and current research on receptor isolation and receptor mechanisms will be discussed from a chemical viewpoint. (Same as BIOL 775, CHEM 775, MDCM 775, NURO 775, and PHCH 775.) Prerequisite: BIOL 600 or equivalent. LEC.

**P&TX 799. Pharmacology and Toxicology Seminar. 1-2 Hours.**
A review of current literature and research in pharmacology and toxicology. Required of all graduate students in the department every fall and spring semester. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Graduate standing in PTX. LEC.

**P&TX 800. Pharmacology and Toxicology Teaching Principles. 2 Hours.**
This course is to be used by graduate students fulfilling the teaching requirements for the Ph.D. in pharmacology and toxicology. The student will function as a discussion leader and lecturer in a limited number of class sessions. Each student will meet with the faculty whom he or she is assisting. Prerequisite: Graduate standing in pharmacology and toxicology program. RSH.

**P&TX 801. Issues in Scientific Integrity. 1-3 Hours.**
Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis on practical topics of special importance in molecular-level research in the chemical, biological, and pharmaceutical sciences. Topics will include the nature of ethics, the scientist in the laboratory, the scientist as author, grantee, reviewer, employer/employee, teacher, student, and citizen. Discussions will focus on case histories. Graded on a satisfactory/unsatisfactory basis. (Same as MDCM 801, NURO 801, PHCH 801 and PHCH 802.) LEC.

**P&TX 803. Pharmacology Literature Review I. 1 Hour.**
This course is designed for graduate students and will fulfill the first written exam requirement for the Ph.D. in pharmacology and Toxicology. The student will research and write a six page literature review by choosing a topic provided by the faculty. Prerequisite: Graduate standing in Pharmacology and Toxicology Program. LEC.

**P&TX 805. Pharmacology Literature Review II. 1 Hour.**
This course is designed for graduate students and will fulfill the second written exam requirement for the Ph.D. in pharmacology and Toxicology. The student will research and write a twelve page literature review by choosing a topic provided by the faculty. Prerequisite: Graduate standing in Pharmacology and Toxicology Program. LEC.

**P&TX 825. Research in Pharmacology and Toxicology. 1-10 Hours.**
Original investigations at an advanced level in the areas of pharmacology or toxicology or related fields. This research will be performed by graduate students in collaboration with a faculty member. Prerequisite: Graduate standing and consent of instructor. RSH.

**P&TX 899. Master’s Thesis. 1-11 Hours.**
Hours and credit to be arranged. Independent investigation of a research problem of limited scope. Prerequisite: Graduate standing in PTX and consent of instructor. THE.

**P&TX 990. Postdoctoral Research. 1-11 Hours.**
Advanced level research in collaboration with a faculty member in the department. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Doctoral degree or equivalent in an appropriate related area, and consent of instructor. RSH.

**P&TX 999. Doctoral Dissertation. 1-11 Hours.**
Hours and credit to be arranged. Original investigation in pharmacology and toxicology. Prerequisite: Consent of instructor. THE.

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**Master of Science in Pharmacology and Toxicology**

Pharmacology and Toxicology Graduate Programs

The Department of Pharmacology and Toxicology has research strengths in neuropharmacology — especially in neurodegeneration, mood disorders, and addiction — and control of energy metabolism and effects of diabetes on the nervous system. The research program is founded on a strong graduate program. The major aim of this Master of Science (MS) degree program is to provide qualified graduates to institutions in academia, industry, and government. The Master of Science in Pharmacology and Toxicology program emphasizes student’s research skills in molecular and neuro-pharmacology and toxicology. In addition to the didactic component of our training, we view hands-on training in laboratory research critical to the master’s thesis experience. The department’s research programs and faculty place it at the leading edge of research in the pharmacological and toxicological neurosciences. The School of Pharmacy is ranked third in the nation for the NIH funding.

**Graduate Admission**

Admission is based on the student’s undergraduate record in a relevant field. Graduate Record Examination scores, and 3 letters of recommendation. A minimum grade-point average of 3.0 on a 4.0 scale is required. Applications from non-English-speaking countries must include a copy of the Test of English as a Foreign Language score. Acceptance depends on the availability of space and faculty commitment.

Students are expected to have bachelor’s degrees in pharmacy, chemistry, biology, pharmacology, toxicology, or other physical science related disciplines. Submit your graduate application online (http://wwwgraduate.ku.edu). Send transcripts of all completed college and university course work and all other requested application materials to the department:

**The University of Kansas**
**Department of Pharmacology and Toxicology**
**Malott Hall**
**1251 Wescoe Hall Drive, Room 5064**
**Lawrence, KS 66045-7572**

**M.S. Degree Requirements**

**Course Work**

Students must earn 18 credit hours in the following courses or their equivalents:
Pharmacy is ranked third in the nation for the NIH funding in the pharmacological and toxicological neurosciences. The School of research programs and faculty place it at the leading edge of research in independent scholarship. The department recruits about 4 Ph.D. students and an atmosphere that fosters strong collaborative activities as well as New Ph.D. students can look forward to personal development in a government laboratory setting.

Ph.D. students are prepared to teach and do research in a university, pharmaceutical, biotechnology, or on a strong Ph.D. graduate program. Doctoral students are prepared to result from research of sufficient originality and quality for publication in peer reviewed scientific journals. The research is conducted under the supervision and guidance from the student’s advisor, with input from the thesis committee as needed.

Top graduates, if interested, may transfer into a Ph.D. program in Pharmacology and Toxicology offered in the department.

Doctor of Philosophy in Pharmacology and Toxicology

Pharmacology and Toxicology Graduate Programs

The Department of Pharmacology and Toxicology has research strengths in neuropharmacology — especially in neurodegeneration, mood disorders, and addiction — and control of energy metabolism and effects of diabetes on the nervous system. The research program is founded on a strong Ph.D. graduate program. Doctoral students are prepared to teach and do research in a university, pharmaceutical, biotechnology, or government laboratory setting.

New Ph.D. students can look forward to personal development in an atmosphere that fosters strong collaborative activities as well as independent scholarship. The department recruits about 4 Ph.D. students each year and offers stipends and tuition coverage. The department’s research programs and faculty place it at the leading edge of research in the pharmacological and toxicological neurosciences. The School of Pharmacy is ranked third in the nation for the NIH funding.

Graduate Admission

Admission is based on the student’s undergraduate record in a relevant field, Graduate Record Examination scores, and 3 letters of recommendation. A minimum grade-point average of 3.0 on a 4.0 scale is required. Applications from non-English-speaking countries must include a copy of the Test of English as a Foreign Language score. Acceptance depends on the availability of space and faculty commitment.

Students are expected to have bachelor’s degrees in pharmacy, chemistry, biology, pharmacology, toxicology, or other physical science related disciplines. Submit your graduate application online (http://www.graduate.ku.edu). Send transcripts of all completed college and university course work and all other requested application materials to the department:

The University of Kansas
Department of Pharmacology and Toxicology
Malott Hall
1251 Wescoe Hall Drive, Room 5064
Lawrence, KS 66045-7572

Ph.D. Degree Requirements

Course Work

Incoming students should have completed 4 semesters of Chemistry and 4 semesters of Biology, including a course in Cell Biology and one in Biochemistry. Prerequisites can be completed during the first year. The core courses in Pharmacology and Toxicology that all students are required to take are listed below. Prerequisite for all courses is graduate course work and all other requested application materials to the department:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>P&amp;TX 700</td>
<td>Professional Issues in the Biomedical Sciences</td>
<td>2</td>
</tr>
<tr>
<td>P&amp;TX 730</td>
<td>Advanced Pharmacology I - CNS and ANS</td>
<td>2</td>
</tr>
<tr>
<td>P&amp;TX 731</td>
<td>Advanced Pharmacology II - Cardiovascular and Renal System</td>
<td>2</td>
</tr>
<tr>
<td>P&amp;TX 732</td>
<td>Advanced Pharmacology III - Cancer Biology and Inflammatory Diseases</td>
<td>2</td>
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<tr>
<td>P&amp;TX 733</td>
<td>Advanced Pharmacology IV - Endocrinology</td>
<td>2</td>
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<tr>
<td>P&amp;TX 740</td>
<td>Advanced Biotechnology</td>
<td>3</td>
</tr>
<tr>
<td>P&amp;TX 741</td>
<td>Biomedical Statistics (3 credits)</td>
<td>4</td>
</tr>
<tr>
<td>P&amp;TX 742</td>
<td>Experimental Pharmacology</td>
<td>4</td>
</tr>
<tr>
<td>P&amp;TX 747</td>
<td>Molecular Toxicology</td>
<td>3</td>
</tr>
<tr>
<td>P&amp;TX 799</td>
<td>Pharmacology and Toxicology Seminar</td>
<td>3-9</td>
</tr>
<tr>
<td>P&amp;TX 800</td>
<td>Pharmacology and Toxicology Teaching Principles</td>
<td>2</td>
</tr>
<tr>
<td>P&amp;TX 801</td>
<td>Issues in Scientific Integrity</td>
<td>1</td>
</tr>
<tr>
<td>P&amp;TX 803</td>
<td>Pharmacology Literature Review I</td>
<td>1</td>
</tr>
<tr>
<td>P&amp;TX 805</td>
<td>Pharmacology Literature Review II</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 841</td>
<td>Biometry I</td>
<td>2</td>
</tr>
<tr>
<td>P&amp;TX 825</td>
<td>Research in Pharmacology and Toxicology (Can be repeated during the graduate program based on the advice of each student’s mentor)</td>
<td>3-9</td>
</tr>
<tr>
<td>P&amp;TX 999</td>
<td>Doctoral Dissertation (Can be repeated during the graduate program based on the advice of each student’s mentor)</td>
<td>1-11</td>
</tr>
</tbody>
</table>

Research Advisory Committee members for Ph. D degree aspirants should be identified by the end of the second year in the program. The
committees is composed of at least three members, and the research director serves as chairman. The final dissertation defense committee should consist of the original advisory committee (3 members) plus two (2) other members of the Graduate Faculty. At least one member of the final dissertation committee must be from outside the Department.

Comprehensive Exam Requirements for Ph. D. Students

The comprehensive examination is composed of 3 parts:

1. Written Comprehensive Examination: Each student must complete two written examinations to complete P&TX 803 and P&TX 805.

2. Preparation of an NIH-style research proposal: After successful completion of the second written comprehensive examination, the student should begin working on their NIH grant proposal. These serve as the basis for the oral comprehensive examination.

3. Oral Comprehensive Examination: After approval of the research proposal by the student’s advisory committee, each student, in consultation with the advisor, takes an oral examination covering the student’s major field.

Dissertation Research

The student, with the advisor’s assistance, develops a dissertation project. After the oral comprehensive examination, the student presents the dissertation research project to the advisory committee and receives periodic advice from this committee throughout the project. Upon acceptance of the dissertation by the advisory committee, the candidate must pass a final oral examination, including a defense of the dissertation before the dissertation committee and any other interested members of the Graduate Faculty.

Department of Pharmacy Practice

Pharmacy Practice Graduate Program

The Department of Pharmacy Practice furthers the mission of the School of Pharmacy by striving for excellence in teaching, research, scholarly activity, service, and patient care.

The faculty provide professional educational opportunities for undergraduate, graduate, and postgraduate students and practitioners to enable them to practice pharmaceutical care, adapt to changing professional roles, use new technologies, assume leadership roles in a dynamic health-care environment, and contribute new knowledge to the profession.

Facilities

Facilities of the pharmacy department at the University of Kansas Medical Center (http://www.kumc.edu) in Kansas City are used in the residency portion of the program.

Department of Pharmacy Practice - Lawrence

2010 Becker Drive, Room 2001
Lawrence, KS 66047-1620
785-864-4881
http://pharmpractice.ku.edu/

David Henry, Chair and Graduate Advisor

785-864-4881

Department of Pharmacy Practice - KUMC

KU Medical Center, 6330 Wescoe
Mail Stop 4040, 3910 Rainbow Blvd.
Kansas City, KS 66160
913-588-5360
http://pharmpractice.ku.edu/

David Henry, Chair and Graduate Advisor

913-588-5360

Courses

PHPR 502. Pharmacy Practice II Pharmaceutical Care Fundamentals. 4 Hours.

Drug interactions will be presented with an emphasis on evaluating the risk of the interaction in a particular patient. Patient counseling and communication techniques will be covered. Approximately half the class time will be spent covering non-prescription drugs and herbal products. Prerequisite: PHAR 500. LEC.

PHPR 508. Oncology Elective. 1 Hour.

This course is designed to extend the students’ understanding of Oncology diseases and treatments beyond what is covered in the Pharmacotherapy series in the School of Pharmacy. Prerequisite: PHPR 646. LEC.

PHPR 509. Medicare Part D. 1 Hour.

This elective course will focus on the understanding and active enrollment of patients into Medicaid prescription drug benefit (Part D). Students will mainly focus on the understanding of Medicare eligibility, benefits, formulary requirements, and the administration of benefits. Students will also participate in community outreach which may focus on underserved populations. Prerequisite: 2nd or 3rd professional year standing in the School of Pharmacy. LEC.

PHPR 510. Medical Terminology Elective. 1 Hour.

This course provides the fundamentals for developing a medical vocabulary. The student will develop the ability to understand, define and utilize medical terminology and abbreviations used in patient care. LEC.

PHPR 511. Service-Learning Elective. 1 Hour.

Students will work at a health-related community center and participate in structured learning exercises. The objectives are to: 1) enable students to learn appropriate strategies to communicate and provide services to people with varying languages, cultures, social, and economic backgrounds, disabilities, illnesses, or impairments, 2) increase social interaction and citizenship, 3) heighten social awareness and understanding of ethical issues, and 4) acknowledge social responsibility and realize personal values. FLD.

PHPR 512. Nuclear Pharmacy. 1 Hour.

This course is designed for students interested in learning about nuclear pharmacy practice as a specialty practice in pharmacy. Students will learn about the application of radiopharmaceuticals used in the diagnosis of various diseases or identifying patient therapeutic issues. The course will cover principles of radiation, radiation safety, preparation of and handling of radiopharmaceuticals, their appropriate use, and the training requirements for a nuclear pharmacist. At the conclusion of the course the student will have an insight into this specialty practice in nuclear pharmacy as a potential career. Prerequisite: Students must be admitted to the School of Pharmacy. LEC.
PHPR 513. Chemical Dependency Elective. 1 Hour.
This elective course will enhance the pharmacy student's knowledge and understanding of the current theories behind the addiction process, frequently abused drugs and/or chemicals and the treatment and recovery process. Prerequisite: Must be accepted to the Pharmacy Program. LEC.

PHPR 514. Communication and Counseling. 1 Hour.
An elective course designed to help students improve professional communication skills. Prerequisite: PHAR 500. LEC.

PHPR 515. The Aging Patient. 1 Hour.
This elective course is designed for the learner to explore many of the clinical considerations employed when caring for the aging patient within our health care system. The course will be devoted to exploring generational perceptions, learning how the aging process can impact patient care, and identifying the role of the pharmacist in enhancing this care. Prerequisite: Open to four-year Pharmacy and fifth-year Pharmacy students only. LEC.

PHPR 516. Pharmacy in Public Health. 1 Hour.
Public health is more than providing treatment for an illness; it is a concern for the health of an entire population. The ideal is to ensure the health of all. This course will focus on providing students with a solid foundational understanding of what public health is and how pharmacists play a role as a public health provider. The course will cover the concepts and tools used in public health including issues such as: determining health, cultural competence, health promotion, disease prevention, epidemiology and disease, describing populations and community health. Lastly, the course will provide students with specific pharmacist models of public health. Successful models include tobacco cessation programs, community vaccination programs, obesity prevention, tuberculosis monitoring, emergency preparedness and domestic violence. Prerequisite: Must be accepted to the Pharmacy Program. LEC.

PHPR 517. Medication Safety and Error Prevention. 1 Hour.
This course introduces the student to medication safety and the technology as well as the tools used in error prevention. The student will also learn about adverse drug events including both medication errors and adverse drug reactions in hospital and retail pharmacy settings. Prerequisite: 4th or 5th professional year standing in the School of Pharmacy. LEC.

PHPR 518. Cultural Competency in Pharmacy Practice. 1 Hour.
The United States becomes more culturally diverse every year. This course is designed to help student pharmacists excel in today's multicultural environment by improving their cultural competency skills. Students will explore their own culture and those belonging to other diverse cultures. Students are expected to learn of the beliefs, needs and tendencies of those with cultures much different than themselves. Prerequisite: Must be admitted to the School of Pharmacy. LEC.

PHPR 519. Business Planning for Pharmacy. 1 Hour.
This course is designed for students interested in developing a business plan. Most pharmacists will have an opportunity to develop a new service, product line or even start a new business venture in their careers. Students need to know how to create a formal business plan and how to present the plan to decision makers. The course will cover the basic components and rationale of creating a formal a business plan. When finished students will be expected to have created a written business plan and will present their creation to the class. In this manner, students will gain experience in developing an idea into a plan. Prerequisite: Students must be admitted to the school of Pharmacy. LEC.

PHPR 599. Clinical Application of Basic Science. 1 Hour.
This course is an inter-departmental, team-based, technology-centric elective course. Concomitantly, instructors from the basic and clinical science departments within the school of pharmacy will promote deeper student understanding of the path a drug takes from discovery, development and ultimately clinical use. Instructors will collaborate in course content development to integrate basic and clinical science concepts. The course will utilize a blended learning method, incorporating out of class podcasts, online group collaborative projects, and readiness quizzes and exams. Prerequisite: 4th or 5th professional year standing (4P/5P) in the school of pharmacy and concomitant enrollment in either PTX 599, MDCM 599, or PHCH 599 is required. LEC.

PHPR 601. Advanced Pharmacy Practice Experience 1. 4 Hours.
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. FLD.

PHPR 602. Advanced Pharmacy Practice Experience 2. 4 Hours.
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. FLD.

PHPR 603. Advanced Pharmacy Practice Experience 3. 4 Hours.
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. FLD.

PHPR 604. Advanced Pharmacy Practice Experience 4. 4 Hours.
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model
is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. FLD.

PHPR 605. Advanced Pharmacy Practice Experience 5. 4 Hours. The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. FLD.

PHPR 606. Advanced Pharmacy Practice Experience 6. 4 Hours. The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. FLD.

PHPR 607. Advanced Pharmacy Practice Experience 7. 4 Hours. The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. FLD.

PHPR 608. Advanced Pharmacy Practice Experience 8. 4 Hours. The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. FLD.

PHPR 609. Advanced Pharmacy Practice Experience 9. 4 Hours. The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. FLD.

PHPR 610. Advanced Pharmacy Practice Experience 10. 4 Hours. The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations (PHPR 601-609). PHPR 610 is reserved for students requiring a remedial experiential rotation. FLD.

PHPR 613. Pharmacoconomics and Health Outcomes. 2 Hours. A course to foster an understanding of economic, financial and outcome principles that drive the demand and supply of medical care in the US. Economic logic behind decisions made by patients, physicians, hospitals, managed care organizations, and governments will be covered. Students completing this course should be able to identify the drivers of the health economy, identify different types of pharmacoeconomic evaluations, critically analyze pharmacoeconomic and outcome literature, and apply economic principles to pharmaceutical care. Prerequisite: Students must be admitted to the school of Pharmacy to enroll in this class. LEC.

PHPR 614. Pharmacy Management. 3 Hours. A course designed to provide knowledge and skills to effect efficient and effective pharmacy management. This will include foundations in financial management, inventory control, purchasing, cost-effective drug utilization, quality management, pharmacoconomics, and human resource management. LEC.

PHPR 615. Nuclear Pharmacy Practice. 2 Hours. This introductory course in nuclear pharmacy practice provides a basic understanding of radiation, radiation dosimetry, radiopharmaceuticals, and clinical application of radiopharmaceuticals in diagnosis and treatment. The course includes both didactic material as well as laboratory experience. LEC.

PHPR 619. Health Care Systems. 3 Hours. This course is an introduction to the organization, financing, and delivery of health care services with a focus on the U.S. health care system. Course content addresses the following questions: how do we evaluate the health care sector, where is health care provided, how is health care financed, what are the characteristics of health care providers (individuals and institutions), what influences the performance of the health care sector, and what lies in the future for health care delivery. The purpose of the course is to prepare pharmacy students for non-clinical aspects of their practice sites. Enrollment limited to pharmacy majors. LEC.

PHPR 620. Ethical, Legal, and Cultural Issues in Patient Care. 2 Hours. This course provides an introduction to the fundamentals of law and ethics as they apply to the practice of pharmacy. Course sessions will focus on ethical expectations of the profession, principles and issues in medical and pharmacy ethics, and laws that govern medication dispensing. LEC.
PHPR 621. Pharmacy Law. 2 Hours.
A course developed to increase students' knowledge and understanding of laws that regulate the pharmacy profession. Prerequisite: Fifth year standing. LEC.

PHPR 630. Drug Information/Biostatistics and Med Lit Evaluation. 3 Hours.
An introduction to the principles of drug information analysis, storage, and retrieval as well as biostatistics as applied to understanding and interpreting biomedical literature. Advantages and disadvantages of several commercial and manual drug information systems will be considered. The course includes practical experiences in drug information services. The biostatistical emphasis of the course will be on the application of statistical tests commonly used and the interpretation of their results. Prerequisite: Fifth year standing. LEC.

PHPR 635. Problems in Pharmacy Practice. 1-5 Hours.
A course designed for the study of special topics in pharmacy practice. A research paper will be required. Prerequisite: Consent of instructor. IND.

PHPR 646. Pharmacotherapy I. 4 Hours.
A course dealing with the clinical applications of drug knowledge to patient care. Disease and drug knowledge will be applied to the design and monitoring of therapeutic treatment plans for patients. Incorporates three credit hours of lecture and one credit hour of case studies and off-campus professional experience. Prerequisite: Successful completion of Pharmacy Practice II (PHAR 502). LEC.

PHPR 647. Pharmacotherapy II. 4 Hours.
A course dealing with the clinical applications of drug knowledge to patient care. Disease and drug knowledge will be applied to the design and monitoring of therapeutic treatment plans for patients. Incorporates three credit hours of lecture and one credit hour of case studies and off-campus professional experience. This course is graded A,B,C,F. Prerequisite: Fifth year standing and successful completion of Pharmacotherapy I, PHPR 646. LEC.

PHPR 648. Pharmacotherapy III. 4 Hours.
A course dealing with the clinical applications of drug knowledge to patient care. Disease and drug knowledge will be applied to the design and monitoring of therapeutic treatment plans for patients. Incorporates three credit hours of lecture and one credit hour of case studies and off-campus professional experience. This course is graded A,B,C,F. Prerequisite: Fifth year standing and successful completion of Pharmacotherapy II, PHPR 647 with a C or above. LEC.

PHPR 670. Clinical Assessment. 2 Hours.
This laboratory course will allow students to develop clinical assessment skills necessary in the provision of pharmaceutical care to patients with a variety of disease states. Students will combine physical assessment skills, patient counseling skills, and pharmacotherapy knowledge and apply this information to patient care related activities in various clinical settings. Students will apply their skills using various practice models that include medication therapy management, collaborative drug therapy management, and interprofessional healthcare teams. The lab component will require students to meet for one hour between 1:00 to 5:00 PM on either Monday, Tuesday, or Wednesdays. Prerequisite: Students must be admitted to the School of Pharmacy to enroll in this class. A detailed schedule of lab meeting dates and times will be provided in the syllabus. LAB.

PHPR 845. Professional Communications. 2 Hours.
A course designed to give the graduate student a practical experience in areas of professional communications such as administrative proposals, grants, letters, memos, poster presentations, and written papers. The course focuses on the different kinds of communications required to relate to other health care professionals. Prerequisite: Consent of instructor. LEC.

PHPR 850. Introduction to Pharmacoepidemiology. 3 Hours.
Pharmacoepidemiology is the application of the principles of epidemiology to the study of medications and their effects on health. Evaluating a drug's effects commences when a chemical entity becomes a drug candidate, intensifies through clinical trials, and continues after products reach the market. These studies are critical for supporting the proper use of medications in terms of efficacy, effectiveness, and cost-effectiveness. This course provides a broad introduction to the principles of pharmacoepidemiology with a focus on applications in the medical literature. LEC.

PHPR 855. Economic Evaluation of Health Care Programs and Services. 3 Hours.
The course will provide students with an overview and appraisal of the "state-of-the-art" in the evaluation of health care programs and services (with a special emphasis on pharmaceutical programs, services, and products). The purpose of the course is to provide the student with the tools to conduct economic rather than general evaluation of health care programs and services. There will be some discussion of theoretical concepts, but the major emphasis will be on practical methodological issues in economic evaluation of pharmaceutical programs. The course integrates the perspectives of pharmaceutical and health care technology assessment, managed care, outcomes research, and public health. The main topics covered in the course include: cost, cost-minimization, cost-effectiveness, cost-utility, and cost-benefit analyses. LEC.

PHPR 860. Seminar in Pharmacy Practice. 1 Hour.
Research reports, reviews, and/or presentations on the current status of various aspects of pharmacy practice. Prerequisite: Consent of instructor. LEC.

PHPR 865. Advanced Institutional Pharmacy Services. 3 Hours.
A course dealing with the planning, justification, implementation, management, and coordination of a progressive, comprehensive institutional pharmacy service. Seminar presentations and case studies are used to analyze recent advances and to apply data from the research literature. Prerequisite: Consent of instructor. LEC.

PHPR 875. Health Care Delivery Systems. 3 Hours.
A continuation of PHPR 865 dealing with the current status of health care delivery systems and the impact of changes in this area on pharmacy practice. Prerequisite: PHPR 865 and consent of instructor. LEC.

PHPR 885. Human Resource Management in Institutional Pharmacy Practice. 3 Hours.
A course dealing with recruitment, training, motivation, monitoring of performance, and disciplining of personnel. Seminars, case studies, and role playing are used to apply the information to specific human resource management situations in institutional pharmacy practice. Prerequisite: PHPR 865 and consent of instructor. LEC.

PHPR 899. Research in Pharmacy Practice. 1-6 Hours.
Original investigation in the area of pharmacy practice. Prerequisite: Consent of instructor. RSH.
Master of Science in Pharmacy Practice

Pharmacy Practice Graduate Program

The Department of Pharmacy practice furthers the mission of the School of Pharmacy by striving for excellence in teaching, research, scholarly activity, service, and patient care.

The faculty provide professional educational opportunities for undergraduate, graduate, and postgraduate students and practitioners to enable them to practice pharmaceutical care, adapt to changing professional roles, use new technologies, assume leadership roles in a dynamic health-care environment, and contribute new knowledge to the profession.

Graduate Admission

In addition to meeting the general requirements for admission to graduate studies, applicants are considered for admission if they are graduates of a school of pharmacy accredited by the Accreditation Council for Pharmaceutical Education (ACPE) (https://www.acpe-accredit.org) and are eligible for licensure as registered pharmacists by the Kansas State Board of Pharmacy (http://pharmacy.ks.gov). A Bachelor of Science degree or a Doctor of Pharmacy (Pharm.D.) degree with a major in pharmacy is required.

Submit your graduate application online (http://www.graduate.ku.edu). Send transcripts of all completed college and university course work and all other requested application materials to the department:

The University of Kansas
Department of Pharmacy Practice
2010 Becker Drive, Room 2001
Lawrence, KS 66047-1620

M.S. Degree Requirements

A minimum of 30 credit hours, with a majority of hours in pharmacy, is required for the degree. These courses may be selected from related fields after approval by the department. Examples are health-system pharmacy, clinical pharmacy, nuclear pharmacy, computer science, business administration, health policy and management, and related fields. An approved project, representing 6 to 9 credit hours of original research, is required. It may be in pharmaceutical sciences, clinical pharmacy, pharmacy practice, pharmacotherapy, or health-system pharmacy.

An accredited PGY1/PGY2 residency in Health-Systems Pharmacy Administration in an approved hospital is required of each student. Requirements for the residency program include eligibility for licensure as a pharmacist in Kansas. The student must complete the residency concurrently with the academic portion of the program. Upon satisfactory completion of the residency, the student receives a certificate of residency from the cooperating hospital. The length of the program is 2 years. For students who have previously completed a residency accredited by the American Society of Health-System Pharmacists (http://www.ashp.org), this part of the program may be waived on approval of the department.
Public Affairs Administration (in CLAS)

Bachelor of Arts and Bachelor of General Studies in Public Administration (p. 2344)
Minor in Public Administration (p. 2345)
Master of Public Administration (p. 2346)
Master of Public Administration and Juris Doctor (p. 2347)
Master of Public Administration and Master of Urban Planning (p. 2348)
Doctor of Philosophy in Public Administration (p. 2349)

Why study public affairs and administration?
The School of Public Affairs and Administration develops skilled leaders, innovators and problem solvers who are ready to confront pressing social and economic challenges at the local, state and national levels. Our graduates become public management practitioners who exemplify a deep commitment to ethical and professional public service administration within a wide variety of public and nonprofit sector professions.

The School of Public Affairs and Administration

The School of Public Affairs and Administration is ranked among the top five programs in the nation in public management administration by U.S. News and World Report.

Founded in 1948, and ranked top program in the nation in city management and urban policy since 1998, the M.P.A. program in city management and urban policy prepares students to assume management and leadership roles in local government. The School also provides a career track for working professionals who want to earn their MPA without a career interruption.

The Public Management Center (PMC), also under SPAA, offers educational programs to meet the leadership training needs for public service professionals. The PMC is the only agency in the state of Kansas that can teach the nationally-accredited Kansas Certified Public Manager® program.

Mission

The mission of the School of Public Affairs & Administration of the University of Kansas is to educate exceptional public professionals and generate thought leadership that provides solutions to the most pressing global and community challenges by advancing the public good, democratic values, and ethical public management practices.

Undergraduate Programs

A bachelor’s degree in public administration provides undergraduate students with the knowledge and skills needed for planning, implementing and evaluating public programs. As students learn to think critically and analytically about public policy, they will better understand the dynamics in their own communities and how to be more effective citizens and public officials.

Graduates of the program will be ready to work in settings like local and state government, nonprofit organizations and private sector businesses.

Graduate Programs

The department offers an M.P.A. degree and a Ph.D. degree. The M.P.A. offers two tracks.

- The Intern track M.P.A. is designed for students who have little or no public administration experience and are willing to commit to one year of full-time study and a second year in a full-time internship to prepare themselves for careers in city or county management.
- The Career track M.P.A. is designed for working professionals seeking to strengthen their leadership skills for careers in public service professions or advance in their current profession without a career interruption.
- The Ph.D. degree is designed primarily for students anticipating careers in research and teaching.

Graduate Certificates

Performance Management Graduate Certificate

This certificate is design for those individuals who wish to develop skill sets in analyzing and changing performance in public sector and nonprofit organizations.

Graduate Certificate in City and County Management

This certificate is design for those individuals who wish to develop skill sets in analyzing and changing performance in public sector and nonprofit organizations.

Courses

PUAD 177. First Year Seminar: _____. 3 Hours. SF GE11.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in public administration. May not contribute to major requirements in public administration. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status. LEC.

PUAD 330. Introduction to Public Administration. 3 Hours. S.
Introduction to administration, public policy and policy makings is the study of government workers, the organizations in which they work, how they are financed, and how government engages citizens to help form and maintain community. In various ways, the class sessions explore the three important issues of public administration: discretion, authority, and accountability. (Same as POLS 330.) Prerequisite: POLS 110. LEC.

PUAD 331. Introduction to Public Administration, Honors. 3 Hours. S.
Introduction to administration, public policy, and policy making, for honors students is the study of government workers, the organizations in which they work, how they are financed, and how government engages citizens to help form and maintain community. In various ways, the class sessions explore the three important issues of public administration: discretion, authority, and accountability. (Same as POLS 331.) Prerequisite: POLS 110. LEC.

PUAD 332. Quantitative Methods for Public Administration. 3 Hours. S.
Focuses on building the quantitative analysis skills of students in public administration. Students learn basic and intermediate statistics, and methods of data analysis and interpretation. Students gain exposure to the uses of data in public organizational settings. Prerequisite: Math 101 or equivalent placement. LEC.
PUAD 333. Hard Choices in Public Administration: ______. 3 Hours. 
GE3S / S.
Focuses on some of America’s most vexing public policy challenges and
emphasizes the political context of difficult choices. Course examines
models of decision-making and the process of policy analysis. Students
learn how to apply the tools of policy analysis to make policy judgments.
Prerequisite: PUAD 330 or PUAD 331. LEC.

PUAD 431. Bureaucracy, Public Administration, and the Private 
Sector. 3 Hours. S.
Examines the problems posed by behaviors within and by bureaucracies.
Provides students with a set of conceptual tools for understanding the
organizational environment in which policy analysts ply their profession
and the role of a manager within such organizations. Offers strategies for
the policy professional seeking to navigate large bureaucracies. Readings
and class discussions integrate theoretical analyses of organizations with
detailed case studies. Prerequisite: PUAD 330 or PUAD 331. LEC.

PUAD 432. Conducting the People’s Business Ethically. 3 Hours. 
AE51 / S.
Addresses the moral challenges facing leaders in the public and nonprofit
sectors. Examines the values and virtues important to sustained ethical
leadership, as well as strategies to build strong institutional cultures and
support ethical practices in institutions. Considers moral and political
theory by focusing on contemporary cases and issues. Students learn
how to identify moral issues in public life and public management.
There is a special focus on the integration of moral concerns into public
discussion in a manner that contributes to good policy and does not
polarize issues. This course considers moral and political theory by
focusing on contemporary cases and issues. Prerequisite: PUAD 330 or
PUAD 331. LEC.

PUAD 433. Metropolitics and Macroproblems: The American City 
in Local and Global Context. 3 Hours. S.
An interdisciplinary study of American cities, focusing on the rapidly
changing demographic, physical, political, social, and economic changes.
Sunbelt cities, edge cities, the rustbelt cities, planned and unplanned
suburban communities, as well as declining center cities and newly
revitalized downtowns are considered. The role of immigration and
migration in reshaping the urban environment, and the effects of
globalization are also examined. Prerequisite: PUAD 330 or PUAD 331. 
LEC.

PUAD 435. Generating, Allocating and Managing Public Resources. 3 
Hours. U.
This course is devoted to topics in public budgeting, finance and financial
management. These activities play a central role in public management.
The intent of this course is to understand the role these activities play
in local, state, and federal governments and to see how policy and
management are shaped and influenced by budgets, financial reports,
and tax policy. Prerequisite: PUAD 330 or PUAD 331. LEC.

PUAD 436. Managing People in Public Organizations. 3 Hours. U.
Effective human resources management is one of the key goals of
organizations in both the public and private sectors. This course focuses
on human resources management in a public sector context with
particular emphasis placed upon past, current, and future challenges in
the field. The course covers topics such as the recruitment, selection, and
compensation of public sector employees, as well as more contemporary
issues such as diversity management and public sector personnel reform.
Prerequisite: PUAD 330 or PUAD 331. LEC.

PUAD 494. Topics in Public in Administration: ______. 3 Hours. S.
An introductory study of selected topics in public affairs and
administration. Course may be repeated for credit if content varies.

Course may be offered in lecture or online format. Prerequisite: PUAD 
330 or PUAD 331. LEC.

PUAD 601. Crime and Punishment. 3 Hours. AE41 / S.
Examines the administration of justice and focuses on differential
and discriminatory treatment in policing, criminal prosecutions, trials,
sentencing, or imprisonment. Also considered are the basis and impact of
racial profiling, harassment, arbitrary detention, and abusive treatment of
members of racial and ethnic groups, immigrants, and/or other vulnerable
groups by law enforcement, and disparate treatment by prosecutors and
the courts. Prerequisite: PUAD 330 or PUAD 331. LEC.

PUAD 602. Diversity in Public Administration. 3 Hours. AE41 / S.
Analyzes diversity and leadership in public and private institutions along
ethic, racial, and gender lines and the challenges of the facilitation of
open dialogue on diversity. Examines the political, historical, social, and
economic reasons why Americans of different ethnic, racial, and gender
groups hold divergent views about major public policy areas, as well as
fundamental views about democratic participation. Prerequisite: PUAD 
330 or PUAD 331. LEC.

PUAD 603. Foundations of the Nonprofit Sector. 3 Hours. H/S.
This course provides an overview of the U.S. nonprofit sector, its history,
scope, diversity and its positioning among and between the private
and public sectors of the U.S. economy. The course explores the legal
framework under which nonprofit organizations operate and are regulated.
Economic, political, social, organizational and giving theories of the sector
are reviewed in order to understand the sectors existence, roles and
activities with particular attention to philanthropy and voluntarism. Distinct
contributions to society as well as contemporary challenges faced by the
sector are examined. Prerequisite: PUAD 330, or POLS 110, or MGMT
305, or a PUAD master's core course, or consent of instructor. Junior
status or above is also required. LEC.

PUAD 604. Resource Development and Management in Nonprofit 
Organizations. 3 Hours. H.
This course provides an overview of the broad range of activities relevant
to acquisition, management and utilization of resources in nonprofit
organizations. The course identifies the primary strategies through which
resources are generated with emphasis on grantwriting, fundraising,
social entrepreneurship, and public/private partnerships. Development of
organizational identity and management of public relations is examined
in relation to resource and relationship development. Strategies for
management of resources to ensure long-term benefit and sustainability
are explored. Prerequisite: PUAD 603. LEC.

PUAD 605. Managing Nonprofit Relationships. 3 Hours. H.
This course considers the set of relationships that nonprofit leaders must
balance within the organization and beyond organizational boundaries.
Both internal relationships (with staff, volunteers, and board members)
and external relationships (with stakeholders, other organizations, and
the community at large) are critical to mission accomplishment. This
course provides students with the resources necessary to understand the
challenges and opportunities related to building and LEC.

Values. 3 Hours. H.
This course examines the role of the nonprofit sector in society by posing
broad questions about why nonprofit organizations are held accountable,
to whom they are accountable, and detailing how organizations can
satisfy accountability demands. The course investigates the public role of
the nonprofit sector in society, identifies the stakeholders that are integral
to an organization’s mission, and describes and critiques the financial and
evaluation tools that nonprofits can use to ensure their social viability.
Prerequisite: PUAD 603. LEC.
PUAD 607. Introduction to Project Management. 3 Hours. H.
An exploration of the technical aspects of project management and the human aspects of project leadership. The course integrates conceptual approaches with practical applications of knowledge and skill sets. The course addresses the Project Management Body of Knowledge (PMBOK--as created by the Project Management Institute) and project leadership competencies including leading, communicating, negotiating, problem solving, and influencing. Prerequisite: Junior standing. LEC.

PUAD 608. Collaboration in Public Administration. 3 Hours. S.
Managers must work effectively across organizational and sector boundaries to solve problems and produce public value. This course considers the forces contributing to the need for collaborative governance, changing management tasks and competencies, and how to address key collaborative challenges. Prerequisite: PUAD 330 or POLS 330, or permission of the instructor. LEC.

PUAD 639. Concepts of Civil Society. 3 Hours. U.
Concepts of community, social capital, and civil capacity building, and their relations to effective community functioning, democratic politics, and administrative expertise. LEC.

PUAD 641. Public Service Leadership. 3 Hours. U.
Concepts of leadership in community, political, and administrative settings. These settings include government and all non-business organizations (e.g. certain for-profit organizations). LEC.

PUAD 660. Organizations and Management I. 3 Hours. U.
An exploration of management in the context of public organizations. Management is explored at the individual, group and organizational level including conflict resolution, problem-solving, planning and legal aspects of organizations. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Permission of instructor. LEC.

PUAD 661. Organizations and Management II. 3 Hours. U.
A continuation of PUAD 660. The context for leading public organizations is explored through knowledge management, collaboration, innovation, process improvement and leadership succession. Graded on a satisfactory/unsatisfactory basis. Prerequisite: PUAD 660, and permission of instructor. LEC.

PUAD 691. Internship in Public Service. 1-6 Hours. AE61 / U.
Designed to provide public administration students an applied learning experience in either a public or nonprofit organization. Open to majors in Public Administration only. Prerequisite: One of the following: PUAD 330, 331, PUAD 332, PUAD 333, and consent of instructor required. FLD.

PUAD 692. Research Experience in Public Administration. 1-6 Hours. U.
Designed for advanced public administration students. Students learn research skills by working one-on-one with a faculty member to assist in his/her program of research. Open to majors in Public Administration only. Students are required to complete a final project or presentation, through advising and consultation with the designated faculty member. Prerequisite: One of the following: PUAD 330, 331, PUAD 332, PUAD 333 and consent of instructor required. LEC.

PUAD 693. Directed Readings. 1-3 Hours. U.
For advanced undergraduate students who wish to study a specific topic of interest that is not covered in the curriculum. Each student must complete a proposal outlining his or her topic request and submit to the Undergraduate Advisor. Intended for students majoring in Public Administration. Prerequisite: One of the following: PUAD 330, 331, PUAD 332, PUAD 333, and consent of instructor. IND.

PUAD 694. Topics in Public Administration: ______. 3 Hours. U.
Study of selected topics in public administration. Course may be repeated for credit if content varies. Course may be offered in lecture or online format. Prerequisite: PUAD 330 or PUAD 331. LEC.

PUAD 824. Public Policy and Administration. 3 Hours.
An exploration of the ways in which public policy is made in the United States, focusing on the role of the administrator at each stage of the policy process: formulation, implementation, and evaluation. Various theories of policy-making with application to specific areas of public policy will be examined. LEC.

PUAD 825. Urban Policy and Administration. 3 Hours.
This course explores the development, implementation and evaluation of public policy in the local government context. It examines a variety of policy tools used to address urban problems and applies theories of the policy process, intergovernmental relations, and institutions to municipal governance. (Same as PUAD 825.) LEC.

PUAD 826. Public Policy and Administration of State Government. 3 Hours.
An examination of political and administrative aspects of state government focusing on legislative and executive branches of government. LEC.

PUAD 827. Health Care Policy and Administration. 3 Hours.
A seminar designed to explore the development of public health policy in the United States. Particular attention will be given to (1) the development of public institutions and policy goals; (2) current policy problems such as expenditure-cost controls, prospective reimbursement, utilization review, access, and public and private investment planning; and (3) administrative problems in the current health care system. (Same as HPM 837.) LEC.

PUAD 828. Nonprofit Management and Policy. 3 Hours.
This course focuses on the economic, social, and legal foundations of the nonprofit sector. Nonprofits are examined in the context of a three-sector economy, with emphasis on the ways in which nonprofits compensate for market failures and government failures. The course examines government-nonprofit relations in the modern welfare and offers an in-depth examination of the health, education, and welfare functions as performed by nonprofits. This course also provides exposure to selected topics in nonprofit management such as grant writing, board relations, advocacy, fundraising and volunteer management. LEC.

PUAD 830. Administrative Ethics. 3 Hours.
A survey of ethical issues faced by public administrators. Special attention will be given to ethical problems arising within hierarchical organizations and to the ethical implications of particular public policies. LEC.

PUAD 831. Public Administration Practicum. 1 Hour.
Exposes students to day-to-day operational facets of public management through workshops, speakers, exercises. LEC.

PUAD 832. Organizational Theory. 3 Hours.
An introductory theory course designed to develop an understanding about organizations, their environments, and the political subsystems in which they exist. LEC.

PUAD 833. Administrative Behavior. 3 Hours.
An examination of individual and group behavior within organizations, focusing on motivation, leadership, conflict and conflict resolution, group dynamics and communication. LEC.

PUAD 834. Human Resource Management. 3 Hours.
This course presents the context and practice of effective human resource management, with emphasis on the political, legal, historical, and ethical dimensions of public employment. This course considers the functions of workforce management, including: 1) planning of work and the allocation of labor to that work, 2) acquisition of employees and
their competencies, knowledge, skills, and abilities, 3) development of employees to channel, improve and create new knowledge, skills, and abilities, and 4) maintaining the working relationship between employee and employer. Students will apply workforce management theories and techniques to contemporary organizational challenges and investigate the tensions inherent to balancing competing values (such as: responsiveness/neutrality and efficiency/equity) and meeting conflicting demands of organizational stakeholders and society. LEC.

PUAD 835. State and Local Public Finance. 3 Hours.
Focuses on the tax, spending, and debt practices of state and local governments. Drawing on the tools of positive and normative economic analysis, the course explores the implications of these activities on broader economic outcomes, including private allocation of resources and the distribution of wealth. LEC.

PUAD 836. Introduction to Quantitative Methods. 4 Hours.
Introduces quantitative approaches to examine public management and public policy decisions. Concepts of research design, probability, and inferential statistics are covered. LEC.

PUAD 837. Budgeting and Resource Allocation. 3 Hours.
Examines the practices and the political, economic, and organizational contexts of public and nonprofit budgeting, tools of financial analysis, and ethics of financial management. LEC.

PUAD 838. Urban Service Delivery. 3 Hours.
Focuses on organizational arrangements for the provision of basic urban services and the character of service delivery politics. Methods for evaluating the efficiency and responsiveness of alternative organizational arrangements are treated. LEC.

PUAD 839. Topics in Public Administration: ______. 3 Hours.
Study of selected topics in public administration. LEC.

PUAD 840. Theory of Public Administration. 3 Hours.
Survey of the development of ideas about public administration among public officials and research investigators. Emphasis on basic concepts, research reports, and theoretical treatises on the nature of public administration. LEC.

PUAD 841. The Role, Context, and Ethics of Public Administration in American Society. 3 Hours.
Provides students with an overview of the social context of public administration with an emphasis on political issues, intellectual history, ethics, and the tensions between democracy and bureaucracy. LEC.

PUAD 842. Law and Public Management. 3 Hours.
Course investigates major concepts that make up the legal environment of public administration. The accepted uses and procedures of the field, relationships among courts, agencies, the legislature, and basic legal research are examined. LEC.

PUAD 843. Constitutional Foundations of Public Administration. 3 Hours.
This course provides a grounding in the constitutional premises of public administration including executive, legislative, and judicial powers, and federalism, and those issues associated with the development of economic institutions and processes such as taxation, employment regulation, and commerce controls. LEC.

PUAD 844. Advanced Seminar in State and Local Budgeting. 3 Hours.
This course studies the theories behind selected topics in public budgeting and compares the theories with the actual practice of budgeting in the State of Kansas and its communities. LEC.

PUAD 845. Organizational Analysis and Public Management. 3 Hours.
Explores concepts and practices in organization behavior and management theory as they apply to public organizations. Emphasis is placed on understanding the dynamics of individuals, groups, and teams within organizations, dynamics associated with organizational structures, accountability, and culture and dynamics of risk in leadership, collaboration, and contracting. LEC.

PUAD 846. Kansas and Its Government. 3 Hours.
This course is designed to offer students the opportunity to obtain a comprehensive overview of the culture, history, economy, and geography of Kansas along with the review of state and local government infrastructure. The review of governments will include the financing of governments in Kansas. LEC.

PUAD 847. Legislative Process. 3 Hours.
This course is designed to acquaint students with the workings of the policy process at the level of state government. Its focus will give students an understanding of the political process to enable them to function more effectively in state policy development and implementation. Prerequisite: PUAD 824, PUAD 825, PUAD 826 or PUAD 827. LEC.

PUAD 848. Advanced Management Practices in State Government. 3 Hours.
This course offers the student an opportunity to enhance skills developed in PUAD 826 in an experiential learning environment that simulates actual management practice. Complex cases will be rank ordered and resolved on a work schedule developed by each work group. Groups will work simultaneously on two or more cases at all times. Prerequisite: PUAD 826. LEC.

PUAD 849. Law, Courts, and Public Policy. 3 Hours.
This course provides an overview of the role of law, litigation, and courts in the public policy process, with an emphasis on bureaucratic institutions. The course covers the main theories and empirical research on the policy effects of litigation and intervention, with a particular focus on civil rights in the areas of employment, policing, welfare, prisons, and environmental policy. (Same as POLS 849.) Prerequisite: Graduate standing or consent of instructor. LEC.

PUAD 850. Intergovernmental Relations. 3 Hours.
This course focuses on the fiscal and administrative relationships among the three levels of government - federal, state, and local - in the United States. A number of topics will be examined, including a history of intergovernmental relations, the political, constitutional, and legal foundations of the intergovernmental system, and intergovernmental fiscal policy. The impact of the intergovernmental system will be assessed from the perspective of specific areas and intergovernmental programs. LEC.

PUAD 851. Infra-Structure Management. 3 Hours.
A survey of land-use, infra-structure, and technology issues in municipalities. LEC.

PUAD 852. Comparative Public Policy and Administration. 3 Hours.
This seminar examines the application of theories in public administration, public management, and public policy in international and comparative contexts. Particular attention is given to how governments and publics are connected by way of intergovernmental strategies, governance, and differing political and administrative arrangements. LEC.

PUAD 853. Policy Analysis and Evaluation. 3 Hours.
This course will introduce students to the conceptual foundations and applied techniques associated with identifying, describing, and seeking solutions to public policy problems (policy analysis) and evaluating the performance of public programs and organizations (program evaluation). Basic microeconomic theory is introduced. LEC.
PUAD 854. Innovation and Organizational Change. 3 Hours.
This course will examine theories of innovation and organizational change as applied to public organizations. Particular emphasis will be placed on the concepts of innovation in bureaucratic organizations, on the process of successful change in organizations, and on leadership and employees' roles. LEC.

PUAD 855. Financial Management for Public and Not-for-Profit Organizations. 3 Hours.
Financial management focuses on the use of financial information for decision making and evaluation. This course will rely on fundamental accounting concepts as they relate to the basic financial statements of government and not-for-profit organizations. Time will also be spent on financial management practices (e.g. cash management, debt management, etc.) and financial condition analysis. Material presented in this course expands on the foundational material covered in PUAD 837. Prerequisite: PUAD 837 or permission from the instructor. LEC.

PUAD 856. Management and Information Technology. 3 Hours.
An introduction to the concepts of information policy and management of technology within governmental organizations. The course covers the effects of technology on government and society as well as information policy (privacy, security and access) and their importance to democracy. The course also includes a leadership perspective on planning, funding, and implementation of technology systems in governmental organizations as well as the role of Chief Information Officer. LEC.

PUAD 857. Performance Management and Governance. 3 Hours.
This course examines the practice and governance challenges of performance management and budgeting in the public sector. Topics covered in this course include: a) the governance context of performance measurement and management; b) the historical and theoretical foundation of performance measurement and management; c) the global trend of performance-oriented reforms; d) the practice and politics of performance measurement and management; and e) governance and ethical issues in managing for results. LEC.

PUAD 858. Performance Audit. 3 Hours.
This course examines the practice of performance audit at the national, state, and local levels. Topics covered in the course include: a) the concept of performance audit and the roles of auditors in performance management; b) performance audit systems and standards at the national, state and local levels; c) performance audit methodologies and techniques; d) the establishment of audit criteria; e) the concept and practice of risk and vulnerability analysis; f) the reporting and communication of performance audit results. LEC.

PUAD 859. Service Management. 3 Hours.
This course provides an introduction to service management in the public sector and will focus on providing students with the conceptual understanding and skills to design, promote, manage, and deliver public services. The course will integrate concepts of service management with quality assurance, business process analysis, and project management. Through this course, students will develop a better understanding of methods for improving responsiveness and accountability to organizational goals and mission. LEC.

PUAD 892. Public Administration Internship. 3 Hours.
A part-time supervised professional work experience designed to provide students the knowledge, background, and practical experience in public service. A written summary of the experience including a job description, projects the student, and a reflective statement on integrating the internship with theoretical issues regarding public administration. This course brings theory and practice together. Graded on a satisfactory/unsatisfactory basis. FLD.

PUAD 893. Directed Readings. 1-3 Hours.
Designed to meet the needs of advanced students whose study in public administration cannot be met with current course work. RSH.

PUAD 894. Professional Development Seminar I. 3 Hours.
Open only to precareer students with internships, this intensive seminar is designed around issues interns confront in their working relationships. Emphasis is placed on the transition of the student from an academic environment to a professional work relationship. Class sessions deal with issues like employee socialization, power and trust, and administrative change. Graded on a satisfactory/unsatisfactory basis. FLD.

PUAD 895. Professional Development Seminar II. 3 Hours.
Continuation of PUAD 894. Graded on a satisfactory/unsatisfactory basis. FLD.

PUAD 897. Public Administration Contemporary Issues and Competency Assessment. 3 Hours.
This course exposes students to the contemporary issues in public management and analysis of competencies for public management in four theme areas. Students will participate in discussions of issues and in three assessments of their preparation to lead public organizations. Students will complete the MPA Final Essay which focuses on integration of course and work experience in relation to the values theme of the MPA program. Graded on a satisfactory/unsatisfactory basis. LAB.

PUAD 898. Leadership, Professionalism, and Citizen Engagement. 3 Hours.
This course explores connections between facilitative political and administrative leadership, professional expertise, and citizen engagement. It will explore politics and the political arena; administrative/technical expertise and the relationship between the arenas of politics and administration. It will present the concept of citizen engagement and adaptive work, complicating as well as enriching public policy making and implementation. LEC.

PUAD 930. Research Seminar in Public Administration and Democracy. 3 Hours.
This course focuses on the democratic context of public administration. Topics could include how democracy shapes the practice of public administration; the functioning of public administration in a constitutional democracy; issues relating to control and discretion of public administrators; citizenship and representative bureaucracy; theories of bureaucratic values such as equity, justice and efficiency, ethics and accountability; theories of institutions. SEM.

PUAD 931. Research Seminar in Public Management. 3 Hours.
This course, on the topic which increasingly is approached as an interdisciplinary field, focuses on the management of public and non-profit agencies. Topics could include: the nature of public agencies and the roles of public executives, managers, and professionals; distinctions between public, private, and non-profit agencies in America and internationally; creating and managing organizational networks; leadership; work motivation; and the ethics of decision-making. SEM.

PUAD 932. Seminar in the Intellectual History of Public Administration. 3 Hours.
This course will analyze the intellectual currents that undergird the theories and concepts in public administration. There are three primary perspectives crosscutting the topics. They are historical, cultural and analytical. SEM.

PUAD 934. Research Methods in Public Administration. 3 Hours.
The course examines issues of research and epistemology with an emphasis on connecting theory and research and doing research in field settings. RSH.
PUAD 935. Advanced Quantitative Methods for Public Administration. 3 Hours.
This seminar will assist students to develop a thorough competence in both theory and application of multivariate statistical models of the types that are commonly used to study questions of organization and policy in the public sector. These will include inference for the general linear regression model under a wide variety of specifications, as well as a consideration of path models and systems of simultaneous equations. The principal goal of this course is to strengthen the ability of doctoral students in public administration to work methodologically as independent scholars using relatively advanced designs and technique in their work. SEM.

PUAD 936. Policy Analysis and Program Evaluation. 3 Hours.
This course examines the theoretical foundations and analytical components of policy analysis and program evaluation, common tools for assessing alternative courses of public action and program effectiveness. This examination will include a review and critique of common quantitative and qualitative approaches, including cost-benefit analysis, cost-effectiveness analysis, and quasi-experimental design. LEC.

PUAD 937. Qualitative Methods in Public Administration. 3 Hours.
This course examines the concepts and practices of qualitative research. The focus will be on field research and the collection of “textual data” through observation, interviewing, and documents. The course will also examine the interpretation and analysis of qualitative data and how to present qualitative findings. RSH.

PUAD 939. Topics in Public Administration: _____. 1-3 Hours.
A study of selective topics in public administration. Course may be taken more than once. LEC.

PUAD 943. Constitutional Foundations of Public Administration. 3 Hours.
This course provides grounding in the constitutional premises of public administration including executive, legislative, and judicial powers, and federalism, and those issues associated with the development of economic institutions and processes such as taxation, employment regulation, and commerce controls. LEC.

PUAD 949. Law, Courts, and Public Policy. 3 Hours.
This course provides an in-depth analysis of the role of law, litigation, and courts in the public policy process, with an emphasis on bureaucratic institutions. The course covers the main theories and empirical research on the policy effects of litigation and intervention, with a particular focus on civil rights in the areas of employment, policing, welfare, prisons, and environmental policy. As part of the course requirements, students will conduct original empirical research. LEC.

PUAD 990. Research Practicum in Public Policy and Administration. 3 Hours.
This course will provide students with an opportunity to conduct applied research in a field setting with faculty guidance. May be pursued as an independent study or as a regularly scheduled class with a group of students. Prerequisite: PUAD 934 and PUAD 935. RSH.

PUAD 998. Directed Reading on Public Administration. 1-6 Hours.
Designed to meet the needs of graduate students whose study in public administration cannot be met with present course. Prerequisite: consent of instructor. RSH.

PUAD 999. Dissertation. 1-15 Hours.
Enrollment for writing doctoral dissertations. Graded on a satisfactory/unsatisfactory basis. THE.

Bachelor of Arts and Bachelor of General Studies in Public Administration

Why study public affairs and administration?
Our programs prepare leaders and build professionalism in the public and nonprofit sectors and link KU resources to the challenges of public management. We produce skilled leaders, innovators, and problem-solvers, ready to confront pressing social and economic challenges at the local, state, and national levels.

Since 1998, U.S. News & World Report has ranked the M.P.A. degree program in city management and urban policy first in the nation and the school is ranked fifth in public management.

First-and Second-Year Preparation

KU Edwards Campus
The undergraduate program in public administration is offered in its entirety only at the KU Edwards Campus (http://edwardscampus.ku.edu), 12600 Quivira Rd., Overland Park, KS 66213. This program is designed for students who have earned an associate’s degree or equivalent hours and wish to complete the upper-level courses necessary for a bachelor’s degree.

Public Administration Program
The major accommodates both traditional and nontraditional students. Public administration offers students the necessary knowledge and skills for planning, implementing, and evaluating public programs. Students will be able to work in such settings as local and state government, nonprofit organizations, and private sector businesses.

Students fulfill their first-year and sophomore hours through general education requirements. Students are encouraged, but not required to take POLS 110 as part of their general education hours. Students considering the major should contact the CLAS undergraduate advisor on the Edwards Campus, Dan Mueller, dmueller@ku.edu, 864-8659 (from Lawrence) or 913-897-8659 (outside of Lawrence) for advising on general education requirements leading up to the major.

Requirements for the B.A. or B.G.S. Major

Public Administration Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUAD 330</td>
<td>Introduction to Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>or PUAD 331</td>
<td>Introduction to Public Administration, Honors</td>
<td></td>
</tr>
<tr>
<td>PUAD 332</td>
<td>Quantitative Methods for Public Administration (PSYC 210 or MATH 365 and their equivalents may be substituted for this course requirement but students would need to complete another jr/sr PUAD elective for the PUAD major.)</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 333</td>
<td>Hard Choices in Public Administration: _____.</td>
<td>3</td>
</tr>
</tbody>
</table>

Public Administration Required Electives (18)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUAD 431</td>
<td>Bureaucracy, Public Administration, and the Private Sector</td>
<td>3</td>
</tr>
</tbody>
</table>

Majors must complete 6 courses (18 hours) from the following:
The University of Kansas

[443x750]PUAD 432 Conducting the People’s Business Ethically
PUAD 433 Metropolitics and Macroproblems: The American City in Local and Global Context
PUAD 435 Generating, Allocating and Managing Public Resources
PUAD 436 Managing People in Public Organizations
PUAD 601 Crime and Punishment
PUAD 602 Diversity in Public Administration
PUAD 603 Foundations of the Nonprofit Sector
PUAD 604 Resource Development and Management in Nonprofit Organizations
PUAD 605 Managing Nonprofit Relationships
PUAD 606 Nonprofit Accountability: Public Needs and Public Values
PUAD 639 Concepts of Civil Society
PUAD 691 Internship in Public Service
PUAD 692 Research Experience in Public Administration
PUAD 693 Directed Readings
PUAD 694 Topics in Public Administration: _____

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 27 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 24 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

A sample 4-year plan for the BA degree in Public Administration is available by using the left-side navigation, or by clicking here (http://catalog.ku.edu/public-affairs-administration/ba-bgs/ba-public-administration).

A sample 4-year plan for the BGS degree in Public Administration will be coming soon.

**Minor in Public Administration**

Why study public affairs and administration?

The School of Public Affairs and Administration also offers a minor. All coursework related to the minor is offered at the KU Edwards Campus in Overland Park, Kansas, although PUAD 330/331 is also offered in Lawrence. The minor requires 18 hours of PUAD coursework. Six of these credits will consist of required core coursework, and the additional twelve will consist of elective PUAD courses.

Requirements for the Minor

KU Edwards Campus

All minor course work is offered on the KU Edwards Campus (http://edwardscampus.ku.edu), although PUAD 330/PUAD 331 can be taken in Lawrence.

**Public Administration Minor Core Courses (6)**

Minors must complete a course in each of the following areas:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUAD 330</td>
<td>Introduction to Public Administration</td>
</tr>
<tr>
<td>or PUAD 331</td>
<td>Introduction to Public Administration, Honors</td>
</tr>
<tr>
<td>PUAD 333</td>
<td>Hard Choices in Public Administration: _____</td>
</tr>
</tbody>
</table>

**Public Administration Required Electives (12)**

Minors must complete 4 courses (12 hours) from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUAD 431</td>
<td>Bureaucracy, Public Administration, and the Private Sector</td>
</tr>
<tr>
<td>PUAD 432</td>
<td>Conducting the People’s Business Ethically</td>
</tr>
<tr>
<td>PUAD 433</td>
<td>Metropolitics and Macroproblems: The American City in Local and Global Context</td>
</tr>
<tr>
<td>PUAD 435</td>
<td>Generating, Allocating and Managing Public Resources</td>
</tr>
<tr>
<td>PUAD 436</td>
<td>Managing People in Public Organizations</td>
</tr>
<tr>
<td>PUAD 601</td>
<td>Crime and Punishment</td>
</tr>
<tr>
<td>PUAD 602</td>
<td>Diversity in Public Administration</td>
</tr>
<tr>
<td>PUAD 603</td>
<td>Foundations of the Nonprofit Sector</td>
</tr>
<tr>
<td>PUAD 604</td>
<td>Resource Development and Management in Nonprofit Organizations</td>
</tr>
<tr>
<td>PUAD 605</td>
<td>Managing Nonprofit Relationships</td>
</tr>
<tr>
<td>PUAD 606</td>
<td>Nonprofit Accountability: Public Needs and Public Values</td>
</tr>
<tr>
<td>PUAD 639</td>
<td>Concepts of Civil Society</td>
</tr>
<tr>
<td>PUAD 691</td>
<td>Internship in Public Service</td>
</tr>
<tr>
<td>PUAD 692</td>
<td>Research Experience in Public Administration</td>
</tr>
<tr>
<td>PUAD 693</td>
<td>Directed Readings</td>
</tr>
<tr>
<td>PUAD 694</td>
<td>Topics in Public Administration: _____</td>
</tr>
</tbody>
</table>

**Minor Hours & Minor GPA**

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

**Minor Hours**
Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**
Satisfied by a minimum of 9 hours of KU resident credit in the minor.

**Minor Junior/Senior Hours**
Satisfied by a minimum of 18 hours from junior/senior courses (300+) in the minor.

**Minor Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the minor. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).
Master of Public Administration

Why study public affairs and administration?

Our programs prepare leaders and build professionalism in the public and nonprofit sectors and link KU resources to the challenges of public management. We produce skilled leaders, innovators, and problem-solvers, ready to confront pressing social and economic challenges at the local, state, and national levels.

Since 1998, U.S. News & World Report has ranked the M.P.A. degree program in city management and urban policy first in the nation and the school is ranked fifth in public management.

M.P.A. Admission

The academic prerequisites for regular admission to the M.P.A. program are

1. Completion of a bachelor’s degree, preferably with a background in the social sciences, including basic college algebra and statistics courses.
2. A grade-point average of B (3.0 on a 4.0 scale) for all previous university or college work (in certain circumstances, when the GPA is slightly below 3.0, other factors, such as strong Graduate Record Examination scores or exceptional letters of recommendation may be considered).

Admission is competitive and limited. For all applicants, a completed application includes

1. Online Graduate Studies application (http://www.graduate.ku.edu).
2. A nonrefundable application fee, submitted online with the application form. For domestic applicants, the application fee is $55; for international applicants, the application fee is $65.
3. 1 official transcript from the degree-granting college or university and any post-graduate college or university attended.
4. 3 letters of recommendation. If possible, at least 1 should be an academic reference. The MPA reference form, available through the website (https://kupa.drupal.ku.edu/admissions-intern-option), must be submitted with each letter.
5. A 3- to 5-page essay describing your background and career goals and clearly indicating how the M.P.A. degree fits into those goals and addressing any deficiencies in your academic preparation.
6. A current résumé.
7. A writing sample that is at least 5 pages long. It should be a well-cited work in which you critically analyze (not just summarize) an issue.
8. Graduate Record Examination scores (General test only — verbal, analytical, and quantitative). Not required, but recommended for students who received their bachelor’s degree more than 3 years prior to the time of admission.

Additional Requirements for Intern-option Applicants:

• Additionally, an M.P.A. alum or faculty member may be assigned to interview you. That person’s comments are placed in and considered a part of your application packet.

Additional Requirements for International Applicants:

• Graduate Record Examination scores (General test only — verbal, analytical, and quantitative). For reporting GRE scores to the KU School of Public Affairs and Administration, the institution code is 6871 and the department code is 4801.
• An official Test of English as a Foreign Language score report. Please note that any international students admitted to a KU program must also be tested by the Applied English Center (http://www.aec.ku.edu) upon arrival, regardless of TOEFL score.

Deadlines

Applications for intern-option applicants must be received by February 1.

Applications for career-option applicants: Deadlines are May 1 and June 15 for fall admission and November 1 for spring admission. Note: No preference is given to applications received by the earlier deadlines. We offer the earlier dates to accommodate applicants who need an earlier decision for planning purposes.

International students: The deadline for international students is February 1.

Submit your graduate application online (http://www.graduate.ku.edu). Send all other requested application materials to

The University of Kansas
School of Public Affairs and Administration
Attn: M.P.A. Admissions
4060 Wescoe Hall
1445 Jayhawk Blvd.
Lawrence, KS 66045-7594

or via email to: paddept@ku.edu

Campuses

The M.P.A. degree program is also offered at the following location:

KU Edwards Campus

KU offers a variety of graduate and undergraduate programs on the KU Edwards Campus in Overland Park, Kansas. The Edwards Campus offers late-afternoon and evening classes, catering to working professionals. For more information, call the Edwards Campus at 864-8400 from Lawrence or 913-897-8400 from other locations.

Topeka, Kansas

Each semester, select courses are offered at the Brown v. Board of Education National Historic Site in Topeka, Kansas.

Master of Public Administration Degree

The School of Public Affairs and Administration is home to the Edwin O. Stene Graduate Program in Public Administration and offers a Master of Public Administration degree. The Edwin O. Stene Master’s program is one of the oldest and most respected programs in the United States, with our local government leadership program dating to 1948. Since 1998, our tradition of excellence in educating students at the masters’ level has been recognized by U.S. News and World Report with a #1 ranking in city management and urban policy. The MPA degree may be obtained
Master of Public Administration and Juris Doctor

M.P.A.-J.D. Combined Program

The joint degree program is designed for the student who intends to combine career preparation in law and public administration. Examples of career objectives for this degree are the practice of law in communities (for example, a city attorney, who may be called upon to perform legal services for a municipality) and for city managers (who may need to deal with legal questions and interact with legal professionals). The program combines into 4 years the normal 3-year Juris Doctor (p. 768) program offered by the School of Law (http://www.law.ku.edu) and the 2-year M.P.A. program offered by the School of Public Affairs and Administration (http://www2.ku.edu/%7Ekupa). Students must complete 116 total credit hours: 78 credit hours in the School of Law (42 required and 36 elective), 26 hours in the School of Public Affairs and Administration, and 12 hours of electives of which only 3 hours may be law courses.

Of the 25 required hours in public administration, 6 hours are earned during the internship in the fourth year. The internship may not be taken concurrently with course work. At the conclusion of the internship year, each candidate must successfully pass a final written examination administered by public administration. The J.D. degree is awarded at the completion of the total required credit hours other than those associated with the internship. The M.P.A. degree is awarded upon successful completion of the internship and final examination. All course work counted toward any master’s degree requires a B average for the award of the degree. Specifically, students should understand that if they elect 6 or fewer hours of law requirements, the grades received in those law courses are incorporated into the M.P.A. grade-point average, which must be 3.0 for the award of the M.P.A.

For admission a student must meet requirements of both programs. Dual admission requires submitting separate sets of application materials as required by the respective programs. The M.P.A./J.D. program is open to those who have earned baccalaureate degrees and whose undergraduate academic records indicate that they have the capacity to complete these programs.

Since the total course work, excluding the internship, is 109 hours, students pursuing the joint degree should plan to enroll in course work for 2, and in some instances 3, summers.

M.P.A. Admission

The academic prerequisites for regular admission to the M.P.A. program are

1. Completion of a bachelor’s degree, preferably with a background in the social sciences, including basic college algebra and statistics courses.
2. A grade-point average of B (3.0 on a 4.0 scale) for all previous university or college work (in certain circumstances, when the GPA is slightly below 3.0, other factors, such as strong Graduate Record Examination scores or exceptional letters of recommendation may be considered).

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5. A 3- to 5-page essay describing your background and career goals and clearly indicating how the M.P.A. degree fits into those goals and addressing any deficiencies in your academic preparation.

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Lawrence, KS 66045-7594

or via email to: padept@ku.edu

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Master of Public Administration and Master of Urban Planning

M.P.A.-M.U.P. Combined Program

This program is designed for the student with career goals that center on assuming administrative and management responsibilities in urban planning and urban affairs. It combines into 3 years (excluding the 1-year internship required for the M.P.A. program) the normal course work required for the 2-year Master of Urban Planning (p. 99) degree and the 2-year M.P.A. degree. The program offers students experience not only in public policy management, but also in management with particular expertise in urban problem resolution.

A student must meet admission requirements of both programs. Dual admission requires submitting separate sets of application materials as required by the respective programs. The M.P.A./M.U.P. program is open to those who have earned baccalaureate degrees and whose undergraduate academic records indicate that they have the capacity to complete these graduate programs.

Contact the School of Public Affairs and Administration (http://www2.ku.edu/%7Ekupa) or the Department of Urban Planning (http://urbanplanning.ku.edu) for more information.

M.P.A. Admission

The academic prerequisites for regular admission to the M.P.A. program are

1. Completion of a bachelor’s degree, preferably with a background in the social sciences, including basic college algebra and statistics courses.

2. A grade-point average of B (3.0 on a 4.0 scale) for all previous university or college work (in certain circumstances, when the GPA is slightly below 3.0, other factors, such as strong Graduate Record Examination scores or exceptional letters of recommendation may be considered).

Admission is competitive and limited. For all applicants, a completed application includes
1. Online Graduate Studies application (http://www.graduate.ku.edu).
2. A nonrefundable application fee, submitted online with the application form. For domestic applicants, the application fee is $55; for international applicants, the application fee is $65.
3. 1 official transcript from the degree-granting college or university and any post-graduate college or university attended.
4. 3 letters of recommendation. If possible, at least 1 should be an academic reference. The MPA reference form, available through the website (https://kupa.drupal.ku.edu/admissions-intern-option), must be submitted with each letter.
5. A 3- to 5-page essay describing your background and career goals and clearly indicating how the M.P.A. degree fits into those goals and addressing any deficiencies in your academic preparation.
6. A current résumé.
7. A writing sample that is at least 5 pages long. It should be a well-cited work in which you critically analyze (not just summarize) an issue.
8. Graduate Record Examination scores (General test only — verbal, analytical, and quantitative). Not required, but recommended for students who received their bachelor’s degree more than 3 years prior to the time of admission.

Additional Requirements for Intern-option Applicants:
• Additionally, an M.P.A. alum or faculty member may be assigned to interview you. That person's comments are placed in and considered a part of your application packet.

Additional Requirements for International Applicants:
• Graduate Record Examination scores (General test only — verbal, analytical, and quantitative). For reporting GRE scores to the KU School of Public Affairs and Administration, the institution code is 6871 and the department code is 4801.
• An official Test of English as a Foreign Language score report. Please note that any international students admitted to a KU program must also be tested by the Applied English Center (http://www.aec.ku.edu) upon arrival, regardless of TOEFL score.

Deadlines
Applications for intern-option applicants must be received by February 1.

Applications for career-option applicants: Deadlines are May 1 and June 15 for fall admission and November 1 for spring admission. Note: No preference is given to applications received by the earlier deadlines. We offer the earlier dates to accommodate applicants who need an earlier decision for planning purposes.

International students: The deadline for international students is February 1.

Submit your graduate application online (http://www.graduate.ku.edu). Send all other requested application materials to

The University of Kansas
School of Public Affairs and Administration
Attn: M.P.A. Admissions
4060 Wescoe Hall
1445 Jayhawk Blvd.
Lawrence, KS 66045-7594

or via email to: padept@ku.edu

Campuses
The M.P.A. degree program is also offered at the following location:
KU Edwards Campus

KU offers a variety of graduate and undergraduate programs on the KU Edwards Campus in Overland Park, Kansas. The Edwards Campus offers late-afternoon and evening classes, catering to working professionals. For more information, call the Edwards Campus at 864-8400 from Lawrence or 913-897-8400 from other locations.

Topeka, Kansas

Each semester, select courses are offered at the Brown v. Board of Education National Historic Site in Topeka, Kansas.

Doctor of Philosophy in Public Administration

Why study public affairs and administration?

The mission of the doctoral program in the KU School of Public Affairs and Administration is to provide advanced graduate education in theory and research in order to prepare students for academic and research careers in public administration, as well as professional careers in advanced practice of public administration.

KU SPAA doctoral students are expected to:
• Assist in research being conducted by a public administration faculty member;
• Serve as teaching assistants to gain experience and contribute to the production function of the School;
• Co-author a refereed article with a faculty member;
• Present a scholarly paper at a national conference.

For additional doctoral program data, view doctoral program profiles on the Graduate Studies website (click on Public Affairs and Administration under College of Liberal Arts and Sciences).

Ph.D. Admission

Admission is based on the applicant’s undergraduate and/or graduate academic record, standardized test scores, and references from instructors. All applicants must have completed a bachelor’s degree and an M.P.A. or equivalent degree. Students without an M.P.A. or equivalent degree must complete KU core M.P.A. requirements as part of their doctoral studies.

A completed application must include
• Online application and nonrefundable application fee (see Admission in the Graduate Studies section of the online catalog);
• Graduate Record Examination results — verbal, quantitative, and analytical;
• 2-page statement of goals and research interests including evidence of research aptitude and interest;
• 3 letters of recommendation, preferably from faculty members who can comment on the applicant’s potential for doctoral study;
• A writing sample that reflects the applicant's interest in and ability to conduct research;
• A current resume; and
• 1 official transcript from each college or university attended.

In addition, international students must submit Test of English as a Foreign Language (TOEFL) scores from an examination administered no more than 2 years before the date of application. Immigration requirements and a financial statement are available from the Office of International Student and Scholar Services (http://www.iss.ku.edu). All materials must be received before the application can be considered.

For fall admission and financial aid, the application file must be completed by January 25. Applicants who do not meet this deadline are unlikely to be considered for financial aid, even though applications may be considered throughout the year.

Please refer to the School of Public Affairs and Administration's website (https://kupa.drupal.ku.edu/admissions-phd) for complete details regarding Ph.D. admission requirements. Submit your graduate application online (http://wwwgraduate.ku.edu). Send all other requested application materials to

The University of Kansas
School of Public Affairs and Administration
Attn: Doctoral Admissions
4060 Wescoe Hall
1445 Jayhawk Blvd.
Lawrence, KS 66045-7594

Ph.D. Degree Requirements

The Ph.D. program requires a minimum of 66 credit hours of courses, including up to 30 hours earned completing the M.P.A. degree or its equivalent, plus a minimum of 9 hours for the dissertation, for a total of 75 credit hours. (An applicant with a KU M.P.A. may apply 30 hours toward the 75-hour course work requirement.)

All students who enter the Ph.D. program must already have completed the core curriculum (8 courses) for the KU M.P.A. degree or the equivalent at another university, or they must take the appropriate courses after entering the program.

The requirements for the Ph.D. are based on formal course work and independent study in several fields:

• Foundations of public administration
• Specialization field within public administration
• Cognate field
• Methods sequence

Foundations of Public Administration

4 of the 5 courses listed below are required of all doctoral students.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUAD 930</td>
<td>Research Seminar in Public Administration and Democracy</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 931</td>
<td>Research Seminar in Public Management</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 932</td>
<td>Seminar in the Intellectual History of Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 943 or PUAD 949</td>
<td>Constitutional Foundations of Public Administration</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Law, Courts, and Public Policy</td>
<td></td>
</tr>
</tbody>
</table>

Substitutions require the approval of the coordinator of doctoral studies.

Public Administration Specialization

In consultation with the coordinator of doctoral studies, each student must develop a public administration specialization of at least 3 courses. Common specializations include budgeting, public finance, human resources management, public policy analysis and evaluation, public values and ethics, organizations and organization theory, public law and administration, and urban policy/politics and community building. Each has a basic course that is regularly taught in the present graduate curriculum at the 800 level, and it is presumed that at least an additional course would come from independent study. A third course could come from the school or could be taken outside. Potential cooperating units include the Departments of Political Science, Communication Studies, and Economics, and the Schools of Education and Business. Additional subfield specializations are available in consultation with faculty.

Cognate Fields

The degree requires a cognate field in addition to the public administration specialization. The cognate field is a subfield in economics, political science, education administration, etc., or a policy specialization (environmental policy, transportation policy, etc.) The cognate field's sequence of 3 courses requires the approval of the coordinator of doctoral studies and does not require a comprehensive examination.

Methods

The doctorate emphasizes the development of research skills. It requires PUAD 934 Research Methods in Public Administration, with the prerequisite PUAD 836 or its equivalent, and PUAD 935 Advanced Quantitative Methods for Public Administration. Students also are encouraged to take PUAD 937 Qualitative Methods in Public Administration. Substitutions require the approval of the coordinator of doctoral studies. The methods requirement satisfies Option 1 of the Foreign Language or Other Research Skills Requirement.

Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current policies on Doctoral Research Skills and Responsible Scholarship are listed in the KU Policy Library.

To become a Ph.D. candidate, the student must complete a comprehensive oral examination. No student may attempt the comprehensive oral until he or she has satisfied requirements for the cognate field and passed the preliminary written examination in both the foundations and specialization fields. The doctoral coordinator certifies that the student has met these requirements.

After passing the comprehensive oral examination, the doctoral candidate must write a dissertation approved by a dissertation committee and pass a final oral defense of the dissertation to qualify for the degree. If the aspirant receives a grade of unsatisfactory, the examination may be repeated, but under no circumstances may the student take it more than twice.
Social Welfare

Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your advisor (http://www.advising.ku.edu) for details). Other years’ catalogs (http://catalog.ku.edu/archives) »

Bachelor of Social Work (p. 2359)
Master of Social Work (p. 2362)
Doctor of Philosophy in Social Work (p. 2366)

The University of Kansas School of Social Welfare offers the only comprehensive program in social work in Kansas: the professional degrees of

• Doctor of Philosophy in Social Work (p. 2366),
• Master of Social Work (p. 2362), and
• Bachelor of Social Work (p. 2359).

KU’s School of Social Welfare is an excellent place to pursue your interests in professional social work education. It is the oldest school of social welfare in the state and the only one to offer degree preparation from undergraduate through doctoral degrees in social work.

Social work education began at KU in 1937. The Master of Social Work program, established in Lawrence and at the KU Medical Center in Kansas City in 1946, has been continuously accredited since 1948. The Bachelor of Social Work degree has been awarded since 1948. In 1974, the B.S.W. program became one of the first in the nation to receive accredited status. The Council on Social Work Education (http://www.cswe.org), the accrediting body for social work education, most recently reaccredited the B.S.W. and M.S.W. programs in 2010. The doctoral program admitted its first students in 1981.

KU’s Master of Social Work program consistently ranks among the top U.S. national public universities, according to U.S. News & World Report’s “America’s Best Graduate Schools”. The School of Social Welfare is recognized internationally as an innovator in social work theory development and in research that makes positive contributions to our communities.

The school is housed on KU’s Lawrence campus in Twente Hall, named for nationally renowned social work educator Esther Twente, who chaired the social work department from 1946 to 1957. The school also offers the M.S.W. program at the KU Edwards Campus in Overland Park, a suburb of Kansas City, and in western Kansas in collaboration with Fort Hays State University and Garden City Community College. The B.S.W. Edwards 2+2 program is offered at Kansas City Kansas Community College.

Mission and Themes

Mission

The threefold mission of the University of Kansas School of Social Welfare is to educate students at the B.S.W., M.S.W., and Ph.D. levels, to conduct scholarly inquiry that contributes to the knowledge base of the profession, and to provide leadership in formulating social policy and developing service delivery strategies and systems.

In the B.S.W. and M.S.W. programs, students learn generalist and advanced-level social work practice methods and skills that advance the empowerment and well-being of individuals, families, and communities. At the Ph.D. level, students are equipped with the necessary skills for critical inquiry and scholarship to become leaders in the social work profession in academic, research, and public policy realms.

Guiding Principles and Themes

The KU School of Social Welfare is committed to practicing educational approaches and conducting scholarship that directly and explicitly enhance the connection of theory and concepts to the needs of clients and the demands of everyday practice. This commitment flows from the values and ethical principles of the profession and is enriched by our commitment to these 4 themes:

• A focus on people’s strengths
• An understanding of human diversity
• The promotion of social and economic justice
• The development of a critical perspective

Strengths

A perspective that recognizes, mobilizes, and supports the inherent strengths of individuals, families, neighborhoods, organizations, and communities to discover and develop their own and communal resources and assets in their struggle for a better quality of life.

Diversity

Understanding, valuing, and engaging the broad range of differences and commonalities that are brought to the interaction among social workers, clients, and the social environment and that reflect clients’ culture, ethnicity, race, geography, gender, social class, religion, sexual orientation, and physical and mental abilities — particularly when those differences are the cause for discrimination.

Social and Economic Justice

A commitment to promoting fairness, equality of power, and equity of resources based on a complex understanding of the effects of economic, political, and social structures on people’s life chances, particularly related to economic inequality and the allocation of necessary social resources.

Critical Perspective

The capacity to engage in a deliberate and continuing examination of the assumptions underlying the theories, methods, and approaches used by social work in understanding and responding to human needs.

The Programs

At the University of Kansas, students have the opportunity to prepare for professional careers in social work at the bachelor’s, master’s, and doctoral levels. The curriculum is carefully laid out to bring students from the introductory level through advanced study in clinical social work practice or social work administrative and advocacy practice. Under the umbrella of a practice orientation, the programs are structured to support the essential themes of the school, which focus on people’s strengths, celebrate human diversity, promote social and economic justice, and provide a critical perspective.

Classroom work is one half of professional preparation; field placements are the other half. Placements in social service agencies offer students the opportunity to apply skills learned in the classroom. B.S.W. and M.S.W. students spend time in practicum settings throughout the region.
Our students provide more than 250,000 hours of service to underserved populations through practicum experiences.

Learn more about the School of Social Welfare programs (http://socwel.ku.edu/degrees).

Professional and Community Education

To help our graduates and other professionals maintain proficiency in practice skills and to expand their capacities, the school offers a wide range of courses and workshops through the Professional and Community Education Program (http://socwel.ku.edu/alumni/pce/intro).

These offerings are designed specifically for the practicing professional. Courses are developed in conjunction with the local human services community. They range from management skills to sophisticated clinical strategies. Evening and weekend classes are offered with a variety of credit and noncredit options. For information on the program and its offerings, please contact the program director at 913-897-8550.

Student Profile

The School of Social Welfare currently has more than 500 students, approximately 150 in the B.S.W. program, 350 in the master’s program, and 40 in the Ph.D. program. More than 350 students are enrolled in field practicum settings that reflect the range of practice of professional social work. Many students enter social work as a second career after an extended period away from school.

Student Handbook

During orientation, students who are admitted to degree-seeking status are directed to the student handbook (http://socwel.ku.edu/resources/forstudents/academic-handbooks), which contains full descriptions of policies and other details.

The Profession

Through the long history of the profession, social workers have understood the desperation of the homeless, the despair of the poor, the ostracism suffered by the mentally ill, the pain of those who are abused and neglected, and the humiliation endured by victims of discrimination. By carrying out this special commitment to helping vulnerable groups and individuals, social workers believe that society as a whole is strengthened. At the same time, social workers celebrate differences among people and believe that respecting those differences — whether of race, culture, religion, gender, sexual orientation, or age — enriches the quality of life for all.

Purpose and Objectives of Social Work

Social work is a vital, evolving profession that changes with the world in which we live. The purpose of social work is to promote or restore a mutually beneficial interaction between individuals and society in order to improve the quality of life for everyone. Social workers support the following values:

- The environment (social, physical, organizational) should provide the opportunity and resources for the maximum realization of the potential and aspirations of all individuals, and should provide for their common human needs and for the alleviation of distress and suffering.
- Individuals should contribute as effectively as they can to their own well-being and to the social welfare of others in their immediate environment, as well as to the collective society.
- Transactions between individuals and others in their environment should enhance the dignity, individuality, and self-determination of everyone. People should be treated humanely and fairly.

Social workers focus on person-and-environment interaction. To carry out their purpose, they work with people to achieve the following objectives:

- Help people increase their competence and problem-solving abilities.
- Help people obtain resources.
- Make organizations responsive to people.
- Facilitate interaction between individuals and others in their environment.
- Influence interactions between organizations and institutions.
- Influence social and environmental policy.

Social workers are educated to provide services to individuals, families, groups, and communities; to develop, administer, and evaluate programs and organizations; and to participate in policy formulation and planning at the local, state, and national levels.

NASW Code of Ethics

As a guide to professional conduct, the Code of Ethics of the National Association of Social Workers (http://www.socialworkers.org) represents the fundamental values of the profession. The National Association of Social Workers is the largest organization of professional social workers in the world, with a membership of 166,000.

The Code of Ethics identifies 6 values that inform the following principles:

- Social workers’ primary goal is to help people in need and to address social problems.
- Social workers challenge social injustice.
- Social workers respect the inherent dignity and worth of the person.
- Social workers recognize the central importance of human relations.
- Social workers behave in a trustworthy manner.
- Social workers practice within their areas of competence and develop and enhance their professional expertise.

View the entire Code of Ethics (http://www.socialworkers.org) or request a copy.

Resources

Area Research Offices

The school supports research and policy development in a number of key areas, providing leadership and resources at the local, state, and national levels:

- Assets and Education Initiative (http://aedi.ku.edu)
- C (http://socwel.ku.edu/research-social-work-practice-social-policy)enter for Children & Families (http://childrenandfamilies.ku.edu)
- C (http://socwel.ku.edu/research-social-work-practice-social-policy)enter for Mental Health Research and Innovation (http://mentalhealth.socwel.ku.edu)
- C (http://socwel.ku.edu/research-social-work-practice-social-policy)enter for Research on Aging and Disability Options (http://crado.ku.edu)
- Spirituality Diversity and Social Work Initiative (http://spiritualdiversity.ku.edu)
Faculty
The faculty’s scholarly interests, as reflected in teaching, research, and publications, span a wide range, including health, mental health, child welfare, adult and juvenile justice, gerontology, multiculturalism, women’s issues, history of social work, public policy analysis, homelessness, gender equity, poverty reduction and asset building, and social administration.

School of Social Welfare faculty members hold doctoral degrees in social work, social welfare, psychology, and other fields. In addition, outstanding social work practitioners serve as part-time classroom instructors, and 280 social work practitioners serve as practicum instructors.

Faculty members serve the public interest and the profession of social work as consultants and board members in professional and citizens’ organizations.

Undergraduate Programs
The undergraduate program (http://socwel.ku.edu/academics/degrees/bsw/overview) prepares graduates for generalist social work practice. The program defines generalist practice as maintaining focus on the interface between systems — individuals, families, groups, organizations, and communities.

The B.S.W. Edwards 2+2 program also is offered at Kansas City Kansas Community College. If you are interested, contact the student services coordinator at 913-288-7304 to make an appointment.

University Honors Program
The school encourages qualified undergraduates to participate in the University Honors Program (http://www.honors.ku.edu).

Graduate Programs
The Master of Social Work program (http://socwel.ku.edu/academics/degrees/msw/regular/overview), established in Lawrence and at the KU Medical Center in Kansas City in 1946, has been continuously accredited since 1948. KU’s M.S.W. program ranked 15th among U.S. national public universities, according to U.S. News & World Report’s “America’s Best Graduate Schools” rankings for 2014.

The doctoral program (http://socwel.ku.edu/academics/degrees/phd/overview) admitted its first students in 1981. It prepares students to be leaders of the profession through advanced research, scholarship, and teaching.

Financial Aid
To be eligible for financial aid, applicants should complete the Free Application for Federal Student Aid (FAFSA) by February 15 (March 1 is the priority deadline), even before receiving information about acceptance. FAFSA materials can be obtained from all college or university financial aid offices or submitted online. The School of Social Welfare uses the FAFSA need determination level in making awards. For more information regarding financial aid visit the KU Office of Financial Aid & Scholarship (http://affordability.ku.edu)

For Ph.D. students (http://socwel.ku.edu/academics/degrees/phd/financialsupport), financial assistance, including tuition and significant salary, is available from the school through teaching and research assistantships in research and training areas such as adult and children’s mental health, aging, child welfare, corrections, social policy, spiritual diversity, or other areas of faculty grants and interests.

Scholarships and Awards
The School of Social Welfare has several sources of financial assistance available to students who meet the various criteria. Awards are made on an annual basis and are applied directly towards tuition and fees in most instances. All students interested in applying are required to submit a Free Application for Federal Student Aid by March 1. All recipients are expected to maintain a minimum grade point average of 3.0. Students must renew their applications each year they wish to be considered.

Undergraduate University Regulations
For information about university regulations, see Regulations (p. 12) or visit the University of Kansas Policy Library (http://www.policy.ku.edu).

For information about school regulations refer to the student handbook (http://socwel.ku.edu/resources/forstudents/academic-handbooks).

Change of School
To change from one school to another, you must submit a Change of School form in the B.S.W. program office. Follow the deadlines on the form.

Students are admitted for fall semester only. The priority application deadline is February 1. No applications will be considered after June 15. Additional information is available from the B.S.W. program office.

Graduation with Distinction
The top 10 percent of the graduates of the B.S.W. program each year receive degrees with distinction.

Honor Roll (Dean’s List)
Students who have been accepted into the B.S.W. program, enrolled in a minimum of 9 credit hours during the semester, and earned a semester grade-point average in the top 20 percent of their class (junior or senior) qualify for the KU School of Social Welfare B.S.W. Dean’s List.

Guidelines for Conduct
Refer to the student handbook for specific information.

Required Work in Residence
No baccalaureate degree is granted to an undergraduate who has not completed at least 30 semester credit hours of residence courses at KU. No exceptions are granted.

To earn a bachelor’s degree from KU, you must complete the last 30 hours of credit for the degree by resident study. You may petition the B.S.W. program director for a waiver. Up to 6 hours of work taken at another institution may be accepted as part of the last 30 hours, if the hours are not in required social work courses.

Student Advancement Policy
Refer to the student handbook for specific information.
Advising

Once a student is admitted to the School of Social Welfare, a member of the School’s faculty is assigned as a professional/career advisor. In addition, an academic will be able to assist students in the enrollment process, filling out enrollment forms and other academic program requirements. Students consult with their academic advisor before enrollment each semester and have their advising hold removed by the B.S.W. program office. Current students can view their advisors on the Kyou portal. (https://my.ku.edu/uPortal/f/u56210l1s4/normal/render.uP)

Transfer of Credit

CredTran is a transfer course equivalency system that lists more than 2,200 colleges and universities from which KU has accepted transfer courses in the past. If your school or course is not listed, your evaluation will be completed when you are admitted to KU.

Transfer of credit allows specific course work from other accredited colleges or universities to count toward the B.S.W. degree. Decisions to accept prior credits are made by KU’s transcript evaluator during the admission process. Exceptions must be petitioned through the B.S.W. director. Petitions must be accompanied by a catalog description and a syllabus of the course and submitted at the time of application. Community college equivalents to KU courses are available from the school or through community college counselors. A maximum of 64 credit hours from a community college may be transferred toward the B.S.W. degree.

Prior Work Experience

In accordance with national curriculum policy, prior employment and life experience may not be credited toward classroom course work or practicum requirements.

Leave of Absence and Withdrawal

Refer to the student handbook for specific information

Graduate University Regulations

For information about university regulations, see Regulations (p. 12) or visit the University of Kansas Policy Library (http://www.policy.ku.edu).

For information about school regulations refer to the student handbook.

Guidelines for Conduct

Refer to the student handbook for specific information

Student Advancement Policy

Refer to the student handbook for specific information

Advising

Each student is assigned a faculty advisor who assists with career and academic decision making. Scheduling/enrollment advisors are available at the time of enrollment.

Leave of Absence and Withdrawal

Refer to the student handbook for specific information

Employment Opportunities

Some employment opportunities for social workers include

- Child protection, foster care, and adoption services.
- Services in community centers, juvenile courts, and residential treatment centers.
- Women’s counseling and shelter facilities.
- Family services, substance abuse, illness, and unemployment services.
- Community services for the mentally ill.
- Services for the elderly in home care, nursing homes, and senior centers.
- Services for offenders and their families in community corrections programs.

Courses

SW 177. First Year Seminar: _____. 3 Hours. GE11.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in social work. Course is designed to meet the critical thinking learning outcome of the KU Core. Prerequisite: First-time freshman status. LEC.

SW 210. Contemporary Social Topics: _____. 1-3 Hours.
This course provides the opportunity for experimentation with innovative course content and unique learning strategies in accordance with guidelines established by faculty. Subjects offered as topics include Training for Diversity, Organizing in Underserved Communities, etc. LEC.

SW 220. Social Work, Social Welfare and U.S. Society. 3 Hours. SF GE3S / S.
An introduction to the field of social welfare and its relationship to the social work profession, charged with carrying out its primary missions. Specific social welfare policies will be analyzed, particularly as those policies affect individuals and families in need. LEC.

SW 303. Human Sexuality in Everyday Life. 3 Hours. GE3S.
An introductory course which focuses on helping students to understand their own and others’ sexual development and expression, as found in attitudes, beliefs, and behaviors. Physiological, psychological, and social/cultural aspects of human sexuality will be reviewed. The format of the course will include: lectures, discussion, value clarification exercises, and the use of explicit audio-visual materials. LEC.

SW 310. Managing Stress: Principles and Techniques for Coping, Prevention, and Wellness. 3 Hours.
Covers major stress-management techniques, helping others cope with stress, and promoting wellness. Concepts, theories, and models of stress, psychological basis for stress, relationship between personality and stress, family and social stress, job stress, dissatisfaction, and burnout are discussed. LEC.

SW 410. Professional Writing Skills in Social Work. 3 Hours.
Students learn the principles of organizing, developing, writing and revising documentation for different professional social work settings. Student will master basic writing skills and become proficient in several types of social work writing styles. LEC.

SW 420. Social Work in Urban Settings. 3 Hours.
Students gain knowledge about the historical and current relationships between the definition of social problems, the development of social welfare policies, and the delivery of social services in urban settings. Students will learn to access current policies and practices as they impact local communities in the Kansas City area. LEC.
SW 455. Topics in Social Welfare: _____ 1-3 Hours.
This course covers a variety of topics on a rotating basis and provides the opportunity for experimentation with innovated course content in accordance with guidelines established by faculty. These topics may include, but are not limited to, globalization and poverty, special topics in child welfare, mental health, juvenile justice, etc. LEC.

SW 490. Directed Readings. 1-3 Hours.
Individual and supervised readings in selected areas of social welfare. Prerequisite: Consent of instructor and approval by dean's office. IND.

SW 501. Fundamentals of Social Work Practice. 3 Hours.
Introduces the basic concepts of social work practice including the focus and context of practice, the nature of a social work relationship; basic skills and techniques common to practice such as interviewing, engagement, information gathering, etc. Introduction to problem solving and social work roles. Prerequisite: SW 530, SW 540, and SW 555. LEC.

SW 530. Human Behavior in the Social Environment. 3 Hours. AE61.
A study of theoretical frameworks for understanding human behavior. The theories include the developmental stages across the life cycle, abnormal behavior compared to normal, analysis of family and societal processes and their effects on the individual, and individual behavior in relation to social class, ethnicity, and cultural background. Junior social work classification required. LEC.

SW 532. Community and Organizational Dynamics and Human Behavior. 3 Hours. AE61.
An analysis of community and organizational life with emphasis on human behavior dynamics. Systems operation and change are considered and related to social functioning, especially as it impinges on social welfare objectives. Junior social work classification required. LEC.

SW 540. Fundamentals of Social Work Research. 3 Hours. AE61.
An examination of the basic concepts and principles of scientific inquiry as applied to the social work profession's quest for and utilization of knowledge. Positivistic and naturalistic methods of inquiry are covered. Other content includes conceptualization, operationalization, sample design, ethics, and culturally sensitive research practice. Junior social work classification required. LEC.

SW 541. Social Work Research Seminar. 3 Hours. AE61.
Focus is on applying material learned in SW 540 to the critique of empirical work in the social work arena and to the development of a proposal for a practice-based research project. Emphasis on assessing relevance of research to special populations. Content on the interpretation of graphs, tables, and statistical measures provided. Prerequisite: SW 540. LEC.

This course will provide the conceptual, theoretical and empirical knowledge base related to difference, oppression, social justice and empowerment. This knowledge is necessary for culturally competent social work practice in a multicultural society. Junior social work classification required. LEC.

SW 556. Diversity, Oppression and Social Justice. 3 Hours. AE41.
This course offers non-social work majors the opportunity to explore conceptual, theoretical, and empirical knowledge related to differences based upon race, class, gender, and sexual orientation. The course explores the interplay of social and cultural identities, societal power relations, and other societal forces as they impact human functioning. Assignments and lectures in this course are geared toward helping students develop an informed world view of human diversity and its impact on our own lives and the lives of others. LEC.

SW 560. Study Abroad. 3 Hours.
This course provides the opportunity for Study Abroad in developed and developing countries such as Costa Rica, India, Ireland, Italy, and South Korea. Junior Social Work classification required. LEC.

SW 601. Field Practicum. 6 Hours. AE61.
Students are assigned to social service agencies that provide generalist practice opportunities under the supervision of a qualified field instructor. This provides students with the opportunity to apply and test social work knowledge, values, and skills within an approved practice setting in order to gain competency as beginning social workers. This course is taken for two semesters (fall-spring), with credit being given only after completion of the second semester. Enrollment in this course must be concurrent with enrollment in SW 610 and SW 612. FLD.

SW 610. Social Work Practice Seminar I. 3 Hours.
Focuses on learning and implementing the problem-solving and interaction models of practice to be applied to individuals, families, and small groups. Concurrent with SW 601, practicum; students bring issues with clients to class for discussion. Open only to BSW seniors. Prerequisite: SW 510. LEC.

SW 612. Social Work Practice Seminar II. 3 Hours.
Second of two-course sequence extends the work begun in SW 610. Examines interventive strategies applicable to practice with larger systems. Models of community organization and community development are presented. Concurrent with SW 601, practicum; students work on individualized, agency-related projects. Prerequisite: SW 610. LEC.

SW 620. Social Policies and Program Analysis. 3 Hours.
Conceptual models for the analysis of social welfare problems and policies are developed. The frameworks are applied to the problem of poverty and major policies and programs developed to cope with that problem. In addition the model is used to examine social welfare problems/needs being addressed in the students' practicum agencies. The focus throughout is on the understanding and application of analytic framework. Open only to BSW seniors. LEC.

SW 621. Social Policy Analysis and Advocacy. 3 Hours.
The course builds on SW 620 using the conceptual models to examine a range of social welfare problems/needs, policies and programs. Emphasis is on advancing student's understanding and skills for using the analytic framework and building policy advocacy skills. Attention given to the role of social workers in the legislative process for shaping social welfare policies. Prerequisite: SW 620. LEC.

SW 623. Seminar in Professional Issues. 3 Hours. AE51.
Seminar in the philosophy, values, and issues in contemporary social work and social welfare. Seminar will address areas such as conception of professional and professionalism, ethics and values, standards, licensing, and professional regulation, accountability and professional responsibility. Senior social work classification is required. LEC.

SW 630. Topics in Social Work Practice: Antisocial, Aggressive Behavior in Childhood and Early Adolescence. 1.5 Hour.
This course explores the theories and methods related to practice with children whose behavior is disruptive, oppositional, aggressive, or otherwise antisocial. Emphasis is placed on using protective and risk factors to design appropriate interventions. Open only to BSW seniors. LEC.

SW 631. Topics in Social Work Practice: Intimate Partner Violence. 1.5 Hour.
This course provides students with a beginning understanding of intimate partner violence including definitions, prevalence, theoretical frameworks, dynamics, and consequences for the individual, the family, the community
and society. Students will develop skills required to assess, intervene, and prevent domestic violence cases. Open only to BSW seniors. LEC.

**SW 632. Topics in Social Work Practice: Substance Abuse and Social Work Practice. 1.5 Hour.**

This course will offer BSW students a very basic understanding of concepts associated with social work practice with people who confront challenges with alcohol and other drugs. Students will learn about substance abuse problems currently prevalent, recognize behavior related to substance abuse disorders and applicability of generalist social work practice models in developing interventions. Open only to BSW seniors LEC.

**SW 633. Topics in Social Work Practice: Crisis Intervention. 1.5 Hour.**

This course will provide undergraduate social work students with a basic introduction to crisis intervention, including theoretical models, the evolution and use of crisis theory and the design of interventions across a broad range of crisis situations. Open only to BSW seniors LEC.

**SW 690. Professional Education Topics in Social Welfare: _____, 0.5-3 Hours.**

Current topics supplementing general social work knowledge of professionals in the field. Subjects offered as topics include: Addictions and Professional Enabling, Dynamics of Change, Computer Skills for Social Services Budgeting, Short Term Social Work Interaction. LEC.

**SW 701. Basic Field Practicum. 7 Hours.**

Students are assigned to social service agencies that provide generalist practice opportunities that prepare students for entry into the advanced level of either clinical social work practice or social work administration and advocacy practice. All students work under the supervision of a qualified field instructor where they have the opportunity to apply and test social work knowledge, values, and skills. This course is generally taken for two semesters, with credit being given only after completion of the second semester. Open only to first-level M.S.W. students. Enrollment must be concurrent with enrollment in SW 710 and SW 711. FLD.

**SW 710. Social Work Practice I. 3 Hours.**

The first of two-course sequence prepares students to begin to translate theory into strategies of intervention that cut across social work practice with systems of all sizes. Presents an integrating framework of generalist social work based on a strengths perspective and a person-in-environment frame of reference. Course taken concurrently with SW 701 which provides students an opportunity to integrate theory and practice in work with clients. LEC.

**SW 711. Social Work Practice II. 3 Hours.**

Second of two-course sequence and extends the work begun in SW 710. Focus in the second course is on mastery of the basics of helping relationships and the development of intervention skills for the middle and ending phases of intervention. Content is structured to prepare students to enter the advanced level of the M.S.W. program. Course taken concurrent with SW 701. Prerequisite: SW 701. LEC.

**SW 712. Social Work Practice Seminar. 3 Hours.**

Introduces advanced standing students to the themes of the school. Special emphasis is given to the Strengths Perspective, a multicultural approach to practice, and developing the skills to critically and reflectively think about one's own practice. Advanced standing status required. LEC.

**SW 713. Community and Organizational Practice. 3 Hours.**

Students will be exposed to a body of knowledge and skills necessary to practice with communities and organizations. An advocacy perspective will act as the course's unifying theme with client well-being acting as the driving force behind the activities of community and organizational practitioners. LEC.

**SW 720. Social Policy and Program Analysis. 3 Hours.**

This course provides a broad social context for identifying and analyzing social problems and social policy/program responses. Economic and social justice issues are exemplars for understanding societal dynamics and evaluating related policies. Emphasis is given to the development of conceptual skills in identifying and analyzing needs addressed by programs and policies. LEC.

**SW 730. Human Behavior in the Social Environment. 3 Hours.**

Course provides foundation knowledge about bio-psycho-social aspects of individual and family behavior. Theoretical perspectives on well being dysfunction, and developmental processes are critically analyzed, especially concerning applicability to social work practice that supports client strengths, diversity, and social justice. A holistic conceptual framework is used to integrate these micro-system perspectives with larger environmental socio-political concerns. LEC.

**SW 740. Social Work Research. 3 Hours.**

An examination of professionally relevant aspects of the nature of science: the nature of knowing, a constructed reality, the logic of explanation and inquiry, the nature of concepts, hypotheses, and assumptions. The content will include such issues as sampling, measurement reliability and validity, developing survey questions, types of qualitative and quantitative research, and an introduction to descriptive and inferential statistics. LEC.

**SW 755. Studies: _____, 1-3 Hours.**

This course provides the opportunity for experimentation with innovative course content in accordance with guidelines established by faculty. LEC.

**SW 801. Advanced Field Practicum-Clinical Practice. 7 Hours.**

Students are assigned to social service agencies that provide opportunities for advanced level clinical social work practice. All students work under the supervision of a qualified field instructor where they have the opportunity to integrate theory and practice and develop beginning competence in clinical social work practice. This course is generally taken for two semesters, with credit being given only after completion of the second semester. Open only to Advanced-level M.S.W. students. Enrollment must be concurrent with enrollment in SW 810 and SW 811. Prerequisite: Completion of all foundation requirements. FLD.

**SW 804. Advanced Field Practicum-Social Work Administration. 7 Hours.**

Students are assigned to social service agencies that provide practice opportunities in social work administration. All students work under the supervision of a qualified field instructor where they have the opportunity to develop beginning competence in social work administration. This course is generally taken for two semesters, with credit being given only after completion of the second semester. Open only to Advanced-level M.S.W. students. Enrollment fall semester must be concurrent with enrollment in SW 840, SW 841, and SW 849 and in Spring semester enrollment must be concurrent with enrollment in SW 842, and SW 843. Prerequisite: Completion of all foundation requirements. FLD.

**SW 810. Clinical Social Work Practice. 3 Hours.**

Clinical social work practice occurs in a variety of settings, from large public and private agencies and institutions through many types of individual and group private practice situations. This course is designed to teach advanced knowledge and skills that transcend contextual factors in order to produce a variety of positive client outcomes in a range of practice situations. In addition, this course focuses on the commitment of social work practitioners to provide services to those groups who, by reason of class, race, sex, or other characteristics, are not ordinarily well served by the many institutions in this society. Course taken concurrently with SW 801 which provides an opportunity to integrate theory and
practice in work with clients. Prerequisite: Completion of all foundation requirements. LEC.

SW 811. Topics in Advanced Clinical Social Work: _____, 3 Hours. The organizing theme of the advanced clinical selective emphasizes application of advanced theoretical and practice principles to client systems. This advanced selective provides students with the opportunity to critically consider the themes of the school as they relate to the need for assessment, diagnostic, and process evaluations with a variety of client systems. Every student will engage in activities designed to solidify their professional identity as clinical practitioners as they enter the workforce. Topics offered may include solution-focused brief therapy; family therapy, and cognitive behavioral therapy. Prerequisite: Completion of SW 810. LEC.

SW 830. Social Work in Child and Family Settings, 3 Hours. An in-depth examination of social work in child and family settings. Students demonstrate the capacity to integrate research, policy, direct practice, and human behavior in considering the issues central to this area of practice. Students will also be able to explain how diversity issues manifest themselves at both the policy and direct practice levels. Prerequisite: Completion of all foundation requirements. LEC.

SW 832. Social Work in Health Care and Mental Health Settings, 3 Hours. Content as in SW 830 focused on health care and mental health. LEC.

SW 833. Social Work and Aging, 3 Hours. Content as in SW 830 focused on aging. LEC.

SW 834. Social Work in Schools, 3 Hours. Content as in SW 830 focused on schools. LEC.

SW 840. Program Design and Grant Writing, 3 Hours. Introduction to the effective construction of social programs, and the acquisition of agency resources through grant writing and fundraising. Topics include the design and analysis of social programs and the process of preparing a fundable grant proposal. Prerequisite: Completion of social welfare foundation level requirements. LEC.

SW 841. Advanced Policy and Programs, 3 Hours. The focus is on the development of skills to stay abreast of and knowledgeable about critical federal and state policies, regulations, and funding structures and streams in students' chosen field of practice. Students will also learn how to research the literature on best practice and effective programs. All of these skills and consequential knowledge will be used to inform program design, resource acquisition, financial management, personnel management, outcome management, and other administrative functions. Prerequisite: Completion of all foundation requirements. LEC.

SW 842. Using Outcomes for Administrative and Advocacy Practice, 3 Hours. Emphasis is on the use of information to improve human service program performance. Includes content for the design, implementation, and evaluation of information systems. Prerequisite: Completion of all foundation requirements. LEC.

SW 843. Program Management and Supervision, 3 Hours. Introduction to client centered human service management including the variety of tasks, roles, and functions of managers. Builds knowledge and skills in effective employee supervision and human resource management including the development of a diverse workforce. Prerequisite: Completion of all foundation requirements. LEC.

SW 846. Advanced Community and Advocacy Practice, 3 Hours. This course is designed to build on the content of the foundation course on community and organizational practice by further developing the theories, methods, and skills of community and advocacy practice. The course will help students know and further develop the analytical and empirical skills needed to effectively manage and advocate with and on behalf of different human service communities. Throughout the course, skill-based exercises are presented to aid in understanding theoretical concepts. Prerequisite: Completion of all foundation requirements. LEC.

SW 849. Managing Financial Resources, 3 Hours. Focus on the use of resources needed to operate a client centered program. Includes budgeting techniques and their application; use of budgets for decision making, and problems of reallocation. Prerequisite: Completion of all foundation requirements. LEC.

SW 852. Social Work with Groups, 3 Hours. Theory and practice of social work in the wide range of groups in which social workers participate as workers and co-workers. Focus on the social worker’s tasks and behaviors in establishing group services and in facilitating work in the group from the time of its formation to its termination as a service entity. Prerequisite: Completion of foundation requirements. LEC.

SW 855. Study Abroad, 3 Hours. This course provides the opportunity for Study Abroad in developed and developing countries such as Costa Rica, India, Ireland, Italy and South Korea. LEC.

SW 860. Loss and Grief, 3 Hours. Examines the multiple faces of loss and grief throughout the human life cycle. Examines personal and societal attitudes toward death and dying and the processes of dying and grieving. Course includes exploration of assessment and interventions that enable individuals and their families to cope with loss. Prerequisite: Completion of all foundation requirements. LEC.

SW 861. Intimate Partner Violence, 1.5 Hour. This advanced practice course addresses the seriousness and extent of the problem, contributing factors, consequences for the individual, the family, the community, and society. Prevention and intervention practice models will be discussed within a clinical and strengths framework with a focus on developing skills for assessment, intervention, and prevention of violence with individuals and families. LEC.

SW 862. Intrafamilial Sexual Abuse, 1.5 Hour. This course will focus on sexual misuse that occurs within the family system. Students will obtain a comprehensive understanding of sexual misuse that occurs within the family system and develop assessment and helping skills needed when working with abusive families. Theoretical, assessment, and helping aspects of intrafamilial sexual abuse will be examined. Prerequisite: Completion of all foundation requirements. LEC.

SW 863. Mental Health and Psychopathology, 3 Hours. Theories of mental health and psychopathology are compared concerning etiology, classification, assessment, and treatment of distress and mental disorders. Theories and practices are evaluated critically for their usefulness in a strengths approach to social work in mental health settings. Prerequisite: Completion of all foundation requirements. LEC.

SW 866. Social Work Practice with Children and Adolescents, 3 Hours. Developmental norms and processes in childhood and adolescence and related implications for assessment and intervention methods in work with children and adolescents. Topics include countertransference issues in work with children, working with parents and children, intervention tools, stress in childhood, special issues, and concerns in adolescence, sexual abuse of children. Prerequisite: Completion of all foundation requirements. LEC.
SW 868. Crisis Intervention and Suicide Risk Reduction. 3 Hours.
Principles of planned short term intervention generally and of crisis intervention specifically are addressed. The use of and application of crisis theory, crisis intervention, and suicide risk reduction are examined. Evidence based practices regarding the effects of crises including disasters on individual, family, and community well-being are considered. Prerequisite: Completion of all foundation requirements. LEC.

SW 869. Social Work with Clients with Alcohol and Drug-Related Problems. 3 Hours.
Focus is on developing value consciousness and multidimensional understandings in relation to drug use and abuse. Patterns of drug use, sociocultural attitudes toward drug use and definitional issues in the drug field will be examined. Explanatory theories and contemporary interventions, including the applicability of generalist social work practice models are presented and critically assessed. Prerequisite: Completion of all foundation requirements. LEC.

SW 870. Spiritual Aspects of Social Work Practice. 3 Hours.
This course provides a framework of knowledge, values, and skills for spiritually-sensitive social work practice. In order to prepare students to respond competently and ethically to diverse spiritual perspectives, a comparative, critically reflective approach to content is employed. The role of religion and spirituality in supporting or impeding individual strengths and social justice is considered. Prerequisite: Completion of all foundation requirements. LEC.

SW 872. Cultural Diversity in Social Work Practice. 3 Hours.
Provides students with a framework of knowledge, values, and practice methodology for culturally competent social work practice. Emphasizes themes of oppression and empowerment, culture-specific strengths and resources, and multicultural/transcultural perspectives. Prerequisite: Completion of all foundation requirements. LEC.

SW 873. Social Work with Gay, Lesbian, Transgendered and Bisexual Clients. 3 Hours.
The purpose of this course is to introduce students to the basic knowledge, values, and skills needed to work effectively with people who are gay, lesbian, and bisexual. The course will reflect a person-environment perspective, focusing on strategies that empower lesbians, gay men, and bisexuals to develop personal and environmental resources from a strengths perspective. Throughout the course, attention will be given to issues of diversity within the lesbian and gay population. Prerequisite: Completion of all foundation requirements. LEC.

SW 874. Social Work Practice with Women. 3 Hours.
Expands knowledge and practice skills in working with women in diverse social work practice settings. Critical examination of traditional and feminist practice approaches to problems that frequently confront women. Prerequisite: Completion of foundation requirements. LEC.

SW 875. Readings and Investigations: ______. 1-3 Hours.
Opportunity for scholarly investigation in an area of special interest. Students pursue independent study in an area of social work practice through the guidance of a selected faculty member. RSH.

SW 890. Current Issues in Professional Social Work Education: ______. 0.5-3 Hours.
Course provides opportunity for innovative course content designed for the social work professional. Subjects offered include: Psychopathology: A Biopsychosocial Approach, Ethics and the Social Worker, Mediation, Solution Focused Practice, Strengths-based Management, Outcome-based Measurement of Practice. LEC.

SW 955. Study Abroad. 3 Hours.
This course provides the opportunity for Study Abroad in developed and developing countries such as Costa Rica, India, Ireland, Italy, and South Korea. LEC.

SW 978. Research Design and Methods. 3 Hours.
This class is an in-depth introduction to the process of conducting research. This introduction provides the essential context for the qualitative, quantitative, and mixed methods research courses. LEC.

SW 979. Methods of Qualitative Inquiry. 3 Hours.
This course provides a detailed overview of knowledge and skills in qualitative inquiry. It examines issues in the philosophy of science and paradigms for qualitative inquiry in social work. It emphasizes principles and procedures for qualitative inquiry design, including an introduction to data collection, analysis, report writing, while attending to criteria for establishing trustworthiness. LEC.

SW 980. History and Philosophy of Social Work. 3 Hours.
This course is designed to provide students with opportunities to examine the underlying conceptual frameworks of social work practice—their history and present manifestations. This course rests on the definition of social work practice that includes the interaction of knowledge, value, and skill around professional purpose and in the context of professional sanction. LEC.

SW 981. Advanced Quantitative Research Methods. 3 Hours.
This course, which includes a lab, focuses on quantitative research methodology and related inferential statistics, emphasizing mastery of specific methodological and statistical knowledge and skills. The course will address the following topics: the framing of research questions; the selection of appropriate research methods and designs; the selection of appropriate statistics for data analysis; the principles of analysis; interpretation of findings; and the presentation of results. LEC.

SW 982. Social Welfare Policy. 3 Hours.
This seminar helps doctoral students learn to analyze social welfare policies and programs. After comparing and contrasting various policy analysis frameworks, students learn to analyze the ways in which social conditions, values, and ideologies shape the definitions of social problems as well as the development, implementation, and evaluation of social welfare policies that impact those problems. LEC.

SW 983. Advanced Research Methods II. 3 Hours.
The purpose of this advanced research methods course is to help equip professionals to design and carry out research with direct implications for social work practice and social welfare policy. Building on the experience in SW 978 and SW 981, this course will focus on more advanced topics in research design and both experimental and correlational statistical analyses. LEC.

SW 984. Social Work Practice: Identifying and Improving “Best Practices. 3 Hours.
The main focus of this seminar is on developing skills for conduction multidimensional, value critical inquiry about "best practices" relevant to social work practice, and applying the results of that inquiry toward extending and improving current "best practices". LEC.

SW 985. Theory for Research: ______. 3 Hours.
This course provides an introduction to interdisciplinary theory for applied social research, focusing on: (1) the roles and uses of theory in social inquiry (2) theory building and theory testing (3) induction and deduction (4) the articulation of common or related theoretical traditions in various social science disciplines. LEC.
SW 987. Teaching Social Work: Philosophy and Methods. 3 Hours.
The purpose of the course is to prepare doctoral students for effective
teaching of Social Work courses at all levels of higher education. Doctoral
students need practical skills, a theoretical base, experience, and
confidence in order to improve their teaching performance. LEC.

SW 988. Mixed Methods in Social Science Research. 3 Hours.
The purpose of this course is to provide an overview of mixed methods
research, consisting of the history and philosophy of mixed methods
research, the emerging literature on it, purposes and characteristics
of mixed methods research, types of research problems addressed,
the specification of mixed methods purpose statements and research
questions, types of major mixed methods designs, data collection and
analysis strategies, and reporting and evaluating results. LEC.

SW 990. Graduate Research. 1-9 Hours.
Individual research preparatory to defense of dissertation prospectus. (By
arrangement with doctoral chair.) RSH.

SW 998. Doctoral Applied Research and Education Studies. 1 Hour.
This course provides the opportunity for doctoral students to learn about
research or teaching through direct application of research or teaching
skills under the mentorship of faculty. RSH.

SW 999. Dissertation. 1-12 Hours.
THE.

Bachelor of Social Work

Bachelor of Social Work Program

The School of Social Welfare provides the education and experience
necessary for a career in social work. By helping shape students’ capacity
for caring, the school prepares social workers to carry out the unique
purposes of the profession — to develop human potential, to promote
individual well-being, and to bring about a more just society.

Social work is a major professional discipline in the broad institution of
social welfare. The term social welfare denotes the dimensions of society
concerned with human needs: health, education, economic security,
housing, and mental health.

The undergraduate program of the KU School of Social Welfare prepares
graduates for beginning generalist social work practice. The program
defines generalist practice as maintaining focus on the interface between
systems (i.e., individual, family, groups, organizations, and communities),
with particular emphasis on

- The strengths inherent in these systems.
- The need to understand the role of gender, age, race/ethnicity, class,
  religious beliefs, sexual orientation, disability, and culture in all phases
  of the social work process.
- The promotion of social and economic justice for those
disenfranchised on the basis of the attributes listed above.
- The assumption of a critical perspective regarding different ways of
  knowing.

Beginning generalist practice uses multilevel methodology, depending on
the needs of the client system, and incorporates a knowledge, value, and
skill base that is transferable between and among diverse contexts and
locations.

The B.S.W. program is offered on the Lawrence campus and through the
Edwards Campus as part of a degree-completion program at Kansas City
Kansas Community College.

B.S.W. Edwards Campus 2+2

The B.S.W. Edwards 2+2 program is offered as a partnership between the
KU School of Social Welfare and Kansas City Kansas Community
College (KCKCC). The curriculum is designed as a degree completion
program for students who are completing or who have completed an
associate’s degree and are interested in pursuing a bachelor's degree.
Students in the B.S.W. Edwards 2+2 program take the upper-level social
work courses required for the B.S.W. with KU professors at KCKCC
and receive a KU degree. For more information, contact the B.S.W. 2+2
student services coordinator at 913-288-7304 to make an appointment.

Advising

While Deciding on a Major

Early advising is recommended for undergraduates interested in social
work. Pre-social work students (both KU and transfer) are encouraged to
attend group advising through the school during each enrollment period.

From Another College

For undergraduates who plan to transfer to KU but currently attend
another college, advising is available by phone or email. The school works
closely with counselors from all Kansas colleges.

Once Admitted

Once a student is admitted to the School of Social Welfare, academic
advisors are available to assist students in the enrollment process, filling
out enrollment forms and other academic program requirements. Students
consult with their academic advisor before enrollment each semester and
have their advising hold removed. In addition, a member of the School’s
faculty is assigned as professional/career advisor to assist with career
matters.

For more information on B.S.W. advising, review the student handbook
(http://socwel.ku.edu/resources/forstudents/academic-handbooks).

Beginning in the fall semester, 4 semesters are necessary to complete
professional social work courses required for the B.S.W. degree.

Certificate Programs

Undergraduate Engaged Learning Certificate Programs

The university offers several engaged learning certificate programs
that work well with the undergraduate social work major. Students who
complete an engaged learning certificate program receive a notation
of it on their transcripts. Learn more about certificate programs (http://
socwel.ku.edu/academics/degrees/bsw/bsw/certificateprograms).

Undergraduate Admission to KU

First-year students enter the College of Liberal Arts and Sciences and
complete 3 semesters of work (36 credit hours) before applying to the
B.S.W. program. Visit the Office of Admissions (http://admissions.ku.edu)
for information about admission to KU. Visit the Office of International
Student and Scholar Services (http://www.iss.ku.edu) for information
about international admissions.
Undergraduate Admission to the School of Social Welfare

Admission Requirements

- Completion of 36 hours of course work, including mathematics and English composition I and II.
- A minimum grade-point average of 2.5.
- Submission of completed application (https://deptsec.ku.edu/~socwel/apply) including an essay answering 3 questions, a résumé, and 3 reference forms.
- Online KU application (transfer students).

Grade-Point Average

Evaluation of transcripts submitted as part of the application for admission includes computation of grade-point average for all work completed. This admission grade-point average is adjusted to include only courses that transfer. A student must maintain a minimum cumulative grade-point average of 2.5 and a 2.5 in social work required courses.

Admission Process

Students are admitted for fall semester only. The priority application deadline is February 1. No applications will be considered after June 15.

Learn more about the admission process (http://socwel.ku.edu/admission).

Bachelor of Social Work Degree Requirements

Primary responsibility for meeting graduation requirements rests with the student.

- A minimum of 120 credit hours of course work, including 12 credit hours of field practicum. At least 30 hours must be taken in residence.
- A 2.5 minimum grade-point average for all classroom work.
- A 2.5 minimum grade-point average in required social work courses.
- Successful completion of field practicum.
- Recommendation by the faculty of the school to the chancellor and the Kansas Board of Regents that the degree be granted.

Curriculum

Professional Socialization (6)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>SW 623</td>
<td>Seminar in Professional Issues</td>
<td>3</td>
</tr>
</tbody>
</table>

Students prepare for the responsibilities of social work, involving professional functioning, knowledge and use of professional ethics, values, attitudes, and skills. Students analyze their values critically to develop a unified personal and professional framework. Students develop their professional commitment to a code of ethics and understanding of social work to govern their professional behavior.

Human Behavior and the Social Environment (6)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>SW 530</td>
<td>Human Behavior in the Social Environment</td>
<td>3</td>
</tr>
<tr>
<td>SW 532</td>
<td>Community and Organizational Dynamics and Human Behavior</td>
<td>3</td>
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</tbody>
</table>

Students acquire a knowledge and understanding of individual, group, community, institutional, and cultural dynamics and behavior. Students become familiar with concepts, theories, and empirical findings that enable them to practice effectively as professional social workers.

Research (6)

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>SW 540</td>
<td>Fundamentals of Social Work Research</td>
<td>3</td>
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<tr>
<td>SW 541</td>
<td>Social Work Research Seminar</td>
<td>3</td>
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</table>

Students achieve a command of fundamental social work research. A knowledge of the scientific method is acquired and applied to current research. Students learn to apply critical thinking to the professional literature.

Social Work Practice (21)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>SW 510</td>
<td>Fundamentals of Social Work Practice</td>
<td>3</td>
</tr>
<tr>
<td>SW 555</td>
<td>Diversity, Oppression, and Social Justice: Culturally Competent Social Work</td>
<td>3</td>
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<tr>
<td>SW 560</td>
<td>Study Abroad</td>
<td>3</td>
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<tr>
<td>SW 610</td>
<td>Social Work Practice Seminar I</td>
<td>3</td>
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<tr>
<td>SW 612</td>
<td>Social Work Practice Seminar II</td>
<td>3</td>
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<tr>
<td>SW 630</td>
<td>Topics in Social Work Practice: Antisocial, Aggressive Behavior in Childhood and Early Adolescence</td>
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<td>Topics in Social Work Practice: Intimate Partner Violence</td>
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<tr>
<td>SW 632</td>
<td>Topics in Social Work Practice: Substance Abuse and Social Work Practice</td>
<td>1.5</td>
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<tr>
<td>SW 633</td>
<td>Topics in Social Work Practice: Crisis Intervention</td>
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</tbody>
</table>

Students acquire knowledge and skills needed for effective social work practice. The accumulated knowledge and understanding of the social work curriculum come together in the practice courses.

Social Policy (6)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW 620</td>
<td>Social Policies and Program Analysis</td>
<td>3</td>
</tr>
<tr>
<td>SW 621</td>
<td>Social Policy Analysis and Advocacy</td>
<td>3</td>
</tr>
</tbody>
</table>

Students develop the capacity for critical analysis of social problems, policies, and programs. Students analyze social work practice to understand the effect of policy on direct service. Basic policy analysis skills acquired in the first course are applied in specified areas of practice, applying analytical skills to problems, policies, and programs.

Study Abroad (3)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW 560</td>
<td>Study Abroad</td>
<td>3</td>
</tr>
</tbody>
</table>

Students get exposure to international aspects of social welfare in countries such as Costa Rica, South Korea, India, and Ireland. An elective course that meets general education credit hour requirements.

Field Practicum (SW 601)

The field education office works with community agencies throughout Kansas and western Missouri to provide field practicum opportunities for students. Students are placed in these agencies through a collaborative process among the field education office, the student, and the agency. The field education office is responsible for ensuring that all field placements are able to provide the appropriate learning opportunities for students and that qualified field instructors will be available to the student.

Learn more about field education (http://socwel.ku.edu/academics/degrees/bsw/bsw-fe/fieldeducation).
Required Hours for Field Practicum

Students with 9 or more remaining elective or general education requirement credit hours in the fall of the senior year must complete these hours before beginning field placement. Students who are completing these hours may take SW 620, SW 621, and the mini-courses, but they cannot enroll in SW 610, SW 612, or SW 623. Students will be able to meet the requirements of Core Goals 4, 5, and 6 as a result of completing the major.

B.S.W. Edwards Campus 2+2

The B.S.W. Edwards 2+2 program (http://socwel.ku.edu/academics/degrees/bsw/2plus2/overview) is offered as a partnership between the KU School of Social Welfare and Kansas City Kansas Community College (KCKCC). The curriculum is designed as a degree completion program for students who are completing or who have completed an associate's degree and are interested in pursuing a bachelor's degree. Students in the B.S.W. Edwards 2+2 program take the upper-level social work courses required for the B.S.W. with KU professors at KCKCC and receive a KU degree. For more information, contact the B.S.W. 2+2 student services coordinator at 913-288-7304 to make an appointment.

Liberal Arts Prerequisites for a broad base of understanding

Learn more about the B.S.W. curriculum (http://socwel.ku.edu/academics/degrees/bsw/bsw/curriculum) and liberal arts prerequisites.

COMMUNICATIONS SKILLS

English

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
</tr>
</tbody>
</table>

Literature (One of the following or any 200-level course or above excluding Children's Literature)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 203</td>
<td>Topics in Reading and Writing: ______</td>
</tr>
<tr>
<td>ENGL 209</td>
<td>Introduction to Fiction</td>
</tr>
<tr>
<td>ENGL 210</td>
<td>Introduction to Poetry</td>
</tr>
<tr>
<td>ENGL 211</td>
<td>Introduction to the Drama</td>
</tr>
</tbody>
</table>

Speech Communications

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication</td>
</tr>
<tr>
<td>PHIL 149</td>
<td>does NOT count</td>
</tr>
</tbody>
</table>

Exemption - written verification of two semesters of high school speech/debate with grade of B or better

MATHEMATICS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 101</td>
<td>College Algebra</td>
</tr>
</tbody>
</table>

U.S. CULTURAL STUDIES (one of the following)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAS 306</td>
<td>The Black Experience in the U.S. Since Emancipation</td>
</tr>
<tr>
<td>AMS 100</td>
<td>Introduction to American Studies</td>
</tr>
<tr>
<td>AMS 110</td>
<td>American Identities</td>
</tr>
<tr>
<td>AMS 290</td>
<td>Religion in American Society</td>
</tr>
<tr>
<td>AMS 330</td>
<td>American Society</td>
</tr>
<tr>
<td>AMS 696</td>
<td>Studies in: ______</td>
</tr>
<tr>
<td>HIST 128</td>
<td>History of the United States Through the Civil War</td>
</tr>
<tr>
<td>HIST 129</td>
<td>History of the United States After the Civil War</td>
</tr>
<tr>
<td>HIST 373</td>
<td>The Supreme Court and Religious Issues in the United States</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 530</td>
<td>History of American Women--Colonial Times to 1870</td>
</tr>
<tr>
<td>HIST 531</td>
<td>History of American Women--1870 to Present</td>
</tr>
<tr>
<td>HIST 616</td>
<td>Contemporary America, 1941-Present</td>
</tr>
<tr>
<td>PHIL 160</td>
<td>Introduction to Ethics</td>
</tr>
<tr>
<td>POLS 110</td>
<td>Introduction to U.S. Politics</td>
</tr>
<tr>
<td>POLS 611</td>
<td>Constitutional Law: Civil Liberties</td>
</tr>
<tr>
<td>REL 171</td>
<td>Religion in American Society</td>
</tr>
<tr>
<td>SOC 160</td>
<td>Social Problems and American Values</td>
</tr>
</tbody>
</table>

WESTERN CIVILIZATION

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HWC 204</td>
<td>Western Civilization I</td>
</tr>
<tr>
<td>HWC 205</td>
<td>Western Civilization II</td>
</tr>
</tbody>
</table>

INTERCULTURAL STUDIES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAS 103</td>
<td>Introduction to Africa</td>
</tr>
<tr>
<td>AAAS 104</td>
<td>Introduction to African-American Studies</td>
</tr>
<tr>
<td>AAAS 105</td>
<td>Introduction to African History</td>
</tr>
<tr>
<td>AAAS 106</td>
<td>The Black Experience in the Americas</td>
</tr>
<tr>
<td>AAAS 300</td>
<td>African Traditional Religion and Thought</td>
</tr>
<tr>
<td>AAAS 301</td>
<td>Portrait of a Third-World Nation: Haiti</td>
</tr>
<tr>
<td>AAAS 305</td>
<td>Modern African History</td>
</tr>
<tr>
<td>AAAS 332</td>
<td>Introduction to African Literature</td>
</tr>
<tr>
<td>AAAS 351</td>
<td>Africa's Human Geographies</td>
</tr>
<tr>
<td>AAAS 370</td>
<td>Introduction to the Languages of Africa</td>
</tr>
<tr>
<td>AAAS 376</td>
<td>West African Art</td>
</tr>
<tr>
<td>AAAS 415</td>
<td>Women and Islam</td>
</tr>
<tr>
<td>AAAS 435</td>
<td>Muslim Women's Autobiography</td>
</tr>
<tr>
<td>AAAS 470</td>
<td>Language and Society in Africa</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EALC 508</td>
<td>Religion in China</td>
</tr>
<tr>
<td>EALC 509</td>
<td>Religion in Japan</td>
</tr>
<tr>
<td>EALC 642</td>
<td>Chinese Thought</td>
</tr>
<tr>
<td>EALC 536</td>
<td>Cultural Traditions of Japan</td>
</tr>
<tr>
<td>ECIV 104</td>
<td>Eastern Civilizations</td>
</tr>
<tr>
<td>HA 165</td>
<td>Introduction to Asian Art</td>
</tr>
<tr>
<td>HA 340</td>
<td>Special Study in Asian Art Before 1900: ______</td>
</tr>
<tr>
<td>HA 341</td>
<td>Special Study in Islamic Art, 14th-17th Century: ______</td>
</tr>
</tbody>
</table>
Master of Social Work

Built upon the commitment to a strengths perspective of social work practice, the Master of Social Work program (http://socwel.ku.edu/academics/degrees/msw/regular/overview) offers educational opportunities for those who wish to expand their skills in helping individuals and communities develop their capacities to support and enhance the quality of life for all people. The school recognizes that individuals with a natural skill in helping come from all backgrounds and encourages them to apply.

The Master of Social Work degree prepares graduates for advanced social work practice in 1 of 2 broad areas — clinical social work practice with individuals, families, and groups or social work administrative and advocacy practice aimed at macro-level practice. The first level of the master's curriculum is a generalist foundation required of all students. The foundation consists of 6 classroom courses and a 2-semester practicum that reflects the generalist intent.

At the advanced level, students choose a concentration in clinical social work practice with a focus in a particular field of practice — child and family, health/mental health, aging — or social work administrative and advocacy practice. The advanced-level practicum implements students' choice of concentration.

Full-time students complete the social work degree program in two years. Students admitted for part-time study may extend the program for up to 5 years.

## Requirements for the Major in Social Work

**Preprofessional course (3)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
</table>

The School of Social Welfare requires students to take SW 220 before entering senior-level classes.

### Junior

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW 530</td>
<td>3</td>
</tr>
<tr>
<td>SW 540</td>
<td>3</td>
</tr>
<tr>
<td>SW 555</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW 510</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours: 9**

### Senior

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW 601</td>
<td>6</td>
</tr>
<tr>
<td>SW 610</td>
<td>3</td>
</tr>
<tr>
<td>SW 620</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW 610</td>
<td>3</td>
</tr>
<tr>
<td>SW 612</td>
<td>3</td>
</tr>
<tr>
<td>SW 621</td>
<td>3</td>
</tr>
</tbody>
</table>

Select two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW 623</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>SW 630</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>SW 631</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>SW 632</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>SW 633</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours: 15**

**Total Hours: 48**

---

### Master of Social Work

#### Master of Social Work

Built upon the commitment to a strengths perspective of social work practice, the Master of Social Work program offers educational opportunities for those who wish to expand their skills in helping individuals and communities develop their capacities to support and enhance the quality of life for all people. The school recognizes that individuals with a natural skill in helping come from all backgrounds and encourages them to apply.

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---

### Course List

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 160</td>
<td>Introduction to Child Behavior and Development</td>
<td></td>
</tr>
<tr>
<td>PSYC 333</td>
<td>Child Development</td>
<td></td>
</tr>
<tr>
<td>BIOLOGY (one of the following)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 100 &amp; BIOL 102</td>
<td>Principles of Biology and Principles of Biology Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
<td></td>
</tr>
<tr>
<td>ECON 104</td>
<td>Introductory Economics</td>
<td></td>
</tr>
<tr>
<td>POLITICAL SCIENCE</td>
<td>Introduction to U.S. Politics (also meets US Cultural requirement)</td>
<td></td>
</tr>
<tr>
<td>PSYC 104</td>
<td>General Psychology</td>
<td></td>
</tr>
<tr>
<td>SW 220</td>
<td>Social Work, Social Welfare and U.S. Society</td>
<td></td>
</tr>
</tbody>
</table>

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### Sociology

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 104</td>
<td>Elements of Sociology</td>
<td></td>
</tr>
</tbody>
</table>
to four years (see Completion Plans (http://socwel.drupal.ku.edu/sites/socwel.ku.edu/files/docs/Academics/msw/MSW%20Completion%20Plans%20March%202014.pdf)). The regular M.S.W. program is offered on the main KU campus in Lawrence at the Edwards Campus in Overland Park, KS, and in alternating years in the western Kansas program (http://socwel.drupal.ku.edu/academics/degrees/msw/westernks/overview).

The Advanced-Standing program (http://socwel.drupal.ku.edu/academics/degrees/msw/advancedstanding/overview) admits individuals with B.S.W. degrees and strong academic records. Applicants generally have relevant post-degree work experience.

Postgraduate Education Options
A special program has been created to help meet the continuing education needs of professional social workers in the community. For more information, see the Professional and Community Education Program (http://socwel.ku.edu/alumni/pce/intro).

Social Work & Law

Joint Degree in Social Work and Law
The Juris Doctor/Master of Social Work (http://socwel.drupal.ku.edu/academics/degrees/msw/mswdj/overview) joint degree program combines into 4 years of study the 3-year Juris Doctor (p. 768) program offered by the School of Law (http://www.law.ku.edu) and the 2-year M.S.W. degree offered by the School of Social Welfare. The social work practitioner gains an understanding of the legal environment in which he or she works and its impact on social problems. The legal practitioner learns how social problems shape the law. Applicants must apply to and meet the criteria for admission to both schools. Contact each school for separate admission information.

Master of Social Work

Regular M.S.W. Program - 2-Year Full-Time or Part-Time
Applicants must have bachelor's degrees from accredited universities before beginning the M.S.W. course and field work. Applicants’ undergraduate studies must reflect the successful completion of liberal arts courses, including those in the social sciences and humanities which focus on the development of knowledge in communication; social, biological, and behavioral sciences; history; philosophy and the ways in which knowledge is gained and applied; and the value of a multicultural and diverse society.

Advanced-Standing Program
The Advanced-Standing Program requires a bachelor’s degree from a CSWE-accredited social work program with a grade-point average of at least 3.0. A higher grade-point average is desirable. Applicants who earned their social work bachelor's degrees within the 2 years before applying to the M.S.W. program must submit a copy of their practicum evaluation as well as a letter of recommendation for graduate studies completed by one of their practice instructors. In addition, all applicants who have been employed in a social work setting should submit a letter of recommendation from at least one supervisor who can address the applicant's knowledge, skill, and readiness for graduate education.

Admission decisions take into account the applicants’ amount and types of social service experience, letters of recommendation, narrative statement, writing skills, and undergraduate grade-point averages and courses completed.

The Advanced-Standing Program is a full-time 1-year program or part-time 2-year program. To be considered for advanced standing, current seniors should submit transcripts that document their fall semester grades and their successful practicum experience. All applications to either the regular M.S.W. or the Advanced-Standing Program become the property of the University of Kansas.

Learn more about the M.S.W. programs (http://socwel.ku.edu/academics/degrees/msw/regulardegree/overview).

Admission to the M.S.W. Program

M.S.W. Admission Requirements
- Bachelor's degree from an accredited university (Regular M.S.W.). Bachelor's of social work degree from a CSWE-accredited social work program (Advanced Standing).
- Undergraduate grade-point average of 3.0 or above. The admissions committee takes into account special circumstances such as improvement of grades in upper-division or graduate courses. We look for evidence of an applicant's commitment to the well-being of people and communities; a well-developed sense of self; emotional maturity and the ability to think clearly, creatively, and independently.
- Online application including three electronic reference forms and student-issued transcripts from all previously attended schools regardless of degree status.
- All applicants who have been employed in a social work setting should submit an electronic M.S.W. reference form from at least one supervisor who can address the applicant's knowledge, skill and readiness for graduate social work education as one of the three references.
- Non-refundable application fee of $55 for domestic students and $75 for international students.
- Graduate Record Examination scores are not required. Applicants are evaluated on undergraduate grade-point average, graduate course work (if any), volunteer and work experience especially related to social work, and evidence of potential for a social work career in the application narrative and references.

Deadlines
The deadline for the Advanced-Standing Program is January 15. The deadline for applications to the regular M.S.W. program (full time or part time) is February 15. Early application is encouraged.

Admission Process for All Programs
M.S.W. degree program students are admitted for fall semester only. Applications may be submitted anytime between Oct. 1 and Feb. 15. All fully completed applications are reviewed upon receipt. Admission decisions are made in the spring of each year. Advanced-Standing M.S.W. students begin in June; all other M.S.W. students (full time and part time) begin in August.

Learn more about the application process (http://socwel.ku.edu/admission).

International Students
All students from abroad, including students from English-speaking countries, must visit KU’s Applied English Center (http://www.aec.ku.edu)
for verification of English language skills. You may be required to take an English Language Proficiency Test and to enroll in English language courses if you do not pass that test.

Note: The need to take English courses may delay your start in or extend the length of the M.S.W. program.

If you are admitted to the M.S.W. program, your admission to the School of Social Welfare is provisional. You must visit the KU International Student and Scholar Services (http://www.iss.ku.edu) Office, isss@ku.edu, for your I-20 documentation.

You must also visit the Applied English Center (http://www.aec.ku.edu), aec@ku.edu.

The International Conference on Social Welfare recommends that before seeking professional education for social work in the United States, a student should complete comparable study available in his or her own country and acquire a minimum of 2 years of social work experience there.

International students also must submit

1. Original bank statements showing evidence of your and/or your sponsor’s financial ability to pay for your educational and living expenses. Adequate health insurance coverage also is required.
2. Evidence of having taken the Test of English as a Foreign Language (TOEFL) examination within the past 2 years. Minimum scores are subject to change. Please visit the application area of our website for the latest minimum scores.
3. 1 official, original-language copy of your academic records with a certified English translation.

Planning Your Commitment

Students are admitted on either a full- or a part-time basis. In making decisions about full- or part-time study, students should consider that each class requires several hours of preparation each week. The program is demanding; students can expect reading assignments and paper preparation and should be prepared to fulfill practicum commitments averaging 2½ to 3 days a week.

Students admitted part-time take 6 credit hours each semester the first year and the additional 10 hours, including practicum, the second year. Full-time students enroll in 16 credit hours each semester.

M.S.W. Degree Requirements

The School of Social Welfare requires a total of 64 credit hours for the M.S.W. degree, consisting of

- 36 credit hours of classroom work maintaining a grade-point average of 3.0 (B) — a total of 108 grade points on a 4.0 grading scale.¹
- 28 credit hours of field practicum with an S grade for satisfactory performance.
- 2 sequential semesters of 10-credit-hour enrollments are necessary to meet residence requirements.
- Recommendation of the faculty of the School of Social Welfare to the University Registrar that the master’s degree be granted.

¹ Students who maintain grade-point averages of at least 3.0 in the foundation courses are eligible to take additional courses beyond the minimum requirement.

M.S.W. Foundation Curriculum

Social Work Practice (SW 710, SW 711). Based on the school’s unique strengths perspective, courses provide core knowledge and skills essential for working with individuals, families, and groups.

Community and Organizational Practice (SW 713). This practice class gives students an understanding of the core elements of practice in organizations and communities.

Social Policy and Program Analysis (SW 720). Course emphasizes the effect of social problems, policies, and programs on people and gives students the skills to analyze the effectiveness of policies and programs.

Human Behavior in the Social Environment (SW 730). Theoretical underpinnings essential for effective social work practice and for understanding the behavior of individuals, families, groups, and communities.

Social Work Research (SW 740). Course offers students the opportunity to become informed consumers of social-work-relevant research and to develop skill in evaluating the effectiveness of their own work with clients and the effectiveness of the programs in which they work.

Field Practicum (SW 701). Community agencies throughout Kansas and western Missouri offer practicum opportunities for the application of knowledge, values, and skills learned in the classroom. Field experiences for foundation-level students extend the curriculum goal of generalist social work and are designed so that students acquire fundamental competencies and practice skills across multiple social systems.

Foundation Courses

The following courses (http://socwel.drupal.ku.edu/academics/degrees/msw/regular/curriculum) are required (32 credit hours):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW 701</td>
<td>Basic Field Practicum</td>
<td>7</td>
</tr>
<tr>
<td>SW 701</td>
<td>Basic Field Practicum</td>
<td>7</td>
</tr>
<tr>
<td>SW 710</td>
<td>Social Work Practice I</td>
<td>3</td>
</tr>
<tr>
<td>SW 711</td>
<td>Social Work Practice II</td>
<td>3</td>
</tr>
<tr>
<td>SW 713</td>
<td>Community and Organizational Practice</td>
<td>3</td>
</tr>
<tr>
<td>SW 720</td>
<td>Social Policy and Program Analysis</td>
<td>3</td>
</tr>
<tr>
<td>SW 730</td>
<td>Human Behavior in the Social Environment</td>
<td>3</td>
</tr>
<tr>
<td>SW 740</td>
<td>Social Work Research</td>
<td>3</td>
</tr>
</tbody>
</table>

M.S.W. Advanced-Level Curriculum

Students at the advanced level (http://socwel.drupal.ku.edu/academics/degrees/msw/regular/curriculum) select a concentration in either clinical social work practice or social work administrative and advocacy practice. This selection is based on their goals of working directly with individuals, families, and groups or at the macro-level of practice in advocacy and community practice. With the exception of study abroad courses offered by the School of Social Welfare, students may not enroll in advanced-level classes before completing foundation requirements.

All students completing the M.S.W. degree are eligible to apply for licensure in the State of Kansas as Licensed Master Social Workers (LMSW). Students who anticipate working towards meeting the requirements for the Licensed Specialist Clinical Social Worker (LSCSW) examination should enroll in the clinical social work practice concentration.
Clinical Social Work Concentration

This 32-credit-hour concentration prepares students for social work practice with individuals, families, and small groups. The focus of the student’s academic preparation is twofold: on developing the assessment skills needed to identify client’s personal, interpersonal, environmental and/or systems needs; and on selecting, in concert with the client, appropriate interventions that are evidence based and supported as best practices. Students are exposed to social work theories and methods applicable to the range of practice settings in which clinical social work services are provided; they simultaneously have the opportunity to apply this developing knowledge in the field education component of their graduate programs. Students who anticipate taking the Licensed Specialist Clinical Social Worker (LSCSW) examination should enroll in the clinical social work practice concentration.

The following courses must be taken in the clinical concentration (32 credit hours):

SW 801 Advanced Field Practicum-Clinical Practice 7
SW 801 Advanced Field Practicum-Clinical Practice 7
SW 810 Clinical Social Work Practice 3
SW 863 Mental Health and Psychopathology 3
SW 811 Topics in Advanced Clinical Social Work: _____ 3

This selection of offerings emphasizes application of advanced theoretical and practice principles to client systems.

Integrative seminar: 3

Students must select an integrative seminar that complements the advanced field practicum. Courses include:

SW 830 Social Work in Child and Family Settings
SW 832 Social Work in Health Care and Mental Health Settings
SW 833 Social Work and Aging

Diversity selective: 3

SW 870 Spiritual Aspects of Social Work Practice 3
SW 872 Cultural Diversity in Social Work Practice 3
SW 873 Social Work with Gay, Lesbian, Transgendered and Bi-Sexual Clients 3
SW 874 Social Work Practice with Women 3

This cluster of courses is organized around understanding diversity and applying that understanding to specific populations of people who have been marginalized and oppressed.

Clinical Practice Electives 3

SW 834 Social Work in Schools 3
SW 852 Social Work with Groups 3
SW 860 Loss and Grief 3
SW 861 Intimate Partner Violence 1.5
SW 862 Intrafamilial Sexual Abuse 1.5
SW 866 Social Work Practice with Children and Adolescents 3
SW 868 Crisis Intervention and Suicide Risk Reduction 3
SW 869 Social Work with Clients with Alcohol and Drug-Related Problems 3

The clinical practice elective offers students an opportunity to acquire in-depth knowledge in a core area of clinical social work practice. Topics may include ethics, human sexuality, mental health and psychopathology, family mediation, loss and grief. Study Abroad courses do not meet clinical practice elective requirements.

Non-Clinical Electives 3
SW 846 Advanced Community and Advocacy Practice 3
SW 855 Study Abroad 3
SW 875 Readings and Investigations: _____ 1-3

These courses are macro-oriented and do not have significant clinical content.

(For students expecting to sit for the LSCSW license in the future, at least one of the clinical electives must meet the BSRB requirement for diagnosis and treatment. Those interested in school social work should take SW 834 as one of their elective courses.)

Note: Earning an M.S.W. in the clinical social work concentration requires 15 credit hours of course work which has clinical content covering issues of diagnosis and treatment. These courses include SW SW 810, SW 811, SW 863, integrative seminars, and clinical electives. Study Abroad courses do not contain clinical content and may be used toward the diversity selective requirement or as an elective. If a student enrolls in Study Abroad for the diversity selective requirement, the elective course must contain clinical social work content.

Social Work Administrative and Advocacy Practice Concentration

The 32-credit-hour social work administrative and advocacy practice (SWAAP) curriculum prepares graduates for management or advocacy positions in public and voluntary human services organizations. The concentration helps students achieve competence in managerial and advocacy practice grounded in the knowledge and values of social work. Knowledge and skill areas include program design, managing information, managing people, managing resources, community advocacy, and program evaluation. This concentration prepares students to be program managers, supervisors, agency administrators, program monitors, advocates and evaluators, and social planners with voluntary health and welfare planning agencies; federal, state, and local planning bodies; and advocacy and self-help organizations. Students graduating from the social work administrative and advocacy practice concentration are eligible for licensure at the LMSW level in the state of Kansas.

The following courses must be taken in the SWAAP concentration (32 credit hours):

SW 804 Advanced Field Practicum-Social Work Administration 7
SW 804 Advanced Field Practicum-Social Work Administration 7
SW 840 Program Design and Grant Writing 3
SW 841 Advanced Policy and Programs 3
SW 842 Using Outcomes for Administrative and Advocacy Practice 3
SW 843 Program Management and Supervision 3
SW 846 Advanced Community and Advocacy Practice 3
SW 849 Managing Financial Resources 3
M.S.W. Advanced-Standing Program

The Advanced-Standing program (http://socwel.drupal.ku.edu/academics/degrees/msw/advancedstanding/curriculum) requires an enrollment of 38 credit hours, as follows:

- A summer enrollment in 2 classes:
  a. SW 712, a social work practice class organized around the school’s major curriculum themes. Students must earn a minimum grade of B in SW 712 to continue matriculating.
  b. An elective course selected by the student to broaden the base of knowledge. Electives are offered in various locations.
- The advanced level of the M.S.W. program (32 credit hours):
  a. 18 credit hours of classroom work maintaining a grade-point average of 3.0 (B)
  b. 14 credit hours of field practicum with an S grade for satisfactory performance

No credit is given for courses taken before admission. The advanced level of this program may be taken full time or extended up to 2 years. Two sequential semesters of 10-credit-hour enrollments are necessary to meet residence requirements.

Field Practicum

The field education office works with community agencies throughout Kansas and western Missouri to provide field practicum opportunities for students. Students are placed in these agencies through a collaborative process among the field education office, the student, and the agency. The field education office is responsible for ensuring that all field placements are able to provide the appropriate learning opportunities for students and that qualified field instructors will be available to the student.

Learn more about field education (http://socwel.ku.edu/academics/degrees/msw/regular-fe/fieldeducation).

Prior Work Experience

In accordance with national curriculum policy, prior employment and life experience may not be credited toward classroom course work or practicum requirements.

School Social Work

The Kansas Department of Education no longer certifies school social workers. However, the School of Social Welfare strongly recommends that students interested in practicing in a school setting take the following:

- A practicum experience at the advanced level in a public school setting under the direct supervision of a school social worker.
- Clinical social work concentration.
- SW 830 Social Work in Child and Family Settings.
- SW 834 Social Work in Schools as 1 clinical elective.
- SPED 725 is highly recommended as an elective choice for students planning a future in school social work.

Doctor of Philosophy in Social Work

Doctor of Philosophy in Social Work

The goal of the University of Kansas School of Social Welfare doctoral program is to prepare students to become leaders nationally and internationally in advancing social work practice and policy through research, teaching, and scholarship. Our students graduate from the program with the critical knowledge and skills they need to become innovative stewards of the discipline who generate and disseminate knowledge as researchers, scholars and educators. The school is known internationally as a prime innovator in the Strengths Perspective for social work practice. Doctoral students have played a key role in this exciting initiative.

Program Highlights

- Creative, critical thinking about practice, policy, and theory
- Quantitative and qualitative skills for research
- Innovative scholarship and teaching
- Student-centered educational approach
- Financial support and mentoring for students
- Full- and part-time enrollment options
- Personal and community strengths
- Appreciation for human diversity and global perspective
- Social justice

Doctoral students become conversant with the excitement and creativity in the profession — how professionals come to know what they know, how they put that knowledge into practice, and how it affects consumers.

Consider Our Program

The Ph.D. program (http://socwel.ku.edu/academics/degrees/phd/overview) offers effective alternatives for building knowledge and inquiring into social work practice and social welfare policy. We are dedicated to educating scholars who can develop knowledge for the profession through quantitative, qualitative, theoretical, or conceptual analyses, and historiographic investigations. Demand for our Ph.D. graduates is high. Recent alumni are employed in teaching, research, and combined teaching/research positions at large and small universities.

Curriculum

Doctoral courses (http://socwel.ku.edu/academics/degrees/phd/curriculum) prepare students as scholars with conceptual and methodological sophistication.

- The history and philosophy course focuses on the intellectual history, current status, and innovation of social work ideas, ideologies, and theories.
- In the research sequence, students learn both qualitative and quantitative methodologies, designs, advanced modes of analysis, theory for research, and appropriate applications.
- The policy/practice courses provide the opportunity to analyze policies of interest to the student and discover “best” practices as they affect a population. Students critically consider human problems, strengths, and strategies for change and transformation.
- Qualifying papers and electives help students develop deep understanding in areas of special interest.
Seminars on teaching enable students to be effective educators.

The dissertation involves advanced and focused research into a topic selected by the student, based on quantitative, qualitative, historical, or other methods of inquiry.

GTA & GRA

Teaching and Research Opportunities

Our Ph.D. program contributes significantly to the model of strengths and community-based research, service, and education developed by the school. Under the direction of faculty members, many Ph.D. students help with research projects and serve as teaching assistants. For example, doctoral research assistants work in such areas as aging, asset-building, child welfare, criminal justice, diversity issues, domestic violence, health and disability, child and adult mental health, poverty, social policy, and spirituality.

It is part of the school’s mission to focus on teaching, inquiry, and practice that benefit populations who experience oppression of all kinds. The school is committed to diversity and multicultural perspectives. Many of the research and service projects of faculty members and doctoral students are committed to direct and positive impact on people of color, status minorities, and oppressed peoples, individually, collectively, and internationally.

Responsible Scholarship

Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current Lawrence and Edwards Campus policies on Doctoral Research Skills and Responsible Scholarship are listed in the KU Policy Library.

Admission Criteria & Requirements

Criteria used in judging applications include the applicant’s potential for excellence in academic performance, professional practice experience, and potential for contributions to knowledge-building for social work.

Required

- Master's degree in social work or related field.
- Graduate grade-point average of 3.5 or higher.
- Personal statement.
- Three letters of reference.
- Completion of the Graduate Record Examination's (GRE) Quantitative and Verbal tests within the past 5 years. The GRE Writing/Analytic test is not required.
- Completion of a basic statistics course within the past two years with a grade of B or higher. The applicant must include a written statement showing how this requirement has been met or how it will be met before entering the program.
- Online graduate application.
- For international students, completion of the Test of English as a Foreign Language (TOEFL) or the IELTS within the past two years, demonstrating high proficiency.

Preferred

- GRE scores in at least the 50th percentile on the Quantitative and Verbal tests.
- Undergraduate grade-point average of 3.0 or higher preferred.
- M.S.W. degree preferred. Applicants with master’s degrees related to social work and affiliation with social work activities and values are considered.
- Two years of social work or related practice; two years of post-master’s professional social work experience preferred.
- Personal interview (telephone or email contacts with the chair of the program are recommended before submitting application).

Application Timeline and Procedure

Applications are not reviewed until all materials are received. The deadline is January 15. Applicants are strongly encouraged to take the Graduate Record Examination well in advance of the February 1 deadline. Late applications are considered only on a space-available basis.

Learn more about the admission process.

International Students

International students from all regions of the world are encouraged to apply. Contact the school at socwelweb@ku.edu (admissionsw-phd@ku.edu) for more information about international student applications and resources and regulations of International Student and Scholar Services (http://www.iss.ku.edu) and the Applied English Center (http://www.aec.ku.edu).

Ph.D. Degree Requirements

The program requires a minimum of 54 credit hours, as follows:

- 24 credit hours of required coursework.
- 12 credit hours of electives.
- A qualifying paper.
- A comprehensive examination process.
- Completion of a dissertation.

In fulfilling the elective hours, students may take graduate-level courses in any substantive area or research skills necessary for successful completion of their goals. Students can fulfill this requirement by taking electives in social science or other relevant graduate disciplines.

Beyond course work, students complete one qualifying paper under the guidance of a faculty committee. This demonstrates their ability to integrate knowledge and skills across the three curriculum areas in relation to a theme of inquiry developed by the student in his or her chosen specialization. After the qualifying paper is completed, students complete an oral comprehensive exam (dissertation proposal defense) and then write and defend a doctoral dissertation.

Commuting for 1 or 2 days a week is possible. Required course work (http://socwel.ku.edu/academics/degrees/phd/curriculum) can be completed in 2 years. Additional time is needed to complete the qualifying papers and dissertation. The program can be completed in 4 years of focused work. Students may start on a part-time basis but eventually must spend 1 year in residence, which entails 2 semesters of full-time course work (9 hours) and may include one summer session (6 hours); or a combination of 6 hours of course work and half-time appointment as a teaching or research assistant for 2 semesters.

Doctoral Courses (61)

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<tr>
<th>Course</th>
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<td>SW 978</td>
<td>Research Design and Methods</td>
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<tr>
<td>SW 979</td>
<td>Methods of Qualitative Inquiry</td>
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<td>SW 980</td>
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<td>SW 981</td>
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<td>SW 982</td>
<td>Social Welfare Policy</td>
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<td>SW 983</td>
<td>Advanced Research Methods II</td>
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<td>SW 984</td>
<td>Social Work Practice: Identifying and Improving “Best Practices”</td>
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<td>SW 985</td>
<td>Theory for Research: _____</td>
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<td>SW 987</td>
<td>Teaching Social Work: Philosophy and Methods (optional elective)</td>
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<td>SW 988</td>
<td>Mixed Methods in Social Science Research (optional elective)</td>
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<td>SW 998</td>
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<tr>
<td>SW 999</td>
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Office of Graduate Studies, Lawrence and Edwards Campus Students

Graduate Studies

Graduate Studies (http://www.graduate.ku.edu) at the University of Kansas is the administrative unit responsible for graduate education for the Lawrence and Edwards Campuses.

Graduate Studies (http://www.kumc.edu/academic-affairs/graduate-studies.html) on the KU Medical Center campus (a unit of the Office of Academic Affairs) is responsible for graduate programs in the Schools of Health Professions, Medicine, and Nursing. Please see the online catalog section for the KU Medical Center - Office of Graduate Studies for more information.

Graduate degrees are conferred by the professional schools and the College of Liberal Arts and Sciences with the exception of the Health Informatics master’s degree, which is conferred by the KUMC Office of Graduate Studies upon recommendation by the Health Informatics Advisory Council. Appointments to the Graduate Faculty are authorized by the schools and the College and by the individual academic units on the Medical Center campus and administered by the appropriate Graduate Studies office.

KU offers the Master of Arts degree, the Master of Science, specific professional master’s degrees, the professional degree of Specialist in Education, and the Doctor of Philosophy degree, as well as professional doctorates of Audiology, Education, Engineering, Musical Arts, and Speech-Language Pathology. KU also offers graduate certificate programs and currently enrolls more than 5,000 graduate students.

Goals of Graduate Study

Independent scholarship, competence in research or other creative work, and the cultivation of teaching commitment and skill are the traditional goals of graduate study. Having acquired a broad education as an undergraduate, the student is expected to master a special field, to learn the methods of investigation employed therein, and to proceed toward making an original contribution to knowledge. Since many of those who earn advanced degrees find careers in higher education, the acquisition of skill in teaching and in directing research is also an essential part of graduate education.

These traditional goals gain renewed significance in changing times, while newly emerging societal interests and needs and new demands of the marketplace both underscore their importance and emphasize the necessity for flexibility in programs and accommodation in career objectives. Careers for graduates in many fields are more broadly dispersed, and the contributions of graduate study and research to society must become more widely spread and recognized in government, business and industry, and in diverse professions and arts. At the same time, entering students must realize that a change in employment patterns for graduates is under way in many fields where the major, if not the sole, employment opportunity after graduation was once to be found in a teaching career.

Graduate Military Programs

Graduate Military Programs (GMP) facilitates collaboration between the university and the US Armed Forces for the development of academic programs and research initiatives that support the needs of the Department of Defense (DOD). GMP develops and maintains programs for select officers attending the Command and General Staff College at nearby Fort Leavenworth, instructors at the United States military academies, foreign area officers, logisticians, and other DOD personnel requiring the advanced degrees necessary to teach and conduct research at the highest level. The office assists principal investigators throughout the university to find well matched research grant opportunities, prepare proposals, and coordinate with the appropriate DOD entities. GMP also serves as the voice for all veteran student related educational issues and is committed to creating and maintaining a positive learning environment for military veterans attending our university.

Research

Research and graduate studies are integral parts of the university's educational mission. The National Science Foundation classifies KU as a major university receiving substantial research support. KU is also a Carnegie Doctoral/Research Extensive University and has been a member of the Association of American Universities since 1909. The university has a long and successful record of research collaboration through independent, multidisciplinary research centers that focus on common themes. KU is home to university research centers and institutes, affiliated centers, core service labs, the Kansas Geological Survey, and the Kansas Biological Survey. In addition, a number of research centers exist in individual departments and academic units throughout the university. For more information about research on the Lawrence campus, visit the Research (http://www.ku.edu/research) page or the Office of Research (http://www.research.ku.edu).

Fellowships and Scholarships

Visit the Graduate Studies website (http://graduate.ku.edu/funding) for information about funding opportunities for KU graduate students.

Admission to Graduate Study

Persons whose records indicate their ability to succeed with advanced work may be admitted for graduate study to the University of Kansas in one of the professional schools or College of Liberal Arts and Sciences.

Applicants can either apply as degree-seeking, non-degree-seeking, or certificate-seeking. Applicants seeking an identifiable degree program are degree-seeking, while those applicants who do not have an identified degree or certificate program should be admitted under the non-degree-seeking category. No student may work toward a graduate degree without being accepted as a degree-seeking student in a specific graduate program. (View the current policies on Graduate admission (http://policy.ku.edu/graduate-studies/admission-to-graduate-studies).)

English Proficiency:

International applicants and domestic applicants who are not native speakers of English must verify English proficiency for purposes of admission in accordance with the policy on English Proficiency Requirements for Admitting Graduate Students (https://documents.ku.edu/policies/Graduate_Studies/EnglishProficiencyIntlStudents.htm?num1.5).
Degree-Seeking Admission

Students who wish to work toward graduate degrees should be considered for admission under the degree-seeking category in either the regular or provisional category.

Regular Admission

Regular admission requires evidence* of a bachelor’s degree. The bachelor’s degree is not acceptable if it contains credit awarded for work experience that was not directly supervised by faculty members (life experience) of an accredited university or not evaluated in units that identify the academic content (e.g., P/F, S/U). In exceptional cases, persons not holding bachelor’s degrees may be admitted if they are academically well prepared. In these cases, the Dean of Graduate Studies reviews the student’s academic background before the student is admitted.

Additionally, applicants must demonstrate a grade-point average (GPA) of at least a 3.0 (on a 4.0 scale), in a completed* degree program from KU or from another regionally-accredited institution or foreign university with substantially equivalent bachelor’s, master’s, or doctoral degree requirements.

*Students may be admitted based on the cumulative GPA in the last term of an active degree program, but evidence of a completed bachelor’s degree will be required prior to enrollment in the second term of graduate study at KU.

Provisional Admission

An applicant who has one or more deficiencies in grade-point average, English proficiency scores (see the policy on English Proficiency Requirements for Admitting Graduate Students (https://documents.ku.edu/policies/Graduate_Studies/EnglishProficiencyIntlStudents.htm?num1.5)), prerequisite course work, or in other areas as determined by the department/program, but who meets all other admission standards, may be admitted on a provisional basis.

If a student is admitted provisionally for a lack of prerequisite coursework or low English proficiency scores, it is expected that the student will be reviewed immediately following the first semester of graduate study to determine if the student has met the requirements of regular admission.

If the student meets the requirements of regular admission, the department or program in which the student is enrolled will request that Graduate Studies move the student from provisional to regular status. If the student has not met the requirements of his or her provisional admission at the time of review, the student may be continued on provisional status or dismissed immediately.

A student admitted provisionally may be dismissed at the conclusion of any semester if s/he fails to earn a 3.0 GPA or meet other requirements of regular admission. If, after the first semester, provisional continuation is recommended by the department or program and approved by the graduate division, the student may remain on provisional status until the requirements of regular status are met. Students who have been dismissed from a graduate program may be admitted for further graduate study at KU only by petition of the graduate division that will accept the student. The petition must be approved by the Dean of Graduate Studies.

Non-degree-Seeking Student Admission

A non-degree-seeking applicant applies to the University for admission as a non-degree-seeking student, not to a department or program or school. A non-degree-seeking applicant must confirm that s/he has completed an undergraduate degree and, if applicable, meets English proficiency requirements for provisional admission [for more information, see the policy here (https://policy.drupal.ku.edu/graduate-studies/english-proficiency-international-students)], but s/he is not required to meet the other admission standards of Regular admission.

Non-degree-seeking admission is not intended to bypass regular admission into a graduate degree program. However, if a non-degree-seeking student later applies for admission as a regular degree-seeking student, and if s/he is accepted by a department or program, the total transfer credits toward a graduate degree may not exceed 6 hours, or 8 hours if the student holds a baccalaureate degree from KU (this total includes credit from other accredited graduate schools as well as non-degree credit earned at KU).

Easy Admit

An applicant to graduate study who wishes only to attend institutes or workshops that require graduate admitted status may be admitted under the easy admit process. This process allows any person, with evidence of a baccalaureate degree from an accredited institution, to take one course per semester without needing to meet the additional requirements of provisional admission.

The easy admit process is limited to certain Lawrence campus programs that tend to have a high volume of applicants who enroll in institutes or workshops for continuing education purposes. Easy admit is not available to applicants at the KU Medical Center. An applicant should verify that the easy admit option is available for the course in which s/he is interested before pursuing this option.

Certificate-Spiking Admission

The policies for admissions to a graduate certificate program can be found under Certificates in the Graduate Studies section of the current Academic Catalog or by viewing the current policy on Eligibility and Admission to a Graduate Certificate Program (http://policy.ku.edu/graduate-studies/grad-certification-program-admission).

Admission Procedure

Apply for admission at graduate.ku.edu. To ensure adequate time for review, the applicant should check with each individual degree program for its application deadline date. In addition to the application, Graduate Studies requires official transcripts from the baccalaureate granting institution and any transcripts from institutions attended post-baccalaureate. Programs may request all transcripts if they prefer.

In addition, letters of recommendation and test scores may be required. Applicants should check with the program to which they are applying for more information. Please note, transcripts and test scores that have been faxed by someone other than a university staff member are not accepted as official copies.

International applicants must also provide English proficiency test scores (see English Proficiency Requirements here (http://policy.ku.edu/graduate-studies/english-proficiency-international-students)). The university is unable to issue immigration documents until the international applicant furnishes a financial resources statement. Degree programs may choose not to consider international applications if they are not accompanied by a financial statement.
Application Fees

Nonrefundable application fees payable to the University of Kansas are required. Rates are subject to change. Some departments and programs require deposits from admitted students to be fully credited against required fees upon enrollment.

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<tbody>
<tr>
<td>Degree-seeking domestic application</td>
<td>$55</td>
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<td>Degree-seeking domestic application, Business</td>
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<td>Degree-seeking international application</td>
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<td>Non-degree-seeking application (domestic and international)</td>
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<td>Readmission application</td>
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<td>Easy Admit</td>
<td>$10</td>
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View the current Lawrence and Edwards Campus application fees (https://documents.ku.edu/policies/Graduate_Studies/ApplicationFeesGraduate.htm).

Admission Notification

Each applicant is notified in writing of the admission decision which clearly explains the admission classification (regular, provisional, certificate, or non-degree-seeking).

For all admission categories, enrollment in specific courses may be subject to fulfillment of departmental course prerequisites and consent of the instructor.

Admission to graduate study does not imply admission to candidacy for a higher degree. A student becomes a candidate for an advanced degree only by demonstrating through resident study at KU the requisite preparation and ability. Requirements specified for an advanced degree must be regarded as minimum requirements. Additional requirements depend on the student’s undergraduate preparation and the particular field of graduate work chosen.

After an absence of one year from KU, students must re-apply for admission to their graduate programs and to the appropriate Graduate Division.

Limitations on Admission

Because of limitations of space, faculty, or general resources for research and instruction, some programs must restrict the number of applicants they admit. Questions should be directed to the program to which the prospective student wishes to apply. View the current Graduate admission procedures (http://policy.ku.edu/graduate-studies/admission-procedure).

English Proficiency Requirements for Admission to a Graduate Study

The following are acceptable means for verifying English proficiency for purposes of admitting international applicants and domestic non-native English speakers:

- Graduation with a baccalaureate degree (or higher) earned in residence from an accredited English-medium U.S. college or university or a college or university in the United Kingdom, Australia, New Zealand, Ireland, English-speaking province of Canada, or an English-speaking Caribbean country, with instruction conducted in English.

- Degrees earned online may not be used to verify English proficiency.
- Receipt of official copy (not student's copy) of applicant's English proficiency standardized test scores (e.g., TOEFL) achieved not more than two years prior to the semester of first enrollment.

Regular Admission Minimums for Campus-based Programs*

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<tbody>
<tr>
<td>TOEFL (paper)</td>
<td>All part scores at least 53</td>
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<tr>
<td>TOEFL (iBT)</td>
<td>Reading, Listening, and Writing part scores at least 20</td>
</tr>
<tr>
<td>IELTS</td>
<td>Minimum overall score 6.0 with no part score below 5.5</td>
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Regular Admission Minimums for Online and Distance Learning Programs

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<tr>
<td>TOEFL (iBT)</td>
<td>Reading, Listening, and Writing part scores at least 23</td>
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<tr>
<td>IELTS</td>
<td>Minimum overall score 6.5, at least 6.0 in Listening, Reading, and Writing</td>
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Provisional Admission Minimums for Campus-based programs

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<td>IELTS</td>
<td>Minimum overall score 5.5 with no part score below 5.0</td>
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Deny Admission & Recommend Applying to Applied English Center (AEC)

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<tbody>
<tr>
<td>TOEFL (paper)</td>
<td>One or more part scores below 51</td>
</tr>
<tr>
<td>TOEFL (iBT)</td>
<td>Any part of these part scores below 18: Reading, Listening, and Writing</td>
</tr>
<tr>
<td>IELTS</td>
<td>Overall score 5.5 or any part score below 5.0</td>
</tr>
</tbody>
</table>

For information on the spoken English requirements for GTAs, see the policy on Spoken English Language Competency of Faculty and Graduate Teaching Assistants (https://documents.ku.edu/policies/provost/SpokenEnglishLanguageCompetencyBORPolicy.htm).

*All students who are not native speakers of English and who are admitted to campus-based programs are required to check in at the Applied English Center (AEC) upon arrival on campus. At that time, the AEC will confirm the student’s level of English proficiency and determine if English courses are required.

Any U.S. citizen or U.S. permanent resident who has declared that his/her native language is not English must report to the AEC for verification of English proficiency before enrolling.

Note: Provisional admission is not available to students in all programs. Provisional admission is not available to students who are applying to online programs in the School of Education and are not native English
students. View the current Lawrence and Edwards Campus English proficiency policy (https://documents.ku.edu/policies/Graduate_Studies/EnglishProficiencyIntlStudents.htm).

Permit to Re-enroll
A student who has been actively enrolled in a degree-seeking graduate program but who has not been enrolled for one academic year (three consecutive semesters, including the summer semester) or less, may be eligible to use the permit to re-enroll form with the consent of his/her department/program.

A student who has been actively enrolled in a degree-seeking program and has not enrolled for four or more consecutive semesters without an approved Leave of Absence is not eligible to use the permit to re-enroll form and must re-apply for Graduate admission.

The permit to re-enroll form is not available to a student who:

• was dismissed from a program at KU;
• was voluntarily discontinued (formally withdrew) from a graduate program;
• completed the graduate degree program; or
• most recently enrolled as a non-degree seeking graduate student.

Before completing the permit to re-enroll form, students should contact their graduate program directly to confirm availability of the permit to re-enroll.

Students returning from an approved Leave of Absence will be returned from leave by their department; such students are not required to use the Permit to Re-enroll. View the current Lawrence and Edwards Campus policy on permit to re-enroll (http://policy.ku.edu/graduate-studies/permit-to-reenroll).

Transcripts
Applications must be accompanied by one copy of official transcripts from the institution where the applicant earned the bachelor's degree (or equivalent). This official transcript will be used to verify the completion (or intended completion) of a baccalaureate degree (or equivalent).

If the applicant has completed any graduate work, official transcripts from this institution(s) must be included as well. Letters of recommendation and test scores may also be required. Applicants should check with the program to which they are applying for more information.

Official transcripts and test scores must be sent through secure means (a sealed envelope, electronic transmission) directly from the degree-granting institution or testing service to the University of Kansas in order to be considered official results. Transcripts and test scores provided through unofficial means will not be considered to be official documents for the purpose of admission.

Degrees
Degrees are awarded three times each year, in August, December, and May. Degrees for each academic year’s degrees are conferred formally at the annual commencement in May. Degree candidates are not eligible to graduate if the graduate grade-point average is lower than 3.0 in all courses acceptable for graduate credit. Only doctoral candidates who have fulfilled all of their degree requirements by the deadline date for graduation in May are allowed to participate in the May doctoral hooding ceremony.

Students who are working toward two degrees must complete requirements for each degree. Course work may not count toward fulfilling degree requirements for more than one degree.

Graduate students may not be awarded an additional KU degree with the same name and degree code as a previously awarded degree from KU. This applies to the completion of different degree tracks, concentrations, and subspecialties within a given degree. This does not prohibit students from earning additional master's or doctoral degrees in another discipline.

View the current list of all master's and doctoral degrees on the Graduate Studies Academics page (http://www.graduate.ku.edu/find-graduate-program). View the current Lawrence and Edwards Campus policy on graduate degrees (http://policy.ku.edu/graduate-studies/degrees).

Master's Degree Programs
KU grants traditional Master of Arts and Master of Science degrees, as well as professional master’s degrees that have developed out of these traditional arts and science degrees.

Master of Arts and Master of Science
Historically, most of the master’s degrees granted at KU have been the Master of Arts and Master of Science degrees. This fact conforms to the traditional liberal arts background out of which most U.S. graduate schools developed. The requirements for these degrees are generally concentrated in one area or major discipline.

Professional Master's Degrees
KU grants a number of professional master’s degrees, most of which are offered through the professional schools. Consult the appropriate college or school section of the online catalog for detailed descriptions of all professional master’s programs.

Specialist in Education
The degree of Specialist in Education (http://catalog.dept.ku.edu/201314/schools/educ/departments/pre/programs/eds/requirements) is offered through the School of Education and may be earned as a concentration on the basis of two years of graduate work (which can include an appropriate master’s degree or equivalent). Information on this degree, including the concentration in which it may be earned, can be found in the School of Education section of the online catalog.

Master's Degree Requirements
This section gives the general and common requirements for the traditional degrees of Master of Arts and Master of Science. The school and college sections of the online catalog give specific requirements for these degrees in the programs they offer. Schools list requirements for the professional master’s degrees they offer.

Master's Program Time Constraints
Normal expectations are that most master’s degrees (excluding some professional terminal degrees) should be completed in two years of full-time study. However, master’s degree students are allowed seven years for completion of all degree requirements.

In cases in which compelling reasons or circumstances recommend a one-year extension, the graduate division, on recommendation of the department/committee, has authority to grant the extension. In cases where more than eight years are requested, the appropriate appeals body of the school considers petitions for further extensions and, where
evidence of continuous progress, currency of knowledge, and other reasons are compelling, may grant them. Some departments may have more stringent rulings about time restrictions.

Students should ask about the policy in effect in the department in which they plan to study. View the current Lawrence and Edwards Campus policy on master’s program time constraints (http://policy.ku.edu/graduate-studies/ma-program-time-constraints).

M.A. and M.S. Degrees

A Master of Arts or a Master of Science degree requires at least one year of graduate work or its equivalent. Stated in terms of hours of credit, the standard master’s program requires 30 hours, though some degrees, especially in professional areas, may require as many as 36 or 40 or more. With permission of the department (or in the case of interdepartmental programs, permission of the joint program committee) and of the graduate division, it is sometimes possible to complete a 30-hour master’s degree with as few as 24 hours if the student enters the program especially well prepared and maintains a superior grade-point average. Work for a master’s degree is concentrated in the major area, with only a minimal amount of work (usually no more than 6 hours) that is completed at KU permitted outside the major department. Each master’s program must contain a research component, represented either by a thesis (usually for 6 hours of credit) or by an equivalent enrollment in research, independent investigation, or seminars. Within these requirements and well-founded practices, departmental master’s programs may be flexible enough to meet the particular needs of individual students.

In a few cases, the degree is offered through two schools and administered by joint committees from the two faculties. The Master of Arts degree in speech-language pathology and the Master of Arts degree in audiology are administered by an intercampus committee drawn from the Department of Speech-Language-Hearing: Sciences and Disorders in Lawrence and from the Department of Hearing and Speech of the School of Health Professions in Kansas City.

View the current Lawrence and Edwards Campus policy on master’s degrees (http://policy.ku.edu/graduate-studies/ma-ms-degrees).

Master’s Final Examinations

A final general examination or defense of the thesis or culminating master’s project in the major subject is required of all candidates for the Master of Arts or Master of Science. The degree program and the Graduate Division should ascertain that the graduate student is in good academic standing (3.0 or higher grade-point average) before scheduling the final general examination or thesis defense.

At the option of the department, the examination may be oral or written, or partly oral and partly written. In some departments, passing a written examination is a necessary preliminary to taking the oral examination by which success or failure is judged.

Master’s examinations are administered by a committee of at least three members of the Graduate Faculty.

The examination is held during the semester of the student’s final enrollment in course work. The thesis defense should be held when the thesis has been substantially completed.

The department’s request to schedule the general examination must be made on or before the date set by the graduate division, normally a minimum of two weeks before the examination date.

Students earning a master’s thesis degree must have completed at least one hour of thesis enrollment before the master’s degree may be awarded. See the Graduate Studies website (http://www.graduate.ku.edu/electronic-thesis-and-dissertation) for information and requirements for submitting the thesis electronically.

View the current Lawrence and Edwards Campus policy on master’s final examinations (http://policy.ku.edu/graduate-studies/masters-final-exams).

Master’s Student Oral Exam Committee Composition

Master’s student oral examinations include the master’s comprehensive oral exam and the master’s final oral exam (i.e., thesis defense).

1. Master’s committees are composed of at least three voting members.
2. The majority of committee members serving on a master’s student oral examination committee must be tenured/tenure-track faculty holding regular or dissertation graduate faculty status in the candidate’s department/program of study. Tenured/tenure-track faculty who are appointed as courtesy faculty within the program/department are considered (for the purposes of committee composition) to be faculty of that program/department.
3. Beyond the majority requirement, additional members may hold any graduate faculty status, including regular, dissertation, or special status. This third member can be, but need not be, a member of the candidate’s department/program.
4. For approved professional master’s degree programs (listed in Exclusions or Special Circumstances section below), the committee may be composed as described above, or any number of the committee members may be professors of the practice, clinical faculty, or research faculty in the department/program. For the approved professional master’s degree programs, the committee chair can hold any graduate faculty status.

As long as the conditions above are met, the committee may include more than three members.

The master’s committee chair must hold regular or dissertation status. While master’s committees are not required to have a co-chair, the student or the committee members may decide to select a co-chair. The co-chair can hold any graduate faculty status.

Substitutions of the committee chair (and/or co-chair) are prohibited after the committee has been approved by the Graduate Division of the school/college. If a committee chair (and/or co-chair) needs to be replaced, the revised committee must be approved by the Graduate Division of the school/college in advance of the exam.

Substitutions of the committee members are permitted as long as the new members hold regular or dissertation graduate faculty status. Special members can be added after the committee has been approved by the Graduate Division of the school/college, but these additions must be approved by the Graduate Division of the school/college in advance of the exam.

The following master’s programs are approved to utilize professors of the practice, clinical faculty, and/or research faculty committee composition as outlined elsewhere in this policy:
KU offers the following graduate doctoral degrees:

- Doctoral Degree Programs
- Doctoral of Philosophy (Ph.D.),
- Doctor of Audiology (Au.D.),
- Doctor of Education (Ed.D.),
- Doctor of Engineering (D.E.), and
- Doctor of Musical Arts (D.M.A.)

The School of Law offers the Juris Doctor (J.D.) and Doctor of Juridical Science (S.J.D.) degrees.

The programs offering these degrees are administered by the schools and colleges through their departments and graduate divisions, from admission through final recommendation for degree award.

General descriptions for each of the doctoral degrees are given here in succinct form to provide convenient comparison of the degrees. Detailed information about requirements for each degree as it is offered in specific disciplines should be obtained from the appropriate college, school, or department listing in the online catalog. The requirements there are in addition to the general requirements listed here.

**Doctor of Philosophy**

The degree of Doctor of Philosophy (Ph.D.) is the highest degree offered by the university. It is awarded for mastering a field of scholarship, for learning the methods of investigation appropriate to that field, and for completing a substantial piece of original research. In addition to preparing research specialists, the process of earning a Ph.D. shares certain goals with liberal education:

- putting order into human experience;
- fostering a love of learning for its own sake;
- instilling respect for human values;
- integrating various human powers into a process of creation; and
- making vital, in many fields at least, a sense of history.

Although the courses and research leading to the Ph.D. are necessarily specialized, the attainment of this degree should not be an isolated event in the enterprise of learning. The Ph.D. aspirant is expected to be a well-educated person with a broad base of general knowledge, not only as preparation for more advanced work but also as a means of knowing how the chosen specialty is related to other fields of human thought.

To give depth and breadth to their doctoral programs, many departments require some work in a minor field or at least an articulated selection of extra-departmental courses. Because of the diversity of the fields in which the Ph.D. is offered, and the variety of needs and interests of individual students, the degree does not have a specific requirement for a minor. However, the Ph.D. aspirant is encouraged to plan an integrated program, under departmental direction, that includes courses outside the major field.

View the current Lawrence and Edwards Campus policy on the Doctor of Philosophy degree (https://documents.ku.edu/policies/Graduate_Studies/docofphilosophy.htm).

**Doctor of Audiology**

The Doctor of Audiology (Au.D.) degree program prepares the student to enter clinical practice as an audiologist. Offered by the KU School of Health Professions, the program produces professionals skilled in providing diagnostic, rehabilitative, and related services in the fields of sound, balance, and hearing sciences. There is an emphasis on the clinical learning experience, although research is also a significant
component of the program. A baccalaureate degree is required for admission. Degree requirements are listed under Communicative Disorders: Intercampus Program in the online catalog.

**Doctor of Education**

The degree of Doctor of Education (Ed.D.) is a professional degree designed primarily for practitioners in the field of education. Applicants must present evidence of successful experience in professional education. While many of the requirements for the degree closely parallel those for the Ph.D., the degree program—particularly the dissertation—focuses on research concerned with application of existing knowledge rather than on basic research. Specific degree requirements are listed in the School of Education section of the online catalog.

**Doctor of Engineering**

The degree of Doctor of Engineering (D.E.) is directed toward the practice of engineering and includes the entire process of technology from planning to product. Candidates for the degree are intimately associated throughout their tenure with technology project teams, generally composed of master’s degree candidates and undergraduates. Specific degree requirements are listed in the School of Engineering section of the online catalog.

**Doctor of Musical Arts**

The degree of Doctor of Musical Arts (D.M.A.) is intended as recognition of high professional attainment. Since only exceptionally well-qualified candidates are admitted to the program, students are expected to devote their doctoral studies primarily to developing professional qualifications for teaching at the college level. The degree of Doctor of Musical Arts is offered in the specific fields of bassoon; church music (organ or choral conducting emphasis); clarinet; composition; conducting (band, choral, or orchestral); flute; French horn; oboe; organ; percussion; piano performance, literature, and pedagogy; saxophone; strings; trombone; trumpet; tuba; and voice.

View the current list of all master's and doctoral degrees is available on the Graduate Academics page (http://www.graduate.ku.edu/find-graduate-program).

**Doctoral Degree Requirements**

This section lists KU regulations common to the administration of all doctoral programs. The particular application, interpretation, or method of implementation of such a common element for individual degree programs and departments is, in certain cases, left to the faculty of the department or the degree program (e.g., Research Skills). Additional requirements specific to each degree, along with variations permitting each student to achieve particular academic goals, are listed in the chapter of this catalog for the school through which the degree program is offered.

When a department or program requests its Graduate Division to schedule a comprehensive oral examination or a final oral examination for a student, it must report on the student’s completion of both the general requirements and the specific requirements of the degree program, department, and school. The degree program and Graduate Division should ascertain that the graduate student is in good academic standing (3.0 or higher grade-point average) before scheduling a comprehensive oral examination or a final oral examination.

Doctoral students completing all their degree requirements within the first week of summer session or within the first two weeks of the fall or spring semester are not required to be enrolled for that term. View the current Lawrence and Edwards Campus policy on doctoral degree requirements (http://policy.ku.edu/graduate-studies/doctoral-degree-requirements).

**Application and Admission to a Doctoral Program**

A student who seeks admission to a doctoral program must apply to the graduate degree program and school offering the desired degree. Upon admission, the student is known as an aspirant for the degree and remains so designated until successful completion of the comprehensive oral examination. After passing that examination, the student is designated a candidate for the degree. View the current Lawrence and Edwards Campus policy on doctoral application and admission (http://policy.ku.edu/graduate-studies/doctoral-application-and-admission).

**Doctoral Program Time Constraints**

**Minimum Tenure**

The student must spend three full academic years, or the bona fide equivalent thereof, in resident study at this or some other approved university, including the time spent in attaining the master’s degree. Resident study at less than full time requires a correspondingly longer period, but the requirement is not measured merely in hours of enrollment. Because a minimum number of hours for the degree is not prescribed, no transfer of credit is appropriate. However, graduate degree programs take relevant prior graduate work into consideration in setting up programs of study leading to the doctorate.

**Residence Requirement**

Two semesters, which may include one summer session, must be spent in resident study at KU. During this period, the student must be involved full time in academic or professional pursuits, which may include an appointment for teaching or research if it is directed specifically toward degree objectives. Enrollment in approved distance-learning courses offered through KU cannot be used to meet the doctoral residence requirement. The student must be enrolled in a minimum of 6 credit hours a semester, and the increased research involvement must be fully supported and documented by the dissertation supervisor as contributing to the student’s dissertation or program objectives. Research must be performed under the direct supervision of the major advisor if on campus, or with adequate liaison if off campus.

**Note:** These are minimum residence requirements. Students should check with the graduate division of the professional school/College for additional requirements.

**Maximum Tenure**

After being admitted to doctoral programs at KU, students must complete all degree requirements in eight years. In cases in which compelling circumstances recommend a one-year extension, the graduate division has authority to grant the extension on the written advice of the department and dissertation committee. Students who complete the master’s degree at KU and subsequently begin doctoral studies have a maximum total enrolled time of ten years to complete both degrees. Normal expectations, however, are that most master’s degrees (excluding some professional terminal degrees) should be completed in two years of full-time study, and both master’s and doctorate degrees in six years of full-time study. Some graduate degree programs may have more stringent time restrictions. Students should inquire about the policy in effect in the department in which they plan to study.
A student in any of the above categories may petition the graduate division through the department for a leave of absence during either the pre- or post-comprehensive period to pursue full-time professional activities related to the doctoral program and long-range professional goals. Leaves of absence also may be granted because of illness or other emergency. Ordinarily a leave of absence is granted for one year, with the possibility of extension upon request. After an absence of five years, however, a doctoral aspirant or candidate loses status as such and must apply for readmission to the program and the graduate division. See Leave of Absence under General Regulations.

View the current Lawrence and Edwards Campus policy on doctoral program time constraints (http://policy.ku.edu/graduate-studies/doctoral-program-time-contraints).

Research Skills and Responsible Scholarship

All doctoral students must meet the Research Skills requirement before proceeding to comprehensive exams. The requirement must include at least two components:

1. Every doctoral student is required to have training in responsible scholarship pertinent to the field of research.
2. Every doctoral student is required to obtain research skills pertinent to the doctoral level of research in their field(s).

Procedure

For both of these requirements, it is the responsibility of the department to report when the student completed the requirement and how the requirement was met via the Progress-to-Degree form. Meeting this requirement is determined by the program/department according to the department’s approved research skills requirement plan.

All doctoral programs must have a research skills requirement plan approved by the school/College and the Graduate Studies Office.

As outlined in USRR 2.2.7.6, no course graded CR or NC can count toward the satisfaction of the requirements for a graduate degree. This prohibition includes any courses taken to meet the Research Skills and Responsible Scholarship requirement.

View the current Lawrence and Edwards Campus policy on doctoral research skills and responsible scholarship (http://policy.ku.edu/graduate-studies/research-skills-responsible-scholarship).

Comprehensive Oral Examination

When a doctoral aspirant has completed the major portion of the course work at a level satisfactory to the graduate degree program and school and met all other program, school, and general requirements prerequisite to the comprehensive oral examination, including the research skills requirement as appropriately applied and established for the student’s particular program, the degree program must request the graduate division of its school to schedule the comprehensive oral examination. It should be determined that the student is in good academic standing (3.0 or higher grade-point average) before scheduling the examination. The examination request must be submitted in advance of the examination date by at least the period specified by the graduate division, normally a minimum of two weeks. The graduate division ascertains whether all pertinent requirements have been satisfied and if reports of any previously scheduled comprehensive oral examinations have been properly submitted and recorded.

The committee for the comprehensive oral examination must consist of at least five members, all of whom must be members of the Graduate Faculty. Its members are appointed by the graduate division of the school or college on the basis of nominations submitted by the graduate degree program. At least one member must be from a department other than the aspirant’s major department. This member represents Graduate Studies and must be a regular member of the Graduate Faculty. The Graduate Studies representative is a voting member of the committee, has full right to participate in the examination, and shall provide a written report to the Dean of Graduate Studies for consideration of further action. The examination may be scheduled provided that at least 5 months have elapsed from the time of the aspirant’s first enrollment at KU.

The comprehensive oral examination covers the major field and any extra departmental work for which the program wishes to hold the aspirant responsible. For every scheduled examination, the degree program reports a grade of Honors, Satisfactory, or Unsatisfactory. If the aspirant receives a grade of Unsatisfactory on the comprehensive oral examination, it may be repeated on the recommendation of the degree program, but under no circumstances may it be taken more than three times. In any case, the examination may not be repeated until at least 90 days have elapsed since the last unsuccessful attempt.

Doctoral Comprehensive Exam Time Constraints

Under normal circumstances, the doctoral candidacy period between passage of the oral comprehensive examination and the final dissertation defense must last no longer than five years. If a student took the oral comprehensive examination more than five years prior to the dissertation defense, a re-evaluation of the student’s candidacy status is necessary. Re-evaluation of the student’s candidacy status can include retaking the comprehensive oral examination.

View the current Lawrence and Edwards Campus policy on doctoral comprehensive oral examinations (http://policy.ku.edu/graduate/studies/doctoral-oral-exams).

Doctoral Student Oral Exam Committee Composition

Doctoral student oral examinations include the doctoral comprehensive oral exam and the doctoral final oral exam (i.e., dissertation defense) and must adhere to the following requirements:

1. Doctoral committees are composed of at least five voting members;
2. The majority of committee members serving on a doctoral student oral examination committee must be tenured/tenure-track faculty holding regular or dissertation graduate faculty status in the candidate’s department/program of study. Tenured/tenure-track faculty who are appointed as courtesy faculty within the program/department are considered (for the purposes of committee composition) to be faculty of that program/department;
3. One member must meet the requirements for serving as the Graduate Studies representative. A faculty member from a different department with a courtesy appointment in the student’s department may serve as the Graduate Studies representative or in fulfillment of the committee majority, but cannot serve in both roles at the same time. (For more information on the Graduate Studies representative, see the policy
listed in the Policy Library here (https://policy.ku.edu/graduate-studies-representative-doctoral-exam-committees); and

4. Beyond the majority requirement, the additional member may hold any graduate faculty status, including regular, dissertation, or special status. This fifth member can be, but need not be, a member of the candidate’s department/program. For more information, see the policy on Graduate Faculty appointments (http://policy.ku.edu/graduate-studies/graduate-faculty-appointments).

As long as the conditions above are met, the committee may include more than five members.

The doctoral committee chair must hold dissertation status. While committees are not required to have a co-chair, the student or the committee members may decide to select a co-chair. The co-chair can hold any graduate faculty status.

Substitutions of the committee chair (and/or co-chair) are prohibited after the committee has been approved by the Graduate Division of the school/college. If a committee chair (and/or co-chair) needs to be replaced, the revised committee must be approved by the Graduate Division in advance of the exam.

Substitutions of the committee members are permitted as long as the new members hold regular or dissertation graduate faculty status. Special members can be added after the committee has been approved by the Graduate Division of the school/college, but these additions must be approved by the Graduate Division in advance of the exam.

**Doctoral Candidacy**

**Dissertation Committee**

Upon passing the comprehensive oral examination, the aspirant becomes a candidate for the doctorate. If it has not begun before, the traditional, close student-mentor apprenticeship relationship comes into being. The student is expected to learn by both precept and example of the mentor, and often in collaboration. The chosen field of scholarship is explored using acquired research tools. The principles and customs of academic inquiry and the codes of ethics traditional to the various disciplines and professional fields become part of the student’s thinking and working.

When the student passes the comprehensive oral examination, the graduate division of the appropriate school designates the candidate’s dissertation committee based on the recommendations of the candidate’s major department. The dissertation committee must consist of at least five members and may include members from other departments and divisions or, on occasion, members from outside the university. All members of the committee must be chosen from the Graduate Faculty, and the chair must, in addition, be authorized to chair doctoral dissertations. A prospective member of the committee from outside the university must have gained appointment as Special member of the Graduate Faculty before appointment to the committee.

**Post-Comprehensive Enrollment**

Doctoral candidates are required, after passing the comprehensive oral examination, to be continuously enrolled in one or more hours of dissertation or programmatic equivalent coursework (for example, document hours for DMA students) that both moves the student towards degree completion and reflects, as accurately as possible, the candidate’s demands on faculty time and university facilities. During this time, until all requirements for the degree are completed (including the filing of the dissertation) or until 18 post-comprehensive hours have been completed (whichever comes first), the candidate must enroll for a minimum of 6 hours a semester and 3 hours a summer session. Post-comprehensive enrollment may include enrollment during the semester or summer session in which the comprehensive oral examination has been passed. If after 18 hours of post-comprehensive enrollment the degree is not completed, the candidate must continue to enroll each semester and each summer session until all degree requirements have been met. The number of hours of each enrollment must be determined by the candidate’s advisor and must reflect as accurately as possible the candidate’s demands on faculty time and university facilities.

View the current Lawrence and Edwards Campus policy on doctoral candidacy (http://policy.ku.edu/graduate-studies/docoral-candidacy) are listed in the KU Policy Library.

**Doctoral Dissertation**

The doctoral candidate must present a dissertation showing the planning, conduct, and results of original research and/or scholarly creativity. The purpose of the dissertation is to encourage and ensure the development of broad intellectual capabilities and to demonstrate an intensive focus on a problem or research area. The dissertation itself should be an evident product of the candidate’s growth and attainment of the ability to identify significant problems; organize, analyze, and communicate scholarly results; and bring to bear on an area of scholarly or scientific interest a variety of research skills and scholarly or creative processes. The dissertation must show some original accomplishment, but it should also demonstrate without doubt the candidate’s potential to make future contributions to knowledge and understanding.

The dissertation is to be a coherent scholarly work, not a collage of separate, distinct pieces. Its unity of theme and treatment may still accommodate several subtopics by demonstrating their relationships and interactions. If previously published material by other authors is included in the dissertation, it must be quoted and documented. Final acceptance of the dissertation is subject to the approval of the dissertation committee. It should be noted that prior publication does not guarantee acceptance of the dissertation by the dissertation committee. The dissertation—or one or more substantial portions of it, often rewritten—is expected to be publishable and, indeed, to be published.

Both the dissertation research and the dissertation itself are to be completed under the guidance and direction of the committee appointed as described in the Graduate Student Oral Exam Committee Composition policy. Instructions about the proper form of the dissertation may be obtained from the KU Graduate Studies website (http://www.graduate.ku.edu/formatting), or from the graduate division of each school/college. Candidates and faculty members are reminded that the dissertation is to be a coherent, logically organized scholarly document. Because the demands and practices of different disciplines are varied, the format is somewhat flexibly described, and moderate departures from the norm are allowed when justified by the nature of the work or the circumstances of presentation. Any substantial divergences must be approved in advance as prescribed by the instructions, and candidates and faculty members are urged to seek early approval to avoid last-minute disappointments over unacceptable format or reproduction.

View the current Lawrence and Edwards Campus policy on doctoral dissertations (http://policy.ku.edu/graduate-studies/docoral-dissertation).

**Final Oral Examination**

Completion of the dissertation is the culminating academic phase of a doctoral program, climaxed by the final oral examination and defense
of the dissertation. In all but the rarest cases, tentative approval of the dissertation is followed promptly by the final oral examination. When the completed dissertation has been accepted by the committee in final draft form, and all other degree requirements have been satisfied, the chair of the committee requests the graduate division to schedule the final oral examination. This request must be made in advance of the desired examination by at least the period specified by the graduate division (normally at least three weeks). The submission of the request must allow sufficient time to publicize the examination so that interested members of the university community may attend. At least five months must elapse between the successful completion of the comprehensive oral examination and the date of the final oral examination. Three months must elapse between the comprehensive exam and the final defense of the DMA document for Doctor of Musical Arts candidates.

The committee for the final oral examination must consist of at least five members (the members of the dissertation committee plus other members of the Graduate Faculty recommended by the committee chair and the department and appointed by the graduate division). At least one member must be from a department other than the major department. This member represents Graduate Studies and must be a regular member of the Graduate Faculty. Before the examination, the graduate division provides a list of responsibilities to the Graduate Studies representative. The Graduate Studies representative is a voting member of the committee and has full right to participate in the examination. In the case of any unsatisfactory or irregular aspects of the exam or violation of Graduate Studies policy, the Graduate Studies representative shall provide a written report to the Dean of Graduate Studies for consideration of further action.

The graduate division ascertains whether all other degree requirements have been met and if reports of any previously scheduled final oral examinations have been submitted and recorded. Upon approval of the request, the final oral examination is scheduled at the time and place designated by the graduate division. This information must be published in a news medium as prescribed by the Graduate Faculty. Interested members of the university community are encouraged to attend these examinations.

For every scheduled final oral examination, the department reports to the graduate division a grade of Honors, Satisfactory, or Unsatisfactory for the candidate’s performance. If an Unsatisfactory grade is reported, the candidate may be allowed to repeat the examination on the recommendation of the department.

View the current Lawrence and Edwards Campus policy on doctoral final oral examinations (http://policy.ku.edu/graduate-studies/final-oral-exams).

**Dissertation Submission and Publication**

When the candidate has passed the final oral examination and the members of the dissertation committee have signed the dissertation, a title page and acceptance page with original signatures are to be delivered to the graduate division of the school/college in which the student’s program resides so that completion of degree requirements may be officially certified. As a requirement of graduation, the candidate must arrange publication of the dissertation and payment of all applicable fees, through the electronic submission process found on the KU Graduate Studies website (http://www_graduate_kuedu/formatting).

Dissertations will be made available through UMI/Proquest and KU ScholarWorks, unless there is an embargo in place or special circumstances pertain as outlined in the KU Embargo policy.

The student must be the author of the dissertation, and every publication deriving from it must indicate that authorship. Practices vary among disciplines —and even among scholars in a given field— as to whether the mentor’s name may appear as a co-author, and whether as senior or junior co-author, or subsequent publication of the dissertation (usually revised), or on articles prepared from it. It is expected that clear understandings in individual cases will be established during the apprenticeship period, when ethical practices in publication are addressed within the professional development training of the program.

Students from the following program are allowed to request a permanent embargo of their dissertation: PhD in English: Literature and Creative Writing track. View the current Lawrence and Edwards Campus policy on doctoral dissertations (http://policy.ku.edu/graduate-studies/doctoral-dissertation).

**Dual-Title Doctor of Philosophy Degrees**

A dual-title Ph.D. is a single degree with significant scholarship in two fields. At the completion of a dual-title degree program, the graduate will receive one diploma with two program names. Students enrolled in a dual-title degree program work concurrently in both areas of study.

Students are admitted initially into the major Ph.D. program. Upon being approved to pursue a dual-title Ph.D., students will be admitted into the dual-title Ph.D. program.

**Guidelines:**

Only existing programs approved to grant doctor of philosophy degrees may collaborate in creating a dual-title degree.

A dual-title degree is a single degree from KU. University-wide degree count reports will record a single Ph.D. in the major Ph.D. program discipline area. During the program proposal phase, doctoral programs must determine which program will be credited with the degree count. This department will also be responsible for reviewing the program during Board of Regents’ program review cycle.

All program requirements for both areas must be met as determined by the faculty in each program. The governing structure for dual-title Ph.D. programs is overseen by the Directors of Graduate Study in each participating Ph.D. program. Dual-title Ph.D.s. are conferred by the dean of the student’s major Ph.D. program.

A student applies for a dual-title degree only after being admitted and enrolled in an existing graduate doctoral program. Admissions procedures are described in the admission section of the Graduate Studies catalog.

**Admissions Procedures and Plan of Study for Dual-Title Ph.D. Programs**

**Admissions Procedures for a Dual-Title Ph.D.**

1. The student applies and is admitted to the major Ph.D. program. The student must enroll in the major Ph.D. program for at least one semester and be in good academic standing before applying to the dual-title Ph.D. program.

2. The student may then apply and be admitted to the dual-title Ph.D. program. This is an internal application procedure for students already admitted and enrolled at KU.

**Plan of Study for Dual-Title Ph.D.**
1. The student completes coursework in the major Ph.D. program and any additional coursework in the dual-title Ph.D. program. In many cases, the dual-title field coursework is integrated with the disciplinary field coursework. For example, PSYC 691 (Psychology of Aging) might meet the requirements for the dual-title degree in Psychology and Gerontology.

2. The two participating Ph.D. programs of the dual-title program develop sections in their graduate student handbooks that outline the nature of the dual-title degree, stipulate the array of courses typically taken, and detail other structural and practical requirements of a dual-title degree.

Each participating program oversees its own dual-title students and signs off on a curricular plan for its own program.

3. Ideally, the student's advisor is a member of the major Ph.D. program and the dual-title program. If this is not possible, the student must have a co-chair from each of the two fields. This ensures integration of the two areas in the coursework, examinations, and the dissertation.

4. The candidacy examination committee for the dual-title degree-seeking student must be composed of faculty from the major Ph.D. program as well as at least one faculty member from the dual-title Ph.D. program. The comprehensive exam requirements of both programs must be met.

5. The dissertation topic should integrate both fields and be defended before a committee of graduate faculty from both programs.

The dean of the school for the major Ph.D. program confers the dual-title degree. The student's diploma carries the name of both programs; for example: Doctor of Philosophy in Psychology and Gerontology. One Classification of Instructional Programs (CIP) code is assigned for the dual title degree.

M.A., M.S., and Ph.D. with a Major in Interdisciplinary Studies

Only superior students admitted and enrolled in a graduate program at KU whose proposed studies require direction not available in any single department are considered for admission to an Interdisciplinary Studies program. Before seeking acceptance, an applicant must assemble a graduate faculty advisory committee headed by a faculty member authorized to direct master's research (for M.A. or M.S. in Interdisciplinary Studies), doctoral research and dissertations (for Ph.D. in Interdisciplinary Studies). The applicant, in conjunction with the committee, must prepare a proposal for the course of study. The proposal must provide a rationale for the particular mix of disciplines, demonstrating how each contributes to a central theme or focus. It must also show that the proposed program cannot be achieved through an established master's or doctoral program at KU.

The student seeking to enter the Interdisciplinary Studies program must have an outstanding academic record (a grade-point average of 3.75 or higher on a 4.0 scale for graduate courses or a grade-point average of 3.5 or higher on a 4.0 scale for undergraduate courses if no graduate courses have been taken) and must be admitted to and enrolled in a graduate program at KU at the time of application. A graduate student who has failed to maintain the required grade-point average is not eligible for the Interdisciplinary Studies program. A student is not eligible for this program if he or she has tried and failed to achieve candidacy in a regular graduate department or program at KU.

The student is expected to assume the initiative in determining his or her potential eligibility through consultation with graduate advisors and, if deemed eligible, in forming an advisory committee and preparing documentation to support the application.

Preadmission Procedures

To enter the program, a student should:

1. Determine that KU offers courses and research in the areas appropriate to the student's interest(s).

2. Prepare a tentative study plan based on those offerings to serve as a basis for initial discussion.

3. Approach a professor whose interests are comparable to those of the student and request that he or she act as advisor. Normally this professor is a faculty member of the program of principal interest to the student. To grant an M.A. or M.S. in Interdisciplinary Studies, it is essential that the school has the authority to grant master's degrees. To grant a Ph.D. in Interdisciplinary Studies, it is essential that the school has the authority to grant doctoral degrees. The selected professor must be a full member of the graduate faculty and authorized to chair doctoral dissertation committees for Ph.D. in Interdisciplinary Studies.

4. After a professor agrees to serve as an advisor, the student should assemble an advisory committee of at least three additional professors representing the disciplines covered in the Interdisciplinary program. At least two disciplines or departments must be represented.

5. In conjunction with the advisor and the committee, the student prepares a proposal for study, including:
   - A statement, with supporting documentation, that the proposed Interdisciplinary Studies program cannot be accomplished through established programs.
   - A statement of the interdisciplinary or transdisciplinary nature of the proposed area of study.
   - A definition of the field of study incorporating in a consistent way a description of the contribution of each included discipline to the broader field.
   - An outline of the course of study, indicating substantive work in the fields represented. Readings courses and independent study do not substitute for regular courses.
   - A description of the method for satisfying research skills and responsible scholarship requirements.
   - A description of the comprehensive examination procedures for the Ph.D. (nature of the examinations and possible examining committee) or final examination for the M.A./M.S.
   - A description, to the extent possible, of the nature of the field in which a dissertation or master's thesis might be written, indicating the respective contributions of the selected disciplines to the final product.

   Attach the following:
   - i complete transcripts of all previous work,
   - ii a cover sheet, signed by committee members, indicating their support of the proposal,
   - iii letters of recommendation and other appropriate supporting documents.

Note: The diploma indicates the degree awarded as "M.A. in Interdisciplinary Studies," "M.S. in Interdisciplinary Studies," or "Ph.D. in Interdisciplinary Studies," and does not specify the area of specialization.
The transcript notes the area of specialization as determined by the admissions committee.

**Admission and Review Procedure**

Upon completion of the above, the student must submit the application for admission into the Interdisciplinary Studies program to the dean of Graduate Studies in Research and Graduate Studies. The dean of Graduate Studies appoints an admission committee consisting of (a) the associate dean of graduate studies or associate dean’s designate for the school most involved in the interdisciplinary undertaking (the school in which the major advisor resides), (b) two or more doctoral chairing faculty members from unrelated fields, including at least one member of the Executive Council of the Graduate Faculty, and (c) the chair or director of graduate studies of the department in which the student resides at time of application. The dean of Graduate Studies serves as ex officio chair of the Interdisciplinary Studies admissions committee. The committee reviews the documents and may, if necessary, interview the student and the advisor for clarification and additional information or to discuss suggested revisions to the proposal.

**Approved Program Implementation**

Upon acceptance of the proposal and admission to the Interdisciplinary Studies program, the student is admitted to the school of the major advisor to facilitate record keeping and to provide a central administrative office. The associate dean or director of graduate studies of that school must enroll the student and monitor the program and, along with the major advisor, must make annual reports to Graduate Studies on the student’s progress. These reports are distributed to the directors of other involved programs along with a request to supply any additional information regarding the student’s performance. Proposals for major deviations from the approved course of study must be submitted for review by Graduate Studies and by the graduate studies office of the school in which the student resides. It is understood that no additional requirements unique to traditional graduate programs of the school(s) or departments may be imposed unless stated explicitly in the approved study plan.

Once approved, changes to the program plan must be approved by a Graduate Studies committee, appointed by the Dean of Graduate Studies. Significant curricular changes may require a new proposal and admissions process.

All basic rules and requirements for the Master of Arts, Master of Science, and Doctor of Philosophy degrees apply to Interdisciplinary Studies programs. These include program time constraints, residence requirement, post-comprehensive enrollment, final examinations, research skills and responsible scholarship requirements, dissertation submission and publication, grade-point average, etc. (See Master’s Degree Requirements and Doctoral Degree Requirements in this section of the online catalog.)

View the current Lawrence and Edwards Campus policy on graduate degrees (http://policy.ku.edu/graduate-studies/degrees).

**Distance Education**

The University of Kansas offers online and hybrid courses and certificate and degree programs. For more information about specific online course and degree program options, students should contact their academic department of study. Similar to regular courses, the availability of online courses varies by semester and year.

**Online or Hybrid Graduate Programs**

- Certificate in Autism Spectrum Disorders
- Master of Social Work (http://www.socwel.ku.edu/academics/degrees/msw/regular/curriculum)
- Master of Science in Pharmaceutical Chemistry (http://www.pharmchem.ku.edu/~phch-web/cgi-bin/mydrupal/?q=node/21)
- Master of Science in Education in Education Administration (http://elps.soe.ku.edu/academics/edadmin/mse)
- Master of Science in Education in Special Education Transition Education and Services (http://specialedu.soe.ku.edu/academics/transition/mse)
- Master of Science in Education in Curriculum and Instruction - Reading
- Master of Science in Education in Curriculum and Instruction
- Doctor of Philosophy in Pharmaceutical Chemistry

Additional online programs may be available. View KU’s current online or hybrid programs (https://online.ku.edu/programs) or contact the KU Center for Online and Distance Learning (http://www.independentstudy.ku.edu/index.shtml) for more information on online and hybrid courses.

**Independent Study**

Independent study is a research experience or directed readings independently pursued through an academic department. Students should contact their academic department to discuss independent study opportunities to investigate a special research problem or directed readings in an area not covered by regular courses.

**Eligibility and Admission Criteria**

An application is required in order to be admitted to and pursue a Graduate certificate. Degree-seeking graduate students who wish to apply to a certificate program must be in good standing in their departments or programs. An individual who is not currently a degree-seeking graduate student at KU must be admitted directly to a graduate certificate program.

With the consent of the certificate-granting department, degree-seeking or non-degree seeking students may count up to two (2) courses — for a maximum of 8 credit hours— taken at KU prior to admission to the certificate program toward the graduate certificate. Any course credits that are counted are subject to the specific certificate coursework requirements in the certificate program. Graduate certificates are not granted retroactively and no exceptions to this two-course limit will be granted. Students who withdraw from a degree program and subsequently
seek admission to a certificate program are subject to these same limits (i.e., 8 hours).

If students admitted to a graduate certificate program are later admitted to a graduate degree program as degree-seeking students, applicable courses taken for the graduate certificate program may be counted toward the degree with the approval of the degree-granting program.

While the courses comprising a graduate certificate may be used as evidence in support of a student’s application for admission to a graduate program, the certificate itself is not considered to be a prerequisite and does not guarantee admission into any graduate degree program.

Graduate credit from another institution may not be transferred to a KU graduate certificate program.

View the current policy on eligibility and admission to a graduate certificate program (http://policy.ku.edu/graduate-studies/grad-certification-program-admission). A current list of all certificate programs is available on the KU Academics page (http://www.ku.edu/academics).

Policies and Processes for Graduate Certificate Programs

The graduate certificate is a focused collection of courses that, when completed, affords the student some record of coherent academic accomplishment in a given discipline or set of related disciplines. Students may be awarded these certificates upon completion of a well-defined program of course work. The didactic material comprised within a graduate certificate program may represent a more practice-oriented subset of an existing graduate discipline.

A graduate certificate program will comprise no less than 9 and generally no more than 18 credit hours of course work in a particular discipline or related disciplines of study.

All proposals for graduate certificate programs will be adopted for a seven-year time period. The certificate program will expire at the end of that period. The program may request renewal of the certificate program by sending an updated program proposal, endorsed by the department and school/College to the Executive Council of Graduate Faculty. The proposal will be evaluated for an additional seven-year period. Graduate Studies will remind the graduate certificate program about its renewal one year before the graduate certificate program is scheduled to expire. If a program expires or is discontinued, no new students may be enrolled in the program and those students currently in the program will continue until completion.

Student Records Criteria

- It is the responsibility of the degree program that houses the graduate certificate program to maintain all student records of the graduate certificate program. These records should include, but are not limited to, the number of students that apply to the program, the number accepted and denied into the program, and the number of students enrolled in the program by semester, the number of students who complete the program by semester.
- The courses taken in the graduate certificate program will be listed on the student’s transcript and recognition of the earned certificate will also be posted on the transcript.
- The awarding of graduate certificates will coincide with the August, December and May graduations at the University of Kansas. The certificate-awarding department will forward its list of certificate recipients to the graduate division of the school/College that holds the certificate program. The graduate division will forward names of the students completing graduate certificates in a given semester to the Graduate Studies office. The same degree-granting deadline dates will apply to the awarding of graduate certificates.
- Graduate Studies will be responsible for providing the University Registrar’s office with the names of certificate recipients along with the corresponding names of the completed certificate programs.
- Each semester, Graduate Studies will provide departments with authorized Graduate Certificates for students who successfully complete all certificate program requirements. The department will be responsible for completing the certificates and presenting them to the students.

Graduate certificates will not be recognized by any Graduate Studies official graduation ceremony.

View the current graduate certificate policies and processes (http://policy.ku.edu/graduate-studies/certificate-programs).

The Graduate Faculty

The Graduate Faculty consists of members of the university faculty and other persons qualified by training and experience who are duly nominated and appointed. Only members of the Graduate Faculty may teach courses for graduate credit, supervise master’s programs and theses, or serve on doctoral committees. View the current policies on Graduate Faculty appointments (http://policy.ku.edu/graduate-studies/graduate-faculty-appointments).

Regular Graduate Faculty Status

Any faculty member who is appointed to a tenure-track position automatically receives Regular graduate status. These members of the Graduate Faculty may:

- teach courses for graduate credit,
- supervise the master’s programs and thesis students,
- serve on master’s and doctoral committees, and
- chair master’s committees.

When appropriate, a qualified member of the regular Graduate Faculty may be nominated to serve as co-chair of a specific dissertation committee if a faculty member with dissertation chair status serves as co-chair of the committee and agrees to ensure that all requirements are met. However, this does not apply to circumstances where a regular member of the Graduate Faculty had dissertation chair status removed.

Present or newly appointed faculty members in tenure-track appointments with the rank of assistant professor or above in departments or programs with approved graduate programs are granted regular membership in the Graduate Faculty, provided they have received the terminal degree in their field of specialization or have acquired equivalent training and/or professional experience as determined by the appropriate graduate division.

In special cases where faculty members who hold regular membership in the graduate faculty enroll in a KU graduate program as part of their professional development, they may be permitted to retain their graduate faculty status. They may not supervise or serve as the instructor of record for students that are peers in the graduate program in which they are enrolled.

To hold regular membership in the Graduate Faculty, a faculty member must continue to show evidence of a pattern of productive professional
activity demonstrating the ability to contribute to high-quality graduate education. The form that productive professional activity may take varies across disciplines. Conventional evidence of such activity includes such things as:

- effective teaching,
- scholarly publication,
- participation in professional societies, and
- other scholarly activity.

Graduate degree programs are responsible for monitoring faculty with regular membership in the Graduate Faculty. View the current policies on Regular Graduate Faculty status (http://policy.ku.edu/graduate-studies/grad-faculty-status).

**Dissertation Status**

To qualify for the privilege of chairing doctoral dissertation committees, a regular member of the Graduate Faculty must demonstrate continuing activity commensurate with being an established scholar in his or her field and involvement in the graduate education program as evidenced by:

1. Teaching graduate courses;
2. Advising and mentoring graduate students and serving on thesis and dissertation committees;
3. Maintaining an ongoing program of scholarly activity including a record of scholarship, publication, and other contributions to the field.

It is the graduate program’s responsibility to nominate members of the Graduate Faculty for authorization to chair doctoral committees and to provide evidence of scholarship and involvement in the graduate education program. Authorization to chair dissertation committees is reviewed as part of each graduate program review.

View the current policy on Dissertation Graduate Faculty status (http://policy.ku.edu/graduate-studies/grad-faculty-dissertation-status).

**Special Member Status**

Special membership may be granted to employees of the university and its affiliates who do not have tenure-track faculty appointments in a department granting graduate degrees, or who are not employed by the university or its affiliates, but who are uniquely qualified by training or experience and otherwise meet the established criteria for regular membership in the Graduate Faculty.

Such membership is for the purpose of:

1. teaching a course or courses;
2. having courses cross-listed as KU courses if they are part of a cooperative graduate program between KU and the appointee’s home institution; or
3. serving on the thesis, dissertation, or examination committee of a particular student or students.

**Serving on a dissertation committee:**

When appropriate, Graduate Studies may authorize a qualified committee member with special status to serve as co-chair of a specific dissertation committee. While committees are not required to have a co-chair, the student or the committee members may decide to select a co-chair. The chair must have dissertation status, while the co-chair can hold any status.

Special memberships are limited to a maximum period of five calendar years for teaching purposes or for the duration of the specified committee assignment.

All nominations for special membership must state clearly the specific purposes for which the nomination is being sought and, when it can be known in advance, the length of time for which it is being requested.

Special appointments are reviewed by the appointing graduate department and continued as appropriate. View the current policy on Special Graduate Faculty status (http://policy.ku.edu/graduate-studies/grad-fac-special-members-status).

**Graduate Studies Representative on Doctoral Exam Committees**

Doctoral student oral examinations include the doctoral comprehensive oral exam and the doctoral final oral exam (i.e., dissertation defense). The committee for the comprehensive oral examination and final oral examination must consist of at least five Graduate Faculty members appointed by the committee chair, department, and/or Graduate Division of the professional school/College.

The Graduate Studies representative must be a member of the Graduate Faculty with regular or dissertation status from a department other than the aspirant’s major department.

A faculty member from a different department with a courtesy appointment in the student’s department may serve as the Graduate Studies representative or in fulfillment of the committee majority pursuant of the Doctoral Student Oral Exam Committee Composition policy (http://policy.ku.edu/graduate-studies/doctoral-student-oral-exam-committee-composition), but cannot serve in both roles at the same time.

The role of the Graduate Studies representative is designed to assure the appropriate standard of fairness, professionalism, judgment, and skill are applied throughout the examination process for the benefit of the institution and in the best interest of the student. As an independent participant observer, this member should have no personal or professional duality/conflict of interest with other members of the committee or the student that would prevent him or her from the unbiased fulfillment of these responsibilities (also see definitions section below for more information).

The Graduate Studies representative is a voting member of the committee and has full rights to participate in the examination. In the case of any unsatisfactory or irregular aspects of the exam or violation of Graduate Studies policy, the Graduate Studies representative shall provide a written report to the Dean of Graduate Studies for consideration of further action.

Before the examination, the Graduate Division should provide a list of responsibilities to the Graduate Studies representative. A list of these responsibilities is provided below:

1. The examination was conducted in compliance with the policies and by-laws of Graduate Studies and the program’s Graduate Division.
2. The examination was held in a manner that was free and open to the public.
3. He/she was accorded full participatory rights in the examination.
4. He/she were accorded full voting rights as a member of the committee.
5. The examination was free from irregularities or unfairness to the student.
6. The examination was free from irregularities or unfairness among faculty members.
7. The examination, if repeated, occurred at least 90 days after last unsuccessful attempt.

Non-reappointment, Graduate Faculty Eligibility, and Procedures When Graduate Faculty Are Given Terminal Contracts

Faculty members given a notice of non-reappointment are not eligible to hold Graduate faculty status. The Provost’s Office will provide Graduate Studies with a written list of faculty who receive a notice of non-reappointment. Graduate Studies will remove graduate faculty status for the above faculty for the appointment period for which the terminal notice is effective.

Upon non-reappointment the faculty member is no longer eligible for graduate faculty status. The named faculty member will no longer be allowed to teach future courses for graduate credit or to serve on graduate students’ committees.

The appropriate dean of the school/College of the faculty member receiving the terminal notice may request, in writing, an exception to the policy from the Dean of Graduate Studies. Permission may be given to the faculty member to serve on a graduate student's committee if the graduate student will meet all degree requirements within the semester.

The faculty member who received notice of non-reappointment will be given a copy of the initial letter sent to the dean and will be provided a copy of the letter sent requesting and defining an exception.

View the current policy on non-reappointment (http://policy.ku.edu/graduate-studies/grad-faculty-terminal) and procedures when graduate faculty are given terminal contracts (http://policy.ku.edu/graduate-studies/grad-faculty-terminal).

University Faculty and Advanced Degrees

Members of the university faculty having, or eligible for, tenure or holding any rank above that of instructor will not be granted degrees or certificates. Because of the variety of appointments covered by such terms as Lecturer, Associate, or the like, every case must be considered individually, with the student’s department making a recommendation to Graduate Studies before the student begins the graduate degree or certificate program, or for students already in graduate programs, before the appointment is made. Although appointing departments are expected to bring this rule to the attention of prospective appointees who plan to seek degrees or certificates, the responsibility for initiating a request for waiver of the rule lies with the student. Waivers may be granted in rare cases where the student and the department demonstrate satisfactorily that circumstances and conditions assure freedom from conflict of interest and undue influence.

View the current policy on university faculty and advanced degrees (http://policy.ku.edu/graduate-studies/university-faculty-advanced-degrees).

Graduate Research Assistants, Graduate Teaching Assistants, and Graduate Assistants

The following premises and eligibility requirements govern all graduate research assistant (GRA), graduate teaching assistant (GTA) and graduate assistant (GA) appointments at the University of Kansas, Lawrence:

Principles:

1. Individuals who enroll in graduate educational programs at the University of Kansas do so in order to attain specific educational goals. It is the University’s responsibility to help ensure that graduate students attain their academic goals in a reasonable amount of time and move on to the next stage in their careers, whether to another advanced degree program or to professional employment.

2. When departments and schools offer GRA, GTA, or GA appointments, the assistantships must contribute to the training experience of the graduate student.

3. GRA, GTA, and GA responsibilities should be in balance with the student’s responsibilities to the graduate program. For appointments of .5 FTE, the expectation is that the assigned duties will average no more than 20 hours per week during the semester. For appointments at other percentages, the number of hours per week must be proportional to the appointment percentage.

Appointment Limits:

GTA appointments shall not normally exceed 50% (.50 FTE). GTA appointments in excess of .50 FTE must be approved by the Graduate Studies or by the Dean’s Office of the College of Liberal Arts & Sciences in advance of an appointment offer and will be approved only in extraordinary circumstances. See the Memorandum of Agreement between The University of Kansas and the Board of Regents and the Kansas Association of Public Employees (representing graduate teaching assistants at the University of Kansas, Lawrence).

GRA appointments may be made up to 72.5% (.725 FTE).

GA appointments shall not normally exceed .50 FTE. GA appointments in excess of .50 FTE must be approved by the Office of Graduate Studies in advance of an appointment offer and will be approved only in special circumstances.

Although GRA, GTA, and GA appointments in excess of 50% have the undesirable potential to extend time towards degree, GRA appointments and combined GRA/GTA or GRA/GA appointments of up to 72.5% (.725 FTE) will be approved so long as the GTA or GA component of the appointment does not exceed .50 FTE. GTA, GRA or GA appointments above 72.5% (.725 FTE), or combined appointments above 72.5%, must additionally be authorized by the appropriate dean(s) or vice provost(s) in accordance with the policy on Student Employee Eligibility Requirements and Appointment Limits (http://policy.ku.edu/human-resources/student-employee-eligibility-aca). Exceptions for GTA appointment limits must comply with the provisions of the GTA Memorandum of Agreement (http://www.humanresources.ku.edu/files/documents/gta_moa.pdf).

Departments are expected to monitor appointments in excess of .50 to ensure that the graduate students’ assistantship assignments enhance their academic preparation and do not interfere with progress towards degree. Departments are expected to monitor appointments in excess
of .50 to ensure that the graduate students' assistantship assignments enhance their academic preparation and do not interfere with progress towards degree.

**Graduate Research Assistantships**

Graduate research assistantships may be available to graduate students. For further information, the applicant should write directly to the chair or graduate advisor of the major department.

**Graduate Teaching Assistantships**

Graduate teaching assistantships may be available to graduate students through graduate departments. Graduate students should apply directly to the department for GTA appointments. Graduate teaching assistantships in Lawrence are governed by a memorandum of agreement among KU, the Kansas Board of Regents, and the Kansas Association of Public Employees, which represents KU GTAs in Lawrence. The memorandum of agreement, with additional information on tuition and fee payment, appointments, wages, benefits, and other topics of interest to GTAs, is available on the Graduate Studies website (http://www.graduated.ku.edu).

**Graduate Assistantships**

Graduate assistantships may be available to graduate students. For further information, the applicant should write directly to the chair or graduate advisor of the major department.

**GRA, GTA, and GA Eligibility (Lawrence campus)**

**GRA Eligibility**

The following eligibility requirements govern all Graduate Research Assistant (GRA) appointments at the University of Kansas, Lawrence:

Graduate Research Assistants are salaried student employees who perform research that is in their fields (or a closely related field) of study and is integral to the student’s education (e.g., dissertation topic). The duties performed are under the direct supervision of faculty or research professionals. The duties do not involve classroom instruction. GRA appointments must be approved by the Office of the Vice Chancellor for Research (for all funds under Research and KUGR), the Budget Office (for the professional schools’ state- and endowment-funded GRA positions), or the College of Liberal Arts and Sciences (for state- and endowment-funded GRA positions in CLAS).

In order to be eligible for a GRA appointment, a graduate student must meet all of the following conditions:

1. During the term of appointment, the person is admitted to and enrolled in a graduate degree program offered by the University of Kansas; 
2. During the fall or spring semester, the person is enrolled in no fewer than six credit hours required for the student's graduate degree. During the summer session, the GRA must be enrolled in coursework related to his/her graduate program. The number of hours must be determined by the student’s advisor and must reflect as accurately as possible the student’s demand on faculty time and University facilities. Generally, an enrollment of three credit hours is appropriate for the summer session.

   a. Enrollment and Post Comps: Upon successful completion of the doctoral comprehensive examination and all other Graduate Studies and departmental requirements for candidacy to the doctoral degree and upon completion of eighteen post-comprehensive credit hours, the person may enroll in one or more dissertation, thesis, or equivalent credit hours as approved by the Graduate Studies Office or the Dean's Office of the College of Liberal Arts and Sciences as appropriate to qualify for a graduate research assistantship appointment. [Note: Candidates for professional doctoral degrees may enroll in dissertation-equivalent hours as approved by Graduate Studies. More detailed information about post-comprehensive enrollment can be found under “Regulations” in the Graduate Studies section of the catalog.]

3. During the term of appointment, the GRA must be in academic good standing and be making satisfactory progress toward a graduate degree, as determined by the Office of Graduate Studies and the department in which the person is enrolled. [Note: Students who are admitted to a degree program on provisional status are not considered to be in academic good standing for the purpose of GRA appointments. Exceptions may be granted by the Dean of Graduate Studies under extraordinary circumstances.] A graduate student must maintain a cumulative grade point average (GPA) of 3.0 to remain in academic good standing. However, if a department judges that a graduate student whose GPA falls below 3.0 after the first semester at KU is nonetheless making satisfactory progress, the department may recommend to the Dean of Graduate Studies that the student be allowed to keep his/her GRA position for one additional semester.

4. The person must successfully pass a background check established by the University.

5. A student who has earned a graduate degree may not continue in a GRA appointment after the graduation date unless he or she has just completed a master’s degree and is enrolled in a doctoral program in the same field or a closely related field or is a doctoral graduate who has been accepted into another graduate program.

**Enrollment Exceptions for GRAs**

Doctoral Candidates: In accordance with Graduate Studies requirements, after passing the comprehensive oral examination for a doctoral degree, the candidate must be continuously enrolled, including summer sessions, until all requirements for the degree are completed, and each enrollment must reflect as accurately as possible the candidate’s demand on faculty time and University facilities. Until 18 post-comprehensive hours are completed, the candidate must enroll in a minimum of six hours each semester and three hours during the summer session. Doctoral candidates may be enrolled in fewer than six post-comprehensive hours in the fall and spring semesters and in fewer than three hours during the summer session if all of the described in 2.A. above are met.

Please note that different enrollment criteria may be used in determining eligibility for student financial aid and student loan deferments. GRAs are advised to consult with Financial Aid and Scholarships (http://affordability.ku.edu) to determine student financial aid eligibility.

In certain master's degree programs, students who are in the final semester may be able to complete the course and hours requirements for the degree while enrolling in fewer than six hours. Such students may enroll in fewer than six hours and still retain eligibility to hold a position as a Graduate Research Assistant (GRA) provided that the student will not be continuing in a doctoral program at the University of Kansas. The option of enrolling in fewer than six hours during the final semester is available only to master’s students with GRA appointments. It is not available to master's students with GTA or GA appointments.

Process: In order to certify that a GRA is eligible to enroll in fewer than six credit hours, campus departments must submit the Certification of
Eligibility to Enroll in Fewer than Six Hours Form for doctoral candidates (GRAs, GTAs, or GAs) or the Certification of Eligibility form for Master’s Level Graduate Research Assistants.

View the current policy on GRA appointment eligibility (http://policy.ku.edu/graduate-studies GRA-appointment-eligibility).

**GTA Eligibility**

The following eligibility requirements govern all Graduate Teaching Assistant (GTA) appointments at the University of Kansas, Lawrence:

Graduate Teaching Assistants are salaried student employees whose job duties consist primarily of direct involvement in classroom or laboratory instruction. The duties are performed under the supervision of faculty. The University also requires that a GTA’s teaching assignment be in his/her own field of study or one that is closely related. Out-of-field appointments require consultation with the student’s home academic unit and the explicit approval of the Office of Graduate Studies or College of Liberal Arts and Sciences.

In accordance with the Memorandum of Agreement between the University of Kansas and the Board of Regents and the Kansas Association of Public Employees (MOA), in order to be eligible for a GTA appointment, a graduate student must meet all of the following conditions:

1. During the term of appointment, the person is admitted to and enrolled in a graduate degree program offered by the University of Kansas;
2. During the term of appointment, the person is enrolled in no fewer than six graduate credit hours per semester or other credit hours as required for the student’s graduate degree and as approved by Graduate Studies or the Dean’s Office of the College of Liberal Arts and Sciences as appropriate. [Note: GTAs on summer session appointments may enroll but are not required to do so unless they are doctoral candidates, who are required to be continuously enrolled.] a. Enrollment and Medical Leave: Should the person be unable to enroll in six graduate or other approved hours for reasons of medical condition or other hardship, that person may, with supporting documentation and the approval of the department of employment (and the department of study in cases in which the two are different), petition the Graduate Studies Office or the Dean’s Office of the College of Liberal Arts and Sciences as appropriate that this requirement be waived. Final approval rests with the Graduate Studies Office of the Dean’s Office of the College of Liberal Arts and Sciences as appropriate.
   b. Enrollment and Post Comps: Upon successful completion of the doctoral comprehensive examination and all other Graduate Studies and departmental requirements for candidacy to the doctoral degree and upon completion of eighteen post-comprehensive credit hours, the person may enroll in one or more dissertation, thesis, or equivalent credit hours as approved by Graduate Studies or the Dean’s Office of the College of Liberal Arts and Sciences as appropriate to qualify for a graduate teaching assistantship appointment. [Note: Candidates for professional doctoral degrees may enroll in dissertation-equivalent hours as approved by Graduate Studies. More detailed information about post-comprehensive enrollment can be found under “Regulations” in the Graduate Studies section of the catalog.]
3. During the term of appointment, the GTA must be in academic good standing and making satisfactory progress toward a graduate degree, as determined by Graduate Studies and the department in which the person is enrolled. [Note: Students who are admitted to a degree program on probationary or provisional status are not considered to be in academic good standing for the purpose of GTA appointments. Exceptions may be granted by the University or the Dean of Graduate Studies under extraordinary circumstances.] A graduate student must maintain a cumulative grade point average (GPA) of 3.0 to remain in academic good standing. However, if a department judges that a graduate student whose GPA falls below 3.0 after the first semester at KU is nonetheless making satisfactory progress, the department may recommend to the Dean of Graduate Studies or the Dean of the College of Liberal Arts and Sciences that the student be allowed to keep his/her GTA position for one additional semester.
4. The graduate student must satisfy any and all English proficiency criteria established by the Regents and/or the University. [ Note: Prior to finalization of a GTA appointment, every prospective GTA must be interviewed and have his or her spoken English competency certified by no fewer than three institutional personnel, at least one of whom should be a student. Non-native speakers of English must achieve a minimum score of 50 the SPEAK (Speaking Proficiency Assessment Kit), a score of 22 on the IBT (Internet-based TOEFL), or an 8 on the IELTS (International English Language Testing System.)]
5. During the term of the appointment, the person’s assigned responsibilities consist primarily of direct involvement in classroom or laboratory instruction.
6. The person has satisfactorily completed all of the components of the orientation and training as specified in section 7 of the MOA within the timeframes established by the University.
7. The department may require a graduate teaching assistant to be on campus to assume the responsibilities of his/her employment, not to exceed five weekdays (excluding weekend days) prior to the first day of classes each semester [Note: In accordance with Article 5, Section 1, of the MOA, “Individuals who are being reappointed as GTAs, regardless of whether the appointment is for an academic year or a shorter period, shall begin work on the first day of classes for which they are appointed, unless notified by the GTA’s department of earlier required assignments. Attendance at GTA orientation prior to the start of the semester is required as a condition of employment for any person who has not previously served as a GTA at the University of Kansas or for any returning GTA who has been identified as needing to attend GTA orientation.”]
8. The person must successfully pass a background check established by the University.

In addition to the conditions of appointment set forth in the MOA, the University has established the following condition:

A student who has earned a graduate degree may not continue in a GTA appointment after the graduation date unless he or she has just completed a master’s degree and is enrolled in a doctoral program in the same field or a closely related field or is a doctoral graduate who has been accepted into another graduate program.

**Enrollment Exceptions for GTAs who are Doctoral Candidates**

In accordance with Graduate Studies requirements, after passing the comprehensive oral examination for a doctoral degree, the candidate must be continuously enrolled, including summer sessions, until all requirements for the degree are completed, and each enrollment must reflect as accurately as possible the candidate’s demand on faculty time and University facilities. Until 18 post-comprehensive hours are completed, the candidate must enroll in a minimum of six hours each semester and three hours during the summer session. Doctoral
candidates may be enrolled in fewer than six post-comprehensive hours in the fall and spring semesters and in fewer than three hours during the summer session if all of the conditions described in 2b (above) are met.

Please note that different enrollment criteria may be used in determining eligibility for student financial aid and student loan deferments. GTAs are advised to consult with Financial Aid and Scholarships (http://affordability.ku.edu) to determine student financial aid eligibility.

Process: In order to certify that a GTA is eligible to enroll in fewer than six credit hours, campus departments must submit the Certification of Eligibility to Enroll in Fewer than Six Hours Form for doctoral students (available here: https://policy.drupal.ku.edu/graduate-studies/doctoral-GTA-eligibility-fewer-six-hours).

View the current policy on GTA appointment eligibility (http://policy.ku.edu/graduate-studies/GTA-appointment-eligibility).

**GA Eligibility**

The following eligibility requirements govern all Graduate Assistant (GA) appointments at the University of Kansas, Lawrence:

Graduate Assistants are salaried student employees (as determined by Human Resources and Equal Opportunity) who hold a position that furthers the professional and/or academic development of the graduate student. The duties performed are professional in nature and under the direct supervision of faculty, academic professionals, or administrators. The duties do not involve classroom instruction or research integral to the student’s degree program or dissertation. The graduate assistant’s responsibilities may include, but are not limited to, administrative and professional internships. The Dean of Graduate Studies must approve GA appointments. [Note: Graduate Assistant positions are a distinct category of graduate student support. This category does not include Graduate Research Assistants or Graduate Teaching Assistants.]

In order to be eligible for a GA appointment, a graduate student must meet all of the following criteria:

1. During the term of appointment, the person is admitted to and enrolled in a graduate degree program offered by the University of Kansas;
2. During the fall and/or spring semesters in which the graduate student holds a GA appointment, he or she must be enrolled in no fewer than six credit hours required for the student’s graduate degree. GAs on summer session appointments may enroll but are not required to do so unless they are doctoral candidates, who are required to be continuously enrolled.
   a. Enrollment and Post Comps: Upon successful completion of the doctoral comprehensive examination and all other Graduate Studies and departmental requirements for candidacy to the doctoral degree and upon completion of eighteen post-comprehensive credit hours, the person may enroll in one or more dissertation, thesis, or equivalent credit hours approved by Graduate Studies or the Dean’s Office of the College of Liberal Arts and Sciences as appropriate to qualify for a graduate teaching assistantship appointment. [Note: Candidates for the professional doctoral degrees may enroll in dissertation-equivalent hours as approved by Graduate Studies. More detailed information about post-comprehensive enrollment can be found under “Regulations” in the Graduate Studies section of the catalog.]
3. During the term of appointment, the GA must be in academic good standing and making satisfactory progress toward a graduate degree, as determined by Graduate Studies and the department in which the person is enrolled. Students who are admitted to a degree program on provisional status are not considered to be in academic good standing for the purpose of GA appointments. Exceptions may be granted by the Dean of Graduate Studies under extraordinary circumstances. A graduate student must maintain a cumulative grade point average (GPA) of 3.0 to remain in academic good standing. However, if a department judges that a graduate student whose GPA falls below 3.0 after the first semester at KU is nonetheless making satisfactory progress, the department may recommend to the Dean of Graduate Studies that the student be allowed to keep his/her GA position for one additional semester.
4. The person must successfully pass a background check established by the University.
5. A student who has earned a graduate degree may not continue in a GA appointment after the graduation date unless he or she has just completed a master’s degree and is enrolled in a doctoral program in the same field or a closely related field or is a doctoral graduate who has been accepted into another graduate program.

**Enrollment Exceptions for GAs who are Doctoral Candidates**

In accordance with Graduate Studies requirements, after passing the comprehensive oral examination for a doctoral degree, the candidate must be continuously enrolled, including summer sessions, until all requirements for the degree are completed, and each enrollment must reflect as accurately as possible the candidate’s demand on faculty time and University Facilities. Until 18 post-comprehensive hours are completed, the candidate must enroll in a minimum of six hours each semester and three hours during the summer session. Doctoral candidates may be enrolled in fewer than six post-comprehensive hours in the fall and spring semesters and in fewer than three hours during the summer session if all of the described in 2.A. above are met.

Please note that different enrollment criteria may be used in determining eligibility for student financial aid and student loan deferments. GAs are advised to consult with Financial Aid and Scholarships (http://affordability.ku.edu) to determine student financial aid eligibility.

Process: In order to certify that a GA is eligible to enroll in fewer than six credit hours, campus departments must submit to Graduate Studies the Certification of Eligibility to Enroll in Fewer than Six Hours Form for doctoral candidates.

View the current policy on GA appointment eligibility (http://policy.ku.edu/graduate-studies/GA-appointment-eligibility).

**GRA, GTA, and GA Benefits - Lawrence and Edwards Campuses**

The University is authorized by Kansas statutes and administrative regulations to provide graduate research assistants (GRAs), graduate teaching assistants (GTAs) and graduate assistants (GAs) with certain benefits that are not available to other student employees. The Memorandum of Agreement (MOA) (http://www.humanresources.ku.edu/files/documents/gta_moa.pdf) between the University of Kansas and the Board of Regents and the Kansas Association of Public Employees (representing Graduate Teaching Assistants at the University of Kansas, Lawrence) provides further information about benefits available to GTAs. This summary is provided for informational purposes only. For information about specific benefits, contact the offices listed at the end of this document.
1. **STAFF RATES.** Graduate students with GRA, GTA or GA appointments of 40% or more are eligible for staff (resident) rates for tuition, as are individuals who hold concurrent GRA, GTA and GA appointments totaling 40% or more as stipulated in the Staff and Staff Dependent Tuition Rates policy (http://policy.drupal.ku.edu/Registrar/staff-tuition-rates#GTA).

2. **PAYMENT OF TUITION.** GRAs and GTAs are eligible to have all or some of their tuition paid, including any differential tuition assessed, according to the provisions below.

**Graduate Research Assistants:**

Graduate Research Assistants with an appointment of 40% or more will have their tuition provided by the same funding source as their salary. The full cost of tuition for graduate research assistants must be included in all proposals, renewals, and contracts as part of the proposal budget when permissible by the granting agency or funding source. When not permitted by the funding source, the payment of tuition may be granted by the Graduate Tuition Assistance Pool. Further information about this program is available in the Graduate Research Assistant Tuition Assistance Policy (http://policy.drupal.ku.edu/graduate-studies/GRA-tuition-assistance-policy).

**Graduate Teaching Assistants:**

Depending on the level of appointment, the University pays all or some of a GTA’s tuition, including any course fees for GTAs who are enrolled in schools/programs that charge such fees. If the student is eligible for staff rates, these will be assessed before applying the tuition waiver. Course fees include all school course fees and the Edwards Campus Program Fee as listed in section 1.1 of the Comprehensive Fee Schedule (http://www.withdraw.ku.edu/~registrar/fees/index.shtml) published annually by the Office of the University Registrar.

The Comprehensive Fee Schedule (http://www.withdraw.ku.edu/~registrar/fees/index.shtml)

GTAs with appointments of less than 40% will have a portion of their basic tuition and course fees paid in accordance with the table that appears in Article 7, Section 3, of the MOA and is reproduced here:

<table>
<thead>
<tr>
<th>Percentage appointment</th>
<th>Percentage of tuition paid by University</th>
</tr>
</thead>
<tbody>
<tr>
<td>40% or more, 100%</td>
<td></td>
</tr>
<tr>
<td>30% but less than 40%, 75%</td>
<td></td>
</tr>
<tr>
<td>20% but less than 30%, 50%</td>
<td></td>
</tr>
<tr>
<td>10% but less than 20%, 25%</td>
<td></td>
</tr>
</tbody>
</table>

Summer appointment percentages and tuition may vary from those shown here because of the reduced term of the appointment. Students should consult with their departmental hiring manager for more information on summer term tuition benefits.

3. **PAYMENT OF REQUIRED CAMPUS FEES.** For GTAs, the University pays required campus fees for three credit hours per semester in accordance with the table and restrictions set forth below.

<table>
<thead>
<tr>
<th>Percentage appointment</th>
<th>Percentage of campus fees for three credit hours paid by University</th>
</tr>
</thead>
<tbody>
<tr>
<td>40% or more, 100%</td>
<td></td>
</tr>
</tbody>
</table>

20% but less than 30%, 50%

10% but less than 20%, 25%

The GTA is responsible for paying the remainder of the required campus fee assessment, any applicable off-campus area service fees, e.g., Edwards Campus construction fee, Union fee, and required fee; mediated course fees; optional fees; Housing costs; and other specialized fees.

4. **TUITION AND Fee ASSESSMENTS IN CASE OF RESIGNATION OR TERMINATION.** If a GTA resigns or abandons the GTA/GRA position or the appointment is terminated, the GTA/GTA must pay all resident or non-resident tuition and fees for that semester, as appropriate given the GTA/GTA's residence status as a student who does not hold a GTA/GTA appointment. The GTA/GTA will lose his or her eligibility for staff rates and, if a non-resident, will be required to pay non-resident tuition for that semester.

If a GA resigns or abandons the GA position or the appointment is terminated, the GA will lose his or her eligibility for staff rates and, if a non-resident, will be required to pay non-resident tuition for that semester.

5. **DEFERMENT OF TUITION AND FEES.** Returning GRAs, GTAs and GAs have the option of deferring payment for any tuition and required campus fees until September 15 (fall) and February 15 (spring). Please note that housing costs, optional campus fees, or other charges are not eligible for deferral. The fall deadline for returning graduate students to request a fee deferment is August 10; the spring deadline is January 10. Returning GTAs, GRAs, or GAs who do not request a deferment or do not pay their tuition and fees by the deadline will be assessed a late fee.

6. **PAYMENT OF TUITION AND FEES FOR REQUIRED ORIENTATION/TRAINING COURSE.** In cases where a GTA is required to enroll in a for-credit orientation or training course, the University covers the full tuition and campus fee associated with one orientation/training course.

7. **HEALTH INSURANCE.** The Kansas Board of Regents, in cooperation with the state universities, offers health insurance for students. Full information can be found here (http://www.hr.ku.edu/benefits_pay/benefits_info/health_insurance_programs/gta_ga_health_insurance.aspx).

8. **SICK LEAVE AND ANNUAL (VACATION) LEAVE.** In accordance with Board of Regents policy, persons appointed to student unclassified positions (including GRA, GTA and GA positions) do not accrue sick leave or annual leave.

9. **APPROVED MEDICAL LEAVE.** The GTA MOA (Article 5, Section 10) provides that GTAs with a medical condition that necessitates an absence of more than a week from assigned responsibilities shall request unpaid leave with appropriate medical documentation. Such unpaid leave of absence shall be requested in writing from the department/school by the GTA or a representative in advance of taking the leave, unless the illness or injury precludes advance notice. The request for leave without pay must be reviewed and approved by the department/school or college, the Graduate Studies Office, and by the Department of Human Resources and Equal Opportunity before being granted, but approval shall not be withheld if appropriate supporting medical documentation is provided. If additional documentation is needed, the GTA or authorized representative from the department/school will be notified and given reasonable time to provide the documentation. Failure to request a leave of absence or to have a leave of absence approved according to this provision shall result
in the placement of the GTA on leave without pay or the termination of the GTA’s appointment.

GRAs or GAs with a medical condition that necessitates an absence of more than a week from assigned responsibilities shall request unpaid leave with appropriate medical documentation. Such unpaid leave of absence shall be requested in writing from the department/school by the GRA/GA or a representative in advance of taking the leave, unless the illness or injury precludes advance notice. The request for leave without pay must be reviewed and approved by the department/school or college, the Graduate Studies Office, and by the Department of Human Resources and Equal Opportunity before being granted, but approval shall not be withheld if appropriate supporting medical documentation is provided. If additional documentation is needed, the GRA/GA or authorized representative from the department/school will be notified and given reasonable time to provide the documentation. Failure to request a leave of absence or to have a leave of absence approved according to this provision shall result in the placement of the GRA/GA on leave without pay or the termination of the GRA/GA’s appointment.

Please note that the approval of a medical leave of absence from a GRA, GT, or GA position does not affect the academic status of a graduate student. A student who wishes to reduce his or her enrollment level due to a medical condition must consult with the department/school; doctoral students who wish to take a leave of absence from graduate studies because of a medical condition must request a leave from the department.

10. OTHER BENEFIT PROGRAMS. GRAs, GTAs and GAs also can participate in voluntary benefit programs. Additional information is located on the Temporary & Student Employee Voluntary Benefits page (http://www.hr.ku.edu/benefits_pay/benefits_info/gta_gra_other_voluntary_benefits.aspx).

View current policies on GTA/GRA/GA Benefits (http://policy.ku.edu/graduate-studies/benefits-for-GRAs-GTAs-GAs). Further information about tuition (http://affordability.ku.edu/cs/index.shtml) and fees is available from the Office of the University Registrar (http://www.registrar.ku.edu/tuition-and-fees).

GTAs Who Are Non-Native Speakers of English

All prospective graduate teaching assistants of the state universities shall have their English competency assessed prior to being considered for any employment having classroom or laboratory instructional responsibility and/or direct tutorial responsibilities. The following shall be used to implement this policy:

1. All prospective graduate teaching assistants, whose first language is not English, must be interviewed by and have their competency in spoken English assessed by no fewer than three institutional personnel, one of which should be a student. An oral interview shall be conducted either face-to-face or by mediated means.

2. To be eligible for an appointment without spoken English language remediation conditions, all prospective graduate teaching assistants, whose first language is not English, shall be required to achieve a minimum score of 50 on the Test of Spoken English (TSE) or the Speaking Proficiency English Assessment Kit (SPEAK), or equivalent, or a minimum score, set by Board staff in consultation with the Council of Chief Academic Officers and with the approval of the Board Academic Affairs Standing Committee, on the Speaking section of the Test of English as a Foreign Language internet Based Test (TOEFL iBT).

3. All prospective graduate teaching assistants who do not meet the above requirements shall not be assigned teaching responsibilities or other tasks requiring direct instructional contact with students.

4. An exception will be made for courses taught in sign language.

5. A report detailing the process for interviewing graduate teaching assistants, whose first language is not English, including the composition of the interview team and scores from the TSE or SPEAK for each candidate, will be submitted to the President/CEO every other year.

View the current policy on Spoken English Language Competency of Faculty and Graduate Teaching Assistants (Kansas Board of Regents Policy) (https://policy.drupal.ku.edu/provost/spoken-english-competency-BOR-policy).

Academic Calendar

The Graduate Studies academic calendar is available online (http://www.graduate.ku.edu/student-resources).

Academic Probation

Upon falling below a cumulative graduate grade-point average of 3.0, computed with the inclusion of grades earned at KU for all courses acceptable for graduate credit, the student is placed on probation by the graduate division or school/College. The grades of P, S, U, and I, for which no numerical equivalents are defined, are excluded from the computation. If the student’s overall graduate average has been raised to 3.0 by the end of the next semester of enrollment after being placed on probation, the student may be returned to regular status. If not, the student is not permitted to re-enroll unless the graduate division acts favorably on a departmental recommendation for the student to continue study.

If admitted provisionally due to deficiencies in grade point average, a student must earn an overall graduate average of at least 3.0 during the first semester of enrollment (in which case the student is considered to have achieved good academic standing) to be permitted to re-enroll. A student admitted provisionally who fails to earn a 3.0 average in the first semester of enrollment may be dismissed immediately. If provisional continuation is recommended by the department or program, and approved by the graduate division, the student may remain on provisional status for one additional semester. Students who have been dismissed from a graduate program may be readmitted for further graduate study at KU only by petition of the graduate division that will accept the student. The petition must be approved by the Dean of Graduate Studies.

View the current policy on academic probation (http://policy.ku.edu/graduate-studies/academic-probation).

Course Numbering System

Generally, graduate courses are numbered according to the following scheme:

- Courses numbered 500-699 are designed for juniors and seniors, but are also taken by some graduate students who have fewer than 30 hours of graduate credit.
- Courses numbered 700-799 are designed for graduate students who have fewer than 30 hours of graduate credit, but they are also taken by some undergraduates.
Courses that contain a mixture of undergraduate and graduate students should set requirements for graduate credit beyond or different from the requirements for undergraduate credit. No course, regardless of its number, can give graduate credit unless it has been approved for graduate credit by the appropriate Graduate Division and is taught by a person holding a current appointment to the Graduate Faculty. See the graduate credit section of the catalog (below) for more information.

Seniors and Graduate Study (Coenrollment)

Seniors at KU who will complete the requirements for a baccalaureate degree in a given semester, and who have very strong academic records (grade-point average higher than 3.0 on a 4.0 scale), must apply and be admitted provisionally as degree-seeking students and request the permission of the appropriate Graduate Division to co-enroll for the final undergraduate semester. Seniors requesting the privilege of co-enrollment must make formal application through the graduate affairs office of the appropriate school or college.

Procedure

To meet the criteria of co-enrollment, the student must earn undergraduate credit for at least one class during the co-enrollment semester. Continuing education courses may be used to satisfy this requirement. If after the co-enrollment semester the baccalaureate degree is not completed, the student will not be permitted to enroll in courses for graduate credit until the baccalaureate degree has been conferred. After one semester, students are not eligible for co-enrollment and the graduate admission will be retracted.

Students who are eligible to co-enroll receive an email from the Registrar’s Office before enrollment with instructions on how to enroll in more than one career (ex. LAW, GRDL-Graduate, UGDL-Undergraduate). Students will have separate appointment times to enroll for each career and must enroll only in the courses that will count correctly toward the career in which they are enrolling during each appointment time. When enrollment is complete for each career, students must check the grading option for each course to ensure the class will be counted correctly.

View the current policy on coenrollment (http://policy.ku.edu/graduate-studies/seniors-and-grad-study?num2.8).

Discontinued Enrollment

A student may voluntarily resign from their program of study by requesting discontinuance. Once this request is granted, the student resigns their place in the program and if they choose to return to their studies at a later date, they must reapply for admission. Discontinuance is requested through the Progress to Degree form. View the current Lawrence and Edwards Campus policy on discontinued enrollment (http://policy.ku.edu/graduate-studies/discontinued-enrollment?num2.1).

Dismissed Enrollment (Dismissal)

Graduate programs are responsible for evaluating the students in their programs to ensure that they are making satisfactory progress toward a degree. If the graduate program finds that a student is not making satisfactory progress due to, but not limited to, cases where the student has run out of time to degree, or the student has neither been enrolled nor received an approved leave of absence for two consecutive semesters, or academic misconduct has occurred the program may recommend to the school/college that the student be dismissed from the program. Dismissal is requested by the graduate program through the Progress to Degree form.

Students who have been dismissed from a graduate program may be readmitted for further graduate study at KU only by petition of the graduate division of the school/college that will accept the student. The petition must be approved by the Dean of Graduate Studies.

Academic Probation and Dismissal

Upon falling below a cumulative grade-point average of 3.0, computed with the inclusion of grades earned at KU for all courses acceptable for graduate credit, the student is placed on probation by the graduate division of the school/college. The grades of P, S, U, and I, for which no numerical equivalents are defined, are excluded from the computation. If the student’s overall GPA has been raised to 3.0 by the end of the next semester of enrollment after being placed on probation, the student may be returned to good academic standing. If not, the student is not permitted to re-enroll and will be dismissed unless the graduate division of the school/college acts favorably on a departmental recommendation for the student to continue study.

Graduate divisions within the schools/college may have more stringent dismissal policies in place. Please check with the graduate division of the school/college for more information. View the current policy on dismissal (http://policy.ku.edu/graduate-studies/dismissed-enrollment?num2.2).

Embargo of Theses and Dissertations

When an exception to the immediate release of a thesis or dissertation is necessary, an embargo provides a temporary, delayed public release of the work. Embargo periods of six months, one year, or two years are available. While embargoes are not intended to be permanent, renewals of the original embargo period are permissible. Considerations that may be deemed reasonable for granting permission for an embargo include, but are not limited to:

- Patentable rights or other issues are contained in the work the disclosure of which may be detrimental to the rights or interests of the author.
- There is a need to prevent disclosure of government information about persons, institutions, technologies, etc. that is contained in the work.
- An academic or commercial press has expressed interest in acquiring the rights to publish the work as a book that may require an embargo.
- The work contains content that has already been submitted to a peer-reviewed journal that may require an embargo.
- Approval for delay has been granted by the KU Restricted Research Committee.

Requests for an extension of the embargo should be directed to the Office of Graduate Studies and must be received at least one month prior to the expiration of the current embargo to ensure sufficient time to process the request. A request for an embargo submitted to the University of Kansas affects only the publication of the thesis or dissertation in KU ScholarWorks. It is the graduate student’s responsibility to request

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ScholarWorks. It is the responsibility to request
an extension from both the University of Kansas for the copy in KU ScholarWorks and separately through ProQuest/UMI.

While there is no limit to the number of times a student can request an embargo extension, embargoes that have been allowed to expire without a request for an extension will result in the thesis or dissertation being made publicly available.

The embargo period will be calculated beginning at the end of the semester in which the student graduates with the specific dates being: December 31st, May 31st, and August 31st.

Steps necessary for embargoing a thesis or dissertation:

Theses and dissertations at the University of Kansas are made available in two electronic databases: KU ScholarWorks and ProQuest/UMI. Items in KU ScholarWorks are publicly accessible on the world-wide web and can be indexed by search engines such as Google, Bing, Yahoo, and others.

A student who does not wish to have his/her thesis or dissertation made public in these two venues for some limited period of time must receive permission to embargo the thesis or dissertation from the director of graduate studies in his/her department, the committee chair, the department chair, or the dean of the pertinent school/college. The student must request this permission with the Electronic Thesis and Dissertation (ETD) Release Form. The University of Kansas will accept the thesis or dissertation—thereby completing all degree requirements—only if the student signs this release form. Likewise, the University of Kansas will only entertain requests for an embargo on the publication of a thesis or dissertation through submission of this same form.

To ensure that embargoed work is restricted, students must take two steps after receiving the appropriate signatures before graduation.

• First, the student must submit the Electronic Thesis and Dissertation (ETD) Release Form to the school/College. If an embargo has been approved, this form will ensure that the work is temporarily restricted in KU ScholarWorks.

• Second, during the electronic submission process to ProQuest/UMI, the student must select the embargo option under the publishing restrictions section. If an embargo has been approved, this step will ensure that public view of the work is temporarily restricted in the ProQuest/UMI Dissertations and Theses database. See the related documents section below for more information.

Note: If a student does not receive permission for an embargo and/or does not submit the required documentation requesting such an embargo to Graduate Studies prior to graduation, the work will be made publicly available through KU ScholarWorks, and search engines like Google, Bing, Yahoo, and others will find and index the work. For this reason, once a work is released publicly, it is impossible to deploy an embargo in its entirety, because copies of a released work are likely to be stored on the web even if the KU ScholarWorks or ProQuest/UMI copies are retracted. It is therefore crucial for students who desire the embargo option to request it prior to graduation and to request extensions, if needed, prior to the work being exposed to public search engines.

Dissertation defenses are open to the public. In the event that an embargo is deemed necessary for a dissertation, the committee should consider holding an additional question period for the defense that is closed to the public. Any sensitive data may be discussed in the closed session.

View the current policy on embargo of theses and dissertations (http://policy.ku.edu/graduate-studies/embargo-policy). Students from the following programs are permitted to request a permanent embargo of their thesis or dissertation: Master of Fine Arts (MFA) in Creative Writing and the PhD in English: Literature and Creative Writing track.

Graduate Student Enrollment

All graduate students are expected to fit into one of the following enrollment categories at all times while completing the credits required for the fulfillment of their degrees.

Graduate students are not normally permitted to enroll for more than 16 hours a semester or more than 8 hours in the summer session.

• Full-time Enrollment
• Leave of Absence
• Discontinued
• Dismissed
• Post-comp Enrollment for Doctoral Candidates

View the current Lawrence and Edwards Campbell policy on enrollment (http://policy.ku.edu/graduate-studies/enrollment?num2.3).

Full-Time Enrollment for Graduate Students

Full-time and half-time enrollment consists of the following:

Full-time enrollment for fall and spring semesters

• Enrollment in 9 credit hours;
• Enrollment in 6 credit hours plus a GTA, GRA, or GA appointment, regardless of percentage of appointment;
• Enrollment in 6 credit hours for graduate students using the Montgomery GI Bill – Active Duty (MGB-AD) and Post-9/11 GI Bill – Active Duty;
• Doctoral candidates enrolled in dissertation hour(s).
*See Doctoral post-comprehensive enrollment.

Full-time enrollment for summer sessions

• Enrollment in 6 credit hours;
• Enrollment in 3 credit hours plus a GTA, GRA, or GA appointment, regardless of percentage of appointment;
• Enrollment in 3 credit hours for graduate students using the Montgomery GI Bill – Active Duty (MGB-AD) and Post-9/11 GI Bill – Active Duty;
• Doctoral candidates enrolled in dissertation hour(s).

3/4-time enrollment for Fall and Spring semesters

• Enrollment in 7 credit hours;
• Enrollment in 4.5 credit hours plus a GTA or GRA appointment, regardless of percentage of appointment;

3/4-time enrollment for Summer semesters:

• Enrollment in 4.5 credit hours;
• Enrollment in 2 credit hours plus a GTA or GRA appointment, regardless of percentage of appointment;
Half-time enrollment for fall and spring semesters

- Enrollment in 5 credit hours;
- Enrollment in 3 credit hours plus a GTA, GRA, or GA appointment; regardless of percentage of appointment;
- Enrollment in 3 credit hours for graduate students using the Montgomery GI Bill – Active Duty (MGIB-AD) and Post-9/11 GI Bill – Active Duty.

Half-time enrollment for summer sessions

- Enrollment in 3 credit hours;
- Enrollment in 1 credit hour plus a GTA, GRA, or GA appointment, regardless of percentage of appointment;
- Enrollment in 1 credit hour for graduate students using the Montgomery GI Bill – Active Duty (MGIB-AD) and Post-9/11 GI Bill – Active Duty.

Students enrolled in fewer hours than defined by half-time enrollment are considered part-time.

All students should check with their graduate degree programs and Graduate Studies’ policies to determine if additional enrollment requirements or summer enrollment requirements exist. View the current Lawrence and Edwards Campus policy on full-time enrollment for Graduate students (http://policy.ku.edu/graduate-studies/fulltime-enrollment).

Note: A few internship programs have been approved by Graduate Studies to count as full-time enrollment. Students enrolled in these internship programs will be counted as full-time students. Please contact your program to verify that an internship program qualifies.

*A doctoral candidate is defined as a doctoral student who has successfully passed the comprehensive examination. View the current policy on doctoral post-comprehensive enrollment (http://policy.ku.edu/graduate-studies/doctoral-candidacy).

International Students

International students in F-1 and J-1 status must also comply with Federal immigration requirements of pursuing a full course of study each semester to maintain their legal status. All international students must conform to residence requirements, even though immigration regulatory requirements may be lower.

All students should check with their graduate degree programs to determine if the program has additional enrollment requirements.

Grading

The basic system is an A, B, C, D, F system, where A designates above-average graduate work; B, average graduate work; C, passing but not average graduate work (C– is not considered a passing grade); D and F, failing graduate work. C–, D, and F work does not count toward fulfilling degree requirements.

The letter P is used only to indicate participation in thesis, dissertation, and research enrollments (related to thesis or dissertation), and in the first semester enrollment of a two-semester sequence course. In any semester, an instructor may, at his or her option, assign a letter grade of A, B, C, D, or F when evidence about performance is available. Upon completion of thesis/dissertation or research hours leading to a master’s or doctoral degree, the P remains on the final transcript except for the last semester of enrollment. A letter grade (A, B, C, D, or F) is assigned in the last semester of enrollment to characterize the quality of the final product. The I grade is not appropriate for enrollment in thesis, dissertation, or research, and is not accepted.

For enrollments other than thesis, dissertation, or research, the letter I indicates course work that has been of passing quality, some part of which is, for good reason, unfinished.

As stated in University Senate Rules and Regulations (http://policy.ku.edu/governance/USRR), Article II, Section 2.2.3.2: “A student who has an I posted for a course must make up the work by the date determined by the instructor, in consultation with the student, which may not exceed one calendar year, or the last day of the term of graduation, whichever comes first. An I not removed according to this rule shall automatically convert to a grade of F or U, or the lapse grade assigned by the course instructor, and shall be indicated on the student’s record.”

The grades of S and U may be used to designate satisfactory and unsatisfactory performance, respectively, in continuing education, workshop, and institute courses upon the recommendation of the department offering the course. No more than 6 hours total of graduate courses graded S are permitted to count toward a degree.

In courses numbered 800 or above for which specific authorization has been given, the instructor may report a grade of S for students who have satisfactorily attended the course but for whom it has not been possible to evaluate the quality of performance.

Once the S grade for a particular course (or a particular faculty member’s section of a multi-section course) has been recommended by the department and approved by the Graduate Division, it must be applied to the entire student enrollment in the course or section. This applies to those 800- or 900-level courses eligible for the S grade (or its alternative of F), as well as to Continuing Education, institute, and workshop courses. The S and U grades are not used in computing the grade-point average.

The Credit/No Credit option is authorized for graduate students. For graduate students, the grade of CR will be received for grades of C and above, and the grade of NC (no credit) will be received for grades of C- and below.

As outlined in USRR 2.2.7.6, no course graded CR or NC can count toward the satisfaction of the requirements for a graduate degree or a graduate certificate. This prohibition includes any courses taken to meet the Research Skills and Responsible Scholarship requirement.

Please see the Research Skills and Responsible Scholarship policy (https://policy.drupal.ku.edu/graduate-studies/research-skills-responsible-scholarship) for more information.

The individual schools have the option of using or not using +/-, according to the policy adopted by the particular school. B– does not represent satisfactory work in graduate studies.

In the grading system defined above, at least a B average is required on course work counted toward any of the master’s degrees or the Specialist in Education degree at KU, and only courses graded A, B, or C (excluding C–) may be so counted. Course work counted toward a doctorate, including that for a master’s degree if obtained at KU, should average better than a B. Courses graded P, S, U, or I are excluded from the computation of the average.
Performance is graded Honors, Satisfactory, or Unsatisfactory for the following examinations:

1. The general examination for the master's degree.
2. The general examination for the degree of Specialist in Education.
3. The comprehensive oral examination for the doctorate.
4. The final examination for the doctorate.

View the current Graduate Studies policy on grading (http://policy.ku.edu/graduate-studies/grading?num2.4).

Graduate Credit

Three conditions must be met for a student to receive graduate credit for work satisfactorily completed at KU:

1. The student must have gained graduate admission.
2. The course must be numbered 500 level or above and have been approved for graduate credit by the appropriate school/College.
3. The instructor must have gained appointment to the Graduate Faculty.

Credit by Examination

Credit by examination is not accepted toward graduate degrees.

Transfer Credit

Six hours of graduate credit taken at a regionally accredited graduate school may be transferred and applied to a KU program leading to a KU master's degree if the credits were taken before the final semester of enrollment at KU and have the approval of the major department and the appropriate school.

Eight hours may be approved for transfer if the student holds a baccalaureate degree from KU.

The total of transferred credit, including graduate continuing education credit and distance-learning courses taken at KU may not exceed 6 hours, or 8 if the student holds a baccalaureate degree from KU.

Only work graded B (3.0 on a 4.0 scale) or higher may be transferred. KU does not accept transfer credit for courses that have been graded B- or below. KU also does not accept transfer for institutes, workshops, or for life/work experience. Any exceptions to this must be approved by the department, schools/divisions, and the Office of Graduate Studies.

Credit will not transfer for courses that were counted toward the requirements for an undergraduate or graduate degree, whether completed at KU or another institution.

No credit is actually transferred toward the doctorate, but departments may take relevant prior graduate work into consideration in setting up programs of study. In order to transfer credits, the appropriate coursework must be initiated by the student’s department. View the current policy on graduate credit (http://policy.ku.edu/graduate-studies/graduate-credit).

Graduate Course Work Expiration Dates

Courses completed at the University of Kansas, or transfer credits from another university, cannot be used to fulfill graduate degree requirements if these courses were completed more than ten (10) years prior to the final defense for doctoral candidates or graduation for master’s students.

Faculty members retain the responsibility for determining the validity of courses that count toward the degree. Any decision to make an exception to the policy outlined above must be approved by the graduate affairs office of the school/college in which the student’s program resides. View the current policy on Graduate Coursework Expiration Dates (https://documents.ku.edu/policies/Graduate_Studies/Graduate_Coursework_Expiration_Dates.htm).

Graduate Student Oral Exam Attendance

Ideally, all members of the committee are physically present at graduate student oral examinations, which include the master’s comprehensive oral exam, the master’s final oral exam (i.e. thesis defense), the doctoral comprehensive oral exam, and the doctoral final oral exam (i.e. dissertation defense).

A majority of committee members must be physically present for an examination to commence; for doctoral oral examinations this requirement is 3 of the 5 members, for master’s oral examinations the requirement is 2 of the 3 members.

In addition, it is required that the student being examined, the chair of the committee, and the Graduate Studies representative all be physically present at the examination or defense. Mediated attendance by the student, chair and Graduate Studies representative is prohibited.

When a situation arises in which a committee member cannot be physically present, attendance via mediated means (tele/video-conferencing) is acceptable at the discretion of the committee chair.

In cases where the student prefers an examination in which all committee members are physically present, the student's preference shall be honored.

In the case of failure of technology during the examination, all members of the committee present must concur that the examination was substantially complete. If any member of the committee dissents, the examination is considered canceled and must be rescheduled. The committee members at remote locations must be contacted to submit their decision concerning the assessment of the examination before the exam results are recorded.

View the current policy on Graduate Student Oral Exam Attendance (https://documents.ku.edu/policies/Graduate_Studies/Graduate_Student_Oral_Exam_Attendance.htm).

Grievance Policy for Graduate Students

A graduate student who believes himself or herself to be unfairly or unlawfully treated in an academic matter may present a grievance to the academic department or program chair. Each academic unit and all graduate divisions have established grievance policies and procedures. Appeal of a grievance heard at one of these levels is made to the Judicial Board. Graduate Studies has established a set of guidelines for graduate student petitions in certain categories that may not be under the jurisdiction of other hearing bodies. The Executive Council of Graduate Faculty has identified two categories as the purview of Graduate Studies:

1. Cases involving the graduate divisions of two or more schools or colleges;
2. Cases involving the interpretation of Graduate Studies policy as it pertains to the graduate division of a school or college.

For disputes involving alleged academic misconduct or alleged violations of student rights, the initial hearing normally is held at the unit level. There is an option to hold an initial hearing at the Judicial Board level if both parties agree, or if either party petitions the Judicial Board chair to hold the hearing at the Judicial Board level and the petition is granted. The
petition must state why a fair hearing cannot be obtained at the unit level; the opposing party has an opportunity to respond to the petition.

Procedures for Graduate Student Grievances

Pursuant to Article XIV of the University Senate Code and Articles V and VI of the University Senate Rules and Regulations of the University of Kansas, Lawrence, Graduate Studies establishes the following procedures to hear the individual grievances of graduate students. Except as provided in USRR 6.5.4, no person shall be disciplined for using the grievance procedure or assisting another in using the grievance procedure. Graduate Studies shall provide a copy of this procedure to anyone who requests it.

A sub-committee of the Executive Council of Graduate Faculty is charged to establish policies governing the handling of individual grievances of graduate students brought to the attention of Graduate Studies and to carry out or delegate the investigation of individual grievances presented to Graduate Studies, and to make and report final recommendations to the Dean of Graduate Studies with respect to individual grievances. Since the sub-committee has the responsibility to adjudicate and hence to hear grievances, it cannot function to develop evidence on behalf of either complainant or respondent. It is appropriate, however, for Graduate Studies, in its administrative capacity, to look into complaints prior to scheduling a grievance hearing, to interview parties, to secure documents, and to seek a conciliatory solution. Before pursuing formal grievance procedures, a grievant should ordinarily attempt to resolve the matter informally through direct or indirect consultation with the other party, through discussions with supervisory personnel or through informal mediation. If the problem is not solved in this fashion the Dean shall refer the complainant to the sub-committee or, if appropriate, to another appropriate unit charged with jurisdiction to resolve the dispute. If it is referred to the sub-committee, Graduate Studies shall make available to the committee what it has learned that bears on the complaint. This shall not be construed, however, to deny the right of a student to file a complaint directly with the committee.

1. To start the grievance process, the complainant must submit a written grievance to Graduate Studies. The complaint shall contain a statement of the facts underlying the complaint and specify the provision(s) of the Faculty Code of Conduct, University Senate Code, the University Senate Rules and Regulations, the Code of Student Rights and Responsibilities, or other applicable rule, policy, regulation, or law allegedly violated. The complaint shall also indicate the witnesses or other evidence relied on by the complaining party, and copies of any documents relevant to the complaint shall be attached to the complaint.

2. At the time the complaint is submitted to Graduate Studies, the complaining party shall provide a copy of the complaint, with accompanying documents, to the respondent(s).

3. Upon receipt of the complaint, Graduate Studies shall contact the respondent to verify that the respondent has received a copy of the complaint and to provide the respondent with a copy of these procedures.

4. Pursuant to University Senate Code 14.2.c, a respondent has the privilege of remaining silent and refusing to give evidence in response to a complaint. The respondent also has the right to respond and give evidence in response to the complaint.

5. The respondent shall submit a written response to Graduate Studies within 14 calendar days of receiving the complaint. The response shall contain the respondent’s statement of the facts underlying the dispute as well as any other defenses to the allegations in the complaint. The response shall also identify the witnesses or other evidence relied on by the respondent and shall include copies of any documents relevant to the response. The respondent shall provide a complete copy of the response to the complaining party.

6. Upon receipt of the response, Graduate Studies shall contact the complaining party to verify that a copy of the response has been provided.

7. Upon receiving the complaint and response, or if the respondent fails to respond within the 14-day time period, Graduate Studies shall appoint a committee to consider the complaint. Normally, a complaint shall be heard by a sub-committee of the Executive Council of Graduate Faculty from among the members of the committee. The sub-committee members shall be disinterested parties who have not had previous involvement in the specific situation forming the basis of the complaint. In the summer, if the complainant requests a hearing before the full committee he or she must waive the right to timely hearing (see 11 below) and a hearing date will be scheduled early in the fall.

8. Pursuant to USRR 6.8.4.2, the chair of the sub-committee may contact other hearing bodies within the University to determine whether a grievance or complaint involving the underlying occurrence or events is currently pending before or has been decided by any other hearing body.

9. Time limits. To use this procedure, the complainant must file the written complaint with Graduate Studies within six months from the action or event that forms the basis of the complaint. The six-month time period shall be calculated using calendar days (including weekends and days during which classes are not in session).

10. Upon receiving the complaint, if the chair of the sub-committee determines that the any of the following grounds exist, he or she may recommend to the Dean that the complaint be dismissed without further proceedings. The grounds for such dismissal are: (a) the grievance or another grievance involving substantially the same underlying occurrence or events has already been, or is being, adjudicated by proper University procedures; (b) the grievance has not been filed in a timely fashion; (c) Graduate Studies lacks jurisdiction over the subject matter or any of the parties; (d) the grievance fails to allege a violation of a University rule; (e) the party filing the grievance lacks standing because he or she has not suffered a distinct injury as a result of the challenged conduct and has not been empowered to bring the complaint on behalf of the University; or (f) the party filing the grievance has been denied the right to file grievances pursuant to USRR 6.5.4.

11. If the chair of the sub-committee determines that a grievance on its face properly should be heard by another body, the chair will recommend that the Dean send the grievance to the appropriate hearing body without further proceedings in Graduate Studies. The Dean will send a copy of the referral to the complainant(s) and any responding parties.

12. If not previously attempted, prior to scheduling a hearing, the parties shall participate in mediation of the dispute unless either party waives mediation. Mediation shall be governed by USRR 6.2.3.

13. If mediation is successful, the mediator will forward to Dean, the sub-committee chair, and all parties a letter describing the outcome of the mediation and the terms upon which the parties have agreed to resolve the dispute. This letter shall be a recommendation to the Dean. The Dean will notify the mediator, the sub-committee chair, and the parties that the recommendation has been accepted, modified, or rejected.
14. If mediation is not successful, the mediator will notify the Dean, the sub-committee chair, and the parties that mediation has terminated. If mediation is not successful, or if it is waived by either party, the grievance sub-committee will schedule a hearing no later than 30 calendar days from the written submission of the complaint. The 30-day period may be extended for good cause as determined by the chair of the sub-committee. The 30-day period shall be suspended during the mediation process. The hearing will be closed unless all parties agree that it shall be public.

15. Each party may represent himself or herself or be represented by an advisor or counsel of his or her choice.

16. Each party has the right to introduce all relevant testimony and documents if the documents have been provided with the complaint or response.

17. Each party shall be entitled to question the other party’s witnesses. The committee may question all witnesses.

18. Witnesses other than parties shall leave the hearing room when they are not testifying.

19. The chair of the sub-committee shall have the right to place reasonable time limits on each party’s presentation.

20. The chair of the sub-committee shall have the authority and responsibility to keep order, rule on questions of evidence and relevance, and shall possess other reasonable powers necessary for a fair and orderly hearing.

21. The hearing shall not be governed by the rules of evidence, but the chair of the sub-committee may exclude information he or she deems irrelevant, unnecessary, or duplicative. Statements or admissions made as part of the mediation process are not admissible.

22. The sub-committee will make an audiotape of the hearing but not of the deliberations of the sub-committee. The audiotape will be available to the parties, their authorized representatives, the sub-committee and the Dean. If a party desires a copy of the audiotape or a transcript of the tape, that party will pay for the cost of such copy or transcript. In the event of an appeal, the audiotape will be provided to the appellate body as part of the record of the case.

23. After the presentation of evidence and arguments, the sub-committee will excuse the parties and deliberate. The sub-committee’s decision will be a written recommendation to the Dean. The sub-committee shall base its recommendations solely upon the information presented at the hearing.

24. The sub-committee will send its written recommendation to the Dean and the parties as soon possible and no later than 14 calendar days after the end of the hearing.

25. Within 14 calendar days of receiving the sub-committee recommendation, the Dean will notify the parties of the acceptance, modification, or rejection of the recommendation. The Dean will advise the parties of the procedure available to appeal the decision.

Appropriate documentation related to these extraordinary circumstances may be requested from the student directly. Evidence of progress towards degree will also be a determining factor in the decision to grant an exception.

The time taken for a leave of absence does not count against the student’s time to degree. However, if the total time for the leave extends more than five years, the student will lose his/her place in the program and must reapply for admission.

For more information, please contact Graduate Studies or view the current policy on Leave of Absence (https://documents.ku.edu/policies/Graduate_Studies/leaveofabsence.htm?num2.6).

Undergraduate Student Enrollment in Graduate-Level Courses

Well-qualified undergraduate students may be permitted to enroll in 800- or 900-level courses for undergraduate credit with the approval of the instructor, the student’s advisor, and the Graduate Division. The student must bring a Count Towards Degree form signed by the instructor, a letter of explanation and recommendation from the advisor, and current academic record to the Graduate Division for approval. If approved, the Graduate Division signs the Count Towards Degree form, which the student must present to the staff in the Student Records Center to enroll in the courses. Courses taken for undergraduate credit may not be transferred to graduate credit.

View current policy on undergraduate student enrollment in graduate-level courses (http://policy.ku.edu/graduate-studies/undergrad-student-enroll-grad-course).

Student Responsibilities

All graduate students are responsible for informing themselves of requirements and Graduate Studies policies. Visit the Graduate Studies website (http://www.graduate.ku.edu) for the most up-to-date requirements and policies. Graduate students are also expected to be familiar with the regulations and requirements of their Graduate Divisions and departments and of their graduate programs. Members of the Graduate Faculty and staff members of the Graduate Divisions are expected to be ready to answer questions and offer counsel.

It is each graduate student’s responsibility to know and observe all regulations and procedures relating to the graduate degree program the student is pursuing. In no case will a regulation be waived or an exception be granted because students plead ignorance of, or contend that they were not informed of, requirements, regulations, procedures, and deadlines. Responsibility for following all policies and meeting all requirements and deadlines rests with the student.

View the current policy on Grievance Procedure for Graduate Studies (http://policy.ku.edu/graduate-studies/grievance).

Leave of Absence

A Leave of Absence may be granted upon request to the graduate program in advance of leave. A leave of absence may be granted in extraordinary circumstances (e.g. cases of illness, emergency, financial hardship, military leave), to pursue family responsibilities, or to pursue full-time activities related to long-range professional goals.
Office of Graduate Studies, Medical Center Campus Students

The Office of Graduate Studies (a unit of the Office of Academic Affairs (http://www.kumc.edu/academic-affairs.html)) on the KU Medical Center campus (http://www.kumc.edu) is the administrative unit responsible for graduate education on that campus. A variety of graduate programs are offered through the Medical Center’s Schools of Health Professions (p. 650), Medicine (p. 2062), and Nursing (p. 2264).

Graduate degrees on the Medical Center campus are conferred by the Schools of Health Professions, Medicine and Nursing with the exception of the Health Informatics master’s degree, which is conferred by the Office of Graduate Studies upon recommendation by the Health Informatics Advisory Council. Appointments to the Graduate Faculty are recommended by individual academic units and administered by the Graduate Studies office.

Goals of Graduate Study

Independent scholarship, competence in research or other creative work, and the cultivation of teaching commitment and skill are the traditional goals of graduate study. Having acquired a broad education as an undergraduate, the student is expected to master a special field, to learn the methods of investigation employed therein, and to proceed toward making an original contribution to knowledge. Since many of those who earn advanced degrees find careers in higher education, the acquisition of skill in teaching and in directing research is also an essential part of graduate education.

These traditional goals gain renewed significance in changing times, while newly emerging societal interests and needs and new demands of the marketplace both underscore their importance and emphasize the necessity for flexibility in programs and accommodation in career objectives.

Research

Research is an integral part of the university’s educational mission. The National Science Foundation classifies KU as a major university receiving substantial research support. KU is also a Carnegie Doctoral/ Research Extensive University and has been a member of the Association of American Universities since 1909. The university has a long and successful record of research collaboration through independent, multidisciplinary research centers that focus on common themes. For more information about research on the Medical Center campus, visit the University of Kansas Medical Center Research Institute (http://www.kumc.edu/kumcri.html) website page.

This catalog is not itself a source of policy and does not create a contract between the University of Kansas and its students. University policy is the binding agent in the event an inconsistency is noted between the catalog and official University policy. Whenever possible the catalog provides information from the latest policies at the time of publication and links to the policies referenced.

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Admission to Graduate Studies

Persons whose records indicate their ability to succeed with advanced work may be admitted for graduate study. Applicants may either apply as degree seeking, non-degree seeking, or to a Graduate Certificate program. Applicants seeking an identifiable degree program are degree seeking, while those applicants who do not have an identified degree program should be admitted under the non-degree seeking category. No student may work toward a graduate degree without being accepted as a degree seeking student in a specific graduate program.

Degree Seeking Admission

Students who wish to work toward a specific graduate degree should be considered for admission under the degree seeking category in either the regular or provisional category.

Regular Admission

Regular admission requires a bachelor’s degree and a cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale, from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor’s degree requirements. The bachelor’s degree is not acceptable if it contains credit awarded for work experience that was not directly supervised by faculty members (life experience) of an accredited university or not evaluated in units that identify the academic content (e.g., P/F, S/U). Applicants who are not native speakers of English must demonstrate they meet the Minimum English Proficiency Requirements as described below.

Applicants must meet these minimum admission requirements to qualify for regular admission. Individual academic programs may have additional admission requirements that the applicant must also meet to be eligible for regular admission status to that program.

In exceptional cases, persons not holding bachelor’s degrees may be admitted if they are academically well prepared. In these cases, the Dean of Graduate Studies reviews the student’s academic background and approves graduate admission.

Regular Admission, Special B

This category is available only to degree seeking graduate students applying to the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS) offered by the School of Medicine. A student meeting the minimum admissions
requirements described under Regular Admission and the academic standards of the basic science departments is admitted to graduate study in IGPBS. If the applicant does not meet the minimum admissions requirements, he or she may be admitted in the provisional category.

After completion of the IGPBS program, the student seeks entrance directly into a specific graduate discipline in one of the basic science departments. When the department accepts an IGPBS student, the department submits a Progress to Degree form to formally change the individual student’s academic program from IGPBS to the specific basic science doctoral program.

**Provisional Admission**

An applicant who has one or more deficiencies in 1) grade-point average, 2) English proficiency scores, 3) prerequisite course work, and/or 4) other specific deficiencies determined by the academic program, may be admitted on a provisional basis.

If admitted provisionally for a lack of prerequisite course work or low English proficiency scores, it is expected that the student will be reviewed immediately following the first semester of graduate study to determine if the student has met the requirements of regular admission. When the student meets the requirements of regular admission the program submits a Progress to Degree form to Graduate Studies to move the student from provisional to regular status. If the student has not met the requirements of his or her provisional admission at the time of review, the program may recommend to the Dean of Graduate Studies to continue the student on provisional status for another semester or dismiss immediately. A student admitted provisionally for any reason who fails to earn a B (3.0) average in their first semester may be dismissed immediately.

Students who have been dismissed from a graduate program may be admitted for further graduate study at KU only if the new academic program receives approval by petition from the Dean of Graduate Studies.

**Non-degree Seeking Admission**

A non-degree seeking applicant applies to the university for admission as a non-degree seeking student and may be processed by a specific department or program. Admission requires a bachelor’s degree from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor’s degree requirements. Applicants who are not native speakers of English, must demonstrate they meet the Minimum English Proficiency Requirements as described below. The applicant is not required to meet the other admission standards of regular admission.

Non-degree seeking admission is not intended to bypass regular admission into a graduate degree program. However, if a non-degree seeking student later applies for admission as a regular degree seeking student, and is accepted by an academic program, the total transfer credits toward a graduate degree may not exceed six hours, or eight hours if the student holds a baccalaureate degree from KU (this total includes credit from other accredited graduate programs as well as non-degree credit earned at KU).

**Graduate Certificate Admission**

An application is required to pursue a graduate certificate. A graduate certificate program must adhere to the same minimum admission standards required for degree seeking admission (bachelor's degree, 3.0 grade-point average, English proficiency).

No student may work toward a graduate certificate without being accepted in a specific graduate certificate program. Graduate certificates are not granted retroactively. Graduate credit from another institution may not be transferred to a KU graduate certificate program. The certificate program is not intended to serve as a default system for students in a degree program who find that they are not able to complete the degree for academic or other reasons. Should a student drop out of a degree program and seek admission to a certificate program, all certificate admission requirements must be followed for admission and conferral of the certificate.

Applicants apply directly to a graduate certificate program for admission unless the applicant is a current graduate degree seeking student. To admit a current degree seeking graduate student to a certificate program, the student must be in good standing (3.0 or higher grade-point average) with their degree program. If pursuing a graduate certificate offered by another department, the student must inform the graduate director, advisor, or coordinator in the home degree program of intent to seek the certificate. If approved by the home department, the student must then make application directly to the graduate certificate program.

The graduate certificate program is not a means of entry into a graduate degree program. If students admitted to a graduate certificate program are later admitted to a graduate degree program as degree seeking, applicable courses taken for the graduate certificate program may, upon recommendation of the program to the Office of Graduate Studies and within general guidelines, be approved by the Dean of Graduate Studies to be counted toward the degree.

While the courses comprising a graduate certificate may be used as evidence in support of a student’s application for admission to a graduate degree program, the certificate itself is not considered to be a prerequisite and does not guarantee admission into any graduate degree program.

**Minimum English Proficiency Requirement for Admission to a Graduate Program**

Academic programs must verify that all applicants, whether domestic or international, who are not native speakers of English, meet the minimum English proficiency requirement to be admitted for graduate study as degree seeking, non-degree seeking or certificate program students. Verification may come in any one of the following forms:

- Official transcript showing the applicant graduated with a baccalaureate degree (or higher) earned in residence from an accredited U.S. institution of higher education.
- Official transcript showing the applicant graduated with a baccalaureate degree (or higher) from an institution whose medium of instruction is English. This does not apply to degrees earned online. This verification may be from a catalog or program description.
brochure or an official letter from a department chair, dean, or other university official stipulating English as the language of instruction.
Verification of English instruction from the institution must be included unless the degree is from one of the countries on the "TOEFL/IELTS Exemption List" posted on the Office of International Programs website (http://www.kumc.edu/international-programs/academic-english-requirements.html). The program considering admission should also conduct a phone interview with the prospective student.
- Receipt of an official copy (not student's copy) of applicant's TOEFL or IELTS scores achieved not more than two years before the semester of admission.

Below are the minimum scores required on the TOEFL or IELTS to satisfy the minimum English proficiency requirement for admission. Individual programs may opt for a more restrictive policy regarding English proficiency for the students they recommend to Graduate Studies for admission.

<table>
<thead>
<tr>
<th>TOEFL (paper)</th>
<th>TOEFL (IBT)</th>
<th>IELTS scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>57 overall minimum</td>
<td>23 minimum Reading and Listening</td>
<td>6.5 overall minimum with no part below 6</td>
</tr>
<tr>
<td>5.0 minimum on essay</td>
<td>19 minimum on Writing</td>
<td></td>
</tr>
</tbody>
</table>

If a student does not meet the minimum requirement for admission, the academic program may petition the Dean of Graduate Studies for an exception. The petition will include a justification for admitting the specific student, including a description of the interview process, and a plan for the student to achieve academic success. The petition should also describe the metrics that the program proposes for evaluating the academic success of the student and the timeline that will be followed for the plan.

Additional Spoken English Proficiency Requirements for Graduate Teaching Assistants, Medical Center Campus
The Kansas Board of Regents (http://www.kansasregents.org) requires that in order to be appointed as a Graduate Teaching Assistant (GTA), students must first attain a minimum score of 50 on the TSE or SPEAK tests, a minimum iBT speaking score of 24, or a minimum IELTS speaking score of 8. The SPEAK test is administered free of charge by appointment in the Office of International Programs (http://www.kumc.edu/international-programs/academic-english-requirements/speak-test-faq.html). SPEAK scores from other institutions will not be accepted.

Admission Procedure — Medical Center Campus
The Office of Admissions (http://www.kumc.edu/student-services/office-of-admissions.html) facilitates the application process for all graduate programs through the KUMC online application (https://www.applyweb.com/apply/kumc). To ensure adequate time for review, the applicant should check with each individual degree program for its application deadline date.

Graduate Studies requires official transcripts from the baccalaureate granting institution that show a bachelor's degree was conferred, plus any transcripts from institutions attended post-baccalaureate. International applicants must provide English proficiency test scores, see "Minimum English Proficiency Requirement" above. Programs may request transcripts for all college courses taken and other application materials.

Applicants should check with the program to which they are applying for information on required application materials.

Background Check
A background check is required during the admission process; it may affect the student's eligibility to enter the program. In the case of students involved in direct patient contact, additional checks maintained by various health care disciplines may be required. Prospective students should check with their individual academic programs regarding these requirements.

All domestic students, as well as any international students who have been in the United States for more than 30 days prior to admission*, must submit to at least a standard background check through Validity Screening Solutions. In the case of students involved in direct patient contact, additional checks of Employment Disqualified Listings maintained by various health care disciplines may be required by specific programs. Prospective students should check with their individual department or program to determine the process and appropriate institutional or program code number to be provided to Validity Screening Solutions for the transmission of the background check results.

Background check results will be considered on a case-by-case basis but, in general, the following may be considered as disqualifying findings and therefore prevent admission or matriculation. Future licensing requirements can determine admission.

- Felony convictions
- Misdemeanor convictions or felony deferred adjudications involving crimes against persons (physical or sexual assault or abuse)
- Misdemeanor convictions related to moral turpitude (e.g., prostitution, public lewdness, etc.)
- Felony deferred adjudications for the sale, possession, distribution or transfer of narcotic drugs or other controlled substances.
- Registered sex offender status
- Medicare, Medicaid or other healthcare fraud or misuse

Should you have any questions concerning this requirement for admission to Medical Center campus programs, please contact your specific program or department.

*International students admitted on valid visas and who have not resided in the United States for more than 30 days may be excused from this requirement due to the background checks conducted as part of their visa screening process.

Application Fees
Nonrefundable application fees payable to the University of Kansas are required. Rates are subject to change. Some departments and programs require deposits from admitted students to be fully credited against required fees upon enrollment.

<table>
<thead>
<tr>
<th>Type of Application</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree-seeking domestic application</td>
<td>$60</td>
</tr>
<tr>
<td>Degree-seeking international application</td>
<td>$60</td>
</tr>
<tr>
<td>Non-degree-seeking application (domestic and international)</td>
<td>$60</td>
</tr>
<tr>
<td>Readmission application</td>
<td>$60</td>
</tr>
</tbody>
</table>
Admission Notification
Each applicant is notified in writing of the admission decision. The admission decision letter includes the admission classification (Regular Degree Seeking, Special B, Provisional Degree Seeking, Non-degree Seeking or Graduate Certificate). For all admission categories, enrollment in specific courses may be subject to fulfillment of program course prerequisites and/or consent of the instructor.

After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission to graduate studies does not imply admission to candidacy for a higher degree. A student becomes a candidate for an advanced degree only by demonstrating through resident study at KU the requisite preparation and ability. Requirements for an advanced degree must be regarded as minimum requirements. Additional requirements depend on the student's undergraduate preparation and the particular field of graduate work chosen.

Reactivation
Students who are not continuously enrolled should check with the academic program to see if they will be required to re-apply for admission or if they may be reactivated without re-applying. If permission is granted by the program to reactivate, the student completes the Reactivation Form (https://www.kumc.edu/student-services/enrollment-services/current-students/more-information/reactivation-form.html) on the posted on the Registrar’s website and pays the reactivation fee that is in place at the time of reactivation. Individual programs make the determination about when a student is required to re-apply. However, after an absence of 5 years, Graduate Studies requires the student to re-apply for admission to their graduate program.

Limitations on Admission
Because of limitations of space, faculty, or general resources for research and instruction, some programs must restrict the number of applicants they admit. Questions should be directed to the program to which the prospective student wishes to apply.

· Awarding of Degrees
· Combined Degrees
· Dissertation Committee
· Dissertation Submission and Publication
· Doctoral Degree Programs
· Doctoral Degree Requirements
· Final Oral Exam
· General Examination, Thesis Defense or Project Defense
· Interdisciplinary Studies
· Masters Degree Programs
· Master's Degree Requirements
· Oral Comprehensive Exam
· Post-Comprehensive Enrollment
· Research Skills and Responsible Scholarship
· Thesis Submissions and Publication

Awarding of Degrees
Degrees are awarded 3 times each year, in August, December, and May. Each academic year's degrees are conferred formally at the annual commencement in May. Degree candidates are not eligible to graduate if the graduate cumulative grade-point average is lower than 3.0 in all courses taken for graduate credit.

Students who are working toward 2 degrees must complete requirements for each degree. Course work may not count toward fulfilling degree requirements for more than 1 degree.

Graduate students may not earn an additional KU degree with the same name and degree code as a previously awarded degree from KU. This applies to the completion of different degree tracks, concentrations, and subspecialties within a given degree. This does not prohibit students from earning additional master's or doctoral degrees in another discipline.

Master's Degree Programs

Historically, most of the master's degrees granted have been the Master of Arts (M.A.) and Master of Science (M.S.). This fact conforms with the traditional liberal arts background out of which most U.S. graduate schools developed. These degrees' requirements are generally concentrated in 1 area or major discipline. The KU Medical Center campus with oversight from the Office of Graduate Studies offers Master of Science degrees in several disciplines through the Schools of Health Professions, Medicine, and Nursing.

Professional Master's Degrees
In more recent years, professional master’s degree programs have been developed for entry level or advancement in specific professions. On the Medical Center campus this includes health

• Awarding of Degrees (p. )
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In more recent years, professional master’s degree programs have been developed for entry level or advancement in specific professions. On the Medical Center campus this includes health
services administration (M.H.S.A.) (p. 2121), occupational therapy (M.O.T.) (p. 717), and public health (M.P.H.). (p. 2162)

Master's Degree Requirements
This section gives the general and common requirements for all master's degree programs. The program sections of the online catalog give specific requirements for the degrees they offer.

Master's Program Time Constraints
Normal expectations are that most master's degrees (excluding some professional terminal degrees) should be completed in 2 years of full-time study. However, master's degree students are allowed 7 years for completion of all degree requirements. In cases in which compelling reasons or circumstances recommend a 1-year extension, the Office of Graduate Studies, on recommendation of the academic program, has authority to grant the extension. In cases where more than 8 years are requested, the Office of Graduate Studies considers petitions for further extensions and, when evidence of continuous progress, currency of knowledge, and other reasons are compelling, may grant them. Some academic programs may have more stringent rulings about time restrictions. Students should ask about the policy in effect in the academic program in which they plan to study.

Master's Enrollment Requirement
All graduate students enrolled in master's graduate programs must be enrolled the semester they complete master's degree requirements. Master's students who complete degree requirements during the first week of summer session or within the first 2 weeks of the fall or spring semester are not required to be enrolled for that term unless they were not enrolled during the previous semester. See the current Graduate Studies calendar for deadlines for specific semesters.

M.A. and M.S. Degree Requirements
A Master of Arts (M.A.) or a Master of Science (M.S.) degree requires at least 1 year of graduate work or its equivalent. Stated in terms of hours of credit, the standard master's program requires 30 hours. With permission of the academic program (or in the case of interdepartmental programs, permission of the joint program committee) and of the Office of Graduate Studies, it is sometimes possible to complete a 30-hour master's degree with as few as 24 hours if the student enters the program especially well prepared and maintains a superior grade-point average. Work for a master's degree is concentrated in the major area, with only a minimal amount of work (usually no more than 6 hours) that is completed at KU permitted outside the major department. Each master's program must contain a research component, represented either by a thesis (usually for 6 hours of credit) or by an equivalent enrollment in research, independent investigation, or seminars. Within these requirements, departmental master's programs may be flexible enough to meet the particular needs of individual students.

In a few cases, the degree is offered through two schools and administered by joint committees with faculty representation from both schools. The Master of Arts degree in speech-language pathology and the Master of Arts degree in audiology are administered by an intercampus committee drawn from the Department of Speech-Language-Hearing: Sciences and Disorders in Lawrence and from the Department of Hearing and Speech in the School of Health Professions in Kansas City.

M.A. and M.S. Final General Examination, Thesis Defense or Project Defense
Completion of a final general examination, defense of a thesis or defense of a project in the major subject, is the culminating academic phase of the M.A. and M.S. degree programs and is required of all candidates for these two degrees. At the option of the academic program, the final general examination may be oral or written, or partly oral and partly written. In some departments, passing a written examination is a necessary preliminary to taking the oral examination by which success or failure is judged. For students defending a master's thesis, the student must be enrolled in a minimum of one hour of master thesis the semester the thesis is defended.

When a M.A. or M.S. student is in their final semester, the degree program requests the Office of Graduate Studies approve the scheduling of the final general exam, thesis or project defense via the Progress to Degree form. The degree program should ascertain that the student is in good academic standing (3.0 or higher grade-point average) and is currently in regular admission status, if the student was admitted provisionally, before scheduling the examination or defense. This request must be submitted in advance of the examination date by a minimum of two weeks.

The committee for the administration of the general exam or the defense of a thesis or project, must consist of at least 3 members, all of whom must be members of the Graduate Faculty (see Graduate Faculty section of this catalog.)

The Office of Graduate Studies verifies that all criteria described in the preceding three paragraphs has been met upon receiving a Progress to Degree form requesting the scheduling of the general exam, thesis defense or project defense. If the criteria has been met, Graduate Studies approves the request to proceed.

M.A. and M.S. Thesis Submission
For those students completing a thesis, when the final oral examination has been passed and the thesis title page has been signed by the members of the committee, the title page with original signatures are to be delivered to the Office of Graduate Studies. When all requested changes have been made to thesis, the student arranges for the thesis committee chair to review changes, then sign and date the acceptance page, verifying the thesis is approved for publishing. The acceptance page with original signature is also delivered to the Office of Graduate Studies.

The student is then required to arrange publication of the thesis and payment of all associated fees (including copyright fee if applicable), through the electronic submission process (http://wwwgraduate.ku.edu/electronic-thesis-and-dissertation) detailed on the Graduate Studies website. The student must be the author of the thesis, and every publication from it naturally must indicate that authorship. However, practices vary among disciplines, and even among scholars in a given field, as to whether the mentor's name may appear as a co-author and whether as senior or junior, on subsequent publication of the thesis (usually revised), or on articles prepared from it. Clear understandings in individual cases are expected to be established during the apprenticeship period, when the ethical practices in publication are addressed within the program's professional development training.
Doctoral Degree Programs

KU Medical Center campus with oversight from the Office of Graduate Studies offers the five graduate doctoral degrees. General descriptions for each of the five doctoral degrees are given here in succinct form to provide convenient comparison of the degrees. Detailed information about requirements for each degree as it is offered in specific disciplines should be obtained from the appropriate academic program elsewhere in this catalog. Note: The School of Medicine also offers the Doctor of Medicine (p. 2062) (M.D.) (p. 2063) degree which is administered by the School of Medicine.

Doctor of Philosophy

The degree of Doctor of Philosophy (Ph.D.) is the highest degree offered by the university. It is awarded for mastering a field of scholarship, for learning the methods of investigation appropriate to that field, and for completing a substantial piece of original research. In addition to preparing research specialists, the process of earning a Ph.D. shares certain goals with liberal education: putting order into human experience; fostering a love of learning for its own sake; instilling respect for human values; integrating various human powers into a process of creation; and making vital, in many fields at least, a sense of history.

Although the courses and research leading to the Ph.D. are necessarily specialized, the attainment of this degree should not be an isolated event in the enterprise of learning. The Ph.D. aspirant is expected to be a well-educated person with a broad base of general knowledge, not only as preparation for more advanced work but also as a means of knowing how the chosen specialty is related to other fields of human thought.

To give depth and breadth to their doctoral programs, many departments require some work in a minor field or at least an articulated selection of courses. Because of the diversity of the fields in which the Ph.D. is offered, and the variety of needs and interests of individual students, the degree does not have a specific requirement for a minor. However, the Ph.D. aspirant is encouraged to plan an integrated program, under departmental direction, that includes courses outside the major field.

Doctor of Philosophy (Ph.D.) is offered by programs in specific disciplines by the Schools of Health Professions (p. 650), Medicine (p. 2062), and Nursing (p. 2264).

Doctor of Audiology

The Doctor of Audiology (Au.D.) degree program prepares the student to enter clinical practice as an audiologist. Offered by the KU School of Health Professions, the program produces professionals skilled in providing diagnostic, rehabilitative, and related services in the fields of sound, balance, and hearing sciences. There is an emphasis on the clinical learning experience, although research is also a significant component of the program. A baccalaureate degree is required for admission. Degree requirements are listed under Communicative Disorders: Intercampus Program (p. 678) in the online catalog.

Doctor of Nursing Practice

The Doctor of Nursing Practice (D.N.P.) at the KU School of Nursing prepares advanced practice nurses at the highest level of nursing practice. The D.N.P. offers sophisticated, cutting-edge experiences that help nurses actively engage in a complex, dynamic, and demanding health care field. Skills in collaboration, innovation, and evaluation, complemented by advanced practice skills, prepare nurses to share the future of health care. Students preparing for advanced practice roles learn to provide patient-centered care that is evidence-based, and contribute to the development of the highest level of evidence-based practice. Students preparing for indirect care roles learn to provide the highest level of leadership in a variety of care and educational settings. Requirements are listed in the Doctor of Nursing Practice (p. 2295) and the Doctor of Nursing Practice in Nurse Anesthesia (p. 709) section of the online catalog.

Doctor of Occupational Therapy

The Doctor of Occupational Therapy (O.T.D.) is a professional degree offered by the School of Health Professions. This program of study is intended for therapists already in practice who have either a bachelor’s degree or a Master of Occupational Therapy degree and wish to upgrade their knowledge and skills to the doctoral level to meet the increasing demands of complex practice issues. Requirements for admission are listed in the Doctor of Occupational Therapy (p. 719) section of the online catalog.

Doctor of Physical Therapy

The Doctor of Physical Therapy (D.P.T.) is designed for individuals pursuing careers in physical therapy. The program prepares a physical therapy practitioner with the skills for lifelong professional development. To be eligible for admission, the student must have a minimum of a baccalaureate degree or its equivalent. Requirements for admission are listed in the Doctor of Physical Therapy (p. 724) section of the online catalog.

Doctoral Degree Requirements

The sections immediately following list the general and common requirements for doctoral degrees. Specific degree requirements, including requirements for the clinical doctoral degrees, set by specific departments, programs, and schools, appear in the sections of the catalog devoted to those units.

Maximum Tenure for Doctoral Programs

After being admitted to doctoral programs at KU, students complete all degree requirements in 8 years. In cases in which compelling circumstances recommend a 1-year extension, the Graduate Division has authority to grant the extension on the written advice of the department and dissertation committee. Students who complete the master’s degree at KU and subsequently begin doctoral studies have a maximum total enrolled time of 10 years to complete both degrees. Normal expectations, however, are that most master’s degrees (excluding some professional terminal degrees) should be completed in 2 years of full-time study, and both master’s and doctorate in 6 years of full-time study. Some graduate degree programs may have more stringent time restrictions. Students should inquire about the policy in effect in the department in which they plan to study.

Doctoral Enrollment Requirement

All graduate students enrolled in doctoral graduate programs must be enrolled the semester they complete doctoral degree requirements. Doctoral students who complete degree requirements during the first week of summer session or within the first 2 weeks of the fall or spring semester are not required to be enrolled for that term unless they were not enrolled during the previous semester.
See the current Graduate Studies Calendar (http://www.kumc.edu/academic-affairs/graduate-studies/calendars.html) for deadlines for specific semesters.

**Research Skills and Responsible Scholarship**
All doctoral students must meet this requirement before proceeding to comprehensive exams. The requirement must include at least 2 components:

1. Every doctoral student is required to have training in responsible scholarship pertinent to the field of research.
2. Every doctoral student is required to obtain research skills pertinent to the doctoral level of research in their field(s).

**Procedure**
All doctoral programs must have a research skills and responsible scholarship requirement plan approved by the Graduate Studies Office. Students meet this requirement as determined by the approved plan for their program. It is the responsibility of the program to report when the student completed the requirement and how the requirement was met.

No course graded CR or NC can count toward the satisfaction of the requirements for a graduate degree. This prohibition includes any courses taken to meet the Research Skills and Responsible Scholarship requirement.

It is the purview of the department or program to determine the necessary topics in training doctoral students in the areas of responsible scholarship. Such topics may include:

- Protection of human subjects
- Welfare of laboratory animals
- Conflicts of interest
- Data management
- Mentor/student responsibilities
- Collaborative research
- Authorship, publication, plagiarism, copyright
- Peer review
- Professional practices
- Maintenance of confidentiality
- Appropriate research conduct and research misconduct

It is also the purview of the department or program to determine the research skills necessary to perform doctoral level research. Research skills may include:

- Knowledge of language(s) significant to the field
- Research methodology
- Methods of qualitative and quantitative data analysis
- Computer programming necessary for the field

Laboratory skills and techniques necessary for the discipline

**Note:** These lists serve as guides; additional appropriate topics may exist.

**Doctor of Philosophy Degree Requirements**
This section lists KU regulations common to the administration of all doctoral Ph.D. programs. The particular application, interpretation, or method of implementation of such a common element for individual degree programs and departments is, in certain cases, left to the faculty of the department or the degree program (e.g., Research Skills and Responsible Scholarship requirement). Additional requirements specific to each degree, along with variations permitting each student to achieve particular academic goals, are listed in the section of this catalog for the school through which the degree program is offered.

1. **Application and Admission**
   A student who seeks admission to a doctoral program must apply to the graduate degree program and school offering the desired degree. Upon admission, the student is known as an aspirant for the degree and remains so designated until successful completion of the comprehensive oral examination. After passing that examination, the student is designated a candidate for the degree.

2. **Program Time Constraints**
   **Minimum Tenure**
   The student must spend 3 full academic years, or the bona fide equivalent thereof, in resident study at this or some other approved university, including the time spent in attaining the master’s degree. Resident study at less than full time requires a correspondingly longer period, but the requirement is not measured merely in hours of enrollment. Because a minimum number of hours for the degree is not prescribed, no transfer of credit is appropriate. However, graduate degree programs take relevant prior graduate work into consideration in setting up programs of study leading to the doctorate.

   **Residence Requirement**
   Two semesters, which may include one summer session, must be spent in resident study at KU. For the two specific semesters counted towards meeting this requirement, the student must be involved full time in academic or professional pursuits such as a GTA or GRA appointment for teaching or research if it is directed specifically toward degree objectives. Enrollment in approved distance-learning courses offered through KU cannot be used to meet the doctoral residence requirement.

   Full time enrollment for a graduate student is 9 hours for Fall or Spring semesters and 6 hours for the Summer semester. For semesters in which a student holds a GTA or GRA appointment, full-time enrollment is 6 hours for Fall or Spring semesters and 3 hours for the Summer semester. The residence requirement must be met prior to the semester the Comprehensive Oral Examination is scheduled. It is the responsibility of the academic program to report the two semesters that will satisfy this requirement via the Progress to Degree form requesting approval to schedule the Comprehensive Oral Examination.
**Note:** These are minimum residence requirements. Please check with the individual program for any additional requirements.

**Maximum Tenure**
After being admitted to doctoral programs at KU, students complete all degree requirements in 8 years. In cases in which compelling circumstances recommend a 1-year extension, Graduate Studies has authority to grant the extension on the written advice of the department and dissertation committee. Students who complete the master’s degree at KU and subsequently begin doctoral studies have a maximum total enrolled time of 10 years to complete both degrees. Normal expectations, however, are that most master’s degrees (excluding some professional terminal degrees) should be completed in 2 years of full-time study, and both master’s and doctorate in 6 years of full-time study. Some graduate degree programs may have more stringent time restrictions. Students should inquire about the policy in effect in the department in which they plan to study.

A student in any of the above categories may petition the Dean of Graduate Studies through the program for a leave of absence during either the pre- or post-comprehensive period to pursue full-time professional activities related to the doctoral program and long-range professional goals. Leaves of absence also may be granted because of illness or other emergency. Ordinarily a leave of absence is granted for 1 year, with the possibility of extension upon request. After an absence of 5 years, however, a doctoral aspirant or candidate loses status as such and must apply for readmission to the program.

**3. Research Skills and Responsible Scholarship**
All doctoral students must meet this requirement before proceeding to comprehensive exams. The requirement must include at least 2 components:

1. Every doctoral student is required to have training in responsible scholarship pertinent to the field of research.
2. Every doctoral student is required to obtain research skills pertinent to the doctoral level of research in their field(s).

**Procedure**
All doctoral programs must have a research skills and responsible scholarship requirement plan approved by the Graduate Studies Office. Students meet this requirement as determined by the approved plan for their program. It is the responsibility of the program to report when the student completed the requirement and how the requirement was met via the Progress to Degree form requesting approval to schedule the Comprehensive Oral Examination.

No course graded CR or NC can count toward the satisfaction of the requirements for a graduate degree. This prohibition includes any courses taken to meet the Research Skills and Responsible Scholarship requirement.

It is the purview of the department or program to determine the necessary topics in training doctoral students in the areas of responsible scholarship. Such topics may include:

- Protection of human subjects
- Welfare of laboratory animals
- Conflicts of interest
- Data management
- Mentor/student responsibilities
- Collaborative research
- Authorship, publication, plagiarism, copyright
- Peer review
- Professional practices
- Maintenance of confidentiality
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It is also the purview of the department or program to determine the research skills necessary to perform doctoral level research. Research skills may include:

- Knowledge of language(s) significant to the field
- Research methodology
- Methods of qualitative and quantitative data analysis
- Computer programming necessary for the field
- Laboratory skills and techniques necessary for the discipline

**Note:** These lists serve as guides; additional appropriate topics may exist.

**4. Comprehensive Oral Examination**
The comprehensive oral examination covers the major field and any extra departmental work for which the program wishes to hold the aspirant responsible. When a doctoral aspirant has completed the major portion of the course work at a level satisfactory to the graduate degree program and met all other program and general requirements prerequisite to the comprehensive oral examination, including the research skills and responsible research requirement as appropriately applied and established for the student’s particular program, the degree program requests the Office of Graduate Studies approve the scheduling of the comprehensive oral examination via the Progress to Degree form. The degree program should ascertain that the student is in good academic standing (3.0 or higher grade-point average) and is currently in regular admission status, if the student was admitted provisionally, before scheduling the examination. The examination may be scheduled provided that at least 5 months have elapsed since the time of the aspirant’s first enrollment at KU and at least 90 days have elapsed since any unsuccessful attempt. The examination request must be submitted in advance of the examination date by a minimum of two weeks.

The committee for the comprehensive oral examination must consist of at least 5 members, all of whom must be members of the
Graduate Faculty (see Graduate Faculty section of this catalog.) At least one member of the committee must be from a department other than the aspirant’s major department. This outside committee member represents the Office of Graduate Studies and must hold either regular or dissertation graduate faculty status to be eligible to serve in this capacity. Before the examination, Graduate Studies provides the outside committee member a list of responsibilities as the Graduate Studies representative. The Graduate Studies representative is a voting member of the committee, has full right to participate in the examination, and reports any unsatisfactory or irregular aspects of the examination to the committee chair, department chair, and Graduate Studies.

The Office of Graduate Studies verifies that all criteria described in the preceding two paragraphs has been met upon receiving a Progress to Degree form requesting the scheduling of the Comprehensive Exam. If the criteria has been met, Graduate Studies approves the request to proceed with the exam.

For every scheduled examination, the degree program reports an exam result of Honors, Satisfactory, or Unsatisfactory. If the aspirant receives a grade of Unsatisfactory on the comprehensive oral examination, it may be repeated on the recommendation of the aspirant’s department chair, and Graduate Studies.

The University of Kansas

5. Candidacy

Dissertation Committee

Upon passing the comprehensive oral examination, the aspirant becomes a candidate for the doctorate. If it has not begun before, the traditional, close student-mentor apprenticeship relationship comes into being. The student is expected to learn by both precept and example of the mentor, and often in collaboration. The chosen field of scholarship is explored using acquired research tools. The principles and customs of academic inquiry and the codes of ethics traditional to the various disciplines and professional fields become part of the student’s thinking and working.

When the student passes the comprehensive oral examination, the program designates the candidate’s dissertation committee. All members of the committee must be chosen from the Graduate Faculty, and the chair must, in addition, be authorized to chair doctoral dissertations.

Post-Comprehensive Enrollment

Doctoral candidates are required, after passing the comprehensive oral examination, to be continuously enrolled in one or more hours that both moves the student towards degree completion and reflects, as accurately as possible, the candidate's demands on faculty time and university facilities. During this time, until all requirements for the degree are completed (including the filing of the dissertation) or until 18 post-comprehensive hours have been completed (whichever comes first), the candidate must enroll for a minimum of 6 hours a semester and 3 hours a summer session. Post-comprehensive enrollment may include enrollment during the semester in which the comprehensive oral examination has been passed. If after 18 hours of post-comprehensive enrollment the degree is not completed, the candidate must continue to enroll each semester until all degree requirements have been met. The number of hours at this stage may be as little as one hour a semester. The number of hours of enrollment is determined by the candidate’s advisor and must reflect as accurately as possible the candidate’s demands on faculty time and university facilities.

6. Dissertation

The candidate must present a dissertation showing the planning, conduct, and results of original research and scholarly creativity. The purpose of the dissertation is to encourage and ensure the development of broad intellectual capabilities as well as to demonstrate an intensive focus on a problem or research area. The dissertation itself should be an evident product of the candidate’s growth and attainment of the ability to identify significant problems; organize, analyze, and communicate scholarly results; and bring to bear on a useful area of interest a variety of research skills and scholarly or creative processes. It must show some original accomplishment, but it should also demonstrate without doubt the candidate’s potential to make future contributions to knowledge and understanding.

The dissertation is to be a coherent scholarly work, not a collage of separate, distinct pieces. Its unity of theme and treatment may still accommodate several subtopics by demonstrating their relationships and interactions. If previously published material by other authors is included in the dissertation, it must be quoted and documented. It should be noted that prior publication does not guarantee acceptance of the dissertation by the dissertation committee. Final acceptance of the dissertation is subject to the approval of the dissertation committee. The dissertation—or one or more substantial portions of it, often rewritten—is expected to be publishable and indeed to be published (see the Dissertation Submission and Publication section).

Both the dissertation research and the dissertation itself are to be completed under the guidance and direction of the dissertation committee. Instructions about the proper format of the dissertation are available on the Graduate Studies website (http://www.graduate.ku.edu/electronic-thesis-and-dissertation) Candidates and faculty members are reminded that the dissertation is to be a coherent, logically organized scholarly document. Because the demands and practices of different disciplines are varied, the format is somewhat flexibly described, and moderate departures from the norm are allowed when justified by the nature of the work or the circumstances of presentation. Any substantial divergences must be approved in advance as prescribed by the instructions, and candidates and faculty members are urged to seek early approval to avoid last-minute disappointments over unacceptable format or reproduction.

7. Final Oral Examination

Completion of the dissertation is the culminating academic phase of a doctoral program, climaxed by the final oral examination and defense of the dissertation. In all but the rarest cases, tentative approval of the dissertation is followed promptly by the final oral examination. When the completed dissertation has been accepted by the committee in final draft form, and all other degree requirements have been satisfied, the chair of the committee requests Graduate Studies approve the scheduling of the final oral examination via the Progress to Degree form. This request must be made in advance of the desired examination by at least 3 weeks to
allow sufficient time to publicize the examination so that interested members of the university community may attend.

At least 5 months must elapse between the successful completion of the comprehensive oral examination and the date of the final oral examination. Under normal circumstances, the doctoral candidacy period between passage of the oral comprehensive examination and the final dissertation defense must last no longer than 5 years. If a student took the oral comprehensive examination more than 5 years prior to the dissertation defense, a re-evaluation of the student’s candidacy status is necessary. Re-evaluation of the student’s candidacy status can include retaking the comprehensive oral examination.

The committee for the final oral examination must consist of at least 5 members, all of whom must be members of the Graduate Faculty (see Graduate Faculty section of this catalog.) At least one member of the committee must be from a department other than the aspirant’s major department. This outside committee member represents the Office of Graduate Studies and must hold either regular or dissertation graduate faculty status to be eligible to serve in this capacity. Before the examination, Graduate Studies provides the outside committee member a list of responsibilities as the Graduate Studies representative. The Graduate Studies representative is a voting member of the committee, has full right to participate in the examination, and reports any unsatisfactory or irregular aspects of the examination to the committee chair, department chair, and Graduate Studies.

The Office of Graduate Studies verifies that all criteria described in the preceding three paragraphs has been met upon receiving a Progress to Degree form requesting the scheduling of the Final Oral Exam. If the criteria has been met, Graduate Studies approves the request to proceed with the exam. Upon approval of the request, Graduate Studies publishes the final oral examination information in a Medical Center campus news medium so interested members of the university community may attend the examination.

For every scheduled final oral examination, the department reports to Graduate Studies an examination result of Honors, Satisfactory, or Unsatisfactory for the candidate’s performance. If an Unsatisfactory grade is reported, the candidate may be allowed to repeat the examination on the recommendation of the department.

8. Dissertation Submission and Publication

When the final oral examination has been passed and the dissertation title page has been signed by the members of the committee, the title page with original signatures are to be delivered to the Office of Graduate Studies. When all requested changes have been made to the dissertation, the student arranges for the dissertation committee chair to review changes, then sign and date the acceptance page, verifying the dissertation is approved for publishing. The acceptance page with original signature is also delivered to the Office of Graduate Studies.

The student is then required to arrange publication of the dissertation and payment of all associated fees (including copyright fee if applicable), through the electronic submission process (http://www.graduate.ku.edu/electronic-thesis-and-dissertation) detailed on the Graduate Studies website. The student must be the author of the dissertation, and every publication from it naturally must indicate that authorship. However, practices vary among disciplines, and even among scholars in a given field, as to whether the mentor’s name may appear as a co-author and whether as senior or junior, on subsequent publication of the dissertation (usually revised), or on articles prepared from it. Clear understandings in individual cases are expected to be established during the apprenticeship period, when the ethical practices in publication are addressed within the program’s professional development training.

Interdisciplinary Studies

M.A., M.S., and Ph.D. with a Major in Interdisciplinary Studies

Only superior students admitted and enrolled in a graduate program at KU whose proposed studies require direction not available in any single department are considered for admission to an Interdisciplinary Studies program. Before seeking acceptance, an applicant must assemble a graduate faculty advisory committee headed by a faculty member authorized to direct master’s research (for M.A. or M.S. in Interdisciplinary Studies), doctoral research and dissertations (for Ph.D. in Interdisciplinary Studies). The applicant, in conjunction with the committee, must prepare a proposal for the course of study. The proposal must provide a rationale for the particular mix of disciplines, demonstrating how each contributes to a central theme or focus. It must also show that the proposed program cannot be achieved through an established master’s or doctoral program at KU.

The student seeking to enter the Interdisciplinary Studies program must have an outstanding academic record (a grade-point average of 3.75 or higher on a 4.0 scale for graduate courses or a grade-point average of 3.5 or higher on a 4.0 scale for undergraduate courses if no graduate courses have been taken) and must be admitted to and enrolled in a graduate program at KU at the time of application. A graduate student who has failed to maintain the required grade-point average is not eligible for the Interdisciplinary Studies program. A student is not eligible for this program if he or she has tried and failed to achieve candidacy in a regular graduate department or program at KU.

The student is expected to assume the initiative in determining his or her potential eligibility through consultation with graduate advisors and, if deemed eligible, in forming an advisory committee and preparing documentation to support the application.

Preadmission Procedures

To enter the program, a student should

1. Determine that KU offers courses and research in the areas appropriate to the student’s interest(s).

2. Prepare a tentative study plan based on those offerings to serve as a basis for initial discussion.

3. Approach a professor whose interests are comparable to those of the student and request that he or she acts as advisor. Normally this professor is a faculty member of the program of principal interest to the student. To grant an M.A. or M.S. in Interdisciplinary Studies, it is essential that the school has the authority to grant master’s degrees. To grant a Ph.D. in Interdisciplinary Studies, it is essential that the school has the authority to grant doctoral degrees. The selected professor must be a full member of the graduate faculty and authorized to chair doctoral dissertation committees for Ph.D. in Interdisciplinary Studies.

4. After a professor agrees to serve as an advisor, the student should assemble an advisory committee of at least 3 additional professors.
representing the disciplines covered in the Interdisciplinary program. At least 2 disciplines or departments must be represented.

5. In conjunction with the advisor and the committee, the student prepares a proposal for study, including:

- A statement, with supporting documentation, that the proposed Interdisciplinary Studies program cannot be accomplished through established programs.
- A statement of the interdisciplinary or transdisciplinary nature of the proposed area of study.
- A definition of the field of study incorporating in a consistent way a description of the contribution of each included discipline to the broader field.
- An outline of the course of study, indicating substantive work in the fields represented. Readings courses and independent study do not substitute for regular courses.
- A description of the method for satisfying research skills and responsible scholarship requirements.
- A description of the comprehensive examination procedures for the Ph.D. (nature of the examinations and possible examining committee) or final examination for the M.A./M.S.
- A description, to the extent possible, of the nature of the field in which a dissertation or master's thesis might be written, indicating the respective contributions of the selected disciplines to the final product.
- Attach the following:
  i. complete transcripts of all previous work,
  ii. a cover sheet, signed by committee members, indicating their support of the proposal,
  iii. letters of recommendation and other appropriate supporting documents.

Note: The diploma indicates the degree awarded as "M.A. in Interdisciplinary Studies," "M.S. in Interdisciplinary Studies," or "Ph.D. in Interdisciplinary Studies," and does not specify the area of specialization. The transcript notes the area of specialization as determined by the admissions committee.

Admission and Review Procedure

Upon completion of the above, the student must submit the application for admission into the Interdisciplinary Studies program to the Dean of Graduate Studies. The Dean of Graduate Studies appoints an admission committee consisting of (a) the associate dean of graduate studies or associate dean’s designate for the school most involved in the interdisciplinary undertaking (the school in which the major advisor resides), (b) 2 or more doctoral chairing faculty members from unrelated fields, including at least 1 member of the Graduate Council, and (c) the chair or director of graduate studies of the department in which the student resides at time of application. The Dean of Graduate Studies serves as ex officio chair of the Interdisciplinary Studies admissions committee. The committee reviews the documents and may, if necessary, interview the student and the advisor for clarification and additional information or to discuss suggested revisions to the proposal.

Approved Program Implementation

Upon acceptance of the proposal and admission to the Interdisciplinary Studies program, the student is admitted to the school of the major advisor to facilitate record keeping and to provide a central administrative office. The associate dean or director of graduate studies of that school must enroll the student and monitor the program and, along with the major advisor, must make annual reports to Graduate Studies on the student's progress. These reports are distributed to the directors of other involved programs along with a request to supply any additional information regarding the student’s performance. Proposals for major deviations from the approved course of study must be submitted for review by Graduate Studies and by the school in which the student resides. It is understood that no additional requirements unique to traditional graduate programs of the school(s) or departments may be imposed unless stated explicitly in the approved study plan.

Once approved, changes to the program plan must be approved by a Graduate Studies committee, appointed by the Dean of Graduate Studies. Significant curricular changes may require a new proposal and admissions process.

All basic rules and requirements for the Master of Arts, Master of Science, and Doctor of Philosophy degrees apply to Interdisciplinary Studies programs. These include program time constraints, residence requirement, post-comprehensive enrollment, final examinations, research skills and responsible scholarship requirements, thesis or dissertation submission and publication, grade-point average, etc. (See Master’s Degree Requirements and Doctoral Degree Requirements in this section of the online catalog.)

Combined Degrees

Combined degrees are granted in programs meeting the requirements of the graduate master’s or doctoral degree and the professional post-baccalaureate degree. Approved programs include the following degrees:

<table>
<thead>
<tr>
<th>Degree</th>
<th>with...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor of Audiology (Au.D.)</td>
<td>with Ph.D. in Audiology</td>
</tr>
<tr>
<td>Doctor of Philosophy (Ph.D.) in basic medical science fields</td>
<td>with M.D.</td>
</tr>
<tr>
<td>Doctor of Philosophy (Ph.D.)</td>
<td>with Au.D.</td>
</tr>
<tr>
<td>Master of Health Services Administration (M.H.S.A.)</td>
<td>with B.S. in Health Information Management</td>
</tr>
<tr>
<td>Master of Health Services Administration (M.H.S.A.)</td>
<td>with J.D.</td>
</tr>
<tr>
<td>Master of Arts (M.A.) or Master of Science (M.S.) in basic medical science fields</td>
<td>with M.D.</td>
</tr>
<tr>
<td>Master of Health Services Administration (M.H.S.A.)</td>
<td>with M.D.</td>
</tr>
<tr>
<td>Master of Science (M.S.) in Nursing</td>
<td>with M.H.S.A.</td>
</tr>
<tr>
<td>Master of Science (M.S.) in Nursing</td>
<td>with M.P.H.</td>
</tr>
</tbody>
</table>
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Office of Graduate Studies, Medical Center Campus Students

Combined Medical and Master’s Degrees
Graduate students in the basic medical science departments in the School
of Medicine are enrolled, for the most part, only in graduate programs.
Outstanding medical students, however, are allowed to participate in
work leading jointly to the M.D. degree and a graduate degree. A student
admitted to both academic programs may enroll concurrently in courses
in the respective programs, provided the regular medical course load is
reduced to compensate for the added graduate work. The student should
discuss concurrent enrollment with the chair or graduate advisor of the
master’s degree program; departmental policies vary. All requirements for
the degrees must be met, but within these limitations, superior students
may be able to complete the joint degree program in less time than the
total required for the 2 degrees to be earned separately. For the master’s
degree, a student must complete graduate work equivalent to at least 1
academic year in addition to the time spent on the medical curriculum.

Combined Medical and Doctoral Degrees
Outstanding students who are qualified to do so may participate
concurrently in work leading to the M.D. and the Ph.D. degrees. Credit
hours earned in the medical curriculum cannot be transferred as graduate
credit hours toward the requirements for the Ph.D. degree, although
recognition of satisfactory performance in appropriate medical courses
may be given by the involved Ph.D. program when formulating the
student’s additional graduate curriculum for the Ph.D. All the requirements
for the respective degrees must be met. The joint degree requirements
and application information for the joint M.D.-Ph.D. program are posted
on the M.D.-Ph.D. website (http://catalog.ku.edu/medicine/combined-mdphd).

Policies and Processes for Graduate Certificate
Programs
The graduate certificate is a focused collection of courses that, when
completed, affords the student some record of coherent academic
accomplishment in a given discipline or set of related disciplines. Students
may be awarded these certificates upon completion of a well-defined
program of course work. The didactic material comprised within a
graduate certificate program may represent a more practice-oriented
subset of an existing graduate discipline.
The KU Medical Center campus with oversight from the Office of
Graduate Studies offers graduate certificate programs in several
disciplines through the Schools of Health Professions, Medicine, and
Nursing. Specific information about the certificate programs offered can
be found in the the Schools of Health Professions (p. 650), Medicine
(p. 2062), and Nursing (p. 2264) sections of this catalog.

Eligibility and Admission Criteria
See Graduate Certificate Admission (p. 2395) section of this catalog for
admission criteria on the Medical Center campus.

Number of Credits
A graduate certificate program will comprise no less than 9 and generally
no more than 18 credit hours of course work in a particular discipline or
related disciplines of study.

Expiration of Program
All proposals for graduate certificate programs will be adopted for a 7-year
time period. The certificate program will expire at the end of that period.
The program may request renewal of the certificate program by sending
an updated program proposal, endorsed by the department and School

to the Graduate Council on the Medical Center campus. The proposal
will be evaluated for an additional 7-year period. The Office of Graduate
Studies will remind the graduate certificate program about its renewal one
year before the graduate certificate program is scheduled to expire. If a
program expires or is discontinued, no new students may be enrolled in
the program and those students currently in the program will continue until
completion.

Student Records Criteria
• It is the responsibility of the degree program that houses the graduate
certificate program to maintain all student records of the graduate
certificate program. These records should include, but are not limited
to, the number of students that apply to the program, the number
accepted and denied into the program, the number of students
enrolled in the program by semester, the number of students who
complete the program by semester.
• The courses taken in the graduate certificate program will be listed on
the student’s transcript and recognition of the earned certificate will
also be posted on the transcript.
• The awarding of graduate certificates will coincide with the August,
December and May graduations at the University of Kansas. The
certificate awarding department will forward its list of certificate
recipients in a given semester to the Graduate Studies office. The
same degree granting deadline dates will apply to the awarding of
graduate certificates.
• Graduate Studies will be responsible for providing the University
Registrar’s office with the names of certificate recipients along with
the corresponding names of the completed certificate programs each
semester.
• The Registrar's Office will provide Graduate Certificates for students
who successfully complete all certificate program requirements each
semester.
• Graduate certificates will not be recognized by any Graduate Studies
official graduation ceremony.

Process of Approval for New Graduate Certificate
Programs
Approval Process
Proposals for new graduate certificate programs may be created and
submitted by graduate faculty in the same manner as proposals for
new graduate degree programs, with the exception that all approvals
are made internally at the University of Kansas. The proposal must be
approved by the Vice Chancellor for Academic Affairs and accompanied
by endorsement from the department chairperson, and dean of the school
in which the contributing course work is administered.
After a proposal has been endorsed by the sponsoring department and
school, the proposal must go to the Graduate Council and, if approved,
will be forwarded to the Vice Chancellor for Academic Affairs.

Curriculum Criteria
• All certificate programs must be linked to a specific KU degree
program(s), such that they provide a specific set of skills or knowledge
base within a defined body of knowledge of the particular discipline.
Certificate programs are encouraged where they might provide valueadded benefits to students in existing graduate degree programs
or provide a needed educational initiative for post-baccalaureate
students in an area not currently addressed by a graduate degree
program. These programs are not encouraged where they might
detract from existing graduate programs.


• The proposed sequence of course work must offer a clear and appropriate educational objective at the post-baccalaureate level.
• The proposed certificate program must achieve its educational objective in an efficient and well-defined manner.
• A statement of the proposed course sequence associated with the certificate, including titles, number of credit hours of courses, and course descriptions both for existing courses and any new courses that may be developed.
• Graduate certificate programs may be at the post-baccalaureate, the post-master’s or post-doctoral level.
• Graduate certificate programs must be proposed for current KU graduate students or new KU students seeking a post-baccalaureate certificate.
• The certificate program must include an appropriate number of credit hours. In general, certificate programs should be no less than 9 credit hours. All proposals must have a maximum time to completion of no more than 4 full academic years.
• The proposal will identify the extent to which the curriculum overlaps with the curriculum of existing degree programs.
• The proposal will identify requirements of the program that are supplemented to the course work, including but not limited to laboratories, practicum, internships, and projects.

Faculty Criteria
Instructors in graduate certificate programs must have gained appointment to the Graduate Faculty.

Materials Required for New Certificate Proposal
Proposals for a graduate certificate program at KU must include the following materials:

• A statement of the educational objectives of the program.
• A statement of the proposed course sequence associated with the certificate, including titles, number of graduate credit hours, and course descriptions both for existing courses and any new graduate courses that may be developed.
• A statement identifying the important academic objectives of the proposed certificate program, including the range of skills and knowledge future graduates will possess. Proposals should show how the graduate certificate program complements existing courses and does not detract from existing programs.
• A statement of how the proposed course sequence associated with the certificate will meet the stated educational objectives.
• A statement of the need for the proposed program and the basis for such need, supported by either external or internal derived data.
• A list of the names of the faculty associated with or contributing to the certificate program, either by teaching the courses or advising the students within the program. An up-to-date curriculum vitae for each faculty member listed needs to be included.
• The name and curriculum vitae of the faculty member who will be designated as the coordinator of the program.
• A planned date of implementation.

The Graduate Faculty
The Graduate Faculty consists of members of the university faculty and other persons qualified by training and experience who are duly nominated by a graduate department and appointed by the Office of Graduate Studies. Only members of the Graduate Faculty may teach courses for graduate credit, supervise master’s programs, serve on master’s examination and defense committees, or serve on doctoral examination committees.

Regular Graduate Faculty Status
Any faculty member who is appointed to a tenure-track position in a graduate degree granting department on the Medical Center campus receives regular graduate status. These members of the Graduate Faculty may teach courses for graduate credit, master’s programs, serve on master’s examination and defense committees, or serve on doctoral examination committees.

When appropriate, a qualified member of the Regular Graduate Faculty may be nominated to serve as co-chair of a specific dissertation committee if a faculty member with Dissertation status serves as co-chair of the committee and agrees to ensure that all requirements are met. However, if the regular member of the Graduate Faculty has lost dissertation status, this does not apply. Present or newly appointed faculty members in tenure-track appointments with the rank of assistant professor or above in departments or programs with approved graduate programs are granted regular membership in the Graduate Faculty, provided they have received the terminal degree in their field of specialization or have acquired equivalent training and/or professional experience as determined by the appropriate Graduate Division.

In special cases where faculty members who hold regular membership in the graduate faculty enroll in a KU graduate program as part of their professional development, they may be permitted to retain their graduate faculty status. They may not supervise or serve as the instructor of record for students who are peers in the graduate program in which they are enrolled. To hold regular membership in the Graduate Faculty, a faculty member must continue to show evidence of a pattern of productive professional activity demonstrating the ability to contribute to high-quality graduate education. The form that productive professional activity may take varies across disciplines. Conventional evidence of such activity includes such things as effective teaching, scholarly publication, participation in professional societies, and other scholarly activity. Graduate degree programs are responsible for monitoring faculty with regular membership in the Graduate Faculty.

Dissertation Graduate Faculty Status
To qualify for the privilege of chairing doctoral dissertation committees, a regular member of the Graduate Faculty must demonstrate continuing activity commensurate with being an established scholar in his or her field and involvement in the graduate education program as evidenced by:

1. Teaching graduate courses,
2. Advising and mentoring graduate students and serving on thesis and dissertation committees, and
3. Maintaining an ongoing program of scholarly activity including a record of scholarship, publication and other contributions to the field.

It is the graduate program’s responsibility to nominate members of the Graduate Faculty for authorization to chair doctoral committees and to provide evidence of scholarship and involvement in the graduate education program. Authorization to chair dissertation committees is reviewed as part of each graduate program review.

Special Graduate Faculty Status
Special membership may be granted to any university employee or non-employee who is uniquely qualified by training or experience for membership in the Graduate Faculty for the purposes of:
1. Teaching a course or courses;
2. Having courses cross-listed as KU courses if they are part of a cooperative graduate program between KU and the appointee’s home institution;
3. Serving on the thesis, dissertation, or examination committee of a particular student or students;
4. Chairing master’s thesis committees of a particular student or students.
5. Co-chairing dissertation committees of a particular student or students. The other co-chair must hold dissertation status and agrees to ensure that all requirements are met.

Special memberships are limited to a maximum period of 5 calendar years for teaching purposes or for the duration of the specified committee assignment. All nominations for special membership must state clearly the specific purposes for which the nomination is being sought and, when it can be known in advance, the length of time for which it is being requested. Special appointments are reviewed by the appointing graduate department and renewed when term ends as appropriate.

**Graduate Faculty Appointment Chart**

This chart summarizes the organization and privileges of the various types of Graduate Faculty appointments.

<table>
<thead>
<tr>
<th>Type of Employment</th>
<th>Tenure Status</th>
<th>Teach</th>
<th>Serve</th>
<th>Chair</th>
<th>Serve</th>
<th>Chair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Faculty appointee</td>
<td>Tenure - Yes, track/tenured</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes, unless dissertation status was discontinued</td>
</tr>
<tr>
<td>GTA eligibility</td>
<td>Tenure - Yes, track/tenured</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Graduate Teaching Assistantships (GTA)</td>
<td>Tenure - Yes, track/tenured</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>GTA Tuition Benefit</td>
<td>Tenure - Yes, track/tenured</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Graduate Research Assistantships (GRA)</td>
<td>Tenure - Yes, track/tenured</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>GRA Tuition Benefit</td>
<td>Tenure - Yes, track/tenured</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Principles Guiding Assistantships**

The following principles govern all graduate teaching assistant (GTA) and graduate research assistant (GRA) appointments on the Medical Center campus:

1. Individuals who enroll in graduate educational programs at the University of Kansas do so in order to attain specific educational goals. It is the University’s responsibility to help ensure that graduate students attain their academic goals in a reasonable amount of time and move on to the next stage in their careers, whether to another advanced degree program or to professional employment.
2. When academic programs/departments offer GTA or GRA appointments, the assistantships must contribute to the training experience of the graduate student.
3. The responsibilities required of the GTA or GRA should be in balance with their responsibilities as a student in the graduate program. For appointments of .50 FTE, the expectation is that the assigned duties will average no more than 20 hours per week during the semester. For appointments at other percentages, the number of hours per week must be proportional to the appointment percentage.

Appointments shall not normally exceed .50 FTE. Appointments in excess of .50 FTE but not exceeding .75 FTE, must be approved by the academic
program and the Dean of Graduate Studies in advance of an appointment offer and will be approved only in special circumstances. Departments are expected to monitor appointments in excess of .50 FTE to ensure that the graduate students’ assistantship assignments enhance their academic preparation and do not interfere with progress towards degree.

Graduate Teaching Assistantships (GTA)

Graduate Teaching Assistants are salaried student employees whose job duties consist primarily of direct involvement in classroom or laboratory instruction. The duties are performed under the supervision of faculty. The University also requires that a GTA’s teaching assignment be in his/her own field of study or one that is closely related.

A limited number of graduate teaching assistantships are available. Graduate students should inquire directly to their academic program/ department about GTA appointment opportunities. Graduate teaching assistantship policy is administered on the Medical Center campus by the Office of Graduate Studies. [Note: Graduate teaching assistantships on the Lawrence campus differ in that they are governed by a memorandum of agreement among KU, the Kansas Board of Regents, and the Kansas Association of Public Employees, which represents KU GTAs in Lawrence only.]

GTA Eligibility

The following eligibility requirements govern all Graduate Teaching Assistant (GTA) appointments at the Medical Center campus:

1. During the semester of appointment, the GTA is admitted to and enrolled in a graduate degree program offered by the Medical Center campus.

2. During the semester of appointment, the GTA is enrolled in no fewer than six graduate credit hours per Fall and Spring semester and no fewer than 3 credit hours per Summer semester. See “Enrollment Exceptions” below.

3. During the semester of appointment, the GTA must be in good academic standing and making satisfactory progress toward a graduate degree, as determined by Graduate Studies and the department in which the student is enrolled. [Note: A graduate student must maintain a cumulative grade point average of 3.0 to remain in good academic standing. However, if a program judges that a graduate student whose GPA falls below 3.0 is nonetheless making satisfactory progress, the program may recommend to the Dean of Graduate Studies that the student be allowed to continue with the GTA appointment.]

4. The GTA must satisfy the English proficiency criteria established by the Board of Regents for GTAs - see Minimum English Requirement for GTAs below.

5. A student completing his or her graduate degree may not continue in a GTA appointment after the graduation date unless he or she has just completed a master’s degree and is enrolled in a doctoral program in the same field or a closely related field or is a doctoral graduate who has been accepted into another graduate program.

Enrollment Exceptions

A Ph.D. student appointed as a GTA, who has successfully completed the doctoral comprehensive examination and 18 post-comprehensive credit hours, may request approval to reduce enrollment below the GTA minimum enrollment requirement.

The request form is located on the Graduate Studies (http://www.kumc.edu/academic-affairs/graduate-studies/gta-and-gra.html) website and is subject to approval by the academic department and the Dean of Graduate Studies.

A professional doctoral (Au.D., D.N.P., D.P.T., O.T.D.) student appointed as a GTA, who is in his or her final semester, may request approval to reduce enrollment below the GTA minimum enrollment requirement. The request form is located on the Graduate Studies (http://www.kumc.edu/academic-affairs/graduate-studies/gta-and-gra.html) website and is subject to approval by the academic department and the Dean of Graduate Studies. Approval will not be granted for a subsequent semester if the semester approved for reduced enrollment is not his or her final semester after all.

A master’s student appointed as a GTA, who is in his or her final semester, may request approval to reduce enrollment below the GTA minimum enrollment requirement. The request form is located on the Graduate Studies (http://www.kumc.edu/academic-affairs/graduate-studies/gta-and-gra.html) website and is subject to approval by the academic department and the Dean of Graduate Studies. Approval will not be granted for a subsequent semester if the semester approved for reduced enrollment is not his or her final semester after all.

Minimum English Requirement for GTAs

All applicants for graduate teaching assistantships whose first language is not English, including international students and U.S. residents or citizens, must meet one of the following criteria:

1. Score a minimum of 22 on the spoken English portion of the TOEFL iBT.

2. Score a minimum of 8 on the spoken English portion of the IELTS.

3. Score a minimum of 50 on the SPEAK administered by the Office of International Programs (http://www.kumc.edu/international-programs/academic-english-requirements/speak-test-faq.html) on the Medical Center campus.

GTA Tuition Benefit

The Medical Center campus pays the tuition of graduate students who receive appointments as graduate teaching assistants as defined below for the semester of appointment:

<table>
<thead>
<tr>
<th>.40 FTE or more appointment</th>
<th>100% of tuition</th>
</tr>
</thead>
<tbody>
<tr>
<td>.30 FTE but less than .40 FTE appointment</td>
<td>75% of tuition</td>
</tr>
<tr>
<td>.20 FTE but less than .30 FTE appointment</td>
<td>50% of tuition</td>
</tr>
<tr>
<td>.10 FTE but less than .20 FTE appointment</td>
<td>25% of tuition</td>
</tr>
</tbody>
</table>

A graduate student who has a GTA appointment or a combination of a GTA and GRA appointment of at least .40 FTE is eligible for staff (resident) tuition rates for the semester of appointment. The staff rate is assessed before tuition is paid. The tuition payment program covers only tuition, including any differential tuition assessed. It is not applicable for campus fees, KU Edwards Campus construction fee, union fee, and required fees; mediated and
Continuing Education course fees; optional fees; housing costs; or other specialized fees.

**GTA Health Insurance Benefit**

A graduate student who has a GTA appointment or combination GTA and GRA appointment of at least .50 FTE for a given semester is eligible to participate in a health care benefits plan for that semester, for which the University provides a contribution. The health care benefits plan is the same plan that is available to all students, but a portion of the premium is paid if the student appointed as a .50 FTE GTA/GRA selects the plan. The health insurance information is available from the Student Health Insurance Office (http://www.kumc.edu/student-services/student-health-insurance-.html) in Student Services.

**Resignation or Termination**

If a GTA resigns or abandons the position or the appointment is terminated before working a minimum of 8 pay-periods during the semester, the student must pay full tuition for that semester and will lose eligibility for staff (resident) tuition rates and, if a non-resident, will be required to pay non-resident tuition for that semester.

**Graduate Research Assistantships (GRA)**

Graduate Research Assistants are salaried student employees who perform research that is in their fields (or a closely related field) of study and is integral to the student’s education (e.g., dissertation topic). The duties performed are under the direct supervision of faculty or research professionals.

A limited number of graduate research assistantships (GRA) are available. Graduate students should inquire directly to their academic program/department about GRA appointment opportunities. Graduate research assistantship policy is administered on the Medical Center campus by the Office of Graduate Studies.

**GRA Eligibility**

The following eligibility requirements govern all Graduate Research Assistant (GRA) appointments at the Medical Center campus:

1. During the semester of appointment, the GRA is admitted to and enrolled in a graduate degree program offered by the Medical Center campus.

2. During the semester of appointment, the GRA is enrolled in no fewer than six graduate credit hours per Fall and Spring semester and no fewer than 3 credit hours per Summer semester. See “Enrollment Exceptions” below.

3. During the semester of appointment, the GRA must be in good academic standing and making satisfactory progress toward a graduate degree, as determined by Graduate Studies and the department in which the student is enrolled. [Note: A graduate student must maintain a cumulative grade point average of 3.0 to remain in good academic standing. However, if a program judges that a graduate student whose GPA falls below 3.0 is nonetheless making satisfactory progress, the program may recommend to the Dean of Graduate Studies that the student be allowed to continue with the GRA appointment.]

4. A student completing his or her graduate degree may not continue in a GRA appointment after the graduation date unless he or she has just completed a master’s degree and is enrolled in a doctoral graduate who has been accepted into another graduate program.

**Enrollment Exceptions for GRAs**

A Ph.D. student appointed as a GRA, who has successfully completed the doctoral comprehensive examination and 18 post-comprehensive credit hours, may request approval to reduce enrollment below the GRA minimum enrollment requirement. The request form is located on the Graduate Studies (http://www.kumc.edu/academic-affairs/graduate-studies/gta-and-gra.html) website and is subject to approval by the academic department and the Dean of Graduate Studies.

A professional doctoral (Au.D., D.N.P., D.P.T., O.T.D.) student appointed as a GRA, who is in his or her final semester, may request approval to reduce enrollment below the GRA minimum enrollment requirement. The request form is located on the Graduate Studies (http://www.kumc.edu/academic-affairs/graduate-studies/gta-and-gra.html) website and is subject to approval by the academic department and the Dean of Graduate Studies. Approval will not be granted for a subsequent semester if the semester approved for reduced enrollment is not his or her final semester after all.

A master’s student appointed as a GRA, who is in his or her final semester, may request approval to reduce enrollment below the GRA minimum enrollment requirement. The request form is located on the Graduate Studies (http://www.kumc.edu/academic-affairs/graduate-studies/gta-and-gra.html) website and is subject to approval by the academic department and the Dean of Graduate Studies. Approval will not be granted for a subsequent semester if the semester approved for reduced enrollment is not his or her final semester after all.

**GRA Tuition Benefit**

A graduate student who has a GRA appointment or combination of a GRA and GTA appointment of at least .40 FTE is eligible for staff (resident) tuition rates for the semester of appointment.

**GRA Health Insurance Benefit**

A graduate student who has a GRA appointment or combination GRA and GTA appointment of at least .50 FTE for a given semester is eligible to participate in a health care benefits plan for that semester, for which the University provides a contribution. The health care benefits plan is the same plan that is available to all students, but a portion of the premium is paid if the student appointed as a .50 FTE GTA/GRA selects the plan. The health insurance information is available from the Student Health Insurance Office (http://www.kumc.edu/student-services/student-health-insurance-.html) in Student Services.

**Resignation or Termination**

If a GRA resigns or abandons the position or the appointment is terminated before working a minimum of 6 pay-periods during the semester, the student will lose eligibility for staff (resident) tuition rates and, if a non-resident, will be required to pay non-resident tuition for that semester.
The University of Kansas

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- Academic Misconduct (p. 2417)
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- Undergraduate Enrollment in Graduate Level Courses (p. 2420)

Academic Misconduct

Guidelines for Alleged Misconduct

The following information shall serve as guidelines for dealing with situations where inappropriate deviations from these accepted standards of conduct by a graduate student are alleged to have occurred. All questions concerning these guidelines should be directed to the Dean of Graduate Studies or his/ her designee.

I. Expectations for Conduct by a Graduate Student

One goal shared by the graduate programs at the University of Kansas Medical Center is to provide a seminal educational environment in which a student can master a special field of knowledge and strive to develop competence in independent scholarship and research, in order to make original contributions to knowledge. In achieving that goal, there is an expectation by the University of Kansas Medical Center that the graduate faculty and their students will conduct themselves with high integrity and professional ethics. Such conduct by a graduate student must include adherence to the written and observed or taught guidelines for ethical standards of the profession for which the student is seeking to enter. A graduate student is responsible for informing himself/ herself about these requirements and expectations of conduct as well as seeking answers to his/ her own questions about what constitutes misconduct. Potential sources for this information include the:

A. Director of the Graduate Program and the faculty members of the department in which the graduate student has entered;

B. Student Handbook or a similar document prepared by the student's academic program, department and/or school;

C. the University of Kansas Medical Center “Behavioral Standards in Patient Care.”

Academic Misconduct

Academic misconduct by a student shall include, but not be limited to: cheating on examinations whether by a student on his/ her own behalf or by giving to another student or receiving from another student unauthorized aid on examinations; giving or receiving of unauthorized aid in the preparation of notebooks, themes, reports, or other types of assignments, or in the preparation of master's theses and/or doctoral dissertations; or knowingly misrepresenting the source of any academic work, falsification of research results, plagiarism of another's work, violation of regulations, ethical or professional codes for the treatment of humans and animals, or otherwise acting dishonestly.

II. Decisions by a Faculty Member Relative to Academic Misconduct

A. Not to Make a Recommendation for an Investigative Hearing: A faculty member (acting as an instructor or assistant in a course, or a graduate student's advisor or mentor for his/ her research and/or academic program, etc.) may decide not to recommend an investigative hearing, as outlined in these Guidelines, for what he/ she believes is academic misconduct by a student. The faculty member thus may treat as unsatisfactory any student work which he/ she believes is a product of academic misconduct and impose a sanction(s) appropriate to the traditionally accepted realm
of authority or jurisdiction of the faculty member. Any action by the faculty member shall be with due written notice to the student.

B. Make a Recommendation for an Investigative Hearing:
The Faculty Member may decide to recommend to his/her Chairperson (also see Section IV. A. 4, and Section IV. B., below):

1. that an investigative Hearing be held for the alleged occurrence of academic misconduct, and/or
2. imposing a sanction that is outside of the traditionally accepted realm of authority or jurisdiction of The Faculty Member (e.g., see Section VI. D. below). Hence, The Faculty Member initiates the procedures in Section IV.

III. Procedural Information for and Investigative Hearing Process

A. Definitions of Terms Hereafter Applied in these Guidelines

1. "The Faculty Member" is the faculty member initiating an allegation of academic misconduct by a student.

2. "The Student" is the graduate student identified by The Faculty Member as the subject of the alleged act(s) of academic misconduct.

3. The "Involved Department" is the department, center, or functional unit in which the act(s) of academic misconduct allegedly occurred by The Student.

4. The "Chairperson" is the Chairperson of the Involved Department in which the act(s) of academic misconduct allegedly occurred by The Student and is the next higher administrative officer to whom The Faculty Member sends the initial report about an allegation of academic misconduct.

a. "Dean of the School of Nursing" replaces the designation of "Chairperson" hereafter throughout these Guidelines for Dealing With Alleged Misconduct by a Graduate Student as the appropriate administrative officer to whom faculty members in the School of Nursing shall forward any report or recommendation, if the alleged act occurred in this School.

b. Possible Conflicts of Interest:

i. If The Faculty Member perceives (relative to Section III. B., above) that there may be a conflict of interest involved in this issue between The Student and The Chairperson, or If The Chairperson is The Faculty Member initiating the allegation of misconduct, then The Faculty Member's Inquiry Report of the alleged incident(s) (see Section IV. B., below) shall be forwarded to the Dean of the Faculty Member's or Chairperson's, respectively, School or the next higher administrative officer, as appropriate, who thereafter will assume the responsibilities of "The Chairperson" identified throughout these Guidelines for Dealing With Alleged Misconduct by a Graduate Student.

ii. For Other Situations when questions arise about conflict of interest, the questions shall be directed to the Dean of Graduate Studies.

5. The Official Record of the Hearing Process:
The Dean of Graduate Studies shall initiate and maintain in the Office of Graduate Studies an Official Record (i.e., file) of the entire Hearing Process. All subsequent original written communications, documents, audio tape recordings (see Section V. 3., below), and recommendations that relate to the alleged misconduct and the Hearing shall be sent on a timely basis by The Chairperson and/or the Hearing Officer (see Section IV. E., below) to the Dean of Graduate Studies for inclusion in the Official Record. If the final conclusion of the Hearing Process is that academic misconduct has not occurred, then only the Dean's Official Record of the entire Hearing Process shall be saved as the permanent record; all other faculty, Departmental, and School copies of a "record/file" for the Hearing Process must be destroyed (see Section V. B. 2. a., below).

6. The Time Periods for the Hearing Process:
Throughout these Guidelines, MAXIMUM LIMITS are specified for the length of time allowed for certain stages of the overall Hearing Process to take place. Unless specified otherwise, all lengths of time shall be in terms of the traditionally considered "working days" of any given week (recognized holidays that occur on otherwise traditional working days are not to be counted in these time frames). Any request for an extension of a time limit shall be made expeditiously, and before the expiration of the limit, to either the Chairperson or the Hearing Officer or the Dean of Graduate Studies, as appropriate, (or, in their absence, their designates), who shall decide and notify within three (3) days if there is good cause for the extension and, if so, for what period of time. Notification shall be to all involved parties of the Hearing Process and may be done first by telephone if deemed appropriate, and then shall be followed by written notification.

B. Inquiry Report by the Faculty Member is Sent to the Chairperson: Following the decision by The Faculty Member in Section III. B., above, and with due notice to The Student, The Faculty Member shall submit a detailed written report about the allegation (hereafter called the Inquiry Report) to the Chairperson. The Inquiry Report shall be submitted within twenty (20) days of the discovery of the alleged occurrence of misconduct. The Chairperson shall, within 15 days of receiving the Inquiry Report, review the report and attempt to resolve the allegation through consultation and mediation with the involved persons. If the Chairperson determines that the allegation should be resolved through the investigative Hearing Process, then the Chairperson shall continue the procedure outlined hereafter in these Guidelines. Written notice shall be sent to The Student (see Section IV. D., below) and to the Faculty Member (including a request for the Faculty Member
to respond, within 10 days of receipt of the notice, with his/ her selection of a faculty member to serve on the Hearing Panel; see Section IV. E. 2., below).

C. Notification of the Dean of Graduate Studies: The Chairperson shall send a written notification to the Dean of Graduate Studies that an investigative Hearing Process for alleged academic misconduct by The Student is going to be initiated. The Chairperson’s notification shall include copies of The Faculty Member’s Inquiry Report of the alleged misconduct and all written communications up to this time with The Student.

D. Notification About the Allegation to the Student: A written notification of the specific allegation shall be sent (certified or registered letter with return receipt requested indicating the date of receipt) to The Student by The Chairperson within fifteen (15) days after the time The Chairperson receives the Faculty Member’s Inquiry Report. A copy of this notification shall be sent to the Dean of Graduate Studies. The notice shall include:

1. a statement of the specific allegation(s) with sufficient explanatory information to enable The Student to understand the nature and extent of the allegation(s);

2. an invitation for The Student to provide, to The Chairperson, within ten (10) days after receiving the notification letter: a. a written response to the allegation(s); and b. the name of a faculty member whom The Student selects to serve on the Hearing Panel (see Section IV. E. 2., below), and a statement indicating that this faculty member told The Student that he/ she agreed to serve;

3. a statement indicating that The Student has the right to continue attending class as scheduled until such time as the Dean of Graduate Studies has reached his/ her final decision UNLESS there is a question of unsafe and/ or disruptive behavior and/ or offense against other persons (including patients of or visitors to) and/ or property of the University of Kansas.

4. a copy of these “Guidelines for Dealing With Alleged Academic Misconduct by a Graduate Student” so that The Student is aware of the procedural process and possible actions.

E. Selection of Members for the Hearing Panel: The Hearing Panel shall be composed of four (4) members of the graduate faculty (voting members of the Panel), excluding The Faculty Member initiating the allegation of misconduct (See Section IV. A. 4., above) and excluding the chairperson of the department in which The Student named in the allegation is a graduate student member, and one (1) graduate student (voting member of the Panel), excluding The Student who is the subject of the allegation. One of the graduate faculty members of the Panel will be designated by The Chairperson as the “Hearing Officer” in charge of the Hearing Panel. Any member of the Hearing Panel who perceives that there is any irregularity in the proceedings of the Hearing process has the responsibility of PROMPTLY reporting this to the Dean of Graduate Studies. Selection of the Hearing Panel shall include at least one but no more than two faculty members from the Involved Department in the allegation and shall be done as follows:

1. the graduate student member:
   - shall be selected by the officers of the Graduate Student Council at an on-need basis,
   - shall not be a graduate student member of the same Department as The Student named in the allegation, and
   - must be currently classified as a Regular Graduate Student in the category of Degree-Seeking Students and in good academic standing (not on probation);

2. one faculty member from inside or outside the Involved Department may be selected by The Student named in the allegation;

3. one faculty member from inside or outside the Involved Department may be selected by The Faculty Member initiating the allegation; and

4. two faculty members selected by The Chairperson. The Chairperson’s selections shall assure that the composition of the Panel includes at least one but no more than two members from the Involved Department in the event that The Student and/ or The Faculty Member do not select such a member. Additionally, if The Student and/ or The Faculty Member decline(s) to select a Panel member or fail to respond to The Chairperson within ten (10) days of the request (see Section IV. B. and IV. D. 2., above), then The Chairperson will also select that member or members, likewise with due consideration for the basic composition of the Panel as defined above.

F. Scheduling the Hearing: The Hearing Officer shall, within five (5) days of the selection of members of the Hearing Panel, (1) schedule the day, time and place for the Hearing to occur (which shall be sometime between 20 and 30 days after the selection of the Hearing Panel), and (2) provide written notice of this schedule to The Faculty Member, The Student, The Chairperson, and The Dean of Graduate Studies. Both The Student and The Faculty Member shall be informed with this scheduling notification that during the Hearing each:

1. will be given the opportunity to present his/ her own viewpoint of the situation(s) that directly led to the allegation(s), and/ or

2. may have witnesses speak or have witnesses’ affidavits read on his/ her behalf.

G. Documents, Representatives & Witnesses for the Hearing: All information cited below shall be promptly sent to (see time deadlines indicated in this Section) or collected by the Hearing Officer, who shall promptly distribute copies of the information to The Student, The Faculty Member, and the rest of the Hearing Panel members.

1. The Faculty Member’s Inquiry Report sent to The Chairperson (see Section IV. B.),

2. The Chairperson’s Notification of Allegation letter sent to The Student (see Section IV. D.),
3. The Hearing Officer’s letter to The Student and The Faculty Member stating the day, time and place for the hearing (see Section IV. F.),

4. The Student’s written Response to the allegation(s), if such was sent to The Chairperson (see Section IV. D. 2. a.).

5. Any documents provided by The Student and/ or The Faculty Member for presentation as evidence to the Hearing Panel (sent at least by five (5) days before the Hearing),

6. Names of Representatives:

   Each party to the Hearing should be present for the Hearing unless the Chairperson agrees that another person may appear as a substitute representative. A Hearing may be held even if The Student and/ or The Faculty Member fail to appear for the Hearing. Neither The Student nor The Faculty Member is compelled to appear or testify at the Hearing, and no inference may be drawn by the Hearing Panel against The Student or the Faculty Member due to his/ her failure or refusal to testify or appear.

   The use of legal counsel is discouraged.

7. Names of Witnesses: The Student and The Faculty Member shall provide a list of intended witnesses, if any, to the Hearing Officer at least ten (10) days before the Hearing is to occur. The Hearing Officer shall provide these names, reciprocally, to The Faculty Member and The Student at least five (5) days before the Hearing.

8. All materials (including the audio recording tapes identified in Section IV. H. 3., below) concerning the alleged violation of misconduct should be treated as CONFIDENTIAL documents. The Hearing Panel members will return all materials received for the Hearing to the Hearing Officer at the end of the scheduled Hearing, The Hearing Officer will forward ALL ORIGINAL AND PHOTOCOPIED AND AUDIO TAPE RECORDED MATERIALS to the Dean of Graduate Studies (see Section IV. A. 5., above).

H. Conducting the Hearing: The Hearing Officer of the Hearing Panel may establish procedures in addition to those listed, however, the basic requirements of the Hearing procedure as listed here may not be altered by the Hearing Officer: The Hearing shall be conducted in a closed session and witnesses shall be excluded from the Hearing except when actually testifying.

   1. The Hearing Officer shall have the authority to keep order, rule on questions of relevance and evidence, and shall possess other powers normal and necessary for a fair and orderly Hearing. Rules of Evidence that govern courtroom proceedings shall not apply.

   2. There shall be only a single audio tape recording made of the proceedings in order to provide an accurate record of the Hearing for possible review by the Hearing

Panel (Section IV. I. 1) and/ or Dean of Graduate Studies (Section IV. I. 4.).

3. The Hearing Officer shall introduce the Hearing Panel members, The Faculty Member, The Student, and, their representatives, if any.

4. The Hearing Officer shall explain the Hearing Procedures as outlined herein.

5. The Hearing Officer shall announce that The Faculty Member initiating the allegation has the responsibility to persuade the Hearing Panel by a preponderance of evidence that academic misconduct has occurred.

6. The Hearing Officer shall orally review the allegation(s) of misconduct which led to the Hearing, and the possible sanction(s).

7. The Hearing Officer shall allow The Faculty Member to state the allegation and explain the incident. The Faculty Member may choose to remain silent. (see Section IV. G. 6. a.).

8. The Hearing Officer shall allow The Student to reply and explain the incident. The Student, if present, may choose to remain silent. (see Section IV. G. 6. a.).

9. Hearing Panel members may direct questions to The Faculty Member, if present, The Student, if present, and any witnesses and/ or representatives.

10. Through the procedural process of the Hearing, The Student and The Faculty Member may question one another and any witnesses appearing. One witness at a time may be called by either The Faculty Member or The Student. No witness will be permitted to participate in the Hearing if his/ her name was not previously given to the Hearing Officer in accord with Section IV. G. 7., above. IN EXCEPTIONAL CIRCUMSTANCES, this provision may be modified by decision of the Hearing Officer, and, if it is, The Student and The Faculty Member will be given sufficient opportunity to collect information to respond to whatever the witness presents.

11. The Hearing Officer shall state that the Hearing Panel will make a recommendation to the Dean of Graduate Studies within seven (7) days after the Hearing.

I. Findings of the Hearing Panel and Recommendation Carried Forward:

1. At the conclusion of the Hearing, the Panel members, alone and in closed session, shall deliberate and decide by a majority vote (anonymous written ballot counted by the Hearing Officer and verified by the graduate student member) if “academic misconduct,” as alleged by The Faculty Member and only based upon all evidence presented to and heard by the Hearing Panel, “has occurred” or “has not occurred.”

2. If the Panel’s decision is that “academic misconduct has occurred,” then the Panel members shall deliberate and determine (by majority vote) their
recommendation(s) for specific disciplinary action and/or sanction(s), if any.

3. The Hearing Officer shall compile comments, rationale, findings, voting results, and recommendations in writing and forward them within seven (7) days after the Hearing to the Dean of Graduate Studies. The Hearing Panel recommendation(s) shall not be binding upon the Dean of Graduate Studies.

4. The Dean of Graduate Studies shall consider the recommendation(s) and report of the Hearing Officer and any relevant information and take action.

J. Notifications Consequent to the Hearing Process:

1. The Dean of Graduate Studies shall, within seven (7) days of receipt of the summary final report of the Hearing Officer, send written notification of his/her action(s) to The Faculty Member, The Student (notification by certified or registered mail with return receipt requesting delivery date), and the Hearing Officer.

2. If this final action of the Hearing process concludes that academic misconduct by The Student has NOT occurred, then the Dean of Graduate Studies also shall, in writing, instruct the chairperson(s) of the involved department(s) that: a. all materials appended to any and all departmental files, including a possible so-called permanent file on The Student, that would not have been in these files if an allegation of misconduct had not been made shall be removed (also see Section IV. A. 5., above) b. conscientious efforts are to be made by the involved department(s) not to subject the student to unwarranted bias or action by the department(s) consequent to the hearing process.

IV. Sanctions that may be Imposed for Academic Misconduct:

A. Censure: A written reprimand for actions which constitute academic misconduct. Censure may include a written warning that subsequent actions of academic misconduct may be the cause for a more severe disciplinary sanction.

B. Unsatisfactory Work: Treating as unsatisfactory any work which is a product of academic misconduct. This may include reduction of a pending or existing grade (including the awarding of a Failing grade) for the work and/or a grade in the course.

C. Suspension: Exclusion from classes and other specified privileges or activities for a definite period not in excess of two years.

D. Expulsion: Termination of graduate student status for an indefinite period. The conditions of readmission, if any, shall be stated in the order of expulsion. Approved by Graduate Studies Committee. University of Kansas Medical Center, April 4, 1991.

Academic Probation

The cumulative grade point average is computed at the end of each semester with the inclusion of grades earned at KU for all courses acceptable for graduate credit. If the cumulative graduate grade point average falls below 3.0 (B average), the student is placed on probation by the Office of Graduate Studies and the student and program are both notified in writing.

The grades of P, S, U, and I, for which no numerical equivalents are defined, are excluded from the computation. If the student’s overall graduate average has been raised to a 3.0 by the end of the next semester of enrollment after being placed on probation, the student may be returned to good academic standing. If not, the student may not be permitted to enroll and will be dismissed unless the Dean of Graduate Studies acts favorably on a program recommendation for the student to continue study.

If a student is admitted provisionally due to deficiencies in grade point average, a student must earn an overall graduate average of at least 3.0 during the first 9 hours of enrollment which is the equivalent of one semester full-time enrollment. When the overall 3.0 grade point average has been achieved, the program submits a Progress to Degree form to move the student from provisional to regular admission status. A student admitted provisionally who fails to earn a 3.0 average in the first 9 hours of enrollment may be dismissed immediately. If provisional continuation is recommended by the program, and approved by the Dean of Graduate Studies, the student may remain on provisional status for one additional semester. Subsequent recommendation and approval are required for each additional semester continued on provisional status.

Students who have been dismissed from a graduate program may be readmitted for further graduate study at KU only by petition of the graduate program that will accept the student. The petition must be approved by the Dean of Graduate Studies on the appropriate campus (Medical Center or Lawrence).

Childbirth Accommodation

The University of Kansas Medical Center acknowledges that the years spent in graduate and professional degree programs can be prime childbearing years for students. KUMC wishes to assert itself as an institution that values family-friendly policies for students, faculty and staff by adopting a student-specific childbirth accommodation policy. This policy illustrates a commitment by KUMC to diversity and inclusion which will allow the institution to recruit and retain the highest quality students.

The University of Kansas Medical Center will grant students up to a six-week accommodation period for welcoming a child under the following conditions: the birth of a child, the adoption of a child, or the placement of a child for adoption or foster care. The six-week accommodation period can be granted as a leave, a revised academic, research, or clinical schedule, or a combination of the above.

Eligibility

This policy will apply to all enrolled students regardless of gender or marital status. Other situations related to family life would continue to be covered by general leave of absence. Depending on their academic program, timing of birth/adoption, and level of support they will receive in caring for a newborn, a student may find it more advantageous both academically and personally to take a leave of absence rather than utilizing the childbirth accommodation policy.

Academic Accommodations

A student should fill out the Application for an Academic Accommodation Period form to initiate discussions with their advisor(s) and departmental or school administrators as soon as
possible, but no later than four months prior to the anticipated delivery date. If a child is being welcomed through adoption or foster care, please fill out an Application for an Academic Accommodation Period form as soon as possible depending on the situation. Individual programs and departments will review the student’s requests and, along with the student and other necessary parties (i.e. advisors, instructors), determine the accommodations that will be provided. These discussions should also detail the type of academic engagement, and progress expected from the student while on leave or a revised academic schedule. If a program decides that due to academic requirements, a leave of absence is more appropriate, a request may be denied. The denial of the request must be made to the student in writing with adequate justification. If an accommodation period of less than six weeks is proposed, this decision must also be justified. Upon approval of a student’s request, a plan will be submitted to the Dean of the student’s School. The plan will outline the specific accommodations being provided for a student, as well as any expectations from the academic program. Students may appeal decisions regarding accommodations. The appeal of the decision must be made in writing and submitted to the Dean of the student’s School. The Dean of the student’s School will have final decision-making authority.

All academic programs and departments are expected to work with their students and make a good-faith effort to provide reasonable accommodations so that their students can remain in good academic standing and continue progress towards their degree while also balancing the demands of caring for a new child. It is also encouraged that advisors, academic staff, and departmental leaders work with sensitivity and imagination to provide more than these minimum standards put forth by KUMC when circumstances allow for further accommodations. Students should be proactive in speaking with advisors, instructors, and academic deans when they are planning a family or expecting a child to devise the best personal and academic plan.

Student Status

Students will retain their full time student status if approved for an academic accommodation period. Additionally, for students who decide to take a leave of absence, they will have the option to pay student fees if they wish to have continued access to campus resources.

Financial Support (applicable to those funded by GTAs, GRAs, or Fellowships)

For students who currently receive stipends through a graduate teaching assistantship (GTA) or graduate research assistantship (GRA), they will remain fully funded for a six-week period. Students who do not receive stipends at the time of application are not eligible for financial support. Any continuation of support past six weeks will be determined on an individual basis. Students will remain funded by their current stipend source for the first two weeks and then will be funded by a Childbirth Accommodation Fund through the Office of Graduate Studies for up to four additional weeks. Students in the MD/PhD program would continue to receive their stipends from their current source during the MD phase and from current stipend source for two weeks and then the Childbirth Accommodation Fund for up to four additional weeks during the PhD phase. If a student is on a grant or fellowship that allows them to receive stipends during maternity/paternity leaves, then they will continue to be paid by their current funding source for the entire six-week period. If funding is not allowed by the outside grant or fellowship, then the student will receive six weeks of support from the Childbirth Accommodation Fund.

While not covered under this childbirth accommodation policy, students who experience medically necessary absences during pregnancy or due to conditions related to pregnancy should refer to the federal Title IX policy to educate themselves about their rights regarding their education. If you feel that you are experiencing discrimination due to pregnancy or related conditions, please contact the Office of Institutional Opportunity and Access (IOA@ku.edu).

Course Numbering System

Courses that may give graduate credit are numbered according to the following scheme:

- **Courses numbered 500-699** are designed primarily for juniors and seniors, but are also taken by some graduate students who have fewer than 30 hours of graduate credit.
- **Courses numbered 700-799** are designed primarily for graduate students who have fewer than 30 hours of graduate credit, but they are also taken by some undergraduates.
- **Courses numbered 800-899** are designed primarily for graduate students who have fewer than 30 hours of graduate credit.
- **Courses numbered 900-999** are designed primarily for graduate students who have 30 or more hours of graduate credit.

Courses that contain a mixture of undergraduate and graduate students should set requirements for graduate credit beyond or different from the requirements for undergraduate credit. No course, regardless of its number, can give graduate credit unless it has been approved for graduate credit by the appropriate Graduate Studies Office (Medical Center or Lawrence) and is taught by a person holding a current appointment to the Graduate Faculty.

Co-enrollment (Seniors and Graduate Study)

Seniors at KU who will complete the requirements for a baccalaureate degree in a given semester, and who have very strong academic records (grade-point average higher than 3.0 on a 4.0 scale), must apply and be admitted provisionally as degree seeking students and request the permission of the appropriate Graduate Studies Office (Medical Center or Lawrence) to co-enroll for the final undergraduate semester. Seniors requesting the privilege of co-enrollment must make formal application through the online graduate application.

Procedure

To meet the criteria of co-enrollment, the student must earn undergraduate credit for at least one class during the co-enrollment semester. Continuing education courses may be used to satisfy this requirement. If after the co-enrollment semester the baccalaureate degree is not completed, the student will not be permitted to enroll in courses for graduate credit until the baccalaureate degree has been conferred. After one semester, students are not eligible for co-enrollment and the graduate admission will be retracted.

Students who are eligible to co-enroll receive an email from the Registrar’s Office before enrollment with instructions on how to enroll in more than one career (ex. LAW, GRDL-Graduate, UGDL-Undergraduate). Students will have separate appointment times to enroll for each career and must enroll only in the courses that will count correctly toward the career in which they are enrolling during
each appointment time. When enrollment is complete for each career, students must check the grading option for each course to ensure the class will be counted correctly.

**Discontinuance**

A student may voluntarily resign from their program of study by submitting an "Official Severance Form" located on the Registrar's website (http://www.kumc.edu/student-services/office-of-the-registrar/current-students/dropping-and-withdrawing-from-classes.html).

**Dismissal**

Graduate programs are responsible for evaluating the students in their programs to ensure that they are making satisfactory progress toward a degree. If the graduate program finds that a student is not making satisfactory progress due to, but not limited to, cases where the student has run out of time to degree, or the student has neither been enrolled nor received an approved leave of absence, or academic misconduct has occurred, the program may recommend to the Dean of Graduate Studies that the student be dismissed from the program. Dismissal is requested by the graduate program through the Progress to Degree form.

Students who have been dismissed from a graduate program may be readmitted for further graduate study at KU only by petition of the graduate program that will accept the student. The petition must be approved by the Dean of Graduate Studies.

**Academic Probation and Dismissal**

Upon falling below a cumulative grade-point average of 3.0, computed with the inclusion of grades earned at KU for all courses acceptable for graduate credit, the student is placed on probation by the Office of Graduate Studies. The grades of P, S, U, and I, for which no numerical equivalents are defined, are excluded from the computation.

If the student’s overall GPA has been raised to 3.0 by the end of the next semester of enrollment after being placed on probation, the student may be returned to good academic standing. If not, the student will be dismissed unless the Dean of Graduate Studies acts favorably on a program recommendation for the student to continue study.

**Distance Education**

The University of Kansas offers online and hybrid courses and certificate and degree programs. For more information about specific online course and degree program options, students should contact their academic department of study. Similar to regular courses, the availability of online courses varies by semester and year.

**Embargo of Theses and Dissertations**

When an exception to the immediate release of a thesis or dissertation is necessary, an embargo provides a temporary, delayed public release of the work. Embargo periods of six months, one year, or two years are available. While embargoes are not intended to be permanent, renewals of the original embargo period are permissible. Considerations that may be deemed reasonable for granting permission for an embargo include, but are not limited to:

- Patentable rights or other issues are contained in the work the disclosure of which may be detrimental to the rights or interests of the author.
- There is a need to prevent disclosure of government information about persons, institutions, technologies, etc. that is contained in the work.
- An academic or commercial press has expressed interest in acquiring the rights to publish the work as a book that may require an embargo.
- The work contains content that has already been submitted to a peer-reviewed journal that may require an embargo.
- Approval for delay has been granted by the KU Restricted Research Committee.

Requests for an extension of the embargo should be directed to the Office of Graduate Studies and must be received at least one month prior to the expiration of the current embargo to ensure sufficient time to process the request. A request for an embargo submitted to the University of Kansas affects only the publication of the thesis or dissertation in KU ScholarWorks. It is the graduate student’s responsibility to request an extension from both the University of Kansas for the copy in KU ScholarWorks and separately through ProQuest/UMI.

While there is no limit to the number of times a student can request an embargo extension, embargoes that have been allowed to expire without a request for an extension will result in the thesis or dissertation being made publicly available.

The embargo period will be calculated beginning at the end of the semester in which the student graduates with the specific dates being: December 31st, May 31st, and August 31st.

**Procedure**

**Steps necessary for embargoing a thesis or dissertation:**

Theses and dissertations at the University of Kansas are made available in two electronic databases: KU ScholarWorks and ProQuest/UMI Dissertations and Theses. Items in KU ScholarWorks are publicly accessible on the world-wide web and can be indexed by search engines such as Google, Bing, Yahoo, and others.

A student who does not wish to have his or her thesis or dissertation made public in these two venues for some limited period of time must receive permission to embargo the thesis or dissertation from one of the following 1) department graduate director, 2) department chair, or 3) committee chair, and the Dean of Graduate Studies. The student must request this permission with the Electronic Thesis and Dissertation (ETD) Release Form. The University of Kansas will accept the thesis or dissertation—thereby completing all degree requirements—only if the student signs this release form. Likewise, the University of Kansas will only entertain requests for an embargo on the publication of a thesis or dissertation through submission of this same form.

To ensure that embargoed work is restricted, students must take two steps after receiving the appropriate signatures before graduation.

- First, the student must submit the Electronic Thesis and Dissertation (ETD) Release Form to the Office of Graduate Studies. If an embargo has been approved, this form will ensure that the work is temporarily restricted in KU ScholarWorks.
- Second, during the electronic submission process to ProQuest/UMI, the student must select the embargo option under the publishing restrictions section. If an embargo
has been approved, this step will ensure that public view of the work is temporarily restricted in the ProQuest/UMI Dissertations and Theses database. See the related documents section below for more information.

Note: If a student does not receive permission for an embargo and/or does not submit the required documentation requesting such an embargo to Graduate Studies prior to graduation, the work will be made publicly available through KU ScholarWorks, and search engines like Google, Bing, Yahoo, and others will find and index the work. For this reason, once a work is released publicly, it is impossible to deploy an embargo in its entirety, because copies of a released work are likely to be stored on the web even if the KU ScholarWorks or ProQuest/UMI copies are retracted. It is therefore crucial for students who desire the embargo option to request it prior to graduation and to request extensions, if needed, prior to the work being exposed to public search engines.

Dissertation defenses are open to the public. In the event that an embargo is deemed necessary for a dissertation, the committee should consider holding an additional question period for the defense that is closed to the public. Any sensitive data may be discussed in the closed session.

Enrollment Definitions (Full-Time, Half-Time, and Part-Time)

**Full-time enrollment for fall and spring semesters**
- Enrollment in 9 credit hours;
- Enrollment in 6 credit hours plus a GTA, GRA, or GA appointment, regardless of percentage of appointment;
- Enrollment in 6 credit hours for graduate students using the Montgomery GI Bill – Active Duty (MGIB-AD) and Post-9/11 GI Bill – Active Duty;
- Doctoral candidates enrolled in dissertation hour(s). *See doctoral candidates below.

**Full-time enrollment for summer sessions**
- Enrollment in 6 credit hours;
- Enrollment in 3 credit hours plus a GTA, GRA, or GA appointment, regardless of percentage of appointment;
- Enrollment in 3 credit hours for graduate students using the Montgomery GI Bill – Active Duty (MGIB-AD) and Post-9/11 GI Bill – Active Duty;
- Doctoral candidates enrolled in dissertation hour(s). *See doctoral candidates below.

**Half-time enrollment for fall and spring semesters**
- Enrollment in 5 credit hours;
- Enrollment in 3 credit hours plus a GTA, GRA, or GA appointment, regardless of percentage of appointment;
- Enrollment in 3 credit hours for graduate students using the Montgomery GI Bill – Active Duty (MGIB-AD) and Post-9/11 GI Bill – Active Duty.

**Half-time enrollment for summer sessions**
- Enrollment in 3 credit hours;
- Enrollment in 1 credit hour plus a GTA, GRA, or GA appointment, regardless of percentage of appointment;
- Enrollment in 1 credit hour for graduate students using the Montgomery GI Bill – Active Duty (MGIB-AD) and Post-9/11 GI Bill – Active Duty.

**Part-time enrollment**
- Students enrolled in fewer hours than defined by half-time enrollment are considered part-time.

*A doctoral candidate is defined as a doctoral student who has successfully passed the comprehensive examination. See Post-Comprehensive Enrollment in this section of the catalog for doctoral candidate enrollment requirement.

All students should check with their graduate degree programs and Graduate Studies’ policies to determine if additional enrollment requirements or summer enrollment requirements exist.

Note: A few internship programs have been approved by Graduate Studies to count as full-time enrollment. Students enrolled in these internship programs will be counted as full-time students.

**International Student Enrollment**
International students in F-1 and J-1 status must also comply with Federal immigration requirements of pursuing a full course of study each semester to maintain their legal status. All international students must conform to residence requirements, even though immigration regulatory requirements may be lower.

**Enrollment Policy**
All graduate students are expected either to be enrolled or to be on approved Leave of Absence at all times while completing the credit hours required for the fulfillment of their degrees unless they have been dismissed from the program or discontinued (voluntarily resigned) from the program.

Graduate students are not normally permitted to enroll for more than 16 hours a semester or more than 8 hours in summer session.

**Grading**
The basic system is an A, B, C, D, F system, where A designates above-average graduate work; B, average graduate work; C, passing but not average graduate work (C– is not considered a passing grade); D and F, failing graduate work. C–, D, and F work does not count toward fulfilling degree requirements.

The letter P is used only to indicate participation in thesis, dissertation, and research enrollments (related to thesis or dissertation), and in the first semester enrollment of a multi-semester sequence course. In any semester, an instructor may, at his or her option, assign a letter grade of A, B, C, D, or F when evidence about performance is available. Upon completion of thesis/dissertation or research hours leading to a master’s or doctoral degree, the P remains on the final transcript except for the last semester of enrollment. A letter grade (A, B, C, D, or F) is assigned in the last semester of enrollment to characterize the quality of the final product. The I grade is not appropriate for enrollment in thesis, dissertation, or research and is not accepted.
For enrollments other than thesis, dissertation, or research, the letter I indicates course work that has been of passing quality, some part of which is, for good reason, unfinished.

A student who has an I posted for a course must make up the work by the date determined by the instructor, in consultation with the student, which may not exceed one calendar year, or the last day of the term of graduation, whichever comes first. An I grade not removed according to this rule shall automatically convert to a grade of F or U, or the lapse grade assigned by the course instructor, and shall be indicated on the student’s record.

The grades of S and U may be used to designate satisfactory and unsatisfactory performance, respectively, in continuing education, workshop, and institute courses upon the recommendation of the department offering the course. No more than 6 hours total of graduate courses graded S are permitted to count toward a degree. An exception to this rule is that in courses numbered 800 or above for which Graduate Council authorization has been given, the instructor may report a grade of S for students who have satisfactorily attended the course but for whom it has not been possible to evaluate the quality of performance. The S and U grades are not used in computing the grade-point average.

The Credit/No Credit option is authorized for graduate students. For graduate students, the grade of CR will be received for grades of C and above, and the grade of NC (no credit) will be received for grades of C- and below.

No course graded CR or NC can count toward the satisfaction of the requirements for a graduate degree or a graduate certificate. This prohibition includes any courses taken to meet the Research Skills and Responsible Scholarship requirement. Please see the Research Skills and Responsible Scholarship policy in the Doctoral Degree Requirements section of this catalog for more information.

The individual schools have the option of using or not using +/−, according to the policy adopted by the particular school. B− does not represent satisfactory work in graduate studies.

In the grading system defined above, at least a B average is required on course work counted toward any of the master’s degrees or the Specialist in Education degree at KU, and only courses graded A, B, or C (excluding C−) may be so counted. Course work counted toward a doctorate, including that for a master’s degree if obtained at KU, should average at least a B or better. Courses graded P, S, U, or I are excluded from the computation of the average.

Performance is graded Honors, Satisfactory, or Unsatisfactory for the following examinations:

1. The general examination for the master’s degree.
2. The general examination for the degree of Specialist in Education.
3. The comprehensive oral examination for the doctorate.
4. The final examination for the doctorate.

**Graduate Credit**

Three conditions must be met for a student to receive graduate credit for work satisfactorily completed at KU:

1. The student must have gained graduate admission.
2. The course must be numbered 500 level or above and have been approved for graduate credit by the appropriate school/college and the Graduate Council on the Medical Center campus.
3. The instructor must have gained appointment to the Graduate Faculty.

**Credit by Examination**

Credit by examination is not accepted toward graduate degrees.

**Transfer Credit**

Six hours of graduate credit taken at a regionally accredited graduate school may be transferred and applied to a program leading to one of the master’s degrees if the credits were taken before the final semester of enrollment at KU and have the approval of the major department and the appropriate school.

Eight hours may be approved for transfer if the student holds a baccalaureate degree from KU.

The total of transferred credit, including graduate continuing education credit and distance-learning courses taken at KU may not exceed 6 hours, or 8 if the student holds a baccalaureate from KU.

Only work graded B (3.0 on a 4.0 scale) or higher may be transferred. KU does not accept transfer credit for courses that have been graded B- or below. KU also does not accept transfer for institutes, workshops, or life/work experience. Any exceptions to this policy must be approved by the department and the Dean of Graduate Studies.

To transfer credits, the Progress to Degree form must be initiated by the student’s department.

Credit will not transfer for courses that were counted toward the requirements for an undergraduate or graduate degree, whether completed at KU or another institution.

No credit is actually transferred toward the doctorate, but programs may take relevant prior graduate work into consideration in setting up programs of study.

**Graduate Course Work Expiration Dates**

Courses completed at the University of Kansas, or transfer credits from another university, cannot be used to fulfill graduate degree requirements if these courses were completed more than ten (10) years prior to the final defense for doctoral candidates or graduation for master’s students. A request to make an exception to this policy must be approved by the program and the Dean of Graduate Studies.

**Graduate Student Oral Exams**

**Attendance**

Ideally, all members of the committee are physically present at graduate student oral examinations. For M.S. and M.S. students this includes the final general exam, project defense or thesis defense. For Ph.D. students this includes the doctoral comprehensive oral exam, and the doctoral final oral exam (i.e., dissertation defense).

A majority of committee members must be physically present for an examination to commence; for doctoral oral examinations this requirement is 3 of the 5 members, for master’s oral examinations the requirement is 2 of the 3 members.

In addition, it is required that the student being examined, the chair of the committee, and the outside committee member all be physically present at the examination or defense. Mediated
attendance by the student, chair and outside member is prohibited. When a situation arises in which a member cannot be physically present, attendance via mediated means (tele/video-conferencing) is acceptable at the discretion of the committee chair.

In cases where the student prefers an examination in which all committee members are physically present, the student's preference shall be honored.

In the case of failure of technology during the examination, all members of the committee present must concur that the examination was substantially complete. If any member of the committee dissents, the examination is considered cancelled and must be rescheduled. The committee members at remote locations must be contacted to submit their decision concerning the assessment of the examination before the exam results are recorded.

The Office of Graduate Studies will manage consideration of and decisions on exceptions to the policy outlined above. Requests for exceptions to this policy shall be submitted in writing to the Dean of Graduate Studies. If exceptions are granted, Graduate Studies will request that a member of the departmental leadership (the chair or director of graduate studies) be present at the examination.

**Committee Composition**

The majority of committee members serving on a graduate student oral examination committee in most cases are in the candidate's department/program of study.

Ph.D. doctoral committees are composed of at least five voting members and must adhere to the following requirements:

1. The chair of the committee must hold dissertation status. If the committee has co-chairs, at least one of the co-chairs must hold dissertation status.

2. One member must meet the requirements for serving as an outside member: i.e., be a KU faculty member holding regular or dissertation graduate faculty status and is not a faculty member holding graduate status in the candidate's department/program. The outside member represents Graduate Studies and is a voting member of the committee, has full rights to participate in the examination, and reports any unsatisfactory or irregular aspects of the examination.

Master's committees are composed of at least three voting members and must adhere to the following requirements:

1. At least two committee members must be members of the candidate's department/program.

**Grievance Policy and Procedures for Graduate Students**

A graduate student who believes herself or himself unfairly or unlawfully treated in an academic matter may present a grievance to the academic department or appropriate program chairperson. Each academic unit has established grievance policies and procedures Concerns regarding illegal discrimination or harassment should be reported to the Equal Opportunity Office. For academic misconduct issues, see the Academic Misconduct policy in this section of the catalog.

The grievance procedure may not be used as an appeal for a grade. Grades should be appealed at the department or program level. Committees established at the department, program or school level to hear grievances proceed in accordance with their own specific procedures and make recommendations to the appropriate administrative officers as provided in those procedures. Appeals from the decision of a department or program or school must be made to the Dean of Graduate Studies.

The appellate process is designed to ensure that due process has been afforded an individual in the initial hearing. The Dean of Graduate Studies will appoint the committee chair from the membership of the KUMC Graduate Council. Two other members will be selected by the chair from the Graduate Council and one other graduate faculty member selected by the student complainant and a second graduate faculty member selected by the accused. The selection of these faculty members shall be acceptable to both parties. A student member will be selected by the President of the Graduate Student Council. Care should be taken to ensure that none of the members has a conflict of interest in this case. This committee will examine all pertinent documents including student records and interview the parties directly involved in the complaint as well as other parties deemed necessary. Minutes of testimony will be made available to both the complainant and accused parties after the hearing is completed. It is essential that all parties retain confidentiality of information gained through the hearing process. Both parties will be provided an opportunity to respond to the minutes in writing before the committee's final recommendation is forwarded to the Dean of Graduate Studies who will make the final determination. The documents provided to the grievance committee will be retained in the Office of Graduate Studies for a period of three years, after which time they will be destroyed. There is no further appeal.

**Independent Study**

Independent study is a research experience or directed readings independently pursued through an academic department. Students should contact their academic department to discuss independent study opportunities to investigate a special research problem or directed readings in an area not covered by regular courses.

**Intellectual Property Policy**

All enrolled students are subject to the Board of Regents and KU Intellectual Property Policies. The ownership of student works submitted in fulfillment of academic requirements is retained by the creator(s). By enrolling, the student gives the institution a nonexclusive royalty-free license to mark on, modify, retain the work in the process of instruction, or otherwise handle the work, as set out in the institution's Intellectual Property Policy or in the course syllabus. The institution does not have the right to use the work in any other manner without the written consent of the creator(s).

**Leave of Absence**

The Office of Graduate Studies may grant a leave of absence (LOA) from an academic program for up to one year, with the possibility of extension. The student must make a written request for a leave of absence from their academic program and submit to their program. The program forwards the student's request along with the program's recommendation to the Dean of Graduate Studies for approval. If approved, the time on leave from the academic program will not be counted toward the maximum time granted to complete a degree (doctoral, 8 years; master's, 7 years).
Post-Comprehensive Enrollment for Doctoral Candidates

Doctoral candidates are required, after passing the comprehensive oral examination, to be continuously enrolled in one or more hours of dissertation that both moves the student towards degree completion and reflect, as accurately as possible, the candidate’s demands on faculty time and university facilities. During this time, until all requirements for the degree are completed (including the filing of the dissertation) or until 18 post-comprehensive hours have been completed (whichever comes first), the candidate must enroll for a minimum of 6 hours a semester and 3 hours a summer session.

Post-comprehensive enrollment may include enrollment during the semester or summer session in which the comprehensive oral examination has been passed. If after 18 hours of post-comprehensive enrollment the degree is not completed, the candidate must continue to enroll each semester and each summer session until all degree requirements have been met. The number of hours of each enrollment are determined by the candidate’s advisor and must reflect as accurately as possible the candidate’s demands on faculty time and university facilities.

Posthumous Degrees

In order to recognize the achievement of students who have died, the University of Kansas may grant undergraduate, graduate and professional degrees posthumously. This policy applies to deceased students who were in good academic standing at the time of death and enrolled for their final semester at the University of Kansas, as determined by the dean of the school or college. Requests for posthumous degrees must be initiated by the student’s academic department and approved by the dean of the school or college conferring the degree. Each case will be determined on its own merits.

The dean of the school or college posthumously conferring the degree should contact the Office of the University Registrar to confirm the correct information for the degree to be conferred, notify the Vice Provost for Academic Affairs, and coordinate with the Office of the Chancellor for notification to the family. Posthumous degrees are conferred during the semester in which the student was expected to graduate. The Chancellor informs the student’s family in writing of the posthumous award of the degree.

Progress to Degree Policy

The Progress to Degree system is used by Graduate Studies to track and monitor graduate student progress. The forms should be used to report items such as change in degree plan within the same department, change in admission status, transfer credit towards a master’s degree, master’s general exam, master’s thesis defense and oral comprehensive and final exam for PhD students. This system is used by designated faculty or staff to request Graduate Studies approval for the various functions indicated.

Research Compliance

There are certain types of research or activities that may not be pursued unless specific prior approval and/or training has been obtained. Students should refer to KUMC Office of Compliance (http://www.kumc.edu/compliance.html) policies.

Student Responsibilities

All graduate students are responsible for informing themselves of requirements and policies of the Office of Graduate Studies. They are also expected to be familiar with the regulations and requirements of their departments and of their graduate programs. Program Graduate Directors and Office of Graduate Studies staff are ready to answer questions and offer counsel. It is each graduate student’s responsibility to know and observe all regulations and procedures relating to the graduate degree program the student is pursuing. In no case will a regulation be waived or an exception be granted because students plead ignorance of, or contend that they were not informed of, requirements, regulations, procedures, and deadlines. Responsibility for following all policies and meeting all requirements and deadlines rests with the student.

Undergraduate Enrollment in Graduate-Level Courses

Well-qualified undergraduate students may be permitted to enroll in 800- or 900-level courses for undergraduate credit with the approval of the instructor and the student’s advisor. The student must bring a Count Towards Degree form signed by the instructor, a letter of explanation and recommendation from the advisor, and current academic record to the Office of Graduate Studies for approval. If approved, the Office of Graduate Studies signs the Count Towards Degree form, which the student must present to the staff in the Student Records Center to enroll in the courses. Courses taken for undergraduate credit may not be transferred to graduate credit.
Applied English

Applied English Center

Applied English Center courses provide English language instruction to non-native speakers of English. All students whose native language is not English, including international students and residents or citizens of the United States, are required by the Faculty Senate Rules and Regulations (http://www.policy.ku.edu) to enroll in the English language courses, if any, specified for them by the AEC before enrolling in any academic work.

Admission to KU does not constitute a waiver of the University of Kansas English proficiency requirement. Students may be required to take the English Proficiency Exam and may be required to take courses with the Applied English Center.

Courses labeled 140 and above and AECT 101 are available for credit toward an undergraduate degree. To receive a grade of Credit, students must receive a grade of A, B, or C in the course. Transcripts show No Credit for these courses in which students receive a grade of D or F.

A maximum of 9 hours of credit may count toward undergraduate degrees in the College of Liberal Arts and Sciences and the School of Business. A maximum of 6 hours of credit may count toward undergraduate degrees in the School of Architecture, Design and Planning. Consult an advisor in the College or school for details.

Courses

AAPG 140. English Academic Purposes: Grammar. 3 Hours. U.
An advanced grammar skills course combining in-class and on-line work to review, expand and practice sentence and discourse-level grammar and vocabulary to support students' accurate use of English in academic and non-academic contexts. In this course, students participate in in-class and outside class study of grammar as well as produce written assignments that develop and strengthen academic literacy skills. Prerequisite: Placement in this course by the KU Academic Accelerator Program. LEC.

AAP 140. English for Academic Purposes: Listening and Speaking. 3 Hours. U.
An advanced skills course providing practice in pronunciation, fluency, comprehension, and vocabulary development, with an emphasis on college-level content. Students listen to interviews and lectures, and participate in class discussions in order to improve skills in comprehension, note-taking, content discussion, interview, summarization, and presentation in an advanced academic setting. Recorded and written work and analysis are also required. Prerequisite: Placement in this course by the KU Academic Accelerator Program. LEC.

AAPL 140. English for Academic Purposes: Reading and Writing. 3 Hours. U.
An advanced course to improve strategies for academic reading, writing and research in preparation for college-level coursework. Emphasis is placed on increasing fluency, building vocabulary, and developing academic skills such as research strategies and note-taking. Additional objectives include integrating ideas from multiple sources which will culminate in producing a research paper. Course materials will include a range of academic topics in order to prepare the student for academic work in their academic field. Prerequisite: Placement in this course by the KU Academic Accelerator Program. LEC.

AAPS 1. Special Enrollment in KUAAP Non-Credit English Supplement I: ____. 1 Hour. U.
A content-based English as a second language course that helps to build English language proficiency by baying lessons incorporating grammar, vocabulary development, reading comprehension skills, and writing skills on academic course content in the first term of the KU Academic Accelerator Program. Prerequisite: Placement in this course by the KU Academic Accelerator Program. LEC.

AAPS 2. Special Enrollment in KUAAP Non-Credit English Supplement II: ____. 1 Hour. U.
A content-based English as a second language course that helps to build English language proficiency by baying lessons incorporating grammar, vocabulary development, reading comprehension skills, and writing skills on academic course content in the second term of the KU Academic Accelerator Program. Prerequisite: Placement in this course by the KU Academic Accelerator Program. LEC.

AAPS 3. Special Enrollment in KUAAP Non-Credit English Supplement III: ____. 1 Hour. U.
A content-based English as a second language course that helps to build English language proficiency by baying lessons incorporating grammar, vocabulary development, reading comprehension skills, and writing skills on academic course content in the third term of the KU Academic Accelerator Program. Prerequisite: Placement in this course by the KU Academic Accelerator Program. LEC.

AAP 1. Technology for Academic Purposes I. 1 Hour. U.
A technology skills course that teaches the English vocabulary as well the "how to use it" of technology in an academic setting. Topics include fundamental skills such as word processing, presentation applications, and online course applications as well as advanced skills such as digital research and source documentation. Prerequisite: Placement in this course by the KU Academic Accelerator Program. LEC.

AAP 2. Technology for Academic Purposes II. 1 Hour. U.
A continuation of the first term technology skills course that teaches both the English vocabulary as well the "how to use it" of technology in an academic setting. Topics build on first-term functions and applications and expand into additional areas including advanced word processing, presentation skills in a scholarly environment, spreadsheet input and output including creating graphs and charts, and digital research and source documentation. Prerequisite: Placement in this course by the KU Academic Accelerator Program. LEC.

AEC 5. Short Term Program with Applied English Center Course Enrollment: ____. 1-16 Hours. U.
Skill-based special topics at appropriate level(s) for short term program students attending core AEC courses for a partial term. Prerequisite: Placement in this course by the Applied English Center. LEC.

AEC 6. Anticipated Future Applied English Center Credit Hours. 1-16 Hours. U.
This course is a placeholder for future anticipated Applied English Center credit hour enrollment. Prerequisite: Placement in this course by the Applied English Center. LEC.

AEC 7. Short Term Programs Self-Contained Enrollment: ____. 1-16 Hours. U.
Specialized English language courses for short term program students. Courses focus on the use of English in particular fields of study or employment based on program objectives. Prerequisite: Placement in this course by the Applied English Center. LEC.

AEC 8. Anticipated Future Applied English Center Course Enrollment: ____. 1-16 Hours. U.
Skill-based special topics at appropriate level(s) for short term program students attending core AEC courses for a partial term. Prerequisite: Placement in this course by the Applied English Center. LEC.
AEC 10. Diagnostic Tests for Level 1. 1-16 Hours. U.
Diagnostic test. Enrollment required for students who take proficiency test at semester start and place into level 1 courses. Prerequisite: Placement in this course by the Applied English Center. LEC.

AEC 11. Study Hall 1-1. 0 Hours. U.
A beginning level study hall course structured to assist students, with limited English proficiency, in learning and practicing concepts presented in core courses. Prerequisite: Placement in this course by the Applied English Center. LEC.

AEC 12. Study Hall 1-2. 0 Hours. U.
A beginning level study hall course structured to assist students with foundational English proficiency in learning and practicing concepts presented in core courses. Prerequisite: Placement in this course by the Applied English Center. LEC.

AEC 13. Study Hall 1-3. 0 Hours. U.
A beginning level study hall course structured to assist students with elementary English proficiency in learning and practicing concepts presented in core courses. Prerequisite: Placement in this course by the Applied English Center. LEC.

AEC 82. Classroom Communication for International Teaching Assistants. 3-4 Hours. U.
Practice of communication skills: pronunciation, fluency and vocabulary development, question and answer techniques, paraphrasing and discussion; video-recorded practice teaching mini-lectures or demonstrations with feedback by instructor in tutorial sessions and by other native speakers during presentations. Open only to graduate students or seniors near graduation. Four credits in the fall and spring semesters; three credits in the summer term. Prerequisite: Students must have completed all AEC courses except AECG 151 or AECR 151, have a score of at least 35 on the SPEAK test; and have written permission from the Applied English Center. LEC.

AEC 90. English Proficiency Test. 0 Hours. U.
Final proficiency test. Required of all students enrolled in one or more Applied English Center courses, except AEC 82. Graded satisfactory/unsatisfactory. LEC.

AEC 150. Advanced English for Academic Purposes 5. 6-7 Hours. U.
A content-based combined skills course offering advanced instruction in university-level written and spoken materials. Students are required to write response papers, essays, and a research paper, as well as take essay tests and make oral presentations. Additional objectives of this course include developing notetaking skills in lectures and completing a portfolio for assessment at midterm and semester end. Seven credits in the fall and spring semesters; six credits in the summer term. Prerequisite: Placement in this course by the Applied English Center. LEC.

AECG 11. Grammar for Communication for Academic Purposes 1-1. 3-5 Hours. U.
A beginning level communicative course designed to help students with limited English proficiency acquire essential vocabulary and rudimentary sentence- and discourse-level grammar to begin expressing meaning appropriately and accurately in spoken and written English. Five credits in the fall and spring semesters; three credits in the summer term. Prerequisite: Placement in this course by the Applied English Center. LEC.

AECG 12. Grammar for Communication for Academic Purposes 1-2. 3-5 Hours. U.
A beginning level communicative course designed to help students with foundational English proficiency gain basic vocabulary and sentence- and discourse-level grammar to continue expressing meaning appropriately and accurately in spoken and written English. Five credits in the fall and spring semesters; three credits in the summer term. Prerequisite: Placement in this course by the Applied English Center. LEC.

AECG 13. Grammar for Communication for Academic Purposes 1-3. 3-5 Hours. U.
A beginning level communicative course designed to help students with elementary English proficiency increase basic vocabulary and sentence- and discourse-level grammar to further express meaning appropriately and accurately in spoken and written English. Five credits in the fall and spring semesters; three credits in the summer term. Prerequisite: Placement in this course by the Applied English Center. LEC.

AECG 20. Grammar for Communication for Academic Purposes 2. 3-5 Hours. U.
A lower-intermediate level communicative course designed to help students build conventional sentence- and discourse-level grammar and vocabulary to expand their ability to express meaning appropriately and accurately in spoken and written English. At this level, students practice increasingly complex sentence structures and vocabulary in a wide variety of in-class and out-of-class activities, including group projects. Five credits in the fall and spring semesters; three credits in the summer term. Prerequisite: Placement in this course by the Applied English Center. LEC.

AECG 30. Grammar for Communication for Academic Purposes 3. 3-5 Hours. U.
An upper-intermediate level communicative course designed to help students increase conventional sentence- and discourse-level grammar and vocabulary to advance their ability to express meaning appropriately and accurately in spoken and written English. At this level, students continue to learn and practice increasingly complex sentence structures and vocabulary in a wide variety of in-class and out-of-class activities, including group projects. Five credits in the fall and spring semesters; three credits in the summer term. Prerequisite: Placement in this course by the Applied English Center. LEC.

AECG 40. Grammar for Communication for Academic Purposes 4. 3-5 Hours. U.
A low-advanced level communicative course designed to help students better understand sentence- and discourse-level grammar and vocabulary to support their ability to express meaning appropriately and accurately in spoken and written English. At this level, students master increasingly complex sentence structures and vocabulary through practice in a wide variety of in-class and out-of-class activities. Five credits in the fall and spring semesters; three credits in the summer term. Prerequisite: Placement in this course by the Applied English Center. LEC.

AECG 50. Grammar for Communication for Academic Purposes 5. 3-5 Hours. U.
A beginning level communicative course designed to help students with elementary English proficiency increase basic vocabulary and sentence- and discourse-level grammar to further express meaning appropriately and accurately in spoken and written English. Five credits in the fall and spring semesters; three credits in the summer term. Prerequisite: Placement in this course by the Applied English Center. LEC.

AECG 151. Special Studies in Grammar for Communication 5-1. 3-4 Hours. U.
An individualized course combining in-class and on-line work designed to help upper-advanced level students better review sentence- and discourse-level grammar and vocabulary to support their ability to identify, analyze and correct errors in writing. In this course, students write weekly essays in the AEC computer lab and receive feedback and individualized grammar assignments via e-mail. Students also have several face-to-face conferences with their instructor and must use review skills to write a passing essay within a designated time limit. Four credits in the fall and spring semesters; three credits in the summer term. Prerequisite: Placement in this course by the Applied English Center. LEC.

AECG 152. Special Studies in Grammar for Communication 5-2. 2 Hours. U.
An individualized course combining in-class and on-line work designed to help high-advanced level students better review sentence- and discourse-level grammar and vocabulary to support their ability to identify, analyze and correct errors in writing. In this course, students write weekly essays
in the AEC computer lab and receive feedback and individualized
grammar assignments via e-mail. Enrollment in this course is intended for
students requiring less intensive special studies instruction. Prerequisite:
Placement in this course by the Applied English Center. LEC.

AEC 11. Listening, Speaking and Grammar for Academic Purposes
1-1. 3-8 Hours. U.
A beginning level course designed to provide students with limited English
proficiency practice in pronunciation, fluency, vocabulary development,
and comprehension. Students work with several topics during the
semester, building listening and note taking skills in academic and
conversational texts. Speaking and presentation skills include discussing
and summarizing the content of oral text, creating and editing recorded
work, and using computer programs to create visual aids for large
group presentations. Written work is also required. Students build the
conventional sentence- and discourse-level grammar and vocabulary
needed to express meaning appropriately and accurately in spoken
English. Six and a half credits in the fall and spring semesters; three
credits in the summer term. Prerequisite: Placement in this course by the
Applied English Center. LEC.

AEC 12. Listening, Speaking and Grammar for Academic Purposes
1-2. 3-8 Hours. U.
A beginning level course designed to provide students with foundational
English proficiency practice in pronunciation, fluency, vocabulary
development, and comprehension. Students work with several topics
during the semester, building listening and note taking skills in academic
and conversational texts. Speaking and presentation skills include discussing
and summarizing the content of oral text, creating and editing recorded
work, and using computer programs to create visual aids for large
group presentations. Written work is also required. Students build the
conventional sentence- and discourse-level grammar and vocabulary
needed to express meaning appropriately and accurately in spoken
English. Six and a half credits in the fall and spring semesters; three
credits in the summer term. Prerequisite: Placement in this course by the
Applied English Center. LEC.

AEC 13. Listening, Speaking and Grammar for Academic Purposes
1-3. 3-8 Hours. U.
A beginning level course designed to provide students with elementary
English proficiency practice in pronunciation, fluency, vocabulary
development, and comprehension. Students work with several topics
during the semester, building listening and note taking skills in academic
and conversational texts. Speaking and presentation skills include discussing
and summarizing the content of oral text, creating and editing recorded
work, and using computer programs to create visual aids for large
group presentations. Written work is also required. Students build the
conventional sentence- and discourse-level grammar and vocabulary
needed to express meaning appropriately and accurately in spoken
English. Six and a half credits in the fall and spring semesters; three
credits in the summer term. Prerequisite: Placement in this course by the
Applied English Center. LEC.

AEC 14. Reading, Writing and Grammar for Academic Purposes
1-2. 3-8 Hours. U.
A beginning level course designed to teach students with limited English
proficiency strategies to begin reading and writing. Emphasis is placed on
taking notes from academic texts to demonstrate and develop students’
understanding of the organization of English writing. At this level, students
focus on establishing writing fluency and building a foundation of high
frequency vocabulary. Students build the conventional sentence- and
discourse-level grammar and vocabulary needed to express meaning appropriately and accurately in written English. Six and a half credits in the fall and spring semesters; three credits in the summer term. Prerequisite: Placement in this course by the Applied English Center. LEC.

AEC 15. Reading, Writing and Grammar for Academic Purposes
1-3. 3-8 Hours. U.
A high-intermediate level course designed to provide students practice in
pronunciation, fluency, vocabulary development, and comprehension.
Students work with several topics during the semester, strengthening note taking, content discussion, interviewing, summarization, and presentation skills. Written work is also required. Students build the conventional sentence- and discourse-level grammar and vocabulary needed to express meaning appropriately and accurately in spoken English. Four credits in the fall and spring semesters; three credits in the summer term. Prerequisite: Placement in this course by the Applied English Center. LEC.

AECR 11. Reading, Writing and Grammar for Academic Purposes
1-1. 3-7 Hours. U.
A high-advanced level course designed to help students polish the
listening comprehension and oral presentation skills necessary for
success in a collegiate setting. Students work with several topics during the
semester, strengthening note taking, content discussion, interviewing,
summarization, and presentation skills. Written work is also required.
Students build the conventional sentence- and discourse-level grammar and vocabulary needed to express meaning appropriately and accurately in spoken English. Four credits in the fall and spring semesters; three credits in the summer term. Prerequisite: Placement in this course by the Applied English Center. LEC.

AECR 12. Reading, Writing and Grammar for Academic Purposes
1-2. 3-8 Hours. U.
A beginning level course designed to teach students with foundational
English proficiency strategies to begin reading and writing. Emphasis is placed on
taking notes from academic texts to demonstrate and
develop students’ understanding of the organization of English writing. At this level, students focus on establishing writing fluency and building a foundation of high-frequency vocabulary. Students build the conventional sentence- and discourse-level grammar and vocabulary needed to express meaning appropriately and accurately in written English. Six and a half credits in the fall and spring semesters; three credits in the summer term. Prerequisite: Placement in this course by the Applied English Center. LEC.

AECR 13. Reading, Writing and Grammar for Academic Purposes 1-3. 3-8 Hours. U.
A beginning level course designed to teach students with elementary English proficiency strategies to begin reading and writing. Emphasis is placed on taking notes from academic texts to demonstrate and develop students’ understanding of the organization of English writing. At this level, students focus on establishing writing fluency and building a foundation of high-frequency vocabulary. Students build the conventional sentence- and discourse-level grammar and vocabulary needed to express meaning appropriately and accurately in written English. Six and a half credits in the fall and spring semesters; three credits in the summer term. Prerequisite: Placement in this course by the Applied English Center. LEC.

AECR 15. Reading, Writing and Grammar for Academic Purposes 1-5. 3-8 Hours. U.
A beginning to lower-intermediate level course designed to teach students with elementary English proficiency strategies for advancing their reading and writing. Emphasis is placed on taking notes from academic texts to demonstrate and promote students’ understanding of the organization of English writing. At this level, students focus on progressing writing fluency and broadening their general knowledge of high-frequency vocabulary. Students build the conventional sentence- and discourse-level grammar and vocabulary needed to express meaning appropriately and accurately in written English. Six and a half credits in the fall and spring semesters; three credits in the summer term. Prerequisite: Placement in this course by the Applied English Center. LEC.

AECR 20. Reading, Writing and Grammar for Academic Purposes 2. 3-8 Hours. U.
A low-intermediate level course designed to teach and reinforce strategies for improving students’ academic reading and writing. At this level, emphasis is placed on writing complex sentences and paragraphs to strengthen fluency and vocabulary. Additional competencies developed in this course include writing essays and integrating ideas from several sources into academic writing. Students build the conventional sentence- and discourse-level grammar and vocabulary needed to express meaning appropriately and accurately in written English. Six and a half credits in the fall and spring semesters; three credits in the summer term. Prerequisite: Placement in this course by the Applied English Center. LEC.

AECR 30. Reading, Writing and Grammar for Academic Purposes 3. 3-8 Hours. U.
A high-intermediate level course designed to teach and promote strategies for improving students’ academic reading and writing. At this level, emphasis is placed on deepening vocabulary and refining academic skills, including note-taking, paraphrasing, summarizing, revising, and integrating ideas from several sources, to elevate fluency and comprehension. Additional objectives covered in this course include building critical reading and writing skills as well as learning the process of writing a research paper. Students build the conventional sentence- and discourse-level grammar and vocabulary needed to express meaning appropriately and accurately in written English. Six and a half credits in the fall and spring semesters; three credits in the summer term. Prerequisite: Placement in this course by the Applied English Center. LEC.
all AEC courses except AECG 151 or AECR 151, have a score of at least 35 on the SPEAK test, and have written permission from the Applied English Center. LEC.

AECT 101. Special Enrollment in English as a Second Language For-Credit Tutorial: _____. 1-16 Hours. U.
Individualized schedule of instruction in one or more language skills at appropriate level(s) for students enrolling in level 4 or 5 AEC courses. Prerequisite: Placement in this course by the Applied English Center. LEC.
The University of Kansas is one of only 37 U.S. universities with a full offering of Army, Air Force, and Naval ROTC programs. These programs are integrated into the mainstream of campus activities. All ROTC programs offer scholarships that pay tuition and fees, furnish books and uniforms, and provide a monthly living allowance.

Students in ROTC pursue regular courses toward a degree and augment their studies with courses from the Departments of Military Science, Aerospace Studies, or Naval Science. These courses may be crosslisted with a professional school or reviewed on an individual basis by the Assembly of the College of Liberal Arts and Sciences (http://clas.ku.edu) for accreditation toward degree requirements.

On successful completion of requirements and graduation from KU, Army or Air Force ROTC cadets are commissioned as Army or Air Force Second Lieutenants, and Naval ROTC Midshipmen are commissioned either as Ensigns in the Navy or as Second Lieutenants in the Marine Corps.

Programs

Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your advisor (http://www.advising.ku.edu) for details).

Army: Department of Military Science

The Department of Military Science administers the Army Reserve Officers Training Corps program at KU. The military science curriculum provides a student with unique leadership and management training, along with practical experience. It develops qualities basic to success in the Army and in the civilian sector. It also offers the student the opportunity to earn an officer’s commission in the Army.

Eligible students enrolled at KU may register for a 100- or 200-level military science course or for ARMY 303 or ARMY 450. These students receive credit if the course they are enrolled in has been approved for degree credit in the College of Liberal Arts and Sciences (http://clas.ku.edu). The credit does not count toward the required 100 hours in the College for students earning a baccalaureate degree in the College of Liberal Arts and Sciences.

Students who want to receive a commission in the Army through the ROTC program must meet the eligibility requirements of Section 2103, Title 10, U.S. Code, and current Department of Defense and Department of the Army guidelines.

Army: Department of Military Science

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Army: Department of Military Science

Military Science Building
1520 Summerfield Hall Drive, Room 203
Lawrence, KS 66045-7554
785-864-3311
goldbar@ku.edu
http://www.armyrotc.ku.edu/

Lieutenant Colonel Davis K. McElwain, Chair
785-864-3311

4-Year Program

The 4-year Army ROTC program is made up of a basic course and an advanced course.

Basic Course

The basic course is taken during the first 2 years of college. It covers subjects such as organizational behavior, leadership, management, ethics, writing, public speaking, military affairs, and tactics. All necessary textbooks, classroom materials, uniforms, and other equipment are furnished at no cost. Students who have completed the basic course; have met academic, physical, and medical standards; and have the potential to serve as officers may enter the advanced course.

The basic course is composed of a total of 4 courses. A student may enter the basic course at one of 3 points (if eligible).

1. Entering First-Semester First-Year Students
First semester:
ARMY 101 Introduction to Military Science I 1
Second semester:
ARMY 102 Introduction to Military Science II 1

2. Entering Second-Semester First-Year Students
First semester:
ARMY 102 Introduction to Military Science II 1
ARMY 201 Basic Military Science I 1
Second semester:
ARMY 202 Basic Military Science II 1

3. Entering Third Semester (Sophomore Year)
First semester:
ARMY 101 Introduction to Military Science I 1
ARMY 102 Introduction to Military Science II 1
Second semester:
ARMY 201 Basic Military Science I 1
ARMY 202 Basic Military Science II 1

Advanced Course

The advanced course normally is taken during the final 2 years of college. It offers instruction in military organization, tactics, military law, Army
administration, and leadership. All necessary books, classroom supplies, uniforms, and other equipment are issued to students at no cost. During the summer between the junior and senior years of college, students must attend the Leadership Development and Assessment Camp, a fully paid, five-week training and evaluation course. LDAC gives each student the chance to practice for an extended period of time what they have learned in the classroom. All students contracted in the advanced course receive stipends from the government of up to $5,000 a year.

The advanced course is composed of a total of 4 courses.

First Year
First semester:
- ARMY 301 Theory and Dynamics of Tactical Operations I 3
Second semester:
- ARMY 302 Theory and Dynamics of Tactical Operations II 3

Second Year
First semester:
- ARMY 401 Concepts of Military Management 3
Second semester:
- ARMY 402 The Military Profession 3

2-Year Program
Students can receive credit for the basic course in 3 ways other than taking the 4 courses associated with the basic course. Students who complete the basic course by 1 of these alternate means can enroll in basic course classes but cannot enroll in the advanced course until they are academic juniors. Any upper-level student, junior through graduate, may earn a commission through the 2-year program. The 3 alternate ways to receive basic course credit are

1. Successfully completing the basic enlisted training offered by any of the armed services.
2. Successfully completing the ROTC Leadership Training Course held each summer (prerequisite to ARMY 301).
3. Successfully completing at least 4 years of high school Junior ROTC.

Professional Military Education Course
The following course is required for commissioning:

Military History. Gain an understanding of the evolution of warfare, military theory, the military profession, and the place of military institutions in American society. The requirement can be met by successfully completing a history course focusing on either a major war or on military history in general. ROTC courses also meet this requirement.

Scholarships and Financial Assistance
Army ROTC offers 2-, 3-, and 4-year scholarships to qualified students. Scholarships are awarded on a competitive basis to students with outstanding academic and leadership abilities. These scholarships pay for all tuition, required fees, $1,200 a year for books and other supplies, and a stipend of up to $5,000 a year. Special consideration is given to students who major in nursing, engineering, or the sciences. The Kansas Army National Guard offers numerous educational benefits such as the Board of Regents Scholarship.

Army National Guard and Army Reserve Students
Students who are members of the Army National Guard or the Army Reserve may enroll in Army ROTC classes and be members of their units at the same time. Once students enter a contractual agreement as early as their sophomore year, they can remain members of their units under the Simultaneous Membership Program. These students are still eligible for all military benefits they have earned under enlisted contract such as Tuition Assistance, GI Bill, and drill pay; additionally, they may compete for guaranteed reserve forces designated ROTC scholarships if they commit to commissioning to the Army Reserve or Army National Guard.

Courses
ARMY 10. Leadership Laboratory. 0 Hours. U.
Required of all Army Cadets. A study of Army customs and courtesies, drill and ceremony, career opportunities in the Army, and the life and work of a junior Army officer. Cadets develop leadership potential through practical supervised training. Course must be taken in conjunction with Army 101, 102, 201, 202, 301, 302, 401, and 402. Course not approved for credit in the College of Liberal Arts and Sciences. LAB.

ARMY 101. Introduction to Military Science I. 1 Hour. U.
Required introductory course for the Army military science program. Course is comprised of one hour of lecture and one hour of laboratory per week. Introduces the military science program as an element of the reserve forces and includes an examination of major legislation, the Army organization structure, and military leadership techniques. Approved for degree credit in the College of Liberal Arts and Sciences. Such courses count within the limit of 25 hours accepted from other schools and divisions. LAB.

ARMY 102. Introduction to Military Science II. 1 Hour. U.
Course comprised of one hour of lecture and one hour of leadership laboratory per week. A general study and appreciation of the American military system from colonial times to the present. The course identifies factors present in the American society and national policy in each particular historical period which influenced the development of American military systems. The relationship between the military establishment and the larger American society is examined in each historical period. Approved for degree credit in the College of Liberal Arts and Sciences. Such courses count within the limit of 25 hours accepted from other schools and divisions. Prerequisite: ARMY 101 or department approval. LEC.

ARMY 201. Basic Military Science I. 1 Hour. U.
Course comprised of one hour of lecture and one hour of laboratory per week. Analyzes the principles of war and military leadership at small unit level, and introduces principles of military writing. Approved for degree credit in the College of Liberal Arts and Sciences. Such courses count within the limit of 25 hours accepted from other schools and divisions. Prerequisite: ARMY 102 or department approval. LAB.

ARMY 202. Basic Military Science II. 1 Hour. U.
Course is comprised of one hour of lecture and one hour of leadership laboratory per week. Curriculum consists of the fundamentals of topographic map reading and their application in a field environment. Includes instruction in various types of maps, marginal information, topographic symbols and colors, scale, direction, and use of the magnetic compass. Approved for degree credit in the College of Liberal Arts and Sciences. Such courses count within the limit of 25 hours accepted from other schools and divisions. Prerequisite: ARMY 201 or department approval. LAB.
ARMY 301. Theory and Dynamics of Tactical Operations I. 3 Hours. U.
Course is comprised of three hours of lecture and two hours of leadership laboratory per week. A comprehensive study of conventional tactical operations. Emphasizes the fundamentals of land warfare and the qualities necessary to conduct fluid, non-linear operations. Introduces the student to the tenets of Air-Land Battle, the underlying structure of modern warfare, the dynamics of combat power, and the application of classical principles of war to a contemporary battlefield. Approved for degree credit in the College of Liberal Arts and Sciences. Such courses count within the limit of 25 hours accepted from other schools and divisions. Prerequisite: ARMY 301 or department approval. LEC.

ARMY 302. Theory and Dynamics of Tactical Operations II. 3 Hours. U.
Course is comprised of three hours of lecture and two hours of leadership laboratory per week. Expands on the application of conventional tactical operations in the low, medium, and high intensity conflict spectrum. Examines the three-dimensional nature of modern warfare and the unified battlefield. Approved for degree credit in the College of Liberal Arts and Sciences. Such courses count within the limit of 25 hours accepted from other schools and divisions. Prerequisite: ARMY 301 or department approval. LEC.

ARMY 303. Military Conditioning. 1 Hour. U.
Introduction to the theoretical and practical aspects of developing physical fitness programs for all Army personnel from the commander or supervisor's perspective. Provides an overview of total fitness, defines physical fitness, outlines the phases of fitness, discusses various types of fitness programs, and presents evaluation criteria. Approved for degree credit in the College of Liberal Arts and Sciences, to count within the limit of 25 hours accepted from other schools and divisions. LEC.

ARMY 401. Concepts of Military Management. 3 Hours. U.
Course is comprised of three hours of lecture and two hours of leadership laboratory per week. An introduction to the military management system with special attention to the functions, organizations, and operations of military training, logistics and administration. The use of standardized staff formats in the development of plans and orders is emphasized from the standpoint of the leader with limited resources. Extensive use of standard staff procedures is emphasized in problem solving scenarios. Approved for degree credit in the College of Liberal Arts and Sciences. Such courses count within the limit of 25 hours accepted from other schools and divisions. Prerequisite: ARMY 302 or department approval. LEC.

ARMY 402. The Military Profession. 3 Hours. U.
Course is comprised of three hours of lecture and two hours of leadership laboratory per week. A seminar on the military profession as an object of social inquiry. Focus is on the internal structure of the profession, current problems, and interaction with the larger American society. Seminar topics include but are not limited to the following: a historical perspective on the military profession; civil-military relations; social and political impact of military activities; military justice; professionalism versus careerism. Approved for degree credit in the College of Liberal Arts and Sciences. Such courses count within the limit of 25 hours accepted from other schools and divisions. Prerequisite: ARMY 401 or department approval. LEC.

ARMY 450. Military Analysis. 1 Hour. U.
A study of present and future military operations; emphasis placed on analysis of problem. The student will defend his/her analysis through written and oral presentations. Prerequisite: Permission of department chairperson. LEC.

Reserve Officers Training Corps - Air Force

The Program
The Air Force Reserve Officer Training Corps program trains intelligent, energetic, and dedicated men and women for service as second lieutenants in the United States Air Force. To accomplish this, the Air Force, with approval of KU, has established a curriculum that allows commissioning in 3- to 4-year programs.

Air Force: Department of Aerospace Studies

Detachment 280, Military Science Building
1520 Summerfield Hall Drive, Room 109
Lawrence, KS 66045-7554
785-864-4676
http://www.afrotc.ku.edu/

Lieutenant Colonel Brian R. Salmans, Chair
785-864-4676

4-Year Program

The Air Force ROTC program is divided into the General Military Course (GMC) and the Professional Officer Course (POC). The program is for high-school scholarship recipients as well as those without scholarships. All cadets not on scholarship are eligible to compete for in-college scholarships, which are awarded based on GPA, physical fitness, commander’s ranking, and academic degree. Scholarships support tuition and fees, along with a nontaxable subsistence allowance. Scholarship recipients receive $900 a year for books. Please visit www.afrotc.com for more information about scholarships.

Although most AFROTC cadets complete the program in 4 years, students can join the program in their sophomore year by taking all GMC courses in one year. Certain majors such as engineering and atmospheric science are 5-year degrees, thus extending the student’s time in the program. More information can be obtained by contacting the Air Force ROTC office.

The General Military Course (GMC, Foundations of the USAF, Airpower History) is offered during the first 2 years of college and constitutes an introduction to the present-day Air Force. The emphasis is on the role of military forces in world affairs, customs and courtesies, being an officer, professionalism, the mission and organization of the Air Force, and the history of air power. If the cadet is medically and academically qualified and successfully completes 4 weeks of Field Training, he or she may enter the POC during the junior and senior years.

The Professional Officer Course (POC, Leadership Studies, National Security Studies) teaches leadership and management, organizational patterns, technologies, military policies and procedures, and provides an in-depth study of national security affairs. Cadets also learn and practice communication, leadership, and management skills. POC cadets receive a nontaxable subsistence allowance.

Current Subsistence Allowance for Contracted Cadets

(authorized Oct. 1, 2007)
All aerospace studies textbooks and uniforms for ROTC are provided free of charge.

Air Force Career Fields

Cadets commissioned from AFROTC are called to active duty in such diverse career fields as pilot, combat systems officer, engineering, nursing, space and missile officer, aircraft maintenance, personnel, air traffic control, space control, finance, scientist, contracting, weather, security forces, and public affairs. Medical and legal opportunities are available as well. Opportunities are limited only by initiative, ability, and desire. Go to www.afrotc.com (http://www.afrotc.com) for more information about career opportunities.

Field Training

AFROTC Field Training is held during summer break following the cadet's second year in the program. Cadets must receive an enrollment allocation to attend field training, which is mandatory for cadets who wish to enter the POC. Each cadet receives pay and transportation to and from field training. The major areas of study are junior officer training, career orientation, survival training, base functions, team building, and physical training. College credit is not given for attending Field Training.

Leadership Laboratory

The Leadership Laboratory is a noncredit, 2-hour, once-a-week course taken every semester throughout the cadet's enrollment in AFROTC. Instruction is conducted in the framework of an organized cadet corps with a progression of experiences that develop each student's leadership potential. Leadership Lab also includes proper wear of the uniform, military rank, and military drill and ceremony. Because physical fitness is an integral part of Air Force life, an additional 2 hours a week of physical fitness activities each week.

Scholarships

High school seniors may apply for Air Force ROTC guaranteed scholarships covering the 4-year college period. Some technical majors, such as engineering, are regularly approved for five-year scholarship support. Students should apply no later than December 1 of the senior year of high school. Online applications (http://www.afrotc.com) are available beginning about May of the junior year. 2- and 3-year scholarships are available to qualified college students. These are awarded competitively. Scholarships generally cover full tuition, laboratory and incidental fees, $900 a year for books, and the nontaxable subsistence allowance. Visit the website (http://www.afrotc.com) for more information and to apply online for a high school scholarship.

Service Commitment

Upon commissioning, the Air Force service commitment for most cadets is 4 years of active duty for most officers, 10 years for pilots, 6 years for cadets who become combat systems officers, air battle managers, or remote aircraft pilots. Certain cadets may be eligible to receive a commission directly into the guard or reserve for a commitment of 6 years.

Courses

AIR 100. Leadership Laboratory. 0 Hours. U.
The AS 100 and AS 200 Leadership Laboratory courses (LLABs) include a study of Air Force customs and courtesies, drill and ceremonies, and military commands. The LLAB also includes studying the environment of an Air Force officer and learning about areas of opportunity available to commissioned officers. The AS 300 and AS 400 LLABs consist of activities classified as leadership and management experiences. They involve the planning and controlling of military activities of the cadet corps and the preparation and presentation of briefings and other oral and written communications. LLABs also include interviews, guidance, and information which will increase the understanding, motivation, and performance of other cadets. LAB.

AIR 144. Foundations of the USAF. 1 Hour. U.
Survey course designed to introduce students to the United States Air Force and Air Force Reserve Officer Training Corps. Featured topics include: mission and organization of the Air Force, officer professionalism, military customs and courtesies, Air Force officer opportunities, and an introduction to communication skills. Leadership Laboratory is mandatory for AFROTC cadets and complements this course by providing cadets with followership experiences. LEC.

AIR 148. Foundations of the USAF. 1 Hour. U.
Survey course designed to introduce students to the United States Air Force and Air Force Reserve Officer Training Corps. Featured topics include: mission and organization of the Air Force, officer professionalism, military customs and courtesies, Air Force officer opportunities, and an introduction to communication skills. Leadership Laboratory is mandatory for AFROTC cadets and complements this course by providing cadets with followership experiences. LEC.

AIR 284. Airpower History. 1 Hour. U.
A course designed to examine general aspects of air and space power through an historical perspective ranging from the first balloons and dirigibles to space-age satellite systems and the Global War on Terrorism. Leaders, pivotal situations in peace and war, successes and failures are provided to extrapolate the development of Air Force capabilities (competencies), and missions (functions) in shaping today's USAF air and space power. In addition, the students will continue to discuss the importance of the Air Force Core Values with the use of operational examples and historical Air Force leaders and will continue to develop their communication skills. Leadership Laboratory is mandatory for AFROTC cadets and complements this course by providing cadets with followership experiences. LEC.

AIR 288. Airpower History. 1 Hour. U.
A course designed to examine general aspects of air and space power through an historical perspective ranging from the first balloons and dirigibles to space-age satellite systems and the Global War on Terrorism. Leaders, pivotal situations in peace and war, successes and failures are provided to extrapolate the development of Air Force capabilities (competencies), and missions (functions) in shaping today's USAF air and space power. In addition, the students will continue to discuss the importance of the Air Force Core Values with the use of operational examples and historical Air Force leaders and will continue to develop their communication skills. Leadership Laboratory is mandatory for AFROTC cadets and complements this course by providing cadets with followership experiences. LEC.

AIR 344. Leadership Studies. 3 Hours. U.
A study of leadership, management fundamentals, professional knowledge, Air Force personnel and evaluation systems, leadership ethics, and communication skills required of an Air Force junior officer.
Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied. Leadership Laboratory is mandatory for AFROTC cadets and complements this course by providing advanced leadership experiences in officer-type activities, giving students the opportunity to apply leadership and management principles of this course. LEC.

**AIR 348. Leadership Studies. 3 Hours. U.**
A study of leadership, management fundamentals, professional knowledge, Air Force personnel and evaluation systems, leadership ethics, and communication skills required of an Air Force junior officer. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied. Leadership Laboratory is mandatory for AFROTC cadets and complements this course by providing advanced leadership experiences in officer-type activities, giving students the opportunity to apply leadership and management principles of this course. LEC.

**AIR 404. National Security Affairs. 3 Hours. U.**
Course examines the national security process (from a military standpoint) from its birth with the Founding Fathers and the US Constitution to the joint warfighting scenarios of today. It looks at the Constitutionally established roles of the legislative and executive branches of government in dealing with defense issues during war or peacetime. It examines the current command and control structure within the Department of Defense and outlines the global responsibilities of the military, specifically of the US Air Force. This course also examines the development of National Security policy and the interrelationship between the Air Force, sister services and the Air Reserve component. Multiple classroom hours on formal military communications skills (writing and briefing) are included. The course culminates with a look at current political trends and U.S. defense policy decisions in some of the world's major geographical areas. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences giving students the opportunity to apply leadership principles in a dynamic setting. LEC.

**AIR 408. National Security Affairs. 3 Hours. U.**
Course examines U.S. National Security Policy as it relates to major geographical regions and political issues across the world. It also covers multiple legal, social and policy structures/procedures that Air Force officers and commanders face day-to-day. Air Force communications techniques, formal writing and speaking, are covered in detail. The latter part of the course addresses situations that new officers will encounter in their first few assignments. LEC.

**Navy: Department of Naval Science**

**The Program**
Cources in naval science include both practical and theoretical instruction in subjects pertaining to the Navy and the Marine Corps. The Navy-option student receives 23 credit hours of naval science instruction over a period of 4 years. The Marine-option student receives 17 credit hours of instruction.

Additionally, naval science laboratory meets every semester for 4 years. Laboratory sessions integrate and apply knowledge gained from naval science courses through practical application during tactical planning exercises, leadership training, and professional development. They also include classroom instruction on issues relating to naval careers and policies and some close-order drill.

**Navy: Department of Naval Science**

**Military Science Building**
1520 Summerfield Hall Drive. Room 115
Lawrence, KS 66045-7554
785-864-3161
http://www2.ku.edu/~kunrotc/

**Admissions**
Male and female citizens of the United States who are 17 years old on or before September 1 of the year of initial enrollment may apply.

- **Scholarship** applicants must not have reached age 27 on June 30 of the year in which they will be commissioned.
- **College Program** students must not have reached age 27½ on June 30 of the year in which they will be commissioned.

Age waivers may be available to students with active duty military backgrounds. Please contact the NROTC office for details. All students must be physically qualified for the NROTC program and must enter into an agreement with the Secretary of the Navy to accept a commission, if offered, in the Navy or Marine Corps upon successful completion of work toward their first bachelor's degree.

**4-Year Scholarship NROTC Students**
Students may begin applying for scholarships as early as their second semester of their high school junior year (preceding the year in which the scholarship is desired). This scholarship is rolling, and therefore students will be selected periodically until the deadline (which occurs between January and February of the following year). Selection is based on high school grades, SAT/ACT test results, physical ability, citizenship, and aptitude for naval service.

If selected, students are appointed as midshipmen and granted compensation and benefits specified by law. These benefits include tuition, required fees, laboratory equipment, a $750-a-year book stipend, and subsistence pay of $250 a month for first-year students. Subsistence pay increases to $300 a month for sophomores, $350 for juniors, and $400 for seniors.

Scholarship students participate in 3 required summer training cruises. Scholarship students assume an obligation to serve at least 5 years on active duty after commissioning as Ensign, U.S. Navy, or 4 years as Second Lieutenant, U.S. Marine Corps.

Students with 30 or more college credits are not eligible to apply for this scholarship. More information can be found at www.nrotc.navy.mil.

**4-Year College Program NROTC Students**
These NROTC students have the status of civilians who have entered into an agreement with the Navy. They are not entitled to the benefits and compensation given to scholarship NROTC students, but are entitled to uniform issue. A subsistence allowance of $350 a month for juniors and $400 for seniors is paid in the final two years of training if they are selected for scholarship.

These students participate in one summer cruise between their junior and senior years. College program students agree to accept commissions in
the Naval or Marine Corps Reserve and serve a minimum of three years on active duty.

Upon proven superior performance in the college program, students will apply for a 3- or 2-year scholarship with the same requirements and benefits as 4-year scholarship students. Students must be selected for a scholarship by the end of their sophomore year to complete training.

3- and 2-Year Programs (Side-load Scholarship)

Entrance into the 3- or 2-year scholarship, or “side load scholarship”, program is offered to qualified students with 3 or 2 years remaining to complete their undergraduate degrees. Students applying for these scholarships are encouraged to have completed 1 year of differential and integral calculus of 1 real variable (MATH 115 and MATH 116, or MATH 121 and MATH 122) and must have attained a minimum grade of C.

Students who are accepted into either program may complete a paid 6-week summer course at the Naval Science Institute in Newport, Rhode Island. Upon successful completion of NSI, students have the same program benefits and requirements as students in the 4-year scholarship or college programs.

Applications for these programs must be completed by date released via message to the Navy ROTC at University of Kansas.

Naval Science Students

Any student enrolled at KU may enroll in a naval science course for KU credit after obtaining consent of the Naval Science Instructor. Such students are not considered to be in the NROTC program and are not entitled to receive any compensation, benefits, or a commission.

4-Year Program Requirements

Both Navy- and Marine-option students must take professional Navy- and/ or Marine-option courses as part of the NROTC program. The normal sequence of courses is

Navy 4-Year Scholarship Students

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAVY 101</td>
<td>Introduction to Naval Science</td>
<td>2</td>
</tr>
<tr>
<td>NAVY 220</td>
<td>Seapower and Maritime Affairs</td>
<td>3</td>
</tr>
<tr>
<td>NAVY 401</td>
<td>Principles of Naval Organization and Management (Leadership and Management I)</td>
<td>3</td>
</tr>
<tr>
<td>NAVY 180</td>
<td>Introduction to Naval Ships Systems I (Engineering)</td>
<td>3</td>
</tr>
<tr>
<td>NAVY 300</td>
<td>Navigation and Operations I</td>
<td>3</td>
</tr>
<tr>
<td>NAVY 304</td>
<td>Navigation and Operations II</td>
<td>3</td>
</tr>
<tr>
<td>NAVY 184</td>
<td>Introduction to Naval Ships Systems II (Weapons)</td>
<td>3</td>
</tr>
<tr>
<td>NAVY 402</td>
<td>Seminar in Military Leadership and Management (Leadership and Management II)</td>
<td>3</td>
</tr>
</tbody>
</table>

Marine 4-Year Scholarship Students

<table>
<thead>
<tr>
<th>Course</th>
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<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAVY 101</td>
<td>Introduction to Naval Science</td>
<td>2</td>
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<tr>
<td>NAVY 220</td>
<td>Seapower and Maritime Affairs</td>
<td>3</td>
</tr>
<tr>
<td>NAVY 401</td>
<td>Principles of Naval Organization and Management (Leadership and Management I)</td>
<td>3</td>
</tr>
<tr>
<td>MCOR 380</td>
<td>Evolution of Warfare</td>
<td>3</td>
</tr>
<tr>
<td>MCOR 384</td>
<td>Amphibious Warfare</td>
<td>3</td>
</tr>
</tbody>
</table>

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<tr>
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<tr>
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<td>Amphibious Warfare</td>
<td>3</td>
</tr>
</tbody>
</table>

The above courses are approved by the College of Liberal Arts and Sciences (http://clas.ku.edu) and count as elective credit but do not count toward the required 100 hours in the College for students earning a baccalaureate degree in the College of Liberal Arts and Sciences.

Navy scholarship students must take the following courses in the College of Liberal Arts and Sciences:

Mathematics and Physics (17)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 121</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 122</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>PHSX 211</td>
<td>General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHSX 212</td>
<td>General Physics II</td>
<td>3</td>
</tr>
</tbody>
</table>

(MATH 122 is a prerequisite for PHSX 212.)

Plus courses in the following areas (12)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>American history, military affairs, or national security policy</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Computer science</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Navy-option college program students must complete 1 year (6 semester credit hours) of college-level study in both mathematics and physical science as a prerequisite for commissioning. Mathematics courses must be at the level of college algebra or higher and must be completed by the end of the junior year. The physical science requirement can be completed by a 1-year sequence, or 2 courses, in an area of physical science, and must be completed by the end of the senior year. Additionally, college program students must complete 6 semester credit hours of English and 3 credit hours of computer science.

Marine Corps Option

Marine-option students are not required to take MATH 121, MATH 122, PHSX 211, or PHSX 212, but are encouraged to do so. During the junior and senior years, Marine-option students take MCOR 380, MCOR 384, and 2 relevant courses taught by civilian faculty and approved by the marine officer instructor in lieu of NAVY 300 and NAVY 304.

Courses

MCOR 380. Evolution of Warfare. 3 Hours. U.
A study of the art, science, concepts, and evolution of warfare as one instrument of political action throughout history. The study of selected battles and campaigns serves as a vehicle to emphasize the application of the classical principles of warfare, the influence of leadership, and the advancement of technology of the art and science of war. This course is substituted for NAVY 300 by NROTC students selected for Marine Corps training. Approved for degree credit in the College of Liberal Arts and Sciences effective fall 1975. Such courses count within the limit of twenty-five hours accepted from other schools and divisions. LEC.

MCOR 384. Amphibious Warfare. 3 Hours. U.
An historical survey and evaluation of the concept, doctrinal origins, evolution, and strategic role of the amphibious projection of seapower ashore from antiquity and into the 20th century. The student studies and critiques historically significant amphibious campaigns. The student then evaluates the current and future need of an amphibious capability within the U.S. defense community. Approved for degree credit in the College of Liberal Arts and Sciences effective Fall 1976. Such courses count within the limit of 25 hours accepted from other schools and divisions. LEC.
NAVY 100. Naval Science Laboratory. 0 Hours. U.
Designed for and required annually of all NROTC midshipmen, to provide increased knowledge in the areas of warfare techniques, history, operations, and operational decision making. Applies knowledge learned from other accredited naval science courses. Highly educated, well known, professional guest lecturers appear frequently and make presentations on topics which apply to naval science courses, increase the educational awareness of future Navy and Marine Corps officers, and further develop the leadership and decision making of the officer candidates. Some close order drill and lectures on standard naval topics. Graded on a satisfactory/unsatisfactory basis. LAB.

NAVY 101. Introduction to Naval Science. 2 Hours. U.
An introduction to the Department of the Navy (U.S. Navy and U.S. Marine Corps) emphasizing its mission, organization, operation, and relationship to other U.S. federal and military institutions. Through historical overview, the development of the current Department of the Navy mission, organization and operation, both at sea and ashore, including customs, traditions, regulations, and professional/technical vocabulary is examined. Educational opportunities and specializations for naval officers are also detailed. Approved for degree credit in the College of Liberal Arts and Sciences effective spring 1982. Such courses count within the limit of 25 hours accepted from other schools and divisions. LEC.

NAVY 180. Introduction to Naval Ships Systems I. 3 Hours. U.
A course designed to familiarize students with the types, structures, and purpose of naval ships. Ship compartmentation, propulsion systems, auxiliary power systems, electrical systems, interior communications, and control are included. Elements of ship design to achieve safe operations, damage control, and ship stability characteristics are examined. Approved for degree credit in the College of Liberal Arts and Sciences effective fall 1971. Such courses counts within the limit of 25 hours accepted from other schools and divisions. (Same as ENGR 180.) LEC.

NAVY 184. Introduction to Naval Ships Systems II. 3 Hours. U.
The concept of weapons systems and the systems approach are explored. The techniques of linear analysis of ballistics and weapons are introduced. The dynamics of the basic components of weapons control systems are investigated and stated as transfer functions. This course provides the tools for the future development in the student's understanding of the basic principles that underlie all modern naval weapons systems. Approved for degree credit in the College of Liberal Arts and Sciences effective fall 1971. Such courses count within the limit of 25 hours accepted from other schools and divisions. (Same as ENGR 184.) Prerequisite: MATH 002. LEC.

NAVY 200. Seapower and Maritime Affairs. 3 Hours. U.
A survey of United States naval history from the American Revolution to the present with emphasis on major developments. Included is an in-depth discussion of the geopolitical theory of Mahan. The course also treats present day concerns in seapower and maritime affairs including the economic and political issues of merchant marine commerce, the law of the sea, the Global War on terror, and a comparison of United States and foreign naval strategies. Approved for degree credit in the College of Liberal Arts and Sciences effective fall 1975. Such courses count within the limit of 25 hours accepted from other schools and divisions. LEC.

NAVY 300. Navigation and Operations I. 3 Hours. U.
A comprehensive study of the theory, principles, and procedures of ship navigation in coastal and open ocean environment. Includes piloting, triangulation, ocean and tidal currents, International and U.S. inland rules of the road for navigation, sight reduction, publications, and logs; an introduction to electronic navigation, including theory of wave propagation, hyperbolic and azimuthal systems, doppler, inertial, and satellite systems. Approved for degree credit in the College of Liberal Arts and Sciences effective fall 1971. Such courses count within the limit of 25 hours accepted from other schools and divisions. (Same as ENGR 301.) LEC.

NAVY 304. Navigation and Operations II. 3 Hours. U.
A study of the laws for the prevention of collisions at sea; tactical formations and dispositions, relative motion, and the maneuvering board. A portion of the semester is devoted to an analysis of naval operations utilizing formal decision making theory, particularly as applied to command and control. Numerous case studies are used to examine the application of the above topics. Approved for degree credit in the College of Liberal Arts and Sciences effective fall 1971. Such courses count within the limit of 25 hours accepted from other schools and divisions. (Same as ENGR 305.) Prerequisite: MATH 111 or higher. LEC.

NAVY 401. Principles of Naval Organization and Management. 3 Hours. U.
An introduction of management functions as they apply to routine daily military activities. The concepts of planning, organizing, staffing, directing, controlling, and coordinating are introduced and examined using lecture, seminar, and case study methods. The course includes discussions on responsibility and accountability, power and influence, managerial theories, decision making, personnel appraisal, organizational structure, and communications. Emphasis is placed on management of personnel and physical resources. Approved for degree credit in the College of Liberal Arts and Sciences effective fall 1975. Such courses count within the limit of 25 hours accepted from other schools and divisions. LEC.

NAVY 402. Seminar in Military Leadership and Management. 3 Hours. U.
A study of military leadership and management which investigates techniques and concepts of task accomplishment in the absence of a normative business environment. The course includes an examination of military law, ethical leadership, personal responsibility, authority, and bureaucracy. The focus of discussion is on those aspects of leadership and management not normally present in civilian enterprise such as operating in the presence of hostility and morale management. Approved for degree credit in the College of Liberal Arts and Sciences effective fall 1975. Such courses count within the limit of 25 hours accepted from other schools and divisions. LEC.
If you’re planning an undergraduate degree in a KU school that doesn’t admit first-year students, you’ll start out in the College of Liberal Arts and Sciences, complete your prerequisites, and then apply for admission to the KU school you want.

Meanwhile, you’ll be classified in one of the following ways:

- Prebusiness (p. 187)
- Preclinical laboratory science (p. 685)
- Pre-dentistry (p. 1943)
- Pre-education (p. 245)
- Pre-education (elementary) (p. 302)
- Pre-education (secondary) (p. 302)
- Pre-education (sport science/community health) (p. 427)
- Pre-education (p.e./health teacher education) (p. 427)
- Pre-engineering (p. 467)
- Prehealth information management (p. 702)
- Prehealth professions (p. 650)
- Prejournalism (p. 733)
- Prelaw (p. 1943)
- Premedicine (p. 1943)
- Prenursing (p. 2264)
- Pre-occupational therapy (p. 712)
- Pre-optometry (p. 1943)
- Prepharmacy (p. 2300)
- Prephysical therapy (p. 438)
- Prephysician’s assistant (p. 1943)
- Prerespiratory care (p. 726)
- Presocial welfare (p. 2351)
- Preveterinary medicine (p. 1943)

1 These are graduate programs at KU. If you’re interested in these programs, please consult your academic advisor for more information.

2 KU doesn’t offer these degree programs. Students may indicate interest in these areas as preparation for programs at other colleges and universities.
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